AB: 2 BRRTS #'S
2 COVER SHEET
1 PACKET MW

GIS REGISTRY INFORMATION

SITE NAME: Schwister Ford → plus 02-41-279678 02-41-231844

BRRTS #: 03-41-127856 **FID # (if appropriate):** 241143100

COMMERCE # (if appropriate): 532245199 36

CLOSURE DATE: 06/01/2005 e AUG 12 2005 sub 8-12-05 VS

STREET ADDRESS: 10136 W Fond du Lac

CITY: Milwaukee

SOURCE PROPERTY GPS COORDINATES (meters in WTM91 projection): X= 679566 Y= 298068

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=

JAN 12 2006

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 issued ✓

Copy of most recent deed, including legal description, for all affected properties ✓

Certified survey map or relevant portion of the recorded plat map *(if referenced in the legal description)* **for all affected properties** ✓

County Parcel ID number, *if used for county*, for all affected properties 145 · 9992 · 111 · 8 ✓

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) · notification to current owner

Letter informing ROW owner of residual contamination (if applicable)(public, highway or railroad ROW)

Copy of (soil or land use) deed restriction(s) or deed notice *if any required as a condition of closure*

January 13, 2005

Mr. Anthony M. Karabon
General Counsel
Boucher Group Inc.
4141 S. 108th Street
Greenfield, WI 53228

RE: Closure Request for the Former Schwister Ford Property, Located at 10136 West Fond du Lac Avenue in Milwaukee, Wisconsin

Dear Mr. Karabon:

Groundwater contamination that appears to have originated on the former Schwister Ford property located at 10136 West Fond du Lac Avenue still remains on that property. The levels of petroleum and chlorinated volatile organic compound contamination in the groundwater is above the state groundwater standards found in chapter NR 140, Wisconsin Administrative Code. However, the environmental consultants who have investigated this contamination have informed me that this groundwater contaminant plume is stable or receding and will naturally degrade over time. I believe that allowing natural attenuation to complete the cleanup at this site will meet the requirements for case closure that are found in chapter NR 726 and chapter NR 746, Wisconsin Administrative Code, and I will be requesting that the Wisconsin Department of Natural Resources accept natural attenuation as the final remedy for this site and grant case closure. Closure means that the Department will not be requiring any further investigation or cleanup action to be taken, other than reliance on natural attenuation.

The site has already received conditional closure with respect to contamination associated with a former gasoline underground storage tank (UST) release, a waste oil UST release, and releases associated with the former hydraulic lifts. This additional closure will address the remaining contamination at the site currently being monitored, and will fulfill or replace any remaining requirements with respect to the earlier conditional closures.

The Department of Natural Resources will not grant my closure request for at least 30 days after the date of this letter. As an affected property owner, the Boucher Group Inc. has the right to contact the Department to provide any technical information that they may have that indicates that closure should not be granted for this site. If you would like to submit any information to the Department of Natural Resources that is relevant to this closure request, you should mail that information to Binyoti F. Amungwafor, Department of Natural Resources, P.O. Box 12436, Milwaukee, Wisconsin, 53212-0436.

If this case is closed, the property will be listed on the Department of Natural Resources' geographic information system (GIS) Registry of Closed Remediation Sites. The information on the GIS Registry includes maps showing the location of properties in

Wisconsin where groundwater contamination above chapter NR 140 enforcement standards was found at the time that the case was closed. The GIS Registry will be available to the general public on the Department of Natural Resources' internet web site. Please review the enclosed legal description of your property, and notify me within the next 30 days if the legal description is incorrect.

Should you or any subsequent property owner wish to construct a well on your property, special well construction standards may be necessary to protect the well from the residual groundwater contamination. Any well driller who proposes to construct a well on your property in the future will first need to call the Diggers Hotline (1-800-242-8511) if your property is located outside of the service area of a municipally owned water system, or contact the Drinking Water program within the Department of Natural Resources if your property is located within the designated service area of a municipally owned water system, to determine if there is a need for special well construction standards. In addition, WDNR approval and special disposal methods may be required for soils removed from the areas of remaining soil contamination.

Once the Department makes a decision on my closure request, it will be documented in a letter. If the Department grants closure, you may obtain a copy of this letter by requesting a copy from me, 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 is included as part of the site file on the GIS Registry of Closed Remediation Sites.

If you need more information, you may contact me at 1160 Scenic Gulf Drive #1008A, Destin, Florida, 32550, telephone number 262-488-1664, or you may contact Binyoti F. Amungwafor, Department of Natural Resources, PO Box 12436, Milwaukee, Wisconsin, 53212-0436, telephone number 414-263-8607.

Sincerely,

William Schwister

William Schwister

GIS REGISTRY
Cover Sheet

March, 2010
(RR 5367)

Source Property Information

CLOSURE DATE: Jun 1, 2005

BRRTS #: 02-41-279678, 02-41-231844, and 03-41-127856

ACTIVITY NAME: SCHWISTER FORD PROPERTY - FORMER (SCHWISTER FORD INC)

PROPERTY ADDRESS: 10136 W Fond du Lac

MUNICIPALITY: Milwaukee

PARCEL ID #: 145-9992-111-8

FID #: 241143100

DATCP #:

COMM #:

***WTM COORDINATES:**

X: **679576** Y: **298068**

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

WTM COORDINATES REPRESENT:

(●) Approximate Center Of Contaminant Source

( ) Approximate Source Parcel Center

Please check as appropriate: (BRRTS Action Code)

Rescanned to packets 4/27/11 JM

Contaminated Media:

[X] Groundwater Contamination > ES *(236)*

[ ] Contamination in ROW

[ ] Off-Source Contamination

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

[X] Soil Contamination > *RCL or **SSRCL *(232)*

[ ] Contamination in ROW

[ ] Off-Source Contamination

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

Added 234 To packets Info sent on closure forms other well forms

Land Use Controls:

[X] N/A *(Not Applicable)*

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

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

[ ] Structural Impediment *(224)*

[ ] Site Specific Condition *(228)*

[ ] Cover or Barrier *(222)*

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

[ ] Vapor Mitigation *(226)*

[ ] Maintain Liability Exemption *(230)*

*(**note:** local government unit or economic development corporation was directed to take a response action)*

Monitoring Wells:

Are all monitoring wells properly abandoned per NR 141? *(234)*

(●) Yes (crossed out, "N/A") (●) No (circled) ( ) N/A

W-1

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

GIS Registry Checklist

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

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

02-41-279678, 02-41-231844, and 03-41-127856 PARCEL ID #: 145-9992-111-8

ACTIVITY NAME: SCHWISTER FORD PROPERTY - FORMER (SCHWISTER WTM COORDINATES: X: 679576 Y: 298068

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

- [X] **Closure Letter**
- [ ] **Maintenance Plan** (*if activity is closed with a land use limitation or condition (land use control) under s. 292.12, Wis. Stats.*)
- [ ] **Continuing Obligation Cover Letter** (for property owners affected by residual contamination and/or continuing obligations)
- [X] **Conditional Closure Letter**
- [ ] **Certificate of Completion (COC)** (for VPLE sites)

SOURCE LEGAL DOCUMENTS

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

  Figure #: 2031 **Title:**
- [X] **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description accurately describes the correct contaminated property.

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

Maps must be no larger than 11 x 17 inches unless the map is submitted electronically.

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

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

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

  Figure #: 9 **Title: Soil Analytical Results**

BRRTS #: 02-28-235068 ACTIVITY NAME: SCHWISTER FORD PROPERTY - FORMER (SCHWISTER

MAPS (continued)

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

Figure #: 3 **Title: Soil Profile Cross-Section Diagram**

Figure #: 4 **Title: Soil Profile Cross-Section Diagram**

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

Figure #: 10 **Title: Groundwater Analytical Results**

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

Figure #: 6 **Title: Groundwater Elevation Contour Diagram March 16, 2000**

Figure #: 9 **Title: Groundwater Elevation Contour Diagram June 14, 2002**

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

Tables must be no larger than 11 x 17 inches unless the table is submitted electronically. Tables must not contain shading and/or cross-hatching. The use of **BOLD** or *ITALICS* is acceptable.

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

Table #: 5 **Title: RI Soil Sample Analytical Results**

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

Table #: 4 **Title: Groundwater Analytical Results**

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

Table #: 3 **Title: Groundwater Elevations**

IMPROPERLY ABANDONED MONITORING WELLS

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

☒ **Not Applicable**

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

Figure #: **Title:**

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

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

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

BRRTS #: 02-28-235068 ACTIVITY NAME: SCHWISTER FORD PROPERTY - FORMER (SCHWISTER

NOTIFICATIONS

Source Property

☒ **Not Applicable**

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

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

Off-Source Property

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

☒ **Not Applicable**

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

Number of "Off-Source" Letters:

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

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

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

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

GIS REGISTRY INFORMATION

e

AUG 12 2005

Sub 8-12-05 VS

SITE NAME: Schwister Ford

BRRTS #: 02-41-279678 **FID # (if appropriate):** 241143100

COMMERCE # (if appropriate):

CLOSURE DATE:

STREET ADDRESS: 10136 W Fond du Lac

CITY: Milwaukee

SOURCE PROPERTY GPS COORDINATES (meters in WTM91 projection): X= 679566 Y= 298068

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

JAN 12 2006

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 issued ☑

Copy of most recent deed, including legal description, for all affected properties ☑

Certified survey map or relevant portion of the recorded plat map *(if referenced in the legal description)* **for all affected properties** ☑

County Parcel ID number, ***if used for county*****, for all affected properties** 145 · 9992 · 111 · 8 ☑

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) · notification to current owner ☐

Letter informing ROW owner of residual contamination (if applicable)(public, highway or railroad ROW) ☐

Copy of (soil or land use) deed restriction(s) or deed notice ***if any required as a condition of closure*** ☐

WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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

Southeast Region Headquarters
2300 N. Dr. Martin Luther King, Jr. Drive
PO Box 12436
Milwaukee, Wisconsin 53212-0436
Telephone 414-263-8500
FAX 414-263-8716
TTY 414-263-8713

June 1, 2005,

Mr. Bill Schwister
Henry J. Schwister Revocable Trust
1165 Kerechum Rd.
Hubertus, Wisconsin, 532033

Subject: Final Closure, Former Schwister Ford Property, 10136 W. Fond Du Lac, Milwaukee, Wisconsin, BRRTS #s 02-41-279678, 02-41-231844 and 03-41-127856, FID # 2411343100

Dear Mr. Schwister:

On June 1, 2005 your site as described above was reviewed for closure by the Department of Natural Resources. The Department reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. On August 23, 2001 BRRTs Case # 02-41-231844 granted conditional closure.

On February 17, 2005 the Department received correspondence indicating that you have complied with the conditions of closure. The conditions of closure were: to sign and record a deed restriction to maintain a surface barrier over the remaining soil contamination to prevent it from impacting human health and the environment, abandon the monitoring wells on this site and submit the well abandonment forms according to NR 141 and submit a complete GIS packet for soil. 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 or other action is required at this time.

Your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed 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.

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 (414) 263-8607.

Sincerely,

Binyoti F. Amungwafor
Hydrogeologist

CC: Mr. Jason Herbst, Drake Environmental Inc. /Case File

WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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

Southeast Region Headquarters
2300 N. Dr. Martin Luther King, Jr. Drive
PO Box 12436
Milwaukee, Wisconsin 53212-0436
Telephone 414-263-8500
FAX 414-263-8483
TTY 414-263-8713

August 23, 2001

In Reply Refer To: FID# 241143100
BRRTS# 02-41-231844
County of Milwaukee
BRR-ERP

Mr. Bill Schwister
Henry J. Schwister Revocable Trust
1165 Kerechum Rd
Hubertus, WI 53033

SUBJECT: Conditional Closure of the *Former Schwister Ford Waste Oil and Hydraulic Oil* Site, 10136 W Fond Du Lac Ave., Milwaukee, WI

Dear Mr. Schwister:

The Wisconsin Department of Natural Resources (WDNR) has reviewed the reports entitled *Closure Request (January 9, 2001)* and the *Case Summary and Close Out Form (July 30, 2001)*, which were prepared by Drake Environmental, Inc. The reports contain the conclusion that "No Further Action" is warranted at the site. Based upon the information in the case file and in the above referenced report, it appears that the degree and extent of Waste Oil and Hydraulic Oil contamination has been determined in the groundwater at the site. However, an estimate of the volume of soil contamination above the Residual Concentration Limits (RCLs), still remaining at the site, was not given by your consultant.

Due to the presence of benzene in the groundwater at the site, at a concentration above the NR 140 Enforcement Standard (ES), in the following wells (W-2 & W-8), in the most recent sampling rounds, a requirement of case closure is that a "groundwater use restriction" be placed on the deed of the property, according to s. NR 726.05(8)(am). You must submit a draft copy of the proposed deed restriction prior to placement on the deed of the property so that WDNR Legal Staff can verify that the restriction is acceptable. Upon completion of the legal review, you will be notified if any changes to the document are required prior to recording the deed restriction at the Milwaukee County Register of Deeds Office. The language in the deed restriction should follow the template contained in the guidance document entitled "Close Out Guidance on the Use of Deed and Groundwater Use Restrictions and Deed Notices". In addition to the language, please attach a map that identifies the location of the remaining groundwater contamination to the deed restriction

Please note that the Former Schwister Ford Leaded-Gasoline Site (BRRTS# 02-41-127856), located on the western corner of the on-site building, was granted "conditional closure" on July 15, 1999, pending receipt by WDNR of an acceptable groundwater use restriction for that site. To date, WDNR has not received this document, therefore that site has not received "final closure". If that groundwater use restriction has not yet been recorded, you may wish to combine these documents.

Due to the presence of soil contamination, which is above the RCLs, remaining in the area of the hoists and waste oil tank, another requirement of case closure is that a notice be placed on the deed of the property to inform any potential purchaser that this contamination exists. The notice should include a map of the extent of soil contamination and an estimate of the volume of soil contamination remaining above the RCLs. The notice must also state that if any contaminated soil is ever discovered and excavated due to construction or other activities, the soil must be properly handled according to any applicable laws in effect at that time. This requirement can be accomplished by adding additional language to the groundwater use restriction.

After the WDNR receives an official recorded copy of the acceptable deed restriction from the Register of Deeds office and copies of the well abandonment forms for all on-site monitoring wells, the Waste Oil and Hydraulic Oil contamination site will be tracked as closed on the WDNR's computer database.

This conditional closure letter does not apply to the chlorinated volatile organic compounds (CVOCs) detected at the site. The following CVOCs were detected above their respective Enforcement Standards (ES) in the groundwater at the site: vinyl chloride, trichloroethene, cis-1,2-dichloroethene, and 1,1-dichloroethene. Additional action is required based on the presence of these compounds, including: 1) The degree and extent of CVOCs must be determined in the soil and groundwater at the site, 2) Potential source(s) and source areas must be determined and 3) If remediation by natural attenuation (RNA) is the proposed remedy, you must demonstrate that RNA will reduce the concentrations of the remaining contaminants to below standards, including such factors as groundwater velocity, degradation rates, evaluation of indicator parameters and presence of final break down products such as ethene.

Please note that if any contaminated soil is ever discovered and excavated due to construction or other activities, the soil must be properly handled according to any applicable laws in effect at that time.

The WDNR appreciates the actions you have taken to restore the environment at this site. If you have any questions regarding this letter you may contact me at (414) 263-8541. Please refer to the FID and BRRTS numbers on the top of this letter in any future correspondence.

Sincerely,

Andrew Boettcher
Hydrogeologist

cc: Jason Bartley - Drake Environmental
SER File

STATE BAR OF WISCONSIN FORM 16 – 1982
TRUSTEE'S DEED

DOCUMENT NO.

William Schwister and Marlene Schnittka

as ~~Trustee of~~
co-trustees of the Henry J. Schwister Living Trust

for a valuable consideration conveys without warranty to
Gordie Boucher Ford of Menomonee Falls, Inc.

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

Legal description attached.

THIS SPACE RESERVED FOR RECORDING DATA

NAME AND RETURN ADDRESS

Anthony M. Kaasbed
c/o The Boucher Group
4141 S. 108th Street
Greenfield, WI 53228

145-9992-111-8
PARCEL IDENTIFICATION NUMBER

this is not homestead property

Dated this 10th day of September, 19 99.

William Schwister (SEAL)
• William Schwister
Trustee

Marlene Schnittka (SEAL)
• Marlene Schnittka
Trustee

AUTHENTICATION

Signature(s) of William J. Schwister and Marlene SChnittka

authenticated this 10th day of September, 19 99

• Michael W. Tobin

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

THIS INSTRUMENT WAS DRAFTED BY
Michael W. Tobin

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

ACKNOWLEDGMENT

State of Wisconsin, } ss.
_____ County.

Personally came before me this _____ day of _____, 19____, the above named

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

• _____
Notary Public, _____ County, Wis.
My commission is permanent. (If not, state expiration date: _____, 19____.)

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

Parcel 1 of Certified Survey Map No. 2031, recorded on March 7, 1973, on Reel 707, Image 1875, as Document No. 4744658, being a part of the Southwest 1/4 of Section 20, Township 8 North, Range 21 East, City of Milwaukee, County of Milwaukee, State of Wisconsin.

ALSO;

Lands in the Southwest 1/4 of Section 20, in Township 8 North, Range 21 East, in the City of Milwaukee, County of Milwaukee, State of Wisconsin, bounded and described as follows:
Commencing at the centerline of West Fond du Lac Avenue and 1028.60 feet Southeasterly from North line of said 1/4 Section; thence North 45° 47' 40" East, 230.78 feet to Southwesterly line of relocated State Highway 145 - thence Southeasterly along said highway line 670.30 feet more or less; thence Southwesterly 230.50 feet more or less to a point in centerline of said avenue. Said point being 792.75 feet Southeasterly from South line Rudy Mack Acres measured along centerline of said avenue; thence Northwesterly along centerline of said avenue 671.30 feet to beginning.
EXCEPTING the Southwesterly 33 feet for street.

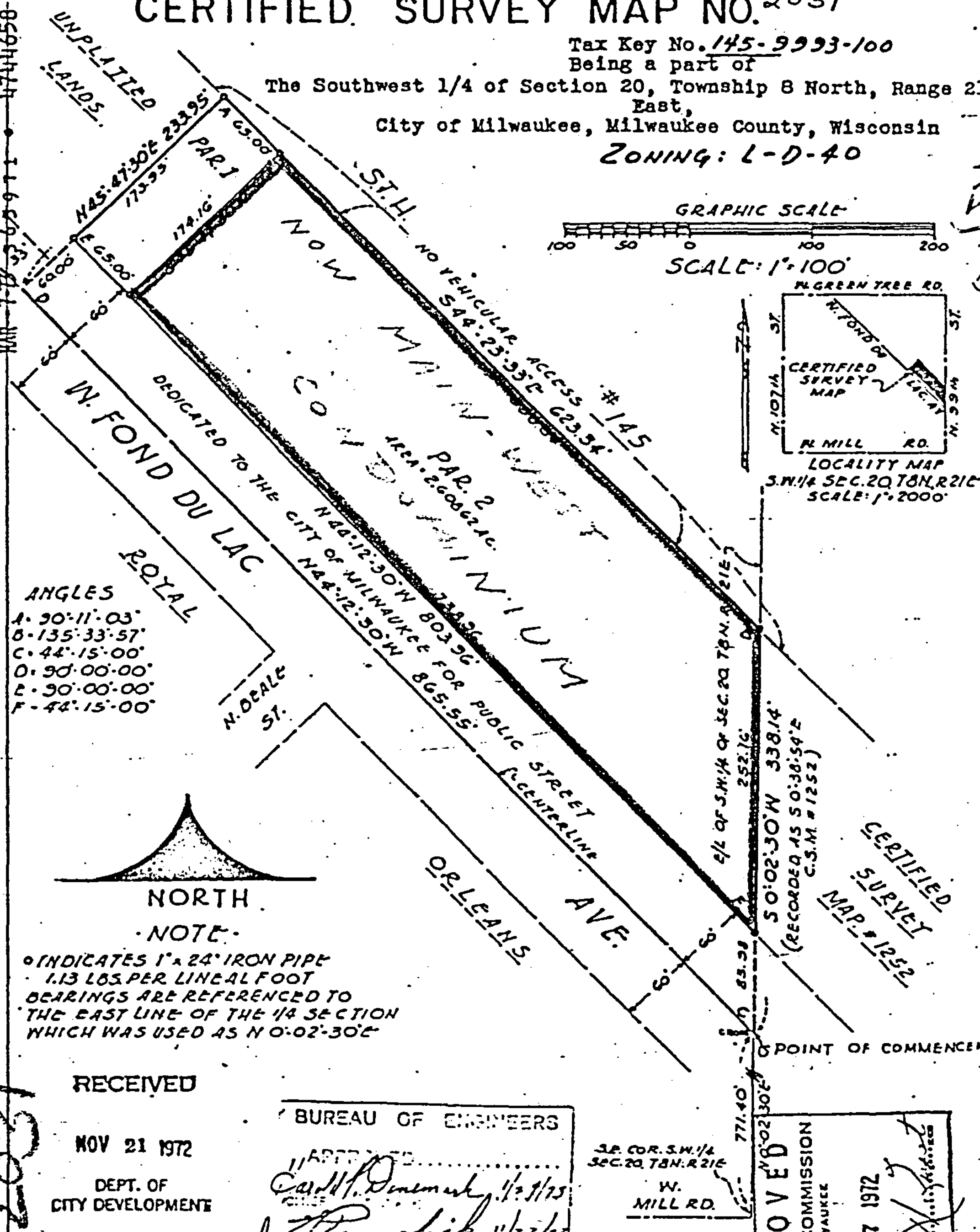
Tax Key No. 145-9992-111-8

ADDRESS: 10136 W. FOND DU LAC AVENUE

FILE 707 IMAGE 1875

CERTIFIED SURVEY MAP NO. 2031

Tax Key No. 145-9993-100
Being a part of
The Southwest 1/4 of Section 20, Township 8 North, Range 21 East,
City of Milwaukee, Milwaukee County, Wisconsin
ZONING: L-D-40



NOTE

o INDICATES 1" x 24" IRON PIPE 1.13 LBS. PER LINEAL FOOT
BEARINGS ARE REFERENCED TO THE EAST LINE OF THE 1/4 SECTION WHICH WAS USED AS N 0°02'30"E

RECEIVED
NOV 21 1972
DEPT. OF CITY DEVELOPMENT

BUREAU OF ENGINEERS
APPROVED
Carl F. Dinemark 1/29/73
11/23/72
1/29/73

CITY FEE DEPOSITED
\$5.00 11/27/72 J.F.C.

APPROVED
CITY PLAN COMMISSION OF MILWAUKEE
NOV 27 1972

4744658

This instrument was drafted by William H. Schmitt

Sheet 1 of 4

Par. 1-2

REEL 707 IMAGE 1876

485

CERTIFIED SURVEY MAP NO.

Tax Key No._____
Being a part of
The Southwest 1/4 of Section 20, Township 8 North, Range 21 East,
City of Milwaukee, Milwaukee County, Wisconsin

SURVEYOR'S AFFIDAVIT

STATE OF WISCONSIN (SS
COUNTY OF MILWAUKEE (

I, WILLIAM H. SCHMITT, a registered land surveyor, being first duly sworn, on oath, hereby depose and say:

THAT I have surveyed, divided and mapped a part of the Southwest 1/4 of Section 20, Township 8 North Range 21 East, in the City of Milwaukee, Milwaukee County, Wisconsin, bounded and described as follows, to-wit:

COMMENCING at the Southeast corner of said 1/4 Section; running thence North 0° 02' 30" East on and along the East line of said 1/4 Section 771.40 feet to a point in the centerline of West Fond du Lac Avenue and the point of beginning of the parcel herein to be described; running thence North 44° 12' 30" West on and along the centerline of said West Fond du Lac Avenue 865.55 feet to a point; thence North 45° 47' 30" East 233.95 feet to a point in the Southerly right-of-way line of State Trunk Highway No. 145; thence South 44° 23' 33" East on and along said Southerly right-of-way line 623.34 feet to a point in the East line of said 1/4 Section; thence South 0° 02' 30" West (recorded as S. 0° 02' E.) on and along the East line of said 1/4 Section 338.14 feet to the point of beginning, and dedicating herefrom the Southwesterly 60 feet to the City of Milwaukee for public street purposes.

THAT I have made such survey, land division and map by the direction of Main Inv. Inc. owner of said land.

THAT such map is a correct representation of all exterior boundaries of the land surveyed and the land division thereof made.

THAT I have fully complied with the provisions of Chapter 236 of the WISCONSIN STATUTES and Chapter 9 of the MILWAUKEE CODE OF ORDINANCES in surveying, dividing and mapping the same.

Subscribed and sworn to before me
this 17 day of November, 1972.

William H. Schmitt (SEAL)
William H. Schmitt, Registered
Land Surveyor S-626

Notary Public
Milwaukee County, Wisconsin
My Commission expires Aug. 4, 74

WISCONSIN
WILLIAM H.
SCHMITT
WEST ALLIS,
WIS.
LAND SURVEYOR

4744658

REGISTER'S OFFICE
Milwaukee County, Wis. } SS
RECORDED AT 1 35 P.M.
on Dec 7 1972 in
Reel 707 Image 1875 to 1878 Incl

REGISTER OF DEEDS

REEL 707 IMAGE 1877

485

CERTIFIED SURVEY MAP NO.

Tax Key No._____
Being a part of
The Southwest 1/4 of Section 20, Township 8 North, Range 21 East
City of Milwaukee, Milwaukee County, Wisconsin

CORPORATE OWNER'S CERTIFICATE

MAIN INV. INC., a corporation organized and existing under and by virtue of the laws of the State of Wisconsin, as owner, does hereby certify that said corporation caused the land described on this map to be surveyed, divided mapped and dedicated as represented on this map in accordance with the requirements of Section 9-8.5 of the City of Milwaukee Code of Ordinances.

We also certify that this map is required by SECTION 236.10 of the WISCONSIN STATUTES (1965) to be approved by the following: CITY OF MILWAUKEE.

In consideration of the approval of the map by the Common Council, the undersigned covenants and agrees to and with the City of Milwaukee that no lot or parcel as set forth shall at any time subsequent to the recording of this map be in any manner divided, described or conveyed so as to result in lots, parcels or building sites having dimensions, areas or courses other than as hereon set forth, unless said divisions, descriptions or conveyances are first approved by the Common Council of the City of Milwaukee, and that such restrictions are binding on the undersigned, his, her or their heirs and assigns. Such approval, however, shall not be required for the taking of land for public purposes.

THAT all utility lines to provide electric power and telephone service to all lots in the Certified Survey Map shall be installed underground in easements provided therefor.

IN WITNESS WHEREOF, the said Main Inv. Inc. has caused these presents to be signed by Walter A. Machulak, its president, and countersigned by Julius F. Machulak, its secretary at Milwaukee, Wisconsin and its corporate seal to be hereunto affixed this 17th day of November, 1972.

In the presence of:

Alex E. Winslow

Richard J. Boulay

Main Inv. Inc.,

Walter A. Machulak, President

Julius F. Machulak, Secretary

STATE OF WISCONSIN)
MILWAUKEE COUNTY) SS

PERSONALLY came before me this 17 day of November, 1972, the president and secretary of the above named corporation, to me known to be the persons who executed the foregoing instrument, and to me known to be such president and secretary of said corporation, and acknowledged that they executed the foregoing instrument as such officers as the deed of said corporation, by its authority.

(SEAL)
Notary Public
Milwaukee County, Wisconsin
My Commission expires Aug. 4, 74

REEL 707 IMAGE 1878

485

CERTIFIED SURVEY MAP NO.

Tax Key No._____
Being a part of
The Southwest 1/4 of Section 20, Township 8 North, Range 21 East,
City of Milwaukee, Milwaukee County, Wisconsin

CERTIFICATE OF CITY TREASURER

STATE OF WISCONSIN)
COUNTY OF MILWAUKEE) SS

I, R. J. Krueger, being the duly elected qualified and acting City Treasurer of the City of Milwaukee, do hereby certify that in accordance with the records in the office of the City Treasurer of the City of Milwaukee there are no unpaid taxes or special assessments on any lands in the above description of this certified survey map.

FEB 5 1973
Date

R. J. Krueger (SEAL)
City Treasurer

COMMON COUNCIL RESOLUTION

Be it noted that this Certified Survey Map, submitted under File No. 72-1654, being a part of the Southwest 1/4 of Section 20, Township 8 North, Range 21 East, in the City of Milwaukee, Milwaukee County, Wisconsin, having been approved by the Department of City Development, has been approved by the Milwaukee Common Council.

I hereby certify that the foregoing Certified Survey Map was approved by Common Council resolution on FEB [illegible] 1973.

City Clerk, City of Milwaukee

Henry Maier, Mayor

This instrument was drafted by William H. Schmitt

January 13, 2005

To Whom It May Concern:

I believe that, to the best of my knowledge, the legal description for each property that is within, or partially within, the contaminated site boundary is attached to this letter.

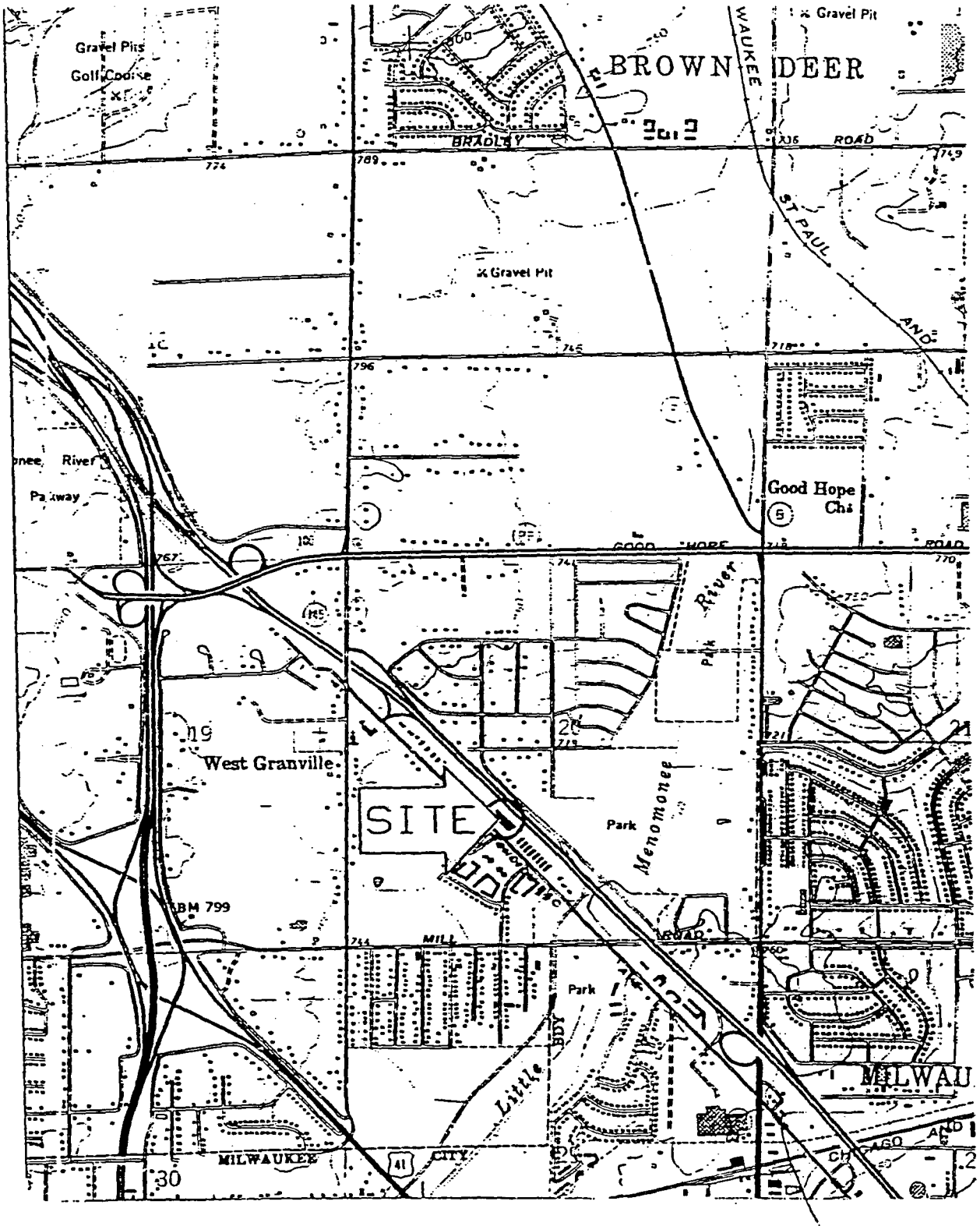
Sincerely,

William Schwister

William Schwister
1160 Scenic Gulf Drive #1008A
Destin, FL 32550

Attachment

J99074T



COPIED FROM 7.5 SERIES [TOPOGRAPHIC] - U.S.G.S. QUADRANGLE

DIAGRAM SCALE
0 1000 2000
1-INCH - 2000-FEET

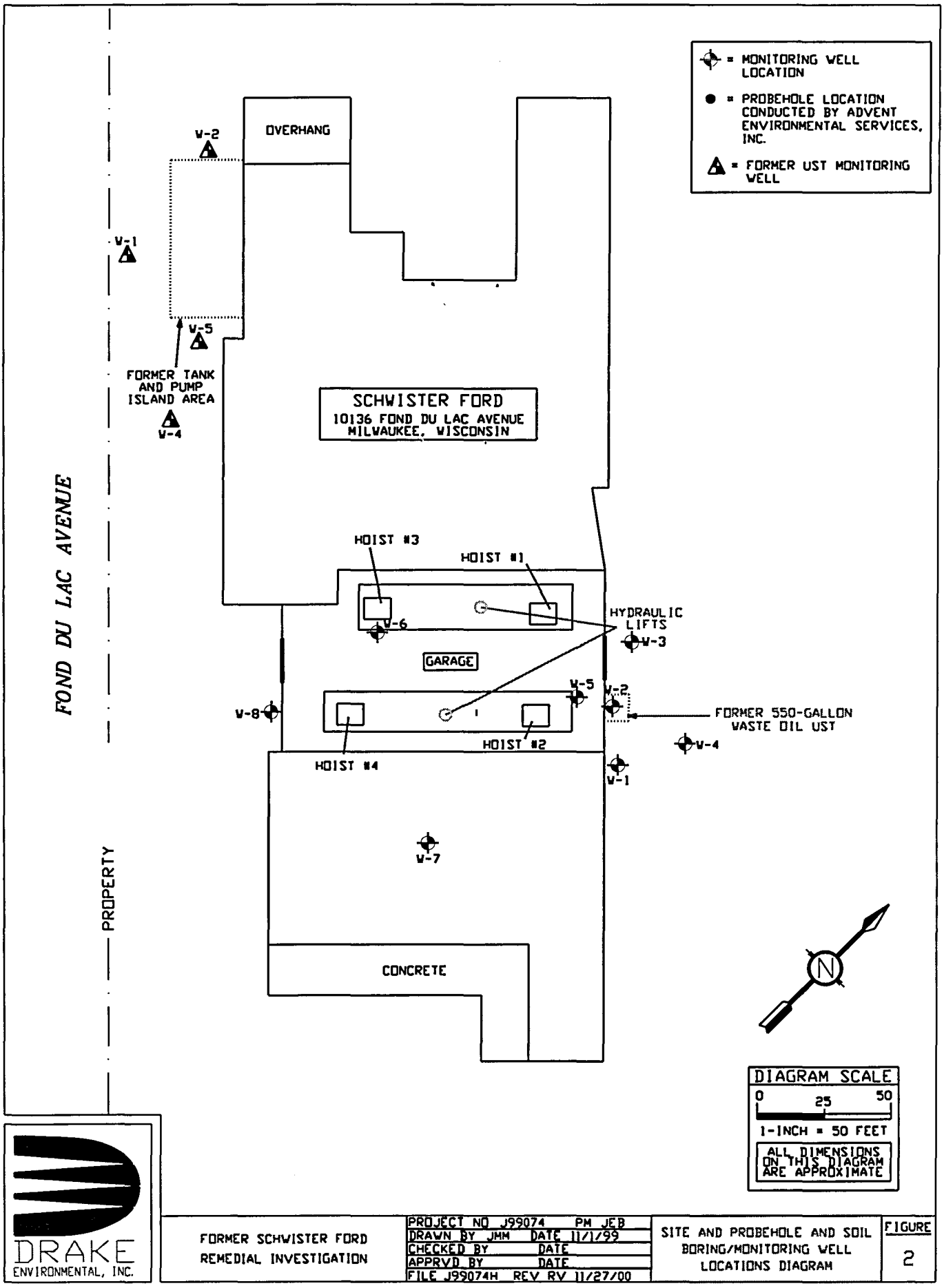
MENOMONEE FALLS - WISCONSIN
NE 1/4 SW 1/4 SEC 20 T8N R21E

DRAKE ENVIRONMENTAL, INC.

SCHNISTER FORD REMEDIAL INVESTIGATION	PROJECT NO. J97082 PM SBA DRAWN BY JMM DATE: 06/11/97 CHKD BY EB DATE: 5-8-97 APRVD BY EB DATE: 7-21-97	VICINITY DIAGRAM

FIGURE 1

FILE:



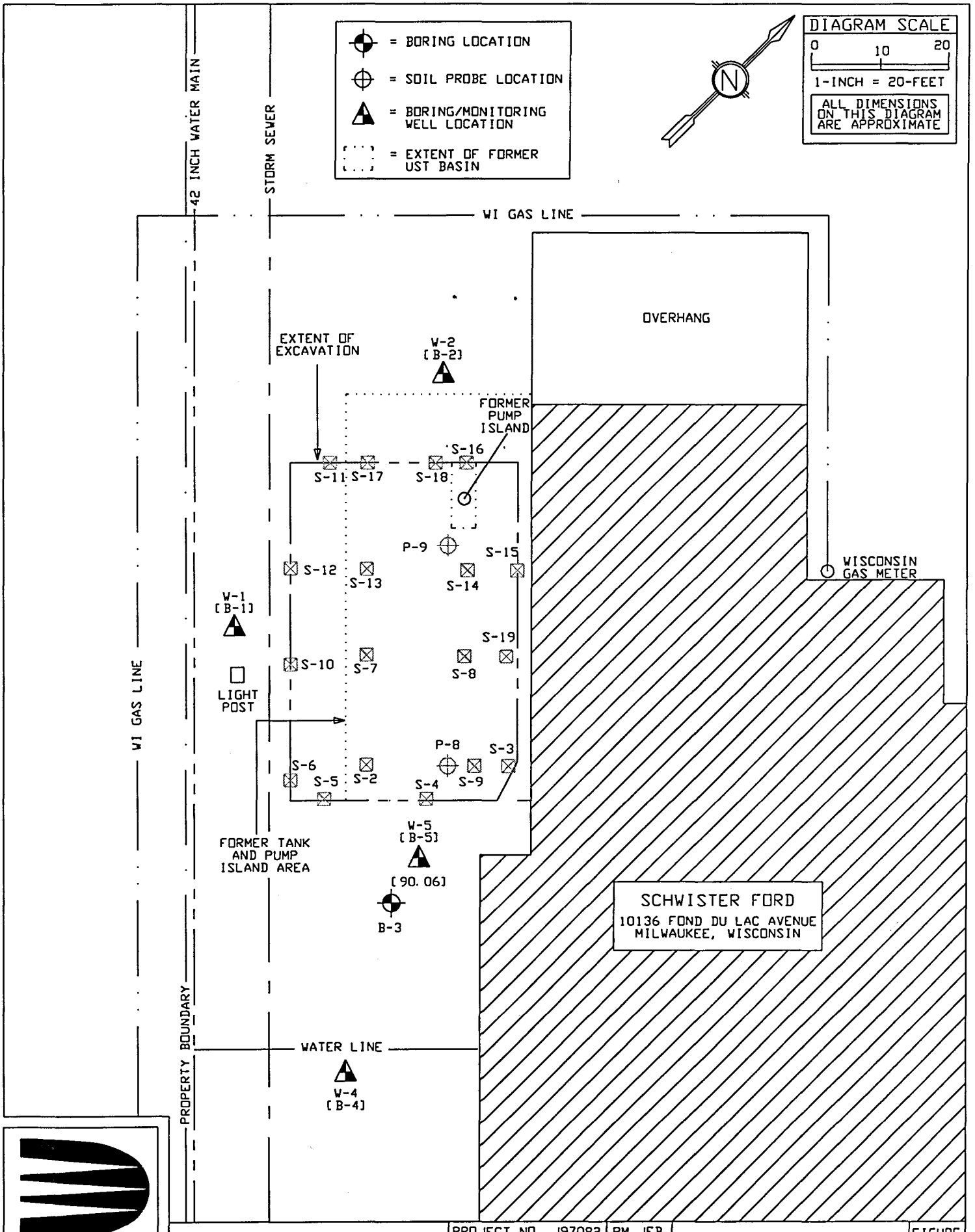
DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO	J99074 PM JEB
DRAWN BY	JMM DATE 11/1/99
CHECKED BY	DATE
APPRVD BY	DATE
FILE	J99074H REV RV 11/27/00

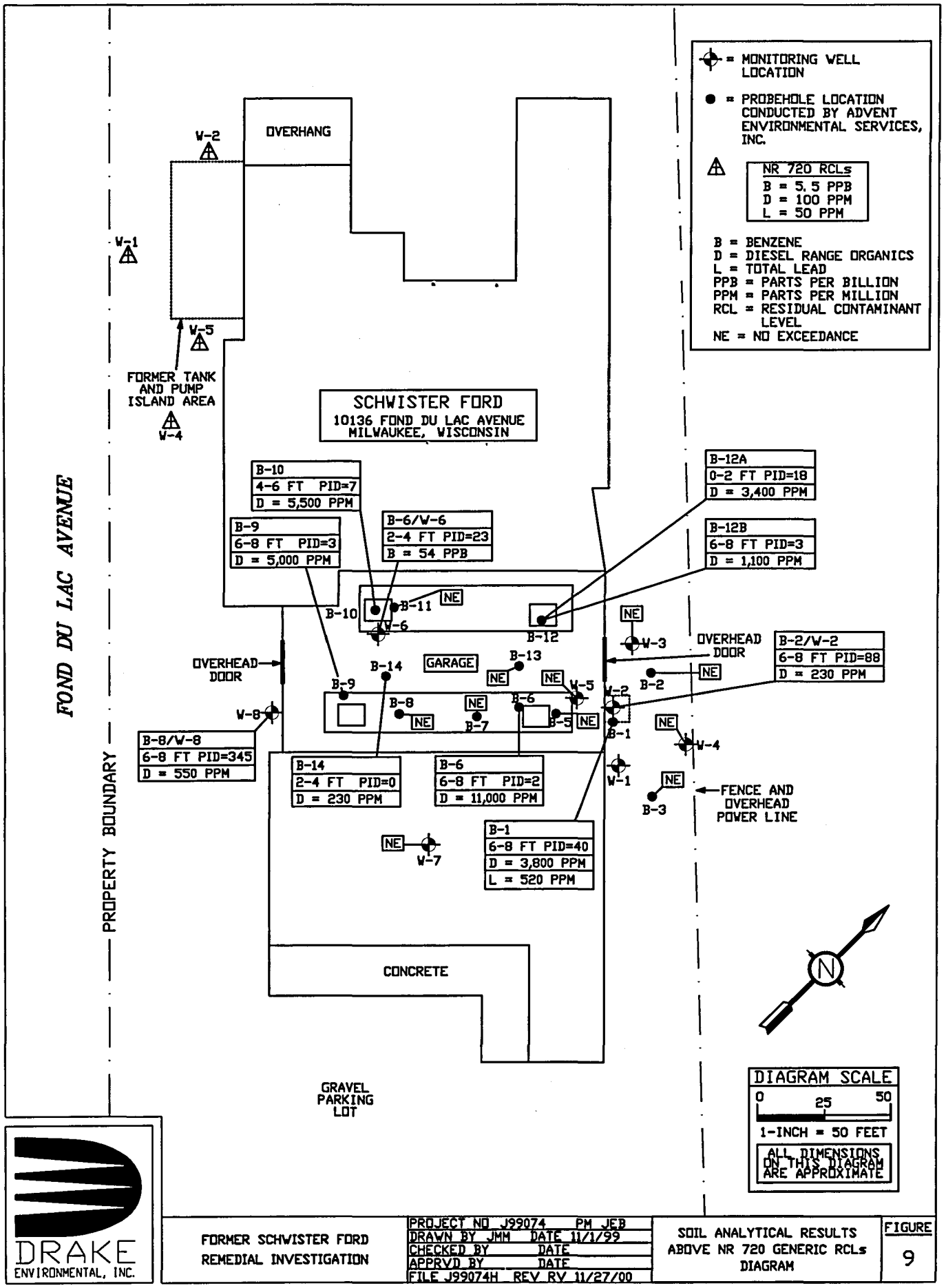
SITE AND PROBEHOLE AND SOIL BORING/MONITORING WELL LOCATIONS DIAGRAM

FIGURE 2



DRAKE ENVIRONMENTAL, INC.

SCHWISTER FORD REMEDIATION	PROJECT NO. J97082 PM JEB	EXTENT OF EXCAVATION AND SAMPLE LOCATIONS DIAGRAM	FIGURE 3
	DRAWN BY JMM DATE: 12/31/97		
	CHKD BY DATE		
	APRVD BY DATE		



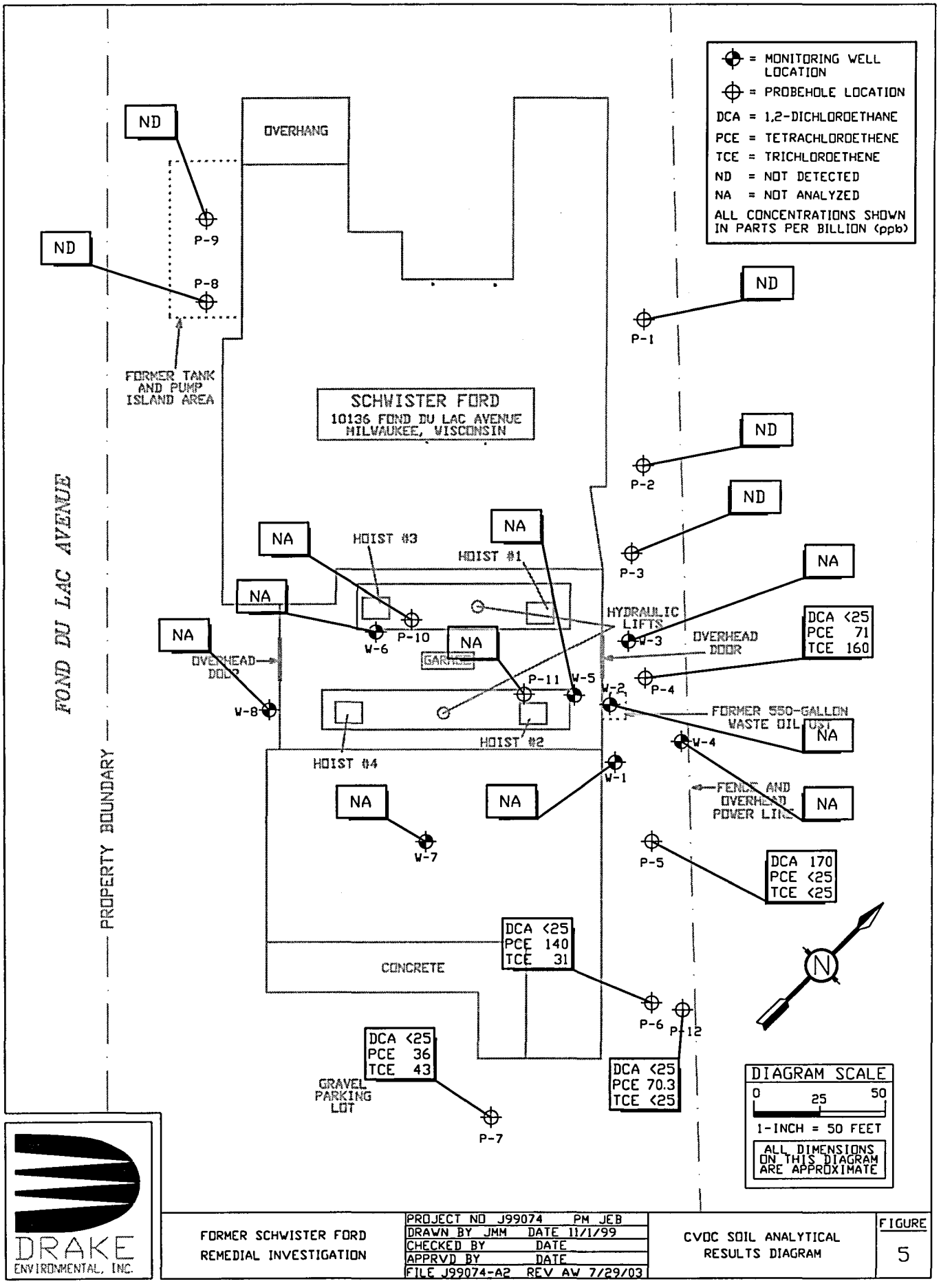
DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO J99074 PM JEB
DRAWN BY JMM DATE 11/1/99
CHECKED BY DATE
APPRVD BY DATE
FILE J99074H REV RV 11/27/00

SOIL ANALYTICAL RESULTS ABOVE NR 720 GENERIC RCLs DIAGRAM

FIGURE 9



DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO	J99074 PM JEB
DRAWN BY	JMM DATE 11/1/99
CHECKED BY	DATE
APPRVD BY	DATE
FILE	J99074-A2 REV AW 7/29/03

CVOC SOIL ANALYTICAL RESULTS DIAGRAM

FIGURE 5

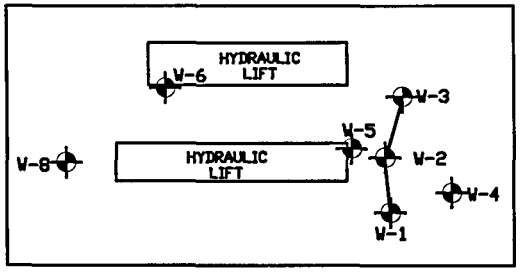
DRAKE ENVIRONMENTAL, INC.

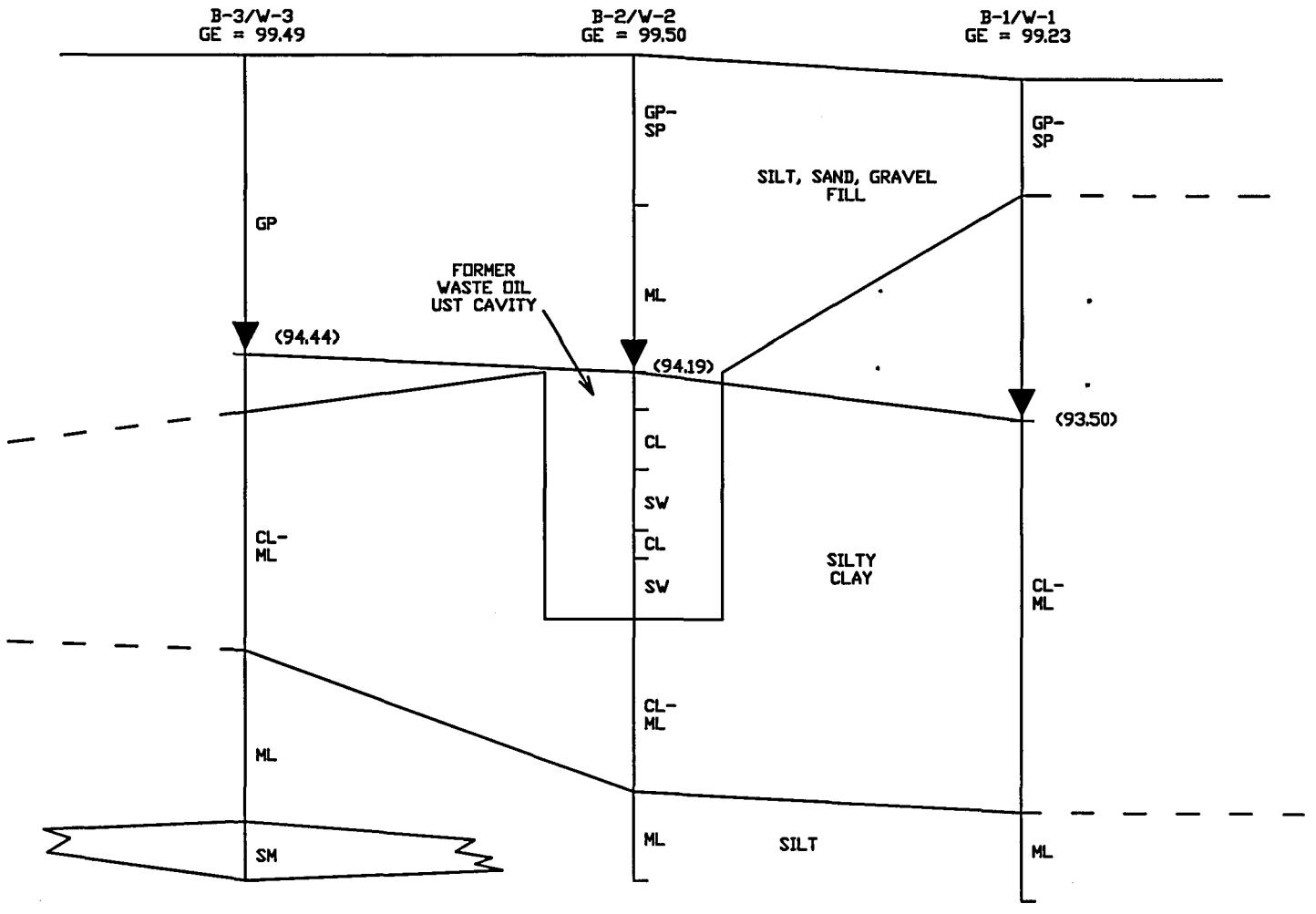
SCALE

HORIZONTAL: 0 5 10 — 1 INCH = 10 FEET

VERTICAL: 0 1.5 3 — 1 INCH = 3 FEET

GE = GROUND SURFACE ELEVATION
9/14/00 GROUNDWATER ELEVATION DATA
▼ = GROUNDWATER ELEVATION





FORMER SCHWISTER FORD PROPERTY
REMEDIAL INVESTIGATION

PROJECT NO. J99074 PM JEB
DRAWN BY RV DATE 12/1/00
CHECKED BY DATE
APPRVD BY DATE
FILE J99074G

SOIL PROFILE CROSS-SECTION DIAGRAM

FIGURE 3

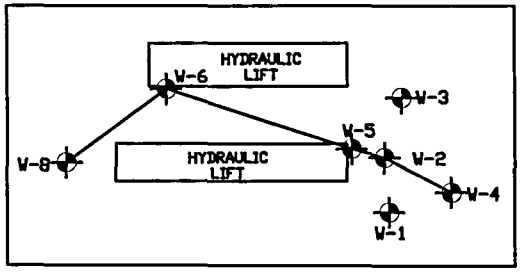
DRAKE ENVIRONMENTAL, INC.

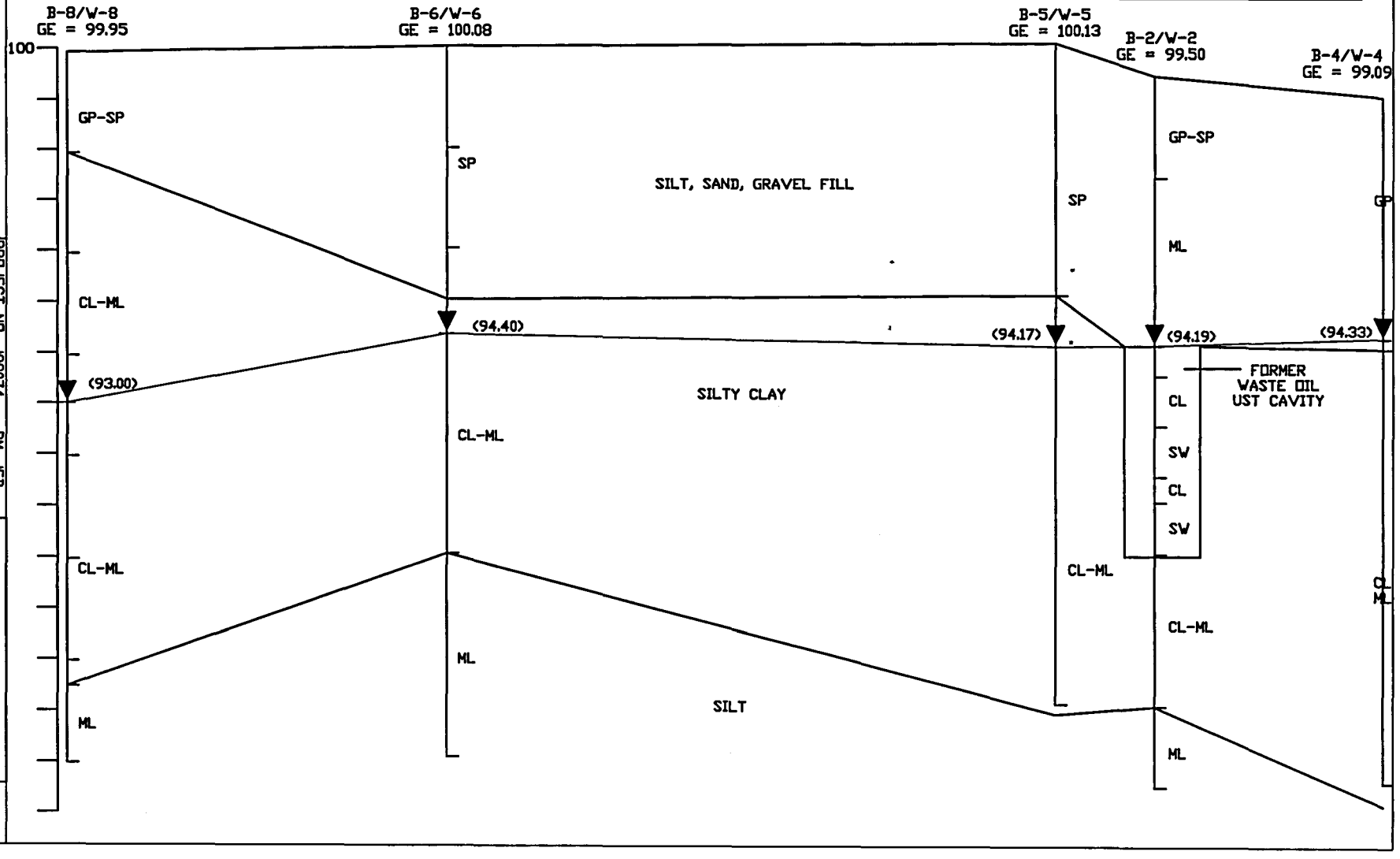
SCALE

HORIZONTAL: 0 10 20 — 1 INCH = 20 FEET

VERTICAL: 0 1.5 3 — 1 INCH = 3 FEET

GE = GROUND SURFACE ELEVATION
9/14/00 GROUNDWATER ELEVATION DATA
▼ = GROUNDWATER ELEVATION



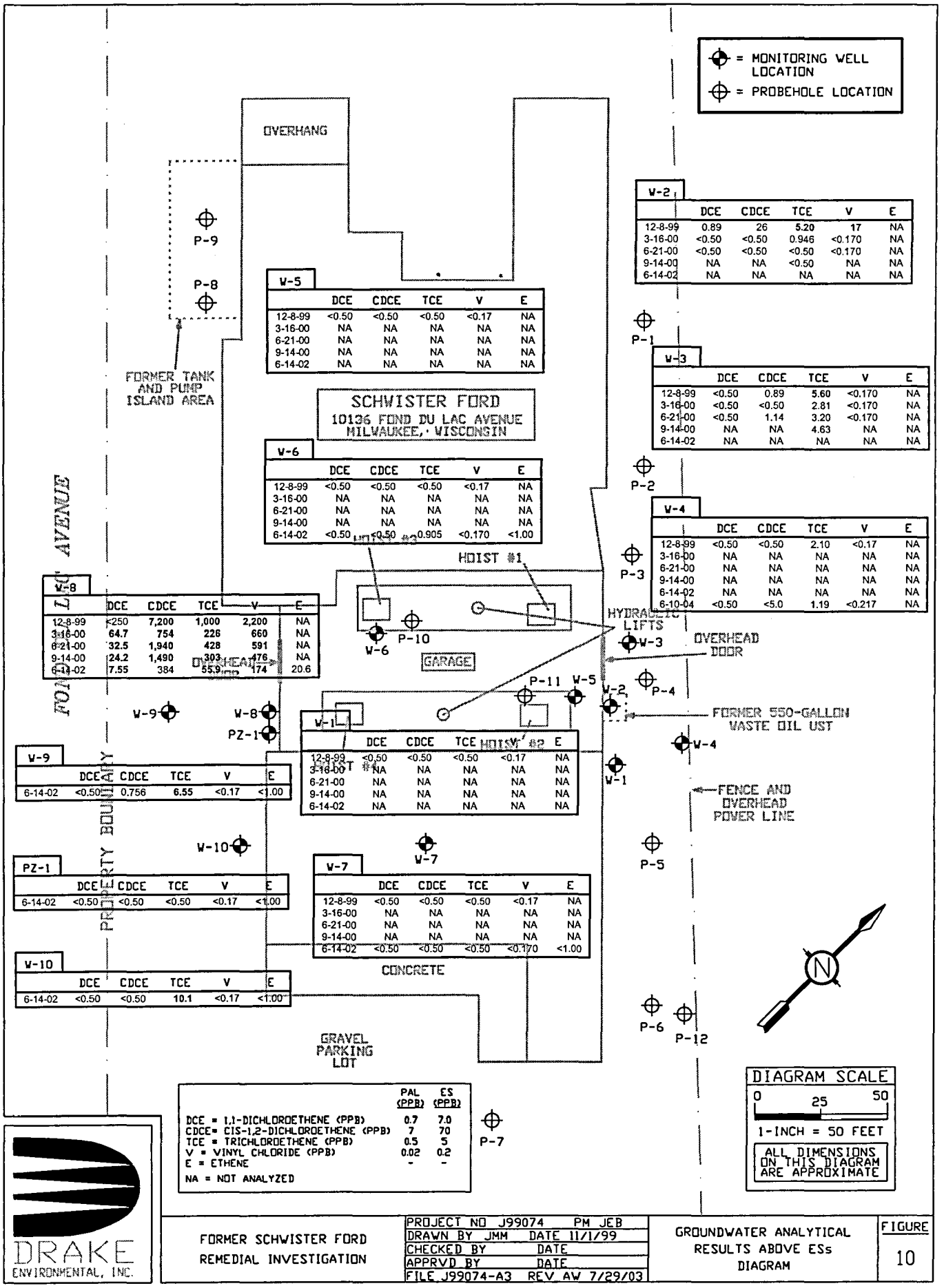


FORMER SCHWISTER FORD PROPERTY
REMEDIAL INVESTIGATION

PROJECT NO. J99074 PM JEB
DRAWN BY RV DATE 12/1/00
CHECKED BY DATE
APPRVD BY DATE
FILE J99074G

SOIL PROFILE CROSS-SECTION DIAGRAM

FIGURE 4



W-2

	DCE	CDCE	TCE	V	E
12-8-99	0.89	26	5.20	17	NA
3-16-00	<0.50	<0.50	0.946	<0.170	NA
6-21-00	<0.50	<0.50	<0.50	<0.170	NA
9-14-00	NA	NA	<0.50	NA	NA
6-14-02	NA	NA	NA	NA	NA

W-5

	DCE	CDCE	TCE	V	E
12-8-99	<0.50	<0.50	<0.50	<0.17	NA
3-16-00	NA	NA	NA	NA	NA
6-21-00	NA	NA	NA	NA	NA
9-14-00	NA	NA	NA	NA	NA
6-14-02	NA	NA	NA	NA	NA

W-3

	DCE	CDCE	TCE	V	E
12-8-99	<0.50	0.89	5.60	<0.170	NA
3-16-00	<0.50	<0.50	2.81	<0.170	NA
6-21-00	<0.50	1.14	3.20	<0.170	NA
9-14-00	NA	NA	4.63	NA	NA
6-14-02	NA	NA	NA	NA	NA

W-6

	DCE	CDCE	TCE	V	E
12-8-99	<0.50	<0.50	<0.50	<0.17	NA
3-16-00	NA	NA	NA	NA	NA
6-21-00	NA	NA	NA	NA	NA
9-14-00	NA	NA	NA	NA	NA
6-14-02	<0.50	<0.50	0.905	<0.170	<1.00

W-4

	DCE	CDCE	TCE	V	E
12-8-99	<0.50	<0.50	2.10	<0.17	NA
3-16-00	NA	NA	NA	NA	NA
6-21-00	NA	NA	NA	NA	NA
9-14-00	NA	NA	NA	NA	NA
6-14-02	NA	NA	NA	NA	NA
6-10-04	<0.50	<5.0	1.19	<0.217	NA

W-8

	DCE	CDCE	TCE	V	E
12-8-99	<250	7,200	1,000	2,200	NA
3-16-00	64.7	754	226	660	NA
6-21-00	32.5	1,940	428	591	NA
9-14-00	24.2	1,490	303	476	NA
6-14-02	7.55	384	55.9	174	20.6

W-1

	DCE	CDCE	TCE	V	E
12-8-99	<0.50	<0.50	<0.50	<0.17	NA
3-16-00	NA	NA	NA	NA	NA
6-21-00	NA	NA	NA	NA	NA
9-14-00	NA	NA	NA	NA	NA
6-14-02	NA	NA	NA	NA	NA

W-9

	DCE	CDCE	TCE	V	E
6-14-02	<0.50	0.756	6.55	<0.17	<1.00

W-7

	DCE	CDCE	TCE	V	E
12-8-99	<0.50	<0.50	<0.50	<0.17	NA
3-16-00	NA	NA	NA	NA	NA
6-21-00	NA	NA	NA	NA	NA
9-14-00	NA	NA	NA	NA	NA
6-14-02	<0.50	<0.50	<0.50	<0.170	<1.00

PZ-1

	DCE	CDCE	TCE	V	E
6-14-02	<0.50	<0.50	<0.50	<0.17	<1.00

W-10

	DCE	CDCE	TCE	V	E
6-14-02	<0.50	<0.50	10.1	<0.17	<1.00

	PAL (PPB)	ES (PPB)
DCE = 1,1-DICHLORDETHENE (PPB)	0.7	7.0
CDCE= CIS-1,2-DICHLORDETHENE (PPB)	7	70
TCE = TRICHLORDETHENE (PPB)	0.5	5
V = VINYL CHLORIDE (PPB)	0.02	0.2
E = ETHENE	-	-

NA = NOT ANALYZED

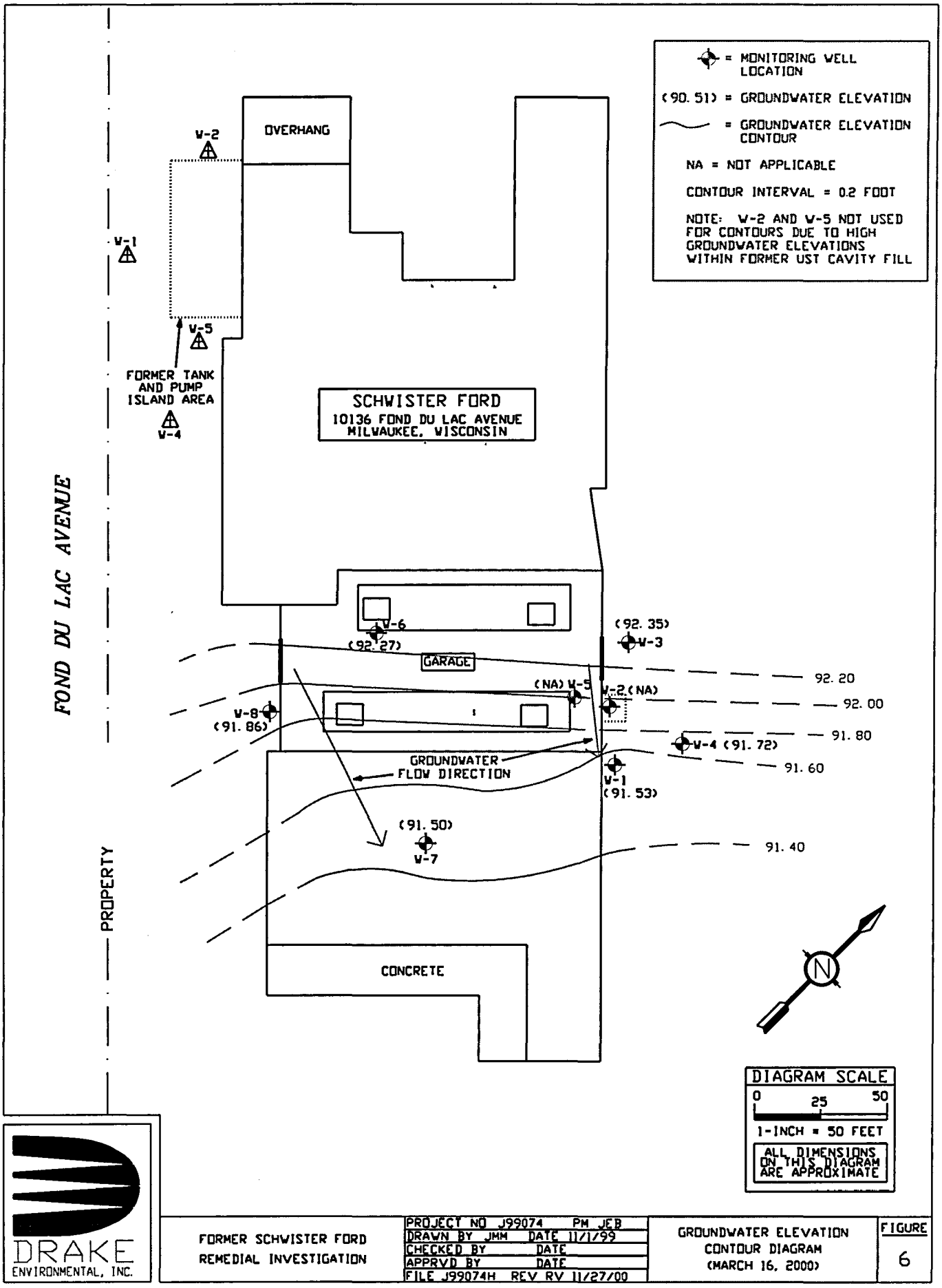
DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO	J99074 PM JEB
DRAWN BY	JMM DATE 11/1/99
CHECKED BY	DATE
APPRVD BY	DATE
FILE	J99074-A3 REV AW 7/29/03

GROUNDWATER ANALYTICAL RESULTS ABOVE ESs DIAGRAM

FIGURE 10



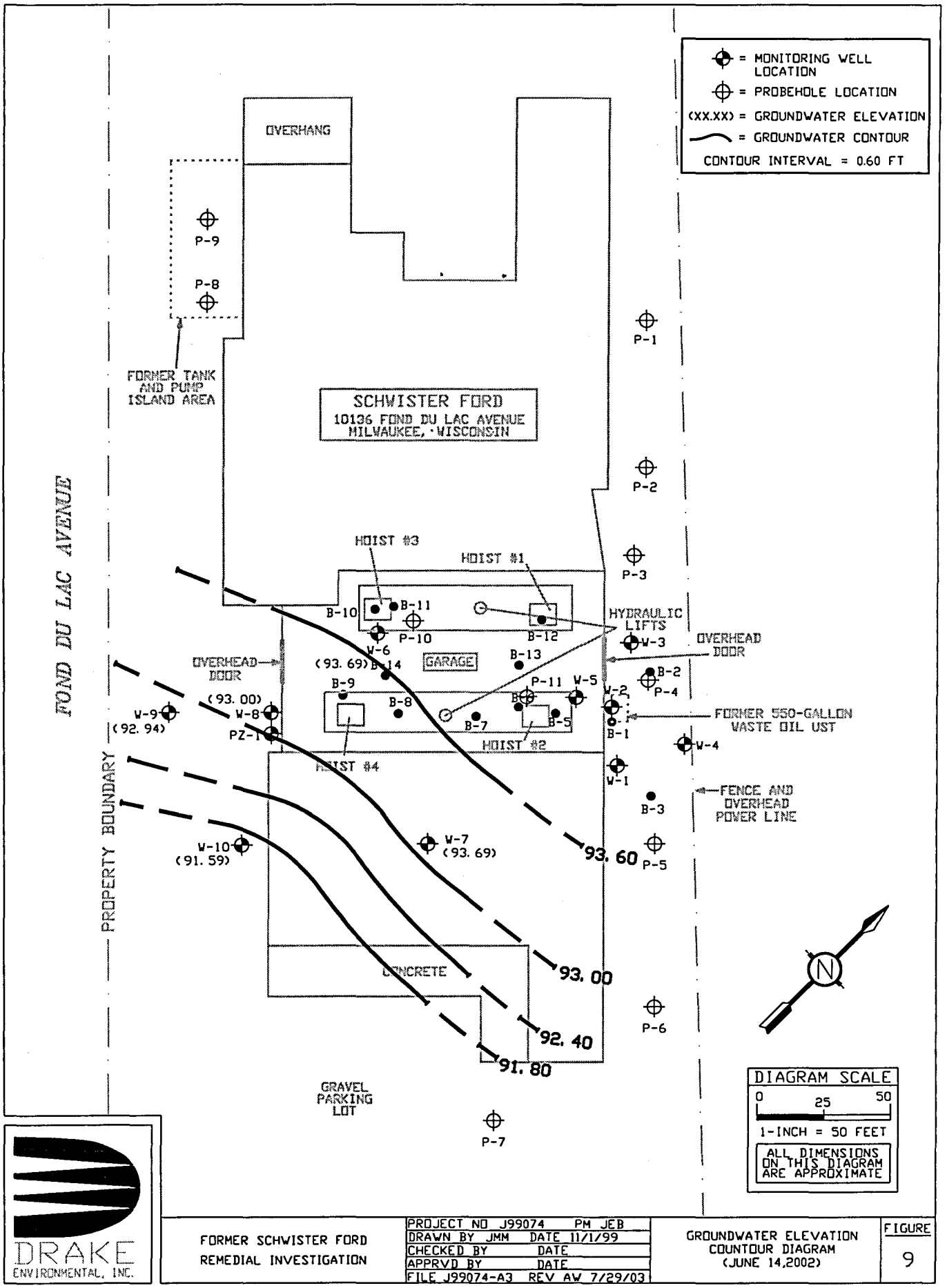
DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO J99074	PM JEB
DRAWN BY JMM	DATE 11/1/99
CHECKED BY	DATE
APPRVD BY	DATE
FILE J99074H REV RV 11/27/00	

GROUNDWATER ELEVATION CONTOUR DIAGRAM (MARCH 16, 2000)

FIGURE 6



DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO J99074	PM JEB
DRAWN BY JMM	DATE 11/1/99
CHECKED BY	DATE
APPRVD BY	DATE
FILE J99074-A3	REV AW 7/29/03

GROUNDWATER ELEVATION
COUNTOUR DIAGRAM
(JUNE 14,2002)

FIGURE
9

TABLE 5
RI Soil Sample Analytical Results
Former Schwister Ford Property

Sample No.	B-1:6-8	B-2:6-8	B-2:8-10	B-3:6-8	B-4:5-10	B-5:5-10	B-6:0-5	B-7:5-10	B-8:6-8	B-8:12-14	NR 720 Standard
DRO (ppm)	<5.8	**230**	NA	<5.6	7.1	<5.9	33	<5.7	**550**	<5.4	100
*VOCs (ppb)											
Benzene	<25	<25	NA	<25	<25	<25	**54**	<25	<25	<25	*5.5*
Bromobenzene	NA	1,800	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Bromodichloromethane	NA	550	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
n-butylbenzene	NA	570	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
sec-butylbenzene	NA	550	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
tert-butylbenzene	NA	570	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Carbon tetrachloride	NA	890	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Chlorobenzene	NA	710	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Chloromethane	NA	170	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
4-chlorotoluene	NA	660	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
1,2-dibromo-3-chloropropane	NA	750	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
1,2-dichlorobenzene	NA	580	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
1,3-dichlorobenzene	NA	640	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
1,4-dichlorobenzene	NA	670	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
1,1-dichloroethene	NA	2,100	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Ethylbenzene	<25	600	NA	<25	<25	<25	97	<25	470	<25	*2,900*
Isopropylbenzene	NA	580	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
p-isopropyltoluene	NA	740	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Methyl tert-butyl ether	<25	<25	NA	<25	<25	<25	<25	<25	<25	38	*NS*
Methylene chloride	NA	2,900	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Naphthalene	NA	690	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
n-propylbenzene	NA	520	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Toluene	<25	<25	NA	<25	<25	<25	110	<25	94	<25	*1,500*
1,2,4-triclorobenzene	NA	650	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
1,1,1-trichloroethane	NA	1,100	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Total trimethylbenzenes	<50	910	NA	39	<50	<50	1,671	<50	6,400	<50	*NS*
Total Xylenes	<25	1,700	NA	<25	<25	<25	260	<25	530	<25	*4,100*
Total lead	<6.7	3.8	21	5.4	34	9.2	NA	NA	5.3	NA	*50*
Total cadmium	NA	<0.58	NA	NA	<0.59	NA	NA	NA	NA	NA	*8*

*Only the detected VOCs are listed.

Note: Concentrations in bold type are above the WAC Chapter NR 720 RCLs.

Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Laboratory Data Tables" provided at the beginning of this appendix.

TABLE 4
Advent Phase II and Drake Hoist Removal Soil Sample Analytical Results
Former Schwister Ford Property
Milwaukee, Wisconsin

Sample No.	Sample Depth (ft.)	PID Reading (iu)	DRO (ppm)	Benzene (ppb)	Ethyl-benzene (ppb)	MTBE (ppb)	Toluene (ppb)	Total TMBs (ppb)	Total xylenes (ppb)	Total Lead (ppm)
SB-1A	6-8	40	**3,800**	<25	1,900	<25	48	4,200	610	**520**
SB-2A	10-12	0	94	<25	<25	<25	<25	<50	<25	NA
SB-3A	8-10	0	21	<25	<25	<25	<25	<50	<25	NA
SB-5A	6-8	0	<5.6	NA	NA	NA	NA	NA	NA	NA
SB-6A	6-8	2	**11,000**	<25	<25	<25	<25	<50	<25	NA
SB-7A	8-10	0	<5.9	NA	NA	NA	NA	NA	NA	NA
SB-8A	8-10	0	93	NA	NA	NA	NA	NA	NA	NA
SB-9A	6-8	3	**5,000**	<25	30	<25	<25	128	84	NA
SB-10A	4-6	7	**5,500**	<25	610	<25	330	5,700	3,300	NA
SB-11A	6-8	0	<5.7	NA	NA	NA	NA	NA	NA	NA
SB-12A	0-2	18	**3,400**	<25	69	<25	29	18,900	2,000	NA
SB-12B	6-8	3	**1,100**	<25	<25	<25	<25	440	44	NA
SB-13A	4-6	0	10	<25	<25	<25	<25	<50	<25	NA
SB-14A	2-4	0	**230**	<25	<25	<25	<25	<50	<25	NA
EX-1	6	10	**2,540**	NA	NA	NA	NA	NA	NA	NA
EX-2	6	20	**18,100**	NA	NA	NA	NA	NA	NA	NA
EX-11	6	<1	100	NA	NA	NA	NA	NA	NA	NA
EX-14	6	5	**205**	NA	NA	NA	NA	NA	NA	NA
EX-20	6	<1	<6.14	NA	NA	NA	NA	NA	NA	NA
Generic RCL	—	—	*100*	*5.5*	*2,900*	*NS*	*1,500*	*NS*	*4,100*	*50*

Note: Concentrations in bold type exceed their DNR NR 720 generic RCLs.

Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Laboratory Data Tables" provided at the beginning of this appendix.

TABLE 2 (Page 1 of 1)
Additional RI Soil Analytical Results
Former Schwister Ford Property
Milwaukee, Wisconsin

Well ID	Sampling Date	PID (iu)	1,1-DCA (ppb)	1,2-DCA (ppb)	1,1-DCE (ppb)	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	1,1,1-TCA (ppb)	TCE (ppb)	Vinyl Chloride (ppb)
B-9:6-8	5/20/02	<1	<25	<25	<25	<25	<25	<25	<25	<25
B-9:12-14	5/20/02	1.3	<25	<25	<25	<25	<25	<25	104	<25
B-10:4-6	5/20/02	<1	<25	<25	<25	<25	<25	<25	<25	<25
Generic RCL	-	-	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	NS

Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Data Tables"

TABLE 1 (Page 1 of 2)
Phase II Soil Analytical Results
Former Schwister Ford Property
Milwaukee, Wisconsin

Sample No.	P-1:S-2	P-2:S-3	P-3:S-4	P-4:S-1	P-5:S-1	P-6:S-2	P-7:S-1	P-8:S-3	NR 720 Standard
Sample Depth (ft.)	3-5	5-7	7-9	1-3	1-3	3-5	1-3	5-7	
PID Readings (iu)	<1	<1	<1	42	24	2	15	754	
Parameter									
GRO (ppm)	NS	NS	NS	NS	NS	NS	NS	640	100
DRO (ppm)	<6.2	<6.4	20	120	9.2	12	32	100	100
VOCs (ppb)									
Benzene	<25	<25	<25	<25	<25	<25	<25	1,700	5.5
n-Butlybenzene	<25	<25	<25	380	<25	<25	<25	11,000	NS
1,2-Dichloroethane	<25	<25	<25	<25	170	<25	<25	<25	4.9
Ethyl benzene	<25	<25	<25	120	<25	<25	<25	17,000	2900
Isopropyl benzene	<25	<25	<25	130	<25	<25	<25	3,200	NS
Naphthalene	<25	<25	<25	<25	<25	<25	37	4,900	NS
n-Propylbenzene	<25	<25	<25	220	<25	<25	<25	4,400	NS
Tetra chloroethene	<25	<25	<25	71	<25	140	36	<625	NS
Toluene	91	<25	<25	69	<25	51	110	1,800	1500
Trichloroethene	<25	<25	<25	160	<25	31	43	<625	NS
1,2,4-Trimethylbenzene	60	<25	<25	62	<25	<25	31	26,000	NS
1,3,5-Trimethylbenzene	<25	<25	<25	88	<25	<25	<25	8,600	NS
Total xylenes	160	<25	<25	170	<25	46	97	56,000	4100

ppb = parts per billion or micrograms per kilogram
ppm = parts per million of milligrams per kilogram
NA = not analyzed
NS = no established standard
iu = instrument units

TABLE 1 (Page 2 of 2)
Phase II Soil Analytical Results
Former Schwister Ford Property
Milwaukee, Wisconsin

Sample No.	P-9:S-3	P-10:S-3	P-11:S-2	NR 720 Standard
Sample Depth (ft.)	5-7	5-7	3-5	
PID Readings (iu)	639	3	<1	
Parameter				
GRO (ppm)	**1,400**	NS	NA	100
DRO (ppm)	**280**	<5.8	<5.2	100
VOCs (ppb)				
Benzene	**8,500**	NA	NA	5.5
n-Butlybenzene	28,000	NA	NA	NS
1,2-Dichloroethane	<25	NA	NA	4.9
Ethyl benzene	**28,000**	NA	NA	2900
Isopropyl benzene	3,000	NA	NA	NS
Naphthalene	13,000	NA	NA	NS
n-Propylbenzene	11,000	NA	NA	NS
Tetra chloroethene	<1,300	NA	NA	NS
Toluene	**69,000**	NA	NA	1500
Trichloroethene	<1,300	NA	NA	NS
1,2,4-Trimethylbenzene	77,000	NA	NA	NS
1,3,5-Trimethylbenzene	25,000	NA	NA	NS
Total xylenes	**160,000**	NA	NA	4100

ppb = parts per billion or micrograms per kilogram
ppm = parts per million of milligrams per kilogram
NA = not analyzed
NS = no established standard
iu = instrument units

TABLE 4 (Page 1 of 2)
Groundwater Analytical Results
Former Schwister Ford Property
Milwaukee, Wisconsin

(Compounds not listed have never been detected above their respective PAL)

Well ID	Sampling Date	Benzene (ppb)	1,2-DCA (ppb)	1,1-DCE (ppb)	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	1,1,1-TCA (ppb)	TCE (ppb)	Vinyl Chloride (ppb)	Ethene (ppb)
W-1	12/8/99	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.17	NA
	6/14/02	This well was not sampled during this event.								
W-2	12/8/99	<0.50	<0.50	0.89	26.00	<0.50	0.81	**5.20**	**17**	NA
	3/16/00	2.8	<0.50	<0.50	<0.50	<0.50	<0.50	0.946	<0.17	NA
	6/21/00	1.26	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.17	NA
	9/14/00	1.89	NA	NA	NA	NA	NA	<0.50	NA	NA
	6/14/02	This well was not sampled during this event.								
W-3	12/8/99	<0.50	<0.50	<0.50	0.89	<0.50	<0.50	**5.60**	<0.17	NA
	3/16/00	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.81	<0.17	NA
	6/21/00	<0.50	<0.50	<0.50	1.14	<0.50	<0.50	3.20	<0.17	NA
	9/14/00	<0.50	NA	NA	NA	NA	NA	4.63	NA	NA
	6/14/02	This well was not sampled during this event.								
W-4	12/8/99	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.10	<0.17	NA
	6/14/02	This well was not sampled during this event.								
W-5	12/8/99	<0.50	<0.50	<0.50	<0.50	<0.50	2.40	<0.50	<0.17	NA
	6/14/02	This well was not sampled during this event.								
ES (ppb)	-	*5*	*5*	*7*	*70*	*100*	*200*	*5*	*0.2*	*NS*
PAL (ppb)	-	*0.5*	*0.5*	*0.7*	*7*	*200*	*40*	*0.5*	*0.02*	*NS*

Note: Concentrations which exceed their respective WAC Chapter NR 140 ESs are in bold type.
Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Data Tables"

TABLE 4 (Page 2 of 2)
Groundwater Analytical Results
Former Schwister Ford Property
Milwaukee, Wisconsin
(Compounds not listed have never been detected above their respective PAL)

Well ID	Sampling Date	Benzene (ppb)	1,2-DCA (ppb)	1,1-DCE (ppb)	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	1,1,1-TCA (ppb)	TCE (ppb)	Vinyl Chloride (ppb)	Ethene (ppb)
W-6	12/8/99	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.17	NA
	6/14/02	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.905	<0.17	<1.00
W-7	12/8/99	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.17	NA
	6/14/02	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.17	<1.00
W-8	12/8/99	<250	<250	<250	**7,200**	<250	<250	**1,000**	**2,200**	NA
	3/16/00	**22.1**	**64.7**	**64.7**	**754**	60.5	<0.50	**226**	**660**	NA
	6/21/00	**14.7**	**5.65**	**32.5**	**1,940**	25.0	<0.50	**428**	**591**	NA
	9/14/00	**16.0**	<0.50	**24.20**	**1,490**	24.3	<0.50	**303**	**476**	NA
	6/14/02	**10.7**	<5.00	**7.55**	384	11.1	<5.00	**55.9**	**174**	20.6
W-9	6/14/02	<0.50	<0.50	<0.50	0.756	<0.50	<0.50	**6.55**	<0.17	<1.00
W-10	6/14/02	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**10.1**	<0.17	<1.00
PZ-1	6/14/02	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.17	<1.00
ES (ppb)	-	*5*	*5*	*7*	*70*	*100*	*200*	*5*	*0.2*	*NS*
PAL (ppb)	-	*0.5*	*0.5*	*0.7*	*7*	*200*	*40*	*0.5*	*0.02*	*NS*

Note: Concentrations which exceed their respective WAC Chapter NR 140 ESs are in bold type.
Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Data Tables"

TABLE 5 (Page 1 of 2)
Natural Attenuation Indicator Parameter Data
Former Schwister Ford Property
Milwaukee, Wisconsin

Well ID	Sampling Date	Nitrate (ppm)	Sulfate (ppm)	Alkalinity (ppb)	Dissolved Manganese (ppm)	Dissolved Methane (ppb)	*DO (ppm)	*ORP (mV)	*Dissolved Iron (ppm)	*pH (su)	*Conductivity (umhos/cm)	*Temperature (°C)
W-1	12/8/99	4.2	140	310	0.78	<24	9.36	308	0	7.06	1,200	10.21
	3/16/00	15.0	104	360	<0.05	9.10	1.84	292	0	7.35	1,514	9.60
	6/21/00	9.91	132	263	<0.05	NA	1.80	274	<1	7.58	1,159	13.30
	9/14/00	13.4	114	389	<0.05	NA	2.03	249	0	7.60	1,502	16.02
W-2	12/8/99	8.5	57	370	0.22	<24	11.30	324	0	**8.00**	**1,000**	10.99
	3/16/00	1.94	141	606	0.891	1,010	2.79	272	0	7.13	1,391	9.59
	6/21/00	<0.05	81.4	514	1.44	NA	2.44	219	<1	7.09	1,205	14.02
	9/14/00	0.205	31.5	514	0.889	NA	1.95	208	0.1	7.25	1,229	17.33
W-3	12/8/99	2.2	56	190	0.36	<24	10.35	292	0	**8.59**	1,200	10.22
	3/16/00	2.35	115	346	0.138	<7.20	1.84	292	0	7.35	1,514	9.60
	6/21/00	1.04	65.9	338	<0.05	NA	3.08	264	<1	7.61	1,059	15.54
	9/14/00	1.38	48.8	393	<0.05	NA	1.47	243	0	7.64	1,154	16.57
W-4	12/8/99	8.40	140	340	0.62	<24	10.42	324	0	8.06	1,200	10.18
	3/16/00	13.30	192	700	0.14	<7.20	3.61	287	0	7.43	1,579	8.13
	6/21/00	16.20	235	332	0.211	NA	1.96	272	<1	7.43	1,602	12.80
	9/14/00	4.93	130	392	<0.05	NA	3.39	249	0	7.57	1,414	17.68
W-5	12/8/99	18	64	410	0.5	<24	1.39	336	0	7.70	1,100	11.97
	3/16/00	14.9	76.8	1,060	0.247	<7.20	1.41	292	0	6.94	1,654	13.05
	6/21/00	18.3	83.5	890	0.185	NA	1.69	333	<1	7.10	1,614	16.79
	9/14/00	11.1	53.0	316	0.292	NA	0.81	333	0	7.38	1,156	18.35

*indicates a field measurement.

Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Data Tables"

TABLE 5 (Page 2 of 2)
Natural Attenuation Indicator Parameter Data
Former Schwister Ford Property
Milwaukee, Wisconsin

Well ID	Sampling Date	Nitrate (ppm)	Sulfate (ppm)	Alkalinity (ppb)	Dissolved Manganese (ppm)	Dissolved Methane (ppb)	*DO (ppm)	*ORP (mV)	*Dissolved Iron (ppm)	*pH (su)	*Conductivity (umhos/cm)	*Temperature (°C)
W-6	12/8/99	0.11	41	280	1.4	<24	9.15	342	0	7.33	1,000	12.59
	3/16/00	0.079	22.2	1,640	0.406	7.90	0.95	282	0	7.06	793	15.68
	6/21/00	0.485	40.6	400	0.239	NA	1.29	285	<1	7.41	876	17.19
	9/14/00	0.555	23.1	390	0.153	41	13.20	283	0	7.47	893	18.49
	6/14/02	NA	NA	NA	NA	NA	4.31	347	NM	7.77	774	16.29
W-7	12/8/99	15	150	370	0.60	<24	9.46	344	0	**7.52**	**1,100**	11.76
	3/16/00	NA	NA	NA	0.658	7.90	1.47	304	0	6.76	1,836	14.69
	6/21/00	21.1	181	414	0.295	NA	2.39	289	<1	7.11	1,850	17.04
	9/14/00	18.2	168	500	0.133	<7.1	1.30	268	0	7.28	1,873	17.85
	6/14/02	NA	NA	NA	NA	NA	3.15	354	NM	7.77	1,584	14.70
W-8	12/8/99	0.17	36	480	1.50	1,560	10.59	323	0	**7.75**	1,100	12.48
	3/16/00	<0.05	47.1	572	1.21	850	3.00	291	0	6.95	1,890	11.77
	6/21/00	<0.05	49.5	510	1.45	NA	2.89	268	<1	7.14	1,663	15.32
	9/14/00	<0.05	14.7	490	1.38	536	1.30	218	0	7.25	1,725	17.21
	6/14/02	NA	NA	NA	NA	NA	3.85	319	NM	7.80	1,282	13.60
W-9	5/20/02	This well was installed on May 20, 2002.										
	6/14/02	NA	NA	NA	NA	NA	4.70	341	NM	7.76	1,651	12.61
W-10	5/20/02	This well was installed on May 20, 2002.										
	6/14/02	NA	NA	NA	NA	NA	6.23	339	NM	7.86	2,027	13.32
PZ-1	5/20/02	This well was installed on May 20, 2002.										
	6/14/02	NA	NA	NA	NA	NA	4.04	313	NM	8.63	870	13.77

*indicates a field measurement.

Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Data Tables"

TABLE 3 (Page 1 of 2)
Groundwater Elevations
Former Schwister Ford Property
Milwaukee, Wisconsin

Well Number	Date	*Total Well Depth	Ground Surface Elevation	Top of Casing Elevation	*Depth to Water Below Casing	Depth to Water Below Ground	Groundwater Elevation
W-1	12/8/99	14.15	99.23	98.88	8.37	8.72	**90.51**
	3/16/00				7.53	7.88	**91.35**
	6/21/00				6.18	6.53	**92.70**
	7/7/00				NM	NM	**NM**
	9/14/00				5.38	5.73	**93.50**
	6/14/02				NM	NM	**NM**
W-2	12/8/99	12.92	99.50	99.02	7.22	7.70	**91.80**
	3/16/00				6.59	7.07	**92.43**
	6/21/00				5.68	6.16	**93.34**
	7/7/00				NM	NM	**NM**
	9/14/00				4.83	5.31	**94.19**
	6/14/02				NM	NM	**NM**
W-3	12/8/99	12.93	99.49	99.14	7.55	7.90	**91.59**
	3/16/00				6.79	7.14	**92.35**
	6/21/00				5.65	6.00	**93.49**
	7/7/00				NM	NM	**NM**
	9/14/00				4.70	5.05	**94.44**
	6/14/02				NM	NM	**NM**
W-4	12/8/99	13.08	99.09	98.65	7.88	8.32	**90.77**
	3/16/00				6.93	7.37	**91.72**
	6/21/00				5.86	6.30	**92.79**
	7/7/00				6.01	6.45	**92.64**
	9/14/00				4.32	4.76	**94.33**
	6/14/02				NM	NM	**NM**
W-5	12/8/99	12.97	100.13	99.49	7.65	8.29	**91.84**
	3/16/00				7.06	7.70	**92.43**
	6/21/00				5.79	6.43	**93.70**
	7/7/00				NM	NM	**NM**
	9/14/00				5.32	5.96	**94.17**
	6/14/02				NM	NM	**NM**

*Measured from the north rim of the top of well casing.
All measurements are presented in feet.
Benchmark: Elevations referenced to a benchmark assigned an arbitrary elevation of 100.00 feet.
Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Data Tables"

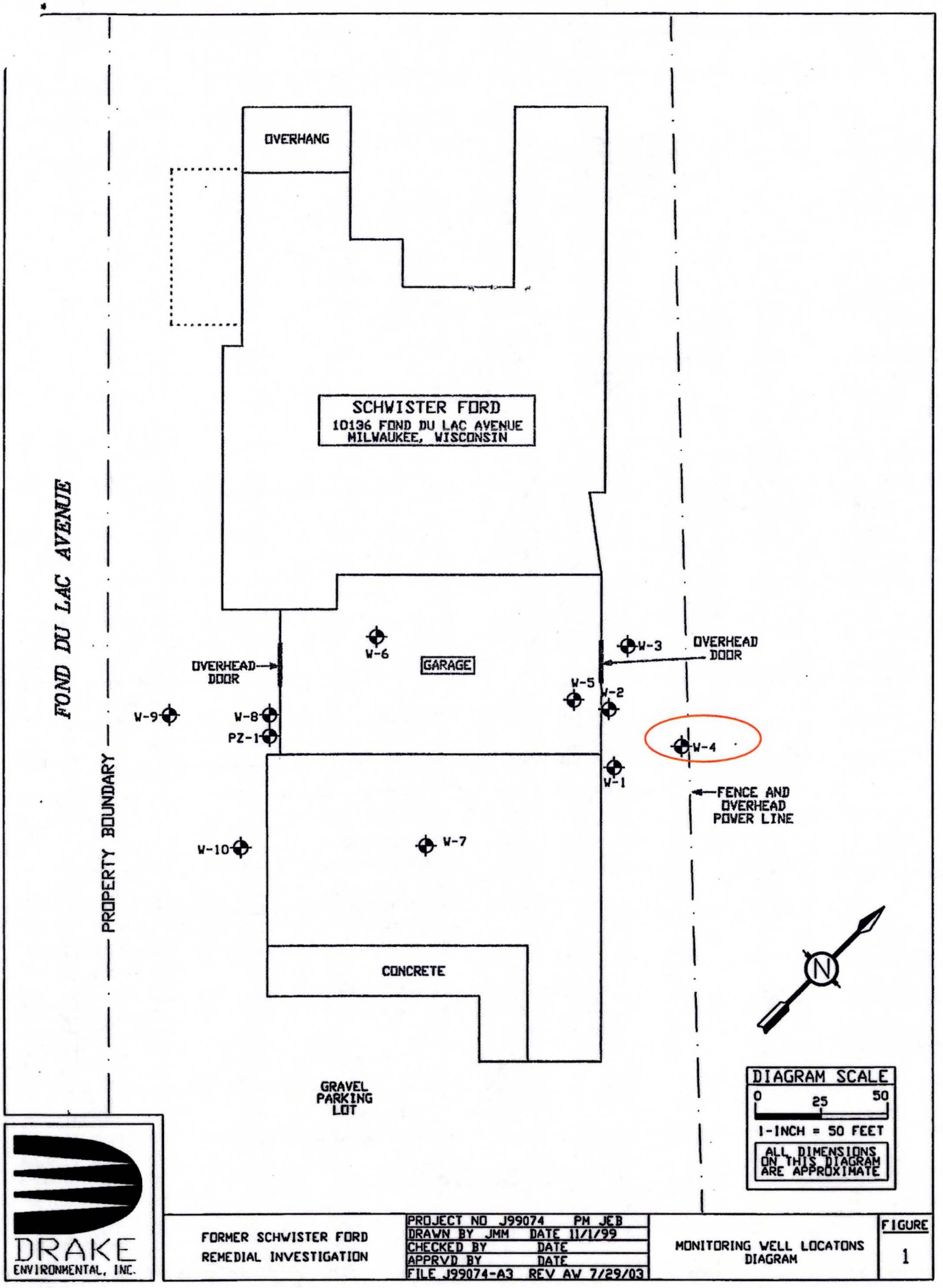
TABLE 3 (Page 2 of 2)
Groundwater Elevations
Former Schwister Ford Property
Milwaukee, Wisconsin

Well Number	Date	*Total Well Depth	Ground Surface Elevation	Top of Casing Elevation	*Depth to Water Below Casing	Depth to Water Below Ground	Groundwater Elevation
W-6	12/8/99	13.68	100.08	99.80	8.06	8.34	**91.74**
	3/16/00				7.53	7.81	**92.27**
	6/21/00				5.99	6.27	**93.81**
	7/7/00				5.83	6.11	**93.97**
	9/14/00				5.40	5.68	**94.40**
	6/14/02				6.11	6.39	**93.69**
W-7	12/8/99	13.79	100.15	99.76	9.05	9.44	**90.71**
	3/16/00				8.26	8.65	**91.50**
	6/21/00				6.74	7.13	**93.02**
	7/7/00				7.03	7.42	**92.73**
	9/14/00				6.97	7.36	**92.79**
	6/14/02				6.51	6.90	**93.25**
W-8	12/8/99	14.25	99.95	99.67	8.36	8.64	**91.31**
	3/16/00				7.81	8.09	**91.86**
	6/21/00				6.60	6.88	**93.07**
	7/7/00				6.82	7.10	**92.85**
	9/14/00				6.67	6.95	**93.00**
	6/14/02				6.67	6.95	**93.00**
W-9	5/20/02	This well was installed on 5-20-02.					
	6/14/02	15.34	99.21	98.87	5.93	6.27	**92.94**
W-10	5/20/02	This well was installed on 5-20-02.					
	6/14/02	15.35	99.37	98.71	7.12	7.78	**91.59**
PZ-1	5/20/02	This well was installed on 5-20-02.					
	6/14/02	28.60	99.83	99.39	12.73	13.17	**86.66**

Sampling Date	Groundwater Flow Direction	Average Horizontal Hydraulic Gradient
12/8/99	east-southeast	0.015
3/16/00	southeast	0.010
6/21/00	southeast	0.011
7/7/00	southeast	0.016
9/14/00	south-southeast	0.024
6/14/02	south-southeast	0.023

*Measured from the north rim of the top of well casing.
All measurements are presented in feet.
Benchmark: Elevations referenced to a benchmark assigned an arbitrary elevation of 100.00 feet.
Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Data Tables"

IMPROPERLY ABANDONED
MONITORING WELL



DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD REMEDIAL INVESTIGATION	PROJECT NO J99074 PM JEB DRAWN BY JMM DATE 11/1/99 CHECKED BY DATE APPRVD BY DATE FILE J99074-A3 REV AW 7/29/03	MONITORING WELL LOCATONS DIAGRAM	FIGURE 1

IMPROPERLY ABANDONED MONITORING WELL

to: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☐ _____

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: SPENCER SCHWISPER FORD	Local Grid Location of Well: _____ ft ☐N ☐S _____ ft ☐E ☐W	Well Name: W-4
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No.: JP069 / DNR Well ID No.: ____
Facility ID: 241143100	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 12/02/1999 (m m d d y y y y)
Type of Well: Well Code ____/____	Section Location of Waste/Source: NE 1/4 of SW 1/4 of Sec. 20 T. 8 N, R. 21 ☒E ☐W	Well Installed By: Name (first, last) and Firm: CHUCK - WISCONSIN SOIL TESTING
Distance from Waste/Source: 30 ft.	Enf. Stds. Apply ☒	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known
		Gov. Lot Number: ____

Protective pipe, top elevation _____ ft. MSL

Well casing, top elevation _____ ft. MSL

Land surface elevation _____ ft. MSL

Surface seal, bottom _____ ft. MSL or 0.5 ft.

2. USCS classification of soil near screen:
GP ☒ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☐ CL ☒ CH ☐
Bedrock ☐

3. Sieve analysis performed? ☐ Yes ☒ No

4. Drilling method used: Rotary ☐ 50 Hollow Stem Auger ☒ 41 Other ☐ ____

5. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☐ 03 None ☒ 99

6. Drilling additives used? ☐ Yes ☒ No

Describe NA

7. Source of water (attach analysis, if required):
NA

Bentonite seal, top _____ ft. MSL or 0.5 ft.

Fine sand, top _____ ft. MSL or ____ ft.

Filter pack, top _____ ft. MSL or 2.5 ft.

Screen joint, top _____ ft. MSL or 3.08 ft.

Well bottom _____ ft. MSL or 13.08 ft.

Filter pack, bottom _____ ft. MSL or 13.5 ft.

Borehole, bottom _____ ft. MSL or 13.5 ft.

Borehole, diameter 8.0 in.

O.D. well casing 2.38 in.

I.D. well casing 2.00 in.

1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 9.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04 Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 30 Concrete ☒ 01 Other ☐ ____

4. Material between well casing and protective pipe: Bentonite ☒ 30 Other ☐ ____
BENTONITE W/ SOIL CAP

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight ... Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight ..... Bentonite slurry ☐ 31
d. ____ % Bentonite ..... Bentonite-cement grout ☐ 50
e. ____ ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☒ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. _____ Other ☐ ____

7. Fine sand material: Manufacturer, product name & mesh size
a. ____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. RED FLINT SAND & GRAVEL #30
b. Volume added _____ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 Other ☐ ____

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ ____
b. Manufacturer _____
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.

11. Backfill material (below filter pack): None ☒ 14 Other ☐ ____

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

Signature: _____ Firm: DRAKE ENVIRONMENTAL, INC.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Wisconsin Department of Commerce
Environmental and Regulatory Services Division

Bureau of PECFA
Site Review Section

COMMERCE
CASE SUMMARY AND CLOSE OUT

Personal information you provide may be used for secondary purposes [Privacy Act, s. 15.04(1)(M)].

SEE INSTRUCTIONS

RECEIVED Date Received (office use only)
JAN 1 0 2001
ERS DIVISION
MILWAUKEE

A. COMMERCE NUMBER: 53224-5199-36

DNR BRRTS NUMBER (optional): 02-41-231844

B. Responsible Party or Owner Name	C. Responsible Party or Owner Phone Number
HENRY J. SCHWISTER REVOCABLE TRUST C/O MR. WILLIAM SCHWISTER	HENRY J. SCHWISTER REVOCABLE TRUST C/O MR. WILLIAM SCHWISTER (262) 644-1319
D. Responsible Party or Owner Address, City, State and Zip Code	**E. Remedial Action Site Name, Address, City and Zip Code**
4832 HIGHLAND PARK DRIVE SLINGER, WI 53086	FORMER SCHWISTER FORD PROPERTY 10136 W. FOND DU LAC AVE. MILWAUKEE, WI 53224

Enforcement Actions or Permits Closed Out? NA Y ____ N Contaminant Type(s): ____

Quantity Released: UNKNOWN Potential Receptors: GROUNDWATER

Status of water supply wells within 1200 feet of the site?
GROUNDWATER PLUME CONTAINED ON SITE AND WILL NOT LIKELY MIGRATE OFF SITE. NO PROPERTIES ARE LOCATED ADJACENT TO THE SITE IN THE DOWNGRADIENT DIRECTION. THEREFORE, THERE ARE THREATS TO ANY POTABLE WELLS. SITE AND VICINITY SERVICED BY MUNICIPAL WAT

♦ SOIL

Soil Type SP (FILL TO 5') CL-ML (TO AT LEAST 14') Depth to Bedrock ~300 feet

Site Specific Soil Standards (NR 720.19)? ___Y X N, Final Confirmation Sampling Method: —

Remedial Action Taken: 6a NATURAL ATTENUATION Were Soils Excavated? ___Y X N Quantity: — Tons

Treatment/Disposal Method: — Treatment/Disposal Location: —

♦ GROUNDWATER (if applicable)

Groundwater Encountered? X Y ___N Monitoring Well(s) Installed? X Y ___N

Depth to Groundwater & Flow Direction: 5-9 FEET SOUTHEAST, Perched Water? ___Y X N Depth: — feet

Preventive Action Limit exceeded? X Y ___N ___ (If yes, location) W-2, W-3, W-4 (12-99), W-8

Enforcement Standard exceeded? X Y ___N ___ (If yes, location) W-8

Environmental Consultant Name and Phone Number	Environmental Consultant Address, City, State and Zip Code
DRAKE ENVIRONMENTAL, INC. ATTN: MR. JASON BARTLEY (414) 351-1440	6980 N. TELTONIA AVE. MILWAUKEE, WI 53209

I, the environmental consultant certify with my signature that the information presented is true and accurate and recommend that no further action be required at this site.

Consultant Signature _____ Date Signed 11-14-00

State of Wisconsin
Department of
Natural Resources

OPERATION, MAINTENANCE, MONITORING AND OPTIMIZATION REPORTING OF SOIL AND GROUNDWATER REMEDIATION SYSTEMS

PURPOSE AND APPLICABILITY OF THIS FORM: Completion of this form is required under s. NR 724.13(e), Wis. Adm. Code. Use of this form is mandatory. Failure to submit this form as require is a violation of s. NR 724.13, Wis. Adm. Code, and is subject to the penalties in s. 144.99, Wis. Stats. This form must be submitted every six months for active soil and groundwater remediation projects and every twelve months for passive (natural attenuation) remediation projects that are regulated under the NR 700 series of Wis. Adm. Code. Specifically, for sites meeting any of the following criteria:

- Soil or groundwater remediation projects that report progress in accordance with s. NR 700.11(1), Wis. Adm. Code.
- Soil or groundwater remediation projects that report progress in accordance with s. NR 724.13(3), Wis. Adm. Code. (Note: s. NR 724.13(3) requires progress reports for operation and maintenance of active systems to be submitted every three months however the Department considers submittal of this form every six months to satisfy the requirements of the rules, unless otherwise directed by the Department on a site specific basis.)
- Soil or groundwater remediation projects that report progress in accordance with s. NR 724.17(3), Wis. Adm. Code. (Note: s. NR 724.17(3) requires progress reports every time that samples are collected however the Department considers submittal of this form every twelve months to satisfy the requirements of the rules for monitoring natural attenuation, unless otherwise directed by the Department on a site specific basis.)

Submittal of this form is not a substitute for reporting required by Department programs such as Wastewater or Air Management. Personally identifiable information on this form is not intended to be used for any other purpose then tracking progress of the remediation by the Bureau for Remediation and Redevelopment.

Please refer to the instructions that are attached to the back of these forms starting on page INS-1. In all cases, when asked to "explain," those explanations are to be included on separate sheets of paper. Explanations must include a title that refers to the page and item number, for example: Page GI-2, C.1.a.

A. GENERAL INFORMATION:

1. Site name: FORMER SCHWISTER FORD
2. Reporting period from: 12-99 To: 12-00 Days in period: 365
3. Regulatory agency (enter DNR, DCOM, DATCP and/or other): WI DEPARTMENT OF COMMERCE
4. DNR issued site number: DNR FID # 241143100
5. State reimbursement fund claim number and fund name (if not applicable, enter NA): PECFA # 53224-5199-36-B
6. Site location:
   a. DNR region and county: DNR SOUTHEAST DISTRICT MILWAUKEE COUNTY
   b. Street address and municipality: 10136 W. FOND DU LAC AVE., MILWAUKEE
   c. Township, range, section and quarter quarter section: NE 1/4, SW 1/4, SEC 20, T8N., R21E.
7. Responsible party:
   a. Name: HENRY J. SCHWISTER REVOCABLE TRUST C/O MR. BILL SCHWISTER
   b. Mailing address: 4832 HIGHLAND PARK DR.
      SLINGER, WI 53086
   c. Phone number: (262) 644-1319
8. Consultant:
   a. Company name: DRAKE ENVIRONMENTAL, INC.
   b. Mailing address: 6980 N. TENTONIA AVE.
      MILWAUKEE, WI 53209
   c. Phone number: (414) 351-1440
9. Contaminants: DRO, BENZENE, 1,2-DCA, 1,1-DCE, CIS-1,2-DCE, TRANS-1,2-DCE, TCE, VINYL CHLORIDE
10. Soil types (USCS or USDA): ML, CL, SW
11. Hydraulic conductivity (cm/sec): 6.76×10^{-6} cm/sec 12. Average linear velocity of groundwater (ft/yr): 7.04 ft/yr

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: FORMER SCHWISTER FORD

Reporting period from: 12-99 To: 12-00 Days in period: 365

A. GENERAL INFORMATION (CONTINUED):

13. If soil is treated ex situ, is the treatment location off site? (Y/N) If yes, give location:

a. DNR region and county: NA

b. Township, range, section and quarter quarter section: NA

B. REMEDIATION METHOD: Only submit pages that apply to an individual site. Check all that apply:

- ____ Groundwater extraction (submit a completed page GW-1).
- ____ Free product recovery (submit a completed page GW-1).
- ____ In situ air sparging (submit a completed page GW-2).
- X Groundwater natural attenuation (submit a completed page GW-3).
- ____ Other groundwater remediation method (submit a completed page GW-4).
- ____ Soil venting (including soil vapor extraction and bioventing, submit a completed page IS-1).
- ____ Soil natural attenuation (submit a completed page IS-2).
- ____ Other in situ soil remediation method (submit a completed page IS-3).
- ____ Biopiles (submit a completed page ES-1).
- ____ Landspreading/thinspreading of petroleum contaminated soil (submit a completed page ES-2).
- ____ Other ex situ soil remediation method (submit a completed page ES-3).

C. GENERAL EFFECTIVENESS EVALUATION FOR ALL ACTIVE SYSTEMS: If the remediation is active (not natural attenuation), complete this subsection.

1. Is the system operating at design rates and specifications? (Y/N): NA
   If the answer is no, explain whether or not modifications are necessary to achieve the goal that was previously established in design.
2. Are modifications to the system warranted to improve effectiveness? (Y/N) If yes, explain: NA
3. Is natural attenuation an effective low cost option at this time? (Y/N): YES
4. Is closure sampling warranted at this time? (Y/N): NA
5. Are there any modifications that can be made to the remediation to improve cost effectiveness? (Y/N) If yes, explain: NA

D. ECONOMIC AND COST DATA TO DATE: $26,380.60

1. Total investigation costs ($):
2. Implementation costs (design, capital and installation costs, excluding investigation costs) ($): 8164.00
3. Total costs during the previous reporting period ($): 0
4. Total costs during this reporting period ($): ~ $8,000
5. Total anticipated costs for the next reporting period ($): 0
6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above? (Y/N) If yes explain: YES
   CLOSURE REQUEST / REMEDIAL INVESTIGATION REPORT
7. If close out is anticipated within 12 months, estimated costs for project closeout ($): 5,000

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: FORMER SCHWISTER FORD

Reporting period from: 12-99 To: 12-00 Days in period: 365

E. NAME(S), SIGNATURE(S) AND DATE OF PERSON(S) SUBMITTING FORM: Legibly print name, date and sign. Only persons qualified to submit reports under ch. NR 712 Wis. Adm. Code are to sign this form.

Registered Professional Engineers:

I (print name) RICHARD. W. FRIESEKE, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature, title, P.E. number and date: _____

Hydrogeologists:

I (print name) JASON E. BARTLEY, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature, title and date: _____

Scientists:

I (print name) _____, hereby certify that I am a scientist as that term is defined in s. NR 712.03(3), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature, title and date: _____

Professional Seal(s), if applicable:

NATURAL ATTENUATION (PASSIVE BIOREMEDIATION) IN GROUNDWATER

SITE NAME AND REPORTING PERIOD:

Site name: FORMER SCHWISTER FORD

Reporting period from: 12-99 To: 12-00 Days in period: 365

A. EFFECTIVENESS EVALUATION:

1. If free product is not present, determine the single contaminant that requires the greatest percent reduction to achieve ch. NR 140 ES and PAL. Perform this calculation for all contaminants that were present at the site that have ch. NR 140 standards. Use the highest contaminant concentration measured in any sampling points during reporting period. If free product is present, write "FREE PRODUCT" in A.1.a.

   a. Contaminant: VINYL CHLORIDE

   b. Percent reduction necessary to reach ch. NR 140 ES and PAL: 99.96% (ES), ~100% (PAL)

   c. Maximum contaminant concentration level in any monitoring well (µg/L): 476 ppb (W-8)

2. Aquifer parameters:

   a. Hydraulic conductivity (cm/sec): 6.76×10^{-6} cm/sec

   b. Groundwater average linear velocity (ft/yr): 7.04 ft/yr.

3. Is there a downgradient monitoring well that meets ch. NR 140 standards (Y/N): YES

4. Based on water chemistry results, is the plume expanding, stabilized or contracting: CONTRACTING

5. If the answer in 4. (above) is "expanding," is natural attenuation still the best option? (Y/N) If yes, explain: NA

6. Biodegradation parameters:

   a. Upgradient (or other site specific background) DO level (mg/L): 1.20ppm (9-14-00)

   b. DO levels in the part of the plume that is most heavily contaminated (mg/L): 1.30 (9-14-00)

7. Is site closure a viable option within 12 months from the date of this form? (Y/N): YES

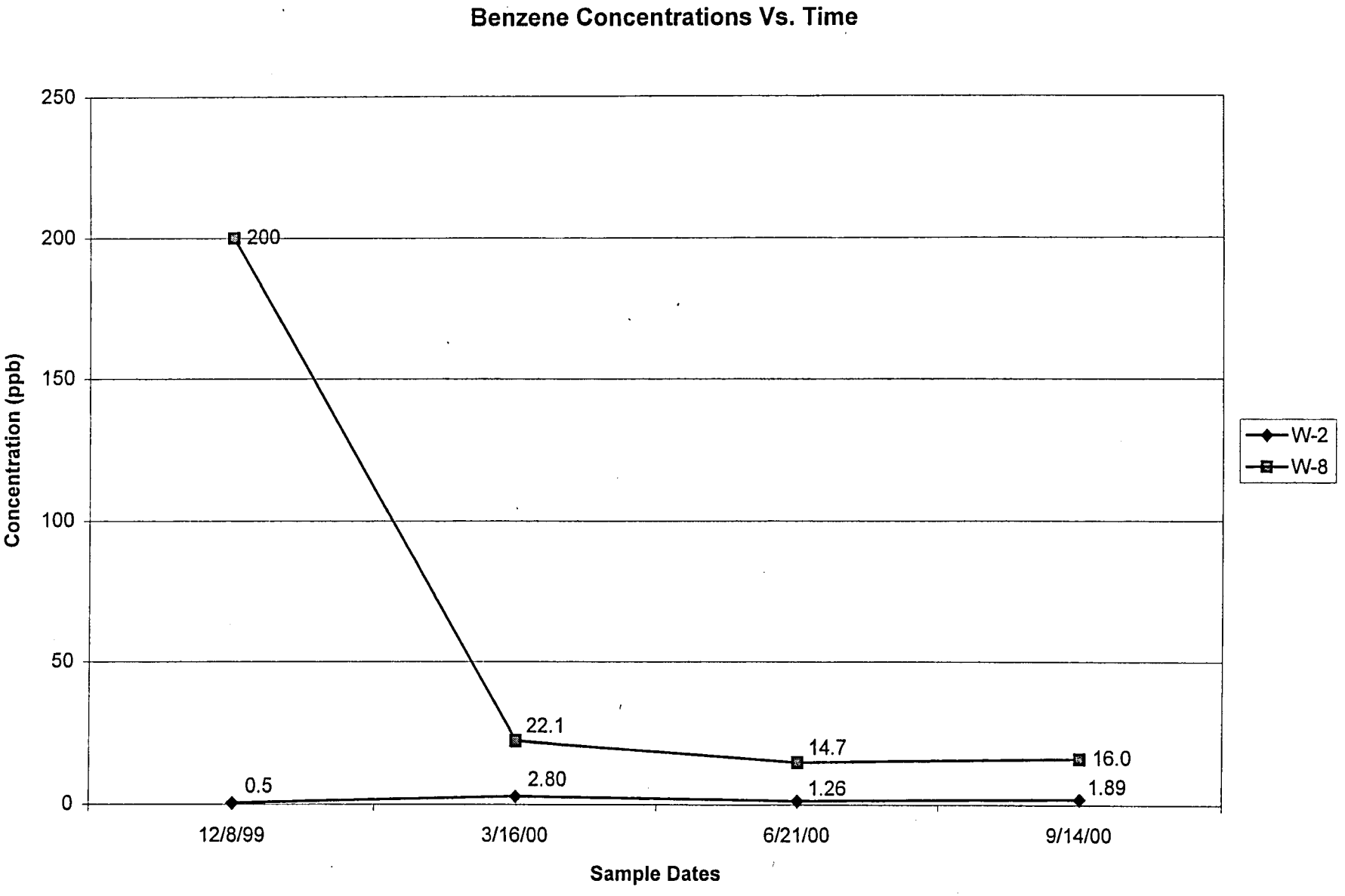
8. Are there any modifications that can improve cost effectiveness? (Y/N) If yes, explain: NO

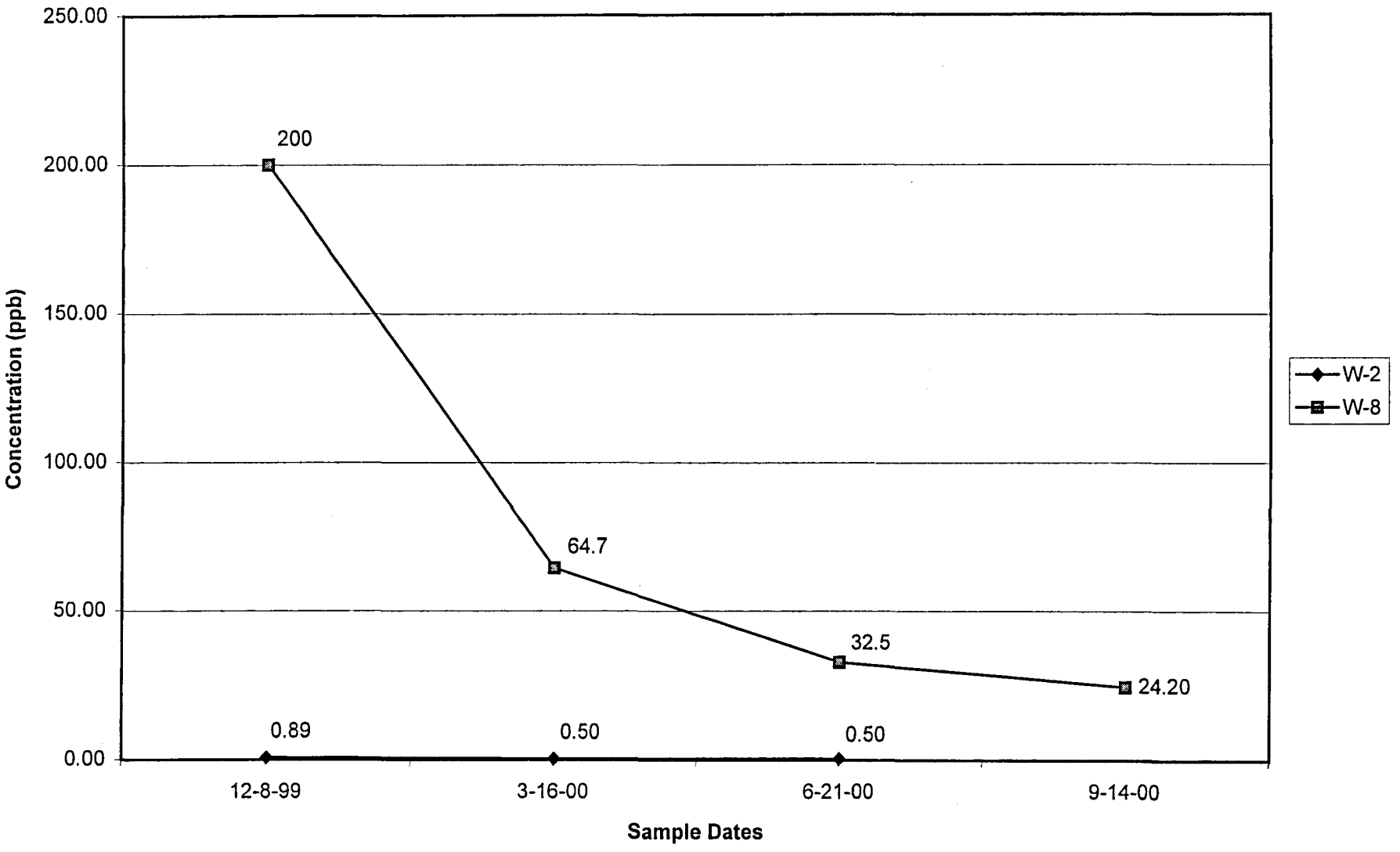
9. Have groundwater table fluctuations changed the contaminant level trends over time? (Y/N) If yes, explain: NO

10. Has the direction of ground water flow changed during the reporting period? (Y/N) If yes, approximate change in degrees: NO

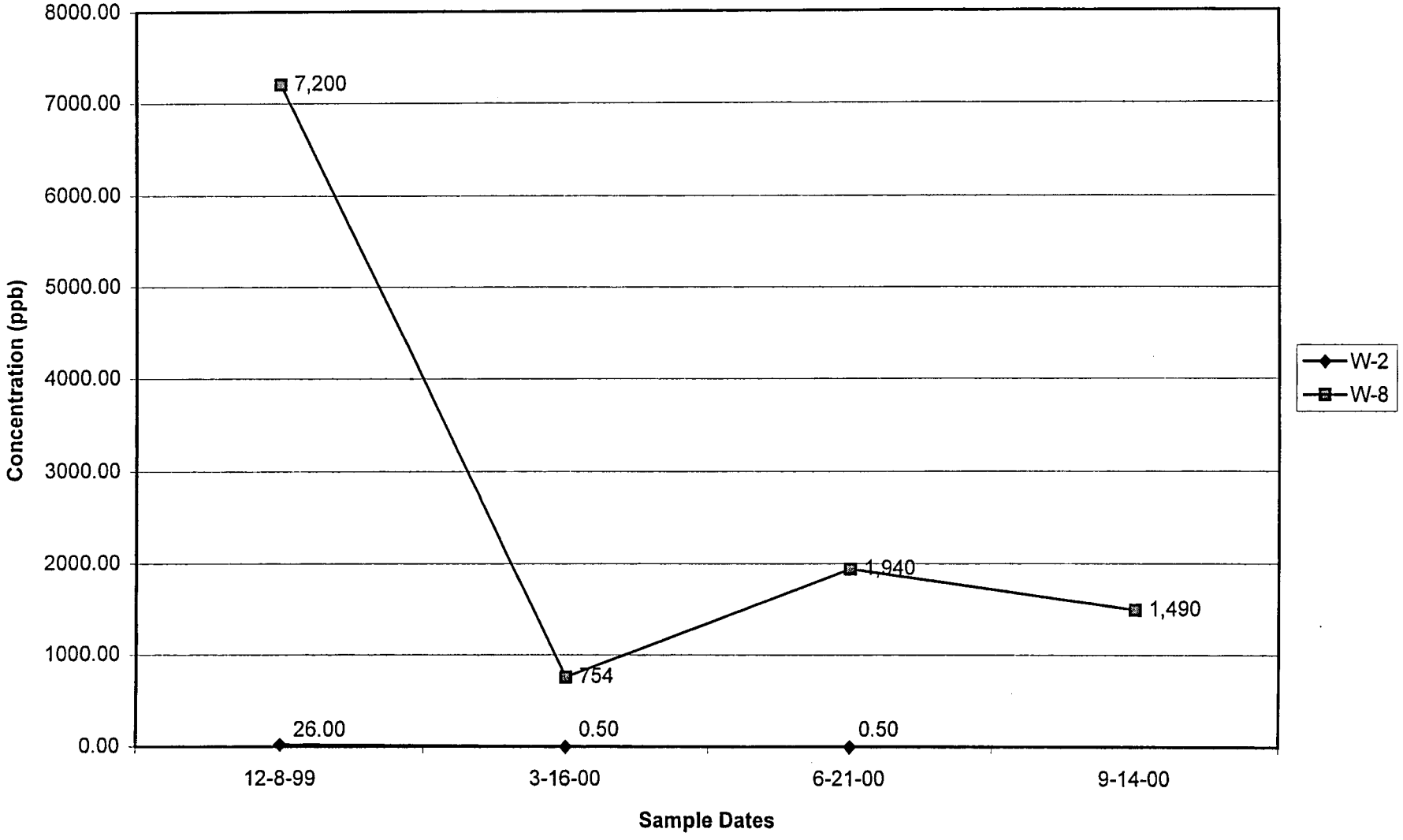
B. ADDITIONAL ATTACHMENTS: Attach the following to this form:

- Groundwater contour map.
- Groundwater contaminant distribution map (may be combined with contour map).
- When contaminants are aerobically biodegradable, attach a dissolved oxygen in groundwater map (dissolved oxygen may be combined with the contaminant data on a single map).
- Graph of contaminant concentrations versus time for the contaminant listed in A.1.a. (above) for the monitoring point with the greatest level of contamination.
- Graph of contaminant concentrations versus distance.
- Groundwater contaminant chemistry table.
- Groundwater biological parameters.
- Groundwater elevations table.

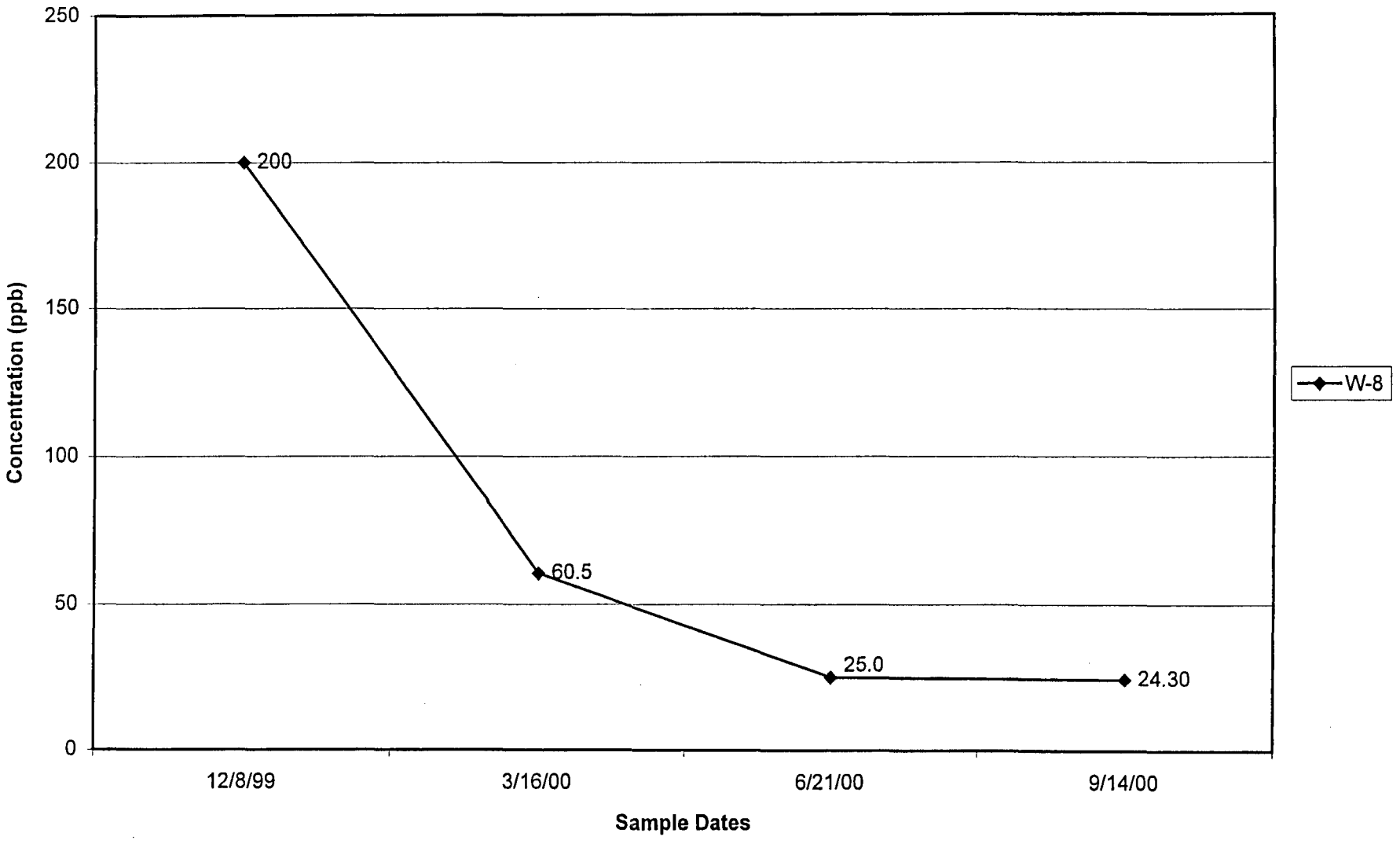

Benzene Concentrations Vs. Time
250
200
150
100
50
0
Concentration (ppb)
200
22.1
14.7
16.0
0.5
2.80
1.26
1.89
12/8/99
3/16/00
6/21/00
9/14/00
Sample Dates
W-2
W-8


1,1-DCE Concentrations Vs. Time
250.00
200.00
150.00
100.00
50.00
0.00
Concentration (ppb)
200
64.7
32.5
24.20
0.89
0.50
0.50
12-8-99
3-16-00
6-21-00
9-14-00
Sample Dates
W-2
W-8

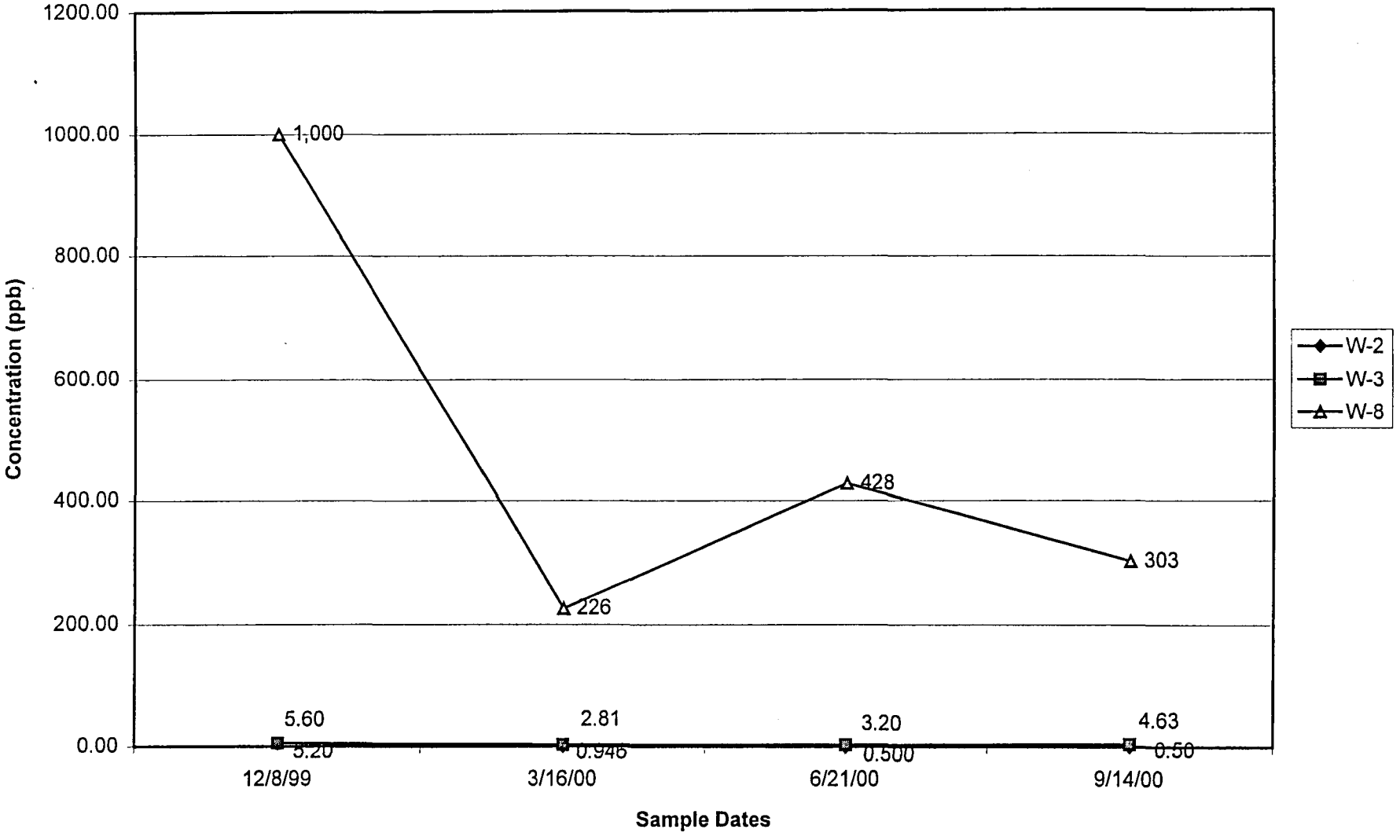
cis-1,2-DCE Concentrations Vs. Time



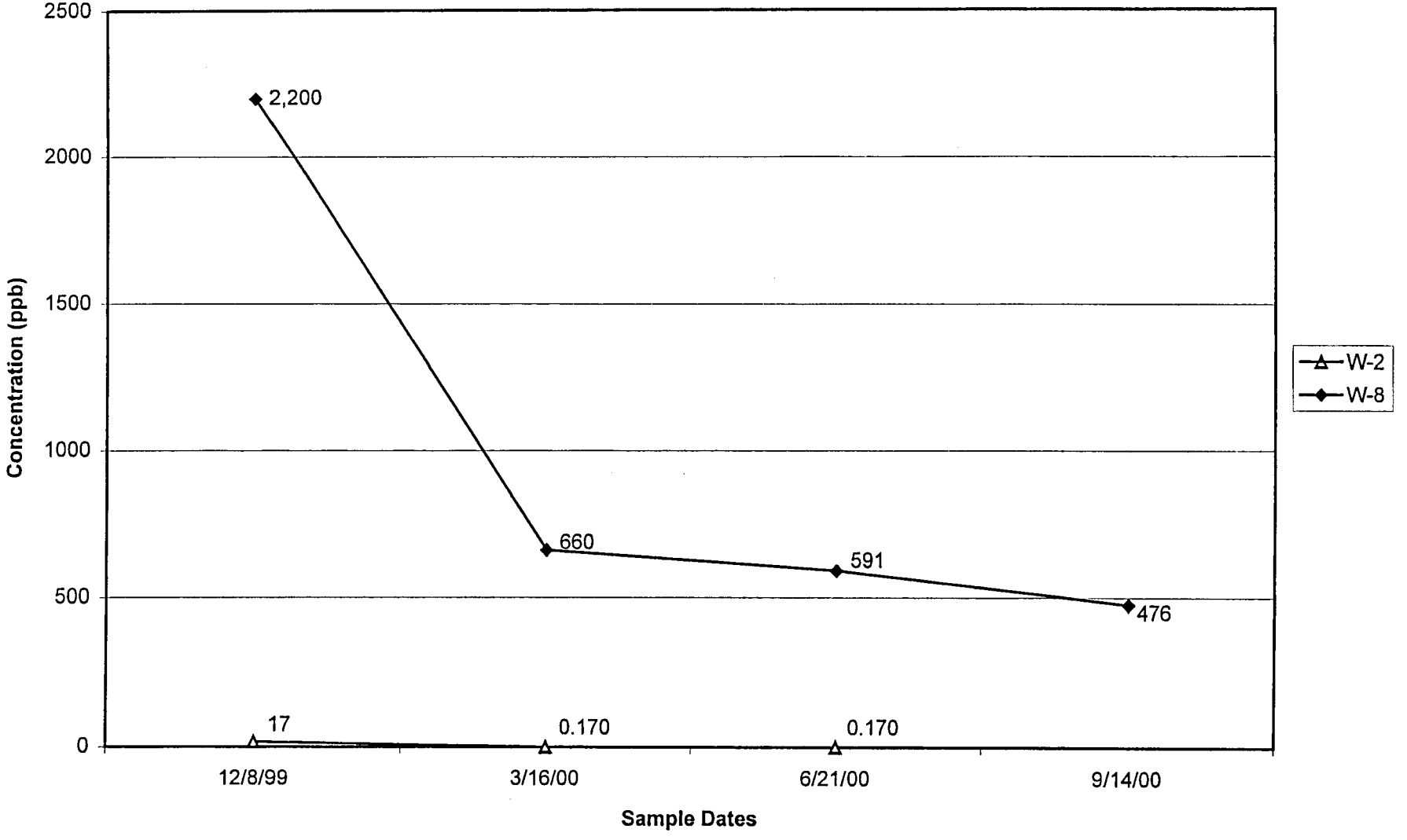
Trans-1,2-DCE Cncentrations Vs. Time



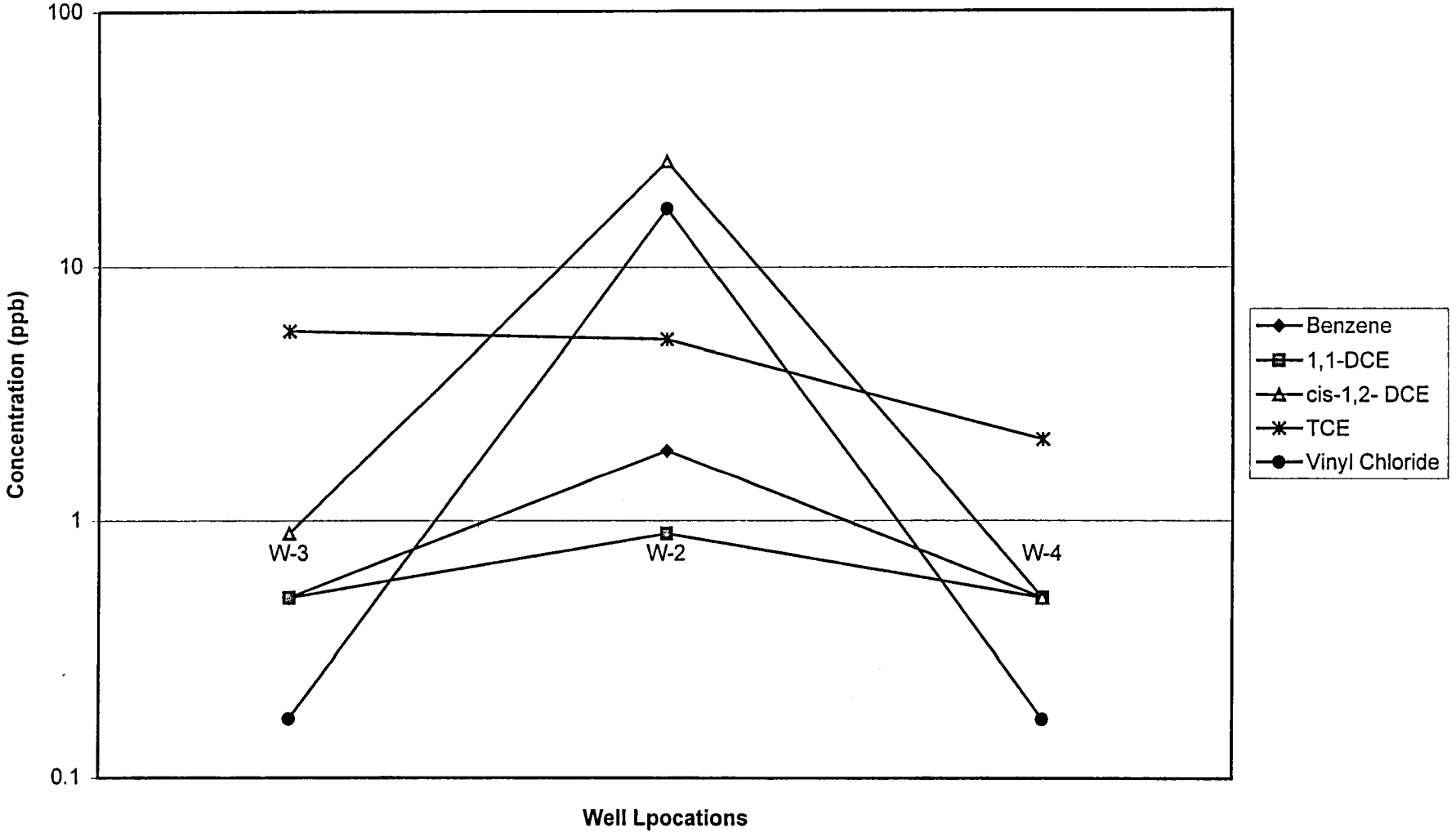
TCE Concentrations Vs. Time



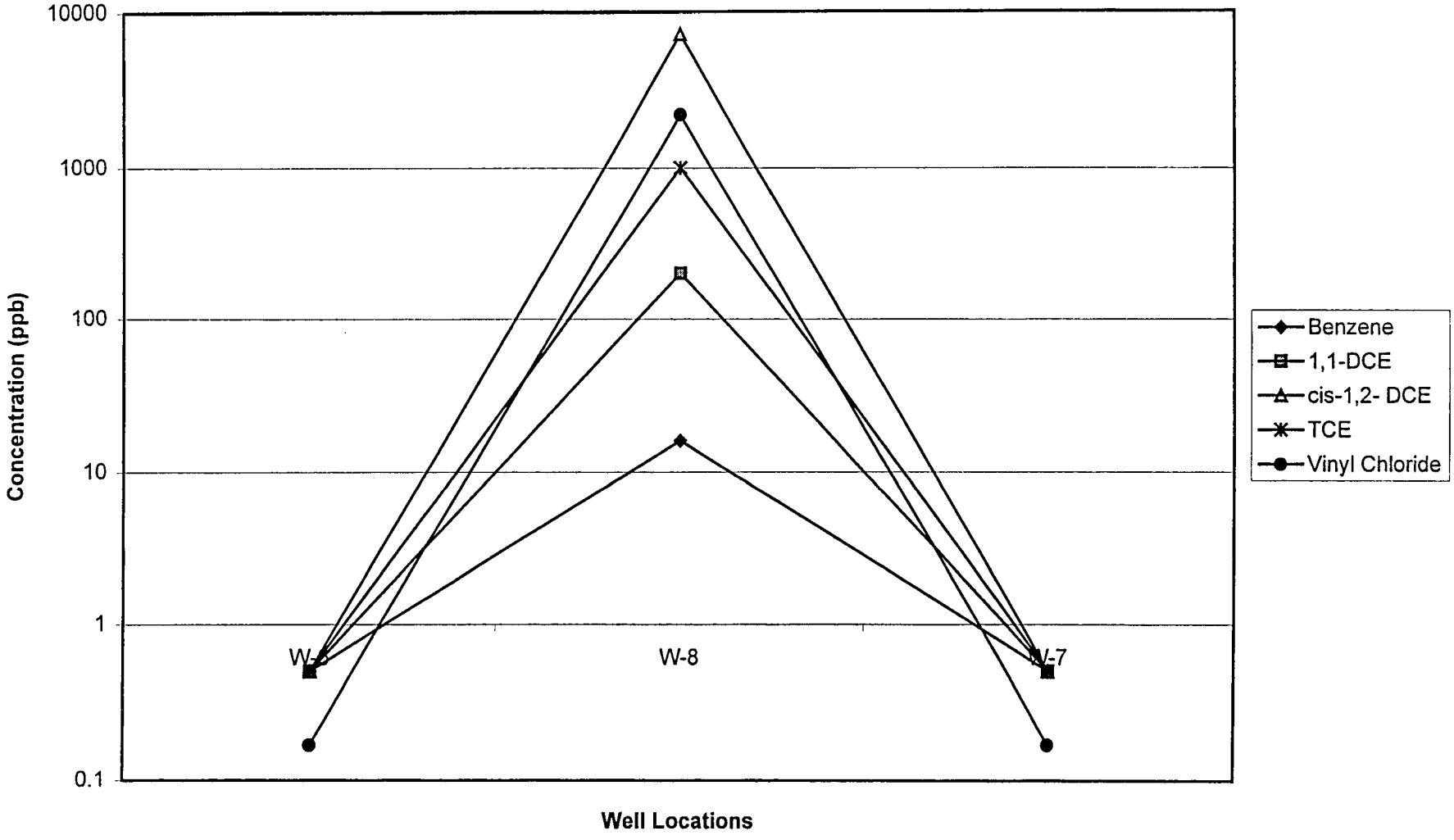
Vinyl Chloride Concentrations Vs. Time



Concentrations Vs. Distance
W-3, W-2, W-4



Concentration Vs. Distance
W-6, W-8, W-7



WDNR BRRTS CASE # 02 - 41 - 231844 WDNR SITE NAME FORMER SCHWISTER FORD

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
Case Summary and Close Out Form Instructions & Checklist

The Case Summary and Close Out Form and attached instructions have been designed by staff in the Bureau for Remediation and Redevelopment to provide responsible parties, environmental consultants, Department staff, and other interested parties with a checklist of information that must be evaluated prior to case closure. The closure of a case means that the Department has determined that no further response is required at that time. Various closure options are available within Department codes. Responsible parties and their consultants should specify the options sought for closure for the soils and groundwater at their site. Groundwater quality standards found in ch. NR 140 and soil standards found in ch. NR 720 must generally be met. However, some closure options allow closure where groundwater or soil standards are not met provided that deed or groundwater use restrictions are imposed on the subject property. The Department may reopen a previously closed case if information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety or welfare or the environment.

In order to expedite the closure process for your case, you should provide a complete and accurate closure package according to the following instructions. Submit the Case Summary and Close Out Form and required attachments as a stand alone document. **Please do not submit the close out request in a bound report.** The information supplied should succinctly summarize the chronological history of the entire case and should reinforce the justification for closure. Submission of tabulated analytical results from previous reports is acceptable (i.e. it is not necessary to create new tables). However, do not submit previously submitted reports themselves as attachments. **Submittals with incomplete forms and/or documentation will be returned.** The following items should be included in the order shown (if any item is not included, please attach a justification):

X **(A) Case Summary and Close Out Form** (Form 4400-202) must be complete.

X **(B) A Brief, Written Case History, Description of the Remedial Action Taken** and **Justification for Case Closure** must be included. The Case History should consist of the Executive Summary from the Site Investigation Report, a summary of any investigative activities conducted subsequent to the Site Investigation Report, and a summary of the interim and remedial actions taken at the site. The history should also specify the pathway(s) to closure requested for both the soil and groundwater as described per instructions on the form.

X **(C) Regional Location Map** which identifies the site on a USGS topographic map and also identifies locations of all municipal and potable wells within 1200' of the Site must be included.

X **(D) Site Map**, per s. NR 716.15(2)(d)5-6, to scale showing the layout of the buildings, roads, tank and/or discharge locations, utilities, monitoring and potable wells, property lines and other relevant features of the site. If possible, the scale should be 1 inch = 10 or 20 feet.

X **(E) Pre-Remedial Soil Sample Location Map(s)** that depict all soil sample locations and the items listed in Item D, above. Highlight those sample locations that exceed ch. NR 720 (including free product location) and identify the extent of contamination. Maps should be prepared according to the applicable portions of s. NR 716.15(2)(h)1. You may submit more than one map, for example various contaminant isoconcentration maps.

X **(F) Pre-Remedial Soil Analytical Results Table(s)** which show the analytical results for all contaminants found and sample depths of all of the pre-remedial soil samples (i.e. tank pull, site investigation, etc.). If more than one table, please put them in chronological order. Highlight those results that exceed the ch. NR 720 soil standards. Provide the level of detection for results which are below the detection level (i.e. do not just list as ND). Identify the depth of the water table. All data must be in table format as specified in ss. NR 716.15(2)(g)3 and 716.15(2)(h)3, (i.e. do not submit lab data sheets unless they have not been submitted in a previous report).

WDNR BRRTS CASE # 02 - 41 - 231844 WDNR SITE NAME former Schwister Farm

X (G) **Pre-Remedial Geologic Cross Section(s)** including source location(s), extent of soil and groundwater contamination, free product location/depth, soil sample locations, water table elevation, and bedrock elevation, if encountered. Maps should be prepared according to ss. NR 716.15(2)(g)5-8 and 716.15(2)(h)1-2.

NA (H) **Post-Remedial Soil Sample Location Map(s)** which show the location of all post-remedial soil sample locations, the extent of remedial efforts and the items listed in Item D, above. Highlight those sample locations that exceed ch. NR 720, i.e. identify the extent of any remaining contaminated soils. Maps should be prepared according to the applicable portions of s. NR 716.15(2)(h)1. You may submit more than one map.

NA (I) **Post-Remedial Soil Analytical Results Table(s)** which show the analytical results for **all** contaminants found and sample depths of all of the post-remedial soil samples. Highlight the analyses that exceed ch. NR 720 soil standards. Provide the level of detection for analytical results which are below the detection level (i.e. do not just list as ND). Identify the depth of the water table. Document free product recovery results per s. NR 708.15. All data must be in table format as identified in ss. NR 716.15(2)(g)3 and 716.15(2)(h)3, (i.e. do not submit lab data sheets unless they have not been submitted in a previous report).

NA (J) **Post-Remedial Geologic Cross Section(s)** including former source location(s), extent of remaining soil contamination, soil sample locations, extent of excavation, water table elevation, and bedrock elevation, if encountered. Maps should be prepared according to ss. NR 716.15(2)(g)5-8 and 716.15(2)(h)1-2.

X (K) **Groundwater Sample Location Map(s)** which show the locations of the items from D, above, and all of the monitoring wells, sumps, extraction wells, and potable wells. Highlight those wells that have PAL or ES exceedances in the most recent round of sampling (differentiate between PAL and ES). Maps should be prepared according to the applicable portions of s. NR 716.15(2)(h)1. You may submit more than one map, for example the pre-remedial extent of groundwater contamination, post-remedial extent of groundwater contamination, and isoconcentration maps.

X (L) **Groundwater Analytical Results Table(s)** showing all of the site's historical groundwater analytical results for **all** contaminants in chronological order. Highlight those results which exceeded ch. NR 140 (differentiate between PAL and ES exceedances). All data must be in table format as identified in ss. NR 716.15(2)(g)3 and 716.15(2)(h)3, (i.e. do not submit lab data sheets unless they have not been submitted in a previous report). Differentiate between pre-remedial, remedial and post-remedial samples (i.e. identify when the groundwater remediation system was active/inactive).

X (M) **Groundwater Contour Map(s)** which show the historical changes in direction, elevation and/or gradient. Provide one map if data is consistent over time. Maps should be prepared according to the applicable portions of ss. NR 716.15(2)(g)5-8 and 716.15(2)(h)1-2.

X (N) **Groundwater Elevations Table** which shows all of the site's historical groundwater elevations for each well in chronologic order. Also indicate the elevations of the top and bottom of the screened interval for each well.

X (O) **Graphs and Statistical Analyses** which demonstrate the dynamics of the groundwater plume, for sites requesting closure using Natural Attenuation under s. NR 726.05(2)(b). Refer to WDNR Publication RR-614 for guidance.

WDNR BRRTS CASE # 02 - 41 - 231844 WDNR SITE NAME FORMER SCHWISTER FORD

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
CASE SUMMARY AND CLOSE OUT FORM

NOTE: Use of this form is required by the Department for any case close out application filed pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code. Completion of this form is mandatory for applications for case closure. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee per ch. NR 749, Wis. Adm. Code, Table 1 is included. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing close out requests and determining the need for additional response action.

I certify that, to the best of my knowledge, the information presented on and attached to this form is true and accurate. This recommendation for case closure is based upon all available data as of 7-30-01 (date). I have read the Case Summary and Close Out Form Instructions and all required information has been included.

Form Completed By: X **Closeout Review Fee Attached**

J E B 7-30-01
(Signature) **(Date)**

Printed Name: JASON BARTLEY Company Name: DRAKE ENVIRONMENTAL, INC.

Email address: jbartley@drakeenviro.com

If not site owner, relationship to site owner: CONSULTANT

Address: 6980 N. TENTONIA AVE., MILWAUKEE, WI 53209

Telephone Number: (414) 351-1440 FAX Number: (414) 351-1404

Environmental Consultant (if different then above): SAME

Address:

Telephone Number: (_____) FAX Number: (_____)

1. SITE LOCATION & ZONING

WDNR Site Name: FORMER SCHWISTER FORD

Complete Site Address: 10136 W. FOND DU LAC AVE. MILWAUKEE, WI 53224

WDNR BRRTS Case #: 02 - 41 - 231844 FID #: 241143100

PECFA Claim #: 53224 - 5199 - 36

Responsible Party Name: HENRY J. SCHWISTER REVOCABLE TRUST C/O MR. BILL SCHWISTER

Complete Responsible Party Address: 1165 KORECHUM RD. HUBERTUS, WI 53033

Site Legal Description: NE 1/4, SW 1/4, Section 20, T 8 N, R 21 (E/W) Town: MILWAUKEE

County: MILWAUKEE Latitude: ___° ___' ___.___" Longitude: ___° ___' ___.___"

GIS Coordinates obtained: _____on site using GPS Locator _____ using computer map coordinates

Date of Incident/Discovery: SEPT. 1999 Contaminant Type(s): WASTE OIL & HYDRAULIC OIL

Quantity Released: UNKNOWN Current Zoning Classification: COMMERCIAL

WDNR BRRTS CASE # 02 - 41 - 231844 WDNR SITE NAME FORMER SCHWISTER FORD.

2. CASE HISTORY AND JUSTIFICATION FOR CLOSURE ATTACHED? ___Yes **(See Instructions Checklist Item B)**

3. RECEPTORS (See Instructions Checklist Item D)

Identify all pre-remedial potential receptors, the potential risk and their locations (i.e. utility corridors, basements or sumps of nearby buildings, contaminated soil inhalation/ingestion/onsite, water supplies – onsite & offsite, surface waters, sediments, etc.) (For definition refer to s. NR 700.03 (47), Wis. Adm. Code):
GROUNDWATER - HOWEVER, THE SITE & AREA IS SERVICED BY MUNICIPAL WATER SUPPLY AND SOILS ARE LOW PERMEABLE MATERIAL

Have the remedial actions abated the potential impacts to these receptors? X Yes ___No (RNA)

If not, please identify the nature of the remaining risk and the receptor at risk:_____

4. SOIL INVESTIGATION INFORMATION (See Instructions Checklist Items C-G)

Extent Defined? X Yes ___No If not, explain why?_____

Soil Type(s): SILTY CLAY & SILT Depth of Contamination: 10 FEET

Type of Bedrock: DOLOMITE Depth to Bedrock: >300 FEET

Is any contaminated soil (unsaturated or saturated) in contact with the bedrock? ___Yes X No

List all contaminants found in soil (regardless of NR720 standards/attach table if necessary) SEE TABLES 4 & 5

COMPOUNDS DETECTED IN SOIL WERE GENERALLY IN SAMPLES AT OR BELOW WATER IN LOW PERMEABLE MATERIAL

Measurable Free Product? ___Yes X No Depth/ Location:_____

Maps of Pre-remedial Sample Locations for all contaminants attached? X Yes

Tables of Pre-remedial Analytical Results for all contaminants attached? X Yes

5. SOIL REMEDIATION INFORMATION (See Instructions Checklist Items H-J) NA

Remedial Action Completed? ___Yes X No s. NR 720.19 Analysis? ___Yes X No (If yes, attach supporting documentation)

Were emergency or interim actions conducted? ___Yes X No If yes, what?_____

Brief Description of Remedial Action Taken: NA

Were Soils Excavated? ___Yes X No Quantity: — Disposal Method: —

Final Confirmation Sample Collection Methods: —

Final Soil/Drill Cuttings Disposal Location: SUPERIOR'S EMERALD PARK LANDFILL (BIOPILE)

Estimated volume and depth of in situ soils exceeding ch. NR 720 Table RCLs or site specific RCLs: BELOW WATER

Estimated volume and depth of in situ soils exceeding ch. NR 746 Table 1 or Table 2 or site specific RCLs: NONE

Maps of Post Remedial Sample Locations for all contaminants attached? ___Yes ___No

Location map(s) and cross sections depicting all excavated areas and/or residual soil contamination attached? ___Yes ___No

Tables for Post Remedial Analytical Results for all contaminants attached? ___Yes

WDNR BRRTS CASE # 02-41-231844 WDNR SITE NAME FORMER SCHWISTER FORD.

6. GROUNDWATER INFORMATION (See Instructions Checklist Items K-O) RNA

Extent of Contamination Defined? ____Yes ____No ____N/A Remedial Action Completed? X Yes ____No ____N/A

Brief Description of Remedial Action Taken: RNA

# of Sample Rounds: 4 Depth(s) to Groundwater/Flow Direction(s): 6-8 FEET EAST - SOUTHEAST

Field Analyses? X Yes ____No Lab Analyses? X Yes ____No # of Sampling Points: 8

NR 141 Monitoring Wells Sampled: 8 # Temporary Groundwater Sampling Points Sampled: —

Recovery Sumps Sampled: — # Municipal Wells Sampled: — # Private Wells Sampled: —

List **all** contaminants found in groundwater (regardless of NR140 standards/attach table if necessary) SEE TABLES 6, 7, AND 8

NO COMPOUND DETECTED ABOVE ES IN PERMEABLE MATERIAL

Has DNR Been Notified of Substances in Groundwater w/o Standards? X Yes ____No If Yes, How Many? ____

What Substances? SEE TABLES

Potable Wells Within 1200 Feet of Site? ____Yes X No

Map attached showing location(s) ____Yes Have They Been Sampled? ____Yes ____No

Have Well Owners/Occupants Been Notified of Results? ____Yes ____No Are notification letters attached? ____Yes ____No

Preventive Action Limit Currently Exceeded? X Yes ____No If Yes, identify location(s) W-2, W-3

Enforcement Standard Currently Exceeded? X Yes ____No If Yes, identify location(s) W-2, W-3, W-8

Measurable Free Product Detected? ____Yes X No ____ pre-remediation? ____ post-remediation? Was Free Product remediated? ____Yes ____No

Explain: ____

Tables of Analytical Results for all contaminants attached? X Yes Map of Groundwater Sample Locations attached? X Yes

7. OTHER CONTAMINATED MEDIA INFORMATION (Sediments, Surface Water, Concrete, etc.)

Are any other media contaminated onsite or offsite? ____Yes X No Which Media? ____

Have Other Media Been Impacted (either on-site or off-site)? ____Yes ____No Briefly Describe ____

Extent of Contamination Defined? ____Yes ____No ____N/A Remedial Action Completed? ____Yes ____No ____N/A

Brief Description of Remedial Action Taken: ____

# of Sample Rounds: ____ Field Analyses? ____Yes ____No Lab Analyses? ____Yes ____No

# of Sampling Points: ____ Tables of Analytical Results for all contaminants Attached? ____Yes

List **all** contaminants found in this media (per s. NR722.09/attach table if necessary) ____

WDNR BRRTS CASE # 02 - 41 - 231844 WDNR SITE NAME Former Schwister Ford.

8. PATHWAY TO CLOSURE PROPOSED AND ASSOCIATED SITE INFORMATION: (See Instruction Checklist Items B and O)

Soil

X < s. NR 720.09/720.11 Generic RCLs
___s. NR 720.19(2) Soil Performance Standards(SPS)
___s. NR 720.19(3) Site Specific Standards(SSRCLs)

Groundwater

___< s. NR 140.10 Table 1 & Table 2 Values
___s. NR 140.28(2) PAL Exemption
X s. NR 726.05(2)(b), ≥ ES Natural Attenuation (Low Permeable Mat.)

Petroleum Storage Tank Soil Options for Closure:

___s. NR 746.07 Soil Screening Levels/Post Investigation
___s. NR 746.08 Soil Screening/Post Remediation

Petroleum Storage Tank Groundwater Options for Closure:

___s. NR 746.07 ≥PAL <ES Low Permeability Site/Post Investigation
___s. NR746.07 ≥ES, Permeable Site, Post Investigation
___s. NR 746.08 ≥ES, Low Permeability Site, Post Remediation
___s. NR 746.08 ≥ES, Permeable Site, Post Remediation

A. Enforcement Actions Closed Out? ____Yes ____No X N/A
Permits Closed Out? ____Yes ____No X N/A

B. Proposed Post Remediation Land Use: ____ Residential X Commercial ____ Industrial ____ Other Specify:_____

C. Does Remedy Include Soil Performance Standard (SPS)? ____Yes X No
Type: ____Cap ____ Soil ____Building ____ Natural Attenuation of Groundwater ___Other Specify:_____
Does SPS tie into post land use? ____Yes ____No How?_____
Proof of NR 714 public notice attached? ____Yes ____No
(Proof can be either the actual entire page of the newspaper with the notice OR a "Proof of Publication" from the Newspaper Publisher)
Maps and photos attached documenting the cap area, construction, and/or the integrity of the cap? ____Yes ____No ____N/A
A maintenance plan is attached for the performance standard per ss. NR 720.19(2) and 724.13(2), Wis. Adm. Code? ____Yes ____No

D. Does Remedy include SSRCLs? ____Yes X No
Is post-remedial land use industrial? ____Yes ____No
Is zoning change required or completed? ____Yes ____No If Yes, Is Municipal Verification attached? ____Yes ____No
Complete Assumptions and Calculations for SSRCLs attached with justification? ____Yes ____No
If using EPA Soil Screening Level Model as justification for closure of sites with residual contaminated soils,
are the numbers used: (circle one) site specific inputs or defaults and are calculations and results attached? ____Yes ____No

E. Does Remedy Include Natural Attenuation of Groundwater only? (i.e. there is no residual soil contamination?) X Yes ____No
Mann-Kendall/Mann-Whitney U Results attached? ____Yes ____No NA [Low Permeable Material 746.07(2)(c)]

F. Describe how the following pathways are protected:
1) Direct Contact Pathway: No direct contact pathway for soils - contaminated areas are covered w/ asphalt or concrete or building.
2) Groundwater: Amendment of the existing GW use restriction at the site.
Mann-Kendall/Mann-Whitney U Results Attached? ____Yes X No (required for NR 746 permeable sites)

9. PROPOSED INSTITUTIONAL CONTROLS (See PUB. RR-606)

___Unrestricted
___Deed Restriction (required for industrial cleanup level/ and when performance standard requires maintenance plan)
___Deed Notice
X Groundwater Use Restriction (Amend existing restriction)
___Other

Copy of current deed attached? ____Yes X No Copy of Draft Deed Document(s) attached? ____Yes X No

WDNR BRRTS CASE # 02 - 41 - 231844 WDNR SITE NAME Former Schuster Ford

FOR DEPARTMENT USE ONLY

PROJECT MANAGER: _____ **Date Reviewed:** _____

FIRST REVIEW DATE: _____ **[ ] Approved [ ] Denied**

_____ _____ _____ _____
(Signature) (Signature) (Signature) (Signature)

SECOND REVIEW DATE: _____ **[ ] Approved [ ] Denied**

_____ _____ _____ _____
(Signature) (Signature) (Signature) (Signature)

COMMITTEE RECOMMENDATION:

_____ **Closure Approved Per:**
- _____ No Restrictions
- _____ Groundwater Use Restriction
- _____ Zoning Verification
- _____ Deed Restriction
- _____ Deed Affidavit
- _____ Site Specific Close Out Letter Necessary
- _____ Well Abandonment Documentation
- _____ Soil Disposal Documentation
- _____ Public Notice Needed
- _____ NR 140 Exemption For: _____

_____ Specific Comments: _____

_____

_____

_____

_____ **Closure Denied, Needs More:**
- _____ Investigation
- _____ Groundwater Monitoring
- _____ Soil Remediation
- _____ Groundwater Remediation
- _____ Documentation of Soil Landspreading or Biopile Destiny
- _____ Specific Comments: _____

_____

_____

_____

REPORT SUMMARY

The former Schwister Ford property ("subject property") is located at 10136 Fond du Lac Avenue in Milwaukee, Wisconsin. The following underground storage tanks (USTs) were removed from the property between 1988 and 1991: two 2,000-gallon unleaded gasoline USTs, two 3,000-gallon unleaded gasoline USTs, and a 550-gallon waste oil UST. Drake Environmental, Inc. previously conducted a remedial investigation (RI) and subsequent remediation to address the contamination associated with the above gasoline USTs. It should be noted that the former waste oil UST was not identified at the time of the above RI and remediation near the gasoline USTs. In a letter dated July 15, 1999, the Wisconsin Department of Natural Resources (DNR) granted conditional case closure, and a groundwater use restriction was signed and recorded for the subject property.

Due to their interest in purchasing the subject property, The Boucher Group retained Advent Environmental Services, Inc. in August 1999, to conduct a Phase II Environmental Assessment on their behalf at the subject property. Based on the results of the Phase II, contamination was identified at separate areas of the subject property near a former waste oil UST area and four hydraulic hoists. On September 30, 1999, Drake reported the contamination to the DNR. In a letter dated October 28, 1999, the DNR required that an RI be conducted to document the degree and extent of soil and groundwater contamination at the subject property.

The RI included drilling eight soil borings and completing them as groundwater monitoring wells. Soil samples were collected for field screening and laboratory analyses, and four rounds of groundwater sampling were conducted. Four test pits were also conducted in conjunction with the removal of four hydraulic hoists as a separate phase of the project, and soil sampling was conducted within the test pits.

The general soil profile encountered at the borings consisted of fill material from the ground surface to approximately 5 feet below ground surface (bgs). The fill material in the former waste oil UST cavity extends to approximately 9 feet bgs. The underlying native soils consist of predominantly brown to gray silty clay to approximately 12 feet bgs, overlying gray silt to at least approximately 14 feet, the maximum depth

investigated. Based on transmissivity test results, both permeable and low permeable materials exist at the subject property.

The depth to groundwater ranged from approximately 5 to 9 feet bgs. The direction of groundwater flow is predominantly southeast with an average hydraulic gradient of approximately 0.013 foot/foot.

Soil contamination is present in the immediate vicinities of the former waste oil UST cavity and four former hydraulic hoists. The Advent Phase II results indicate that diesel range organics (DRO) was the only compound detected above its generic residual contaminant level (RCL). The results of Drake's RI indicated DRO was only detected above its generic RCL in two samples. Benzene was the only petroleum volatile organic compound (PVOC) detected above its generic RCL, and only in one sample. Various VOCs were detected in the sample collected directly from the former waste oil UST cavity; however, generic RCLs have not been established for those compounds, and a majority of those VOCs were not detected in groundwater. The extent of soil contamination is defined on site, and the sources of contamination have been removed.

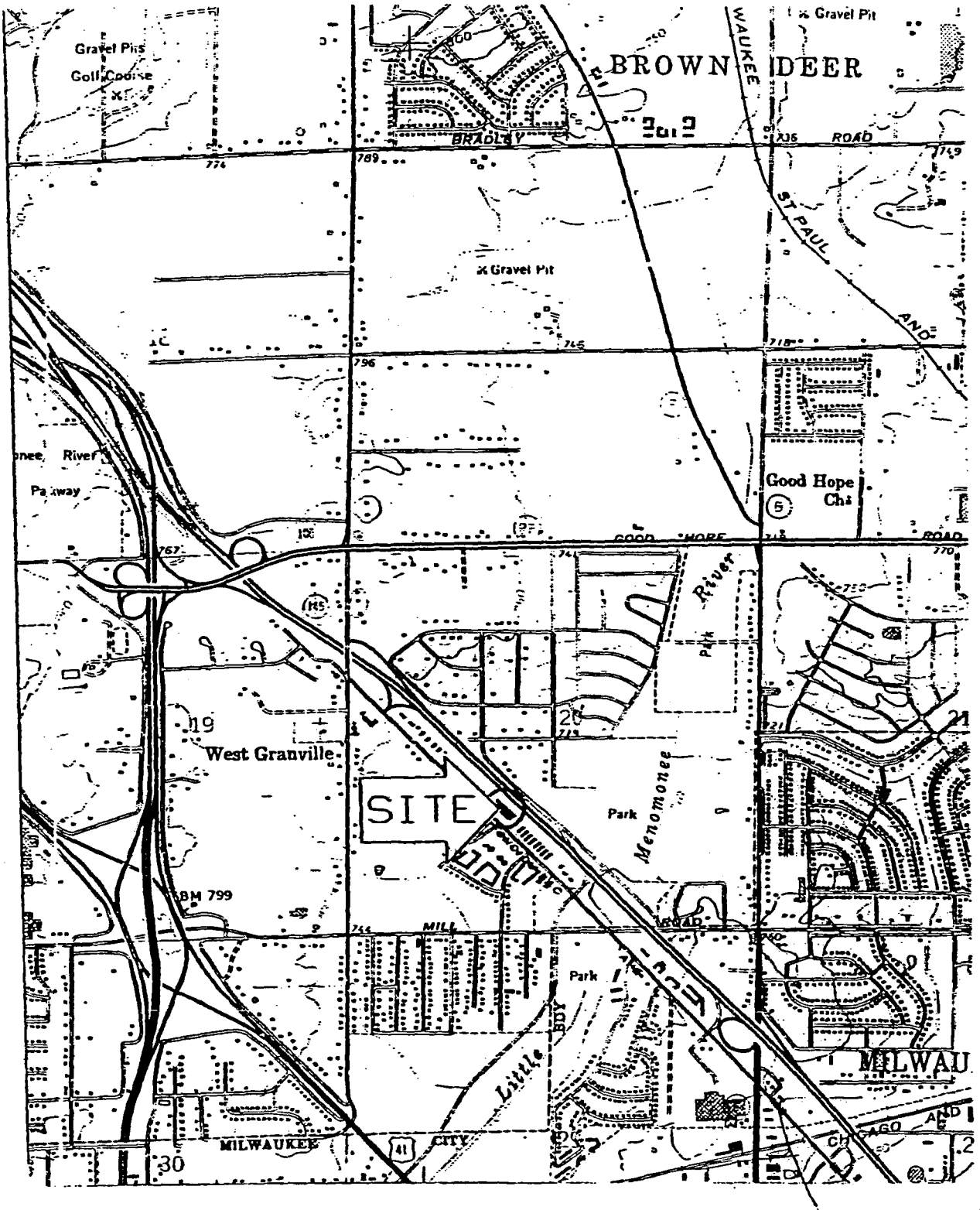
Benzene was the only PVOC detected above its respective enforcement standard (ES), (W-8), and the only PVOC detected above its preventive action limit (PAL) but below its ES (W-2). Additional VOCs also currently exist at W-3 and W-8; however, the concentrations have demonstrated decreasing trends over the course of the year of monitoring. The groundwater analytical results indicate that the source is no longer present, and the groundwater plume is contracting. The extent of groundwater contamination is defined on site.

None of the Comm 47 environmental factors or Comm 46 risk screening criteria are applicable to the subject property. Based on the absence of environmental factors and risk screening criteria, the regulatory review for the subject property should be transferred to the Wisconsin Department of Commerce.

Based on WAC ch. Comm 46.06, Drake recommends that closure be granted for the subject property, contingent on the amendment of the groundwater use restriction that already exists on the deed of the subject property. Subsequent to closure, the monitoring wells should be abandoned in accordance with WAC ch. NR 141.

The project costs associated with the waste oil UST are eligible for reimbursement through the Petroleum Environmental Cleanup Fund Act (PECFA), and the costs associated with the hydraulic hoists are ineligible. It should be noted that the costs for the waste oil UST area and the hydraulic hoist areas were kept separate throughout the project. A copy of this report will be submitted with the completed claim for reimbursement through the PECFA program for eligible project costs.

Please refer to the attached report for a detailed discussion of the project.



DRAKE ENVIRONMENTAL, INC.

COPIED FROM 7.5 SERIES [TOPOGRAPHIC] - U.S.G.S. QUADRANGLE

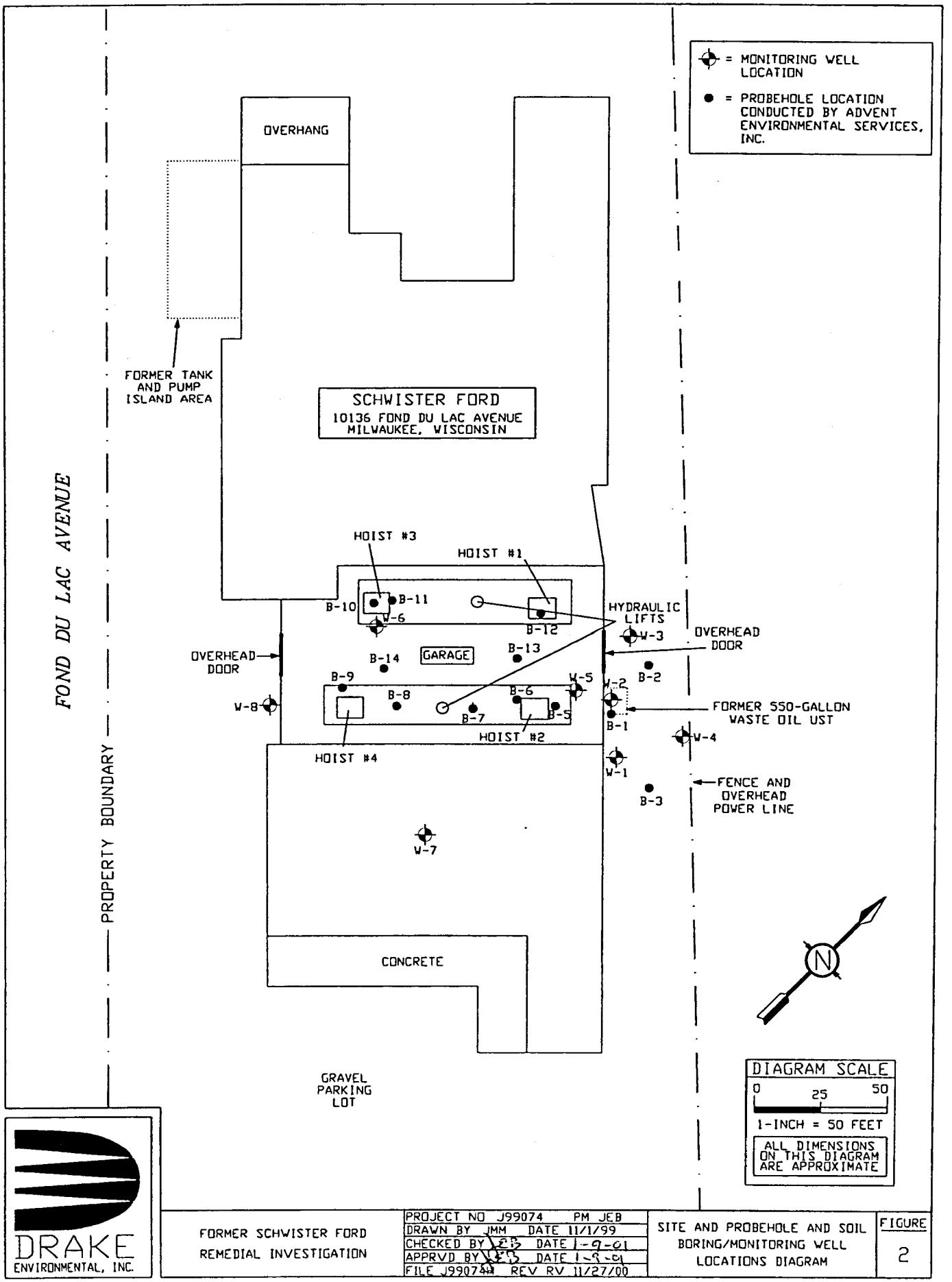
MENOMONEE FALLS - WISCONSIN
NE 1/4 SW 1/4 SEC 20 T8N R21E

DIAGRAM SCALE
0 1000 2000
1-INCH - 2000-FEET

N

SCHVISTER FORD REMEDIAL INVESTIGATION	PROJECT NO. J97082 PM SBA DRAWN BY JMA DATE: 06/11/97 CHKD BY JEB DATE 7-31-97 APRVD BY JEB DATE 7-21-97	VICINITY DIAGRAM	FIGURE 1

FILE:



DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO	J99074 PM JEB
DRAWN BY	JMM DATE 11/1/99
CHECKED BY	JEB DATE 1-9-01
APPRVD BY	JEB DATE 1-9-01
FILE	J99074 REV RV 11/27/00

SITE AND PROBEHOLE AND SOIL BORING/MONITORING WELL LOCATIONS DIAGRAM

FIGURE 2

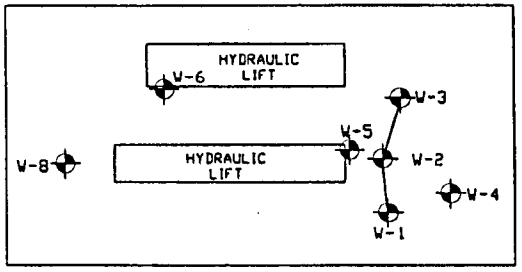
DRAKE ENVIRONMENTAL, INC.

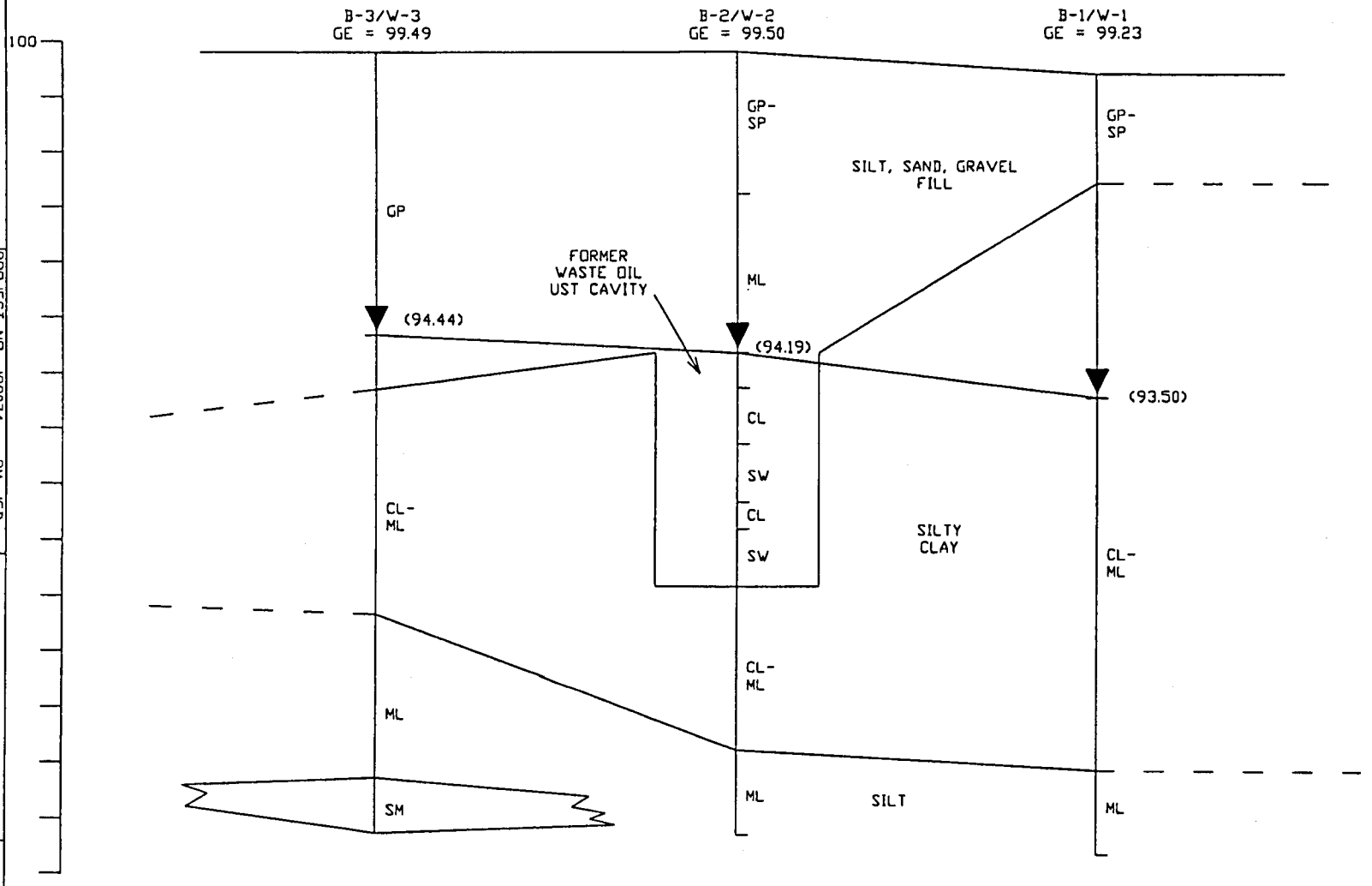
SCALE

HORIZONTAL: 0 5 10 — 1 INCH = 10 FEET

VERTICAL: 0 1.5 3 — 1 INCH = 3 FEET

GE = GROUND SURFACE ELEVATION
9/14/00 GROUNDWATER ELEVATION DATA
▼ = GROUNDWATER ELEVATION





FORMER SCHWISTER FORD PROPERTY
REMEDIAL INVESTIGATION

PROJECT NO	J99074
DRAWN BY RV	DATE 12/1/00
CHECKED BY [illegible]	DATE 1-9-01
APPRVD BY [illegible]	DATE 1-8-01
FILE J99074	PM JEB

SOIL PROFILE CROSS-SECTION DIAGRAM

FIGURE 3

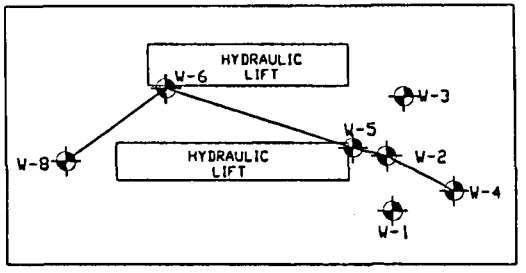
DRAKE
ENVIRONMENTAL, INC.

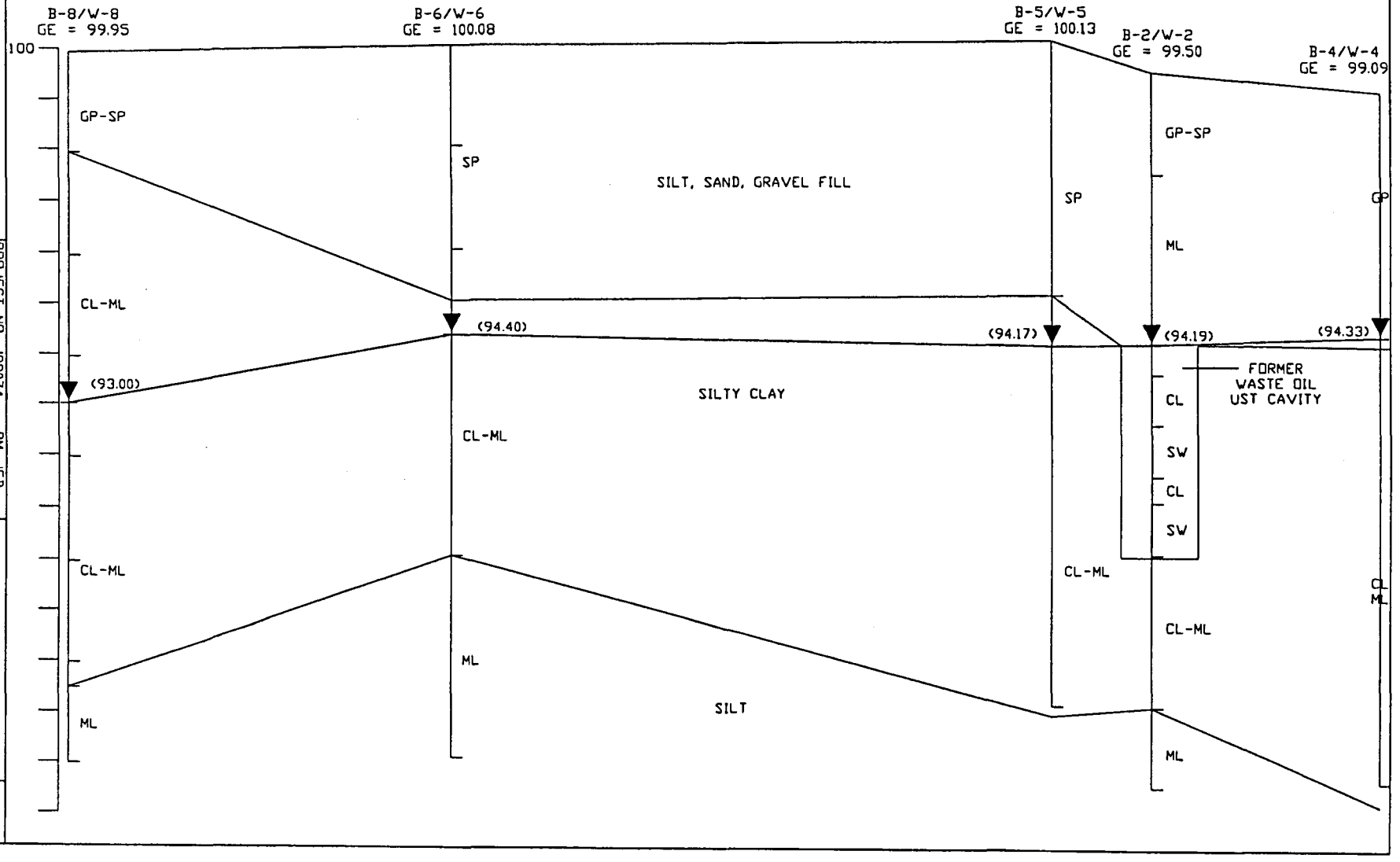
SCALE

HORIZONTAL: 0 10 20 — 1 INCH = 20 FEET

VERTICAL: 0 1.5 3 — 1 INCH = 3 FEET

GE = GROUND SURFACE ELEVATION
9/14/00 GROUNDWATER ELEVATION DATA
▼ = GROUNDWATER ELEVATION





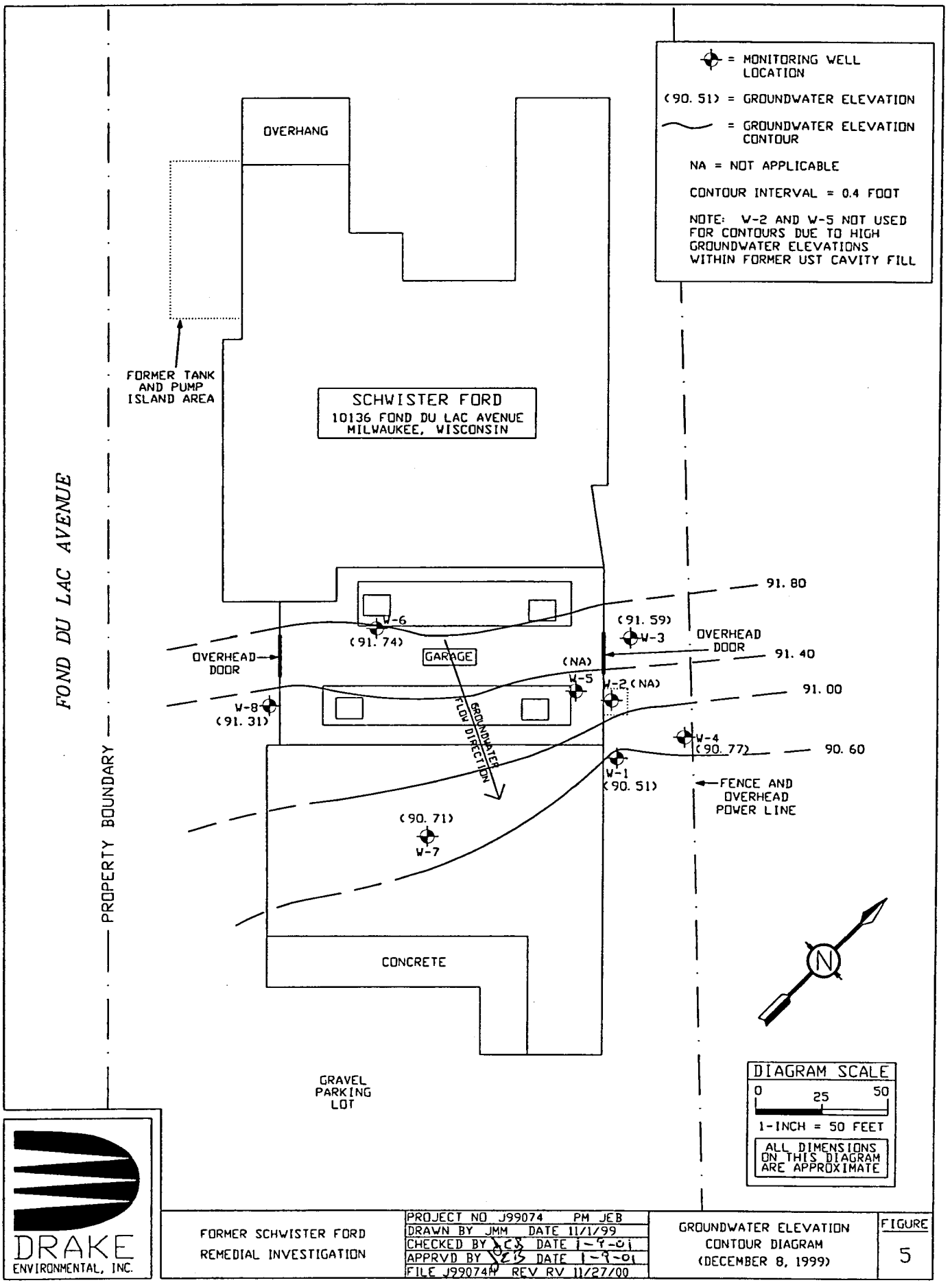
FORMER SCHWISTER FORD PROPERTY
REMEDIAL INVESTIGATION

PROJECT NO	J99074
DRAWN BY	RV
DATE	12/1/00
PM	JEB
CHECKED BY	
DATE	1-9-01
APPRVD BY	
DATE	1-9-01

FILE J990748

SOIL PROFILE CROSS-SECTION DIAGRAM

FIGURE 4



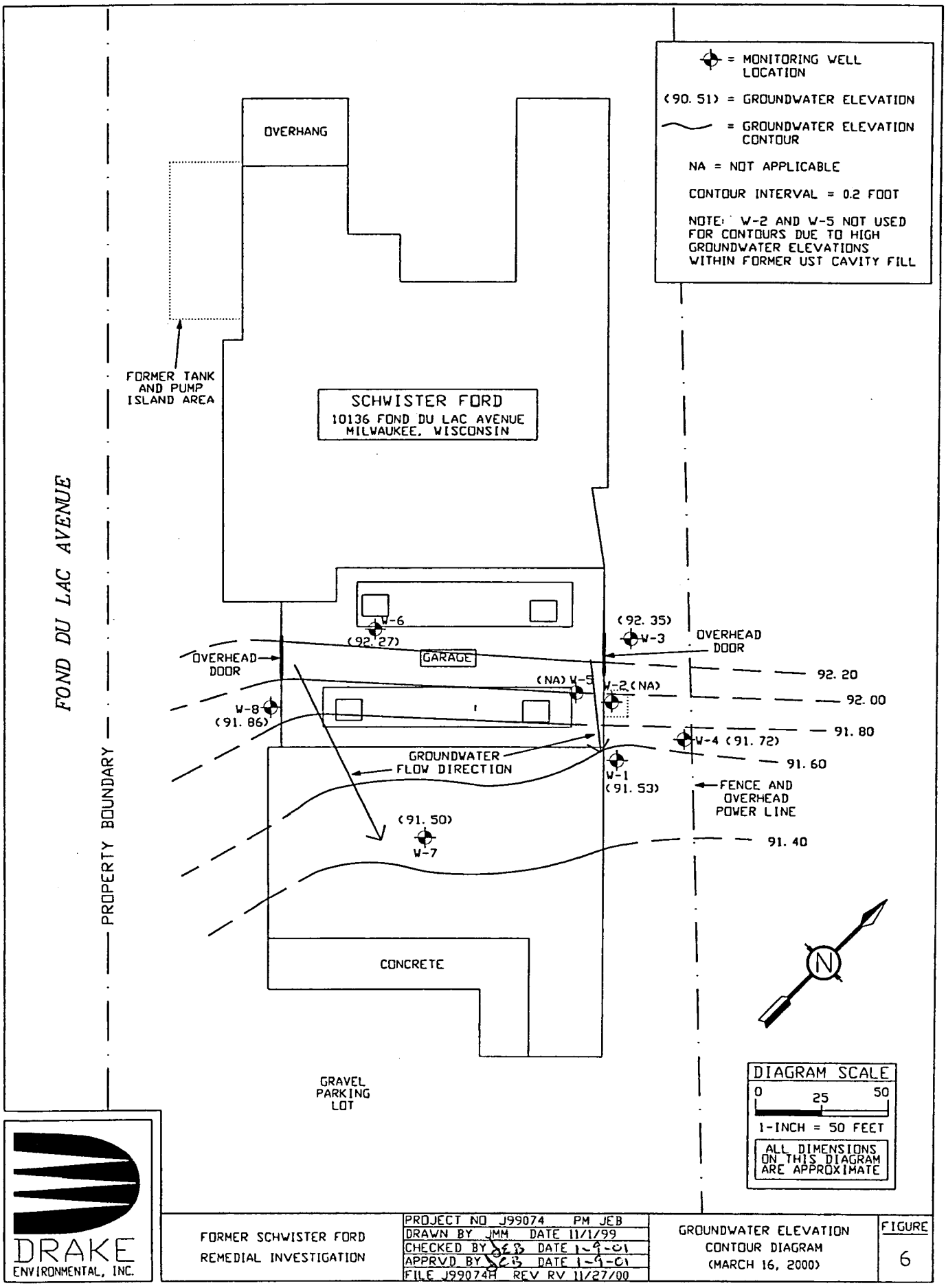
DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO	J99074 PM JEB
DRAWN BY	JMM DATE 11/1/99
CHECKED BY	DCS DATE 1-9-01
APPRVD BY	DCS DATE 1-9-01
FILE	J99074H REV RV 11/27/00

GROUNDWATER ELEVATION CONTOUR DIAGRAM (DECEMBER 8, 1999)

FIGURE 5



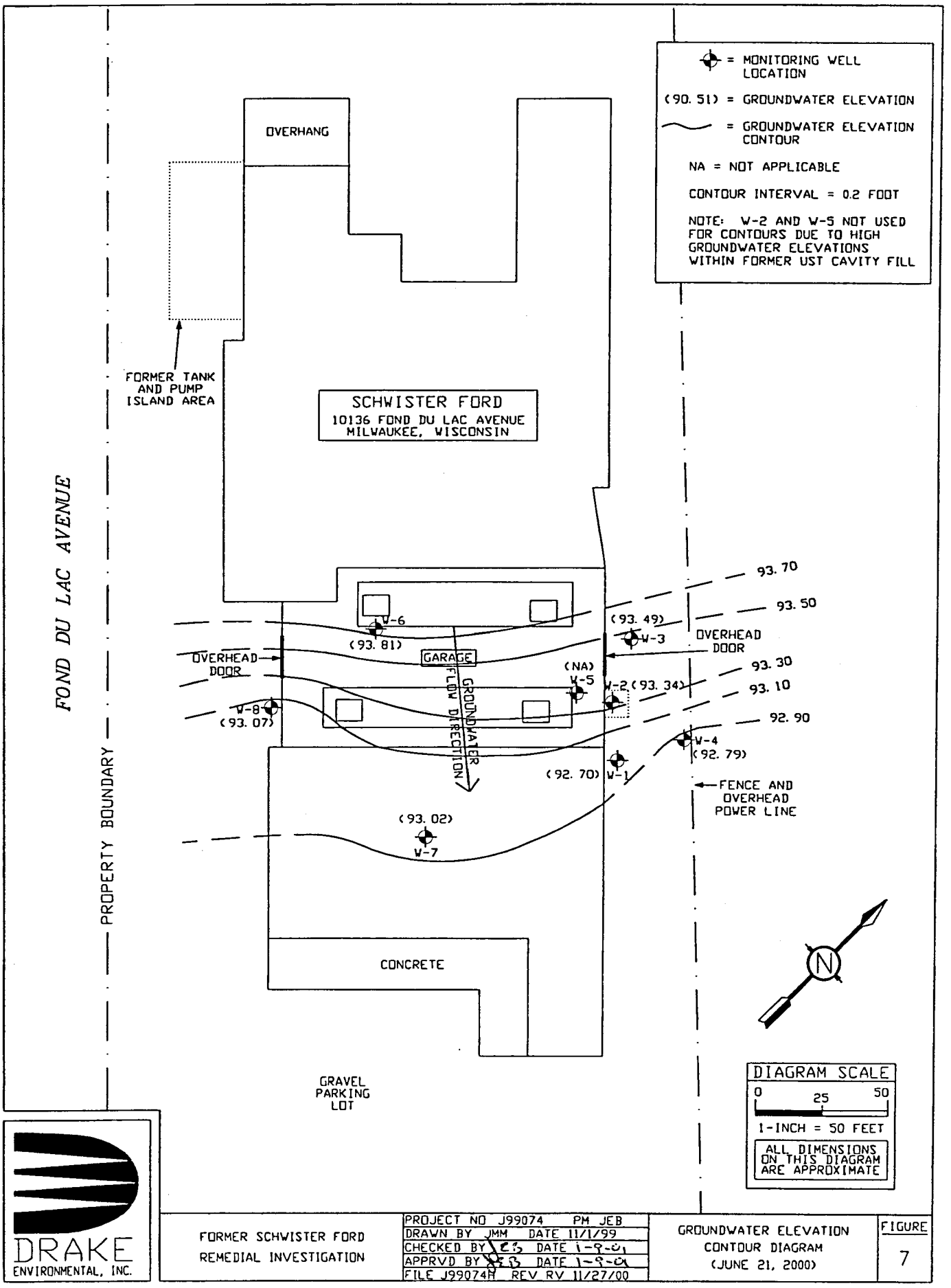
DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO	J99074 PM JEB
DRAWN BY	JMM DATE 11/1/99
CHECKED BY	JEB DATE 1-9-01
APPRVD BY	JEB DATE 1-9-01
FILE	J99074A REV RV 11/27/00

GROUNDWATER ELEVATION CONTOUR DIAGRAM
(MARCH 16, 2000)

FIGURE
6



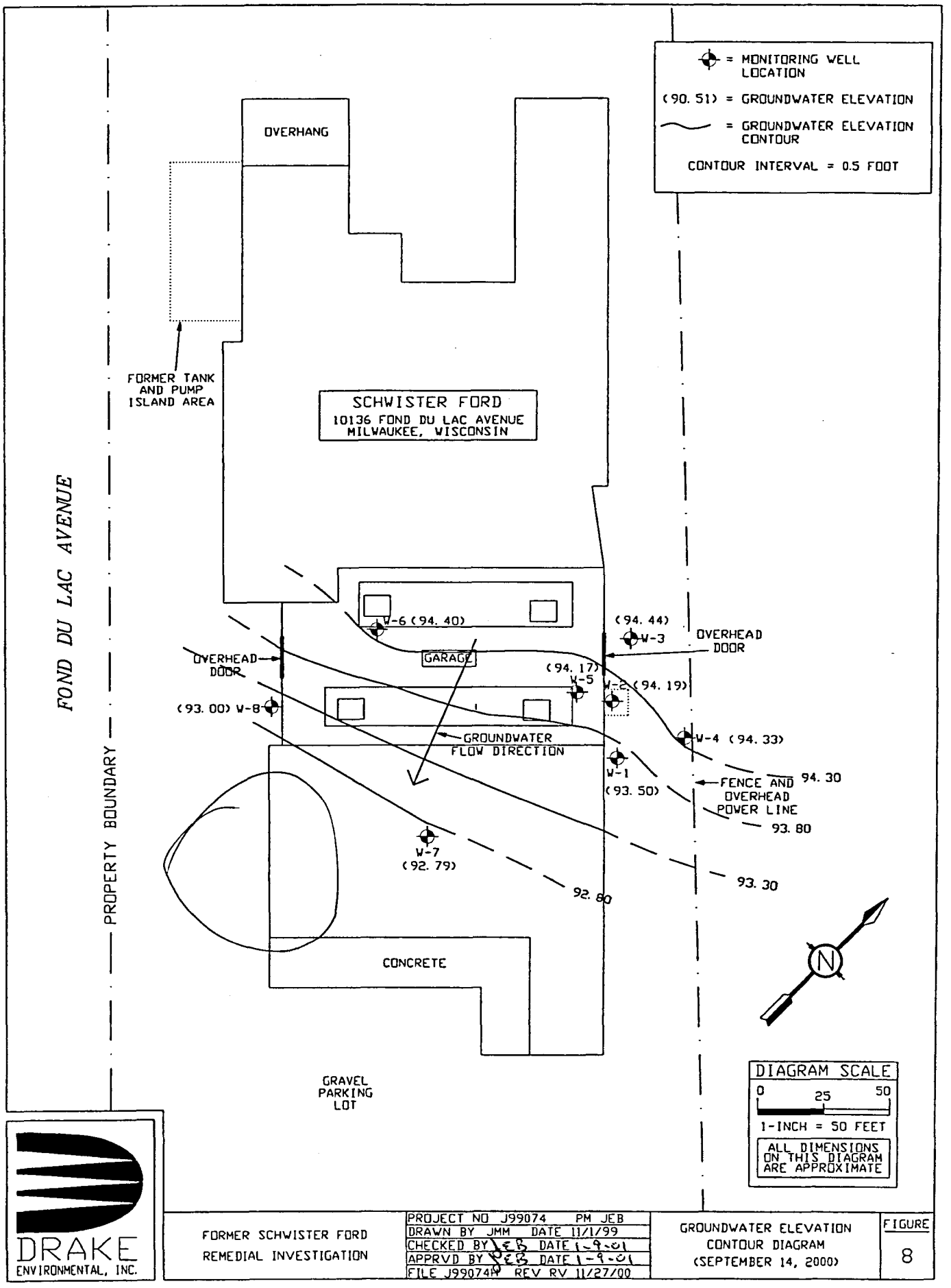
DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO	J99074 PM JEB
DRAWN BY	JMM DATE 11/1/99
CHECKED BY	CB DATE 1-9-01
APPRVD BY	CB DATE 1-9-01
FILE	J99074H REV RV 11/27/00

GROUNDWATER ELEVATION CONTOUR DIAGRAM
(JUNE 21, 2000)

FIGURE 7



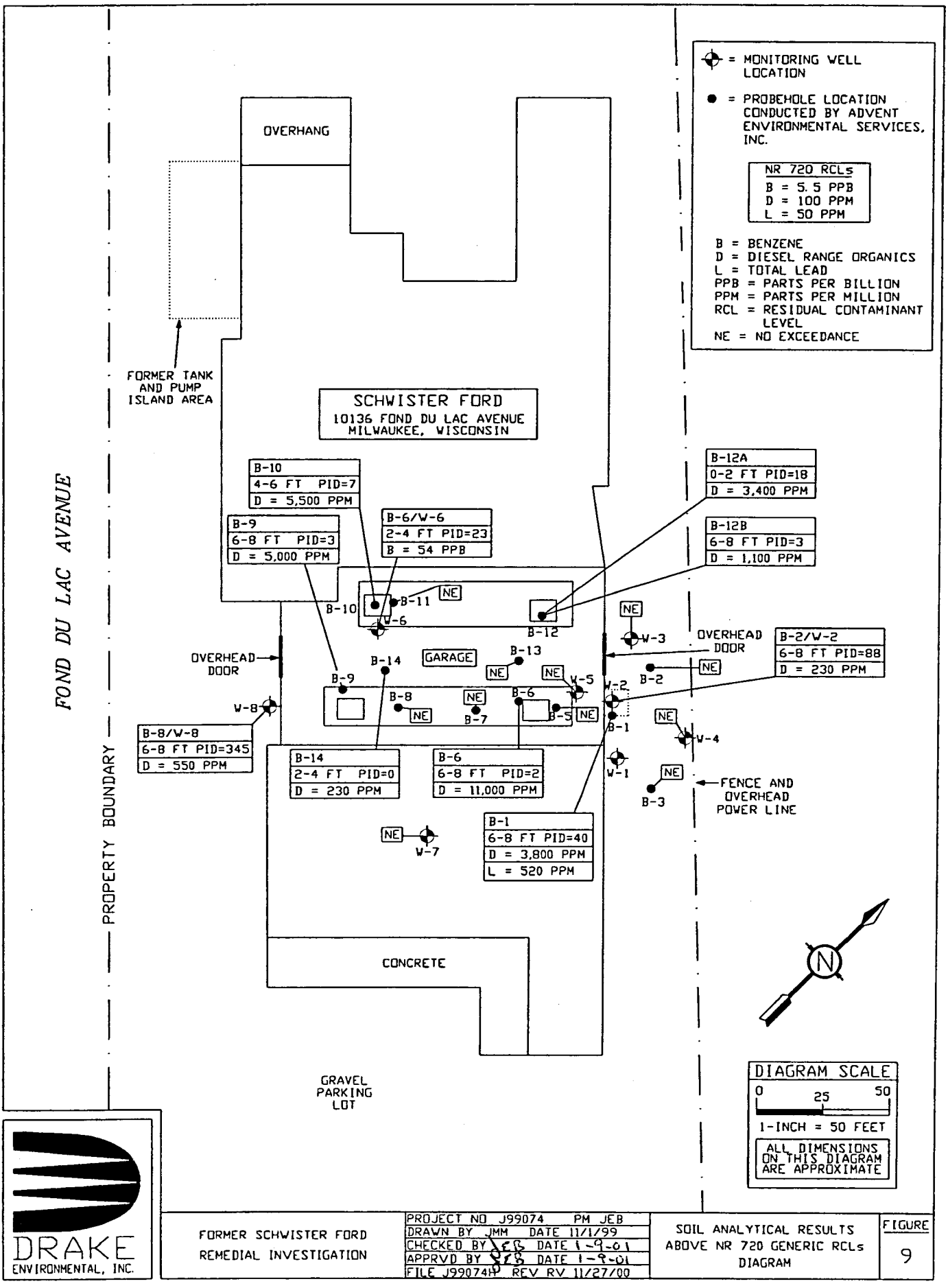
DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO	J99074 PM JEB
DRAWN BY	JMM DATE 11/1/99
CHECKED BY	JEB DATE 1-9-01
APPRVD BY	JEB DATE 1-9-01
FILE	J99074W REV RV 11/27/00

GROUNDWATER ELEVATION CONTOUR DIAGRAM
(SEPTEMBER 14, 2000)

FIGURE
8



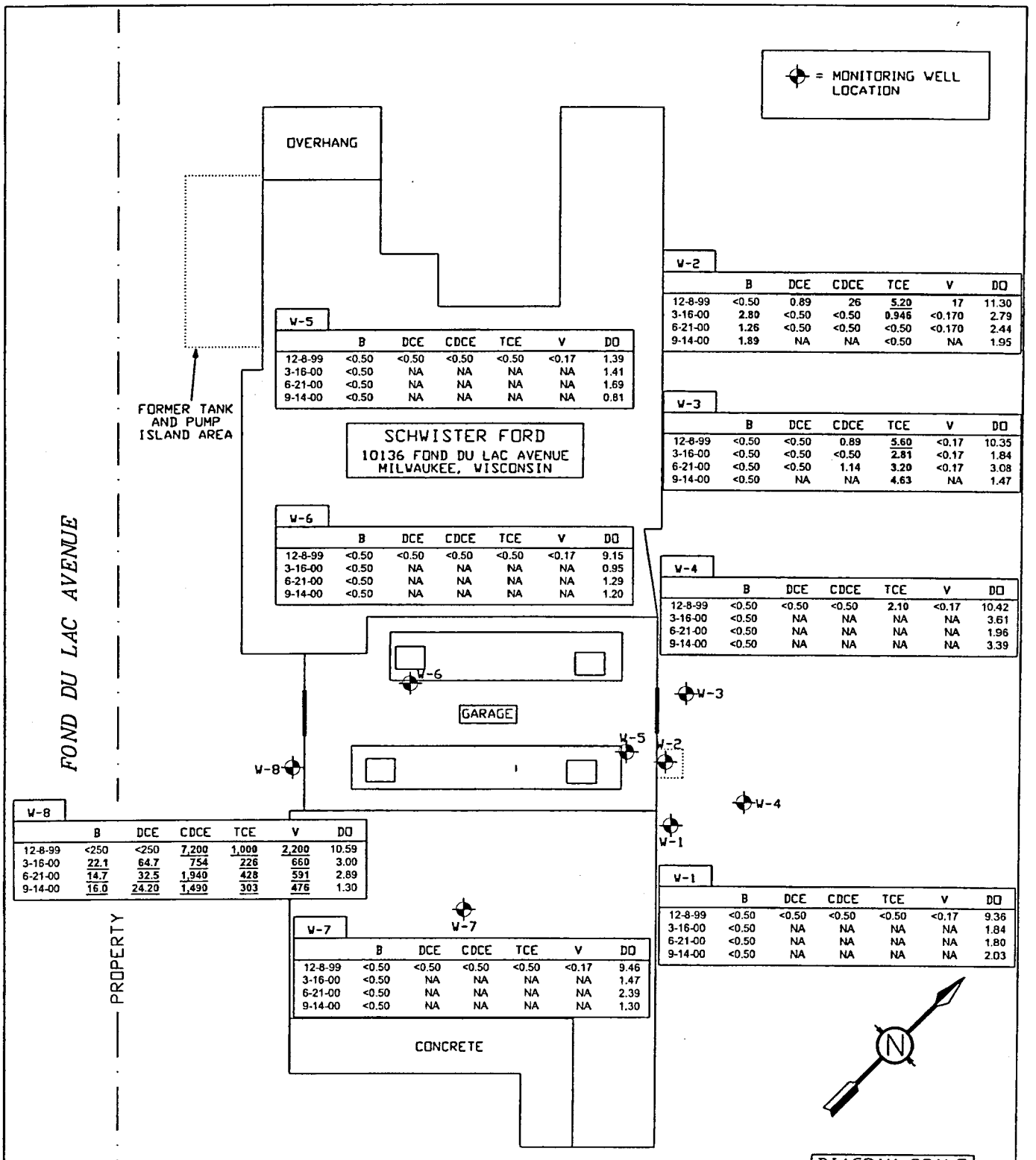
DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO J99074 PM JEB
DRAWN BY JMM DATE 11/1/99
CHECKED BY JEB DATE 1-9-01
APPRVD BY JEB DATE 1-9-01
FILE J99074D REV RV 11/27/00

SOIL ANALYTICAL RESULTS
ABOVE NR 720 GENERIC RCLs
DIAGRAM

FIGURE
9



W-2

	B	DCE	CDCE	TCE	V	DO
12-8-99	<0.50	0.89	26	5.20	17	11.30
3-16-00	2.80	<0.50	<0.50	0.946	<0.170	2.79
6-21-00	1.26	<0.50	<0.50	<0.50	<0.170	2.44
9-14-00	1.89	NA	NA	<0.50	NA	1.95

W-5

	B	DCE	CDCE	TCE	V	DO
12-8-99	<0.50	<0.50	<0.50	<0.50	<0.17	1.39
3-16-00	<0.50	NA	NA	NA	NA	1.41
6-21-00	<0.50	NA	NA	NA	NA	1.69
9-14-00	<0.50	NA	NA	NA	NA	0.81

W-3

	B	DCE	CDCE	TCE	V	DO
12-8-99	<0.50	<0.50	0.89	5.60	<0.17	10.35
3-16-00	<0.50	<0.50	<0.50	2.81	<0.17	1.84
6-21-00	<0.50	<0.50	1.14	3.20	<0.17	3.08
9-14-00	<0.50	NA	NA	4.63	NA	1.47

W-6

	B	DCE	CDCE	TCE	V	DO
12-8-99	<0.50	<0.50	<0.50	<0.50	<0.17	9.15
3-16-00	<0.50	NA	NA	NA	NA	0.95
6-21-00	<0.50	NA	NA	NA	NA	1.29
9-14-00	<0.50	NA	NA	NA	NA	1.20

W-4

	B	DCE	CDCE	TCE	V	DO
12-8-99	<0.50	<0.50	<0.50	2.10	<0.17	10.42
3-16-00	<0.50	NA	NA	NA	NA	3.61
6-21-00	<0.50	NA	NA	NA	NA	1.96
9-14-00	<0.50	NA	NA	NA	NA	3.39

W-8

	B	DCE	CDCE	TCE	V	DO
12-8-99	<250	<250	7,200	1,000	2,200	10.59
3-16-00	22.1	64.7	754	226	660	3.00
6-21-00	14.7	32.5	1,940	428	591	2.89
9-14-00	16.0	24.20	1,490	303	476	1.30

W-7

	B	DCE	CDCE	TCE	V	DO
12-8-99	<0.50	<0.50	<0.50	<0.50	<0.17	9.46
3-16-00	<0.50	NA	NA	NA	NA	1.47
6-21-00	<0.50	NA	NA	NA	NA	2.39
9-14-00	<0.50	NA	NA	NA	NA	1.30

W-1

	B	DCE	CDCE	TCE	V	DO
12-8-99	<0.50	<0.50	<0.50	<0.50	<0.17	9.36
3-16-00	<0.50	NA	NA	NA	NA	1.84
6-21-00	<0.50	NA	NA	NA	NA	1.80
9-14-00	<0.50	NA	NA	NA	NA	2.03

	PAL (PPB)	ES (PPB)
B = BENZENE (PPB)	0.5	5.0
DCE = 1,1-DICHLORDETHENE (PPB)	0.7	7.0
CDCE= CIS-1,2-DICHLORDETHENE (PPB)	7	70
TCE = TRICHLORDETHENE (PPB)	0.5	5
V = VINYL CHLORIDE (PPB)	0.02	0.2
DO - DISSOLVED OXYGEN (PPM)	-	-

DIAGRAM SCALE

0 25 50

1-INCH = 50 FEET

ALL DIMENSIONS ON THIS DIAGRAM ARE APPROXIMATE

DRAKE ENVIRONMENTAL, INC.

FORMER SCHWISTER FORD
REMEDIAL INVESTIGATION

PROJECT NO J99074 PM JEB
DRAWN BY JMM DATE 11/1/99
CHECKED BY JEB DATE 1-9-01
APPRVD BY JEB DATE 1-9-01
FILE J99074H REV RV 11/27/00

GROUNDWATER ANALYTICAL RESULTS ABOVE NR 140 STANDARDS DIAGRAM

FIGURE 10

Drake Environmental, Inc.
Guide to Abbreviations
in Laboratory Data Tables

"—" = Not analyzed for the indicated parameter or not sampled.
< = Less than the specified detection limit.
DO = Dissolved oxygen
ES = Enforcement Standard as established in Wisconsin Administrative Code Chapter NR
DRO = Diesel range organics
GRO = Gasoline range organics
iu = instrument units
MTBE = Methyl-tert butyl ether
mV = Millivolts
NA = Not analyzed for the indicated parameter.
NM = Not measured for the indicated parameter.
NR = No recovery at this interval.
NS = No standard has been established.
ORP = Oxidation-reduction potential
PAL = Preventive Action Limit as established in Wisconsin Administrative Code Chapter
PID = Photoionization detector
ppb = parts per billion
ppm = parts per million
RCL = Residual contaminant level as established in Wisconsin Administrative Code Chap
TMBs = Trimethylbenzenes (combined 1,2,4- and 1,3,5-trimethylbenzene)
umhos = Micromhos

Table 1 (Page 1 of 2)
Groundwater Elevations
Former Schwister Ford Property
Milwaukee, Wisconsin

Well Number	Date	Total Well Depth	Ground Surface Elevation	Top of Casing Elevation	Depth to Water Below Ground	*Depth to Water Below Casing	Groundwater Elevation
W-1	12/8/99	14.15	99.23	98.88	8.72	8.37	**90.51**
	3/16/00				7.88	7.53	**91.35**
	6/21/00				6.53	6.18	**92.70**
	7/7/00				NM	NM	**NM**
	9/14/00				5.73	5.38	**93.50**
W-2	12/8/99	12.92	99.50	99.02	7.70	7.22	**91.80**
	3/16/00				7.07	6.59	**92.43**
	6/21/00				6.16	5.68	**93.34**
	7/7/00				NM	NM	**NM**
	9/14/00				5.31	4.83	**94.19**
W-3	12/8/99	12.93	99.49	99.14	7.90	7.55	**91.59**
	3/16/00				7.14	6.79	**92.35**
	6/21/00				6.00	5.65	**93.49**
	7/7/00				NM	NM	**NM**
	9/14/00				5.05	4.70	**94.44**
W-4	12/8/99	13.08	99.09	98.65	8.32	7.88	**90.77**
	3/16/00				7.37	6.93	**91.72**
	6/21/00				6.30	5.86	**92.79**
	7/7/00				6.45	6.01	**92.64**
	9/14/00				4.76	4.32	**94.33**

*Measured from the north rim of the top of well casing.

All measurements are presented in feet.

Benchmark: Elevations are referenced to a benchmark assigned an arbitrary elevation of 100.00 feet.

Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Laboratory Data T provided at the beginning of this appendix.

Table 1 (Page 2 of 2)
Groundwater Elevations
Former Schwister Ford Property
Milwaukee, Wisconsin

Well Number	Date	Total Well Depth	Ground Surface Elevation	Top of Casing Elevation	Depth to Water Below Ground	*Depth to Water Below Casing	Groundwater Elevation
W-5	12/8/99	12.97	100.13	99.49	8.29	7.65	**91.84**
	3/16/00				7.70	7.06	**92.43**
	6/21/00				6.43	5.79	**93.70**
	7/7/00				NM	NM	**NM**
	9/14/00				5.96	5.32	**94.17**
W-6	12/8/99	13.68	100.08	99.80	8.34	8.06	**91.74**
	3/16/00				7.81	7.53	**92.27**
	6/21/00				6.27	5.99	**93.81**
	7/7/00				6.11	5.83	**93.97**
	9/14/00				5.68	5.40	**94.40**
W-7	12/8/99	13.79	100.15	99.76	9.44	9.05	**90.71**
	3/16/00				8.65	8.26	**91.50**
	6/21/00				7.13	6.74	**93.02**
	7/7/00				7.42	7.03	**92.73**
	9/14/00				7.36	6.97	**92.79**
W-8	12/8/99	14.25	99.95	99.67	8.64	8.36	**91.31**
	3/16/00				8.09	7.81	**91.86**
	6/21/00				6.88	6.60	**93.07**
	7/7/00				7.10	6.82	**92.85**
	9/14/00				6.95	6.67	**93.00**

*Measured from the north rim of the top of well casing.

All measurements are presented in feet.

Benchmark: Elevations are referenced to a benchmark assigned an arbitrary elevation of 100.00 feet.

Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Laboratory Data Tables" provided at the beginning of this appendix.

TABLE 2 (Page 1 of 2)
Transmissivity/Hydraulic Conductivity Calculations
Former Schwister Ford Property
Milwaukee, Wisconsin

To conduct the transmissivity tests, a volume of water was removed from each monitoring well and the water level recovery in the well was measured after a specified time had elapsed. The resulting data was used to determine the hydraulic conductivity of the area surrounding the monitoring well by following the steps below.

1) Calculate $T = q/4\pi st$
   where T = coefficient of transmissivity
   q = volume of groundwater removed (2 gallons)
   s = measured residual drawdown, in feet (water level at time (t) minus the initial depth to water)
   t = time, in days, over which the test was run
2) Convert T in gpd/ft to T in ft^2/sec by dividing result of Step 1 by 646272.
3) Calculate $K = T/b$
   where K = hydraulic conductivity, in ft/sec
   b = saturated interval of well, in feet
4) Convert K in ft/sec to K in cm/sec by multiplying result of Step 3 by 30.48.

The results of the above calculations are as follows:

W-4

1) Calculate $T = 2/4\pi(0.86)(0.10)$
   $= 1.91$ gpd/ft
2) Convert T to ft^2/sec
   $= 2.95 \times 10^{-6}$ ft^2/sec
3) Calculate $K = 2.95 \times 10^{-6}/7.07$
   $= 4.18 \times 10^{-7}$ ft/sec
4) Convert K to cm/sec
   $= \mathbf{1.27 \times 10^{-5}}$ **cm/sec**

q = 2 gallons
s = 0.86 feet
t = 0.10 days
b = 7.07 feet

W-6

1) Calculate $T = 2/4\pi(0.25)(0.09)$
   $= 7.49$ gpd/ft
2) Convert T to ft^2/sec
   $= 1.16 \times 10^{-5}$ ft^2/sec
3) Calculate $K = 7.81 \times 10^{-6}/7.85$
   $= 1.48 \times 10^{-6}$ ft/sec
4) Convert K to cm/sec
   $= \mathbf{4.50 \times 10^{-5}}$ **cm/sec**

q = 2 gallons
s = 0.25 feet
t = 0.09 days
b = 7.85 feet

TABLE 2 (Page 2 of 2)
Transmissivity/Hydraulic Conductivity Calculations
Former Schwister Ford Property
Milwaukee, Wisconsin

W-7

1) Calculate T $= 2/4\pi(2.00)(0.10)$
$= 0.796$ gpd/ft
2) Convert T to ft^2/sec
$= 1.23 \times 10^{-6}$ ft^2/sec
3) Calculate K $= 1.23 \times 10^{-6}/6.76$
$= 1.82 \times 10^{-7}$ ft/sec
4) Convert K to cm/sec
$= 5.55 \times 10^{-6}$ cm/sec

q = 2 gallons
s = 2.00 feet
t = 0.10 days
b = 6.76 feet

W-8

1) Calculate T $= 2/4\pi(1.67)(0.92)$
$= 0.104$ gpd/ft
2) Convert T to ft^2/sec
$= 1.60 \times 10^{-7}$ ft^2/sec
3) Calculate K $= 1.60 \times 10^{-7}/7.43$
$= 2.16 \times 10^{-8}$ ft/sec
4) Convert K to cm/sec
$= 6.58 \times 10^{-7}$ cm/sec

q = 2 gallons
s = 1.67 feet
t = 0.92 days
b = 7.43 feet

TABLE 3 (Page 1 of 2)
PID Screening Results
Former Schwister Ford Property
Milwaukee, Wisconsin

Boring Samples

Depth (feet)	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8
0-2	3	1	5	-	-	-	-	0
2-4	20	0	0	4	0	*23	3	NR
4-6	5	0	1	-	-	-	-	138
6-8	*0	*88	*2	*0	*0	0	*0	*345
8-10	0	*12	0	-	-	-	-	204
10-12	0	17	0	0	0	0	0	17
12-14	0	10	0	-	-	-	-	*100

"-" = Sampling not attempted at this interval.

NM = Not measured. Either insufficient samples recovery for both field screening and lab analys or not measured because the sample was collected below the apparent depth of groundwate

NR = No recovery. Insufficient sample recovery for field screening.

*Indicates sample submitted for laboratory analyses.

Notes: PID readings are measured in instrument units.

TABLE 3 (Page 2 of 2)
PID Screening Results
Former Schwister Ford Property
Milwaukee, Wisconsin

Test Pit Samples

Sample No.	Representative Location	Depth (ft.)	PID Reading (iu)
Hoist #1			
*EX-1	North wall	6	10
*EX-2	South wall	6	20
EX-3	West wall	6	7
EX-4	East wall	6	8
EX-5	Base	8	42
Hoist #2			
EX-7	Base	8	5
EX-8	North wall	6	<1
EX-9	South wall	6	<1
EX-10	West wall	6	<1
*EX-11	East wall	6	<1
Hoist #3			
EX-12	Base	8	35
EX-13	North wall	6	0
*EX-14	South wall	6	5
EX-15	West wall	6	<1
EX-16	East wall	6	<1
Hoist #4			
EX-17	Base	8	<1
EX-18	North wall	6	<1
EX-19	South wall	6	<1
*EX-20	West wall	6	<1
EX-21	East wall	6	<1

*Indicates soil samples submitted for laboratory analyses.

Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Laboratory Data Tables" provided at the beginning of this appendix.

TABLE 4
Advent Phase II and Drake Hoist Removal Soil Sample Analytical Results
Former Schwister Ford Property
Milwaukee, Wisconsin

Sample No.	Sample Depth (ft.)	PID Reading (iu)	DRO (ppm)	Benzene (ppb)	Ethyl-benzene (ppb)	MTBE (ppb)	Toluene (ppb)	Total TMBs (ppb)	Total xylenes (ppb)	Total Lead (ppm)
SB-1A	6-8	40	**3,800**	<25	1,900	<25	48	4,200	610	**520**
SB-2A	10-12	0	94	<25	<25	<25	<25	<50	<25	NA
SB-3A	8-10	0	21	<25	<25	<25	<25	<50	<25	NA
SB-5A	6-8	0	<5.6	NA	NA	NA	NA	NA	NA	NA
SB-6A	6-8	2	**11,000**	<25	<25	<25	<25	<50	<25	NA
SB-7A	8-10	0	<5.9	NA	NA	NA	NA	NA	NA	NA
SB-8A	8-10	0	93	NA	NA	NA	NA	NA	NA	NA
SB-9A	6-8	3	**5,000**	<25	30	<25	<25	128	84	NA
SB-10A	4-6	7	**5,500**	<25	610	<25	330	5,700	3,300	NA
SB-11A	6-8	0	<5.7	NA	NA	NA	NA	NA	NA	NA
SB-12A	0-2	18	**3,400**	<25	69	<25	29	18,900	2,000	NA
SB-12B	6-8	3	**1,100**	<25	<25	<25	<25	440	44	NA
SB-13A	4-6	0	10	<25	<25	<25	<25	<50	<25	NA
SB-14A	2-4	0	**230**	<25	<25	<25	<25	<50	<25	NA
EX-1	6	10	**2,540**	NA	NA	NA	NA	NA	NA	NA
EX-2	6	20	**18,100**	NA	NA	NA	NA	NA	NA	NA
EX-11	6	<1	100	NA	NA	NA	NA	NA	NA	NA
EX-14	6	5	**205**	NA	NA	NA	NA	NA	NA	NA
EX-20	6	<1	<6.14	NA	NA	NA	NA	NA	NA	NA
Generic RCL	—	—	*100*	*5.5*	*2,900*	*NS*	*1,500*	*NS*	*4,100*	*50*

Note: Concentrations in bold type exceed their DNR NR 720 generic RCLs.

Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Laboratory Data Tables" provided at the beginning of this appendix.

TABLE 5
RI Soil Sample Analytical Results
Former Schwister Ford Property

Sample No.	B-1:6-8	B-2:6-8	B-2:8-10	B-3:6-8	B-4:5-10	B-5:5-10	B-6:0-5	B-7:5-10	B-8:6-8	B-8:12-14	NR 720 Standard
DRO (ppm)	<5.8	**230**	NA	<5.6	7.1	<5.9	33	<5.7	**550**	<5.4	100
*VOCs (ppb)											
Benzene	<25	<25	NA	<25	<25	<25	**54**	<25	<25	<25	*5.5*
Bromobenzene	NA	1,800	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Bromodichloromethane	NA	550	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
n-butylbenzene	NA	570	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
sec-butylbenzene	NA	550	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
tert-butylbenzene	NA	570	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Carbon tetrachloride	NA	890	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Chlorobenzene	NA	710	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Chloromethane	NA	170	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
4-chlorotoluene	NA	660	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
1,2-dibromo-3-chloropropane	NA	750	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
1,2-dichlorobenzene	NA	580	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
1,3-dichlorobenzene	NA	640	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
1,4-dichlorobenzene	NA	670	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
1,1-dichloroethene	NA	2,100	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Ethylbenzene	<25	600	NA	<25	<25	<25	97	<25	470	<25	*2,900*
Isopropylbenzene	NA	580	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
p-isopropyltoluene	NA	740	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Methyl tert-butyl ether	<25	<25	NA	<25	<25	<25	<25	<25	<25	38	*NS*
Methylene chloride	NA	2,900	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Naphthalene	NA	690	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
n-propylbenzene	NA	520	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Toluene	<25	<25	NA	<25	<25	<25	110	<25	94	<25	*1,500*
1,2,4-triclorobenzene	NA	650	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
1,1,1-trichloroethane	NA	1,100	NA	NA	NA	NA	NA	NA	NA	NA	*NS*
Total trimethylbenzenes	<50	910	NA	39	<50	<50	1,671	<50	6,400	<50	*NS*
Total Xylenes	<25	1,700	NA	<25	<25	<25	260	<25	530	<25	*4,100*
Total lead	<6.7	3.8	21	5.4	34	9.2	NA	NA	5.3	NA	*50*
Total cadmium	NA	<0.58	NA	NA	<0.59	NA	NA	NA	NA	NA	*8*

*Only the detected VOCs are listed.

Note: Concentrations in bold type are above the WAC Chapter NR 720 RCLs.

Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Laboratory Data Tables" provided at the beginning of this appendix.

TABLE 6
DRO, PVOC, and Dissolved Lead Groundwater Analytical Results
Former Schwister Ford Property
Milwaukee, Wisconsin

Well ID	Sampling Date	DRO (ppb)	Benzene (ppb)	Ethyl-Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Total Trimethyl-Benzenes (ppb)	Total Xylenes (ppb)	Dissolved Lead (ppb)
W-1	12/8/99	0.280	<0.50	<0.50	<0.50	<2.0	6.8	<2.0	<0.50	<0.020
	3/16/00	0.128	<0.50	<0.50	<0.20	NA	<0.50	<2.0	<0.50	NA
	6/21/00	<0.100	<0.50	0.817	<0.20	NA	0.592	3.96	2.70	NA
	9/14/00	<0.100	<0.50	<0.50	<0.20	NA	<0.50	<2.0	<0.50	NA
W-2	12/8/99	1.1	<0.50	<0.50	<0.50	<2.0	<0.50	1.3	0.74	<0.020
	3/16/00	4.69	**2.80**	2.94	1.09	<2.0	3.61	17.85	16.5	NA
	6/21/00	1.27	**1.26**	1.03	<0.50	<2.0	<0.50	2.32	<0.50	NA
	9/14/00	<0.100	**1.89**	1.15	0.523	NA	<0.50	2.06	<0.50	NA
W-3	12/8/99	0.21	<0.50	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50	<0.020
	3/16/00	<0.102	<0.50	3.23	<0.50	7.74	0.530	7.66	6.80	NA
	6/21/00	<0.100	<0.50	<0.50	<0.50	<2.00	<0.50	<2.0	<0.50	NA
	9/14/00	<0.100	<0.50	<0.50	<0.50	NA	<0.50	<2.0	<0.50	NA
W-4	12/8/99	0.9	<0.50	<0.50	<0.50	<2.0	<0.50	2.7	<0.50	<0.020
	3/16/00	0.370	<0.50	<0.50	0.369	NA	<0.50	<2.0	<0.50	NA
	6/21/00	<0.100	<0.50	<0.50	<0.20	NA	<0.50	<2.0	1.21	NA
	9/14/00	<0.100	<0.50	<0.50	<0.20	NA	<0.50	<2.0	<0.50	NA
W-5	12/8/99	0.11	<0.50	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50	<0.020
	3/16/00	<0.102	<0.50	<0.50	<0.20	NA	<0.50	<2.0	<0.50	NA
	6/21/00	<0.100	<0.50	<0.50	<0.20	NA	<0.50	<2.0	<0.50	NA
	9/14/00	<0.100	<0.50	<0.50	<0.20	NA	<0.50	<2.0	<0.50	NA
W-6	12/8/99	<0.10	<0.50	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50	<0.020
	3/16/00	<0.102	<0.50	<0.50	<0.20	NA	<0.50	<2.0	<0.50	NA
	6/21/00	<0.100	<0.50	<0.50	<0.20	NA	<0.50	<2.0	<0.50	NA
	9/14/00	<0.100	<0.50	<0.50	<0.20	NA	<0.50	<2.0	<0.50	NA
W-7	12/8/99	0.21	<0.50	<0.50	<0.50	<2.0	<0.50	<2.0	<0.50	<0.020
	3/16/00	0.101	<0.50	<0.50	<0.20	NA	<0.50	<2.0	<0.50	NA
	6/21/00	<0.100	<0.50	<0.50	<0.20	NA	<0.50	<2.0	<0.50	NA
	9/14/00	<0.100	<0.50	<0.50	<0.20	NA	<0.50	<2.0	<0.50	NA
W-8	12/8/99	5.1	<250	<250	<250	<1,000	<250	<1,000	<250	<0.020
	3/16/00	4.57	**22.1**	0.822	<0.50	2.48	1.65	2.37	0.57	NA
	6/21/00	0.701	**14.7**	1.66	<0.50	<2.00	1.93	5.58	5.71	NA
	9/14/00	0.690	**16.0**	<0.50	<0.50	<2.00	0.512	<2.0	1.91	NA
ES	-	*NS*	*5*	*700*	*60*	*40*	*1,000*	*480*	*10,000*	*15*
PAL	-	*NS*	*0.5*	*140*	*12*	*8*	*200*	*96*	*1,000*	*1.5*

Note: Concentrations in bold type are above the WAC Chapter NR 140 PALs
Concentrations in bold and underlined type are above the WAC Chapter NR 140 ESs

Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Laboratory Data Tables" provided at the beginning of this appendix.

TABLE 7 (Page 1 of 2)
VOC Groundwater Analytical Results
Former Schwister Ford Property
Milwaukee, Wisconsin
(only detected VOCs are presented)

Well ID	Sampling Date	n-Butyl-benzene (ppb)	sec-Butyl-benzene (ppb)	1,1-DCA (ppb)	1,2,-DCA (ppb)	1,1-DCE (ppb)	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	isopropyl-benzene (ppb)	p-Isopropyl-toluene (ppb)	1,1,1-TCA (ppb)	TCE (ppb)	Vinyl Chloride (ppb)
W-1	12/8/99	<0.50	2.60	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.17
W-2	12/8/99	0.57	1.50	0.92	<0.50	**0.89**	**26.00**	<0.50	<0.50	<0.50	0.81	**5.20**	**17**
	3/16/00	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.946**	<0.170
	6/21/00	<0.50	1.24	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.170
	9/14/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	NA
W-3	12/8/99	<0.50	1.50	<0.50	<0.50	<0.50	0.89	<0.50	<0.50	<0.50	<0.50	**5.60**	<0.17
	3/16/00	8.17	5.81	<0.50	<0.50	<0.50	<0.50	<0.50	4.75	<0.50	<0.50	**2.81**	<0.170
	6/21/00	<0.50	<0.50	<0.50	<0.50	<0.50	1.14	<0.50	<0.50	<0.50	<0.50	**3.20**	<0.170
	9/14/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**4.63**	NA
W-4	12/8/99	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.60	<0.50	**2.10**	<0.17
ES	-	*NS*	*NS*	*850*	*5*	*7*	*70*	*100*	*NS*	*NS*	*200*	*5*	*0.2*
PAL	-	*NS*	*NS*	*85*	*0.5*	*0.7*	*7*	*20*	*NS*	*NS*	*40*	*0.5*	*0.02*

Note: Concentrations in bold type are above the WAC Chapter NR 140 PALs
Concentrations in bold and underlined type are above the WAC Chapter NR 140 ESs

Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Laboratory Data Tables" provided at the beginning of this appendix.

TABLE 7 (Page 2 of 2)
VOC Groundwater Analytical Results
Former Schwister Ford Property
Milwaukee, Wisconsin
(only detected VOCs are presented)

Well ID	Sampling Date	n-Butyl-benzene (ppb)	sec-Butyl-benzene (ppb)	1,1-DCA (ppb)	1,2,-DCA (ppb)	1,1-DCE (ppb)	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	isopropyl-benzene (ppb)	p-Isopropyl-toluene (ppb)	1,1,1-TCA (ppb)	TCE (ppb)	Vinyl Chloride (ppb)
W-5	12/8/99	<0.50	0.52	0.87	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.40	<0.50	<0.17
W-6	12/8/99	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.17
W-7	12/8/99	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.17
W-8	12/8/99	<250	<250	<250	<250	<250	**7,200**	<250	<250	<250	<250	**1,000**	**2,200**
	3/16/00	3.39	1.55	<0.50	**64.7**	**64.7**	**754**	**60.5**	0.999	<0.50	<0.5	**226**	**660**
	6/21/00	2.01	2.79	<0.50	**5.65**	**32.5**	**1,940**	**25.0**	0.999	0.772	<0.5	**428**	**591**
	9/14/00	<0.50	1.37	<0.50	<0.50	**24.20**	**1,490**	**24.30**	1.51	0.713	<0.50	**303**	**476**
ES	-	*NS*	*NS*	*850*	*5*	*7*	*70*	*100*	*NS*	*NS*	*200*	*5*	*0.2*
PAL	-	*NS*	*NS*	*85*	*0.5*	*0.7*	*7*	*20*	*NS*	*NS*	*40*	*0.5*	*0.02*

Note: Concentrations in bold type are above the WAC Chapter NR 140 PALs
Concentrations in bold and underlined type are above the WAC Chapter NR 140 ESs

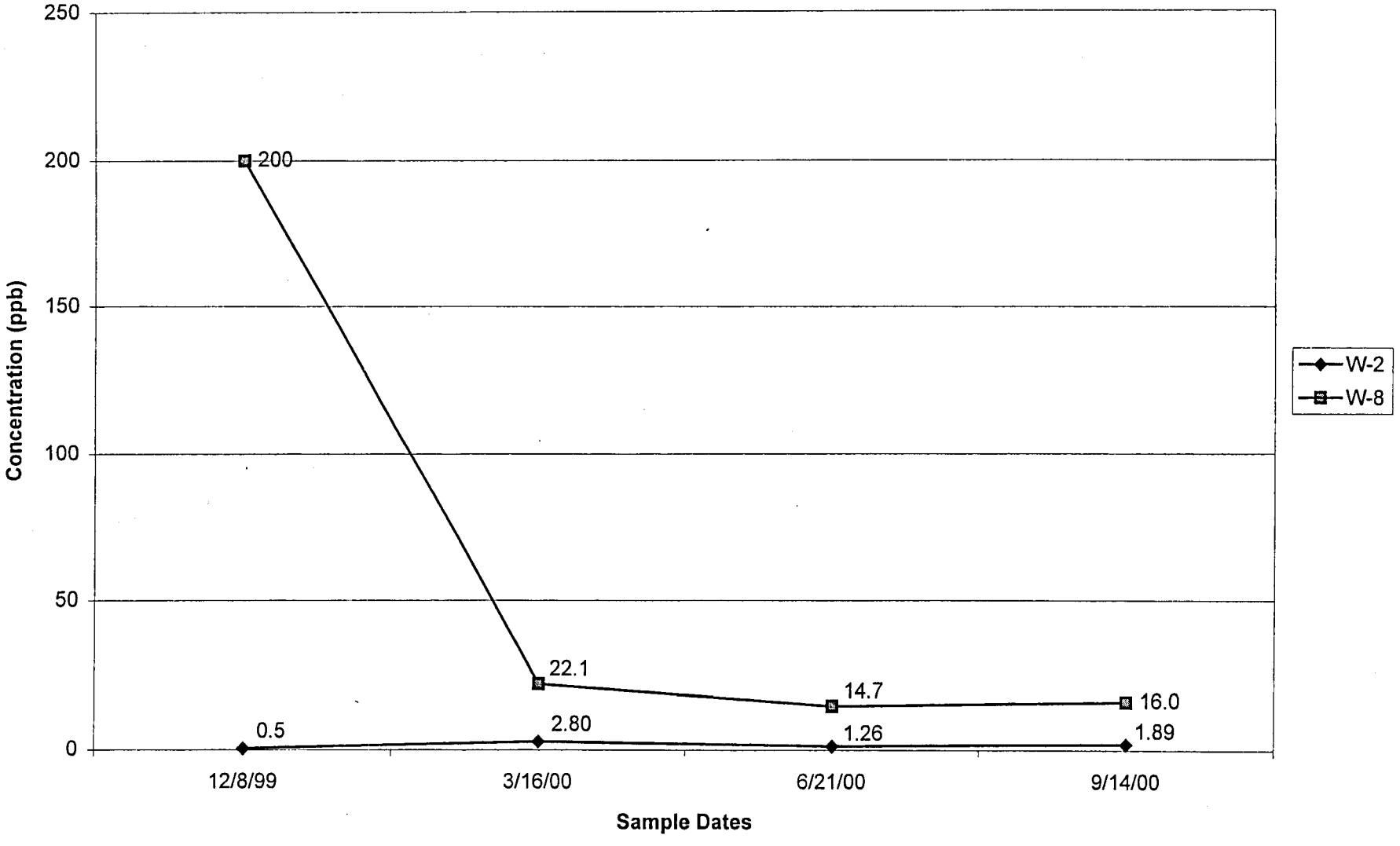
Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Laboratory Data Tables" provided at the beginning of this appendix.

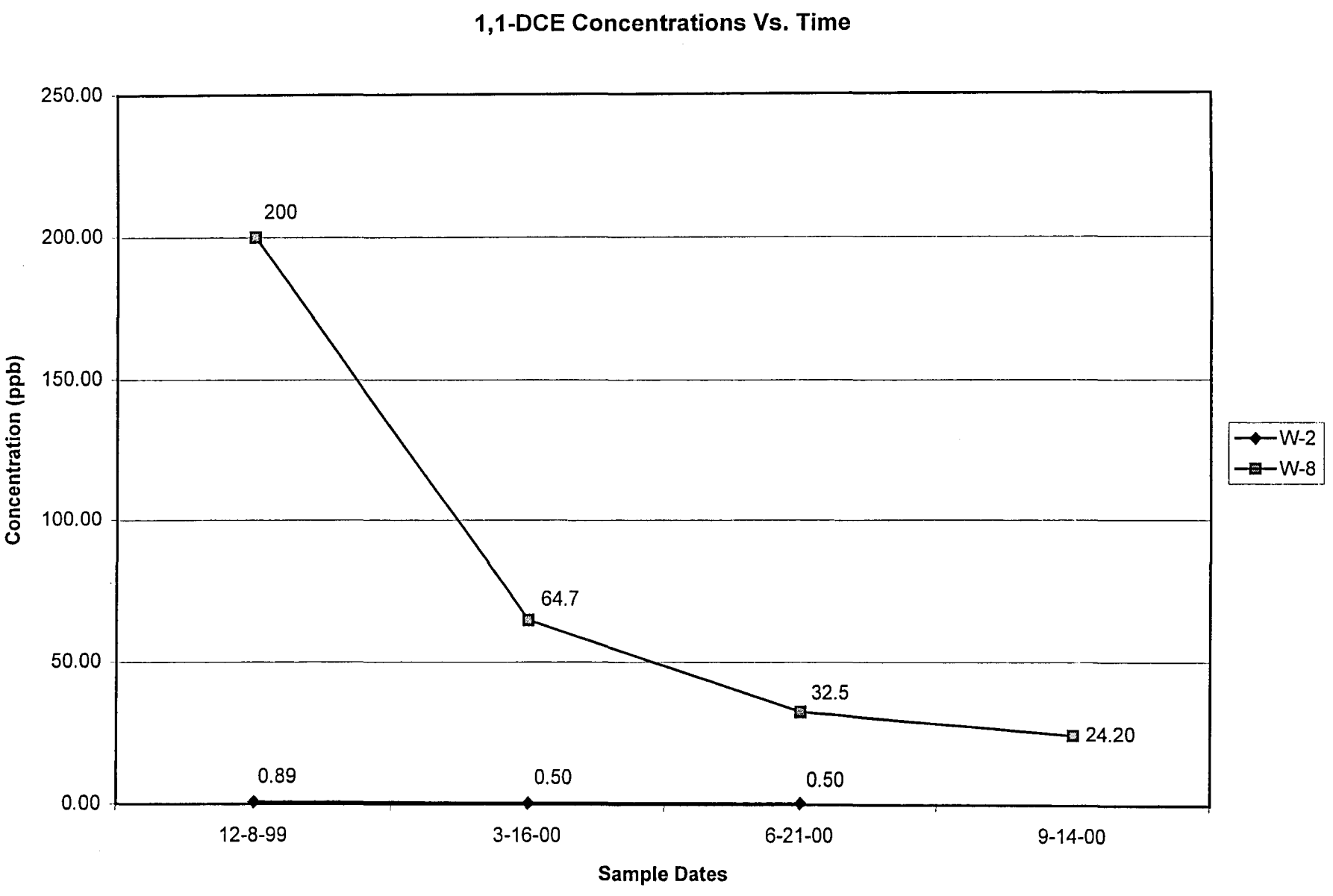
TABLE 8
PAH Groundwater Analytical Results
Former Schwister Ford Property
Milwaukee, Wisconsin

Well Sampled Sampling Date	W-2 12/8/99	W-4 12/8/99	W-6 12/8/99	W-8 12/8/99	NR 140 PAL	 ES
Parameter (ppb)						
Acenaphthene	<5.3	<5.0	<5.2	<5.6	NS	NS
Acenaphthylene	<4.2	<4.0	<4.1	<4.4	NS	NS
Anthracene	<0.21	<0.20	<0.21	<0.22	600	3,000
Benz (a) anthracene	<0.011	<0.010	<0.010	<0.011	NS	NS
Benzo (a) pyrene	<0.021	<0.020	<0.021	<0.022	0.02	0.2
Benzo (b) fluoranthene	<0.021	<0.020	<0.021	<0.022	0.02	0.2
Benzo (ghi) perylene	<0.063	<0.060	<0.062	<0.067	NS	NS
Benzo (k) fluoranthene	<0.011	<0.010	<0.010	<0.011	NS	NS
Chrysene	<0.053	<0.050	<0.052	<0.056	0.02	0.2
Dibenz (ah) anthracene	<0.021	<0.020	<0.021	<0.022	NS	NS
Fluoranthene	<1.1	<1.0	<1.0	<1.1	80	400
Fluorene	<1.1	<1.0	<1.0	<1.1	80	400
Indeno (1,2,3-cd) pyrene	<0.42	<0.40	<0.41	<0.44	NS	NS
1-Methylnaphthalene	<3.2	<3.0	<3.1	<3.3	NS	NS
2-Methylnaphthalene	<3.2	<3.0	<3.1	<3.3	NS	NS
Naphthalene	<3.2	<3.0	<3.1	<3.3	8	40
Phenanthrene	<0.32	<0.30	<0.31	<0.33	NS	NS
Pyrene	<1.1	<1.0	<1.0	<1.1	50	250

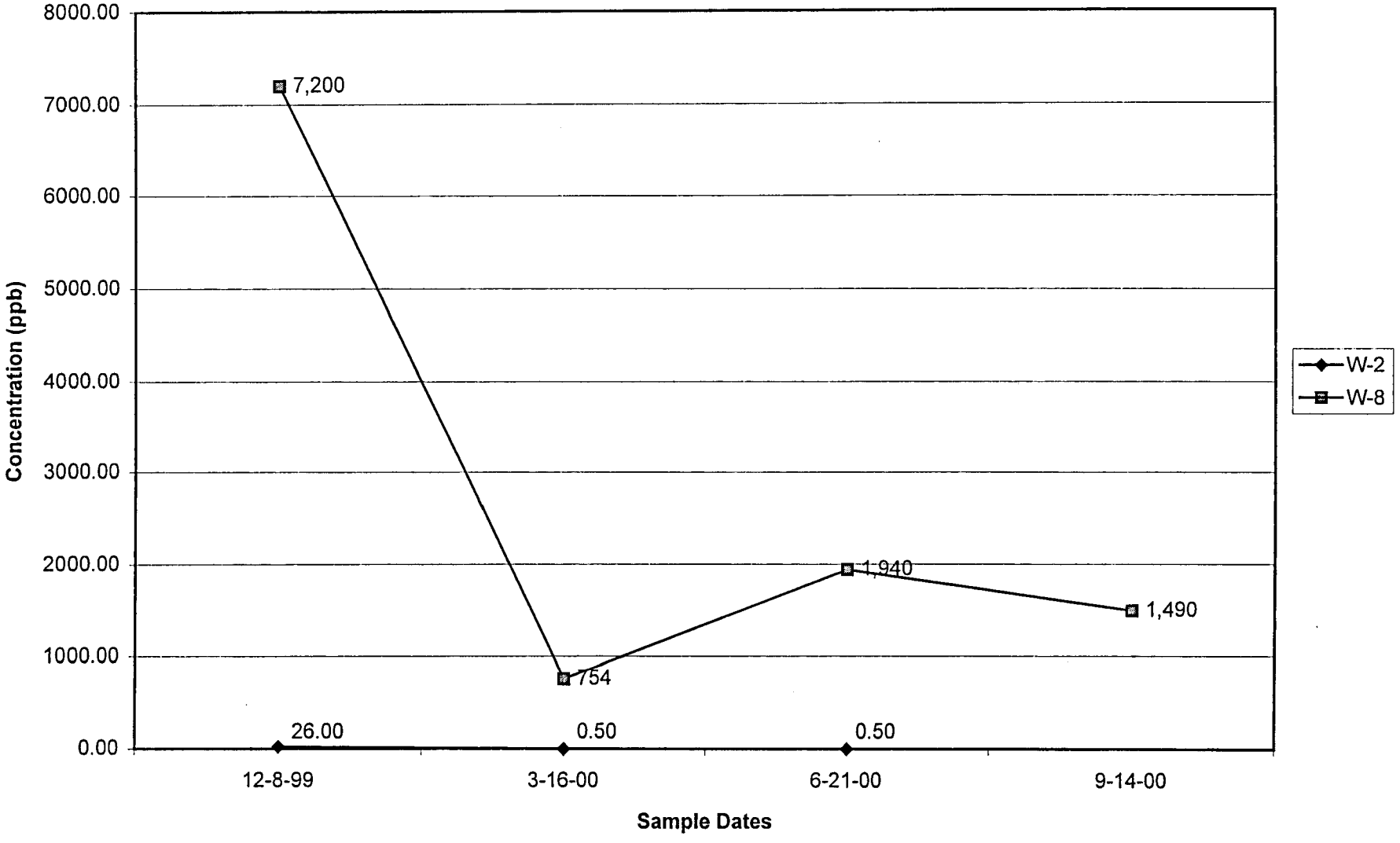
Note: For a list of abbreviations used in this table, see the "Guide to Abbreviations in Laboratory Data Tables provided at the beginning of this appendix.

Benzene Concentrations Vs. Time

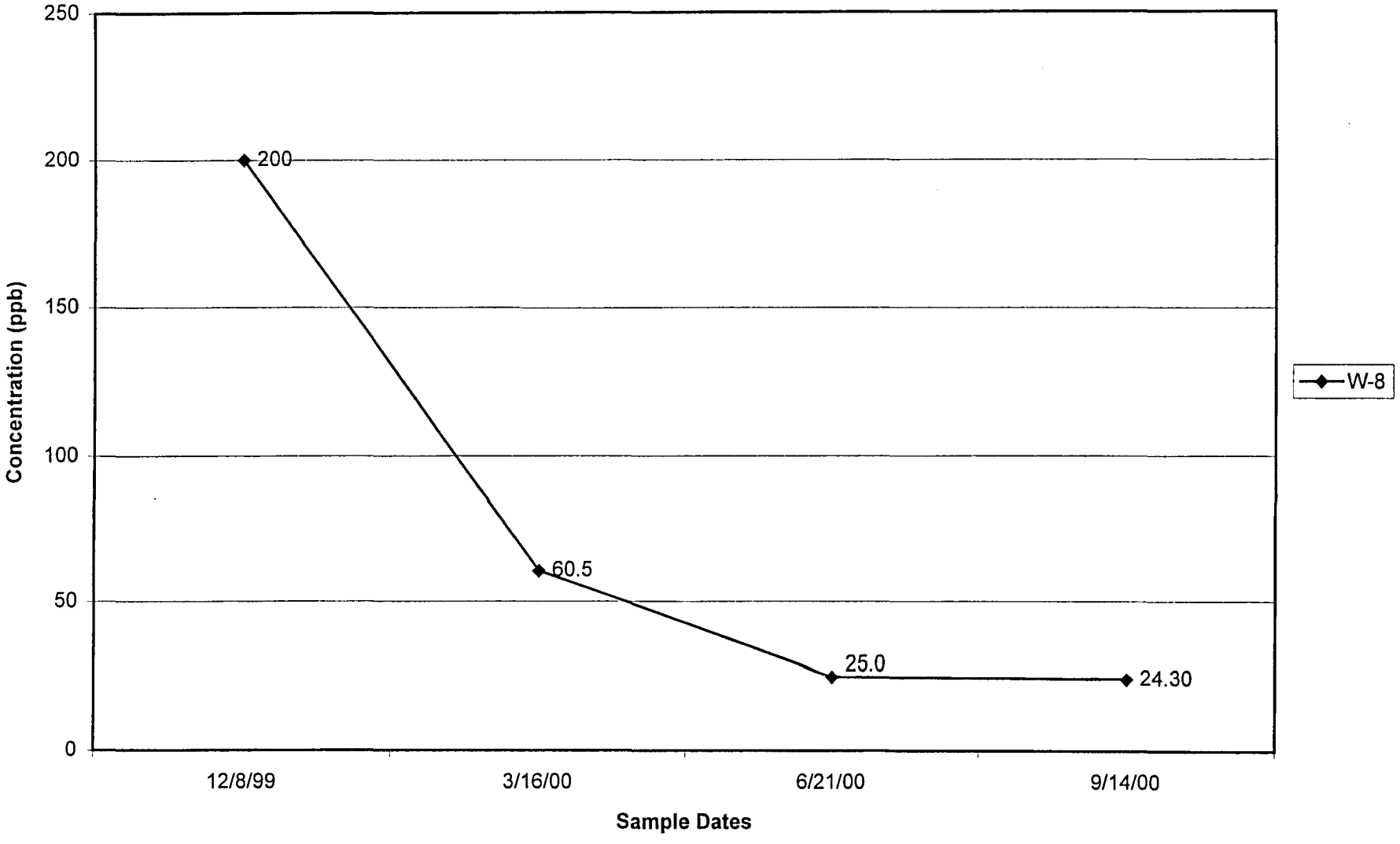



1,1-DCE Concentrations Vs. Time
250.00
200.00
150.00
100.00
50.00
0.00
Concentration (ppb)
200
64.7
32.5
24.20
0.89
0.50
0.50
12-8-99
3-16-00
6-21-00
9-14-00
Sample Dates
W-2
W-8

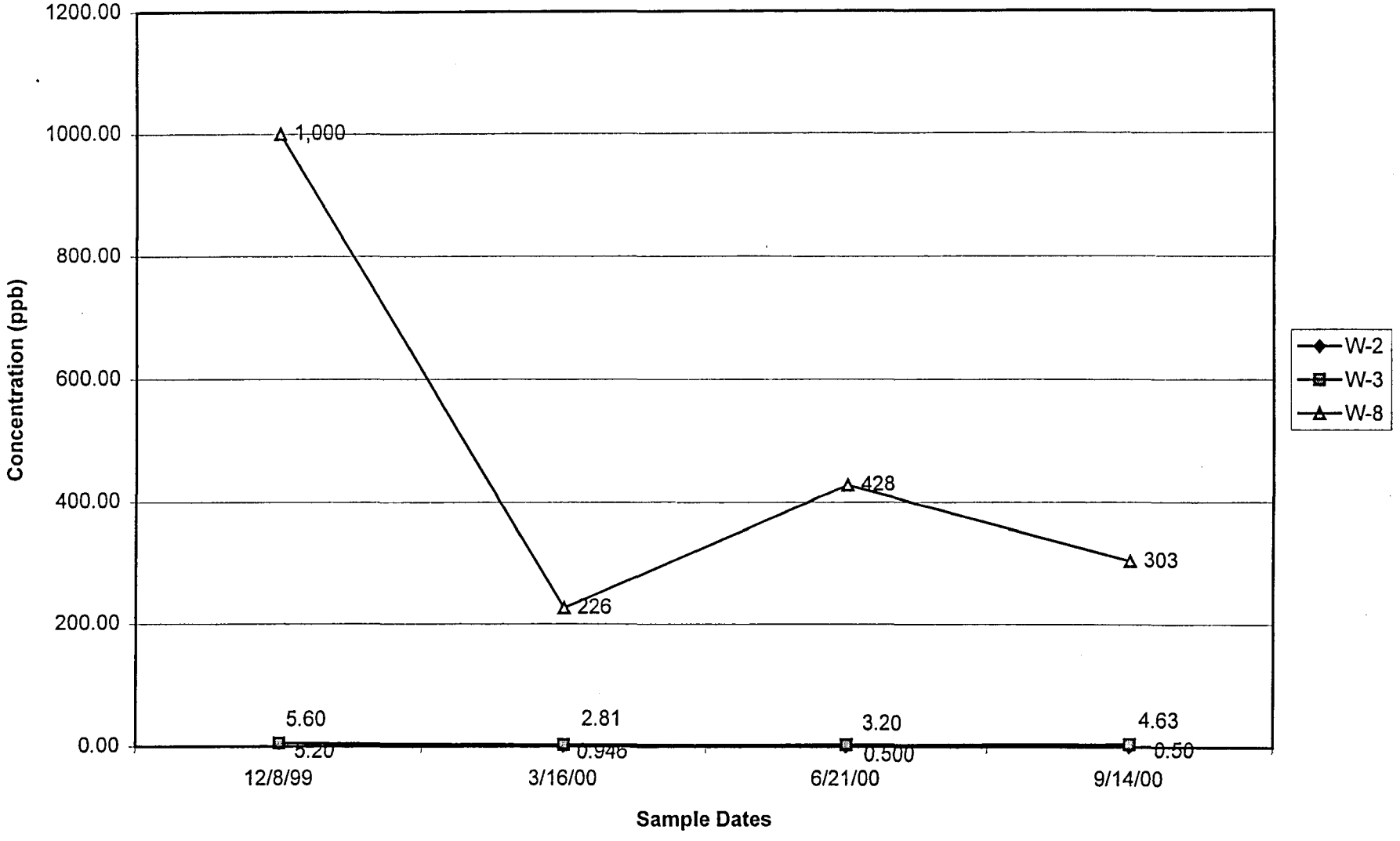
cis-1,2-DCE Concentrations Vs. Time



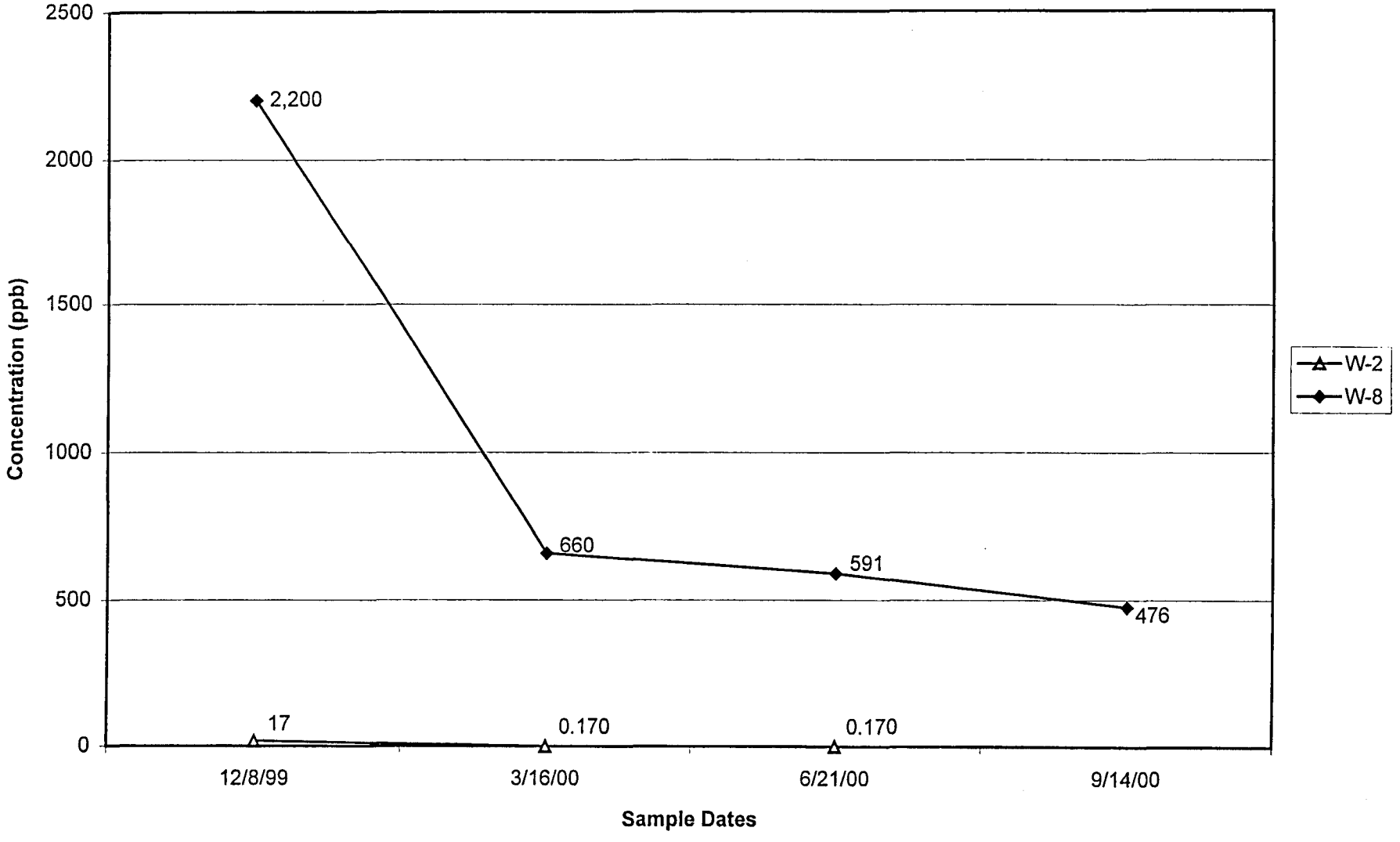
Trans-1,2-DCE Cncentrations Vs. Time



TCE Concentrations Vs. Time



Vinyl Chloride Concentrations Vs. Time



Wisconsin
Department of Commerce

ENVIRONMENTAL & REGULATORY SERVICES
101 West Pleasant Street Suite 100A
Milwaukee, Wisconsin 53212
www.commerce.state.wi.us
Fax: (414) 220-5374
Scott McCallum, Governor
Brenda J. Blanchard, Secretary

March 20, 2001

Mr. Bill Schwister
Henry J. Schwister Revocable Trust
4832 Highland Park Dr.
Slinger, WI 53086

RE: COMMERCE # 53224-5199-36B, BRRTS #: 02-41-231844
Schwister Ford-Waste Oil (Second Occurance) 10136 W Fond Du Lac Ave, Milwaukee, WI

Transfer of this site back to the Department of Natural Resources

Dear Mr. Schwister:

After reviewing the information provided by your consultant Drake Environmental, Inc. the Department of Commerce has determined that this site does not fall under its jurisdiction. The Department does not have authority for underground storage tank sites that have both chlorinated and petroleum contamination. Therefore, this site will be transferred back to the Wisconsin Department of Natural Resources. Please forward all additional information to the program assistant (414-263-8680) at:

Wisconsin Department of Natural Resources
Regional Headquarters
2300 N. Martin Luther King Jr. Dr.
PO Box 12436
Milwaukee, WI 53212

If you have any questions pertaining to this transfer feel free to contact me at 414.220.5375.

Sincerely,

Gregory S. Michael
Hydrogeologist
PECFA Site Review Section

Cc: e-file
Drake

WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor
George E. Meyer, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Regional Headquarters
2300 N. Dr. ML King Drive, PO Box 12436
Milwaukee, Wisconsin 53212-0436
Telephone 414-263-8500
FAX 414-263-8483
TDD 414-263-8713

February 2, 2001

Henry J Schwister Revocable Trust
4832 Highland Park Dr
Slinger, WI 53086

Subject: Transfer of Site File for Former Schwister Ford Property, 10136 W Fond Du Lac, Milwaukee, WI

FID#: 241143100
BRRTS#: 02-41-231844

Dear Sir:

The State of Wisconsin divides the jurisdiction for sites contaminated by petroleum storage tank systems between the DNR and the Department of Commerce (Commerce). This is based on statutory definitions of high, medium and low risk sites. Under this statute, oversight of sites falling under the definition of "low or medium risk", are the responsibility of Commerce rather than our agency. Your consultant has advised us that your site falls under the definition of "low or medium risk". As such, further reviews of submittals and all technical assistance will need to be provided by staff at Commerce. Accordingly, DNR will transfer the above referenced file to Commerce.

Due to the changes in this statutory language, we are transferring your site, along with all file documents for your site, to the Department of Commerce. Commerce staff will be reviewing your request and providing you with a response as to its adequacy in the near future.

If you have questions or concerns regarding your site, or would like to review any of the pertinent file documents, you should direct them to Commerce staff at the following address:

Gregory Michael	(414) 220-5375	Wisconsin Department of Commerce
Nancy Kochis	(414) 220-5372	Environmental & Regulatory Services
Linda Michalets	(414) 220-5376	101 West Pleasant Street – Suite 205
Jennifer Skinner	(414) 220-5373	Milwaukee, WI 53212

Thank you for you understanding as we implement the language contained within the recent Biennial Budget.

Sincerely,

Victoria Stovall
Program Assistant
Remediation & Redevelopment
Telephone: 414/263-8680

cc: Jason Bartly, Drake Environmental
WDNR SER Files

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January 9, 2001

DRAKE
ENVIRONMENTAL, INC.
Common Sense. Uncommon Service.

Ms. Nancy Kochis
Wisconsin Department of Commerce
101 West Pleasant Street
Suite 205
Milwaukee, WI 53212-3939

Transfer

RE: **Closure Request**/Remedial Investigation Report for the Former Schwister Ford Property in Milwaukee, Wisconsin — Drake Project No. J99074; DNR FID No. 241143100; BRRTS No. 02-41-231844; PECFA Claim No. 53224-5199-36-B

Dear Ms. Kochis:

On behalf of the Henry J. Schwister Revocable Trust, Drake Environmental, Inc. has completed the Remedial Investigation (RI) for the above-referenced site. The attached report presents the results of the field and laboratory testing, a discussion of the results, and our conclusions and recommendations for site closure. This site is currently under the oversight of the Wisconsin Department of Natural Resources (DNR). Because we believe that the subject property is classified as a medium-priority site, We are submitting the attached report to the Wisconsin Department of Commerce. A copy of this letter was submitted to the DNR.

If you have any concerns regarding this report, please feel free to call us at (414) 351-1440.

Respectfully,
DRAKE ENVIRONMENTAL, INC.

Jason E. Bartley
Project Manager

Richard W. Frieseke, P.E.
Project Director

Attachments
J99074G

cc: Mr. Bill Schwister
Wisconsin Department of Natural Resources - LETTER ONLY

6980 North Teutonia Avenue
Milwaukee, WI 53209-2536
(414)351-1440
1-800-853-8440
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email@drakeenviro.com

DRAKE
ENVIRONMENTAL, INC.
Common Sense. Uncommon Service.

WORK PLAN FOR HOIST REMOVAL AND REMEDIAL INVESTIGATION

FORMER SCHWISTER FORD PROPERTY MILWAUKEE, WISCONSIN

HENRY J. SCHWISTER REVOCABLE TRUST

DRAKE
ENVIRONMENTAL, INC.
Common Sense. Uncommon Service.

November 9, 1999

Ms. Brenda Brown
Program Assistant
Wisconsin Department of Natural Resources
Southeast Region Headquarters Office
Post Office Box 12436
2300 North Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212

RE: Work Plan for Hoist Removal and Remedial Investigation at the Former Schwister Ford Property, Located at 10136 West Fond du Lac Avenue in Milwaukee, Wisconsin — Drake Project No. J99074; BRRTS No. 02-41-231844; DNR FID No. 241143100; ERP/LUST: ERP

Dear Ms. Brown:

Drake Environmental, Inc. is pleased to submit this work plan to conduct hydraulic hoist/soil removal and Remedial Investigation (RI) activities at the above-referenced site. We propose to complete the project by documenting the removal of four hydraulic hoists, and excavation and off-site bioremediation of the contaminated soils, if warranted. Drake will also conduct an RI in the hoist and former waste oil underground storage tank (UST) areas to evaluate soil and groundwater conditions. Drake will also evaluate the feasibility of remediation by natural attenuation (RNA). By evaluating the results of field and laboratory analyses, we will provide conclusions regarding the effectiveness of the soil removal and groundwater conditions.

This work plan describes a detailed scope of work for the project and provides the DNR with written verification that the Henry J. Schwister Revocable Trust has hired Drake as their environmental consultant, per the requirements of the DNR's October 13, 1999 letter.

6980 North Teutonia Avenue
Milwaukee, WI 53209-2536
(414)351-1440
1-800-853-8440
Fax:(414)351-1404
www.drakeenviro.com
email@drakeenviro.com

If you have any questions or comments, please call us at 351-1440.

Respectfully,

DRAKE ENVIRONMENTAL, INC.

Jason E. Bartley
Associate Project Manager

Richard W. Frieseke, P.E.
Project Director

cc: Bill Schwister, Trustee
Attorney Mike Tobin

Attachments
86\J99074E

WORK PLAN

PROJECT
Work Plan for
Hoist Removal and Remedial Investigation
Former Schwister Ford Property
10136 West Fond du Lac Avenue
Milwaukee, WI 53224
BRRTS No.: 02-41-231844
DNR FID No.: 241143100
ERP/LUST: ERP

CLIENT
Mr. William Schwister, Trustee
Henry J. Schwister Revocable Trust
10136 Fond du Lac Avenue
Milwaukee, WI 53224

Drake Project Number
J99074

Date
November 9, 1999

DRAKE ENVIRONMENTAL, INC.
6980 North Teutonia Avenue
Milwaukee, Wisconsin 53209-2536

WORK PLAN CONTENTS

Page

PROJECT SCOPE

WORK PLAN FOR
HOIST REMOVAL AND REMEDIAL INVESTIGATION
FORMER SCHWISTER FORD PROPERTY
MILWAUKEE, WISCONSIN

PROJECT SCOPE

Project Description

The former Schwister Ford property is located at 10136 Fond du Lac Avenue, in Milwaukee, Wisconsin. The site location is illustrated on Figure 1 (attached). It is understood that a 550-gallon waste oil underground storage tank (UST) was formerly located at the above-referenced site and was removed on December 15, 1988. It is also understood that several hydraulic hoists are currently located at the subject site. The general location of the hydraulic hoist area and the former location of the waste oil UST cavity are illustrated on Figure 2 (attached).

Based on the results of field observations (soil staining and petroleum odors), field screening with a photoionization detector (PID), and laboratory results in samples collected by Advent Environmental Services, Inc., petroleum contamination is present in soils in the vicinity of the former UST cavity, and in soils associated with four of the hydraulic hoists. On September 30, 1999, Drake Environmental, Inc. notified the Wisconsin Department of Natural Resources (DNR) of the release. In a letter dated October 13, 1999, the DNR required that a Remedial Investigation (RI) be conducted to estimate the extent and degree of soil and groundwater contamination, if any, and to develop recommendations for remediation, if warranted.

Drake was retained by Mr. Bill Schwister, Trustee of the Henry J. Schwister Revocable Trust, to conduct the RI within the vicinities of the former waste oil UST cavity and hydraulic hoist areas.

To remove the source of contamination, Drake also recommends that four of the existing hoists be removed from the property. Drake will coordinate with a contractor to remove four in-ground, single-post hydraulic hoists from the subject site. Because it is likely that contaminated soils exist in the area of the hoists, Drake is recommending

limited excavation of contaminated soils encountered during removal of the hydraulic hoists. Soil excavation with off-site bioremediation at a licensed landfill is anticipated to be the most cost-effective soil disposal method. The hydraulic hoists will be removed concurrent with soil investigation and excavation activities. Drake will evaluate the extent and significance of contamination during the hoist and soil removal activities.

This work plan describes a detailed scope of work for the project and provides the DNR with written verification that the Henry J. Schwister Revocable Trust has hired Drake as their environmental consultant, per the requirements of the DNR's October 13, 1999 letter.

Site Geology and Hydrogeology

Drake reviewed United States Geological Survey (USGS), United States Department of Agriculture (USDA), and Wisconsin Geological and Natural History Survey (WGNHS) publications to gather information about the site and surrounding area. According to the Menomonee Falls quadrangle map, the subject site is situated in the NE 1/4 of the SW 1/4 of Section 20, Township 8N, Range 21E. The ground surface of the subject site has an elevation of approximately 720 feet above mean sea level (MSL) and is relatively flat. The ground surface in vicinity of the subject site appears to gradually slope downward to the southeast. The quadrangle map depicts the site and site vicinity to be located in an relatively undeveloped area of Milwaukee with some residential properties located across from the subject site along Fond du Lac Avenue, and commercial properties located on the same side of Fond du Lac Avenue as the subject site. Figure 2 (attached) illustrates the features of the subject site.

According to the July 1971 USDA, Soil Survey of Milwaukee and Waukesha Counties, Wisconsin, soils in the region of the subject property generally consist glacial moraine deposits comprised of well-drained to somewhat poorly drained soils that have a subsoil of silty clay loam and silty clay. The soils beneath the subject site are generally miscellaneous fill materials comprised mostly of clay to clay loam containing fragments of bricks, pavement material, and various debris. The soil type and presence of fill material were confirmed at the subject property during previous sampling activities. The soils at the site are expected to exhibit relatively low permeabilities (less than $1x10^{-5}$ centimeters per second).

The soils apparently overlie Silurian age dolomite/limestone bedrock, which appears to be present at a depth of approximately 50-100 feet below ground surface (bgs).

Groundwater flow within the unconsolidated surficial soils generally follows the local topography, flowing from recharge areas of higher elevation to discharge areas of lower elevation. Shallow groundwater flow is expected to be toward the Little Menomonee River, located approximately 1,500 feet southeast of the subject site. However, the actual direction of shallow groundwater flow is likely affected by the variability of the fill materials at the subject property. No surface water bodies are located within 1,200 feet of the subject site. Groundwater flow within the deeper bedrock aquifer is expected to be toward Lake Michigan, located approximately 7 miles east of the subject site.

Scope of Work

The scope of work for this project will ultimately depend upon the actual site characteristics, as well as the requirements and concerns of all the parties involved. Drake has developed a scope of work that includes field, laboratory, and documentation services considered necessary to comply with the regulatory requirements applicable to this property. A detailed description of each service is also presented.

- Assist with the selection of excavating/hoist removal and drilling/well installation contractors, and an analytical laboratory.
- Prepare a site-specific health and safety plan.
- Assist with obtaining approval for off-site bioremediation of the contaminated soils.
- Coordinate the project with the contractor, who will remove four hydraulic hoists and conduct limited excavation within the vicinity of each hoist, if warranted.
- Document the removal of the hydraulic hoists.
- Document the soil removal procedures.
- Collect representative soil samples at the walls and bases of the final excavations in the hydraulic hoist areas.
- Coordinate with the drilling contractor to drill approximately two soil borings within the garage, and approximately five borings within the vicinity of the former waste oil UST cavity.

- Document the drilling procedures and collect representative soil samples from each soil boring.
- Screen the soil samples from the former waste oil and hydraulic hoist areas to preliminarily evaluate their degree of petroleum contamination.
- Document the procedures used by the drilling contractor to complete each soil boring as a groundwater monitoring well.
- Develop each monitoring well and conduct 1 year of quarterly groundwater sampling to evaluate groundwater quality and contaminant trends.
- Submit selected soil and groundwater samples to an analytical laboratory for chemical testing to quantify contaminants.
- Conduct an elevation survey to determine the ground surface and top of PVC pipe elevations at each well location.
- Evaluate the significance of the contamination and applicability with Wisconsin Administrative Code (WAC) Chapters COMM 47 and COMM 46.
- Prepare a report for submittal to the appropriate regulatory agency presenting the procedures and results of the project, along with conclusions and recommendations based on the results.
- Prepare a closure request, if appropriate, or prepare a Remedial Action Options (RAO) letter for submittal to the appropriate regulatory agency.

If additional services are requested or the scope of work described in this work plan is substantially altered, an added or revised scope of work may be documented in future correspondence and addended to this work plan.

Contractor and Laboratory Selection

Drake will assist with selecting an excavating/hydraulic hoist removal contractor to remove four hoists, and excavate and transport contaminated soils off site for bioremediation; a drilling contractor to drill soil borings and subsequently install groundwater monitoring wells; and an independent certified laboratory for the proposed analytical testing. Drake will establish scopes of work for these services and request bids based on the scopes of work. Drake will then schedule and coordinate the project with the selected contractors and laboratory.

Health and Safety Plan

Prior to implementation of the fieldwork, Drake will prepare a site-specific health and safety plan to comply with requirements of the Occupational Safety and Health Administration (OSHA). The plan will apply to Drake staff members conducting fieldwork or providing project support at the site. A description of site characteristics, a hazards evaluation, safety requirements, and emergency procedures will be included in the plan. The health and safety plan will be available on site during the fieldwork.

Bioremediation Approval

Drake will use the previous analytical results of the soil sampling to obtain approval for bioremediation at the most cost-effective bioremediation facility. Drake will assist with preparing the documents necessary to obtain approval for bioremediation. Drake will subsequently coordinate soil disposal with the selected facility.

Hydraulic Hoist Removal

Drake will document the procedures followed by the contractor to remove, clean, and dispose of four hydraulic hoists. The contractor will be responsible for clearing utilities and obtaining the necessary permits. Based on the results of previous sampling, soil contamination will likely be encountered during removal of the hoists. Therefore, Drake will evaluate the soils at the time of hoist removal, and coordinate soil excavation as needed. The hoist cavities will be backfilled with imported soils immediately following soil removal, if warranted. If sludge is encountered in association with hoist removal, it will be stored in 55-gallon, DOT-approved drums and disposed of following approval.

Drake will document the procedures used to remove the hydraulic hoists and physically observe and field screen soils in the hoist areas.

Soil Excavation

Drake will document the soil removal procedures and soil conditions during excavation in the areas of the hydraulic hoists. The excavations will be terminated when Drake's field screening results and physical observations indicate that the most significantly

contaminated soils have apparently been removed or when additional removal is not possible due to obstructions on the property. The scope of remediation does not include removing all of the contaminated soils, but only those which may pose a threat to potential off-site migration of groundwater contamination. During excavation, the extent of contamination will also be further evaluated.

Drake assumes that the excavations will be backfilled immediately by the contractor with imported sand, gravel, or other fill material(s) suitable to reduce potential settlement beneath existing and/or future pavement, buildings, and other improvements. It is also assumed that the fill material(s) will be uncontaminated; Drake will not conduct sampling or analyses to confirm that the fill material(s) is uncontaminated.

The selected contractor will be responsible for importing, placing, and compacting structural fill material(s) with regard to reducing potential settlement beneath existing and/or future pavement, buildings, and other improvements. Drake will not be present on site for the specific purpose of determining the suitability of backfill materials or for monitoring the placement and/or compaction of backfill materials.

Soil Excavation Sampling

During soil removal, Drake will evaluate the soil conditions at the excavation areas by collecting representative soil samples from the walls and bases of the final excavations. Samples of the excavated soils will also be collected. The samplers utilized to collect soils will be decontaminated before and after each sample recovery to prevent the transfer of contaminants by the sampling equipment. The samples will be placed into the appropriate containers for field and laboratory testing.

Soil Boring Drilling and Groundwater Monitoring Well Installation

Drake will coordinate with a drilling contractor to drill an estimated two soil borings in the garage area and an estimated five borings in the former waste oil UST area. The soil borings will be drilled with a drill rig equipped with 4 1/4-inch inside diameter, hollow-stem augers. Drake will document the drilling procedures and the procedures used by the contractor to complete each soil boring as a groundwater monitoring well. The wells will be installed at the appropriate depth to intersect the groundwater table.

and will be constructed in accordance with the requirements set forth in WAC Chapter NR 141.

Soil Boring Sampling

Soil samples will be collected from the soil boring locations to identify the site's geologic conditions, estimate the horizontal and vertical extent of soil contamination, and estimate the approximate depth to groundwater. The contractor will assist Drake in collecting the samples at approximate 2-foot vertical intervals to recover representative, relatively undisturbed samples. The samplers utilized to collect soils will be decontaminated before and after each sample recovery to prevent the transfer of contaminants by the sampling equipment. The samples will be placed into the appropriate containers for field screening, visual classification, and potential submittal for laboratory analyses.

Soil Sample Screening

Drake will preliminarily evaluate the samples in the field to identify indications of petroleum contamination. The samples will be screened with a photoionization detector (PID) following the DNR "headspace" method. PID screening detects the presence of volatile organic vapors commonly emitted by volatile organic compounds (VOCs). VOCs are common constituents in petroleum fuels. Drake will also evaluate the soils for the presence of staining and odors indicative of contamination.

Groundwater Monitoring Well Development and Sampling

Drake will develop each monitoring well in accordance with the requirements set forth in WAC Chapter NR 141. Following well development, and every 3 months thereafter for 1 year, Drake will collect groundwater samples from each monitoring well for laboratory analyses. Drake will submit groundwater samples for analyses of contaminant concentrations as well as natural attenuation indicator parameters to evaluate the potential for remediation by natural attenuation (RNA). The results of the groundwater sampling will assist in determining groundwater quality, as well as groundwater contaminant trends.

Prior to well development and each sampling event, Drake will measure the depth to groundwater at each well to determine the direction of groundwater flow.

Sample Analytical Testing

Drake will submit selected soil samples exhibiting elevated PID readings, odors, and/or staining; and the groundwater samples to an independent certified laboratory for analyses. Chain of Custody forms will be maintained for the samples submitted to the laboratory.

In accordance with DNR requirements, the following sampling plan will be utilized for the soil samples:

Number of Samples	Parameter	Method of Analysis
15	Diesel Range Organics (DRO)	DNR Modified DRO Method
*11	Petroleum Volatile Organic Compounds (PVOCs)	EPA Method 8020
5	Volatile Organic Compounds (VOCs)	EPA Method 8021
5	Total Lead	EPA Method 6010
2	Polycyclic Aromatic Hydrocarbons (PAHs)	EPA Method 3510
1	Cadmium	EPA Method 6010
1	Polychlorinated Biphenols (PCBs)	EPA Method 8082
1	TCLP Lead	EPA Method 6010

*Includes a quality control trip blank.

Drake will compare the laboratory results of the soil samples to WAC Chapter NR 720 standards to evaluate the soil conditions.

The following sampling plan will be utilized for the groundwater samples during each event:

Number of Samples	Parameter	Method of Analysis
5	DRO	DNR Modified DRO Method
*5	VOCs	EPA Method 8021
**6	PVOCs	EPA Method 8020
5	Dissolved Lead	EPA Method 7421
*5	PAHs	EPA Method 8310
*5	Dissolved Cadmium	EPA Method 7421
*5	PCBs	EPA Method 8082
5	Nitrate	EPA Method 353.2
5	Sulfate	EPA Method 375.2
5	Dissolved Methane	EPA Method SW 846-8015
5	Alkalinity	EPA Method 350.1
5	Dissolved Manganese	EPA Method 243.1

*May only be analyzed for during initial event.
**Includes five groundwater samples plus a quality control field blank sample.

Analytical testing for nitrate, sulfate, dissolved methane, alkalinity, and dissolved manganese will be conducted to evaluate the potential for natural attenuation to reduce contaminant concentrations over time. In addition, field testing for dissolved oxygen (DO), oxidation-reduction potential (ORP), pH, conductivity, temperature, and ferrous iron will be conducted to evaluate the feasibility of RNA.

Drake will compare the groundwater sample laboratory results to standards set forth in WAC Chapter NR 140 to evaluate the groundwater quality at the site.

Elevation Survey

An elevation survey will be completed to determine the ground surface and groundwater table elevations at each well. The elevations of the ground surface and tops of the PVC pipes will be determined utilizing conventional leveling techniques. The water level at each groundwater monitoring well will be determined by using an electronic water level probe. Drake will evaluate the survey data to identify the hydrogeologic characteristics and will prepare a map depicting the water table elevations and direction of groundwater flow, to comply with DNR regulations.

COMM 47 and COMM 46 Evaluation

Following completion of the soil and groundwater sampling, Drake will evaluate the presence of any of the five EFs presented in WAC Chapter COMM 47 to comply with DNR requirements. The EF evaluation will assist in determining if closure is appropriate for the site. Drake will also evaluate the results of field and laboratory analyses to evaluate the site conditions and how they relate to the risk factors presented in WAC Chapter COMM 46. If contaminant concentrations in soil and groundwater are present above their respective standards, the site may still be closed contingent on the COMM 46 risk factors being satisfied.

Report Preparation

Following receipt of the laboratory results, Drake will prepare a detailed project report. The purposes of the report will be to present the technical project data and explain the significance of the data in a concise, comprehensive document. The report will be intended to provide sufficient explanation and support of the data for the purposes of the Henry J. Schwister Revocable Trust, and their agents, as well as to obtain regulatory approval.

Included in the report will be descriptions of the field procedures, field and laboratory results, and a detailed analysis of the results. In the report, Drake will also present the COMM 47 and COMM 46 evaluation, and will present the results of the RNA feasibility evaluation. The report will provide Drake's conclusions and recommendations regarding additional investigation or remediation, if warranted. Drake will also provide copies of the site diagrams, laboratory reports, hydraulic hoist removal documentation, and applicable field forms in the report. If appropriate, the report will request site closure. The closure request may be contingent on the use of institutional controls, such as a deed restriction or groundwater use restriction. The report will be presented in a format appropriate for submittal to the DNR and/or Wisconsin Department of Commerce ("Commerce") for approval.

Remedial Action Option (RAO) Evaluation and Planning

If remediation is warranted, Drake will consider various alternatives for remediation that may include non active source removal, RNA, and/or flexible closure. Drake will evaluate the alternatives based on the RI results; the likelihood for EFs to exist at the site; estimated cost, time, and effectiveness; and regulatory acceptance.

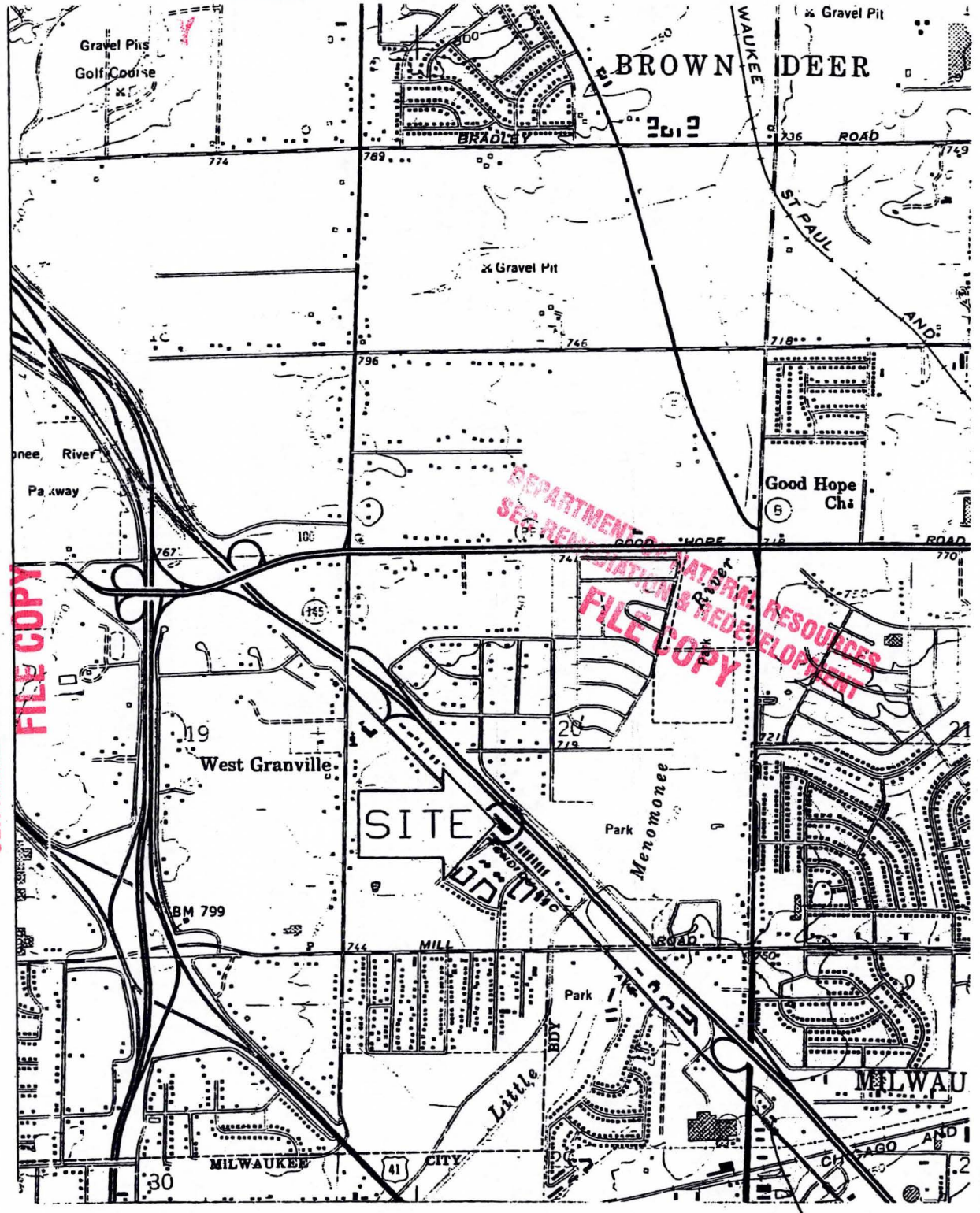
Under current regulations, projects than can be completed for less than $80,000 (total investigative/remedial costs) do not require formal regulatory approval. Since the total costs are estimated to be less than $80,000, Drake will prepare a letter to inform Commerce of the selected RAO.

Remedial Investigation Schedule

The following preliminary schedule is provided for the completion of the RI activities for the project.

Task	Dates
- Obtain drilling and laboratory quotes	October 25 - November 5, 1999
- Schedule and complete well installation	November 8 - November 19, 1999
- Schedule and complete hoist/soil removal	November 8 - December 3, 1999
- Conduct well development and first round of groundwater sampling	November 22 - November 26, 1999
- Conduct second round of groundwater sampling	February 21 - February 25, 2000
- Conduct third round of groundwater sampling	May 22 - May 26, 2000
- Conduct fourth round of groundwater sampling	August 21 - August, 2000
- Review field and analytical data and compile geological and hydrogeological data	August 28 - September 15, 2000
- Prepare and submit RI/groundwater monitoring report	September 18 - October 31, 2000

This schedule has been provided as an estimate for the listed RI tasks. The actual schedule will depend on the availability of contractors to conduct the drilling/well construction services and the hoist/soil removal activities, availability of analytical reports, and possible alterations of the scope of work.



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MENOMONEE FALLS - WISCONSIN
NE 1/4 SW 1/4 SEC 20 T8N R21E

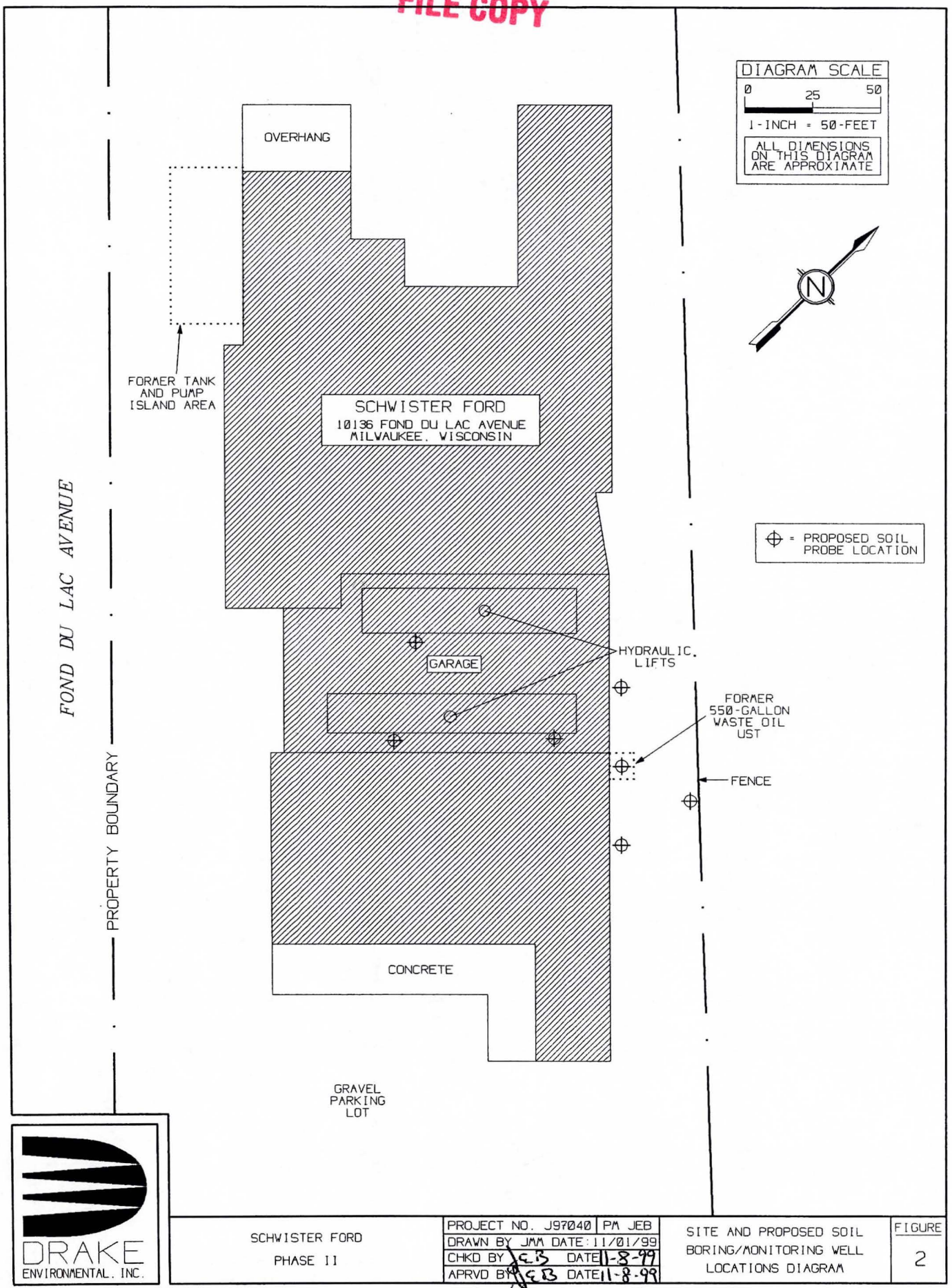
DIAGRAM SCALE
0 1000 2000
1-INCH - 2000-FEET

N

DRAKE ENVIRONMENTAL, INC.

SCHWISTER FORD REMEDIAL INVESTIGATION	PROJECT NO. J97082 PM SBM DRAWN BY JMM DATE: 06/11/97 CHKD BY JEB DATE: 7-21-97 APRVD BY JEB DATE: 7-21-97	VICINITY DIAGRAM	FIGURE 1

FILE:



DRAKE ENVIRONMENTAL, INC.

SCHWISTER FORD PHASE II	PROJECT NO. J97040 | PM JEB DRAWN BY JMM DATE: 11/01/99 CHKD BY JEB DATE 11-8-99 APRVD BY JEB DATE 11-8-99	SITE AND PROPOSED SOIL BORING/MONITORING WELL LOCATIONS DIAGRAM	FIGURE 2

FILE: J97040A(L3)