Natural
Resource
Technology, Inc.
N R T

April 26, 1999
(1105)

Mr. Mike Zillmer
Solid Waste Section
WDNR - Southeast District
4041 N. Richards Street, P.O. Box 12436
Milwaukee, Wisconsin 53212

RE: **Operation, Maintenance and Monitoring Status Report No. 11**
Reporting Period - July 1, 1998 to December 31, 1998
Praefke Brake and Supply, 133 Oak Street, West Bend, Wisconsin
FID #267083740, 267004430

Dear Mr. Zillmer:

On behalf on Praefke Brake and Supply (Praefke), Natural Resource Technology, Inc. (NRT) has prepared this Operation, Maintenance and Monitoring (OM&M) Status Report for the two groundwater remediation systems at the above-referenced site. Two copies of the report are enclosed for your review. This report was prepared using appropriate pages from Form 4400-194 and summarizes OM&M activities for the period July 1, 1998 to December 31, 1998. The related attachments to the form are listed below. As a reminder, this site has two groundwater pump and treat systems. System 001 is the VOC remediation system on the north side of the property. System 002 is the PCP remediation system on the south side of the property. In our meeting on October 20, 1998, the WDNR agreed to a shutdown of System 001 for an evaluation period. This shutdown occurred on October 30, 1998. Please contact us if you have any questions or comments regarding the status report for the Praefke Brake site. We look forward to your review of the system operation.

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.

Julie A. Zimdars

Julie A. Zimdars, P.E.
Environmental Engineer

Laurie J. Parsons/JAZ

Laurie J. Parsons, P.E.
Senior Engineer

Attachments: Completed Form 4400-194 (System 001 and System 002) and Explanations
Figure 1 - Site Location Map
Figure 2 - Site Plan with Groundwater Contour Map
Figure 3 - Groundwater Contaminant Distribution Map
Table 1 - Groundwater Analytical Summary - VOCs

23713 W. Paul Road • Pewaukee, WI 53072 • (414) 523-9000 • Fax (414) 523-9001

Attachments: Table 2 - Groundwater Analytical Summary - SVOCs
Table 3 - Groundwater Elevation Data
Sampling Schedule
Cumulative Contaminant Removal Graphs (System 001 and 002)
Contaminant Concentration vs. Time Graphs - System 001
Contaminant Concentration vs. Time Graphs - System 002
WDNR Discharge Monitoring Report Forms - fourth quarter 1998

cc: Mr. Mike Butz, Praefke Brake and Supply
Ms. Jennifer Buzecky, Whyte, Hirschboeck, Dudek S.C.
Mr. Craig Caliendo, Whyte, Hirschboeck, Dudek S.C.
Mr. Frank Volage, EIS Brake Parts, Div. of Standard Motor Products
Ms. Lisa Wadge, EnviroCheck Ltd.

[1105\1105zillmer 99.4.26.ltr]

COMPLETED FORM 4400-194
(SYSTEM 001 AND SYSTEM 002) AND EXPLANATIONS

State of Wisconsin
Department of
Natural Resources

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

Status Report No. 11

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 s 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 than 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: Praefke Brake and Supply Corporation (System 001-VOC)
2. Reporting period from: 7/1/98 To: 12/31/98 Days in period: 184
3. Regulatory agency (enter DNR, DCOM, DATCP and/or other): WDNR
4. DNR issued site number: Case # 02-67-152445 FID# 267083740, 267004430
5. State reimbursement fund claim number and fund name (if not applicable, enter NA): NA
6. Site location:
   a. DNR region and county: Southeast Region, Washington County
   b. Street address and municipality: 133 Oak Street, West Bend
   c. Township, range, section and quarter quarter section: T11NR19E, S13 SW ¼ of SW ¼
7. Responsible party:
   a. Name: Praefke Brake & Supply Corporation
   b. Mailing address: 133 Oak Street
      West Bend, WI 53095
   c. Phone number: (414) 334-2355, Mr. Mike Butz
8. Consultant:
   a. Company name: Natural Resource Technology, Inc.
   b. Mailing address: 23713 West Paul Road
      Pewaukee, WI 53702
   c. Phone number: (414) 523-9000, Ms. Laurie J. Parsons, Ms. Julie A. Zimdars
9. Contaminants: Chlorinated volatile organic compounds (Trichloroethene, 1,1,1 - Trichloroethane, etc.), & Methyl tert butyl ether
10. Soil types (USCS or USDA): SM/SP, interbedded CL, some GP (to 35'), CL (to 50')
11. Hydraulic conductivity (cm/sec): 3.90 x 10^{-4} geom. mean slug tests (Range 1.95 x 10^{-4} to 4.60 x 10^{-4} cm/s)
12. Average linear velocity of groundwater (ft/yr): 21.5

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: Praefke Brake and Supply Corporation (System 001-VOC)

Reporting period from: 7/1/98 To: 12/31/98 Days in period: 184

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:

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

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

- [X] 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).
- [ ] 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): Yes
   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: No
3. Is natural attenuation an effective low cost option at this time? (Y/N): Shutdown of System occurred 10/30/98
4. Is closure sampling warranted at this time? (Y/N): Yes, see attached
5. Are there any modifications that can be made to the remediation to improve cost effectiveness? (Y/N) If yes, explain: No

D. ECONOMIC AND COST DATA TO DATE:

1. Total investigation costs ($): Not Available, performed by previous owner
2. Implementation costs (design, capital and installation costs, excluding investigation costs) ($): Not available, see above
3. Total costs during the previous reporting period ($): Praefke Brake is performing Operation and Maintenance
4. Total costs during this reporting period ($): Praefke Brake is performing Operation and Maintenance
5. Total anticipated costs for the next reporting period ($): See closeout / natural attenuation sampling
6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above? (Y/N) If yes explain: No
7. If close out is anticipated within 12 months, estimated costs for project closeout ($): $20,000 - $30,000

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: Praefke Brake (System 001-VOC)

Reporting period from: 7/1/98 To: 12/31/98 Days in period: 184

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) Julie A. Zimdars, Laurie J. Parsons, 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:

Julie A. Zimdars, Environmental Engineer, #31,452, 4/26/99

Laurie J. Parsons/SAZ, Senior Engineer, #27,812, 4/26/99

Hydrogeologists:

I (print name) _____, 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.

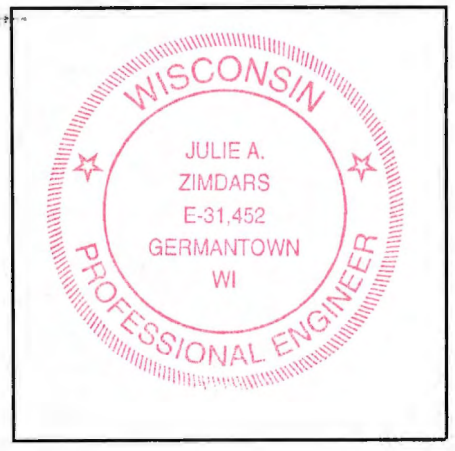
Signature, title and date: _____

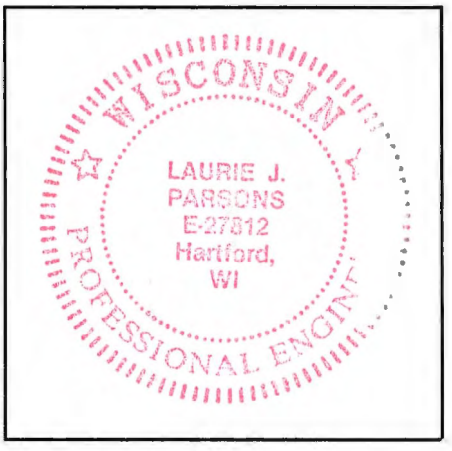
Scientists:

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:





State of Wisconsin
Department of
Natural Resources

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

Status Report No. 11

Form 4400-194
7-96
Page GW-1

GROUNDWATER PUMP AND TREAT SYSTEMS AND FREE PRODUCT RECOVERY SYSTEMS

SITE NAME AND REPORTING PERIOD:

Site name: Praefke Brake (System 001-VOC)

Reporting period from: 7/1/98 To: 12/31/98 Days in period: 184

Date that the system was first started up: 12/6/95

A. GROUNDWATER EXTRACTION SYSTEM OPERATION:

1. Total number of groundwater extraction wells or trenches available and the number in use during period: 3/2 (RW1C shut down on 9/8/97)
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain): 122, shutdown 10/30
3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain: 100%,see att.
4. Quantity of groundwater extracted during this time period (gallons): 1,820,500 gal
5. Average groundwater extraction rate (gpm): 10.4 gpm (based on 122 days)
6. Quantity of dissolved phase contaminants removed during this time period in pounds: 0.25 lbs Total VOCs

B. FREE PRODUCT RECOVERY SYSTEM OPERATION:

1. Is free product (nonaqueous phase liquid) being recovered at this site? (Y/N) If yes, list method: No
2. Quantity of free product extracted during this time period (gallons, enter none if none): --
3. Average free product extraction rate (gpd): --

C. SYSTEM EFFECTIVENESS EVALUATION:

1. Is a contaminated groundwater plume fully contained in the capture zone? (Y/N) If no, explain: Substantially, PAL exceedance at MW-A outside capture zone
2. If free product is present, is the free product fully contained in capture zone? (Y/N) If no, explain: --
3. If free product is present in any wells at the site, but free product was not recovered during reporting period, explain.
4. 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 C.4.a.

   a. Contaminant: Trichloroethene (TCE) ; Methyl tert butyl ether (MTBE)

   b. Percent reduction necessary to reach ch. NR 140 ES and PAL: ES: NA PAL: 83.9% ; ES: 60% PAL: 92%

   c. Maximum contaminant concentration level in any monitoring well of that contaminant (µg/L) 1.1 µg/L ; 150 ug/L

   d. Maximum contaminant concentration level in any extraction well of that contaminant (µg/L): 3.1 µg/L : ND

   e. If the maximum concentration in a monitoring well is more that one order of magnitude above the concentration measured in an extraction well, explain why the extracted groundwater contamination levels are significantly less than the levels at other locations within the aquifer.

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

- Most recent report to the DNR Wastewater Program, if applicable.
- Groundwater contour map with capture zone indicated.
- Groundwater contaminant distribution map (may be combined with contour map).
- Graph of cumulative contaminant removal, if both free product recovery and ground water extraction are used, provide separate graphs.
- Time versus groundwater contaminant concentration graphs for the contaminant listed in C.4.a. (above), as follows:
  - — Graph of contaminant concentrations versus time for each extraction well in use during the period.
  - — Graph of contaminant concentrations versus time for the monitoring well with the greatest level of contamination.
- Groundwater contaminant chemistry table.
- Groundwater elevations table.
- System operational data table.

[1105: O&M form VOC system]

Praefke Brake and Supply
Reporting period: 7/1/98 - 12/31/98
Status Report No. 11

SYSTEM 001 - VOC

Explanation for Page GI-2, C. 3&4 General Effectiveness Evaluation for All Active Systems:

Representatives for Praefke discussed continued operation of the VOC system with the WDNR in a meeting on October 20, 1998. The WDNR agreed to a shutdown for an evaluation period. The VOC system was shutdown on October 30, 1998. The system can be restarted in the future, if required.

The system appears to have reached the limits of its effectiveness. Sampling is being conducted to determine if concentrations will remain stable or decrease with the system not operating. Sampling with the system off was conducted on November 10, 1998 and February 10, 1999. The results show decreases in TCE, the contaminant of concern, at all monitoring wells and recovery wells as compared to the August 10, 1998 sampling round with the system on. However, methyl tert butyl ether (MTBE) has recently been detected at MW-6A and MW-6B. NRT and Praefke are evaluating likely sources of this compound. MTBE is typically associated with gasoline contamination, due to its primary use as an octane booster. According to previous site reports (Warzyn report, Feb. 1987 and Delta report, Nov. 1987), a 4,000 gallon gasoline UST previously existed south of the storage shed and south of MW-2. Boring B-3 performed by Warzyn in January 1987 adjacent to the former UST did not indicate the presence gasoline contamination. In addition, monitoring wells MW-G and MW-2 located north of the former UST location (in the direction of groundwater flow) have not previously indicated MTBE or any petroleum related contamination.

NRT sampled MW-G, MW-6A, and MW-6B in February 1999 to check for presence or trends of MTBE in these wells. MTBE was not detected at MW-G indicating that the former gasoline UST is not the suspected source of MTBE contamination. The MTBE concentration at MW-6A decreased from 150 ug/L (Nov. 1998) to 28 ug/L (Feb. 1999), and MTBE was detected at MW-6B at a concentration of 33 ug/L (Feb. 1999). Currently, it is suspected that the source of this compound is from off-site, possibly one of the gas stations or industries to the south and/or west. Because of the suspected off-site source and the fact that the levels of MTBE are below the enforcement standard, these detects should not affect closure of this portion of the site.

Groundwater sampling will likely be conducted for two more quarters and assuming favorable results, closure will be recommended at that time.

Explanation for Page GW-1, A4, 5, and 6. Groundwater Extraction System Operation

System utilization was calculated based on 122 operating days only since the system was shutdown on October 30, 1998. The quantity of groundwater extracted, average extraction rate and the quantity of dissolved phase contaminants removed all increased since the last reporting period due to the increase in the flow rates from the wells. Prior to this period, the wells were being throttled such

SYSTEM 001 - VOC (cont'd)

that the combined flow from both wells was approximately 6 gpm. On July 28, 1998, the flow from wells RW-1A and RW-1B was increased to a combined flow of 12 gpm.

Explanation for Page GW-1, D. Additional Attachments

System Operational Data (We are submitting a written explanation in lieu of a table)

The pump at RW-1C was shut down on September 8, 1997 due to non-detectable concentrations at this well. Only two pumps (RW-1A and RW-1B) were operated during this period. The system operated with a combined flow rate of approximately 9,000 gallons per day (6.3 gpm) from July 1 to July 28, 1998. The two wells were throttled and pumped continuously with approximately equal flow from each well.

From July 28 to October 30, 1998, the system operated with a combined flow rate of approximately 17,000 gallons per day (12 gpm). During this time, the two wells were throttled and pumped continuously with RW-1A contributing approximately 7 to 8 gpm and RW-1B contributing approximately 4 to 5 gpm.

State of Wisconsin
Department of
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OPERATION, MAINTENANCE, MONITORING AND OPTIMIZATION REPORTING OF SOIL AND GROUNDWATER REMEDIATION SYSTEMS

Status Report No. 11

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- 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.)

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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: Praefke Brake and Supply Corporation (System 002-PCP)
2. Reporting period from: 7/1/98 To: 12/31/98 Days in period: 184
3. Regulatory agency (enter DNR, DCOM, DATCP and/or other): WDNR
4. DNR issued site number: Case #02-67-152445 FID#267083740, 267004430
5. State reimbursement fund claim number and fund name (if not applicable, enter NA): NA
6. Site location:
   a. DNR region and county: Southeast Region, Washington County
   b. Street address and municipality: 133 Oak Street, West Bend
   c. Township, range, section and quarter quarter section: T11N, R19E, S13, SW¼ of SW¼
7. Responsible party:
   a. Name: Praefke Brake & Supply Corporation
   b. Mailing address: 133 Oak Street
      West Bend, WI 53095
   c. Phone number: (414) 334-2355 Mr. Mike Butz
8. Consultant:
   a. Company name: Natural Resource Technology, Inc.
   b. Mailing address: 23713 West Paul Road
      Pewaukee, WI 53072
   c. Phone number: (414) 523-9000, Ms. Laurie Parsons, Ms. Julie Zimdars
9. Contaminants: Pentachlorophenol, PAHs
10. Soil types (USCS or USDA): SM/SP, interbedded CL, some GP (to 35'); CL (to 50')
11. Hydraulic conductivity (cm/sec): 3.90 x 10^{-4} Geom. Mean slug tests (Range 1.95 x 10^{-4} to 4.60 x 10^{-4} cm/s)
12. Average linear velocity of groundwater (ft/yr): 21.5

Status Report No. 11

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: Praefke Brake (System 002-PCP)

Reporting period from: 7/1/98 To: 12/31/98 Days in period: 184

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:

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

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

- [X] 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).
- [ ] 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): No, see attached
   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: Yes, see attached
3. Is natural attenuation an effective low cost option at this time? (Y/N): No
4. Is closure sampling warranted at this time? (Y/N): No
5. Are there any modifications that can be made to the remediation to improve cost effectiveness? (Y/N) If yes, explain: Yes

D. ECONOMIC AND COST DATA TO DATE:

1. Total investigation costs ($): Not available, performed by previous owner
2. Implementation costs (design, capital and installation costs, excluding investigation costs) ($): Not available, see above
3. Total costs during the previous reporting period ($): Praefke Brake is performing operation and maintenance
4. Total costs during this reporting period ($): Praefke Brake is performing operation and maintenance
5. Total anticipated costs for the next reporting period ($): Praefke Brake is performing operation and maintenance
6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above? (Y/N) If yes explain: No
7. If close out is anticipated within 12 months, estimated costs for project closeout ($): –

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: Praefke Brake (System 002-PCP)

Reporting period from: 7/1/98 To: 12/31/98 Days in period: 184

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) Julie A. Zimdars, Laurie J. Parsons, 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:

Julie A Zimdars, Environmental Engineer, #31,452, 4/26/99
Laurie J Parsons, Senior Engineer, #27,812, 4/26/99

Hydrogeologists:

I (print name) _____, 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.

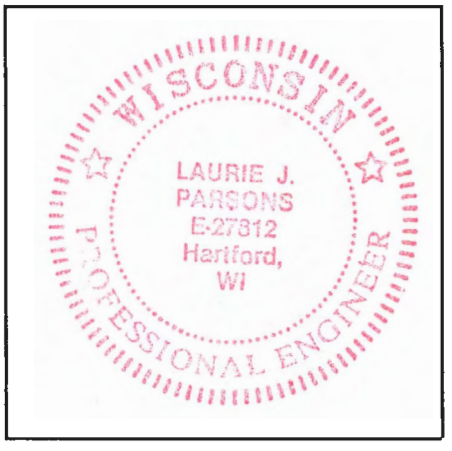
Signature, title and date: _____

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:



State of Wisconsin
Department of
Natural Resources

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

Status Report No. 11

Form 4400-194
7-96
Page GW-1

GROUNDWATER PUMP AND TREAT SYSTEMS AND FREE PRODUCT RECOVERY SYSTEMS

SITE NAME AND REPORTING PERIOD:

Site name: Praefke Brake (System 002-PCP)

Reporting period from: 7/1/98 To: 12/31/98 Days in period: 184

Date that the system was first started up: 12/6/95

A. GROUNDWATER EXTRACTION SYSTEM OPERATION:

1. Total number of groundwater extraction wells or trenches available and the number in use during period: 3/ 2 (RW-2C shut down 11/18/97)
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain): 184
3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain: 100%
4. Quantity of groundwater extracted during this time period (gallons): 443,200 gal
5. Average groundwater extraction rate (gpm): 1.7 gpm
6. Quantity of dissolved phase contaminants removed during this time period in pounds: 0.09 lb PCP

B. FREE PRODUCT RECOVERY SYSTEM OPERATION:

1. Is free product (nonaqueous phase liquid) being recovered at this site? (Y/N) If yes, list method: No
2. Quantity of free product extracted during this time period (gallons, enter none if none): --
3. Average free product extraction rate (gpd): --

C. SYSTEM EFFECTIVENESS EVALUATION:

1. Is a contaminated groundwater plume fully contained in the capture zone? (Y/N) If no, explain: No
2. If free product is present, is the free product fully contained in capture zone? (Y/N) If no, explain: --
3. If free product is present in any wells at the site, but free product was not recovered during reporting period, explain.
4. 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 C.4.a.
   a. Contaminant: Pentachlorophenol
   b. Percent reduction necessary to reach ch. NR 140 ES and PAL: ES: 99.92% ; PAL = 99.992%
   c. Maximum contaminant concentration level in any monitoring well of that contaminant (µg/L): 1,200 µg/L
   d. Maximum contaminant concentration level in any extraction well of that contaminant (µg/L): 13 µg/L
   e. If the maximum concentration in a monitoring well is more that one order of magnitude above the concentration measured in an extraction well, explain why the extracted groundwater contamination levels are significantly less than the levels at other locations within the aquifer.

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

- Most recent report to the DNR Wastewater Program, if applicable.
- Groundwater contour map with capture zone indicated.
- Groundwater contaminant distribution map (may be combined with contour map).
- Graph of cumulative contaminant removal, if both free product recovery and ground water extraction are used, provide separate graphs.
- Time versus groundwater contaminant concentration graphs for the contaminant listed in C.4.a. (above), as follows:
  - — Graph of contaminant concentrations versus time for each extraction well in use during the period.
  - — Graph of contaminant concentrations versus time for the monitoring well with the greatest level of contamination.
- Groundwater contaminant chemistry table.
- Groundwater elevations table.
- System operational data table.

[1105: O&M form PCP system]

Praefke Brake and Supply
Reporting period: 7/1/98 - 12/31/98
Status Report No. 11

SYSTEM 002 - PCP

Explanation for Page GI-2, C. 1,2, and 5. General Effectiveness Evaluation for All Active Systems

The design flow rate for each well was 2 gpm. Actual flow rates for wells RW-2A and RW-2C (prior to shutdown) are close to 2 gpm (see discussion of system operational data below). However, RW-2B produces far less than the design flow rate. In general, the permeability of the soil and well flow rates are lower in the area of the PCP system than the VOC system.

In addition, the drawdown influence from the PCP extraction system is not performing as predicted in the original modeling by others. The Remedial Action Plan details the previous modeling procedure and results performed by GZA GeoEnvironmental in coordination with EnviroAudit. The modeling results indicated that with wells spaced 100 ft apart, the combined drawdown influence at the midpoint between the wells would be approximately 2 feet and would be sufficient to overcome the regional gradient to the north. Monitoring well MW-3, located 20 feet north of RW-2A (between RW-2A and RW-2B), previously had a static water level elevation of 901.3 ft in December 1989. The water level elevation measure at this well under pumping conditions is typically between 901 and 902 ft, which indicates minimal to no drawdown. Therefore, based on the these measurements, the actual radius of influence of each recovery well is likely less than 20 ft.

The PCP groundwater concentrations at monitoring wells MW-3 (on-site) and MW-H (off-site) increased in the August and November 1998 sampling rounds, but decreased in the February 1999 sampling round (Table 2). However, concentrations at MW-H did not increase as much in August/November 1998 as they did in August/November 1997. Based on review of the attached graphical results for MW-3 and MW-H, the occasional increase in concentration at these wells may be a result of seasonal water table variation. PCP contaminated soil remains on-site and occurs below the water table as shown in the *Soil Remedial Action Plan*, Figures 8 and 9 (EnviroAudit, September 1995). The contaminated soil exists at approximately 6 to 12 ft below ground surface (bgs) and the water table in this area is located at approximately 11 to 12 ft bgs. Therefore, because of the lack of significant dewatering in this area, the PCP contaminated soil continues to contact the groundwater directly and may be a continuing source.

The most effective method for improving the performance of the PCP remediation system would be to address the source of the PCP impacts.

SYSTEM 002 - PCP (cont'd)

Explanation for Page GW-1, C. 1. System Effectiveness Evaluation

PCP concentrations continue to be variable at MW-H, which is out of the capture zone of the system (across the railroad tracks). Of note, the "design" capture zone of the system did not include well MW-H. Sampling from MW-D1 and MW-D2 was performed in May 1998 as a check on groundwater quality down-gradient of the plume area. During the May 1998 sampling round, no PCP or PAH concentrations were detected at MW-D1 or MW-D2. These wells will be sampled again in May 1999. See above explanation for planned remedies to improve system effectiveness.

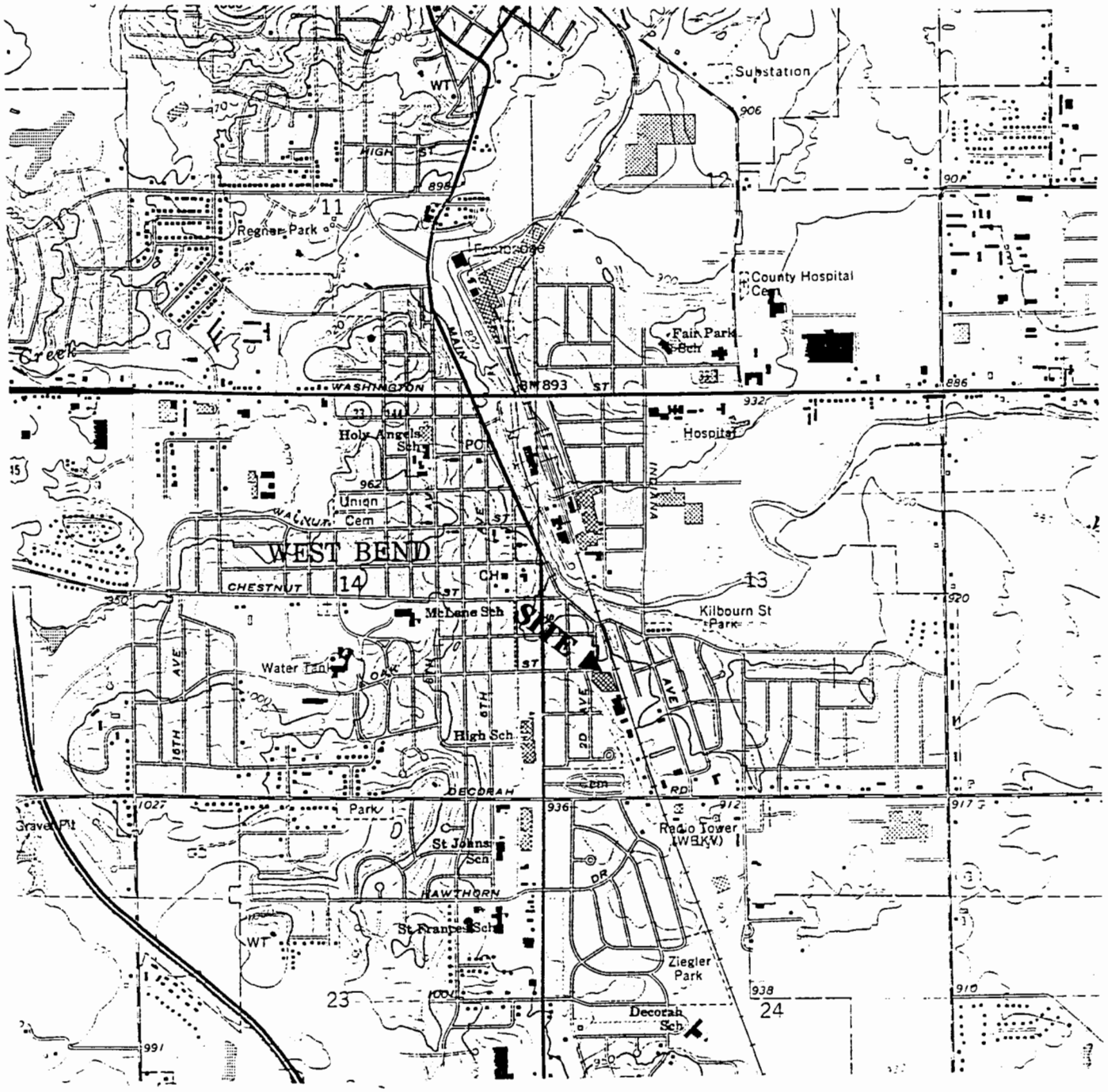
Explanation for Page GW-1, C. 4. E System Effectiveness Evaluation

Because of the longer and deeper well screen at RW-2A vs. MW-3, more dilution is occurring at RW-2A. In addition, active pumping at RW-2A increases dilution and decreases desorption of contaminants into groundwater.

Explanation for Page GW-1, D. Additional Attachments

System Operational Data (We are submitting a written explanation in lieu of a table)

The pump at RW-2C was shut down on November 18, 1997 due to non-detectable concentrations at this well. No appreciable increase in capture zone was noted when we raised the float settings in November 1997, and therefore, the float settings at RW-2A and RW-2B were lowered to their original depth on November 9, 1998. Only these two pumps (RW-2A and RW-2B) were operating during this time period. Well RW-2A produced approximately 90-95 % of the total flow, with RW-2B producing minimal flow. Flow rates during July 1 through November 9, 1998 averaged 2,100 gallons per day (1.5 gpm). After the floats were lowered, flow rates ranged from 3,500 gallons per day (2.4 gpm) in mid November 1998 down to 3,000 gallons per day (2.1 gpm) at the end of December 1998. The decrease in flow rate is due to worn pump impellers at RW-2A. This pump will likely require replacement in February 1999. Before the floats were lowered, the pumps operated at the highest flow rate possible (no throttling) in a discontinuous mode controlled by the float switches at each well. After the floats were lowered, the pump at RW-2A operated continuously and flow rates decreased due to the worn pump impellers. In the future, RW-2B may also be shutdown due to its non-detectable concentrations and low productivity.



SOURCE: USGS 7.5 MINUTE QUADRANGLE,
WEST BEND. DATED 1959.
REVISED 1994.

QUADRANGLE LOCATION

0 2000 4000

SCALE IN FEET

CONTOUR INTERVAL 10 FEET

Natural Resource Technology

N R T

SITE LOCATION MAP

PRAEFKE BRAKE AND SUPPLY CORPORATION
133 OAK STREET
WEST BEND, WISCONSIN

DRAWN BY: TAS APPROVED BY: JAZ DATE: 2/5/99

PROJECT NO. 1105

DRAWING NO. 1105-A01

FIGURE NO. 1

BENCHMARK TABLE	ELEV.
BM 1 - PARKER-KALON MASONRY NAIL SE CORNER PARKING LOT	934.35
BM 2 - PARKER KALON MASONRY NAIL WEST SIDE OF BUILDING	908.37
BM 3 - PARKER KALON MASONRY NAIL NEAR SOUTHEAST BUILDING CORNER	935.82
BM 4 - PARKER KALON MASONRY NAIL NEAR SOUTH END OF ASPHALT WEST STORAGE BUILDING	911.84
BM 5 - PARKER-KALON MASONRY NAIL BETWEEN SHED AND BUILDING SOUTH OF LOADING DOCKS	905.91
BM 6 - PARKER KALON MASONRY NAIL EAST OF MONITORING WELL 'A'	902.92

LEGEND

- MW-D1 — MONITORING WELL
- RW-1C — RECOVERY WELL
- HOGWIRE FENCE
- CHAINLINK FENCE
- BENCHMARK
- POWER POLE
- INDICATES APPARENT UTILITY EASEMENT
- MW-E — ABANDONED WELL

NOTES

1) Elevations referenced to National Geodetic Vertical Datum (NGVD).
2) Elevations measured on Nov. 13, 1998. System 001 shutdown on October 30, 1998.
3) *Well locations and water level elevations from December 1989 provided for information only.

BEARING BASIS:
ALL BEARINGS REFER TO THE SOUTH LINE OF THE SOUTHWEST 1/4 OF SECTION 13, WHICH HAS A WISCONSIN STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) BEARING OF S88°52'39"W

0 50 100 200
SCALE IN FEET

SOURCE NOTE:
THIS DRAWING WAS DEVELOPED FROM A MAP BY R.A. PAGELS & CO. BEARING REFERRENCES PER NORTH ARROW NOTE.

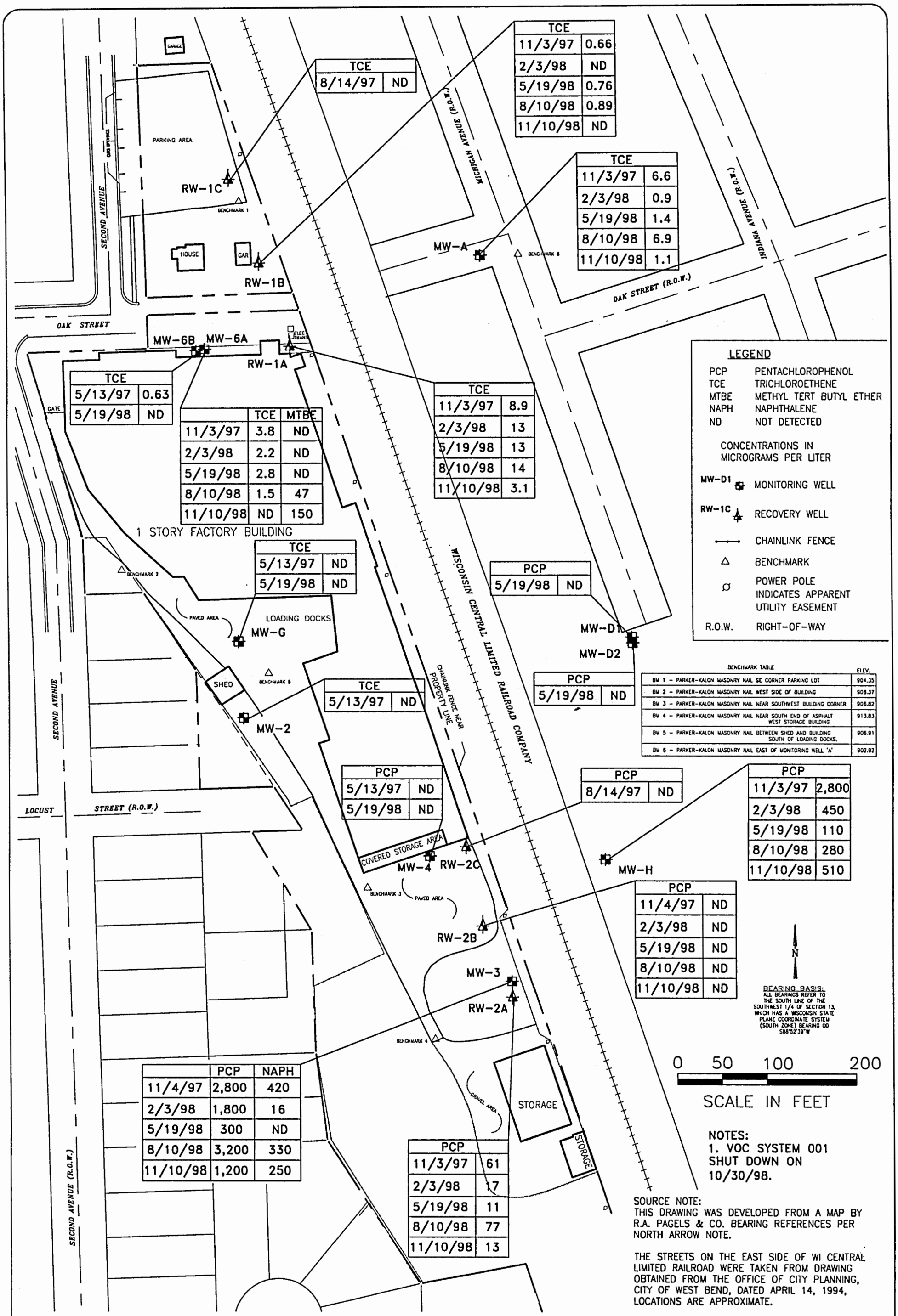
Natural Resource Technology

SITE PLAN WITH GROUNDWATER CONTOUR MAP

PRAEFKE BRAKE AND SUPPLY CORP.
133 OAK STREET
WEST BEND, WISCONSIN

DRAWN BY: TAS/JAZ	DATE: 10/7/97 1/29/99
CHECKED BY: BRH/LJP	DATE: 2/4/99
APPROVED BY: LJP	DATE: 2/5/99
AUTOCAD FILE: 1105.DWG	

PROJECT NO. 1105/2.1
DRAWING NO. 1105
FIGURE NO. 2



TCE	
8/14/97	ND

TCE	
11/3/97	0.66
2/3/98	ND
5/19/98	0.76
8/10/98	0.89
11/10/98	ND

TCE	
11/3/97	6.6
2/3/98	0.9
5/19/98	1.4
8/10/98	6.9
11/10/98	1.1

TCE	
5/13/97	0.63
5/19/98	ND

	TCE	MTBE
11/3/97	3.8	ND
2/3/98	2.2	ND
5/19/98	2.8	ND
8/10/98	1.5	47
11/10/98	ND	150

TCE	
11/3/97	8.9
2/3/98	13
5/19/98	13
8/10/98	14
11/10/98	3.1

TCE	
5/13/97	ND
5/19/98	ND

PCP	
5/19/98	ND

TCE	
5/13/97	ND

PCP	
5/19/98	ND

PCP	
5/13/97	ND
5/19/98	ND

PCP	
8/14/97	ND

PCP	
11/3/97	2,800
2/3/98	450
5/19/98	110
8/10/98	280
11/10/98	510

PCP	
11/4/97	ND
2/3/98	ND
5/19/98	ND
8/10/98	ND
11/10/98	ND

	PCP	NAPH
11/4/97	2,800	420
2/3/98	1,800	16
5/19/98	300	ND
8/10/98	3,200	330
11/10/98	1,200	250

PCP	
11/3/97	61
2/3/98	17
5/19/98	11
8/10/98	77
11/10/98	13

LEGEND

PCP	PENTACHLOROPHENOL
TCE	TRICHLOROETHENE
MTBE	METHYL TERT BUTYL ETHER
NAPH	NAPHTHALENE
ND	NOT DETECTED

CONCENTRATIONS IN MICROGRAMS PER LITER

MW-D1 — MONITORING WELL

RW-1C — RECOVERY WELL

CHAINLINK FENCE

BENCHMARK

POWER POLE
INDICATES APPARENT UTILITY EASEMENT

R.O.W. — RIGHT-OF-WAY

BENCHMARK TABLE

	ELEV.
BM 1 – PARKER-KALON MASONRY NAIL SE CORNER PARKING LOT	904.35
BM 2 – PARKER-KALON MASONRY NAIL WEST SIDE OF BUILDING	908.37
BM 3 – PARKER-KALON MASONRY NAIL NEAR SOUTHWEST BUILDING CORNER	906.82
BM 4 – PARKER-KALON MASONRY NAIL NEAR SOUTH END OF ASPHALT WEST STORAGE BUILDING	913.83
BM 5 – PARKER-KALON MASONRY NAIL BETWEEN SHED AND BUILDING SOUTH OF LOADING DOCKS.	906.91
BM 6 – PARKER-KALON MASONRY NAIL EAST OF MONITORING WELL 'A'	902.92

N

BEARING BASIS:
ALL BEARINGS REFER TO THE SOUTH LINE OF THE SOUTHWEST 1/4 OF SECTION 13, WHICH HAS A WISCONSIN STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) BEARING OF S88°52'39"W

0 50 100 200

SCALE IN FEET

NOTES:
1. VOC SYSTEM 001 SHUT DOWN ON 10/30/98.

SOURCE NOTE:
THIS DRAWING WAS DEVELOPED FROM A MAP BY R.A. PAGELS & CO. BEARING REFERENCES PER NORTH ARROW NOTE.

THE STREETS ON THE EAST SIDE OF WI CENTRAL LIMITED RAILROAD WERE TAKEN FROM DRAWING OBTAINED FROM THE OFFICE OF CITY PLANNING, CITY OF WEST BEND, DATED APRIL 14, 1994, LOCATIONS ARE APPROXIMATE.

FIGURE NO. 3

DRAWING NO. 1105-B06

PROJECT NO. 1105/2.1

Natural Resource Technology

GROUNDWATER CONTAMINANT DISTRIBUTION MAP

PRAEFKE BRAKE AND SUPPLY CORP.
133 OAK STREET
WEST BEND, WISCONSIN

DRAWN BY: TAS	DATE: 02/05/99
CHECKED BY: JAZ	DATE: 02/05/99
APPROVED BY: JAZ	DATE: 4/26/99
AUTOCAD FILE: 1105-B06.DWG	

Table 1 - Groundwater Analytical Summary
Volatile Organic Compounds (VOCs)
Praefke Brake and Supply Corporation - West Bend, WI

Natural Resource Technology

VOCs (µg/L)

Sample Location	Sample Date	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	1,2-Dichloropropane	Ethylbenzene	Methylene Chloride	MEK	MIBK	MTBE	Naphthalene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Xylenes
SYSTEM #1																							
MW-2	9/25/87	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.3	--	--	nd	nd	nd	nd	0.6	nd	nd
	3/88	--	1.4	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
	5/88	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
	2/89	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
	1/94	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
	12/6/95	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	2/27/96	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	5/14/96	5.6	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	8/13/96	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	11/14/96	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	2/3/97	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	5/13/97	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
MW-G	2/89	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	3.0	20	nd	nd
	1990	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	9.1	nd	nd
	1/94	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	2.2	nd	nd
	12/6/95	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	5/14/96	8.1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	8/13/96	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.0	nd	nd
	11/14/96	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	2/3/97	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.31	nd	nd
	5/13/97	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.35	nd	nd
	5/19/98	nd	nd	1.8 (B)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	2/10/99	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.40	nd	nd
MW-6/6A	9/25/87	--	nd	--	nd	nd	nd	1.2	1.1	nd	2.7	nd	nd	1.1	--	--	nd	nd	nd	nd	180	230	nd
	3/88	--	3.7	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	18	--	--	nd	nd	nd	nd	140	78	nd
	5/88	--	nd	--	nd	nd	nd	nd	nd	nd	11	nd	nd	nd	--	--	nd	nd	nd	nd	210	180	nd
	2/89	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	260	120	nd
Wisconsin Groundwater Quality Standards																							
NR 140 PAL		**200**	**0.5**	**200**	**0.5**	**ns**	**80**	**0.6**	**85**	**0.5**	**0.7**	**0.5**	**140**	**0.5**	**90**	**50**	**12**	**8**	**0.5**	**68.6**	**40**	**0.5**	**124**
NR 140 ES		**1000**	**5**	**1000**	**5**	**ns**	**400**	**6**	**850**	**5**	**7**	**5**	**700**	**5**	**460**	**500**	**60**	**40**	**5**	**343**	**200**	**5**	**620**

Table 1, continued - Groundwater Analytical Summary
Volatile Organic Compounds (VOCs)
Praefke Brake and Supply Corporation - West Bend, WI

Natural Resource Technology

VOCs (µg/L)

Sample Location	Sample Date	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	1,2-Dichloropropane	Ethylbenzene	Methylene Chloride	MEK	MIBK	MTBE	Naphthalene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Xylenes
SYSTEM #1 (cont.)																							
MW-6/6A	1/94**	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	920	73	nd
(cont.)	3/94**	--	nd	--	nd	nd	nd	nd	nd	nd	75	nd	nd	nd	--	--	nd	nd	nd	nd	950	83	nd
	12/6/95	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	28	2.4	nd
	2/27/96	nd	nd	nd	nd	nd	nd	nd	2.2	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	110	11	nd
	5/14/96	6.8	nd	nd	nd	nd	nd	nd	1.4	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	64	13	nd
	8/13/96	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	19	8.9	nd
	11/14/96	nd	0.6	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	17	6.1	nd
	2/3/97	nd	nd	nd	nd	nd	nd	0.47	0.51	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	60	23	nd
	5/13/97	nd	nd	nd	nd	nd	nd	0.69	0.53	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	63	15	nd
	8/14/97	4.1 (L)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	9.8	7.1	nd
	11/3/97	3.6 (L)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	7.8	3.8	nd
	2/3/98	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	4.6	2.2	nd
	5/19/98	nd	nd	1.9 (B)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	5.4	2.8	nd
	8/10/98	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	nd	47	nd	nd	nd	2.0	1.5	nd
	11/10/98	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	150	nd	nd	nd	nd	nd	nd
	2/10/99	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	28	nd	nd	nd	nd	1.2	nd
MW-6B	3/88	--	1.4	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	9.2	4.5	nd
	5/88	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	6.5	2.0	nd
	2/89	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	3.6	0.6	nd
	1/94	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	8.9	nd	nd
	12/6/95	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	2/27/96	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	12	1.1	nd
	5/14/96	7.6	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	7.3	nd	nd
	8/13/96	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	4.1	nd	nd
	11/14/96	nd	0.58	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	4.6	nd	nd
	2/3/97	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	5.0	nd	nd
	5/13/97	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	7.2	0.63	nd
	5/19/98	nd	nd	1.9 (B)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	4.3	nd	nd
	2/10/99	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	33	nd	nd	nd	1.9	nd	nd
Wisconsin Groundwater Quality Standards																							
NR 140 PAL		**200**	**0.5**	**200**	**0.5**	**ns**	**80**	**0.6**	**85**	**0.5**	**0.7**	**0.5**	**140**	**0.5**	**90**	**50**	**12**	**8**	**0.5**	**68.6**	**40**	**0.5**	**124**
NR 140 ES		**1000**	**5**	**1000**	**5**	**ns**	**400**	**6**	**850**	**5**	**7**	**5**	**700**	**5**	**460**	**500**	**60**	**40**	**5**	**343**	**200**	**5**	**620**

Table 1, continued - Groundwater Analytical Summary
Volatile Organic Compounds (VOCs)
Praefke Brake and Supply Corporation - West Bend, WI

Natural Resource Technology

VOCs (µg/L)

Sample Location	Sample Date	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	1,2-Dichloropropane	Ethylbenzene	Methylene Chloride	MEK	MIBK	MTBE	Naphthalene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Xylenes
SYSTEM #1 (cont.)																							
MW-A	3/88	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	24	300	nd
	5/88	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	7.8	180	nd
	2/89	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	6.3	110	nd
	1/94	--	nd	--	nd	nd	nd	nd	nd	nd	3.2	nd	nd	nd	--	--	nd	nd	nd	nd	67	9.5	nd
	12/6/95	nd	nd	nd	nd	nd	nd	nd	1.7	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	120	18	nd
	2/27/96	nd	nd	nd	nd	nd	nd	1.4	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	33	7.9	nd
	5/14/96	6.4	nd	nd	nd	nd	nd	nd	1.4	nd	2.7	nd	nd	nd	nd	nd	nd	nd	nd	nd	60	12	nd
	8/13/96	nd	nd	nd	nd	nd	nd	nd	3.8	nd	3.3	nd	nd	nd	nd	nd	nd	nd	nd	nd	120	44	nd
	11/14/96	nd	nd	nd	nd	nd	nd	nd	1	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	32	13	nd
	2/3/97	nd	0.85	nd	nd	nd	nd	0.84	0.39	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	23	9.4	1.5
	5/13/97	nd	0.43	nd	nd	nd	nd	0.84	0.53	nd	1.1	nd	nd	nd	nd	nd	nd	0.37	nd	nd	29	5.5	nd
	8/14/97	nd	1.4	nd	nd	nd	nd	0.80	0.67	nd	1.8	nd	nd	nd	nd	nd	nd	4.4	nd	nd	17	4.8	1.8
	11/3/97	5.4 (L)	1.9	nd	nd	nd	nd	0.84	nd	nd	nd	nd	nd	1.3 (L)	nd	nd	nd	64	nd	0.97	13	6.6	29
	2/3/98	4.7 (L)	nd	nd	nd	nd	nd	0.62	nd	nd	nd	nd	nd	nd	3.7	nd	nd	4.4	nd	nd	0.82	0.9	nd
	5/19/98	4.0 (B)	2.2	2.0 (B)	nd	nd	nd	0.56	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	4.1	1.4	nd
	8/10/98	nd	1.5	--	nd	nd	nd	0.35	0.50	nd	1.0	nd	nd	nd	--	nd	nd	9.7	nd	3.3	18	6.9	11
	11/10/98	nd	nd	nd	nd	nd	nd	0.22	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.42	nd	nd	2.6	1.1	nd
	2/10/99	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.8	1.1	nd
001 Influent	12/6/95	nd	nd	3.8	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.1	nd
	2/27/96	16	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	8.7	1.7	nd
	5/14/96	9.0	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	2.7	nd	nd	nd	nd	15	4.1	nd
	8/13/96	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	6.4	3.0	nd
	11/13/96	6.0	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	8.3	3.6	nd
	2/3/97	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.86	nd	4.2	3.6	nd
	5/13/97	4.5	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	12	7.3	nd
	8/14/97	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	4.5	3.2	nd
	11/3/97	3.2 (L)	nd	nd	nd	nd	nd	nd	0.27	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	7.4	5.9	nd
	2/3/98	4.2 (L)	nd	nd	nd	nd	nd	nd	0.29	nd	nd	nd	nd	nd	3.1	nd	nd	nd	0.71	nd	5.2	4.9	nd
	5/19/98	5.7 (B)	nd	2.3 (B)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.8	nd	6.7	3.2	nd
	8/10/98	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	6.6	9.8	nd
Wisconsin Groundwater Quality Standards																							
NR 140 PAL		**200**	**0.5**	**200**	**0.5**	**ns**	**80**	**0.6**	**85**	**0.5**	**0.7**	**0.5**	**140**	**0.5**	**90**	**50**	**12**	**8**	**0.5**	**68.6**	**40**	**0.5**	**124**
NR 140 ES		**1000**	**5**	**1000**	**5**	**ns**	**400**	**6**	**850**	**5**	**7**	**5**	**700**	**5**	**460**	**500**	**60**	**40**	**5**	**343**	**200**	**5**	**620**

Table 1, continued - Groundwater Analytical Summary
Volatile Organic Compounds (VOCs)
Praefke Brake and Supply Corporation - West Bend, WI

Natural Resource Technology

VOCs (µg/L)

Sample Location	Sample Date	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethylene	1,2-Dichloropropane	Ethylbenzene	Methylene Chloride	MEK	MIBK	MTBE	Naphthalene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Xylenes
SYSTEM #1 (cont.)																							
RW-1A	8/14/97	nd	nd	nd	nd	nd	nd	nd	0.26	nd	nd	nd	nd	nd	nd	nd	nd	nd	**1.0**	nd	13	**14**	nd
	11/3/97	nd	nd	nd	nd	nd	nd	nd	0.32	nd	nd	nd	nd	nd	nd	nd	nd	nd	**0.92**	nd	9.1	**8.9**	nd
	2/3/98	3.3 (L)	nd	nd	nd	nd	nd	nd	0.4	nd	nd	nd	nd	nd	3.4	nd	nd	nd	**0.94**	nd	11	**13**	nd
	5/19/98	10 (B)	nd	2.5 (B)	nd	nd	nd	0.19	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	**0.96**	nd	12	**13**	nd
	8/10/98	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	nd	nd	nd	**0.88**	nd	9.3	**14**	nd
	11/10/98	nd	nd	nd	nd	nd	nd	nd	0.77	nd	nd	nd	nd	nd	nd	nd	nd	nd	**1.1**	nd	11	**3.1**	nd
	2/9/99	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	**1.1**	nd	2.4	**7.8**	nd
RW-1B	8/14/97	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	5.5	**1.9**	nd
	11/3/97	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	3.0	**0.66**	nd
	2/3/98	4.7 (L)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.9	nd	nd
	5/19/98	8.8 (B)	nd	4.2 (B)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	3.2	**0.76**	nd
	8/10/98	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	2.3	**0.89**	nd
	11/10/98	nd	nd	nd	nd	nd	nd	**0.83**	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	2/9/99	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.45	nd	nd
RW-1C	8/14/97	4.5 (L)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SYSTEM #2																							
MW-3	9/25/87	--	nd	--	**33**	nd	1.2	**30**	66	nd	**5.7**	0.3	2.4	**2.5**	--	--	nd	nd	nd	4.9	**180**	**2.8**	nd
	3/88	--	nd	--	**35**	6.0	nd	**24**	43	nd	nd	nd	nd	**17**	--	--	nd	nd	nd	4.7	**65**	**2.4**	nd
	5/88	--	nd	--	**14**	nd	nd	**11**	43	nd	nd	nd	7.4	**9.2**	--	--	nd	nd	nd	nd	**50**	nd	nd
	2/89	--	nd	--	nd	nd	nd	**1.9**	35	0.4	**1.3**	nd	3.0	**5.2**	--	--	nd	nd	nd	1.5	27	nd	nd
	1990	--	nd	--	nd	nd	nd	**1.1**	2.3	**0.5**	0.5	nd	2.1	**3.5**	--	--	nd	nd	nd	2.2	15	nd	nd
	1/94	--	nd	--	**1.2**	nd	nd	**1.4**	6.7	nd	nd	nd	1.9	nd	--	--	nd	nd	nd	13	6.0	nd	24
MW-4	9/25/87	--	nd	--	nd	nd	nd	**0.6**	nd	nd	nd	nd	nd	**1.3**	--	--	nd	nd	nd	nd	nd	nd	nd
	3/88	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
	5/88	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
	6/26/95	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	31	**3.2**	nd
Wisconsin Groundwater Quality Standards																							
NR 140 PAL		**200**	**0.5**	**200**	**0.5**	**ns**	**80**	**0.6**	**85**	**0.5**	**0.7**	**0.5**	**140**	**0.5**	**90**	**50**	**12**	**8**	**0.5**	**68.6**	**40**	**0.5**	**124**
NR 140 ES		**1000**	**5**	**1000**	**5**	**ns**	**400**	**6**	**850**	**5**	**7**	**5**	**700**	**5**	**460**	**500**	**60**	**40**	**5**	**343**	**200**	**5**	**620**

Table 1, continued - Groundwater Analytical Summary
Volatile Organic Compounds (VOCs)
Praefke Brake and Supply Corporation - West Bend, WI

Natural Resource Technology

VOCs (µg/L)

Sample Location	Sample Date	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichlorooethylene	1,2-Dichloropropane	Ethylbenzene	Methylene Chloride	MEK	MIBK	MTBE	Naphthalene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Xylenes
SYSTEM #2 (cont.)																							
MW-H	2/89	--	nd	--	nd	nd	nd	nd	2.9	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
	1990	--	nd	--	nd	nd	nd	1.6	2.7	0.2	nd	nd	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
	1/94	--	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	--	--	nd	nd	nd	nd	nd	nd	nd
Wisconsin Groundwater Quality Standards																							
NR 140 PAL		**200**	**0.5**	**200**	**0.5**	**ns**	**80**	**0.6**	**85**	**0.5**	**0.7**	**0.5**	**140**	**0.5**	**90**	**50**	**12**	**8**	**0.5**	**68.6**	**40**	**0.5**	**124**
NR 140 ES		**1000**	**5**	**1000**	**5**	**ns**	**400**	**6**	**850**	**5**	**7**	**5**	**700**	**5**	**460**	**500**	**60**	**40**	**5**	**343**	**200**	**5**	**620**

Notes:
1) nd = not detected
2) -- = not analyzed
3) ns = no NR 140 standard currently exists.
4) ** = Elevated detection limit
5) L = compound is a common lab solvent and contaminant.
6) Bold and underline is a NR 140 Preventive Action Limit (PAL) exceedance
7) Bold and shaded is a NR 140 Enforcement Standard (ES) exceedance
8) Only compounds that were detected are shown.
9) B = Blank is Contaminated
10) MW-A, 5/13/97, contained detections of bromodichloromethane (0.33 µg/L) and chlorodibromomethane (0.18 µg/L) below the laboratory LOQ.
11) MW-A, 8/14/97, contained detections of bromodichloromethane (0.38 µg/L) and chlorodibromomethane (0.25 µg/L) below the laboratory LOQ.
12) MW-A, 11/3/97, contained detections of bromodichloromethane (0.3 µg/L), and chlorodibromomethane (0.25 µg/L) below the laboratory LOQ.
13) MW-A, 2/3/98, contained detections of bromodichloromethane (0.42 ug/L), and chlorodibromomethane (0.19 ug/L) below the laboratory LOQ.
14) Recovery well RW-1C was shutdown due to non-detectable concentrations.
15) MW-A, 5/19/98, contained detections of bromodichloromethane (0.22 µg/L) below the laboratory LOQ.

rev. 1/99
By: dvp/jag/slm/dvp
Chkd By: jag/tln/jaz

General Note : This summmary table was developed from available information; some minor inaccuracies may exist in the 1987 through 1994 data. The table will be updated if more accurate information is found.

Table 2 - Groundwater Analytical Summary
Semi-Volatile Organic Compounds (SVOCs)
Praefke Brake and Supply Corporation - West Bend, WI

Natural Resource Technology

SVOCs (µg/L)

		ACID COMPOUNDS									BASE/NEUTRALS													
Sample Location	Sample Date	2-Methyl-4,6-dinitrophenol	Cresols, Total	2,4-Dichlorophenol	2,4-Dimethylphenol	4-Methylphenol (p-Cresol)	Pentachlorophenol	Phenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaphthene	Acenaphthylene	Anthracene	Bis(2-ethylhexyl)phthalate	Dibenzofuran	Di-n-butyl phthalate	Fluoranthene	Fluorene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	2-Nitroaniline	N-nitrosodiphenylamine	Phenanthrene
SYSTEM #1																								
MW-2	9/25/87	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	3/88	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/88	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/89	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-G	2/89	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6/6A	9/25/87	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	3/88	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/88	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/89	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6B	3/88	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/88	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/89	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-A	3/88	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/88	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/89	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wisconsin Groundwater Quality Standards																								
NR 140 PAL		**ns**	**ns**	**ns**	**ns**	**ns**	**0.1**	**1,200**	**ns**	**ns**	**ns**	**ns**	**600**	**0.6**	**ns**	**20**	**80**	**80**	**ns**	**ns**	**8**	**ns**	**0.7**	**ns**
NR 140 ES		**ns**	**ns**	**ns**	**ns**	**ns**	**1**	**6,000**	**ns**	**ns**	**ns**	**ns**	**3,000**	**6**	**ns**	**100**	**400**	**400**	**ns**	**ns**	**40**	**ns**	**7**	**ns**

Table 2, continued - Groundwater Analytical Summary
Semi-Volatile Organic Compounds (SVOCs)
Praefke Brake and Supply Corporation - West Bend, WI

Natural Resource Technology

SVOCs (µg/L)

		ACID COMPOUNDS									BASE/NEUTRALS													
Sample Location	Sample Date	2-Methyl-4,6-dinitrophenol	Cresols, Total	2,4-Dichlorophenol	2,4-Dimethylphenol	4-Methylphenol (p-Cresol)	Pentachlorophenol	Phenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaphthene	Acenaphthylene	Anthracene	Bis(2-ethylhexyl)phthalate	Dibenzofuran	Di-n-butyl phthalate	Fluoranthene	Fluorene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	2-Nitroaniline	N-nitrosodiphenylamine	Phenanthrene
SYSTEM #2																								
MW-3	9/25/87	nd	--	13	nd	nd	590	nd	nd	nd	nd	nd	nd	nd	nd	1.7	nd	nd	nd	nd	nd	nd	nd	nd
	3/88	nd	--	nd	nd	nd	16,000	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/88	nd	--	nd	nd	nd	590	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/89	nd	--	nd	nd	nd	5,000	nd	nd	39	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1990	nd	--	nd	nd	nd	4,000	nd	nd	nd	nd	140	nd	nd	nd	nd	nd	5.6	nd	nd	160	nd	nd	nd
	1/94	nd	--	nd	1.0	6	3,700(E)	nd	4.0	nd	nd	30	0.15	nd	2.0	nd	nd	4.8	nd	78	91	nd	nd	2.2
	10/18/95	nd	nd	nd	nd	--	1,100	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	12/6/95	nd	nd	nd	nd	--	590	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	120	76	nd	nd	nd
	2/27/96	nd	nd	nd	nd	--	300	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	100	110	nd	nd	nd
	5/14/96	nd	17	nd	nd	--	450	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	130	110	nd	nd	nd
	8/13/96**	nd	nd(M)	nd(M)	nd(M)	--	2,000	nd	nd(M)	nd(M)	nd	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)
	11/14/96	nd	11	nd	nd	--	680	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	200	160	nd	nd	nd
	2/3/97	nd	6.2	nd	2.8	--	170	2.5	6.5	nd	nd	nd	4.3	nd	4.7	nd	nd	4.6	nd	140	120	3.4	nd	4.3
	5/13/97	nd	4.1	nd	nd	--	650	nd	nd	nd	nd	nd	0.13	--	--	--	0.35	1.7	50	66	43	--	--	1.3
	8/14/97	nd	9.6	nd	nd	--	2,600	3.2	8.6	nd	nd (M)	nd(M)	nd(M)	--	--	--	nd(M)	10	260	280	370	--	--	4.4
	11/4/97	nd	8.0	nd	nd	--	2,800	nd	11	nd	2.5	nd	0.59	--	--	--	nd	12	190	270	420	--	--	8.3
	2/3/98	nd	nd	nd	nd	--	1,800	nd	8.6	nd	nd	nd	nd	--	--	--	nd	4.2	15	16	16	--	--	nd
	5/19/98	nd	nd	nd	nd	--	300	nd	nd	nd	32	nd	nd	--	--	--	nd	0.56	22	38	nd	--	--	0.62
	8/10/98	nd	5.8	nd	nd	--	3,200	nd	13	nd	nd	nd	1.1	--	--	--	nd	13	220	420	330	--	--	6.2
	11/10/98	nd(M)	nd(M)	nd(M)	nd(M)	--	1,200	nd(M)	nd(M)	nd(M)	nd	nd	0.66	--	--	--	0.57	15	170	330	250	--	--	7.4
	2/10/99	nd	nd	nd	nd	--	76	nd	nd	nd	nd	nd	nd	--	--	--	nd	nd	nd	nd	nd	--	--	nd
Wisconsin Groundwater Quality Standards																								
NR 140 PAL		ns	ns	ns	ns	ns	0.1	1,200	ns	ns	ns	ns	600	0.6	ns	20	80	80	ns	ns	8	ns	0.7	ns
NR 140 ES		ns	ns	ns	ns	ns	1	6,000	ns	ns	ns	ns	3,000	6	ns	100	400	400	ns	ns	40	ns	7	ns

Table 2, continued - Groundwater Analytical Summary
Semi-Volatile Organic Compounds (SVOCs)
Praefke Brake and Supply Corporation - West Bend, WI

Natural Resource Technology

SVOCs (µg/L)

		ACID COMPOUNDS									BASE/NEUTRALS													
Sample Location	Sample Date	2-Methyl-4,6-dinitrophenol	Cresols, Total	2,4-Dichlorophenol	2,4-Dimethylphenol	4-Methylphenol (p-Cresol)	Pentachlorophenol	Phenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaphthene	Acenaphthylene	Anthracene	Bis(2-ethylhexyl)phthalate	Dibenzofuran	Di-n-butyl phthalate	Fluoranthene	Fluorene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	2-Nitroaniline	N-nitrosodiphenylamine	Phenanthrene
SYSTEM #2 (cont.)																								
MW-4	9/25/87	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	3/88	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/88	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/27/96	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	5/14/96	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	8/13/96	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	11/14/96	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	2/3/97	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	2.2	nd
	5/13/97	nd	nd	nd	nd	--	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/19/98	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	nd	nd	nd	nd	nd	--	--	nd
MW-H	2/89	nd	--	nd	nd	nd	570	nd	nd	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1990	nd	--	nd	nd	nd	70	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	1/94	nd	--	nd	nd	nd	82(E)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	10/18/95	nd	nd	nd	nd	--	860	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	12/6/95	nd	nd	nd	nd	--	210	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	2/27/96	nd	nd	nd	nd	--	450	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	5/14/96	nd	nd	nd	nd	--	460	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	8/13/96	nd(M)	nd(M)	nd(M)	nd(M)	--	nd (M)	nd (M)	nd(M)	nd(M)	nd (M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)	nd(M)
	11/14/96	nd	nd	nd	nd	--	310	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	2/3/97	7.6	nd	nd	nd	--	240	nd	nd	nd	nd	nd	nd	3.4	nd	nd	nd	nd	nd	nd	11	nd	nd	nd
	5/13/97	nd	nd	nd	nd	--	400	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/14/97	nd	nd	nd	nd	--	2,200	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/3/97	nd	nd	nd	nd	--	2,800	nd	8.6	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/3/98	nd	nd	nd	nd	--	450	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/19/98	nd	nd	nd	nd	--	110	nd	nd	nd	0.72	nd	nd	--	--	--	nd	nd	nd	nd	nd	--	--	nd
	8/10/98	nd	nd	nd	nd	--	280	nd	nd	nd	nd	nd	nd	--	--	--	nd	nd	nd	nd	nd	--	--	nd
	11/10/98	nd(M)	nd(M)	nd(M)	nd(M)	--	510	nd(M)	nd(M)	nd(M)	nd	nd	nd	--	--	--	nd	nd	4.2	nd	1.4	--	--	nd
	2/10/99	nd	nd	nd	nd	--	140	nd	nd	nd	nd	nd	nd	--	--	--	nd	nd	nd	nd	nd	--	--	nd
Wisconsin Groundwater Quality Standards																								
NR 140 PAL		ns	ns	ns	ns	ns	0.1	1,200	ns	ns	ns	ns	600	0.6	ns	20	80	80	ns	ns	8	ns	0.7	ns
NR 140 ES		ns	ns	ns	ns	ns	1	6,000	ns	ns	ns	ns	3,000	6	ns	100	400	400	ns	ns	40	ns	7	ns

Table 2, continued - Groundwater Analytical Summary
Semi-Volatile Organic Compounds (SVOCs)
Praefke Brake and Supply Corporation - West Bend, WI

Natural Resource Technology

SVOCs (µg/L)

		ACID COMPOUNDS									BASE/NEUTRALS													
Sample Location	Sample Date	2-Methyl-4,6-dinitrophenol	Cresols, Total	2,4-Dichlorophenol	2,4-Dimethylphenol	4-Methylphenol (p-Cresol)	Pentachlorophenol	Phenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaphthene	Acenaphthylene	Anthracene	Bis(2-ethylhexyl)phthalate	Dibenzofuran	Di-n-butyl phthalate	Fluoranthene	Fluorene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	2-Nitroaniline	N-nitrosodiphenylamine	Phenanthrene
SYSTEM #2 (cont.)																								
002 Influent	12/6/95	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	23	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	2/27/96	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	5/14/96	nd	nd	nd	nd	--	38	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	8/13/96	nd	nd	nd	nd	--	28	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	11/13/96	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	2/3/97	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	2.6	nd
	5/13/97	nd	nd	nd	nd	--	24	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/14/97	nd	nd	nd	nd	--	31	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/3/97	nd	nd	nd	nd	--	34	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/3/98	nd	nd	nd	nd	--	32	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/19/98	nd	nd	nd	nd	--	11	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/10/98	nd	nd	nd	nd	--	36	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/10/98	nd	nd	nd	nd	--	13	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/9/99	nd	nd	nd	nd	--	16	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-D1	5/19/98	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	nd	nd	nd	nd	nd	--	--	nd
MW-D2	5/19/98	nd	nd	nd	nd	--	nd	nd	nd	nd	nd	nd	nd	--	--	--	nd	nd	nd	nd	nd	--	--	nd
Wisconsin Groundwater Quality Standards																								
NR 140 PAL		ns	ns	ns	ns	ns	0.1	1,200	ns	ns	ns	ns	600	0.6	ns	20	80	80	ns	ns	8	ns	0.7	ns
NR 140 ES		ns	ns	ns	ns	ns	1	6,000	ns	ns	ns	ns	3,000	6	ns	100	400	400	ns	ns	40	ns	7	ns

Table 2, continued - Groundwater Analytical Summary
Semi-Volatile Organic Compounds (SVOCs)
Praefke Brake and Supply Corporation - West Bend, WI

Natural Resource Technology

SVOCs (µg/L)

		ACID COMPOUNDS									BASE/NEUTRALS													
Sample Location	Sample Date	2-Methyl-4,6-dinitrophenol	Cresols, Total	2,4-Dichlorophenol	2,4-Dimethylphenol	4-Methylphenol (p-Cresol)	Pentachlorophenol	Phenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaphthene	Acenaphthylene	Anthracene	Bis(2-ethylhexyl)phthalate	Dibenzofuran	Di-n-butyl phthalate	Fluoranthene	Fluorene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	2-Nitroaniline	N-nitrosodiphenylamine	Phenanthrene
SYSTEM #2 (cont.)																								
RW-2A	8/14/97	nd	nd	nd	nd	--	**64**	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/3/97	nd	nd	nd	nd	--	**61**	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/3/98	nd	nd	nd	nd	--	**17**	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/19/98	nd	nd	nd	nd	--	**11**	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/10/98	nd	nd	nd	nd	--	**77**	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/10/98	nd	nd	nd	nd	--	**13**	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/9/99	nd	nd	nd	nd	--	**8.4**	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RW-2B	8/14/97	nd	nd	nd	nd	--	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/4/97	nd	nd	nd	nd	--	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/3/98	nd	nd	nd	nd	--	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/19/98	nd	nd	nd	nd	--	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/10/98	nd	nd	nd	nd	--	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/10/98	nd	nd	nd	nd	--	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/9/99	nd	nd	nd	nd	--	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RW-2C	8/14/97	nd	nd	nd	nd	--	nd	nd	nd	nd	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wisconsin Groundwater Quality Standards																								
NR 140 PAL		**ns**	**ns**	**ns**	**ns**	**ns**	**0.1**	**1,200**	**ns**	**ns**	**ns**	**ns**	**600**	**0.6**	**ns**	**20**	**80**	**80**	**ns**	**ns**	**8**	**ns**	**0.7**	**ns**
NR 140 ES		**ns**	**ns**	**ns**	**ns**	**ns**	**1**	**6,000**	**ns**	**ns**	**ns**	**ns**	**3,000**	**6**	**ns**	**100**	**400**	**400**	**ns**	**ns**	**40**	**ns**	**7**	**ns**

Notes:

1) nd = not detected
2) -- = not analyzed
3) ns = no NR 140 standard currently exists.
4) ** = Elevated detection limit
5) E = Compound concentration exceeds the calibration range of the intrument.
6) M = Matrix interference
7) Bold and underlined = NR 140 Preventive Action Limit (PAL) exceedance.
8) Bold and shaded = NR 140 Enforcement Standard (ES) exceedance.
9) Only compounds that were detected are shown

rev. 1/99
By: dvp/jag/slm/dvp
Chkd By: jag/tln/jaz

General Note : This summmary table was developed from available information; some minor inaccuracies may exist in the 1987 through 1994 data. The table will be updated if more accurate information is found.

Table 3 - Groundwater Elevation Data
Praefke Brake and Supply - West Bend, WI

Monitoring Well	MW-A	MW-D1	MW-D2	MW-G	MW-H	MW-2	MW-3	MW-4	MW-6A	MW-6B	RW-1A	RW-1B	RW-1C	RW-2A	RW-2B	RW-2C
Ground Surface Elevation (ft)	903.72	911.28	911.54	906.89	908.99	908.08	912.62	906.65	907.30	907.29	905.17	908.26	903.11	913.81	906.86	906.37
TOC Elevation (ft)	905.55	913.24	913.43	906.57	911.56	909.92	914.53	906.22	906.97	906.81	901.25	904.53	898.99	910.21	902.83	902.64
Well Depth (ft)	27.9	26.1	34.0	23.5	20.7	15.0	20.2	12.0	25.0	34.7	28.40	31.44	32.24	34.00	25.83	12.36
Base of Well Elevation (ft)	877.7	887.1	879.4	883.1	890.9	894.9	894.4	894.2	882.0	872.1	872.9	873.1	866.8	876.2	877.0	890.3
Groundwater Elevation (ft)																
2/21/89	884.75	891.38	892.26	891.95	898.16	895.46	901.62	900.84	887.35	887.42	nm	nm	nm	nm	nm	nm
12/6/89	884.40	891.12	891.99	891.57	897.95	895.13	901.33	nm	887.01	887.09	nm	nm	nm	nm	nm	nm
2/27/96	885.30	nm	nm	nm	898.36	896.28	901.13	900.74	888.24	888.33	nm	nm	nm	nm	nm	nm
5/14/96	885.13	nm	nm	892.46	898.47	896.28	900.83	901.62	887.55	887.61	nm	nm	nm	nm	nm	nm
8/13/96	886.14	nm	nm	893.91	898.36	896.90	901.19	901.07	888.89	888.98	nm	nm	nm	nm	nm	nm
11/14/96	884.99	nm	nm	892.60	898.26	896.03	901.09	900.74	887.52	882.16	nm	nm	nm	nm	nm	nm
2/3/97	884.44	nm	nm	891.68	898.21	895.36	901.76	900.82	886.77	886.84	nm	nm	nm	nm	nm	nm
5/13/97	884.99	nm	nm	892.02	898.93	896.62	901.75	901.47	887.19	887.25	nm	nm	nm	nm	nm	nm
8/14/97	884.65	nm	nm	nm	898.26	nm	901.18	nm	887.01	nm	nm	nm	nm	nm	nm	nm
9/17/97	884.42	891.32	892.17	891.79	898.07	895.51	901.08	900.82	886.74	886.84	884.24	884.73	885.42	878.55	883.06	883.63
11/3/97	883.98	nm	nm	nm	896.84	nm	901.05	nm	886.30	nm	nm	nm	nm	nm	nm	nm
2/3/98	883.51	nm	nm	nm	898.04	nm	901.03	nm	885.67	nm	nm	nm	nm	nm	nm	nm
5/19/98	885.55	893.19	893.58	892.27	898.96	896.76	902.08	901.86	887.92	887.96	887.38	887.06	886.73	892.11	891.59	901.41
6/23/98	885.14	892.10	892.92	892.53	898.62	896.43	901.86	901.63	887.59	887.67	885.74	884.27	886.24	892.16	891.56	901.13
8/10/98	884.71	nm	nm	nm	898.58	nm	901.82	nm	886.90	nm	nm	nm	nm	nm	nm	nm
11/13/98	883.76	891.07	891.99	891.20	898.24	895.20	901.19	901.02	886.20	886.28	885.56	885.18	884.74	881.21	879.31	900.55
2/10/99	884.35	nm	nm	891.22	898.51	nm	901.38	nm	886.75	886.83	nm	nm	nm	nm	nm	nm

Notes:
Elevations obtained from survey performed by R.A. Pagels, September 15, 1997. Elevations are referenced to National Geodetic Vertical Datum (NGVD).
Well depth measurements made relative to top of well casing.
nm = not measured.
Pumping at RW-1C was shutdown on 9/8/97 and pumping at RW-2C was shutdown on 11/18/97.
The float settings at RW-2A and RW-2B were raised approx. 13 ft. on 11/18/97. The float settings were lowered to approximately original depths on 11/9/98.
System 001 was not operating (RW-1A and RW-1B not pumping) during collection of the May 19, 1998 water level measurements due to replacement of discharge line.
System 001 was shutdown on October 30, 1998 on a temporary basis.

updated by SLM 6/23/98, JAZ 11/17/98

SAMPLING SCHEDULE

Sampling Schedule - Revised February 3, 1999
Praefke Brake and Supply
West Bend, WI
FID #: 267083740

Sample Location	Parameter	Method	Frequency	Months	Comments
SYSTEM 001 -VOC Plume					
Influent	VOCs	8260A	**Not Sampled**	Feb, May, Aug, Nov	**System temp. shutdown Oct. 30, 1998**
Effluent	Total Susp. Solids	160.2	**Not Sampled**	Feb, May, Aug, Nov	**System temp. shutdown Oct. 30, 1998**
	VOCs (1)	8260A	**Not Sampled**	Feb, May, Aug, Nov	**System temp. shutdown Oct. 30, 1998**
	Flow	metered	--		System temp. shutdown Oct. 30, 1998, Limit 12 gpm
Monitoring Wells (MW-G,6A,6B,A)	VOCs - MW-6A, MW-A	8260A	Qtrly	Feb, May, Aug, Nov	
	VOCs - MW-G,6B	8260A	Annually	Feb*, May	Eliminated MW-2 - 1998
Recovery Wells (RW-1A, 1B)	VOCs	8260A	Qtrly	Feb, May, Aug, Nov	
SYSTEM 002 - PCP Plume					
Influent	ACID Compounds	8270	Qtrly	Feb, May, Aug, Nov	
Between GAC Units	ACID Compounds	8270	Monthly		
Effluent	ACID Compounds(2)	8270	Qtrly	Feb, May, Aug, Nov	
	PAHs (3)	8310	Qtrly	Feb, May, Aug, Nov	
	Flow	metered	--		Limit 12 gpm
Monitoring Wells (MW-3,4,H, D1,D2)	ACID Compounds- MW-3,H	8270	Qtrly	Feb, May, Aug, Nov	
	ACID Compounds- MW-4, D1, D2	8270	Annually	May	Added MW-D1, D2 - 1998
	PAHs - MW-3,H	8310	Qtrly	Feb, May, Aug, Nov	Added MW-H - 1998
	PAHs -MW-4, D1, D2	8310	Annually	May	
Recovery Wells (RW-2A,2B)	ACID Compounds	8270	Qtrly	Feb, May, Aug, Nov	

Notes:
(1) VOC compounds listed on the Discharge Monitoring Reports (DMRs) include 1,1 Dichloroethene, **Trichloroethene**, and 1,1,1 Trichloroethane. **Eliminated Carbon Tetrachloride**.
(2) Acid compounds listed on the Discharge Monitoring Reports (DMRs) include Pentachlorophenol and Phenol. **Eliminated 2,4 Dichlorophenol and 2,4,6 Trichlorophenol**.
(3) PAH compounds listed on the Discharge Monitoring Reports (DMRs) include **Acenaphthylene and Naphthalene**.
* Wells MW-G and MW-6B will also be sampled in February 1999.

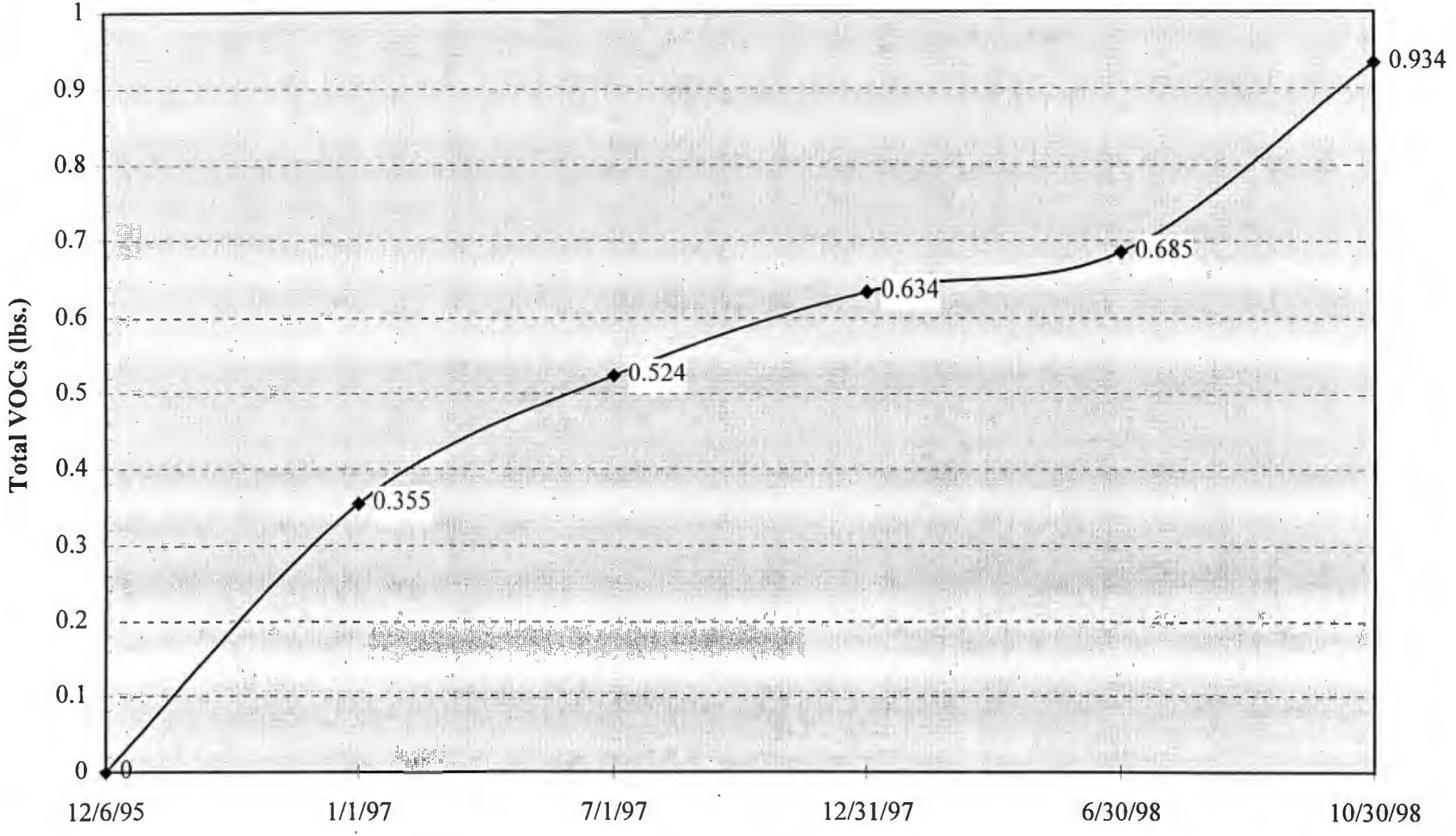
Note - Recovery wells to be sampled by Praefke Brake personnel.

System 001 Influent and Effluent will not be sampled due to temporary shutdown of the system on Oct. 30, 1998.

CUMULATIVE CONTAMINANT REMOVAL GRAPHS
(SYSTEM 001 AND 002)

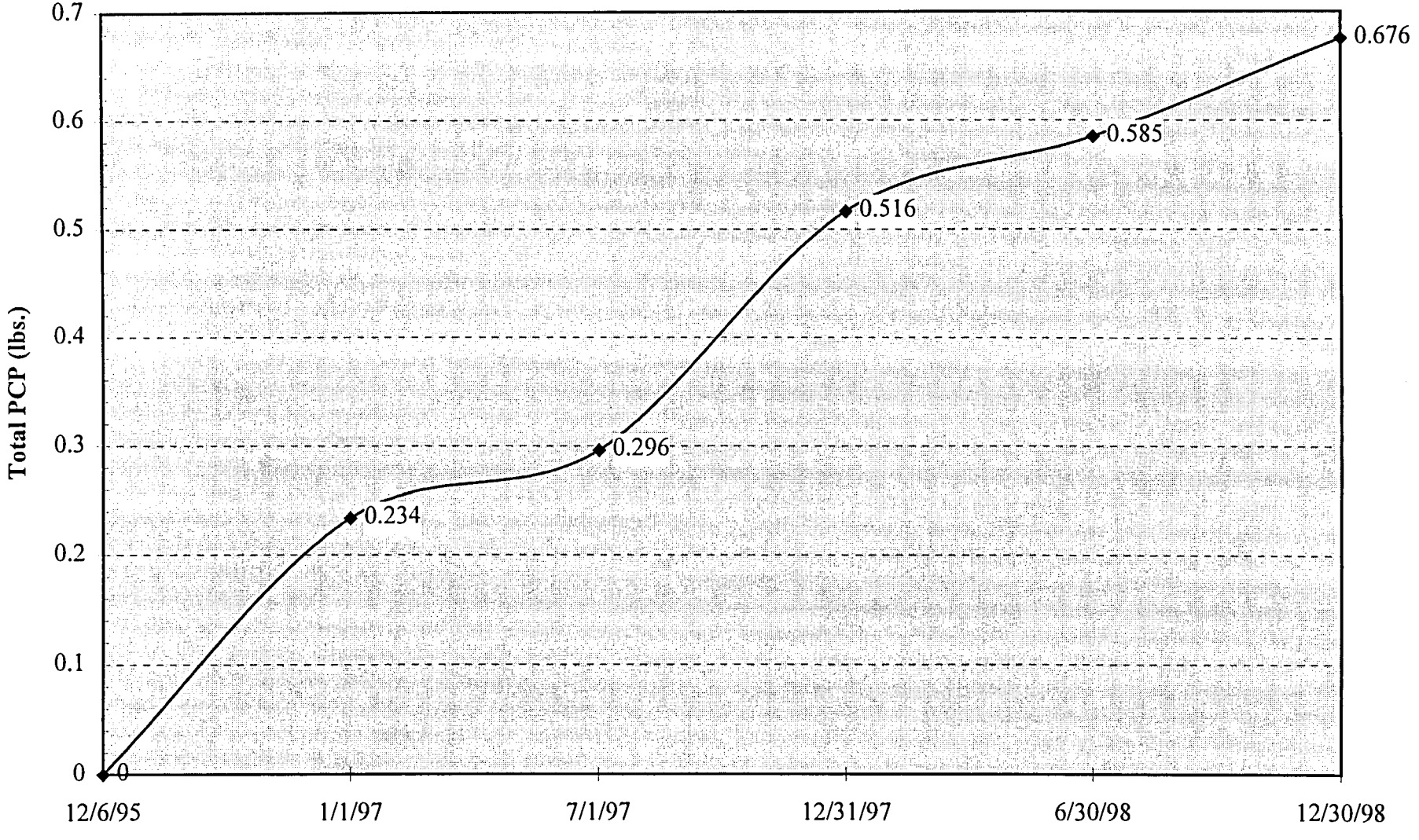
Cumulative Contaminant Removal - System 001

Praefke Brake - West Bend, WI

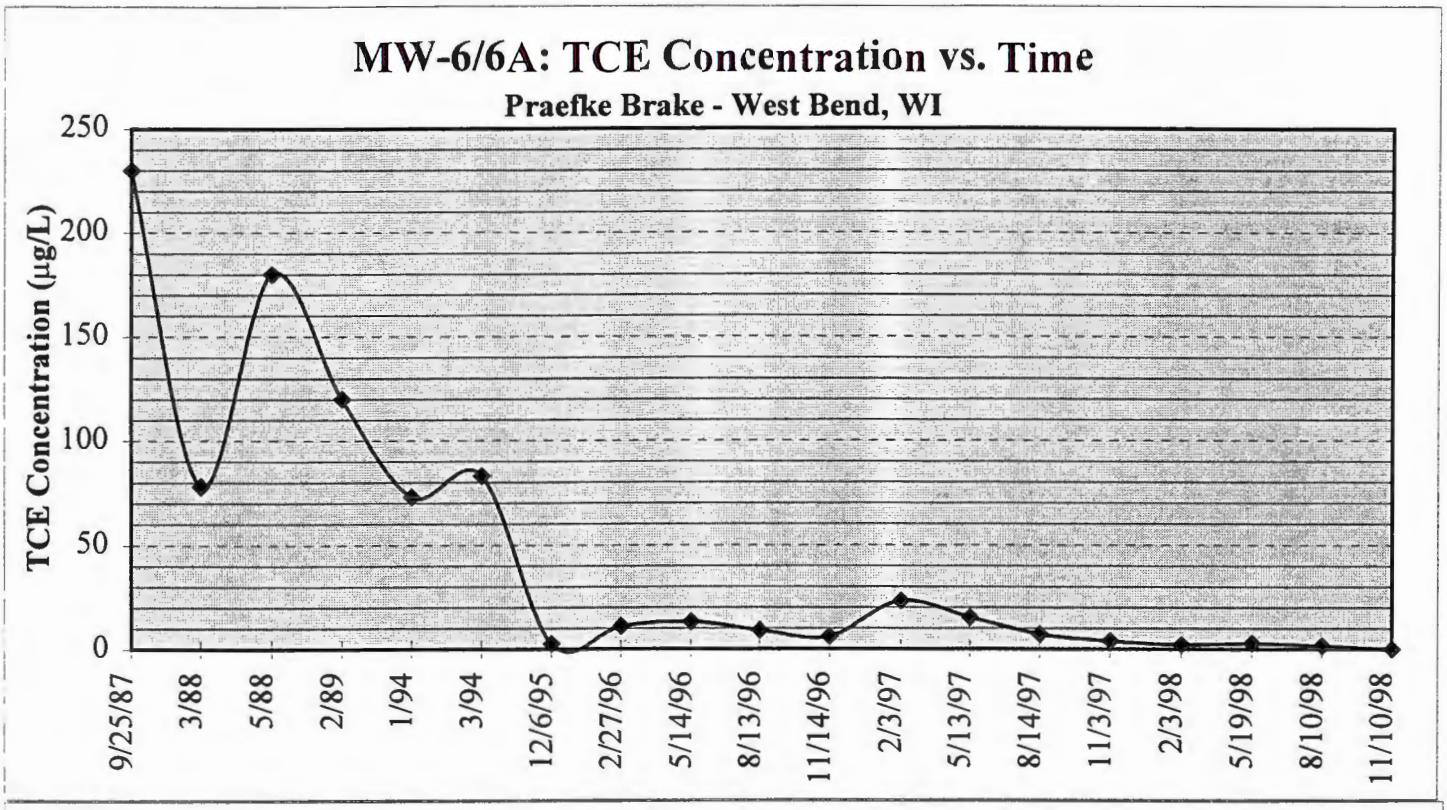


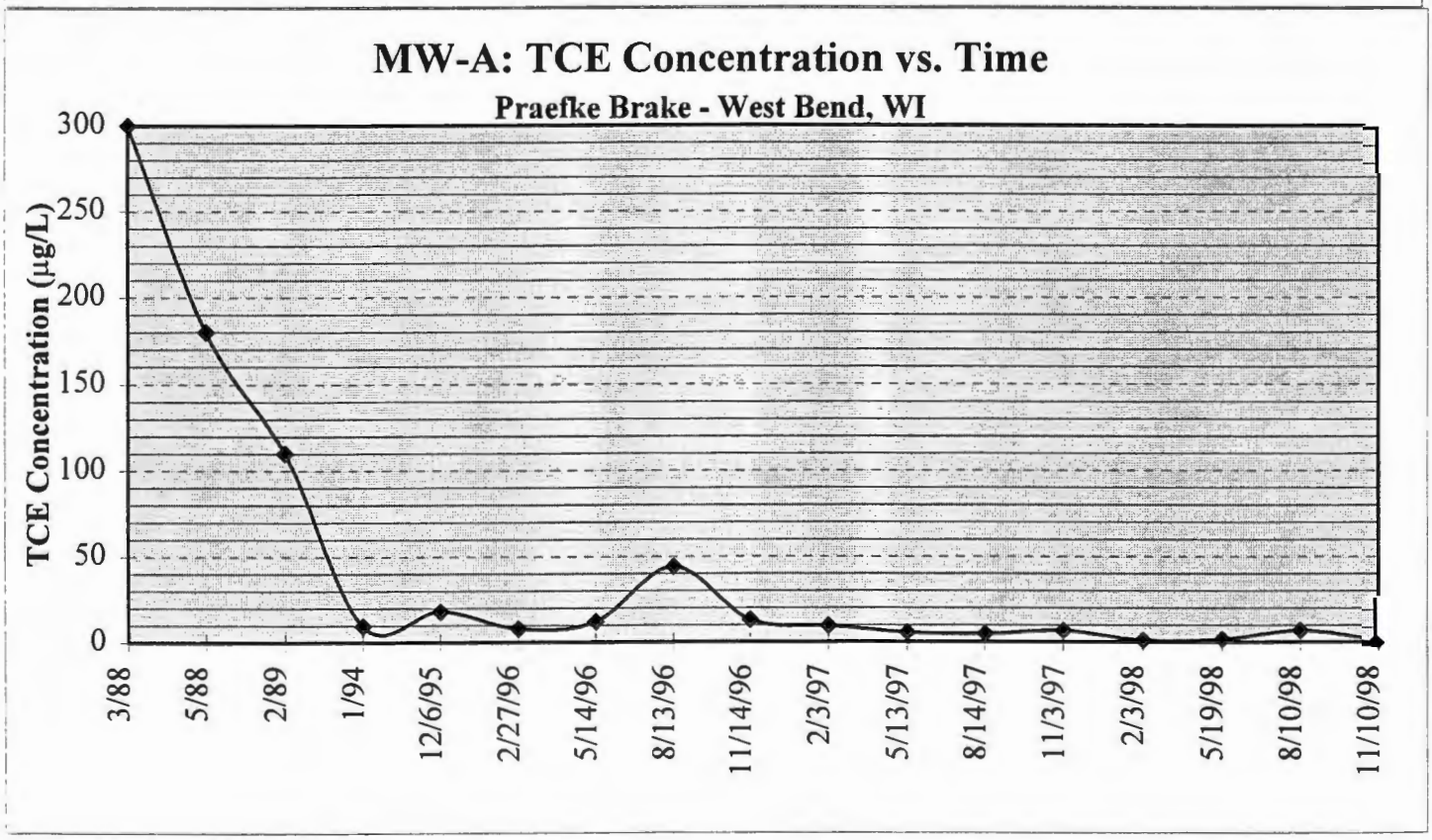
Cumulative Contaminant Removal - System 002

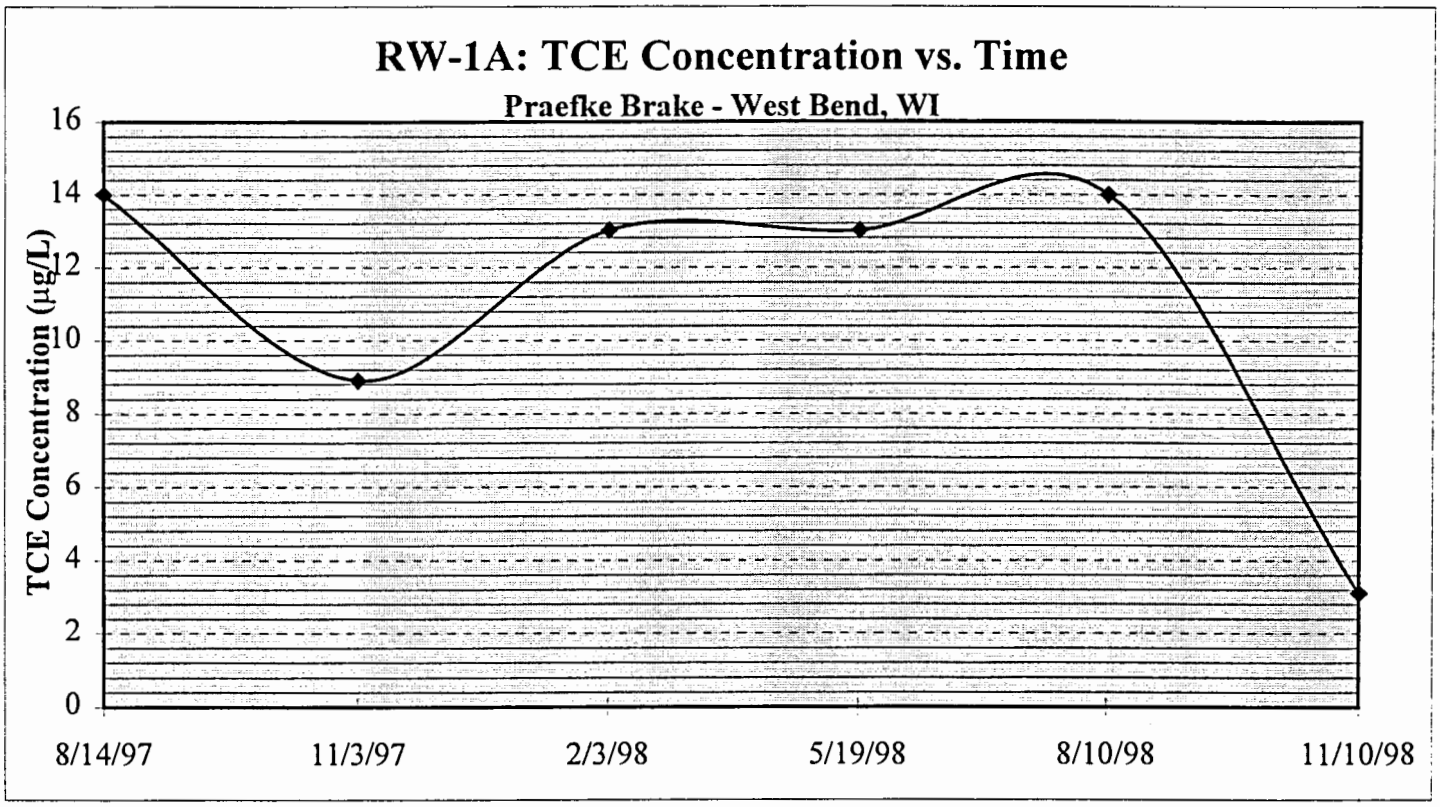
Praefke Brake - West Bend, WI

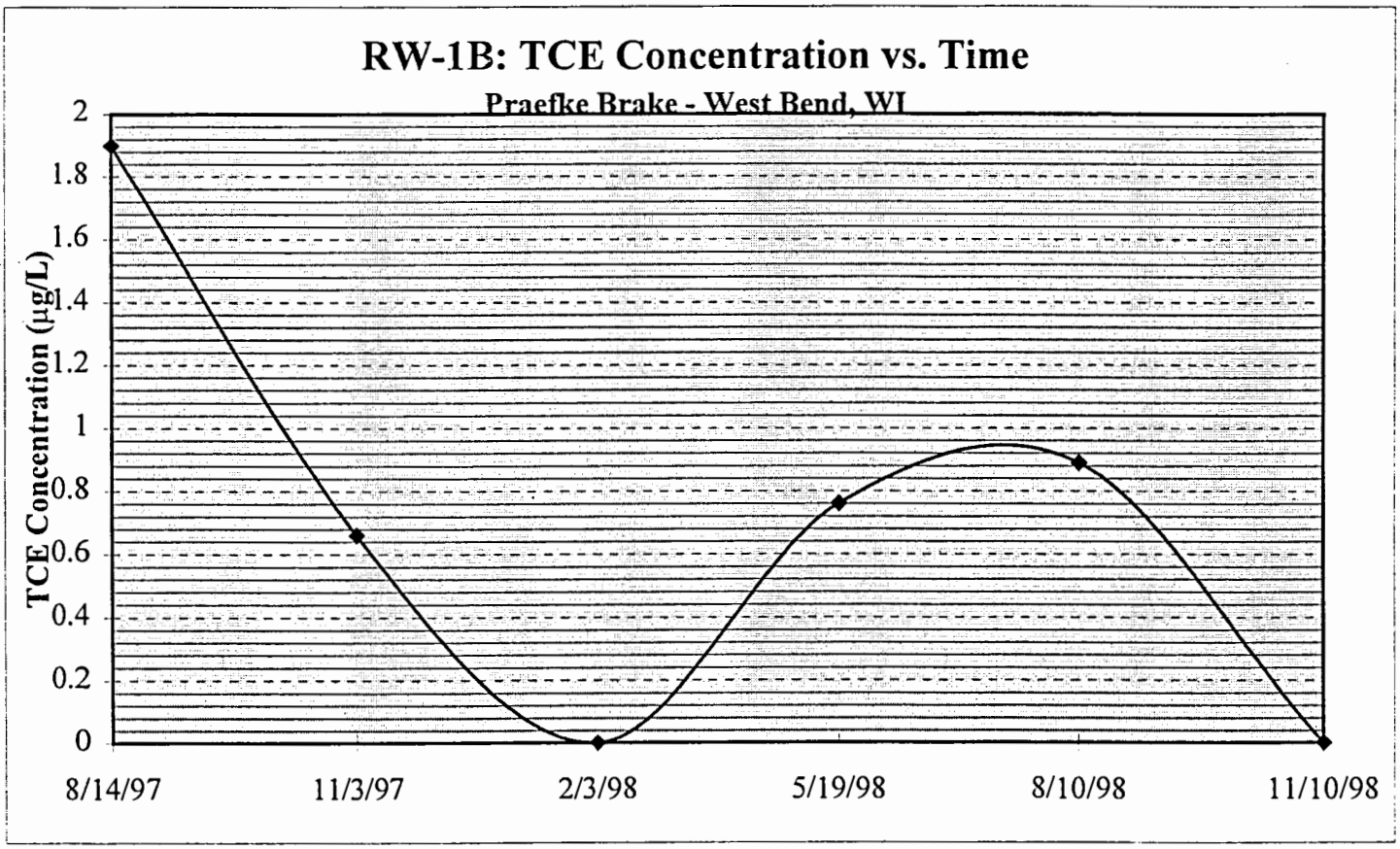


CONTAMINANT CONCENTRATION VS. TIME GRAPHS - SYSTEM 001

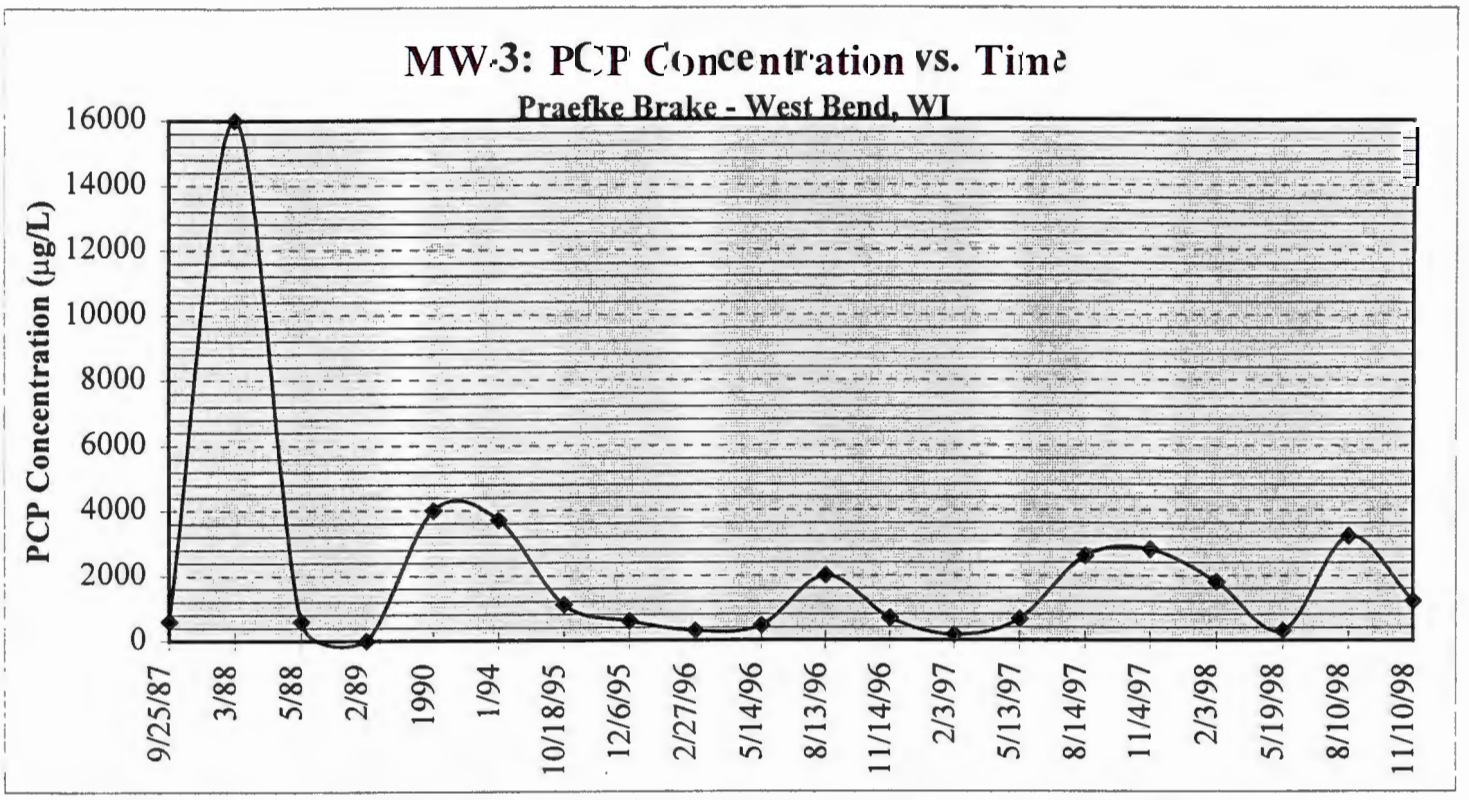

MW-6/6A: TCE Concentration vs. Time
Praefke Brake - West Bend, WI
TCE Concentration (µg/L)
250
200
150
100
50
0
9/25/87
3/88
5/88
2/89
1/94
3/94
12/6/95
2/27/96
5/14/96
8/13/96
11/14/96
2/3/97
5/13/97
8/14/97
11/3/97
2/3/98
5/19/98
8/10/98
11/10/98


MW-A: TCE Concentration vs. Time
Praefke Brake - West Bend, WI
TCE Concentration (µg/L)
300
250
200
150
100
50
0
3/88
5/88
2/89
1/94
12/6/95
2/27/96
5/14/96
8/13/96
11/14/96
2/3/97
5/13/97
8/14/97
11/3/97
2/3/98
5/19/98
8/10/98
11/10/98


RW-1A: TCE Concentration vs. Time
Praefke Brake - West Bend, WI
TCE Concentration (µg/L)
16
14
12
10
8
6
4
2
0
8/14/97
11/3/97
2/3/98
5/19/98
8/10/98
11/10/98


RW-1B: TCE Concentration vs. Time
Praefke Brake - West Bend, WI
TCE Concentration (µg/L)
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
8/14/97
11/3/97
2/3/98
5/19/98
8/10/98
11/10/98

CONTAMINANT CONCENTRATION VS. TIME GRAPHS - SYSTEM 002


MW-3: PCP Concentration vs. Time
Praefke Brake - West Bend, WI
PCP Concentration (µg/L)
16000
14000
12000
10000
8000
6000
4000
2000
0
9/25/87
3/88
5/88
2/89
1990
1/94
10/18/95
12/6/95
2/27/96
5/14/96
8/13/96
11/14/96
2/3/97
5/13/97
8/14/97
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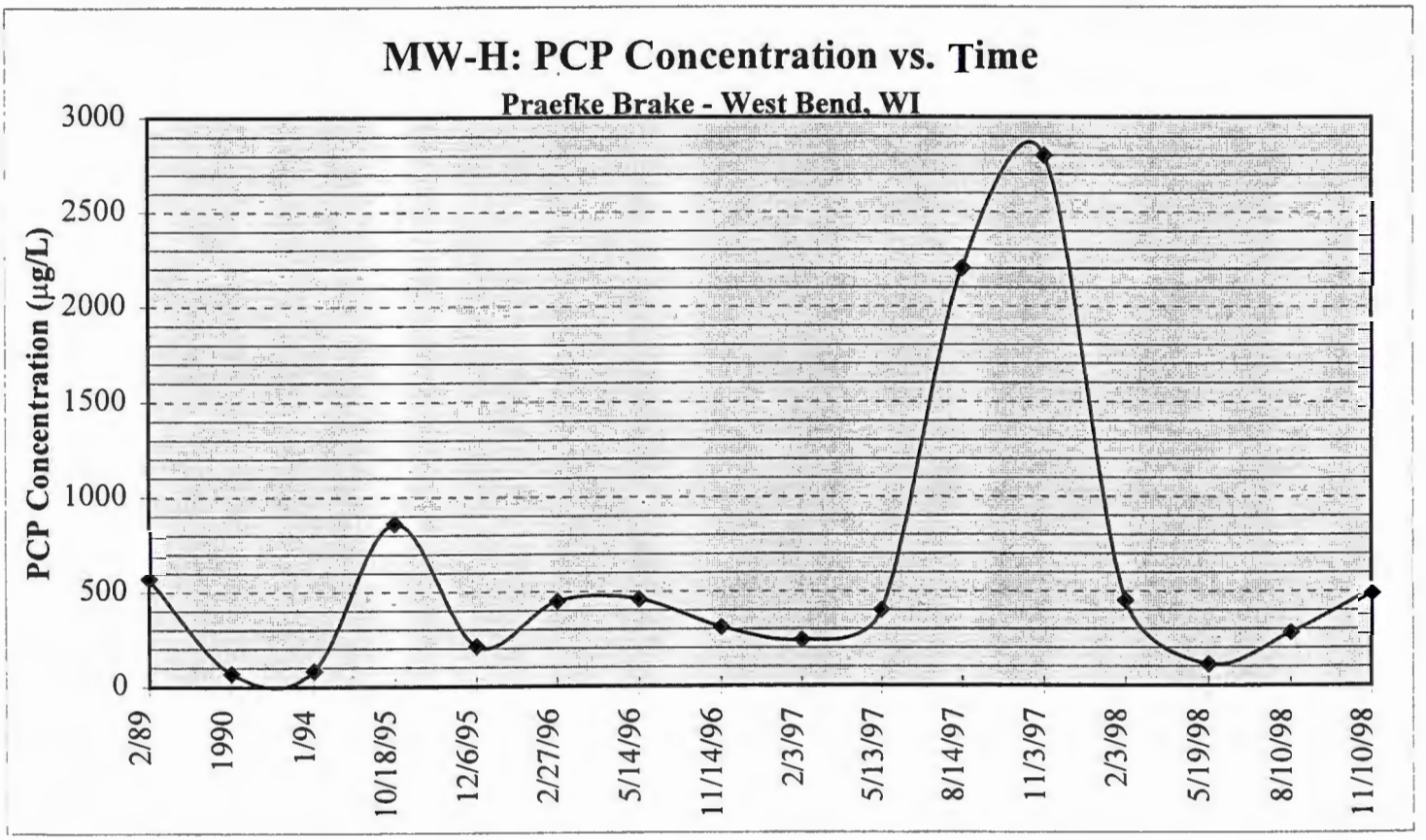
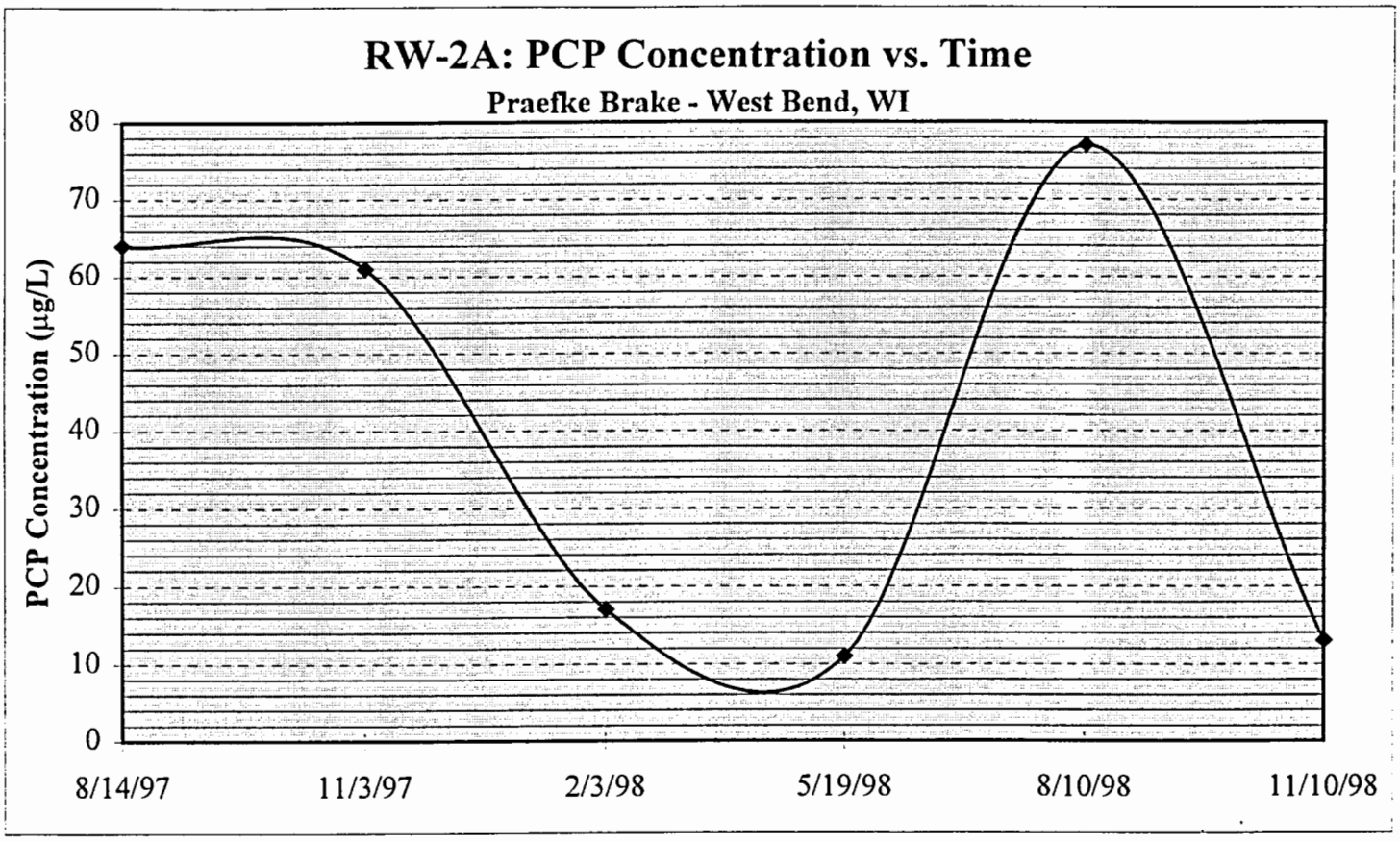
2/3/98
5/19/98
8/10/98
11/10/98


MW-H: PCP Concentration vs. Time
Praefke Brake - West Bend, WI
PCP Concentration (µg/L)
3000
2500
2000
1500
1000
500
0
2/89
1990
1/94
10/18/95
12/6/95
2/27/96
5/14/96
11/14/96
2/3/97
5/13/97
8/14/97
11/3/97
2/3/98
5/19/98
8/10/98
11/10/98


RW-2A: PCP Concentration vs. Time
Praefke Brake - West Bend, WI
PCP Concentration (µg/L)
80
70
60
50
40
30
20
10
0
8/14/97
11/3/97
2/3/98
5/19/98
8/10/98
11/10/98

WDNR DISCHARGE MONITORING REPORT FORMS

PRAEFKE BRAKE & SUPPLY CORP.

133 Oak Street
West Bend, Wisconsin 53095

(414) 334-2355
Fax No: (414) 334-2358

COPY

January 15, 1999

Wastewater Section
Dept. of Natural Resources
P.O. Box 12346
Milwaukee, Wi 53212

RE: Permit No. WI-0046566-3
DNR File Ref. #267004430

Enclosed you will find our Discharge Report Forms for the fourth quarter of 1998.

Should you have any further questions, please feel free to contact us.

Very truly yours,

PRAEFKE BRAKE & SUPPLY CORP.

Michael W. Butz
Quality Control Manager

Discharge Monitoring Report Form (Contaminated Groundwater) Permit No. - WI-0046566-3 Permittee ~~Dan~~ MICHAEL BUTZ ~~Kudek~~

Lab Name: —

Lab Cert#: —

DMR Sent to: Praefke

DNR File Reference Number: 267004430

Page 1 of 2

Praefke Brake
133 Oak Street
West Bend WI 53095

Outfall Number	001	001	001	001	001	001
Parameter Name	VOCs	1,1 Dichloroethylene	Trichloroethene	1,1,1Trichloroethane	TSS	flow
Parameter Units	ug/l	ug/l	ug/l	ug/l	ug/l	gal./day
Lab Method Used						metered
Date(s) Sampled						
	Not Sampled	Not Sampled.	Not Sampled	Not Sampled	Not Sampled	16,155 gal/day
	* System shut down Oct.	30, 1998 (may require re-start)				Operated Oct. 1 -
	per	Mike Zillmer, WDNR				Oct. 30, 1998
Daily Max Limit					40	
Monthly Avg. Limit		0.7	40	50		
Sample Type	Grab	Grab	Grab	Grab	Grab	Estimate
Sample Frequency	See Permit	See Permit	See Permit	See Permit	See Permit	continuous

Unless noted under parameter name, each daily value entered must be the highest value of all sample types analyzed for that day

Send Report To: Wastewater Section
Department of Natural Resources
P.O. Box 12436
Milwaukee, WI 53212

Return Report no later Than: January 15 1999

Please attach notes and/or address-name corrections on a seperate sheet

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediatly responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitted false information, including the possibility of fines and imprisonment, (40 CFR 122.5). I also certify that the values being submitted are the actual values found in the samples; no values have been modified or changed in any manner. Where ever I believe a value being reported is inaccurate, I have added an explaination indicating the reasons why the value is inaccurate.

Signature of Person Completing Form	
Michael D. Butz	
Signature of Principal Exec. Officer or Authorized Agent	Title
Michael D. Butz	Q.C. MGR

Discharge Monitoring Report Form (Contaminated Groundwater) Permit No. - WI-0046566-3 Permittee ~~Dan~~ MICHAEL Butz ~~Kodek~~

Lab Name: NET

Lab Cert#: 128053530

DMR Sent to: Praefke

DNR File Reference Number: 267004430

Page 2 of 2

Praefke Brake
133 Oak Street
West Bend WI 53095

Outfall Number	002	002	002	002	002	
Parameter Name	Pentachlorophenol	Phenol	Acenaphtylene	Naphthalene	Flow	
Parameter Units	ug/l	ug/l	ug/l	ug/l	gal/day	
Lab Method Used	8270	8270	8310	8310	metered	
Date(s) Sampled						
11/10/98	< 3.3	< 1.8	< 0.58	< 0.23	2,678 gal/day	
Daily Max Limit						
Monthly Avg. Limit	no detect	no detect	no detect	no detect		
Sample Type	Grab	Grab	Grab	Grab	estimate	
Sample Frequency	See Permit	See Permit	See Permit	See Permit	continuous	

Unless noted under parameter name, each daily value entered must be the highest value of all sample types analyzed for that day

Send Report To: Wastewater Section
Department of Natural Resources
P.O. Box 12436
Milwaukee, WI 53212

Return Report no later Than: January 15 1999

Please attach notes and/or address-name corrections on a seperate sheet

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Signature of Person Completing Form

Michael A. Butz

Signature of Principal Exec. Officer or Authorized Agent

Michael A. Butz

Title

Q.C. MGR.