

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor  
George E. Meyer, Secretary  
Ronald W. Kazmierczak, Regional Director

Shawano Office  
647 Lakeland Rd.  
Shawano, Wisconsin 54166-3843  
Telephone 715-524-2183  
FAX 715-524-3214

August 10, 2000

Mrs. Karen Conradt  
PO Box 12  
Bear Creek, WI 54922

**COPY**

Subject: Case Closure with Restrictions for Former Dennison Quality Oil, Corner of Highway 45 and 76, Bear Creek, WI; DNR Case # 03-69-000214.

Dear Mrs. Conradt:

I have received the 1) the monitoring well abandonment forms (Form 3300-05B) for all monitoring wells related to the above case and 2) documentation that the current owner, Mr. Donald Wegner, has filed the groundwater use restriction. These items were a condition of case closure as indicated in my letter to you on February 17, 2000.

The Department considers this case closed and will remove it from our active list on our case tracking system. Please be aware that this letter does not absolve the current or any future owner of this property from future decisions regarding this site or impacts which may be discovered and/or traced back to past or future activities at this site. If additional information in the future indicates that further investigation or cleanup is warranted, the Department will require that appropriate action be taken at that time. If you have questions regarding this letter, you may contact me at (715) 526-4230.

Sincerely,

Tom Sturm,  
Hydrogeologist  
Remediation and Redevelopment Program  
E-mail: [sturmt@dnr.state.wi.us](mailto:sturmt@dnr.state.wi.us)

Cc: Mr. Donald Wegner – E7598 Neitzke Rd., Clintonville, WI 54929  
Richard Mazurkiewicz – Delta Environmental Consultants, 15700 West Cleveland Ave., New Berlin, WI 53151



Document Number

GROUNDWATER USE RESTRICTION

16-

REGISTER'S OFFICE  
WAUPACA COUNTY WI  
RECEIVED FOR RECORD

JUN 19 2000

At 8:00 o'clock A.M. and Recorded  
In Vol. 979 of Page 803  
Register

Declaration of Restrictions

In Re: Parcel described in Exhibit A, attached and made part of this restriction.

STATE OF WISCONSIN )  
 ) ss  
COUNTY OF Waupaca )

Recording Area

Name and Return Address  
DONALD WEGNER  
67598 NEITZHE RD  
CLINTONVILLE WI  
54929

WHEREAS, Donald L. Wegner is the owner of the above-described property.

01-24-43-9  
Parcel Identification Number (PIN)

WHEREAS, one or more petroleum discharges have occurred on this property. Petroleum contaminated groundwater above ch. NR 140, Wis. Adm. Code, enforcement standards existed on this property at the following locations on March 11, 1999: MW-3, Benzene at 13 micrograms per liter (ug/L); MW-5, Benzene at 230 ug/L, Xylenes at 720 ug/L, Naphthalene at 170 ug/L; MW-7, Benzene at 55 ug/L, Xylenes at 1400 ug/L, Trimethylbenzene at 1250 ug/L, Naphthalene at 400 ug/L. Locations are depicted on Exhibit B, attached and made part of this restriction.

WHEREAS, it is the desire and intention of the property owner to impose on the property restrictions which will make it unnecessary to conduct further groundwater or soil remediation activities on the property at the present time.

WHEREAS, natural attenuation has been approved by the Department of Natural Resources to remediate groundwater contamination exceeding ch. NR 140 groundwater standards within the boundaries of this property.

WHEREAS, construction of wells where the water quality does not comply with drinking water standards in ch. NR 809 is restricted by chs. NR 811 and NR 812, Wis. Adm. Code. Special well construction standards or water treatment requirements, or both, or well construction prohibitions may apply.

NOW THEREFORE, the owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied and improved subject to the following limitation and restrictions:

Anyone who proposes to construct or reconstruct a well on this property is required to contact the Department of Natural Resources' Bureau of Drinking

Water and Groundwater, or its successor agency, to determine what specific requirements are applicable, prior to constructing or reconstructing a well on this property. No well may be constructed on this property unless applicable requirements are met.

If construction is proposed on this property that will require dewatering, or if groundwater is to be otherwise extracted from this property, while this groundwater use restriction is in effect, the groundwater shall be sampled and analyzed for contaminants that were previously detected on the property and any extracted groundwater shall be managed in compliance with applicable statutes and rules.

This restriction is hereby declared to be a covenant running with the land and shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase or otherwise. This restriction benefits and is enforceable by the Wisconsin Department of Natural Resources, its successors or assigns. The Department, its successors or assigns, may initiate proceedings at law or in equity against any person or persons who violate or are proposing to violate this covenant, to prevent the proposed violation or to recover damages for such violation.

Any person who is or becomes owner of the property described above may request that the Wisconsin Department of Natural Resources or its successor issue a determination that one or more of the restrictions set forth in this covenant is no longer required. Upon the receipt of such a request, the Wisconsin Department of Natural Resources shall determine whether or not the restrictions contained herein can be extinguished. If the Department determines that the restrictions can be extinguished, an affidavit, attached to a copy of the Department's written determination, may be recorded to give notice that this deed restriction, or portions of this deed restriction, are no longer binding.

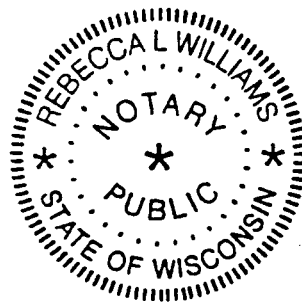
IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restrictions, this 12 day of JUNE, 2000.

Signature: Donald W. Wegner

Printed Name: Donald W. Wegner

Subscribed and sworn to before me this 12<sup>th</sup> day of June, 2000

Rebecca L. Williams  
Notary Public, State of Wisconsin  
My commission expires 10/12/03



This document was drafted by the Wisconsin Department of Natural Resources based on information submitted by Delta Environmental Consultants..

EXHIBIT A

The South 4 rods of the West 40 rods of the Southwest  $\frac{1}{4}$  of the Southeast  $\frac{1}{4}$  EXCEPT the parcel conveyed for highway purposes as described in Volume 273 of Deeds at page 44 as Document No. 262793, and ALSO EXCEPT land described in Volume 386 of records at page 392, as Document 313088; AND

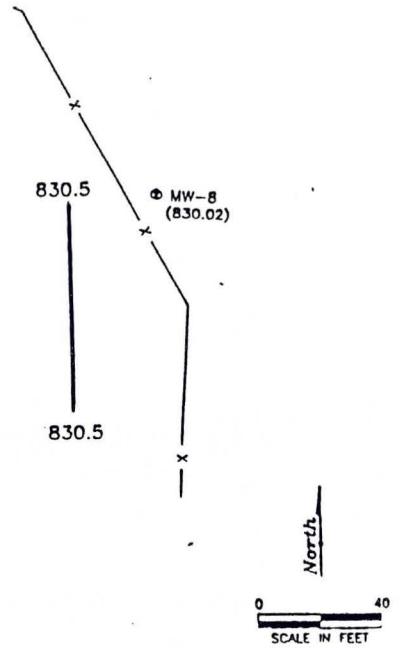
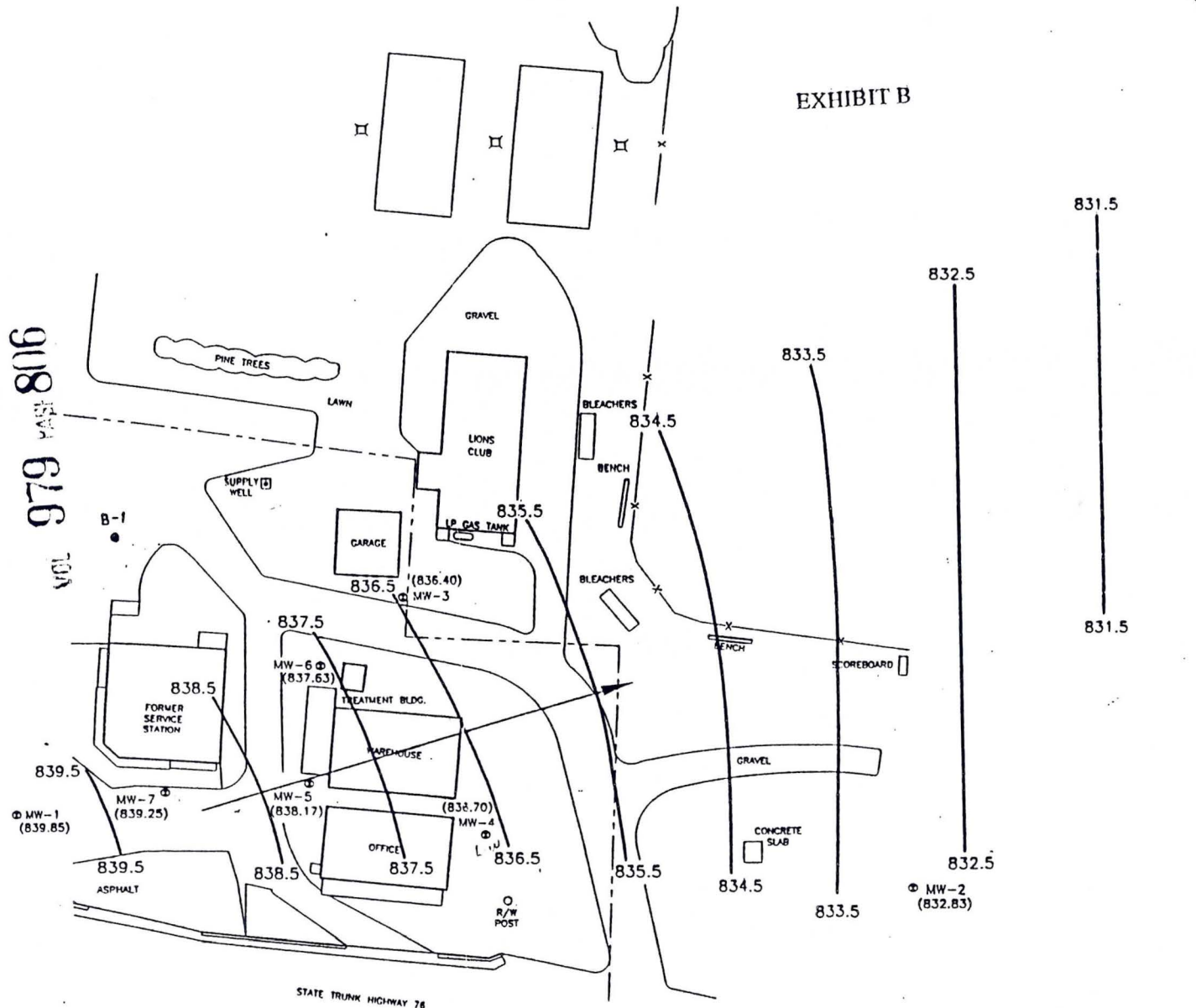
The north 10 feet of the South 142 feet of the Southwest  $\frac{1}{4}$  of the Southeast  $\frac{1}{4}$  EXCEPT the West 60 feet conveyed for highway purposes;

All in Section 24, Township 24 North, Range 14 East, Town of Bear Creek, Waupaca County, Wisconsin.

Lot 1 of Certified Survey map No. 2227 recorded in the office of the Register of Deeds for Waupaca County, Wisconsin on May 29, 1986 in Volume 7 of Certified Survey Maps on page 189 as Document No. 438318, being part of Lot 1 of Certified Survey Map No. 1763 as recorded in the office of the Register of Deeds for Waupaca County, Wisconsin on June 9, 1983 in Volume 5 of Certified Survey Maps on page 427 as Document No. 415718, and part of the Southwest  $\frac{1}{4}$  of the Southeast  $\frac{1}{4}$ , Section 24, Township 24 North, Range 14 East, Town of Bear Creek, Waupaca County, Wisconsin. TOGETHER WITH and SUBJECT to easements and conditions contained in the Warranty Deed recorded in the office of the Register of Deeds for Waupaca County, Wisconsin on June 2, 1986 in Volume 621 of Records on page 867 as Document No. 438421.

EXHIBIT B

979 WEST 806



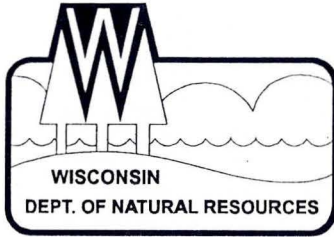
- LEGEND:**
- APPROXIMATE PROPERTY BOUNDARY
  - x- FENCE
  - ⊙ MONITORING WELL LOCATION
  - 834.0 GROUNDWATER CONTOUR LINE  
CONTOUR INTERVAL = 1.0 FEET
  - (836.40) GROUNDWATER ELEVATION (FT.)
  - ← GROUNDWATER FLOW DIRECTION
- APPROXIMATE HYDRAULIC GRADIENT (MW-1, MW-6),  
dh/dl = 0.018 ft/ft

GROUNDWATER ELEVATION CONTOUR MAP  
MARCH 11, 1999  
FORMER DENNISON QUALITY OIL CO.  
BEAR CREEK, WISCONSIN

PROJECT NO. 1093-506	PREPARED BY RM	DRAWN BY DD
DATE 11/10/99	REVIEWED BY	FILE NAME 93506SM



STATE TRUNK HIGHWAY 76



## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor  
George E. Meyer, Secretary  
Ronald W. Kazmierczak, Regional Director

Shawano Office  
647 Lakeland Rd.  
Shawano, Wisconsin 54166-3843  
Telephone 715-524-2183  
FAX 715-524-3214

February 17, 2000

Mrs. Karen Conradt  
PO Box 12  
Bear Creek, WI 54922

**COPY**

Subject: Case Closure with Restrictions for Former Dennison Quality Oil, Corner of Highway 45 and 76, Bear Creek, WI; DNR Case # 03-69-000214.

Dear Mrs. Conradt:

The Department's Case Closeout Committee in the Northeast Region has completed a review of the above-referenced petroleum contamination case and has approved it for closure. Your case closure letter has the following two significant parts:

1. General case closure criteria.
2. Groundwater Use Deed Restriction

Please read this entire letter. It addresses each of these topics with subtitled indented paragraphs.

### 1. General Case Closure

The case closure panel reviews environmental remediation cases for compliance with state laws, standards, and guidelines to maintain consistency in the closeout of cases. At the present time, it appears that actions have been taken to the extent practicable to restore the environment and minimize the harmful effects from this discharge to the air, lands and waters of this state. Please be aware that this letter does not absolve the current or any future owner of this property from future decisions regarding this site or impacts which may be discovered and/or traced back to past or future activities at this site. If additional information in the future indicates that further investigation or cleanup is warranted, the Department will require that appropriate action be taken at that time.

### 3. Deed Notice of Remaining On-site Groundwater Contamination.

Groundwater contamination in excess of NR140 Groundwater Quality Enforcement Standards remains at the site. However monitoring data indicates that natural attenuation will remediate the remaining contamination in a reasonable period of time. As a condition of closure, the Department is requiring that a groundwater use restriction be placed on the property deed indicating this condition and special requirements that will be necessary to construct a well on the property.

Please send me a copy of the current property deed as filed with the Waupaca County Register of Deeds. The deed must have a detailed property description and the name of the current property owner. I will prepare the groundwater use restriction based on this information and return it to you

for filing at the register of deed office. Please note that the current property owner or an authorized representative must file the notice.

The Department appreciates the actions you have undertaken to restore the environment at this site. This case will appear as closed on the Department's case tracking system after our receipt of 1) the monitoring well abandonment forms (Form 3300-05B) for all monitoring wells related to this case and 2) documentation that the groundwater use restriction has been filed.

If you have questions regarding this letter, you may contact me at (715) 526-4230.

Sincerely,

*Tom Sturm*

Tom Sturm,  
Hydrogeologist  
Remediation and Redevelopment Program  
E-mail: sturmt@dnr.state.wi.us

cc: Richard Mazurkiewicz – Delta Environmental Consultants, 15700 West Cleveland Ave., New Berlin, WI 53151

539503

DOCUMENT NO.

WARRANTY DEED

VOL 820 PAGE 380

Dennison's Quality Oil, Inc.

conveys and warrants to Donald L. Wegner

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

REGISTER'S OFFICE WAUPACA COUNTY WI RECEIVED FOR RECORD

DEC 5 1995

At 8:40 o'clock P.M. and Recorded In Vol. 820 of Records Page 380

THIS SPACE RESERVED FOR RECORDING DATA

NAME AND RETURN ADDRESS

GERALD E. CONNOLLY ATTORNEY AT LAW 135 A So. Main St. Clintonville, WI 54929

The South 4 rods of the West 40 rods of the Southwest 1/4 of the Southeast 1/4 EXCEPT the parcel conveyed for highway purposes as described in Volume 273 of Deeds at page 44, as Document No. 262793, and ALSO EXCEPT land described in Volume 386 of Records at page 392, as Document No. 313088; AND

The North 10 feet of the South 142 feet of the West 240 feet of the Southwest 1/4 of the Southeast 1/4 EXCEPT the West 60 feet conveyed for highway purposes;

All in Section 24, Township 24 North, Range 14 East, Town of Bear Creek, Waupaca County, Wisconsin.

Lot 1 of Certified Survey map No. 2227 recorded in the office of the Register of Deeds for Waupaca County, Wisconsin on May 29, 1986 in Volume 7 of Certified Survey Maps on page 189 as Document No. 438318, being part of Lot 1 of Certified Survey Map No. 1763 as recorded in the office of the Register of Deeds for Waupaca County, Wisconsin on June 9, 1983 in Volume 5 of Certified Survey Maps on page 427 as Document No. 415718, and part of the Southwest 1/4 of the Southeast 1/4, Section 24, Township 24 North, Range 14 East, Town of Bear Creek, Waupaca County, Wisconsin. TOGETHER WITH and SUBJECT to easements and conditions contained in Warranty Deed recorded in the office of the Register of Deeds for Waupaca County, Wisconsin on June 2, 1986 in Volume 621 of Records on page 867 as Document No. 438421.

This is not homestead property.

Exception to warranties: Easements, zoning ordinances and other restrictions of record.

TRANSFER FEE PAID IN FULL 165.00

Dated this 10th day of November, 1995 DENNISON'S QUALITY OIL, INC.

By: Grace Dennison (SEAL) Grace Dennison Karen M. Dennison Konrad (SEAL) Karen Dennison Konrad

AUTHENTICATION

Signature(s) authenticated this day of 1995 TITLE: MEMBER STATE BAR OF WISCONSIN (If not authorized by s. 06.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY Attorney Robert E. Sorenson Hortonville, WI 54944 (Signature may be authenticated or acknowledged. Both are not necessary.)

ACKNOWLEDGMENT

STATE OF WISCONSIN } ss. Ouzgamie County, Personally came before me this 10th day of November, 1995 the above named Grace Dennison and Karen Dennison Konrad, Officers of Dennison's Quality Oil, Inc. to me known to be the person who executed the foregoing instrument and acknowledge the same. Notary Public Ouzgamie County, Wis. My commission is permanent. (If not, state expiration date: )

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

WARRANTY DEED

STATE BAR OF WISCONSIN FORM No. 2 - 1982

Wisconsin Legal Blank Co., Inc. Milwaukee, Wis

OFFICE OF REGISTER OF DEEDS, Waupaca County, Wisconsin } I, George E. Jorgensen Register

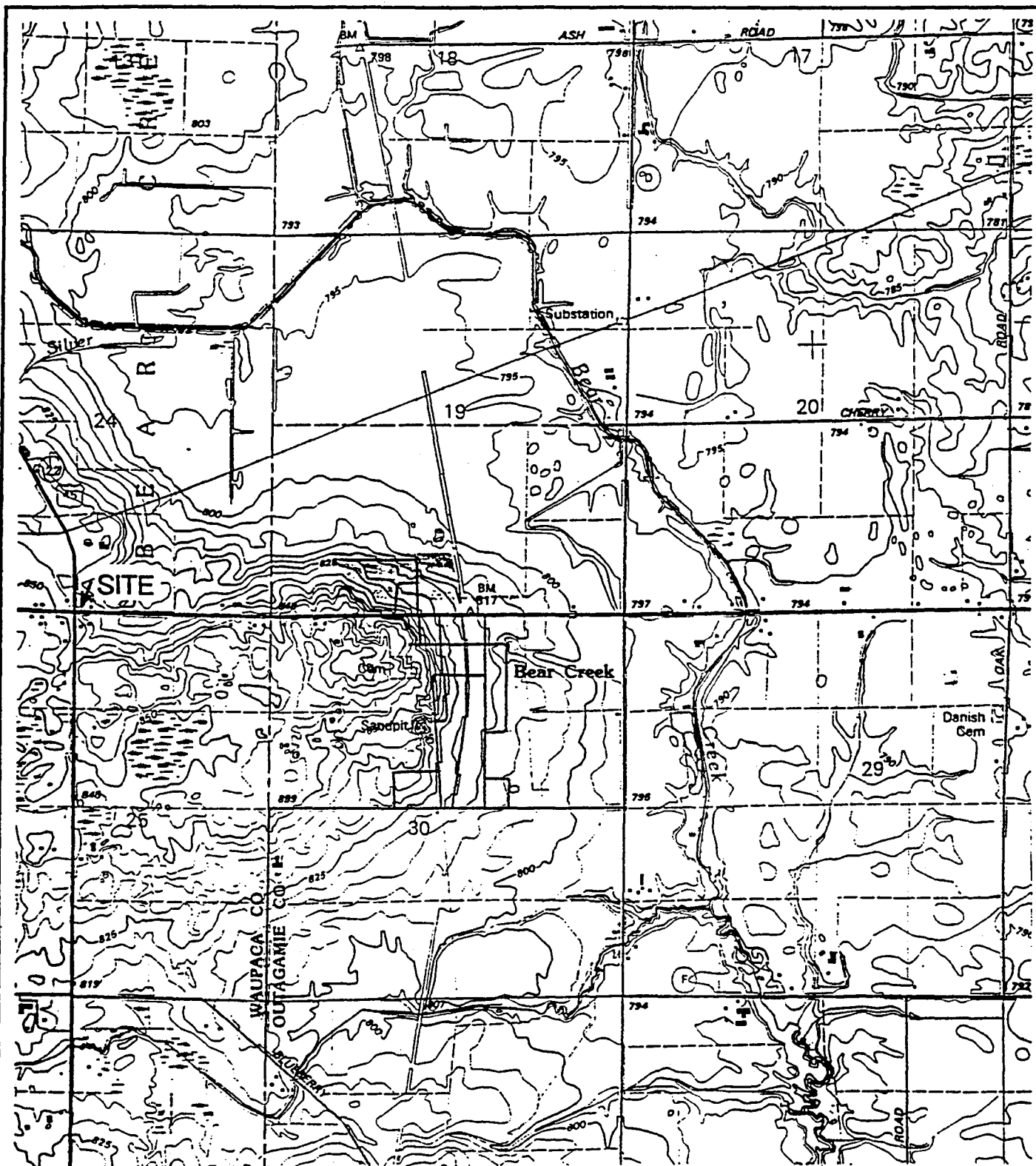
of Deeds of said Waupaca County, do hereby certify that I have compared the within and foregoing copy of WARRANTY DEED with the record of the same recorded in my office, and that said copy is a true and correct transcript and copy of such Record and of the whole thereof.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed Official

Seal this MAR 27 2000 Register of Deeds, Waupaca County, Wisconsin.

I HEREBY CERTIFY THAT I HAVE ON THIS 8th DAY OF DECEMBER, 1995, MICROPHOTOPGRAPHED THE ABOVE AND FOREGOING DOCUMENTS IN ACCORDANCE WITH AND WITH STANDARDS ESTABLISHED BY S. 889 (b) AND WITH ESTABLISHED PROCEDURES. MARIA WATRS, MICROFILM TECHNICIAN, WAUPACA COUNTY COURTHOUSE, WAUPACA, WI 54981

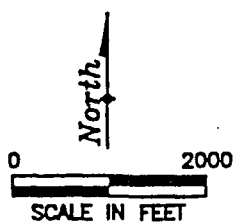




BEAR CREEK QUADRANGLE  
 WISCONSIN  
 7.5 MINUTE SERIES (TOPOGRAPHIC)



QUADRANGLE LOCATION



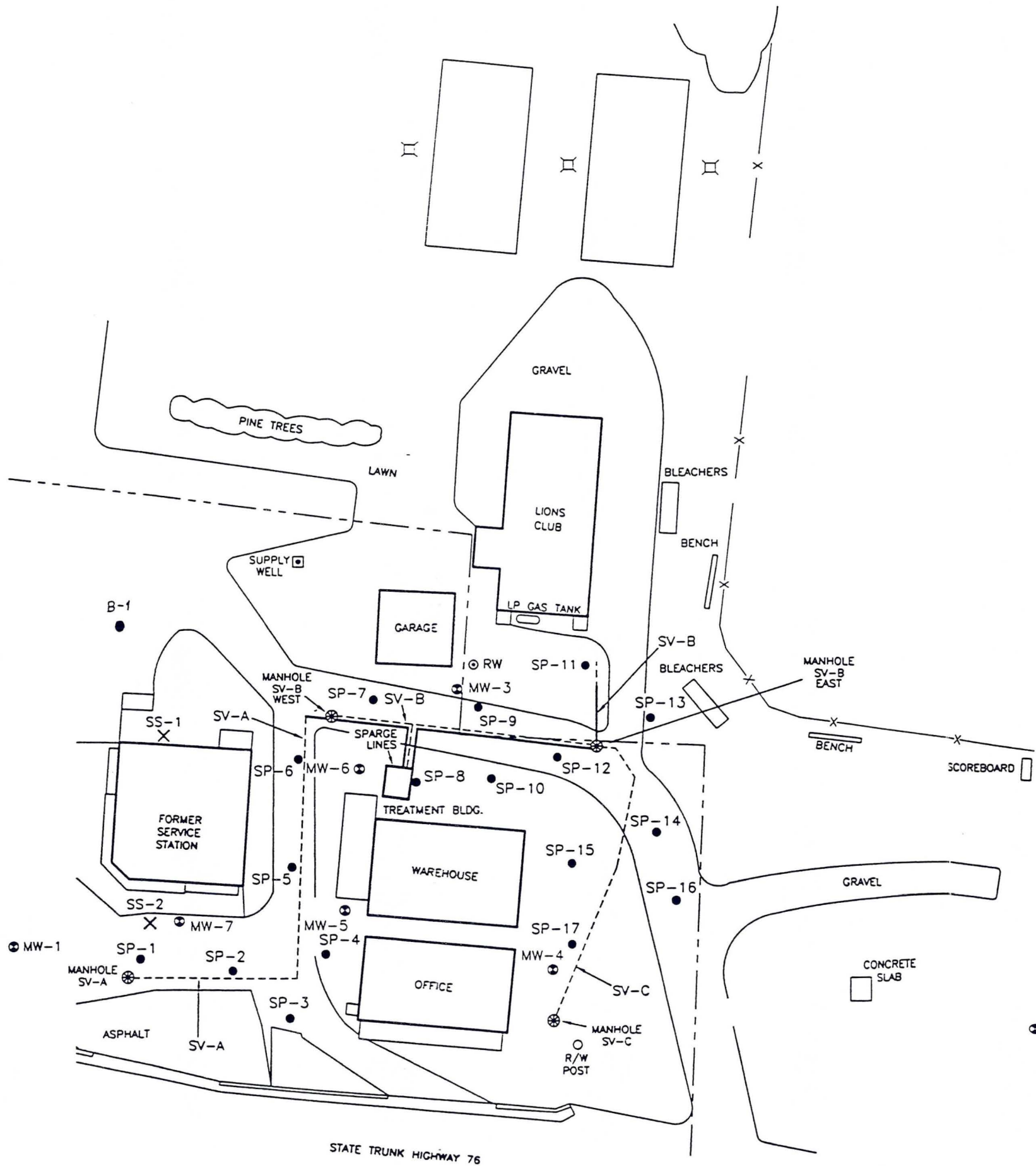
**FIGURE 1**  
**SITE LOCATION MAP**

FORMER DENNISON QUALITY OIL CO.  
 BEAR CREEK, WISCONSIN

PROJECT NO.  
 1093-506  
 DATE  
 08/18/97

PREPARED BY  
 GCG  
 REVIEWED BY






BALL DIAMOND

**LEGEND:**

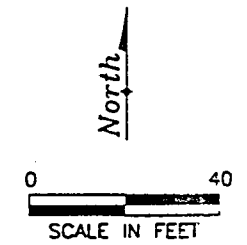
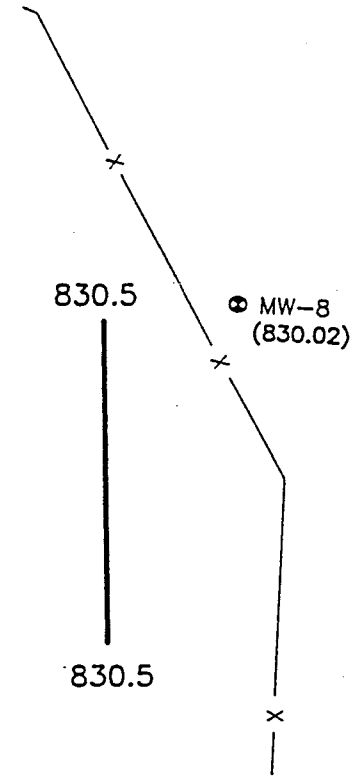
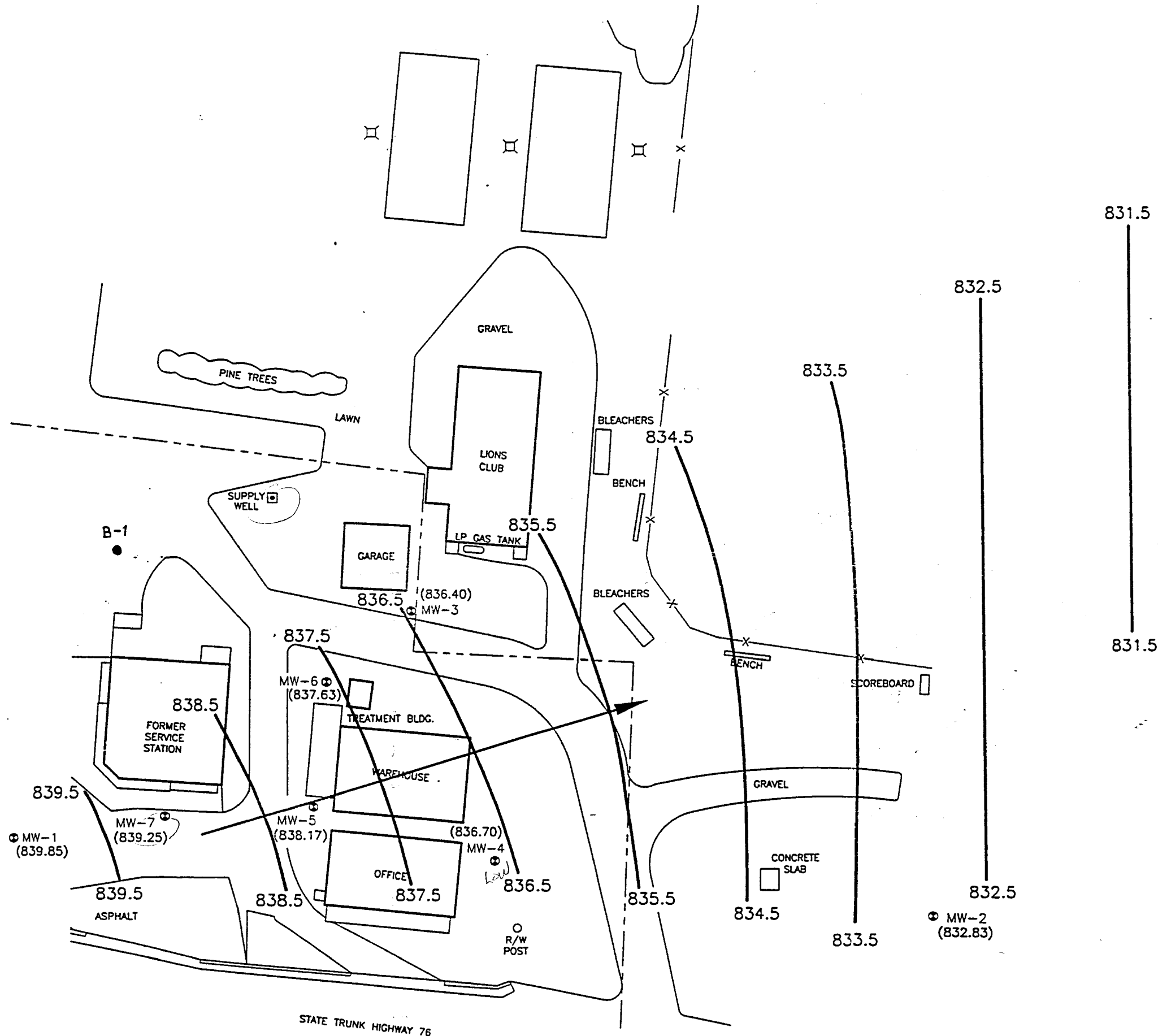
- APPROXIMATE PROPERTY BOUNDARY
- x- FENCE
- ⊕ MONITORING WELL LOCATION
- x SOIL SAMPLE
- ⊗ SOIL VENT LINE ACCESS MANHOLE
- SPARGE POINT
- PRIVATE WELL LOCATION
- ⊙ RECOVERY WELL
- - - SLOTTED HORIZONTAL SOIL VAPOR EXTRACTION LINES
- SOLID HORIZONTAL SOIL VAPOR EXTRACTION LINES

**FIGURE 2**  
SITE PLAN

FORMER DENNISON QUALITY OIL CO.  
BEAR CREEK, WISCONSIN

PROJECT NO. 1093-506	PREPARED BY RM	DRAWN BY DD	
DATE 11/10/99	REVIEWED BY	FILE NAME 93506SM	

STATE TRUNK HIGHWAY 76



**LEGEND:**

- APPROXIMATE PROPERTY BOUNDARY
- x- FENCE
- ⊙ MONITORING WELL LOCATION
- 834.0 GROUNDWATER CONTOUR LINE  
CONTOUR INTERVAL = 1.0 FEET
- (836.40) GROUNDWATER ELEVATION (FT.)
- GROUNDWATER FLOW DIRECTION

APPROXIMATE HYDRAULIC GRADIENT (MW-1, MW-6),  
dh/dl = 0.018 ft/ft

GROUNDWATER ELEVATION CONTOUR MAP  
MARCH 11, 1999  
FORMER DENNISON QUALITY OIL CO.  
BEAR CREEK, WISCONSIN

PROJECT NO. 1093-506	PREPARED BY RM	DRAWN BY DD
DATE 11/10/99	REVIEWED BY	FILE NAME 93506SM



STATE TRUNK HIGHWAY 76

TABLE 2

GROUNDWATER CHEMISTRY AND BIODEGRADATION DATA SUMMARY

Former Dennison Quality Oil

Bear Creek, WI

Delta No. 1093-506

Volatile Organic Compounds										In-field Biodegradation Measurements						
Parameter/ Date Sampled	Benzene ug/L	Toluene ug/L	Ethyl- benzene ug/L	Xylenes ug/L	1,3,5- TMB ug/L	1,2,4- TMB ug/L	Naphthalene ug/l	MTBE ug/L	GRO ug/L	DO ppm	REDOX mV	Temp °C	Conductivity µS/cm	pH s.u.	Iron (T) ppm	Iron (S) ppm
MW-1																
NR 140 ES	5.0	343	700	620	480		40	60								
09/13/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	NM	19	4600	7.2	1.0	1.0
12/14/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.6	NM	NM	NM	NM	NM	NM
03/27/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.3	162	NM	NM	NM	NM	NM
06/18/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
09/11/96	<0.5	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	4.4	<50	1.6	-041	16	5400	7.1	4.0	6.0
12/16/96	<5	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<50	1.8	-017	8	3600	7.1	0.20	0.10
03/12/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.9	-003	NM	NM	NM	NM	NM
06/25/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.3	133	NM	NM	NM	NM	NM
09/25/97	<0.13	<0.20	<0.22	<0.23	<0.29	<0.22	<0.46	<1.9	<50	4.9	-078	17	1600	7.2	10.00	10.00
12/15/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.8	015	NM	NM	NM	NM	NM
03/18/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.0	042	NM	NM	NM	NM	NM
06/17/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.8	031	NM	NM	NM	NM	NM
09/16/98	<0.13	<0.20	<0.22	<0.23	<0.29	<0.22	<0.46	<0.16	<50	0.8	-061	18	600	7.0	10+	8
12/02/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.9	171	NM	NM	NM	NM	NM
03/11/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.3	025	NM	NM	NM	NM	NM

Volatile Organic Compounds										In-field Biodegradation Measurements						
Parameter/ Date Sampled	Benzene ug/L	Toluene ug/L	Ethyl- benzene ug/L	Xylenes ug/L	1,3,5- TMB ug/L	1,2,4- TMB ug/L	Naphthalene ug/l	MTBE ug/L	GRO ug/L	DO ppm	REDOX mV	Temp °C	Conductivity µS/cm	pH s.u.	Iron (T) ppm	Iron (S) ppm
MW-2																
NR 140 ES	5.0	343	700	620	480		40	60								
09/13/95	ND	ND	ND	ND	ND	ND	NA	1.2	ND	3.1	NM	16	2300	7.2	0.6	0.4
12/14/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.7	NM	NM	NM	NM	NM	NM
03/27/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.5	205	NM	NM	NM	NM	NM
06/18/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NM	NM	NM	NM	NM	NM	NM
09/11/96	<0.5	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	12	<50	1.2	056	14	1800	7.0	0.2	0.1
12/16/96	<5	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<6.0	<50	1.8	062	8	2500	7.0	0.20	0.10
03/12/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.7	073	NM	NM	NM	NM	NM
06/25/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.2	114	NM	NM	NM	NM	NM
09/25/97	1.2	<0.20	<0.22	<0.23	<0.29	<0.22	1.7	<0.22	<50	4.7	-015	14	600	7.2	7.00	6.00
12/15/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.2	-016	NM	NM	NM	NM	NM
03/18/98	0.36	<0.20	<0.22	<0.23	<0.29	<0.22	<1.1	6.1	<50	1.2	-030	7	200	7.8	10+	8.0
06/17/98	1.5	<0.20	<0.22	<0.23	<0.29	<0.22	<1.1	7.3	<50	0.6	028	15	200	7.8	8.0	6.0
09/16/98	<0.13	<0.20	<0.22	<0.23	<0.29	<0.22	<0.46	<2.0	<50	1.0	-036	15	300	7.6	5.0	1.0
12/02/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.0	168	NM	NM	NM	NM	NM
03/11/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.3	040	NM	NM	NM	NM	NM

TABLE 2

## GROUNDWATER CHEMISTRY AND BIODEGRADATION DATA SUMMARY

Former Dennison Quality Oil

Bear Creek, WI

Delta No. I093-506

Volatile Organic Compounds										In-field Biodegradation Measurements						
Parameter/ Date Sampled	Benzene ug/L	Toluene ug/L	Ethyl- benzene ug/L	Xylenes ug/L	1,3,5- TMB ug/L	1,2,4- TMB ug/L	Naphthalene ug/l	MTBE ug/L	GRO ug/L	DO ppm	REDOX mV	Temp °C	Conductivity µS/cm	pH s.u.	Iron (T) ppm	Iron (S) ppm
MW-3																
NR 140 ES	5.0	343	700	620	480		40	60								
09/13/95	30	35	<5	350	210	<200	54	<5	2300	1.9	NM	19	1700	7.3	5.0	3.0
12/14/95	51	<5	<5	72	90	37	10	<20	1400	7.1	NM	8	1200	7.2	2.0	1.0
03/27/96	41	2.7	5.5	130	130	41	17	<1	1300	8.9	302	4	2400	7.2	0.8	0.2
06/18/96	16	2	2.2	58	18	46	7.1	<1.0	750	3.4	040	15	700	7.1	0.6	0.4
09/11/96	72	9.2	9.3	120	30	94	25	<1.0	1400	2.4	-081	15	2700	7.0	2.0	0.6
12/16/96	32	21	17	86	19	58	13	<12	970	0.8	-086	8	3100	7.1	4.0	2.0
03/12/97	28	2	4.2	29	11	30	4.7	<6.0	380	8.3	111	3	2400	7.1	0.4	0.2
06/25/97	69	1.7	9.2	16	6.2	19	4.9	<0.16	490	1.5	127	14	1200	7.5	0.2	0.1
09/25/97	27	31	21	85	38	130	20	<0.32	2800	3.7	-083	18	600	7.1	6.0	5.0
12/15/97	5.4	3.5	14	40	14	75	16	10	1800	0.2	035	10	800	7.5	>10	7.0
03/18/98	17	<17	9.1	100	53	160	23	<5.1	2200	0.3	-020	5	300	7.5	3.0	2.0
06/17/98	21	12	11	49	27	86	12	<6.8	1900	0.2	-093	18	300	7.6	10+	10.0
09/16/98	14	20	11	45	14	65	11	<7.8	980	0.3	-121	20	500	7.1	10+	10+
12/02/98	32	77	60	130	15	130	39	16	2000	0.2	-100	13	200	7.5	10+	10+
03/11/99	13	10	11	98	18	88	17	<0.67	1600	0.2	-023	NM	NM	NM	NM	NM

Volatile Organic Compounds										In-field Biodegradation Measurements						
Parameter/ Date Sampled	Benzene ug/L	Toluene ug/L	Ethyl- benzene ug/L	Xylenes ug/L	1,3,5- TMB ug/L	1,2,4- TMB ug/L	Naphthalene ug/l	MTBE ug/L	GRO ug/L	DO ppm	REDOX mV	Temp °C	Conductivity µS/cm	pH s.u.	Iron (T) ppm	Iron (S) ppm
MW-4																
NR 140 ES	5.0	343	700	620	480		40	60								
09/13/95	130	3.7	110	11	6.9	<5	7.4	<2	700	2.0	NM	18	4400	7.3	10.0	10.0
12/14/95	52	1.3	42	<3	1.3	<1	1.7	<10	450	6.1	NM	7	2400	7.1	3.0	2.0
03/27/96	14	<1	15	<1	<1	<1	1.1	<10	200	8.4	330	5	4500	7.1	NA	NA
06/18/96	21	<1.0	22	<3.0	1.5	2.1	1.6	<1.0	300	1.4	-066	15	4000	7.1	8.0	6.0
09/11/96	9.1	<1.0	10	<3.0	<1.0	1.1	<3.0	<28	260	1.2	-073	15	4000	7.1	>10	>10
12/16/96	4.9	<1.0	1.7	<3.0	<1.0	<1.0	<1.0	<1.0	120	1.2	-022	9	3600	7.1	>10	>10
03/12/97	1.1	<0.20	0.89	0.34	<0.29	<0.22	<0.46	7.9	<50	11.7	183	3	4100	7.4	1.0	0.8
06/25/97	8	0.39	1.9	0.97	<0.29	0.48	<2.0	<0.16	81	1.3	069	14	3500	6.8	8.0	6.0
09/25/97	12	0.44	1	0.53	<0.29	0.32	<0.46	<12	<50	4.4	-074	16	1200	7.1	10.0	8.0
12/15/97	1.6	0.25	0.99	0.48	<0.29	0.41	0.88	<0.16	53	0.2	-054	13	700	7.4	>10	>10
03/18/98	4.9	0.53	1.6	1.7	0.34	1.0	<1.1	<6.5	100	0.4	-032	6	300	7.5	10+	10+
06/17/98	2.8	0.33	2.0	1.0	<0.29	1.1	1.2	4	<50	0.9	-063	17	300	7.6	10+	10+
09/16/98	1.1	0.24	0.42	<0.23	<0.29	0.29	0.53	<3.1	<50	0.3	-108	16	600	7.1	10+	10+
12/02/98	1.2	<0.20	0.26	<0.23	<0.29	0.42	0.59	2.7	120	0.2	-057	13	200	7.4	10+	10+
03/11/99	4.0	0.33	0.33	0.97	<0.29	<0.22	<1.1	6.0	87	0.2	-060	NM	NM	NM	NM	NM

TABLE 2

## GROUNDWATER CHEMISTRY AND BIODEGRADATION DATA SUMMARY

Former Dennison Quality Oil

Bear Creek, WI

Delta No. I093-506

Volatile Organic Compounds										In-field Biodegradation Measurements						
Parameter/ Date Sampled	Benzene ug/L	Toluene ug/L	Ethyl- benzene ug/L	Xylenes ug/L	1,3,5- TMB ug/L	1,2,4- TMB ug/L	Naphthalene ug/l	MTBE ug/L	GRO ug/L	DO ppm	REDOX mV	Temp °C	Conductivity µS/cm	pH s.u.	Iron (T) ppm	Iron (S) ppm
<i>NR 140 ES</i>	5.0	343	700	620	480		40	60								
09/13/95	3900	2200	220	3400	500	<200	<300	<50	17000	0.8	NM	19	5600	7.3	10.0	10.0
12/14/95	280	160	49	710	140	140	<40	<100	7600	1.2	NM	7	5000	7.5	10.0	10.0
03/27/96	2000	610	<100	1900	310	<380	<2,200	<100	20000	1.0	059	5	4900	7.2	10.0	10.0
06/18/96	300	170	54	1100	91	190	<50	<50	3300	0.9	-072	15	4800	6.8	10.0	10.0
09/11/96	2100	640	150	2300	180	380	250	<50	21000	0.2	-121	14	4900	6.9	>10	>10
12/16/96	760	280	65	1500	140	280	460	<20	5500	0.5	-136	8	5100	7.2	>10	>10
03/12/97	140	36	15	240	38	66	19	<4.0	1300	4.1	-035	3	4200	7.1	9.0	5.0
06/25/97	560	170	63	1000	100	200	14	<0.80	5500	1.2	-041	15	4000	6.9	>10	>10
09/25/97	770	260	110	1800	190	380	140	<16	6000	1.9	-141	19	2000	7.0	>10	>10
12/15/97	920	230	120	1300	140	270	42	38	12000	1.2	014	12	1400	7.2	>10	>10
03/18/98	610	190	89	1200	130	250	89	<16	5600	0.2	-069	6	600	7.2	10+	10+
06/17/98	480	200	140	1800	240	490	<370	<8.0	24000	0.9	-125	19	800	7.6	10+	10+
09/16/98	150	52	44	660	140	260	170	<6.9	7800	0.2	-150	19	1200	7.2	10+	10+
12/02/98	100	38	18	500	98	150	30	9.7	3800	0.2	-117	13	500	7.4	10+	10+
03/11/99	230	84	<44	720	110	210	170	<32	20000	0.2	-142	NM	NM	NM	NM	NM

Volatile Organic Compounds										In-field Biodegradation Measurements						
Parameter/ Date Sampled	Benzene ug/L	Toluene ug/L	Ethyl- benzene ug/L	Xylenes ug/L	1,3,5- TMB ug/L	1,2,4- TMB ug/L	Naphthalene ug/l	MTBE ug/L	GRO ug/L	DO ppm	REDOX mV	Temp °C	Conductivity µS/cm	pH s.u.	Iron (T) ppm	Iron (S) ppm
<i>NR 140 ES</i>	5.0	343	700	620	480		40	60								
09/13/95	2.1	<1	<1	<3	<1	<1	<1	<1	<50	1.7	NM	19	1300	7.4	0.4	0.2
12/14/95	0.77	<1	<1	<3	1.3	<1	1.3	<1	82	5.2	NM	7	800	7.2	0.4	0.2
03/27/96	<0.50	<1	<1	<3	<1	<1	<1	<1	<500	11.0	223	4	1700	7.1	0.4	0.2
06/18/96	<0.50	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<50	7.1	125	14	1300	7.0	0.1	0.0
09/11/96	3.6	1	<1.0	<3.0	<1.0	1	<1.0	<10	85	1.9	-014	15	2100	6.9	7.0	5.0
12/16/96	3.7	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	6.9	<50	1.7	-094	8	1500	7.0	0.4	0.2
03/12/97	<0.13	<0.20	<0.22	<0.40	<0.29	0.45	<0.46	2.3	<50	10.7	201	4	900	7.5	0.4	0.2
06/25/97	4.2	0.25	0.6	3.1	1.8	1.9	1.1	<2.2	72	5.8	189	14	1100	7.4	0.4	0.2
09/25/97	1.0	0.38	0.24	1.1	0.67	1.2	1.2	<3.3	57	4.5	040	18	1000	7.6	10.0	7.0
12/15/97	1.1	0.34	0.78	2.6	1.6	2.9	1.9	<0.16	54	9.6	044	11	900	7.9	7.0	5.0
03/18/98	1.2	0.36	1.4	1.2	0.98	1.9	<1.7	<0.81	130	1.0	038	6	400	7.6	2.0	0.6
06/17/98	0.84	0.24	0.8	1.4	1.2	2.4	<1.1	<0.16	140	0.4	-025	18	300	7.5	10+	10+
09/16/98	2.6	1.0	2.1	3.6	3.8	3.5	1.6	<1.9	210	0.2	-210	18	700	7.4	10+	10+
12/02/98	1.8	<0.20	<0.22	0.51	0.34	0.79	1.2	<0.16	160	0.2	-085	13	200	7.5	10+	10+
03/11/99	1.1	0.65	0.81	1.4	1.5	2.1	<1.1	<0.16	160	0.2	-086	NM	NM	NM	NM	NM

TABLE 2

## GROUNDWATER CHEMISTRY AND BIODEGRADATION DATA SUMMARY

Former Dennison Quality Oil

Bear Creek, WI

Delta No. I093-506

MW-7										In-field Biodegradation Measurements						
Parameter/ Date Sampled	Volatile Organic Compounds									DO ppm	REDOX mV	Temp °C	Conductivity µS/cm	pH s.u.	Iron (T) ppm	Iron (S) ppm
	Benzene ug/L	Toluene ug/L	Ethyl- benzene ug/L	Xylenes ug/L	1,3,5- TMB ug/L	1,2,4- TMB ug/L	Naphthalene ug/l	MTBE ug/L	GRO ug/L							
NR 140 ES	5.0	343	700	620	480		40	60								
09/13/95	340	1600	850	3400	1300	<1100	200	<100	14000	1.4	NM	20	5100	7.3	10.0	10.0
12/14/95	360	2000	740	3400	1100	330	290	<100	12000	1.3	NM	7	4800	7.5	10.0	10.0
03/27/96	470	5200	1200	6500	1600	<1400	540	<100	24000	0.5	-018	4	6500	7.3	10.0	10.0
06/18/96	400	3200	1300	5400	410	1600	500	<20	20000	0.3	-103	150	5700	7.2	10.0	10.0
09/11/96	260	2200	1100	3300	310	1300	510	<10	17000	0.2	-102	17	5200	7.1	>10	>10
12/16/96	300	2700	1000	3300	370	1400	310	<20	13000	0.6	-120	8	5400	7.2	>10	>10
03/12/97	140	1600	740	3400	510	1400	320	<8.0	12000	2.8	-071	3	6800	7.1	>10	10.0
06/25/97	120	660	830	2700	320	1300	380	<3.2	13000	1.3	-048	15	5800	7.0	>10	>10
09/25/97	110	1400	730	3100	350	1300	250	<3.2	14000	2.5	-136	18	1800	7.1	>10	>10
12/15/97	80	2900	1100	5100	470	1700	520	<6.4	21000	0.2	-137	12	1600	7.4	>10	>10
03/18/98	73	1600	860	3400	390	1400	330	<5.5	17000	0.2	-099	7	600	7.3	10+	10+
06/17/98	56	1000	740	2900	330	1200	310	<3.2	14000	0.8	-124	17	400	7.5	10+	10+
09/16/98	38	490	520	2100	270	930	340	<8.0	11000	0.2	-164	20	1200	7.2	10+	10+
12/02/98	30	200	480	2100	380	1300	500	21	11000	0.2	-120	13	300	7.5	10+	10+
03/11/99	55	160	330	1400	300	950	400	<32	10000	0.2	-156	NM	NM	NM	NM	NM

1250

MW-8										In-field Biodegradation Measurements						
Parameter/ Date Sampled	Volatile Organic Compounds									DO ppm	REDOX mV	Temp °C	Conductivity µS/cm	pH s.u.	Iron (T) ppm	Iron (S) ppm
	Benzene ug/L	Toluene ug/L	Ethyl- benzene ug/L	Xylenes ug/L	1,3,5- TMB ug/L	1,2,4- TMB ug/L	Naphthalene ug/l	MTBE ug/L	GRO ug/L							
NR 140 ES	5.0	343	700	620	480		40	60								
09/13/95	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	NM	17	700	7.1	0.2	0.1
12/14/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.4	NM	NM	NM	NM	NM	NM
03/27/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.3	125	NM	NM	NM	NM	NM
06/18/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NM	NM	NM	NM	NM	NM	NM
09/11/96	<0.5	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	2.9	<50	1.5	098	15	500	7.0	0.1	0.0
12/16/96	<0.5	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<50	1.3	087	8	800	7.0	0.2	0.1
03/12/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.5	094	NM	NM	NM	NM	NM
06/25/97	<0.13	<0.20	<0.22	<0.23	<0.29	<0.22	0.55	<0.16	<50	1.3	139	14	500	7.6	0.1	0.0
09/25/97	<0.13	<0.20	<0.22	<0.23	<0.29	<0.22	<0.46	<0.16	<50	4.3	047	15	400	7.6	0.6	0.3
12/15/97	<0.13	<0.20	<0.22	0.34	<0.29	<0.22	<0.46	<0.16	<50	1.2	017	12	300	7.9	0.3	0.2
03/18/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.8	036	NM	NM	NM	NM	NM
06/17/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.5	106	NM	NM	NM	NM	NM
09/16/98	<0.13	<0.20	<0.22	<0.23	<0.29	<0.22	<0.46	<0.16	<50	0.7	087	16	200	7.8	0.6	0.3
12/02/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.2	149	NM	NM	NM	NM	NM
03/11/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.6	023	NM	NM	NM	NM	NM

TABLE 2

GROUNDWATER CHEMISTRY AND BIODEGRADATION DATA SUMMARY

Former Dennison Quality Oil

Bear Creek, WI

Delta No. I093-506

Lion's Club Well									
Parameter/ Date Sampled	Volatile Organic Compounds								GRO ug/L
	Benzene ug/L	Toluene ug/L	Ethyl- benzene ug/L	Xylenes ug/L	1,3,5- TMB ug/L	1,2,4- TMB ug/L	Napthalene ug/l	MTBE ug/L	
NR 140 ES	5.0	343	700	620	480		40	60	
06/18/96	<0.50	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<50
12/16/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
09/25/97	<0.13	<0.20	<0.22	<0.23	<0.29	<0.22	<0.46	0.49	<50
12/15/97	NS	NS	NS	NS	NS	NS	NS	NS	NS
03/18/98	NS	NS	NS	NS	NS	NS	NS	NS	NS
06/17/98	<0.13	<0.20	<0.22	<0.23	<0.29	<0.22	<1.1	<0.16	<50
09/16/98	<0.13	<0.20	<0.22	<0.23	<0.29	<0.22	<0.46	<0.16	<50
12/02/98	NS	NS	NS	NS	NS	NS	NS	NS	NS
03/11/99	NS	NS	NS	NS	NS	NS	NS	NS	NS

NOTES

<sup>o</sup>C = Degrees Centigrade

µg/l = micrograms per liter

µS/cm = microSiemens per centimeter

DO = Dissolved Oxygen

GRO = Gasoline Range Organics

MTBE = Methyl tert-butyl ether

mV = Millivolts

NA = Parameter not analyzed.

NM = Not measured

NR 140 ES = Wisconsin Administrative Code Chapter NR 140 Enforcement Standards

NS = No Sample collected

ppm = parts per million

S = Soluble

Shaded cells indicate results equal to or greater than NR 140 ES

T=Total

Temp. = Temperature

TMB = Trimethylbenzene



**TABLE 3**

**POTABLE WELL RECEPTOR DATA**

Former Dennison Quality Oil

Bear Creek, WI

Delta Project No. I093-506

Well No.	Aquifer Material	Total Depth (feet)	Address	Dist. from Site (ft.)	Use	Gradient to Site	Date Installed	Screen Interval (feet)	Status
1	Sand	174	State Road 22, Bear Creek, WI 54922	1,000	Domestic	Upgradient	12/20/1965	not specified	in use
2	clayey Sand	171	State Road 76, Bear Creek, WI 54922	1,000	Domestic	Sidegradient	1/30/1984	168-171	in use
3	sandy Clay	141	State Road 22, Bear Creek, WI 54922 800	800	Domestic	Upgradient	1/22/1990	137-141	in use
4	sandy Clay	103	SE 1/4, sec. 25, T24N, R14E	~1,000	Domestic	Upgradient	4/10/1970	99-103	Unknown
5	Clay	118	SE 1/4, sec. 25, T24N, R14E	~1,000	Domestic	Upgradient	10/17/1958	114-118	Unknown
6	clayey Sand	184	SW 1/4, sec. 24, T24N, R14E	~1,000	Domestic	Upgradient	5/20/1981	180-184	Unknown
7	clayey Sand	205	SW 1/4, sec. 24, T24N, R14E	~1,000	Domestic	Upgradient	10/11/1977	201-205	Unknown
8	not available	184	SW 1/4, sec. 24, T24N, R14E	600	Private, potable	Upgradient	11/11/1998	Unknown	in use
L	silty Sand	Unknown	SW 1/4, sec. 24, T24N, R14E	200	Seasonal, potable, private	Sidegradient	Unknown	Unknown	in use April-Oct.

Well locations are presented on Figure 11.