TO: Eric Sandin, GEF II, Geo/8

Groundwater Use Registry Buckslip

Site Name ASHLAND COUNTY HIGHWAY DEPT

Address 408 N ADAMS ST

GLIDDEN WI

BRRTS # 03-02-000696

GPS Location: 475886.71875 ~~latitude~~ X 629370.93750 ~~longitude~~ Y

Date of Closure Decision 3/3/2000

No Off-site Contamination
No ROW Issues

Required

- [x] Closure Letter
- [ ] Deeds for all properties with ES exceedance in Groundwater
- [x] GPS location (latitude and longitude)
- [x] Location map
- [x] Detailed Site Map
- [x] Groundwater Flow Direction Diagram including location of monitoring wells and all drinking water wells
- [ ] Latest Groundwater Plume Map with Groundwater Flow Direction
- [x] Latest Table of Analytical Results for Groundwater

If Available, include the following:

- [ ] Metes and Bounds Legal Description
- [ ] Tax Parcel Number
- [x] Geologic cross sections showing soil and groundwater contaminant source extent and location, isoconcentrations for all groundwater contaminants that exceed NR 140 enforcement standards, water table and piezometric elevations, and the extent, location and elevation of geologic units, bedrock, and confining unites

file

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
William H. Smith, Regional Director

Northern Region Headquarters
107 Sutliff Ave.
Rhinelander, Wisconsin 54501-0818
Telephone 715-365-8900
FAX 715-365-8932
TDD 715-365-8957

March 22, 2000

Mr. Emmer Shields
Ashland County Highway Dept
201 W Main St, Room 205
Ashland, WI 54806

Subject: Ashland County Highway Dept, 408 N Adams St, Glidden, WI
BRRTS # 03-02-000696 PECFA #54527-9998-08

Dear Mr. Shields:

The Department of Natural Resources provided a notice to you that the degree and extent of petroleum contamination at the above-named site was required to be investigated and remediated. We have since been informed that the required investigation and remediation has been accomplished.

On March 3, 2000, the above-named site was reviewed by the Northern Region Closeout Committee for a determination as to whether or not the case qualified for close out under ch. NR 726, Wis. Adm. Code.

Based on the investigative and remedial documentation provided to the Department, it appears that the petroleum contamination at the above-named site has been remediated to the extent practicable under current site conditions, and that no further action is necessary at this time. Therefore, the Department will consider the case "closed," pursuant to NR 726.05(8)(am), if the responsible party sign and record a Groundwater Use Restriction for the property.

Enclosed is an example of a Groundwater Use Restriction. Please draft a specific Groundwater Use Restriction for this site and submit the draft to me. Department of Natural Resources attorneys will review the draft and return it to you with revisions. After you have made the revisions, you should sign and record the restriction with the County Register of Deeds. To document that this condition has been complied with, the responsible party must submit to the Department a copy of the recorded Groundwater Use Restriction, with the recording information stamped on it, within 15 days after the Register of Deeds returns the Groundwater Use Restriction to the responsible party. The Groundwater Use Restriction may be amended in the future with the approval of DNR is conditions change at the site and the residual contamination is remediated.

The groundwater use restriction is an option that the Department can offer to you in order to close this site. If you choose not to accept this option, you may perform additional investigation and cleanup of the remaining contamination. Note that this additional work may not be eligible for reimbursement through the Petroleum Environmental Cleanup Fund Award (PECFA) Program. You should contact the Department of Commerce to determine eligibility of the additional work for reimbursement.

Please note that this case closure is contingent upon proper documentation of proper abandonment of the

monitoring wells on site. If monitoring wells remain at this site, please provide the documentation that this action has been completed, or have your consultant do so. Please complete Form 3300-5B and send it to my attention at the above address.

If you have any additional information which was not formerly provided to the Department, and which you feel would significantly impact this closure decision, you may submit that information for our re-evaluation of case closure.

If you have any questions, please call me at 715-365-8990.

Sincerely,
NORTHERN REGION

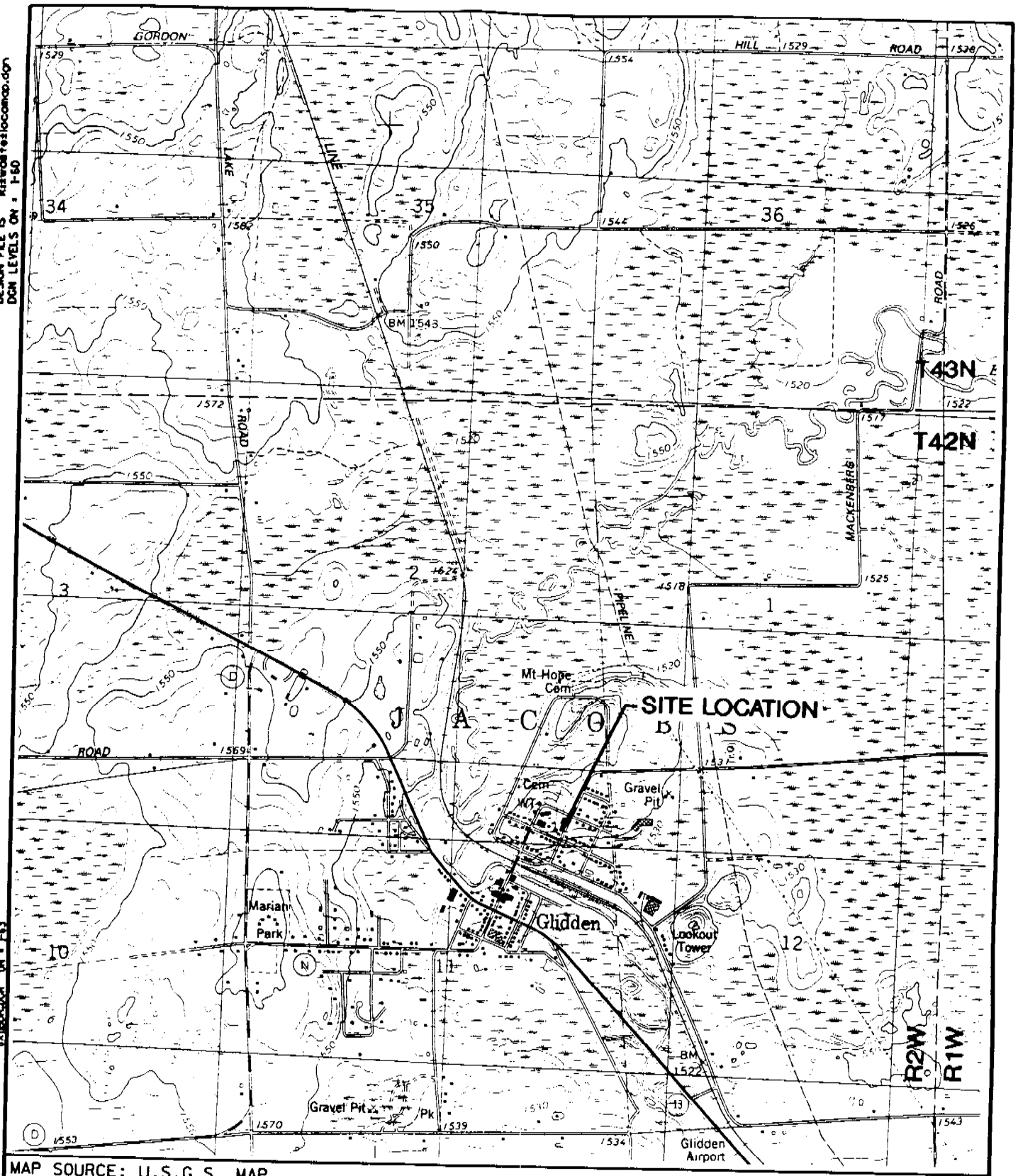
Janet Kazda

Janet Kazda
Case Closeout Committee

cc: File
Lori Huntoon, Dept of Commerce
Steve Karklins, DG/2
Chuck Fitzgerald, Rhinelander
Ron Becker, Rhinelander
Bill Dobbins, Rhinelander
Chris Saari, Brule

Trevor Wilson
Ayres Associates
PO Box 1590
Eau Claire, WI 54701

Agnes Beil, Town Clerk
PO Box 18
Glidden, WI 54527-0029



MAP SOURCE: U.S.G.S. MAP
GLIDDEN (1984)

SCALE 1:24000

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

NORTH

REMEDIAL INVESTIGATION ASHLAND COUNTY HWY DEPT SHOP GLIDDEN, WISCONSIN	DRN. BY: MLE CHK. BY: JFH DATE: OCT. 1995 AVRES ASSOCIATES	LOCATION MAP	FIGURE 1

TABLE 3
GROUND WATER ANALYTICAL RESULTS
ASHLAND COUNTY HIGHWAY DEPARTMENT SHOP - GLIDDEN, WISCONSIN

LOCATION	DATE	DRO ug/L	GRO ug/L	BENZENE ug/L	TOLUENE ug/L	ETHYL-BENZENE ug/L	TOTAL XYLENES ug/L	NAPHTHALENE ug/L	1,2-DCA ug/L	TOTAL TMB'S ug/L	MTBE ug/L	TOTAL LEAD mg/L
MW-1	2/24/1994	< 50	< 50	3.2	< 2.0	< 1.0	< 2.0	< 1.0	< 0.50	<2.0	NA	--
	12/28/94	< 70	< 100	< 0.30	< 0.20	< 0.30	< 0.90	< 0.30	< 0.30	<0.60	NA	< 0.010
	8/16/95	< 70	250	< 0.30	< 0.20	< 0.30	< 0.90	< 0.30	< 0.30	<0.60	NA	--
	9/09/96	<30	<30	<0.2	< 0.20	<0.2	<0.60	<0.8	<0.20	<1.0	<0.2	--
	7/09/97	<28	<30	13	< 0.20	0.4	<0.60	<0.80	<0.20	<1.1	0.7	--
	11/05/97	32	90	65	2.9	3.5	8.4	<1.1	<0.20	1.7	0.2	--
	3/5/98	<27	130	82	2.0	2.2	7.0	--	--	1.2	1.0	--
	5/28/98	27	160	56	0.70	0.90	5.9	--	--	1.3	<0.20	--
	8/19/98	<27	110	58	<0.40	<0.60	2.0	--	--	<1.2	<0.40	--
	11/18/98	26	47	23	<0.20	1.1	2.4	--	--	<1.0	<0.20	--
MW-2	2/24/1994	842	2,100	559	67.3	94.3	1092.00	38.7	< 0.50	148.8	NA	--
	12/28/94	360	10,000	1,100	260	520	430	48	< 0.30	<0.60	NA	< 0.010
	8/16/95	2,700	7,000	610	230	390	3,400	2.9	1.8	285.2	NA	--
Duplicate	8/16/95	2,900	7,600	650	250	400	3,400	3.0	1.8	175.2	NA	--
	9/09/96	1,400	7,700	1,690	245	442	3,650	125.0	<10	733	<10	--
	7/09/97	39	170	23	1.1	5.3	8.8	<0.29	<0.20	15.5	<0.20	--
	11/05/97	<27	57	1.8	0.3	<0.20	<0.8	<1.1	<0.20	2.3	<0.20	--
	3/5/98	120	<30	1.4	<0.20	0.4	1.0	--	--	3.2	<0.20	--
	5/28/98	<28	61	3.3	0.20	<0.30	<0.9	--	--	4.3	<0.20	--
	8/19/98	<26	31	6	<0.20	<0.30	<0.9	--	--	<0.60	<0.20	--
	11/18/98	36	<30	4.8	<0.20	<0.30	<0.9	--	--	<0.60	<0.20	--
MW-3	2/24/1994	< 50	< 50	< 0.20	< 2.0	< 1.0	<2.0	< 1.0	< 0.50	<2.0	NA	--
	12/28/94	< 70	< 100	< 0.30	< 0.20	< 0.30	<0.9	< 0.30	< 0.30	<0.60	NA	< 0.010
	8/16/95	< 70	< 100	< 1.0	< 1.0	< 1.0	< 1.0	--	--	<2.0	<5.0	--
	9/09/96	<32	<30	<0.2	<0.2	<0.2	<0.6	<0.8	<0.2	<1.1	<0.20	--
	11/05/97	<27	<30	<0.30	<2.0	<0.20	<0.8	<1.1	<0.20	<0.90	<0.20	--
Duplicate	11/05/97	NA	<30	<0.30	<0.20	<0.20	<0.8	<1.1	<0.20	2.3	<0.20	--
Enforcement Standard		xx	xx	5	343	700	620	40	5	480	60	15
Preventive Action Limit		xx	xx	0.5	68.6	140	124	8	0.5	96	12	1.5

DRO = Diesel Range Organics
GRO = Gasoline Range Organics
NA= not available

DCA = Dichloroethane
TMB = Trimethylbenzene

-- = Not Analyzed
xx = No State Standard
= Exceeds NR 140 Enforcement Standards
= Exceeds NR 140 Preventive Action Limit

TABLE 3 (Cont.)
GROUND WATER ANALYTICAL RESULTS
ASHLAND COUNTY HIGHWAY DEPARTMENT SHOP - GLIDDEN, WISCONSIN

LOCATION	DATE	DRO ug/L	GRO ug/L	BENZENE ug/L	TOLUENE ug/L	ETHYL-BENZENE ug/L	P/M-XYLENE ug/L	NAPHTHALENE ug/L	1,2-DCA ug/L	1,2,4-TMB ug/L	MTBE ug/L	TOTAL LEAD mg/L
MW-4	12/28/94	< 70	< 100	< 0.30	< 0.20	< 0.30	<0.90	< 0.30	< 0.30	<0.60	NA	< 0.010
	8/16/95	< 70	< 100	< 0.30	< 0.20	< 0.30	<0.90	< 0.30	< 0.30	<0.60	NA	--
	9/09/96	<32	<30	<0.2	<0.2	<0.2	<0.60	<0.8	<0.2	<0.70	<0.20	--
	7/09/97	<27	<30	<0.20	<0.20	<0.20	<0.60	<0.80	<0.20	<1.1	<0.20	--
	11/05/97	65	<30	<0.30	<0.20	<0.20	<0.80	<1.1	<0.20	<0.90	<0.20	--
	3/5/98	<27	<30	<0.30	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
	5/28/98	<26	<30	<0.20	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
	8/19/98	<26	<30	<0.20	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
	11/18/98	<26	<30	<0.20	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
MW-5	12/28/94	< 70	< 100	< 0.30	< 0.20	< 0.30	<0.90	< 0.30	< 0.30	<0.60	NA	< 0.010
Duplicate	12/28/94	< 70	< 100	< 0.30	< 0.20	< 0.30	<0.90	< 0.30	< 0.30	<0.60	NA	< 0.010
	8/16/95	160	< 100	< 0.30	< 0.20	< 0.30	<0.90	< 0.30	< 0.30	<0.60	NA	--
	9/09/96	71	<30	<0.2	<0.2	<0.2	<0.60	<0.8	<0.2	<1.1	<0.20	--
	7/09/97	36	<30	<0.20	<0.20	<0.20	<0.60	<0.8	<0.2	<1.1	4.5	--
	11/05/97	140	<30	<0.30	<0.20	<0.20	<0.80	<1.1	<0.20	<0.90	<0.20	--
MW-6	12/28/94	< 70	< 100	< 0.30	< 0.20	< 0.30	<0.90	< 0.30	< 0.30	<0.60	NA	< 0.010
	8/16/95	100	< 100	< 1.0	1.5	< 1.0	7.2	--	--	8.8	<5.0	--
	9/09/96	<31	<30	<0.2	<0.2	<0.2	<0.60	<0.8	<0.2	<1.1	<0.20	--
	7/09/97	<27	<30	<0.20	<0.20	<0.20	<0.40	<0.80	<0.20	<1.1	0.5	--
	11/05/97	<27	<30	<0.30	<0.20	<0.20	<0.80	<1.1	<0.20	<0.90	<0.20	--
	5/28/98	2,200	<30	<0.20	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
	8/19/98	430	<30	<0.20	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
	11/18/98	<26	<30	<0.20	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
Enforcement Standard		xx	xx	5	343	700	620	40	5	480	60	15
Preventive Action Limit		xx	xx	0.5	68.6	140	124	8	0.5	96	12	1.5

DRO = Diesel Range Organics
GRO = Gasoline Range Organics
NA= not available
DCA = Dichloroethane
TMB = Trimethylbenzene
-- = Not Analyzed
xx = No State Standard
= Exceeds NR 140 Enforcement Standards
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TABLE 3 (Cont.)
GROUND WATER ANALYTICAL RESULTS
ASHLAND COUNTY HIGHWAY DEPARTMENT SHOP - GLIDDEN, WISCONSIN

LOCATION	DATE	DRO ug/L	GRO ug/L	BENZENE ug/L	TOLUENE ug/L	ETHYL-BENZENE ug/L	TOTAL XYLENES ug/L	NAPHTHALENE ug/L	1,2-DCA ug/L	TOTAL TMB'S ug/L	MTBE ug/L	TOTAL LEAD mg/L
PZ-1	12/28/94	< 70	< 100	< 0.30	< 0.20	< 0.30	<0.90	< 0.30	< 0.30	<0.60	NA	< 0.010
	8/16/95	130	< 100	< 1.0	< 1.0	< 1.0	< 1.0	--	--	<2.0	<5.0	--
	9/09/96	100	<30	<0.2	<0.20	<0.20	<0.60	<0.80	<0.20	<1.1	<0.20	--
	7/09/97	63	<30	<0.20	<0.20	<0.20	<0.60	<0.80	<0.20	<1.1	3.0	--
Duplicate	7/09/97	120	<30	<0.20	<0.20	<0.20	<0.60	<0.80	<0.20	<1.1	<0.20	--
	11/05/97	140	<30	<0.30	<0.20	<0.20	<0.80	<1.1	<0.20	<0.90	<0.20	--
	5/28/98	89	<30	<0.20	<0.20	<0.30	<0.60	--	--	<0.60	<0.20	--
	8/19/98	110	<30	<0.20	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
	11/18/98	<26	<30	<0.20	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
MW-7	8/16/95	180	< 100	< 1.0	< 1.0	< 1.0	< 1.0	--	--	<2.0	<5.0	--
	9/09/96	39	<30	<0.2	<0.2	<0.2	<0.60	<0.80	<0.20	<1.1	<0.20	--
	7/09/97	<27	<30	<0.20	<0.20	<0.20	<0.60	<0.80	<0.20	<1.1	5.9	--
	11/05/97	250	<30	<0.30	<0.20	<0.20	<0.80	<1.1	<0.20	<0.90	<0.20	--
	3/5/98	<27	<30	<0.20	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
	5/28/98	120	<30	<0.20	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
	8/19/98	<27	<30	<0.20	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
	11/18/98	<28	<30	<0.20	<0.20	<0.30	<0.90	--	--	<0.60	<0.20	--
GLIDDEN WEL	7/27/99	--	--	<0.23	2.7**	<0.23	<0.67	<0.38	<0.18	<0.50	<0.21	--
	9/15/99	--	--	<0.23	0.86**	<0.23	<0.67	<0.38	<0.18	<0.50	<0.21	--
	10/4/99	--	--	<0.23	<0.23	<0.23	<0.67	<0.38	<0.18	<0.50	<0.21	--
Enforcement Standard		xx	xx	5	343	700	620	40	5	480	60	15
Preventive Action Limit		xx	xx	0.5	68.6	140	124	8	0.5	96	12	1.5

DRO = Diesel Range Organics
GRO = Gasoline Range Organics
NA= not available

DCA = Dichloroethane
TMB = Trimethylbenzene
** = Detection is found in trip blank

-- = Not Analyzed
xx = No State Standard
= Exceeds NR 140 Enforcement Standards
= Exceeds NR 140 Preventive Action Limit

TABLE 4
NATURAL ATTENUATION PARAMETERS

Location	Date	Temperature (°C)	pH	Redox Potential (mV)	Dissolved Oxygen (ppm)	Total Sulfate (mg/L)	Dissolved Iron (mg/L)	Nitrate + Nitrite as N (mg/L)
MW-1	3/5/98	–	–	–	–	9.4	1.8	<0.14
	5/28/98	7	7.3	0.07	0.2	4.43	1.15	<0.14
	8/19/99	15	6.52	106.6	0.2	9.6	1.09	<0.14
	11/18/98	10	6.89	104	0.5	9.8	0.813	<0.14
MW-2	3/5/98	–	–	–	–	7.6	107	0.27
	5/28/98	8	6.97	-110.5	0.20	7.89	116	<0.14
	8/19/99	16	6.78	-76	0.20	17.2	39	<0.14
	11/18/98	11	6.59	120.6	1.50	6.9	11.8	0.3
MW-4	3/5/98	–	–	–	–	16.8	159	0.28
	5/28/98	9	6.2	-6.4	0.2	4.41	101	<0.14
	8/19/99	15	6.04	65.3	0.20	19.1	68.5	0.47
	11/18/98	11	5.82	229.5	6.00	88.7	8.15	0.31
MW-6	5/28/98	14	6.53	-5	0.10	8.83	21.9	<0.14
	8/19/99	20	6.23	15.7	0.10	10.7	10.2	<0.14
	11/18/98	10	5.96	33.8	0.40	7.8	19.2	0.19
PZ-1	5/28/98	12	8.5	45	0.10	8.45	0.258	<0.14
	8/19/99	19	7.45	148.7	0.20	34.1	–	<0.14
	11/18/98	11	9.2	108.9	1.60	30.5	–	0.21
MW-7	3/5/98	–	–	–	–	22.4	0.335	0.18
	5/28/98	7	6.65	159.7	0.30	9.67	0.173	0.39
	8/19/99	11	6.5	125.7	0.20	19.3	0.286	0.21
	11/18/98	11	6.5	215.2	4.00	14.5	0.087	0.35

– = Not analyzed
mg/L = Milligrams per liter, equivalent to parts per million

Mann-Kendall Analysis Spreadsheet, Wisconsin DNR Remediation and Redevelopment Program

This spreadsheet is used to test for increasing, decreasing or stable trends, based on the Mann-Kendall statistical test. Refer to guidance titled *Interim Guidance on Natural Attenuation for Petroleum Releases* dated October 1999 for more information.
Spreadsheet version 1.0 prepared by George Mickelson, June 9, 1999. Spreadsheet QA/QC check by Resty Pelayo, June and July 1999.

Site Name = Ashland County-Glidden Glidden Wisconsin | BRRTS No. = 03-20-000696 | Well Number = MW-02 (a)

Event Number	Sampling Date (most recent last)	Benzene Concentration (leave blank if no data)	Toluene Concentration (leave blank if no data)	Ethylbenzene Concentration (leave blank if no data)	Total Xylenes Concentration (leave blank if no data)	Total TMB Concentration (leave blank if no data)	MTBE Concentration (leave blank if no data)
1	24-Feb-94	559.00	67.30	94.30	1,092.00	148.80	
2	28-Dec-94	1,100.00	260.00	520.00	430.00	0.60	
3	16-Aug-95	610.00	230.00	390.00	3,400.00	285.20	
4	9-Sep-96	1,690.00	245.00	442.00	3,650.00	733.00	10.00
5	9-Jul-97	23.00	1.10	5.30	8.80	15.50	10.00
6	5-Nov-97	1.80	0.30	0.30	0.90	2.30	10.00
7	5-Mar-98	1.40	0.20	0.40	1.00	3.20	10.00
8	28-May-98	3.30	0.20	0.30	0.90	4.30	10.00
9	19-Aug-98	6.00	0.20	0.30	0.90	0.60	10.00
10	18-Nov-98	4.80	0.20	0.30	0.90	0.60	10.00
	S =	-19	-31	-29	-27	-18	0
	n =	10	10	10	10	10	7
	Average =	399.93	80.45	145.32	858.54	119.41	10
	St. Dev. =	591.7812172	115.6305059	214.8917236	1448.717301	235.3383732	0
	CV =	1.479711993	1.43729653	1.478748442	1.68741969	1.970843088	0
Increasing Trend (80% Confidence)		NO	NO	NO	NO	NO	NO
Decreasing Trend (80% Confidence)		YES	YES	YES	YES	YES	NO
Undetermined Stable Trend, CV< =1		NO	NO	NO	NO	NO	YES
Undetermined Non-Stable Trend, CV>1		NO	NO	NO	NO	NO	NO
Error Check, OK if Blank							
Stable or Decreasing Trend at 80% Confidence Level		YES	YES	YES	YES	YES	YES

Data Entry By = TAW | Date = 31-Jan-00 | Checked By =

Mann-Kendall Analysis Spreadsheet, Wisconsin DNR Remediation and Redevelopment Program

This spreadsheet is used to test for increasing, decreasing or stable trends, based on the Mann-Kendall statistical test. Refer to guidance titled *Interim Guidance on Natural Attenuation for Petroleum Releases* dated October 1999 for more information.
Spreadsheet version 1.0 prepared by George Mickelson, June 9, 1999. Spreadsheet QA/QC check by Resty Pelayo, June and July 1999.

Site Name =	Ashland County-Glidden	Glidden	Wisconsin	BRRTS No. =	03-20-000696	Well Number =	MW-01(a)
	Compound	Benzene Concentration (leave blank if no data)	Toluene Concentration (leave blank if no data)	Ethylbenzene Concentration (leave blank if no data)	Total Xylenes Concentration (leave blank if no data)	Total TMB Concentration (leave blank if no data)	MTBE Concentration (leave blank if no data)
Event Number	Sampling Date (most recent last)						
1	24-Feb-94	3.20	2.00	1.00	2.00	2.00	
2	28-Dec-94	0.30	2.00	1.00	2.00	2.00	
3	16-Aug-95	0.30	2.00	1.00	2.00	2.00	
4	9-Sep-96	0.30	2.00	1.00	2.00	2.00	0.40
5	9-Jul-97	13.00	2.00	0.40	2.00	2.00	0.70
6	5-Nov-97	65.00	2.90	3.50	8.40	1.70	0.20
7	5-Mar-98	82.00	2.00	2.20	7.00	1.20	1.00
8	28-May-98	56.00	0.70	0.90	5.90	1.30	0.40
9	19-Aug-98	58.00	2.00	1.00	1.80	2.00	0.40
10	18-Nov-98	23.00	2.00	1.00	2.40	2.00	0.40
	S =	20	-3	0	7	-10	-1
	n =	10	10	10	10	10	7
	Average =	30.11	1.96	1.3	3.55	1.82	0.5
	St. Dev. =	31.78292519	0.525357021	0.891939211	2.52421605	0.315524255	0.264575131
	CV =	1.055560451	0.268039297	0.686107085	0.711046775	0.173364975	0.529150262
Increasing Trend (80% Confidence)		YES	NO	NO	NO	NO	NO
Decreasing Trend (80% Confidence)		NO	NO	NO	NO	NO	NO
Undetermined Stable Trend, CV<=1		NO	YES	YES	YES	YES	YES
Undetermined Non-Stable Trend, CV>1		NO	NO	NO	NO	NO	NO
Error Check, OK if Blank							
Stable or Decreasing Trend at 80% Confidence Level		**NO**	YES	YES	YES	YES	YES

Data Entry By = TAW | Date = 31-Jan-00 | Checked By =

Mann-Kendall Analysis Spreadsheet, Wisconsin DNR Remediation and Redevelopment Program

This spreadsheet is used to test for increasing, decreasing or stable trends, based on the Mann-Kendall statistical test. Refer to guidance titled *Interim Guidance on Natural Attenuation for Petroleum Releases* dated October 1999 for more information.
Spreadsheet version 1.0 prepared by George Mickelson, June 9, 1999. Spreadsheet QA/QC check by Resty Pelayo, June and July 1999.

Site Name = Ashland County-Glidden Glidden Wisconsin | BRRTS No. = 03-20-000696 | Well Number = MW-01(a)

Event Number	Compound / Sampling Date (most recent last)	Benzene Concentration (leave blank if no data)	Toluene Concentration (leave blank if no data)	Ethylbenzene Concentration (leave blank if no data)	Total Xylenes Concentration (leave blank if no data)	Total TMB Concentration (leave blank if no data)	MTBE Concentration (leave blank if no data)
1	24-Feb-94						
2	28-Dec-94						
3	16-Aug-95						
4	9-Sep-96		1.00	1.00	2.00	2.00	0.40
5	9-Jul-97	13.00	1.00	0.40	2.00	2.00	0.70
6	5-Nov-97	65.00	2.90	3.50	8.40	1.70	0.20
7	5-Mar-98	82.00	1.00	2.20	7.00	1.20	1.00
8	28-May-98	56.00	0.70	0.90	5.90	1.30	0.40
9	19-Aug-98	58.00	1.00	1.00	1.80	2.00	0.40
10	18-Nov-98	23.00	1.00	1.00	2.40	2.00	0.40
	S =	-1	-3	0	-2	-1	-1
	n =	6	7	7	7	7	7
	Average =	49.5	1.228571429	1.428571429	4.214285714	1.742857143	0.5
	St. Dev. =	26.25071428	0.745462464	1.062566525	2.80025509	0.355232989	0.264575131
	CV =	0.53031746	0.606771773	0.743796567	0.66446731	0.203822207	0.529150262
Increasing Trend (80% Confidence)		NO	NO	NO	NO	NO	NO
Decreasing Trend (80% Confidence)		NO	NO	NO	NO	NO	NO
Undetermined Stable Trend, CV < = 1		YES	YES	YES	YES	YES	YES
Undetermined Non-Stable Trend, CV > 1		NO	NO	NO	NO	NO	NO
Error Check, OK if Blank							
Stable or Decreasing Trend at 80% Confidence Level		YES	YES	YES	YES	YES	YES

Data Entry By = TAW | Date = 31-Jan-00 | Checked By =

270850
cument Number

GROUNDWATER USE RESTRICTION

A part of the NW ¼ of Section 4, Township 42 North, Range 2 West, described as follows:

Lots One (1), Two (2), and Three (3) of Block Five (5) of the village of ippewa Crossing according to the recorded plat thereof. As shown Volume 175, Page 296. Also including Lot Numbered Four (4), Block imbered (5), Village of Chippewa Crossing, now Glidden, Wisconsin. shown in Volume 214, Page 342

REGISTER OF DEEDS OFFICE
ASHLAND COUNTY, WI
Received for Record
at 8:00 O'clock A M. duly recorded in
Vol. 518 of Records on Page 297-298
SEP 22 2000
Karen M. Miller
REGISTER OF DEEDS

Recording Area

Name and Return Address

Parcel ID Number 12-126-0000

Declaration of Restrictions

STATE OF WISCONSIN)
) SS
COUNTY OF ASHLAND)

WHEREAS, Ashland County Highway Department is the owner of the above described property.

WHEREAS, one or more petroleum (diesel and gasoline) discharges have occurred at this property. Petroleum (benzene) contaminated groundwater above ch. NR 140, Wis. Adm. Code enforcement standards exists on this property at the following locations: In the proximity of former monitoring well MW-1 at a concentration of 23 ug/L and at monitoring well MW-2 at a concentration of 4.8 ug/L as found on November 11, 1998. Soil contamination exists at the following locations: In soil samples collected from excavation samples L002 thru L010, L014 and at L020, benzene was found to range in concentrations from 0.10 to 4.1 milligrams per kilogram (mg/kg) on October 21 and 22, 1996. Attachment A is a map showing all previous monitoring well and soil sample locations.

WHEREAS, it is the desire and intention of the property owner to impose on the property restrictions which will make it unnecessary to conduct additional 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 exceeding ch. NR 140, Wis. Adm. Code groundwater standards within the boundaries of this property.

WHEREAS, construction of wells where the water quality exceeds the drinking water standards in ch. 809, Wis. Adm. Code is restricted by ch. NR 811, Wis. Adm. Code and ch. 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 prohibitions or requirements are applicable and to obtain Department approval, prior to constructing or reconstructing a well on this property. No well may be constructed or reconstructed on this property unless applicable requirements are met.

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If construction is proposed on this property that will require dewatering or if contaminated groundwater is otherwise extracted from this property in the future, the groundwater must be sampled and analyzed and must be managed in compliance with applicable laws and regulations. The property owner will need to apply for a WPDES permit if extracted groundwater from this property is proposed to be discharged.

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 and 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 the restrictions set forth in this covenant are no longer required. Upon 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 can be recorded to give notice that this groundwater use restriction is no longer binding.

IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restrictions, this 21st day of SEPT., 2000.

Signature: Emmer W. Shields Jr.

Printed Name: Emmer W. Shields JR., P.E.

[When appropriate]: Title: Highway Commissioner

Subscribed and sworn to before me

this 21 day of Sept., 2000

Sandy Paul

Notary Public, State of WI

My commission expires 6-15-03

This document was drafted by Ayres Associates based on comments from the Wisconsin Department of Natural Resources

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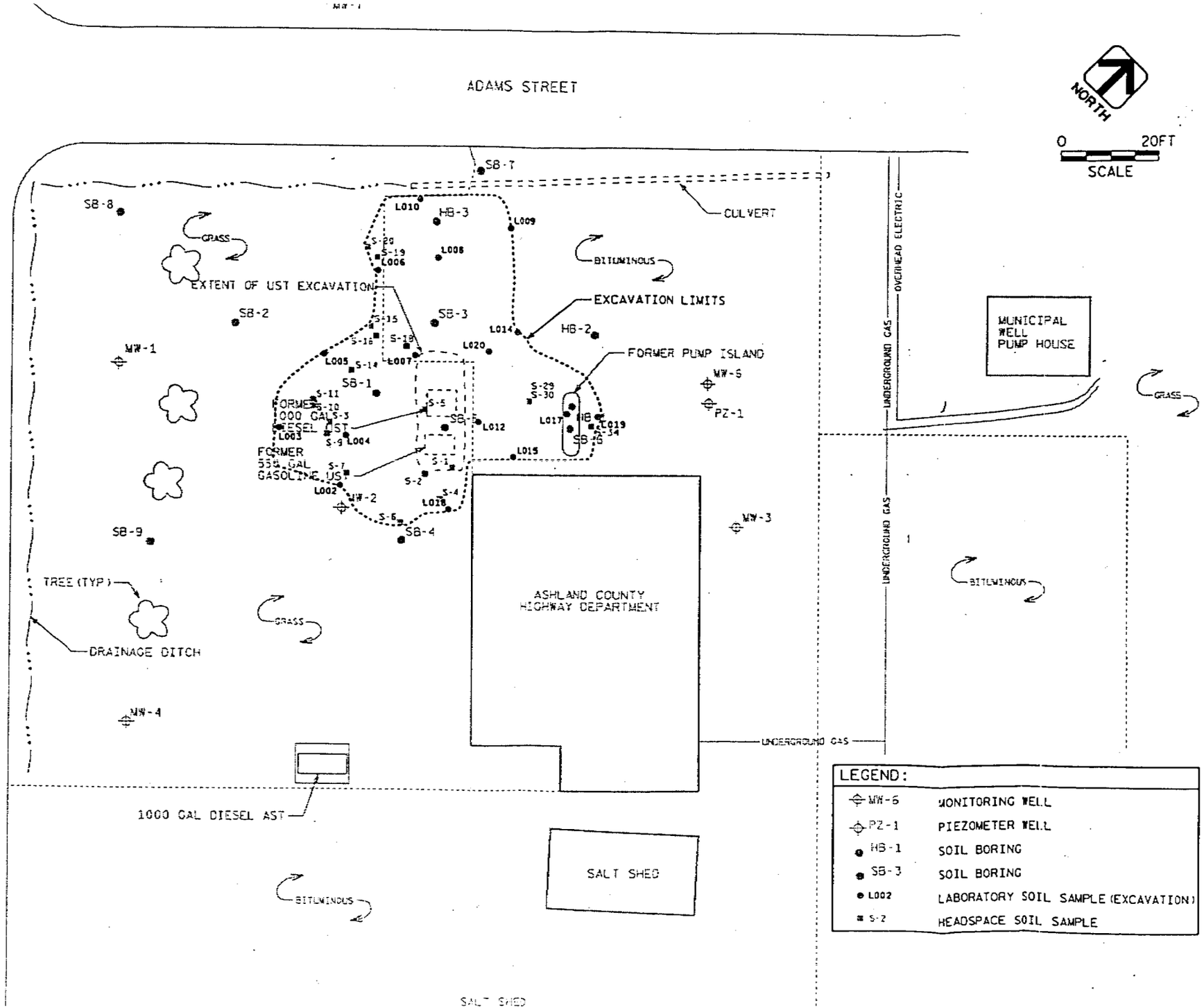


SOIL SAMPLE LOCATIONS & EXCAVATION LIMITS

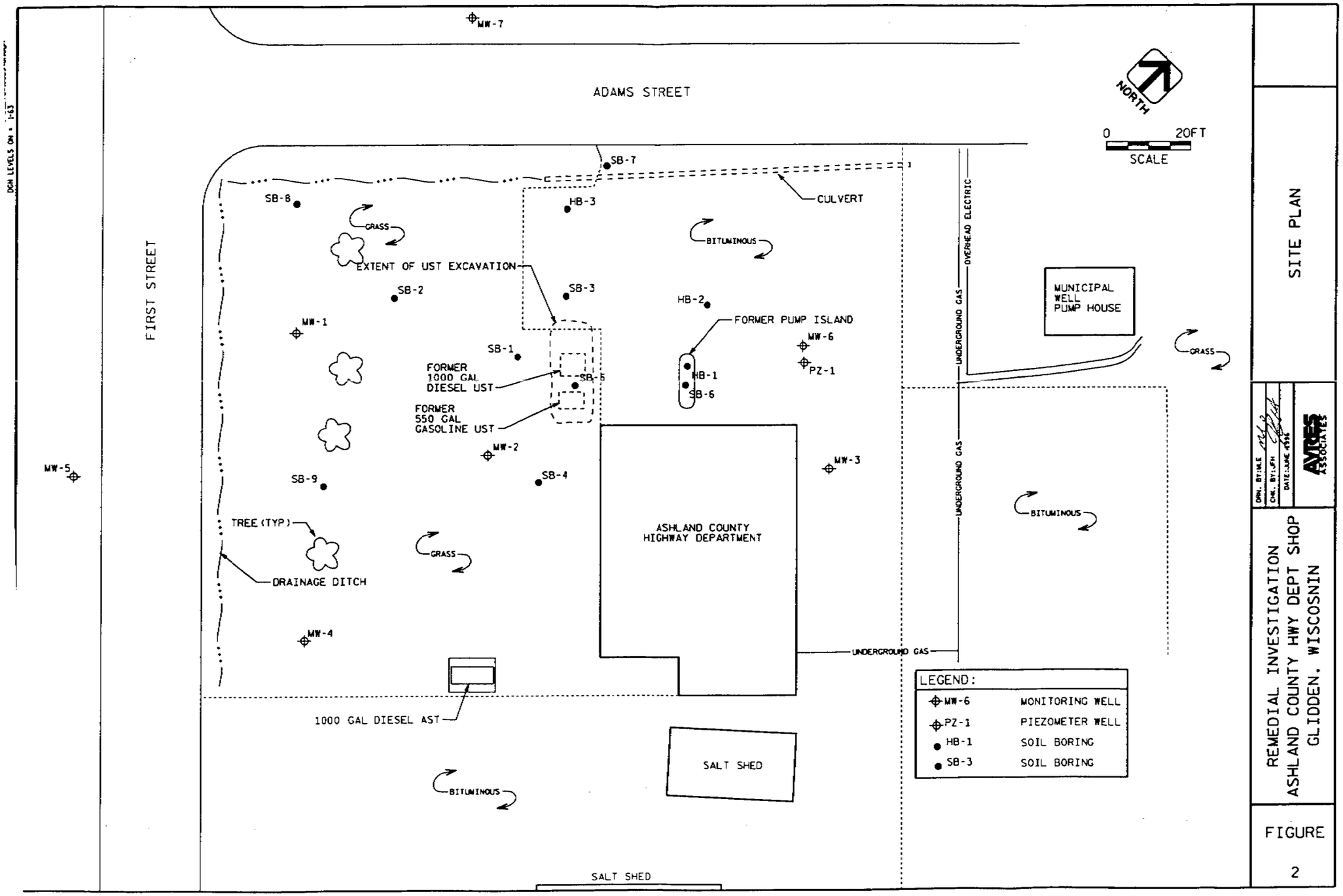
DRN. BY: MLE
CHK. BY: FRW
DATE: FEBRUARY 1997

AVRES ASSOCIATES

REMEDIAL ACTION
ASHLAND COUNTY HWY DEPT SHOP
GLIDDEN, WISCONSIN

FIGURE 2

VOL 518 PG 298



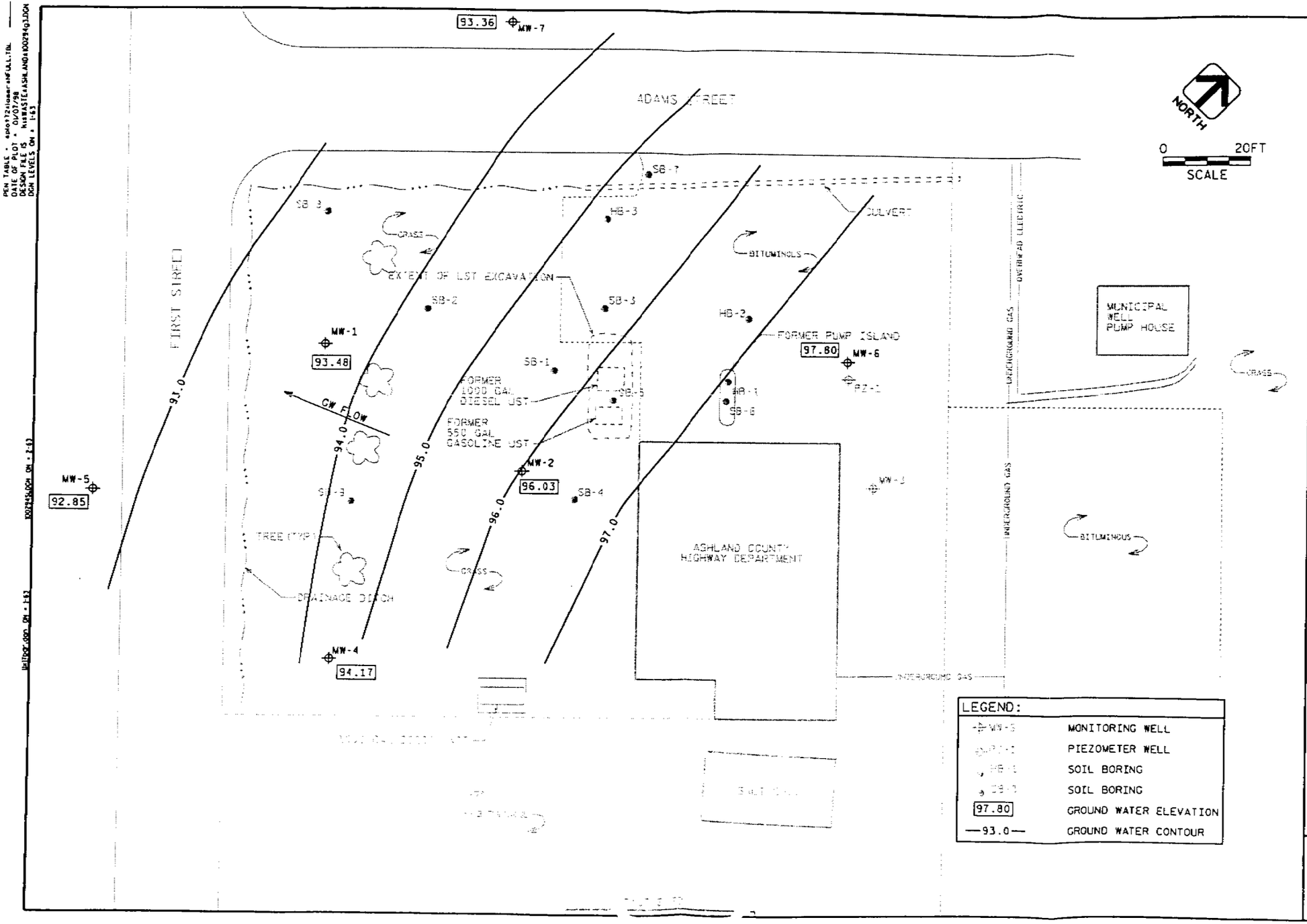
SITE PLAN

DRN. BY: MLE
CHK. BY: JFH
DATE: JUNE 1996

AMRES ASSOCIATES

REMEDIAL INVESTIGATION
ASHLAND COUNTY HWY DEPT SHOP
GLIDDEN, WISCOSNIN

FIGURE
2



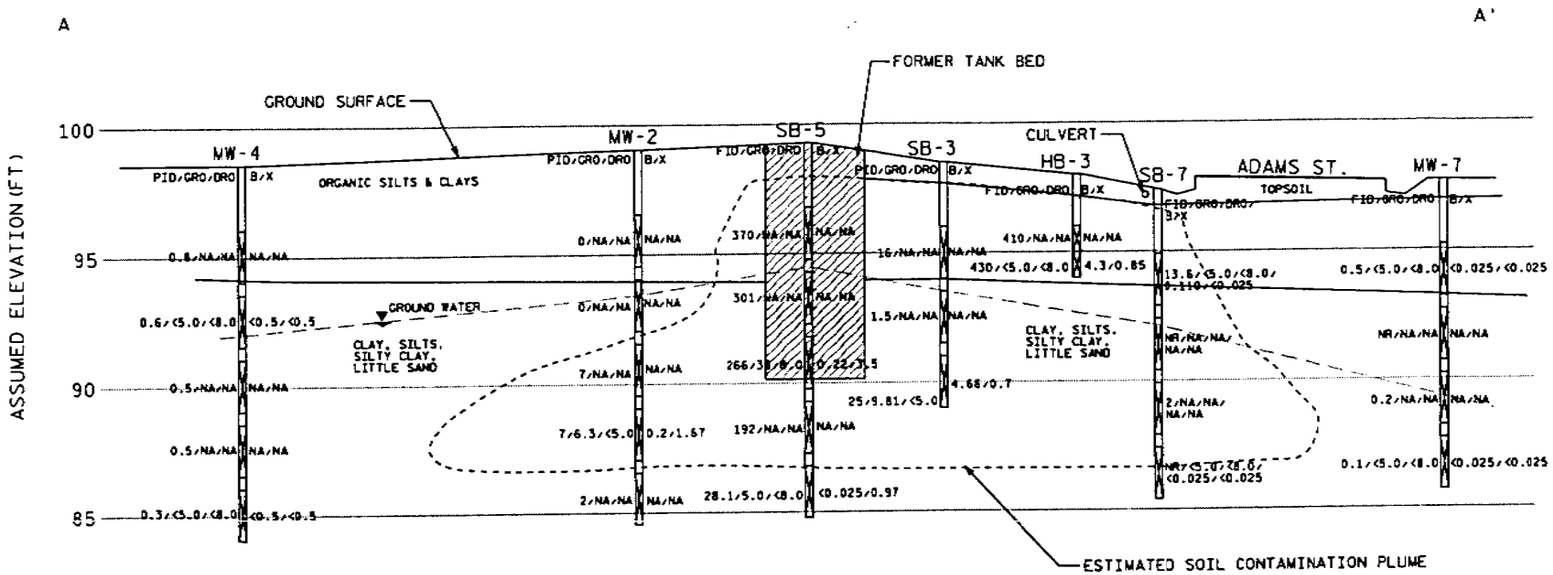
GROUND WATER CONTOURS
JULY 9. 1997

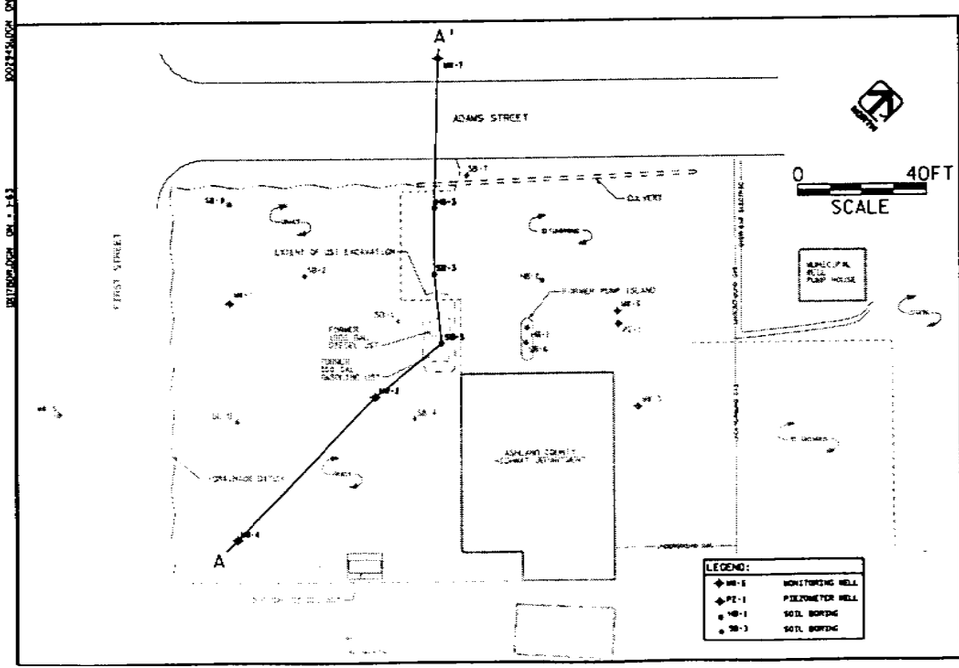
DRN. BY: MLE
CHK. BY: JJM
DATE: JANUARY 1998

AMES ASSOCIATES

ASHLAND COUNTY HWY DEPT SHOP
GLIDDEN. WISCOSNIN

FIGURE
6





LEGEND:	
PID	PHOTO IONIZATION DETECTOR (IU)
FID	FLAME IONIZATION DETECTOR (IU)
GRO	GASOLINE RANGE ORGANICS (mg/kg)
DRO	DIESEL RANGE ORGANICS (mg/kg)
B	BENZENE (mg/kg)
X	TOTAL XYLENES (mg/kg)
NA	NOT ANALYZED
NR	NO RESPONSE

SCALE:
1"=20' HORIZ.
1"=5' VERT.

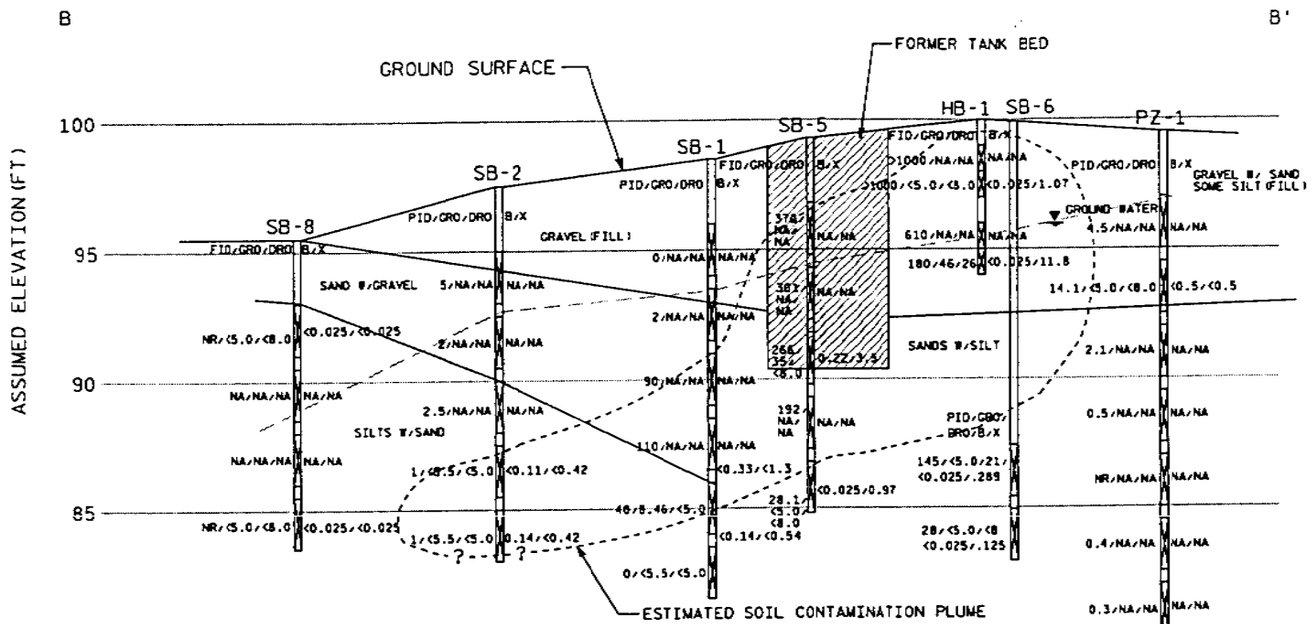
CROSS SECTION A-A'

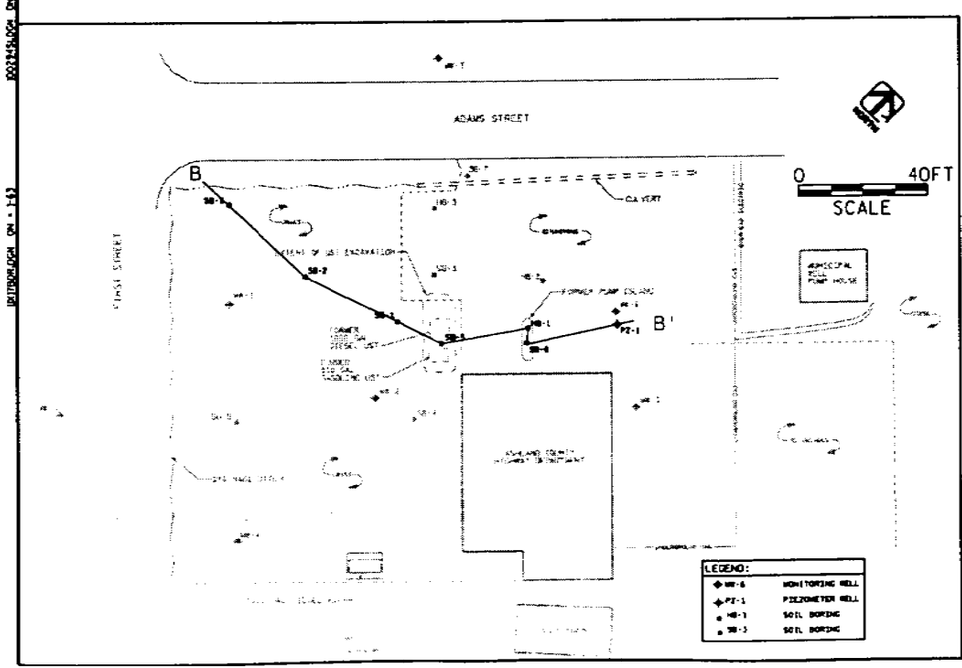
DRN. BY: WCL
CHK. BY: JPH
DATE: JULY-1996

AVRES ASSOCIATES

REMEDIAL INVESTIGATION
ASHLAND COUNTY HWY DEPT SHOP
GLIDDEN, WISCONSIN

FIGURE
3





LEGEND:	
PID	PHOTO IONIZATION DETECTOR (IU)
FID	FLAME IONIZATION DETECTOR (IU)
GRO	GASOLINE RANGE ORGANICS (mg/kg)
DRO	DIESEL RANGE ORGANICS (mg/kg)
B	BENZENE (mg/kg)
X	TOTAL XYLENES (mg/kg)
NA	NOT ANALYZED
NR	NO RESPONSE

SCALE:
1"=20' HORIZ.
1"=5' VERT.

CROSS SECTION B-B'

DRN. BY: MLE
CHK. BY: JPH
DATE: FEBRUARY 1996
AVDEC

REMEDIAL INVESTIGATION
ASHLAND COUNTY HWY DEPT SHOP

FIGUR

4