

**GIS REGISTRY INFORMATION**

**SITE NAME:** Jackson County Iron Mine (former) Area 5 (Now Wazee Park)

**BRRTS #:** 02-27-202640

**CLOSURE DATE:** 11/22/2002

**STREET ADDRESS:** Bauer & Brockway Roads

**CITY:** Town of Brockway

**MEDIA AFFECTED:**                      **Groundwater:**                          **Soil:**    **Both:**

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

**OFF-SOURCE CONTAMINATION (>ES):**                       Yes     No

**SOIL CONTAMINATION >GENERIC OR SITE-SPECIFIC RCL:**                       Yes     No

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

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

~~IF YES, STREET ADDRESS 2: \_\_\_\_\_~~

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

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

**DOCUMENTS NEEDED:**

- Closure Letter, and any conditional closure letter issued
- Copy of most recent deed, including legal description, for all affected properties
- Certified survey map or relevant portion of the recorded plat map (if referenced in the legal description) for all affected properties
- County Parcel ID number, if used for county, for all affected properties
- Location Map which outlines all properties within contaminated site boundaries on USGS topographic map or plat map in sufficient detail to permit the parcels to be located easily (8.5x14" if paper copy). If groundwater standards are exceeded, the map must also include the location of all municipal and potable wells within 1200' of the site.
- Detailed Site Map(s) for all affected properties, showing buildings, roads, property boundaries, contaminant sources, utility lines, monitoring wells and potable wells. (8.5x14", if paper copy) This map shall also show the location of all contaminated public streets, highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding ch. NR 140 ESs and soil contamination exceeding ch. NR 720 generic or site-specific residual contaminant levels.

Tables of Latest Groundwater Analytical Results (no shading or cross-hatching)

x

Tables of Latest Soil Analytical Results (no shading or cross-hatching)

Isoconcentration map(s), if required for site investigation (SI) (8.5x14" if paper copy).  
The isoconcentration map should have flow direction and extent of groundwater contamination defined. If not available, include the latest extent of contaminant plume map.

GW: Table of water level elevations, with sampling dates, and free product noted if present

x

GW: Latest groundwater flow direction/monitoring well location map (should be 2 maps if maximum variation in flow direction is greater than 20 degrees)

x

x

SOIL: Latest horizontal extent of contamination exceeding generic or site-specific RCLs, with one contour.

Geologic cross-sections, if required for SI. (8.5x14' if paper copy)

RP certified statement that legal descriptions are complete and accurate

Copies of off-source notification letters (if applicable)

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

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

Letter informing current landowner

x



## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor  
Darrell Bazzell, Secretary  
Scott A. Humrickhouse, Regional Director

West Central Region Headquarters  
1300 W. Clairemont Avenue  
PO Box 4001  
Eau Claire, Wisconsin 54702-4001  
Telephone 715-839-3700  
FAX 715-839-6076  
TTY 715-839-2786

November 22, 2002

Mr. Gustav Josephson  
Inland Steel Mining Company  
P.O. Box 1  
Virginia, MN 55792

Subject: Contamination Cleanup Case Closure  
Jackson County Iron Mine, Area 5, Former Bulk Fuel Oil Storage  
Jackson County, Wisconsin, DNR #02-27-202640

Dear Mr. Josephson:

On March 18, 2002, your request for closure of the case described above was reviewed by the Department of Natural Resources' West Central Region close-out committee. The committee reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. After careful review of the closure request, the committee determined that the petroleum contamination on the site from the former bulk fuel oil storage appears to have been investigated and remediated to the extent practicable under site conditions.

Issuance of a closure letter was deferred until the following items needed to complete the close-out documentation in accordance with NR726.05(3) were submitted:

### GIS REGISTRY OF SITES WITH RESIDUAL GROUNDWATER CONTAMINATION

Additional location information was required to facilitate entry of this site on the GIS registry of sites closed with residual groundwater contamination. Your consultant has provided that information.

### NOTICE TO CURRENT LAND OWNER OF RESIDUAL GROUNDWATER CONTAMINATION

Ownership of the property on which the above described contamination investigation and remediation has occurred has been transferred to Jackson County Forestry and Parks Department. There is residual groundwater contamination present. Section NR 726.05(2)(b)4, Wis. Adm. Code, requires you to provide written notification of the presence of residual groundwater contamination to the municipal department or state agency that owns and maintains the property. You have provided me with a copy of your letter to the Jackson County Forestry and Parks Department.

Submittal of the above items completed the required case summary and close out form.

A condition of final closure is proper abandonment of the monitoring wells at the site. The monitoring wells at the site must be properly abandoned in compliance with ch. NR 141, Wis. Adm. Code. Documentation of well abandonment was submitted to me on Form 3300-5B on November 20, 2002

Your case has been remediated to Department standards in accordance with s. NR 726.05, Wis. Adm. Code. Your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites. Information that was submitted with your closure request will be included on the registry. To review the sites on the GIS Registry web page, visit <http://gomapout.dnr.state.wi.us/org/at/et/geo/gwur/index.htm>]

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

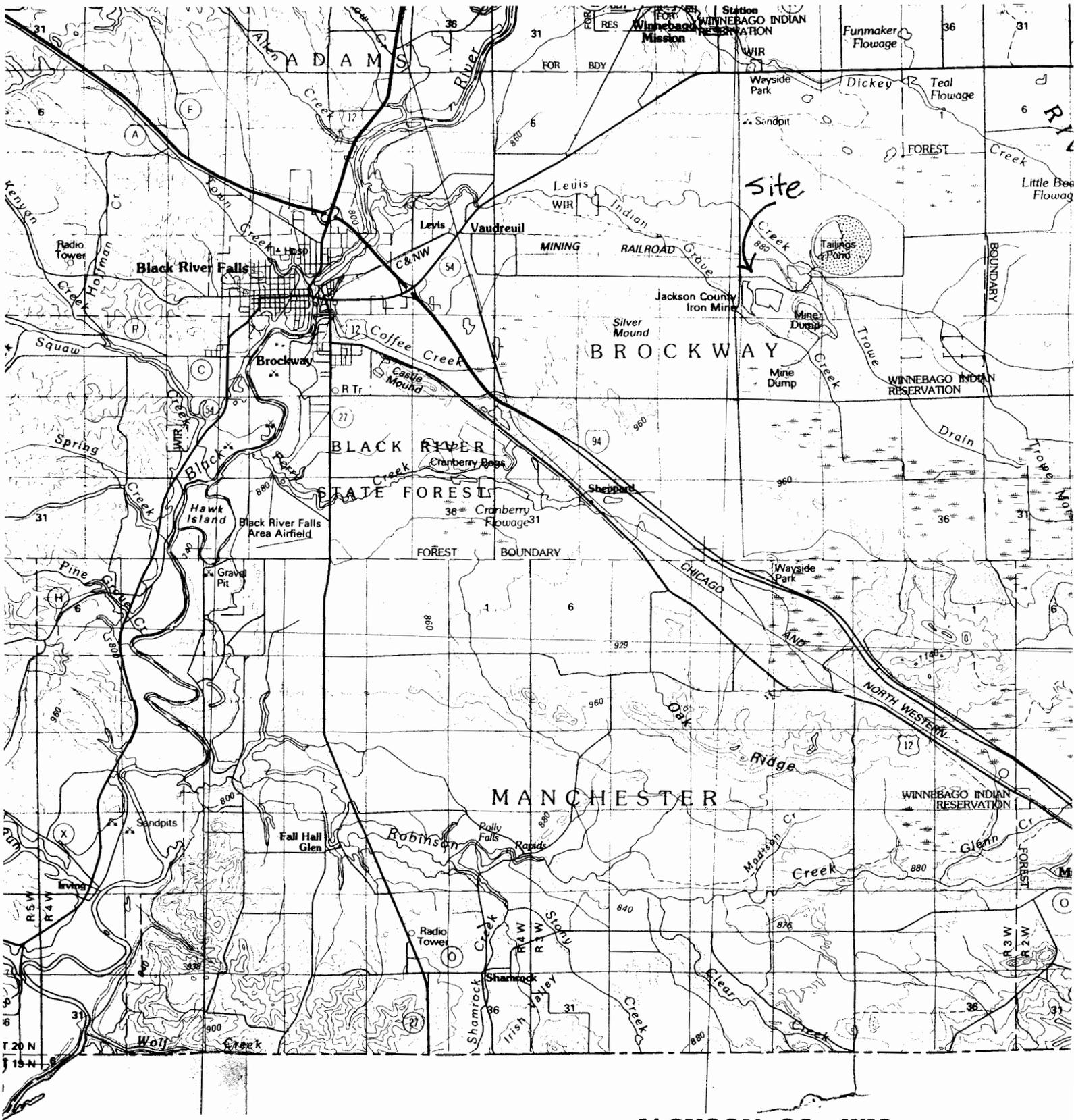
Please be aware that the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment.

If you have any questions about this letter, please feel free to call me at 715-839-3824. The Department appreciates the work you have done to help protect health and the environment in Wisconsin.

Sincerely,

Eileen Kramer, P.H.  
Hydrogeologist  
Remediation & Redevelopment Program

copy: Dave Koubsky, Service Environmental, 675 Vandalia St., St. Paul, MN 55114

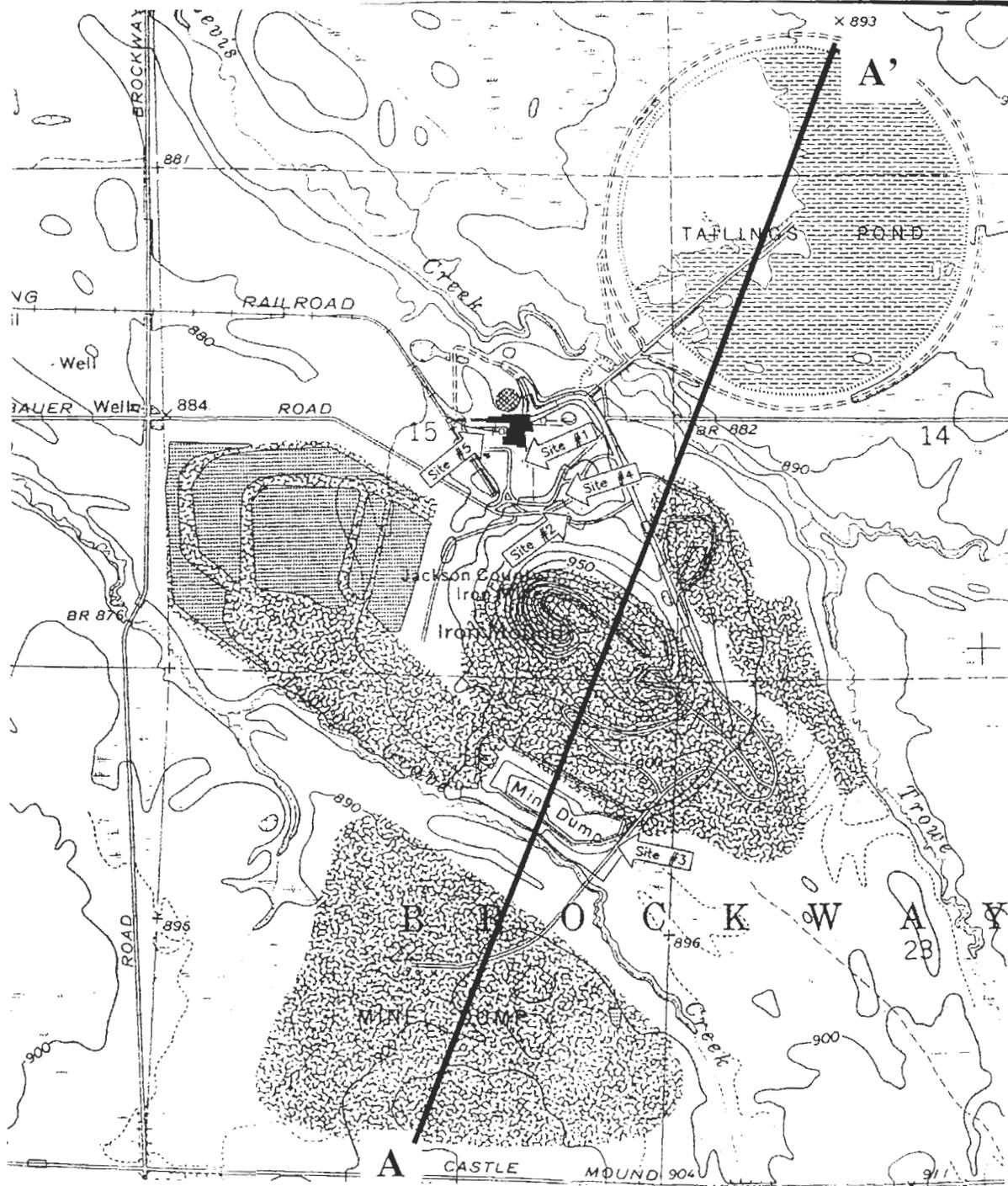


**SCALE 1:100 000**

1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND  
 CONTOUR INTERVAL 80 FEET  
 SUPPLEMENTARY CONTOUR INTERVAL 20 FEET

**JACKSON CO., WIS.**  
**44090-C7-CF-100**

1986



↑  
NORTH

APPROXIMATE SCALE  
1:20,000

**SERVICE**

*Environmental & Engineering*

FIGURE 1  
QUAD MAP  
JACKSON COUNTY MINE  
BLACK RIVER FALLS, WISCONSIN

FILE NAME	DATE	DRAWN BY	REVIEWED BY
96047 03.dwg	10/24/00	L.SIMMONS	D.KOUBSKY

**Table 3  
Water Level Measurements**

Well Number	Date	Depth of Water from Top of Riser	Product Thickness	Relative Groundwater Elevation	Water Level Above Screen (Y/N)
MW-1 TOR 100.00	10/15/97	13.70	0	86.30	N
	12/19/97	14.54	0	85.46	N
	11/11/98	<del>18.88</del> <sup>A</sup>	0	<del>81.12</del>	N
	3/18/99	14.26	0	85.74	N
	6/30/99	12.85	0	87.15	N
	10/7/99	12.50	0	87.50	N
	12/15/99	14.18	0	85.82	N
	8/10/00	13.98	0	86.02	N
MW-2 TOR 98.82	10/15/97	12.12	0	86.70	N
	12/19/97	12.97	0	85.85	N
	11/11/98	14.57	0	84.25	N
	3/18/99	12.61	0	86.21	N
	6/30/99	11.29	0	87.53	N
	10/7/99	10.92	0	87.90	N
	12/15/99	12.57	0	86.25	N
	8/10/00	12.39	0	86.43	N
MW-3 TOR 100.00	10/15/97	14.49	0	85.51	N
	12/19/97	15.37	0	84.63	N
	11/11/98	12.04	0	87.96	N
	3/18/99	15.03	0	84.97	N
	6/30/99	13.59	0	86.41	N
	10/7/99	13.24	0	86.76	N
	12/15/99	14.96	0	85.04	N
	8/10/00	14.70	0	85.30	N
MW-4 TOR 101.04	3/18/99	18.71	0	82.33	N
	6/30/99	17.14	0	83.90	N
	10/7/99	16.85	0	84.19	N
	12/15/99	18.48	0	82.20	N
	8/10/00	18.21	0	82.83	N

*Describe the methods and procedures used to measure water levels and product thickness.*

*Notes: Water level indicator*

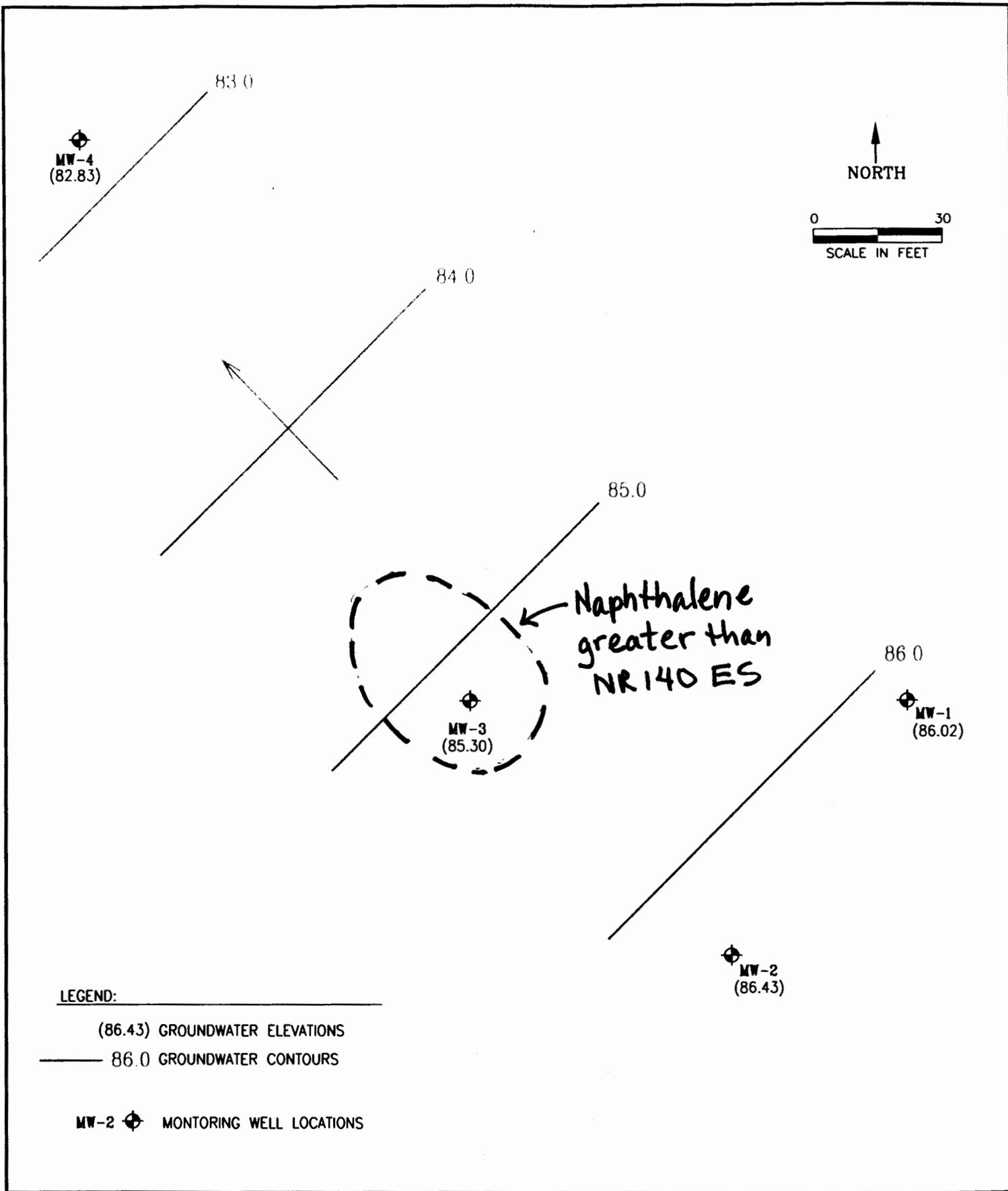


FIGURE TITLE **FIGURE 8**  
**GROUNDWATER CONTOUR MAP, 8/10/00**  
**JACKSON COUNTY MINE**  
**BLACK RIVER FALLS, WISCONSIN**



Environmental & Engineering

FILE NAME	DATE	REVISION DATE	DRAWN BY	REVIEWED BY
96047 02.dwg	10/4/01		L.SIMMONS	D.KOUBSKY

**Table 4**  
**Area 5 - Wazee Park**  
**Analytical Testing Results - Groundwater**  
**Black River Falls, Wisconsin**

Compound/Parameter	MW-1								Public Health	
	10/15/1997	12/19/1997	11/11/1998	3/18/1999	6/30/1999	10/7/1999	12/15/1999	8/10/2000	ES	PAL
<b>Volatile Organic Compounds</b>										
Diesel Range Organics	<30	<30	<30	<100	<100	<100	<100	<100	NE	NE
n-Butylbenzene	<0.4	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NE	NE
sec-Butylbenzene	<0.4	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NE	NE
Chloroform	0.5 <sup>(1)</sup>	<0.3	NS	<1.0	<1.0	<1.0	<1.0	1.2 <sup>(2)</sup>	6	0.6
1,1-Dichloroethane	0.4 <sup>(1)</sup>	<0.3	NS	<1.0	<1.0	<1.0	<1.0	<1.0	850	85
Ethyl Ether	<0.3	<0.3	NS	NS	NS	NS	NS	NS	NE	NE
Ethyl Benzene	<0.3	<0.3	0.3	<1.0	<1.0	<1.0	<1.0	<1.0	700	140
Isopropylbenzene	<0.3	<0.3	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NE	NE
p-Isopropylbenzene	<0.4	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NE	NE
Methyl isobutyl ketone	0.6 <sup>(1)</sup>	<0.2	NS	NS	NS	NS	NS	NS	500	50
Naphthalene	<0.3	<0.3	NS	<1.0	<1.0	<1.0	<1.0	<1.0	40	8
n-Propylbenzene	<0.4	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NE	NE
Tetrachloroethene	<0.4	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	5	0.5
1,2,4 - Trimethylbenzene	<0.4	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	480	96
1,3,5 - Trimethylbenzene	<0.4	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	480	96
m,p-Xylene	<0.6	<0.6	0.6	<1.0	<1.0	<1.0	<1.0	<1.0	10,000	1,000
<b>Polynuclear Aromatic Hydrocarbons</b>										
Naphthalene	<0.5	<0.5	<0.2	<5.2	<5.2	<5.2	<5.2	<5.2	40	8
Acenaphthylene	<0.6	0.6	<0.2	<2.1	<2.1	<2.1	<2.1	<2.1	NE	NE
Acenaphthene	<0.6	<0.6	<0.2	<2.1	<2.1	<2.1	<2.1	<2.1	NE	NE
Fluorene	<0.7	0.7	<0.2	<2.1	<2.1	<2.1	<2.1	<2.1	400	80
Phenanthrene	<0.7	0.7	<0.2	<2.1	<2.1	<2.1	<2.1	<2.1	NE	NE
Anthracene	<0.6	0.6	<0.2	<2.1	<2.1	<2.1	<2.1	<2.1	3,000	600
Pyrene	<0.6	0.6	<0.2	<2.1	<2.1	<2.1	<2.1	<2.1	250	50
<b>Metals</b>										
Dissolved Lead	NS	NS	NS	NS	NS	NS	NS	NS	15	2
Nitrate	3,300	3,400	NS	3,000	NS	NS	NS	NS	10,000	2,000
Methane	150	NS	NS	NS	NS	NS	NS	NS	NE	NE
<b>Public Welfare</b>										
Sulfate	58,000	36,000	NS	31,000	NS	NS	NS	NS	250,000	125,000
Manganese	1,400	1,100	NS	500	NS	NS	NS	NS	50	25
Ferrous Iron	<0.1	<0.1	<0.1	71	NS	NS	NS	NS	300	150

**Notes:**

All units reported in micrograms per liter (ug/L) or parts-per-billion (ppb).

ES = Wisconsin Department of Natural Resources- Enforcement Standard

PAL = Wisconsin Department of Natural Resources- Preventative Action Limit.

NS = Not sampled for this parameter.

NE = Not established for this analytical parameter.

<sup>(1)</sup> Result is above the laboratory method detection limit, but below practical quantitation limit and therefore is estimated.

<sup>(2)</sup> The analytical report indicates that this result appears to be due to laboratory contamination.

**Table 4**  
**Area 5 - Wazee Park**  
**Analytical Testing Results - Groundwater**  
**Black River Falls, Wisconsin**

*up-gradient*

Compound/Parameter	MW-2								Public Health	
	10/15/1997	12/19/1997	11/11/1998	3/18/1999	6/30/1999	10/7/1999	12/15/1999	8/10/2000	ES	PAL
<b>Volatile Organic Compounds</b>										
<b>Diesel Range Organics</b>	<30	<30	<30	<100	<100	<100	<100	<100	NE	NE
<b>n-Butylbenzene</b>	<0.4	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NE	NE
<b>sec-Butylbenzene</b>	<0.4	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NE	NE
<b>Chloroform</b>	<0.3	<0.3	NS	<1.0	<1.0	<1.0	<1.0	<1.0	6	0.6
<b>1,1-Dichloroethane</b>	<0.3	<0.3	NS	<1.0	<1.0	<1.0	<1.0	<1.0	850	85
<b>Ethyl Ether</b>	<0.3	<0.3	NS	NS	NS	NS	NS	NS	NE	NE
<b>Ethyl Benzene</b>	<0.3	<0.3	0.3	<1.0	<1.0	<1.0	<1.0	<1.0	700	140
<b>Isopropylbenzene</b>	<0.3	<0.3	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NE	NE
<b>p-Isopropylbenzene</b>	<0.3	<0.3	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NE	NE
<b>Methyl isobutyl ketone</b>	0.6 <sup>(1)</sup>	<0.2	NS	NS	NS	NS	NS	NS	500	50
<b>Naphthalene</b>	<0.4	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	40	8
<b>n-Propylbenzene</b>	<0.4	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NE	NE
<b>Tetrachloroethene</b>	0.8 <sup>(1)</sup>	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	5	0.5
<b>1,2,4 - Trimethylbenzene</b>	<0.3	<0.3	NS	<1.0	<1.0	<1.0	<1.0	<1.0	480	96
<b>1,3,5 - Trimethylbenzene</b>	<0.4	<0.4	NS	<1.0	<1.0	<1.0	<1.0	<1.0	480	96
<b>m,p-Xylene</b>	<0.4	<0.4	0.6	<1.0	<1.0	<1.0	<1.0	<1.0	10,000	1,000
<b>Polynuclear Aromatic Hydrocarbons</b>										
<b>Naphthalene</b>	<0.5	<0.5	0.2	<5.2	<5.2	<5.0	<5.0	<5.2	40	8
<b>Acenaphthylene</b>	<0.6	<0.6	0.2	<2.2	<2.1	<2.0	<2.0	<2.1	NE	NE
<b>Acenaphthene</b>	<0.6	<0.6	0.2	<2.2	<2.1	<2.0	<2.0	<2.1	NE	NE
<b>Fluorene</b>	<0.7	<0.7	0.2	<2.2	<2.1	<2.0	<2.0	<2.1	400	80
<b>Phenanthrene</b>	<0.7	<0.7	<0.6	<2.2	<2.1	<2.0	<2.0	<2.1	NE	NE
<b>Anthracene</b>	<0.6	<0.6	<0.6	<2.2	<2.1	<2.0	<2.0	<2.1	3,000	600
<b>Pyrene</b>	<0.6	<0.6	0.2	<2.2	<2.1	<2.0	<2.0	<2.1	250	50
<b>Metals</b>										
<b>Dissolved Lead</b>	NS	NS	NS	NS	NS	NS	NS	NS	15	2
<b>Nitrate</b>	1,700	4,500	NS	2,700	NS	NS	NS	NS	10,000	2,000
<b>Methane</b>	370	NS	NS	NS	NS	NS	NS	NS	NE	NE
									<b>Public Welfare</b>	
<b>Sulfate</b>	78,000	38,000	NS	19,000	NS	NS	NS	NS	250,000	125,000
<b>Manganese</b>	40	80	NS	200	NS	NS	NS	NS	50	25
<b>Ferrous Iron</b>	<0.1	<0.1	NS	60	NS	NS	NS	NS	300	150
<b>Notes:</b>										
All units reported in micrograms per liter (ug/L) or parts-per-billion (ppb).										
ES = Wisconsin Department of Natural Resources- Enforcement Standard.										
PAL = Wisconsin Department of Natural Resources- Preventative Action Limit.										
NS = Not sampled for this parameter.										
NE = Not Established for this analytical parameter.										
<sup>(1)</sup> Result is above the laboratory method detection limit, but below practical quantitation limit and therefore is estimated.										
<sup>(2)</sup> The analytical report indicates that this result appears to be due to laboratory contamination.										

**Table 4**  
**Area 5 - Wazee Park**  
**Analytical Testing Results - Groundwater**  
**Black River Falls, Wisconsin**

*Source*

Compound/Parameter	MW-3								Public Health	
	10/15/1997	12/19/1997	11/11/1998	3/18/1999	6/30/1999	10/7/1999	12/15/1999	8/10/2000	ES	PAL
<b>Volatile Organic Compounds</b>										
Diesel Range Organics	7,700	3,300	<30	3,400	9,600	4,500	4,100	4,000	NE	NE
n-Butylbenzene	<4	40	NS	<1	<1	<10	11.0	3.8	NE	NE
sec-Butylbenzene	8.9 <sup>(1)</sup>	9.6 <sup>(1)</sup>	NS	6.9	<1	<10	5.8	3.2	NE	NE
Chloroform	<3	<3	NS	<1	<1	<10	<1	<1	6	0.6
1,1-Dichloroethane	<3	<3	NS	<1	<1	<10	<1	<1	850	85
cis-1,2-Dichloroethene	<3	<3	<3	<1	1	<10	<1	<1	70	7
Ethyl Ether	7.7 <sup>(1)</sup>	<3	NS	NS	NS	NS	NS	NS	NE	NE
Ethyl Benzene	26	20	<3	24.0	14.0	20.0	23.0	15.0	700	140
Isopropylbenzene	8.7 <sup>(1)</sup>	8.4 <sup>(1)</sup>	NS	7.9	4.0	<10	7.0	4.0	NE	NE
p-Isopropylbenzene	<4	7.0 <sup>(1)</sup>	NS	4.6	4	<10	3	3	NE	NE
Methyl isobutyl ketone	<2	<2	NS	NS	NS	NS	NS	NS	500	50
Naphthalene	190	140	NS	100.0	290.0	210.0	140.0	80.0	40	8
n-Propylbenzene	11	12	NS	15.0	7.0	<10	12.0	7.3	NE	NE
Tetrachloroethene	<4	<4	NS	<2	<2	<10	<2	<2	5	0.5
1,2,4 - Trimethylbenzene	140	110	NS	88.0	85.0	100.0	92.0	64.0	480	96
1,3,5 - Trimethylbenzene	37	31	NS	35.0	23.0	28.0	29.0	22.0	480	96
m,p-Xylene	28	19	<6	22.0	17.0	23.0	21.0	14.0	10,000	1,000
<b>Polynuclear Aromatic Hydrocarbons</b>										
Naphthalene	160	140	0.2	140.0	160.0	150.0	18.0	<5.2	40	8
2-Methylnaphthalene	NS	NS	NS	240.0	240.0	180.0	33.0	<5.2	NE	NE
Acenaphthylene	3	3	0.2	<2.4	<2.2	<2.0	<2.0	<2.1	NE	NE
Acenaphthene	15	12	0.2	8.6	7.4	9.7	<2.0	<2.1	NE	NE
Carbazole	NS	NS	NS	<2.2	6.1	<5.1	<2.0	<2.1	NE	NE
Dibenzofuran	NS	NS	NS	<2.2	6.6	7.3	<2.0	<2.1	NE	NE
Fluorene	18	17	0.2	11.0	10.0	12.0	<2.0	<2.1	400	80
Phenanthrene	24	18	<0.6	15.0	13.0	12.0	<2.0	<2.1	NE	NE
Anthracene	2	2	<0.6	<2.4	<2.2	<2.0	<2.0	<2.1	3,000	600
Pyrene	1	<0.6	0.2	<2.4	<2.2	<2.0	<2.0	<2.1	250	50
<b>Metals</b>										
Dissolved Lead	NS	NS	NS	NS	NS	NS	NS	NS	15	2
Nitrate	<100	<100	NS	<20	NS	NS	NS	NS	10,000	2,000
Methane	3,800	NS	NS	NS	NS	NS	NS	NS	NE	NE
									<b>Public Welfare</b>	
Sulfate	10,000	2,000	NS	<500	NS	NS	NS	NS	250,000	125,000
Manganese	940	610	NS	330	NS	NS	NS	NS	50	25
Ferrous Iron	7,700	17,000	NS	10,000	NS	NS	NS	NS	300	150

**Notes:**

All units reported in micrograms per liter (ug/L) or parts-per-billion (ppb).

ES = Wisconsin Department of Natural Resources- Enforcement Standard.

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<sup>(1)</sup> Result is above the laboratory method detection limit, but below practical quantitation limit and therefore is estimated.

<sup>(2)</sup> The analytical report indicates that this result appears to be due to laboratory contamination.

**Table 4**  
**Area 5 - Wazee Park**  
**Analytical Testing Results - Groundwater**  
**Black River Falls, Wisconsin**

*Down-gradient  
(150')*

Compound/Parameter	MW-4					Public Health	
	3/18/1999	6/30/1999	10/7/1999	12/15/1999	8/10/2000	ES	PAL
<b>Volatile Organic Compounds</b>							
Diesel Range Organics	9,300	5,000	4,900	9,700	3,000	NE	NE
Benzene	<sup>1</sup>	<1	<1	<1	<1	5	0.5
n-Butylbenzene	<1	<1	1	3	<1	NE	NE
sec-Butylbenzene	3	2	<1	3	<1	NE	NE
Chloroform	<1	<1	<1	<1	<1	6	0.6
1,1-Dichloroethane	<1	<1	<1	<1	<1	850	85
Ethyl Ether	NS	NS	NS	NS	NS	NE	NE
Ethyl Benzene	16.0	15.0	4.3	16.0	4.0	700	140
Isopropylbenzene	4.0	3.7	1.2	4.0	1.0	NE	NE
p-Isopropylbenzene	2.6	2.2	<1	2.3	<1	NE	NE
Methyl isobutyl ketone	NS	NS	NS	NS	NS	500	50
Naphthalene	83.0	89.0	37.0	110.0	19.0	40	8
Tetrachloroethene	<2	<2	<1	<1	<1	5	0.5
n-Propylbenzene	5.3	<1	1.5	5.6	1.3	NE	NE
1,2,4 - Trimethylbenzene	36.0	39.0	12.0	49.0	18.0	480	96
1,3,5 - Trimethylbenzene	18.0	16.0	4.6	18.0	5.8	480	96
m,p-Xylene	19.0	14.0	4.2	19.0	6.5	10,000	1,000
<b>Polynuclear Aromatic Hydrocarbons</b>							
Naphthalene	49	47	24	35	10	40	8
2-Methylnaphthalene	30	31	16	26	<5.2	NE	NE
Acenaphthylene	<2.1	<2.1	<2.1	<2.1	<2.1	NE	NE
Acenaphthene	5	4	4	3	<2.1	NE	NE
Fluorene	6	5	4	4	<2.1	400	80
Phenanthrene	6	4	4	4	<2.1	NE	NE
Anthracene	<2.1	<2.1	<2.1	<2.1	<2.1	3,000	600
Pyrene	<2.1	<2.1	<2.1	<2.1	<2.1	250	50
<b>Metals</b>							
Dissolved Lead	NS	NS	NS	NS	NS	15	2
Nitrate	<20	NS	NS	NS	NS	10,000	2,000
Methane	NS	NS	NS	NS	NS	NE	NE
						<b>Public Welfare</b>	
Sulfate	6,900	NS	NS	NS	NS	250,000	125,000
Manganese	3,900	NS	NS	NS	NS	50	25
Ferrous Iron	14,000	NS	NS	NS	NS	300	150

**Notes:**

All units reported in micrograms per liter (ug/L) or parts-per-billion (ppb).

ES = Wisconsin Department of Natural Resources- Enforcement Standard.

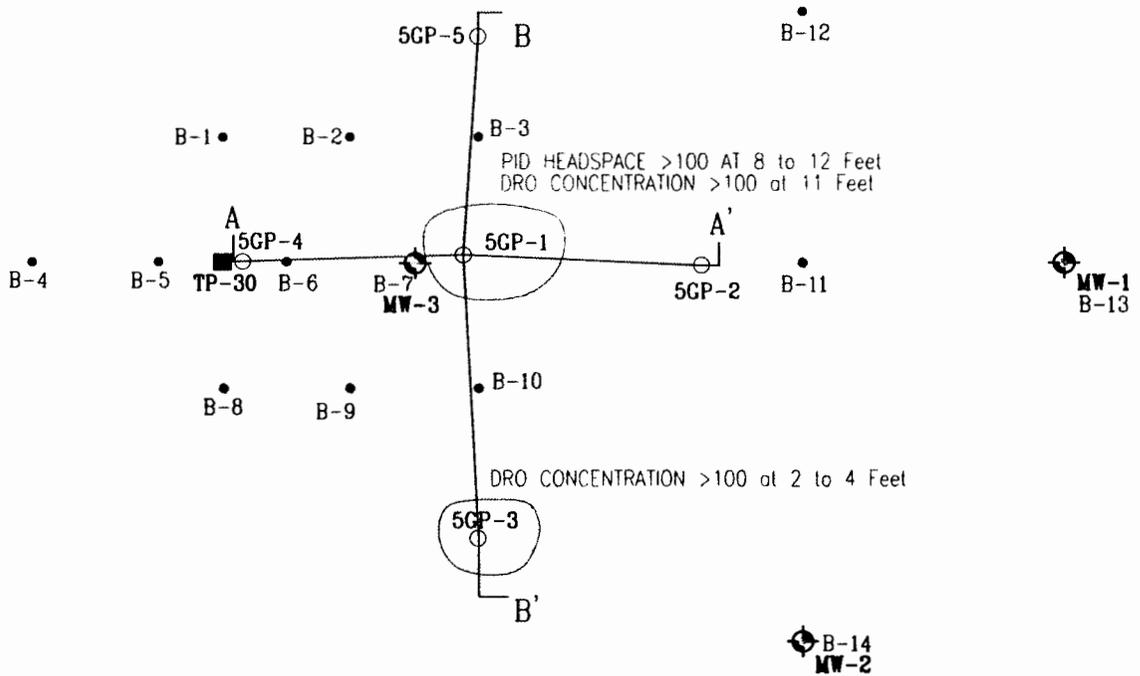
PAL = Wisconsin Department of Natural Resources- Preventative Action Limit.

NS = Not sampled for this parameter.

NE = Not Established for this analytical parameter.

<sup>(1)</sup> Result is above the laboratory method detection limit, but below practical quantitation limit and therefore is estimated.

<sup>(2)</sup> The analytical report indicates that this result appears to be due to laboratory contamination.



**LEGEND:**

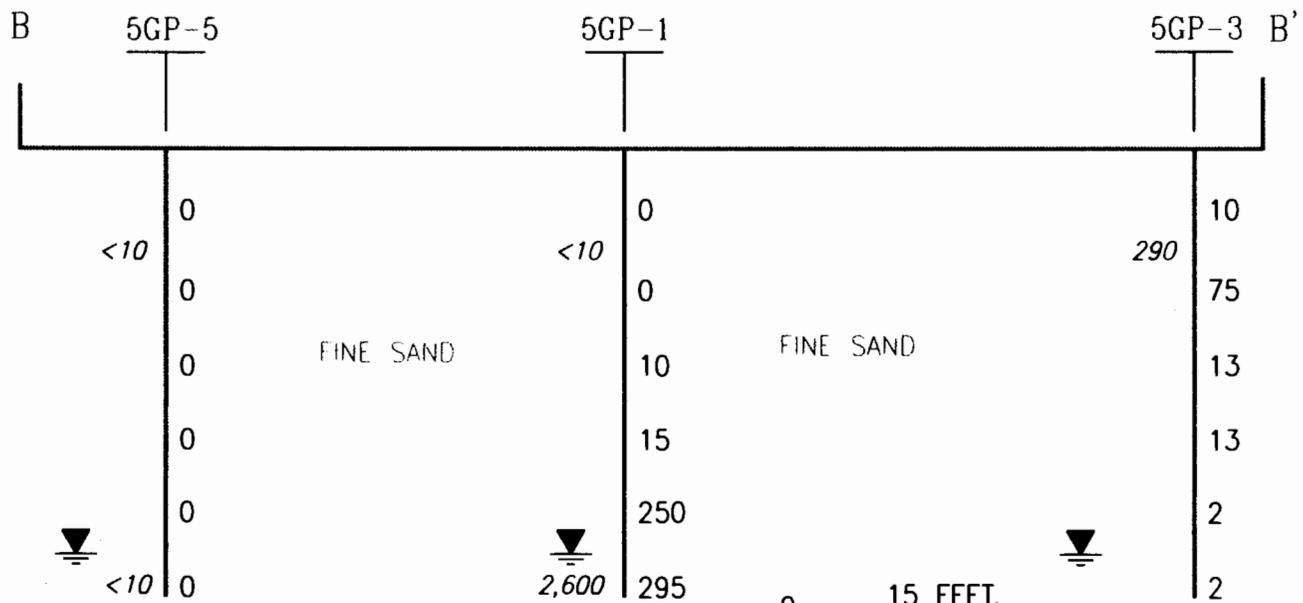
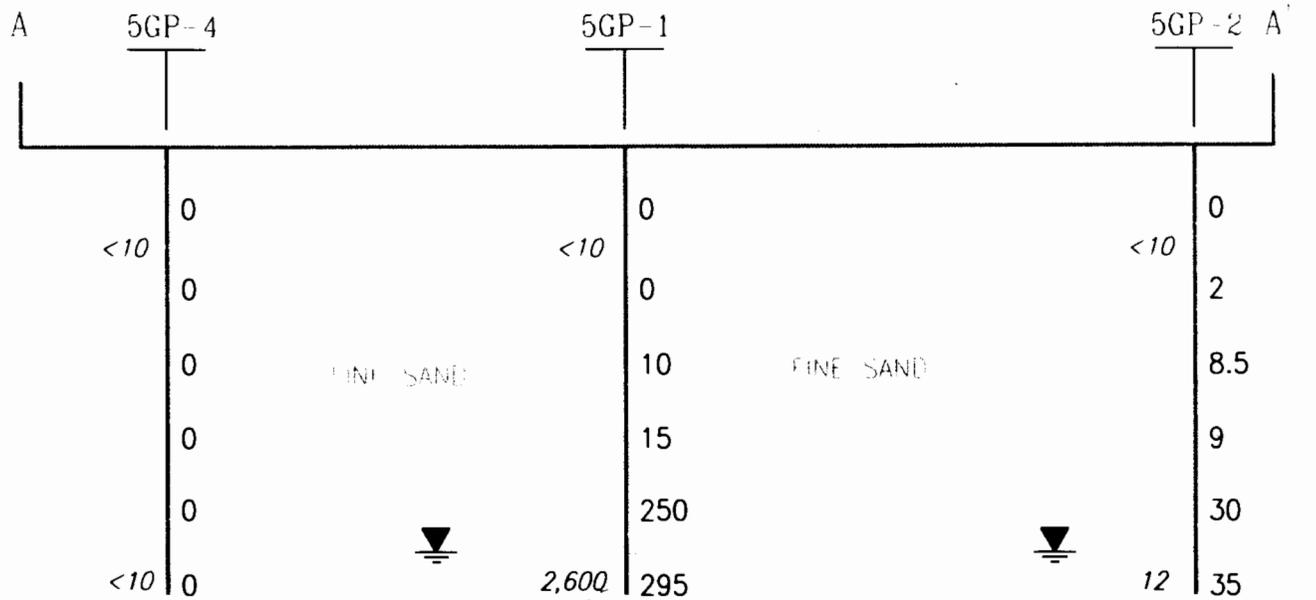
- 5GP-3 ○ SOIL PROBE SAMPLE LOCATION
- B-8 • BORING LOCATIONS
- TP-30 ■ TEST PIT LOCATION
- MW-2 ◉ MONITORING WELL LOCATIONS

FIGURE TITLE **FIGURE 6**  
**POST REMEDIAL SOIL SAMPLE LOCATIONS (9/7/01)**  
**JACKSON COUNTY MINE**  
**BLACK RIVER FALLS, WISCONSIN**



FILE NAME 96047 02.dwg	DATE 10/4/01	REVISION DATE	DRAWN BY L.SIMMONS	REVIEWED BY D.KOUBSKY
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Environmental & Engineering



LEGEND:

<11 DRO (ppm) | 7.2 PID

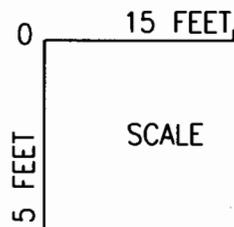


FIGURE TITLE **FIGURE 7**  
**POST REMEDIAL CROSS SECTIONS**  
**JACKSON COUNTY MINE**  
**BLACK RIVER FALLS, WISCONSIN**



Environmental & Engineering

FILE NAME 96047 04.dwg	DATE 10/4/01	REVISION DATE	DRAWN BY L.SIMMONS	REVIEWED BY D.KOUBSKY
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## ISPAT INLAND MINING

June 11, 2002

Mr. Jon Schweitzer  
Assistant Administrator  
Jackson County Forestry and Parks Department  
307 Main  
Black River Falls, Wisconsin 54615

Re: Site Closure Request Land Owner Notification Letter

Dear Mr. Schweitzer,

The remedial efforts in response to a fuel oil release at the Area 5 site on the former Jackson County Iron Mine site have progressed to a point where the Wisconsin Department of Natural Resources (WDNR) is reviewing the site for closure. As part of the closure review process, the WDNR requires landowners to be notified if groundwater quality exceeds state enforcement standards found in Chapter NR 140 of the Wisconsin Administrative Code.

Concentrations of two inorganic compounds and one organic compound exceed current WDNR enforcement standards. The compounds are manganese, ferrous iron and naphthalene. Although iron and manganese exceed current enforcement standards, they are consistent with naturally occurring concentrations of the area and in other naturally occurring iron oxide formations. Based on the ground water monitoring results at Area 5, SERVICE Engineering Group believes the dissolved naphthalene plume is stable or receding and will naturally degrade over time. Allowing natural attenuation to complete the cleanup at this time will meet the requirement for case closure that are found in Chapter NR 726 and Chapter NR 746 of the Wisconsin Administrative Code. Ispat Inland Mining Company has requested the WDNR to accept natural attenuation as the final remedy for this site and grant case closure. Closure means that the WDNR will not be requiring any further investigation or cleanup action to be taken, other than the reliance on natural attenuation.

Ispat Inland Mining Company  
Minorca Mine  
P.O. Box 1 - 5950 Old Hwy. 53  
Virginia, Minnesota 55792  
Tel: 1-218-749-5910 \* Fax: 1-218-749-5256  
E-mail: [minorca@ispatinlandmining.com](mailto:minorca@ispatinlandmining.com)

*Subsidiary of ISPAT INLAND INC.*

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**ISPAT INLAND MINING**

**The WDNR will not finalize their review of the closure request for at least 30 days after receipt of this letter. As the current property owner, the County, has the right to contact the WDNR and provide any technical information you have that indicates closure should not be granted for this site. If you choose to submit information to the WDNR that is relevant to the closure request, you should mail the information to Eileen Krammer of the WDNR. Ms. Krammer can be reached at (715) 839-3824.**

**If the site is closed, the property within the boundaries where groundwater contamination exceeds Chapter NR 140 groundwater enforcement standards will be listed on the Department of Natural Resources' Geographic Information System (GIS) Registry of Closed Remediation Sites. The information on the GIS Registry includes maps showing the location of properties in Wisconsin where groundwater contamination above Chapter NR 140 enforcement standards was found at the time that the case was closed. The GIS Registry is available to the general public on the WDNR Internet web site.**

**Please review the enclosed legal description of your property and notify me within 30 days if the legal description is incorrect.**

**If you or any subsequent property owner wish to construct a well within the Area 5 Site, special well construction standards may be necessary to protect the well from the residual groundwater contamination in that area. Any well driller who proposed to construct a well in that area will need to call the Diggers Hotline (1-800-242-8511) if your property is located outside of the service area of a municipally owned water system, or contact the Drinking Water Program within the WDNR if your property is located within the designated service area of a municipally owned water system, to determine if there is a need for special well construction standards.**

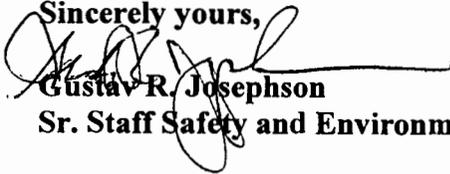
**Once the WDNR makes a decision on the closure request, it will be documented in a letter. If the WDNR grants closure, you may obtain a copy of the closure letter from me, the WDNR or by accessing the WDNR GIS Registry of Closed Remediation Sites on the internet at [www.dnr.state.wi.us/org/at/et/geo/](http://www.dnr.state.wi.us/org/at/et/geo/). A copy of the closure letter is included as part of the site file on the GIS Registry of Closed Remediation Sites.**

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**ISPAT INLAND MINING**

If you need any further information, you may contact me at (218) 749-5910, Ext. 283, Dave Koubsky of Service Environmental at (652) 644-6680 or Eileen Krammer of the WDNR at (715)839-3824.

Sincerely yours,



Gustav R. Josephson

**Sr. Staff Safety and Environmental Engineer**

**Cc: Eileen Krammer, Dave Koubsky, Kevin Delorey**

**Enclosures**