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Waukesha, WI 53188

**Pleasant Prairie Power Plant Sulfate in Groundwater**  
***Pleasant Prairie Power Plant, Pleasant Prairie, WI***  
***BRRTS#: 02-30-527479***

Dear Ms. Laube-Anderson:

April 27, 2020

On behalf of We Energies, O'Brien & Gere Engineers, Inc., a Ramboll Company (Ramboll), has prepared this letter report discussing the presence of sulfate in groundwater at the Pleasant Prairie Power Plant (P4), BRRTS#: 012-30-527479. This letter report was prepared with the intent of obtaining a No Action Required or No Further Action determination from the Wisconsin Department of Natural Resources (WDNR). On August 1, 2019, We Energies submitted a technical memorandum, *Pleasant Prairie Power Plant (P4) Sulfate in Groundwater BRRTS#:02-30-527479*, and technical assistance form (Form 4400-237) and associated fee. In email correspondence on October 1, 2019, WDNR provided comments on the technical memorandum; the comments were further discussed on a conference call on October 18, 2019. This letter report was prepared to address comments received from WDNR.

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We Energies initially submitted a technical memorandum, *Pleasant Prairie Power Plant (P4) Groundwater Monitoring Program Review*, dated June 29, 2018, on July 2, 2018 for WDNR review and comment. In an email dated October 17, 2018 the WDNR provided references that indicated the presence of naturally occurring sulfate concentrations in groundwater. The October 17, 2018 response from WDNR suggested that an argument could be made that the concentrations of sulfate were naturally occurring, and if substantiated, a No Action Required or No Further Action determination may be appropriate.

Ramboll has incorporated previous comments and evaluated the references provided by the WDNR and has gathered additional information as lines of evidence to support a No Further Action determination. This letter includes a brief discussion of the references provided by the WDNR and documentation which supports that concentrations of sulfate reported in groundwater near P4 are likely naturally occurring. The lines of evidence that suggest sulfate concentrations are naturally occurring include:

- Regionally elevated concentrations of naturally occurring sulfate in groundwater and increased sulfate in precipitation

- Geochemical conditions including;
  - Variability in groundwater elevations to release sulfate from oxidation of sulfide minerals within the clay till
  - Surficial development activities that potentially mobilize sulfate from shallow clay till and/or road base materials
- Soil sample results from below the coal pile runoff basin liner

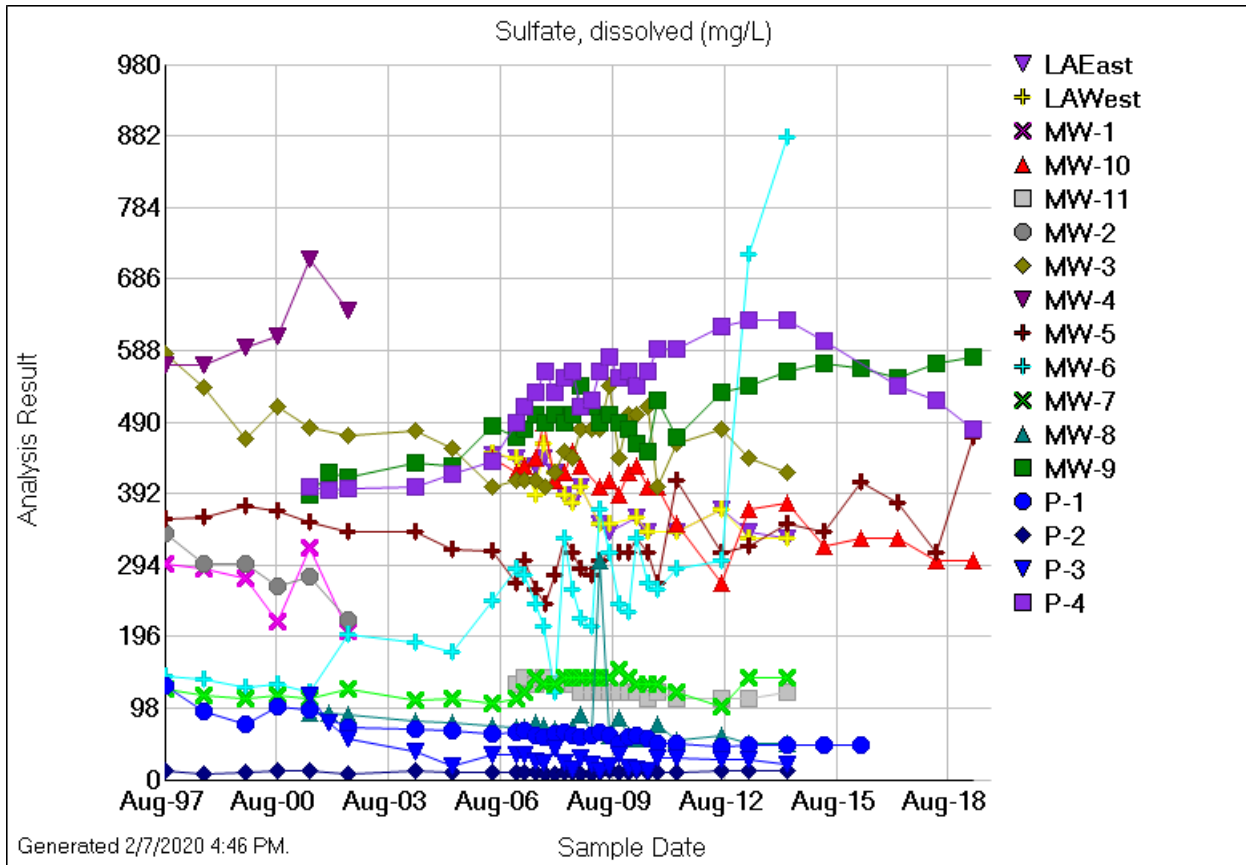
Furthermore, the power plant infrastructure including the coal pile and other suspected sources (basins and runoff ditches) have been removed eliminating those facilities as sources to the sulfate concentrations in groundwater. The power plant was fueled with low sulfur coal during the life of the plant's operations.

### **SUMMARY OF SULFATE IMPACTS IN GROUNDWATER**

The sulfate concentrations detected in groundwater from monitoring wells onsite (Figure 1) and trends were discussed in detail in the June 29, 2018 memorandum, additional evaluation including the 2019 results are included in the Figure below, Table 1, and are summarized as follows:

- An upward trend reported in MW-9 concentrations appear to have peaked and are stabilizing based on the last five rounds of data.
- Upward trends which were reported in piezometer P-4 are no longer observed and no statistically significant trends are observed. Recent data from the last five rounds suggest a downward trend.
- A downward trend reported in MW-10 is no longer present and concentrations indicate a stable trend. However, the median concentration detected over the eight most recent sampling events (330.5 mg/L) is less than the median concentration (420 mg/L) detected previously (1997-2011) indicating overall improvement in groundwater quality.
- Concentrations of sulfate in MW-5 have been variable following completion of basin lining activities and following their recent removal; recent data from the last three events indicates sulfate continues to be variable with concentrations ranging 160 mg/L (from 470 to 310 mg/L).

The groundwater flow direction is to the southwest as shown in Attachment A. Based on flow directions, the sulfate concentrations and trends detected in groundwater are likely the result of several factors which include natural sources and the former plant activities (development), however, the plant infrastructure (as historically attributed) is unlikely to have been the source of sulfate concentrations. The relative contribution from each of these potential sources was not evaluated, but the previously suspected sources from the former plant infrastructure and operations that are associated with this BRRTS case have been removed and as a result will not impact groundwater.



**Sulfate concentrations in groundwater monitoring wells.**

The Coal Pile Ditch, Coal Pile Runoff Basin, Metal Cleaning Wastewater Basin, and Low Volume Wastewater Basin were lined during 2007-2010. As shown in the Figure above groundwater concentrations did not decline in response to those activities. Concentrations in MW-5 nearest to these locations remained stable or increased slightly, while concentrations at MW-9, further downgradient, increased. The lack of significant and consistent response to the lining of the ponds demonstrates that these suspected sources were not the source of sulfate.

**POTENTIAL SOURCES OF SULFATE IMPACTS IN GROUNDWATER**

In addition to the information in the references provided by the WDNR, a literature search and review was conducted to identify potential sources of sulfate in shallow clay soils and within the sand and gravel aquifer in which the P4 monitoring wells are screened. Literature review indicated that the following conditions in addition to the former plant development activities may contribute to elevated sulfate concentrations detected in groundwater:

- Elevated naturally occurring sulfate concentrations in the Silurian dolomite and glacial sand and gravel aquifer
- Local evidence for elevated sulfate in shallow monitoring wells as demonstrated by a nearby BRRTS case with similar/higher sulfate concentrations unrelated to P4 operations
- Increased sulfur (as sulfate) present in southeast Wisconsin precipitation
- Low pH is measured in precipitation in southeast Wisconsin (which can influence geochemical conditions)

Each of these potential sources is discussed below.

### **Sulfate Concentrations in the Silurian Dolomite and Overlying Sand and Gravel**

The monitoring wells at the site are screened within the unconsolidated glacial deposits which include clay till, silt, and sand. In general, the deeper wells (labeled with "P") are screened within the sand and gravel aquifer, while shallower wells are screened at least partially in the clay till. Based on the literature review, "the sand and gravel aquifer is connected hydrologically with the Silurian dolomite aquifer. Water moves freely between the aquifers, which generally are considered to be a single hydrologic unit referred to as the shallow aquifer" (SEWRPC, 2002<sup>1</sup>).

A summary of groundwater data from this aquifer compiled by Kammerer (1984<sup>2</sup>) indicates that the regional concentrations of sulfate in the sand and gravel aquifer range from 0.4 to 893 mg/L, and in the Silurian dolomite the range is 0.4 to 1,400 mg/L. Furthermore, "log transformed sulfate concentration values are distributed normally or closely approximate normal distributions in all units. As a result, it is assumed that these data represent valid statistical samples of likely concentrations in areas of these units where data are available" (Kammerer, 1984). Concentrations of sulfate detected in the site monitoring wells are within the range of concentrations detected in the same aquifer throughout the state prior to when plant operations began in 1984, and summarized in this study, and therefore concentrations detected near P4 may be a result of natural variability within these aquifers.

### **Evidence for Elevated Sulfate at Nearby BRRTS Sites**

A survey of BRRTS cases located in the vicinity of P4 was completed using the WDNR Remediation and Redevelopment Sites Map (RR Sites Map), to identify sites that may have analyzed groundwater for sulfate concentrations. Sulfate concentrations are sometimes measured to evaluate whether natural attenuation is occurring at petroleum or chlorinated volatile organic compound (PVOCs or CVOCs) sites. Showing sulfate concentrations that decrease through time or along a flow path can be used as a line of evidence to support selection of monitored natural attenuation as a remedy.

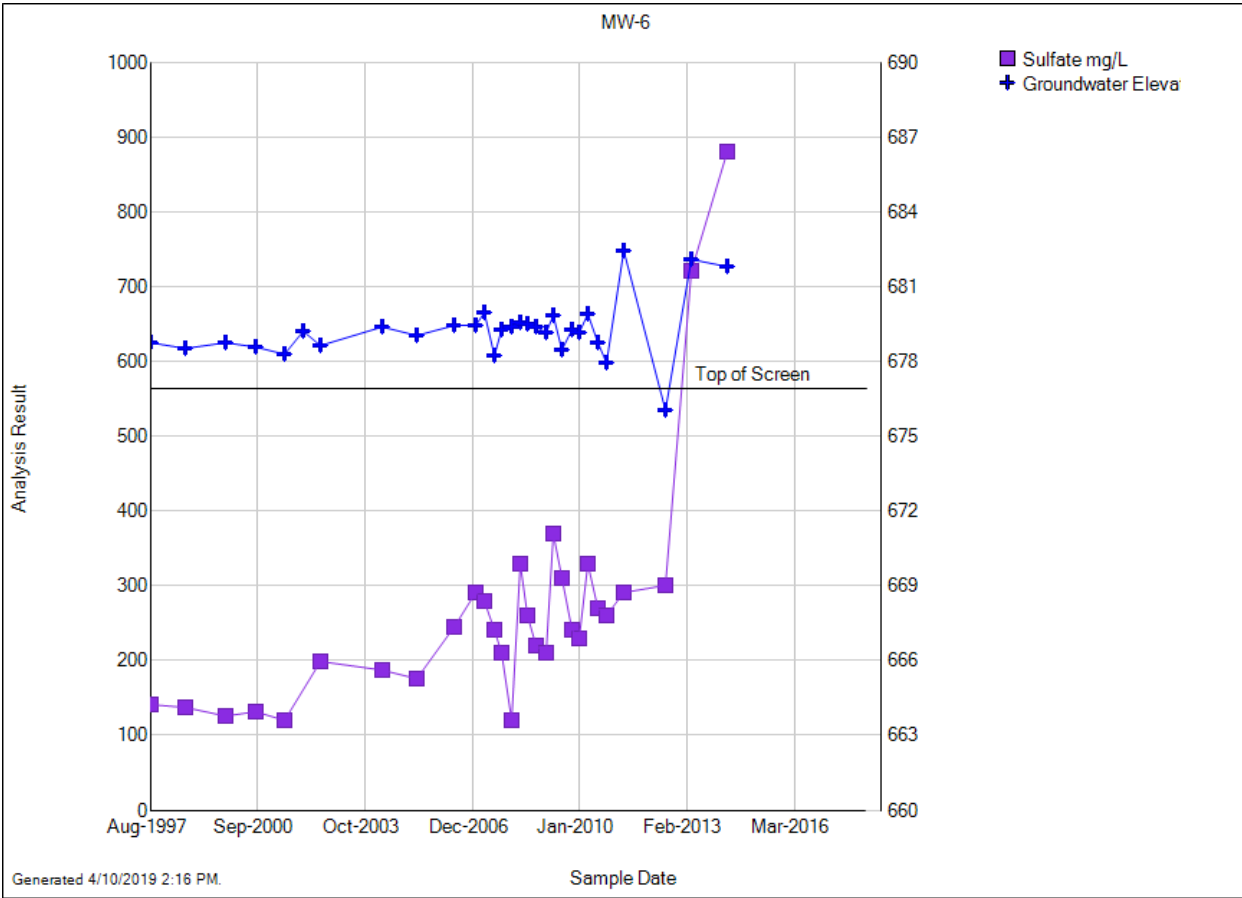
One site, BRRTS Case #02-30-107682, was identified with accessible information that included concentrations of sulfate in shallow groundwater wells. The site is located about 1.5 miles northeast of the P4 property (Figure 3). The concentrations of sulfate in shallow groundwater monitoring wells and remediation sumps ranged from non-detect in sump locations to 870 mg/L in an upgradient background well (MW-1, Table B-1 Attachment B). This upgradient background well is screened within clay till and the measured water elevations were variable but were within the screened elevation of the well, (potentially resulting in oxidation of sulfide minerals in clay). The measured concentrations are similar to those associated with the P4 groundwater and, as discussed previously, within the range of regional concentrations reported in the summary report (Kammerer, 1984). The BRRTS activity for this identified site was closed on September 25, 2002, with a groundwater use restriction because of residual petroleum impacts with no further requirements related to sulfate concentrations.

<sup>1</sup> SEWRPC, 2002. Groundwater Resources of Southeastern Wisconsin. Southeastern Wisconsin Regional Planning Commission and Wisconsin Geological and Natural History Survey. 2002

<sup>2</sup> Kammerer, P.A., 1984. An Overview of Groundwater Quality Data in Wisconsin. USGS Water Resources Investigations Report 83-4239. February 1984.

### GEOCHEMICAL CONDITIONS

The natural sources of sulfate at the P4 site, as described in the Sulfate Concentrations in the Silurian Dolomite and Overlying Sand and Gravel section above, can be mobilized or migrate due to changes in the geochemical conditions at the site. In the November 13, 2014 technical memorandum *Groundwater Monitoring Program Review, We Energies Pleasant Prairie Power Plant* (NRT, 2014), increasing concentrations of sulfate and arsenic in groundwater at upgradient well MW-6 were attributed to oxidation of sulfide minerals at shallow depths in the soil column. High sulfate concentrations were a result of changes in groundwater elevation, which increased the potential for oxidation of pyrite minerals. In particular, the increase in sulfate during 2013, followed a significant decline and subsequent rebound in groundwater elevation (see below). When the water elevation is compared to the top of the screen elevation in MW-6, it is apparent that air (oxygen) was in contact with the aquifer materials which can explain the sharp increase in sulfate observed in MW-6 during 2013.

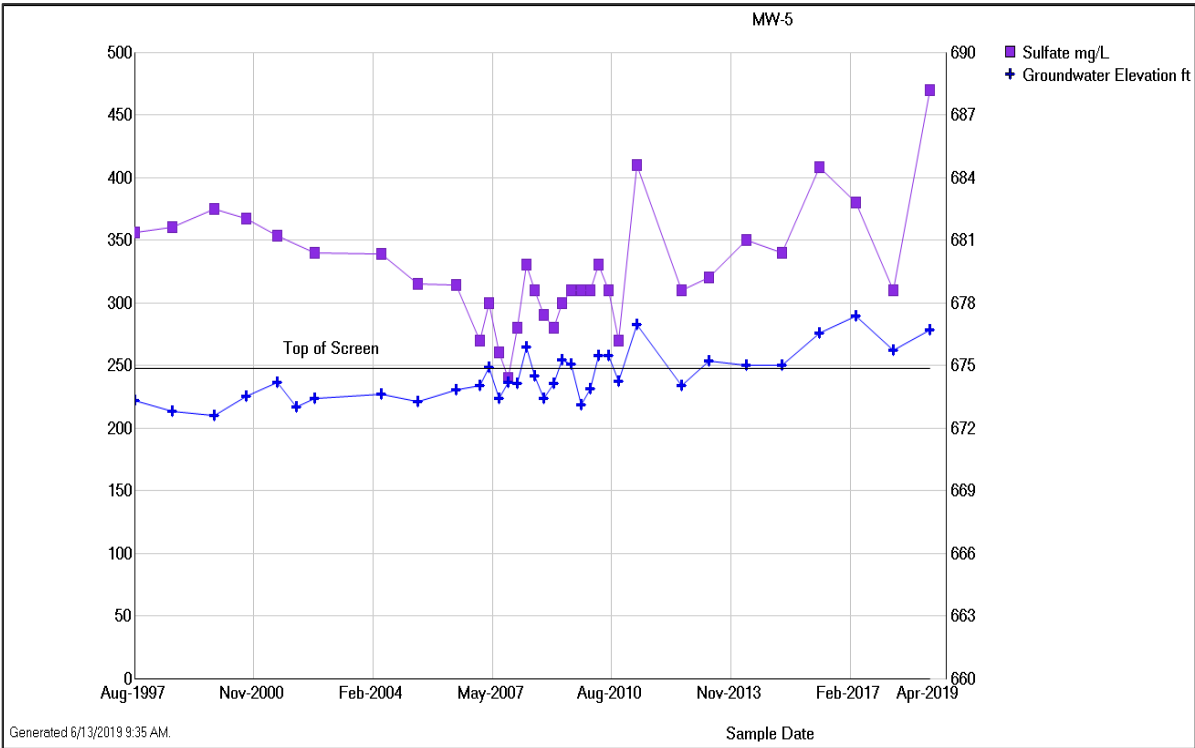


#### Groundwater concentrations and elevations in MW-6.

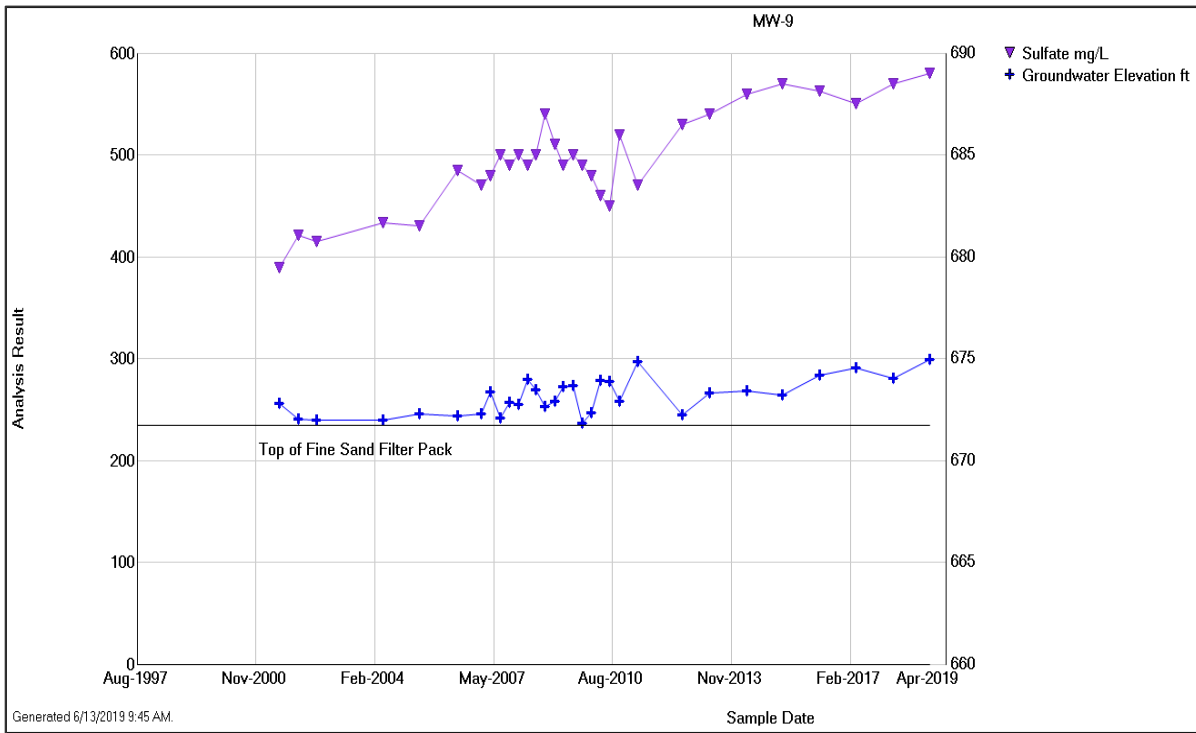
In addition to changes in water elevations, leaching of sulfate from surface deposition and/or oxidation of sulfide minerals contained in materials placed at the surface (i.e. road base, railroad ballast, and laydown lots from historical construction), has the potential to release sulfate to the aquifers over long term exposure to precipitation. Both mechanisms that have the potential to release sulfate to the aquifer are evaluated below.

### Variability in Groundwater Elevation

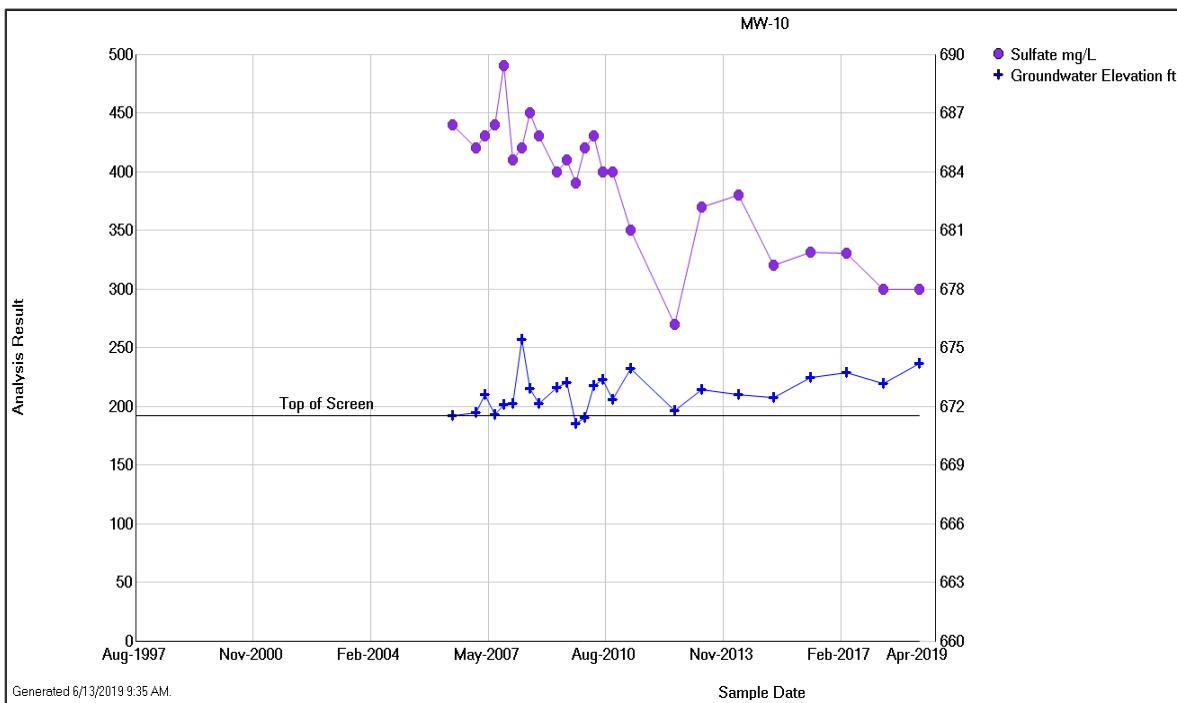
Groundwater elevations and sulfate concentrations are plotted for monitoring wells MW-5, MW-9, and MW-10. As shown in the plots, sulfate concentrations appear elevated when water elevations are at or near the screened interval. Significant increases also occur following periods when the water elevation declines to be within the screened interval (i.e. MW-5 and MW-9 in fall 2010, or MW-10 in fall 2012) which allows oxygen to contact the aquifer materials. P-4 is a piezometer, therefore changes in water elevation are not expected to result in variability in groundwater concentrations, however concentrations exhibit similar trends which indicates groundwater concentrations may be responding to variable water levels in upgradient recharge areas.



### Groundwater concentrations and elevations in MW-5.

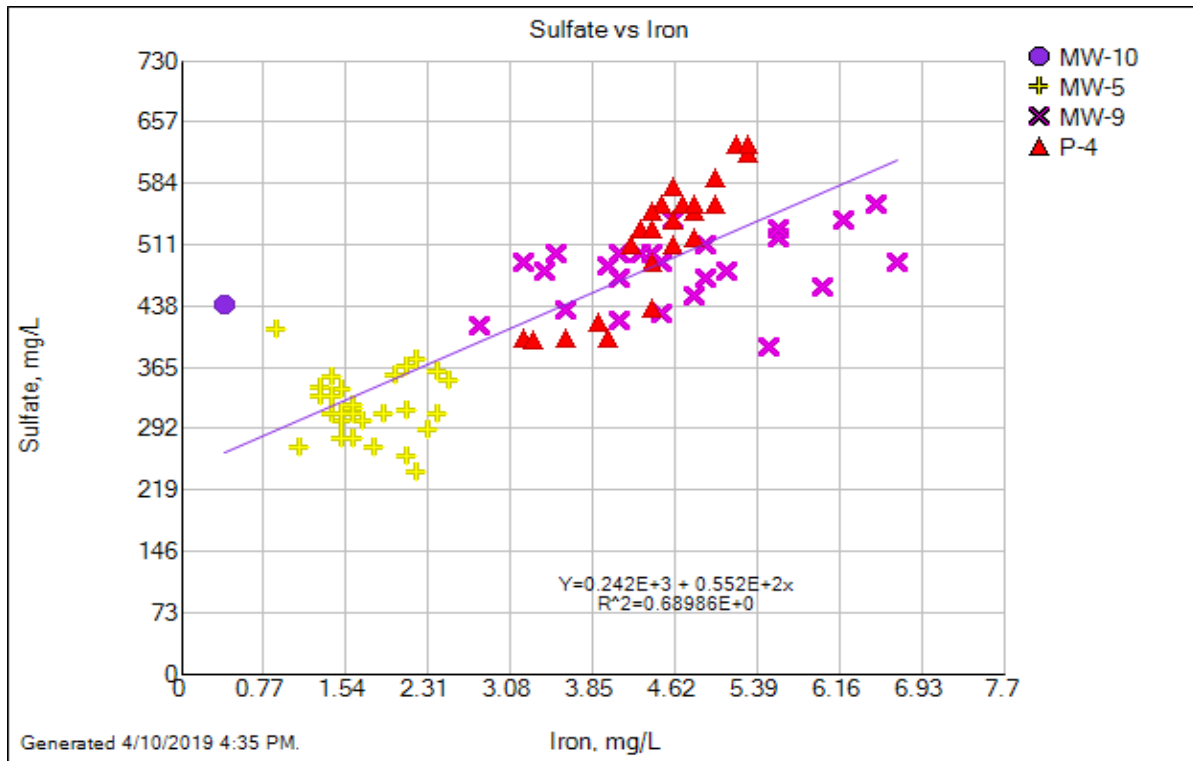


### Groundwater concentrations and elevations in MW-9.



### Groundwater concentrations and elevations in MW-10.

A scatter plot of iron and sulfate concentrations in these wells (below) provides support that pyrite oxidation is occurring because the resulting iron and sulfate concentrations show a relatively high correlation.



**Sulfate and iron concentrations in downgradient wells.**

### Surficial Activity and Potential Mobilization of Sulfate from Shallow Soils

Sulfate concentrations can also be mobilized from surficial deposition or shallow materials that contain sulfide minerals. During construction of P4 and the necessary support structures, (i.e. substations, transmission lines, parking lots, roads, etc.) clay soils at the surface were disturbed over a large area (Figures 4 and 5). Limestone and gravel road base that is quarried in the area and utilized for construction often contains minor inclusions of sulfide minerals (arsenopyrite, pyrite, marcasite, sphalerite) and it is likely that these were displaced and exposed to air and/or precipitation which changes the geochemical conditions and increases the potential for oxidation and sulfate migration. Long term leaching of sulfate may occur from these sources:

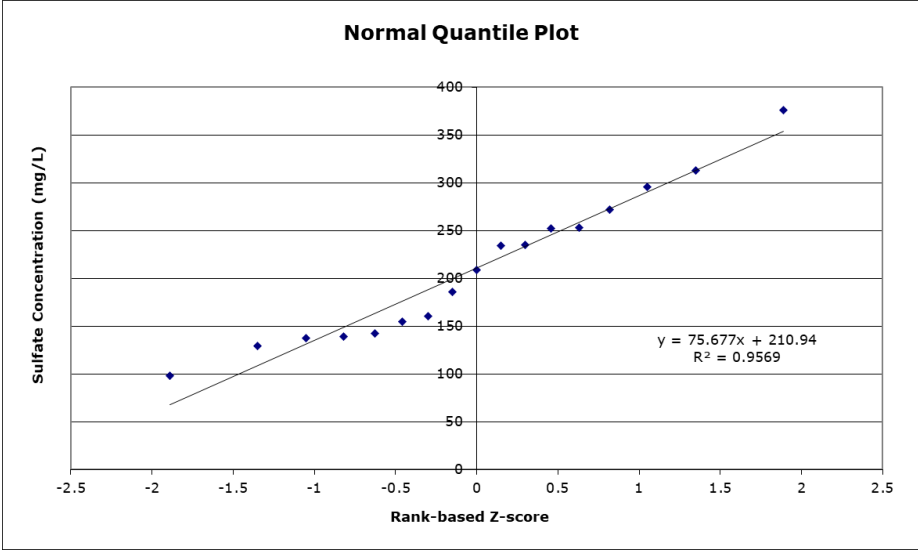
- Pyrite and other sulfide minerals within formerly anaerobic clay till or road base materials (see historic aerials Figures 2 and 3)
- Lake Andrea was a former quarry as shown in historic aerials from 1974 to the 1990's (Figures 4-6), it is unclear what was mined from the quarry, but minerals exposed to oxidation during the quarrying activities and could result in long term elevated sulfate within the lake

### Soil Sample Results – Coal Pile Runoff Basin

Following removal of the Coal Pile Runoff Basin, soil samples were collected from the soils underlying the basin. The samples were analyzed for metals and indicators of potential impacts, and the results are provided in Table 2a and 2b and locations are shown in Figure 2. The results indicate that arsenic in nine



samples was detected above the background threshold value (BTV). Arsenopyrite ((Fe,As)-S) and pyrite often are found in similar settings and as expected, concentrations of arsenic and sulfate were reported coincidentally within the clay till and road base materials. Sulfate was detected at concentrations ranging from 97.9 to 376 mg/kg, note the highest concentration was associated with a sample that contained a larger percentage of gravel. This road base material has been identified as a suspected source of sulfate. The presence of these compounds and their concentrations are representative of the clay till and gravel fill below the liner, because they are not significantly elevated and the results are consistent with a normal distribution. The data provides no indication of a release from the basins.



Removal of the lined basin has also exposed the underlying materials (clay and gravel) to precipitation and potential oxidation since they are no longer isolated from interaction by the liner. The ground disturbance that occurred during removal and the remaining soils that are exposed at the surface could continue to be a source of sulfate to the aquifer until all available sulfate is leached. The recent concentration increase in MW-5, which is located nearest to these basins, may be a result of these activities

**Sulfate in Precipitation**

Sulfate in precipitation is elevated in the southeast portion of the state, including Milwaukee, Racine, and Kenosha Counties (see Figure 12-6 below.) Sulfate deposition occurs when sulfur dioxide reacts with water in the air to form sulfate and sulfuric acid. The sulfate and sulfuric acid are deposited or transferred to surface or groundwater when it rains. Through evaporation and evapotranspiration water is removed and sulfate may become concentrated in soils, surface water, and groundwater. Due to the distribution of industry and heavy transportation traffic in southern Wisconsin and northern Illinois, the southeast portion of Wisconsin is susceptible to higher concentrations and more sulfate deposition with acidic precipitation as shown in the figure below.

**Figure 12-6. Sulfate sulfur in precipitation.**

Source: National Atmospheric Deposition Program, 1999.



The amount of sulfate deposition and the acidity of precipitation has decreased as levels of SO<sub>2</sub> released to the atmosphere have been reduced in the last 30 years. In this area of the state the sulfate concentrations in precipitation have decreased from >2 mg/L in 1985 to <1 mg/L in 2017 (Attachment C1). Similarly, the pH in precipitation has increased from about 4.4 S.U. in 1985 to 5.8 S.U. in 2017 (Attachment C2). The presence of over a century of sulfate in precipitation likely contributed to sulfate concentrations detected in groundwater, and the acidity of the precipitation influences the geochemical conditions of the aquifer. These changes in geochemical conditions can increase the potential sulfate release from soils and aquifer solids.

**REMOVAL AND DECOMMISSIONING OF FORMER SUSPECTED SOURCES**

After further investigation and evaluation of sulfate concentrations in the vicinity of the site, there is significant evidence to suggest that the sulfate in the groundwater is naturally occurring to a substantial extent. Historically, the plant infrastructure were suspected to have contributed to the sulfate concentration detected in groundwater, but the lack of response to remedial activities indicate that it is unlikely that plant infrastructure was a source. These facilities were removed in 2017-2018 and there will be no contribution in the future. The removal of the basins and other infrastructure are, in effect, removal of the suspected source of sulfate or a remedial activity.

## CONCLUSIONS

Based on the information provided in this memorandum, sulfate in groundwater near P4 is likely a result of natural sources; however, plant operations, including construction activities cannot be ruled out as a former contributing source. However, the formerly suspected sources have been removed, and although elevated sulfate concentrations may persist due to removal activities, current We Energies operations do not contribute to sulfate concentrations in groundwater, and no further action for We Energies is appropriate.

Please contact the undersigned or Tim Muehlfeld at We Energies, 414-221-2206, to discuss any questions or comments.

Sincerely,



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### **Figures**

Figure 1	Monitoring Locations
Figure 2	Soil Sample Locations
Figure 3	Ocean Spray Site
Figure 4	Aerial Photograph 1981
Figure 5	Aerial Photograph 1987
Figure 6	Aerial Photograph 1974

### **Tables**

Table 1	Groundwater Analytical Results
Table 2A	Summary of Post-Liner Removal Soil Sample Field Observations
Table 2B	Summary of Post-Liner Soil Sample Laboratory Analytical Results
Table 3	Surface Water Analytical Results

### **Attachments**

Attachment A	Groundwater Flow Direction
Attachment B	Ocean Spray Summary, Figure, and Table
Attachment C1	Sulfate in Precipitation 1985-2017
Attachment C2	pH in Precipitation 1985-2017

cc: Tim Muehlfeld, WEC Business Services, LLC

## FIGURES



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- ☒ CURRENT MONITORING LOCATION
- ☐ PAST MONITORING LOCATION



### MONITORING LOCATIONS

FIGURE 1

**WE ENERGIES GROUNDWATER/SURFACE WATER MONITORING**  
**PLEASANT PRAIRIE POWER PLANT**  
 PLEASANT PRAIRIE, WISCONSIN

RAMBOLL US CORPORATION  
 A RAMBOLL COMPANY



# FIGURE 2 - SOIL SAMPLE LOCATION MAP

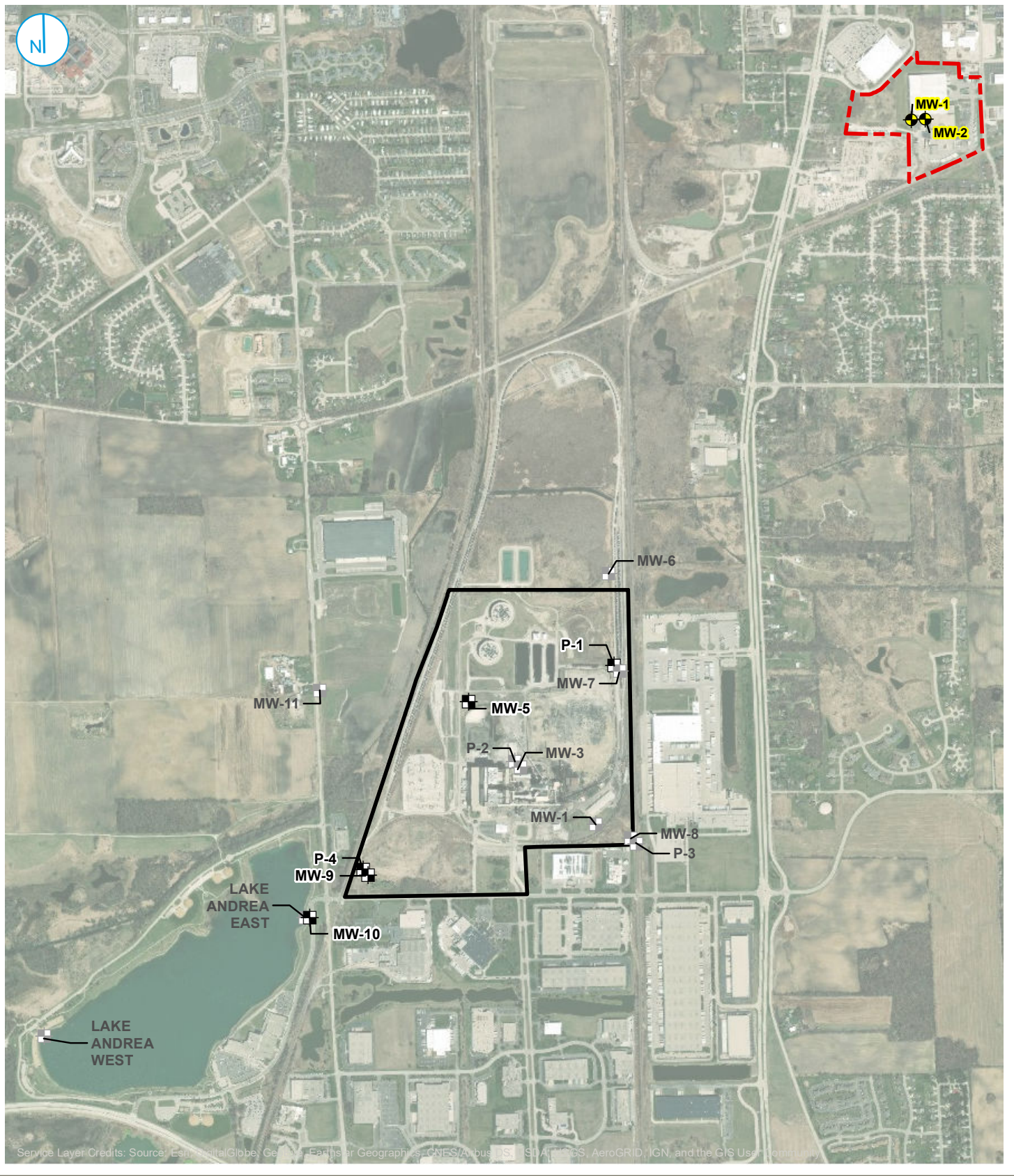
● APPROXIMATE POST-LINER REMOVAL SOIL SAMPLE LOCATION



1 inch = 75 feet  
Date Printed: 5/30/2018



**DISCLAIMER** This map is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, data and information located in various state, county and municipal offices and other sources affecting the area shown and is to be used for reference purposes only. Kenosha County is not responsible for any inaccuracies herein contained. If discrepancies are found, please contact Kenosha County.



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- CURRENT MONITORING LOCATION
- PAST MONITORING LOCATION
- OCEAN SPRAY MONITORING WELL LOCATION
- PLEASANT PRAIRIE POWER PLANT PROPERTY
- OCEAN SPRAY SITE PARCEL BOUNDARY (BRRS #: 02-30-107682)

### OCEAN SPRAY SITE

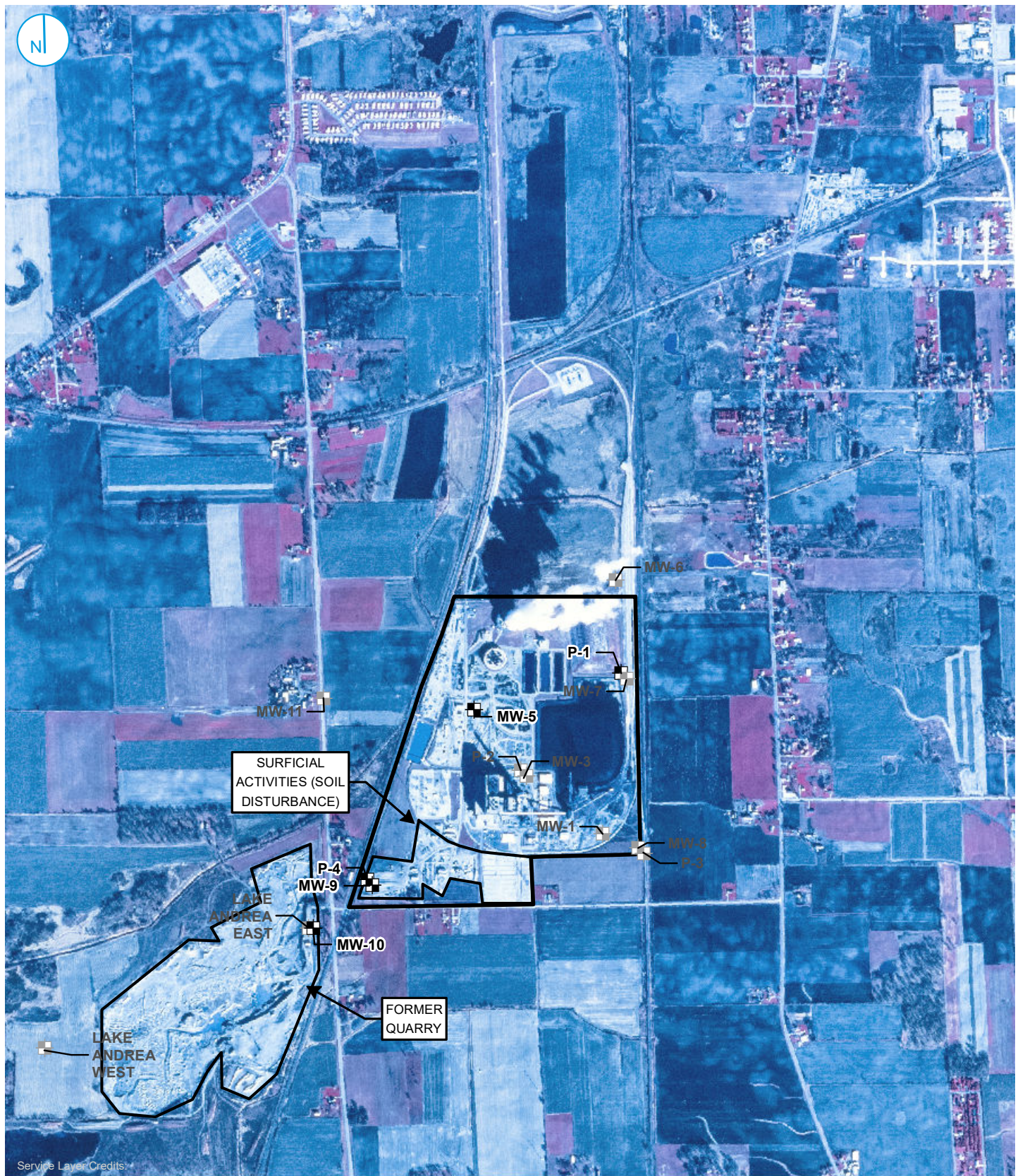
### FIGURE 03

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**WE ENERGIES GROUNDWATER/SURFACE WATER MONITORING  
PLEASANT PRAIRIE POWER PLANT  
PLEASANT PRAIRIE, WISCONSIN**





- CURRENT MONITORING LOCATION
- PAST MONITORING LOCATION
- PLEASANT PRAIRIE POWER PLANT PROPERTY

1981 IMAGERY

FIGURE 04

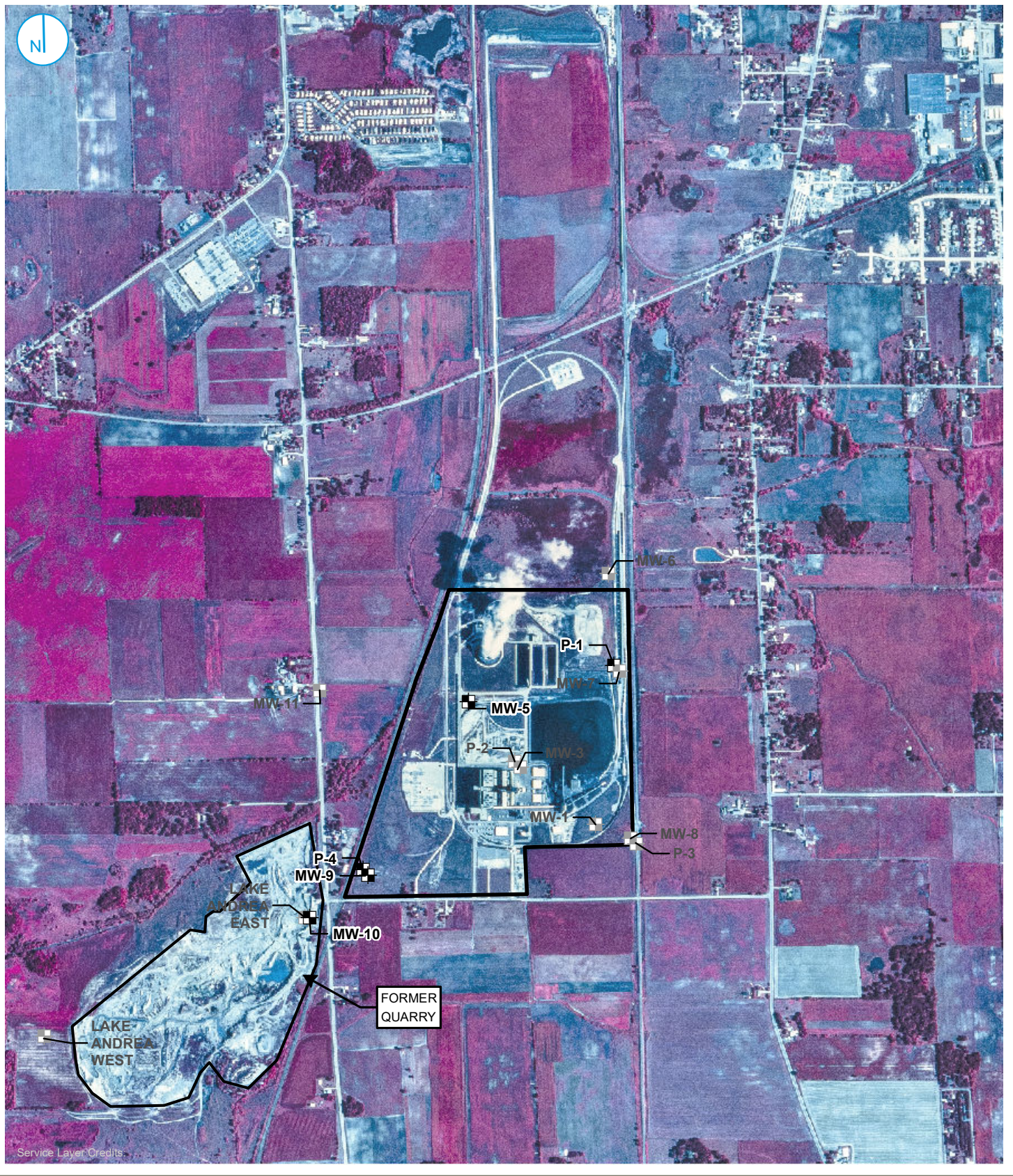
RAMBOLL US CORPORATION  
A RAMBOLL COMPANY






**WE ENERGIES GROUNDWATER/SURFACE WATER MONITORING  
PLEASANT PRAIRIE POWER PLANT  
PLEASANT PRAIRIE, WISCONSIN**







-  CURRENT MONITORING LOCATION
-  PAST MONITORING LOCATION
-  PLEASANT PRAIRIE POWER PLANT PROPERTY

1987 IMAGERY

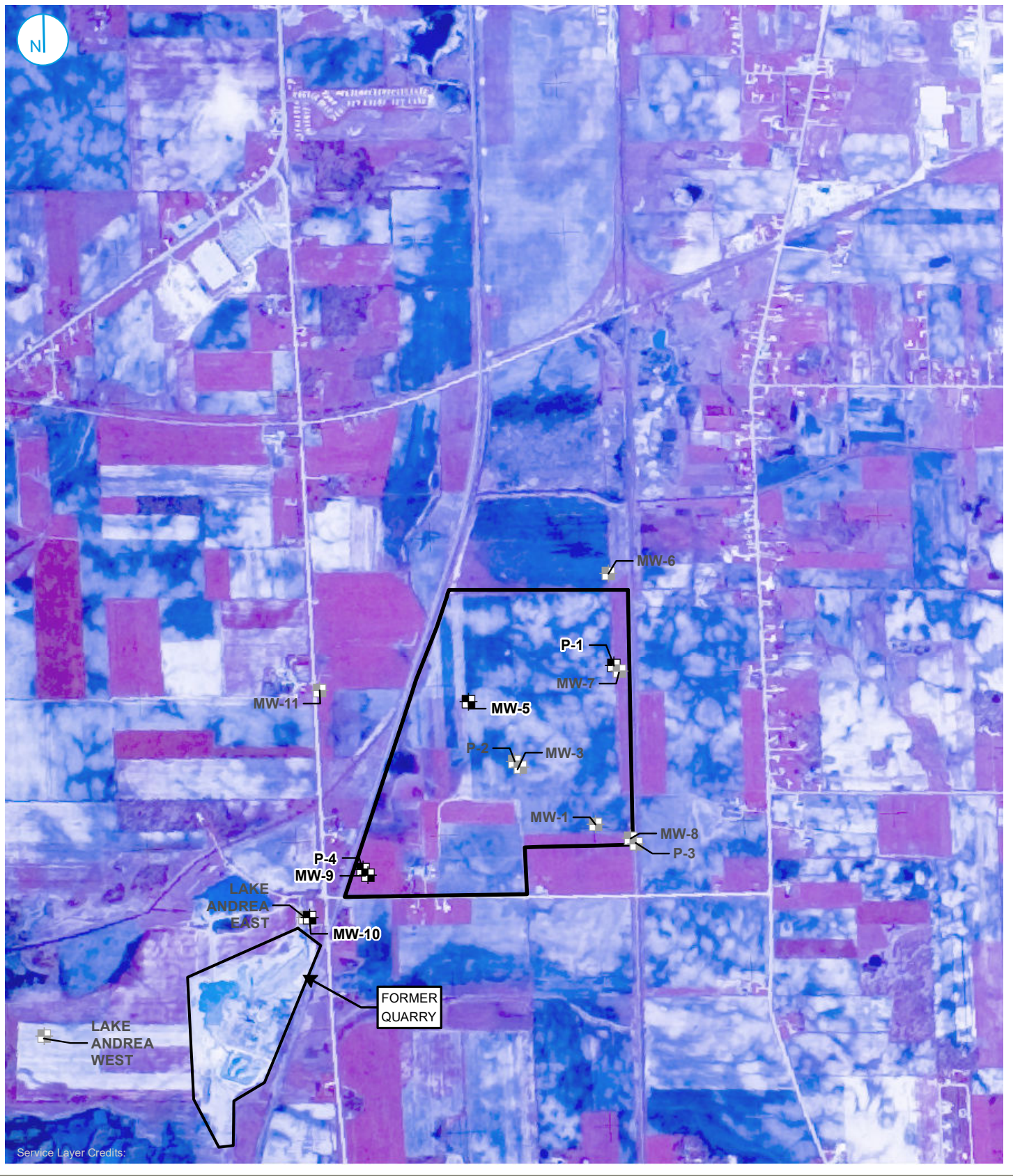
FIGURE 05

RAMBOLL US CORPORATION  
A RAMBOLL COMPANY



**WE ENERGIES GROUNDWATER/SURFACE WATER MONITORING**  
**PLEASANT PRAIRIE POWER PLANT**  
 PLEASANT PRAIRIE, WISCONSIN





Service Layer Credits:

- CURRENT MONITORING LOCATION
- PAST MONITORING LOCATION
- PLEASANT PRAIRIE POWER PLANT PROPERTY

1974 IMAGERY

FIGURE 06

RAMBOLL US CORPORATION  
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**WE ENERGIES GROUNDWATER/SURFACE WATER MONITORING  
PLEASANT PRAIRIE POWER PLANT  
PLEASANT PRAIRIE, WISCONSIN**



## **TABLES**



**Table 1 - Groundwater Analytical Results**

Pleasant Prairie Power Plant  
 We Energies  
 Pleasant Prairie, Wisconsin

9-Digit Code	Sample Location	Sample Date	PAH	PAH	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Inorganic	Inorganic	Inorganic	Inorganic	Inorganic	GEO	GEO	Field Param	RNA	RNA	RNA	RNA		
			Benzo(a)pyrene	Chrysene	Arsenic, Dissolved	Barium, Dissolved	Boron, Dissolved	Cadmium, Dissolved	Calcium, Dissolved	Chromium, Dissolved	Copper, Dissolved	Iron, Dissolved	Lead, Dissolved	Magnesium, Dissolved	Manganese, Dissolved	Mercury, Dissolved	Mercury, Total	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO2 + NO3, Total	Sulfate, Dissolved	Hardness, Dissolved	Solids, Total Dissolved	Elevation, Groundwater (Feet Above Mean Sea Level)	Groundwater, depth to	pH, Field	Specific Conductance, Field	Temperature, Water	
Reporting Units:			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Deg C
			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Wisconsin PAL:			0.02	0.02	1	400	200	0.5	NS	10	130	150	1.5	NS	60	0.2	0.2	10	10	6	2,500	NS	NS	NS	2	125	NS	NS	NS	NS	NS	NS	NS	NS
Wisconsin ES:			0.2	0.2	10	2,000	1,000	5	NS	100	1,300	300	15	NS	300	2	2	50	50	30	5,000	NS	NS	NS	10	250	NS	NS	NS	NS	NS	NS	NS	NS
MW-11-39092	MW-11	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.2	7	1,284	11
MW-11-39184	MW-11	4/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.25	6.9	1,241	10
MW-11-39287	MW-11	7/24/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.99	7.4	1,285	11	
MW-11-39372	MW-11	10/17/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.42	7.2	1,265	13.5	
MW-11-39470	MW-11	1/23/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.87	6.9	1,201	11.5	
MW-11-39562	MW-11	4/24/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.34	7.1	1,322	10	
MW-11-39644	MW-11	7/15/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.44	7.2	1,328	10.5	
MW-11-39729	MW-11	10/8/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.49	6.9	1,279	12	
MW-11-39835	MW-11	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.82	7.6	1,355	11	
MW-11-39912	MW-11	4/9/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.22	7.2	1,257	9.5	
MW-11-40008	MW-11	7/14/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.79	7.4	1,262	10	
MW-11-40106	MW-11	10/20/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.24	7.3	1,223	11.5	
MW-11-40192	MW-11	1/14/2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.29	7.3	1,204	10.5	
MW-11-40281	MW-11	4/13/2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.82	7.3	1,210	9	
MW-11-40379	MW-11	7/20/2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.55	7.5	1,209	11	
MW-11-40476	MW-11	10/25/2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.11	7.5	1,231	13	
MW-11-40660	MW-11	4/27/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.27	7.2	1,111	9.5	
MW-11-41101	MW-11	7/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.38	7.3	1,070	11	
MW-11-41374	MW-11	4/10/2013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.77	7.3	1,124	9	
MW-11-41745	MW-11	4/16/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.44	7.3	1,160	9	
MW-2-35655	MW-2	8/13/1997	--	--	<0.9 U	23	75	<0.1 U	--	<0.6 U	<0.7 U	260	<1 U	--	160	0	<1 U	0	--	<10 U	310	29	<5 U	--	337	700	922	673.09	14.13	7.2	1,187	10.5		
MW-2-36034	MW-2	8/27/1998	--	--	<0.7 U	36	84	0.07	--	<0.2 U	<1 U	22	<0.7 U	--	74	<0.18 U	--	<0.7 U	<0.14 U	--	12	240	36	<3.5 U	--	295	640	824	672.81	14.41	7.2	1,146	11.5	
MW-2-36447	MW-2	10/14/1999	--	--	<1 U	31	100	<0.14 U	150,000	<0.6 U	1.2	90	<0.6 U	61,000	92	<0.18 U	--	<0.9 U	<0.094 U	--	0	310	32	8	--	295	630	744	672.43	14.79	7.3	1,101	13	
MW-2-36766	MW-2	8/28/2000	--	--	<0.9 U	33	90	<0.15 U	140,000	<0.4 U	<1.1 U	67	<0.59 U	57,000	70	<0.18 U	--	<1.2 U	<0.17 U	--	13	270	32	<3.9 U	--	265	580	866	673.85	13.37	7.1	1,036	13	
MW-2-37075	MW-2	7/3/2001	--	--	<0.6 U	34	84	<0.17 U	140,000	<0.4 U	<0.8 U	49	<0.9 U	62,000	51	<0.18 U	--	<1.2 U	<0.17 U	--	3.2	300	33	<2.2 U	--	279	600	836	674	13.22	7.1	1,120	11.5	
MW-2-37265	MW-2	1/9/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	672.87	14.35	6.9	1,054	13
MW-2-37453	MW-2	7/16/2002	--	--	1.7	31	110	<0.12 U	120,000	<0.21 U	<0.9 U	47	<0.7 U	58,000	38	<0.19 U	--	<1.1 U	<0.1 U	<2 U	<3.6 U	300	31	<2.4 U	0.43	219	540	703	673.26	13.96	7.1	982	12	























**Table 1 - Groundwater Analytical Results**

Pleasant Prairie Power Plant  
 We Energies  
 Pleasant Prairie, Wisconsin

9-Digit Code	Sample Location	Sample Date	PAH	PAH	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Metal	Inorganic	Inorganic	Inorganic	Inorganic	Inorganic	GEO	GEO	Field Param	RNA	RNA	RNA	RNA		
			Benzo(a)pyrene	Chrysene	Arsenic, Dissolved	Barium, Dissolved	Boron, Dissolved	Cadmium, Dissolved	Calcium, Dissolved	Chromium, Dissolved	Copper, Dissolved	Iron, Dissolved	Lead, Dissolved	Magnesium, Dissolved	Manganese, Dissolved	Mercury, Dissolved	Mercury, Total	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO2 + NO3, Total	Sulfate, Dissolved	Hardness, Dissolved	Solids, Total Dissolved	Elevation, Groundwater (Feet Above Mean Sea Level)	Groundwater, depth to	pH, Field	Specific Conductance, Field	Temperature, Water	
Reporting Units:			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Wisconsin PAL:			0.02	0.02	1	400	200	0.5	NS	10	130	150	1.5	NS	60	0.2	0.2	10	10	6	2,500	NS	NS	NS	2	125	NS	NS	NS	NS	NS	NS	NS	NS
Wisconsin ES:			0.2	0.2	10	2,000	1,000	5	NS	100	1,300	300	15	NS	300	2	2	50	50	30	5,000	NS	NS	NS	10	250	NS	NS	NS	NS	NS	NS	NS	NS

mg/L = milligrams per liter

NS = A groundwater quality standard has not been established.

NO2 + NO3 = nitrite plus nitrate

J = Estimated Concentration

GEO = Geotechnical Property

ES = Enforcement Standard

Dup = Quality Control Field Duplicate Sample

Deg C = degrees Celsius

µS/cm = microsiemens per centimeter (aka micromhos per centimeter)

µg/L = micrograms per liter (equivalent to parts per billion - ppb)

< = Concentration is less than reported limit

Lab comments, additional data qualifiers and definitions can be found in associated laboratory reports.



**TABLE 2A**  
**SUMMARY OF POST-LINER REMOVAL SOIL SAMPLE FIELD OBSERVATION**  
 COAL PILE RUNOFF BASIN ABANDONMENT  
 Pleasant Prairie Power Plant  
 Pleasant Prairie, Wisconsin

Sample ID	Sample Collection Date	Sample Depth (feet, bgs)	PID (ppm)	Soil Classification
SS-01	1/16/2019	0-0.5	4.0	gray/black CLAY (FILL), moist
SS-02	1/16/2019	0-0.5	< 1	brown/dark gray CLAY (FILL), moist, trace gravel
SS-03	1/16/2019	0-0.5	1.4	brown/dark gray CLAY (FILL), moist, trace gravel
SS-04	1/16/2019	0-0.5	< 1	brown/dark gray CLAY (FILL), moist, trace gravel
SS-05	1/16/2019	0-0.5	< 1	brown/dark gray CLAY (FILL), moist, trace gravel
SS-06	1/16/2019	0-0.5	< 1	brown/grayish brown CLAY (FILL), moist, trace to few gravel
SS-07	1/16/2019	0-0.5	< 1	gray/black CLAY (FILL), moist, trace gravel
SS-08	1/16/2019	0-0.5	1.1	gray/brown CLAY (FILL), moist, few sand, trace gravel
SS-09	1/16/2019	0-0.5	< 1	gray CLAY, moist, few sand, trace gravel
SS-10	1/16/2019	0-0.5	< 1	gray/grayish brown CLAY, moist, few sand, trace gravel
SS-11	1/16/2019	0-0.5	< 1	brown/grayish brown CLAY (FILL), moist, few sand, trace gravel
SS-12	1/16/2019	0-0.5	< 1	brown/grayish brown CLAY, moist, few sand, trace gravel
SS-13	1/16/2019	0-0.5	< 1	grayish brown CLAY (FILL), moist, few sand, trace gravel
SS-14	1/16/2019	0-0.5	< 1	grayish brown CLAY, moist, few sand, trace gravel
SS-15	1/16/2019	0-0.5	< 1	dark gray CLAY with GRAVEL (FILL), moist, few sand
SS-16	1/16/2019	0-0.5	< 1	black/brown/gray CLAY (FILL), moist, few sand, trace to few gravel

*Notes:*

bgs - below ground surface

PID - photoionization detector VOC field screening instrument

ppm - parts per million

VOC - volatile organic compound

**TABLE 2B**  
**SUMMARY OF POST-LINER REMOVAL SOIL SAMPLE LABORATORY ANALYTICAL RESULTS**  
 COAL PILE RUNOFF BASIN ABANDONMENT  
 Pleasant Prairie Power Plant  
 Pleasant Prairie, Wisconsin

Sample ID	SS-01	SS-02	SS-03	SS-04	SS-05	SS-06	SS-06 DUP	SS-07	SS-08	WDNR Soil RCL			WDNR BTV
										Direct Contact		Groundwater Protection (DF=2)	
Sample Collection Date	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	Non-Industrial	Industrial	
Sample Depth (feet, bgs)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5			
<b>Metals (mg/kg)</b>													
Arsenic	6.9	7.5	8.5	8.0	10.2	8.0	8.4	8.6	7.1	0.677	3	0.584	8
Cadmium	0.17 J	< 0.12	< 0.11	< 0.11	< 0.12	< 0.11	< 0.11	< 0.12	< 0.12	71.1	985	0.752	1
Chromium, trivalent	22.2 J	22.5 J	27.5 J	22.1 J	23.2 J	22.5 J	19.6 J	19.7 J	23.0 J	100000	100000	--	44
Chromium, hexavalent	< 2.56	< 2.57	< 2.59	< 2.53	< 2.57	< 2.58	< 2.52	< 2.63	< 2.52	0.301	6.36	--	
Copper	20.4	20.4	23.0	23.2	23.8	31.3	22.3	21.6	17.7	3130	46700	91.6	35
Iron	20500	20400	24400	20200	21900	19700	19100	19800	23200	54800	100000	--	34314
Lead	10.3	10.6	14.0	11.8	14.9	11.6	10.9	11.9	12.4	400	800	27	52
Manganese	575	551	578	498	559	527	578	505	365	1830	25900	39.1244	2937
Sulfate	252	296	272	155	142	139	209	253	186	--	--	--	--
Zinc	60.9	61.0	66.7	59.7	64.2	438	46.7	61.6	64.3	23500	100000	--	150
<b>VOCs (ug/kg)</b>	ND	--	ND	--	--	--	--	--	ND	--	--	--	--

Sample ID	SS-09	SS-10	SS-11	SS-12	SS-13	SS-14	SS-15	SS-16	WDNR Soil RCL			WDNR BTV
									Direct Contact		Groundwater Protection (DF=2)	
Sample Collection Date	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019	1/16/2019				
Sample Depth (feet, bgs)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5				
<b>Metals (mg/kg)</b>												
Arsenic	6.7	7.5	10.6	7.2	8.8	8.9	9.7	8.5	0.677	3	0.584	8
Cadmium	< 0.11	< 0.11	< 0.12	< 0.11	0.24 J	< 0.12	0.12 J	0.17 J	71.1	985	0.752	1
Chromium, trivalent	19.4 J	20.6 J	26.1 J	20.2 J	20.2 J	11.8 J	19.7 J	16.8 J	100000	100000	--	44
Chromium, hexavalent	< 2.50	< 2.54	< 2.61	< 2.53	< 2.57	6.56 J	< 2.52	< 2.61	0.301	6.36	--	
Copper	18.9	18.7	27.0	19.0	29.6	21.0	29.9	20.7	3130	46700	91.6	35
Iron	18800	21900	24600	18100	21300	19800	22000	18300	54800	100000	--	34314
Lead	9.6	14.2	14.1	10.7	13.3	11.0	16.2	11.7	400	800	27	52
Manganese	494	387	618	523	544	579	446	498	1830	25900	39.1244	2937
Sulfate	235	97.9	234	137	160	129	376	313	--	--	--	--
Zinc	42.7	59.1	64.8	54.5	70.0	58.1	74.8	62.8	23500	100000	--	150
<b>VOCs (ug/kg)</b>	--	--	--	--	--	--	--	--	--	--	--	--

WDNR Soil RCL			WDNR BTV
Direct Contact		Groundwater Protection (DF=2)	
Non-Industrial	Industrial		
0.677	3	0.584	8
71.1	985	0.752	1
100000	100000	--	44
0.301	6.36	--	
3130	46700	91.6	35
54800	100000	--	34314
400	800	27	52
1830	25900	39.1244	2937
--	--	--	--
23500	100000	--	150
--	--	--	--

*Notes:*

- not analyzed, not established or not applicable
- bgs - below ground surface
- BTV - background threshold value
- DF - dilution factor
- DUP - duplicate
- J - estimated concentration at or above the limit of detection and below the limit of quantitation
- mg/kg - milligrams per kilogram
- ND - not detected (refer to laboratory report for detection limits)
- RCL - residual contaminant level (June 2018)
- ug/kg - micrograms per kilogram
- VOCs - volatile organic compounds
- WDNR - Wisconsin Department of Natural Resources

**Table 3 - Surface Water Analytical Results**

Pleasant Prairie Power Plant  
We Energies  
Pleasant Prairie, Wisconsin

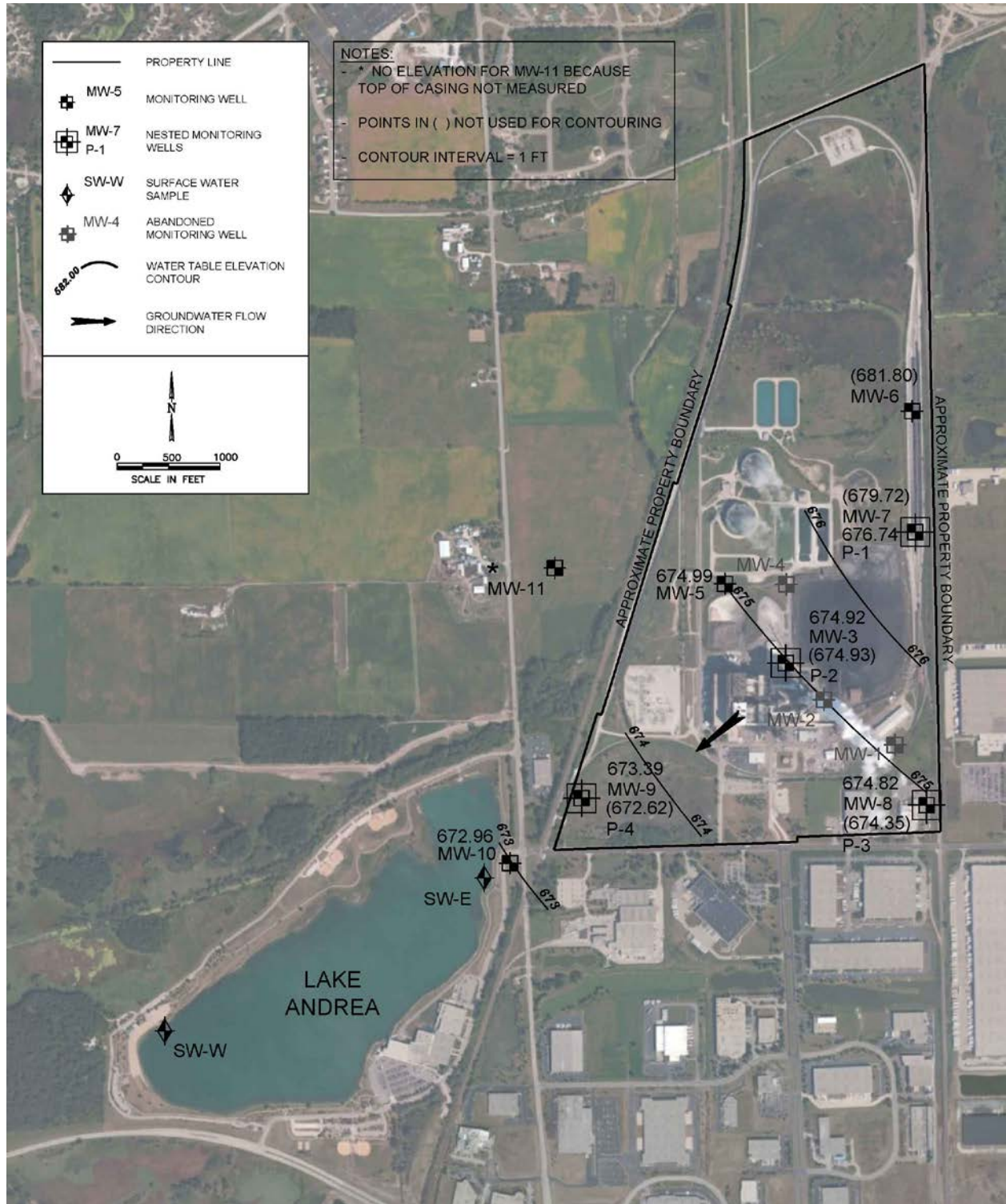
9-Digit Code	Sample Location	Sample Date	Inorganic		RNA	RNA	RNA	RNA
			Sulfate, Dissolved	Groundwater, depth to	pH, Field	Specific Conductance, Field	Temperature, Water	
								mg/L
Reporting Units:			Result	Flag	Result	Result	Result	Result
LAEast-38860	LAEast	5/23/2006	<b>446</b>	--	--	--	--	--
LAEast-39092	LAEast	1/10/2007	<b>440</b>	0	7.9	1,173	1.5	1.5
LAEast-39184	LAEast	4/12/2007	<b>430</b>	--	7.3	1,109	5.5	5.5
LAEast-39287	LAEast	7/24/2007	<b>430</b>	--	7.8	1,130	24.5	24.5
LAEast-39372	LAEast	10/17/2007	<b>440</b>	0	7.5	1,108	16.5	16.5
LAEast-39470	LAEast	1/23/2008	<b>420</b>	0	7.4	1,152	0	0
LAEast-39562	LAEast	4/24/2008	<b>390</b>	--	7.9	1,143	13.5	13.5
LAEast-39644	LAEast	7/15/2008	<b>380</b>	--	8	1,132	24	24
LAEast-39729	LAEast	10/8/2008	<b>400</b>	--	7.9	1,124	15	15
LAEast-39912	LAEast	4/9/2009	<b>350</b>	--	8.2	1,098	9	9
LAEast-40008	LAEast	7/14/2009	<b>340</b>	--	8.4	1,080	22	22
LAEast-40281	LAEast	4/13/2010	<b>360</b>	--	8.3	1,266	10.5	10.5
LAEast-40379	LAEast	7/20/2010	<b>340</b>	--	8.4	1,244	25.5	25.5
LAEast-40660	LAEast	4/27/2011	<b>340</b>	--	8.1	1,119	10	10
LAEast-41101	LAEast	7/11/2012	<b>370</b>	--	8.2	1,142	26.5	26.5
LAEast-41374	LAEast	4/10/2013	<b>340</b>	--	8.1	1,224	6.5	6.5
LAEast-41745	LAEast	4/16/2014	<b>330</b>	--	8.2	1,218	8	8
LakeAndreaB-39184	LakeAndreaB	4/12/2007	<b>420</b>	--	7.7	1,108	6	6
LAWest-38860	LAWest	5/23/2006	<b>447</b>	--	--	--	--	--
LAWest-39092	LAWest	1/10/2007	<b>440</b>	0	7.6	1,168	1.5	1.5
LAWest-39184	LAWest	4/12/2007	<b>430</b>	--	7.6	1,116	5.5	5.5
LAWest-39287	LAWest	7/24/2007	<b>390</b>	--	7.9	1,173	24.5	24.5
LAWest-39372	LAWest	10/17/2007	<b>460</b>	0	7.9	1,124	16.5	16.5
LAWest-39470	LAWest	1/23/2008	<b>420</b>	0	7.8	1,162	0	0
LAWest-39562	LAWest	4/24/2008	<b>390</b>	--	7.1	1,146	13.5	13.5
LAWest-39644	LAWest	7/15/2008	<b>380</b>	--	7.4	1,135	23	23
LAWest-39729	LAWest	10/8/2008	<b>400</b>	--	7.1	1,124	16	16
LAWest-39912	LAWest	4/9/2009	<b>350</b>	--	7.6	1,102	7	7
LAWest-40008	LAWest	7/14/2009	<b>350</b>	--	8.3	1,079	22.5	22.5
LAWest-40281	LAWest	4/13/2010	<b>360</b>	--	8	1,259	10.5	10.5
LAWest-40379	LAWest	7/20/2010	<b>340</b>	--	8.3	1,241	26.5	26.5
LAWest-40660	LAWest	4/27/2011	<b>340</b>	--	8	1,173	9.5	9.5
LAWest-41101	LAWest	7/11/2012	<b>370</b>	--	8.2	1,147	21.5	21.5
LAWest-41374	LAWest	4/10/2013	<b>330</b>	--	7.9	1,416	6.5	6.5
LAWest-41745	LAWest	4/16/2014	<b>330</b>	--	8.2	1,227	8	8
SG-1A-39286	SG-1A	7/23/2007	--	27.8	--	--	--	--
SG-1A-39561	SG-1A	4/23/2008	--	16.85	--	--	--	--
SG-1A-39643	SG-1A	7/14/2008	--	18.1	--	--	--	--
SG-1A-39729	SG-1A	10/8/2008	--	22.41	--	--	--	--
SG-1A-40007	SG-1A	7/13/2009	--	6.52	--	--	--	--
SG-2-39286	SG-2	7/23/2007	--	9.85	--	--	--	--
SG-2-39561	SG-2	4/23/2008	--	10.25	--	--	--	--
SG-2-39643	SG-2	7/14/2008	--	9.91	--	--	--	--
SG-2-39729	SG-2	10/8/2008	--	8.05	--	--	--	--
SG-2-39911	SG-2	4/8/2009	--	7.8	--	--	--	--
SG-2-40007	SG-2	7/13/2009	--	9.4	--	--	--	--
SG-3-39286	SG-3	7/23/2007	--	7.2	--	--	--	--
SG-3-39561	SG-3	4/23/2008	--	7.2	--	--	--	--
SG-3-39643	SG-3	7/14/2008	--	7.37	--	--	--	--
SG-3-39729	SG-3	10/8/2008	--	5.51	--	--	--	--
SG-3-39911	SG-3	4/8/2009	--	18.25	--	--	--	--
SG-31-39911	SG-31	4/8/2009	--	5.29	--	--	--	--

[O:CMD 2/6/20, C:CMD 2/6/20]

Underlined concentration that attains or exceeds WDNR PAL  
**Bold** concentration that attains or exceeds WDNR ES  
 PAL and ES from WI Administrative Code NR 140 groundwater quality standard revised effective February 2017.  
 -- = Analysis not performed  
 WDNR = Wisconsin Department of Natural Resources  
 U = Concentration was not detected above the reported limit  
 s.u. = standard units  
 RNA = Remediation by Natural Attenuation (lab and field)  
 PAL = Preventive Action Limit  
 PAH = Polycyclic Aromatic Hydrocarbon  
 mg/L = milligrams per liter  
 NS = A groundwater quality standard has not been established.  
 NO2 + NO3 = nitrite plus nitrate  
 J = Estimated Concentration  
 GEO = Geotechnical Property  
 ES = Enforcement Standard  
 Dup = Quality Control Field Duplicate Sample  
 Deg C = degrees Celsius  
 µS/cm = microsiemens per centimeter (aka micromhos per centimeter)  
 µg/L = micrograms per liter (equivalent to parts per billion - ppb)  
 < = Concentration is less than reported limit

Lab comments, additional data qualifiers and definitions can be found in associated laboratory reports.

## **ATTACHMENT A**



**Figure 1. Site map showing current monitoring locations and groundwater elevations in April 2014. MW6, MW7, P3, and P4 were not used for contouring because they are screened in clay; MW3 was used instead of P2 for contouring because MW3 is closer to the water table; and MW11 was not used for contouring because the top of casing elevation was not surveyed.**

## **ATTACHMENT B**

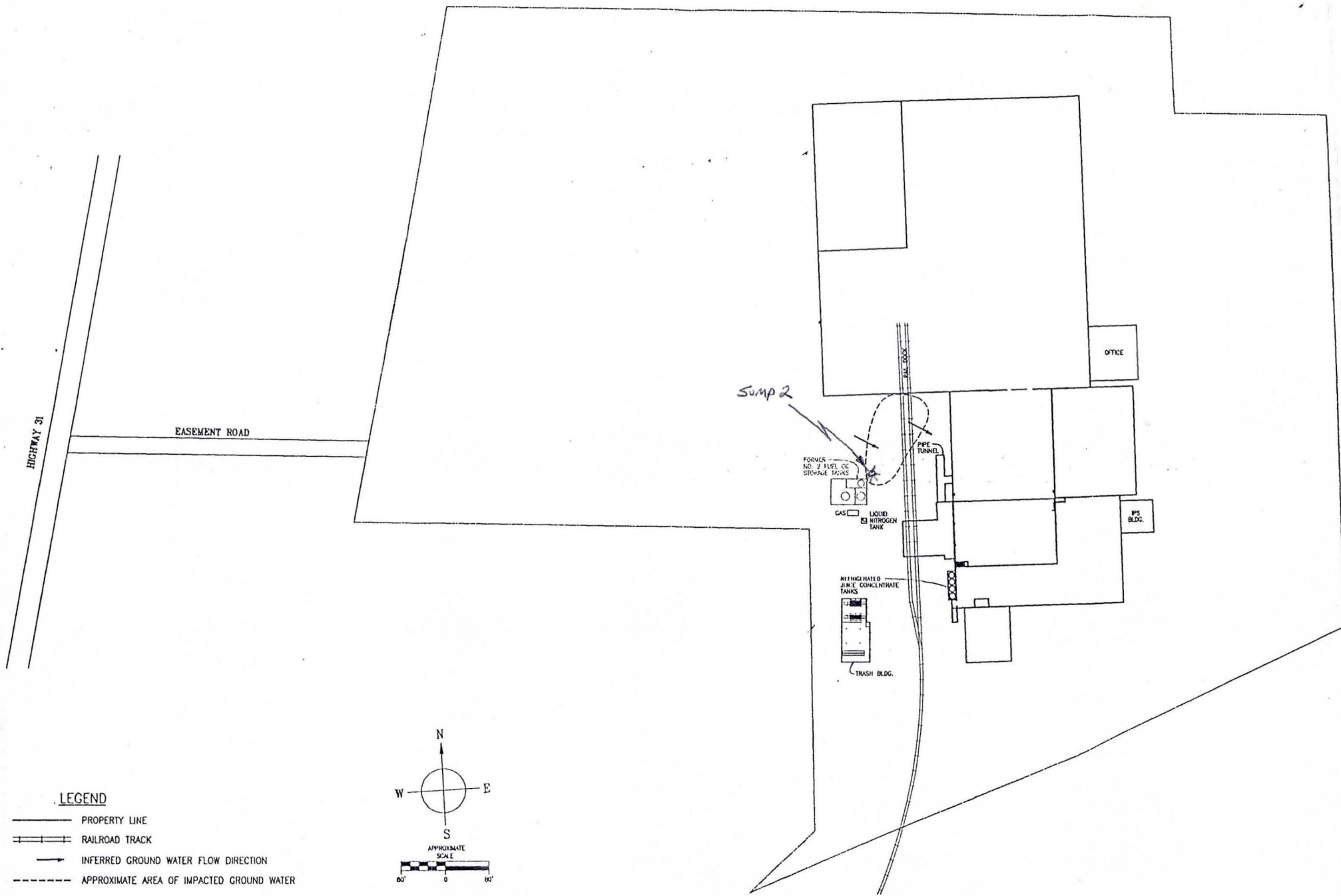
**Table B-1 - Groundwater Analytical Results**

BRRTS#: 02-30-107682

Ocean Spray

Pleasant Prairie, Wisconsin

Well ID	Date	Iron (ug/L)	Sulfate (mg/L)
MW-1	3/14/1997	458	648
MW-1	6/17/1997	235	870
MW-1	9/3/1997	<50.0	734
MW-1	12/3/1997	298	730
MW-2	3/14/1997	425	264
MW-2	6/17/1997	243	318
MW-2	9/3/1997	<50.0	289
MW-2	12/3/1997	359	252



**LEGEND**

- PROPERTY LINE
- ▬ RAILROAD TRACK
- INFERRED GROUND WATER FLOW DIRECTION
- - - - - APPROXIMATE AREA OF IMPACTED GROUND WATER

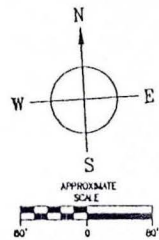




TABLE 3  
 REMEDIATION BY NATURAL ATTENUATION INDICATOR MEASUREMENTS  
 OCEAN SPRAY CRANBERRIES, INC.  
 7800 60TH AVENUE  
 KENOSHA, WISCONSIN

Monitoring Location Date Sampled Lab		MW-1				MW-2			
		3/14/97 SAI	6/17/97 SAI	9/3/97 SAI	12/3/97 SAI	3/14/97 SAI	6/17/97 SAI	9/3/97 SAI	12/3/97 SAI
Lab ID:	Units	97-A020067	97-A049203	97-A074110	97-A109499	97-A020068	97-A049204	97-A074111	97-A109500
Temperature	°C	7.2	9.85	13.69	10.83	6.83	9.66	14.32	11.57
DO	mg/L	3	4.82	5.03	2.16	3.87	3.68	2.79	1.15
Specific Conductance	µmhos/cm	1902	2225	1672	1486	1183	1557	1162	1023
pH		6.82	7.00	7.08	7.12	6.94	7.09	7.16	7.12
TDS	g/L	1.218	1.427	1.071	0.951	0.757	0.995	0.744	0.654
ORP	mv	383	458	419	409	370	455	219	400
CO <sub>2</sub>	mg/L	NA	152.8	162	NA	NA	98.6	114	NA
Iron (dissolved)	µg/L	458	235	<50.0	298	425	243	<50.0	359
Manganese (dissolved)	µg/L	41	<15.0	<15.0	<15.0	21	<15.0	<15.0	<15.0
Nitrate-N	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate (total)	mg/L	648	878	734	758	284	318	289	252
Alkalinity	mg/L	340	300	339	343	402	351	424	463
Methane	µg/L	NA	<26.0	<26.0	<26	NA	<26.0	<26.0	<26

Notes:

- °C - Degrees celsius
- DO - Dissolved oxygen
- TDS - Total dissolved solids
- ORP - Oxygen-reduction potential
- mg/L - Milligrams per liter
- µg/mL - Micrograms per milliliter
- µmhos/cm - Micromhos per centimeter
- g/L - Grams per liter
- mv - Millivolts
- NM - Not measured; Parameters were not measured due to the presence of free product.
- \* - A CO<sub>2</sub> measurement could not be determined due to the color and turbidity of the sample.
- NA - Not analyzed
- SAI - Specialized Assays, Incorporated.  
 2960 Foster Creighton Drive  
 Nashville, Tennessee 37204-0566  
 WDNR Certification No. 998020430

TABLE 3  
 REMEDIATION BY NATURAL ATTENUATION INDICATOR MEASUREMENTS  
 OCEAN SPRAY CRANBERRIES, INC.  
 7800 60TH AVENUE  
 KENOSHA, WISCONSIN

Monitoring Location Date Sampled Lab		MW-3				MW-4			
		3/14/97 SAI	6/17/97 SAI	9/3/97 SAI	12/3/97 SAI	3/14/97 SAI	6/17/97 SAI	9/3/97 SAI	12/3/97 SAI
Lab ID:	Units	97-A020069	97049205	97-A074112	97-A109501	97-A020070	97-A049206	97-A074113	97-A109502
Temperature	°C	6.78	12.02	15.92	13.22	5.6	14.98	16.19	12.55
DO	mg/L	4.13	3.57	1.25	0.38	NM	4.39	2.51	0.5
Specific Conductance	µmhos/cm	1080	1389	1054	984	1080	41	1192	1024
pH		6.83	7.06	7.00	7.01	6.8	6.67	6.96	7.14
TDS	g/L	6.92	0.884	0.674	0.631	NM	0.026	0.763	0.656
ORP	mv	370	461	417	408	NM	410	167	153
CO <sub>2</sub>	mg/L	NA	93.4	*	NA	*	114.4	133	NA
Iron (dissolved)	µg/L	463	708	76	347	501	665	125	2,500
Manganese (dissolved)	µg/L	471	396	192	136	2,290	3,280	4,560	3,510
Nitrate-N	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate (total)	mg/L	142	178	189	195	48.5	79.8	14.1	<5.0
Alkalinity	mg/L	443	364	461	478	470	424	572	598
Methane	µg/L	NA	<26.0	41	<26	NA	4,000	8,600	6,450

Notes:

- °C - Degrees celsius
- DO - Dissolved oxygen
- TDS - Total dissolved solids
- ORP - Oxygen-reduction potential
- mg/L - Milligrams per liter
- µg/mL - Micrograms per milliliter
- µmhos/cm - Micromhos per centimeter
- g/L - Grams per liter
- mv - Millivolts
- NM - Not measured; Parameters were not measured due to the presence of free product.
- \* - A CO<sub>2</sub> measurement could not be determined due to the color and turbidity of the sample.
- NA - Not analyzed
- SAI - Specialized Assays, Incorporated.  
 2960 Foster Creighton Drive  
 Nashville, Tennessee 37204-0566  
 WDNR Certification No. 998020430

TABLE 3  
 REMEDIATION BY NATURAL ATTENUATION INDICATOR MEASUREMENTS  
 OCEAN SPRAY CRANBERRIES, INC.  
 7800 60TH AVENUE  
 KENOSHA, WISCONSIN

Monitoring Location Date Sampled Lab		Sump 1 (RS-1)				Sump 2 (RS-2)			
		3/14/97 SAI	6/17/97 SAI	9/3/97 SAI	12/3/97 SAI	3/14/97 SAI	6/17/97 SAI	9/3/97 SAI	12/3/97 SAI
Lab ID:	Units	97-A020071	97-A049207	97-A074114	97-A109503	97-A020072	97-A049207	97-A074115	97-A109504
Temperature	°C	6.3	15.93	17.11	8.38	5.2	15.95	19.12	12.37
DO	mg/L	NM	0.52	1.72	1.46	NM	0.30	1.28	0.53
Specific Conductance	µmhos/cm	1710	1194	19539	16317	620	7,470	7,881	6380
pH		7.8	7.15	6.76	6.69	8.1	6.8	6.94	6.82
TDS	g/L	NM	0.857	12.47	10.68	NM	4.827	5.052	4.109
ORP	mv	NM	385	149	212	NM	155	137	154
CO <sub>2</sub>	mg/L	NA	24.4	51	NA	NA	*	47	NA
Iron (dissolved)	µg/L	782	202	19,400	131	244	5,260	4,360	10,900
Manganese (dissolved)	µg/L	155	24	795	81.0	<15	223.0	230.0	188.0
Nitrate-N	mg/L	<0.10	0.25	<0.10	0.21	<0.10	<0.10	<0.10	<0.10
Sulfate (total)	mg/L	29.8	18.0	<5.0	28.0	11.5	<5.0	<5.0	<5.0
Alkalinity	mg/L	81	45.4	355	88.4	59.4	261	323	442
Methane	µg/L	NA	1,000	22,600	96	NA	13,000	38,800	20,800

Notes:

- °C - Degrees celsius
- DO - Dissolved oxygen
- TDS - Total dissolved solids
- ORP - Oxygen-reduction potential
- mg/L - Milligrams per liter
- µg/mL - Micrograms per milliliter
- µmhos/cm - Micromhos per centimeter
- g/L - Grams per liter
- mv - Millivolts
- NM - Not measured; Parameters were not measured due to the presence of free product.
- \* - A CO<sub>2</sub> measurement could not be determined due to the color and turbidity of the sample.
- NA - Not analyzed
- SAI - Specialized Assays, Incorporated.  
 2960 Foster Creighton Drive  
 Nashville, Tennessee 37204-0566  
 WDNR Certification No. 998020430

GW Analytical Results

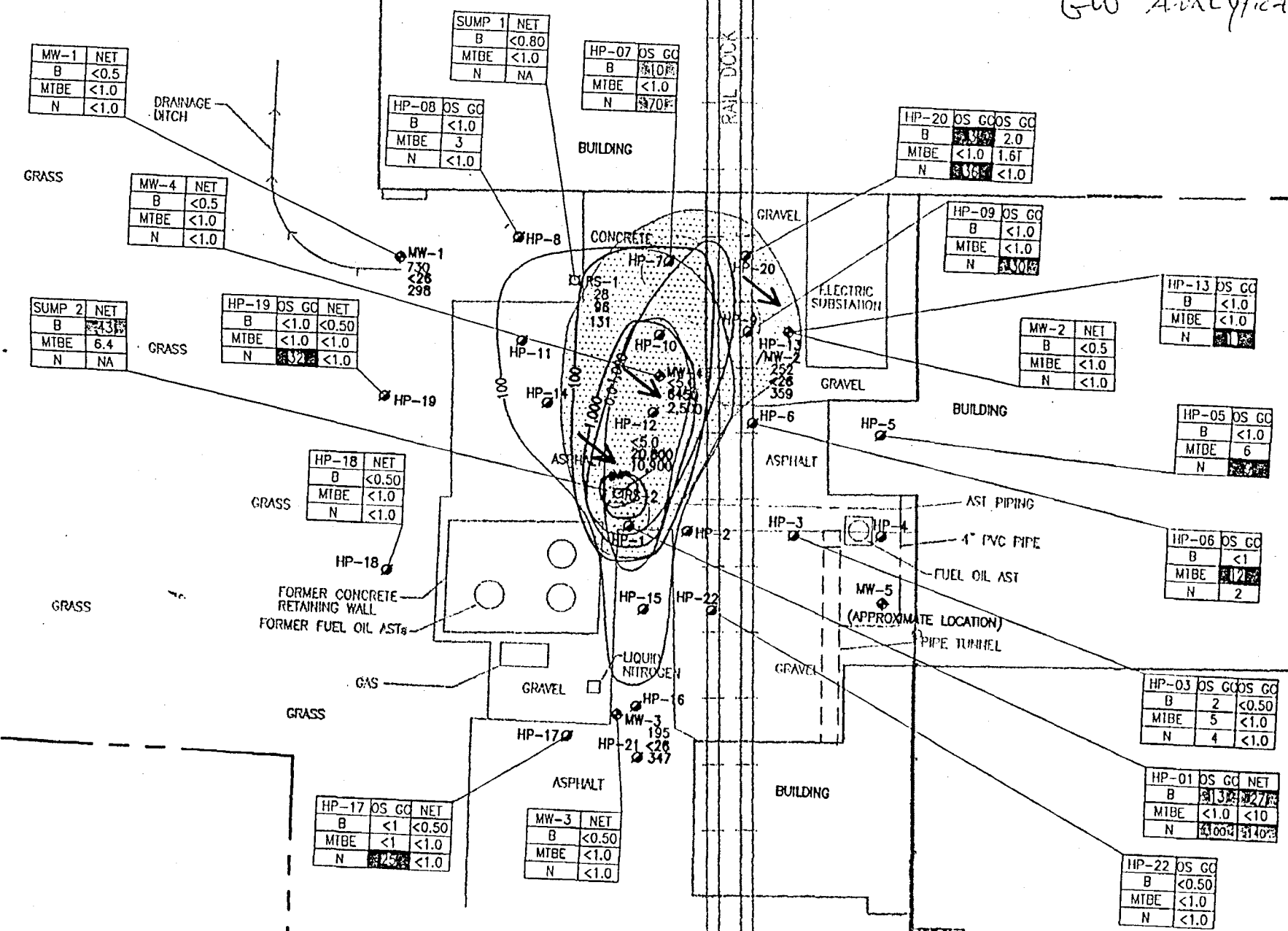
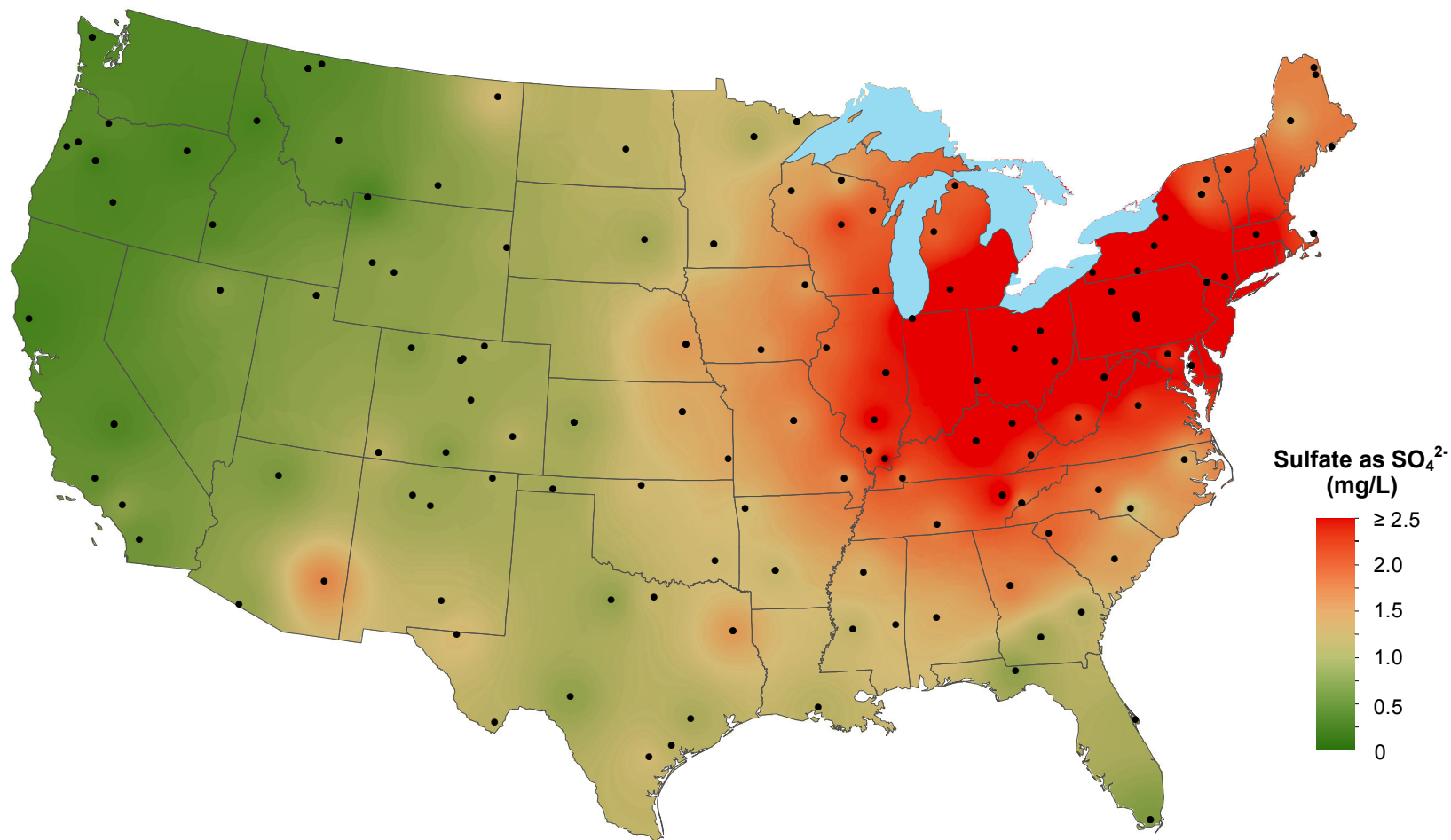


FIGURE 1

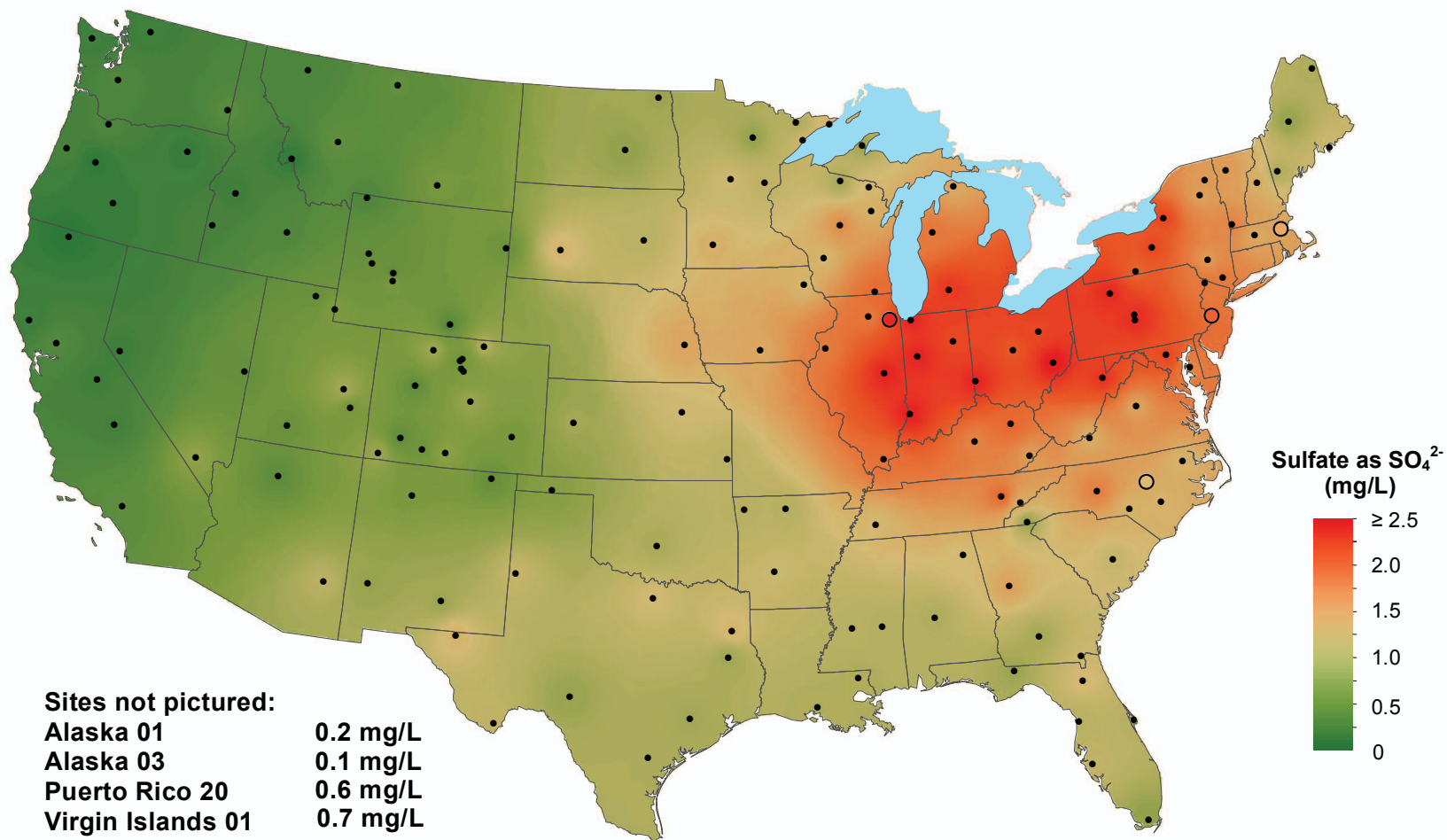
**ATTACHMENT C1**

## Sulfate ion concentration, 1985

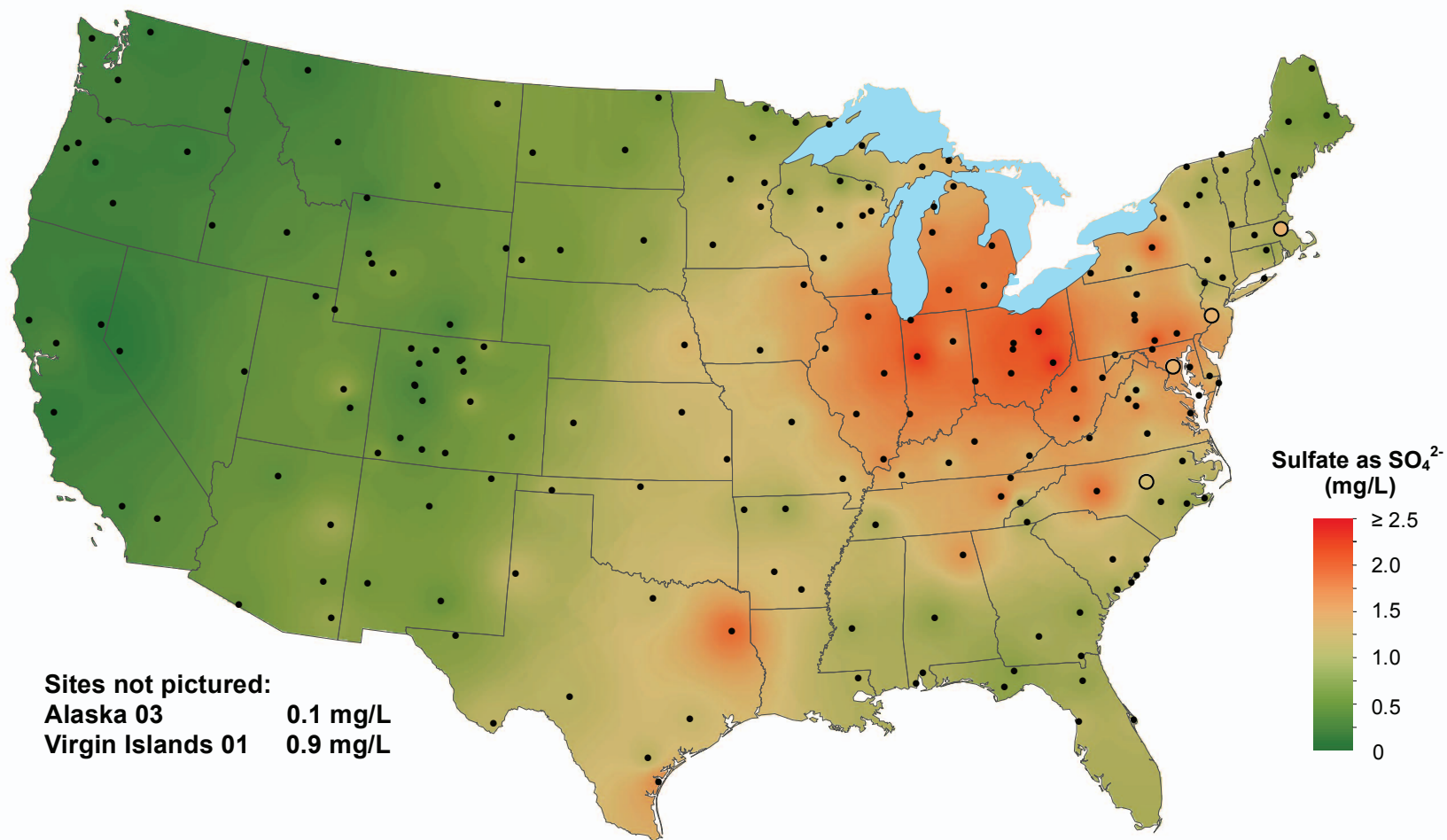


National Atmospheric Deposition Program/National Trends Network  
<http://nadp.isws.illinois.edu>

## Sulfate ion concentration, 1998

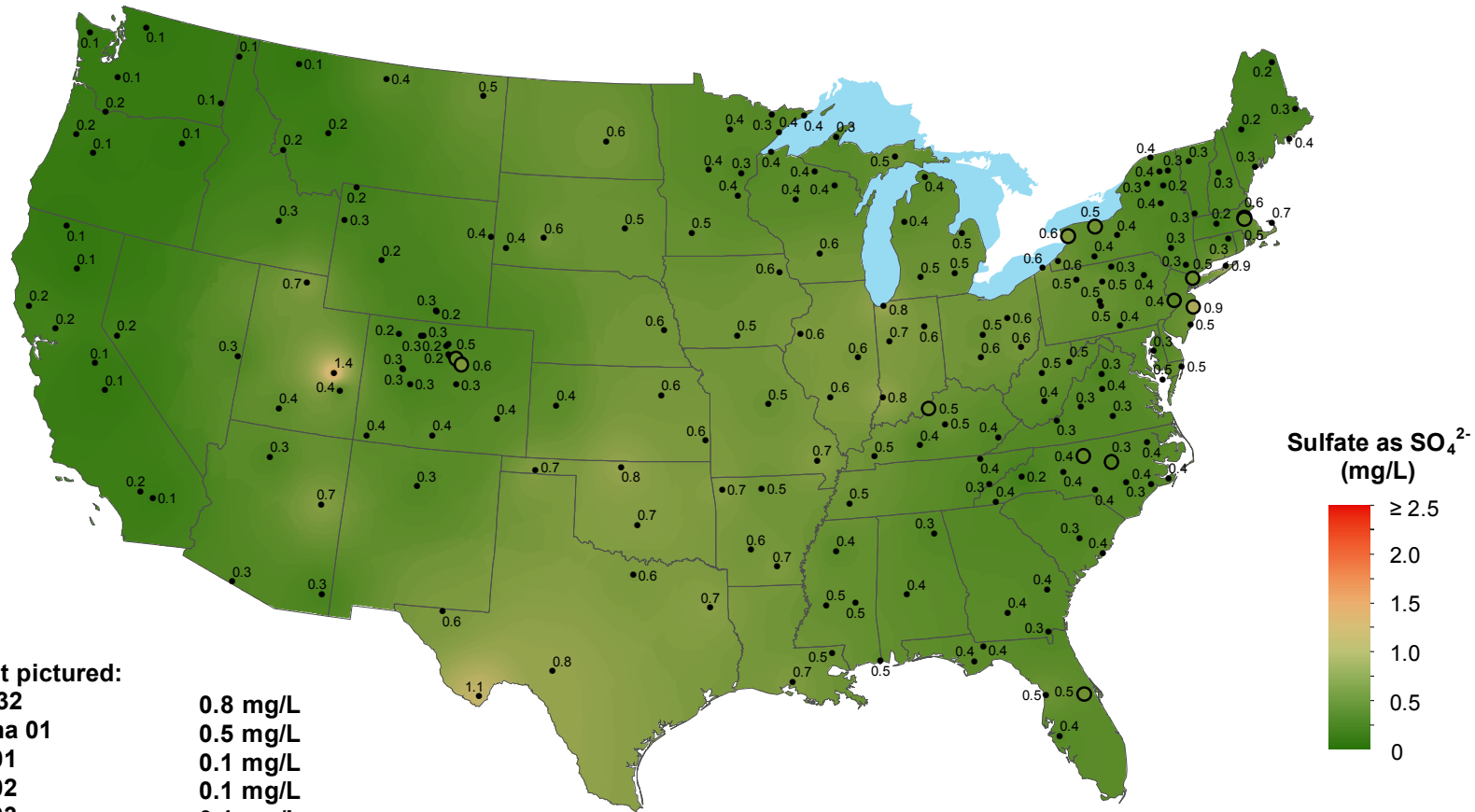


## Sulfate ion concentration, 2005





# Sulfate ion concentration, 2017



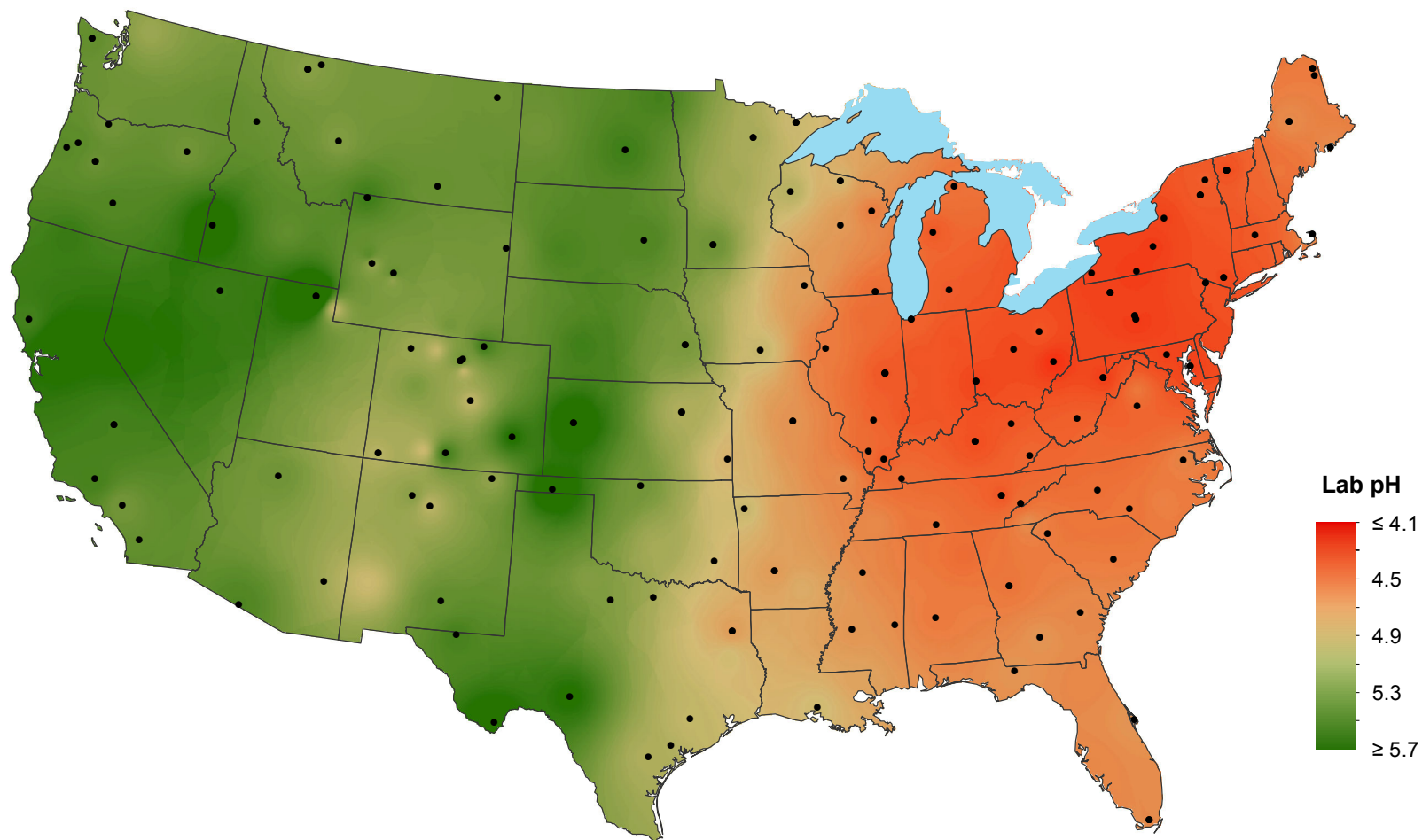
**Sites not pictured:**

Alberta 32	0.8 mg/L
Argentina 01	0.5 mg/L
Alaska 01	0.1 mg/L
Alaska 02	0.1 mg/L
Alaska 03	0.1 mg/L
Alaska 97	0.3 mg/L
British Columbia 22	1.5 mg/L
British Columbia 23	0.3 mg/L
British Columbia 24	0.2 mg/L
Saskatchewan 21	0.3 mg/L
Saskatchewan 31	0.4 mg/L

National Atmospheric Deposition Program/National Trends Network  
<http://nadp.slh.wisc.edu>

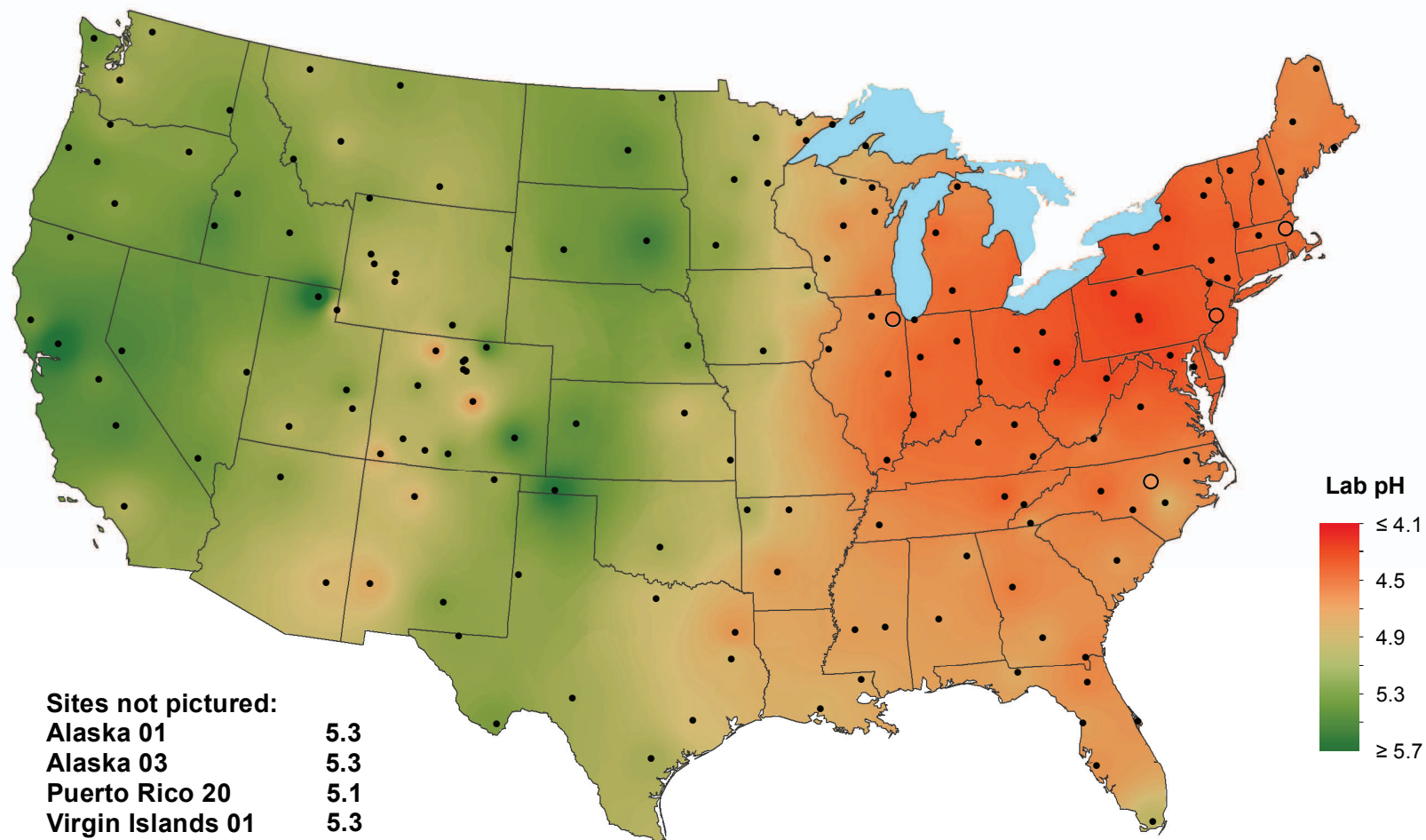
## **ATTACHMENT C2**

## Hydrogen ion concentration as pH from measurements made at the Central Analytical Laboratory, 1985

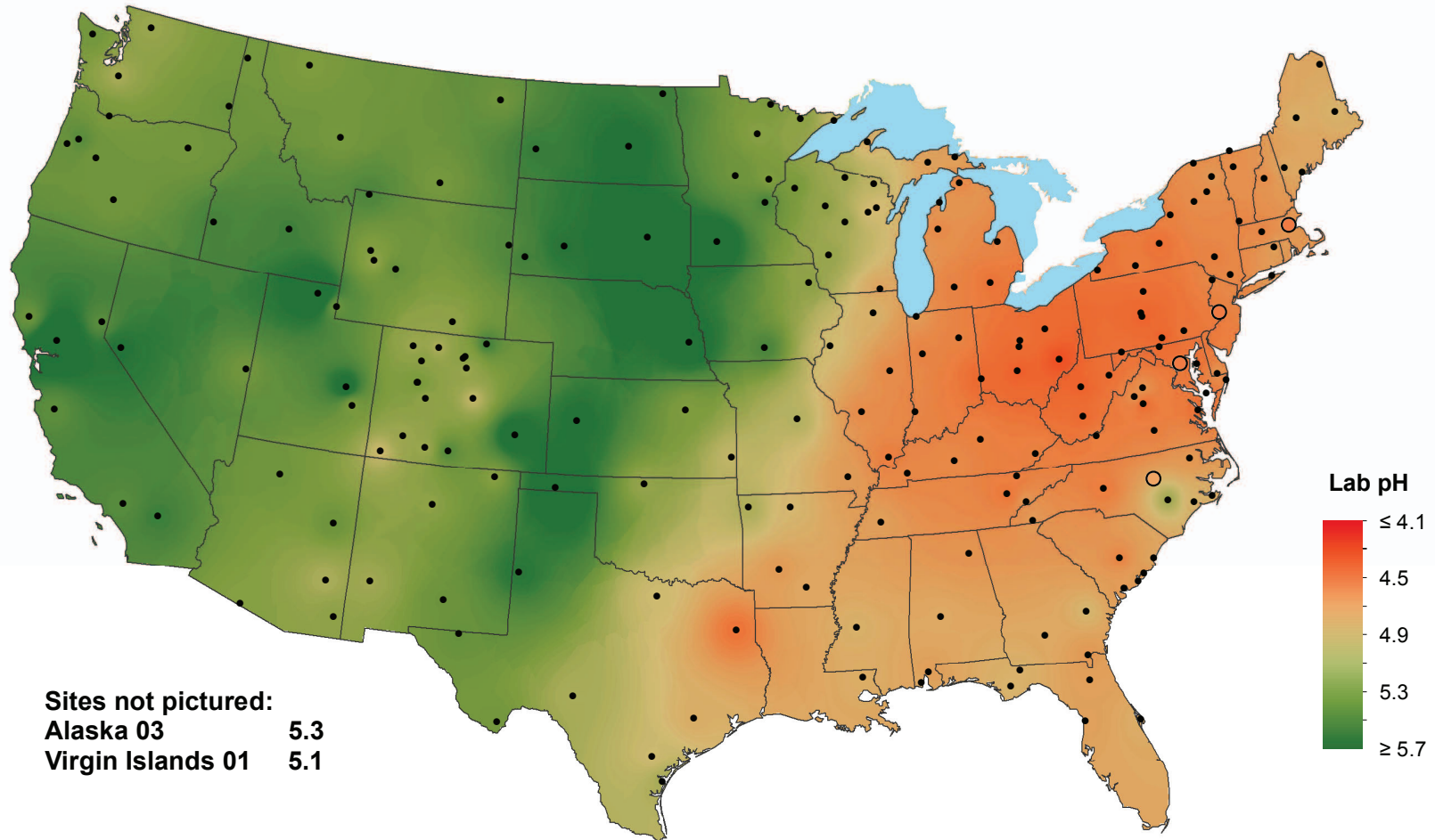


National Atmospheric Deposition Program/National Trends Network  
<http://nadp.isws.illinois.edu>

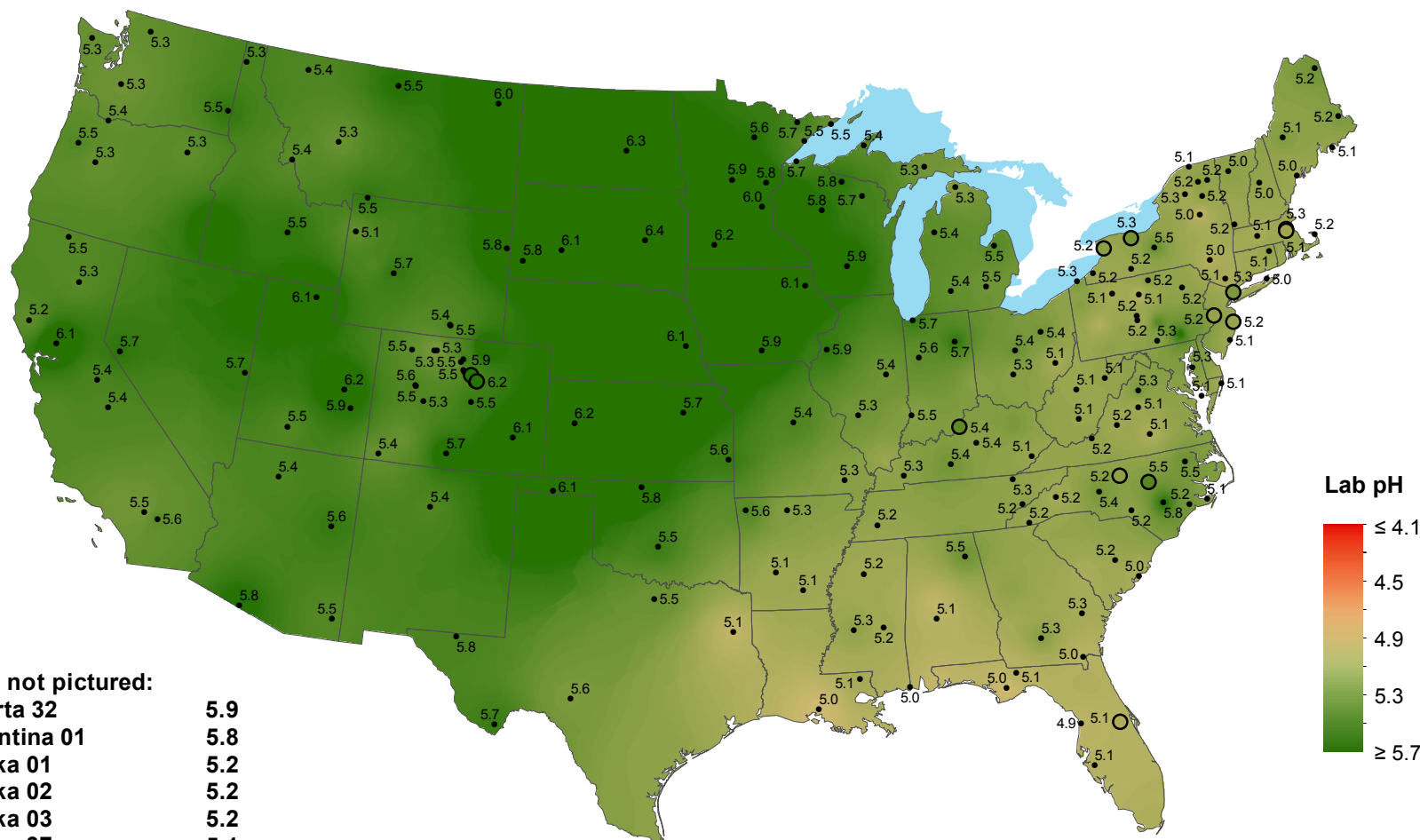
## Hydrogen ion concentration as pH from measurements made at the Central Analytical Laboratory, 1998



# Hydrogen ion concentration as pH from measurements made at the Central Analytical Laboratory, 2005



# Hydrogen ion concentration as pH from measurements made at the Central Analytical Laboratory, 2017



**Sites not pictured:**

Alberta 32	5.9
Argentina 01	5.8
Alaska 01	5.2
Alaska 02	5.2
Alaska 03	5.2
Alaska 97	5.1
British Columbia 22	4.4
British Columbia 23	5.0
British Columbia 24	5.2
Saskatchewan 21	5.7
Saskatchewan 31	5.8

National Atmospheric Deposition Program/National Trends Network  
<http://nadp.slh.wisc.edu>

**Notice:** Use this form to request a **written response (on agency letterhead)** from the Department of Natural Resources (DNR) regarding technical assistance, a post-closure change to a site, a specialized agreement or liability clarification for Property with known or suspected environmental contamination. A fee will be required as is authorized by s. 292.55, Wis. Stats., and NR 749, Wis. Adm. Code., unless noted in the instructions below. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

### Definitions

**"Property"** refers to the subject Property that is perceived to have been or has been impacted by the discharge of hazardous substances.

**"Liability Clarification"** refers to a written determination by the Department provided in response to a request made on this form. The response clarifies whether a person is or may become liable for the environmental contamination of a Property, as provided in s. 292.55, Wis. Stats.

**"Technical Assistance"** refers to the Department's assistance or comments on the planning and implementation of an environmental investigation or environmental cleanup on a Property in response to a request made on this form as provided in s. 292.55, Wis. Stats.

**"Post-closure modification"** refers to changes to Property boundaries and/or continuing obligations for Properties or sites that received closure letters for which continuing obligations have been applied or where contamination remains. Many, but not all, of these sites are included on the GIS Registry layer of RR Sites Map to provide public notice of residual contamination and continuing obligations.

### Select the Correct Form

This form should be used to request the following from the DNR:

- Technical Assistance
- Liability Clarification
- Post-Closure Modifications
- Specialized Agreements (tax cancellation, negotiated agreements, etc.)

**Do not use this form if one of the following applies:**

- Request for an **off-site liability exemption or clarification** for Property that has been or is perceived to be contaminated by one or more hazardous substances that originated on another Property containing the source of the contamination. Use DNR's Off-Site Liability Exemption and Liability Clarification Application Form 4400-201.
- Submittal of an Environmental Assessment for the **Lender Liability Exemption**, s 292.21, Wis. Stats., **if no response or review by DNR is requested**. Use the Lender Liability Exemption Environmental Assessment Tracking Form 4400-196.
- Request for an **exemption to develop on a historic fill site** or licensed landfill. Use DNR's Form 4400-226 or 4400-226A.
- **Request for closure** for Property where the investigation and cleanup actions are completed. Use DNR's Case Closure - GIS Registry Form 4400-202.

All forms, publications and additional information are available on the internet at: [dnr.wi.gov/topic/Brownfields/Pubs.html](http://dnr.wi.gov/topic/Brownfields/Pubs.html).

### Instructions

1. Complete sections 1, 2, 6 and 7 for all requests. Be sure to provide adequate and complete information.
2. Select the type of assistance requested: Section 3 for technical assistance or post-closure modifications, Section 4 for a written determination or clarification of environmental liabilities; or Section 5 for a specialized agreement.
3. Include the fee payment that is listed in Section 3, 4, or 5, unless you are a "Voluntary Party" enrolled in the Voluntary Party Liability Exemption Program **and** the questions in Section 2 direct otherwise. Information on to whom and where to send the fee is found in Section 8 of this form.
4. Send the completed request, supporting materials and the fee to the appropriate DNR regional office where the Property is located. See the map on the last page of this form. A paper copy of the signed form and all reports and supporting materials shall be sent with an electronic copy of the form and supporting materials on a compact disk. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>

The time required for DNR's determination varies depending on the complexity of the site, and the clarity and completeness of the request and supporting documentation.

## Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 12/18)

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### Section 1. Contact and Recipient Information

#### Requester Information

This is the person requesting technical assistance or a post-closure modification review, that his or her liability be clarified or a specialized agreement and is identified as the requester in Section 7. DNR will address its response letter to this person.

Last Name	First	MI	Organization/ Business Name
Muehlfeld	Tim		We Energies / WEC Energy Group- Business Services
Mailing Address			City
231 West Michigan Street			Milwaukee
			State
			WI
			ZIP Code
			53203
Phone # (include area code)	Fax # (include area code)	Email	
(414) 221-2206		tim.muehlfeld@wecenergygroup.com	

The requester listed above: (select all that apply)

- Is currently the owner
- Is currently considering selling the Property
- Is renting or leasing the Property
- Is currently considering acquiring the Property
- Is a lender with a mortgagee interest in the Property
- Other. Explain the status of the Property with respect to the applicant:

#### Contact Information (to be contacted with questions about this request)

Select if same as requester

Contact Last Name	First	MI	Organization/ Business Name
Muehlfeld	Tim		We Energies / WEC Energy Group- Business Services
Mailing Address			City
231 West Michigan Street			Milwaukee
			State
			WI
			ZIP Code
			53204
Phone # (include area code)	Fax # (include area code)	Email	
(414) 221-2206		tim.muehlfeld@wecenergygroup.com	

#### Environmental Consultant (if applicable)

Contact Last Name	First	MI	Organization/ Business Name
Keller	Nathaniel	R	Ramboll
Mailing Address			City
234 W. Florida St			Milwaukee
			State
			WI
			ZIP Code
			53204
Phone # (include area code)	Fax # (include area code)	Email	
(414) 837-3630		nate.keller@ramboll.com	

### Section 2. Property Information

Property Name	FID No. (if known)		
We Energies Pleasant Rairie Power Plant	230006260		
BRRTS No. (if known)	Parcel Identification Number		
02-30-527479			
Street Address	City		
8000 95th Street	Pleasant Prairie		
	State		
	WI		
	ZIP Code		
	53158		
County	Municipality where the Property is located	Property is composed of:	Property Size Acres
Kenosha	<input type="radio"/> City <input type="radio"/> Town <input checked="" type="radio"/> Village of Pleasant Prairie	<input type="radio"/> Single tax parcel <input type="radio"/> Multiple tax parcels	403



**Technical Assistance, Environmental Liability  
Clarification or Post-Closure Modification Request**

Form 4400-237 (R 12/18)

Page 3 of 7

1. Is a response needed by a specific date? (e.g., Property closing date) Note: Most requests are completed within 60 days. Please plan accordingly.

- No  Yes

Date requested by: 10/01/2019

Reason: Preparing for site decommissioning.

2. Is the "Requester" enrolled as a Voluntary Party in the Voluntary Party Liability Exemption (VPLE) program?

- No. Include the fee that is required for your request in Section 3, 4 or 5.  
 Yes. Do not include a separate fee. This request will be billed separately through the VPLE Program.

Fill out the information in Section 3, 4 or 5 which corresponds with the type of request:

Section 3. Technical Assistance or Post-Closure Modifications;

Section 4. Liability Clarification; or Section 5. Specialized Agreement.

**Section 3. Request for Technical Assistance or Post-Closure Modification**

Select the type of technical assistance requested: [Numbers in brackets are for WI DNR Use]

- No Further Action Letter (NFA) (Immediate Actions) - NR 708.09, [183] - Include a fee of \$350. Use for a written response to an immediate action after a discharge of a hazardous substance occurs. Generally, these are for a one-time spill event.
- Review of Site Investigation Work Plan - NR 716.09, [135] - Include a fee of \$700.
- Review of Site Investigation Report - NR 716.15, [137] - Include a fee of \$1050.
- Approval of a Site-Specific Soil Cleanup Standard - NR 720.10 or 12, [67] - Include a fee of \$1050.
- Review of a Remedial Action Options Report - NR 722.13, [143] - Include a fee of \$1050.
- Review of a Remedial Action Design Report - NR 724.09, [148] - Include a fee of \$1050.
- Review of a Remedial Action Documentation Report - NR 724.15, [152] - Include a fee of \$350
- Review of a Long-term Monitoring Plan - NR 724.17, [25] - Include a fee of \$425.
- Review of an Operation and Maintenance Plan - NR 724.13, [192] - Include a fee of \$425.

Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)

- Schedule a Technical Assistance Meeting - Include a fee of \$700.
- Hazardous Waste Determination - Include a fee of \$700.
- Other Technical Assistance - Include a fee of \$700. Explain your request in an attachment.

Post-Closure Modifications - NR 727, [181]

- Post-Closure Modifications: Modification to Property boundaries and/or continuing obligations of a closed site or Property; sites may be on the GIS Registry. This also includes removal of a site or Property from the GIS Registry. Include a fee of \$1050, and:
- Include a fee of \$300 for sites with residual soil contamination; and
- Include a fee of \$350 for sites with residual groundwater contamination, monitoring wells or for vapor intrusion continuing obligations.

Attach a description of the changes you are proposing, and documentation as to why the changes are needed (if the change to a Property, site or continuing obligation will result in revised maps, maintenance plans or photographs, those documents may be submitted later in the approval process, on a case-by-case basis).

Technical Assistance, Environmental Liability  
Clarification or Post-Closure Modification Request

Form 4400-237 (R 12/18)

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Skip Sections 4 and 5 if the technical assistance you are requesting is listed above and complete Sections 6 and 7 of this form.

**Section 4. Request for Liability Clarification**

Select the type of liability clarification requested. Use the available space given or attach information, explanations, or specific questions that you need answered in DNR's reply. Complete Sections 6 and 7 of this form. [Numbers in brackets are for DNR Use]

"Lender" liability exemption clarification - s. 292.21, Wis. Stats. [686]

❖ Include a fee of \$700.

Provide the following documentation:

- (1) ownership status of the real Property, and/or the personal Property and fixtures;
- (2) an environmental assessment, in accordance with s. 292.21, Wis. Stats.;
- (3) the date the environmental assessment was conducted by the lender;
- (4) the date of the Property acquisition; for foreclosure actions, include a copy of the signed and dated court order confirming the sheriff's sale.
- (5) documentation showing how the Property was acquired and the steps followed under the appropriate state statutes.
- (6) a copy of the Property deed with the correct legal description; and,
- (7) the Lender Liability Exemption Environmental Assessment Tracking Form (Form 4400-196).
- (8) If no sampling was done, please provide reasoning as to why it was not conducted. Include this either in the accompanying environmental assessment or as an attachment to this form, and cite language in s. 292.21(1)(c)2., h.-i., Wis. Stats.:
  - h. The collection and analysis of representative samples of soil or other materials in the ground that are suspected of being contaminated based on observations made during a visual inspection of the real Property or based on aerial photographs, or other information available to the lender, including stained or discolored soil or other materials in the ground and including soil or materials in the ground in areas with dead or distressed vegetation. The collection and analysis shall identify contaminants in the soil or other materials in the ground and shall quantify concentrations.
  - i. The collection and analysis of representative samples of unknown wastes or potentially hazardous substances found on the real Property and the determination of concentrations of hazardous waste and hazardous substances found in tanks, drums or other containers or in piles or lagoons on the real Property.

"Representative" liability exemption clarification (e.g. trustees, receivers, etc.) - s. 292.21, Wis. Stats. [686]

❖ Include a fee of \$700.

Provide the following documentation:

- (1) ownership status of the Property;
- (2) the date of Property acquisition by the representative;
- (3) the means by which the Property was acquired;
- (4) documentation that the representative has no beneficial interest in any entity that owns, possesses, or controls the Property;
- (5) documentation that the representative has not caused any discharge of a hazardous substance on the Property; and
- (6) a copy of the Property deed with the correct legal description.

Clarification of local governmental unit (LGU) liability exemption at sites with: (select all that apply)

- hazardous substances spills - s. 292.11(9)(e), Wis. Stats. [649];
- Perceived environmental contamination - [649];
- hazardous waste - s. 292.24 (2), Wis. Stats. [649]; and/or
- solid waste - s. 292.23 (2), Wis. Stats. [649].

❖ Include a fee of \$700, a summary of the environmental liability clarification being requested, and the following:

- (1) clear supporting documentation showing the acquisition method used, and the steps followed under the appropriate state statute(s).
- (2) current and proposed ownership status of the Property;
- (3) date and means by which the Property was acquired by the LGU, where applicable;
- (4) a map and the ¼, ¼ section location of the Property;
- (5) summary of current uses of the Property;
- (6) intended or potential use(s) of the Property;
- (7) descriptions of other investigations that have taken place on the Property; and
- (8) (for solid waste clarifications) a summary of the license history of the facility.

Technical Assistance, Environmental Liability  
Clarification or Post-Closure Modification Request

Form 4400-237 (R 12/18)

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**Section 4. Request for Liability Clarification (cont.)**

Lease liability clarification - s. 292.55, Wis. Stats. [646]

❖ **Include a fee of \$700 for a single Property, or \$1400 for multiple Properties and the information listed below:**

- (1) a copy of the proposed lease;
- (2) the name of the current owner of the Property and the person who will lease the Property;
- (3) a description of the lease holder's association with any persons who have possession, control, or caused a discharge of a hazardous substance on the Property;
- (4) map(s) showing the Property location and any suspected or known sources of contamination detected on the Property;
- (5) a description of the intended use of the Property by the lease holder, with reference to the maps to indicate which areas will be used. Explain how the use will not interfere with any future investigation or cleanup at the Property; and
- (6) all reports or investigations (e.g. Phase I and Phase II Environmental Assessments and/or Site Investigation Reports conducted under s. NR 716, Wis. Adm. Code) that identify areas of the Property where a discharge has occurred.

General or other environmental liability clarification - s. 292.55, Wis. Stats. [682] - Explain your request below.

❖ **Include a fee of \$700 and an adequate summary of relevant environmental work to date.**

No Action Required (NAR) - NR 716.05, [682]

❖ **Include a fee of \$700.**

Use where an environmental discharge has or has not occurred, and applicant wants a DNR determination that no further assessment or clean-up work is required. Usually this is requested after a Phase I and Phase II environmental assessment has been conducted; the assessment reports should be submitted with this form. This is not a closure letter.

Clarify the liability associated with a "closed" Property - s. 292.55, Wis. Stats. [682]

❖ **Include a fee of \$700.**

- Include a copy of any closure documents if a state agency other than DNR approved the closure.

Use this space or attach additional sheets to provide necessary information, explanations or specific questions to be answered by the DNR.

**Section 5. Request for a Specialized Agreement**

Select the type of agreement needed. Include the appropriate draft agreements and supporting materials. Complete Sections 6 and 7 of this form. More information and model draft agreements are available at: [dnr.wi.gov/topic/Brownfields/lgu.html#tabx4](http://dnr.wi.gov/topic/Brownfields/lgu.html#tabx4).

Tax cancellation agreement - s. 75.105(2)(d), Wis. Stats. [654]

❖ **Include a fee of \$700, and the information listed below:**

- (1) Phase I and II Environmental Site Assessment Reports,
- (2) a copy of the Property deed with the correct legal description.

Agreement for assignment of tax foreclosure judgement - s.75.106, Wis. Stats. [666]

❖ **Include a fee of \$700, and the information listed below:**

- (1) Phase I and II Environmental Site Assessment Reports,
- (2) a copy of the Property deed with the correct legal description.

Negotiated agreement - Enforceable contract for non-emergency remediation - s. 292.11(7)(d) and (e), Wis. Stats. [630]

❖ **Include a fee of \$1400, and the information listed below:**

- (1) a draft schedule for remediation; and,
- (2) the name, mailing address, phone and email for each party to the agreement.

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**Section 6. Other Information Submitted**

Identify all materials that are included with this request.

Send both a paper copy of the signed form and all reports and supporting materials, and an electronic copy of the form and all reports, including Environmental Site Assessment Reports, and supporting materials on a compact disk.

Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.

- Phase I Environmental Site Assessment Report - Date: \_\_\_\_\_
- Phase II Environmental Site Assessment Report - Date: \_\_\_\_\_
- Legal Description of Property (required for all liability requests and specialized agreements)
- Map of the Property (required for all liability requests and specialized agreements)

Analytical results of the following sampled media: Select all that apply and include date of collection.

- Groundwater
- Soil
- Sediment
- Other medium - Describe: \_\_\_\_\_

Date of Collection: 01/06/2019

- A copy of the closure letter and submittal materials
- Draft tax cancellation agreement
- Draft agreement for assignment of tax foreclosure judgment
- Other report(s) or information - Describe: Technical Memorandum on Sulfate in Groundwater

For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?

- Yes - Date (if known): \_\_\_\_\_
- No

Note: The Notification for Hazardous Substance Discharge (non-emergency) form is available at:  
[dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf](http://dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf).

**Section 7. Certification by the Person who completed this form**

- I am the person submitting this request (requester)
- I prepared this request for: Tim Muehlfeld - WEC Energy Group

Requester Name

I certify that I am familiar with the information submitted on this request, and that the information on and included with this request is true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.

Nathaniel R Kelly  
Signature

10/8/2019  
Date Signed

Senior Hydrogeologist  
Title

(414) 837-3630  
Telephone Number (include area code)

# Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

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## Section 8. DNR Contacts and Addresses for Request Submittals

Send or deliver one paper copy and one electronic copy on a compact disk of the completed request, supporting materials, and fee to the region where the property is located to the address below. Contact a DNR regional brownfields specialist with any questions about this form or a specific situation involving a contaminated property. For electronic document submittal requirements see:

<http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>.

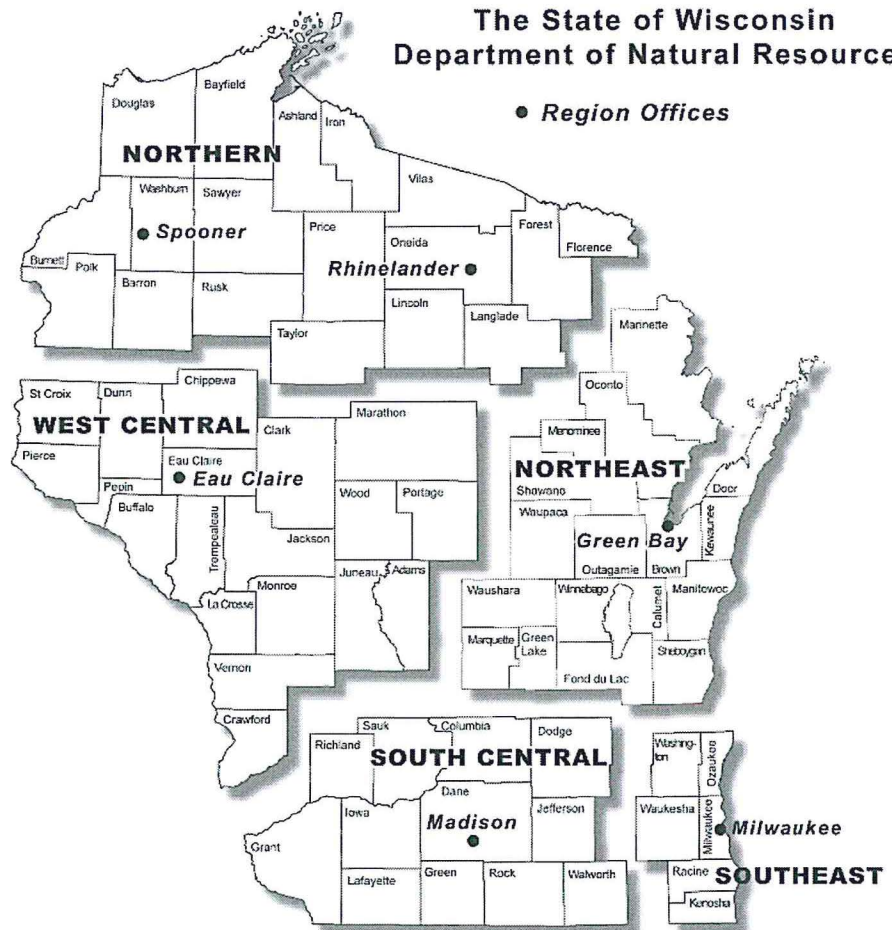
**DNR NORTHERN REGION**  
Attn: RR Program Assistant  
Department of Natural Resources  
223 E Steinfest Rd Antigo, WI 54409

**DNR NORTHEAST REGION**  
Attn: RR Program Assistant  
Department of Natural Resources  
2984 Shawano Avenue  
Green Bay WI 54313

**DNR SOUTH CENTRAL REGION**  
Attn: RR Program Assistant  
Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg WI 53711

**DNR SOUTHEAST REGION**  
Attn: RR Program Assistant  
Department of Natural Resources  
2300 North Martin Luther King Drive  
Milwaukee WI 53212

**DNR WEST CENTRAL REGION**  
Attn: RR Program Assistant  
Department of Natural Resources  
1300 Clairmont Ave.  
Eau Claire WI 54702



*Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.*

DNR Use Only			
Date Received	Date Assigned	BRRTS Activity Code	BRRTS No. (if used)
DNR Reviewer		Comments	
Fee Enclosed? <input type="radio"/> Yes <input type="radio"/> No	Fee Amount \$	Date Additional Information Requested	Date Requested for DNR Response Letter
Date Approved	Final Determination		