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141 NW Barstow Street, Room 180  
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:

February 14, 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.

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 may be 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

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Ref. 70068

- Geochemical conditions including;
  - Variability in groundwater elevations to release sulfate from oxidation of sulfide minerals within the clay till
  - Surficial 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

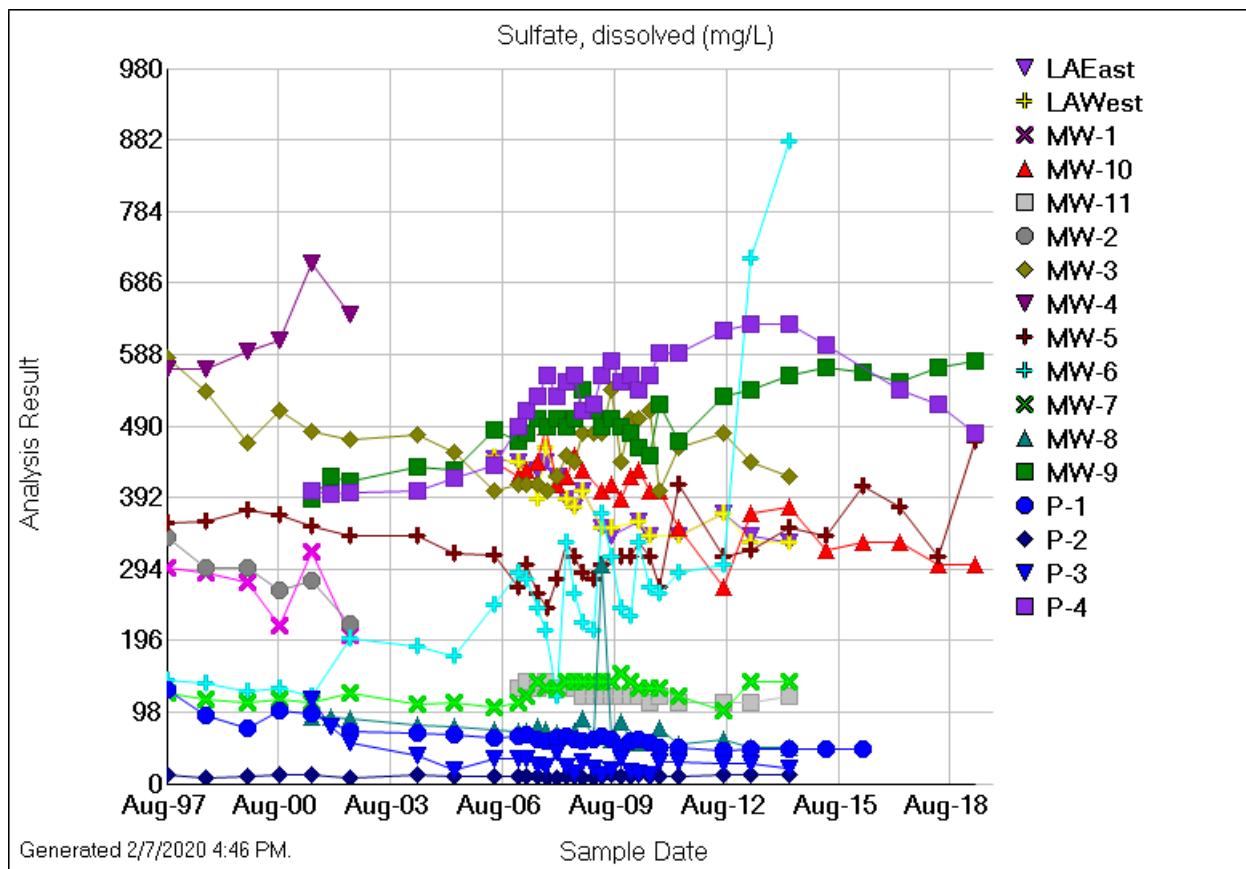
Furthermore, the power plant infrastructure including the coal pile and other potential sources (basins and runoff ditches) have been removed eliminating those facilities as potential sources that may have contributed to the sulfate concentrations in groundwater. The power plant was fueled with low sulfur 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 may 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 may be the result of several contributing factors which include natural sources and the former plant infrastructure (as historically attributed). The relative contribution from each of these potential sources was not evaluated, but the potential sources from the former plant 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.

### 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 plant operations 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).

A summary of groundwater data from this aquifer compiled by Kemmerer (1984) 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" (Kemmerer, 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

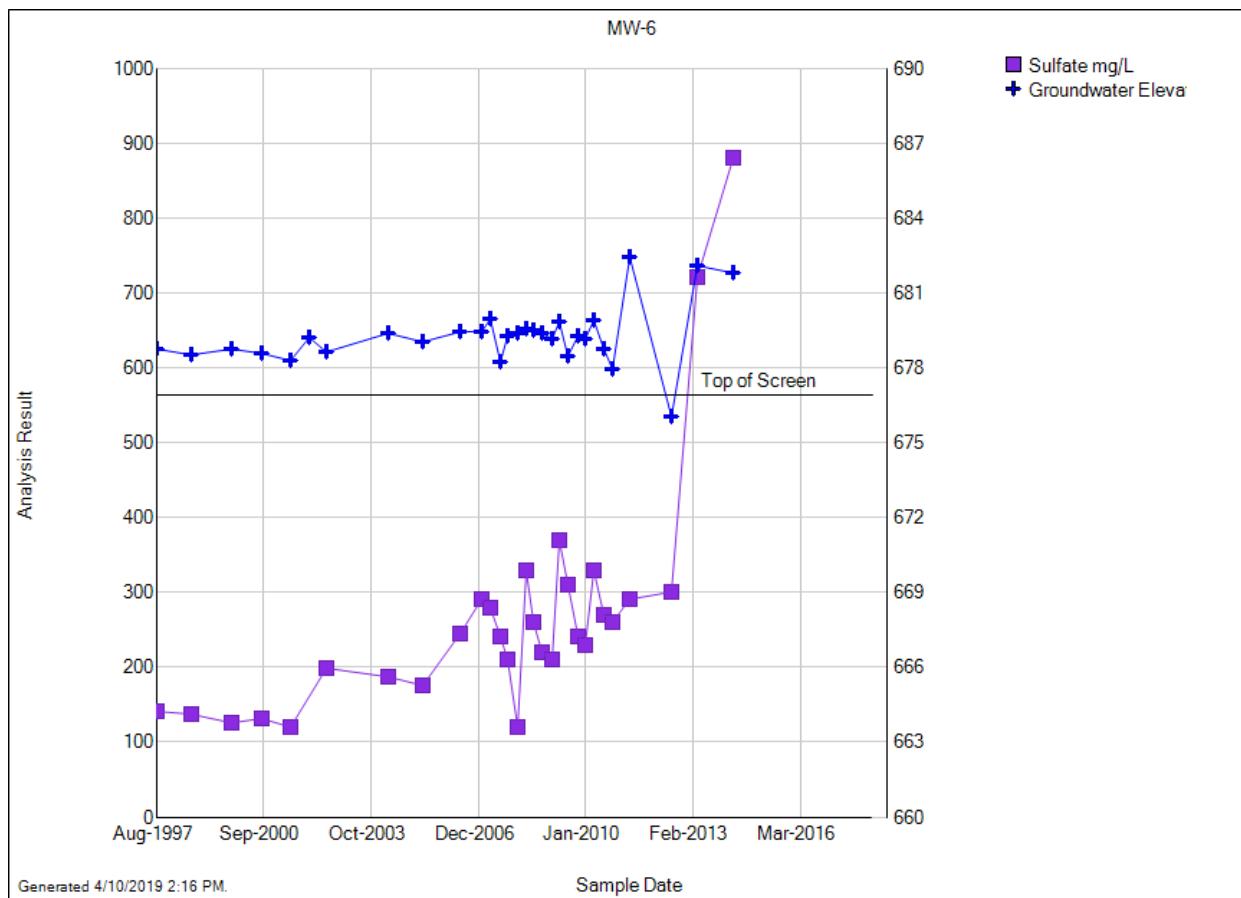
A survey of BRRTS cases located in the vicinity of P4 was completed using the WDNR Remediation and Redevelopment Sites Map (RR Sites Map), to identify sites that may have analyzed groundwater for sulfate concentrations. Sulfate concentrations are sometimes measured to evaluate whether natural attenuation 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 2). 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 (Kemmerer, 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.

## 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.

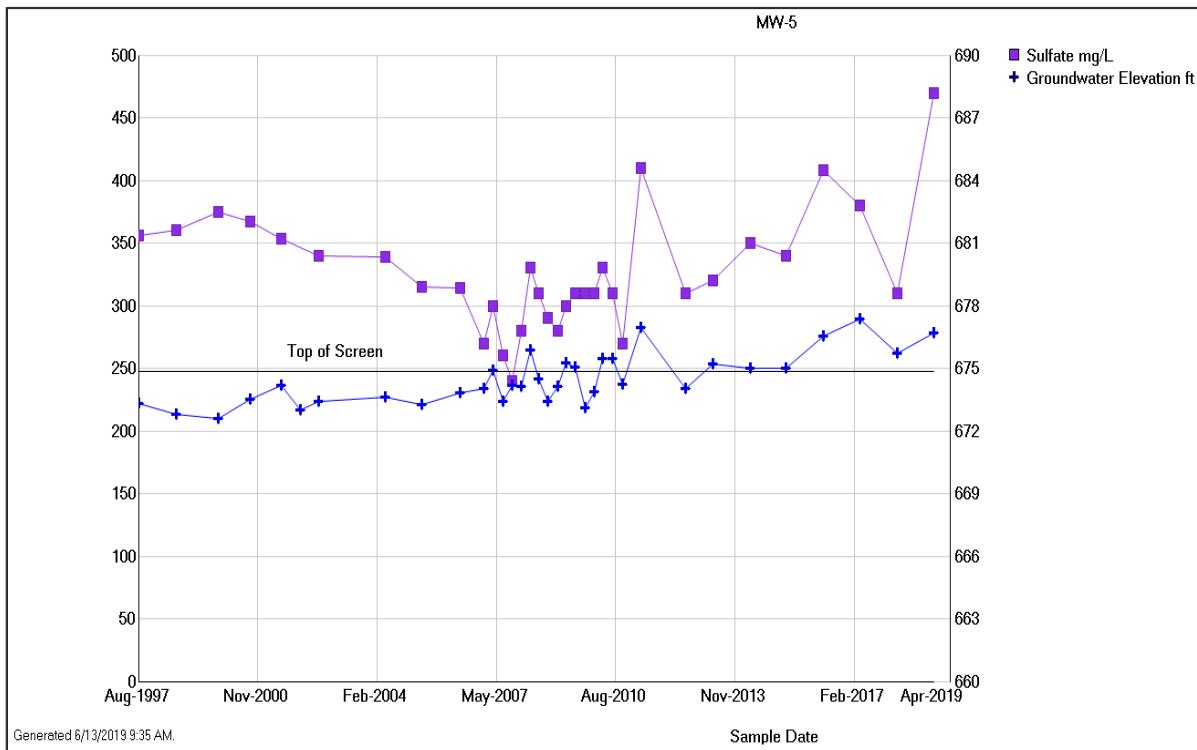


### Groundwater concentrations and elevations in MW-6.

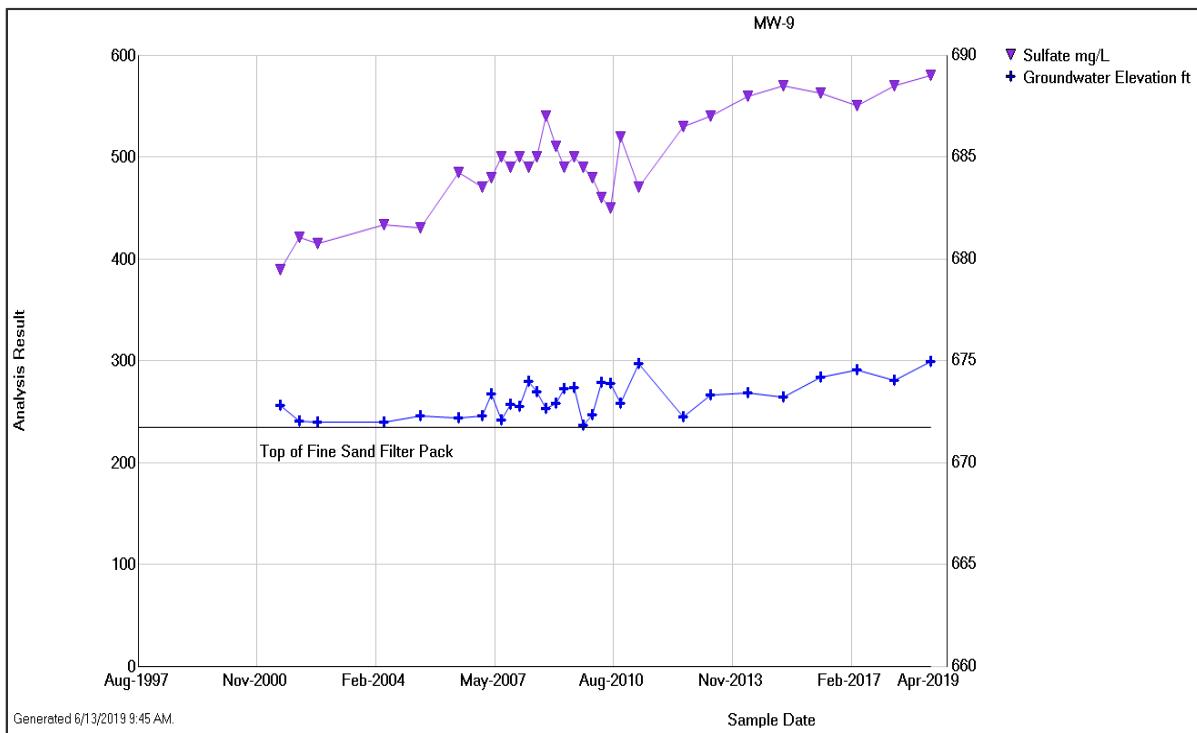
In addition to changes in water elevations, leaching of sulfate from surface deposition and/or oxidation of sulfide minerals contained in materials placed at the surface (i.e. road base, railroad ballast, and laydown lots from historical construction), has the potential to release sulfate to the aquifers 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

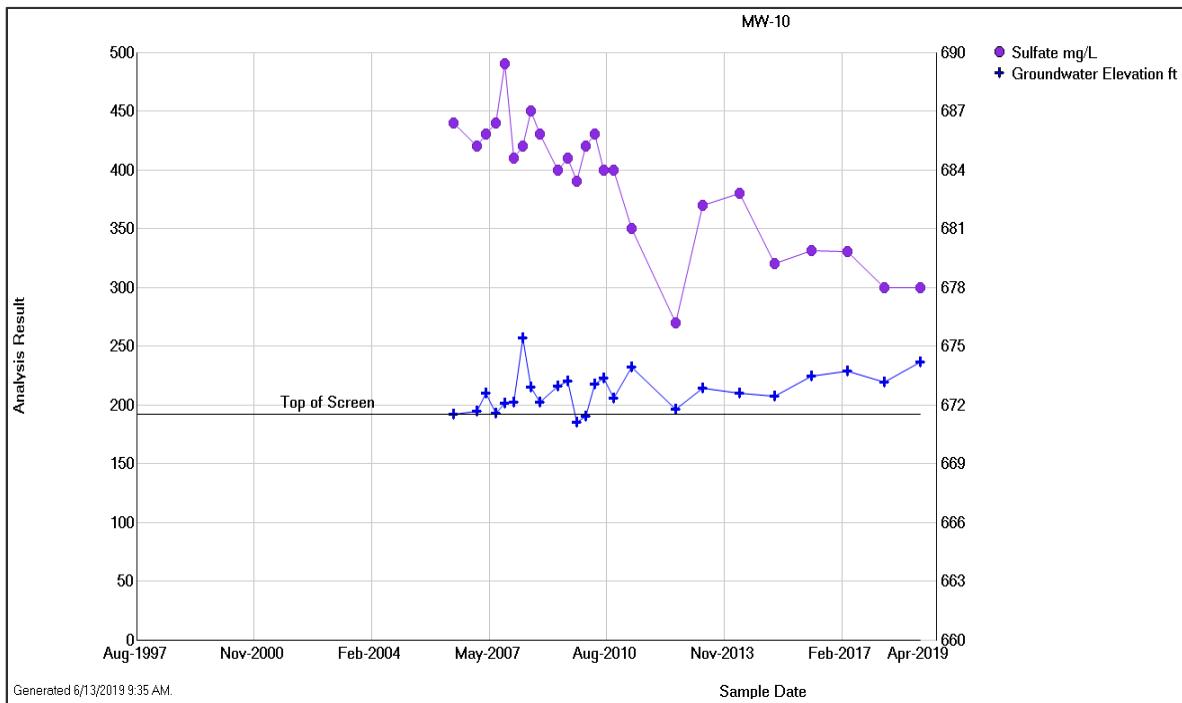
Groundwater elevations and sulfate concentrations are plotted for monitoring wells MW-5, MW-9, and MW-10. As shown in the plots, sulfate concentrations appear elevated when water elevations are at or near the screened interval. Significant increases also occur following periods when the water elevation 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.

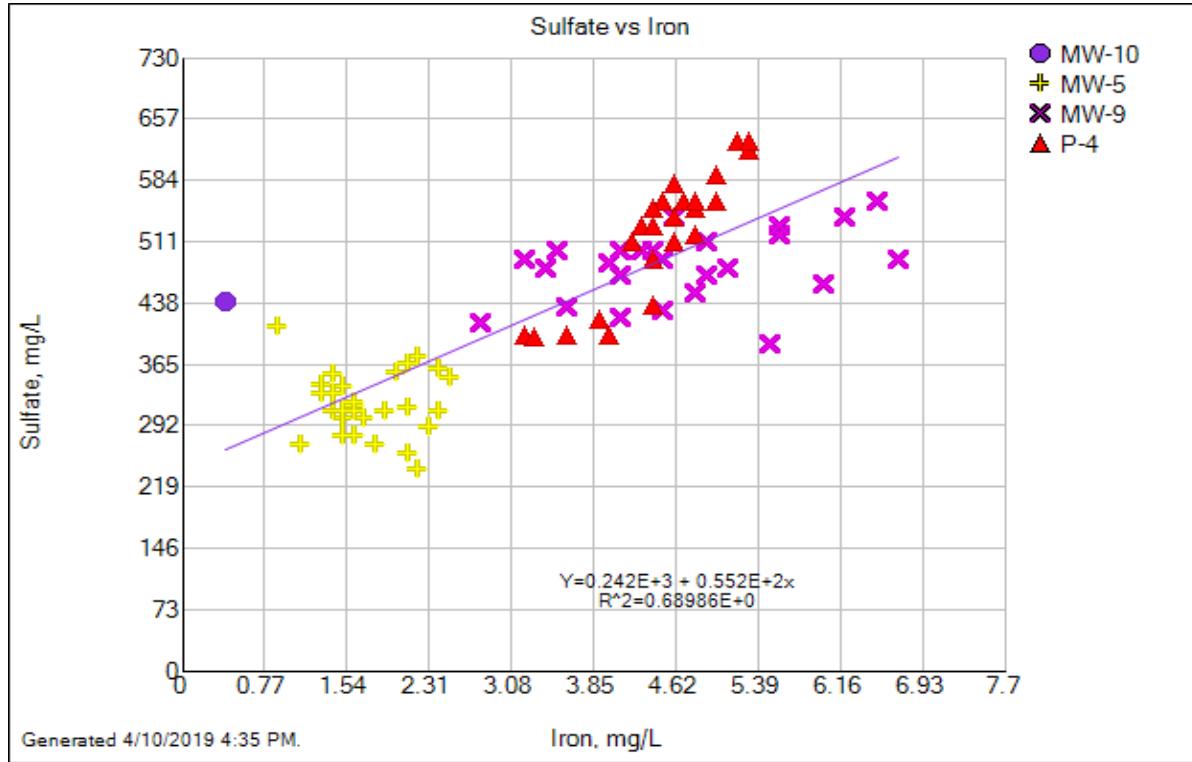


### Groundwater concentrations and elevations in MW-9.



### 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 3 and 4). 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 3 and 4)
- Lake Andrea was a former quarry as shown in historic aerials from 1974 to the 1990's (Figures 3-5), it is unclear what was mined from the quarry, but minerals were 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 1 in Attachment D. The results indicate that only arsenic in two samples was detected above the industrial direct contact residual contaminant level (RCL). 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. The presence of these compounds and their concentrations are representative of the clay till and gravel fill below the liner and because they are not significantly elevated are not indicative of a release from the basins.

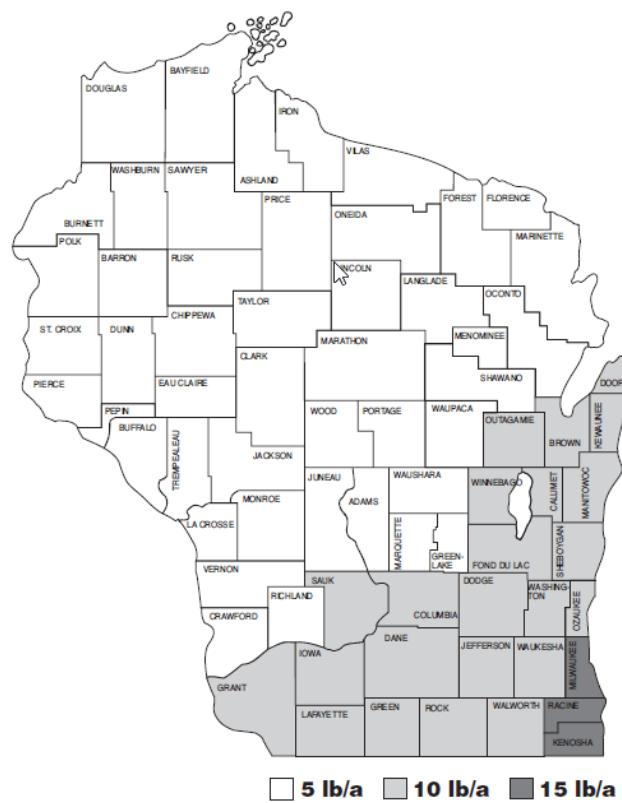
Removal of the lined basin also expose the underlying materials (clay and gravel) to precipitation and potential oxidation since they are no longer isolated by the liner. The ground disturbance that occurred during removal and the remaining soils that are exposed at the surface could continue to be a source of sulfate to the aquifer until all available sulfate is leached. The recent concentration increases 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. Changes in geochemical conditions can increase the potential sulfate release from soils and aquifer solids.

## REMOVAL AND DECOMMISSIONING OF POTENTIAL 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 may have contributed to the sulfate concentration detected in groundwater, but the magnitude is unclear, and these facilities were removed in 2017-2018 and any potential contribution has been eliminated. The removal of the basins and other infrastructure are, in effect, removal of a potential 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 and the low sulfur coal pile and ditches and basins, cannot be ruled out as a former contributing source. However, these sources have been removed, and although elevated sulfate concentrations may persist due to removal activities, We Energies operations no longer contributes 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 Aerial Photograph 1981
- Figure 3 Aerial Photograph 1987
- Figure 4 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
- Attachment D Soil Sample Locations

cc: Tim Muehlfeld, WEC Business Services, LLC

## **FIGURES**



■ CURRENT MONITORING LOCATION  
■ PAST MONITORING LOCATION

### MONITORING LOCATIONS

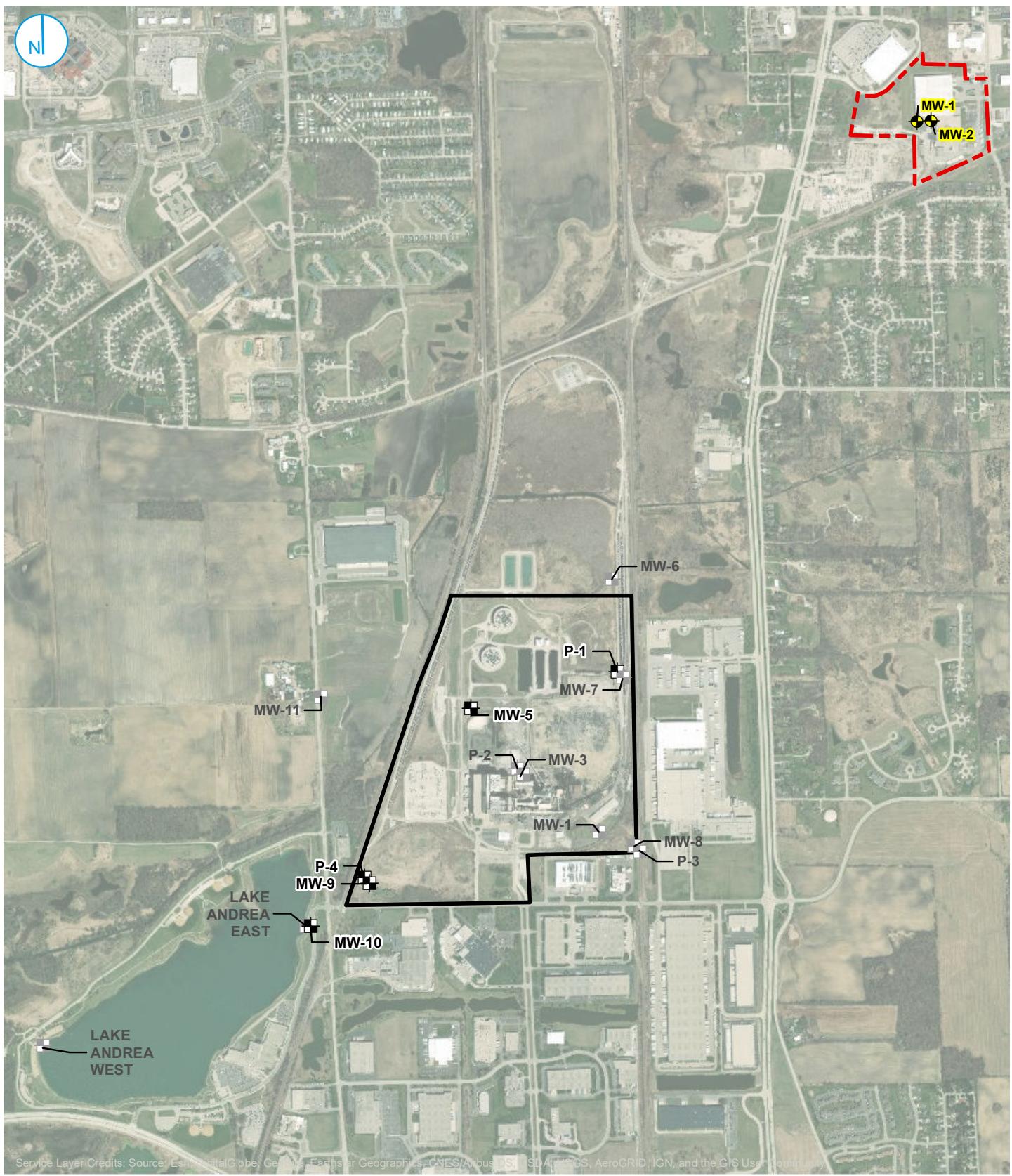
0 400 800 Feet

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

RAMBOLL

FIGURE 1

RAMBOLL US CORPORATION  
A RAMBOLL COMPANY



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

## OCEAN SPRAY SITE

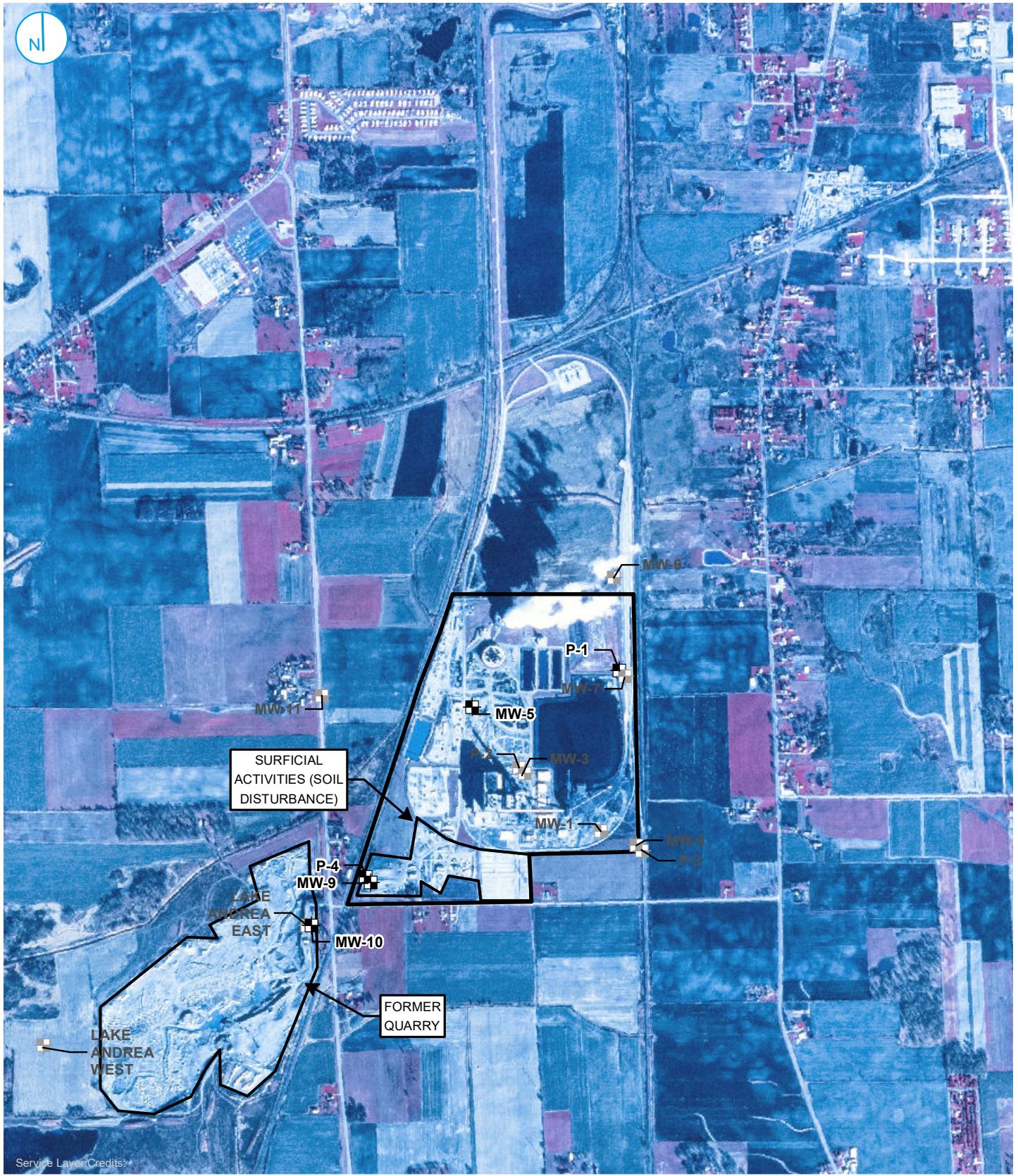
**FIGURE 02**

RAMBOLL US CORPORATION  
A RAMBOLL COMPANY

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

0 875 1,750 Feet

**RAMBOLL**



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

1981 IMAGERY

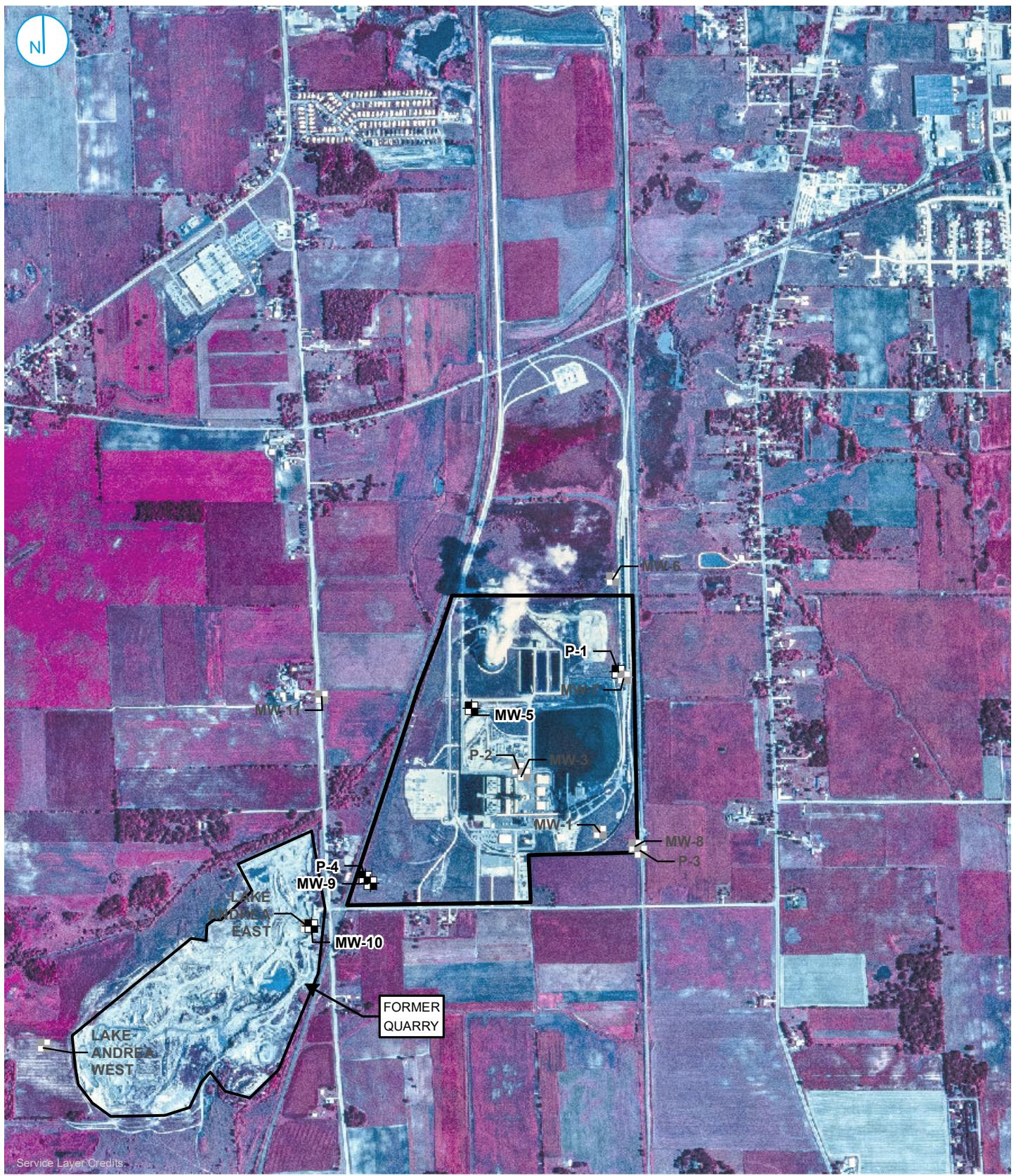
FIGURE 03

RAMBOLL US CORPORATION  
A RAMBOLL COMPANY

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

0 875 1,750 Feet

RAMBOLL



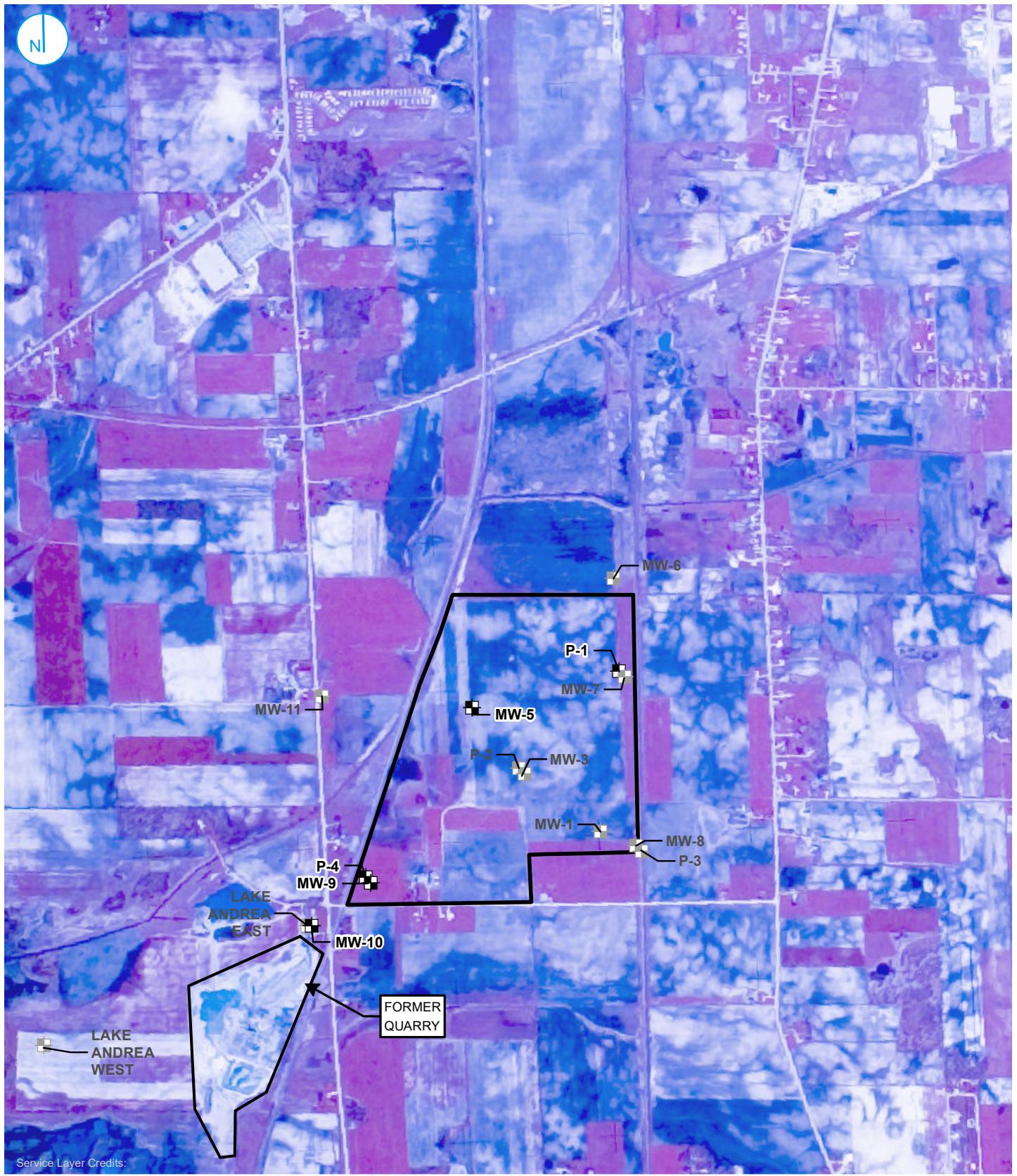
- CURRENT MONITORING LOCATION
- PAST MONITORING LOCATION
- PLEASANT PRAIRIE POWER PLANT PROPERTY

**1987 IMAGERY****FIGURE 04**RAMBOLL US CORPORATION  
A RAMBOLL COMPANY

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

0 875 1,750 Feet

**RAMBOLL**



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

1974 IMAGERY

FIGURE 05

RAMBOLL US CORPORATION  
A RAMBOLL COMPANY

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

0 875 1,750 Feet

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## **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	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	Manganese, Dissolved	Mercury, Total	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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										
			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	Feet	Feet	s.u.	romhos	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											
			Reporting Units:																																						
			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									
			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									
Inhouse-39834	Inhouse	1/21/2009	--	--	<0.34	U	--	<0.63	U	--	<10	U	--	--	<1.3	U	<0.015	U	<0.69	U	<0.021	U	--	--	--	--	<5	U	--	--	<0.1	U	<2.5	U	<36	U					
Inhouse-39911	Inhouse	4/8/2009	--	--	<0.29	U	--	11	--	<15	U	--	--	<1.3	U	<0.048	U	2.1	<0.049	U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
Inhouse-40007	Inhouse	7/13/2009	--	--	<0.29	U	--	<1.5	U	--	<15	U	--	--	1.3	<0.048	U	<18	U	<0.049	U	--	--	--	--	--	--	<5	U	--	--	<0.1	U	<1	U	<36	U				
Inhouse-42472	Inhouse	4/12/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
MW-1-35655	MW-1	8/13/1997	--	--	1.9	19	26	<0.1	U	--	<0.6	U	<0.7	U	2,000	<1	U	--	630	0.07	--	<1	U	0.08	--	<10	U	350	33	<5	U	--	296	730	930	673.13	16.67	7.1	1,213	9	
MW-1-36034	MW-1	8/27/1998	--	--	4.3	23	42	<0.05	U	--	<0.2	U	<1	U	1,600	<0.7	U	--	390	<0.18	U	--	0.7	<0.14	U	--	79	350	25	<3.5	U	--	289	720	858	672.83	16.97	7.1	1,203	10	
MW-1-36447	MW-1	10/14/1999	--	--	2.8	24	49	<0.14	U	150,000	<0.6	U	<1.2	U	1,500	<0.6	U	69,000	320	0.22	--	<0.9	U	<0.094	U	--	0	370	28	9	--	276	660	834	672.51	17.29	7	1,136	11.5		
MW-1-36459	MW-1	10/26/1999	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.18	U	--	--	--	--	--	--	--	--	--	--	--	--	672.3	17.5	7	1,119	11			
MW-1-36766	MW-1	8/28/2000	--	--	2.4	24	41	<0.15	U	130,000	<0.4	U	<1.1	U	1,600	<0.59	U	64,000	300	<0.18	U	--	<1.2	U	<0.17	U	--	4.6	310	33	<3.9	U	--	217	590	822	673.38	16.42	7.1	1,043	11
MW-1-37074	MW-1	7/2/2001	--	--	2.1	23	49	<0.17	U	170,000	<0.4	U	<0.8	U	3,800	<0.9	U	87,000	1,500	<0.18	U	--	<1.2	U	<0.17	U	--	<3.2	U	410	24	6.2	--	318	780	993	673.96	15.84	6.9	1,319	10
MW-1-37264	MW-1	1/8/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.4	U	--	--	--	<0.011	U	--	--	--	--	--	--	--	672.91	16.89	6.9	1,135	11			
MW-1-37453	MW-1	7/16/2002	--	--	3.8	24	37	<0.12	U	130,000	0.27	<0.9	U	1,700	<0.7	U	69,000	450	<0.19	U	--	<1.1	U	<0.1	U	<2	U	<3.6	U	320	42	2.5	0.31	204	610	718	673.26	16.54	7	1,053	11
MW-1-38860	MW-1	5/23/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	673.56	16.24	--	--	--					
MW-1-39091	MW-1	1/9/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	673.75	16.05	--	--	--					
MW-1-39183	MW-1	4/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	673.86	15.94	--	--	--					
MW-1-39286	MW-1	7/23/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	673.52	16.28	--	--	--					
MW-1-39643	MW-1	7/14/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	674.22	15.58	--	--	--					
MW-1-40007	MW-1	7/13/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	675.03	14.77	--	--	--					
MW-10-38860	MW-10	5/23/2006	--	--	1.4	--	87	--	270,000	--	--	400	0.29	100,000	470	<0.011	U	--	--	--	--	--	--	--	420	--	12	--	440	1,100	2,000	671.5	11.92	6.5	2,680	11					
MW-10-39091	MW-10	1/9/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	671.67	11.75	6.6	2,780	13						
MW-10-39184	MW-10	4/12/																																							

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	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	Manganese, Dissolved	Magnesium, Dissolved	Mercury, Total	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Feet	Feet	s.u.	romhos	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													
			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											
			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											
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	7/3/20																																								

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	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	Manganese, Dissolved	Mercury, Dissolved	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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											
			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	Feet	Feet	s.u.	romhos	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												
			Reporting Units:																																							
			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											
			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											
MW-3-35655	MW-3	8/13/1997	--	--	5.3	22	80	<0.1	U	--	<0.6	U	<0.7	U	4,700	<1	U	--	190	0.07	--	<1	U	0.07	--	10	400	31	<5	U	--	583	1,100	1,390	673.29	15.18	7	1,666	12			
MW-3-36034	MW-3	8/27/1998	--	--	6.1	23	110	0.05	--	<0.2	U	<1	U	3,500	<0.7	U	--	210	<0.18	U	--	0.9	<0.14	U	--	6.6	330	25	<3.5	U	--	538	1,000	1,260	672.83	15.64	7	1,630	12.5			
MW-3-36447	MW-3	10/14/1999	--	--	5.6	26	130	<0.14	U	210,000	<0.6	U	<1.2	U	2,400	<0.6	U	90,000	190	<0.18	U	--	<0.9	U	<0.094	U	--	6.7	400	24	8	--	468	890	1,180	672.6	15.87	7	1,451	14.5		
MW-3-36766	MW-3	8/28/2000	--	--	5.2	25	140	<0.15	U	200,000	<0.4	U	<1.1	U	3,600	<0.59	U	82,000	160	<0.18	U	--	<1.2	U	<0.17	U	--	4.4	350	25	<3.9	U	--	510	840	1,320	673.56	14.91	6.9	1,478	14	
MW-3-37075	MW-3	7/3/2001	--	--	4.3	25	130	<0.17	U	220,000	<0.4	U	<0.8	U	4,100	<0.9	U	90,000	200	<0.18	U	--	<1.2	U	<0.17	U	--	<3.2	380	28	<2.2	U	--	482	920	1,240	674.19	14.28	7	1,540	13	
MW-3-37265	MW-3	1/9/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.4	U	--	--	--	--	0.2	--	--	--	673.04	15.43	6.7	1,456	14							
MW-3-37453	MW-3	7/16/2002	--	--	6.2	28	120	<0.12	U	210,000	0.21	<0.9	U	3,200	<0.7	U	91,000	350	<0.19	U	--	<1.1	U	<0.1	U	<2	U	<3.6	U	360	38	<2.4	U	0.36	471	900	1,170	673.4	15.07	6.9	1,460	13.5
MW-3-38112	MW-3	5/5/2004	--	--	2	--	130	--	210,000	--	--	540	<1.4	U	84,000	310	<0.17	U	--	--	--	--	--	--	--	--	350	--	<4	U	--	478	870	1,100	673.37	15.1	7.2	822	13			
MW-3-38475	MW-3	5/3/2005	--	--	3.6	--	110	--	200,000	--	--	570	0.74	--	79,000	200	<0.17	U	--	--	--	--	--	--	--	--	330	--	<5	U	--	454	820	1,000	673.26	15.21	6.8	1,365	12.5			
MW-3-38861	MW-3	5/24/2006	--	--	4	--	110	--	190,000	--	--	650	0.11	--	69,000	190	<0.011	U	--	--	--	--	--	--	--	--	360	--	5.9	--	400	760	1,000	673.74	14.73	6.8	1,223	13				
MW-3-39091	MW-3	1/9/2007	--	--	4	--	120	--	180,000	--	--	1,300	0.094	--	73,000	200	<0.0055	U	--	--	--	--	--	--	--	--	360	--	<2.4	U	--	410	750	1,000	673.99	14.48	7	1,345	14			
MW-3-39183	MW-3	4/11/2007	--	--	2.9	--	100	--	150,000	--	--	1,700	0.077	--	65,000	120	<0.012	U	--	--	--	--	--	--	--	--	350	--	<2.4	U	--	410	640	1,000	674.8199	13.65	6.9	1,305	12			
MW-3-39286	MW-3	7/23/2007	--	--	3.6	--	120	--	160,000	--	--	1,300	<0.039	U	64,000	150	<0.0012	U	--	--	--	--	--	--	--	--	340	--	4.7	--	410	660	1,000	673.43	15.04	7.1	1,299	13.5				
MW-3-39373	MW-3	10/18/2007	--	--	6.3	--	180	--	232,000	--	--	1,400	0.05	--	90,000	190	--	<0.001	U	--	--	--	--	--	--	--	340	--	2.9	--	400	950	1,000	674.08	14.39	7	1,285	15				
MW-3-39470	MW-3	1/23/2008	--	--	3.3	--	140	--	190,000	--	--	2,200	<0.015	U	74,000	190	<0.001	U	--	--	--	--	--	--	--	--	320	--	3.5	--	420	780	1,000	674.08	14.39	6.9	1,327	13				
MW-3-39561	MW-3	4/23/2008	--	--	4.6	--	170	--	250,000	--	--	1,100	0.032	--	75,000	190	<0.001	U	--	--	--	--	--	--	--	--	320	--	<3.3	U	--	450	930	1,200	675.95	12.52	7	1,445	12.5			
MW-3-39644	MW-3	7/15/2008	--	--	3.5	--	150	--	200,000	--	--	1,600	0.025	--	82,000	170	<0.0012	U	--	--	--	--	--	--	--	--	290	--	9.8	--	440	840	1,100	674.47	14	7	1,441	13				
MW-3-39730	MW-3	10/9/2008	--	--	3.6	--	180	--	180,000	--	--	950	0.064																													

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	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, Total	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Feet	Feet	s.u.	romhos	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														
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													
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													
MW-5-35655	MW-5	8/13/1997	--	--	<0.9	U	42	82	<0.1	U	--	<0.6	U	<0.7	U	2,000	<1	U	--	190	0.09	--	<1	U	0	--	<10	U	380	42	6	--	356	870	1,010	673.29	13.34	6.9	1,392	10.5			
MW-5-36034	MW-5	8/27/1998	--	--	1	40	110	<0.05	U	--	<0.2	U	<1	U	2,400	0.9	--	180	<0.18	U	--	1.5	<0.14	U	--	9.6	400	33	4	--	360	660	994	672.8	13.83	7.1	1,373	12					
MW-5-36447	MW-5	10/14/1999	--	--	<1	U	53	110	<0.14	U	180,000	<0.6	U	<1.2	U	2,200	<0.6	U	84,000	190	<0.18	U	--	1.2	<0.094	U	--	6.5	390	29	10	--	375	800	922	672.6	14.03	7	1,275	13.5			
MW-5-36766	MW-5	8/28/2000	--	--	1.4	38	100	<0.15	U	170,000	<0.4	U	<1.1	U	2,100	<0.59	U	78,000	210	<0.18	U	--	<1.2	U	<0.17	U	--	8.9	360	35	<3.9	U	--	367	750	1,020	673.51	13.12	7.1	1,309	13		
MW-5-37075	MW-5	7/3/2001	--	--	<0.6	U	38	100	<0.17	U	190,000	<0.4	U	<0.8	U	1,400	<0.9	U	81,000	260	<0.18	U	--	<1.2	U	<0.17	U	--	<3.2	U	380	35	<2.2	U	--	353	810	1,090	674.16	12.47	7	1,395	11
MW-5-37265	MW-5	1/9/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.4	U	--	--	--	--	0.41	--	--	--	--	673	13.63	6.6	1,369	13							
MW-5-37453	MW-5	7/16/2002	--	--	<0.8	U	40	100	<0.12	U	170,000	<0.21	U	<0.9	U	1,300	<0.7	U	85,000	290	<0.19	U	--	<1.1	U	<0.1	U	<2	U	<3.6	U	390	36	3.8	0.34	340	770	970	673.39	13.24	6.9	1,313	12
MW-5-38111	MW-5	5/4/2004	--	--	<0.5	U	--	110	--	180,000	--	--	1,500	<1.4	U	79,000	300	<0.17	U	--	--	--	--	--	--	400	--	6	--	339	770	970	673.64	12.99	7.1	1,007	11						
MW-5-38475	MW-5	5/3/2005	--	--	<1.3	U	--	100	--	160,000	--	--	1,600	0.66	--	74,000	210	<0.17	U	--	--	--	--	--	--	390	--	<5	U	--	315	700	920	673.26	13.37	6.8	1,269	10.5					
MW-5-38861	MW-5	5/24/2006	--	--	1.2	--	74	--	180,000	--	--	2,100	0.087	--	68,000	290	<0.011	U	--	--	--	--	--	--	410	--	4	--	314	730	1,000	673.82	12.81	6.8	1,279	11							
MW-5-39091	MW-5	1/9/2007	--	--	1.4	--	84	--	150,000	--	--	1,800	0.076	--	65,000	230	<0.0055	U	--	--	--	--	--	--	430	--	2.7	--	270	640	920	674.02	12.61	7.1	1,350	12.5							
MW-5-39091-Dup	MW-5	1/9/2007	--	--	1.3	--	85	--	150,000	--	--	1,700	0.067	--	62,000	230	<0.0055	U	--	--	--	--	--	--	380	--	4.9	--	270	630	940	--	--	7.1	1,347	12.5							
MW-5-39183	MW-5	4/11/2007	--	--	0.94	--	85	--	140,000	--	--	1,700	0.048	--	67,000	200	<0.012	U	--	--	--	--	--	--	390	--	<2.4	U	--	300	630	920	674.9	11.73	6.9	1,274	10						
MW-5-39286	MW-5	7/23/2007	--	--	1.3	--	100	--	160,000	--	--	2,100	<0.039	U	70,000	210	<0.0012	U	--	--	--	--	--	--	350	--	3.7	--	260	690	970	673.4	13.23	7.1	1,358	11.5							
MW-5-39373	MW-5	10/18/2007	--	--	1.5	--	130	--	174,000	--	--	2,200	<0.039	U	77,000	240	--	<0.001	U	--	--	--	--	--	340	--	5.9	--	240	750	920	674.2	12.43	6.9	1,333	13							
MW-5-39469	MW-5	1/22/2008	--	--	1.1	--	97	--	160,000	--	--	1,500	0.29	--	68,000	240	<0.001	U	--	--	--	--	--	--	380	--	<3.3	U	--	280	680	910	674.12	12.51	6.8	1,251	12						
MW-5-39561	MW-5	4/23/2008	--	--	0.81	--	92	--	200,000	--	--	1,300	0.073	--	76,000	260	<0.001	U	--	--	--	--	--	--	340	--	3.3	--	330	810	1,000	675.89	10.74	6.9	1,428	11							
MW-5-39644	MW-5	7/15/2008	--	--	1.2	--	96	--	170,000	--	--	1,900	0.0																														

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	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	Manganese, Dissolved	Magnesium, Dissolved	Mercury, Total	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Feet	Feet	s.u.	romhos	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										
			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								
			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								
MW-6-35655	MW-6	8/13/1997	--	--	4.8	150	290	<0.1	U	--	<0.6	U	<0.7	U	17,000	<1	U	--	600	0	--	<1	U	0.06	--	10	660	15	58	--	142	920	936	678.72	9.36	6.9	1,450	11		
MW-6-36034	MW-6	8/27/1998	--	--	8.5	120	340	0.15	--	<0.2	U	<1	U	14,000	1	--	580	<0.18	U	--	1.6	<0.14	U	--	14	600	15	30	--	138	910	898	678.49	9.59	6.9	1,520	12.5			
MW-6-36447	MW-6	10/14/1999	--	--	8.2	140	380	<0.14	U	190,000	<0.6	U	1.6	12,000	<0.6	U	90,000	450	<0.18	U	--	0.98	<0.094	U	--	0	700	15	59	--	126	840	854	678.76	9.32	6.9	1,430	14		
MW-6-36766	MW-6	8/28/2000	--	--	7	110	330	<0.15	U	200,000	<0.4	U	<1.1	U	14,000	<0.59	U	85,000	500	<0.18	U	--	<1.2	U	<0.17	U	--	22	600	14	35	--	131	850	978	678.56	9.52	6.8	1,433	14
MW-6-37074	MW-6	7/2/2001	--	--	8.1	110	340	<0.17	U	210,000	<0.4	U	<0.8	U	14,000	<0.9	U	95,000	530	<0.18	U	--	<1.2	U	<0.17	U	--	<3.2	700	14	26	--	120	920	938	678.26	9.82	6.7	1,550	10
MW-6-37264	MW-6	1/8/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	679.19	8.89	6.5	1,550	11.5					
MW-6-37453	MW-6	7/16/2002	--	--	8.5	140	310	<0.12	U	230,000	0.28	<0.9	U	16,000	<0.7	U	110,000	560	<0.19	U	--	<1.1	U	<0.1	U	<2	U	16	740	13	67	0.6	198	1,000	1,110	678.63	9.45	6.5	1,670	12
MW-6-38111	MW-6	5/4/2004	--	--	7.5	--	300	--	230,000	--	--	14,000	<1.4	U	98,000	520	<0.17	U	--	--	--	--	--	--	--	--	770	--	14	--	188	980	1,100	679.37	8.71	6.8	1,132	9		
MW-6-38475	MW-6	5/3/2005	--	--	7.5	--	270	--	220,000	--	--	15,000	1.3	--	96,000	450	<0.17	U	--	--	--	--	--	--	--	--	610	--	27	--	175	940	1,100	679.03	9.05	6.4	1,560	8.5		
MW-6-38861	MW-6	5/24/2006	--	--	11	--	260	--	220,000	--	--	15,000	0.21	--	86,000	490	<0.011	U	--	--	--	--	--	--	--	--	740	--	32	--	245	900	1,100	679.43	8.65	6.6	1,392	9		
MW-6-39091	MW-6	1/9/2007	--	--	10	--	280	--	190,000	--	--	13,000	0.072	--	90,000	440	<0.0055	U	--	--	--	--	--	--	--	--	650	--	22	--	290	840	1,100	679.46	8.62	6.8	1,640	10.5		
MW-6-39183	MW-6	4/11/2007	--	--	5.9	--	240	--	200,000	--	--	14,000	0.085	--	96,000	460	<0.012	U	--	--	--	--	--	--	--	--	740	--	47	--	280	890	1,200	679.24	8.13	6.6	1,580	8		
MW-6-39286	MW-6	7/23/2007	--	--	8.7	--	310	--	190,000	--	--	12,000	<0.039	U	90,000	440	<0.0012	U	--	--	--	--	--	--	--	--	810	--	21	--	240	840	1,100	679.24	8.84	6.8	1,570	13.5		
MW-6-39372	MW-6	10/17/2007	--	--	17	--	530	--	310,000	--	--	16,000	0.055	--	140,000	650	--	<0.001	U	--	--	--	--	--	--	--	1300	--	22	--	210	1,400	1,100	679.24	8.84	6.8	1,570	13.5		
MW-6-39469	MW-6	1/22/2008	--	--	9.6	--	310	--	220,000	--	--	10,000	<0.015	U	98,000	480	<0.001	U	--	--	--	--	--	--	--	--	770	--	31	--	120	950	1,100	679.36	8.72	6.6	1,540	9		
MW-6-39561	MW-6	4/23/2008	--	--	6	--	360	--	320,000	--	--	12,000	0.037	--	110,000	680	<0.001	U	--	--	--	--	--	--	--	--	780	--	53	--	330	1,300	1,400	679.55	8.53	6.5	1,910	10		
MW-6-39643	MW-6	7/14/2008	--	--	10	--	320	--	250,000	--	--	14,000	0.092	--	110,000	490	<0.0012	U	--	--	--	--	--	--	--	--	700	--	22.3	--	260	1,100	1,200	679.5	8.58	6.7	1,790	10		
MW-6-39729	MW-6	10/8/2008	--	--	11	--	350	--	190,000	--	--	11,000	0.2	--																										

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	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	Manganese, Dissolved	Magnesium, Dissolved	Mercury, Total	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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											
			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	Feet	Feet	s.u.	romhos	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													
			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											
			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											
MW-7-35655	MW-7	8/13/1997	--	--	2	78	320	<0.1	U	--	<0.6	U	<0.7	U	19	<1	U	--	4	0	--	1	0	--	<10	U	320	1	<5	U	--	124	420	486	681.41	6.4	7.5	764	10				
MW-7-36034	MW-7	8/27/1998	--	--	1.6	79	350	<0.05	U	--	<0.2	U	1.3	<2.4	U	<0.7	U	--	11	<0.18	U	--	<0.7	U	<0.14	U	--	10	320	1.2	<3.5	U	--	116	380	492	681.55	6.26	7.5	778	11.5		
MW-7-36447	MW-7	10/14/1999	--	--	1.6	93	360	<0.14	U	54,000	<0.6	U	1.3	<2.6	U	<0.6	U	55,000	29	<0.18	U	--	1.4	<0.094	U	--	0	330	1.3	8	--	111	360	404	679.77	8.04	7.5	750	13				
MW-7-36766	MW-7	8/28/2000	--	--	1.5	83	340	<0.15	U	53,000	<0.4	U	1.4	8.7	<0.59	U	52,000	24	<0.18	U	--	<1.2	U	<0.17	U	--	3.6	320	1.5	<3.9	U	--	115	350	478	681.87	5.94	7.5	731	13			
MW-7-37074	MW-7	7/2/2001	--	--	0.7	95	360	<0.17	U	53,000	<0.4	U	<0.8	U	<1.5	U	<0.9	U	54,000	1.1	<0.18	U	--	<1.2	U	<0.17	U	--	<3.2	U	310	0.8	<2.2	U	--	110	350	472	681.07	6.74	7.6	763	10
MW-7-37264	MW-7	1/8/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.4	U	--	--	--	--	--	--	679.9	7.91	7.4	762	11.5							
MW-7-37453	MW-7	7/16/2002	--	--	1.5	88	340	<0.12	U	54,000	<0.21	U	<0.9	U	11	<0.7	U	56,000	4.7	<0.19	U	--	<1.1	U	<0.1	U	<2	U	<3.6	U	320	1.5	<2.4	U	0.49	125	370	498	680.61	7.2	7.1	753	12
MW-7-38111	MW-7	5/4/2004	--	--	<0.5	U	--	370	--	53,000	--	--	13	<1.4	U	54,000	6.1	<0.17	U	--	--	--	--	--	--	--	--	320	--	<4	U	--	109	350	420	679.86	7.95	7.6	778	9			
MW-7-38475	MW-7	5/3/2005	--	--	<1.3	U	--	330	--	52,000	--	--	22	<0.59	U	52,000	8.6	<0.17	U	--	--	--	--	--	--	--	--	320	--	<5	U	--	112	340	410	679.58	8.23	7.2	731	9.5			
MW-7-38861	MW-7	5/24/2006	--	--	1.7	--	320	--	54,000	--	--	<26	U	0.19	49,000	12	<0.011	U	--	--	--	--	--	--	--	--	320	--	5.6	--	104	340	450	680.1	7.71	7.3	697	10					
MW-7-39091	MW-7	1/9/2007	--	--	1.5	--	380	--	52,000	--	--	<50	U	0.045	53,000	2.9	<0.0055	U	--	--	--	--	--	--	--	--	310	--	<2.4	U	--	110	350	460	680.2	7.61	7.6	746	11.5				
MW-7-39183	MW-7	4/11/2007	--	--	1	--	350	--	49,000	--	--	<50	U	0.04	53,000	18	<0.012	U	--	--	--	--	--	--	--	--	310	--	<2.4	U	--	120	340	460	679.19	8.62	7.3	729	8				
MW-7-39286	MW-7	7/23/2007	--	--	1.4	--	400	--	54,000	--	--	<1.5	U	<0.039	U	57,000	2.4	<0.0012	U	--	--	--	--	--	--	--	310	--	2.8	--	140	370	460	680.63	7.18	7.3	763	11					
MW-7-39372	MW-7	10/17/2007	--	--	1.8	--	500	--	68,000	--	--	<50	U	<0.039	U	69,000	12	--	<0.001	U	--	--	--	--	--	--	320	--	<2.4	U	--	130	450	460	681.38	6.43	7.3	766	13				
MW-7-39469	MW-7	1/22/2008	--	--	<0.34	U	--	440	--	60,000	--	--	<16	U	<0.015	U	59,000	0.26	<0.001	U	--	--	--	--	--	--	320	--	<3.3	U	--	130	390	490	679.41	8.4	7.4	742	11				
MW-7-39561	MW-7	4/23/2008	--	--	1.2	--	510	--	81,000	--	--	<16	U	0.032	56,000	<0.021	U	<0.001	U	--	--	--	--	--	--	--	310	--	<3.3	U	--	140	430	470	679.33	8.48	7.4	795	10.5				
MW-7-39643	MW-7	7/14/2008	--	--	1.3	--	420	--	62,000	--	--	49	0.057	59,000	1.9	<0.0012	U	--	--	--	--	--	--	--	--	310	--	4.5	--	140	400	480	680.37	7.44	7.5	799	10						
MW-7-39643-Dup	MW-7	7/14/2008	--	--	1.4	--	410	--	62,000	--	--	<16	U	0.019	58,000	0.71	<0.0012	U	--	--	--	--	--	--	--	300	--	4.5	--	130	390	470	--	7.5	79								

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	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	Manganese, Dissolved	Mercury, Dissolved	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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												
			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	Feet	Feet	s.u.	romhos	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													
			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												
			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												
MW-8-37074	MW-8	7/2/2001	--	--	1.5	92	160	<0.17	U	150,000	<0.4	U	<0.8	U	67	<0.9	U	50,000	340	<0.18	U	--	<1.2	U	<0.17	U	--	<3.2	U	310	133	6.5	--	91	580	742	674.12	16.98	7	1,222	10		
MW-8-37264	MW-8	1/8/2002	--	--	0.8	--	180	--	--	--	--	--	--	--	96	--	--	--	280	--	--	--	--	--	--	--	--	--	--	--	--	--	--	673.06	18.04	6.9	1,202	11					
MW-8-37453	MW-8	7/16/2002	--	--	<0.8	U	66	160	<0.12	U	140,000	<0.21	U	<0.9	U	130	<0.7	U	56,000	250	<0.19	U	--	<1.1	U	<0.1	U	<2	U	<3.6	U	350	132	4.1	0.3	89	580	740	673.44	17.66	6.8	1,237	11
MW-8-38111	MW-8	5/4/2004	--	--	<0.5	U	--	180	--	140,000	--	--	--	--	200	<1.4	U	52,000	210	<0.17	U	--	--	--	--	--	--	--	--	380	--	5	--	81	560	700	673.51	17.59	7	1,310	10.5		
MW-8-38475	MW-8	5/3/2005	--	--	<1.3	U	--	160	--	140,000	--	--	--	--	200	0.72	49,000	170	<0.17	U	--	--	--	--	--	--	--	--	310	--	<5	U	--	79	550	700	673.27	17.83	6.6	1,255	10		
MW-8-38860	MW-8	5/23/2006	--	--	0.8	--	140	--	130,000	--	--	--	--	--	120	0.49	44,000	170	<0.011	U	--	--	--	--	--	--	--	--	380	--	7.2	--	74	510	790	673.71	17.39	6.9	1,209	10			
MW-8-38861	MW-8	5/24/2006	<0.019	U	<0.2	U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--								
MW-8-39091	MW-8	1/9/2007	--	--	1.2	--	180	--	130,000	--	--	510	0.53	49,000	170	<0.0055	U	--	--	--	--	--	--	--	--	--	390	--	4.9	--	71	530	750	673.95	17.15	7	1,279	11					
MW-8-39183	MW-8	4/11/2007	--	--	0.78	--	190	--	120,000	--	--	370	0.14	51,000	150	<0.012	U	--	--	--	--	--	--	--	--	400	--	<2.4	U	--	71	510	720	674.8199	16.28	6.9	1,248	10					
MW-8-39286	MW-8	7/23/2007	--	--	0.85	--	210	--	130,000	--	--	360	0.084	55,000	160	<0.0012	U	--	--	--	--	--	--	--	340	--	4	--	78	550	720	673.48	17.62	7	1,238	10							
MW-8-39286-Dup	MW-8	7/23/2007	--	--	0.69	--	180	--	110,000	--	--	200	<0.039	U	47,000	130	<0.0012	U	--	--	--	--	--	--	--	340	--	4	--	80	470	700	--	--	7.1	1,222	10						
MW-8-39372	MW-8	10/17/2007	--	--	0.89	--	200	--	130,000	--	--	360	0.12	52,000	150	--	<0.001	U	--	--	--	--	--	--	400	--	<2.4	U	--	74	540	730	673.88	17.22	7	1,237	11						
MW-8-39469	MW-8	1/22/2008	--	--	1.2	--	210	--	140,000	--	--	440	0.18	56,000	180	<0.001	U	--	--	--	--	--	--	390	--	<3.3	U	--	69	580	760	674.13	16.97	6.6	1,262	11							
MW-8-39561	MW-8	4/23/2008	--	--	0.61	--	170	--	170,000	--	--	260	0.18	50,000	190	<0.001	U	--	--	--	--	--	--	330	--	<3.3	U	--	65	630	770	675.99	15.11	6.9	1,380	10.5							
MW-8-39643	MW-8	7/14/2008	--	--	0.82	--	180	--	130,000	--	--	940	0.46	52,000	150	<0.0012	U	--	--	--	--	--	--	320	--	8.4	--	71	540	750	674.44	16.66	6.9	1,335	9.5								
MW-8-39729	MW-8	10/8/2008	--	--	0.84	--	180	--	130,000	--	--	670	0.26	52,000	140	0.0015	--	--	--	--	--	--	390	--	<3.3	U	--	88	540	770	673.64	17.46	6.8	1,345	10								
MW-8-39834	MW-8	1/21/2009	--	--	0.64	--	160	--	120,000	--	--	510	0.16	50,000	130	<0.0005	U	--	--	--	--	--	400	--	<2.5	U	--	65	510	750	674.0699	17.03	7.4	1,475	10								
MW-8-39911	MW-8	4/8/2009	--	--	0.99	--	170	--	140,000	--	--	540	0.19	54,000	160	<0.0005	U	--	--	--	--	--	380	--	4.3	--	300	570	820	675.28	15.82	7	1,481	9.5									
MW-8-40007	MW-8	7/13/2009	--	--	0.78	--	150	--	140,000	--	--	580	<0.048	U	46,000	140	--	<0.0005	U	--	--	--	380	--	4.5	--	60	540	720	675.1	16	7.3	1,358	10									
MW-8-40105	MW-8	10/19/20																																									

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	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	Manganese, Dissolved	Mercury, Dissolved	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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											
			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	Feet	Feet	s.u.	romhos	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												
			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										
			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										
MW-9-37075	MW-9	7/3/2001	--	--	1.8	75	69	<0.17	U	220,000	1.5	4.3	5,500	3.4	110,000	280	<0.18	U	<1.2	U	<0.17	U	--	10	350	28	2.5	--	389	1,000	1,080	672.79	15.71	7	1,500	11						
MW-9-37264	MW-9	1/8/2002	--	--	1.5	--	67	--	--	--	4,100	--	--	160	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	672.05	16.45	6.8	1,493	11							
MW-9-37453	MW-9	7/16/2002	--	--	1.6	44	56	<0.12	U	190,000	<0.21	U	1.6	2,800	<0.7	U	110,000	120	<0.19	U	--	<1.1	U	<0.1	U	<2	U	<3.6	U	410	27	<2.4	U	1.7	415	930	1,130	671.99	16.51	6.9	1,449	12
MW-9-38112	MW-9	5/5/2004	--	--	<0.5	U	--	69	--	200,000	--	--	3,600	<1.4	U	100,000	120	<0.17	U	--	--	--	--	--	--	400	--	<4	U	--	433	910	1,100	671.98	16.52	7.1	671	11				
MW-9-38475	MW-9	5/3/2005	--	--	<1.3	U	--	68	--	200,000	--	--	4,500	1	99,000	110	<0.17	U	--	--	--	--	--	--	380	--	8.8	--	430	910	1,100	672.27	16.23	6.8	1,424	10.5						
MW-9-38860	MW-9	5/23/2006	--	--	1.4	--	65	--	210,000	--	--	4,000	0.34	95,000	130	<0.011	U	--	--	--	--	--	--	--	410	--	6.8	--	485	920	1,300	672.18	16.32	6.8	1,411	10.5						
MW-9-39092	MW-9	1/10/2007	--	--	1	--	70	--	190,000	--	--	4,100	0.13	100,000	130	<0.0055	U	--	--	--	--	--	--	--	460	--	6.2	--	470	890	1,200	672.29	16.21	7.1	1,491	11						
MW-9-39184	MW-9	4/12/2007	--	--	0.87	--	71	--	180,000	--	--	3,400	0.085	100,000	120	<0.012	U	--	--	--	--	--	--	--	460	--	8.9	--	480	860	1,200	673.34	15.16	6.9	1,464	10.5						
MW-9-39184-Dup	MW-9	4/12/2007	--	--	0.91	--	65	--	180,000	--	--	1,600	0.053	100,000	110	<0.012	U	--	--	--	--	--	--	--	460	--	6	--	470	860	1,200	--	--	6.9	1,460	10.5						
MW-9-39287	MW-9	7/24/2007	--	--	1.1	--	75	--	180,000	--	--	4,100	<0.039	U	97,000	110	<0.0012	U	--	--	--	--	--	--	--	340	--	11	--	500	850	1,200	672.08	16.42	7.2	1,550	10.5					
MW-9-39373	MW-9	10/18/2007	--	--	1.3	--	110	--	280,000	--	--	6,700	0.099	150,000	170	--	<0.001	U	--	--	--	--	--	--	--	450	--	8.9	--	490	1,300	1,200	672.86	15.64	7	1,520	11.5					
MW-9-39470	MW-9	1/23/2008	--	--	<0.34	U	--	81	--	220,000	--	--	3,500	<0.015	U	110,000	140	<0.001	U	--	--	--	--	--	--	450	--	6.7	--	500	1,000	1,200	672.72	15.78	6.9	1,470	10					
MW-9-39561	MW-9	4/23/2008	--	--	0.43	--	110	--	240,000	--	--	3,200	0.024	120,000	130	<0.001	U	--	--	--	--	--	--	--	370	--	5.3	--	490	1,100	1,200	674	14.45	7.1	1,610	11.5						
MW-9-39561-Dup	MW-9	4/23/2008	--	--	0.67	--	10	--	230,000	--	--	2,300	<0.015	U	140,000	130	<0.001	U	--	--	--	--	--	--	--	370	--	<3.3	U	--	500	1,200	1,300	--	--	7.1	1,600	11.5				
MW-9-39644	MW-9	7/15/2008	--	--	0.46	--	82	--	210,000	--	--	4,400	0.052	110,000	120	<0.0012	U	--	--	--	--	--	--	--	390	--	10.4	--	500	980	1,200	673.47	15.03	7.1	1,620	10						
MW-9-39730	MW-9	10/9/2008	--	--	0.81	--	82	--	200,000	--	--	4,600	0.2	110,000	120	0.00045	--	--	--	--	--	--	--	--	440	--	5	--	540	950	1,200	672.62	15.88	6.9	1,640	10						
MW-9-39835	MW-9	1/22/2009	--	--	0.5	--	76	--	190,000	--	--	4,900	0.037	110,000	120	<0.0005	U	--	--	--	--	--	--	--	430	--	<2.5	U	--	510	930	1,200	672.89	15.61	7.4	1,680	10					
MW-9-39912	MW-9	4/9/2009	--	--	0.81	--	120	--	270,000	--	--	4,500	0.056	140,000	160	0.0013	--	--	--	--	--	--	--	--	440	--	5.5	--	490	1,200	1,200	673.61	14.89	7	1,620	10						
MW-9-40008	MW-9	7/14/2009	--	--	0.63	--	74	--	210,000	--	--	4,300	<0.048	U	100,000	110	--	<0.0005	U	--	--	--	--	--	--	450	--	10	--	500	940											

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	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	Manganese, Dissolved	Magnesium, Dissolved	Mercury, Total	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Feet	Feet	s.u.	romhos	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													
			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											
			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											
P-1-35655	P-1	8/13/1997	--	--	<0.9	U	65	250	<0.1	U	--	<0.6	U	<0.7	U	940	<1	U	--	13	0	--	<1	U	0	--	30	340	7.7	<5	U	--	129	490	534	675.15	14.65	7.6	815	10			
P-1-36034	P-1	8/27/1998	--	--	<0.7	U	60	270	<0.05	U	--	<0.2	U	<1	U	700	<0.7	U	--	11	<0.18	U	--	<0.7	U	<0.14	U	--	6.7	310	6.3	6	--	94	380	446	674.65	15.15	7.7	738	11.5		
P-1-36447	P-1	10/14/1999	--	--	<1	U	72	260	<0.14	U	51,000	<0.6	U	1.6	570	0.95	49,000	8.9	<0.18	U	--	<0.9	U	<0.094	U	--	6.7	300	5.5	9	--	75	330	432	674.48	15.32	7.6	657	11.5				
P-1-36766	P-1	8/28/2000	--	--	0.8	60	260	<0.15	U	56,000	<0.4	U	<1.1	U	770	<0.59	U	52,000	9	<0.18	U	--	<1.2	U	<0.17	U	--	6.8	310	6.8	<3.9	U	--	99	350	480	675.39	14.41	7.6	699	12		
P-1-37074	P-1	7/2/2001	--	--	<0.6	U	71	290	<0.17	U	57,000	<0.4	U	<0.8	U	650	<0.9	U	54,000	9.4	<0.18	U	--	<1.2	U	<0.17	U	--	<3.2	U	300	6.3	2.5	--	95	360	454	675.93	13.87	7.6	744	10.5	
P-1-37264	P-1	1/8/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.4	U	--	--	--	--	0.2	--	--	674.96	14.84	7.4	659	10.5							
P-1-37453	P-1	7/16/2002	--	--	<0.8	U	71	270	<0.12	U	48,000	<0.21	U	<0.9	U	500	<0.7	U	48,000	8.4	<0.19	U	--	<1.1	U	<0.1	U	<2	U	4.3	300	5.6	<2.4	U	0.37	72	320	374	675.24	14.56	7.4	635	12
P-1-38111	P-1	5/4/2004	--	--	<0.5	U	--	290	--	--	48,000	--	--	550	<1.4	U	45,000	19	<0.17	U	--	--	--	--	290	--	6	--	70	310	360	675.45	14.35	7.7	659	11							
P-1-38475	P-1	5/3/2005	--	--	<1.3	U	--	260	--	--	45,000	--	--	590	<0.59	U	41,000	16	<0.17	U	--	--	--	--	280	--	<5	U	--	66	280	330	675.11	14.69	7.1	608	10.5						
P-1-38861	P-1	5/24/2006	--	--	<0.43	U	--	250	--	--	47,000	--	--	400	<0.029	U	39,000	25	<0.011	U	--	--	--	--	280	--	<2	U	--	63	280	380	675.64	14.16	7.5	584	11						
P-1-38861-Dup	P-1	5/24/2006	--	--	<0.43	U	--	250	--	--	46,000	--	--	280	0.068	39,000	12	<0.011	U	--	--	--	--	280	--	2.3	--	63	280	380	--	--	--	--	--								
P-1-39091	P-1	1/9/2007	--	--	<0.53	U	--	280	--	--	41,000	--	--	420	<0.039	U	39,000	9.1	<0.0055	U	--	--	--	--	270	--	3.3	--	65	260	350	675.77	14.03	7.7	616	11							
P-1-39183	P-1	4/11/2007	--	--	<0.53	U	--	280	--	--	40,000	--	--	540	0.048	40,000	22	<0.012	U	--	--	--	--	280	--	3	--	66	260	350	676.75	13.05	7.5	598	10.5								
P-1-39286	P-1	7/23/2007	--	--	<0.53	U	--	280	--	--	37,000	--	--	420	<0.039	U	36,000	9.4	<0.0012	U	--	--	--	--	280	--	6.2	--	60	240	370	675.28	14.52	7.6	607	11.5							
P-1-39372	P-1	10/17/2007	--	--	<0.53	U	--	390	--	--	57,000	--	--	580	<0.039	U	53,000	21	--	<0.001	U	--	--	--	--	280	--	3.9	--	58	360	370	675.77	14.03	7.6	612	11						
P-1-39469	P-1	1/22/2008	--	--	<0.34	U	--	320	--	--	50,000	--	--	520	<0.015	U	45,000	10	<0.001	U	--	--	--	--	280	--	4.8	--	63	310	340	675.96	13.84	7.5	590	10							
P-1-39561	P-1	4/23/2008	--	--	<0.34	U	--	400	--	--	53,000	--	--	300	<0.015	U	37,000	11	<0.001	U	--	--	--	--	270	--	<3.3	U	--	65	280	380	677.79	12.01	7.6	632	10.5						
P-1-39643	P-1	7/14/2008	--	--	0.22	--	320	--	--	49,000	--	--	480	0.02	43,000	12	<0.0012	U	--	--	--	--	270	--	7.1	--	61																

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	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	Manganese, Dissolved	Magnesium, Dissolved	Mercury, Total	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Feet	Feet	s.u.	romhos	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											
			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										
			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										
P-2-35655	P-2	8/13/1997	--	--	2.4	85	240	<0.1	U	--	<0.6	U	0.7	52	<1	U	--	46	0	--	<1	U	0	--	<10	U	200	2	<5	U	--	11	190	242	673.17	15.58	7.9	388	11.5		
P-2-36034	P-2	8/27/1998	--	--	2.2	85	280	<0.05	U	--	<0.2	U	1.1	9	<0.7	U	--	28	<0.18	U	--	<0.7	U	<0.14	U	--	8.2	200	1.9	<3.5	U	--	8	150	208	672.86	15.89	8	392	12.5	
P-2-36447	P-2	10/14/1999	--	--	3.3	87	280	<0.14	U	26,000	<0.6	U	1.7	220	<0.6	U	19,000	50	<0.18	U	--	<0.9	U	<0.094	U	--	0	210	2	9	--	9.9	140	197	672.42	16.33	7.6	381	13		
P-2-36766	P-2	8/28/2000	--	--	4.2	86	260	<0.15	U	27,000	<0.4	U	7.9	260	0.7	19,000	54	<0.18	U	--	<1.2	U	<0.17	U	--	7.4	210	2.2	<3.9	U	--	11	150	232	673.45	15.3	7.8	386	14		
P-2-37075	P-2	7/3/2001	--	--	1.8	100	280	<0.17	U	28,000	<0.4	U	1.5	180	<0.9	U	20,000	68	<0.18	U	--	<1.2	U	<0.17	U	--	<3.2	U	220	2.1	5.5	--	11	150	248	674.06	14.69	8	406	14	
P-2-37265	P-2	1/9/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.1	--	--	--	--	0.32	--	--	--	672.93	15.82	7.4	393	13				
P-2-37453	P-2	7/16/2002	--	--	2.8	100	270	<0.12	U	27,000	<0.21	U	1.4	110	<0.7	U	20,000	64	<0.19	U	--	<1.1	U	<0.1	U	<2	U	9.8	210	2.1	<2.4	U	0.67	7.9	150	172	673.26	15.49	7.5	387	14
P-2-38112	P-2	5/5/2004	--	--	1.8	--	290	--	28,000	--	--	120	<1.4	U	21,000	43	<0.17	U	--	--	--	--	--	--	--	210	--	<4	U	--	11	160	220	673.43	15.32	8	410	13			
P-2-38475	P-2	5/3/2005	--	--	2	--	260	--	27,000	--	--	100	<0.59	U	19,000	41	<0.17	U	--	--	--	--	--	--	--	210	--	<5	U	--	10	150	180	673.13	15.62	7.5	393	12.5			
P-2-38861	P-2	5/24/2006	--	--	2.9	--	250	--	26,000	--	--	52	0.18	20,000	95	<0.011	U	--	--	--	--	--	--	--	210	--	6.2	--	10	150	230	673.6	15.15	7.5	388	13.5					
P-2-39091	P-2	1/9/2007	--	--	2.8	--	280	--	26,000	--	--	21	0.16	20,000	120	<0.0055	U	--	--	--	--	--	--	--	210	--	4.3	--	8.9	150	210	673.89	14.86	7.7	399	14					
P-2-39183	P-2	4/11/2007	--	--	2.7	--	280	--	25,000	--	--	220	0.17	20,000	89	<0.012	U	--	--	--	--	--	--	--	220	--	3.7	--	8.9	140	210	674.64	14.11	7.5	394	12.5					
P-2-39286	P-2	7/23/2007	--	--	2.4	--	290	--	24,000	--	--	31	<0.039	U	20,000	14	<0.0012	U	--	--	--	--	--	--	220	--	6.2	--	8.9	140	220	673.27	15.48	7.7	413	13					
P-2-39373	P-2	10/18/2007	--	--	4.6	--	510	--	45,000	--	--	<50	U	0.19	36,000	100	--	<0.001	U	--	--	--	--	--	210	--	<2.4	U	--	7.7	260	220	673.9	14.85	7.6	395	14				
P-2-39470	P-2	1/23/2008	--	--	3	--	330	--	31,000	--	--	120	0.14	24,000	88	<0.001	U	--	--	--	--	--	--	220	--	<3.3	U	--	8.2	180	200	673.92	14.83	7.6	390	12					
P-2-39561	P-2	4/23/2008	--	--	3.4	--	310	--	35,000	--	--	<16	U	0.14	22,000	25	<0.001	U	--	--	--	--	--	220	--	<3.3	U	--	9.2	180	220	676.02	12.73	7.9	424	12.5					
P-2-39644	P-2	7/15/2008	--	--	3	--	310	--	31,000	--	--	60	0.13	24,000	36	<0.0012	U	--	--	--	--	--	210	--	9.4	--	10	180	230	674.35	14.4	7.9	432	13							
P-2-39730	P-2	10/9/2008	--	--	2.9	--	310	--	27,000	--	--	290	0.29	22,000	44	0.0012	--	--	--	--	--	220	--	<3.3	U	--	8.3	160	220	673.41	15.34	7.5	422	14.5							
P-2-39834	P-2	1/21/2009	--	--																																					

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	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	Manganese, Dissolved	Magnesium, Dissolved	Mercury, Total	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Feet	Feet	s.u.	romhos	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											
			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										
			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										
P-3-37074	P-3	7/2/2001	--	--	0.8	110	350	<0.17	U	62,000	0.8	1.4	830	1.2	27,000	170	<0.18	U	<1.2	U	<0.17	U	--	9.8	220	30	6.8	--	116	270	484	674.18	16.72	7.7	735	10.5					
P-3-37264	P-3	1/8/2002	--	--	<0.6	U	--	420	--	--	--	--	140	--	--	70	--	--	--	--	<3.4	U	--	--	--	--	79	--	--	673.07	17.83	7.5	550	10							
P-3-37453	P-3	7/16/2002	--	--	1	53	430	<0.12	U	31,000	<0.21	U	1.8	200	<0.7	U	14,000	87	<0.19	U	--	<1.1	U	<0.1	U	<2	U	<3.6	U	190	8.6	12	0.4	55	140	286	673.58	17.32	7.8	468	11.5
P-3-38111	P-3	5/4/2004	--	--	<0.5	U	--	490	--	28,000	--	--	190	<1.4	U	11,000	70	<0.17	U	--	--	--	--	--	--	--	170	--	6	--	38	120	200	673.28	17.62	7.4	473	11			
P-3-38475	P-3	5/3/2005	--	--	<1.3	U	--	440	--	22,000	--	--	230	<0.59	U	8,500	56	<0.17	U	--	--	--	--	--	--	--	160	--	11	--	19	90	170	657.5	33.4	6.8	357	10.5			
P-3-38860	P-3	5/23/2006	--	--	1.1	--	460	--	26,000	--	--	430	1.8	10,000	89	<0.011	U	--	--	--	--	--	--	--	--	160	--	20	--	35	110	230	673.47	17.43	7.6	389	11.5				
P-3-38861	P-3	5/24/2006	0.045	0.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
P-3-39091	P-3	1/9/2007	--	--	1	--	490	--	22,000	--	--	<50	U	0.22	10,000	74	<0.0055	U	--	--	--	--	--	--	--	160	--	14	--	34	96	200	673.69	17.21	7.7	380	11				
P-3-39183	P-3	4/11/2007	--	--	1.2	--	490	--	24,000	--	--	260	0.35	10,000	52	<0.012	U	--	--	--	--	--	--	--	160	--	4.4	--	35	100	220	673.25	17.65	7.5	373	10.5					
P-3-39286	P-3	7/23/2007	--	--	1.2	--	560	--	25,000	--	--	170	0.062	11,000	54	<0.0012	U	--	--	--	--	--	--	--	160	--	6.6	--	26	110	170	673.14	17.76	7.8	363	11					
P-3-39372	P-3	10/17/2007	--	--	1.8	--	640	--	29,000	--	--	250	0.36	12,000	85	--	0.0011	--	--	--	--	--	--	--	160	--	8.9	--	22	120	170	672.97	17.93	7.7	345	11					
P-3-39469	P-3	1/22/2008	--	--	0.93	--	530	--	31,000	--	--	260	0.34	12,000	98	<0.001	U	--	--	--	--	--	--	--	160	--	7	--	42	130	200	655.7401	35.16	7.3	388	10.5					
P-3-39561	P-3	4/23/2008	--	--	1.2	--	710	--	31,000	--	--	130	0.18	12,000	60	<0.001	U	--	--	--	--	--	--	--	160	--	<3.3	U	--	24	130	210	674.55	16.35	7.7	357	11				
P-3-39643	P-3	7/14/2008	0.039	0.17	1.1	--	520	--	24,000	--	--	620	0.35	10,000	62	<0.0012	U	--	--	--	--	--	--	--	150	--	8.1	--	15	100	180	673.2	17.7	7.7	348	11					
P-3-39729	P-3	10/8/2008	--	--	0.83	--	530	--	23,000	--	--	200	0.2	10,000	50	0.0012	--	--	--	--	--	--	--	--	160	--	8	--	30	99	190	672.35	18.55	7.7	380	10					
P-3-39834	P-3	1/21/2009	--	--	1.4	--	460	--	21,000	--	--	110	0.12	9,500	54	0.00051	--	--	--	--	--	--	--	--	160	--	5.2	--	20	92	190	673.4301	17.47	8.3	375	10					
P-3-39911	P-3	4/8/2009	--	--	1.4	--	520	--	20,000	--	--	110	0.16	8,900	59	<0.0005	U	--	--	--	--	--	--	--	150	--	7.1	--	13	87	170	673.01	17.89	8	329	10.5					
P-3-40007	P-3	7/13/2009	0.0057	J	0.021	J	1.6	--	500	--	22,000	--	--	160	0.2	7,600	71	--	0.00098	--	--	--	--	--	--	150	--	<2.5	U	--	18	86	180	674.53	16.37	8.2	341	11.5			
P-3-40105	P-3	10/19/2009	0.0057	J	0.021	J	2.2	--	480	--	28,000	--	--	630	0.8	11,000	140	--	0.0025	--	--	--	--	--	--	160	--	7.4	--	34	120	220	672.4901	18.41	7.8	3					

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	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, Total	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Feet	Feet	s.u.	romhos	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										
			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									
			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									
P-4-37075	P-4	7/3/2001	--	--	<0.6	U	91	91	<0.17	U	190,000	<0.4	U	<0.8	U	3,200	<0.9	U	85,000	200	<0.18	U	--	<1.2	U	<0.17	U	--	<3.2	U	340	31	2.8	--	400	820	1,170	672.08	16.42	7.1	1,426	11
P-4-37264	P-4	1/8/2002	--	--	0.7	--	91	--	--	--	--	3,300	--	--	--	160	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	671.51	16.99	6.9	1,371	10.5			
P-4-37453	P-4	7/16/2002	--	--	0.8	64	81	<0.12	U	180,000	<0.21	U	<0.9	U	3,600	<0.7	U	88,000	150	<0.19	U	--	<1.1	U	<0.1	U	<2	U	4.7	370	30	<2.4	U	0.37	399	810	1,020	671.25	17.25	6.9	1,341	12
P-4-38112	P-4	5/5/2004	--	--	<0.5	U	--	89	--	190,000	--	--	4,000	<1.4	U	82,000	130	<0.17	U	--	--	--	--	--	--	--	--	370	--	4	--	400	810	990	671.51	16.99	7.1	699	11			
P-4-38475	P-4	5/3/2005	--	--	<1.3	U	--	84	--	190,000	--	--	3,900	0.63	79,000	130	<0.17	U	--	--	--	--	--	--	--	--	320	--	<5	U	--	418	800	990	671.79	16.71	6.8	1,298	10.5			
P-4-38860	P-4	5/23/2006	--	--	0.43	--	90	--	190,000	--	--	4,400	0.2	73,000	120	<0.011	U	--	--	--	--	--	--	--	--	370	--	3	--	436	780	1,100	671.61	16.89	6.8	1,297	11					
P-4-39092	P-4	1/10/2007	--	--	<0.53	U	--	89	--	190,000	--	--	4,400	0.065	84,000	120	<0.0055	U	--	--	--	--	--	--	--	370	--	6.5	--	490	820	1,200	671.92	16.58	7.1	1,441	10.5					
P-4-39184	P-4	4/12/2007	--	--	0.69	--	85	--	180,000	--	--	4,200	0.07	89,000	120	<0.012	U	--	--	--	--	--	--	--	380	--	4.4	--	510	820	1,200	672.81	15.69	6.9	1,432	10.5						
P-4-39287	P-4	7/24/2007	--	--	0.7	--	120	--	230,000	--	--	4,300	<0.039	U	110,000	150	<0.0012	U	--	--	--	--	--	--	370	--	3.7	--	530	1,000	1,200	671.34	17.16	7.2	1,490	11						
P-4-39373	P-4	10/18/2007	--	--	0.74	--	110	--	220,000	--	--	4,500	<0.039	U	100,000	140	--	<0.001	U	--	--	--	--	--	370	--	2.6	--	560	960	1,200	672.22	16.28	7.1	1,463	11						
P-4-39470	P-4	1/23/2008	--	--	0.21	--	97	--	210,000	--	--	4,400	<0.015	U	92,000	130	<0.001	U	--	--	--	--	--	--	370	--	4.8	--	530	900	1,200	672.29	16.21	6.9	1,445	10.5						
P-4-39561	P-4	4/23/2008	--	--	<0.34	U	--	133	--	300,000	--	--	4,400	<0.015	U	100,000	170	<0.001	U	--	--	--	--	--	320	--	<3.3	U	--	550	1,200	1,300	673.5	15	7.1	1,600	11.5					
P-4-39644	P-4	7/15/2008	--	--	0.22	--	110	--	220,000	--	--	4,700	0.043	110,000	130	<0.0012	U	--	--	--	--	--	--	370	--	6.5	--	560	1,000	1,300	672.71	15.79	7.2	1,620	11							
P-4-39730	P-4	10/9/2008	--	--	<0.34	U	--	99	--	190,000	--	--	4,600	0.13	92,000	120	0.001	--	--	--	--	--	--	370	--	<3.3	U	--	510	850	1,200	672.08	16.42	6.9	1,540	10.5						
P-4-39835	P-4	1/22/2009	--	--	0.2	--	93	--	190,000	--	--	4,800	0.088	95,000	120	<0.0005	U	--	--	--	--	--	--	380	--	<2.5	U	--	520	870	1,200	672.52	15.98	7.6	1,690	10						
P-4-39912	P-4	4/9/2009	--	--	0.39	--	150	--	290,000	--	--	5,000	<0.048	U	140,000	180	<0.0005	U	--	--	--	--	--	380	--	<2.5	U	--	560	1,300	1,200	673.17	15.33	7.1	1,620	10						
P-4-40008	P-4	7/14/2009	--	--	0.31	--	93	--	260,000	--	--	4,600	0.095	91,000	150	--	<0.0005	U	--	--	--	--	--	380	--	<2.5	U	--	580	1,000	1,300	673.1	15.4	7.4	1,670	10.5						
P-4-40106	P-4	10/20/2009	--	--	0.85	--	96	--	210,000	--	--	4,800	<0.017	U	97,000	170	--	0.00059	--	--	--	--	370	--	5.5	--	550</td															

**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	Inorganic	Inorganic	Inorganic	Inorganic	GEO	GEO	Field Param	RNA	RNA	RNA	RNA				
			Benz(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, Total	Selenium, Dissolved	Silver, Dissolved	Vanadium, Dissolved	Zinc, Dissolved	Alkalinity, Dissolved	Chloride, Dissolved	COD	Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> , 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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Feet	Feet	s.u.	romhos	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	Result	Result	Result	
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	
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	

mg/L = milligrams per liter

NS = A groundwater quality standard has not been established.

NO<sub>2</sub> + NO<sub>3</sub> = 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
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	Direct Contact	Groundwater Protection (DF=2)	WDNR BTV
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	Non-Industrial	Industrial	
<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
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
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	100000	100000	--
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
Iron	20500	20400	24400	20200	21900	19700	19100	19800	23200	54800	100000	--
Lead	10.3	10.6	14.0	11.8	14.9	11.6	10.9	11.9	12.4	400	800	27
Manganese	575	551	578	498	559	527	578	505	365	1830	25900	39.1244
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	--
VOCs (ug/kg)	ND	--	ND	--	--	--	--	--	ND	--	--	--

Sample ID	SS-09	SS-10	SS-11	SS-12	SS-13	SS-14	SS-15	SS-16
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
Cadmium	< 0.11	< 0.11	< 0.12	< 0.11	0.24 J	< 0.12	0.12 J	0.17 J
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
Chromium, hexavalent	< 2.50	< 2.54	< 2.61	< 2.53	< 2.57	6.56 J	< 2.52	< 2.61
Copper	18.9	18.7	27.0	19.0	29.6	21.0	29.9	20.7
Iron	18800	21900	24600	18100	21300	19800	22000	18300
Lead	9.6	14.2	14.1	10.7	13.3	11.0	16.2	11.7
Manganese	494	387	618	523	544	579	446	498
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
VOCs (ug/kg)	--	--	--	--	--	--	--	--

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

*Notes:*

-- not analyzed, not established or not applicable

bgs - below ground surface

BTM - 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

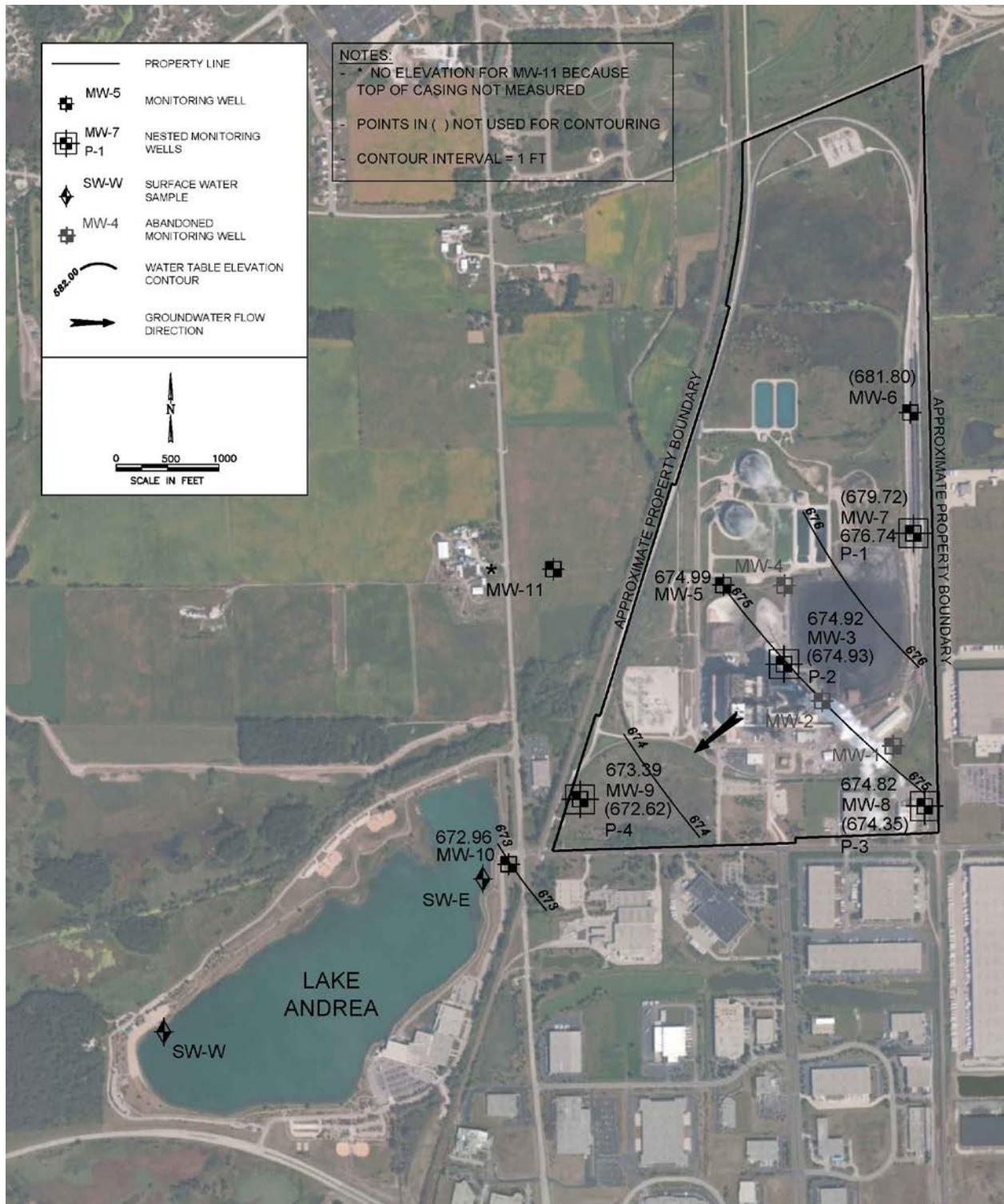
9-Digit Code	Sample Location	Sample Date	Inorganic	RNA	RNA	RNA	RNA
			Sulfate, Dissolved	Groundwater, depth to	pH, Field	Specific Conductance, Field	Temperature, Water
			Reporting Units:	mg/L	Feet	s.u.	micromhos/cm
			Result	Flag	Result	Result	Deg C
LAEast-38860	LAEast	5/23/2006	<b>446</b>	--	--	--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

HIGHWAY 31

EASEMENT ROAD

Sump 2

FONNEX  
NO. 2 FUEL OIL  
STORAGE TANKS

GAS

Liquid

NITROGEN

TANK

REFRIGERATED  
JUICE CONCENTRATE  
TANKS

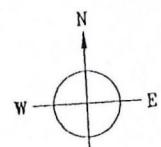
TRASH

BLDG.

OFFICE

IPS

BLDG.



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	870	734	730	264	318	289	252
Alkalinity	mg/L	340	300	335	345	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

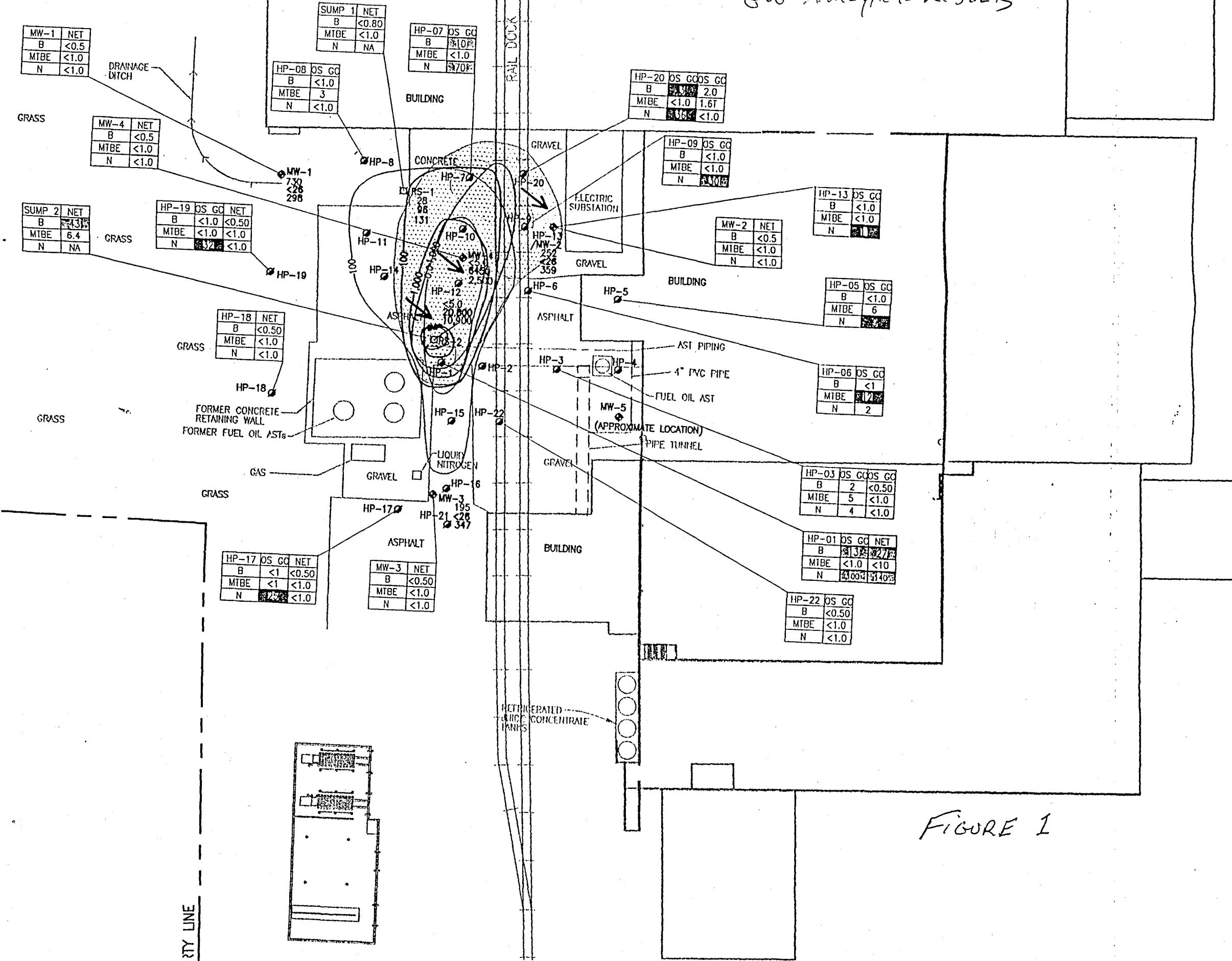
TABLE 3  
REMEDIATION BY NATURAL ATTENUATION INDICATOR MEASUREMENTS  
OCEAN SPRAY CRANBERRIES, INC.  
7800 60TH AVENUE  
KENOSHA, WISCONSIN

Monitoring Location Date Sampled Lab	Lab ID:	Units	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
			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:

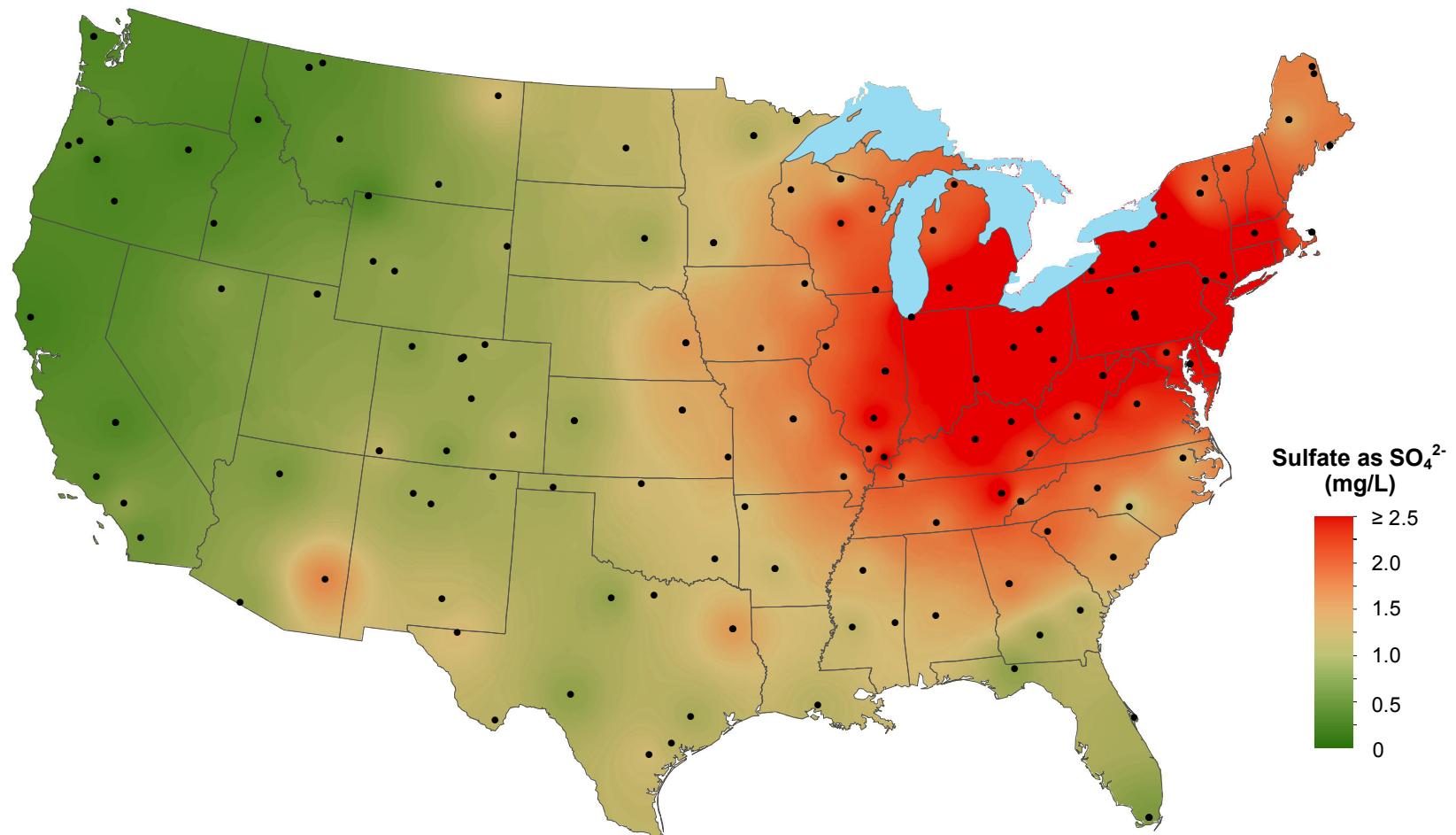
- °C - Degrees celsius
- DO - Dissolved oxygen
- TDS - Total dissolved solids
- ORP - Oxygen-reduction potential
- mg/L - Milligrams per liter
- μg/mL - Micrograms per milliliter
- μmhos/cm - Micromhos per centimeter
- g/L - Grams per liter
- mv - Millivolts
- NM - Not measured; Parameters were not measured 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



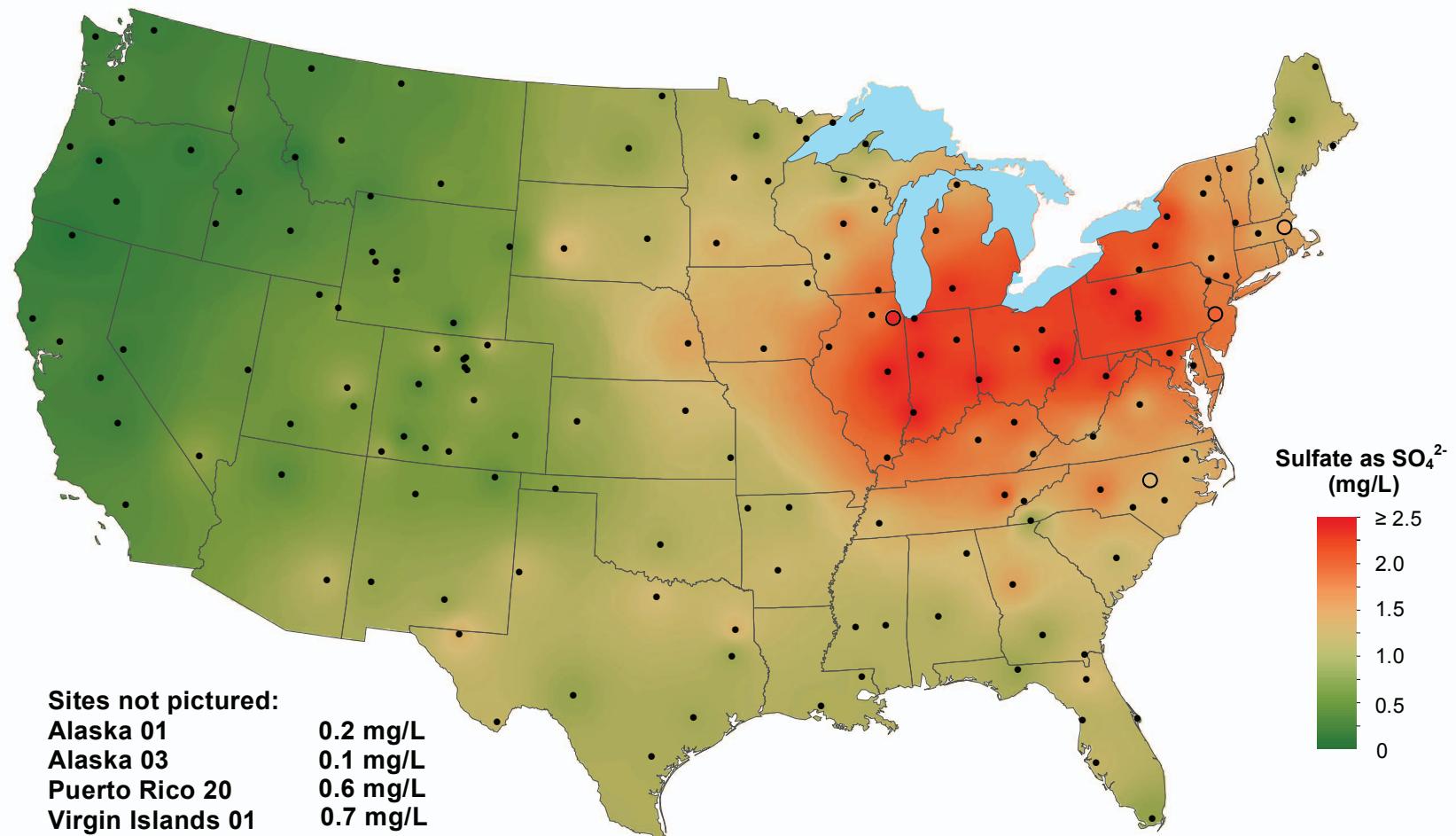
**ATTACHMENT C1**

## Sulfate ion concentration, 1985

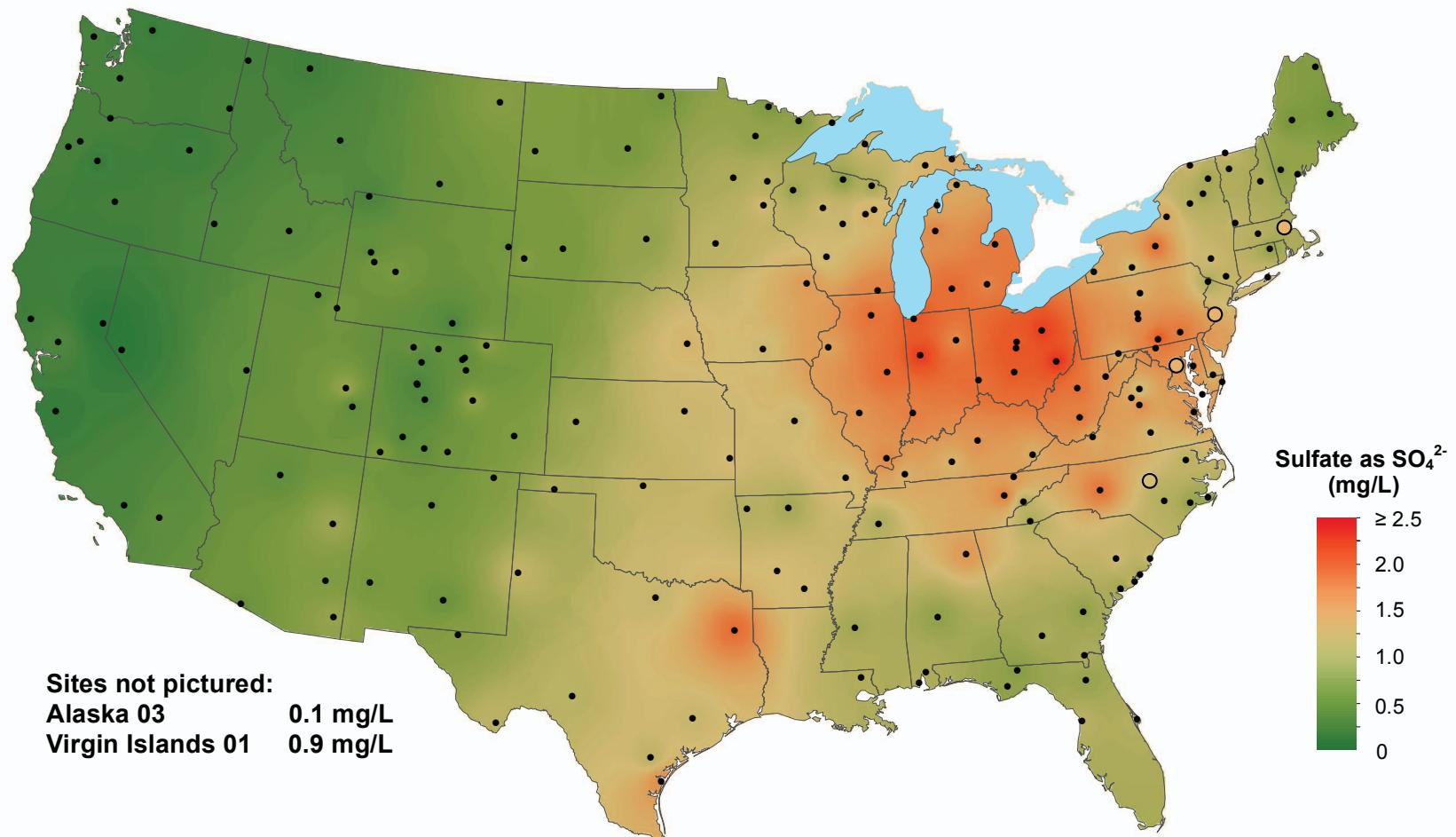


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<http://nadp.isws.illinois.edu>

## Sulfate ion concentration, 1998

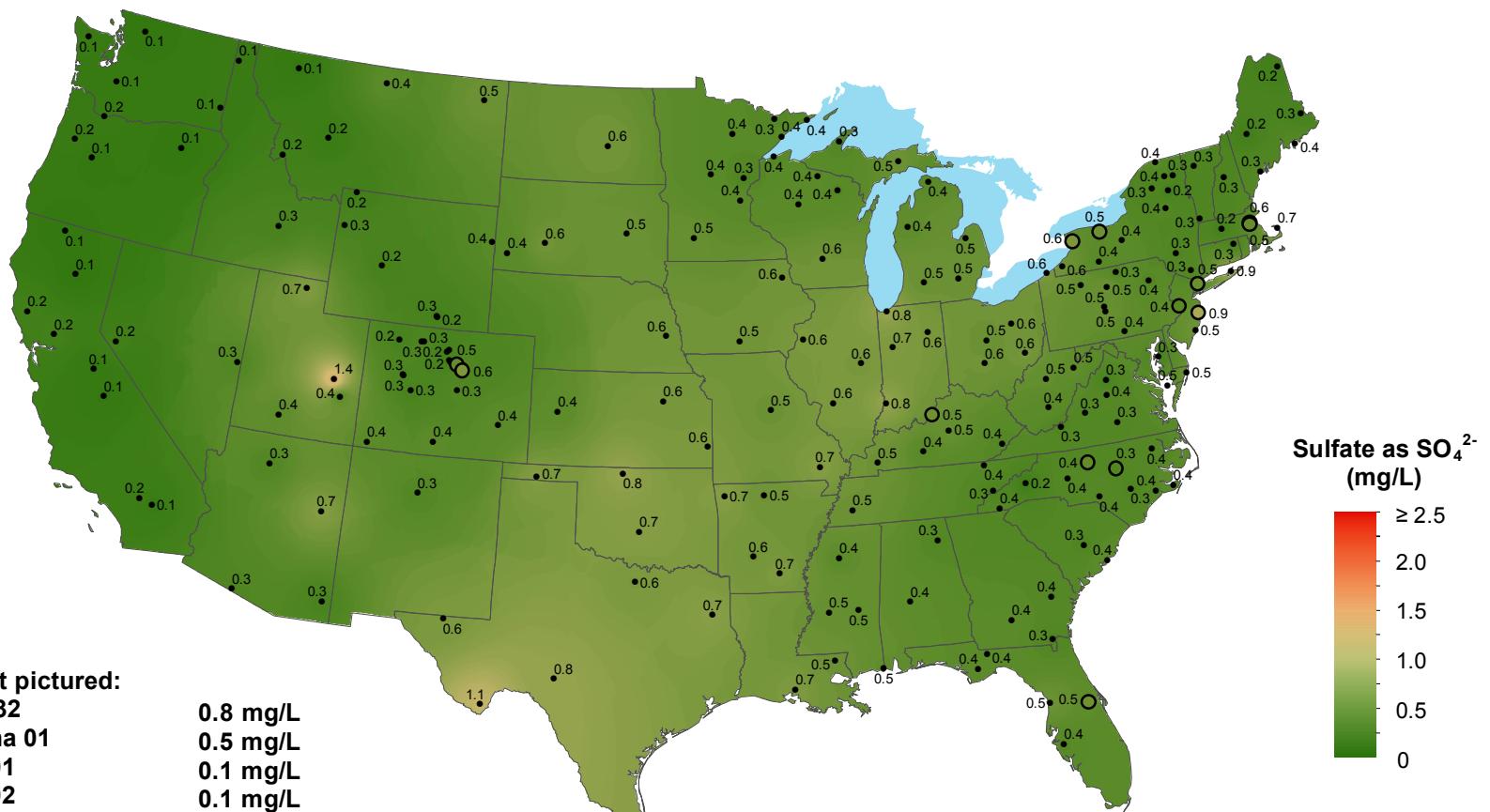


## Sulfate ion concentration, 2005



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

# Sulfate ion concentration, 2017



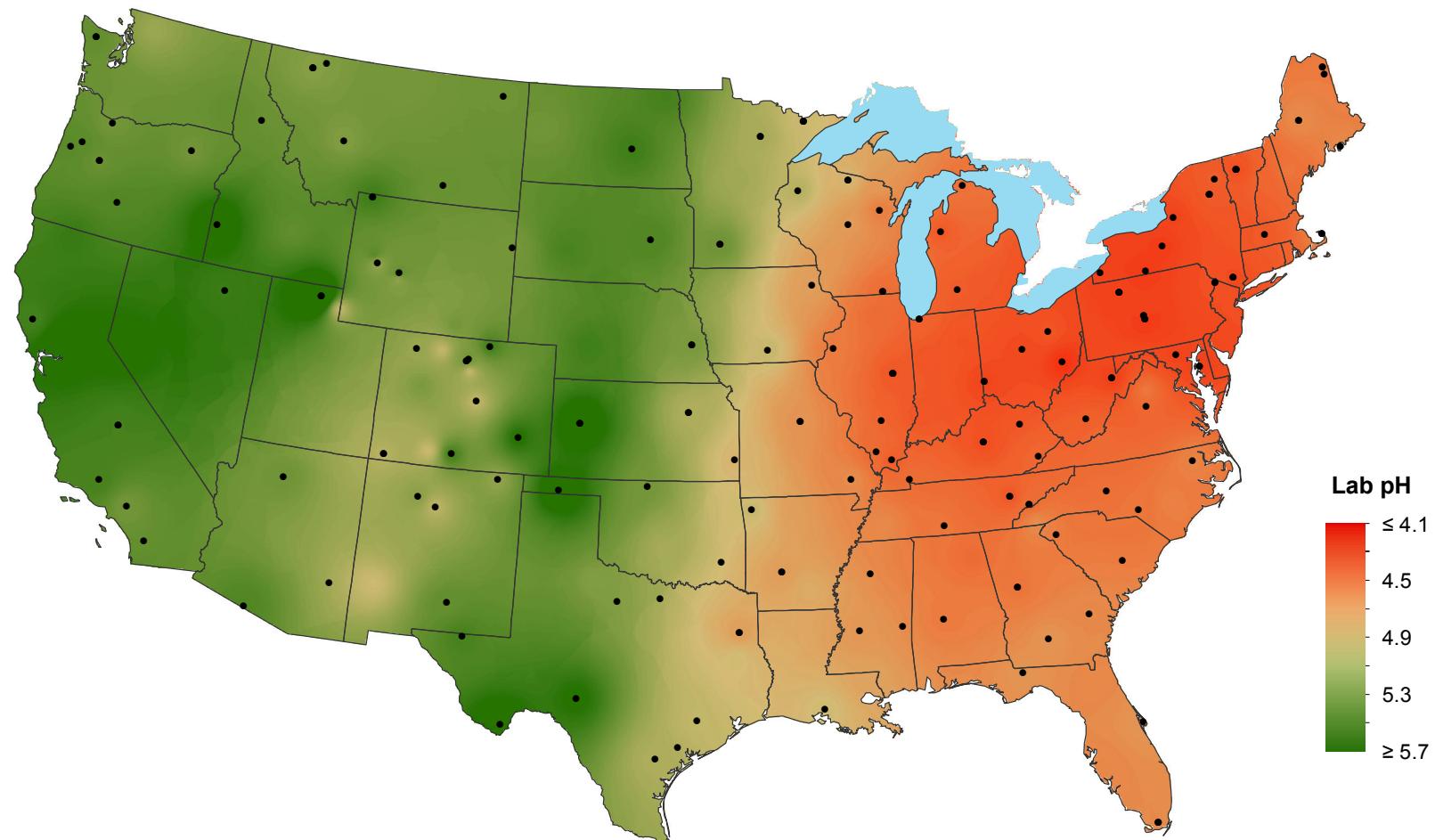
## Sites not pictured:

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

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<http://nadp.slh.wisc.edu>

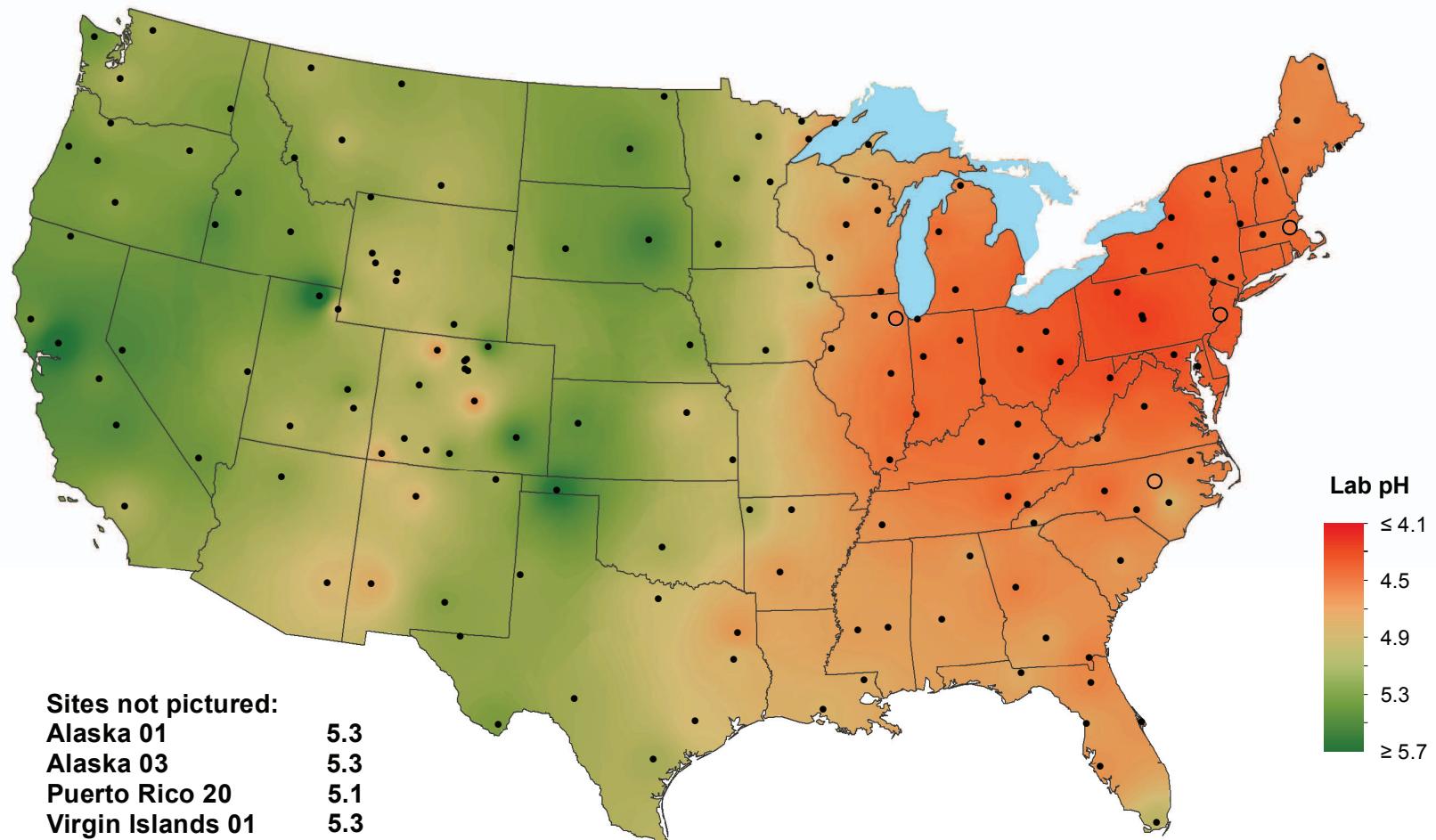
**ATTACHMENT C2**

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

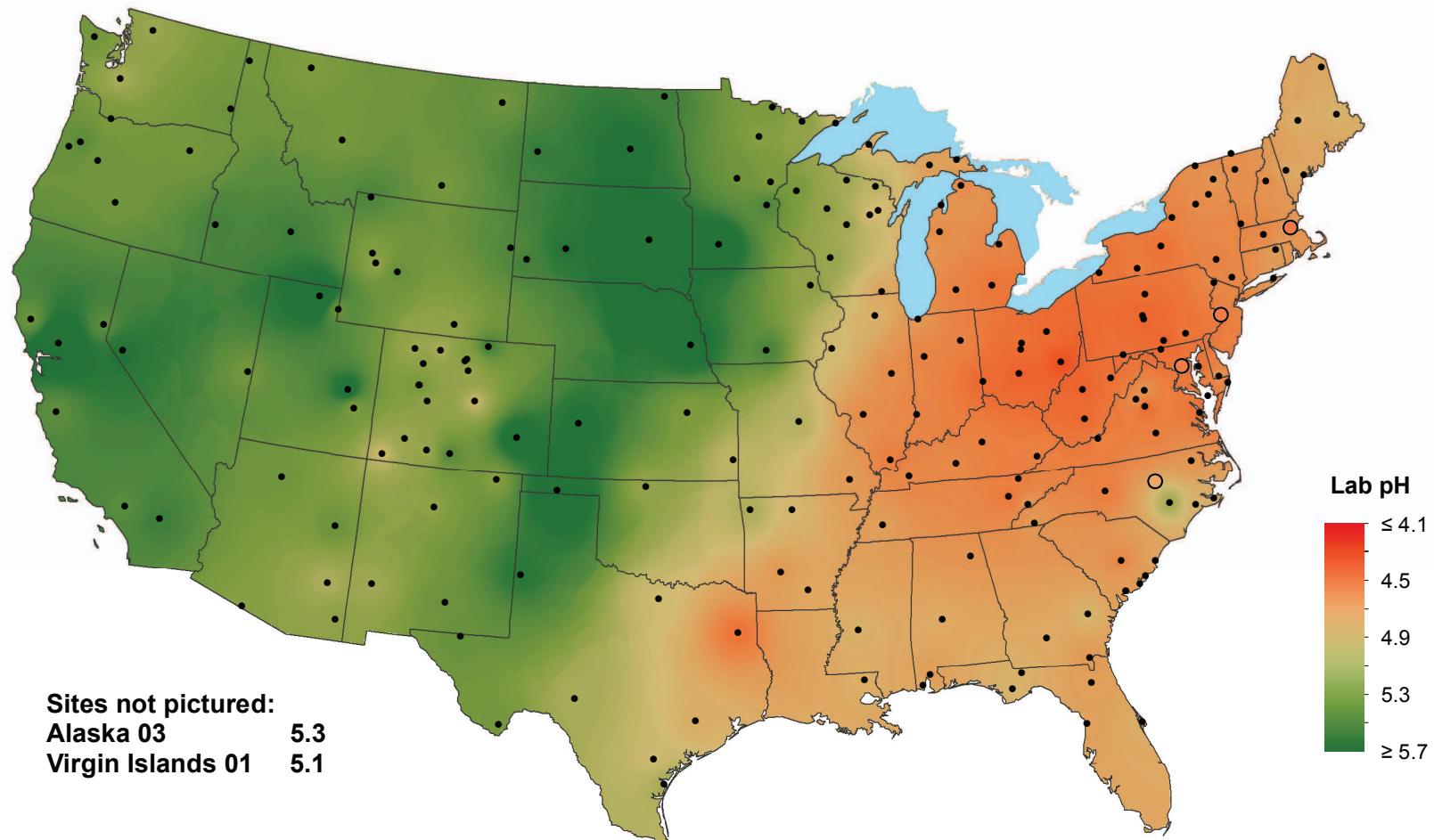


National Atmospheric Deposition Program/National Trends Network  
<http://nadp.isws.illinois.edu>

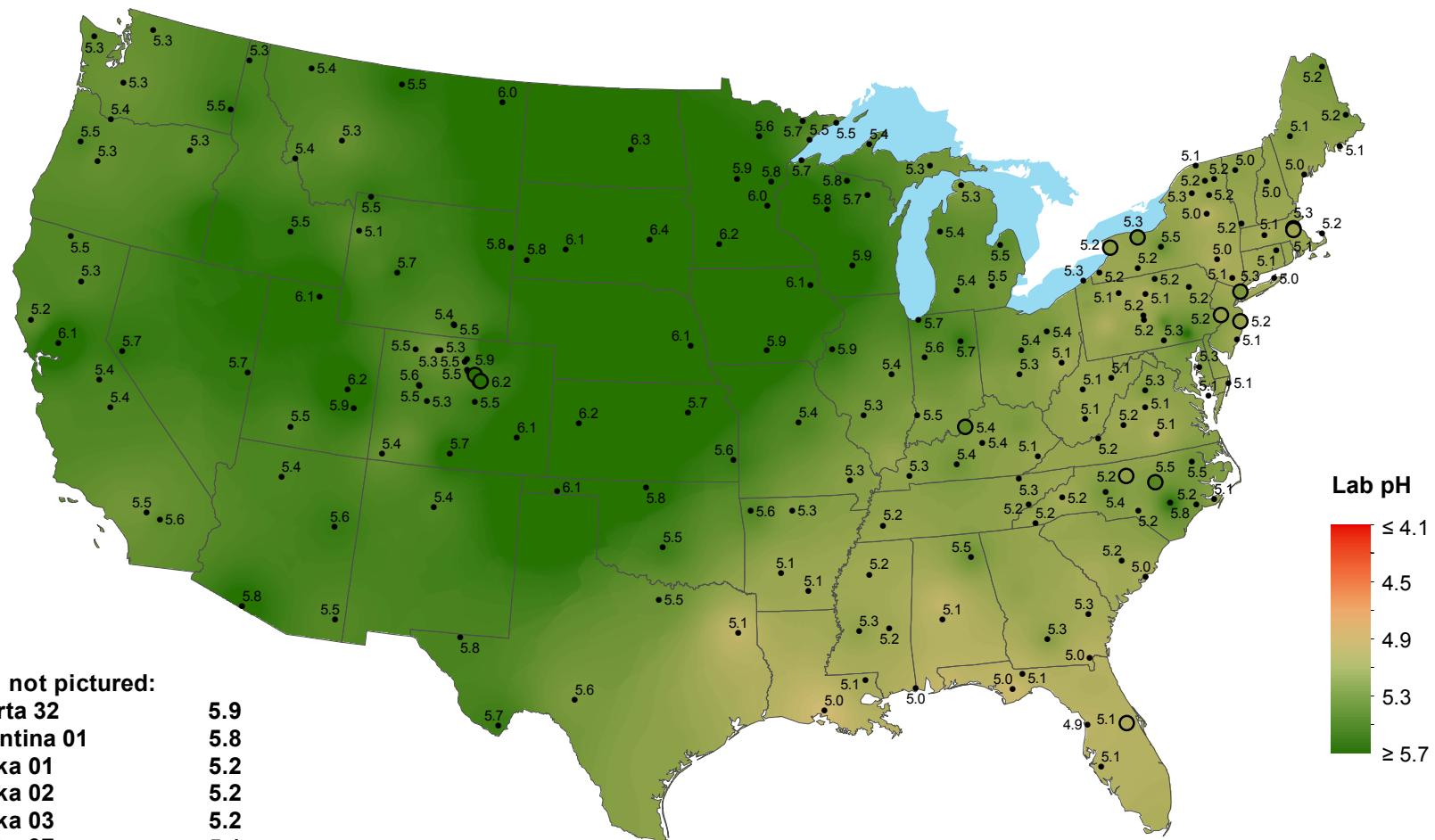
# Hydrogen ion concentration as pH from measurements made at the Central Analytical Laboratory, 1998



# 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



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

**ATTACHMENT D**

# FIGURE 1 - 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.