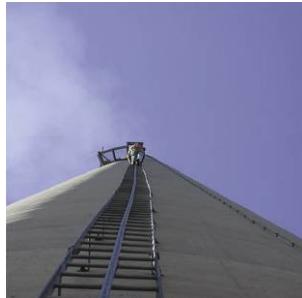


Prepared for:  
**Superior Water Light & Power Company**  
Superior, Wisconsin



# **Groundwater Monitoring Report**

## **Former SWL&P Manufactured Gas Plant**

### **Superior, Wisconsin**

AECOM, Inc.  
October 2009  
Project No.: 12842-001

**AECOM**

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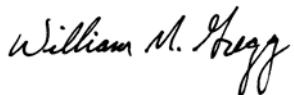
## **Former SWL&P Manufactured Gas Plant**

### **Superior, Wisconsin**

WDNR BRRTs # 02-16-275446



Prepared By Daniel Phelps



Reviewed By William M. Gregg

AECOM, Inc.  
October 2009  
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| AECOM

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## 1.0 Introduction

This report presents the results of groundwater monitoring completed at the Superior Water Light & Power (SWL&P) Former Manufactured Gas Plant (MGP), located at the intersection of Winter Street and East 1<sup>st</sup> Street in Superior, Wisconsin. The site location is shown in Figure 1.

The groundwater monitoring follows the methodologies outlined in the Site Investigation Work Plan submitted to the Wisconsin Department of Natural Resources (WDNR) in November 2001. Groundwater samples were collected on August 12 and 13, 2008 from all 22 site monitoring wells and groundwater samples were collected on July 22, 2009 from nine key monitoring wells. The results represent groundwater conditions prior to and following a remedial excavation and Cool-Ox™ application completed at the site in December 2008.

## 2.0 Methodology

### 2.1 Monitoring Well Gauging

On August 12 and 13, 2008 and on July 22, 2009, prior to groundwater sampling, groundwater level measurements were collected from all monitoring wells using an interface probe (Heron, Model H.01L). The depth to water was recorded and each well was checked for light and deep non-aqueous phase liquids (NAPL) using the interface probe. The water level measurements were made from a surveyed measuring point established on the north side of the top of the PVC well casing.

### 2.2 Groundwater Sampling

On August 12 and 13, 2008, groundwater samples were collected from all twenty-two monitoring wells (MW-1 through MW-22) and on July 22, 2009, groundwater samples were collected from nine monitoring wells (MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-15, MW-20, and MW-22) in general accordance with the WDNR "Groundwater Sampling Field Manual," September 1996. Groundwater samples were collected using a low-flow sampling technique. Before sampling, each monitoring well was purged using a peristaltic pump and dedicated tubing until groundwater water quality parameters stabilized. Water quality measurements, including pH, specific conductivity, temperature, oxidation-reduction potential, and dissolved oxygen were measured with a YSI water quality meter equipped with a flow-through cell. The stabilized water quality measurements were recorded on the Groundwater Sample Collection Records included as Attachment A. Samples were collected from the well using the peristaltic pump and placed directly into laboratory supplied containers. The samples were stored on ice in coolers and were delivered under chain-of-custody to Pace Analytical in Minneapolis, Minnesota. The samples were submitted for analysis of volatile organic compounds (VOC) by EPA method 8260b and polyaromatic hydrocarbons (PAH) by EPA method 8270 SIM. Additionally, samples collected on July 22, 2009 were analyzed for total iron using EPA method 6010.

### 2.3 Decontamination Procedures

The interface probe was decontaminated prior to each use with a detergent wash followed by a potable water rinse. All other equipment and supplies used during sampling were disposable and used only on one well. Therefore, no other decontamination was necessary.

## 3.0 Results

### 3.1 Geology and Hydrogeology

The Site ground surface is situated at an elevation between 610 and 615 feet above mean sea level (ft msl). The topography of the former MGP property is relatively flat with little or no slope. To the northeast of the former MGP, the topography slopes down towards the railroad tracks. The land surface to the north of the railroad tracks is relatively flat with most elevations between 605 and 607 feet above mean sea level. The water elevation in Superior Bay is approximately 601 feet above mean sea level.

The results of previous subsurface investigations indicate that there are several soil types encountered in the area:

- Reddish-brown high-plasticity clay;
- Sand and silty sand;
- Fill material consisting primarily of light gray to dark gray lime-like material; and
- Miscellaneous fill such as bricks, wood, slag, and cinders.

On August 12 and 13, 2008 groundwater elevations ranged from 600.93 ft msl in MW-16 to 611.88 ft msl in MW-1. The groundwater elevations for the August 12 and 13, 2008 sampling event are summarized in Table 1 and illustrated on Figure 2. No light or dense NAPL was measured in the wells during the August 2008 sampling event.

On July 22, 2009 the groundwater elevations ranged from 602.07 ft msl in MW-20 to 612.07 ft msl in MW-3. The groundwater elevations for the July 22, 2009 sampling event are summarized in Table 2 and illustrated on Figure 3. No NAPL was measured in the wells during the July 2009 sampling event.

Based on the 2008 and 2009 groundwater elevations, the groundwater flow direction appears to be to the northeast towards Superior Bay. This is consistent with the previously measured groundwater elevations and interpreted groundwater flow direction.

### 3.2 Groundwater Sampling Results

On August 12 and 13, 2008 groundwater samples were collected from MW-1 through MW-22 and were submitted for PAH and VOC laboratory analysis. On July 22, 2009 groundwater samples were collected from nine monitoring wells (MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-15, MW-20, and MW-22) and were submitted for PAH, VOC, and total iron laboratory analysis. The complete laboratory analytical reports are included in Appendix B. The August 2008 and July 2009 groundwater sampling VOC and PAH results and historic sampling results are summarized on Table 3. The groundwater results were compared to the applicable WDNR groundwater standards (NR 140, Table 1).

A review of the analytical results indicated that following VOC exceeded the applicable WDNR groundwater standards in one or more wells during the August 2008 and/or July 2009 sampling event:

- Benzene
- Chloromethane
- Ethylbenzene
- Naphthalene
- Styrene

- Toluene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Xylene

Benzene was the VOC which most commonly exceeded the applicable WDNR groundwater standard (the benzene standard is 5 micrograms per liter ( $\mu\text{g}/\text{L}$ )). The benzene concentrations from the August 2008 sampling event are illustrated on Figure 4. The benzene concentrations from the July 2009 sampling event are illustrated on Figure 5. The wells with the highest benzene concentrations also tended to have the highest concentrations of other VOCs. Thus, benzene is a good indicator of the general extent of the VOC plume.

A review of the analytical results indicated that following PAH compounds exceeded the applicable WDNR groundwater standards in one or more wells during the August 2008 and July 2009 sampling events:

- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Chrysene
- Naphthalene

The PAH concentrations that exceed the applicable WDNR groundwater standards are illustrated on Figure 6 for the August 2008 sampling event and Figure 7 for the July 2009 sampling event.

The concentrations of detected VOC and PAH compounds in samples collected during the August 2008 and July 2009 sampling events were generally consistent with the historic sampling results (e.g. similar magnitude and extent).

Total iron concentrations in samples collected during the July 2009 sampling event ranged from non-detectable in MW-6 and MW-22 to 29,100  $\mu\text{g}/\text{L}$  in MW-20. Total iron analytical results are summarized in Table 4. In general, the total iron concentrations are highest in wells with the highest VOC and PAH concentrations. Wells with lower VOC and PAH concentrations had lower relative iron concentrations. The elevated iron concentrations within the plume may be caused by anaerobic biological degradation of hydrocarbons. During this process, relatively insoluble ferric iron is reduced to the ferrous form ( $\text{Fe}^{+2}$ ) which is more soluble in water. The total iron concentrations measured include both ferric and ferrous iron.

### **3.3 Discussion of Results**

The extent of VOCs in groundwater has been delineated to the applicable WDNR groundwater standards as illustrated on Figure 4 and Figure 5. Benzene is the most frequently detected VOC and has the greatest magnitude and extent. The VOC plume is located at the source area near the former MGP building and downgradient to the Superior Bay boat slip. Wells MW-3 and MW-4, located near former gas holders, also contained concentrations of VOCs above the applicable WDNR groundwater standards. However, based on previous investigations the impacts appear isolated and have not significantly migrated most likely because of the low permeability clay soil in those areas.

The extent of dissolved PAH in groundwater was delineated to the applicable WDNR groundwater standards as illustrated on Figure 6 and Figure 7. The dissolved PAH plume appears to extend from the former MGP building downgradient to the northeast and southeast. MW-3, near a former gas holder, also contained concentrations of naphthalene above the applicable WDNR groundwater standard. However, the impacts appear isolated and have not significantly migrated most likely because of the clay soil.

The majority of VOC impacts are found in the same general location as the PAH impacts, except that the VOC impacts are slightly greater in extent. The VOC concentrations are generally similar between the 2008 and 2009 sampling events. The PAH concentrations for the 2009 results are generally lower compared to the 2008 results.

### **3.4 Quality Assurance and Quality Control Samples**

Quality assurance and quality control (QA/QC) samples were collected to help confirm that accurate and reliable data was obtained for this investigation. The laboratory conducted standard QA/QC procedures. In addition, two field duplicates, collected from wells MW-10 and MW-15, were analyzed for VOC and PAH during the August 2008 sampling event. One field duplicate was collected from well MW-10 and analyzed for VOC, PAH, and total iron during the July 2009 sampling event. Trip blanks accompanied the sample shipments and were analyzed for VOC. No VOCs were detected in the trip blank samples. The complete results for QA/QC samples can be found in the laboratory analytical reports.

## 4.0 Summary and Conclusion

The results of the August 2008 and July 2009 groundwater monitoring events indicate the magnitude and extent of the groundwater plume was generally unchanged between events, except the PAH plume magnitude and extent slightly decreased in the July 2009 event. As shown on Figures 4, 5, 6, and 7 the extent of VOC and PAH in the groundwater has been delineated. The VOC detected most frequently and with the highest concentrations in the groundwater was benzene. Four PAH compounds, naphthalene being the most frequently detected, exceeded the applicable WDNR groundwater standard during the August 2008 and July 2009 sampling events. The VOC and PAH plumes are comingled and located in the same general area, except the VOC plume is slightly greater in extent. The groundwater VOC and PAH plumes are located near the former MGP building and extend downgradient with the groundwater flow direction and along the former Superior Bay shoreline (along the railroad tracks).

The August 2008 groundwater monitoring results will be used as baseline concentrations for the groundwater quality prior to the remedial source area excavation and Cool-Ox Application (completed December 2008). Additional monitoring will be needed to evaluate the affect of the source area remedial action on the groundwater quality.

## Tables

**Table 1**  
**2008 Groundwater Elevation Data and Well Summary**  
**Superior Water, Light Power MGP**  
**Superior, Wisconsin**

Well ID	Ground Elevation <sup>a</sup>	Measuring Point Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Groundwater Elevation <sup>b</sup>	Hydraulic Conductivity <sup>d</sup>
MW-1	616.2	619.11	7.23	611.88	Clay <sup>e</sup>
MW-2	614.2	617.15	6.34	610.81	Clay
MW-3	613.9	617.07	6.10	610.97	Clay
MW-4	614.0	617.11	6.17	610.94	Clay
MW-5	610.1	612.40	8.49	603.91	$7.63 \times 10^{-5}$
MW-6	611.4	613.74	10.17	603.57	$3.07 \times 10^{-3}$
MW-7	612.3	614.91	11.55	603.36	$7.79 \times 10^{-3}$
MW-8	612.0	615.17	12.60	602.57	$3.26 \times 10^{-3}$
MW-9	608.7	611.38	8.58	602.80	$1.17 \times 10^{-2}$
MW-10	606.5	606.08	3.85	602.23	$7.46 \times 10^{-3}$
MW-11	607.0	609.89	7.62	602.27	$8.48 \times 10^{-3}$
MW-12	607.9	607.64	5.51	602.13	$3.28 \times 10^{-3}$
MW-13	613.56	616.26	5.87	610.39	Clay
MW-14	614.06	617.27	8.10	609.17	Clay
MW-15	609.06	608.95	7.07	601.88	$1.1 \times 10^{-3}$
MW-16	610.03	613.11	12.18	600.93	$1.6 \times 10^{-3}$
MW-17	608.48	610.93	8.31	602.62	$2.3 \times 10^{-3}$
MW-18	606.4	606.42	3.58	602.84	$4.5 \times 10^{-5}$
MW-19	606.82	606.77	3.42	603.35	$1.0 \times 10^{-2}$
MW-20	605.91	605.43	3.10	602.33	$6.8 \times 10^{-3}$
MW-21	609.59	612.57	9.46	603.11	$1.5 \times 10^{-1}$
MW-22	607.5	610.55	7.27	603.28	$4.4 \times 10^{-3}$

Groundwater elevations were measured on August 12 & 13, 2008 with an interface probe.

- a. The ground surface and top of casings elevations were surveyed by Salo Engineering.
- b. Elevation is given in feet above mean sea level.
- c. Depth to water in feet as measured below top of casing.
- d. Hydraulic conductivity (cm/sec) was determined by conducting slug tests in November 2001, November 2004, and October 2006.
- e. Wells screened in high plasticity clay. Estimated hydraulic conductivity is less than  $10^{-6}$  cm/sec. (Slug test was not performed on well.)

**Table 2**  
**2009 Groundwater Elevation Data and Well Summary**  
**Superior Water, Light Power MGP**  
**Superior, Wisconsin**

Well ID	Ground Elevation <sup>a</sup>	Measuring Point Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Groundwater Elevation <sup>b</sup>	Hydraulic Conductivity <sup>d</sup>
MW-1	616.2	619.11	7.53	611.58	Clay <sup>e</sup>
MW-2	614.2	617.15	6.55	610.60	Clay
MW-3	613.9	617.07	5.00	612.07	Clay
MW-4	614.0	617.11	6.50	610.61	Clay
MW-5	610.1	612.40	8.75	603.65	$7.63 \times 10^{-5}$
MW-6	611.4	613.74	9.36	604.38	$3.07 \times 10^{-3}$
MW-7	612.3	614.91	10.27	604.64	$7.79 \times 10^{-3}$
MW-8	612.0	615.17	11.07	604.10	$3.26 \times 10^{-3}$
MW-9	608.7	611.38	7.85	603.53	$1.17 \times 10^{-2}$
MW-10	606.5	606.08	2.69	603.39	$7.46 \times 10^{-3}$
MW-11	607.0	609.89	7.53	602.36	$8.48 \times 10^{-3}$
MW-12	607.9	607.64	5.00	602.64	$3.28 \times 10^{-3}$
MW-13	613.56	616.26	6.46	609.80	Clay
MW-14	614.06	617.27	8.84	608.43	Clay
MW-15	609.06	608.95	6.60	602.35	$1.1 \times 10^{-3}$
MW-16	610.03	613.11	9.97	603.14	$1.6 \times 10^{-3}$
MW-17	608.48	610.93	7.82	603.11	$2.3 \times 10^{-3}$
MW-18	606.4	606.42	1.48	604.94	$4.5 \times 10^{-5}$
MW-19	606.82	606.77	2.52	604.25	$1.0 \times 10^{-2}$
MW-20	605.91	605.43	3.36	602.07	$6.8 \times 10^{-3}$
MW-21	609.59	612.57	9.30	603.27	$1.5 \times 10^{-1}$
MW-22	607.5	610.55	6.1	604.45	$4.4 \times 10^{-3}$

Groundwater elevations were measured on July 22, 2009 with an interface probe.

- a. The ground surface and top of casings elevations were surveyed by Salo Engineering.
- b. Elevation is given in feet above mean sea level.
- c. Depth to water in feet as measured below top of casing.
- d. Hydraulic conductivity (cm/sec) was determined by conducting slug tests in November 2001, November 2004, and October 2006.
- e. Wells screened in high plasticity clay. Estimated hydraulic conductivity is less than  $10^{-6}$  cm/sec. (Slug test was not performed on well.)

**Table 3**  
**Summary of VOC and PAH Analytical Results in Groundwater**  
**Superior Water, Light Power MGP**  
**Superior, Wisconsin**

Well ID	Enforcement Standard <sup>a</sup>	MW-1	MW-1	MW-1	MW-1	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4-dup	MW-4	MW-4		
Date		2/11/2002	9/20/2002	11/15/2005	8/12/2008	2/11/2002	9/18/2002	11/15/2005	8/13/2008	2/11/2002	9/20/2002	11/15/2005	8/12/2008	2/11/2002	9/20/2002	11/15/2005	8/13/2008	
<b>VOC</b>																		
1,2,4-Trimethylbenzene	<b>480<sup>b</sup></b>	---	<0.69	<0.97	<1	---	<0.69	<0.97	<1	---	26	120	100	---	<690	<690	<1,200	
1,3,5-Trimethylbenzene	<b>480</b>	---	<0.64	<0.83	<1	---	<0.64	<0.83	<1	---	11	41	<5	---	<640	<640	<1,000	
2-Butanone (MEK)	<b>460</b>	---	---	---	<4	---	---	---	<4	---	---	---	<20	---	---	---	<8,000	
Acetone	<b>1,000</b>	---	---	---	<10	---	---	---	<10	---	---	---	<50	---	---	---	<20,000	
Benzene	<b>5</b>	<0.45	<0.25	<0.41	<1	<0.45	<0.25	<0.41	<1	<b>21</b>	<b>620</b>	<b>2,800</b>	<b>3,890</b>	<b>110,000</b>	<b>120,000</b>	<b>130,000</b>	<b>190,000</b>	<b>227,000</b>
Bromobenzene	<b>NE<sup>c</sup></b>	---	---	<0.82	<1	---	---	<0.82	<1	---	---	<20	<5	---	---	---	<1,000	
Chloroethane	<b>400</b>	---	---	<0.97	<1	---	---	<0.97	<1	---	---	<24	<5	---	---	---	<1,200	
Chloroform	<b>6</b>	---	---	<0.37	<1	---	---	<0.37	<1	---	---	<9.2	<5	---	---	---	<460	
Chloromethane	<b>3</b>	---	---	0.33	<b>3.8</b>	---	---	<0.24	<b>6</b>	---	---	<6.0	<5	---	---	---	<300	
Ethylbenzene	<b>700</b>	<0.82	<0.53	<0.54	<1	<0.82	<0.53	<0.54	<1	4.8	45	130	117	<820	<530	<530	<680	
Isopropylbenzene (Cumene)	<b>NE</b>	---	---	<0.59	<1	---	---	<0.59	<1	---	---	<15	8.1	---	---	---	<740	
Naphthalene	<b>100</b>	---	---	<0.74	<4	---	---	<0.74	<4	---	---	<b>2,100</b>	<b>1,390</b>	---	---	---	<920	
n-Propylbenzene	<b>NE</b>	---	---	<0.81	<1	---	---	<0.81	<1	---	---	<20	5.2	---	---	---	<1,000	
p-Isopropyltoluene	<b>NE</b>	---	---	<0.67	<1	---	---	<0.67	<1	---	---	<17	<5	---	---	---	<840	
Styrene	<b>100</b>	---	---	<0.86	<1	---	---	<0.86	<1	---	---	<22	<5	---	---	---	<1,100	
Toluene	<b>1,000</b>	<0.68	<0.84	<0.67	<1	<0.68	<0.84	<0.67	<1	26	100	25	7.8	<b>19,000</b>	<840	960	<b>1,500</b>	<2,000
m&p-Xylene	<b>10,000<sup>d</sup></b>	<0.77	<1.1	<1.8	<2	<0.77	<1.1	<1.8	<2	44	130	260	58.7	<770	<1,100	<1,100	<2,200	<4,000
o-Xylene	<b>10,000<sup>d</sup></b>	<1.7	<0.73	<0.83	<1	<1.7	<0.73	<0.83	<1	8.5	96	25	13.3	<1,700	<730	<730	<1,000	<2,000
<b>PAH</b>																		
1-Methylnaphthalene	<b>NE</b>	<0.027	<0.027	0.07	---	<0.027	<0.027	<0.012	---	<0.027	22	82	---	0.055	0.042	0.033	0.11	---
2-Chloronaphthalene	<b>NE</b>	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2-Methylnaphthalene	<b>NE</b>	<0.028	<0.028	0.05	---	<0.028	<0.028	<0.012	---	<0.028	15	29	---	0.088	0.059	0.048	0.13	---
Acenaphthene	<b>NE</b>	<0.018	<0.018	0.049	<0.041	<0.018	<0.018	<0.0088	<0.041	<0.018	<7.2	2.7	1.9	<0.018	<0.018	<0.018	<0.086	<0.04
Acenaphthylene	<b>NE</b>	<0.023	<0.023	<0.0086	<0.041	<0.023	<0.023	<0.0088	<0.041	<0.023	<9.2	1.4	1.2	<0.023	<0.023	<0.023	<0.086	<0.04
Anthracene	<b>3,000</b>	<0.020	<0.020	<0.012	<0.041	<0.020	<0.020	<0.013	<0.041	<0.020	0.27	1.7	0.92	<0.020	<0.020	<0.020	<0.12	<0.04
Benzo(a)anthracene	<b>NE</b>	<0.019	<0.019	<0.017	<0.041	<0.019	<0.019	<0.017	<0.041	<0.019	<0.019	<1.7	<0.041	<0.019	<0.019	<0.019	<0.17	<0.04
Benzo(a)pyrene	<b>0.2</b>	<0.012	<0.012	<0.019	<0.041	<0.012	<0.012	<0.020	<0.041	<0.012	0.014	<1.9	<0.041	<0.012	<0.012	<0.012	<0.19	<0.04
Benzo(b)fluoranthene	<b>0.2</b>	<0.014	<0.014	<0.017	<0.041	<0.014	<0.014	<0.017	<0.041	<0.014	<0.014	<1.7	<0.041	<0.014	<0.014	<0.014	<0.17	<0.04
Benzo(g,h,i)perylene	<b>NE</b>	<0.015	<0.015	<0.020	<0.041	<0.015	<0.015	<0.021	<0.041	<0.015	<0.015	<2.0	<0.041	<0.015	<0.015	<0.015	<0.20	<0.04
Benzo(k)fluoranthene	<b>NE</b>	<0.013	<0.013	<0.020	<0.041	<0.013	<0.013	<0.021	<0.041	<0.013	<0.013	<2.0	<0.041	<0.013	<0.013	<0.013	<0.20	<0.04
Chrysene	<b>0.2</b>	<0.018	<0.018	<0.020	<0.041	<0.018	<0.018	<0.021	<0.041	<0.018	<0.018	<2.0	<0.041	<0.018	<0.018	<0.018	<0.20	<0.04
Dibenz(a,h)anthracene	<b>NE</b>	<0.017	<0.017	---	<0.041	<0.017	<0.017	---	<0.041	<0.017	<0.017	---	<0.041	<0.017	<0.017	---	<0.04	
Dibenzofuran	<b>NE</b>	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Fluoranthene	<b>400</b>	<0.028	<0.028	<0.016	<0.041	<0.028	<0.028	<0.017	<0.041	<0.028	0.061	<1.6	0.35	<0.028	<0.028	<0.028	<0.16	<0.04
Fluorene	<b>400</b>	<0.021	<0.021	0.0097	<0.041	<0.021	<0.021	<0.0098	<0.041	<0.021	<8.4	6	3.1	<0.021	<0.021	<0.021	<0.096	<0.04
Indeno(1,2,3-cd)pyrene	<b>NE</b>	<0.014	<0.014	<0.020	<0.041	<0.014	<0.014	<0.020	<0.041	<0.014	<0.014	<2.0	<0.041	<0.014	<0.014	<0.014	<0.20	<0.04
Naphthalene	<b>100</b>	0.21	<0.027	0.28														

**Table 3**  
**Summary of VOC and PAH Analytical Results in Groundwater**  
**Superior Water, Light Power MGP**  
**Superior, Wisconsin**

Well ID	Enforcement Standard <sup>a</sup>	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-6	MW-6	MW-6-dup	MW-6	MW-6	MW-6	MW-7	MW-7-dup	MW-7			
Date		11/20/2001	2/11/2002	9/18/2002	11/17/2004	11/15/2005	8/12/2008	11/20/2001	2/11/2002	9/18/2002	11/17/2004	11/16/2005	8/12/2008	7/22/2009	11/20/2001	2/11/2002	2/11/2002	9/18/2002	
<b>VOC</b>																			
1,2,4-Trimethylbenzene	<b>480<sup>b</sup></b>	---	---	<0.69	---	<0.97	<1	---	0.8	0.81	---	<0.97	1.0	7.8	---	---	---	<b>770</b>	
1,3,5-Trimethylbenzene	<b>480</b>	---	---	<0.64	---	<0.83	<1	---	<0.64	<0.64	---	<0.83	<1	1.9	---	---	---	<640	
2-Butanone (MEK)	<b>460</b>	---	---	---	---	<4	---	---	---	---	---	---	<4	<4	---	---	---	---	
Acetone	<b>1,000</b>	---	---	---	---	<10	---	---	---	---	---	---	21.9	42.1	---	---	---	---	
Benzene	<b>5</b>	<b>6.2</b>	<0.45	0.99	1.2	<0.41	<1	<b>5</b>	<b>10</b>	3.1	3.1	<b>17</b>	4.6	2.1	4.5	<b>230,000</b>	<b>190,000</b>	<b>200,000</b>	<b>110,000</b>
Bromobenzene	<b>NE<sup>c</sup></b>	---	---	---	---	<0.82	<1	---	---	---	---	<0.82	<1	<1	---	---	---	---	
Chloroethane	<b>400</b>	---	---	---	---	<0.97	<1	---	---	---	---	---	0.97	<1	<1	---	---	---	
Chloroform	<b>6</b>	---	---	---	---	<0.37	<1	---	---	---	---	---	<0.37	<1	<1	---	---	---	
Chloromethane	<b>3</b>	---	---	---	---	<0.24	<1	---	---	---	---	---	<0.48	<1	<4	---	---	---	
Ethylbenzene	<b>700</b>	<0.82	<0.82	<0.53	<0.4	<0.54	<1	1.5	5.8	1.1	1.2	21	3.3	1.3	12.0	<b>1,900</b>	<b>3,600</b>	<b>3,700</b>	<b>6,100</b>
Isopropylbenzene (Cumene)	<b>NE</b>	---	---	---	---	<0.59	<1	---	---	---	---	---	<0.59	<1	1.2	---	---	---	
Naphthalene	<b>100</b>	---	---	---	---	1.2	<4	---	---	---	---	---	26	12.7	88.2	---	---	---	
n-Propylbenzene	<b>NE</b>	---	---	---	---	<0.81	<1	---	---	---	---	---	<0.81	<1	<1	---	---	---	
p-Isopropyltoluene	<b>NE</b>	---	---	---	---	<0.67	<1	---	---	---	---	---	<0.67	1.6	2.6	---	---	---	
Styrene	<b>100</b>	---	---	---	---	<0.86	<1	---	---	---	---	---	<0.86	<1	<1	---	---	---	
Toluene	<b>1,000</b>	2.1	<0.68	<0.84	1.4	<0.67	<1	1.6	2	0.84	0.85	2.6	1.1	1.0	1.5	<b>130,000</b>	<b>120,000</b>	<b>120,000</b>	<b>64,000</b>
m&p-Xylene	<b>10,000<sup>d</sup></b>	6.1	<0.77	<1.1	<0.74	<1.8	<2	2.2	2.6	<1.1	<1.1	4	<1.8	<2	2.5	<b>14,000</b>	<b>9,500</b>	<b>10,000</b>	<b>18,000</b>
o-Xylene	<b>10,000<sup>d</sup></b>	3	<1.7	<0.73	<0.36	<0.83	<1	1.4	2.3	<0.73	<0.73	7.6	1.2	<1	4.5	<b>11,000</b>	<b>17,000</b>	<b>17,000</b>	<b>4,800</b>
<b>PAH</b>																			
1-Methylnaphthalene	<b>NE</b>	0.058	<0.027	0.19	0.15	0.14	---	3	5	2.5	2.1	11	4.1	---	---	4.7	4.1	3.8	10
2-Chloronaphthalene	<b>NE</b>	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2-Methylnaphthalene	<b>NE</b>	<0.028	<0.028	0.15	0.068	0.057	---	2.3	3.7	1.6	1.3	8	2.4	---	---	6.3	5.6	5.2	13
Acenaphthene	<b>NE</b>	3.8	0.11	0.43	0.44	0.38	0.66	4.8	5	4.5	3.9	13	5.1	5.1	8.5	1.9	2.4	2	5.4
Acenaphthylene	<b>NE</b>	0.16	<0.023	<0.023	<0.039	0.011	<0.041	0.26	0.22	<0.92	<0.92	0.49	<0.43	0.20	<0.040	3.4	2.8	2.5	<4.6
Anthracene	<b>3,000</b>	0.22	<0.020	0.059	0.046	0.034	<0.041	0.96	<0.80	<0.8	<0.8	0.69	<0.61	0.52	0.46	0.75	<0.40	<0.40	<4
Benzo(a)anthracene	<b>NE</b>	0.053	<0.019	<0.019	<0.039	<0.017	<0.041	0.12	0.083	<0.76	<0.76	<0.39	<0.83	0.069	0.095	<0.38	<0.38	<3.8	
Benzo(a)pyrene	<b>0.2</b>	0.023	<0.012	<0.012	<0.036	<0.019	<0.041	0.026	<0.012	<0.48	<0.48	<0.36	<0.97	<0.041	<0.040	<0.24	<0.24	<2.4	
Benzo(b)fluoranthene	<b>0.2</b>	0.022	<0.014	<0.014	<0.036	<0.017	<0.041	0.022	<0.014	<0.56	<0.56	<0.36	<0.83	<0.041	<0.040	<0.28	<0.28	<2.8	
Benzo(g,h,i)perylene	<b>NE</b>	0.017	<0.015	<0.015	<0.041	<0.020	<0.041	0.016	<0.015	<0.6	<0.6	<0.41	<1.0	<0.041	<0.040	<0.30	<0.30	<0.30	<3
Benzo(k)fluoranthene	<b>NE</b>	0.014	<0.013	<0.013	<0.039	<0.020	<0.041	0.018	<0.013	<0.52	<0.52	<0.39	<1.0	<0.041	<0.040	<0.26	<0.26	<0.26	<2.6
Chrysene	<b>0.2</b>	0.037	<0.018	<0.018	<0.033	<0.020	<0.041	0.095	0.081	<0.72	<0.72	<0.33	<1.0	0.095	0.086	<0.36	<0.36	<0.36	<3.6
Dibenz(a,h)anthracene	<b>NE</b>	<0.017	<0.017	<0.017	<0.044	---	<0.041	<0.017	<0.017	<0.68	<0.68	<0.44	---	<0.041	<0.040	<0.34	<0.34	<0.34	<3.4
Dibenzofuran	<b>NE</b>	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Fluoranthene	<b>400</b>	1.3	0.03	0.051	0.035	0.041	0.051	1.1	<1.1	<1.1	<1.1	1.6	<0.82	0.96	0.79	<0.56	<0.56	<5.6	
Fluorene	<b>400</b>	1.2	0.035	0.24	0.24	0.2	0.36	0.76	<0.84	<0.84	<0.84	1.6	0.5	0.83	1.2	2.2	1.7	<4.2	
Indeno(1,2,3-cd)pyrene	<b>NE</b>	<0.014	<0.014	<0.014	<0.034	<0.020	<0.041	<0.014	<0.014	<0.56	<0.56	<0.34	<1.0	<0.041	<0.040	<0.28	<0.28	<2.8	
Naphthalene	<b>100</b>	0.2	0.092	1.3	0.72	0.77	0.54	9.8	34	12	10	91	18	9.2	52.8	<b>350</b>	<b>430</b>	<b>290</b>	<b>490</b>
Phen																			

**Table 3**  
**Summary of VOC and PAH Analytical Results in Groundwater**  
**Superior Water, Light Power MGP**  
**Superior, Wisconsin**

Well ID	Enforcement Standard <sup>a</sup>	MW-7	MW-7	MW-7	MW-7	MW-8	MW-8 DUP	MW-8	MW-8	MW-8	MW-9	MW-9	MW-9	MW-9	MW-10	MW-10
		Date	11/17/2004	11/16/2005	8/12/2008	7/22/2009	11/16/2004	11/16/2004	11/15/2005	8/13/2008	7/22/2009	11/16/2004	11/15/2005	8/13/2008	7/22/2009	11/16/2004
<b>VOC</b>																
1,2,4-Trimethylbenzene	480 <sup>b</sup>	---	<970	652	<1000	---	---	<610	694	<1000	---	<240	<250	<250	---	<120
1,3,5-Trimethylbenzene	480	---	<830	369	<1000	---	---	<520	378	<1000	---	<210	<250	<250	---	<100
2-Butanone (MEK)	460	---	---	<800	<4000	---	---	---	<200	<4000	---	---	<1,000	<1,000	---	---
Acetone	1,000	---	---	<2,000	<10,000	---	---	---	<500	<10,000	---	---	<2,500	<2,500	---	---
Benzene	5	46,000	110,000	156,000	198,000	74,000	72,000	73,000	122,000	109,000	54,000	29,000	24,700	20,600	9,900	13,000
Bromobenzene	NE <sup>c</sup>	---	<820	<200	<1000	---	---	<510	<50	<1000	---	<200	<250	<250	---	<100
Chloroethane	400	---	<970	<200	<1000	---	---	<610	<50	<1000	---	<240	<250	<250	---	<120
Chloroform	6	---	<370	<200	<1000	---	---	<230	<50	<1000	---	<92	<250	<250	---	<46
Chloromethane	3	---	<240	<200	<4000	---	---	<150	<50	<4000	---	<60	<250	<1,000	---	<30
Ethylbenzene	700	2,100	3,600	4,760	4,280	980	880	510	1,220	1,100	870	530	565	449	340	240
Isopropylbenzene (Cumene)	NE	---	<590	<200	<1000	---	---	<370	<50	<1000	---	<150	<250	<250	---	<74
Naphthalene	100	---	<740	<800	<4000	---	---	680	776	<4000	---	340	<1,000	<1,000	---	240
n-Propylbenzene	NE	---	<810	<200	<1000	---	---	<510	<50	<1000	---	<200	<250	<250	---	<100
p-Isopropyltoluene	NE	---	<670	<200	<1000	---	---	<420	<50	<1000	---	<170	<250	<250	---	<84
Styrene	100	---	<860	428	1,350	---	---	2,000	5,300	4,010	---	<220	<250	<250	---	<110
Toluene	1,000	15,000	57,000	64,500	116,000	51,000	48,000	51,000	80,200	79,800	13,000	6,700	1,850	2,170	34	5,100
m&p-Xylene	10,000 <sup>d</sup>	5,400	12,000	14,500	17,400	14,000	12,000	9,900	18,800	16,800	2,700	2,200	673	800	<37	770
o-Xylene	10,000 <sup>d</sup>	1,600	2,500	3,960	4,910	6,500	5,600	2,200	4,720	3,850	780	420	<250	<250	100	180
<b>PAH</b>																
1-Methylnaphthalene	NE	<8.1	6.2	---	---	690	3300	61	---	---	100	42	---	---	84	41
2-Chloronaphthalene	NE	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	NE	<9.1	8.4	---	---	830	3900	44	---	---	110	44	---	---	5	18
Acenaphthene	NE	<7.8	3.1	3.1	3.8	1000	5200	37	55.7	61.6	100	39	49.9	40.9	75	38
Acenaphthylene	NE	<7.8	1.3	1.3	1.9	130	<770	4.7	9.3	9.5	<19	1.6	1.1	<0.82	<1.9	2.9
Anthracene	3,000	<7.1	<1.3	0.66	0.62	520	2800	7.9	6.5	5.7	<18	8.4	4.7	5.8	4.1	8.6
Benzo(a)anthracene	NE	<7.9	<1.7	0.23	0.19	300	1600	<1.7	0.53	0.41	<20	<1.7	0.75	<0.82	<2.0	3.9
Benzo(a)pyrene	0.2	<7.3	<2.0	0.32	0.21	230	1,200	<1.9	0.24	0.12	<18	<1.9	0.38	<0.82	<1.8	2.7
Benzo(b)fluoranthene	0.2	<7.2	<1.7	0.33	0.31	<110	<720	<1.7	0.21	0.25	<18	<1.7	0.34	<0.82	<1.8	<1.7
Benzo(g,h,i)perylene	NE	<8.3	<2.1	0.28	0.32	<130	<830	<2.0	0.11	0.23	<21	<2.0	0.18	<0.82	<2.1	<2.0
Benzo(k)fluoranthene	NE	<7.8	<2.1	0.13	0.088	140	<770	<2.0	0.12	0.047	<19	<2.0	0.14	<0.82	<1.9	<2.0
Chrysene	0.2	<6.6	<2.1	0.32	0.20	290	1,600	<2.0	0.52	0.35	<16	<2.0	0.64	<0.82	<1.6	4.5
Dibenz(a,h)anthracene	NE	<8.9	---	0.043	<0.041	<140	<880	---	<0.041	<0.041	<22	---	<0.041	<0.82	<2.2	---
Dibenzofuran	NE	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	400	<6.7	<1.7	1.2	0.78	790	4,400	6.6	5.1	4.4	<16	4.8	3.9	3.1	5.3	11
Fluorene	400	<8.8	1.7	2.1	2.2	410	2,100	11	17.7	18.6	31	12	13.7	10.8	18	11
Indeno(1,2,3-cd)pyrene	NE	<6.9	<2.1	0.19	0.12	<110	<680	<2.0	0.076	<0.041	<17	<2.0	0.13	<0.82	<1.7	<2.0
Naphthalene	100	180	330	238	354	1,400	4,700	380	512	541	310	160	108	132	36	110
Phenanthrene	NE	<8.2	3.2	3.2	2.5	1900	10000	35	29.9	32.8	78	33	26.7	23.5	31	30
Pyrene	250	<6.6	<1.6	1.6	1.1	1,000	5,300	8.6	5.7	5.9	<16	6.3	5.0	4.2	6.1	15

**Notes:**

Results are reported in micrograms per liter or parts per billion.

Shaded results indicate concentrations greater than the enforcement standards.

a. The Wisconsin Department of Natural Resources Groundwater Enforcement Standards for the protection of public health (NR 140, Table 1).

b. The enforcement standard is 480 ug/L for the sum of all trimethylbenzene concentrations.

c. NE means enforcement standard is not established.

d. The enforcement standard is 10,000 ug/L for the sum of all xylene concentrations.

**Table 3**  
**Summary of VOC and PAH Analytical Results in Groundwater**  
**Superior Water, Light Power MGP**  
**Superior, Wisconsin**

Well ID	Enforcement Standard <sup>a</sup>	MW-10	MW-10 DUP	MW-10	MW-10 DUP	MW-11	MW-11	MW-11 FD	MW-11	MW-11	MW-12	MW-12	MW-12	MW-13	MW-13	MW-13	MW-14	MW-14	MW-14
Date		8/12/2008	8/12/2008	7/22/2009	7/22/2009	11/16/2004	11/15/2005	11/15/2005	8/12/2008	7/22/2009	11/16/2004	11/14/2005	8/12/2008	11/15/2005	10/24/2006	8/13/2008	11/16/2005	10/24/2006	8/12/2008
<b>VOC</b>																			
1,2,4-Trimethylbenzene	<b>480<sup>b</sup></b>	<50	55.2	2.0	<2.0	---	<2.9	<3.0	1.7	3.0	---	<24	5.5	<0.97	<1.0	<1	<0.97	<1.0	<1
1,3,5-Trimethylbenzene	<b>480</b>	<50	<50	<2.0	<2.0	---	<0.83	<0.83	<1	<1	---	<21	<1	<0.83	<1.0	<1	<0.83	<1.0	<1
2-Butanone (MEK)	<b>460</b>	<200	<200	<8.0	<8.0	---	---	---	<4	<4	---	---	<4	---	<5.0	<4	---	<5.0	<4
Acetone	<b>1,000</b>	<500	<500	<20	<20	---	---	---	<10	<10	---	---	<10	---	<5.0	<10	---	<5.0	<10
Benzene	<b>5</b>	<b>7,160</b>	<b>7,840</b>	<b>270</b>	<b>252</b>	0.95	1.4	1.4	2.5	3.4	<b>4,000</b>	<b>4,100</b>	<b>1,730</b>	3.8	<1.0	<1	<0.41	<1.0	<1
Bromobenzene	<b>NE<sup>c</sup></b>	<50	<50	<2.0	<2.0	---	<0.82	<0.82	<1	<1	---	<20	<1	<0.82	<1.0	<1	<0.82	<1.0	<1
Chloroethane	<b>400</b>	<50	<50	<2.0	<2.0	---	<0.97	<0.97	<1	<1	---	<24	<1	<0.97	<1.0	<1	<0.97	<1.0	<1
Chloroform	<b>6</b>	<50	<50	<2.0	<2.0	---	<0.37	<0.37	<1	<1	---	<9.2	<1	<0.37	<1.0	<1	<0.37	<1.0	<1
Chloromethane	<b>3</b>	<50	<50	<8.0	<8.0	---	0.25	<0.24	<1	<4	---	<6.0	<1	0.6	<1.0	<1	0.56	<1.0	<1
Ethylbenzene	<b>700</b>	158	199	6.1	6.9	0.56	0.91	1	1.2	3.5	<10	<14	3.3	<0.54	<1.0	<1	<0.54	<1.0	<1
Isopropylbenzene (Cumene)	<b>NE</b>	<50	<50	<2.0	<2.0	---	<0.59	<0.59	<1	<1	---	<15	1.8	<0.59	<1.0	<1	<0.59	<1.0	<1
Naphthalene	<b>100</b>	<200	<200	<8.0	<8.0	---	29	33	25.1	13.8	---	<18	<4	<0.74	<1.0	<4	0.93	<1.0	<4
n-Propylbenzene	<b>NE</b>	<50	<50	<2.0	<2.0	---	<0.81	<0.81	<1	<1	---	<20	<1	<0.81	<1.0	<1	<0.81	<1.0	<1
p-Isopropyltoluene	<b>NE</b>	<50	<50	<2.0	<2.0	---	<0.67	<0.67	<1	<1	---	<17	<1	<0.67	<1.0	<1	<0.67	<1.0	<1
Styrene	<b>100</b>	<50	<50	<2.0	<2.0	---	<0.86	<0.86	<1	<1	---	<22	<1	<0.86	<1.0	<1	<0.86	<1.0	<1
Toluene	<b>1,000</b>	333	<b>1,280</b>	18.4	19.9	<3.6	<0.67	<0.67	1.1	<1	<8.9	<17	<1	<0.67	<1.0	<1	<0.67	<1.0	<1
m&p-Xylene	<b>10,000<sup>d</sup></b>	<100	262	7.7	7.9	1.70	<1.8	<1.8	<2	<2	<19	<45	<2	<1.8	<2.0	<2	<1.8	<2.0	<2
o-Xylene	<b>10,000<sup>d</sup></b>	64.1	120	3.6	3.6	3.90	1.4	1.5	1.5	1.8	<9	<21	1.3	<0.83	<1.0	<1	<0.83	<1.0	<1
<b>PAH</b>																			
1-Methylnaphthalene	<b>NE</b>	---	---	---	---	10	9.4	9.9	---	---	53	43	---	0.055	<0.04	---	<0.011	<0.04	---
2-Chloronaphthalene	<b>NE</b>	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.04	---	---	<0.04	---
2-Methylnaphthalene	<b>NE</b>	---	---	---	---	1.3	1.2	1.2	---	---	12	1.8	---	0.045	<0.04	---	<0.012	<0.04	---
Acenaphthene	<b>NE</b>	44.0	40.2	2.4	2.8	8.4	8.7	9.6	9.9	11.2	51	46	39.0	<0.0086	<0.04	<0.04	<0.0086	<0.04	<0.04
Acenaphthylene	<b>NE</b>	0.90	0.88	<0.042	0.082	<0.39	0.1	0.11	0.15	<0.041	<3.1	<0.86	0.39	<0.0086	<0.04	<0.04	<0.0086	<0.04	<0.04
Anthracene	<b>3,000</b>	1.6	1.7	0.19	0.22	<0.35	0.12	0.13	0.12	0.14	3.9	4.0	2.6	<0.012	<0.04	<0.04	<0.012	<0.04	<0.04
Benzo(a)anthracene	<b>NE</b>	1.1	1.1	0.11	0.11	<0.39	0.017	0.018	<0.041	<0.041	<3.1	<1.7	0.076	<0.017	<0.04	<0.04	<0.017	<0.04	<0.04
Benzo(a)pyrene	<b>0.2</b>	<b>1.1</b>	<b>0.98</b>	0.11	0.10	<0.36	0.019	<0.019	<0.041	0.044	<2.9	<1.9	<0.041	<0.019	<0.04	<0.04	<0.019	<0.04	<0.04
Benzo(b)fluoranthene	<b>0.2</b>	<b>0.91</b>	<b>0.86</b>	<b>0.23</b>	<b>0.22</b>	<0.36	<0.017	<0.017	<0.041	<0.041	<2.9	<1.7	<0.041	<0.017	<0.04	<0.04	<0.017	<0.04	<0.04
Benzo(g,h,i)perylene	<b>NE</b>	0.66	0.61	0.25	0.24	<0.41	<0.020	<0.020	<0.041	<0.041	<3.3	<2.0	<0.041	<0.020	<0.04	<0.04	<0.020	<0.04	<0.04
Benzo(k)fluoranthene	<b>NE</b>	0.40	0.36	<0.042	<0.040	<0.39	<0.020	<0.020	<0.041	<0.041	<3.1	<2.0	<0.041	<0.020	<0.04	<0.04	<0.020	<0.04	<0.04
Chrysene	<b>0.2</b>	<b>1.2</b>	<b>1.1</b>	0.097	0.11	<0.33	<0.020	<0.020	<0.041	<0.041	<2.6	<2.0	0.11	<0.020	<0.04	<0.04	<0.020	<0.04	<0.04
Dibenz(a,h)anthracene	<b>NE</b>	<0.041	<0.041	<0.042	<0.040	<0.44	---	---	<0.041	<0.041	<3.5	---	<0.041	---	---	<0.04	---	---	<0.04
Dibenzofuran	<b>NE</b>	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.04	---	---	<0.04
Fluoranthene	<b>400</b>	3.5	3.2	0.26	0.27	<0.33	<0.059	0.05											

**Table 3**  
**Summary of VOC and PAH Analytical Results in Groundwater**  
**Superior Water, Light Power MGP**  
**Superior, Wisconsin**

Well ID	Enforcement Standard <sup>a</sup>	MW-15	MW-15 FD	MW-15	MW-15	MW-15 DUP	MW-15	MW-16	MW-16	MW-16	MW-17	MW-17	MW-18	MW-18	MW-18	MW-19	MW-19	MW-19	MW-20	
Date		11/14/2005	11/14/2005	10/24/2006	8/12/2008	8/12/2008	7/22/2009	11/15/2005	10/24/2006	8/12/2008	11/15/2005	10/24/2006	8/13/2008	11/15/2005	10/24/2006	8/13/2008	11/14/2005	10/24/2006	8/12/2008	11/14/2005
<b>VOC</b>																				
1,2,4-Trimethylbenzene	<b>480<sup>b</sup></b>	25	23	17.7	1.6	1.7	14.0	<0.97	<1.0	<1	<0.97	<1.0	<1	<0.97	<1.0	<1	<0.97	<1.0	<1	<48
1,3,5-Trimethylbenzene	<b>480</b>	3.6	2.9	1.7	<1	<1	<1	<0.83	<1.0	<1	<0.83	<1.0	<1	<0.83	<1.0	<1	<0.83	<1.0	<1	<42
2-Butanone (MEK)	<b>460</b>	---	---	<5.0	<4	<4	<4	---	<5.0	<4	---	<5.0	<4	---	<5.0	<4	---	<5.0	<4	---
Acetone	<b>1,000</b>	---	---	<5.0	<10	<10	<10	---	<5.0	<10	---	<5.0	<10	---	110	99.6	---	<5.0	<10	---
Benzene	<b>5</b>	<b>23</b>	<b>21</b>	<b>23.2</b>	<b>51.5</b>	<b>48.6</b>	<b>50.7</b>	<0.41	<1.0	<1	<0.41	<1.0	<1	4.1	4.1	3.5	<0.41	<1.0	<1	<b>3,800</b>
Bromobenzene	<b>NE<sup>c</sup></b>	<0.82	<0.82	<1.0	<1	<1	<1	<0.82	<1.0	<1	<0.82	<1.0	<1	<0.82	<1.0	<1	<0.82	<1.0	<1	<41
Chloroethane	<b>400</b>	<0.97	<0.97	<1.0	<1	<1	<1	<0.97	<1.0	<1	<0.97	<1.0	<1	<0.97	<1.0	<1	<0.97	<1.0	<1	<48
Chloroform	<b>6</b>	<0.37	<0.37	<1.0	<1	<1	<1	<0.37	<1.0	<1	<0.37	<1.0	<1	<0.37	<1.0	<1	<0.37	<1.0	<1	<18
Chloromethane	<b>3</b>	<0.24	<0.24	<1.0	<1	1.1	<4	0.53	<1.0	<b>37.7</b>	<0.24	<1.0	<1	0.33	<1.0	<b>3.9</b>	<0.24	<1.0	<1	<12
Ethylbenzene	<b>700</b>	6.8	5	5	<1	<1	4.7	<0.54	<1.0	<1	<0.54	<1.0	<1	<0.54	<1.0	<1	<0.54	<1.0	<1	43
Isopropylbenzene (Cumene)	<b>NE</b>	4.3	4	4.4	1.0	1.0	3.1	<0.59	<1.0	<1	<0.59	<1.0	<1	<0.59	<1.0	<1	<0.59	<1.0	<1	<30
Naphthalene	<b>100</b>	<b>110</b>	90	79.7	4.9	5.0	63.4	<0.74	<1.0	<4	<0.74	<1.0	<4	0.89	<1.0	<4	<0.74	<1.0	<4	<b>280</b>
n-Propylbenzene	<b>NE</b>	1.6	1.4	1.5	<1	<1	1.0	<0.81	<1.0	<1	<0.81	<1.0	<1	<0.81	<1.0	<1	<0.81	<1.0	<1	<40
p-Isopropyltoluene	<b>NE</b>	<0.67	<0.67	<1.0	<1	<1	<1	<0.67	<1.0	<1	<0.67	<1.0	<1	<0.67	<1.0	<1	<0.67	<1.0	<1	<34
Styrene	<b>100</b>	<0.86	<0.86	<1.0	<1	<1	<1	<0.86	<1.0	<1	<0.86	<1.0	<1	<0.86	<1.0	<1	<0.86	<1.0	<1	<43
Toluene	<b>1,000</b>	<0.67	<0.67	<1.0	<1	<1	<1	<0.67	<1.0	<1	<0.67	<1.0	<1	3.2	1.1	1.1	<0.67	<1.0	<1	<34
m&p-Xylene	<b>10,000<sup>d</sup></b>	<1.8	<1.8	<2.0	<2	<2	<2	<1.8	<2.0	<2	<1.8	<2.0	<2	<1.8	<2.0	<2	<1.8	<2.0	<2	<90
o-Xylene	<b>10,000<sup>d</sup></b>	2.8	2.2	2.4	1.1	1.1	2.3	<0.83	<1.0	<1	<0.83	<1.0	<1	<0.83	<1.0	<1	<0.83	<1.0	<1	<42
<b>PAH</b>																				
1-Methylnaphthalene	<b>NE</b>	45	57	38.4	---	---	0.074	<0.04	---	<0.011	<0.04	---	0.17	0.22	---	0.04	<0.04	---	18	
2-Chloronaphthalene	<b>NE</b>	---	---	0.075	---	---	---	<0.04	---	---	<0.04	---	---	<0.04	---	---	<0.04	---	---	
2-Methylnaphthalene	<b>NE</b>	17	20	9.4	---	---	0.047	<0.04	---	<0.012	<0.04	---	0.13	0.18	---	0.025	<0.04	---	1.4	
Acenaphthene	<b>NE</b>	43	51	49.6	52.4	49.9	56.2	0.042	<0.04	0.040	0.017	0.056	<0.041	0.09	0.1	<0.041	0.045	<0.04	<0.041	14
Acenaphthylene	<b>NE</b>	<1.7	0.71	<0.04	0.88	0.74	<0.042	<0.0086	<0.04	<0.04	<0.0086	<0.04	<0.041	0.013	<0.04	<0.041	<0.0086	<0.04	<0.041	<0.86
Anthracene	<b>3,000</b>	3.5	4.2	2.8	0.85	0.89	1.5	0.023	<0.04	<0.04	0.015	<0.04	<0.041	0.049	0.072	<0.041	0.015	<0.04	<0.041	<1.2
Benzo(a)anthracene	<b>NE</b>	0.27	<0.33	0.23	0.18	0.18	0.16	0.027	0.049	<0.04	<0.017	<0.04	<0.041	0.044	0.047	<0.041	<0.017	<0.04	<0.041	<1.7
Benzo(a)pyrene	<b>0.2</b>	0.11	<0.39	<0.04	0.053	0.047	<0.042	0.021	<0.04	<0.04	<0.019	<0.04	<0.041	0.026	<0.04	<0.041	<0.019	<0.04	<0.041	<1.9
Benzo(b)fluoranthene	<b>0.2</b>	0.054	<0.33	0.16	0.049	0.048	<0.042	<0.017	0.17	<0.04	<0.017	<0.04	<0.041	0.019	0.15	<0.041	<0.017	<0.04	<0.041	<1.7
Benzo(g,h,i)perylene	<b>NE</b>	0.054	<0.41	<0.04	<0.041	<0.041	<0.042	<0.020	0.26	<0.04	<0.020	<0.04	<0.041	<0.020	<0.04	<0.041	<0.020	<0.04	<0.041	<2.0
Benzo(k)fluoranthene	<b>NE</b>	0.063	<0.41	<0.04	<0.041	<0.041	<0.042	<0.020	<0.04	<0.04	<0.020	<0.04	<0.041	<0.020	<0.04	<0.041	<0.020	<0.04	<0.041	<2.0
Chrysene	<b>0.2</b>	<b>0.22</b>	<0.40	0.19	<b>0.21</b>	<b>0.20</b>	0.14	0.024	0.044	<0.04	<0.020	<0.04	<0.							

**Table 3**  
**Summary of VOC and PAH Analytical Results in Groundwater**  
**Superior Water, Light Power MGP**  
**Superior, Wisconsin**

Well ID	Enforcement Standard <sup>a</sup>	MW-20	MW-20	MW-20	MW-21	MW-21	MW-21	MW-22	MW-22	MW-22	
		Date	10/24/2006	8/13/2008	7/22/2009	11/15/2005	10/24/2006	8/13/2008	11/15/2005	10/24/2006	8/13/2008
<b>VOC</b>											
1,2,4-Trimethylbenzene	<b>480<sup>b</sup></b>	31	18.6	<25	<0.97	<1.0	<1	<0.97	<1.0	<1	<1
1,3,5-Trimethylbenzene	<b>480</b>	1.3	<10	<25	<0.83	<1.0	<1	<0.83	<1.0	<1	<1
2-Butanone (MEK)	<b>460</b>	<5.0	<40	<100	---	<5.0	<4	---	10.5	9.5	10.0
Acetone	<b>1,000</b>	<5.0	<100	<250	---	<5.0	<10	---	171	195	145
Benzene	<b>5</b>	<b>5,830</b>	<b>16,000</b>	<b>2,770</b>	<0.41	<1.0	<1	<b>10</b>	<b>6.4</b>	<b>10.7</b>	<b>5.4</b>
Bromobenzene	<b>NE<sup>c</sup></b>	<1.0	<10	<25	<0.82	<1.0	<1	<0.82	<1.0	<1	<1
Chloroethane	<b>400</b>	<1.0	<10	<25	<0.97	<1.0	<1	<0.97	<1.0	<1	<1
Chloroform	<b>6</b>	<1.0	<10	<25	0.39	<1.0	<1	<0.37	1.1	<1	<1
Chloromethane	<b>3</b>	<1.0	<10	<100	<0.24	<1.0	<b>3.6</b>	0.48	<1.0	<1	<b>4.1</b>
Ethylbenzene	<b>700</b>	10.1	30.4	<25	<0.54	<1.0	<1	<0.54	<1.0	<1	<1
Isopropylbenzene (Cumene)	<b>NE</b>	6.7	<10	<25	<0.59	<1.0	<1	<0.59	<1.0	<1	<1
Naphthalene	<b>100</b>	41.1	<40	<100	<0.74	<1.0	<4	2.7	2.9	<4	<4
n-Propylbenzene	<b>NE</b>	3.1	<10	<25	<0.81	<1.0	<1	<0.81	<1.0	<1	<1
p-Isopropyltoluene	<b>NE</b>	<1.0	<10	<25	<0.67	<1.0	<1	<0.67	2.3	2.8	<1
Styrene	<b>100</b>	<1.0	<10	<25	<0.86	<1.0	<1	<0.86	<1.0	<1	<1
Toluene	<b>1,000</b>	<1.0	<10	<25	<0.67	<1.0	<1	1.5	1.8	1.9	1.8
m&p-Xylene	<b>10,000<sup>d</sup></b>	<1.0	<20	<50	<1.8	<2.0	<2	<1.8	<2.0	<2	<2
o-Xylene	<b>10,000<sup>d</sup></b>	12.6	20.0	<25	<0.83	<1.0	<1	<0.83	<1.0	<1	<1
<b>PAH</b>											
1-Methylnaphthalene	<b>NE</b>	29.5	---	---	0.02	<0.04	---	1.7	0.25	---	---
2-Chloronaphthalene	<b>NE</b>	<0.04	---	---	---	<0.04	---	---	<0.04	---	---
2-Methylnaphthalene	<b>NE</b>	1.5	---	---	0.023	<0.04	---	1.2	0.17	---	---
Acenaphthene	<b>NE</b>	27.1	55.4	33.5	0.016	<0.04	<0.04	1.9	0.14	0.43	0.089
Acenaphthylene	<b>NE</b>	<0.04	<0.04	<0.041	<0.0086	<0.04	<0.04	0.12	<0.04	<0.041	<0.041
Anthracene	<b>3,000</b>	0.2	0.17	0.21	<0.012	<0.04	<0.04	0.98	0.05	0.29	<0.041
Benzo(a)anthracene	<b>NE</b>	<0.04	<0.04	<0.041	<0.017	<0.04	<0.04	0.4	0.052	0.32	<0.041
Benzo(a)pyrene	<b>0.2</b>	<0.04	<0.04	<0.041	<0.019	<0.04	<0.04	<b>0.21</b>	<0.04	<b>0.22</b>	<0.041
Benzo(b)fluoranthene	<b>0.2</b>	<0.04	<0.04	<0.041	<0.017	<0.04	<0.04	<0.17	0.16	0.19	<0.041
Benzo(g,h,i)perylene	<b>NE</b>	<0.04	<0.04	<0.041	<0.020	<0.04	<0.04	<0.20	0.26	0.11	<0.041
Benzo(k)fluoranthene	<b>NE</b>	<0.04	<0.04	<0.041	<0.020	<0.04	<0.04	<0.20	<0.04	0.082	<0.041
Chrysene	<b>0.2</b>	<0.04	<0.04	<0.041	<0.020	<0.04	<0.04	<b>0.38</b>	0.057	<b>0.36</b>	<0.041
Dibenz(a,h)anthracene	<b>NE</b>	---	<0.04	<0.041	---	<0.04	---	---	<0.041	<0.041	---
Dibenzofuran	<b>NE</b>	0.19	---	---	---	<0.04	---	---	<0.04	---	---
Fluoranthene	<b>400</b>	0.34	0.25	0.29	<0.016	<0.04	<0.04	1.1	0.083	0.68	<0.041
Fluorene	<b>400</b>	3.3	3.5	2.4	<0.0096	<0.04	<0.04	0.71	<0.04	0.16	<0.041
Indeno(1,2,3-cd)pyrene	<b>NE</b>	<0.04	<0.04	<0.041	<0.020	<0.04	<0.04	<0.20	<0.04	0.071	<0.041
Naphthalene	<b>100</b>	21.4	28.6	5.1	0.23	<0.04	<0.04	3.4	0.52	0.84	0.50
Phenanthrene	<b>NE</b>	1.2	0.95	1.1	<0.012	<0.04	<0.04	3.1	0.21	1.1	0.072
Pyrene	<b>250</b>	0.29	0.19	0.28	<0.015	<0.04	<0.04	1.5	0.1	0.99	<0.041

**Notes:**

Results are reported in micrograms per liter or parts per billion.

Shaded results indicate concentrations greater than the enforcement standards.

a. The Wisconsin Department of Natural Resources Groundwater Enforcement Standards for the protection of public health (NR 140, Table 1).

b. The enforcement standard is 480 ug/L for the sum of all trimethylbenzene concentrations.

c. NE means enforcement standard is not established.

d. The enforcement standard is 10,000 ug/L for the total xylene concentrations.

**Table 4**  
**Total Iron Analytical Results in Groundwater**  
**Superior Water, Light, and Power Former MGP**  
**Superior, Wisconsin**

Sample ID	Date	Total Iron ( $\mu\text{g/L}$ )	pH (standard units)
<b>MW-6</b>	12/8/2008	<50	12.2
	12/12/2008	<50	11.8
	7/22/2009	<50	---
<b>MW-7</b>	12/8/2008	4,790	6.7
	12/12/2008	3,210	7.8
	7/22/2009	19,200	---
<b>MW-8</b>	7/22/2009	279	---
<b>MW-9</b>	7/22/2009	2,360	---
<b>MW-10</b>	7/22/2009	2,990	---
<b>MW-11</b>	7/22/2009	15,200	---
<b>MW-15</b>	7/22/2009	29,100	---
<b>MW-20</b>	7/22/2009	26,100	---
<b>MW-22</b>	7/22/2009	<50	---
<b>PIT</b>	12/8/2008	8,460	9.0

**Notes:**

Samples collected from MW-6 and MW-7 on 12/8/08 represent pre-excavation and pre-Cool-Ox application conditions in groundwater.

Samples collected from MW-6 and MW-7 on 12/12/08 represent post-excavation and post-Cool-Ox application conditions in groundwater.

The "PIT" sample was collected from the mixture of groundwater and Cool-Ox that had accumulated during the first day of excavating (12/8/08).

"---" indicates not analyzed.

## **Figures**



Scale: 1 : 24,000

USGS 7½ Minute Topographic Quadrangle from DeLorme  
Superior, Wisconsin, 1993

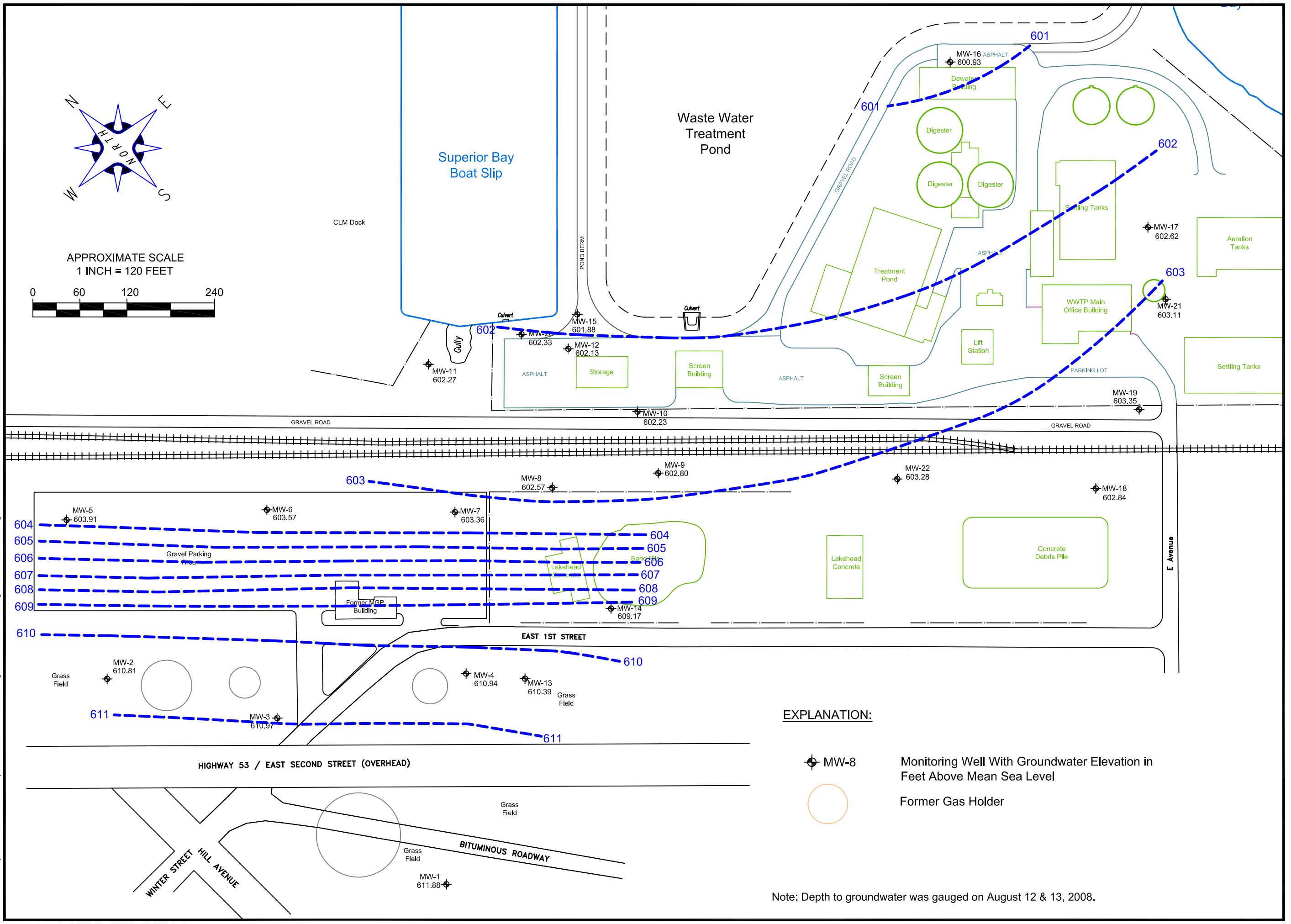
## Site Location

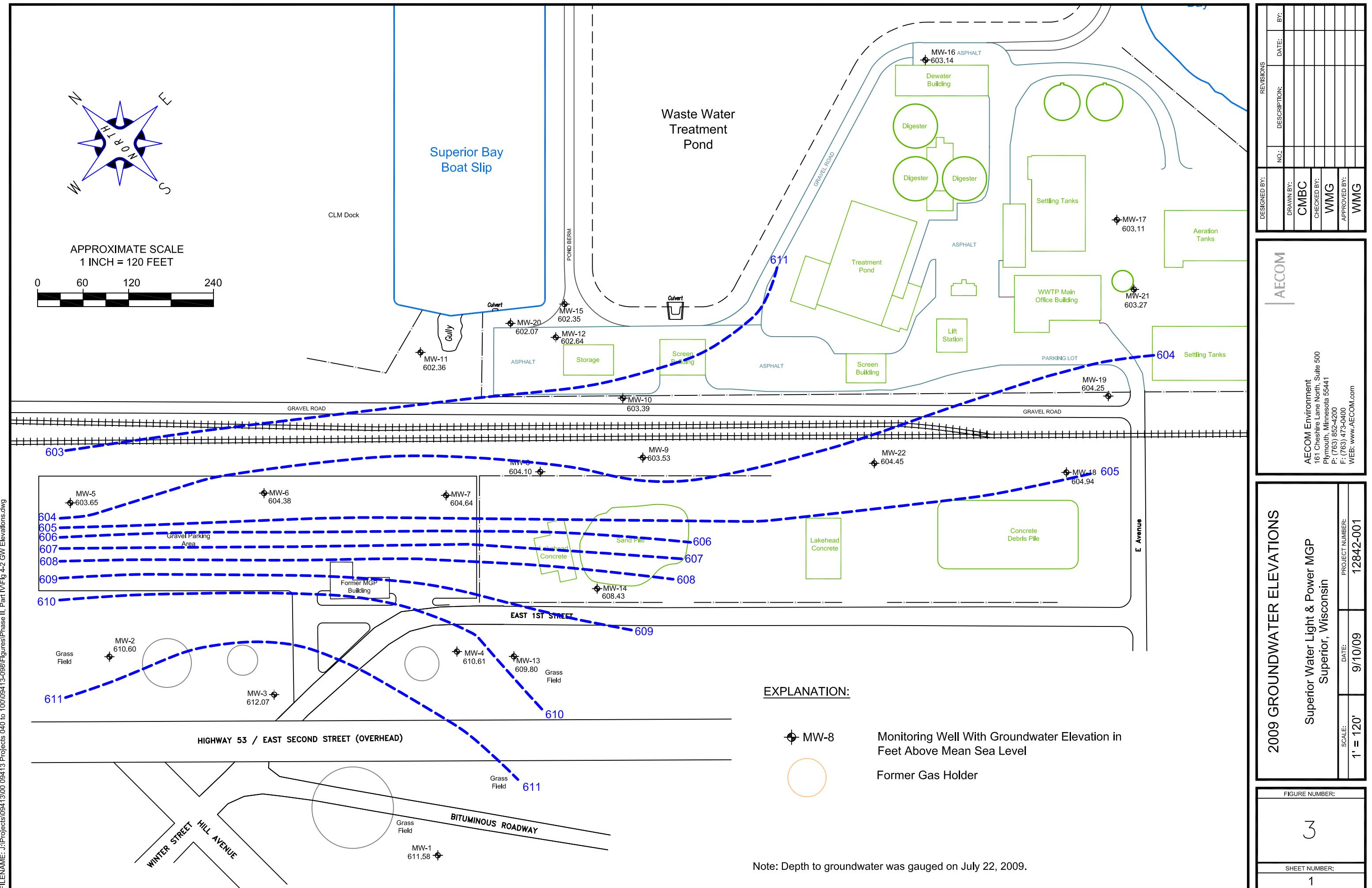
Superior Water Light & Power  
Former MGP  
Superior, Wisconsin

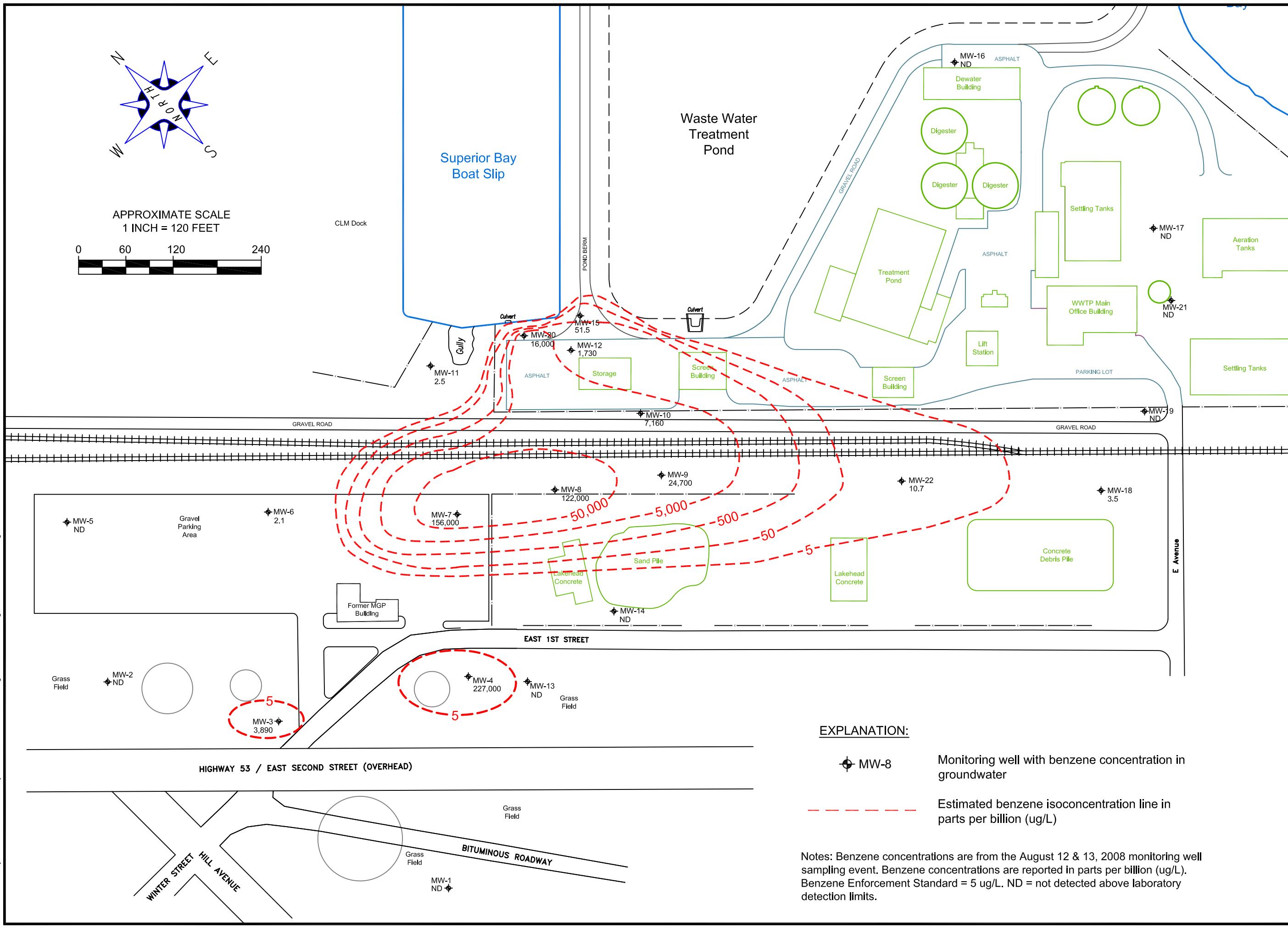
September 2009 Job No. 12842-001

**Figure 1**

[www.aecom.com](http://www.aecom.com)







**ESTIMATED EXTENT OF BENZENE PLUME IN GROUNDWATER - 2008**  
Superior Water Light & Power MGP  
Superior, Wisconsin

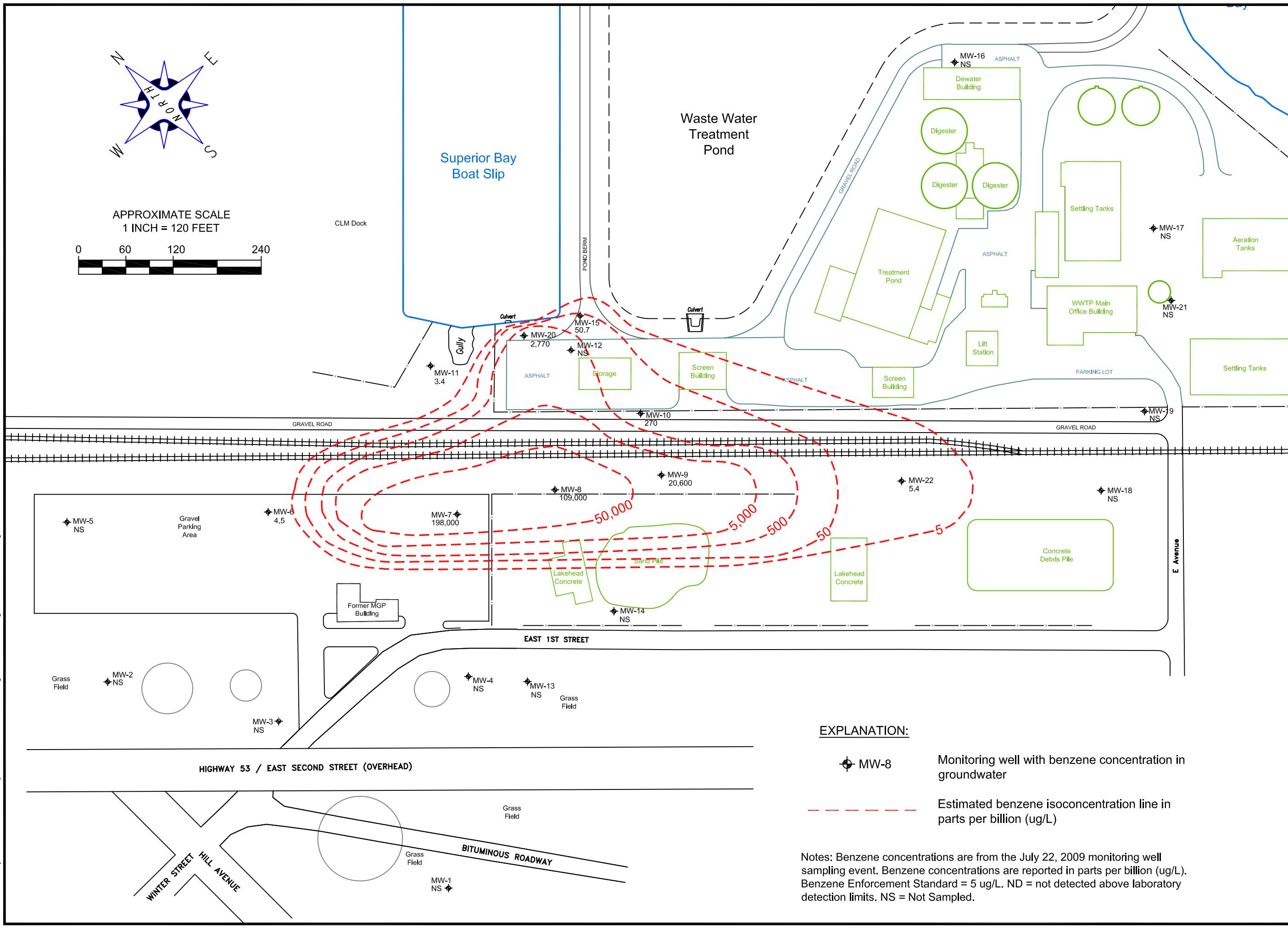
SCALE:	DATE:	PROJECT NUMBER:
1' = 120'	9/10/09	12842-001

FIGURE NUMBER:
4
SHEET NUMBER: 1

AECOM Environment  
161 Cheshire Lane North, Suite 500  
Plymouth, Minnesota 55441  
P: (763) 852-4200  
F: (763) 473-0400  
WEB: www.AECOM.com

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REVISIONS			
DESIGNED BY:	NO.:	DESCRIPTION:	DATE:
DRAWN BY:	NO.:	DESCRIPTION:	DATE:
CMB			
CHECDED BY:			
WMG			
APPROVED BY:			
WMG			



**ESTIMATED EXTENT OF BENZENE PLUME IN GROUNDWATER - 2009**  
**Superior Water Light & Power MGP**  
**Superior, Wisconsin**

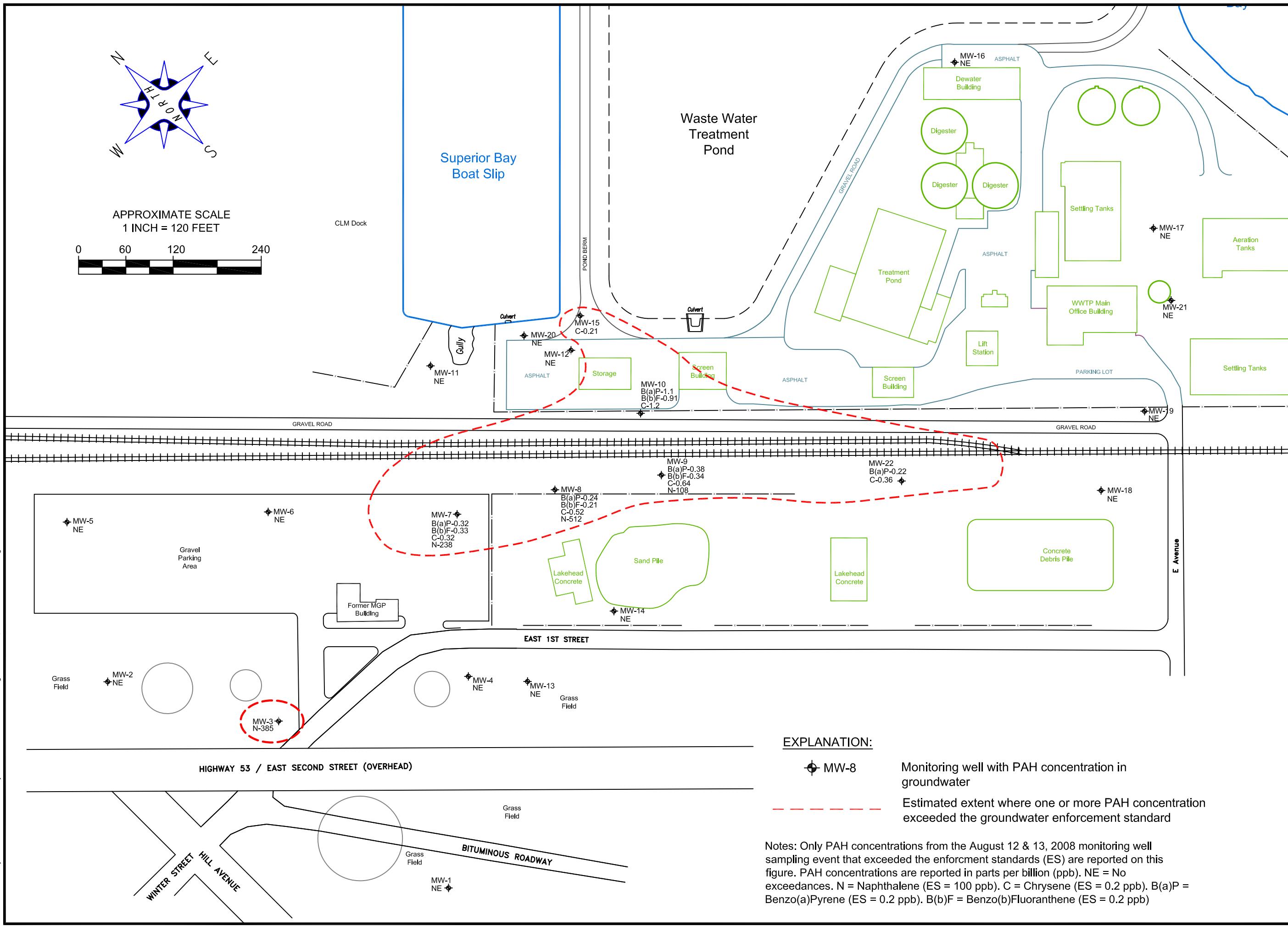
FIGURE NUMBER:	12842-001		
SCALE:	1' = 120'	DATE:	9/10/09
PROJECT NUMBER:			
FIGURE NUMBER:			
FILE NUMBER:			

FIGURE NUMBER:	5		
SHEET NUMBER:			
FIGURE NUMBER:	1		

AECOM Environment  
161 Cheshire Lane North, Suite 500  
Plymouth, Minnesota 55441  
F: (763) 452-4200  
WEB: www.AECOM.com

**AECOM**

DESIGNED BY:		REVISIONS	
DRAWN BY:		NO.:	DATE:
CMB			
CHECKED BY:			
WMG			
APPROVED BY:			
WMG			



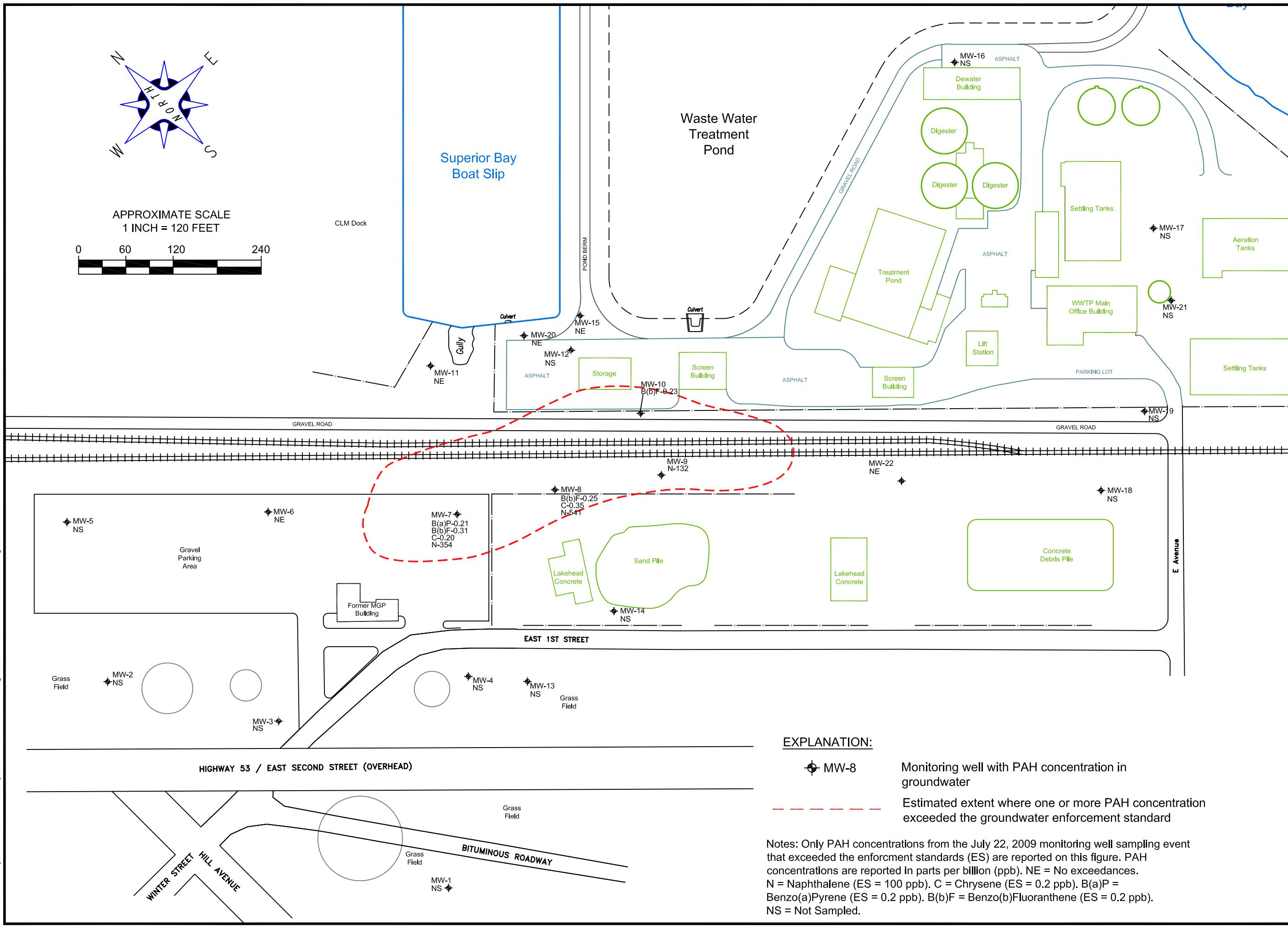
**SUMMARY OF PAH GROUNDWATER ANALYTICAL RESULTS - 2008**  
Superior Water Light & Power MGP  
Superior, Wisconsin

SCALE:	DATE:	PROJECT NUMBER:
1" = 120'	9/11/09	12842-001

FIGURE NUMBER:
O
SHEET NUMBER: 1

AECOM Environment  
161 Cheshire Lane North, Suite 500  
Plymouth, Minnesota 55441  
P: (763) 452-2400  
F: (763) 473-0400  
WEB: www.AECOM.com

REVISIONS			
DESIGNED BY:	NO.:	DESCRIPTION:	DATE:
CMB			
WMG			
WMG			



**SUMMARY OF PAH GROUNDWATER ANALYTICAL RESULTS - 2009**  
Superior Water Light & Power MGP  
Superior, Wisconsin

SCALE:	1" = 120'	DATE:	9/11/09	PROJECT NUMBER:	12842-001
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FIGURE NUMBER:  
**7**  
SHEET NUMBER:  
**1**

AECOM Environment  
161 Cheshire Lane North, Suite 500  
Plymouth, Minnesota 55441  
P: (763) 452-2400  
F: (763) 473-0400  
WEB: www.AECOM.com

REVISIONS			
DESIGNED BY:	NO.:	DESCRIPTION:	DATE:
CMB			
WMG			
WMG			

**AECOM**

## **Appendix A**

### **Analytical Report**

July 31, 2009

Bill Gregg  
AECOM  
413 Waucota St.  
Suite 400  
Saint Paul, MN 55101

RE: Project: Superior WLP 12842-001-300  
Pace Project No.: 1099910

Dear Bill Gregg:

Enclosed are the analytical results for sample(s) received by the laboratory on July 23, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Carol Davy

carol.davy@pacelabs.com  
Project Manager

Enclosures

#### **REPORT OF LABORATORY ANALYSIS**

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## CERTIFICATIONS

Project: Superior WLP 12842-001-300  
Pace Project No.: 1099910

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### Minnesota Certification IDs

Alaska Certification #: UST-078  
Wisconsin Certification #: 999407970  
California Certification #: 01155CA  
Florida/NELAP Certification #: E87605  
Illinois Certification #: 200011  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Louisiana Certification #: 03086  
Louisiana Certification #: LA080009  
Maine Certification #: 2007029  
Minnesota Certification #: 027-053-137

Montana Certification #: MT CERT0092  
New Jersey Certification #: MN-002  
New York Certification #: 11647  
North Carolina Certification #: 530  
North Dakota Certification #: R-036  
Oregon Certification #: MN200001  
Pennsylvania Certification #: 68-00563  
Tennessee Certification #: 02818  
Washington Certification #: C754  
Arizona Certification #: AZ-0014

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1099910001	MW-6	Water	07/22/09 09:15	07/23/09 10:50
1099910002	MW-7	Water	07/22/09 09:45	07/23/09 10:50
1099910003	MW-8	Water	07/22/09 13:05	07/23/09 10:50
1099910004	MW-9	Water	07/22/09 13:35	07/23/09 10:50
1099910005	MW-10	Water	07/22/09 14:40	07/23/09 10:50
1099910006	MW-11	Water	07/22/09 15:10	07/23/09 10:50
1099910007	MW-15	Water	07/22/09 11:40	07/23/09 10:50
1099910008	MW-20	Water	07/22/09 11:10	07/23/09 10:50
1099910009	MW-22	Water	07/22/09 14:10	07/23/09 10:50
1099910010	MW-10 DUP	Water	07/22/09 14:45	07/23/09 10:50
1099910011	Trip Blank	Water	07/22/09 00:00	07/23/09 10:50

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Superior WLP 12842-001-300  
Pace Project No.: 1099910

Lab ID	Sample ID	Method	Analysts	Analytes Reported
1099910001	MW-6	EPA 6010	IP	1
		EPA 8260	CNC	73
		EPA 8270 by SIM	HRG	19
1099910002	MW-7	EPA 6010	IP	1
		EPA 8260	CNC	73
		EPA 8270 by SIM	HRG	19
1099910003	MW-8	EPA 6010	IP	1
		EPA 8260	CNC	73
		EPA 8270 by SIM	HRG	19
1099910004	MW-9	EPA 6010	IP	1
		EPA 8260	CNC	73
		EPA 8270 by SIM	LCW	19
1099910005	MW-10	EPA 6010	IP	1
		EPA 8260	CNC	73
		EPA 8270 by SIM	HRG	19
1099910006	MW-11	EPA 6010	IP	1
		EPA 8260	CNC	73
		EPA 8270 by SIM	HRG	19
1099910007	MW-15	EPA 6010	IP	1
		EPA 8260	CNC	73
		EPA 8270 by SIM	HRG	19
1099910008	MW-20	EPA 6010	IP	1
		EPA 8260	CNC	73
		EPA 8270 by SIM	HRG	19
1099910009	MW-22	EPA 6010	IP	1
		EPA 8260	CNC	73
		EPA 8270 by SIM	HRG	19
1099910010	MW-10 DUP	EPA 6010	IP	1
		EPA 8260	CNC	73
		EPA 8270 by SIM	HRG	19
1099910011	Trip Blank	EPA 8260	CNC	73

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-6	Lab ID: 1099910001	Collected: 07/22/09 09:15	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	ND ug/L		50.0	1	07/27/09 10:22	07/27/09 18:05	7439-89-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	8.5 ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	83-32-9	
Acenaphthylene	ND ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	208-96-8	
Anthracene	0.46 ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	120-12-7	
Benzo(a)anthracene	0.095 ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	56-55-3	
Benzo(a)pyrene	ND ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	207-08-9	
Chrysene	0.086 ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	53-70-3	
Fluoranthene	0.79 ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	206-44-0	
Fluorene	1.2 ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	193-39-5	
Naphthalene	52.8 ug/L		0.40	10	07/24/09 11:33	07/29/09 16:51	91-20-3	
Phenanthrene	2.9 ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	85-01-8	
Pyrene	0.91 ug/L		0.040	1	07/24/09 11:33	07/27/09 15:01	129-00-0	
Nitrobenzene-d5 (S)	85 %		51-125	1	07/24/09 11:33	07/27/09 15:01	4165-60-0	
2-Fluorobiphenyl (S)	65 %		58-125	1	07/24/09 11:33	07/27/09 15:01	321-60-8	
Terphenyl-d14 (S)	79 %		57-134	1	07/24/09 11:33	07/27/09 15:01	1718-51-0	
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Acetone	42.1 ug/L		10.0	1	07/24/09 06:13	67-64-1		
Allyl chloride	ND ug/L		4.0	1	07/24/09 06:13	107-05-1		
Benzene	4.5 ug/L		1.0	1	07/24/09 06:13	71-43-2		
Bromobenzene	ND ug/L		1.0	1	07/24/09 06:13	108-86-1		
Bromochloromethane	ND ug/L		1.0	1	07/24/09 06:13	74-97-5		
Bromodichloromethane	ND ug/L		1.0	1	07/24/09 06:13	75-27-4		
Bromoform	ND ug/L		8.0	1	07/24/09 06:13	75-25-2		
Bromomethane	ND ug/L		4.0	1	07/24/09 06:13	74-83-9		
2-Butanone (MEK)	ND ug/L		4.0	1	07/24/09 06:13	78-93-3		
n-Butylbenzene	ND ug/L		1.0	1	07/24/09 06:13	104-51-8		
sec-Butylbenzene	ND ug/L		1.0	1	07/24/09 06:13	135-98-8		
tert-Butylbenzene	ND ug/L		1.0	1	07/24/09 06:13	98-06-6		
Carbon tetrachloride	ND ug/L		1.0	1	07/24/09 06:13	56-23-5		
Chlorobenzene	ND ug/L		1.0	1	07/24/09 06:13	108-90-7		
Chloroethane	ND ug/L		1.0	1	07/24/09 06:13	75-00-3		
Chloroform	ND ug/L		1.0	1	07/24/09 06:13	67-66-3		
Chloromethane	ND ug/L		4.0	1	07/24/09 06:13	74-87-3		
2-Chlorotoluene	ND ug/L		1.0	1	07/24/09 06:13	95-49-8		
4-Chlorotoluene	ND ug/L		1.0	1	07/24/09 06:13	106-43-4		
1,2-Dibromo-3-chloropropane	ND ug/L		4.0	1	07/24/09 06:13	96-12-8		
Dibromochloromethane	ND ug/L		1.0	1	07/24/09 06:13	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1	07/24/09 06:13	106-93-4		

Date: 07/31/2009 03:55 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-6	Lab ID: 1099910001	Collected: 07/22/09 09:15	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromomethane	ND ug/L		1.0	1		07/24/09 06:13	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 06:13	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 06:13	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 06:13	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		07/24/09 06:13	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		07/24/09 06:13	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/24/09 06:13	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		07/24/09 06:13	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		07/24/09 06:13	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		07/24/09 06:13	156-60-5	
Dichlorofluoromethane	ND ug/L		1.0	1		07/24/09 06:13	75-43-4	
1,2-Dichloropropane	ND ug/L		1.0	1		07/24/09 06:13	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		07/24/09 06:13	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		07/24/09 06:13	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		07/24/09 06:13	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		4.0	1		07/24/09 06:13	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		4.0	1		07/24/09 06:13	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		4.0	1		07/24/09 06:13	60-29-7	
Ethylbenzene	<b>12.0</b> ug/L		1.0	1		07/24/09 06:13	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		4.0	1		07/24/09 06:13	87-68-3	
Isopropylbenzene (Cumene)	<b>1.2</b> ug/L		1.0	1		07/24/09 06:13	98-82-8	
p-Isopropyltoluene	<b>2.6</b> ug/L		1.0	1		07/24/09 06:13	99-87-6	
Methylene Chloride	ND ug/L		4.0	1		07/24/09 06:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		4.0	1		07/24/09 06:13	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/24/09 06:13	1634-04-4	
Naphthalene	<b>88.2</b> ug/L		4.0	1		07/24/09 06:13	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		07/24/09 06:13	103-65-1	
Styrene	ND ug/L		1.0	1		07/24/09 06:13	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/24/09 06:13	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/24/09 06:13	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/24/09 06:13	127-18-4	
Tetrahydrofuran	ND ug/L		10.0	1		07/24/09 06:13	109-99-9	
Toluene	<b>1.5</b> ug/L		1.0	1		07/24/09 06:13	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/24/09 06:13	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/24/09 06:13	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/24/09 06:13	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/24/09 06:13	79-00-5	
Trichloroethene	ND ug/L		1.0	1		07/24/09 06:13	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/24/09 06:13	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		07/24/09 06:13	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		1.0	1		07/24/09 06:13	76-13-1	
1,2,4-Trimethylbenzene	<b>7.8</b> ug/L		1.0	1		07/24/09 06:13	95-63-6	
1,3,5-Trimethylbenzene	<b>1.9</b> ug/L		1.0	1		07/24/09 06:13	108-67-8	
Vinyl chloride	ND ug/L		0.40	1		07/24/09 06:13	75-01-4	
Xylene (Total)	<b>7.0</b> ug/L		3.0	1		07/24/09 06:13	1330-20-7	
m&p-Xylene	<b>2.5</b> ug/L		2.0	1		07/24/09 06:13	1330-20-7	
o-Xylene	<b>4.5</b> ug/L		1.0	1		07/24/09 06:13	95-47-6	

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## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-6	Lab ID: 1099910001	Collected: 07/22/09 09:15	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>								Analytical Method: EPA 8260
Dibromofluoromethane (S)	97 %		75-125	1			07/24/09 06:13	1868-53-7
1,2-Dichloroethane-d4 (S)	97 %		75-125	1			07/24/09 06:13	17060-07-0
Toluene-d8 (S)	100 %		75-125	1			07/24/09 06:13	2037-26-5
4-Bromofluorobenzene (S)	97 %		75-125	1			07/24/09 06:13	460-00-4

Date: 07/31/2009 03:55 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-7	Lab ID: 1099910002	Collected: 07/22/09 09:45	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	19200	ug/L	50.0	1	07/27/09 10:22	07/27/09 18:25	7439-89-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	3.8	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	83-32-9	
Acenaphthylene	1.9	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	208-96-8	
Anthracene	0.62	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	120-12-7	
Benzo(a)anthracene	0.19	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	56-55-3	
Benzo(a)pyrene	0.21	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	50-32-8	
Benzo(b)fluoranthene	0.31	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	205-99-2	
Benzo(g,h,i)perylene	0.32	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	191-24-2	
Benzo(k)fluoranthene	0.088	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	207-08-9	
Chrysene	0.20	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	53-70-3	
Fluoranthene	0.78	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	206-44-0	
Fluorene	2.2	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	86-73-7	
Indeno(1,2,3-cd)pyrene	0.12	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	193-39-5	
Naphthalene	354	ug/L	2.0	50	07/24/09 11:33	07/29/09 17:12	91-20-3	
Phenanthrene	2.5	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	85-01-8	
Pyrene	1.1	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:22	129-00-0	
Nitrobenzene-d5 (S)	85 %		51-125	1	07/24/09 11:33	07/27/09 15:22	4165-60-0	
2-Fluorobiphenyl (S)	70 %		58-125	1	07/24/09 11:33	07/27/09 15:22	321-60-8	
Terphenyl-d14 (S)	60 %		57-134	1	07/24/09 11:33	07/27/09 15:22	1718-51-0	
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Acetone	ND	ug/L	10000	1000		07/24/09 11:45	67-64-1	
Allyl chloride	ND	ug/L	4000	1000		07/24/09 11:45	107-05-1	
Benzene	198000	ug/L	1000	1000		07/24/09 11:45	71-43-2	
Bromobenzene	ND	ug/L	1000	1000		07/24/09 11:45	108-86-1	
Bromochloromethane	ND	ug/L	1000	1000		07/24/09 11:45	74-97-5	
Bromodichloromethane	ND	ug/L	1000	1000		07/24/09 11:45	75-27-4	
Bromoform	ND	ug/L	8000	1000		07/24/09 11:45	75-25-2	
Bromomethane	ND	ug/L	4000	1000		07/24/09 11:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	4000	1000		07/24/09 11:45	78-93-3	
n-Butylbenzene	ND	ug/L	1000	1000		07/24/09 11:45	104-51-8	
sec-Butylbenzene	ND	ug/L	1000	1000		07/24/09 11:45	135-98-8	
tert-Butylbenzene	ND	ug/L	1000	1000		07/24/09 11:45	98-06-6	
Carbon tetrachloride	ND	ug/L	1000	1000		07/24/09 11:45	56-23-5	
Chlorobenzene	ND	ug/L	1000	1000		07/24/09 11:45	108-90-7	
Chloroethane	ND	ug/L	1000	1000		07/24/09 11:45	75-00-3	
Chloroform	ND	ug/L	1000	1000		07/24/09 11:45	67-66-3	
Chloromethane	ND	ug/L	4000	1000		07/24/09 11:45	74-87-3	
2-Chlorotoluene	ND	ug/L	1000	1000		07/24/09 11:45	95-49-8	
4-Chlorotoluene	ND	ug/L	1000	1000		07/24/09 11:45	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4000	1000		07/24/09 11:45	96-12-8	
Dibromochloromethane	ND	ug/L	1000	1000		07/24/09 11:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1000	1000		07/24/09 11:45	106-93-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-7	Lab ID: 1099910002	Collected: 07/22/09 09:45	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromomethane	ND ug/L		1000	1000		07/24/09 11:45	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1000	1000		07/24/09 11:45	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1000	1000		07/24/09 11:45	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1000	1000		07/24/09 11:45	106-46-7	
Dichlorodifluoromethane	ND ug/L		1000	1000		07/24/09 11:45	75-71-8	
1,1-Dichloroethane	ND ug/L		1000	1000		07/24/09 11:45	75-34-3	
1,2-Dichloroethane	ND ug/L		1000	1000		07/24/09 11:45	107-06-2	
1,1-Dichloroethene	ND ug/L		1000	1000		07/24/09 11:45	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1000	1000		07/24/09 11:45	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1000	1000		07/24/09 11:45	156-60-5	
Dichlorofluoromethane	ND ug/L		1000	1000		07/24/09 11:45	75-43-4	
1,2-Dichloropropane	ND ug/L		1000	1000		07/24/09 11:45	78-87-5	
1,3-Dichloropropane	ND ug/L		1000	1000		07/24/09 11:45	142-28-9	
2,2-Dichloropropane	ND ug/L		1000	1000		07/24/09 11:45	594-20-7	
1,1-Dichloropropene	ND ug/L		1000	1000		07/24/09 11:45	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		4000	1000		07/24/09 11:45	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		4000	1000		07/24/09 11:45	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		4000	1000		07/24/09 11:45	60-29-7	
Ethylbenzene	<b>4280</b> ug/L		1000	1000		07/24/09 11:45	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		4000	1000		07/24/09 11:45	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L		1000	1000		07/24/09 11:45	98-82-8	
p-Isopropyltoluene	ND ug/L		1000	1000		07/24/09 11:45	99-87-6	
Methylene Chloride	ND ug/L		4000	1000		07/24/09 11:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		4000	1000		07/24/09 11:45	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1000	1000		07/24/09 11:45	1634-04-4	
Naphthalene	ND ug/L		4000	1000		07/24/09 11:45	91-20-3	
n-Propylbenzene	ND ug/L		1000	1000		07/24/09 11:45	103-65-1	
Styrene	<b>1350</b> ug/L		1000	1000		07/24/09 11:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1000	1000		07/24/09 11:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1000	1000		07/24/09 11:45	79-34-5	
Tetrachloroethene	ND ug/L		1000	1000		07/24/09 11:45	127-18-4	
Tetrahydrofuran	ND ug/L		10000	1000		07/24/09 11:45	109-99-9	
Toluene	<b>116000</b> ug/L		1000	1000		07/24/09 11:45	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1000	1000		07/24/09 11:45	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1000	1000		07/24/09 11:45	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1000	1000		07/24/09 11:45	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1000	1000		07/24/09 11:45	79-00-5	
Trichloroethene	ND ug/L		1000	1000		07/24/09 11:45	79-01-6	
Trichlorofluoromethane	ND ug/L		1000	1000		07/24/09 11:45	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1000	1000		07/24/09 11:45	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		1000	1000		07/24/09 11:45	76-13-1	
1,2,4-Trimethylbenzene	ND ug/L		1000	1000		07/24/09 11:45	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1000	1000		07/24/09 11:45	108-67-8	
Vinyl chloride	ND ug/L		400	1000		07/24/09 11:45	75-01-4	
Xylene (Total)	<b>22300</b> ug/L		3000	1000		07/24/09 11:45	1330-20-7	
m&p-Xylene	<b>17400</b> ug/L		2000	1000		07/24/09 11:45	1330-20-7	
o-Xylene	<b>4910</b> ug/L		1000	1000		07/24/09 11:45	95-47-6	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-7	Lab ID: 1099910002	Collected: 07/22/09 09:45	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>								Analytical Method: EPA 8260
Dibromofluoromethane (S)	93 %		75-125	1000			07/24/09 11:45	1868-53-7
1,2-Dichloroethane-d4 (S)	91 %		75-125	1000			07/24/09 11:45	17060-07-0
Toluene-d8 (S)	99 %		75-125	1000			07/24/09 11:45	2037-26-5
4-Bromofluorobenzene (S)	92 %		75-125	1000			07/24/09 11:45	460-00-4

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-8	Lab ID: 1099910003	Collected: 07/22/09 13:05	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	279	ug/L	50.0	1	07/27/09 10:22	07/27/09 18:32	7439-89-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	61.6	ug/L	0.41	10	07/24/09 11:33	07/29/09 17:33	83-32-9	
Acenaphthylene	9.5	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:43	208-96-8	
Anthracene	5.7	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:43	120-12-7	
Benzo(a)anthracene	0.41	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:43	56-55-3	
Benzo(a)pyrene	0.12	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:43	50-32-8	
Benzo(b)fluoranthene	0.25	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:43	205-99-2	
Benzo(g,h,i)perylene	0.23	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:43	191-24-2	
Benzo(k)fluoranthene	0.047	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:43	207-08-9	
Chrysene	0.35	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:43	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:43	53-70-3	
Fluoranthene	4.4	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:43	206-44-0	
Fluorene	18.6	ug/L	0.41	10	07/24/09 11:33	07/29/09 17:33	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:43	193-39-5	
Naphthalene	541	ug/L	4.1	100	07/24/09 11:33	07/29/09 17:54	91-20-3	
Phenanthrene	32.8	ug/L	0.41	10	07/24/09 11:33	07/29/09 17:33	85-01-8	
Pyrene	5.9	ug/L	0.041	1	07/24/09 11:33	07/27/09 15:43	129-00-0	
Nitrobenzene-d5 (S)	83	%	51-125	1	07/24/09 11:33	07/27/09 15:43	4165-60-0	
2-Fluorobiphenyl (S)	72	%	58-125	1	07/24/09 11:33	07/27/09 15:43	321-60-8	
Terphenyl-d14 (S)	85	%	57-134	1	07/24/09 11:33	07/27/09 15:43	1718-51-0	
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Acetone	ND	ug/L	10000	1000		07/24/09 12:07	67-64-1	
Allyl chloride	ND	ug/L	4000	1000		07/24/09 12:07	107-05-1	
Benzene	109000	ug/L	1000	1000		07/24/09 12:07	71-43-2	
Bromobenzene	ND	ug/L	1000	1000		07/24/09 12:07	108-86-1	
Bromochloromethane	ND	ug/L	1000	1000		07/24/09 12:07	74-97-5	
Bromodichloromethane	ND	ug/L	1000	1000		07/24/09 12:07	75-27-4	
Bromoform	ND	ug/L	8000	1000		07/24/09 12:07	75-25-2	
Bromomethane	ND	ug/L	4000	1000		07/24/09 12:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	4000	1000		07/24/09 12:07	78-93-3	
n-Butylbenzene	ND	ug/L	1000	1000		07/24/09 12:07	104-51-8	
sec-Butylbenzene	ND	ug/L	1000	1000		07/24/09 12:07	135-98-8	
tert-Butylbenzene	ND	ug/L	1000	1000		07/24/09 12:07	98-06-6	
Carbon tetrachloride	ND	ug/L	1000	1000		07/24/09 12:07	56-23-5	
Chlorobenzene	ND	ug/L	1000	1000		07/24/09 12:07	108-90-7	
Chloroethane	ND	ug/L	1000	1000		07/24/09 12:07	75-00-3	
Chloroform	ND	ug/L	1000	1000		07/24/09 12:07	67-66-3	
Chloromethane	ND	ug/L	4000	1000		07/24/09 12:07	74-87-3	
2-Chlorotoluene	ND	ug/L	1000	1000		07/24/09 12:07	95-49-8	
4-Chlorotoluene	ND	ug/L	1000	1000		07/24/09 12:07	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4000	1000		07/24/09 12:07	96-12-8	
Dibromochloromethane	ND	ug/L	1000	1000		07/24/09 12:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1000	1000		07/24/09 12:07	106-93-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-8	Lab ID: 1099910003	Collected: 07/22/09 13:05	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromomethane	ND ug/L		1000	1000		07/24/09 12:07	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1000	1000		07/24/09 12:07	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1000	1000		07/24/09 12:07	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1000	1000		07/24/09 12:07	106-46-7	
Dichlorodifluoromethane	ND ug/L		1000	1000		07/24/09 12:07	75-71-8	
1,1-Dichloroethane	ND ug/L		1000	1000		07/24/09 12:07	75-34-3	
1,2-Dichloroethane	ND ug/L		1000	1000		07/24/09 12:07	107-06-2	
1,1-Dichloroethene	ND ug/L		1000	1000		07/24/09 12:07	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1000	1000		07/24/09 12:07	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1000	1000		07/24/09 12:07	156-60-5	
Dichlorofluoromethane	ND ug/L		1000	1000		07/24/09 12:07	75-43-4	
1,2-Dichloropropane	ND ug/L		1000	1000		07/24/09 12:07	78-87-5	
1,3-Dichloropropane	ND ug/L		1000	1000		07/24/09 12:07	142-28-9	
2,2-Dichloropropane	ND ug/L		1000	1000		07/24/09 12:07	594-20-7	
1,1-Dichloropropene	ND ug/L		1000	1000		07/24/09 12:07	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		4000	1000		07/24/09 12:07	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		4000	1000		07/24/09 12:07	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		4000	1000		07/24/09 12:07	60-29-7	
Ethylbenzene	<b>1100</b> ug/L		1000	1000		07/24/09 12:07	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		4000	1000		07/24/09 12:07	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L		1000	1000		07/24/09 12:07	98-82-8	
p-Isopropyltoluene	ND ug/L		1000	1000		07/24/09 12:07	99-87-6	
Methylene Chloride	ND ug/L		4000	1000		07/24/09 12:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		4000	1000		07/24/09 12:07	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1000	1000		07/24/09 12:07	1634-04-4	
Naphthalene	ND ug/L		4000	1000		07/24/09 12:07	91-20-3	
n-Propylbenzene	ND ug/L		1000	1000		07/24/09 12:07	103-65-1	
Styrene	<b>4010</b> ug/L		1000	1000		07/24/09 12:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1000	1000		07/24/09 12:07	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1000	1000		07/24/09 12:07	79-34-5	
Tetrachloroethene	ND ug/L		1000	1000		07/24/09 12:07	127-18-4	
Tetrahydrofuran	ND ug/L		10000	1000		07/24/09 12:07	109-99-9	
Toluene	<b>79800</b> ug/L		1000	1000		07/24/09 12:07	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1000	1000		07/24/09 12:07	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1000	1000		07/24/09 12:07	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1000	1000		07/24/09 12:07	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1000	1000		07/24/09 12:07	79-00-5	
Trichloroethene	ND ug/L		1000	1000		07/24/09 12:07	79-01-6	
Trichlorofluoromethane	ND ug/L		1000	1000		07/24/09 12:07	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1000	1000		07/24/09 12:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		1000	1000		07/24/09 12:07	76-13-1	
1,2,4-Trimethylbenzene	ND ug/L		1000	1000		07/24/09 12:07	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1000	1000		07/24/09 12:07	108-67-8	
Vinyl chloride	ND ug/L		400	1000		07/24/09 12:07	75-01-4	
Xylene (Total)	<b>20700</b> ug/L		3000	1000		07/24/09 12:07	1330-20-7	
m&p-Xylene	<b>16800</b> ug/L		2000	1000		07/24/09 12:07	1330-20-7	
o-Xylene	<b>3850</b> ug/L		1000	1000		07/24/09 12:07	95-47-6	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-8	Lab ID: 1099910003	Collected: 07/22/09 13:05	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>								Analytical Method: EPA 8260
Dibromofluoromethane (S)	97 %		75-125	1000			07/24/09 12:07	1868-53-7
1,2-Dichloroethane-d4 (S)	94 %		75-125	1000			07/24/09 12:07	17060-07-0
Toluene-d8 (S)	102 %		75-125	1000			07/24/09 12:07	2037-26-5
4-Bromofluorobenzene (S)	97 %		75-125	1000			07/24/09 12:07	460-00-4

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-9	Lab ID: 1099910004	Collected: 07/22/09 13:35	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	2360	ug/L	50.0	1	07/27/09 10:22	07/27/09 18:37	7439-89-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	40.9	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	83-32-9	
Acenaphthylene	ND	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	208-96-8	
Anthracene	5.8	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	207-08-9	
Chrysene	ND	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	53-70-3	
Fluoranthene	3.1	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	206-44-0	
Fluorene	10.8	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	193-39-5	
Naphthalene	132	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	91-20-3	
Phenanthrene	23.5	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	85-01-8	
Pyrene	4.2	ug/L	0.82	20	07/24/09 11:33	07/30/09 14:47	129-00-0	
Nitrobenzene-d5 (S)	0 %		51-125	20	07/24/09 11:33	07/30/09 14:47	4165-60-0	D3,S4
2-Fluorobiphenyl (S)	0 %		58-125	20	07/24/09 11:33	07/30/09 14:47	321-60-8	S4
Terphenyl-d14 (S)	0 %		57-134	20	07/24/09 11:33	07/30/09 14:47	1718-51-0	S4
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Acetone	ND	ug/L	2500	250		07/24/09 11:23	67-64-1	
Allyl chloride	ND	ug/L	1000	250		07/24/09 11:23	107-05-1	
Benzene	20600	ug/L	250	250		07/24/09 11:23	71-43-2	
Bromobenzene	ND	ug/L	250	250		07/24/09 11:23	108-86-1	
Bromochloromethane	ND	ug/L	250	250		07/24/09 11:23	74-97-5	
Bromodichloromethane	ND	ug/L	250	250		07/24/09 11:23	75-27-4	
Bromoform	ND	ug/L	2000	250		07/24/09 11:23	75-25-2	
Bromomethane	ND	ug/L	1000	250		07/24/09 11:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	1000	250		07/24/09 11:23	78-93-3	
n-Butylbenzene	ND	ug/L	250	250		07/24/09 11:23	104-51-8	
sec-Butylbenzene	ND	ug/L	250	250		07/24/09 11:23	135-98-8	
tert-Butylbenzene	ND	ug/L	250	250		07/24/09 11:23	98-06-6	
Carbon tetrachloride	ND	ug/L	250	250		07/24/09 11:23	56-23-5	
Chlorobenzene	ND	ug/L	250	250		07/24/09 11:23	108-90-7	
Chloroethane	ND	ug/L	250	250		07/24/09 11:23	75-00-3	
Chloroform	ND	ug/L	250	250		07/24/09 11:23	67-66-3	
Chloromethane	ND	ug/L	1000	250		07/24/09 11:23	74-87-3	
2-Chlorotoluene	ND	ug/L	250	250		07/24/09 11:23	95-49-8	
4-Chlorotoluene	ND	ug/L	250	250		07/24/09 11:23	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	1000	250		07/24/09 11:23	96-12-8	
Dibromochloromethane	ND	ug/L	250	250		07/24/09 11:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	250	250		07/24/09 11:23	106-93-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-9	Lab ID: 1099910004	Collected: 07/22/09 13:35	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromomethane	ND ug/L		250	250		07/24/09 11:23	74-95-3	
1,2-Dichlorobenzene	ND ug/L		250	250		07/24/09 11:23	95-50-1	
1,3-Dichlorobenzene	ND ug/L		250	250		07/24/09 11:23	541-73-1	
1,4-Dichlorobenzene	ND ug/L		250	250		07/24/09 11:23	106-46-7	
Dichlorodifluoromethane	ND ug/L		250	250		07/24/09 11:23	75-71-8	
1,1-Dichloroethane	ND ug/L		250	250		07/24/09 11:23	75-34-3	
1,2-Dichloroethane	ND ug/L		250	250		07/24/09 11:23	107-06-2	
1,1-Dichloroethene	ND ug/L		250	250		07/24/09 11:23	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		250	250		07/24/09 11:23	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		250	250		07/24/09 11:23	156-60-5	
Dichlorofluoromethane	ND ug/L		250	250		07/24/09 11:23	75-43-4	
1,2-Dichloropropane	ND ug/L		250	250		07/24/09 11:23	78-87-5	
1,3-Dichloropropane	ND ug/L		250	250		07/24/09 11:23	142-28-9	
2,2-Dichloropropane	ND ug/L		250	250		07/24/09 11:23	594-20-7	
1,1-Dichloropropene	ND ug/L		250	250		07/24/09 11:23	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1000	250		07/24/09 11:23	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1000	250		07/24/09 11:23	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		1000	250		07/24/09 11:23	60-29-7	
Ethylbenzene	449 ug/L		250	250		07/24/09 11:23	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1000	250		07/24/09 11:23	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L		250	250		07/24/09 11:23	98-82-8	
p-Isopropyltoluene	ND ug/L		250	250		07/24/09 11:23	99-87-6	
Methylene Chloride	ND ug/L		1000	250		07/24/09 11:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		1000	250		07/24/09 11:23	108-10-1	
Methyl-tert-butyl ether	ND ug/L		250	250		07/24/09 11:23	1634-04-4	
Naphthalene	ND ug/L		1000	250		07/24/09 11:23	91-20-3	
n-Propylbenzene	ND ug/L		250	250		07/24/09 11:23	103-65-1	
Styrene	ND ug/L		250	250		07/24/09 11:23	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		250	250		07/24/09 11:23	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		250	250		07/24/09 11:23	79-34-5	
Tetrachloroethene	ND ug/L		250	250		07/24/09 11:23	127-18-4	
Tetrahydrofuran	ND ug/L		2500	250		07/24/09 11:23	109-99-9	
Toluene	2170 ug/L		250	250		07/24/09 11:23	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		250	250		07/24/09 11:23	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		250	250		07/24/09 11:23	120-82-1	
1,1,1-Trichloroethane	ND ug/L		250	250		07/24/09 11:23	71-55-6	
1,1,2-Trichloroethane	ND ug/L		250	250		07/24/09 11:23	79-00-5	
Trichloroethene	ND ug/L		250	250		07/24/09 11:23	79-01-6	
Trichlorofluoromethane	ND ug/L		250	250		07/24/09 11:23	75-69-4	
1,2,3-Trichloropropane	ND ug/L		250	250		07/24/09 11:23	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		250	250		07/24/09 11:23	76-13-1	
1,2,4-Trimethylbenzene	ND ug/L		250	250		07/24/09 11:23	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		250	250		07/24/09 11:23	108-67-8	
Vinyl chloride	ND ug/L		100	250		07/24/09 11:23	75-01-4	
Xylene (Total)	1030 ug/L		750	250		07/24/09 11:23	1330-20-7	
m&p-Xylene	800 ug/L		500	250		07/24/09 11:23	1330-20-7	
o-Xylene	ND ug/L		250	250		07/24/09 11:23	95-47-6	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-9	Lab ID: 1099910004	Collected: 07/22/09 13:35	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromofluoromethane (S)	92 %		75-125	250		07/24/09 11:23	1868-53-7	
1,2-Dichloroethane-d4 (S)	100 %		75-125	250		07/24/09 11:23	17060-07-0	
Toluene-d8 (S)	101 %		75-125	250		07/24/09 11:23	2037-26-5	
4-Bromofluorobenzene (S)	93 %		75-125	250		07/24/09 11:23	460-00-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-10	Lab ID: 1099910005	Collected: 07/22/09 14:40	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	<b>2990</b> ug/L		50.0	1	07/27/09 10:22	07/27/09 18:43	7439-89-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	<b>2.4</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	83-32-9	
Acenaphthylene	ND ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	208-96-8	
Anthracene	<b>0.19</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	120-12-7	
Benzo(a)anthracene	<b>0.11</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	56-55-3	
Benzo(a)pyrene	<b>0.11</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	50-32-8	
Benzo(b)fluoranthene	<b>0.23</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	205-99-2	
Benzo(g,h,i)perylene	<b>0.25</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	207-08-9	
Chrysene	<b>0.097</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	53-70-3	
Fluoranthene	<b>0.26</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	206-44-0	
Fluorene	<b>0.55</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	86-73-7	
Indeno(1,2,3-cd)pyrene	<b>0.048</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	193-39-5	
Naphthalene	<b>1.9</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	91-20-3	
Phenanthrene	<b>0.61</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	85-01-8	
Pyrene	<b>0.37</b> ug/L		0.042	1	07/24/09 11:33	07/27/09 16:24	129-00-0	
Nitrobenzene-d5 (S)	101 %		51-125	1	07/24/09 11:33	07/27/09 16:24	4165-60-0	
2-Fluorobiphenyl (S)	68 %		58-125	1	07/24/09 11:33	07/27/09 16:24	321-60-8	
Terphenyl-d14 (S)	81 %		57-134	1	07/24/09 11:33	07/27/09 16:24	1718-51-0	
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Acetone	ND ug/L		20.0	2		07/24/09 20:32	67-64-1	
Allyl chloride	ND ug/L		8.0	2		07/24/09 20:32	107-05-1	
Benzene	<b>270</b> ug/L		2.0	2		07/24/09 20:32	71-43-2	
Bromobenzene	ND ug/L		2.0	2		07/24/09 20:32	108-86-1	
Bromochloromethane	ND ug/L		2.0	2		07/24/09 20:32	74-97-5	
Bromodichloromethane	ND ug/L		2.0	2		07/24/09 20:32	75-27-4	
Bromoform	ND ug/L		16.0	2		07/24/09 20:32	75-25-2	
Bromomethane	ND ug/L		8.0	2		07/24/09 20:32	74-83-9	
2-Butanone (MEK)	ND ug/L		8.0	2		07/24/09 20:32	78-93-3	
n-Butylbenzene	ND ug/L		2.0	2		07/24/09 20:32	104-51-8	
sec-Butylbenzene	ND ug/L		2.0	2		07/24/09 20:32	135-98-8	
tert-Butylbenzene	ND ug/L		2.0	2		07/24/09 20:32	98-06-6	
Carbon tetrachloride	ND ug/L		2.0	2		07/24/09 20:32	56-23-5	
Chlorobenzene	ND ug/L		2.0	2		07/24/09 20:32	108-90-7	
Chloroethane	ND ug/L		2.0	2		07/24/09 20:32	75-00-3	
Chloroform	ND ug/L		2.0	2		07/24/09 20:32	67-66-3	
Chloromethane	ND ug/L		8.0	2		07/24/09 20:32	74-87-3	
2-Chlorotoluene	ND ug/L		2.0	2		07/24/09 20:32	95-49-8	
4-Chlorotoluene	ND ug/L		2.0	2		07/24/09 20:32	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		8.0	2		07/24/09 20:32	96-12-8	
Dibromochloromethane	ND ug/L		2.0	2		07/24/09 20:32	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		2.0	2		07/24/09 20:32	106-93-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-10	Lab ID: 1099910005	Collected: 07/22/09 14:40	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromomethane	ND ug/L		2.0	2		07/24/09 20:32	74-95-3	
1,2-Dichlorobenzene	ND ug/L		2.0	2		07/24/09 20:32	95-50-1	
1,3-Dichlorobenzene	ND ug/L		2.0	2		07/24/09 20:32	541-73-1	
1,4-Dichlorobenzene	ND ug/L		2.0	2		07/24/09 20:32	106-46-7	
Dichlorodifluoromethane	ND ug/L		2.0	2		07/24/09 20:32	75-71-8	
1,1-Dichloroethane	ND ug/L		2.0	2		07/24/09 20:32	75-34-3	
1,2-Dichloroethane	ND ug/L		2.0	2		07/24/09 20:32	107-06-2	
1,1-Dichloroethene	ND ug/L		2.0	2		07/24/09 20:32	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		2.0	2		07/24/09 20:32	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		2.0	2		07/24/09 20:32	156-60-5	
Dichlorofluoromethane	ND ug/L		2.0	2		07/24/09 20:32	75-43-4	
1,2-Dichloropropane	ND ug/L		2.0	2		07/24/09 20:32	78-87-5	
1,3-Dichloropropane	ND ug/L		2.0	2		07/24/09 20:32	142-28-9	
2,2-Dichloropropane	ND ug/L		2.0	2		07/24/09 20:32	594-20-7	
1,1-Dichloropropene	ND ug/L		2.0	2		07/24/09 20:32	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		8.0	2		07/24/09 20:32	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		8.0	2		07/24/09 20:32	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		8.0	2		07/24/09 20:32	60-29-7	
Ethylbenzene	<b>6.1</b> ug/L		2.0	2		07/24/09 20:32	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		8.0	2		07/24/09 20:32	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L		2.0	2		07/24/09 20:32	98-82-8	
p-Isopropyltoluene	ND ug/L		2.0	2		07/24/09 20:32	99-87-6	
Methylene Chloride	ND ug/L		8.0	2		07/24/09 20:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		8.0	2		07/24/09 20:32	108-10-1	
Methyl-tert-butyl ether	ND ug/L		2.0	2		07/24/09 20:32	1634-04-4	
Naphthalene	ND ug/L		8.0	2		07/24/09 20:32	91-20-3	
n-Propylbenzene	ND ug/L		2.0	2		07/24/09 20:32	103-65-1	
Styrene	ND ug/L		2.0	2		07/24/09 20:32	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		2.0	2		07/24/09 20:32	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		2.0	2		07/24/09 20:32	79-34-5	
Tetrachloroethene	ND ug/L		2.0	2		07/24/09 20:32	127-18-4	
Tetrahydrofuran	ND ug/L		20.0	2		07/24/09 20:32	109-99-9	
Toluene	<b>18.4</b> ug/L		2.0	2		07/24/09 20:32	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		2.0	2		07/24/09 20:32	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		2.0	2		07/24/09 20:32	120-82-1	
1,1,1-Trichloroethane	ND ug/L		2.0	2		07/24/09 20:32	71-55-6	
1,1,2-Trichloroethane	ND ug/L		2.0	2		07/24/09 20:32	79-00-5	
Trichloroethene	ND ug/L		2.0	2		07/24/09 20:32	79-01-6	
Trichlorofluoromethane	ND ug/L		2.0	2		07/24/09 20:32	75-69-4	
1,2,3-Trichloropropane	ND ug/L		2.0	2		07/24/09 20:32	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		2.0	2		07/24/09 20:32	76-13-1	
1,2,4-Trimethylbenzene	<b>2.0</b> ug/L		2.0	2		07/24/09 20:32	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		2.0	2		07/24/09 20:32	108-67-8	
Vinyl chloride	ND ug/L		0.80	2		07/24/09 20:32	75-01-4	
Xylene (Total)	<b>11.3</b> ug/L		6.0	2		07/24/09 20:32	1330-20-7	
m&p-Xylene	<b>7.7</b> ug/L		4.0	2		07/24/09 20:32	1330-20-7	
o-Xylene	<b>3.6</b> ug/L		2.0	2		07/24/09 20:32	95-47-6	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-10	Lab ID: 1099910005	Collected: 07/22/09 14:40	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromofluoromethane (S)	107 %		75-125	2			1868-53-7	
1,2-Dichloroethane-d4 (S)	98 %		75-125	2			17060-07-0	
Toluene-d8 (S)	102 %		75-125	2			2037-26-5	
4-Bromofluorobenzene (S)	100 %		75-125	2			460-00-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-11	Lab ID: 1099910006	Collected: 07/22/09 15:10	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	15200	ug/L	50.0	1	07/27/09 10:22	07/27/09 18:48	7439-89-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	11.2	ug/L	0.082	2	07/24/09 11:33	07/29/09 18:57	83-32-9	
Acenaphthylene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	208-96-8	
Anthracene	0.14	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	56-55-3	
Benzo(a)pyrene	0.044	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	207-08-9	
Chrysene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	53-70-3	
Fluoranthene	0.12	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	206-44-0	
Fluorene	1.8	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	193-39-5	
Naphthalene	7.1	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	91-20-3	
Phenanthrene	0.87	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	85-01-8	
Pyrene	0.14	ug/L	0.041	1	07/24/09 11:33	07/27/09 16:44	129-00-0	
Nitrobenzene-d5 (S)	101 %		51-125	1	07/24/09 11:33	07/27/09 16:44	4165-60-0	
2-Fluorobiphenyl (S)	69 %		58-125	1	07/24/09 11:33	07/27/09 16:44	321-60-8	
Terphenyl-d14 (S)	79 %		57-134	1	07/24/09 11:33	07/27/09 16:44	1718-51-0	
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Acetone	ND	ug/L	10.0	1		07/24/09 23:07	67-64-1	
Allyl chloride	ND	ug/L	4.0	1		07/24/09 23:07	107-05-1	
Benzene	3.4	ug/L	1.0	1		07/24/09 23:07	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/24/09 23:07	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/24/09 23:07	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		07/24/09 23:07	75-27-4	
Bromoform	ND	ug/L	8.0	1		07/24/09 23:07	75-25-2	
Bromomethane	ND	ug/L	4.0	1		07/24/09 23:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	4.0	1		07/24/09 23:07	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		07/24/09 23:07	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		07/24/09 23:07	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/24/09 23:07	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		07/24/09 23:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/24/09 23:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/24/09 23:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/24/09 23:07	67-66-3	
Chloromethane	ND	ug/L	4.0	1		07/24/09 23:07	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		07/24/09 23:07	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/24/09 23:07	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		07/24/09 23:07	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		07/24/09 23:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/24/09 23:07	106-93-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-11	Lab ID: 1099910006	Collected: 07/22/09 15:10	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromomethane	ND ug/L		1.0	1		07/24/09 23:07	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 23:07	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 23:07	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 23:07	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		07/24/09 23:07	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		07/24/09 23:07	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/24/09 23:07	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		07/24/09 23:07	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		07/24/09 23:07	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		07/24/09 23:07	156-60-5	
Dichlorofluoromethane	ND ug/L		1.0	1		07/24/09 23:07	75-43-4	
1,2-Dichloropropane	ND ug/L		1.0	1		07/24/09 23:07	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		07/24/09 23:07	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		07/24/09 23:07	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		07/24/09 23:07	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		4.0	1		07/24/09 23:07	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		4.0	1		07/24/09 23:07	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		4.0	1		07/24/09 23:07	60-29-7	
Ethylbenzene	3.5 ug/L		1.0	1		07/24/09 23:07	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		4.0	1		07/24/09 23:07	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		07/24/09 23:07	98-82-8	
p-Isopropyltoluene	ND ug/L		1.0	1		07/24/09 23:07	99-87-6	
Methylene Chloride	ND ug/L		4.0	1		07/24/09 23:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		4.0	1		07/24/09 23:07	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/24/09 23:07	1634-04-4	
Naphthalene	13.8 ug/L		4.0	1		07/24/09 23:07	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		07/24/09 23:07	103-65-1	
Styrene	ND ug/L		1.0	1		07/24/09 23:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/24/09 23:07	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/24/09 23:07	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/24/09 23:07	127-18-4	
Tetrahydrofuran	ND ug/L		10.0	1		07/24/09 23:07	109-99-9	
Toluene	ND ug/L		1.0	1		07/24/09 23:07	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/24/09 23:07	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/24/09 23:07	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/24/09 23:07	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/24/09 23:07	79-00-5	
Trichloroethene	ND ug/L		1.0	1		07/24/09 23:07	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/24/09 23:07	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		07/24/09 23:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		1.0	1		07/24/09 23:07	76-13-1	
1,2,4-Trimethylbenzene	3.0 ug/L		1.0	1		07/24/09 23:07	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		07/24/09 23:07	108-67-8	
Vinyl chloride	ND ug/L		0.40	1		07/24/09 23:07	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		07/24/09 23:07	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		07/24/09 23:07	1330-20-7	
o-Xylene	1.8 ug/L		1.0	1		07/24/09 23:07	95-47-6	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-11	Lab ID: 1099910006	Collected: 07/22/09 15:10	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>								Analytical Method: EPA 8260
Dibromofluoromethane (S)	95 %		75-125	1			07/24/09 23:07	1868-53-7
1,2-Dichloroethane-d4 (S)	105 %		75-125	1			07/24/09 23:07	17060-07-0
Toluene-d8 (S)	100 %		75-125	1			07/24/09 23:07	2037-26-5
4-Bromofluorobenzene (S)	98 %		75-125	1			07/24/09 23:07	460-00-4

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-15	Lab ID: 1099910007	Collected: 07/22/09 11:40	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	29100	ug/L	50.0	1	07/27/09 10:22	07/27/09 19:05	7439-89-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	56.2	ug/L	0.42	10	07/24/09 11:33	07/29/09 19:18	83-32-9	
Acenaphthylene	ND	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	208-96-8	
Anthracene	1.5	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	120-12-7	
Benzo(a)anthracene	0.16	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	207-08-9	
Chrysene	0.14	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	53-70-3	
Fluoranthene	1.0	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	206-44-0	
Fluorene	10.6	ug/L	0.42	10	07/24/09 11:33	07/29/09 19:18	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	193-39-5	
Naphthalene	39.4	ug/L	0.42	10	07/24/09 11:33	07/29/09 19:18	91-20-3	
Phenanthrene	10.2	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	85-01-8	
Pyrene	1.2	ug/L	0.042	1	07/24/09 11:33	07/27/09 17:04	129-00-0	
Nitrobenzene-d5 (S)	98 %		51-125	1	07/24/09 11:33	07/27/09 17:04	4165-60-0	
2-Fluorobiphenyl (S)	78 %		58-125	1	07/24/09 11:33	07/27/09 17:04	321-60-8	
Terphenyl-d14 (S)	83 %		57-134	1	07/24/09 11:33	07/27/09 17:04	1718-51-0	
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Acetone	ND	ug/L	10.0	1		07/24/09 23:29	67-64-1	
Allyl chloride	ND	ug/L	4.0	1		07/24/09 23:29	107-05-1	
Benzene	50.7	ug/L	1.0	1		07/24/09 23:29	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/24/09 23:29	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/24/09 23:29	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		07/24/09 23:29	75-27-4	
Bromoform	ND	ug/L	8.0	1		07/24/09 23:29	75-25-2	
Bromomethane	ND	ug/L	4.0	1		07/24/09 23:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	4.0	1		07/24/09 23:29	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		07/24/09 23:29	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		07/24/09 23:29	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/24/09 23:29	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		07/24/09 23:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/24/09 23:29	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/24/09 23:29	75-00-3	
Chloroform	ND	ug/L	1.0	1		07/24/09 23:29	67-66-3	
Chloromethane	ND	ug/L	4.0	1		07/24/09 23:29	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		07/24/09 23:29	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/24/09 23:29	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		07/24/09 23:29	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		07/24/09 23:29	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/24/09 23:29	106-93-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-15	Lab ID: 1099910007	Collected: 07/22/09 11:40	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromomethane	ND ug/L		1.0	1		07/24/09 23:29	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 23:29	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 23:29	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 23:29	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		07/24/09 23:29	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		07/24/09 23:29	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/24/09 23:29	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		07/24/09 23:29	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		07/24/09 23:29	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		07/24/09 23:29	156-60-5	
Dichlorofluoromethane	ND ug/L		1.0	1		07/24/09 23:29	75-43-4	
1,2-Dichloropropane	ND ug/L		1.0	1		07/24/09 23:29	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		07/24/09 23:29	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		07/24/09 23:29	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		07/24/09 23:29	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		4.0	1		07/24/09 23:29	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		4.0	1		07/24/09 23:29	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		4.0	1		07/24/09 23:29	60-29-7	
Ethylbenzene	<b>4.7</b> ug/L		1.0	1		07/24/09 23:29	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		4.0	1		07/24/09 23:29	87-68-3	
Isopropylbenzene (Cumene)	<b>3.1</b> ug/L		1.0	1		07/24/09 23:29	98-82-8	
p-Isopropyltoluene	ND ug/L		1.0	1		07/24/09 23:29	99-87-6	
Methylene Chloride	ND ug/L		4.0	1		07/24/09 23:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		4.0	1		07/24/09 23:29	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/24/09 23:29	1634-04-4	
Naphthalene	<b>63.4</b> ug/L		4.0	1		07/24/09 23:29	91-20-3	
n-Propylbenzene	<b>1.0</b> ug/L		1.0	1		07/24/09 23:29	103-65-1	
Styrene	ND ug/L		1.0	1		07/24/09 23:29	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/24/09 23:29	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/24/09 23:29	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/24/09 23:29	127-18-4	
Tetrahydrofuran	ND ug/L		10.0	1		07/24/09 23:29	109-99-9	
Toluene	ND ug/L		1.0	1		07/24/09 23:29	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/24/09 23:29	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/24/09 23:29	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/24/09 23:29	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/24/09 23:29	79-00-5	
Trichloroethene	ND ug/L		1.0	1		07/24/09 23:29	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/24/09 23:29	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		07/24/09 23:29	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		1.0	1		07/24/09 23:29	76-13-1	
1,2,4-Trimethylbenzene	<b>14.0</b> ug/L		1.0	1		07/24/09 23:29	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		07/24/09 23:29	108-67-8	
Vinyl chloride	ND ug/L		0.40	1		07/24/09 23:29	75-01-4	
Xylene (Total)	<b>3.1</b> ug/L		3.0	1		07/24/09 23:29	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		07/24/09 23:29	1330-20-7	
o-Xylene	<b>2.3</b> ug/L		1.0	1		07/24/09 23:29	95-47-6	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-15	Lab ID: 1099910007	Collected: 07/22/09 11:40	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromofluoromethane (S)	99 %		75-125	1			07/24/09 23:29	1868-53-7
1,2-Dichloroethane-d4 (S)	95 %		75-125	1			07/24/09 23:29	17060-07-0
Toluene-d8 (S)	102 %		75-125	1			07/24/09 23:29	2037-26-5
4-Bromofluorobenzene (S)	99 %		75-125	1			07/24/09 23:29	460-00-4

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-20	Lab ID: 1099910008	Collected: 07/22/09 11:10	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	26100	ug/L	50.0	1	07/27/09 10:22	07/27/09 19:09	7439-89-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	33.5	ug/L	0.41	10	07/24/09 11:33	07/29/09 19:39	83-32-9	
Acenaphthylene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	208-96-8	
Anthracene	0.21	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	207-08-9	
Chrysene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	53-70-3	
Fluoranthene	0.29	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	206-44-0	
Fluorene	2.4	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	193-39-5	
Naphthalene	5.1	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	91-20-3	
Phenanthrene	1.1	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	85-01-8	
Pyrene	0.28	ug/L	0.041	1	07/24/09 11:33	07/27/09 17:25	129-00-0	
Nitrobenzene-d5 (S)	94 %		51-125	1	07/24/09 11:33	07/27/09 17:25	4165-60-0	
2-Fluorobiphenyl (S)	63 %		58-125	1	07/24/09 11:33	07/27/09 17:25	321-60-8	
Terphenyl-d14 (S)	76 %		57-134	1	07/24/09 11:33	07/27/09 17:25	1718-51-0	
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Acetone	ND	ug/L	250	25		07/24/09 21:16	67-64-1	
Allyl chloride	ND	ug/L	100	25		07/24/09 21:16	107-05-1	
Benzene	2770	ug/L	25.0	25		07/24/09 21:16	71-43-2	P6
Bromobenzene	ND	ug/L	25.0	25		07/24/09 21:16	108-86-1	
Bromochloromethane	ND	ug/L	25.0	25		07/24/09 21:16	74-97-5	
Bromodichloromethane	ND	ug/L	25.0	25		07/24/09 21:16	75-27-4	
Bromoform	ND	ug/L	200	25		07/24/09 21:16	75-25-2	
Bromomethane	ND	ug/L	100	25		07/24/09 21:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	25		07/24/09 21:16	78-93-3	
n-Butylbenzene	ND	ug/L	25.0	25		07/24/09 21:16	104-51-8	
sec-Butylbenzene	ND	ug/L	25.0	25		07/24/09 21:16	135-98-8	
tert-Butylbenzene	ND	ug/L	25.0	25		07/24/09 21:16	98-06-6	
Carbon tetrachloride	ND	ug/L	25.0	25		07/24/09 21:16	56-23-5	
Chlorobenzene	ND	ug/L	25.0	25		07/24/09 21:16	108-90-7	
Chloroethane	ND	ug/L	25.0	25		07/24/09 21:16	75-00-3	
Chloroform	ND	ug/L	25.0	25		07/24/09 21:16	67-66-3	
Chloromethane	ND	ug/L	100	25		07/24/09 21:16	74-87-3	
2-Chlorotoluene	ND	ug/L	25.0	25		07/24/09 21:16	95-49-8	
4-Chlorotoluene	ND	ug/L	25.0	25		07/24/09 21:16	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	100	25		07/24/09 21:16	96-12-8	
Dibromochloromethane	ND	ug/L	25.0	25		07/24/09 21:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	25.0	25		07/24/09 21:16	106-93-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-20	Lab ID: 1099910008	Collected: 07/22/09 11:10	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromomethane	ND ug/L		25.0	25		07/24/09 21:16	74-95-3	
1,2-Dichlorobenzene	ND ug/L		25.0	25		07/24/09 21:16	95-50-1	
1,3-Dichlorobenzene	ND ug/L		25.0	25		07/24/09 21:16	541-73-1	
1,4-Dichlorobenzene	ND ug/L		25.0	25		07/24/09 21:16	106-46-7	
Dichlorodifluoromethane	ND ug/L		25.0	25		07/24/09 21:16	75-71-8	
1,1-Dichloroethane	ND ug/L		25.0	25		07/24/09 21:16	75-34-3	
1,2-Dichloroethane	ND ug/L		25.0	25		07/24/09 21:16	107-06-2	
1,1-Dichloroethene	ND ug/L		25.0	25		07/24/09 21:16	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		25.0	25		07/24/09 21:16	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		25.0	25		07/24/09 21:16	156-60-5	
Dichlorofluoromethane	ND ug/L		25.0	25		07/24/09 21:16	75-43-4	
1,2-Dichloropropane	ND ug/L		25.0	25		07/24/09 21:16	78-87-5	
1,3-Dichloropropane	ND ug/L		25.0	25		07/24/09 21:16	142-28-9	
2,2-Dichloropropane	ND ug/L		25.0	25		07/24/09 21:16	594-20-7	
1,1-Dichloropropene	ND ug/L		25.0	25		07/24/09 21:16	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		100	25		07/24/09 21:16	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		100	25		07/24/09 21:16	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		100	25		07/24/09 21:16	60-29-7	
Ethylbenzene	ND ug/L		25.0	25		07/24/09 21:16	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		100	25		07/24/09 21:16	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L		25.0	25		07/24/09 21:16	98-82-8	
p-Isopropyltoluene	ND ug/L		25.0	25		07/24/09 21:16	99-87-6	
Methylene Chloride	ND ug/L		100	25		07/24/09 21:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		100	25		07/24/09 21:16	108-10-1	
Methyl-tert-butyl ether	ND ug/L		25.0	25		07/24/09 21:16	1634-04-4	
Naphthalene	ND ug/L		100	25		07/24/09 21:16	91-20-3	
n-Propylbenzene	ND ug/L		25.0	25		07/24/09 21:16	103-65-1	
Styrene	ND ug/L		25.0	25		07/24/09 21:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		25.0	25		07/24/09 21:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		25.0	25		07/24/09 21:16	79-34-5	
Tetrachloroethene	ND ug/L		25.0	25		07/24/09 21:16	127-18-4	
Tetrahydrofuran	ND ug/L		250	25		07/24/09 21:16	109-99-9	
Toluene	ND ug/L		25.0	25		07/24/09 21:16	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		25.0	25		07/24/09 21:16	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		25.0	25		07/24/09 21:16	120-82-1	
1,1,1-Trichloroethane	ND ug/L		25.0	25		07/24/09 21:16	71-55-6	
1,1,2-Trichloroethane	ND ug/L		25.0	25		07/24/09 21:16	79-00-5	
Trichloroethene	ND ug/L		25.0	25		07/24/09 21:16	79-01-6	
Trichlorofluoromethane	ND ug/L		25.0	25		07/24/09 21:16	75-69-4	
1,2,3-Trichloropropane	ND ug/L		25.0	25		07/24/09 21:16	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		25.0	25		07/24/09 21:16	76-13-1	
1,2,4-Trimethylbenzene	ND ug/L		25.0	25		07/24/09 21:16	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		25.0	25		07/24/09 21:16	108-67-8	
Vinyl chloride	ND ug/L		10.0	25		07/24/09 21:16	75-01-4	
Xylene (Total)	ND ug/L		75.0	25		07/24/09 21:16	1330-20-7	
m&p-Xylene	ND ug/L		50.0	25		07/24/09 21:16	1330-20-7	
o-Xylene	ND ug/L		25.0	25		07/24/09 21:16	95-47-6	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-20	Lab ID: 1099910008	Collected: 07/22/09 11:10	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromofluoromethane (S)	92 %		75-125	25		07/24/09 21:16	1868-53-7	
1,2-Dichloroethane-d4 (S)	93 %		75-125	25		07/24/09 21:16	17060-07-0	
Toluene-d8 (S)	100 %		75-125	25		07/24/09 21:16	2037-26-5	
4-Bromofluorobenzene (S)	95 %		75-125	25		07/24/09 21:16	460-00-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-22	Lab ID: 1099910009	Collected: 07/22/09 14:10	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	ND ug/L		50.0	1	07/27/09 10:22	07/27/09 19:16	7439-89-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	<b>0.089</b> ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	83-32-9	
Acenaphthylene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	208-96-8	
Anthracene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	120-12-7	
Benzo(a)anthracene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	56-55-3	
Benzo(a)pyrene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	207-08-9	
Chrysene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	53-70-3	
Fluoranthene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	206-44-0	
Fluorene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	193-39-5	
Naphthalene	<b>0.50</b> ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	91-20-3	
Phenanthrene	<b>0.072</b> ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	85-01-8	
Pyrene	ND ug/L		0.041	1	07/24/09 11:33	07/27/09 17:45	129-00-0	
Nitrobenzene-d5 (S)	116 %		51-125	1	07/24/09 11:33	07/27/09 17:45	4165-60-0	
2-Fluorobiphenyl (S)	71 %		58-125	1	07/24/09 11:33	07/27/09 17:45	321-60-8	
Terphenyl-d14 (S)	76 %		57-134	1	07/24/09 11:33	07/27/09 17:45	1718-51-0	
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Acetone	<b>145</b> ug/L		10.0	1		07/24/09 01:47	67-64-1	
Allyl chloride	ND ug/L		4.0	1		07/24/09 01:47	107-05-1	
Benzene	<b>5.4</b> ug/L		1.0	1		07/24/09 01:47	71-43-2	
Bromobenzene	ND ug/L		1.0	1		07/24/09 01:47	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		07/24/09 01:47	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		07/24/09 01:47	75-27-4	
Bromoform	ND ug/L		8.0	1		07/24/09 01:47	75-25-2	
Bromomethane	ND ug/L		4.0	1		07/24/09 01:47	74-83-9	
2-Butanone (MEK)	<b>10.0</b> ug/L		4.0	1		07/24/09 01:47	78-93-3	
n-Butylbenzene	ND ug/L		1.0	1		07/24/09 01:47	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	1		07/24/09 01:47	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	1		07/24/09 01:47	98-06-6	
Carbon tetrachloride	ND ug/L		1.0	1		07/24/09 01:47	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		07/24/09 01:47	108-90-7	
Chloroethane	ND ug/L		1.0	1		07/24/09 01:47	75-00-3	
Chloroform	ND ug/L		1.0	1		07/24/09 01:47	67-66-3	
Chloromethane	<b>4.1</b> ug/L		4.0	1		07/24/09 01:47	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		07/24/09 01:47	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		07/24/09 01:47	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		4.0	1		07/24/09 01:47	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		07/24/09 01:47	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		07/24/09 01:47	106-93-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-22	Lab ID: 1099910009	Collected: 07/22/09 14:10	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromomethane	ND ug/L		1.0	1		07/24/09 01:47	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 01:47	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 01:47	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 01:47	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		07/24/09 01:47	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		07/24/09 01:47	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/24/09 01:47	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		07/24/09 01:47	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		07/24/09 01:47	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		07/24/09 01:47	156-60-5	
Dichlorofluoromethane	ND ug/L		1.0	1		07/24/09 01:47	75-43-4	
1,2-Dichloropropane	ND ug/L		1.0	1		07/24/09 01:47	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		07/24/09 01:47	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		07/24/09 01:47	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		07/24/09 01:47	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		4.0	1		07/24/09 01:47	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		4.0	1		07/24/09 01:47	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		4.0	1		07/24/09 01:47	60-29-7	
Ethylbenzene	ND ug/L		1.0	1		07/24/09 01:47	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		4.0	1		07/24/09 01:47	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		07/24/09 01:47	98-82-8	
p-Isopropyltoluene	ND ug/L		1.0	1		07/24/09 01:47	99-87-6	
Methylene Chloride	ND ug/L		4.0	1		07/24/09 01:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		4.0	1		07/24/09 01:47	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/24/09 01:47	1634-04-4	
Naphthalene	ND ug/L		4.0	1		07/24/09 01:47	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		07/24/09 01:47	103-65-1	
Styrene	ND ug/L		1.0	1		07/24/09 01:47	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/24/09 01:47	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/24/09 01:47	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/24/09 01:47	127-18-4	
Tetrahydrofuran	ND ug/L		10.0	1		07/24/09 01:47	109-99-9	
Toluene	1.8 ug/L		1.0	1		07/24/09 01:47	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/24/09 01:47	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/24/09 01:47	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/24/09 01:47	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/24/09 01:47	79-00-5	
Trichloroethene	ND ug/L		1.0	1		07/24/09 01:47	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/24/09 01:47	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		07/24/09 01:47	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		1.0	1		07/24/09 01:47	76-13-1	
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		07/24/09 01:47	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		07/24/09 01:47	108-67-8	
Vinyl chloride	ND ug/L		0.40	1		07/24/09 01:47	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		07/24/09 01:47	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		07/24/09 01:47	1330-20-7	
o-Xylene	ND ug/L		1.0	1		07/24/09 01:47	95-47-6	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-22	Lab ID: 1099910009	Collected: 07/22/09 14:10	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromofluoromethane (S)	96 %		75-125	1		07/24/09 01:47	1868-53-7	
1,2-Dichloroethane-d4 (S)	99 %		75-125	1		07/24/09 01:47	17060-07-0	
Toluene-d8 (S)	99 %		75-125	1		07/24/09 01:47	2037-26-5	
4-Bromofluorobenzene (S)	100 %		75-125	1		07/24/09 01:47	460-00-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-10 DUP	Lab ID: 1099910010	Collected: 07/22/09 14:45	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	2980	ug/L	50.0	1	07/27/09 10:22	07/27/09 19:29	7439-89-6	
<b>8270 MSSV PAH by SIM</b>	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	2.8	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	83-32-9	
Acenaphthylene	0.082	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	208-96-8	
Anthracene	0.22	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	120-12-7	
Benzo(a)anthracene	0.11	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	56-55-3	
Benzo(a)pyrene	0.10	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	50-32-8	
Benzo(b)fluoranthene	0.22	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	205-99-2	
Benzo(g,h,i)perylene	0.24	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	207-08-9	
Chrysene	0.11	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	53-70-3	
Fluoranthene	0.27	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	206-44-0	
Fluorene	0.66	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	86-73-7	
Indeno(1,2,3-cd)pyrene	0.048	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	193-39-5	
Naphthalene	2.2	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	91-20-3	
Phenanthrene	0.77	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	85-01-8	
Pyrene	0.40	ug/L	0.040	1	07/24/09 11:33	07/27/09 18:05	129-00-0	
Nitrobenzene-d5 (S)	94 %		51-125	1	07/24/09 11:33	07/27/09 18:05	4165-60-0	
2-Fluorobiphenyl (S)	69 %		58-125	1	07/24/09 11:33	07/27/09 18:05	321-60-8	
Terphenyl-d14 (S)	76 %		57-134	1	07/24/09 11:33	07/27/09 18:05	1718-51-0	
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	2		07/24/09 20:54	67-64-1	
Allyl chloride	ND	ug/L	8.0	2		07/24/09 20:54	107-05-1	
Benzene	252	ug/L	2.0	2		07/24/09 20:54	71-43-2	
Bromobenzene	ND	ug/L	2.0	2		07/24/09 20:54	108-86-1	
Bromochloromethane	ND	ug/L	2.0	2		07/24/09 20:54	74-97-5	
Bromodichloromethane	ND	ug/L	2.0	2		07/24/09 20:54	75-27-4	
Bromoform	ND	ug/L	16.0	2		07/24/09 20:54	75-25-2	
Bromomethane	ND	ug/L	8.0	2		07/24/09 20:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	8.0	2		07/24/09 20:54	78-93-3	
n-Butylbenzene	ND	ug/L	2.0	2		07/24/09 20:54	104-51-8	
sec-Butylbenzene	ND	ug/L	2.0	2		07/24/09 20:54	135-98-8	
tert-Butylbenzene	ND	ug/L	2.0	2		07/24/09 20:54	98-06-6	
Carbon tetrachloride	ND	ug/L	2.0	2		07/24/09 20:54	56-23-5	
Chlorobenzene	ND	ug/L	2.0	2		07/24/09 20:54	108-90-7	
Chloroethane	ND	ug/L	2.0	2		07/24/09 20:54	75-00-3	
Chloroform	ND	ug/L	2.0	2		07/24/09 20:54	67-66-3	
Chloromethane	ND	ug/L	8.0	2		07/24/09 20:54	74-87-3	
2-Chlorotoluene	ND	ug/L	2.0	2		07/24/09 20:54	95-49-8	
4-Chlorotoluene	ND	ug/L	2.0	2		07/24/09 20:54	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	8.0	2		07/24/09 20:54	96-12-8	
Dibromochloromethane	ND	ug/L	2.0	2		07/24/09 20:54	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	2.0	2		07/24/09 20:54	106-93-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-10 DUP	Lab ID: 1099910010	Collected: 07/22/09 14:45	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromomethane	ND ug/L		2.0	2		07/24/09 20:54	74-95-3	
1,2-Dichlorobenzene	ND ug/L		2.0	2		07/24/09 20:54	95-50-1	
1,3-Dichlorobenzene	ND ug/L		2.0	2		07/24/09 20:54	541-73-1	
1,4-Dichlorobenzene	ND ug/L		2.0	2		07/24/09 20:54	106-46-7	
Dichlorodifluoromethane	ND ug/L		2.0	2		07/24/09 20:54	75-71-8	
1,1-Dichloroethane	ND ug/L		2.0	2		07/24/09 20:54	75-34-3	
1,2-Dichloroethane	ND ug/L		2.0	2		07/24/09 20:54	107-06-2	
1,1-Dichloroethene	ND ug/L		2.0	2		07/24/09 20:54	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		2.0	2		07/24/09 20:54	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		2.0	2		07/24/09 20:54	156-60-5	
Dichlorofluoromethane	ND ug/L		2.0	2		07/24/09 20:54	75-43-4	
1,2-Dichloropropane	ND ug/L		2.0	2		07/24/09 20:54	78-87-5	
1,3-Dichloropropane	ND ug/L		2.0	2		07/24/09 20:54	142-28-9	
2,2-Dichloropropane	ND ug/L		2.0	2		07/24/09 20:54	594-20-7	
1,1-Dichloropropene	ND ug/L		2.0	2		07/24/09 20:54	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		8.0	2		07/24/09 20:54	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		8.0	2		07/24/09 20:54	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		8.0	2		07/24/09 20:54	60-29-7	
Ethylbenzene	<b>6.9</b> ug/L		2.0	2		07/24/09 20:54	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		8.0	2		07/24/09 20:54	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L		2.0	2		07/24/09 20:54	98-82-8	
p-Isopropyltoluene	ND ug/L		2.0	2		07/24/09 20:54	99-87-6	
Methylene Chloride	ND ug/L		8.0	2		07/24/09 20:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		8.0	2		07/24/09 20:54	108-10-1	
Methyl-tert-butyl ether	ND ug/L		2.0	2		07/24/09 20:54	1634-04-4	
Naphthalene	ND ug/L		8.0	2		07/24/09 20:54	91-20-3	
n-Propylbenzene	ND ug/L		2.0	2		07/24/09 20:54	103-65-1	
Styrene	ND ug/L		2.0	2		07/24/09 20:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		2.0	2		07/24/09 20:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		2.0	2		07/24/09 20:54	79-34-5	
Tetrachloroethene	ND ug/L		2.0	2		07/24/09 20:54	127-18-4	
Tetrahydrofuran	ND ug/L		20.0	2		07/24/09 20:54	109-99-9	
Toluene	<b>19.9</b> ug/L		2.0	2		07/24/09 20:54	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		2.0	2		07/24/09 20:54	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		2.0	2		07/24/09 20:54	120-82-1	
1,1,1-Trichloroethane	ND ug/L		2.0	2		07/24/09 20:54	71-55-6	
1,1,2-Trichloroethane	ND ug/L		2.0	2		07/24/09 20:54	79-00-5	
Trichloroethene	ND ug/L		2.0	2		07/24/09 20:54	79-01-6	
Trichlorofluoromethane	ND ug/L		2.0	2		07/24/09 20:54	75-69-4	
1,2,3-Trichloropropane	ND ug/L		2.0	2		07/24/09 20:54	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		2.0	2		07/24/09 20:54	76-13-1	
1,2,4-Trimethylbenzene	ND ug/L		2.0	2		07/24/09 20:54	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		2.0	2		07/24/09 20:54	108-67-8	
Vinyl chloride	ND ug/L		0.80	2		07/24/09 20:54	75-01-4	
Xylene (Total)	<b>11.5</b> ug/L		6.0	2		07/24/09 20:54	1330-20-7	
m&p-Xylene	<b>7.9</b> ug/L		4.0	2		07/24/09 20:54	1330-20-7	
o-Xylene	<b>3.6</b> ug/L		2.0	2		07/24/09 20:54	95-47-6	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: MW-10 DUP	Lab ID: 1099910010	Collected: 07/22/09 14:45	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Dibromofluoromethane (S)	99 %		75-125	2			07/24/09 20:54	1868-53-7
1,2-Dichloroethane-d4 (S)	96 %		75-125	2			07/24/09 20:54	17060-07-0
Toluene-d8 (S)	99 %		75-125	2			07/24/09 20:54	2037-26-5
4-Bromofluorobenzene (S)	98 %		75-125	2			07/24/09 20:54	460-00-4

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: Trip Blank	Lab ID: 1099910011	Collected: 07/22/09 00:00	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>	Analytical Method: EPA 8260							
Acetone	ND ug/L		10.0	1		07/24/09 18:42	67-64-1	
Allyl chloride	ND ug/L		4.0	1		07/24/09 18:42	107-05-1	
Benzene	ND ug/L		1.0	1		07/24/09 18:42	71-43-2	
Bromobenzene	ND ug/L		1.0	1		07/24/09 18:42	108-86-1	
Bromoform	ND ug/L		1.0	1		07/24/09 18:42	74-97-5	
Bromochloromethane	ND ug/L		1.0	1		07/24/09 18:42	75-27-4	
Bromodichloromethane	ND ug/L		1.0	1		07/24/09 18:42	75-25-2	
Bromomethane	ND ug/L		4.0	1		07/24/09 18:42	74-83-9	
2-Butanone (MEK)	ND ug/L		4.0	1		07/24/09 18:42	78-93-3	
n-Butylbenzene	ND ug/L		1.0	1		07/24/09 18:42	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	1		07/24/09 18:42	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	1		07/24/09 18:42	98-06-6	
Carbon tetrachloride	ND ug/L		1.0	1		07/24/09 18:42	56-23-5	
Chlorobenzene	ND ug/L		1.0	1		07/24/09 18:42	108-90-7	
Chloroethane	ND ug/L		1.0	1		07/24/09 18:42	75-00-3	
Chloroform	ND ug/L		1.0	1		07/24/09 18:42	67-66-3	
Chloromethane	ND ug/L		4.0	1		07/24/09 18:42	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		07/24/09 18:42	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		07/24/09 18:42	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		4.0	1		07/24/09 18:42	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		07/24/09 18:42	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		07/24/09 18:42	106-93-4	
Dibromomethane	ND ug/L		1.0	1		07/24/09 18:42	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 18:42	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 18:42	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	1		07/24/09 18:42	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		07/24/09 18:42	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		07/24/09 18:42	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	1		07/24/09 18:42	107-06-2	
1,1-Dichloroethene	ND ug/L		1.0	1		07/24/09 18:42	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	1		07/24/09 18:42	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	1		07/24/09 18:42	156-60-5	
Dichlorofluoromethane	ND ug/L		1.0	1		07/24/09 18:42	75-43-4	
1,2-Dichloropropane	ND ug/L		1.0	1		07/24/09 18:42	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	1		07/24/09 18:42	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	1		07/24/09 18:42	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	1		07/24/09 18:42	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		4.0	1		07/24/09 18:42	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		4.0	1		07/24/09 18:42	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		4.0	1		07/24/09 18:42	60-29-7	
Ethylbenzene	ND ug/L		1.0	1		07/24/09 18:42	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		4.0	1		07/24/09 18:42	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		07/24/09 18:42	98-82-8	
p-Isopropyltoluene	ND ug/L		1.0	1		07/24/09 18:42	99-87-6	
Methylene Chloride	ND ug/L		4.0	1		07/24/09 18:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		4.0	1		07/24/09 18:42	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	1		07/24/09 18:42	1634-04-4	

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## ANALYTICAL RESULTS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Sample: Trip Blank	Lab ID: 1099910011	Collected: 07/22/09 00:00	Received: 07/23/09 10:50	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 VOC</b>		Analytical Method: EPA 8260						
Naphthalene	ND ug/L		4.0	1		07/24/09 18:42	91-20-3	
n-Propylbenzene	ND ug/L		1.0	1		07/24/09 18:42	103-65-1	
Styrene	ND ug/L		1.0	1		07/24/09 18:42	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	1		07/24/09 18:42	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	1		07/24/09 18:42	79-34-5	
Tetrachloroethene	ND ug/L		1.0	1		07/24/09 18:42	127-18-4	
Tetrahydrofuran	ND ug/L		10.0	1		07/24/09 18:42	109-99-9	
Toluene	ND ug/L		1.0	1		07/24/09 18:42	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	1		07/24/09 18:42	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	1		07/24/09 18:42	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	1		07/24/09 18:42	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	1		07/24/09 18:42	79-00-5	
Trichloroethene	ND ug/L		1.0	1		07/24/09 18:42	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	1		07/24/09 18:42	75-69-4	
1,2,3-Trichloropropane	ND ug/L		1.0	1		07/24/09 18:42	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		1.0	1		07/24/09 18:42	76-13-1	
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		07/24/09 18:42	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		07/24/09 18:42	108-67-8	
Vinyl chloride	ND ug/L		0.40	1		07/24/09 18:42	75-01-4	
Xylene (Total)	ND ug/L		3.0	1		07/24/09 18:42	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		07/24/09 18:42	1330-20-7	
o-Xylene	ND ug/L		1.0	1		07/24/09 18:42	95-47-6	
Dibromofluoromethane (S)	97 %		75-125	1		07/24/09 18:42	1868-53-7	
1,2-Dichloroethane-d4 (S)	98 %		75-125	1		07/24/09 18:42	17060-07-0	
Toluene-d8 (S)	100 %		75-125	1		07/24/09 18:42	2037-26-5	
4-Bromofluorobenzene (S)	95 %		75-125	1		07/24/09 18:42	460-00-4	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

QC Batch:	OEXT/11184	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3510	Analysis Description:	8270 Water PAH by SIM MSSV
Associated Lab Samples: 1099910001, 1099910002, 1099910003, 1099910004, 1099910005, 1099910006, 1099910007, 1099910008, 1099910009, 1099910010			

METHOD BLANK:	655133	Matrix:	Water
Associated Lab Samples: 1099910001, 1099910002, 1099910003, 1099910004, 1099910005, 1099910006, 1099910007, 1099910008, 1099910009, 1099910010			

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	07/27/09 14:00	
Acenaphthylene	ug/L	ND	0.040	07/27/09 14:00	
Anthracene	ug/L	ND	0.040	07/27/09 14:00	
Benzo(a)anthracene	ug/L	ND	0.040	07/27/09 14:00	
Benzo(a)pyrene	ug/L	ND	0.040	07/27/09 14:00	
Benzo(b)fluoranthene	ug/L	ND	0.040	07/27/09 14:00	
Benzo(g,h,i)perylene	ug/L	ND	0.040	07/27/09 14:00	
Benzo(k)fluoranthene	ug/L	ND	0.040	07/27/09 14:00	
Chrysene	ug/L	ND	0.040	07/27/09 14:00	
Dibenz(a,h)anthracene	ug/L	ND	0.040	07/27/09 14:00	
Fluoranthene	ug/L	ND	0.040	07/27/09 14:00	
Fluorene	ug/L	ND	0.040	07/27/09 14:00	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	07/27/09 14:00	
Naphthalene	ug/L	ND	0.040	07/27/09 14:00	
Phenanthrene	ug/L	ND	0.040	07/27/09 14:00	
Pyrene	ug/L	ND	0.040	07/27/09 14:00	
2-Fluorobiphenyl (S)	%	71	58-125	07/27/09 14:00	
Nitrobenzene-d5 (S)	%	105	51-125	07/27/09 14:00	
Terphenyl-d14 (S)	%	81	57-134	07/27/09 14:00	

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acenaphthene	ug/L	1	0.75	0.67	75	67	56-125	12	20	
Acenaphthylene	ug/L	1	0.78	0.70	78	70	51-125	10	20	
Anthracene	ug/L	1	0.81	0.73	81	73	58-125	11	20	
Benzo(a)anthracene	ug/L	1	0.93	0.87	93	87	61-125	7	20	
Benzo(a)pyrene	ug/L	1	0.92	0.82	92	82	56-125	12	20	
Benzo(b)fluoranthene	ug/L	1	0.90	0.82	90	82	54-125	9	20	
Benzo(g,h,i)perylene	ug/L	1	0.95	0.90	95	90	42-125	6	20	
Benzo(k)fluoranthene	ug/L	1	0.95	0.86	95	86	60-125	10	20	
Chrysene	ug/L	1	0.95	0.90	95	90	64-125	6	20	
Dibenz(a,h)anthracene	ug/L	1	1.1	1.0	110	100	46-125	9	20	
Fluoranthene	ug/L	1	0.92	0.81	92	81	54-125	13	20	
Fluorene	ug/L	1	0.77	0.74	77	74	55-125	4	20	
Indeno(1,2,3-cd)pyrene	ug/L	1	1.0	0.93	103	93	46-125	11	20	
Naphthalene	ug/L	1	0.76	0.68	76	68	47-125	12	20	
Phenanthrene	ug/L	1	0.78	0.72	78	72	55-125	8	20	
Pyrene	ug/L	1	0.93	0.84	93	84	57-125	10	20	
2-Fluorobiphenyl (S)	%				74	67	58-125			

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

LABORATORY CONTROL SAMPLE & LCSD:		655134		655135							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers	
Nitrobenzene-d5 (S)	%				103	90	51-125				
Terphenyl-d14 (S)	%				85	80	57-134				

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## **QUALITY CONTROL DATA**

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

QC Batch: MSV/12712 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 465 W  
Associated Lab Samples: 1099910005, 1099910006, 1099910007, 1099910008, 1099910010, 1099910011

METHOD BLANK: 655373 Matrix: Water

Associated Lab Samples: 1099910005, 1099910006, 1099910007, 1099910008, 1099910010, 1099910011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	07/24/09 18:20	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/24/09 18:20	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/24/09 18:20	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/24/09 18:20	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	07/24/09 18:20	
1,1-Dichloroethane	ug/L	ND	1.0	07/24/09 18:20	
1,1-Dichloroethene	ug/L	ND	1.0	07/24/09 18:20	
1,1-Dichloropropene	ug/L	ND	1.0	07/24/09 18:20	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	07/24/09 18:20	
1,2,3-Trichloropropane	ug/L	ND	1.0	07/24/09 18:20	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	07/24/09 18:20	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	07/24/09 18:20	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	07/24/09 18:20	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/24/09 18:20	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/24/09 18:20	
1,2-Dichloroethane	ug/L	ND	1.0	07/24/09 18:20	
1,2-Dichloropropane	ug/L	ND	1.0	07/24/09 18:20	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	07/24/09 18:20	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/24/09 18:20	
1,3-Dichloropropane	ug/L	ND	1.0	07/24/09 18:20	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/24/09 18:20	
2,2-Dichloropropane	ug/L	ND	1.0	07/24/09 18:20	
2-Butanone (MEK)	ug/L	ND	4.0	07/24/09 18:20	
2-Chlorotoluene	ug/L	ND	1.0	07/24/09 18:20	
4-Chlorotoluene	ug/L	ND	1.0	07/24/09 18:20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	4.0	07/24/09 18:20	
Acetone	ug/L	ND	10.0	07/24/09 18:20	
Allyl chloride	ug/L	ND	4.0	07/24/09 18:20	
Benzene	ug/L	ND	1.0	07/24/09 18:20	
Bromobenzene	ug/L	ND	1.0	07/24/09 18:20	
Bromochloromethane	ug/L	ND	1.0	07/24/09 18:20	
Bromodichloromethane	ug/L	ND	1.0	07/24/09 18:20	
Bromoform	ug/L	ND	8.0	07/24/09 18:20	
Bromomethane	ug/L	ND	4.0	07/24/09 18:20	
Carbon tetrachloride	ug/L	ND	1.0	07/24/09 18:20	
Chlorobenzene	ug/L	ND	1.0	07/24/09 18:20	
Chloroethane	ug/L	ND	1.0	07/24/09 18:20	
Chloroform	ug/L	ND	1.0	07/24/09 18:20	
Chloromethane	ug/L	ND	4.0	07/24/09 18:20	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/24/09 18:20	
cis-1,3-Dichloropropene	ug/L	ND	4.0	07/24/09 18:20	
Dibromochloromethane	ug/L	ND	1.0	07/24/09 18:20	
Dibromomethane	ug/L	ND	1.0	07/24/09 18:20	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

METHOD BLANK: 655373

Matrix: Water

Associated Lab Samples: 1099910005, 1099910006, 1099910007, 1099910008, 1099910010, 1099910011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	07/24/09 18:20	
Dichlorofluoromethane	ug/L	ND	1.0	07/24/09 18:20	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	07/24/09 18:20	
Ethylbenzene	ug/L	ND	1.0	07/24/09 18:20	
Hexachloro-1,3-butadiene	ug/L	ND	4.0	07/24/09 18:20	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/24/09 18:20	
m&p-Xylene	ug/L	ND	2.0	07/24/09 18:20	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/24/09 18:20	
Methylene Chloride	ug/L	ND	4.0	07/24/09 18:20	
n-Butylbenzene	ug/L	ND	1.0	07/24/09 18:20	
n-Propylbenzene	ug/L	ND	1.0	07/24/09 18:20	
Naphthalene	ug/L	ND	4.0	07/24/09 18:20	
o-Xylene	ug/L	ND	1.0	07/24/09 18:20	
p-Isopropyltoluene	ug/L	ND	1.0	07/24/09 18:20	
sec-Butylbenzene	ug/L	ND	1.0	07/24/09 18:20	
Styrene	ug/L	ND	1.0	07/24/09 18:20	
tert-Butylbenzene	ug/L	ND	1.0	07/24/09 18:20	
Tetrachloroethene	ug/L	ND	1.0	07/24/09 18:20	
Tetrahydrofuran	ug/L	ND	10.0	07/24/09 18:20	
Toluene	ug/L	ND	1.0	07/24/09 18:20	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/24/09 18:20	
trans-1,3-Dichloropropene	ug/L	ND	4.0	07/24/09 18:20	
Trichloroethene	ug/L	ND	1.0	07/24/09 18:20	
Trichlorofluoromethane	ug/L	ND	1.0	07/24/09 18:20	
Vinyl chloride	ug/L	ND	0.40	07/24/09 18:20	
Xylene (Total)	ug/L	ND	3.0	07/24/09 18:20	
1,2-Dichloroethane-d4 (S)	%	96	75-125	07/24/09 18:20	
4-Bromofluorobenzene (S)	%	96	75-125	07/24/09 18:20	
Dibromofluoromethane (S)	%	97	75-125	07/24/09 18:20	
Toluene-d8 (S)	%	103	75-125	07/24/09 18:20	

LABORATORY CONTROL SAMPLE: 655374

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	48.8	98	75-125	
1,1,1-Trichloroethane	ug/L	50	47.1	94	75-125	
1,1,2,2-Tetrachloroethane	ug/L	50	47.1	94	75-125	
1,1,2-Trichloroethane	ug/L	50	47.8	96	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	50	47.4	95	70-138	
1,1-Dichloroethane	ug/L	50	46.3	93	75-125	
1,1-Dichloroethene	ug/L	50	45.6	91	69-129	
1,1-Dichloropropene	ug/L	50	46.0	92	75-126	
1,2,3-Trichlorobenzene	ug/L	50	46.6	93	75-125	
1,2,3-Trichloropropane	ug/L	50	47.2	94	72-126	
1,2,4-Trichlorobenzene	ug/L	50	47.9	96	75-125	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

LABORATORY CONTROL SAMPLE: 655374

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	50	49.7	99	75-125	
1,2-Dibromo-3-chloropropane	ug/L	50	45.6	91	67-125	
1,2-Dibromoethane (EDB)	ug/L	50	49.4	99	75-125	
1,2-Dichlorobenzene	ug/L	50	46.5	93	75-125	
1,2-Dichloroethane	ug/L	50	46.3	93	75-125	
1,2-Dichloropropane	ug/L	50	48.2	96	75-125	
1,3,5-Trimethylbenzene	ug/L	50	47.8	96	75-125	
1,3-Dichlorobenzene	ug/L	50	47.8	96	75-125	
1,3-Dichloropropane	ug/L	50	47.8	96	75-125	
1,4-Dichlorobenzene	ug/L	50	46.4	93	75-125	
2,2-Dichloropropane	ug/L	50	47.9	96	48-150	
2-Butanone (MEK)	ug/L	50	42.7	85	51-134	
2-Chlorotoluene	ug/L	50	48.1	96	75-125	
4-Chlorotoluene	ug/L	50	48.7	97	75-125	
4-Methyl-2-pentanone (MIBK)	ug/L	50	46.4	93	60-125	
Acetone	ug/L	125	107	85	38-125	
Allyl chloride	ug/L	50	49.1	98	64-137	
Benzene	ug/L	50	46.9	94	75-125	
Bromobenzene	ug/L	50	47.4	95	75-125	
Bromochloromethane	ug/L	50	47.9	96	75-125	
Bromodichloromethane	ug/L	50	49.1	98	75-125	
Bromoform	ug/L	100	98.0	98	68-125	
Bromomethane	ug/L	50	40.4	81	47-129	
Carbon tetrachloride	ug/L	50	45.6	91	59-133	
Chlorobenzene	ug/L	50	49.0	98	75-125	
Chloroethane	ug/L	50	44.7	89	73-132	
Chloroform	ug/L	50	43.8	88	75-125	
Chloromethane	ug/L	50	44.1	88	72-125	
cis-1,2-Dichloroethene	ug/L	50	45.7	91	75-125	
cis-1,3-Dichloropropene	ug/L	50	48.5	97	75-125	
Dibromochloromethane	ug/L	50	48.0	96	75-125	
Dibromomethane	ug/L	50	44.4	89	75-125	
Dichlorodifluoromethane	ug/L	50	45.2	90	69-134	
Dichlorofluoromethane	ug/L	50	46.1	92	70-125	
Diethyl ether (Ethyl ether)	ug/L	50	44.6	89	71-125	
Ethylbenzene	ug/L	50	49.8	100	75-125	
Hexachloro-1,3-butadiene	ug/L	50	47.5	95	75-137	
Isopropylbenzene (Cumene)	ug/L	50	50.2	100	75-125	
m&p-Xylene	ug/L	100	98.7	99	75-125	
Methyl-tert-butyl ether	ug/L	50	45.9	92	75-125	
Methylene Chloride	ug/L	50	45.1	90	75-125	
n-Butylbenzene	ug/L	50	49.6	99	75-125	
n-Propylbenzene	ug/L	50	49.7	99	75-125	
Naphthalene	ug/L	50	48.9	98	72-125	
o-Xylene	ug/L	50	48.1	96	75-125	
p-Isopropyltoluene	ug/L	50	48.5	97	75-125	
sec-Butylbenzene	ug/L	50	49.0	98	75-125	
Styrene	ug/L	50	49.1	98	75-125	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

LABORATORY CONTROL SAMPLE: 655374

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/L	50	47.6	95	75-125	
Tetrachloroethene	ug/L	50	47.4	95	74-125	
Tetrahydrofuran	ug/L	500	466	93	65-125	
Toluene	ug/L	50	49.1	98	75-125	
trans-1,2-Dichloroethene	ug/L	50	46.7	93	74-125	
trans-1,3-Dichloropropene	ug/L	50	51.9	104	75-125	
Trichloroethene	ug/L	50	47.4	95	75-125	
Trichlorofluoromethane	ug/L	50	50.2	100	73-134	
Vinyl chloride	ug/L	50	46.6	93	75-126	
Xylene (Total)	ug/L	150	147	98	75-125	
1,2-Dichloroethane-d4 (S)	%			98	75-125	
4-Bromofluorobenzene (S)	%			93	75-125	
Dibromofluoromethane (S)	%			95	75-125	
Toluene-d8 (S)	%			101	75-125	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 655790 655791

Parameter	Units	1099910008		MS Spike		MSD Spike		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max	
		Result	Conc.	Conc.	Result	Conc.	Result						RPD	RPD
1,1,1,2-Tetrachloroethane	ug/L	ND	500	500	499	484	100	97	71-125	3	30			
1,1,1-Trichloroethane	ug/L	ND	500	500	482	459	96	92	75-125	5	30			
1,1,2,2-Tetrachloroethane	ug/L	ND	500	500	481	485	96	97	75-126	1	30			
1,1,2-Trichloroethane	ug/L	ND	500	500	485	489	97	98	75-125	1	30			
1,1,2-Trichlorotrifluoroethane	ug/L	ND	500	500	517	492	103	98	70-150	5	30			
1,1-Dichloroethane	ug/L	ND	500	500	485	455	97	91	75-125	6	30			
1,1-Dichloroethylene	ug/L	ND	500	500	488	449	98	90	64-142	8	30			
1,1-Dichloropropene	ug/L	ND	500	500	488	434	98	87	75-125	12	30			
1,2,3-Trichlorobenzene	ug/L	ND	500	500	512	472	102	94	75-125	8	30			
1,2,3-Trichloropropane	ug/L	ND	500	500	497	477	99	95	72-127	4	30			
1,2,4-Trichlorobenzene	ug/L	ND	500	500	493	475	99	95	75-125	4	30			
1,2,4-Trimethylbenzene	ug/L	ND	500	500	520	474	99	90	75-125	9	30			
1,2-Dibromo-3-chloropropane	ug/L	ND	500	500	463	466	93	93	65-125	1	30			
1,2-Dibromoethane (EDB)	ug/L	ND	500	500	489	482	98	96	75-125	1	30			
1,2-Dichlorobenzene	ug/L	ND	500	500	502	460	100	92	75-125	9	30			
1,2-Dichloroethane	ug/L	ND	500	500	484	498	97	100	75-125	3	30			
1,2-Dichloropropane	ug/L	ND	500	500	495	488	99	98	75-125	1	30			
1,3,5-Trimethylbenzene	ug/L	ND	500	500	523	469	105	94	75-127	11	30			
1,3-Dichlorobenzene	ug/L	ND	500	500	516	459	103	92	75-125	12	30			
1,3-Dichloropropane	ug/L	ND	500	500	499	473	100	95	75-125	5	30			
1,4-Dichlorobenzene	ug/L	ND	500	500	505	449	101	90	75-125	12	30			
2,2-Dichloropropane	ug/L	ND	500	500	509	462	102	92	48-150	10	30			
2-Butanone (MEK)	ug/L	ND	500	500	394	444	79	89	51-134	12	30			
2-Chlorotoluene	ug/L	ND	500	500	504	460	101	92	75-125	9	30			
4-Chlorotoluene	ug/L	ND	500	500	512	455	102	91	68-127	12	30			
4-Methyl-2-pentanone (MIBK)	ug/L	ND	500	500	459	467	92	93	60-135	2	30			
Acetone	ug/L	ND	1250	1250	1140	1030	91	83	30-125	10	30			
Allyl chloride	ug/L	ND	500	500	494	535	99	107	40-137	8	30			

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Parameter	Units	1099910008		MS Spike		MSD Spike		MS Result		MSD Result		% Rec		Max	
		Conc.	Result	Conc.	Spike	Conc.	MSD	Result	% Rec	MSD	Result	% Rec	Limits	RPD	RPD
Benzene	ug/L	2770	500	500	1670	1590	-219	-236	75-125	5	30	P6			
Bromobenzene	ug/L	ND	500	500	489	460	98	92	75-125	6	30				
Bromochloromethane	ug/L	ND	500	500	473	423	95	85	75-125	11	30				
Bromodichloromethane	ug/L	ND	500	500	482	478	96	96	72-125	1	30				
Bromoform	ug/L	ND	1000	1000	1000	959	100	96	51-125	4	30				
Bromomethane	ug/L	ND	500	500	412	454	82	91	47-130	10	30				
Carbon tetrachloride	ug/L	ND	500	500	492	461	98	92	61-133	6	30				
Chlorobenzene	ug/L	ND	500	500	514	469	103	94	75-125	9	30				
Chloroethane	ug/L	ND	500	500	466	436	93	87	75-132	7	30				
Chloroform	ug/L	ND	500	500	438	430	88	86	75-125	2	30				
Chloromethane	ug/L	ND	500	500	448	445	90	89	68-132	1	30				
cis-1,2-Dichloroethene	ug/L	ND	500	500	481	458	96	92	75-125	5	30				
cis-1,3-Dichloropropene	ug/L	ND	500	500	486	467	97	93	63-125	4	30				
Dibromochemicalmethane	ug/L	ND	500	500	477	461	95	92	62-125	3	30				
Dibromomethane	ug/L	ND	500	500	475	466	95	93	75-125	2	30				
Dichlorodifluoromethane	ug/L	ND	500	500	471	449	94	90	65-150	5	30				
Dichlorofluoromethane	ug/L	ND	500	500	472	448	94	90	68-127	5	30				
Diethyl ether (Ethyl ether)	ug/L	ND	500	500	446	448	89	90	71-125	1	30				
Ethylbenzene	ug/L	ND	500	500	511	471	102	94	75-125	8	30				
Hexachloro-1,3-butadiene	ug/L	ND	500	500	553	464	111	93	75-147	18	30				
Isopropylbenzene (Cumene)	ug/L	ND	500	500	527	473	105	95	75-125	11	30				
m&p-Xylene	ug/L	ND	1000	1000	1020	948	102	95	67-125	7	30				
Methyl-tert-butyl ether	ug/L	ND	500	500	462	474	92	95	75-125	3	30				
Methylene Chloride	ug/L	ND	500	500	455	427	91	85	75-125	6	30				
n-Butylbenzene	ug/L	ND	500	500	537	477	107	95	70-135	12	30				
n-Propylbenzene	ug/L	ND	500	500	543	488	109	98	70-131	11	30				
Naphthalene	ug/L	ND	500	500	544	499	109	100	66-127	9	30				
o-Xylene	ug/L	ND	500	500	504	467	101	93	72-125	7	30				
p-Isopropyltoluene	ug/L	ND	500	500	520	471	104	94	71-126	10	30				
sec-Butylbenzene	ug/L	ND	500	500	527	479	105	96	75-127	9	30				
Styrene	ug/L	ND	500	500	503	474	101	95	30-134	6	30				
tert-Butylbenzene	ug/L	ND	500	500	495	453	99	91	75-125	9	30				
Tetrachloroethene	ug/L	ND	500	500	531	454	106	91	74-125	16	30				
Tetrahydrofuran	ug/L	ND	5000	5000	4590	4670	92	93	65-125	2	30				
Toluene	ug/L	ND	500	500	516	483	103	97	75-125	7	30				
trans-1,2-Dichloroethene	ug/L	ND	500	500	506	459	101	92	72-125	10	30				
trans-1,3-Dichloropropene	ug/L	ND	500	500	510	512	102	102	63-125	0	30				
Trichloroethene	ug/L	ND	500	500	488	476	98	95	58-127	2	30				
Trichlorofluoromethane	ug/L	ND	500	500	512	483	102	97	73-150	6	30				
Vinyl chloride	ug/L	ND	500	500	517	477	103	95	75-134	8	30				
Xylene (Total)	ug/L	ND	1500	1500	1520	1420	101	94	75-125	7	30				
1,2-Dichloroethane-d4 (S)	%						93	91	75-125						
4-Bromofluorobenzene (S)	%						102	89	75-125						
Dibromofluoromethane (S)	%						94	94	75-125						
Toluene-d8 (S)	%						101	96	75-125						

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

QC Batch:	MSV/12679	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 465 W
Associated Lab Samples:	1099910009		

METHOD BLANK: 652108                                  Matrix: Water

Associated Lab Samples: 1099910009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	07/23/09 18:21	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/23/09 18:21	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/23/09 18:21	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/23/09 18:21	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	07/23/09 18:21	
1,1-Dichloroethane	ug/L	ND	1.0	07/23/09 18:21	
1,1-Dichloroethene	ug/L	ND	1.0	07/23/09 18:21	
1,1-Dichloropropene	ug/L	ND	1.0	07/23/09 18:21	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	07/23/09 18:21	
1,2,3-Trichloropropane	ug/L	ND	1.0	07/23/09 18:21	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	07/23/09 18:21	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	07/23/09 18:21	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	07/23/09 18:21	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/23/09 18:21	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/23/09 18:21	
1,2-Dichloroethane	ug/L	ND	1.0	07/23/09 18:21	
1,2-Dichloropropane	ug/L	ND	1.0	07/23/09 18:21	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	07/23/09 18:21	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/23/09 18:21	
1,3-Dichloropropane	ug/L	ND	1.0	07/23/09 18:21	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/23/09 18:21	
2,2-Dichloropropane	ug/L	ND	1.0	07/23/09 18:21	
2-Butanone (MEK)	ug/L	ND	4.0	07/23/09 18:21	
2-Chlorotoluene	ug/L	ND	1.0	07/23/09 18:21	
4-Chlorotoluene	ug/L	ND	1.0	07/23/09 18:21	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	4.0	07/23/09 18:21	
Acetone	ug/L	ND	10.0	07/23/09 18:21	
Allyl chloride	ug/L	ND	4.0	07/23/09 18:21	
Benzene	ug/L	ND	1.0	07/23/09 18:21	
Bromobenzene	ug/L	ND	1.0	07/23/09 18:21	
Bromochloromethane	ug/L	ND	1.0	07/23/09 18:21	
Bromodichloromethane	ug/L	ND	1.0	07/23/09 18:21	
Bromoform	ug/L	ND	8.0	07/23/09 18:21	
Bromomethane	ug/L	ND	4.0	07/23/09 18:21	
Carbon tetrachloride	ug/L	ND	1.0	07/23/09 18:21	
Chlorobenzene	ug/L	ND	1.0	07/23/09 18:21	
Chloroethane	ug/L	ND	1.0	07/23/09 18:21	
Chloroform	ug/L	ND	1.0	07/23/09 18:21	
Chloromethane	ug/L	ND	4.0	07/23/09 18:21	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/23/09 18:21	
cis-1,3-Dichloropropene	ug/L	ND	4.0	07/23/09 18:21	
Dibromochloromethane	ug/L	ND	1.0	07/23/09 18:21	
Dibromomethane	ug/L	ND	1.0	07/23/09 18:21	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

METHOD BLANK: 652108

Matrix: Water

Associated Lab Samples: 1099910009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	07/23/09 18:21	
Dichlorofluoromethane	ug/L	ND	1.0	07/23/09 18:21	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	07/23/09 18:21	
Ethylbenzene	ug/L	ND	1.0	07/23/09 18:21	
Hexachloro-1,3-butadiene	ug/L	ND	4.0	07/23/09 18:21	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/23/09 18:21	
m&p-Xylene	ug/L	ND	2.0	07/23/09 18:21	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/23/09 18:21	
Methylene Chloride	ug/L	ND	4.0	07/23/09 18:21	
n-Butylbenzene	ug/L	ND	1.0	07/23/09 18:21	
n-Propylbenzene	ug/L	ND	1.0	07/23/09 18:21	
Naphthalene	ug/L	ND	4.0	07/23/09 18:21	
o-Xylene	ug/L	ND	1.0	07/23/09 18:21	
p-Isopropyltoluene	ug/L	ND	1.0	07/23/09 18:21	
sec-Butylbenzene	ug/L	ND	1.0	07/23/09 18:21	
Styrene	ug/L	ND	1.0	07/23/09 18:21	
tert-Butylbenzene	ug/L	ND	1.0	07/23/09 18:21	
Tetrachloroethene	ug/L	ND	1.0	07/23/09 18:21	
Tetrahydrofuran	ug/L	ND	10.0	07/23/09 18:21	
Toluene	ug/L	ND	1.0	07/23/09 18:21	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/23/09 18:21	
trans-1,3-Dichloropropene	ug/L	ND	4.0	07/23/09 18:21	
Trichloroethene	ug/L	ND	1.0	07/23/09 18:21	
Trichlorofluoromethane	ug/L	ND	1.0	07/23/09 18:21	
Vinyl chloride	ug/L	ND	0.40	07/23/09 18:21	
Xylene (Total)	ug/L	ND	3.0	07/23/09 18:21	
1,2-Dichloroethane-d4 (S)	%	98	75-125	07/23/09 18:21	
4-Bromofluorobenzene (S)	%	96	75-125	07/23/09 18:21	
Dibromofluoromethane (S)	%	103	75-125	07/23/09 18:21	
Toluene-d8 (S)	%	101	75-125	07/23/09 18:21	

LABORATORY CONTROL SAMPLE: 652109

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	53.7	107	75-125	
1,1,1-Trichloroethane	ug/L	50	52.9	106	75-125	
1,1,2,2-Tetrachloroethane	ug/L	50	47.6	95	75-125	
1,1,2-Trichloroethane	ug/L	50	52.5	105	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	50	53.3	107	70-138	
1,1-Dichloroethane	ug/L	50	50.7	101	75-125	
1,1-Dichloroethene	ug/L	50	50.9	102	69-129	
1,1-Dichloropropene	ug/L	50	51.5	103	75-126	
1,2,3-Trichlorobenzene	ug/L	50	49.8	100	75-125	
1,2,3-Trichloropropane	ug/L	50	47.1	94	72-126	
1,2,4-Trichlorobenzene	ug/L	50	50.7	101	75-125	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

LABORATORY CONTROL SAMPLE: 652109

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	50	53.0	106	75-125	
1,2-Dibromo-3-chloropropane	ug/L	50	44.1	88	67-125	
1,2-Dibromoethane (EDB)	ug/L	50	50.9	102	75-125	
1,2-Dichlorobenzene	ug/L	50	50.8	102	75-125	
1,2-Dichloroethane	ug/L	50	49.3	99	75-125	
1,2-Dichloropropane	ug/L	50	54.5	109	75-125	
1,3,5-Trimethylbenzene	ug/L	50	51.8	104	75-125	
1,3-Dichlorobenzene	ug/L	50	51.6	103	75-125	
1,3-Dichloropropane	ug/L	50	51.5	103	75-125	
1,4-Dichlorobenzene	ug/L	50	51.2	102	75-125	
2,2-Dichloropropane	ug/L	50	52.6	105	48-150	
2-Butanone (MEK)	ug/L	50	44.2	88	51-134	
2-Chlorotoluene	ug/L	50	51.6	103	75-125	
4-Chlorotoluene	ug/L	50	51.8	104	75-125	
4-Methyl-2-pentanone (MIBK)	ug/L	50	48.2	96	60-125	
Acetone	ug/L	125	118	94	38-125	
Allyl chloride	ug/L	50	54.7	109	64-137	
Benzene	ug/L	50	50.2	100	75-125	
Bromobenzene	ug/L	50	50.4	101	75-125	
Bromochloromethane	ug/L	50	51.6	103	75-125	
Bromodichloromethane	ug/L	50	52.0	104	75-125	
Bromoform	ug/L	100	106	106	68-125	
Bromomethane	ug/L	50	48.0	96	47-129	
Carbon tetrachloride	ug/L	50	51.9	104	59-133	
Chlorobenzene	ug/L	50	52.1	104	75-125	
Chloroethane	ug/L	50	49.8	100	73-132	
Chloroform	ug/L	50	47.6	95	75-125	
Chloromethane	ug/L	50	49.1	98	72-125	
cis-1,2-Dichloroethene	ug/L	50	50.3	101	75-125	
cis-1,3-Dichloropropene	ug/L	50	51.8	104	75-125	
Dibromochloromethane	ug/L	50	51.1	102	75-125	
Dibromomethane	ug/L	50	49.8	100	75-125	
Dichlorodifluoromethane	ug/L	50	50.2	100	69-134	
Dichlorofluoromethane	ug/L	50	50.8	102	70-125	
Diethyl ether (Ethyl ether)	ug/L	50	49.7	99	71-125	
Ethylbenzene	ug/L	50	53.7	107	75-125	
Hexachloro-1,3-butadiene	ug/L	50	53.1	106	75-137	
Isopropylbenzene (Cumene)	ug/L	50	55.2	110	75-125	
m&p-Xylene	ug/L	100	107	107	75-125	
Methyl-tert-butyl ether	ug/L	50	48.1	96	75-125	
Methylene Chloride	ug/L	50	48.4	97	75-125	
n-Butylbenzene	ug/L	50	53.8	108	75-125	
n-Propylbenzene	ug/L	50	51.0	102	75-125	
Naphthalene	ug/L	50	50.9	102	72-125	
o-Xylene	ug/L	50	53.3	107	75-125	
p-Isopropyltoluene	ug/L	50	52.8	106	75-125	
sec-Butylbenzene	ug/L	50	53.4	107	75-125	
Styrene	ug/L	50	53.4	107	75-125	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

**LABORATORY CONTROL SAMPLE:** 652109

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/L	50	51.3	103	75-125	
Tetrachloroethene	ug/L	50	53.5	107	74-125	
Tetrahydrofuran	ug/L	500	473	95	65-125	
Toluene	ug/L	50	53.4	107	75-125	
trans-1,2-Dichloroethene	ug/L	50	52.9	106	74-125	
trans-1,3-Dichloropropene	ug/L	50	56.6	113	75-125	
Trichloroethene	ug/L	50	53.0	106	75-125	
Trichlorofluoromethane	ug/L	50	52.3	105	73-134	
Vinyl chloride	ug/L	50	54.7	109	75-126	
Xylene (Total)	ug/L	150	160	107	75-125	
1,2-Dichloroethane-d4 (S)	%			97	75-125	
4-Bromofluorobenzene (S)	%			96	75-125	
Dibromofluoromethane (S)	%			93	75-125	
Toluene-d8 (S)	%			101	75-125	

**MATRIX SPIKE & MATRIX SPIKE DUPLICATE:** 655155      655156

Parameter	Units	1099484004		MSD		MS Result	MS % Rec	MSD Result	MSD % Rec	% Rec Limits	Max		
		Spike	Conc.	Spike	Conc.						RPD	RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	500	500	500	504	100	101	101	71-125	1	30	
1,1,1-Trichloroethane	ug/L	ND	500	500	497	482	99	96	96	75-125	3	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	500	500	477	514	95	103	103	75-126	7	30	
1,1,2-Trichloroethane	ug/L	ND	500	500	490	535	98	107	107	75-125	9	30	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	500	500	544	546	109	109	109	70-150	0	30	
1,1-Dichloroethane	ug/L	ND	500	500	492	483	98	97	97	75-125	2	30	
1,1-Dichloroethene	ug/L	ND	500	500	514	523	103	105	105	64-142	2	30	
1,1-Dichloropropene	ug/L	ND	500	500	487	485	97	97	97	75-125	0	30	
1,2,3-Trichlorobenzene	ug/L	ND	500	500	497	503	99	101	101	75-125	1	30	
1,2,3-Trichloropropane	ug/L	ND	500	500	449	500	90	100	100	72-127	11	30	
1,2,4-Trichlorobenzene	ug/L	ND	500	500	487	523	97	105	105	75-125	7	30	
1,2,4-Trimethylbenzene	ug/L	1080	500	500	984	1040	-20	-9	-9	75-125	6	30	M0
1,2-Dibromo-3-chloropropane	ug/L	ND	500	500	518	501	104	100	100	65-125	3	30	
1,2-Dibromoethane (EDB)	ug/L	ND	500	500	477	490	95	98	98	75-125	3	30	
1,2-Dichlorobenzene	ug/L	ND	500	500	481	514	96	103	103	75-125	7	30	
1,2-Dichloroethane	ug/L	ND	500	500	515	529	103	106	106	75-125	3	30	
1,2-Dichloropropene	ug/L	ND	500	500	511	506	102	101	101	75-125	1	30	
1,3,5-Trimethylbenzene	ug/L	283	500	500	626	645	69	72	72	75-127	3	30	M0
1,3-Dichlorobenzene	ug/L	ND	500	500	496	520	99	104	104	75-125	5	30	
1,3-Dichloropropene	ug/L	ND	500	500	481	491	96	98	98	75-125	2	30	
1,4-Dichlorobenzene	ug/L	ND	500	500	488	509	98	102	102	75-125	4	30	
2,2-Dichloropropane	ug/L	ND	500	500	501	504	100	101	101	48-150	1	30	
2-Butanone (MEK)	ug/L	ND	500	500	413	487	83	97	97	51-134	16	30	
2-Chlorotoluene	ug/L	ND	500	500	497	516	99	103	103	75-125	4	30	
4-Chlorotoluene	ug/L	ND	500	500	510	536	102	107	107	68-127	5	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	500	500	450	461	90	92	92	60-135	2	30	
Acetone	ug/L	ND	1250	1250	904	1140	72	91	91	30-125	23	30	
Allyl chloride	ug/L	ND	500	500	452	484	90	97	97	40-137	7	30	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

Parameter	Units	1099484004		MS		MSD		MS		MSD		% Rec	Limits	RPD	RPD	Max					
		Result	Spike Conc.	Spike Conc.	Result	MSD	Result	% Rec	MSD	Result	% Rec										
Benzene	ug/L	4370	500	500	2500	2490	-374	-375	75-125	0	30	P6									
Bromobenzene	ug/L	ND	500	500	487	530	97	106	75-125	8	30										
Bromoform	ug/L	ND	500	500	490	486	98	102	75-125	7	30										
Bromochloromethane	ug/L	ND	500	500	472	508	94	97	72-125	1	30										
Bromodichloromethane	ug/L	ND	500	500	490	486	98	97	51-125	1	30										
Bromomethane	ug/L	ND	500	500	494	504	99	101	47-130	2	30										
Carbon tetrachloride	ug/L	ND	500	500	483	498	97	100	61-133	3	30										
Chlorobenzene	ug/L	ND	500	500	511	517	102	103	75-125	1	30										
Chloroethane	ug/L	ND	500	500	447	460	89	92	75-132	3	30										
Chloroform	ug/L	31.7	500	500	455	457	85	85	75-125	0	30										
Chloromethane	ug/L	ND	500	500	462	443	92	89	68-132	4	30										
cis-1,2-Dichloroethene	ug/L	ND	500	500	484	454	97	91	75-125	6	30										
cis-1,3-Dichloropropene	ug/L	ND	500	500	507	480	101	96	63-125	5	30										
Dibromochloromethane	ug/L	ND	500	500	480	468	96	94	62-125	3	30										
Dibromomethane	ug/L	ND	500	500	495	451	99	90	75-125	9	30										
Dichlorodifluoromethane	ug/L	ND	500	500	513	484	103	97	65-150	6	30										
Dichlorofluoromethane	ug/L	ND	500	500	506	473	101	95	68-127	7	30										
Diethyl ether (Ethyl ether)	ug/L	ND	500	500	487	508	97	102	71-125	4	30										
Ethylbenzene	ug/L	2210	500	500	1570	1540	-128	-134	75-125	2	30	P6									
Hexachloro-1,3-butadiene	ug/L	ND	500	500	519	505	104	101	75-147	3	30										
Isopropylbenzene (Cumene)	ug/L	80.5	500	500	575	557	99	95	75-125	3	30										
m&p-Xylene	ug/L	2710	1000	1000	2350	2310	-36	-40	67-125	2	30	M0									
Methyl-tert-butyl ether	ug/L	ND	500	500	468	488	94	98	75-125	4	30										
Methylene Chloride	ug/L	ND	500	500	527	477	105	95	75-125	10	30										
n-Butylbenzene	ug/L	ND	500	500	523	548	100	105	70-135	5	30										
n-Propylbenzene	ug/L	192	500	500	611	627	84	87	70-131	3	30										
Naphthalene	ug/L	146	500	500	578	610	86	93	66-127	5	30										
o-Xylene	ug/L	705	500	500	870	862	33	31	72-125	1	30	M0									
p-Isopropyltoluene	ug/L	ND	500	500	511	523	102	105	71-126	2	30										
sec-Butylbenzene	ug/L	ND	500	500	518	529	104	106	75-127	2	30										
Styrene	ug/L	ND	500	500	530	535	106	107	30-134	1	30										
tert-Butylbenzene	ug/L	ND	500	500	481	513	96	103	75-125	6	30										
Tetrachloroethene	ug/L	ND	500	500	511	484	102	97	74-125	6	30										
Tetrahydrofuran	ug/L	ND	5000	5000	4690	4860	94	97	65-125	4	30										
Toluene	ug/L	1790	500	500	1350	1330	-87	-91	75-125	2	30	M0									
trans-1,2-Dichloroethene	ug/L	ND	500	500	528	515	106	103	72-125	3	30										
trans-1,3-Dichloropropene	ug/L	ND	500	500	529	536	106	107	63-125	1	30										
Trichloroethene	ug/L	ND	500	500	487	479	97	96	58-127	2	30										
Trichlorofluoromethane	ug/L	ND	500	500	512	528	102	106	73-150	3	30										
Vinyl chloride	ug/L	ND	500	500	524	511	105	102	75-134	3	30										
Xylene (Total)	ug/L	3420	1500	1500	3220	3170	-13	-16	75-125	1	30										
1,2-Dichloroethane-d4 (S)	%						94	93	75-125												
4-Bromofluorobenzene (S)	%						100	97	75-125												
Dibromofluoromethane (S)	%						101	100	75-125												
Toluene-d8 (S)	%						102	102	75-125												

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

QC Batch:	MPRP/16566	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3010	Analysis Description:	6010 MET
Associated Lab Samples: 1099910001, 1099910002, 1099910003, 1099910004, 1099910005, 1099910006, 1099910007, 1099910008, 1099910009, 1099910010			

METHOD BLANK: 655562		Matrix: Water		
Parameter	Units	Blank Result	Reporting Limit	Analyzed
Iron	ug/L	ND	50.0	07/27/09 17:01

LABORATORY CONTROL SAMPLE: 655563		Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Parameter	Units					
Iron	ug/L	10000	10600	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 655564			655565									
Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Iron	ug/L	ND	10000	10000	11200	11100	112	111	80-120	1	30	

MATRIX SPIKE SAMPLE: 655566		1099910009	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Parameter	Units	Result					
Iron	ug/L	ND	10000	11000	109	80-120	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

QC Batch:	MSV/12708	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 465 W
Associated Lab Samples:	1099910001, 1099910002, 1099910003, 1099910004		

METHOD BLANK: 654695   Matrix: Water

Associated Lab Samples: 1099910001, 1099910002, 1099910003, 1099910004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	07/24/09 05:06	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/24/09 05:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/24/09 05:06	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/24/09 05:06	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	07/24/09 05:06	
1,1-Dichloroethane	ug/L	ND	1.0	07/24/09 05:06	
1,1-Dichloroethene	ug/L	ND	1.0	07/24/09 05:06	
1,1-Dichloropropene	ug/L	ND	1.0	07/24/09 05:06	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	07/24/09 05:06	
1,2,3-Trichloropropane	ug/L	ND	1.0	07/24/09 05:06	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	07/24/09 05:06	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	07/24/09 05:06	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	07/24/09 05:06	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/24/09 05:06	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/24/09 05:06	
1,2-Dichloroethane	ug/L	ND	1.0	07/24/09 05:06	
1,2-Dichloropropane	ug/L	ND	1.0	07/24/09 05:06	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	07/24/09 05:06	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/24/09 05:06	
1,3-Dichloropropane	ug/L	ND	1.0	07/24/09 05:06	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/24/09 05:06	
2,2-Dichloropropane	ug/L	ND	1.0	07/24/09 05:06	
2-Butanone (MEK)	ug/L	ND	4.0	07/24/09 05:06	
2-Chlorotoluene	ug/L	ND	1.0	07/24/09 05:06	
4-Chlorotoluene	ug/L	ND	1.0	07/24/09 05:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	4.0	07/24/09 05:06	
Acetone	ug/L	ND	10.0	07/24/09 05:06	
Allyl chloride	ug/L	ND	4.0	07/24/09 05:06	
Benzene	ug/L	ND	1.0	07/24/09 05:06	
Bromobenzene	ug/L	ND	1.0	07/24/09 05:06	
Bromochloromethane	ug/L	ND	1.0	07/24/09 05:06	
Bromodichloromethane	ug/L	ND	1.0	07/24/09 05:06	
Bromoform	ug/L	ND	8.0	07/24/09 05:06	
Bromomethane	ug/L	ND	4.0	07/24/09 05:06	
Carbon tetrachloride	ug/L	ND	1.0	07/24/09 05:06	
Chlorobenzene	ug/L	ND	1.0	07/24/09 05:06	
Chloroethane	ug/L	ND	1.0	07/24/09 05:06	
Chloroform	ug/L	ND	1.0	07/24/09 05:06	
Chloromethane	ug/L	ND	4.0	07/24/09 05:06	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/24/09 05:06	
cis-1,3-Dichloropropene	ug/L	ND	4.0	07/24/09 05:06	
Dibromochloromethane	ug/L	ND	1.0	07/24/09 05:06	
Dibromomethane	ug/L	ND	1.0	07/24/09 05:06	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

METHOD BLANK: 654695

Matrix: Water

Associated Lab Samples: 1099910001, 1099910002, 1099910003, 1099910004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	07/24/09 05:06	
Dichlorofluoromethane	ug/L	ND	1.0	07/24/09 05:06	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	07/24/09 05:06	
Ethylbenzene	ug/L	ND	1.0	07/24/09 05:06	
Hexachloro-1,3-butadiene	ug/L	ND	4.0	07/24/09 05:06	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/24/09 05:06	
m&p-Xylene	ug/L	ND	2.0	07/24/09 05:06	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/24/09 05:06	
Methylene Chloride	ug/L	ND	4.0	07/24/09 05:06	
n-Butylbenzene	ug/L	ND	1.0	07/24/09 05:06	
n-Propylbenzene	ug/L	ND	1.0	07/24/09 05:06	
Naphthalene	ug/L	ND	4.0	07/24/09 05:06	
o-Xylene	ug/L	ND	1.0	07/24/09 05:06	
p-Isopropyltoluene	ug/L	ND	1.0	07/24/09 05:06	
sec-Butylbenzene	ug/L	ND	1.0	07/24/09 05:06	
Styrene	ug/L	ND	1.0	07/24/09 05:06	
tert-Butylbenzene	ug/L	ND	1.0	07/24/09 05:06	
Tetrachloroethene	ug/L	ND	1.0	07/24/09 05:06	
Tetrahydrofuran	ug/L	ND	10.0	07/24/09 05:06	
Toluene	ug/L	ND	1.0	07/24/09 05:06	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/24/09 05:06	
trans-1,3-Dichloropropene	ug/L	ND	4.0	07/24/09 05:06	
Trichloroethene	ug/L	ND	1.0	07/24/09 05:06	
Trichlorofluoromethane	ug/L	ND	1.0	07/24/09 05:06	
Vinyl chloride	ug/L	ND	0.40	07/24/09 05:06	
Xylene (Total)	ug/L	ND	3.0	07/24/09 05:06	
1,2-Dichloroethane-d4 (S)	%	102	75-125	07/24/09 05:06	
4-Bromofluorobenzene (S)	%	92	75-125	07/24/09 05:06	
Dibromofluoromethane (S)	%	101	75-125	07/24/09 05:06	
Toluene-d8 (S)	%	103	75-125	07/24/09 05:06	

LABORATORY CONTROL SAMPLE: 654696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.4	103	75-125	
1,1,1-Trichloroethane	ug/L	50	50.7	101	75-125	
1,1,2,2-Tetrachloroethane	ug/L	50	48.3	97	75-125	
1,1,2-Trichloroethane	ug/L	50	52.2	104	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	50	50.4	101	70-138	
1,1-Dichloroethane	ug/L	50	49.6	99	75-125	
1,1-Dichloroethene	ug/L	50	47.8	96	69-129	
1,1-Dichloropropene	ug/L	50	50.5	101	75-126	
1,2,3-Trichlorobenzene	ug/L	50	49.7	99	75-125	
1,2,3-Trichloropropane	ug/L	50	50.5	101	72-126	
1,2,4-Trichlorobenzene	ug/L	50	47.2	94	75-125	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

LABORATORY CONTROL SAMPLE: 654696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	50	50.0	100	75-125	
1,2-Dibromo-3-chloropropane	ug/L	50	46.7	93	67-125	
1,2-Dibromoethane (EDB)	ug/L	50	51.9	104	75-125	
1,2-Dichlorobenzene	ug/L	50	48.9	98	75-125	
1,2-Dichloroethane	ug/L	50	50.6	101	75-125	
1,2-Dichloropropane	ug/L	50	51.6	103	75-125	
1,3,5-Trimethylbenzene	ug/L	50	50.3	101	75-125	
1,3-Dichlorobenzene	ug/L	50	49.8	100	75-125	
1,3-Dichloropropane	ug/L	50	51.1	102	75-125	
1,4-Dichlorobenzene	ug/L	50	48.4	97	75-125	
2,2-Dichloropropane	ug/L	50	46.1	92	48-150	
2-Butanone (MEK)	ug/L	50	46.4	93	51-134	
2-Chlorotoluene	ug/L	50	48.9	98	75-125	
4-Chlorotoluene	ug/L	50	49.4	99	75-125	
4-Methyl-2-pentanone (MIBK)	ug/L	50	50.8	102	60-125	
Acetone	ug/L	125	131	105	38-125	
Allyl chloride	ug/L	50	49.6	99	64-137	
Benzene	ug/L	50	49.9	100	75-125	
Bromobenzene	ug/L	50	48.2	96	75-125	
Bromochloromethane	ug/L	50	52.9	106	75-125	
Bromodichloromethane	ug/L	50	51.2	102	75-125	
Bromoform	ug/L	100	105	105	68-125	
Bromomethane	ug/L	50	45.4	91	47-129	
Carbon tetrachloride	ug/L	50	51.2	102	59-133	
Chlorobenzene	ug/L	50	50.3	101	75-125	
Chloroethane	ug/L	50	47.5	95	73-132	
Chloroform	ug/L	50	46.4	93	75-125	
Chloromethane	ug/L	50	50.5	101	72-125	
cis-1,2-Dichloroethene	ug/L	50	49.5	99	75-125	
cis-1,3-Dichloropropene	ug/L	50	50.1	100	75-125	
Dibromochloromethane	ug/L	50	49.5	99	75-125	
Dibromomethane	ug/L	50	48.1	96	75-125	
Dichlorodifluoromethane	ug/L	50	47.7	95	69-134	
Dichlorofluoromethane	ug/L	50	51.0	102	70-125	
Diethyl ether (Ethyl ether)	ug/L	50	49.7	99	71-125	
Ethylbenzene	ug/L	50	51.3	103	75-125	
Hexachloro-1,3-butadiene	ug/L	50	48.1	96	75-137	
Isopropylbenzene (Cumene)	ug/L	50	52.3	105	75-125	
m&p-Xylene	ug/L	100	103	103	75-125	
Methyl-tert-butyl ether	ug/L	50	51.2	102	75-125	
Methylene Chloride	ug/L	50	48.4	97	75-125	
n-Butylbenzene	ug/L	50	49.9	100	75-125	
n-Propylbenzene	ug/L	50	50.6	101	75-125	
Naphthalene	ug/L	50	52.3	105	72-125	
o-Xylene	ug/L	50	49.7	99	75-125	
p-Isopropyltoluene	ug/L	50	49.4	99	75-125	
sec-Butylbenzene	ug/L	50	51.3	103	75-125	
Styrene	ug/L	50	51.7	103	75-125	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

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**LABORATORY CONTROL SAMPLE:** 654696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/L	50	48.1	96	75-125	
Tetrachloroethene	ug/L	50	49.4	99	74-125	
Tetrahydrofuran	ug/L	500	526	105	65-125	
Toluene	ug/L	50	49.4	99	75-125	
trans-1,2-Dichloroethene	ug/L	50	50.2	100	74-125	
trans-1,3-Dichloropropene	ug/L	50	55.2	110	75-125	
Trichloroethene	ug/L	50	49.5	99	75-125	
Trichlorofluoromethane	ug/L	50	51.5	103	73-134	
Vinyl chloride	ug/L	50	51.7	103	75-126	
Xylene (Total)	ug/L	150	152	101	75-125	
1,2-Dichloroethane-d4 (S)	%			100	75-125	
4-Bromofluorobenzene (S)	%			96	75-125	
Dibromofluoromethane (S)	%			105	75-125	
Toluene-d8 (S)	%			100	75-125	

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**MATRIX SPIKE SAMPLE:** 655178

Parameter	Units	1099910001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20.4	102	71-125	
1,1,1-Trichloroethane	ug/L	ND	20	22.3	112	75-125	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	19.2	96	75-126	
1,1,2-Trichloroethane	ug/L	ND	20	20.1	101	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	20	24.1	120	70-150	
1,1-Dichloroethane	ug/L	ND	20	21.5	108	75-125	
1,1-Dichloroethene	ug/L	ND	20	21.3	106	64-142	
1,1-Dichloropropene	ug/L	ND	20	21.2	106	75-125	
1,2,3-Trichlorobenzene	ug/L	ND	20	20.6	103	75-125	
1,2,3-Trichloropropane	ug/L	ND	20	19.9	100	72-127	
1,2,4-Trichlorobenzene	ug/L	ND	20	21.0	105	75-125	
1,2,4-Trimethylbenzene	ug/L	7.8	20	29.3	108	75-125	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	18.1	91	65-125	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20.3	101	75-125	
1,2-Dichlorobenzene	ug/L	ND	20	19.7	99	75-125	
1,2-Dichloroethane	ug/L	ND	20	19.8	99	75-125	
1,2-Dichloropropane	ug/L	ND	20	20.9	104	75-125	
1,3,5-Trimethylbenzene	ug/L	1.9	20	22.5	103	75-127	
1,3-Dichlorobenzene	ug/L	ND	20	19.9	99	75-125	
1,3-Dichloropropane	ug/L	ND	20	20.4	102	75-125	
1,4-Dichlorobenzene	ug/L	ND	20	19.9	100	75-125	
2,2-Dichloropropane	ug/L	ND	20	18.8	94	48-150	
2-Butanone (MEK)	ug/L	ND	20	20.6	92	51-134	
2-Chlorotoluene	ug/L	ND	20	20.2	101	75-125	
4-Chlorotoluene	ug/L	ND	20	20.5	102	68-127	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	21.1	106	60-135	
Acetone	ug/L	42.1	50	92.9	102	30-125	
Allyl chloride	ug/L	ND	20	23.8	119	40-137	
Benzene	ug/L	4.5	20	25.6	105	75-125	

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

MATRIX SPIKE SAMPLE:	655178						
Parameter	Units	1099910001	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromobenzene	ug/L	ND	20	19.7	99	75-125	
Bromoform	ug/L	ND	20	20.0	100	75-125	
Bromochloromethane	ug/L	ND	20	20.6	103	72-125	
Bromodichloromethane	ug/L	ND	40	40.3	101	51-125	
Bromomethane	ug/L	ND	20	20.6	103	47-130	
Carbon tetrachloride	ug/L	ND	20	22.0	110	61-133	
Chlorobenzene	ug/L	ND	20	20.6	103	75-125	
Chloroethane	ug/L	ND	20	21.3	106	75-132	
Chloroform	ug/L	ND	20	18.9	95	75-125	
Chloromethane	ug/L	ND	20	23.8	103	68-132	
cis-1,2-Dichloroethene	ug/L	ND	20	20.9	105	75-125	
cis-1,3-Dichloropropene	ug/L	ND	20	19.5	98	63-125	
Dibromochloromethane	ug/L	ND	20	19.3	96	62-125	
Dibromomethane	ug/L	ND	20	19.2	96	75-125	
Dichlorodifluoromethane	ug/L	ND	20	22.7	113	65-150	
Dichlorofluoromethane	ug/L	ND	20	20.9	105	68-127	
Diethyl ether (Ethyl ether)	ug/L	ND	20	20.2	101	71-125	
Ethylbenzene	ug/L	12.0	20	33.1	105	75-125	
Hexachloro-1,3-butadiene	ug/L	ND	20	21.3	106	75-147	
Isopropylbenzene (Cumene)	ug/L	1.2	20	23.4	111	75-125	
m&p-Xylene	ug/L	2.5	40	45.1	107	67-125	
Methyl-tert-butyl ether	ug/L	ND	20	19.8	99	75-125	
Methylene Chloride	ug/L	ND	20	19.0	95	75-125	
n-Butylbenzene	ug/L	ND	20	21.8	109	70-135	
n-Propylbenzene	ug/L	ND	20	22.2	108	70-131	
Naphthalene	ug/L	88.2	20	110	111	66-127	
o-Xylene	ug/L	4.5	20	26.1	108	72-125	
p-Isopropyltoluene	ug/L	2.6	20	24.1	107	71-126	
sec-Butylbenzene	ug/L	ND	20	21.9	110	75-127	
Styrene	ug/L	ND	20	21.5	108	30-134	
tert-Butylbenzene	ug/L	ND	20	20.9	105	75-125	
Tetrachloroethene	ug/L	ND	20	20.9	105	74-125	
Tetrahydrofuran	ug/L	ND	200	196	98	65-125	
Toluene	ug/L	1.5	20	22.6	105	75-125	
trans-1,2-Dichloroethene	ug/L	ND	20	22.0	110	72-125	
trans-1,3-Dichloropropene	ug/L	ND	20	21.0	105	63-125	
Trichloroethene	ug/L	ND	20	20.5	103	58-127	
Trichlorofluoromethane	ug/L	ND	20	23.9	119	73-150	
Vinyl chloride	ug/L	ND	20	23.9	119	75-134	
Xylene (Total)	ug/L	7.0	60	71.3	107	75-125	
1,2-Dichloroethane-d4 (S)	%				98	75-125	
4-Bromofluorobenzene (S)	%				96	75-125	
Dibromofluoromethane (S)	%				99	75-125	
Toluene-d8 (S)	%				101	75-125	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

SAMPLE DUPLICATE: 655177

Parameter	Units	1099767003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,1-Dichloropropene	ug/L	ND	ND		30	
1,2,3-Trichlorobenzene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2,4-Trichlorobenzene	ug/L	ND	ND		30	
1,2,4-Trimethylbenzene	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropene	ug/L	ND	ND		30	
1,3,5-Trimethylbenzene	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,3-Dichloropropane	ug/L	ND	ND		30	
1,4-Dichlorobenzene	ug/L	ND	ND		30	
2,2-Dichloropropene	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	ND	ND		30	
2-Chlorotoluene	ug/L	ND	ND		30	
4-Chlorotoluene	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		30	
Acetone	ug/L	ND	ND		30	
Allyl chloride	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Bromobenzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Dichlorofluoromethane	ug/L	ND	ND		30	
Diethyl ether (Ethyl ether)	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Hexachloro-1,3-butadiene	ug/L	ND	ND		30	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

SAMPLE DUPLICATE: 655177

Parameter	Units	1099767003 Result	Dup Result	RPD	Max RPD	Qualifiers
Isopropylbenzene (Cumene)	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
n-Butylbenzene	ug/L	ND	ND		30	
n-Propylbenzene	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
p-Isopropyltoluene	ug/L	ND	ND		30	
sec-Butylbenzene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
tert-Butylbenzene	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Tetrahydrofuran	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	45.3	46.6	3	30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	96	96	0		
4-Bromofluorobenzene (S)	%	95	94	1		
Dibromofluoromethane (S)	%	100	95	5		
Toluene-d8 (S)	%	98	100	2		

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## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: Superior WLP 12842-001-300

Pace Project No.: 1099910

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

### BATCH QUALIFIERS

Batch: MSSV/4869

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

M0 Matrix spike recovery was outside laboratory control limits.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

S4 Surrogate recovery not evaluated against control limits due to sample dilution.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: <b>Aecom</b>	Report To: <b>Bill Gregg</b>	Copy To:	<b>Bill Gregg</b>	Attention: <b>A/P</b>	
Address: <b>913 Wacota Street Ste 400 St. Paul MN 55701</b>	Purchase Order No.:		Company Name: <b>Aecom</b>	NPDES	<input checked="" type="checkbox"/> DRINKING WATER
Email To: <b>Bill_Gregg</b>	Project Name: <b>Superior Water Light</b>	Reference:	Address: <b>Westford MA</b>	UST	<input type="checkbox"/> GROUND WATER
Phone: <b>651-222-0841</b>	Project Number: <b>12842-001-300</b>	Manager:	Pace Project Profile #: <b>Carol Davy #1</b>	RCRA	<input type="checkbox"/> OTHER
Requested Due Date/TAT: <b>8/22</b>			Site Location: <b>W.I.</b>	STATE: <b>MA</b>	
REGULATORY AGENCY					
Residual Chlorine (Y/N)					
Requested Analysis Filtered (Y/N)					
Section D Required Client Information		COLLECTED		Preservatives	
SAMPLE ID (A-Z, 0-9, /,-) Sample IDs MUST BE UNIQUE		MATRIX CODES Drinking Water Waste Water Product Soil/Solid Oil Wipe Air Tissue Other	MATRIX CODE COMPOSITE START	COMPOSITE END/GRAB	
ITEM #		DATE	TIME	DATE	TIME
# OF CONTAINERS					
SAMPLE TEMP AT COLLECTION					
Unpreserved					
# OF CONTAINERS					
Preservatives					
Ameliorants Test					
Total Tannin					
PAH 8230					
VOC 8260					
NHOH					
Na <sub>2</sub> SO <sub>3</sub>					
Methanol					
Other					
Pace Project No./Lab I.D.					
<b>001</b>					
<b>002</b>					
<b>003</b>					
<b>004</b>					
<b>005</b>					
<b>006</b>					
<b>007</b>					
<b>008</b>					
<b>009</b>					
<b>010</b>					
<b>011</b>					
RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION	DATE
<b>Dose Aecom</b>		<b>7/23/07</b>	<b>1050</b>	<b>Scann Jengis</b>	<b>7/23/07</b>
ADDITIONAL COMMENTS					
58 of 59					
SAMPLE NAME AND SIGNATURE		ORIGINAL			
PRINT Name of SAMPLER: <b>Daniel Phelps</b>					
SIGNATURE of SAMPLER: <b>Daniel Phelps</b>					
Temp in °C Received on C Sealed Container (Y/N)					
Samples intact (Y/N)					
Page: <b>1</b> of <b>1</b>					
1290388					

## Sample Condition Upon Receipt

PaceAnalytical

Client Name: AscomProject # 1099910

Courier:  FedEx  UPS  USPS  Client  Commercial  Pace Other  
 Tracking #: \_\_\_\_\_

(Optional)  
 Proj. Due Date:  
 Proj. Name:

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other Temp Blank: Yes  No

Thermometer Used 80344042, 179425

Type of Ice: Wet Blue None

Samples on ice, cooling process has begun

Cooler Temperature 4.8/1.8/0.0

Temp should be above freezing to 6°C

Biological Tissue Is Frozen: Yes No

Date and Initials of person examining contents: 7/23/09

Comments: \_\_\_\_\_

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>WT</u>	
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions <u>VOA Coliform, TOC, Oil and Grease, WI-DRO (water)</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>7/23/09</u>
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>062409-3</u>		

## Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

## Project Manager Review:

New 7/23/09 8:49

AM

Date: 7/23/09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

## **Appendix B**

### **Sample Collection Records**

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/12/08
Project No:	12842-001-300	Time: Start	1005
Site Location:	Superior, Wisconsin	Finish	1016
Weather Conds:	75 degrees F, light rain	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |      |                    |     |  |                                     |
|----------------------|------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 19.6 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 7.23 | d. Casing Diameter | 2"  | e. Length of Water Column                | 1237 (a-b)                          |
|                      |      |                    |     | f. Calculated Well Volume (see back)     | 2.02                                |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1010	0.45	10.22	7.30	1.644	1.00	1.03	15.3	Clear	---
1013	0.72	10.45	7.28	1.597	0.95	1.04	18.8	Clear	---
1016	1.00	10.70	7.29	1.594	0.45	1.16	23.0	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed Yes  No  N/A  
 Has required turbidity been reached    
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-1	40 ml vial	3	HCL	VOC	1020
MW-1	1 liter amber	2	HCL	PAH	1020

Comments \_\_\_\_\_

Signature \_\_\_\_\_

Date 8/12/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/13/08
Project No:	12842-001-300	Time: Start	1150
Site Location:	Superior, Wisconsin	Finish	1202
Weather Conds:	80 degrees F, pt. cloudy	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |                                      |       |       |
|----------------------|-------|--------------------|-----|--------------------------------------|-------|-------|
| a. Total Well Length | 20.38 | c. Casing Material | PVC | e. Length of Water Column            | 14.04 | (a-b) |
| b. Water Table Depth | 6.34  | d. Casing Diameter | 2"  | f. Calculated Well Volume (see back) | 2.3   |       |

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity      10      NTUs  
 - Stabilization of parameters      10      %

c. Field Testing Equipment Used:      Make      Model      Serial Number  
 YSI      556      07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1153	0.3	11.07	7.44	1.196	2.8	2.50	-19.8	Clear	---
1156	0.5	10.74	7.37	1.181	2.4	1.85	-22.3	Clear	---
1159	0.8	10.86	7.33	1.180	5.7	1.42	-25.3	Clear	---
1202	1.0	11.02	7.32	1.184	2.1	1.36	-26.1	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed      Yes      No      N/A  
 Has required turbidity been reached              
 Have parameters stabilized           

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:**      Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-2	40 ml vial	3	HCL	VOC	1205
MW-2	1 liter amber	2	HCL	PAH	1205

Comments \_\_\_\_\_

Signature \_\_\_\_\_ 

Date 8/13/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/13/08
Project No:	12842-001-300	Time: Start	1345
Site Location:	Superior, Wisconsin	Finish	1354
Weather Conds:	80 degrees, overcast	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 19.38 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 6.1   | d. Casing Diameter | 2"  | e. Length of Water Column                | 13.28 (a-b)                         |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 2.2                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1348	0.33	11.05	7.44	1.309	19	1.74	-87.3	Clear	---
1351	0.67	11.48	7.33	1.316	19	1.26	-88.7	Clear	---
1354	1.00	11.45	7.27	1.312	14	1.16	-88.5	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed  Yes  No  N/A  
 Has required turbidity been reached   
 Have parameters stabilized

If no or N/A - Explain below.

No minimum purge volume established.

Insufficient amount of water to allow turbidity to drop below allowed criteria.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-3	40 ml vial	3	HCL	VOC	1355
MW-3	1 liter amber	2	HCL	PAH	1355

Comments \_\_\_\_\_

Signature \_\_\_\_\_  \_\_\_\_\_

Date 8/12/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/13/08
Project No:	12842-001-300	Time:	Start 1033
Site Location:	Superior, Wisconsin		Finish 1047
Weather Conds:	70 degrees F, clear	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 20.35 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 6.17  | d. Casing Diameter | 2"  | e. Length of Water Column                | 14.18 (a-b)                         |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 2.3                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1038	0.36	10.8	8.64	2.821	11	1.93	-92.5	Lt. Grey	---
1041	0.57	11.17	8.15	2.819	13	1.94	-98.8	Lt. Grey	---
1044	0.78	11.51	7.83	2.846	11	2.6	-110.5	Lt. Grey	---
1047	1	11.57	7.69	2.851	7.7	2.79	-118.5	Lt. Grey	---

e. Acceptance criteria pass/fail  
 Has required volume been removed Yes  No  N/A  
 Has required turbidity been reached    
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-4	40 ml vial	3	HCL	VOC	1050
MW-4	1 liter amber	2	HCL	PAH	1050

Comments \_\_\_\_\_

Signature \_\_\_\_\_ 

Date 8/13/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/12/08
Project No:	12842-001-300	Time:	Start 1235
Site Location:	Superior, Wisconsin		Finish 1300
Weather Conds:	80 degrees F, lt. rain	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 20.32 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 8.49  | d. Casing Diameter | 2"  | e. Length of Water Column                | 11.83 (a-b)                         |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 1.9                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1240	0.5	10.22	8.56	0.770	1.4	1.27	-121.5	Clear	---
1245	1.0	10.27	8.15	0.782	2.4	0.47	-139.9	Clear	---
1250	1.5	10.26	8.03	0.774	0.45	0.32	-135.1	Clear	---
1255	2.0	10.26	7.91	0.775	0.55	0.27	-139.5	Clear	---
1300	2.5	10.31	7.87	0.778	0.55	0.28	-141.8	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed Yes  No  N/A  
 Has required turbidity been reached    
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-5	40 ml vial	3	HCL	VOC	1305
MW-5	1 liter amber	2	HCL	PAH	1305

Comments \_\_\_\_\_

Signature \_\_\_\_\_

Date 8/12/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/12/08
Project No:	12842-001-300	Time:	Start 1115
Site Location:	Superior, Wisconsin		Finish 1140
Weather Conds:	80 degrees F, lt. rain	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 20.33 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 10.17 | d. Casing Diameter | 2"  | e. Length of Water Column                | 10.16 (a-b)                         |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 1.7                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1120	1.0	16.94	12.28	3.570	3.8	3.19	-123.9	Clear	---
1125	2.0	16.97	12.45	3.875	1.1	0.90	-106.9	Clear	---
1130	3.0	16.99	12.47	3.998	0.65	0.61	-103.2	Clear	---
1135	4.0	17.00	12.48	4.078	0.40	0.39	-102.8	Clear	---
1140	5.0	17.02	12.48	4.091	0.50	0.36	-103.6	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed Yes  No  N/A  
 Has required turbidity been reached    
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-6	40 ml vial	3	HCL	VOC	1145
MW-6	1 liter amber	2	HCL	PAH	1145

Comments \_\_\_\_\_

Signature \_\_\_\_\_  \_\_\_\_\_

Date 8/12/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/12/08
Project No:	12842-001-300	Time:	Start 1040
Site Location:	Superior, Wisconsin		Finish 1100
Weather Conds:	75 degrees F, lt. rain	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 20.3  | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 11.55 | d. Casing Diameter | 2"  | e. Length of Water Column                | 8.75 (a-b)                          |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 1.4                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)

- Maximum Allowable Turbidity 10 NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:	Make YSI	Model 556	Serial Number 07L100205
----------------------------------	-------------	--------------	----------------------------

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1045	0.88	9.58	6.80	1.546	11	2.12	-113.5	Lt. Grey	---
1050	1.75	9.45	6.73	1.527	5.6	2.45	-117.6	Clear	---
1055	2.6	9.37	6.69	1.488	4.8	3.40	-116.6	Clear	---
1100	3.5	9.38	6.66	1.475	5.5	3.38	-115.0	Clear	---

e. Acceptance criteria pass/fail

Yes No N/A 

Has required volume been removed

Has required turbidity been reached

Have parameters stabilized

If no or N/A - Explain below.

No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-7	40 ml vial	3	HCL	VOC	1105
MW-7	1 liter amber	2	HCL	PAH	1105

Comments \_\_\_\_\_

Signature \_\_\_\_\_  \_\_\_\_\_

Date 8/12/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/13/08
Project No:	12842-001-300	Time:	Start 0820
Site Location:	Superior, Wisconsin		Finish 0834
Weather Conds:	80 degrees F, overcast	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 19.95 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 12.6  | d. Casing Diameter | 2"  | e. Length of Water Column                | 7.35 (a-b)                          |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 1.2                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
825	0.9	13.80	12.40	3.509	50	1.52	-199.9	Brown	---
828	1.4	13.44	12.44	3.685	15	1.27	-208.6	Clear	---
831	2.0	13.01	12.47	3.856	11	1.09	-206.4	Clear	---
834	2.5	12.70	12.48	3.914	10	1.04	-200.5	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed Yes  No  N/A  
 Has required turbidity been reached    
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-8	40 ml vial	3	HCL	VOC	840
MW-8	1 liter amber	2	HCL	PAH	840

Comments \_\_\_\_\_

Signature \_\_\_\_\_

Date 8/13/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/13/08
Project No:	12842-001-300	Time:	Start 0708
Site Location:	Superior, Wisconsin		Finish 1745
Weather Conds:	Collector(s) Dan Phelps		

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |      |                    |     |  |                                     |
|----------------------|------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 20.2 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 8.58 | d. Casing Diameter | 2"  | e. Length of Water Column                | 11.62 (a-b)                         |
|                      |      |                    |     | f. Calculated Well Volume (see back)     | 1.89                                |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
715	0.65	11.67	6.86	0.901	19	4.07	-188.5	Dark Grey	---
720	1.00	11.32	7.16	0.910	23	4.16	-254.6	Grey	---
725	1.50	11.10	7.30	0.915	29	4.14	-280.6	Clear	---
730	2.00	11.12	7.47	0.902	21	4.87	-302.4	Clear	---
735	2.50	11.00	7.74	0.885	20	5.30	-315.8	Clear	---
740	3.00	11.01	8.00	0.878	18	5.92	-322.9	Clear	---
745	3.50	10.94	8.07	0.875	35	6.19	-323.3	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed  Yes  No  N/A  
 Has required turbidity been reached   
 Have parameters stabilized

If no or N/A - Explain below.

No minimum purge volume established.

The turbidity of groundwater in formation is above criteria.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-9	40 ml vial	3	HCL	VOC	750
MW-9	1 liter amber	2	HCL	PAH	750

Comments \_\_\_\_\_

Signature \_\_\_\_\_

Date 8/13/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	_8/12/08_
Project No:	12842-001-300	Time:	Start _1735_
Site Location:	Superior, Wisconsin		Finish _1755_
Weather Conds:	80 degrees F, overcast	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |   |  |     |       |
|----------------------|-------|--------------------|---|--|-----|-------|
| a. Total Well Length | _____ | c. Casing Material | PVC   | Well <input checked="" type="checkbox"/> Piezometer <input type="checkbox"/> |     |       |
| b. Water Table Depth | 3.85  | d. Casing Diameter | 2"  | e. Length of Water Column  | 7.7 | (a-b) |
|                      |       |                    | f. Calculated Well Volume (see back) 1.3_____ |  |     |       |

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:      Make      Model      Serial Number  
 YSI                    556                    07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1740	0.9	11.83	6.90	0.782	70	1.07	---	Grey	---
1745	1.8	11.61	6.91	0.775	55	0.95	-258.7	Grey	---
1750	2.6	11.66	6.95	0.785	24	0.84	-280.5	Grey	---
1755	3.5	11.69	6.98	0.789	24	0.8	-284.9	Grey	---

e. Acceptance criteria pass/fail  
 Has required volume been removed  Yes  No  N/A  
 Has required turbidity been reached   
 Have parameters stabilized

If no or N/A - Explain below.

No minimum purge volume established.

The turbidity of groundwater in formation is above criteria.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-10	40 ml vial	3	HCL	VOC	1755
MW-10	1 liter amber	2	HCL	PAH	1755
MW-10 DUP	40 ml vial	3	HCL	VOC	1800
MW-10 DUP	1 liter amber	2	HCL	PAH	1800

Comments \_\_\_\_\_

Signature \_\_\_\_\_  \_\_\_\_\_

Date \_\_\_ 8/12/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/12/08
Project No:	12842-001-300	Time:	Start 1812
Site Location:	Superior, Wisconsin		Finish 1835
Weather Conds:	80 degrees F, overcast	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |      |                    |     |  |
|----------------------|------|--------------------|-----|--|
| a. Total Well Length | 14.1 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 7.62 | c. Casing Diameter | 2"  | e. Length of Water Column 6.48 (a-b)   |
|                      |      |                    |     | f. Calculated Well Volume (see back) 1.1                                     |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1815	1.0	11.13	7.12	0.697	300	5.8	-131.1	Brown	---
1820	2.0	10.99	6.94	0.689	100	1.1	-138.8	Brown	---
1825	3.0	11.05	6.85	0.697	25	0.69	-148.4	Brown	---
1830	4.0	11.02	6.80	0.697	18	0.57	-147.9	Clear	---
1835	5.0	11.06	6.78	0.703	9.5	0.53	-152.5	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed Yes  No  N/A  
 Has required turbidity been reached    
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-11	40 ml vial	3	HCL	VOC	1840
MW-11	1 liter amber	2	HCL	PAH	1840

Comments \_\_\_\_\_

Signature \_\_\_\_\_ 

Date 8/12/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/12/08
Project No:	12842-001-300	Time:	Start 1530
Site Location:	Superior, Wisconsin		Finish 1550
Weather Conds:	80 degrees F, overcast	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 12.65 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 5.51  | d. Casing Diameter | 2"  | e. Length of Water Column                | 7.14 (a-b)                          |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 1.2                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1535	1.3	14.91	6.76	0.795	65	3.77	-82.2	Lt. Brown	None
1540	2.5	15.03	6.73	0.844	45	1.26	-90.1	Clear	None
1545	3.8	14.94	6.71	0.859	23	1.03	-94.5	Clear	None
1550	5.0	14.91	6.71	0.862	10	0.94	-97.3	Clear	None

e. Acceptance criteria pass/fail  
 Has required volume been removed Yes  No  N/A  
 Has required turbidity been reached    
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-12	40 ml vial	3	HCL	VOC	1555
MW-12	1 liter amber	2	HCL	PAH	1555

Comments \_\_\_\_\_

Signature \_\_\_\_\_

Date 8/12/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	_8/13/08_
Project No:	12842-001-300	Time:	Start _1108_
Site Location:	Superior, Wisconsin		Finish _1120_
Weather Conds:	75 degrees F, clear	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | _____ | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 5.87  | d. Casing Diameter | 2"  | e. Length of Water Column                | 11.93_ (a-b)                        |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 1.9_____                            |

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:      Make      Model      Serial Number  
 \_\_\_\_\_ YSI      556      07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1111	0.25	11.18	7.49	2.450	6.1	3.54	-53.5	Clear	---
1114	0.50	11.34	7.38	2.410	3.8	2.79	-54.1	Clear	---
1117	0.75	11.35	7.31	2.366	4.5	2.56	-53.1	Clear	---
1120	1.00	11.75	7.24	2.337	4.4	2.46	-51.6	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed  Yes  No  N/A  
 Has required turbidity been reached   
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:**      Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-13	40 ml vial	3	HCL	VOC	1125
MW-13	1 liter amber	2	HCL	PAH	1125

Comments \_\_\_\_\_

Signature \_\_\_\_\_  \_\_\_\_\_

Date \_\_\_ 8/13/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/12/08
Project No:	12842-001-300	Time:	Start 1850
Site Location:	Superior, Wisconsin		Finish 1904
Weather Conds:	80 degrees F, overcast	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 20.84 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 8.1   | d. Casing Diameter | 2"  | e. Length of Water Column                | 12.74 (a-b)                         |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 2.1                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1855	0.25	11.15	7.12	2.049	6.5	1.96	-58.0	Clear	---
1858	0.50	11.46	7.12	2.118	4.3	0.85	-57.7	Clear	---
1901	0.75	11.59	7.12	2.104	3.3	0.72	-59.0	Clear	---
1904	1.00	11.70	7.13	2.037	2.4	0.74	-61.4	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed Yes  No  N/A   
 Has required turbidity been reached    
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-14	40 ml vial	3	HCL	VOC	1905
MW-14	1 liter amber	2	HCL	PAH	1905

Comments \_\_\_\_\_

Signature \_\_\_\_\_ 

Date 8/12/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/12/08
Project No:	12842-001-300	Time:	Start 1445
Site Location:	Superior, Wisconsin		Finish 1505
Weather Conds:	80 degrees F, overcast	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 17.44 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 7.07  | d. Casing Diameter | 2"  | e. Length of Water Column                | 10.37 (a-b)                         |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 1.7                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:  
 Make YSI Model 556 Serial Number 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1450	0.88	13.29	6.94	0.677	70	1.68	-93.3	Lt. Brown	---
1455	1.75	13.13	6.84	0.682	36	1.25	-93.3	Lt. Brown	---
1500	2.6	12.97	6.80	0.685	17	1.15	-97.3	Clear	---
1505	3.5	12.88	6.79	0.682	9	1.15	-99.3	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed Yes  No  N/A  
 Has required turbidity been reached    
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-15	40 ml vial	3	HCL	VOC	1510
MW-15	1 liter amber	2	HCL	PAH	1510
MW-15 DUP	40 ml vial	3	HCL	VOC	1515
MW-15 DUP	1 liter amber	2	HCL	PAH	1515

Comments \_\_\_\_\_

Signature \_\_\_\_\_

Date 8/12/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/12/08
Project No:	12842-001-300	Time: Start	1610
Site Location:	Superior, Wisconsin	Finish	1630
Weather Conds:	80 degrees F, overcast	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 17.05 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 12.18 | d. Casing Diameter | 2"  | e. Length of Water Column                | 4.87 (a-b)                          |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 0.8                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1615	1.0	12.76	7.02	0.641	9.3	0.87	11.1	Clear	---
1620	2.0	12.69	7.00	0.645	2.7	0.57	11.4	Clear	---
1625	3.0	12.67	6.99	0.646	3.0	0.47	11.6	Clear	---
1630	4.0	12.65	7.00	0.648	1.4	0.44	11.5	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed Yes  No  N/A  
 Has required turbidity been reached    
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-16	40 ml vial	3	HCL	VOC	1635
MW-16	1 liter amber	2	HCL	PAH	1635

Comments \_\_\_\_\_

Signature \_\_\_\_\_ 

Date 8/12/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/13/08
Project No:	12842-001-300	Time:	Start 1334
Site Location:	Superior, Wisconsin		Finish 1350
Weather Conds:	80 degrees F, pt. cloudy	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |      |                    |     |  |                                     |
|----------------------|------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 17.4 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 8.31 | d. Casing Diameter | 2"  | e. Length of Water Column                | 9.09 (a-b)                          |
|                      |      |                    |     | f. Calculated Well Volume (see back)     | 1.5                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1340	1.4	13.50	6.39	0.508	210	3.07	-16.0	Brown	---
1345	2.7	13.34	6.40	0.505	50	2.20	-34.9	Brown	---
1350	4.0	13.25	6.39	0.511	32	2.03	-42.2	Brown	---

e. Acceptance criteria pass/fail  
 Has required volume been removed  Yes  No  N/A  
 Has required turbidity been reached   
 Have parameters stabilized

If no or N/A - Explain below.

No minimum purge volume established.

The turbidity of groundwater in formation is above criteria.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-17	40 ml vial	3	HCL	VOC	1355
MW-17	1 liter amber	2	HCL	PAH	1355

Comments \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/13/08
Project No:	12842-001-300	Time:	Start 0939
Site Location:	Superior, Wisconsin		Finish 1002
Weather Conds:	80 degrees F, pt. cloudy	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 11.02 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 3.58  | d. Casing Diameter | 2"  | e. Length of Water Column                | 7.44 (a-b)                          |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 1.2                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make Model Serial Number  
 YSI 556 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
945	1.0	14.70	12.78	7.274	13	1.41	-77.2	Clear	---
950	0.9	11.85	12.85	6.927	26	1.30	-75.0	Lt. brown	---
953	2.4	11.01	12.86	6.550	70	1.42	-74.6	Brown	---
956	2.9	10.38	12.86	6.000	120	1.42	-76.2	Brown	---
959	3.5	9.97	12.83	5.482	80	1.04	-86.2	Brown	---
1002	4.0	9.83	12.83	5.385	45	1.03	-93.9	Brown	---

e. Acceptance criteria pass/fail  
 Has required volume been removed  Yes  No  N/A  
 Has required turbidity been reached   
 Have parameters stabilized

If no or N/A - Explain below.

No minimum purge volume established.

The turbidity of groundwater in formation is above criteria.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-18	40 ml vial	3	HCL	VOC	1005
MW-18	1 liter amber	2	HCL	PAH	1005

Comments \_\_\_\_\_

Signature \_\_\_\_\_

Date 8/13/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/12/08
Project No:	12842-001-300	Time:	Start 1645
Site Location:	Superior, Wisconsin		Finish 1705
Weather Conds:	80 degrees F, overcast	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 11.92 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 3.42  | d. Casing Diameter | 2"  | e. Length of Water Column                | 8.50 (a-b)                          |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 1.4                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:  
 Make YSI Model 556 Serial Number 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1650	1.0	19.11	7.08	0.394	15	3.80	-7.8	Clear	---
1655	2.0	19.02	6.97	0.408	2.0	0.59	-10.7	Clear	---
1700	3.0	18.96	6.95	0.409	1.6	0.47	-10.8	Clear	---
1705	4.0	18.91	6.93	0.408	1.4	0.44	-10.3	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed Yes  No  N/A  
 Has required turbidity been reached    
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-19	40 ml vial	3	HCL	VOC	1710
MW-19	1 liter amber	2	HCL	PAH	1710

Comments \_\_\_\_\_

Signature \_\_\_\_\_ 

Date 8/12/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/13/08
Project No:	12842-001-300	Time: Start	1258
Site Location:	Superior, Wisconsin	Finish	1320
Weather Conds:	80 degrees F, pt. cloudy	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 15.00 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 3.10  | d. Casing Diameter | 2"  | e. Length of Water Column                | 11.9 (a-b)                          |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 1.9                                 |

**WELL PURGING DATA**

a. Purge Method Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:  
 Make YSI Model 556 Serial Number 07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1305	1.5	12.70	6.91	0.880	19	5.86	-107.8	Clear	---
1310	2.5	12.85	6.84	0.876	15	3.94	-116.0	Clear	---
1315	3.5	12.84	6.81	0.872	13	3.17	-118.9	Clear	---
1320	4.5	12.87	6.80	0.870	12	3.06	-119.5	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed  Yes  No  N/A  
 Has required turbidity been reached   
 Have parameters stabilized

If no or N/A - Explain below.

No minimum purge volume established.

The turbidity of groundwater in formation is above criteria.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-20	40 ml vial	3	HCL	VOC	1325
MW-20	1 liter amber	2	HCL	PAH	1325

Comments \_\_\_\_\_

Signature \_\_\_\_\_ 

Date 8/13/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/13/08
Project No:	12842-001-300	Time: Start	1404
Site Location:	Superior, Wisconsin	Finish	1425
Weather Conds:	80 degrees F, pt. cloudy	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |       |                    |     |  |                                     |
|----------------------|-------|--------------------|-----|--|-------------------------------------|
| a. Total Well Length | 17.67 | c. Casing Material | PVC | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | 9.46  | d. Casing Diameter | 2"  | e. Length of Water Column                | 8.21 (a-b)                          |
|                      |       |                    |     | f. Calculated Well Volume (see back)     | 1.3                                 |

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:      Make      Model      Serial Number  
 \_\_\_\_\_ YSI      556      07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
1410	1.0	13.80	6.95	1.076	11	7.09	20.6	Clear	---
1415	2.0	13.65	6.97	1.135	6.4	3.05	20.9	Clear	---
1420	3.0	13.62	6.94	1.142	5.9	2.85	21.5	Clear	---
1425	4.0	13.61	6.96	1.145	4.8	2.77	21.9	Clear	---

e. Acceptance criteria pass/fail  
 Has required volume been removed  Yes  No  N/A  
 Has required turbidity been reached   
 Have parameters stabilized

If no or N/A - Explain below.  
 No minimum purge volume established.

**SAMPLE COLLECTION:**      Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-21	40 ml vial	3	HCL	VOC	1430
MW-21	1 liter amber	2	HCL	PAH	1430

Comments \_\_\_\_\_

Signature \_\_\_\_\_  \_\_\_\_\_

Date 8/13/2008

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	8/13/08
Project No:	12842-001-300	Time: Start	0856
Site Location:	Superior, Wisconsin	Finish	0915
Weather Conds:	80 degrees F, overcast	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                      |              |                    |            |  |                                     |
|----------------------|--------------|--------------------|------------|--|-------------------------------------|
| a. Total Well Length | <u>17.71</u> | c. Casing Material | <u>PVC</u> | Well <input checked="" type="checkbox"/> | Piezometer <input type="checkbox"/> |
| b. Water Table Depth | <u>7.29</u>  | d. Casing Diameter | <u>2"</u>  | e. Length of Water Column                | <u>10.44</u> (a-b)                  |
|                      |              |                    |            | f. Calculated Well Volume (see back)     | <u>1.7</u>                          |

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)  
 - Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:      Make      Model      Serial Number  
 \_\_\_\_\_ YSI      556      07L100205

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Odor
903	1.0	11.83	12.86	7.144	120	6.03	-87.0	Red-brown	---
906	1.5	11.81	12.86	7.090	39	3.82	-85.0	Red-brown	---
909	2.0	11.77	12.86	7.108	34	3.18	-82.9	Red-brown	---
912	2.5	11.79	12.86	1.138	31	2.92	-81.9	Red-brown	---
915	3.0	11.78	12.86	1.173	27	2.76	-81.2	Red-brown	---

e. Acceptance criteria pass/fail  
 Has required volume been removed  Yes  No  N/A  
 Has required turbidity been reached   
 Have parameters stabilized

If no or N/A - Explain below.

No minimum purge volume established.

The turbidity of groundwater in formation is above criteria.

**SAMPLE COLLECTION:** Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-22	40 ml vial	3	HCL	VOC	920
MW-22	1 liter amber	2	HCL	PAH	920

Comments \_\_\_\_\_

Signature \_\_\_\_\_  \_\_\_\_\_

Date 8/13/2008



Well/Piezo ID: MW-6

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	7/22/09
Project No:	12842-001-300	Time: Start	0900
Site Location:	Superior, Wisconsin	Finish	0913
Weather Conds:	65 degrees F, clear	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- a. Total Well Length 20.33 c. Casing Material PVC e. Length of Water Column 10.97 (a-b)  
b. Water Table Depth 9.36 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.8

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and dedicated tubing

b. Acceptance Criteria defined (from workplan)

- Maximum Allowable Turbidity 10 NTUs  
- Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make YSI Model 556 Serial Number 600336-4M

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Other
904	0.5	15.41	12.07	4,950	0.10	0.33	-426.3	Clear	
907	1.0	15.56	12.09	4,975	0.33	0.23	-406.7	Clear	
910	1.5	15.66	12.11	4,971	0.52	0.18	-377.0	Clear	
913	2.0	15.70	12.12	4,961	0.17	0.16	-378.3	Clear	

e. Acceptance criteria pass/fail

Yes

No

N/A

Has required volume been removed Has required turbidity been reached Have parameters stabilized 

If no or N/A - Explain below.

No minimum purge volume established.

**SAMPLE COLLECTION:**Method: Peristaltic pump and dedicated tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-6	40 ml vial	3	HCL	VOC	915
MW-6	1 liter amber	2	None	PAH	915
MW-6	250 ml poly	1	HNO3	Iron, total	915

Comments \_\_\_\_\_

Signature \_\_\_\_\_  \_\_\_\_\_Date 7/22/2009



Well/Piezo ID: MW-7

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	7/22/09
Project No:	12842-001-300	Time: Start	0927
Site Location:	Superior, Wisconsin	Finish	0941
Weather Conds:	65 degrees F, clear	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- a. Total Well Length 20.3 c. Casing Material PVC e. Length of Water Column 10.03 (a-b)  
b. Water Table Depth 10.27 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.6

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and dedicated tubing

b. Acceptance Criteria defined (from workplan)

- Maximum Allowable Turbidity 10 NTUs  
- Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make YSI Model 556 Serial Number 600336-4M

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Other
930	0.6	8.92	8.50	2,889	9.10	4.62	-310.4	Lt. Brown	
933	1.3	8.71	7.58	2,840	8.73	0.65	-260.6	Lt. Brown	
938	1.9	8.71	7.39	2,849	6.20	0.39	-262.6	Lt. Brown	
941	2.5	8.70	7.28	2,843	4.49	0.36	-263.0	Lt. Brown	

e. Acceptance criteria pass/fail

Yes

No

N/A

Has required volume been removed Has required turbidity been reached Have parameters stabilized 

If no or N/A - Explain below.

No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and dedicated tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-7	40 ml vial	3	HCL	VOC	945
MW-7	1 liter amber	2	None	PAH	945
MW-7	250 ml poly	1	HNO3	Iron, total	945

Comments \_\_\_\_\_

Signature \_\_\_\_\_  \_\_\_\_\_Date 7/22/2009

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power		Date: <u>7/22/09</u>
Project No:	<u>12842-001-300</u>		Time: Start <u>1245</u>
Site Location:	Superior, Wisconsin		Finish <u>1301</u>
Weather Conds:	<u>75 degrees F, clear</u>	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

a. Total Well Length 19.95 c. Casing Material PVC e. Length of Water Column 8.88 (a-b)  
 b. Water Table Depth 11.07 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.5

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and dedicated tubing

b. Acceptance Criteria defined (from workplan)

- Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make YSI Model 556 Serial Number 600336-4M

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Other
1248	0.5	15.17	12.37	5,524	72.0	0.41	-367.1	Brown	
1252	1.0	15.78	12.33	5,540	15.0	0.22	-386.2	Brown	
1255	1.5	15.63	12.28	5,702	14.2	0.16	-383.6	Clear	
1258	2.0	15.25	12.28	5,784	14.2	0.14	-378.9	Clear	
1301	2.5	14.99	12.27	5,851	8.9	0.13	-370.3	Clear	

e. Acceptance criteria pass/fail

Yes  No  N/A

Has required volume been removed

Has required turbidity been reached

Have parameters stabilized

If no or N/A - Explain below.

No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and dedicated tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-8	40 ml vial	3	HCL	VOC	1305
MW-8	1 liter amber	2	None	PAH	1305
MW-8	250 ml poly	1	HNO3	Iron, total	1305

Comments \_\_\_\_\_

Signature \_\_\_\_\_ Dan Phelps \_\_\_\_\_ Date 7/22/2009



Well/Piezo ID: MW-9

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	7/22/09
Project No:	12842-001-300	Time: Start	1318
Site Location:	Superior, Wisconsin	Finish	1333
Weather Conds:	75 degrees F, Pt. cloudy	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- a. Total Well Length 20.20 c. Casing Material PVC e. Length of Water Column 12.35 (a-b)  
b. Water Table Depth 7.85 d. Casing Diameter 2" f. Calculated Well Volume (see back) 2.0

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and dedicated tubing

b. Acceptance Criteria defined (from workplan)

- Maximum Allowable Turbidity 10 NTUs  
- Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make YSI Model 556 Serial Number 600336-4M

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Other
1321	0.5	12.04	9.18	1,432	2.78	0.58	-271.0	Clear	
1324	1.0	10.68	8.84	1,387	3.37	0.25	-308.1	Clear	
1327	1.5	10.53	8.72	1,375	3.79	0.17	-336.5	Clear	
1330	2.0	10.62	8.78	1,358	4.32	0.15	-369.0	Clear	
1333	2.5	10.45	8.89	1,357	4.62	0.14	-379.0	Clear	

e. Acceptance criteria pass/fail

Yes

No

N/A

Has required volume been removed Has required turbidity been reached Have parameters stabilized 

If no or N/A - Explain below.

No minimum purge volume established.

**SAMPLE COLLECTION:**Method: Peristaltic pump and dedicated tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-9	40 ml vial	3	HCL	VOC	1335
MW-9	1 liter amber	2	None	PAH	1335
MW-9	250 ml poly	1	HNO3	Iron, total	1335

Comments \_\_\_\_\_

Signature \_\_\_\_\_  \_\_\_\_\_Date 7/22/2009



Well/Piezo ID: MW-10

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	7/22/09
Project No:	12842-001-300	Time: Start	1423
Site Location:	Superior, Wisconsin	Finish	1435
Weather Conds:	65 degrees F, lt. rain	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- a. Total Well Length 11.55 c. Casing Material PVC e. Length of Water Column 8.86 (a-b)  
b. Water Table Depth 2.69 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.4

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and dedicated tubing

b. Acceptance Criteria defined (from workplan)

- Maximum Allowable Turbidity 10 NTUs  
- Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make YSI Model 556 Serial Number 600336-4M

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Other
1426	0.6	15.31	9.04	606	4.49	0.58	-200.4	Clear	
1429	1.3	14.94	8.12	587	2.40	0.47	-220.2	Clear	
1432	1.9	14.70	7.73	589	2.13	0.34	-215.6	Clear	
1435	2.5	14.47	7.42	591	1.46	0.32	-216.6	Clear	

e. Acceptance criteria pass/fail

Yes  No  N/A Has required volume been removed Has required turbidity been reached Have parameters stabilized 

If no or N/A - Explain below.

No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and dedicated tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-10	40 ml vial	3	HCL	VOC	1440
MW-10	1 liter amber	2	None	PAH	1440
MW-10	250 ml poly	1	HNO3	Iron, total	1440
MW-10 DUP	40 ml vial	3	HCL	VOC	1445
MW-10 DUP	1 liter amber	2	None	PAH	1445
MW-10 DUP	250 ml poly	1	HNO3	Iron, total	1445

Comments \_\_\_\_\_

Signature \_\_\_\_\_ Date 7/22/2009



Well/Piezo ID: MW-11

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	7/22/09
Project No:	12842-001-300	Time: Start	1454
Site Location:	Superior, Wisconsin	Finish	1506
Weather Conds:	70 degrees F, clear	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- a. Total Well Length 14.10 c. Casing Material PVC e. Length of Water Column 6.57 (a-b)  
b. Water Table Depth 7.53 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.1

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and disposable tubing

b. Acceptance Criteria defined (from workplan)

- Maximum Allowable Turbidity 10 NTUs  
- Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make YSI Model 556 Serial Number 600336-4M

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Other
1457	0.5	9.91	7.25	993	37.7	0.47	-220.3	Lt. Brown	
1500	1.0	9.85	7.23	988	47.3	0.34	-220.7	Lt. Brown	
1503	1.5	9.84	7.22	984	41.4	0.38	-222.0	Lt. Brown	
1506	2.0	9.82	7.24	983	33.9	0.37	-222.1	Lt. Brown	

e. Acceptance criteria pass/fail

Yes

No

N/A

Has required volume been removed Has required turbidity been reached Have parameters stabilized 

If no or N/A - Explain below.

No minimum purge volume established.

Water in formation above criteria.

**SAMPLE COLLECTION:** Method: Peristaltic pump and dedicated tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-11	40 ml vial	3	HCL	VOC	1510
MW-11	1 liter amber	2	None	PAH	1510
MW-11	250 ml poly	1	HNO3	Iron, total	1510

Comments \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_ 7/22/2009

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power		Date: <u>7/22/09</u>
Project No:	12842-001-300		Time: Start <u>1122</u>
Site Location:	Superior, Wisconsin		Finish <u>1136</u>
Weather Conds:	<u>75 degrees F, clear</u>	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- |                                   |                               |  |   |
|-----------------------------------|-------------------------------|--|---|
| a. Total Well Length <u>17.44</u> | c. Casing Material <u>PVC</u> | Well <input checked="" type="checkbox"/>     | Piezometer <input type="checkbox"/>             |
| b. Water Table Depth <u>6.60</u>  | d. Casing Diameter <u>2"</u>  | e. Length of Water Column <u>10.84</u> (a-b) | f. Calculated Well Volume (see back) <u>1.8</u> |

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and dedicated tubing

b. Acceptance Criteria defined (from workplan)

- |                               |           |      |
|-------------------------------|-----------|------|
| - Maximum Allowable Turbidity | <u>10</u> | NTUs |
| - Stabilization of parameters | <u>10</u> | %    |

c. Field Testing Equipment Used: Make YSI Model 556 Serial Number 600336-4M

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Other
1127	0.5	9.75	6.97	1,154	5.61	0.69	-226.1	Clear	
1130	1.0	9.82	6.97	954	10.72	0.40	-228.7	Clear	
1133	1.5	9.79	6.92	918	7.02	0.31	-230.3	Clear	
1136	2.0	9.96	6.89	902	9.81	0.31	-231.4	Clear	

e. Acceptance criteria pass/fail

Yes

No

N/A

Has required volume been removed Has required turbidity been reached Have parameters stabilized 

If no or N/A - Explain below.

No minimum purge volume established.

**SAMPLE COLLECTION:**Method: Peristaltic pump and dedicated tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-15	40 ml vial	3	HCL	VOC	1140
MW-15	1 liter amber	2	None	PAH	1140
MW-15	250 ml poly	1	HNO3	Iron, total	1140

Comments \_\_\_\_\_

Signature \_\_\_\_\_  \_\_\_\_\_Date 7/22/2009

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	7/22/09
Project No:	12842-001-300	Time: Start	1054
Site Location:	Superior, Wisconsin	Finish	1110
Weather Conds:	75 degrees F, clear	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- a. Total Well Length 15.00 c. Casing Material PVC e. Length of Water Column 11.64 (a-b)  
 b. Water Table Depth 3.36 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.9

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and dedicated tubing

b. Acceptance Criteria defined (from workplan)

- Maximum Allowable Turbidity 10 NTUs  
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make YSI Model 556 Serial Number 600336-4M

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Other
1058	0.5	12.04	7.05	1,391	2.22	1.09	-243.8	Clear	
1101	1.0	12.06	7.05	1,367	2.45	0.63	-247.4	Clear	
1104	1.5	12.05	7.08	1,360	2.31	0.52	-250.9	Clear	
1107	2.0	12.09	7.12	1,356	2.17	0.41	-253.1	Clear	
1110	2.5	12.10	7.17	1,355	2.84	0.37	-254.7	Clear	

e. Acceptance criteria pass/fail

Yes  No  N/A

Has required volume been removed

Has required turbidity been reached

Have parameters stabilized

If no or N/A - Explain below.

No minimum purge volume established.

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**SAMPLE COLLECTION:** Method: Peristaltic pump and dedicated tubing


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Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-20	40 ml vial	3	HCL	VOC	1110
MW-20	1 liter amber	2	None	PAH	1110
MW-20	250 ml poly	1	HNO3	Iron, total	1110

Comments \_\_\_\_\_

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Signature \_\_\_\_\_  Date 7/22/2009



Well/Piezo ID: MW-22

## Ground Water Sample Collection Record

Client:	Superior, Water, Light & Power	Date:	7/22/09
Project No:	12842-001-300	Time: Start	1352
Site Location:	Superior, Wisconsin	Finish	1401
Weather Conds:	70 degrees F, overcast	Collector(s)	Dan Phelps

**WATER LEVEL DATA: (measured from Top of Casing)**

- a. Total Well Length 17.71 c. Casing Material PVC e. Length of Water Column 11.61 (a-b)  
b. Water Table Depth 6.10 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.9

**WELL PURGING DATA**

a. Purge Method \_\_\_\_\_ Peristaltic pump and dedicated tubing

b. Acceptance Criteria defined (from workplan)

- Maximum Allowable Turbidity 10 NTUs  
- Stabilization of parameters 10 %

c. Field Testing Equipment Used: Make YSI Model 556 Serial Number 600336-4M

d. Field Testing Equipment Calibration Documentation Found in the project file

Time	Volume Removed (gal)	T° (C)	pH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Other
1355	0.7	10.48	12.66	11205	1.66	1.96	-363.5	Lt. Brown	
1358	1.3	10.45	12.65	11228.000	1.84	1.85	-345.6	Lt. Brown	
1401	2.0	10.41	12.65	11231	2.2	1.81	-340.5	Clear	

e. Acceptance criteria pass/fail Yes No N/A

Has required volume been removed

Has required turbidity been reached

Have parameters stabilized

If no or N/A - Explain below.

No minimum purge volume established.

**SAMPLE COLLECTION:** Method: Peristaltic pump and dedicated tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-22	40 ml vial	3	HCL	VOC	1410
MW-22	1 liter amber	2	None	PAH	1410
MW-22	250 ml poly	1	HNO3	Iron, total	1410

Comments \_\_\_\_\_

Signature \_\_\_\_\_ Date 7/22/2009