ASHLAND/NSP LAKEFRONT SITE
September 15, 2008 PROGRESS REPORT (No. 58)
WDNR BRRTS #02-02-00013
CERCLA Docket No. V-W-04-C-764
USEPA ID# WISFN057952

This is the fifty-eighth progress report prepared in accordance with the Administrative Order on Consent (AOC) for the Ashland/NSP Lakefront Site, effective November 14, 2003. This report covers activities completed during August 2008. It is intended to meet the requirements described in Task 8 of the Statement of Work appended to the AOC.

Field Activities Completed

Free-Product Recovery System

The recovery system operated with no shutdowns during August. During the 36-day period between July 30th and September 4th, a total of 305.7 gallons was collected by the removal system. This represents a rate of 8.5 gallons/day, an approximate 3.5 times increase in recovery from the previous daily rate calculated during July. This value is misleading, however; the storage tank, floating product surge tank, and oil water separator were evacuated by Northern Minnesota Services on August 26th for off-site disposal. On that date, 811 gallons were removed by the tanker truck (product removal from the surge tank and oil water separator added to the cumulative total during the 36-day period). During the subsequent monitoring event on September 4th, 195.6 gallons were measured in the storage tank, the result of further evacuation of the oil water separator by Coleman Engineering at that time.[1] This final measurement confirms that the cumulative removal of free-product has surpassed 10,000 gallons (10,159.8 gallons) since operation began.

During the same 36-day monitoring period, 28,433 gallons of groundwater were treated and discharged to the sanitary sewer. This includes a measurement of 6,741 gallons through the EW-4 meter. Although the previous report indicated that flow from EW-4 exceeded total system flow between May 29th and July 30th, measurements since July 30th appear consistent with earlier, normal operations.

The August water quality data indicates the treatment system continues to function properly. The total VOC concentration was reduced from 107,000 µg/l at the influent to 1.4 µg/l at the effluent. The air treatment system also shows optimum performance; no detections were measured at any of the monitoring points.

The summary of system monitoring data is included in Tables 1 – 5. Lab analysis reports for the system monitoring samples are included in the Appendix.

RI Activities

All RI field activities were completed during November 2005.

[1] The recovery rate between July 30th and August 20th was approximately 2 gal/day, based on 44.8 gallons recovered during the first 22 days of the monitoring period. This rate is comparable to that measured during July.

SITE Program Activities

The SITE injection program was completed on February 2, 2007 and all equipment demobilized from the Ashland site the week of February 5, 2007.

NSPW submitted comments to USEPA's SITE program team on the draft Innovative Technology Evaluation Report titled *Cool-Ox™ Technology Demonstration at Ashland MGP Lakefront Site* (June 2008) on August 18th.

Treatability Studies

NSPW submitted the draft Bench Scale Air Emissions Treatability Study report to USEPA for review on August 16, 2007. The Cap Flux Test Treatability Study report was submitted on September 18, 2007. The third and final treatability study report, the Multiphase Flow and Consolidation Testing Report, was submitted for review on October 26, 2007. NSPW subsequently submitted Addendum One to the Cap Flux Test Treatability Study report, the Extended Duration Column Test report, on January 9, 2008.

Groundwater Sampling

NSPW completed groundwater sampling of the entire well network between August 11th and August 20th in accordance with the approved *Supplementary Groundwater Sampling Plan*. This report includes August 2008 monitoring well water level information in Table 6, along with free-product (DNAPL) level information in Table 7. All historic levels are also provided for comparison. The water quality data is pending, and should be available for submittal with the next (October 2008) monthly report.

Reporting Activities Completed

Final RI Report

USEPA provided a formal RI Report approval letter to NSPW on February 5, 2008.

Revised Draft Feasibility Study (FS)

The revised draft FS, including the Remedial Action Objectives, Alternatives Screening and Comparative Analysis Memoranda, as well as the compiled Treatability Test Reports, were submitted to the USEPA on May 15, 2008. This submittal included responses to Agency comments to the initial draft FS submitted October 29, 2007. USEPA confirmed during August that its review comments for the latest draft will be forthcoming during September.

Field Activities Planned

Coleman Engineering continues to monitor the free-product removal system on a weekly basis

during September.

Reporting Activities Planned

NSPW is prepared to respond to Agency comments to the revised draft FS when they are received.

The next monthly report will be submitted on October 15, 2008.

Attachments:

Table 1 - Remediation System Water Quality Monitoring Results
Table 2 - Remediation System Air Monitoring Results
Table 3 - Summary of Free-Product and Groundwater Volume Removed
Table 4 – Remediation System – Air Treatment Summary
Table 5 – Remediation System – Water Treatment Summary
Table 6 – Summary of Historic Groundwater Elevations
Table 7 – Summary of Historic Free Phase Hydrocarbon Thickness

Appendix – Interim Treatment System - Laboratory Reporting Forms

Table 1
Remediation System Water Quality Monitoring Results
Northern States Power, Ashland, Wisconsin

August 2008

Analyte	Units	Influent	Precarbon	Effluent	Trip Blank	[1]POTW	Method	[3]Frequency
VOCs								
1,1,1,2-TETRACHLOROETHANE	ug/L	<990	<0.39	<0.39	<0.39	--	EPA 8260	Monthly
1,1,1-TRICHLOROETHANE	ug/L	<840	<0.34	<0.34	<0.34	--	EPA 8260	Monthly
1,1,2,2-TETRACHLOROETHANE	ug/L	<1200	<0.49	<0.49	<0.49	--	EPA 8260	Monthly
1,1,2-TRICHLOROETHANE	ug/L	<1100	<0.43	<0.43	<0.43	--	EPA 8260	Monthly
1,1-DICHLOROETHANE	ug/L	<870	<0.35	<0.35	<0.35	--	EPA 8260	Monthly
1,1-DICHLOROETHENE	ug/L	<850	<0.34	<0.34	<0.34	--	EPA 8260	Monthly
1,1-DICHLOROPROPENE	ug/L	<840	<0.33	<0.33	<0.33	--	EPA 8260	Monthly
1,2,3-TRICHLOROBENZENE	ug/L	<980	<0.39	<0.39	<0.39	--	EPA 8260	Monthly
1,2,3-TRICHLOROPROPANE	ug/L	<1900	<0.76	<0.76	<0.76	--	EPA 8260	Monthly
1,2,4-TRICHLOROBENZENE	ug/L	<860	<0.34	<0.34	<0.34	--	EPA 8260	Monthly
1,2,4-TRIMETHYLBENZENE	ug/L	<1000	<0.4	<0.4	<0.4	--	EPA 8260	Monthly
1,2-DIBROMO-3-CHLOROPROPANE	ug/L	<1300	<0.51	<0.51	<0.51	--	EPA 8260	Monthly
1,2-DIBROMOETHANE	ug/L	<760	<0.3	<0.3	<0.3	--	EPA 8260	Monthly
1,2-DICHLOROBENZENE	ug/L	<950	<0.38	<0.38	<0.38	--	EPA 8260	Monthly
1,2-DICHLOROETHANE	ug/L	<1200	<0.47	<0.47	<0.47	--	EPA 8260	Monthly
1,2-DICHLOROPROPANE	ug/L	<970	<0.39	<0.39	<0.39	--	EPA 8260	Monthly
1,3,5-TRIMETHYLBENZENE	ug/L	<1000	<0.41	<0.41	<0.41	--	EPA 8260	Monthly
1,3-DICHLOROBENZENE	ug/L	<960	<0.38	<0.38	<0.38	--	EPA 8260	Monthly
1,3-DICHLOROPROPANE	ug/L	<910	<0.36	<0.36	<0.36	--	EPA 8260	Monthly
1,4-DICHLOROBENZENE	ug/L	<870	<0.35	<0.35	<0.35	--	EPA 8260	Monthly
2,2-DICHLOROPROPANE	ug/L	<1400	<0.54	<0.54	<0.54	--	EPA 8260	Monthly
2-CHLOROTOLUENE	ug/L	<1000	<0.41	<0.41	<0.41	--	EPA 8260	Monthly
4-CHLOROTOLUENE	ug/L	<1000	<0.42	<0.42	<0.42	--	EPA 8260	Monthly
BENZENE	ug/L	**42000**	<0.42	<0.42	<0.42	--	EPA 8260	Monthly
BROMOBENZENE	ug/L	<1000	<0.41	<0.41	<0.41	--	EPA 8260	Monthly
BROMOCHLOROMETHANE	ug/L	<940	<0.38	<0.38	<0.38	--	EPA 8260	Monthly
BROMODICHLOROMETHANE	ug/L	<880	<0.35	<0.35	<0.35	--	EPA 8260	Monthly
BROMOFORM	ug/L	<960	<0.38	<0.38	<0.38	--	EPA 8260	Monthly
BROMOMETHANE	ug/L	<1400	<0.56	<0.56	<0.56	--	EPA 8260	Monthly
CARBON TETRACHLORIDE	ug/L	<690	<0.28	<0.28	<0.28	--	EPA 8260	Monthly
CHLOROBENZENE	ug/L	<970	<0.39	<0.39	<0.39	--	EPA 8260	Monthly
CHLOROETHANE	ug/L	<3500	<1.4	<1.4	<1.4	--	EPA 8260	Monthly
CHLOROFORM	ug/L	<1000	<0.42	**0.77J**	<0.42	--	EPA 8260	Monthly
CHLOROMETHANE	ug/L	<840	<0.33	<0.33	<0.33	--	EPA 8260	Monthly
CIS-1,2-DICHLOROETHYLENE	ug/L	<1000	<0.4	<0.4	<0.4	--	EPA 8260	Monthly
CIS-1,3-DICHLOROPROPENE	ug/L	<870	<0.35	<0.35	<0.35	--	EPA 8260	Monthly
CYMENE	ug/L	<900	<0.36	<0.36	<0.36	--	EPA 8260	Monthly
DIBROMOCHLOROMETHANE	ug/L	<910	<0.36	<0.36	<0.36	--	EPA 8260	Monthly
DIBROMOMETHANE	ug/L	<1100	<0.45	<0.45	<0.45	--	EPA 8260	Monthly
DICHLORODIFLUOROMETHANE	ug/L	<560	<0.22	<0.22	<0.22	--	EPA 8260	Monthly
ETHYLBENZENE	ug/L	**860J**	<0.33	<0.33	<0.33	--	EPA 8260	Monthly
HEXACHLOROBUTADIENE	ug/L	<810	<0.33	<0.33	<0.33	--	EPA 8260	Monthly
ISOPROPYL ETHER	ug/L	<840	<0.34	<0.34	<0.34	--	EPA 8260	Monthly
ISOPROPYLBENZENE (CUMENE)	ug/L	<810	<0.32	<0.32	<0.32	--	EPA 8260	Monthly
M,P-XYLENE (SUM OF ISOMERS)	ug/L	**3000**	**0.51J**	<0.26	<0.26	--	EPA 8260	Monthly
METHYLENE CHLORIDE	ug/L	<1000	<0.4	**0.64J**	<0.4	--	EPA 8260	Monthly
NAPHTHALENE	ug/L	**35000**	**1.8**	<0.37	<0.37	--	EPA 8260	Monthly
N-BUTYLBENZENE	ug/L	<910	<0.36	<0.36	<0.36	--	EPA 8260	Monthly
N-PROPYLBENZENE	ug/L	<1000	<0.4	<0.4	<0.4	--	EPA 8260	Monthly
O-XYLENE (1,2-DIMETHYLBENZENE)	ug/L	**1600J**	<0.32	<0.32	<0.32	--	EPA 8260	Monthly
SEC-BUTYLBENZENE	ug/L	<900	<0.36	<0.36	<0.36	--	EPA 8260	Monthly
STYRENE	ug/L	**4400**	<0.35	<0.35	<0.35	--	EPA 8260	Monthly
T-BUTYLBENZENE	ug/L	<940	<0.38	<0.38	<0.38	--	EPA 8260	Monthly
TERT-BUTYL METHYL ETHER	ug/L	<950	<0.38	<0.38	<0.38	--	EPA 8260	Monthly
TETRACHLOROETHYLENE (PCE)	ug/L	<760	<0.31	<0.31	<0.31	--	EPA 8260	Monthly
TOLUENE	ug/L	**21000**	<0.37	<0.37	<0.37	--	EPA 8260	Monthly
TRANS-1,2-DICHLOROETHENE	ug/L	<1200	<0.47	<0.47	<0.47	--	EPA 8260	Monthly
TRANS-1,3-DICHLOROPROPENE	ug/L	<940	<0.38	<0.38	<0.38	--	EPA 8260	Monthly
TRICHLOROETHYLENE (TCE)	ug/L	<1100	<0.43	<0.43	<0.43	--	EPA 8260	Monthly
TRICHLOROFLUOROMETHANE	ug/L	<680	<0.27	<0.27	<0.27	--	EPA 8260	Monthly
VINYL CHLORIDE	ug/L	<240	<0.095	<0.095	<0.095	--	EPA 8260	Monthly
Total VOCs	ug/L	**107,860**	**2.3**	**1.4**	**0**	[2]**1000**		

Collected August 7, 2008

< - Less Than Limit of Detection

J Between Limit of Detection and Limit of Quantification

Concentrations exceeding the POTW have been shaded

[1] POTW standards for effluent discharge

[2] 1000 = POTW standard for total BTEX and total PAH for effluent discharge

[3] BTEX and PVOCs collected monthly, remaining analytes collected semi-annually

Table 2
Remediation System Air Monitoring Results
Northern States Power, Ashland, Wisconsin

August 2008

Analyte	Units	Air Stripper	1st Stage Carbon	Effluent	Method	Frequency
VOCs						
Volume Collected	Liters	3.0	3.0	3.0		
Benzene	ug	<20	<20	<20	NIOSH 1501	Monthly
Benzene	mg/m^3	<6.67	<6.67	<4.0	NIOSH 1501	Monthly
Ethylbenzene	ug	<20	<20	<20	NIOSH 1501	Monthly
Ethylbenzene	mg/m^3	<6.67	<6.67	<4.0	NIOSH 1501	Monthly
Hydrocarbons (total)	ug	<30	<30	<30	NIOSH 1550	Monthly
Hydrocarbons (total)	mg/m^3	<10	<10	<6.0	NIOSH 1550	Monthly
Toluene	ug	<20	<20	<20	NIOSH 1501	Monthly
Toluene	mg/m^3	<6.67	<6.67	<4.0	NIOSH 1501	Monthly
Xylenes, Total	ug	<30	<30	<30	NIOSH 1501	Monthly
Xylenes, Total	mg/m^3	<10	<10	<6.0	NIOSH 1501	Monthly

Collected August 7, 2008

< - Less Than Limit of Detection

<> Between Limit of Detection and Limit of Quantification

Table 3
Summary of Free Product and Groundwater Volume Removed

Date	Cumulative Volume of Free Product Removed (gals)	Cumulative Volume of Free Product Removed (lbs)	Cumulative Volume of Groundwater Removed from Wells EW-1, EW-2, EW-3 (gals)	Cumulative Volume of Groundwater Removed from well EW-4 (gals)	Cumulative Volume of Total Groundwater Removed (gals)
20-Feb-01	554.2	4,853	22,826	0	22,826
30-Mar-01	850.0	7,443	44,613	0	44,613
26-Apr-01	915.2	8,014	56,978	0	56,978
17-May-01	1,078.2	9,442	58,967	0	58,967
11-Jun-01	1,291.2	11,307	61,094	0	61,094
31-Jul-01	1,535.2	13,444	65,758	0	65,758
15-Aug-01	1,578.0	13,819	65,758	0	65,758
12-Sep-01	1,578.0	14,193	81,524	0	81,524
28-Sep-01	1,789.9	15,674	104,500	0	104,500
12-Nov-01[1]	2,486.4	21,773	104,900	0	104,900
13-Nov-01	2,551.6	22,344	106,200	0	106,200
14-Nov-01	2,559.7	22,415	107,600	0	107,600
19-Nov-01	2,600.5	22,772	114,200	0	114,200
28-Nov-01	2,682.0	23,486	125,200	0	125,200
03-Dec-01	2,779.8	24,342	131,500	0	131,500
12-Dec-01	2,877.6	25,199	142,300	0	142,300
19-Dec-01	2,975.4	26,055	155,328	0	155,328
03-Jan-02	3,105.8	27,197	172,000	0	172,000
05-Feb-02	3,105.7	27,197	173,116	0	173,116
11-Feb-02	3,122.0	27,340	178,300	0	178,300
12-Feb-02	3,122.1	27,340	180,100	0	180,100
19-Feb-02	3,122.1	27,340	182,900	0	182,900
06-Mar-02	3,138.4	27,483	183,000	0	183,000
12-Mar-02	3,187.3	27,911	194,400	0	194,400
18-Mar-02	3,219.9	28,196	199,400	0	199,400
27-Mar-02	3,317.7	29,053	210,500	0	210,500
03-Apr-02	3,350.3	29,338	216,600	0	216,600
09-Apr-02	3,399.2	29,767	224,000	0	224,000
23-Apr-02	3,473.6	30,419	238,100	0	238,100
30-Apr-02	3,514.3	30,775	246,700	0	246,700
08-May-02	3,538.8	30,989	256,900	0	256,900
15-May-02	3,587.7	31,418	264,500	0	264,500
20-May-02	3,612.1	31,631	266,900	0	266,900
24-May-02	3,636.5	31,845	268,365	10,935	279,300
28-May-02	3,652.8	31,988	272,215	13,185	285,400
17-Jun-02	3,669.1	32,131	287,693	28,507	316,200
25-Jun-02	3,726.2	32,631	295,908	35,492	331,400
02-Jul-02	3,766.9	32,987	299,147	42,153	341,300
09-Jul-02	3,783.2	33,130	306,783	42,717	349,500
17-Jul-02	3,799.5	33,272	314,710	49,990	364,700
22-Jul-02	3,824.0	33,487	319,384	54,516	373,900
29-Jul-02	3,864.7	33,843	326,542	57,158	383,700
08-Aug-02	3,905.5	34,201	334,406	68,394	402,800
15-Aug-02	3,921.8	34,343	340,391	68,609	409,000
09-Sep-02	3,942.1	34,521	343,084	79,816	422,900
19-Sep-02	4,003.3	35,057	350,659	91,441	442,100
26-Sep-02	4,003.3	35,057	356,565	91,535	448,100
04-Oct-02	4,003.3	35,057	363,135	93,265	456,400
11-Oct-02	4,003.3	35,057	374,863	94,737	469,600
18-Oct-02	4,027.8	35,272	374,863	94,737	485,600
25-Oct-02	4,158.2	36,414	379,459	116,901	496,360
31-Oct-02	4,166.3	36,484	381,556	121,045	502,600
08-Nov-02	4,166.3	36,484	390,756	121,045	511,800
21-Nov-02	4,753.3	41,625	387,629	124,272	511,900
26-Nov-02	4,773.6	41,803	391,434	127,566	519,000
04-Dec-02	4,789.9	41,945	398,205	129,795	528,000
10-Dec-02	4,802.2	42,053	403,230	130,971	534,200
18-Dec-02	4,826.6	42,267	410,356	132,444	542,800
23-Dec-02	4,842.9	42,409	412,967	133,333	546,300
30-Dec-02	4,855.1	42,516	415,842	134,458	550,300
10-Jan-03	4,883.7	42,767	425,575	136,125	561,700
15-Jan-03	4,900.0	42,910	429,541	136,859	566,400
20-Jan-03	4,920.3	43,087	434,133	137,567	571,700
30-Jan-03	4,952.9	43,373	442,556	138,844	581,400
13-Feb-03	4,989.6	43,694	454,019	140,881	594,900
19-Feb-03	5,007.8	43,854	456,851	141,149	598,000
26-Feb-03	5,036.3	44,103	463,081	142,019	605,100
04-Mar-03	5,036.3	44,103.1	468,458	142,742	611,200
27-Mar-03	5,036.3	44,103.1	471,979	143,488	615,467
02-Apr-03	5,097.5	44,639	478,430	144,870	623,300
09-Apr-03	5,105.6	44,710	483,745	145,855	629,600

Table 3
Summary of Free Product and Groundwater Volume Removed

Date	Cumulative Volume of Free Product Removed (gals)	Cumulative Volume of Free Product Removed (lbs)	Cumulative Volume of Groundwater Removed from Wells EW-1, EW-2, EW-3 (gals)	Cumulative Volume of Groundwater Removed from well EW-4 (gals)	Cumulative Volume of Total Groundwater Removed (gals)
16-Apr-03	5,121.9	44,853	487,333	148,267	635,600
23-Apr-03[2]	4,910.0	42,997	492,504	152,796	645,300
29-Apr-03	4,926.3	43,140	495,729	155,771	651,500
07-May-03	4,926.3	43,140	499,877	158,223	658,100
15-May-03	4,926.3	43,140	499,877	158,223	658,100
21-May-03	4,942.6	43,283	515,230	172,470	687,700
28-May-03	4,958.9	43,425	522,943	175,357	698,300
03-Jun-03	4,967.1	43,497	524,602	176,598	701,200
10-Jun-03	4,975.2	43,568	529,728	178,472	708,200
17-Jun-03	4,983.4	43,640	534,411	179,789	714,200
26-Jun-03	4,983.4	43,640	540,050	180,950	721,000
02-Jul-03	4,983.4	43,640	543,291	181,909	725,200
09-Jul-03	4,983.4	43,640	549,991	181,909	731,900
16-Jul-03	4,991.5	43,711	553,174	185,526	738,700
22-Jul-03	4,999.7	43,783	556,643	186,957	743,600
30-Jul-03	5,007.8	43,854	560,726	188,074	748,800
06-Aug-03	5,040.4	44,139	562,275	188,825	751,100
20-Aug-03	5,081.2	44,496	567,361	191,139	758,500
28-Aug-03	5,138.2	44,995	570,561	191,139	761,700
04-Sep-03	5,316.7	46,559	572,759	191,841	764,600
11-Sep-03	5,382.7	47,137	575,659	191,841	767,500
19-Sep-03	5,423.5	47,494	579,259	191,841	771,100
25-Sep-03	5,366.4	46,994	578,399	197,101	775,500
03-Oct-03	5,382.7	47,137	584,399	197,101	781,500
09-Oct-03	5,399.0	47,279	583,771	198,229	782,000
24-Oct-03	5,452.0	47,743	589,679	200,821	790,500
29-Oct-03	5,481.5	48,002	592,579	200,821	793,400
06-Nov-03	5,530.4	48,430	596,979	200,821	797,800
13-Nov-03	5,546.7	48,573	598,764	200,836	799,600
11/192003	5,571.2	48,787	598,895	201,005	799,900
25-Nov-03	5,591.5	48,965	601,544	202,056	803,600
03-Dec-03	5,620.1	49,215	604,762	203,438	808,200
11-Dec-03	5,644.5	49,429	608,144	204,556	812,700
19-Dec-03	5,669.0	49,644	612,612	205,488	818,100
26-Dec-03	5,685.5	49,788	615,254	206,146	821,400
29-Dec-03	5,693.4	49,857	615,310	206,190	821,500
09-Jan-04	5,705.6	49,964	618,110	206,190	824,300
20-Jan-04	5,709.7	50,000	619,147	207,153	826,300
29-Jan-04	5,713.8	50,036	626,409	208,091	834,500
03-Feb-04	5,726.0	50,143	630,515	208,485	839,000
11-Feb-04	5,726.0	50,143	633,094	208,706	841,800
17-Feb-04	5,734.2	50,215	637,911	209,089	847,000
26-Feb-04	5,742.3	50,286	645,083	209,617	854,700
02-Mar-04	5,754.5	50,392	649,270	209,930	859,200
12-Mar-04	5,774.9	50,571	657,501	210,999	868,500
19-Mar-04	5,807.9	50,860	664,798	212,102	876,900
25-Mar-04	5,819.7	50,963	669,603	214,997	884,600
02-Apr-04	5,823.8	50,999	669,738	215,163	884,900
05-Apr-04	5,823.8	50,999	672,233	217,667	889,900
23-Apr-04	5,827.9	51,035	672,869	218,231	891,100
27-Apr-04	5,836.0	51,106	673,684	219,616	893,300
12-May-04	5,852.3	51,249	678,475	223,625	902,100
17-May-04	5,856.4	51,285	682,349	225,151	907,500
25-May-04	5,872.7	51,427	688,062	226,538	914,600
04-Jun-04	5,884.9	51,534	697,811	230,589	928,400
10-Jun-04	5,913.5	51,785	703,940	232,060	936,000
14-Jun-04	5,937.9	51,998	708,258	232,742	941,000
24-Jun-04	5,995.0	52,498	719,009	234,191	953,200
02-Jul-04	6,039.8	52,891	726,095	235,205	961,300
06-Jul-04	6,064.2	53,104	729,338	235,762	965,100
14-Jul-04	6,133.5	53,711	745,363	237,038	982,400
20-Jul-04	6,133.5	53,711	739,893	238,007	977,900
26-Jul-04	6,182.4	54,139	744,946	238,654	983,600
04-Aug-04	6,235.4	54,604	749,874	239,426	989,300
10-Aug-04	6,284.3	55,032	752,585	239,915	992,500
19-Aug-04	6,316.9	55,317	753,677	240,923	994,600
26-Aug-04	6,345.4	55,567	759,482	241,618	1,001,100
31-Aug-04	6,378.0	55,852	762,807	242,793	1,005,600
10-Sep-04	6,422.8	56,245	766,587	243,514	1,010,100
15-Sep-04	6,439.1	56,387	770,402	244,599	1,015,000
24-Sep-04	6,451.4	56,495	777,825	247,575	1,025,400

Table 3
Summary of Free Product and Groundwater Volume Removed

Date	Cumulative Volume of Free Product Removed (gals)	Cumulative Volume of Free Product Removed (lbs)	Cumulative Volume of Groundwater Removed from Wells EW-1, EW-2, EW-3 (gals)	Cumulative Volume of Groundwater Removed from well EW-4 (gals)	Cumulative Volume of Total Groundwater Removed (gals)
27-Sep-04	6,492.1	56,852	780,289	248,111	1,028,400
07-Oct-04	6,508.4	56,994	789,339	249,261	1,038,600
15-Oct-04	6,528.8	57,173	795,323	250,477	1,045,800
19-Oct-04	6,541.0	57,280	798,370	251,030	1,049,400
28-Oct-04	6,557.3	57,422	805,072	252,428	1,057,500
04-Nov-04	6,577.7	57,601	809,388	254,112	1,063,500
11-Nov-04	6,663.3	58,351	809,373	254,427	1,063,800
17-Nov-04	6,679.6	58,493	813,846	255,954	1,069,800
23-Nov-04	6,704.0	58,707	815,871	256,629	1,072,500
01-Dec-04	6,708.1	58,743	818,447	257,353	1,075,800
09-Dec-04	6,720.3	58,850	825,818	258,582	1,084,400
15-Dec-04	6,744.8	59,064	831,411	259,289	1,090,700
21-Dec-04	6,761.1	59,207	836,911	259,289	1,096,200
03-Jan-05	6,850.7	59,992	848,711	259,289	1,108,000
12-Jan-05	6,891.5	60,349	853,611	259,289	1,112,900
20-Jan-05	6,924.1	60,635	859,476	259,824	1,119,300
27-Jan-05	6,981.1	61,134	864,329	260,671	1,125,000
01-Feb-05	7,013.7	61,419	867,637	261,264	1,128,900
08-Feb-05	7,058.5	61,811	872,617	262,083	1,134,700
17-Feb-05	7,103.4	62,205	879,040	263,060	1,142,100
23-Feb-05	7,225.7	63,276	883,368	263,632	1,147,000
03-Mar-05	7,274.6	63,704	889,041	264,459	1,153,500
08-Mar-05	7,307.2	63,989	892,526	264,974	1,157,500
15-Mar-05	7,347.9	64,346	895,198	265,602	1,160,800
22-Mar-05	7,372.4	64,560	899,294	266,206	1,165,500
29-Mar-05	7,413.1	64,917	898,895	269,205	1,168,100
06-Apr-05	7,453.9	65,274	904,348	270,652	1,175,000
14-Apr-05	7,494.6	65,630	903,599	277,501	1,181,100
20-Apr-05	7,531.3	65,952	904,434	278,967	1,183,400
27-Apr-05	7,572.0	66,308	905,998	279,902	1,185,900
03-May-05	7,572.0	66,308	907,569	280,831	1,188,400
13-May-05	7,576.1	66,344	909,996	281,504	1,191,500
17-May-05	7,576.1	66,344	910,118	281,583	1,191,700
27-May-05	7,584.3	66,416	911,688	282,912	1,194,600
03-Jun-05	7,590.4	66,469	912,599	283,802	1,196,400
09-Jun-05	7,590.4	66,469	913,562	285,038	1,198,600
15-Jun-05	7,604.6	66,594	914,093	286,707	1,200,800
22-Jun-05	7,596.5	66,523	914,759	286,741	1,201,500
06-Jul-05	7,600.6	66,559	917,068	287,132	1,204,200
14-Jul-05	7,604.6	66,594	920,201	287,499	1,207,700
21-Jul-05	7,606.7	66,612	923,019	287,681	1,210,700
03-Aug-05	7,620.9	66,736	927,240	287,760	1,215,000
11-Aug-05	7,625.0	66,772	927,840	287,760	1,215,600
15-Aug-05	7,625.0	66,772	927,836	287,764	1,215,600
17-Aug-05	7,625.0	66,772	927,836	287,764	1,215,600
25-Aug-05	7,633.2	66,844	931,061	288,139	1,219,200
31-Aug-05	7,637.2	66,879	933,239	289,261	1,222,500
08-Sep-05	7,641.3	66,915	935,371	291,729	1,227,100
14-Sep-05	7,649.5	66,987	937,386	292,915	1,230,300
20-Sep-05	7,653.5	67,022	939,692	294,009	1,233,700
29-Sep-05	7,665.8	67,130	943,360	294,240	1,237,600
07-Oct-05	7,669.8	67,165	946,494	294,406	1,240,900
11-Oct-05	7,673.9	67,201	948,107	294,493	1,242,600
20-Oct-05	7,694.3	67,379	951,719	294,682	1,246,400
27-Oct-05	7,702.4	67,450	954,582	294,819	1,249,400
03-Nov-05	7,714.7	67,558	957,847	294,953	1,252,800
07-Nov-05	7,740.4	67,783	959,285	295,015	1,254,300
17-Nov-05	7,747.3	67,843	964,061	295,139	1,259,200
22-Nov-05	7,759.5	67,950	965,991	295,209	1,261,200
01-Dec-05	7,771.7	68,057	969,762	295,338	1,265,100
07-Dec-05	7,775.8	68,093	971,880	295,420	1,267,300
15-Dec-05	7,796.2	68,272	974,873	295,527	1,270,400
20-Dec-05	7,804.3	68,342	976,634	295,566	1,272,200
29-Dec-05	7,812.5	68,414	980,395	295,605	1,276,000
05-Jan-06	7,820.6	68,485	983,272	295,628	1,278,900
11-Jan-06	7,828.8	68,557	985,872	295,628	1,281,500
17-Jan-06	7,836.9	68,628	988,572	295,628	1,284,200
23-Jan-06	7,841.0	68,664	990,801	296,099	1,286,900
02-Feb-06	7,853.2	68,771	995,042	298,159	1,293,200
06-Feb-06	7,869.5	68,913	997,242	298,159	1,295,400
16-Feb-06	7,877.7	68,985	1,002,623	298,177	1,300,800

Table 3
Summary of Free Product and Groundwater Volume Removed

Date	Cumulative Volume of Free Product Removed (gals)	Cumulative Volume of Free Product Removed (lbs)	Cumulative Volume of Groundwater Removed from Wells EW-1, EW-2, EW-3 (gals)	Cumulative Volume of Groundwater Removed from well EW-4 (gals)	Cumulative Volume of Total Groundwater Removed (gals)
21-Feb-06	7,889.9	69,092	994,712	299,188	1,293,900
22-Feb-06	7,902.1	69,199	994,712	299,188	1,293,900
01-Mar-06	7,922.5	69,378	997,166	300,234	1,297,400
07-Mar-06	7,930.7	69,449	999,465	301,035	1,300,500
15-Mar-06	7,942.9	69,556	1,002,489	302,611	1,305,100
22-Mar-06	7,959.2	69,699	1,005,334	304,466	1,309,800
31-Mar-06	7,963.3	69,735	1,009,815	306,985	1,316,800
04-Apr-06	7,965.4	69,753	1,012,473	309,427	1,321,900
11-Apr-06	7,967.3	69,770	1,015,913	312,387	1,328,300
19-Apr-06	7,971.4	69,806	1,019,668	314,232	1,333,900
28-Apr-06	7,975.5	69,842	1,019,920	314,780	1,334,700
04-May-06	7,979.6	69,878	1,022,600	316,100	1,338,700
09-May-06	7,979.6	69,878	1,024,909	316,891	1,341,800
18-May-06	7,991.8	69,984	1,028,874	318,826	1,347,700
24-May-06	7,999.9	70,055	1,031,888	320,312	1,352,200
31-May-06	8,012.2	70,163	1,035,443	321,557	1,357,000
07-Jun-06	8,020.3	70,234	1,039,065	322,335	1,361,400
16-Jun-06	8,028.5	70,306	1,042,872	323,528	1,366,400
22-Jun-06	8,044.8	70,449	1,045,736	324,064	1,369,800
29-Jun-06	8,069.2	70,662	1,049,141	324,459	1,373,600
06-Jul-06	8,073.3	70,698	1,051,834	325,366	1,377,200
12-Jul-06	8,085.5	70,805	1,054,222	326,078	1,380,300
19-Jul-06	8,093.7	70,876	1,056,982	326,919	1,383,900
26-Jul-06	8,101.8	70,948	1,059,674	327,826	1,387,500
01-Aug-06	8,114.0	71,055	1,064,153	327,348	1,391,500
10-Aug-06	8,122.2	71,126	1,071,862	334,139	1,406,000
16-Aug-06	8,146.6	71,340	1,078,381	335,819	1,414,200
23-Aug-06	8,154.8	71,412	1,085,230	336,871	1,422,100
31-Aug-06	8,158.9	71,448	1,090,690	337,910	1,428,600
06-Sep-06	8,171.1	71,555	1,094,914	338,486	1,433,400
13-Sep-06	8,179.2	71,625	1,097,754	339,346	1,437,100
19-Sep-06	8,183.3	71,661	1,104,061	340,139	1,444,200
27-Sep-06	8,211.8	71,911	1,107,431	341,069	1,448,500
03-Oct-06	8,224.1	72,018	1,110,093	341,808	1,451,900
11-Oct-06	8,226.1	72,036	1,113,607	342,794	1,456,400
16-Oct-06	8,226.1	72,036	1,115,800	343,400	1,459,200
17-Oct-06	8,228.1	72,054	1,116,122	343,478	1,459,600
26-Oct-06	8,236.3	72,125	1,120,707	343,793	1,464,500
06-Nov-06	8,244.5	72,197	1,125,881	344,619	1,470,500
14-Nov-06	8,256.7	72,304	1,129,682	345,218	1,474,900
21-Nov-06	8,260.8	72,340	1,132,849	345,651	1,478,500
29-Nov-06	8,273.0	72,447	1,136,723	346,077	1,482,800
06-Dec-06	8,277.1	72,483	1,138,386	346,415	1,484,800
11-Dec-06	8,281.1	72,518	1,140,343	346,657	1,487,000
19-Dec-06	8,285.2	72,554	1,144,773	346,927	1,491,700
27-Dec-06	8,293.4	72,626	1,152,915	347,385	1,500,300
03-Jan-07	8,297.4	72,661	1,158,558	347,742	1,506,300
09-Jan-07	8,301.5	72,696	1,163,598	348,202	1,511,800
18-Jan-07	8,309.7	72,768	1,169,548	348,953	1,518,500
22-Jan-07	8,313.7	72,803	1,173,360	349,240	1,522,600
01-Feb-07	8,321.9	72,875	1,182,142	349,959	1,532,100
08-Feb-07	8,338.2	73,018	1,186,156	350,444	1,536,600
15-Feb-07	8,358.6	73,196	1,191,766	350,834	1,542,600
21-Feb-07	8,370.8	73,303	1,195,200	351,100	1,546,300
01-Mar-07	8,383.0	73,410	1,199,427	351,473	1,550,900
06-Mar-07	8,383.0	73,410	1,202,260	351,640	1,553,900
15-Mar-07	8,440.0	73,909	1,209,660	351,641	1,561,300
22-Mar-07	8,456.3	74,052	1,213,560	351,641	1,565,200
29-Mar-07	8,537.9	74,767	1,227,660	351,641	1,579,300
10-Apr-07	8,562.3	74,980	1,227,433	351,967	1,579,400
17-Apr-07	8,619.4	75,480	1,232,571	367,329	1,599,900
23-Apr-07	8,664.2	75,873	1,229,536	377,664	1,607,200
30-Apr-07	8,709.0	76,265	1,231,877	387,623	1,619,500
09-May-07	8,729.4	76,444	1,236,096	398,904	1,635,000
15-May-07	8,766.1	76,765	1,243,207	403,393	1,646,600
23-May-07	8,843.5	77,443	1,252,542	403,758	1,656,300
30-May-07	8,855.7	77,550	1,257,605	412,795	1,670,400
05-Jun-07	8,880.2	77,764	1,261,410	416,990	1,678,400
11-Jun-07	8,896.5	77,907	1,265,114	419,945	1,685,059
19-Jun-07	8,912.8	78,050	1,267,664	422,336	1,690,000
25-Jun-07	8,933.1	78,227	1,271,172	426,771	1,697,943
05-Jul-07	8,945.4	78,335	1,278,051	430,249	1,708,300
12-Jul-07	8,969.8	78,549	1,281,828	431,673	1,713,501
20-Jul-07	8,982.0	78,656	1,290,577	433,771	1,724,348

Table 3
Summary of Free Product and Groundwater Volume Removed

Date	Cumulative Volume of Free Product Removed (gals)	Cumulative Volume of Free Product Removed (lbs)	Cumulative Volume of Groundwater Removed from Wells EW-1, EW-2, EW-3 (gals)	Cumulative Volume of Groundwater Removed from well EW-4 (gals)	Cumulative Volume of Total Groundwater Removed (gals)
16-Aug-07	9,153.2	80,155	1,305,010	437,790	1,742,800
20-Aug-07	9,153.2	80,155	1,307,902	440,198	1,748,100
29-Aug-07	9,165.4	80,262	1,315,407	443,793	1,759,200
05-Sep-07	9,185.8	80,440	1,322,292	445,808	1,768,100
10-Sep-07	9,198.0	80,547	1,327,954	446,946	1,774,900
19-Sep-07	9,202.1	80,583	1,332,189	449,836	1,782,025
26-Sep-07	9,206.2	80,619	1,333,696	457,254	1,790,949
02-Oct-07	9,210.3	80,655	1,334,914	462,412	1,797,325
12-Oct-07	9,210.3	80,655	1,334,717	462,809	1,797,525
22-Oct-07	9,210.3	80,655	1,331,638	469,763	1,801,400
06-Nov-07	9,222.5	80,762	1,330,449	489,294	1,819,742
12-Nov-07	9,234.7	80,868	1,331,478	495,067	1,826,544
21-Nov-07	9,242.9	80,940	1,334,520	501,132	1,835,651
29-Nov-07	9,246.9	80,975	1,337,816	504,345	1,842,160
06-Dec-07	9,251.0	81,011	1,340,906	506,666	1,847,571
10-Dec-07	9,267.3	81,154	1,342,685	507,837	1,850,521
19-Dec-07	9,283.6	81,297	1,346,224	510,677	1,856,900
27-Dec-07	9,312.1	81,546	1,349,590	512,962	1,862,551
02-Jan-08	9,336.6	81,761	1,352,432	514,171	1,866,602
08-Jan-08	9,365.1	82,010	1,352,568	514,533	1,867,100
18-Jan-08	9,385.5	82,189	1,356,915	518,176	1,875,090
24-Jan-08	9,405.9	82,368	1,359,510	519,289	1,878,798
31-Jan-08	9,409.9	82,403	1,362,684	520,622	1,883,305
07-Feb-08	9,442.5	82,688	1,365,922	521,979	1,887,900
13-Feb-08	9,471.1	82,939	1,367,735	523,266	1,891,000
26-Feb-08	9,475.1	82,974	1,371,204	526,234	1,897,437
07-Mar-08	9,487.4	83,081	1,372,849	527,552	1,900,400
10-Mar-08	9,691.1	84,865	1,373,978	528,514	1,902,491
20-Mar-08	9,691.1	84,865	1,374,132	538,269	1,912,400
28-Mar-08	9,691.1	84,865	1,375,385	542,016	1,917,400
02-Apr-08	9,699.3	84,937	1,380,985	542,016	1,923,000
08-Apr-08	9,703.3	84,972	1,388,850	542,016	1,930,865
14-Apr-08	9,707.4	85,008	1,393,168	542,016	1,935,183
21-Apr-08	9,711.5	85,044	1,409,516	542,021	1,951,537
29-Apr-08	9,715.6	85,080	1,418,809	548,709	1,967,517
07-May-08	9,715.6	85,080	1,425,927	554,298	1,980,224
13-May-08	9,719.6	85,115	1,427,167	557,668	1,984,834
21-May-08	9,727.8	85,187	1,427,250	559,351	1,986,600
29-May-08	9,731.9	85,222	1,425,839	567,573	1,993,411
05-Jun-08	9,731.9	85,222	1,425,306	573,325	1,998,630
10-Jun-08	9,731.9	85,222	1,421,474	579,600	2,001,073
17-Jun-08	9,740.0	85,293	1,414,903	591,898	2,006,800
24-Jun-08	9,764.5	85,508	1,414,108	597,692	2,011,800
30-Jun-08	9,780.8	85,651	1,411,785	604,744	2,016,529
09-Jul-08	9,801.1	85,828	1,410,159	611,441	2,021,600
16-Jul-08	9,805.2	85,864	1,408,756	616,844	2,025,600
24-Jul-08	9,829.7	86,079	1,407,392	622,081	2,029,473
30-Jul-08	9,854.1	86,293	1,406,859	625,208	2,032,067
07-Aug-08	9,878.6	86,507	1,408,044	627,256	2,035,300
13-Aug-08	9,886.7	86,578	1,408,829	629,071	2,037,900
20-Aug-08	9,898.9	86,685	1,411,104	630,296	2,041,400
26-Aug-08	9,964.2	87,257	NA	reading not taken	reading not taken
04-Sep-08	10,159.8	88,970	1,428,551	631,949	2,060,500

[1] Increase in free product removal w/ no change in groundwater removal volume due to free product collection tank and wash tank being pumped out and shipped to WRR in Eau Claire, WI. Total volume of 1324 gallons, w/ a current estimate of 85% free product in that volume.

[2] Correction of revised quantity of free product removed on 4/23/2003 of -211.9 gallons due to settling of emulsified free product measured on this date.

Table 4
Remediation System Air Treatment Summary
Northern States Power, Ashland, Wisconsin

Sample Date	Total Elapsed Time (days)[1]	Sample Type (Influent/ Effluent)	Air Flow Rate (CFM)	Effluent Temp. (F)	Total Hydrocarbons (mg/m^3)[2]	Benzene (mg/m^3)[2]	Total Hydrocarbon Rate (lbs/day)[3]	Benzene Rate (lbs/day)[3]	Cummulative Mass of Hydrocarbons Removed by Carbon (lbs.)[4]	Cummulative Mass of Benzene Removed by Carbon (lbs.)[4]	Cummulative Mass of Hydrocarbons Emitted (lbs.)[4]	Cummulative Mass of Benzene Emitted (lbs.)[4]
28-Sep-00	2	Effluent	176	70	5	3.33	0.08	0.05	-	-	0.2	0.1
19-Jan-01	21	Influent	176	-	45.5	9.1	0.71	0.14	10.36	0.00		
19-Jan-01	21	Effluent	176	45	13.7	9.1	0.21	0.14			4.2	2.8
30-Mar-01	84	Influent	176	-	71.7	26.3	1.11	0.41	50.73	18.08		
30-Mar-01	84	Effluent	176	52	30.4	7.8	0.47	0.12			33.9	10.4
11-Apr-01	96	Influent	176	-	33	7.67	0.51	0.12	56.32	19.14		
11-Apr-01	96	Effluent	176	62	3	2	0.05	0.03			34.5	10.8
17-May-01	110	Effluent	176	68	5	3.33	0.08	0.05			35.6	11.5
13-Jun-01	125	Effluent	176	80	5	3.33	0.08	0.05			36.7	12.3
31-Jul-01	135	Effluent	176	80	5	3.33	0.08	0.05			37.5	12.8
7-Dec-01	196	Influent	176	35	60	10	0.93	0.16	116.90	26.49		
7-Dec-01	196	Effluent	176	35	5	3.33	0.08	0.05			44.2	17.2
22-Feb-02	232	Influent	176	30	303	39	4.70	0.61	284.47	47.15		
22-Feb-02	232	Effluent	176	30	3	2	0.05	0.03			45.8	18.4
4-Apr-02	267	Influent	176	55	33	8	0.51	0.12	300.76	50.41		
4-Apr-02	267	Effluent	176	55	3	2	0.05	0.03			47.5	19.4
8-Aug-02	393	Influent	15	80	1270	311	1.68	0.41	473.04	91.27		
8-Aug-02	393	Effluent	15	80	236	65.8	0.31	0.09			86.8	30.4
31-Oct-02	456	Influent	125	32	2100	410	23.14	4.52	1919.39	373.59		
31-Oct-02	456	Intermediate	125	32	32.7	3.33	0.36	0.04				
31-Oct-02	456	Effluent	125	32	16.6	2	0.18	0.02			98.3	31.8
27-Nov-02	470	Influent	125	25	1780	500	19.61	5.51	2193.53	450.21		
27-Nov-02	470	Intermediate	125	25	15.3	3.33	0.17	0.04				
27-Nov-02	470	Effluent	125	25	3	2	0.03	0.02			98.8	32.1
30-Jan-03	534	Influent	125	20	17.7	3.33	0.20	0.04	2189.80	445.01		
30-Jan-03	534	Intermediate	125	20	19.7	6.67	0.22	0.07				
30-Jan-03	534	Effluent	125	20	23	10.7	0.25	0.12			115.0	39.7
19-Feb-03	554	Influent	125	19	5	3.33	0.06	0.04	2188.43	444.73		
19-Feb-03	554	Intermediate	125	19	5	3.33	0.06	0.04				
19-Feb-03	554	Effluent	125	19	11.2	4.6	0.12	0.05			117.5	40.7
2-Apr-03	580	Influent	125	29	22	3.33	0.24	0.04	2187.11	442.42		
2-Apr-03	580	Intermediate	125	29	47.3	14.7	0.52	0.16				
2-Apr-03	580	Effluent	125	29	26.6	11.4	0.29	0.13			125.1	43.9
23-Apr-03	596	Influent	125	29	66.3	18.3	0.73	0.20	2195.52	444.62		
23-Apr-03	596	Intermediate	125	29	20.7	3.33	0.23	0.04				
23-Apr-03	596	Effluent	125	29	18.6	5.8	0.20	0.06			128.4	45.0
21-May-03	619	Influent	125	29	43	10	0.47	0.11	2198.51	445.69		
21-May-03	619	Intermediate	125	29	36.7	3.33	0.40	0.04				
21-May-03	619	Effluent	125	29	31.2	5.8	0.34	0.06			136.3	46.4
25-Jun-03	654	Influent	125	29	22	3.33	0.24	0.04	2196.74	442.57		
25-Jun-03	654	Intermediate	125	29	47.3	14.7	0.52	0.16				
25-Jun-03	654	Effluent	125	29	26.6	11.4	0.29	0.13			146.5	50.8
30-Jul-03	684	Influent	125	29	10	3.33	0.11	0.04	2187.05	442.57		
30-Jul-03	684	Intermediate	125	29	15.7	3.33	0.17	0.04				
30-Jul-03	684	Effluent	125	29	39.3	3.33	0.43	0.04			159.5	51.9
28-Aug-03	713	Influent	125	29	5	3.33	0.06	0.04	2183.67	443.00		
28-Aug-03	713	Intermediate	125	29	15	3.33	0.17	0.04				
28-Aug-03	713	Effluent	125	29	15.6	2	0.17	0.02			164.5	52.6
29-Sep-03	745	Influent	125	29	21.3	3.33	0.23	0.04	2182.22	442.34		
29-Sep-03	745	Intermediate	125	29	15	3.33	0.17	0.04				
29-Sep-03	745	Effluent	125	29	25.4	5.2	0.28	0.06			173.5	54.4
29-Oct-03	775	Influent	125	29	5	3.33	0.06	0.04	2179.24	442.78		
29-Oct-03	775	Intermediate	125	29	14.3	3.33	0.16	0.04				
29-Oct-03	775	Effluent	125	29	14	2	0.15	0.02			178.1	55.1
19-Nov-03	796	Influent	125	29	5	3.33	0.06	0.04	2179.71	443.09		
19-Nov-03	796	Intermediate	125	29	5	3.33	0.06	0.04				
19-Nov-03	796	Effluent	125	29	3	2	0.03	0.02			178.8	55.5
29-Dec-03	836	Influent	125	29	5	3.33	0.06	0.04	2177.59	443.67		
29-Dec-03	836	Intermediate	125	29	5	3.33	0.06	0.04				
29-Dec-03	836	Effluent	125	29	9.8	2	0.11	0.02			183.1	56.4
20-Jan-04	858	Influent	125	29	12.7	3.33	0.14	0.04	2179.94	444.00		
20-Jan-04	858	Intermediate	125	29	5	3.33	0.06	0.04				
20-Jan-04	858	Effluent	125	29	3	2	0.03	0.02			183.8	56.9
26-Feb-04	895	Influent	125	29	28.3	6.67	0.31	0.07	2183.65	443.78		
26-Feb-04	895	Intermediate	125	29	23.7	8.33	0.26	0.09				
26-Feb-04	895	Effluent	125	29	19.2	7.20	0.21	0.08			191.7	59.8
19-Mar-04	917	Influent	125	29	12.7	3.33	0.14	0.04	2183.52	442.94		
19-Mar-04	917	Intermediate	125	29	20.0	9.00	0.22	0.10				
19-Mar-04	917	Effluent	125	29	13.2	6.80	0.15	0.07			194.9	61.5
27-Apr-04	956	Influent	125	29	11.3	3.33	0.12	0.04	2184.26	443.51		
27-Apr-04	956	Intermediate	125	29	11.0	3.33	0.12	0.04				
27-Apr-04	956	Effluent	125	29	9.6	2.00	0.11	0.02			199.0	62.3
26-May-04	985	Influent	125	29	5.0	3.33	0.06	0.04	2178.25	443.11		
26-May-04	985	Intermediate	125	29	19.7	3.33	0.22	0.04				
26-May-04	985	Effluent	125	29	23.8	4.60	0.26	0.05			206.6	63.8
24-Jun-04	1014	Influent	125	29	11.7	3.33	0.13	0.04	2179.11	443.53		
24-Jun-04	1014	Intermediate	125	29	13.0	3.33	0.14	0.04				
24-Jun-04	1014	Effluent	125	29	9.0	2.00	0.10	0.02			209.5	64.4
6-Jul-04	1026	Influent	125	29	108.0	3.33	1.19	0.04	2191.17	443.71		
6-Jul-04	1026	Intermediate	125	29	23.0	3.33	0.25	0.04				
6-Jul-04	1026	Effluent	125	29	16.8	2.00	0.19	0.02			211.7	64.7
19-Aug-04	1070	Influent	125	29	5.0	3.33	0.06	0.04	2192.14	444.35		
19-Aug-04	1070	Intermediate	125	29	5.0	3.33	0.06	0.04				
19-Aug-04	1070	Effluent	125	29	3.0	2.00	0.03	0.02			213.1	65.7
30-Sep-04	1112	Influent	125	29	10.3	3.33	0.11	0.04	2190.89	444.97		
30-Sep-04	1112	Intermediate	125	29	14.3	3.33	0.16	0.04				
30-Sep-04	1112	Effluent	125	29	13.0	2.00	0.14	0.02			219.2	66.6

Table 4
Remediation System Air Treatment Summary
Northern States Power, Ashland, Wisconsin

Sample Date	Total Elapsed Time (days)[1]	Sample Type (Influent/ Effluent)	Air Flow Rate (CFM)	Effluent Temp. (F)	Total Hydrocarbons (mg/m^3)[2]	Benzene (mg/m^3)[2]	Total Hydrocarbon Rate (lbs/day)[3]	Benzene Rate (lbs/day)[3]	Cummulative Mass of Hydrocarbons Removed by Carbon (lbs.)[4]	Cummulative Mass of Benzene Removed by Carbon (lbs.)[4]	Cummulative Mass of Hydrocarbons Emitted (lbs.)[4]	Cummulative Mass of Benzene Emitted (lbs.)[4]
28-Oct-04	1140	Influent	125	29	13.3	3.33	0.15	0.04	2186.48	442.48		
28-Oct-04	1140	Intermediate	125	29	37.3	13.70	0.41	0.15				
28-Oct-04	1140	Effluent	125	29	27.6	11.40	0.30	0.13			227.7	70.1
17-Nov-04	1160	Influent	125	29	23.7	7.00	0.26	0.08	2186.54	442.21		
17-Nov-04	1160	Intermediate	125	29	21.0	6.67	0.23	0.07				
17-Nov-04	1160	Effluent	125	29	23.4	8.20	0.26	0.09			232.8	71.9
15-Dec-04	1188	Influent	125	29	84.7	23.30	0.93	0.26	2197.50	445.51		
15-Dec-04	1188	Intermediate	125	29	52.0	15.00	0.57	0.17				
15-Dec-04	1188	Effluent	125	29	49.2	12.60	0.54	0.14			248.0	75.8
12-Jan-05	1216	Influent	125	29	12.3	3.33	0.14	0.04	2200.37	445.92		
12-Jan-05	1216	Intermediate	125	29	5.0	3.33	0.06	0.04				
12-Jan-05	1216	Effluent	125	29	3.0	2.00	0.03	0.02			248.9	76.4
8-Feb-05	1243	Influent	125	29	15.3	4.17	0.17	0.05	2201.05	446.42		
8-Feb-05	1243	Intermediate	125	29	14.0	4.17	0.15	0.05				
8-Feb-05	1243	Effluent	125	29	13.0	2.50	0.14	0.03			252.8	77.2
25-Mar-05	1288	Influent	125	29	5.0	3.33	0.06	0.04	2199.66	447.08		
25-Mar-05	1288	Intermediate	125	29	5.0	3.33	0.06	0.04				
25-Mar-05	1288	Effluent	125	29	7.8	2.00	0.09	0.02			256.7	78.2
6-Apr-05	1300	Influent	125	29	13.0	3.33	0.14	0.04	2200.32	447.26		
6-Apr-05	1300	Intermediate	125	29	11.0	3.33	0.12	0.04				
6-Apr-05	1300	Effluent	125	29	8.0	2.00	0.09	0.02			257.7	78.4
12-May-05	1336	Influent	125	29	5.0	3.33	0.06	0.04	2195.09	445.72		
12-May-05	1336	Intermediate	125	29	16.2	6.50	0.18	0.07				
12-May-05	1336	Effluent	125	29	18.2	7.20	0.20	0.08			265.0	81.3
15-Jun-05	1370	Influent	125	29	5.0	3.33	0.06	0.04	2192.76	446.22		
15-Jun-05	1370	Intermediate	125	29	10.0	3.33	0.11	0.04				
15-Jun-05	1370	Effluent	125	29	11.2	2.00	0.12	0.02			269.2	82.0
6-Jul-05	1391	Influent	125	29	5.0	3.33	0.06	0.04	2193.23	446.53		
6-Jul-05	1391	Intermediate	125	29	5.0	3.33	0.06	0.04				
6-Jul-05	1391	Effluent	125	29	3.0	2.00	0.03	0.02			269.8	82.5
3-Aug-05	1419	Influent	125	29	5.0	3.33	0.06	0.04	2193.84	446.94		
3-Aug-05	1419	Intermediate	125	29	5.0	3.33	0.06	0.04				
3-Aug-05	1419	Effluent	125	29	3.0	2.00	0.03	0.02			270.8	83.1
14-Sep-05	1461	Influent	125	29	5.0	3.33	0.06	0.04	2194.77	447.55		
14-Sep-05	1461	Intermediate	125	29	5.0	3.33	0.06	0.04				
14-Sep-05	1461	Effluent	125	29	3.0	2.00	0.03	0.02			272.2	84.0
12-Oct-05	1489	Influent	125	29	5.0	3.33	0.06	0.04	2194.40	447.96		
12-Oct-05	1489	Intermediate	125	29	5.0	3.33	0.06	0.04				
12-Oct-05	1489	Effluent	125	29	6.2	2.00	0.07	0.02			274.1	84.7
7-Nov-05	1515	Influent	125	29	5.0	3.33	0.06	0.04	2190.79	446.57		
7-Nov-05	1515	Intermediate	125	29	12.0	3.33	0.13	0.04				
7-Nov-05	1515	Effluent	125	29	17.6	8.20	0.19	0.09			279.1	87.0
1-Dec-05	1539	Influent	125	29	5.0	3.33	0.06	0.04	2191.32	446.92		
1-Dec-05	1539	Intermediate	125	29	5.0	3.33	0.06	0.04				
1-Dec-05	1539	Effluent	125	29	3.0	2.00	0.03	0.02			279.9	87.5
5-Jan-06	1574	Influent	125	29	5.0	3.33	0.06	0.04	2192.09	447.43		
5-Jan-06	1574	Intermediate	125	29	5.0	3.33	0.06	0.04				
5-Jan-06	1574	Effluent	125	29	3.0	2.00	0.03	0.02			281.1	88.3
6-Feb-06	1606	Influent	125	29	5.0	3.33	0.06	0.04	2192.09	447.43		
6-Feb-06	1606	Intermediate	125	29	5.0	3.33	0.06	0.04				
6-Feb-06	1606	Effluent	125	29	5.0	3.33	0.06	0.04			282.8	89.5
7-Mar-06	1635	Influent	125	29	8.4	3.33	0.09	0.04	2193.16	447.86		
7-Mar-06	1635	Intermediate	125	29	8.4	3.33	0.09	0.04				
7-Mar-06	1635	Effluent	125	29	5.0	2.00	0.06	0.02			284.4	90.1
11-Apr-06	1670	Influent	125	29	5.0	3.33	0.06	0.04	2192.47	448.37		
11-Apr-06	1670	Intermediate	125	29	11.3	3.33	0.12	0.04				
11-Apr-06	1670	Effluent	125	29	6.8	2.00	0.07	0.02			287.1	90.9
4-May-06	1693	Influent	125	29	12.7	3.33	0.14	0.04	2193.86	448.71		
4-May-06	1693	Intermediate	125	29	11.7	3.33	0.13	0.04				
4-May-06	1693	Effluent	125	29	7.2	2.00	0.08	0.02			288.9	91.4
6-Jun-06	1726	Influent	125	29	5.0	3.33	0.06	0.04	2186.59	446.28		
6-Jun-06	1726	Intermediate	125	29	25.7	8.67	0.28	0.10				
6-Jun-06	1726	Effluent	125	29	25.0	10.00	0.28	0.11			298.0	95.0
12-Jul-06	1762	Influent	125	29	10.7	3.33	0.12	0.04	2182.38	446.28		
12-Jul-06	1762	Intermediate	125	29	12.3	3.33	0.14	0.04				
12-Jul-06	1762	Effluent	125	29	21.3	3.33	0.23	0.04			306.4	96.4
10-Aug-06	1791	Influent	125	29	10.7	3.33	0.12	0.04	2181.33	444.98		
10-Aug-06	1791	Intermediate	125	29	51.7	17.30	0.57	0.19				
10-Aug-06	1791	Effluent	125	29	14.0	7.40	0.15	0.08			310.9	98.7
6-Sep-06	1818	Influent	125	29	5.0	3.33	0.06	0.04	2181.92	445.38		
6-Sep-06	1818	Intermediate	125	29	5.0	3.33	0.06	0.04				
6-Sep-06	1818	Effluent	125	29	3.0	2.00	0.03	0.02			311.8	99.3
11-Oct-06	1853	Influent	125	29	5.0	3.33	0.06	0.04	2180.84	445.89		
11-Oct-06	1853	Intermediate	125	29	5.0	3.33	0.06	0.04				
11-Oct-06	1853	Effluent	125	29	7.8	2.00	0.09	0.02			314.8	100.1
1-Nov-06	1874	Influent	125	29	12.3	3.33	0.14	0.04	2181.10	446.20		
1-Nov-06	1874	Intermediate	125	29	11.7	3.33	0.13	0.04				
1-Nov-06	1874	Effluent	125	29	11.2	2.00	0.12	0.02			317.4	100.5
13-Dec-06	1916	Influent	125	29	18.0	3.33	0.20	0.04	2184.71	446.81		
13-Dec-06	1916	Intermediate	125	29	13.7	3.33	0.15	0.04				
13-Dec-06	1916	Effluent	125	29	10.2	2.00	0.11	0.02			322.1	101.5
4-Jan-07	1938	Influent	125	29	32.7	10.70	0.36	0.12	2188.61	447.66		
4-Jan-07	1938	Intermediate	125	29	23.0	8.30	0.25	0.09				
4-Jan-07	1938	Effluent	125	29	16.6	7.20	0.18	0.08			326.1	103.2
15-Feb-07	1980	Influent	125	29	14.3	3.33	0.16	0.04	2186.34	445.59		
15-Feb-07	1980	Intermediate	125	29	22.7	3.33	0.25	0.04				
15-Feb-07	1980	Effluent	125	29	19.2	7.80	0.21	0.09			335.0	106.8

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Northern States Power, Ashland, Wisconsin

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7-Mar-07	2000	Influent	125	29	5.0	3.33	0.06	0.04	2185.02	445.89		
7-Mar-07	2000	Intermediate	125	29	14.3	3.33	0.16	0.04				
7-Mar-07	2000	Effluent	125	29	11.0	2.00	0.12	0.02			337.4	107.3
11-Apr-07	2035	Influent	125	29	16.7	3.33	0.18	0.04	2190.30	446.40		
11-Apr-07	2035	Intermediate	125	29	5.0	3.33	0.06	0.04				
11-Apr-07	2035	Effluent	125	29	3.0	2.00	0.03	0.02			338.6	108.0
1-May-07	2055	Influent	125	29	17.7	3.33	0.20	0.04	2191.21	445.72		
1-May-07	2055	Intermediate	125	29	21.7	7.67	0.24	0.08				
1-May-07	2055	Effluent	125	29	13.6	6.40	0.15	0.07			341.6	109.5
5-Jun-07	2090	Influent	125	29	5.0	3.33	0.06	0.04	2181.87	443.84		
5-Jun-07	2090	Intermediate	125	29	20.0	3.33	0.22	0.04				
5-Jun-07	2090	Effluent	125	29	29.2	8.20	0.32	0.09			352.9	112.6
5-Jul-07	2120	Influent	125	29	5.0	3.33	0.06	0.04	2175.59	442.17		
5-Jul-07	2120	Intermediate	125	29	25.0	7.67	0.28	0.08				
5-Jul-07	2120	Effluent	125	29	24.0	8.4	0.26	0.09			360.8	115.4
16-Aug-07	2162	Influent	125	29	5.0	3.33	0.06	0.04	2176.52	442.78		
16-Aug-07	2162	Intermediate	125	29	5.0	3.33	0.06	0.04				
16-Aug-07	2162	Effluent	125	29	3.0	2.0	0.03	0.02			362.2	116.3
5-Sep-07	2182	Influent	125	29	5.0	3.33	0.06	0.04	2176.96	443.08		
5-Sep-07	2182	Intermediate	125	29	5.0	3.33	0.06	0.04				
5-Sep-07	2182	Effluent	125	29	3.0	2.0	0.03	0.02			362.8	116.8
2-Oct-07	2209	Influent	125	29	13.7	3.33	0.15	0.04	2180.14	443.47		
2-Oct-07	2209	Intermediate	125	29	5.0	3.33	0.06	0.04				
2-Oct-07	2209	Effluent	125	29	3.0	2.0	0.03	0.02			363.7	117.4
6-Nov-07	2244	Influent	125	29	5.0	3.33	0.06	0.04	2180.91	443.99		
6-Nov-07	2244	Intermediate	125	29	5.0	3.33	0.06	0.04				
6-Nov-07	2244	Effluent	125	29	3.0	2.0	0.03	0.02			364.9	118.1
10-Dec-07	2278	Influent	125	29	5.0	3.33	0.06	0.04	2181.66	444.48		
10-Dec-07	2278	Intermediate	125	29	5.0	3.33	0.06	0.04				
10-Dec-07	2278	Effluent	125	29	3.0	2.0	0.03	0.02			366.0	118.9
8-Jan-08	2307	Influent	125	29	5.0	3.33	0.06	0.04	2182.30	444.91		
8-Jan-08	2307	Intermediate	125	29	5.0	3.33	0.06	0.04				
8-Jan-08	2307	Effluent	125	29	3.0	2.0	0.03	0.02			367.0	119.5
13-Feb-08	2343	Influent	125	29	5.0	3.33	0.06	0.04	2183.10	445.44		
13-Feb-08	2343	Intermediate	125	29	5.0	3.33	0.06	0.04				
13-Feb-08	2343	Effluent	125	29	3.0	2.0	0.03	0.02			368.2	120.3
2-Apr-08	2392	Influent	125	29	5.0	3.33	0.06	0.04	2184.18	446.15		
2-Apr-08	2392	Intermediate	125	29	5.0	3.33	0.06	0.04				
2-Apr-08	2392	Effluent	125	29	3.0	2.0	0.03	0.02			369.8	121.4
7-May-08	2427	Influent	125	29	5.0	3.33	0.06	0.04	2184.18	446.15		
7-May-08	2427	Intermediate	125	29	5.0	3.33	0.06	0.04				
7-May-08	2427	Effluent	125	29	5.0	3.3	0.06	0.04			371.7	122.7
5-Jun-08	2456	Influent	125	29	5.0	3.33	0.06	0.04	2184.82	446.58		
5-Jun-08	2456	Intermediate	125	29	5.0	3.33	0.06	0.04				
5-Jun-08	2456	Effluent	125	29	3.0	2.0	0.03	0.02			372.7	123.3
9-Jul-08	2490	Influent	125	29	5.0	3.33	0.06	0.04	2185.56	447.08		
9-Jul-08	2490	Intermediate	125	29	5.0	3.33	0.06	0.04				
9-Jul-08	2490	Effluent	125	29	3.0	2.0	0.03	0.02			373.8	124.1
7-Aug-08	2519	Influent	125	29	5.0	3.33	0.06	0.04	2186.20	447.50		
7-Aug-08	2519	Intermediate	125	29	5.0	3.33	0.06	0.04				
7-Aug-08	2519	Effluent	125	29	3.0	2.0	0.03	0.02			374.8	124.7

(1) Total Elapsed Time, in days, only for days of remediation system operation, not days since start-up.
(2) When a below detection result occurs, the assumed value is half of the detection limit.
For the 1/19/01 sampling, the samples were incorrectly labeled: Drum #1 is influent to Drum #1, Drum #2 is influent to Drum #2, and Air Stripper is Air Effluent.
(3) Daily emission rate based on laboratory results.
(4) Emission rate to date calculated from average daily emission rate and total days of remediation system operation.

Table 5
Remediation System Water Treatment Summary
Northern States Power, Ashland, Wisconsin

Sample Date	Total Elapsed Time (days)[1]	Sample Type	Cummulative Volume of Treated Effluent (gal.)	VOCs (ug/L)[2]	Benzene (ug/L)[2]	Cummulative Mass of VOCs Removed (lbs.)[3]	Cummulative Mass of Benzene Removed (lbs.)[3]	Cummulative Mass of VOCs Discharged (lbs.)[4]	Cummulative Mass of Benzene Discharged (lbs.)[4]
5-Oct-00	9	Influent[5]		121,985	60,000				
5-Oct-00	9	Effluent	10,592	12.9	0.94	10.8	5.3	0.00114	0.00008
19-Jan-01	21	Inlet[6]		859.5	90.4				
19-Jan-01	21	Mid Carbon		17.3	0.62				
19-Jan-01	21	Effluent	17,346	16.6	0.7	17.7	8.7	0.00208	0.00012
30-Mar-01	84	Inlet[6]		1,120.60	140				
30-Mar-01	84	Effluent	44,613	14.45	0.05	45.6	22.4	0.00520	0.00024
11-Apr-01	96	Influent[5]		100,629	46,000				
11-Apr-01	96	Inlet[6]		557.5	110				
11-Apr-01	96	Mid Carbon		50.73	5.1				
11-Apr-01	96	Effluent	54,636	13.79	0.94	54.0	26.3	0.00636	0.00031
17-May-01	110	Effluent	58,967	23.46	1.3	57.6	27.9	0.00721	0.00036
13-Jun-01	125	Effluent	61,094	7.74	0.05	59.4	28.8	0.00735	0.00036
13-Jul-01	135	Influent[5]		97,450	51,000				
31-Jul-01	135	Effluent	65,758	12.36	0.05	63.2	30.7	0.00783	0.00036
20-Sep-01	157	Influent[5]		113,925	58,000				
20-Sep-01	157	Inlet[6]		3,205	1,100				
20-Sep-01	157	Effluent	91,894	19.23	0.05	88.1	43.4	0.01203	0.00038
7-Dec-01	196	Influent[5]		101,620	52,000				
7-Dec-01	196	Inlet[6]		4,153.5	530				
7-Dec-01	196	Effluent	136,300	9.835	0.05	125.7	62.7	0.01567	0.00039
14-Feb-02	224	Influent		83,055	35,000				
14-Feb-02	224	Precarbon		35,355.3	7,200				
14-Feb-02	224	Effluent	181,000	8.1	0.2	156.7	75.7	0.01869	0.00047
21-Mar-02	256	Influent		143,140	53,000				
21-Mar-02	256	Precarbon		15,716.5	1,600				
21-Mar-02	256	Effluent	202,700	88.22	67	182.6	85.3	0.03467	0.01264
11-Jun-02	323	Influent		63,570	23,000				
11-Jun-02	323	Precarbon		26,320.0	6,400				
11-Jun-02	323	Effluent	286,524	1,244	1,100	226.2	100.6	0.90481	0.78458
8-Aug-02	393	Influent		87,060	41,000				
8-Aug-02	393	Precarbon		26,320.0	18,695				
8-Aug-02	393	Effluent	402,800	6,554.1	4,000	304.3	136.5	7.26406	4.67835
31-Oct-02	456	Influent		27,090.0	5,600				
31-Oct-02	456	Precarbon		24,362.5	13,000				
31-Oct-02	456	Effluent	502600	2,438.3	1,600	324.9	139.9	9.30128	6.01517
27-Nov-02	470	Influent		52,350.0	22,000				
27-Nov-02	470	Precarbon		15,633.0	7,300				
27-Nov-02	470	Effluent	519000	6,449.5	4,600	331.1	142.2	10.18390	6.64674
18-Dec-02	491	Influent		45,325.0	19,000				
18-Dec-02	491	Precarbon		7,685.0	2,700				
18-Dec-02	491	Effluent	542,800	4,785.0	3,300	339.2	145.4	11.13420	7.30426
30-Jan-03	534	Influent		35,275.0	9,600				
30-Jan-03	534	Precarbon		4,230.0	1,700				
30-Jan-03	534	Effluent	581,400	4,584.7	2,200	349.1	147.7	12.61092	8.01520
19-Feb-03	554	Influent		71,520.0	32,000				
19-Feb-03	554	Precarbon		3,149.0	81				
19-Feb-03	554	Effluent	598,000	4,004.0	1,500	358.4	152.0	13.16556	8.22366
2-Apr-03	580	Influent		20,876.0	6,300				
2-Apr-03	580	Precarbon		1,553.0	120				
2-Apr-03	580	Effluent	623,300	114.7	22	362.8	153.3	13.18977	8.22832
23-Apr-03	596	Influent		30,060.0	9,500				
23-Apr-03	596	Precarbon		2,095.0	29				
23-Apr-03	596	Effluent	645,300	3.0	0.15	368.3	155.0	13.19032	8.22835
21-May-03	619	Influent		25,470.0	6,100				
21-May-03	619	Precarbon		5,491.0	71				
21-May-03	619	Effluent	687,700	3.1	0.15	377.3	157.2	13.19142	8.22840
25-Jun-03	654	Influent		42,650.0	26,000				
25-Jun-03	654	Precarbon		3,310.0	150				
25-Jun-03	654	Effluent	721,000	1.9	0.12	389.2	164.4	13.19195	8.22843
30-Jul-03	684	Influent		8,440.0	1,400				
30-Jul-03	684	Precarbon		144.0	6				
30-Jul-03	684	Effluent	748,800	1.2	0.19	391.1	164.7	13.19224	8.22848
28-Aug-03	713	Influent		10,630.0	2,200				
28-Aug-03	713	Precarbon		434.3	36				
28-Aug-03	713	Effluent	761,700	0.5	0.16	392.3	165.0	13.19229	8.22849
29-Sep-03	745	Influent		18,770	3,400				
29-Sep-03	745	Precarbon		300.1	17				
29-Sep-03	745	Effluent	781,500	0.7	0.12	395.4	165.5	13.19241	8.22851
29-Oct-03	775	Influent		8,730	1,200				
29-Oct-03	775	Precarbon		169.7	3				
29-Oct-03	775	Effluent	793,400	0.3	0.18	396.3	165.7	13.19243	8.22853
19-Nov-03	796	Influent		10,940	2,000				
19-Nov-03	796	Precarbon		529	23				
19-Nov-03	796	Effluent	799,900	3.5	0.71	396.8	165.8	13.19262	8.22857
29-Dec-03	836	Influent		11,710	2,100				
29-Dec-03	836	Precarbon		7,815	2,900				
29-Dec-03	836	Effluent	821,500	0.0	0.12	399.0	166.1	13.19262	8.22859
20-Jan-04	858	Influent		9,021	2,200				
20-Jan-04	858	Precarbon		576	44				
20-Jan-04	858	Effluent	826,300	2.57	0.50	399.3	166.2	13.19273	8.22861
26-Feb-04	895	Influent		21,425	4,900				
26-Feb-04	895	Precarbon		631	38				
26-Feb-04	895	Effluent	854,700	0.49	0.05	404.4	167.4	13.19284	8.22862

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15-Mar-04	917	Influent		20,660	4,500				
15-Mar-04	917	Precarbon		673	39				
15-Mar-04	917	Effluent	876,900	0	0.05	408.2	168.2	13.19284	8.22863
27-Apr-04	956	Influent		11,650	3,500				
27-Apr-04	956	Precarbon		430	74				
27-Apr-04	956	Effluent	893,300	0.28	0.09	409.8	168.7	13.19288	8.22865
26-May-04	985	Influent		22,300	4,800				
26-May-04	985	Precarbon		500	12				
26-May-04	985	Effluent	914,600	0	0.15	413.8	169.6	13.19288	8.22867
24-Jun-04	1014	Influent		24,040	4,800				
24-Jun-04	1014	Precarbon		627	47				
24-Jun-04	1014	Effluent	953,200	0	0.15	421.5	171.1	13.19288	8.22872
6-Jul-04	1026	Influent		15,530	2,600				
6-Jul-04	1026	Precarbon		153.1	9.8				
6-Jul-04	1026	Effluent	965,100	0.59	0.09	423.1	171.4	13.19294	8.22873
19-Aug-04	1070	Influent		15,060	1,900				
19-Aug-04	1070	Precarbon		82.2	5.2				
19-Aug-04	1070	Effluent	994,600	0.37	0.09	426.8	171.8	13.19303	8.22875
27-Sep-04	1109	Influent		23,520	5,800				
27-Sep-04	1109	Precarbon		645.9	17.0				
27-Sep-04	1109	Effluent	1,028,400	0.29	0.09	433.4	173.5	13.19311	8.22878
28-Oct-04	1140	Influent		21,680	5,000				
28-Oct-04	1140	Precarbon		274.6	26				
28-Oct-04	1140	Effluent	1,057,500	0.64	0.09	438.7	174.7	13.19327	8.22880
17-Nov-04	1160	Influent		29,010	9,600				
17-Nov-04	1160	Precarbon		201.7	14				
17-Nov-04	1160	Effluent	1,069,800	0.00	0.09	441.7	175.7	13.19327	8.22881
15-Dec-04	1188	Influent		22,710	6,200				
15-Dec-04	1188	Precarbon		199.4	21				
15-Dec-04	1188	Effluent	1,090,700	201.1	200	445.6	176.7	13.22834	8.26380
12-Jan-05	1216	Influent		69,060	23,000				
12-Jan-05	1216	Precarbon		11.8	1.9				
12-Jan-05	1216	Effluent	1,112,900	167.5	160	458.3	180.9	13.25937	8.29354
8-Feb-05	1243	Influent		18,930	4,300				
8-Feb-05	1243	Precarbon		211.8	27				
8-Feb-05	1243	Effluent	1,134,700	0.7	0.42	461.8	181.7	13.25950	8.29362
18-Mar-05	1281	Influent		10,710	2,100				
18-Mar-05	1281	Precarbon		926	510				
18-Mar-05	1281	Effluent	1,160,800	1.13	0	464.1	182.2	13.25974	8.29362
6-Apr-05	1300	Influent		7,750	1,200				
6-Apr-05	1300	Precarbon		220.6	18				
6-Apr-05	1300	Effluent	1,175,000	0	0	465.0	182.3	13.25974	8.29362
12-May-05	1336	Influent		5,610	850				
12-May-05	1336	Precarbon		349.4	79				
12-May-05	1336	Effluent	1,191,500	1.0	0	465.8	182.4	13.25988	8.29362
15-Jun-05	1370	Influent		47,000	14,000				
15-Jun-05	1370	Precarbon		21.1	0.95				
15-Jun-05	1370	Effluent	1,200,800	0	0	469.5	183.5	13.25988	8.29362
6-Jul-05	1391	Influent		9,550	2,100				
6-Jul-05	1391	Precarbon		130.8	18				
6-Jul-05	1391	Effluent	1,204,200	0	0	469.7	183.6	13.25988	8.29362
3-Aug-05	1419	Influent		74,740	32,000				
3-Aug-05	1419	Precarbon		70.0	3.0				
3-Aug-05	1419	Effluent	1,215,000	0	0	476.5	186.5	13.25988	8.29362
14-Sep-05	1461	Influent		11,200	1,600				
14-Sep-05	1461	Precarbon		54.1	4.3				
14-Sep-05	1461	Effluent	1,230,300	1	0	477.9	186.7	13.25995	8.29362
11-Oct-05	1488	Influent		5,920	1,200				
11-Oct-05	1488	Precarbon		54.1	7.6				
11-Oct-05	1488	Effluent	1,242,600	1.24	0	478.5	186.8	13.26008	8.29362
7-Nov-05	1515	Influent		16,320	2,000				
7-Nov-05	1515	Precarbon		43,100	19,000				
7-Nov-05	1515	Effluent	1,254,300	0.29	0.29	480.1	187.0	13.26010	8.29365
1-Dec-05	1539	Influent		69,740	28,000				
1-Dec-05	1539	Precarbon		217	55				
1-Dec-05	1539	Effluent	1,265,100	0.28	0	486.4	189.5	13.26013	8.29365
5-Jan-06	1574	Influent		69,710	31,000				
5-Jan-06	1574	Precarbon		132	23				
5-Jan-06	1574	Effluent	1,278,900	0.86	0	494.4	193.1	13.26023	8.29365
6-Feb-06	1606	Influent		14,260	3,200				
6-Feb-06	1606	Precarbon		113	12				
6-Feb-06	1606	Effluent	1,295,400	0.39	0	496.4	193.5	13.26028	8.29365
7-Mar-06	1635	Influent		6,107	710				
7-Mar-06	1635	Precarbon		324	310				
7-Mar-06	1635	Effluent	1,300,500	7.73	0.27	496.6	193.6	13.26061	8.29366
11-Apr-06	1670	Influent		11,760	2,000				
11-Apr-06	1670	Precarbon		280.5	28				
11-Apr-06	1670	Effluent	1,328,300	319.4	290	499.3	194.0	13.33471	8.36115
4-May-06	1693	Influent		53,032	21,000				
4-May-06	1693	Precarbon		349.4	96				
4-May-06	1693	Effluent	1,338,700	3.74	2.7	503.9	195.8	13.33503	8.36139
6-Jun-06	1726	Influent		11,110	1,800				
6-Jun-06	1726	Precarbon		498	34				
6-Jun-06	1726	Effluent	1,361,400	0.4	0	506.0	196.1	13.33511	8.36139

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Sample Date	Total Elapsed Time (days)[1]	Sample Type	Cummulative Volume of Treated Effluent (gal.)	VOCs (ug/L)[2]	Benzene (ug/L)[2]	Cummulative Mass of VOCs Removed (lbs.)[3]	Cummulative Mass of Benzene Removed (lbs.)[3]	Cummulative Mass of VOCs Discharged (lbs.)[4]	Cummulative Mass of Benzene Discharged (lbs.)[4]
12-Jul-06	1762	Influent		64,080	25,000				
12-Jul-06	1762	Precarbon		4	1.5				
12-Jul-06	1762	Effluent	1,380,300	0.6	0.23	516.1	200.1	13.33520	8.36142
10-Aug-06	1791	Influent		10,760	1,200				
10-Aug-06	1791	Precarbon		1,434	46.0				
10-Aug-06	1791	Effluent	1,406,000	0.8	0	518.4	200.3	13.33537	8.36142
6-Sep-06	1818	Influent		8,860	600				
6-Sep-06	1818	Precarbon		1,039	31.0				
6-Sep-06	1818	Effluent	1,433,400	0.95	0	520.4	200.5	13.33559	8.36142
11-Oct-06	1853	Influent		48,460	22,000				
11-Oct-06	1853	Precarbon		257	59.0				
11-Oct-06	1853	Effluent	1,456,400	5.44	1.8	529.7	204.7	13.33663	8.36177
1-Nov-06	1874	Influent		60,910	25,000				
1-Nov-06	1874	Precarbon		100	6.9				
1-Nov-06	1874	Effluent	1,470,500	1.00	0	536.9	207.6	13.33675	8.36177
13-Dec-06	1916	Influent		19,600	4,300				
13-Dec-06	1916	Precarbon		690	54.0				
13-Dec-06	1916	Effluent	1,487,000	0.32	0	539.6	208.2	13.33680	8.36177
4-Jan-07	1938	Influent		37,940	13,000				
4-Jan-07	1938	Precarbon		338.9	36.0				
4-Jan-07	1938	Effluent	1,506,300	3.39	2.8	545.7	210.3	13.33734	8.36222
15-Feb-07	1980	Influent		26,990	7,900				
15-Feb-07	1980	Precarbon		357.9	78.0				
15-Feb-07	1980	Effluent	1,542,600	0.53	0.2	553.9	212.7	13.33750	8.36227
6-Mar-07	1999	Influent		73,170	28,000				
6-Mar-07	1999	Precarbon		347.9	33.0				
6-Mar-07	1999	Effluent	1,553,900	2.43	0.27	560.8	215.3	13.33773	8.36229
11-Apr-07	2035	Influent		45,400	18,000				
11-Apr-07	2035	Precarbon		157.0	20				
11-Apr-07	2035	Effluent	1,579,400	1.10	0	570.4	219.2	13.33796	8.36229
30-Apr-07	2054	Influent		19,280	4,900				
30-Apr-07	2054	Precarbon		98.4	87				
30-Apr-07	2054	Effluent	1,619,500	49.2	3.7	576.9	220.8	13.35442	8.36353
5-Jun-07	2090	Influent		28,510	9,800				
5-Jun-07	2090	Precarbon		68.3	3.7				
5-Jun-07	2090	Effluent	1,678,400	4.6	1.0	590.9	225.6	13.35668	8.36403
5-Jul-07	2120	Influent		34,990	11,000				
5-Jul-07	2120	Precarbon		106.3	16				
5-Jul-07	2120	Effluent	1,708,300	2.4	1.8	599.6	228.4	13.35727	8.36448
16-Aug-07	2162	Influent		81	0				
16-Aug-07	2162	Precarbon		35.6	2				
16-Aug-07	2162	Effluent	1,742,800	1.3	1.1	599.6	228.4	13.35763	8.36480
5-Sep-07	2182	Influent		11,640	1,900				
5-Sep-07	2182	Precarbon		59.8	4.1				
5-Sep-07	2182	Effluent	1,768,100	4.4	3.6	602.1	228.8	13.35857	8.36556
2-Oct-07	2209	Influent		19,590	5,200				
2-Oct-07	2209	Precarbon		118.4	5.3				
2-Oct-07	2209	Effluent	1,797,325	5.3	4.1	606.9	230.0	13.35987	8.36656
6-Nov-07	2244	Influent		55,030	24,000				
6-Nov-07	2244	Precarbon		24.0	7.3				
6-Nov-07	2244	Effluent	1,819,742	53.6	49.0	617.1	234.5	13.36990	8.37576
10-Dec-07	2278	Influent		56,230	22,000				
10-Dec-07	2278	Precarbon		121.3	14.0				
10-Dec-07	2278	Effluent	1,850,521	1.0	0.0	631.6	240.2	13.37016	8.37576
8-Jan-08	2307	Influent		2,967	1,100				
8-Jan-08	2307	Precarbon		36.5	1.5				
8-Jan-08	2307	Effluent	1,867,100	1.4	0.0	632.0	240.3	13.37035	8.37576
13-Feb-08	2343	Influent		2,095	300				
13-Feb-08	2343	Precarbon		17.0	1.5				
13-Feb-08	2343	Effluent	1,891,000	1.2	0.0	632.4	240.4	13.37060	8.37576
10-Mar-08	2369	Influent		6,165	1,700				
10-Mar-08	2369	Precarbon		29.0	2.9				
10-Mar-08	2369	Effluent	1,902,491	0.3	0.0	633.0	240.5	13.37063	8.37576
2-Apr-08	2392	Influent		67,500	31,000				
2-Apr-08	2392	Precarbon		394.8	30.0				
2-Apr-08	2392	Effluent	1,923,000	0.72	0.0	644.6	245.8	13.37075	8.37576
7-May-08	2427	Influent		12.4	0				
7-May-08	2427	Precarbon		94,180	34,000				
7-May-08	2427	Effluent	1,923,000	0.54	0.0	644.6	245.8	13.37075	8.37576
5-Jun-08	2456	Influent		90,980.0	34,000				
5-Jun-08	2456	Precarbon		14	1.3				
5-Jun-08	2456	Effluent	1,998,630	1.20	0.0	702.0	267.3	13.37151	8.37576
9-Jul-08	2490	Influent		147.4	2.2				
9-Jul-08	2490	Precarbon		2.5	0.0				
9-Jul-08	2490	Effluent	2,021,600	0.5	0.0	702.0	267.3	13.37161	8.37576
7-Aug-08	2519	Influent		107,860	42,000.0				
7-Aug-08	2519	Precarbon		2.3	0.0				
7-Aug-08	2519	Effluent	2,035,300	1.4	0.0	714.3	272.1	13.37177	8.37576

(1) Total Elapsed Time, in days, only for days of remediation system operation, not days since start-up.
(2) When a below detection result occurs, the assumed value is half of the detection limit.
(3) Removal based on Influent vs. Effluent
(4) Emission rate to date calculated from average concentrations in effluent and total days of remediation system operation.
(5) This sample was collected at the oil-water separator discharge, prior to the air diffuser.
(6) This sample was collected at the inlet to the liquid phase carbon.

Table 6
Summary of Historic Groundwater Elevations
Northern States Power, Ashland, Wisconsin

Well Location	Reference Elevation	Sep. 10, 2001		Dec. 3 , 2001		Mar. 18, 2002		June 28, 2002		Sept 16, 2002		Dec 16, 2002		Mar. 24, 2003	
		Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations
MW-1	634.18	15.08	619.10	14.26	619.92	--	--	14.79	619.39	17.43	616.75	15.28	618.90	15.51	618.67
MW-2	634.85	14.92	619.93	--	--	--	--	--	--	--	--	--	--	--	--
MW-2A	634.24	19.50	614.74	--	--	--	--	--	--	--	--	--	--	--	--
MW-2B	634.68	10.52	624.16	--	--	--	--	--	--	--	--	--	--	--	--
MW-2R	637.43	--	--	--	--	14.70	622.73	15.00	622.43	14.75	622.68	16.21	621.22	16.43	621.00
MW-2AR	636.28	--	--	--	--	20.13	616.15	20.25	616.03	14.87	621.41	20.24	616.04	20.28	616.00
MW-2BR	636.24	--	--	--	--	11.97	624.27	12.03	624.21	12.14	624.10	10.86	625.38	10.61	625.63
MW-3	637.83	3.14	634.69	0.00	637.83	--	--	2.72	635.11	2.16	635.67	3.69	634.14	5.09	632.74
MW-4	640.92	6.40	631.63	4.98	636.05	5.60	635.43	5.02	636.01	5.86	635.17	6.60	634.43	5.78	634.43
MW-4A	641.22	14.28	626.94	14.20	627.02	13.50	627.72	13.10	628.12	14.01	627.21	14.02	627.20	14.36	626.86
MW-4B	640.98	16.61	624.37	15.32	625.66	16.27	624.71	16.73	624.25	17.16	623.82	15.98	625.00	15.93	625.05
MW-5	633.82	18.15	615.67	17.95	615.87	19.44	614.38	17.80	616.02	18.58	615.24	--	--	19.70	614.12
MW-5A	633.72	19.38	614.34	19.26	614.46	19.60	614.12	19.05	614.67	19.17	614.55	--	--	19.09	614.63
MW-5B	633.89	19.14	614.75	19.25	614.64	19.37	614.52	19.03	614.86	19.13	614.76	--	--	18.98	614.91
MW-5C	634.33	9.90	624.43	9.47	624.86	9.33	625.00	9.51	624.82	9.94	624.39	--	--	8.97	625.36
MW-6	644.88	17.01	627.87	15.95	628.93	--	--	14.25	630.63	16.58	628.30	17.04	627.84	15.54	629.34
MW-6A	644.79	20.31	624.48	19.76	625.03	--	--	20.02	624.77	20.63	624.16	19.51	625.28	19.52	625.27
MW-7	612.60	3.92	608.68	4.00	608.60	4.17	608.43	--	--	--	--	--	--	--	--
MW-7A	613.25	flowing	--	flowing	--	flowing	--	--	--	flowing	flowing	flowing	flowing	flowing	flowing
MW-8	634.42	4.79	629.63	4.46	629.96	8.09	626.33	4.52	629.90	3.79	630.63	5.81	628.61	frozen	--
MW-8A	634.62	15.68	618.94	15.24	619.38	15.27	619.35	15.47	619.15	15.72	618.90	15.02	619.60	14.94	619.68
MW-9	637.98	5.92	632.06	--	--	--	--	4.58	633.40	4.50	633.48	6.79	631.19	--	--
MW-9A	637.86	13.66	624.20	13.25	624.61	13.21	624.65	13.92	623.94	13.58	624.28	--	--	12.94	--
MW-9B	638.02	13.80	624.22	13.28	624.74	13.30	624.72	13.86	624.16	14.42	623.60	13.09	624.93	12.96	625.06
MW-9C	637.95	13.67	624.28	13.28	624.67	13.22	624.73	14.06	623.89	14.40	623.55	13.07	624.88	12.97	624.98
MW-10	638.20	4.64	633.56	4.33	633.87	4.59	633.61	3.40	634.80	4.17	634.03	5.06	633.14	8.93	629.27
MW-10A	638.07	15.55	622.52	14.19	623.88	14.21	623.86	14.61	623.46	14.98	623.09	13.91	624.16	14.05	624.02
MW-10B	638.40	22.42	615.98	22.33	616.07	21.25	617.15	21.75	616.65	21.45	616.95	21.71	616.69	frozen	--
MW-11	636.13	8.62	627.51	6.23	629.90	--	--	6.20	629.93	7.03	629.10	9.16	626.97	--	--

Notes: Reference elevation surveyed by Dames & Moore/URS

Table 6
Summary of Historic Groundwater Elevations
Northern States Power, Ashland, Wisconsin

Well Location	Reference Elevation	Sep. 10, 2001		Dec. 3 , 2001		Mar. 18, 2002		June 28, 2002		Sept 16, 2002		Dec 16, 2002		Mar. 24, 2003	
		Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations
TW-13	635.72	9.54	626.29	4.58	631.25	4.71	631.12	3.86	631.97	4.50	631.33	--	--	6.06	629.66
MW-13A	635.94	20.79	615.15	21.58	614.36	21.00	614.94	20.70	615.24	20.46	615.48	20.75	615.19	20.50	615.44
MW-13B	635.90	20.83	615.07	21.21	614.69	20.75	615.15	20.62	615.28	20.13	615.77	20.25	615.65	19.98	615.92
MW-13C	636.11	11.73	624.38	11.32	624.79	11.24	624.87	11.95	624.16	12.40	623.71	11.08	625.03	11.03	625.08
MW-13D	637.09	11.81	625.28	11.39	625.70	11.39	625.70	12.03	625.06	12.52	624.57	11.16	625.93	11.08	626.01
MW-14	639.15	4.33	634.82	4.92	634.23	--	--	--	--	3.00	636.15	4.35	634.80	--	--
MW-15	641.21	4.52	636.69	4.33	636.88	3.60	637.61	3.52	637.69	3.73	637.48	5.10	636.11	4.68	636.53
MW-16	642.20	1.74	640.46	1.05	641.15	--	--	0.40	641.80	1.66	640.54	4.20	638.00	8.03	634.17
MW-17	633.88	2.64	631.24	--	--	3.29	630.59	2.56	631.32	2.24	631.64	4.98	628.90	--	--
MW-17A	633.68	19.94	613.74	--	--	20.18	613.50	19.90	613.78	19.77	613.91	19.32	614.36	19.80	613.88
MW-18A	635.57	--	--	--	--	20.50	615.07	20.22	615.35	20.24	615.33	19.93	615.64	20.16	615.41
MW-18B	635.52	--	--	--	--	13.46	622.06	13.75	621.77	13.98	621.54	13.12	622.40	13.31	622.21
MW-19A	636.76	--	--	--	--	21.27	615.49	20.41	616.35	20.90	615.86	20.58	616.18	20.66	616.10
MW-19B	636.65	--	--	--	--	11.74	624.91	11.58	625.07	12.38	624.27	11.25	625.40	10.90	625.75
MW-20A	642.65	--	--	--	--	24.30	618.35	24.25	618.40	24.81	617.84	24.37	618.28	24.85	617.80
MW-21A	637.82	--	--	--	--	21.75	616.07	20.87	616.95	21.57	616.25	21.26	616.56	21.7	616.12
MW-22A	638.34	--	--	--	--	--	--	19.11	619.23	19.44	618.90	19.16	619.18	19.56	618.78
MW-22B	638.50	--	--	--	--	--	--	14.56	623.94	14.79	623.71	13.80	624.70	13.87	624.63
MW-1(NET)	608.40	7.30	601.10	7.47	600.93	8.00	600.40	7.17	601.23	7.09	601.31	7.67	600.73	8.27	600.13
MW-2(NET)	608.23	7.11	601.12	7.24	600.99	7.79	600.44	6.95	601.28	--	--	--	--	7.98	600.25
MW-2A(NET)	607.99	--	--	--	--	--	--	--	--	flowing	flowing	flowing	flowing	flowing	flowing
MW-2B(NET)	608.50	--	--	--	--	--	--	--	--	flowing	flowing	flowing	flowing	flowing	flowing
MW-3(NET)	612.10	7.17	604.93	11.25	600.85	11.38	600.72	10.75	601.35	10.38	601.72	11.52	600.58	12.24	599.86
TW-11	606.80	5.75	601.05	5.75	601.05	5.74	601.06	3.58	603.22	3.75	603.05	6.00	600.80	5.99	600.81
TW-12	608.45	--	--	--	--	--	--	7.38	601.07	--	--	--	--	8.48	599.97

Notes: Reference elevation surveyed by Dames & Moore/URS

Table 6
Summary of Historic Groundwater Elevations
Northern States Power, Ashland, Wisconsin

Well Location	Reference Elevation	June 23, 2003		September 29, 2003		December 15, 2003		March 16, 2004		June 14, 2004		September 20, 2004		December 6, 2004		March 15, 2005	
		Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations
AW-1	--	--	--	--	--	--	--	--	--	flowing	--	flowing	--	flowing	--	flowing	--
AW-2	--	--	--	--	--	--	--	--	--	flowing	--	flowing	--	flowing	--	flowing	--
MW-1	634.18	14.51	619.67	14.80	619.38	NM	--	NM	--	15.51	618.67	14.70	619.48	15.10	619.08	15.22	618.96
MW-2R	637.43	15.59	621.84	15.58	621.85	15.52	621.91	15.32	622.11	15.57	621.86	15.78	621.65	16.66	620.77	16.80	620.63
MW-2AR	636.28	21.09	615.19	20.95	615.33	20.21	616.07	20.58	615.70	21.11	615.17	20.24	616.04	21.77	614.51	22.35	613.93
MW-2BR	636.24	11.67	624.57	11.10	625.14	10.41	625.83	10.68	625.56	10.88	625.36	11.56	624.68	10.68	625.56	10.31	625.93
MW-2C	--	--	--	--	--	2.45	--	9.81	--	10.02	--	10.51	--	9.66	--	9.98	--
MW-3	637.83	2.60	635.23	2.62	635.21	NM	--	5.36	632.47	2.77	635.06	2.94	634.89	3.45	634.38	5.41	632.42
MW-4	640.92	5.07	635.85	6.34	634.58	5.74	635.18	5.31	635.61	5.08	635.84	5.88	635.04	5.93	634.99	5.69	635.23
MW-4A	641.22	13.74	627.48	14.69	626.53	14.14	627.08	14.28	626.94	13.28	627.94	13.93	627.29	13.81	627.41	14.19	627.03
MW-4B	640.98	16.72	624.26	16.35	624.63	16.03	624.95	16.32	624.66	16.05	624.93	16.91	624.07	15.57	625.41	14.93	626.05
MW-5	633.82	19.20	614.62	18.73	615.09	NM	--	18.68	615.14	18.12	615.70	18.19	615.63	18.82	615.00	NM	--
MW-5A	633.72	19.18	614.54	19.17	614.55	NM	--	19.29	614.43	19.74	613.98	19.85	613.87	19.81	613.91	20.02	613.70
MW-5B	633.89	19.15	614.74	19.09	614.80	NM	--	19.08	614.81	19.35	614.54	19.84	614.05	19.69	614.20	19.92	613.97
MW-5C	634.33	10.07	624.26	9.42	624.91	NM	--	9.17	625.16	9.32	625.01	10.02	624.31	9.03	625.30	9.09	625.24
MW-6	644.88	15.28	629.60	16.41	628.47	NM	--	13.41	631.47	14.25	630.63	16.59	628.29	16.97	627.91	15.59	629.29
MW-6A	644.79	20.10	624.69	20.02	624.77	NM	--	19.68	625.11	19.46	625.33	20.17	624.62	19.37	625.42	19.55	625.24
MW-7R	--	--	--	--	--	--	--	--	--	8.86	--	8.29	--	9.09	--	10.09	--
MW-7A	613.25	flowing	--	flowing	--	flowing	--	flowing	--	flowing	--	flowing	--	flowing	--	flowing	--
MW-7B	--	--	--	--	--	--	--	--	--	flowing	--	flowing	--	flowing	--	flowing	--
MW-8	634.42	4.29	630.13	4.30	630.12	5.28	629.14	NM	--	3.53	630.89	3.41	631.01	3.74	630.68	6.39	628.03
MW-8A	634.62	15.67	618.95	15.19	619.43	NM	--	NM	--	14.66	619.96	14.91	619.71	14.67	619.95	10.16	624.46
MW-9	637.98	4.54	633.44	5.60	632.38	NM	--	NM	--	4.26	633.72	4.83	633.15	5.15	632.83	6.17	631.81
MW-9A	637.86	14.21	623.65	13.40	624.46	12.98	624.88	13.26	624.60	15.48	622.38	14.10	623.76	12.91	624.95	10.06	627.80
MW-9B	638.02	13.23	624.79	13.37	624.65	13.20	624.82	13.13	624.89	13.60	624.42	14.05	623.97	12.88	625.14	13.06	624.96
MW-9C	637.95	14.28	623.67	13.41	624.54	13.05	624.90	13.30	624.65	15.50	622.45	14.11	623.84	12.93	625.02	13.32	624.63
MW-10	638.20	3.98	634.22	6.29	631.91	5.84	632.36	6.62	631.58	4.46	633.74	4.78	633.42	5.04	633.16	NM	--
MW-10A	638.07	14.67	623.40	14.31	623.76	14.06	624.01	14.25	623.82	14.12	623.95	14.71	623.36	13.92	624.15	14.13	623.94
MW-10B	638.40	22.52	615.88	22.85	615.55	22.27	--	22.15	616.25	24.03	614.37	25.61	612.79	NM	--	22.11	616.29
MW-11	636.13	6.62	629.51	6.60	629.53	NM	--	NM	--	6.76	629.37	6.93	629.20	7.19	628.94	7.94	628.19
TW-13	635.72	4.74	630.98	5.26	630.46	5.10	630.62	NM	--	4.09	631.63	3.97	631.75	4.45	631.27	5.79	629.93
MW-13A	635.94	21.55	614.39	21.27	614.67	20.60	615.34	20.97	614.97	21.01	614.93	21.52	614.42	21.63	614.31	21.15	614.79
MW-13B	635.90	21.38	614.52	--	--	20.12	615.78	20.46	615.44	20.44	615.46	21.08	614.82	NM	--	NM	--
MW-13C	636.11	12.21	623.90	11.47	624.64	11.07	625.04	11.31	624.80	11.31	624.80	11.91	624.20	10.79	625.32	10.96	625.15
MW-13D	637.09	12.25	624.84	11.53	625.56	11.11	625.98	11.45	625.64	11.51	625.58	12.18	624.91	11.00	626.09	11.17	625.92

Notes: Reference elevation surveyed by Dames & Moore/URS

Table 6
Summary of Historic Groundwater Elevations
Northern States Power, Ashland, Wisconsin

Well Location	Reference Elevation	June 23, 2003		September 29, 2003		December 15, 2003		March 16, 2004		June 14, 2004		September 20, 2004		December 6, 2004		March 15, 2005	
		Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations
MW-14	639.15	3.78	635.37	4.33	634.82	NM	--	NM	--	3.63	635.52	3.67	635.48	4.00	635.15	4.30	634.85
MW-15	641.21	4.22	636.99	5.30	635.91	4.77	636.44	4.92	636.29	4.54	636.67	4.34	636.87	4.23	636.98	4.92	636.29
MW-15A	641.44	--	--	--	--	NM	--	15.13	626.31	14.59	626.85	15.05	626.39	14.99	626.45	15.17	626.27
MW-15B	641.47	--	--	--	--	16.48	624.99	16.79	624.68	16.61	624.86	17.27	624.20	16.28	625.19	16.45	625.02
MW-16	642.20	0.73	641.47	1.82	640.38	NM	--	NM	--	0.57	641.63	0.93	641.27	2.93	639.27	5.21	636.99
MW-17	633.88	2.26	631.62	2.52	631.36	2.65	631.23	2.17	631.71	2.33	631.55	3.52	630.36	3.14	630.74	5.24	628.64
MW-17A	633.68	19.82	613.86	19.61	614.07	19.48	614.20	18.27	615.41	19.34	614.34	20.31	613.37	19.71	613.97	19.47	614.21
MW-18A	635.57	20.35	615.22	20.26	615.31	20.12	615.45	20.42	615.15	20.53	615.04	20.98	614.59	21.02	614.55	21.40	614.17
MW-18B	635.52	13.74	621.78	13.37	622.15	14.66	620.86	12.17	623.35	13.35	622.17	13.83	621.69	13.29	622.23	13.41	622.11
MW-19A	636.76	21.05	615.71	20.96	615.80	NM	--	20.83	615.93	21.05	615.71	21.58	615.18	21.58	615.18	21.54	615.22
MW-19B	636.65	12.15	624.50	11.58	625.07	NM	--	11.12	625.53	11.23	625.42	12.12	624.53	11.23	625.42	11.28	625.37
MW-20A	642.65	24.85	617.80	24.85	617.80	24.82	617.83	24.89	617.76	24.73	617.92	25.14	617.51	25.10	617.55	25.22	617.43
MW-21A	637.82	21.84	615.98	21.92	615.90	21.53	616.29	21.38	616.44	21.61	616.21	21.94	615.88	21.71	616.11	22	615.82
MW-21B	636.83	--	--	--	--	20.78	616.05	20.94	615.89	20.86	615.97	21.36	615.47	21.27	615.56	NM	--
MW-22A	638.34	19.47	618.87	19.77	618.57	19.40	618.94	19.29	619.05	19.11	619.23	19.58	618.76	19.57	618.77	19.71	618.63
MW-22B	638.50	14.58	623.92	14.15	624.35	13.88	624.62	13.97	624.53	13.98	624.52	14.65	623.85	13.69	624.81	13.85	624.65
MW-23A	--	--	--	--	--	--	--	--	--	flowing	--	flowing	--	flowing	--	flowing	--
MW-23B	--	--	--	--	--	--	--	--	--	flowing	--	flowing	--	flowing	--	flowing	--
MW-24	--	--	--	--	--	--	--	--	--	2.78	--	2.32	--	2.64	--	3.56	--
P-24	--	--	--	--	--	--	--	--	--	3.08	--	2.69	--	2.98	--	3.79	--
MW-24A	--	--	--	--	--	--	--	--	--	flowing	--	flowing	--	flowing	--	flowing	--
MW-25	--	--	--	--	--	--	--	--	--	2.27	--	1.80	--	2.17	--	2.97	--
P-25	--	--	--	--	--	--	--	--	--	2.77	--	1.87	--	2.21	--	2.65	--
MW-25A	--	--	--	--	--	--	--	--	--	flowing	--	flowing	--	flowing	--	flowing	--
MW-26	--	--	--	--	--	--	--	--	--	3.25	--	2.90	--	3.11	--	4.10	--
P-26	--	--	--	--	--	--	--	--	--	3.29	--	2.88	--	3.57	--	4.15	--
MW-26A	--	--	--	--	--	--	--	--	--	flowing	--	flowing	--	flowing	--	flowing	--
MW-1(NET)	608.40	7.41	600.99	7.73	600.67	7.80	600.60	8.12	600.28	7.11	601.29	6.68	601.72	7.28	601.12	7.89	600.51
MW-2(NET)	608.23	7.16	601.07	7.48	600.75	7.56	600.67	7.82	600.41	6.85	601.38	6.42	601.81	6.90	601.33	7.62	600.61
MW-2A(NET)	607.99	flowing	--	flowing	--	flowing	--	flowing	--	flowing	--	flowing	--	flowing	--	flowing	--
MW-2B(NET)	608.50	flowing	--	flowing	--	flowing	--	flowing	--	flowing	--	flowing	--	flowing	--	flowing	--
MW-3(NET)	612.10	11.76	600.34	11.68	600.42	11.68	600.42	12.21	599.89	11.19	600.91	10.77	601.33	10.98	601.12	11.75	600.35
TW-9	--	--	--	--	--	--	--	--	--	7.78	--	7.48	--	8.05	--	8.94	--
TW-11	606.80	6.09	600.71	5.43	601.37	5.21	601.59	5.77	601.03	5.63	601.17	4.62	602.18	4.51	602.29	5.42	601.38
TW-12	608.45	7.66	600.79	7.91	600.54	7.99	600.46	NM	--	4.65	603.80	4.22	604.23	4.52	603.93	NM	--

Notes: Reference elevation surveyed by Dames & Moore/URS

Table 6
Summary of Historic Groundwater Elevations
Northern States Power, Ashland, Wisconsin

Well Location	Reference Elevation	June 15, 2005		November 3, 2005		August 11, 2008	
		Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations
AW-1	--	flowing	--	flowing	--	flowing	--
AW-2	--	flowing	--	flowing	--	flowing	--
MW-1	634.04	13.12	620.92	NM	--	14.32	619.72
MW-2R	635.37	14.35	621.02	15.95	619.42	16.55	618.82
MW-2AR	635.23	NM	--	22.33	612.90	22.08	613.15
MW-2BR	635.19	NM	--	10.98	624.21	10.73	624.46
MW-2C	635.30	9.71	625.59	9.51	625.79	10.49	624.81
MW-3	637.86	2.21	635.65	2.86	635.00	2.84	635.02
MW-4	641.32	4.77	636.55	5.19	636.13	7.54	633.78
MW-4A	641.03	13.37	627.66	13.34	627.69	14.14	626.89
MW-4B	640.93	15.63	625.30	15.59	625.34	--	--
MW-5	633.63	NM	--	NM	--	18.86	614.77
MW-5A	633.54	19.86	613.68	20.49	613.05	20.10	613.44
MW-5B	633.75	NM	--	20.35	613.40	19.95	613.80
MW-5C	633.92	9.16	624.76	8.81	625.11	9.89	624.03
MW-6	644.66	13.66	631.00	15.65	629.01	17.41	627.25
MW-6A	644.60	19.51	625.09	19.46	625.14	20.06	624.54
MW-7R	613.31	9.69	603.62	10.21	603.10	10.10	603.21
MW-7A	612.32	-0.80	613.12	-0.40	612.72	-0.61	612.93
MW-7B	613.00	flowing	--	2.36	610.64	0.75	612.25
MW-8	634.77	3.25	631.52	3.60	631.17	4.00	630.77
MW-8A	634.62	14.50	620.12	14.82	619.80	15.29	619.33
MW-9	637.96	4.52	633.44	NM	--	--	--
MW-9A	637.95	13.27	624.68	12.85	625.10	14.26	623.69
MW-9B	638.01	12.84	625.17	13.17	624.84	14.23	623.78
MW-9C	637.90	13.25	624.65	12.80	625.10	14.10	623.80
MW-10	638.01	3.34	634.67	3.99	634.02	4.39	633.62
MW-10A	638.00	13.95	624.05	13.82	624.18	14.61	623.39
MW-10B	637.61	18.19	619.42	20.63	616.98	20.83	616.78
MW-11	637.07	4.80	632.27	6.25	630.82	7.01	630.06
TW-13	635.57	3.05	632.52	4.45	631.12	4.80	630.77
MW-13A	635.36	20.96	614.40	21.35	614.01	21.19	614.17
MW-13B	635.33	20.42	--	21.24	614.09	19.72	615.61
MW-13C	636.11	11.04	625.07	10.63	625.48	12.00	624.11
MW-13D	636.00	11.32	624.68	10.89	625.11	12.19	623.81

Notes: All site wells re-surveyed by Coleman Engineering in April/May 2005.
Note new reference elevations for site wells.
Negative depth to water measurements indicate head above well casing (artesian flow).

Table 6
Summary of Historic Groundwater Elevations
Northern States Power, Ashland, Wisconsin

Well Location	Reference Elevation	June 15, 2005		November 3, 2005		August 11, 2008	
		Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations	Depth to Water	Groundwater Elevations
MW-14	639.02	3.70	--	3.32	635.70	NM	--
MW-15	641.02	4.58	--	5.26	635.76	4.60	636.42
MW-15A	641.31	14.56	626.75	14.46	626.85	17.32	623.99
MW-15B	641.29	16.58	624.71	16.61	624.68	15.00	626.29
MW-16	641.91	0.96	640.95	0.90	641.01	1.84	640.07
MW-17	634.83	1.45	633.38	2.05	632.78	3.23	631.60
MW-17A	634.58	20.05	614.53	20.75	613.83	19.91	614.67
MW-18A	634.51	20.92	613.59	21.63	612.88	21.20	613.31
MW-18B	634.40	13.22	621.18	13.43	620.97	13.94	620.46
MW-19A	635.73	21.31	614.42	22.07	613.66	21.54	614.19
MW-19B	635.58	11.25	624.33	11.05	624.53	11.94	623.64
MW-20A	641.69	25.09	616.60	25.22	616.47	25.14	616.55
MW-21A	636.76	21.90	614.86	22.61	614.15	21.97	614.79
MW-21B	636.76	21.09	615.67	21.50	615.26	21.15	615.61
MW-22A	638.32	19.29	619.03	19.43	618.89	19.40	618.92
MW-22B	638.47	13.80	624.67	13.50	624.97	14.56	623.91
MW-23A	610.74	-1.95	612.69	-2.22	612.96	-2.27	613.01
MW-23B	610.74	-2.35	613.09	-2.30	613.04	-3.08	613.82
MW-24	605.28	2.66	602.62	2.99	602.29	2.83	602.45
P-24	604.94	3.00	601.94	3.21	601.73	3.13	601.81
MW-24A	605.01	-11.65	616.66	-11.20	616.21	-11.55	616.56
MW-25	604.39	2.11	602.28	2.38	602.01	2.28	602.11
P-25	604.37	2.30	602.07	2.26	602.11	2.29	602.08
MW-25A	606.95	-9.70	616.65	-9.50	616.45	-10.14	617.09
MW-26	605.28	3.16	602.12	3.32	601.96	3.06	602.22
P-26	605.26	3.19	602.07	3.37	601.89	3.13	602.13
MW-26A	605.31	-13.05	618.36	-12.30	617.61	-12.50	617.81
MW-1(NET)	609.31	6.98	602.33	7.21	602.10	7.09	602.22
MW-2(NET)	609.01	6.70	602.31	6.99	602.02	6.82	602.19
MW-2A(NET)	608.90	-4.55	613.45	-4.00	612.90	-3.33	612.23
MW-2B(NET)	608.84	6.21	602.63	6.28	602.56	-0.01	608.85
MW-3(NET)	612.99	11.13	601.86	11.31	601.68	10.88	602.11
TW-9	610.02	7.90	602.12	8.11	601.91	7.77	602.25
TW-11	607.11	4.29	602.82	NM	--	4.88	602.23
TW-12	606.81	3.45	603.36	4.72	602.09	4.60	602.21

Notes: All site wells re-surveyed by Coleman Engineering in April/May 2005.
Note new reference elevations for site wells.
Negative depth to water measurements indicate head above well casing (artesian flow).

Table 7
Summary of Historic Free Phase Hydrocarbon Thickness
Northern States Power, Ashland, Wisconsin

Well Location	Depth to Bottom	October 6, 1998			November 23, 1998			June 2, 1999		
		Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape
EW-1	53.51	41.45	12.06	12.25	40.09	13.42	13.5	35.25	18.26	18.2
MW-7	17.88	(1)	(1)	10.14	(1)	(1)	10.01	(1)	(1)	9.91
MW-9	14.62	13.78	0.84	2.73	14.2	0.42	3.6	14.03	0.59	--
TW-13	14.82	(2)	(2)	(2)	(2)	(2)	(2)	18.10	0.31	2.2
MW-13A	45.33	43.22	2.11	4.73	43.36	1.97	3.0	43.37	1.96	--
MW-13B	69.82	43.56	26.26	26.1	43.56	26.26	27.6	52.28	17.54	--
MW-15	15.59	14.78	0.81	2.94	13.93	1.66	2.09	13.26	2.33	2.6

Well Location	Depth to Bottom	August 23, 1999			November 29, 1999			September 27, 2000		
		Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape
EW-1	53.51	34.31	19.2		(2)	(2)	16.2	(2)	(2)	(2)
MW-7	17.88	(1)	(1)	10.44	(2)	(2)	0	(2)	(2)	(2)
MW-9	14.62	13.02	1.6		(2)	(2)	<1 inch	(2)	(2)	(2)
TW-13	14.82	(2)	< 6 inches	< 6 inches	(2)	(2)	<1 inch	14.32	0.5	0.5
MW-13A	45.33	(1)	(1)	8.5	(2)	(2)	2.1	44.33	1.0	1.0
MW-13B	69.82	(1)	(1)	26	(2)	(2)	12.1	57.49	12.33	12.33
MW-15	15.59	(1)	(1)	10.6	(2)	(2)	0.67	(2)	(2)	(2)

Well Location	Depth to Bottom	December 4, 2000			March 27, 2001			June 11, 2001		
		Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape
EW-1	53.51	Not Measured	--	--	Not Measured	--	--	47.51	6.00	6.00
EW-2	50.00	Not Measured		--	Not Measured	--	--	40.5	9.50	9.50
EW-3	70.00	Not Measured	--	--	Not Measured	--	--	68.58	1.42	1.42
MW-2A	44.41	Not Measured	--	--	41.66	2.75	2.75	40.37	4.04	4.04
MW-7	17.88	Frozen	--	--	Frozen	--	--	Damaged	--	--
MW-9	14.62	14.5	0.1	0.1	(2)	(2)	(2)	(2)	(2)	(2)
MW-10B	34.91				34.66	0.25	0.25	34.33	0.58	0.58
TW-13	14.82	14.57	0.25	0.25	14.74	0.08	0.08	(2)	(2)	(2)
MW-13A	45.33	44.25	1.08	1.08	44.25	1.08	1.08	44.83	0.50	0.50
MW-13B	69.82	57.24	12.58	12.58	55.86	13.96	13.96	58.65	11.17	11.17
MW-15	15.59	15.17	0.42	0.25	12.84	2.75	2.75	15.34	0.25	0.25

(1) Free-phase hydrocarbons not detected by interface probe; free-phase hydrocarbons observed on tape.
(2) Product not encountered.
Hydrocarbon thickness in well is difference between depth to bottom and depth to hydrocarbon/water interface.
Hydrocarbon thickness on tape measure after probe removed from the well.

Well Location	Depth to Bottom	September 10, 2001			December 3, 2001			March 18, 2002		
		Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape
EW-1	53.51	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-2	50.00	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-3	70.00	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
MW-2A*	44.41	41.33	3.08	3.08	Not Measured	--	--	43.45**	1.63	1.63
MW-7	17.88	Damaged	--	--	Damaged	--	--	Damaged	--	--
MW-9	14.62	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
MW-10B	34.91	34.41	0.5	0.5	34.58	0.33	0.33	34.58	0.33	0.33
TW-13	14.82	(2)	(2)	(2)	14.74	0.08	0.08	14.74	0.08	0.08
MW-13A	45.33	43.83	0.58	0.58	43.91	0.5	0.5	44.75	0.58	0.58
MW-13B	69.82	58.99	10.83	10.83	59.65	10.17	10.17	58.32	11.50	11.50
MW-15	15.59	15.26	0.33	0.33	15.34	0.25	0.25	15.51	0.08	0.08
MW-18A	44.86	--	--	--	--	--	--	(2)	(2)	(2)
MW-19A	45.20	--	--	--	--	--	--	(2)	(2)	(2)
MW-21A	46.26	--	--	--	--	--	--	46.25*	0.01*	0.01*

Well Location	Depth to Bottom	June 28, 2002			September 16, 2002			December 16, 2002		
		Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape
EW-1	53.51	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-2	50.00	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-3	70.00	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-4	29.50	29.25	0.25	0.25	(2)	(2)	(2)	Not Measured	--	--
MW-2R	29.40	28.23	1.17	1.17	(2)	(2)	(2)	(2)	(2)	(2)
MW-2AR	45.08	44.31	0.77	0.77	41.08	4.00	4.00	39.88	5.20	5.20
MW-7	17.88	Abandoned	--	--	Abandoned	--	--	Abandoned	--	--
MW-9	14.62	Not Measured	--	--	(2)	(2)	(2)	Not Measured	--	--
MW-10B	34.91	34.08	0.83	0.73	33.74	1.17	1.17	33.40	1.51	1.51
TW-13	14.82	Trace	--	--	Trace	--	--	Trace	--	--
MW-13A	45.33	45.25	0.08	0.08	44.33	1.00	1.00	44.33	1.00	1.00
MW-13B	69.82	67.99	1.83	1.83	59.40	10.42	10.42	58.32	11.50	11.50
MW-15	15.59	15.46	0.13	0.13	15.55	0.04	0.04	15.46	0.13	0.13
MW-18A	44.86	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
MW-19A	45.20	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
MW-21A	46.26	Trace	--	--	Trace	--	--	(2)	(2)	(2)
MW-22A	27.55	(2)	(2)	(2)	(2)	(2)	(2)	27.42	0.13	0.13

(1) Free-phase hydrocarbons not detected by interface probe; free-phase hydrocarbons observed on tape.
(2) Product not encountered.

Table 7
Summary of Historic Free Phase Hydrocarbon Thickness
Northern States Power, Ashland, Wisconsin

Well Location	Depth to Bottom	March 24, 2003			June 23, 2003			September 29, 2003		
		Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape
EW-1	53.51	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-2	50.00	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-3	70.00	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-4	29.50	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
MW-2R	29.40	27.32	2.08	2.08	28.02	1.38	1.38	27.53	1.87	1.87
MW-2AR	45.08	40.91	4.17	4.17	38.08	7.00	7.00	41.96	3.12	3.12
MW-3 (NET)	17.60	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
MW-4B	52.30	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
MW-7R	17.01	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
MW-9	14.62	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
TW-9	16.20	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
MW-10B	34.91	Not Measured	--	--	33.24	1.67	1.67	33.83	1.08	1.08
TW-11	14.00	Not Measured	--	--	13.50	0.50	0.50	13.17	0.83	0.83
TW-13	14.82	Trace	--	--	(2)	(2)	(2)	(2)	(2)	(2)
MW-13A	45.33	44.06	1.27	1.27	44.33	Trace	Trace	45.31	0.02	0.02
MW-13B	69.82	58.00	11.82	11.82	(3)	(3)	(3)	(3)	(3)	(3)
MW-15	15.59	15.49	0.10	0.10	15.14	0.45	0.45	15.43	0.16	0.16
MW-15A	30.00	--	--	--	--	--	--	--	--	--
MW-18A	44.86	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
MW-19A	45.20	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
MW-21A	46.26	(2)	(2)	(2)	Trace	Trace	Trace	(2)	(2)	(2)
MW-22A	27.55	27.26	0.29	0.29	(2)	(2)	(2)	(2)	(2)	(2)

(1) Free-phase hydrocarbons not detected by interface probe; free-phase hydrocarbons observed on tape.
(2) Product not encountered.
(3) Measuring device did not reach the well bottom. Suspected obstruction near well screen.
(4) Trace floating LNAPL encountered in well.

Well Location	Depth to Bottom	December 15, 2003			March 16, 2004			June 14, 2004		
		Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape
EW-1	53.51	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-2	50.00	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-3	70.00	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-4	29.50	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
MW-2R	29.40	27.90	1.50	1.50	28.00	1.4	1.4	28.26	1.14	1.14
MW-2AR	45.08	40.63	4.45	4.45	43.43	1.65	1.65	41.99	3.09	3.09
MW-3 (NET)	17.60	17.60	Trace	Trace	17.59	0.01	0.01	17.6	Trace	Trace
MW-4B	52.30	Not Measured	--	--	Not Measured	--	--	52.30	Trace	Trace
MW-7R	17.01	Not Measured	--	--	--	--	--	(2)	(2)	(2)
MW-9	14.62	Not Measured	--	--	Not Measured	--	--	(2)	(2)	(2)
TW-9	16.20	Not Measured	--	--	Not Measured	--	--	13.87	2.33	2.33
MW-10B	34.91	32.31	2.60	2.60	33.01	1.9	1.9	33.83	1.08	1.08
TW-11	14.00	12.92	1.08	1.08	13.20	0.80	0.80	12.92	1.08	1.08
TW-13	14.82	(2)	(2)	(2)	Not Measured	--	--	(2)	(2)	(2)
MW-13A	45.33	45.08	0.25	0.25	45.08	0.25	0.25	44.91	0.42	0.42
MW-13B	69.82	58.57	11.25	11.25	64.4	5.42	5.42	(3)	(3)	(3)
MW-15	15.59	15.57	0.02	0.02	15.58	0.01	0.01	15.04	0.55	0.55
MW-15A	30.00	26.25	3.75	3.75	Not Measured	--	--	29.70	0.30	0.30
MW-18A	44.86	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
MW-19A	45.20	Not Measured	--	--	(2)	(2)	(2)	(2)	(2)	(2)
MW-21A	46.26	46.24	0.02	0.02	(2)	(2)	(2)	(2)	(2)	(2)
MW-22A	27.55	27.51	0.04	0.04	27.54	0.01	0.01	(2)	(2)	(2)

(1) Free-phase hydrocarbons not detected by interface probe; free-phase hydrocarbons observed on tape.
(2) Product not encountered.
(3) Measuring device did not reach the well bottom. Suspected obstruction near well screen.
(4) Trace floating LNAPL encountered in well.

Table 7
Summary of Historic Free Phase Hydrocarbon Thickness
Northern States Power, Ashland, Wisconsin

Well Location	Depth to Bottom	September 20, 2004			December 6, 2004			March 15, 2005		
		Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape
EW-1	53.51	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-2	50.00	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-3	70.00	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-4	29.50	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
MW-2R	29.40	28.23	1.17	1.17	28.50	0.90	0.90	28.82	0.58	0.58
MW-2AR	45.08	38.35	6.73	6.73	24.68	20.4	20.4	29.98	15.10	15.10
MW-3 (NET)	17.60	(4)	(4)	(4)	(4)	(4)	(4)	17.59	0.01	0.01
MW-4A	25.40	Not Measured	--	--	Not Measured	--	--	25.32	0.08	0.08
MW-4B	52.30	49.48	2.82	2.82	47.48	4.82	4.82	49.10	3.20	3.20
MW-7R	17.00	(4)	(4)	(4)	(4)	(4)	(4)	17.00	(4)	(4)
MW-9	14.62	(4)	(4)	(4)	(4)	(4)	(4)	Not Measured	--	--
TW-9	16.20	13.93	2.27	2.27	13.97	2.23	2.23	13.60	2.60	2.60
MW-10B	34.91	33.60	1.31	1.31	Not Measured	--	--	33.33	1.58	1.58
TW-11	14.00	12.97	1.03	1.03	12.99	1.01	1.01	12.84	1.16	1.16
TW-13	14.82	(2)	(2)	(2)	(4)	(4)	(4)	(2)	(2)	(2)
MW-13A	45.33	44.93	0.40	0.40	44.41	0.92	0.92	45.25	0.08	0.08
MW-13B	69.82	(3)	(3)	(3)	Not Measured	--	--	Not Measured	--	--
MW-15	15.59	(4)	(4)	(4)	15.30	0.29	0.29	15.59	Trace	Trace
MW-15A	30.00	28.27	1.73	1.73	24.80	5.20	5.20	30.00	Trace	Trace
MW-18A	44.86	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
MW-19A	45.20	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
MW-21A	46.26	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
MW-22A	27.55	(2)	(2)	(2)	(4)	(4)	(4)	(2)	(2)	(2)

(1) Free-phase hydrocarbons not detected by interface probe; free-phase hydrocarbons observed on tape.
(2) Product not encountered.
(3) Measuring device did not reach the well bottom. Suspected obstruction near well screen.
(4) Trace floating LNAPL encountered in well.

Well Location	Depth to Bottom	June 15, 2005			November 3, 2005			August 11, 2008		
		Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape	Depth to Hydrocarbon	Feet in Well	Feet on Tape
EW-1	53.51	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-2	50.00	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-3	70.00	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
EW-4	29.50	Not Measured	--	--	Not Measured	--	--	Not Measured	--	--
MW-2R	29.40	29.39	0.01	0.01	29.20	0.20	0.20	29.23	0.17	0.17
MW-2AR	45.08	Not Measured	--	--	33.08	12.00	12	33.00	12.08	12.08
MW-3 (NET)	17.60	Not Measured	--	--	(4)	(4)	(4)	(4)	(4)	(4)
MW-4A	25.40	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
MW-4B	52.30	48.55	3.75	3.75	43.30	9.00	9.00	--	--	--
MW-7R	17.00	(4)	(4)	(4)	16.60	0.40	0.40	16.58	0.42	0.42
MW-9	14.62	(4)	(4)	(4)	Not Measured	--	--	--	--	--
TW-9	16.20	13.85	2.35	2.35	15.70	0.50	0.50	12.62	3.58	3.58
MW-10B	34.91	33.95	0.96	0.96	34.01	0.90	0.90	33.95	0.96	0.96
TW-11	14.00	12.88	1.12	1.12	13.05	0.95	0.95	13.08	0.92	0.92
TW-13	14.82	(2)	(2)	(2)	Not Measured	--	--	14.82	Trace	Trace
MW-13A	45.33	44.91	0.42	0.42	(2)	(2)	(2)	45.33	Trace	Trace
MW-13B	69.82	(3)	(3)	(3)	69.37	0.45	0.45	(3)	(3)	(3)
MW-15	15.59	(4)	(4)	(4)	15.24	0.35	0.35	15.59	Trace	Trace
MW-15A	30.00	29.99	0.01	0.01	29.90	0.10	0.1	(2)	(2)	(2)
MW-18A	44.86	Not Measured	--	--	Not Measured	--	--	(2)	(2)	(2)
MW-19A	45.20	Not Measured	--	--	Not Measured	--	--	(2)	(2)	(2)
MW-21A	46.26	Not Measured	--	--	Not Measured	--	--	(2)	(2)	(2)
MW-22A	27.55	Not Measured	--	--	(2)	(2)	(2)	(3)	(3)	(3)
MW-26	14.5	Not Measured	--	--	Not Measured	--	--	14.25	0.25	0.25

(1) Free-phase hydrocarbons not detected by interface probe; free-phase hydrocarbons observed on tape.
(2) Product not encountered.
(3) Measuring device did not reach the well bottom. Suspected obstruction near well screen.
(4) Trace floating LNAPL encountered in well.

Appendix

Interim Treatment System
Laboratory Reporting Forms

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Client: **URS Corporation (Milwaukee)**
Attn: Paul Sklar
6737 West Washington Street #2265
Milwaukee,WI 53214

NLS Project: 121469
NLS Customer: 91206
Fax: 414 831 4101 Phone: 414 831 4100

Project: **Xcel Energy Ashland**

Influent NLS ID: 489538
COC: 108931:1 Matrix: GW
Collected: 08/07/08 00:00 Received: 08/08/08

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA Method 8260B	see attached					08/12/08	SW846 8260	721026460

Pre Carbon NLS ID: 489539
COC: 108931:2 Matrix: GW
Collected: 08/07/08 00:00 Received: 08/08/08

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA Method 8260B	see attached					08/12/08	SW846 8260	721026460

Effluent NLS ID: 489540
COC: 108931:3 Matrix: GW
Collected: 08/07/08 00:00 Received: 08/08/08

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA Method 8260B	see attached					08/12/08	SW846 8260	721026460

Trip Blank NLS ID: 489541
COC: 108931 Matrix: TB
Collected: 08/07/08 00:00 Received: 08/08/08

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
VOCs (water) by EPA Method 8260B	see attached					08/12/08	SW846 8260	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution.

LOD = Limit of Detection LOQ = Limit of Quantitation ND = Not Detected (< LOD) 1000 ug/L = 1 mg/L
DWB = Dry Weight Basis NA = Not Applicable %DWB = (mg/kg DWB) / 10000
MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

Reviewed by: _____

Authorized by:
R. T. Krueger
President

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)

Customer: URS Corporation (Milwaukee) **NLS Project: 121469**

Project Description: Xcel Energy Ashland

Project Title: **Template: SATW** **Printed: 09/08/2008 14:35**

Sample: 489538 Influent Collected: 08/07/08 Analyzed: 08/12/08 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Benzene	42000	ug/L	2500	1000	3500	
Bromobenzene	ND	ug/L	2500	1000	3400	
Bromochloromethane	ND	ug/L	2500	940	3100	
Bromodichloromethane	ND	ug/L	2500	880	2900	
Bromoform	ND	ug/L	2500	960	3200	
Bromomethane	ND	ug/L	2500	1400	4700	
n-Butylbenzene	ND	ug/L	2500	910	3000	
sec-Butylbenzene	ND	ug/L	2500	900	3000	
tert-Butylbenzene	ND	ug/L	2500	940	3100	
Carbon Tetrachloride	ND	ug/L	2500	690	2300	
Chlorobenzene	ND	ug/L	2500	970	3200	
Chloroethane	ND	ug/L	2500	3500	12000	
Chloroform	ND	ug/L	2500	1000	3500	
Chloromethane	ND	ug/L	2500	840	2800	
2-Chlorotoluene	ND	ug/L	2500	1000	3400	
4-Chlorotoluene	ND	ug/L	2500	1000	3500	
Dibromochloromethane	ND	ug/L	2500	910	3000	
1,2-Dibromo-3-Chloropropane	ND	ug/L	2500	1300	4200	
1,2-Dibromoethane	ND	ug/L	2500	760	2500	
Dibromomethane	ND	ug/L	2500	1100	3800	
1,2-Dichlorobenzene	ND	ug/L	2500	950	3200	
1,3-Dichlorobenzene	ND	ug/L	2500	960	3200	
1,4-Dichlorobenzene	ND	ug/L	2500	870	2900	
Dichlorodifluoromethane	ND	ug/L	2500	560	1900	
1,1-Dichloroethane	ND	ug/L	2500	870	2900	
1,2-Dichloroethane	ND	ug/L	2500	1200	3900	
1,1-Dichloroethene	ND	ug/L	2500	850	2800	
cis-1,2-Dichloroethene	ND	ug/L	2500	1000	3400	
trans-1,2-Dichloroethene	ND	ug/L	2500	1200	3900	
1,2-Dichloropropane	ND	ug/L	2500	970	3200	
1,3-Dichloropropane	ND	ug/L	2500	910	3000	
2,2-Dichloropropane	ND	ug/L	2500	1400	4500	
1,1-Dichloropropene	ND	ug/L	2500	840	2800	
cis-1,3-Dichloropropene	ND	ug/L	2500	870	2800	
trans-1,3-Dichloropropene	ND	ug/L	2500	940	3100	
Ethylbenzene	[860]	ug/L	2500	810	2700	
Hexachlorobutadiene	ND	ug/L	2500	810	2700	
Isopropylbenzene	ND	ug/L	2500	810	2700	
p-Isopropyltoluene	ND	ug/L	2500	900	3000	
Methylene chloride	ND	ug/L	2500	1000	3300	
Naphthalene	35000	ug/L	2500	920	2900	
n-Propylbenzene	ND	ug/L	2500	1000	3300	
ortho-Xylene	[1600]	ug/L	2500	790	2600	
Styrene	4400	ug/L	2500	870	2900	
1,1,1,2-Tetrachloroethane	ND	ug/L	2500	990	3300	
1,1,2,2-Tetrachloroethane	ND	ug/L	2500	1200	4100	
Tetrachloroethene	ND	ug/L	2500	760	2500	
Toluene	21000	ug/L	2500	920	3100	
1,2,3-Trichlorobenzene	ND	ug/L	2500	980	3300	
1,2,4-Trichlorobenzene	ND	ug/L	2500	860	2900	
1,1,1-Trichloroethane	ND	ug/L	2500	840	2800	
1,1,2-Trichloroethane	ND	ug/L	2500	1100	3600	

Sample: 489538 Influent Collected: 08/07/08 Analyzed: 08/12/08 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Trichloroethene	ND	ug/L	2500	1100	3600	
Trichlorofluoromethane	ND	ug/L	2500	680	2300	
1,2,3-Trichloropropane	ND	ug/L	2500	1900	6400	
1,2,4-Trimethylbenzene	ND	ug/L	2500	1000	3300	
1,3,5-Trimethylbenzene	ND	ug/L	2500	1000	3400	
Vinyl chloride	ND	ug/L	2500	240	790	
meta,para-Xylene	3000	ug/L	2500	660	2200	
MTBE	ND	ug/L	2500	950	3200	
Isopropyl Ether	ND	ug/L	2500	840	2800	
Dibromofluoromethane (SURR)	111.03%					S
Toluene-d8 (SURR)	116.16%					S
1-Bromo-4-Fluorobenzene (SURR)	97.06%					S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)
Customer: URS Corporation (Milwaukee) NLS Project: 121469
Project Description: Xcel Energy Ashland
Project Title: Template: SATW Printed: 09/08/2008 14:35

Sample: 489539 Pre Carbon Collected: 08/07/08 Analyzed: 08/12/08 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Benzene	ND	ug/L	1	0.42	1.4	
Bromobenzene	ND	ug/L	1	0.41	1.4	
Bromochloromethane	ND	ug/L	1	0.38	1.3	
Bromodichloromethane	ND	ug/L	1	0.35	1.2	
Bromoform	ND	ug/L	1	0.38	1.3	
Bromomethane	ND	ug/L	1	0.56	1.9	
n-Butylbenzene	ND	ug/L	1	0.36	1.2	
sec-Butylbenzene	ND	ug/L	1	0.36	1.2	
tert-Butylbenzene	ND	ug/L	1	0.38	1.3	
Carbon Tetrachloride	ND	ug/L	1	0.28	0.92	
Chlorobenzene	ND	ug/L	1	0.39	1.3	
Chloroethane	ND	ug/L	1	1.4	4.7	
Chloroform	ND	ug/L	1	0.42	1.4	
Chloromethane	ND	ug/L	1	0.33	1.1	
2-Chlorotoluene	ND	ug/L	1	0.41	1.4	
4-Chlorotoluene	ND	ug/L	1	0.42	1.4	
Dibromochloromethane	ND	ug/L	1	0.36	1.2	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.51	1.7	
1,2-Dibromoethane	ND	ug/L	1	0.30	1.0	
Dibromomethane	ND	ug/L	1	0.45	1.5	
1,2-Dichlorobenzene	ND	ug/L	1	0.38	1.3	
1,3-Dichlorobenzene	ND	ug/L	1	0.38	1.3	
1,4-Dichlorobenzene	ND	ug/L	1	0.35	1.2	
Dichlorodifluoromethane	ND	ug/L	1	0.22	0.74	
1,1-Dichloroethane	ND	ug/L	1	0.35	1.2	
1,2-Dichloroethane	ND	ug/L	1	0.47	1.6	
1,1-Dichloroethene	ND	ug/L	1	0.34	1.1	
cis-1,2-Dichloroethene	ND	ug/L	1	0.40	1.3	
trans-1,2-Dichloroethene	ND	ug/L	1	0.47	1.6	
1,2-Dichloropropane	ND	ug/L	1	0.39	1.3	
1,3-Dichloropropane	ND	ug/L	1	0.36	1.2	
2,2-Dichloropropane	ND	ug/L	1	0.54	1.8	
1,1-Dichloropropene	ND	ug/L	1	0.33	1.1	
cis-1,3-Dichloropropene	ND	ug/L	1	0.35	1.1	
trans-1,3-Dichloropropene	ND	ug/L	1	0.38	1.3	
Ethylbenzene	ND	ug/L	1	0.33	1.1	
Hexachlorobutadiene	ND	ug/L	1	0.33	1.1	
Isopropylbenzene	ND	ug/L	1	0.32	1.1	
p-Isopropyltoluene	ND	ug/L	1	0.36	1.2	
Methylene chloride	ND	ug/L	1	0.40	1.3	
Naphthalene	1.8	ug/L	1	0.37	1.2	
n-Propylbenzene	ND	ug/L	1	0.40	1.3	
ortho-Xylene	ND	ug/L	1	0.32	1.1	
Styrene	ND	ug/L	1	0.35	1.2	
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.39	1.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.49	1.6	
Tetrachloroethene	ND	ug/L	1	0.31	1.0	
Toluene	ND	ug/L	1	0.37	1.2	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.39	1.3	
1,2,4-Trichlorobenzene	ND	ug/L	1	0.34	1.1	
1,1,1-Trichloroethane	ND	ug/L	1	0.34	1.1	
1,1,2-Trichloroethane	ND	ug/L	1	0.43	1.4	

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)
Customer: URS Corporation (Milwaukee) NLS Project: 121469
Project Description: Xcel Energy Ashland
Project Title: Template: SATW Printed: 09/08/2008 14:35

Sample: 489539 Pre Carbon Collected: 08/07/08 Analyzed: 08/12/08 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Trichloroethene	ND	ug/L	1	0.43	1.4	
Trichlorofluoromethane	ND	ug/L	1	0.27	0.91	
1,2,3-Trichloropropane	ND	ug/L	1	0.76	2.5	
1,2,4-Trimethylbenzene	ND	ug/L	1	0.40	1.3	
1,3,5-Trimethylbenzene	ND	ug/L	1	0.41	1.4	
Vinyl chloride	ND	ug/L	1	0.095	0.32	
meta,para-Xylene	[0.51]	ug/L	1	0.26	0.87	
MTBE	ND	ug/L	1	0.38	1.3	
Isopropyl Ether	ND	ug/L	1	0.34	1.1	
Dibromofluoromethane (SURR)	109.4%					S
Toluene-d8 (SURR)	114.93%					S
1-Bromo-4-Fluorobenzene (SURR)	103.95%					S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)
Customer: URS Corporation (Milwaukee) NLS Project: 121469
Project Description: Xcel Energy Ashland
Project Title: Template: SATW Printed: 09/08/2008 14:35

Sample: 489540 Effluent Collected: 08/07/08 Analyzed: 08/12/08 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Benzene	ND	ug/L	1	0.42	1.4	
Bromobenzene	ND	ug/L	1	0.41	1.4	
Bromochloromethane	ND	ug/L	1	0.38	1.3	
Bromodichloromethane	ND	ug/L	1	0.35	1.2	
Bromoform	ND	ug/L	1	0.38	1.3	
Bromomethane	ND	ug/L	1	0.56	1.9	
n-Butylbenzene	ND	ug/L	1	0.36	1.2	
sec-Butylbenzene	ND	ug/L	1	0.36	1.2	
tert-Butylbenzene	ND	ug/L	1	0.38	1.3	
Carbon Tetrachloride	ND	ug/L	1	0.28	0.92	
Chlorobenzene	ND	ug/L	1	0.39	1.3	
Chloroethane	ND	ug/L	1	1.4	4.7	
Chloroform	[0.77]	ug/L	1	0.42	1.4	
Chloromethane	ND	ug/L	1	0.33	1.1	
2-Chlorotoluene	ND	ug/L	1	0.41	1.4	
4-Chlorotoluene	ND	ug/L	1	0.42	1.4	
Dibromochloromethane	ND	ug/L	1	0.36	1.2	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.51	1.7	
1,2-Dibromoethane	ND	ug/L	1	0.30	1.0	
Dibromomethane	ND	ug/L	1	0.45	1.5	
1,2-Dichlorobenzene	ND	ug/L	1	0.38	1.3	
1,3-Dichlorobenzene	ND	ug/L	1	0.38	1.3	
1,4-Dichlorobenzene	ND	ug/L	1	0.35	1.2	
Dichlorodifluoromethane	ND	ug/L	1	0.22	0.74	
1,1-Dichloroethane	ND	ug/L	1	0.35	1.2	
1,2-Dichloroethane	ND	ug/L	1	0.47	1.6	
1,1-Dichloroethene	ND	ug/L	1	0.34	1.1	
cis-1,2-Dichloroethene	ND	ug/L	1	0.40	1.3	
trans-1,2-Dichloroethene	ND	ug/L	1	0.47	1.6	
1,2-Dichloropropane	ND	ug/L	1	0.39	1.3	
1,3-Dichloropropane	ND	ug/L	1	0.36	1.2	
2,2-Dichloropropane	ND	ug/L	1	0.54	1.8	
1,1-Dichloropropene	ND	ug/L	1	0.33	1.1	
cis-1,3-Dichloropropene	ND	ug/L	1	0.35	1.1	
trans-1,3-Dichloropropene	ND	ug/L	1	0.38	1.3	
Ethylbenzene	ND	ug/L	1	0.33	1.1	
Hexachlorobutadiene	ND	ug/L	1	0.33	1.1	
Isopropylbenzene	ND	ug/L	1	0.32	1.1	
p-Isopropyltoluene	ND	ug/L	1	0.36	1.2	
Methylene chloride	[0.64]	ug/L	1	0.40	1.3	
Naphthalene	ND	ug/L	1	0.37	1.2	
n-Propylbenzene	ND	ug/L	1	0.40	1.3	
ortho-Xylene	ND	ug/L	1	0.32	1.1	
Styrene	ND	ug/L	1	0.35	1.2	
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.39	1.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.49	1.6	
Tetrachloroethene	ND	ug/L	1	0.31	1.0	
Toluene	ND	ug/L	1	0.37	1.2	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.39	1.3	
1,2,4-Trichlorobenzene	ND	ug/L	1	0.34	1.1	
1,1,1-Trichloroethane	ND	ug/L	1	0.34	1.1	
1,1,2-Trichloroethane	ND	ug/L	1	0.43	1.4	

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)
Customer: URS Corporation (Milwaukee) NLS Project: 121469
Project Description: Xcel Energy Ashland
Project Title: Template: SATW Printed: 09/08/2008 14:35

Sample: 489540 Effluent Collected: 08/07/08 Analyzed: 08/12/08 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Trichloroethene	ND	ug/L	1	0.43	1.4	
Trichlorofluoromethane	ND	ug/L	1	0.27	0.91	
1,2,3-Trichloropropane	ND	ug/L	1	0.76	2.5	
1,2,4-Trimethylbenzene	ND	ug/L	1	0.40	1.3	
1,3,5-Trimethylbenzene	ND	ug/L	1	0.41	1.4	
Vinyl chloride	ND	ug/L	1	0.095	0.32	
meta,para-Xylene	ND	ug/L	1	0.26	0.87	
MTBE	ND	ug/L	1	0.38	1.3	
Isopropyl Ether	ND	ug/L	1	0.34	1.1	
Dibromofluoromethane (SURR)	110.7%					S
Toluene-d8 (SURR)	116.66%					S
1-Bromo-4-Fluorobenzene (SURR)	99.8%					S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)
Customer: URS Corporation (Milwaukee) NLS Project: 121469
Project Description: Xcel Energy Ashland
Project Title: Template: SATW Printed: 09/08/2008 14:35

Sample: 489541 Trip Blank Collected: 08/07/08 Analyzed: 08/12/08 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Benzene	ND	ug/L	1	0.42	1.4	
Bromobenzene	ND	ug/L	1	0.41	1.4	
Bromochloromethane	ND	ug/L	1	0.38	1.3	
Bromodichloromethane	ND	ug/L	1	0.35	1.2	
Bromoform	ND	ug/L	1	0.38	1.3	
Bromomethane	ND	ug/L	1	0.56	1.9	
n-Butylbenzene	ND	ug/L	1	0.36	1.2	
sec-Butylbenzene	ND	ug/L	1	0.36	1.2	
tert-Butylbenzene	ND	ug/L	1	0.38	1.3	
Carbon Tetrachloride	ND	ug/L	1	0.28	0.92	
Chlorobenzene	ND	ug/L	1	0.39	1.3	
Chloroethane	ND	ug/L	1	1.4	4.7	
Chloroform	ND	ug/L	1	0.42	1.4	
Chloromethane	ND	ug/L	1	0.33	1.1	
2-Chlorotoluene	ND	ug/L	1	0.41	1.4	
4-Chlorotoluene	ND	ug/L	1	0.42	1.4	
Dibromochloromethane	ND	ug/L	1	0.36	1.2	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.51	1.7	
1,2-Dibromoethane	ND	ug/L	1	0.30	1.0	
Dibromomethane	ND	ug/L	1	0.45	1.5	
1,2-Dichlorobenzene	ND	ug/L	1	0.38	1.3	
1,3-Dichlorobenzene	ND	ug/L	1	0.38	1.3	
1,4-Dichlorobenzene	ND	ug/L	1	0.35	1.2	
Dichlorodifluoromethane	ND	ug/L	1	0.22	0.74	
1,1-Dichloroethane	ND	ug/L	1	0.35	1.2	
1,2-Dichloroethane	ND	ug/L	1	0.47	1.6	
1,1-Dichloroethene	ND	ug/L	1	0.34	1.1	
cis-1,2-Dichloroethene	ND	ug/L	1	0.40	1.3	
trans-1,2-Dichloroethene	ND	ug/L	1	0.47	1.6	
1,2-Dichloropropane	ND	ug/L	1	0.39	1.3	
1,3-Dichloropropane	ND	ug/L	1	0.36	1.2	
2,2-Dichloropropane	ND	ug/L	1	0.54	1.8	
1,1-Dichloropropene	ND	ug/L	1	0.33	1.1	
cis-1,3-Dichloropropene	ND	ug/L	1	0.35	1.1	
trans-1,3-Dichloropropene	ND	ug/L	1	0.38	1.3	
Ethylbenzene	ND	ug/L	1	0.33	1.1	
Hexachlorobutadiene	ND	ug/L	1	0.33	1.1	
Isopropylbenzene	ND	ug/L	1	0.32	1.1	
p-Isopropyltoluene	ND	ug/L	1	0.36	1.2	
Methylene chloride	ND	ug/L	1	0.40	1.3	
Naphthalene	ND	ug/L	1	0.37	1.2	
n-Propylbenzene	ND	ug/L	1	0.40	1.3	
ortho-Xylene	ND	ug/L	1	0.32	1.1	
Styrene	ND	ug/L	1	0.35	1.2	
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.39	1.3	
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.49	1.6	
Tetrachloroethene	ND	ug/L	1	0.31	1.0	
Toluene	ND	ug/L	1	0.37	1.2	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.39	1.3	
1,2,4-Trichlorobenzene	ND	ug/L	1	0.34	1.1	
1,1,1-Trichloroethane	ND	ug/L	1	0.34	1.1	
1,1,2-Trichloroethane	ND	ug/L	1	0.43	1.4	

ANALYTICAL RESULTS: VOC's by EPA 8260 - Water - (Saturn 2000)
Customer: URS Corporation (Milwaukee) NLS Project: 121469
Project Description: Xcel Energy Ashland
Project Title: Template: SATW Printed: 09/08/2008 14:35

Sample: 489541 Trip Blank Collected: 08/07/08 Analyzed: 08/12/08 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Trichloroethene	ND	ug/L	1	0.43	1.4	
Trichlorofluoromethane	ND	ug/L	1	0.27	0.91	
1,2,3-Trichloropropane	ND	ug/L	1	0.76	2.5	
1,2,4-Trimethylbenzene	ND	ug/L	1	0.40	1.3	
1,3,5-Trimethylbenzene	ND	ug/L	1	0.41	1.4	
Vinyl chloride	ND	ug/L	1	0.095	0.32	
meta,para-Xylene	ND	ug/L	1	0.26	0.87	
MTBE	ND	ug/L	1	0.38	1.3	
Isopropyl Ether	ND	ug/L	1	0.34	1.1	
Dibromofluoromethane (SURR)	108.09%					S
Toluene-d8 (SURR)	113.65%					S
1-Bromo-4-Fluorobenzene (SURR)	103.76%					S

NOTES APPLICABLE TO THIS ANALYSIS:
S = This compound is a surrogate used to evaluate the quality control of a method.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

704 Enterprise Drive Cedar Falls, IA 50613 * 800-750-2401 * Fax 319-277-2425

August 15, 2008

Client:
URS CORPORATION - MILWAUKEE
6737 West Washington St., Suite 226
Milwaukee, WI 53214

Attn: Paul Sklar

Work Order: CRH0527
Project Name: Xcel Energy - Ashland
Project Number: Air Samples

Date Received: 08/11/08

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-(800)750-2401

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
Air Stripper (influent)	CRH0527-01	08/07/08
1st Stage Carbon	CRH0527-02	08/07/08
Air Effluent	CRH0527-03	08/07/08

Case Narrative: Total Hydrocarbons quantified as Gasoline.
Wisconsin Certification Number: 999917270

Field blanks are not used in sample correction unless noted.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the specific sample analyzed.

Approved By:

TestAmerica Cedar Falls
Brian C. Graettinger
Operations Manager

Michael K. McGee, CIH - Laboratory Director
AIHA Lab Certification Number: #101044

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

704 Enterprise Drive Cedar Falls, IA 50613 * 800-750-2401 * Fax 319-277-2425

URS CORPORATION - MILWAUKEE
6737 West Washington St., Suite 226
Milwaukee, WI 53214
Paul Sklar

Work Order: CRH0527
Project: Xcel Energy - Ashland
Project Number: Air Samples

Received: 08/11/08
Reported: 08/15/08 10:17

ANALYTICAL REPORT

Analyte	Result			Data Qualifiers	Date Analyzed	Analyst	Method	Quant. Limit
Sample ID: CRH0527-01 (Air Stripper (influent))			**Sample Air Volume: 3.0 L**			**Sampled: 08/07/08**		
Benzene	<20.0ug/tube	<6.67 mg/m3	<2.09 ppm		8/12/2008	mdm	NIOSH 1501	20.0
Ethylbenzene	<20.0ug/tube	<6.67 mg/m3	<1.54 ppm		8/12/2008	mdm	NIOSH 1501	20.0
Hydrocarbons, Total	<30.0ug/tube	<10 mg/m3	--- ppm		8/14/2008	mdm	NIOSH 1550	30.0
Toluene	<20.0ug/tube	<6.67 mg/m3	<1.77 ppm		8/12/2008	mdm	NIOSH 1501	20.0
Xylenes, total	<30.0ug/tube	<10 mg/m3	<2.3 ppm		8/12/2008	mdm	NIOSH 1501	30.0
Sample ID: CRH0527-02 (1st Stage Carbon)			**Sample Air Volume: 3.0 L**			**Sampled: 08/07/08**		
Benzene	<20.0ug/tube	<6.67 mg/m3	<2.09 ppm		8/13/2008	mdm	NIOSH 1501	20.0
Ethylbenzene	<20.0ug/tube	<6.67 mg/m3	<1.54 ppm		8/13/2008	mdm	NIOSH 1501	20.0
Hydrocarbons, Total	<30.0ug/tube	<10 mg/m3	--- ppm		8/14/2008	mdm	NIOSH 1550	30.0
Toluene	<20.0ug/tube	<6.67 mg/m3	<1.77 ppm		8/13/2008	mdm	NIOSH 1501	20.0
Xylenes, total	<30.0ug/tube	<10 mg/m3	<2.3 ppm		8/13/2008	mdm	NIOSH 1501	30.0
Sample ID: CRH0527-03 (Air Effluent)			**Sample Air Volume: 5.0 L**			**Sampled: 08/07/08**		
Benzene	<20.0ug/tube	<4 mg/m3	<1.25 ppm		8/13/2008	mdm	NIOSH 1501	20.0
Ethylbenzene	<20.0ug/tube	<4 mg/m3	<0.92 ppm		8/13/2008	mdm	NIOSH 1501	20.0
Hydrocarbons, Total	<30.0ug/tube	<6 mg/m3	--- ppm		8/14/2008	mdm	NIOSH 1550	30.0
Toluene	<20.0ug/tube	<4 mg/m3	<1.06 ppm		8/13/2008	mdm	NIOSH 1501	20.0
Xylenes, total	<30.0ug/tube	<6 mg/m3	<1.38 ppm		8/13/2008	mdm	NIOSH 1501	30.0

TestAmerica Cedar Falls
Brian C. Graettinger
Operations Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

704 ENTERPRISE DRIVE • CEDAR FALLS, IA 50613
800-750-2401 • 319-277-2425 FAX

IH Sample Receipt Form

Client: URS Project: Xcel Energy

City: Mt. Laurel

Date: 8/11/08 Receiver's Initials: CW Time (Delivered): 2:40

COC Completed Correctly? [X] Yes [ ] No
(Cite inconsistencies below)

Sample Checklist (Check indicates conformance failure)

	Received Broken		Information Missing
	Improper Media		Missing Sample
	Missing Label		Sample Past Hold Date
	Temperature		Extra Sample
	COC Discrepancy		Insufficient Sample Volume
	Other:		

Couriers

- [ ] UPS
- [ ] TA Courier
- [ ] FedEx
- [ ] TA Field Services
- [ ] DHL
- [ ] Client
- [x] USPS
- [ ] Other
- [ ] Spee-Dee

- [ ] Samples Not Received in a Cooler
- [ ] Temperature Not Taken

Reviewed By SD Date 8/12/08

Comments ok SD

Remarks/Action Taken: Initial/Date: