



January 9, 2013

Ms. Danielle Wincentsen
Remediation & Redevelopment Program
Wisconsin Department of Natural Resources
223 E. Steinfest Road
Antigo, WI 54409

RE: SUPERIOR MANUFACTURED GAS PLANT
WDNR BRRTs #02-16-275446

Dear Ms. Wincentsen:

Enclosed with this letter is the 2012 Annual Groundwater Monitoring Report for the former manufactured gas plant located near the intersection of Winter and Water Streets in Superior, WI. The report was prepared by Summit Envirosolutions, Inc., Superior Water Light and Power company's environmental consultant on this project.

We have also sent a copy of this report to Mr. Jamie Dunn of your Spooner office via email.

If you have any questions regarding the information contained in this report or would like additional information, please contact me at 651-842-4229.

Thank you.

Sincerely,

Summit Envirosolutions, Inc.

William M. Gregg
Program Manager

cc: Jamie Dunn, WDNR-Spooner
David Weber, Superior Water Light and Power Company



2012 Annual Groundwater Monitoring Report for the Former SWL&P Manufactured Gas Plant Superior, Wisconsin

WDNR BRRTs # 02-16-275446

Prepared for:

Superior Water Light and Power Company
2915 Hill Avenue
Superior Wisconsin 54880

Prepared by:

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January 2013



2012 Annual Groundwater Monitoring Report for the Former SWL&P Manufactured Gas Plant Superior, Wisconsin

WDNR BRRTs # 02-16-275446

Prepared By Rebecca Eiden

Reviewed By William M. Gregg, PG

Contents

1.0 Introduction.....	1-1
2.0 Methodology	2-1
2.1 Monitoring Well Gauging	2-1
2.2 Groundwater Sampling.....	2-1
2.3 Decontamination Procedures	2-1
3.0 Results.....	3-1
3.1 Hydrogeology	3-1
3.2 Groundwater Sampling Results	3-1
3.3 Discussion of Results	3-2
3.4 Quality Assurance and Quality Control Samples.....	3-2
4.0 Summary and Conclusion	4-1

List of Appendices

Appendix A Groundwater Sample Collection Forms

Appendix B Laboratory Analytical Report

Appendix C Benzene and Naphthalene Concentration Graphs

Appendix D Transducer Data and NOAA Data for Lake Superior

List of Tables

Table 1 Monitoring Well Gauging – August 2012

Table 2 Groundwater Analytical Results

List of Figures

Figure 1 Site Location Map

Figure 2 Groundwater Elevation Map - August 2012

Figure 3 Estimated Extent of Benzene in Groundwater - August 2012

Figure 4 Estimated Extent of PAH in Groundwater - August 2012

1.0 Introduction

This report presents the results of groundwater monitoring completed in 2012 at the Superior Water Light & Power (SWL&P) Former Manufactured Gas Plant (MGP), located at the intersection of Winter Street and East 1st Street in Superior, Wisconsin. The site location is shown in **Figure 1**.

The groundwater monitoring follows the methodologies outlined in the Site Investigation Work Plan submitted to the Wisconsin Department of Natural Resources (WDNR) in November 2001. Groundwater samples were collected from nine monitoring wells in August 2012. At the same time, pressure transducers were installed in four wells to assess groundwater levels close to Superior Bay.

2.0 Methodology

2.1 Monitoring Well Gauging

Groundwater level measurements were collected from the wells prior to sampling using an interface probe or electric tape. No light or dense non-aqueous phase liquids (NAPL) were detected in any of the wells. The water level measurements were made from a surveyed measuring point established on the north side of the top of the PVC well casing.

During the August 2012 sampling event, INW-brand transducers were installed into wells MW-10, MW-11, MW-15 and MW-20. Installation involved attaching basic hardware to the well cap to secure the cable of the transducer. The transducers have internal data loggers and were programmed to record the water level in the wells every 15 minutes. Data on the elevation of the surface of Lake Superior was obtained from the National Oceanic and Atmospheric Administration at: <http://tidesandcurrents.noaa.gov/geo.shtml?location=9099064>

2.2 Groundwater Sampling

Groundwater samples were collected from the following nine monitoring wells on August 21 and 22, 2012: MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-15, MW-20, and MW-22.

Groundwater samples were collected in general accordance with the WDNR "Groundwater Sampling Field Manual," September 1996. Groundwater samples were collected using a low-flow sampling technique. Before sampling, each monitoring well was purged using a peristaltic pump and dedicated new tubing until groundwater water quality parameters stabilized. Water quality measurements, including pH, specific conductivity, temperature, turbidity, oxidation–reduction potential, and dissolved oxygen were measured with a Horiba U-52 water quality meter equipped with a flow-through cell. The stabilized water quality measurements were recorded on the Groundwater Sample Collection Records included as **Appendix A**. After water quality readings stabilized, samples were collected from each well using the peristaltic pump and placed directly into laboratory-supplied containers. The samples were stored on ice in coolers and were delivered under chain-of-custody to Pace Analytical in Minneapolis, Minnesota. The samples were submitted for analysis of volatile organic compounds (VOC) by EPA method 8260b and polyaromatic hydrocarbons (PAH) by EPA method 8270 SIM.

2.3 Decontamination Procedures

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

3.0 Results

3.1 Hydrogeology

The August groundwater elevations are summarized in **Table 1**. The August groundwater elevations and contours are illustrated on a site plan on **Figure 2**. No light or dense NAPL was measured in the wells during the 2012 sampling events. No measurable NAPL has ever been detected in the wells.

The August 2012 groundwater elevations ranged from 601.43 feet above mean sea level (ft msl) in MW-15 to 612.16 ft msl in MW-1. Based on the 2012 groundwater elevations, the groundwater flow direction appears to be to the northeast towards Superior Bay. This is consistent with the previously measured groundwater elevations and interpreted groundwater flow direction.

More detailed information about the shoreline area water levels is given by the transducer and NOAA data. **Appendix D** contains a number of data plots that compare the groundwater levels to the level of Lake Superior from late August to early November 2012. Lake Superior water elevations in the boat slip adjacent to the MGP site are influenced by the lake-wide seiche. The NOAA gaging station is located nearby in Duluth, MN where it represents water elevations throughout the St. Louis River estuary. Several of the graphs in **Appendix D** show a very close correlation between the elevation changes in the lake and water levels in the wells. In particular, the graph on page 5 of **Appendix D** shows a close correlation between well MW-20 and the lake. The graph on page 6 of **Appendix D** shows the well and lake levels for a two-week period during which time (on October 4, 2012) the lake dropped approximately 18 inches and well MW-20 dropped a foot.

A preliminary review of these continuous water elevation data indicate that groundwater levels are higher than lake levels most of the time, and that the reverse is usually only true for a period of hours at any particular well (well MW-10 may be an exception). Once data have been collected over a longer period of time, and during all seasons of the year, then additional analysis and conclusions will be possible.

The sampled wells are screened in fill materials that were placed over 100 years ago to create land along the Superior Bay shoreline. Prior studies at the Superior MGP have reported slug test results on the monitoring wells with low hydraulic conductivities in the clay and moderate hydraulic conductivities in the fill materials. The combination of hydraulic conductivity and gradients at the site result in low groundwater flow velocities and relatively little groundwater moving through the site.

3.2 Groundwater Sampling Results

Groundwater samples from the 2012 sampling events were submitted to Pace Analytical for PAH and VOC laboratory analysis. The complete laboratory analytical reports are included in **Appendix C**. **Table 2** provides a summary of the groundwater analytical results for VOC and PAH for all site wells (results since 2002 to August 2012). The groundwater results were compared to the applicable WDNR groundwater standards (NR 140, Table 1 Enforcement Standards).

Review of the 2012 analytical results compared to prior years indicate that the same VOC and PAH compounds exceeded the WDNR groundwater standards in one or more wells, and included the following:

Benzene	Benzo(a)pyrene
Naphthalene	Ethylbenzene
Styrene	Benzo(b)fluoranthene
Toluene	Chrysene
1,2,4-Trimethylbenzene	Xylene

Benzene was the VOC which most commonly exceeded the applicable WDNR groundwater standard (the benzene standard is 5 micrograms per liter (ug/L)). The August 2012 benzene results and estimated extent of benzene concentrations greater than 5 ug/l are illustrated on **Figure 4**. The wells with the highest benzene concentrations also tended to have the highest concentrations of other VOCs. Thus, benzene is a good indicator of the general magnitude and extent of the VOC plume.

The PAH results and estimated extent of PAH concentrations that exceeded the WDNR groundwater standards from the August 2012 sampling event are illustrated on **Figure 6**.

Graphs of the concentration results of Benzene and Naphthalene for each well over time are illustrated in **Appendix C**, compared with the WDNR groundwater enforcement standards.

3.3 Discussion of Results

The extent of VOCs in groundwater has been delineated to the applicable WDNR groundwater standards as illustrated on Figures. Benzene is the most frequently detected VOC and has the greatest magnitude and extent. The VOC plume is located at the source area near the former MGP building and downgradient to the Superior Bay boat slip. The extent of the benzene plume, as shown by the limit of the 5 ug/l contour on Figures 3, is well defined and appears to be stable.

The extent of dissolved PAH in groundwater was delineated to the applicable WDNR groundwater standards as illustrated on Figure 4. The dissolved PAH plume appears to extend from the former MGP wastewater discharge area (the area excavated in December 2008) downgradient to the east. The dissolved PAH plume is stable and has a more limited extent than the VOC plume.

The majority of VOC impacts are found in the same general location as the PAH impacts, except that the VOC impacts are greater in aerial extent.

The installed transducers in MW-10, MW-11, MW-15 and MW-20 will provide more data about groundwater fluctuations potentially associated with Lake Superior and seasonal changes.

3.4 Quality Assurance and Quality Control Samples

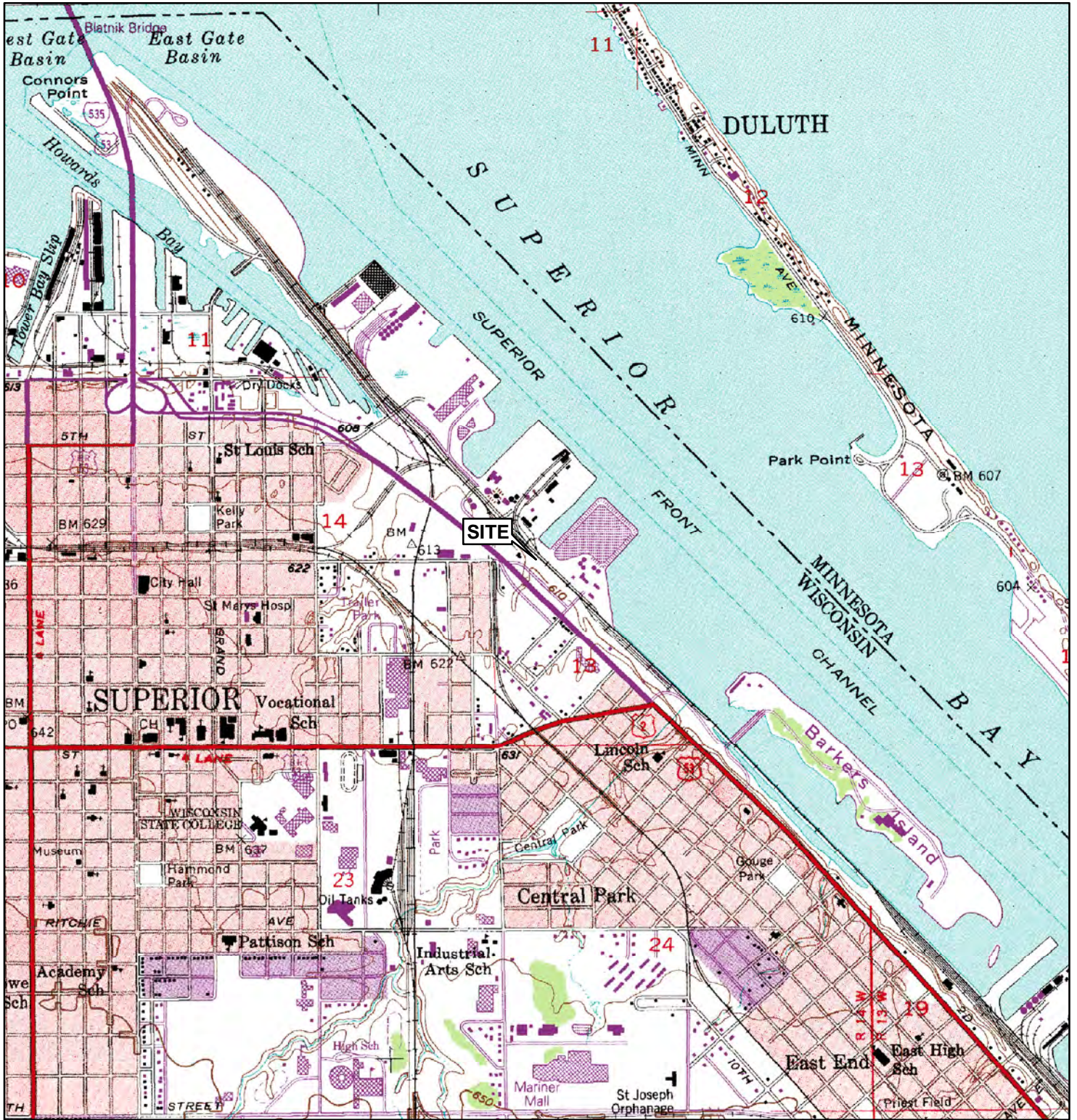
Quality assurance and quality control (QA/QC) samples were collected to help confirm that accurate and reliable data was obtained for this investigation. The laboratory conducted standard QA/QC procedures. In addition, one field duplicate was collected during the sampling event (MW-20) and was analyzed for VOC and PAH. A trip blank accompanied each sample shipment and was analyzed for VOC. No VOCs were detected in the trip blanks. The complete results for QA/QC samples can be found in the laboratory analytical reports.

4.0 Summary and Conclusion


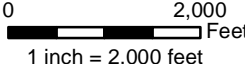


The extent of VOC and PAH in the groundwater has been delineated and the extent has remained nearly stable since sampling commenced in 2002. This result is expected given the long period of time that has elapsed since the MGP ceased operations in 1904. The VOC detected most frequently and with the highest concentrations in the groundwater was benzene. Naphthalene and Chrysene were the most frequently detected and highest concentration PAH compounds detected. The VOC and PAH plumes are comingled and are located in the same general area, except the VOC plume is greater in extent. The groundwater VOC and PAH plumes appear to originate near the former MGP building in the area remediated in December 2008 and extend downgradient with the groundwater flow direction and along the former Superior Bay shoreline (along the railroad tracks). There are also localized areas of VOC in groundwater (and soil) around wells MW-3 and MW-4 (not monitored in 2012) that do not appear to have migrated or changed concentrations since monitoring began in 2002.

Additional groundwater monitoring will enable an evaluation of trends in groundwater quality over time. The slow groundwater velocity allows natural attenuation mechanisms to limit the distance PAH and VOC travel. Semiannual sampling of the nine remedial assessment wells is planned.

Figures



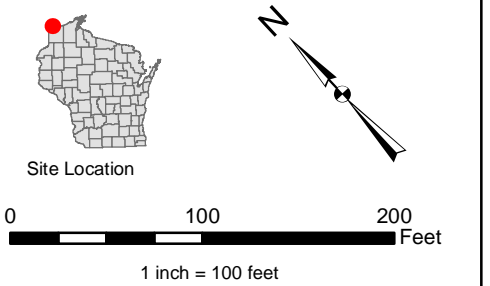
Map adapted from USGS 7.5 minute topographic map(s): Superior, WI.

<p>Legend</p>  <p>Site Location</p>  	<p>GENERAL SITE LOCATION MAP</p> <p>Superior Water Light & Power MGP Superior, Wisconsin</p>
	<p>Figure 1</p> <p>File: Fig1_GenSiteLoc Summit Proj. No.: 2118-0001 Plot Date: 01-07-13 Arc Operator: PRB Reviewed by: BMG</p> 



Legend

- Monitoring Well**
 (Monitoring Well With Groundwater Elevation (08/23/2012) in Feet Above Mean Sea Level)
- Groundwater Elevation
 (Groundwater Elevation Contour Lines - 08/23/2012)



Groundwater Elevation Map (August 2012)
 Superior Water Light & Power MGP
 Superior, Wisconsin

Figure 2



File: 20120103_Fig2_August
 Summit Proj. No.: 2118-0001
 Plot Date: 01-07-2013
 Arc Operator: RRE
 Reviewed by: BMG




Map adapted from LMIC WMS:2009 Northeast Minnesota, 50-cm Resolution, Digital Orthorectified Images, Duluth (DNR)



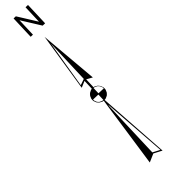
Legend


-  **Monitoring Well**
(Monitoring well with benzene concentration in groundwater)
-  Benzene (08/23/2012)
(Estimated benzene isoconcentration line in parts per billion (ug/L))

Notes: Benzene concentrations are from the August 2012 monitoring well sampling event. Benzene concentrations are reported in parts per billion (ug/L). Benzene Enforcement Standard = 5 ug/L. ND = not detected above laboratory



Site Location





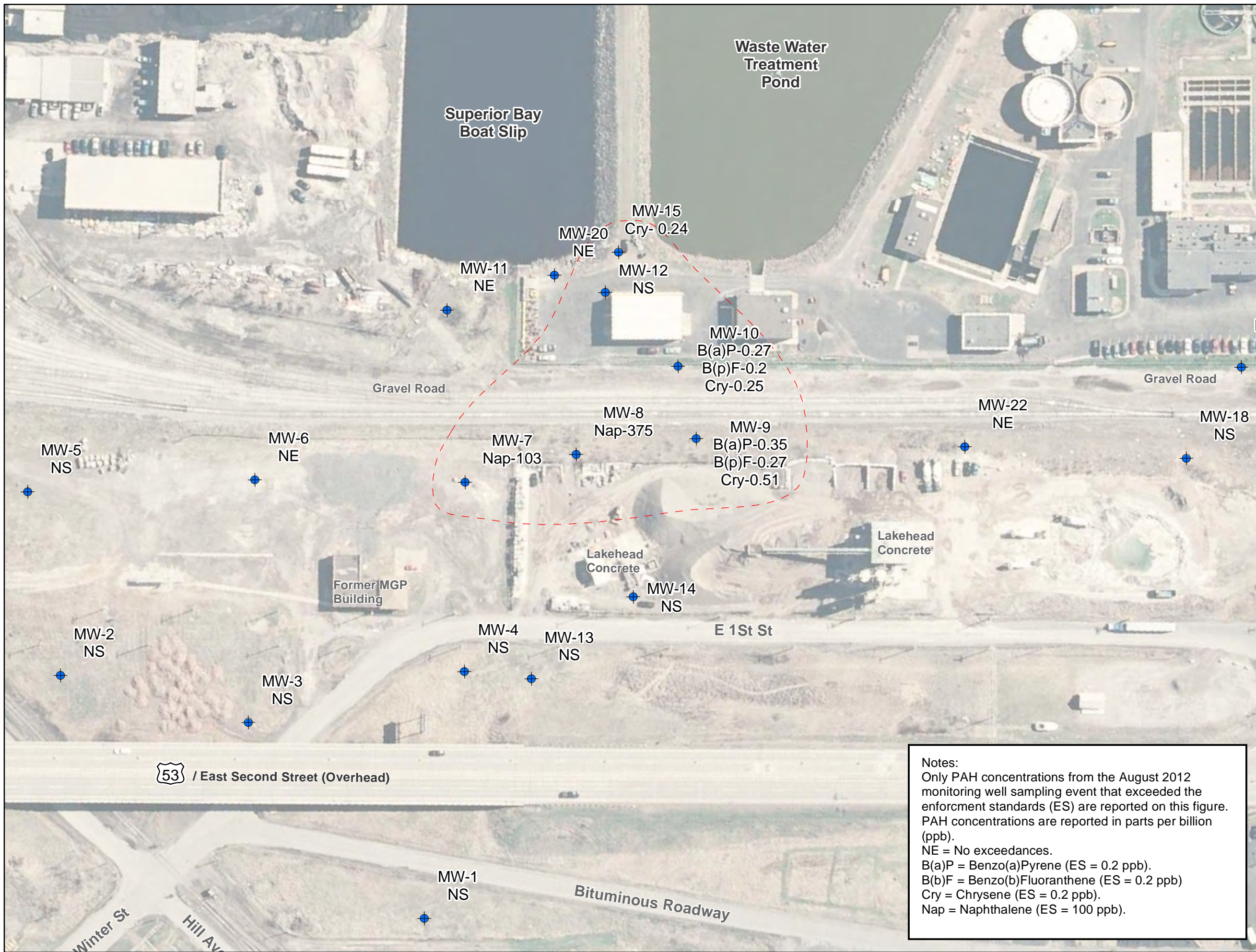
0 100 200 Feet
1 inch = 100 feet

Estimated Extent of Benzene in Groundwater (August 2012)
Superior Water Light & Power MGP
Superior, Wisconsin

Figure 3
File: 20130107_Fig4_AugBenz
Summit Proj. No.: 2118-0001
Plot Date: 01-07-13
Arc Operator: RRE
Reviewed by: BMG



Map adapted from LMIC WMS:2009 Northeast Minnesota, 50-cm Resolution, Digital Orthorectified Images, Duluth (DNR)



Legend

Monitoring Well
Monitoring well with PAH concentration in groundwater.

PAH (08/23/12)
Estimated extent where one or more PAH concentration exceeded the groundwater enforcement standard.

Site Location

1 inch = 100 feet

Estimated Extent of PAH in Groundwater - August 2012

Superior Water Light & Power MGP
Superior, Wisconsin

Figure 4

File: 20120107_Fig4_Nov11PAH
Summit Proj. No.: 2118-0001
Plot Date: 1/7/2012
Arc Operator: RRE
Reviewed by: BMG

Notes:
Only PAH concentrations from the August 2012 monitoring well sampling event that exceeded the enforcement standards (ES) are reported on this figure. PAH concentrations are reported in parts per billion (ppb).
NE = No exceedances.
B(a)P = Benzo(a)Pyrene (ES = 0.2 ppb).
B(b)F = Benzo(b)Fluoranthene (ES = 0.2 ppb)
Cry = Chrysene (ES = 0.2 ppb).
Nap = Naphthalene (ES = 100 ppb).



Tables

Table 1
Groundwater Elevation Data, August, 2012
Superior Water, Light Power MGP
Superior, Wisconsin

Well ID	Ground Elevation ^a	Measuring Point Elevation ^b	Depth to Water ^c	Groundwater Elevation ^b	Hydraulic Conductivity ^d
MW-1	616.2	619.11	6.95	612.16	Clay ^e
MW-2	614.2	617.15	6.34	610.81	Clay
MW-3	613.9	617.07	6.72	610.35	Clay
MW-4	614.0	617.11	6.21	610.90	Clay
MW-5	610.1	612.40	7.73	604.67	7.63×10^{-5}
MW-6	611.4	613.74	10.19	603.55	3.07×10^{-3}
MW-7	612.3	614.91	12.37	602.54	7.79×10^{-3}
MW-8	612.0	615.17	12.60	602.57	3.26×10^{-3}
MW-9	608.7	611.38	8.60	602.78	1.17×10^{-2}
MW-10	606.5	606.08	4.04	602.04	7.46×10^{-3}
MW-11	607.0	609.89	8.07	601.82	8.48×10^{-3}
MW-12	607.9	607.64	5.97	601.67	3.28×10^{-3}
MW-13	613.56	616.26	5.62	610.64	Clay
MW-15	609.06	608.95	7.52	601.43	1.1×10^{-3}
MW-20	605.91	605.43	3.83	601.60	6.8×10^{-3}
MW-22	607.5	610.55	6.82	603.73	4.4×10^{-3}

a. The ground surface and top of casings elevations were surveyed by Salo Engineering.

b. Elevation is given in feet above mean sea level.

c. Depth to water in feet as measured below top of casing.

d. Hydraulic conductivity (cm/sec) was determined by conducting slug tests in November 2001, November 2004, and October 2006.

e. Wells screened in high plasticity clay. Estimated hydraulic conductivity is less than 10^{-6} cm/sec. (Slug test was not performed on well.)

Table 2, MW-6

Parameters	WDNR Enforcement Standard	MW-6	MW-6	MW-6	MW-6-Dup	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
		11/20/2001	2/11/2002	9/18/2002	9/18/2002	11/17/2004	11/16/2005	8/12/2008	7/22/2009	4/22/2010	10/20/2010	4/13/2011	11/3/2011	8/21/2012
VOC														
Acetone	1,000	---	---	---	---	---	---	21.9	42.1	20.6	12.2	<25	<25	<12.5
Benzene	5	5	10	3.1	3.1	17	4.6	2.1	4.5	4.1	1.7	3.7	2.7	2.2
Bromobenzene	None	---	---	---	---	---	<0.82	<1	<1	<1	<1	<1	<1	<0.086
2-Butanone (MEK)	460	---	---	---	---	---	---	<4	<4	<4	<4	<4	<4	<2.0
Chloroethane	400	---	---	---	---	---	0.97	<1	<1	<1	<1	<1	<1	<0.22
Chloroform	6	---	---	---	---	---	<0.37	<1	<1	<1	<1	<1	<1	<0.14
Chloromethane	3	---	---	---	---	---	<0.48	<1	<4	<4	<4	<4	<4	<0.41
Ethylbenzene	700	1.5	5.8	1.1	1.2	21	3.3	1.3	12.0	3.4	<1	2.6	1.2	1.3
Isopropylbenzene (Cumene)	None	---	---	---	---	---	<0.59	<1	1.2	<1	<1	<1	<1	<0.076
p-Isopropyltoluene	None	---	---	---	---	---	<0.67	1.6	2.6	3.3	<1	1.7	2.4	2
Naphthalene	100	---	---	---	---	---	26	12.7	88.2	27.1	8.1	14.3	14.2	12.9
n-Propylbenzene	None	---	---	---	---	---	<0.81	<1	<1	<1	<1	<1	<1	<0.078
Styrene	100	---	---	---	---	---	<0.86	<1	<1	<1	<1	<1	<1	<0.060
Toluene	1,000	1.6	2	0.84	0.85	2.6	1.1	1	1.5	1.3	<1	<1	1.3	<0.077
1,2,4-Trimethylbenzene	480 ^a	---	---	0.8	0.81	---	<0.97	1	7.8	2.1	<1	1.2	1.2	1.1
1,3,5-Trimethylbenzene	480 ^a	---	---	<0.64	<0.64	---	<0.83	<1	1.9	<1	<1	<1	<1	<0.087
m&p-Xylene	10,000 ^b	2.2	2.6	<1.1	<1.1	4	<1.8	<2	2.5	<2	2.4	<2	<2	<0.11
o-Xylene	10,000 ^b	1.4	2.3	<0.73	<0.73	7.6	1.2	<1	4.5	1.6	<1	<1	<1	<0.10
PAH														
1-Methylnaphthalene	None	3	5	2.5	2.1	11	4.1	---	---	---	4.1	---	---	---
2-Chloronaphthalene	None	---	---	---	---	---	---	---	---	---	0.15	---	---	---
2-Methylnaphthalene	None	2.3	3.7	1.6	1.3	8	2.4	---	---	---	0.34	---	---	---
Acenaphthene	None	4.8	5	4.5	3.9	13	5.1	5.1	8.5	5.7	0.061	3.5	3.5	3.1
Acenaphthylene	None	0.26	0.22	<0.92	<0.92	0.49	<0.43	0.2	<0.040	0.2	<0.04	0.13	0.15	0.13
Anthracene	3,000	0.96	<0.80	<0.8	<0.8	0.69	<0.61	0.52	0.46	0.46	<0.04	0.28	0.38	0.37
Benzo(a)anthracene	None	0.12	0.083	<0.76	<0.76	<0.39	<0.83	0.069	0.095	0.053	<0.04	0.043	0.047	0.068
Benzo(a)pyrene	0.2	0.026	<0.012	<0.48	<0.48	<0.36	<0.97	<0.041	<0.040	<0.041	<0.04	<0.041	<0.040	<0.010
Benzo(b)fluoranthene	0.2	0.022	<0.014	<0.56	<0.56	<0.36	<0.83	<0.041	<0.040	<0.31	<0.04	<0.041	<0.040	<0.010
Benzo(g,h,i)perylene	None	0.016	<0.015	<0.6	<0.6	<0.41	<1.0	<0.041	<0.040	<0.041	<0.04	<0.041	<0.040	<0.010
Benzo(k)fluoranthene	None	0.018	<0.013	<0.52	<0.52	<0.39	<1.0	<0.041	<0.040	<0.041	<0.04	<0.041	<0.040	<0.0090
Chrysene	0.2	0.095	0.081	<0.72	<0.72	<0.33	<1.0	0.095	0.086	<0.041	0.055	<0.041	0.047	0.078
Dibenz(a,h)anthracene	None	<0.017	<0.017	<0.68	<0.68	<0.44	---	<0.041	<0.040	<0.041	<0.04	<0.041	<0.040	<0.0090
Dibenzofuran	None	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	400	1.1	<1.1	<1.1	<1.1	1.6	<0.82	0.96	0.79	0.53	0.66	0.4	0.62	0.74
Fluorene	400	0.76	<0.84	<0.84	<0.84	1.6	0.5	0.83	1.2	0.92	0.52	0.52	0.56	0.51
Indeno(1,2,3-cd)pyrene	None	<0.014	<0.014	<0.56	<0.56	<0.34	<1.0	<0.041	<0.040	<0.041	<0.04	<0.041	<0.040	<0.010
Naphthalene	100	9.8	34	12	10	91	18	9.2	52.8	18	6.7	8.3	7.9	5.6
Phenanthrene	None	3.1	2.1	3.4	3.8	3.8	3.1	3.3	2.9	2.4	2.2	1.7	2.2	2.6
Pyrene	250	1.2	0.88	1.1	1.2	0.76	0.81	1.1	0.91	0.59	0.73	0.49	0.69	0.83

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

Shaded results indicate concentrations greater than the enforcement standards.

Only Detected compounds are listed on this table. See laboratory analytical reports for list of results.

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

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

Table 2, MW-7

Parameters	WDNR Enforcement Standard	MW-7	MW-7	MW-7-Dup	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7 DUP	MW-7	MW-7	MW-7 DUP	MW-7	MW-7
		11/20/2001	2/11/2002	2/11/2002	9/18/2002	11/17/2004	11/16/2005	8/12/2008	7/22/2009	4/22/2010	4/22/2010	10/20/2010	4/13/2011	4/13/2011	11/4/2011	8/21/2012
VOC																
Acetone	1,000	---	---	---	---	---	---	<2,000	<10,000	<10,000	<25,000	<10,000	<25,000	<25,000	<1250	<6250
Benzene	5	230,000	190,000	200,000	110,000	46,000	110,000	156,000	198,000	242,000	197,000	117,000	204,000	209,000	74,600	78,200
Bromobenzene	None	---	---	---	---	---	<820	<200	<1000	<1000	<2,500	<1,000	<1,000	<1,000	<50	<43.0
2-Butanone (MEK)	460	---	---	---	---	---	<800	<4000	<4000	<10,000	<4,000	<4,000	<4,000	<4,000	<200	<1000
Chloroethane	400	---	---	---	---	---	<970	<200	<1000	<1000	<2,500	<1,000	<1,000	<1,000	<50	<108
Chloroform	6	---	---	---	---	---	<370	<200	<1000	<1000	<2,500	<1,000	<1,000	<1,000	<50	<72.5
Chloromethane	3	---	---	---	---	---	<240	<200	<4000	<4000	<10,000	<4,000	<4,000	<4,000	<200	<206
Ethylbenzene	700	1,900	3,600	3,700	6,100	2,100	3,600	4,760	4,280	4,750	4,350	4,400	4,200	4,230	1,770	1,690
Isopropylbenzene (Cumene)	None	---	---	---	---	---	<590	<200	<1000	<1000	<2,500	<1,000	<1,000	<1,000	<50	<38.0
p-Isopropyltoluene	None	---	---	---	---	---	<670	<200	<1000	<1000	<2,500	<1,000	<1,000	<1,000	<50	<43.0
Naphthalene	100	---	---	---	---	---	<740	<800	<4000	<4000	<10,000	<4,000	<4,000	<4,000	<200	<34.0
n-Propylbenzene	None	---	---	---	---	---	<810	<200	<1000	<1000	<2,500	<1,000	<1,000	<1,000	<50	<39.0
Styrene	100	---	---	---	---	---	<860	428	1350	1310	<2,500	<1,000	<1,000	<1,000	250	<30.0
Toluene	1,000	130000	120000	120000	64000	15000	57000	64500	116000	144000	104000	49400	110000	109000	32900	40,600
1,2,4-Trimethylbenzene	480 ^a	---	---	---	770	---	<970	652	<1000	<1000	<2,500	<1,000	<1,000	<1,000	218	<35.5
1,3,5-Trimethylbenzene	480 ^a	---	---	---	<640	---	<830	369	<1000	<1000	<2,500	<1,000	<1,000	<1,000	124	<43.5
m&p-Xylene	10,000 ^b	14000	9500	10000	18000	5400	12000	14500	17400	18000	15300	11800	16600	16800	4750	4850
o-Xylene	10,000 ^b	11000	17000	17000	4800	1600	2500	3960	4910	4760	4380	3060	4300	4320	1360	1320
PAH																
1-Methylnaphthalene	None	4.7	4.1	3.8	10	<8.1	6.2	---	---	---	---	---	---	---	---	---
2-Chloronaphthalene	None	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	None	6.3	5.6	5.2	13	<9.1	8.4	---	---	---	---	---	---	---	---	---
Acenaphthene	None	1.9	2.4	2	5.4	<7.8	3.1	3.1	3.8	3.5	3.8	5	1.4	2.1	2.3	1.8
Acenaphthylene	None	3.4	2.8	2.5	<4.6	<7.8	1.3	1.3	1.9	1.8	1.9	1.8	0.71	0.96	0.62	0.51
Anthracene	3,000	0.75	<0.40	<0.40	<4	<7.1	<1.3	0.66	0.62	0.68	0.79	0.69	0.42	0.54	0.65	0.76
Benzo(a)anthracene	None	<0.38	<0.38	<0.38	<3.8	<7.9	<1.7	0.23	0.19	0.2	0.25	0.12	0.33	0.42	0.076	0.046
Benzo(a)pyrene	0.2	<0.24	<0.24	<0.24	<2.4	<7.3	<2.0	0.32	0.21	0.26	0.32	0.14	0.4	0.53	0.12	0.062
Benzo(b)fluoranthene	0.2	<0.28	<0.28	<0.28	<2.8	<7.2	<1.7	0.33	0.31	0.3	0.33	0.13	0.42	0.54	0.1	0.055
Benzo(g,h,i)perylene	None	<0.30	<0.30	<0.30	<3	<8.3	<2.1	0.28	0.32	0.13	0.29	0.12	0.35	0.47	0.1	0.058
Benzo(k)fluoranthene	None	<0.26	<0.26	<0.26	<2.6	<7.8	<2.1	0.13	0.088	0.11	0.11	0.046	0.16	0.19	<0.043	<0.010
Chrysene	0.2	<0.36	<0.36	<0.36	<3.6	<6.6	<2.1	0.32	0.2	0.21	0.26	0.14	0.39	0.49	0.089	0.055
Dibenz(a,h)anthracene	None	<0.34	<0.34	<0.34	<3.4	<8.9	---	0.043	<0.041	<0.041	<0.041	<0.04	0.064	0.084	<0.043	<0.010
Dibenzofuran	None	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	400	<0.56	<0.56	<0.56	<5.6	<6.7	<1.7	1.2	0.78	0.8	0.99	0.87	0.75	0.9	0.72	0.52
Fluorene	400	2.2	1.7	1.7	<4.2	<8.8	1.7	2.1	2.2	2.4	2.5	2.4	0.98	1.4	1.5	1.2
Indeno(1,2,3-cd)pyrene	None	<0.28	<0.28	<0.28	<2.8	<6.9	<2.1	0.19	0.12	0.099	0.18	0.081	0.22	0.3	0.071	<0.011
Naphthalene	100	350	430	290	490	180	330	238	354	376	400	409	122	201	132	103
Phenanthrene	None	1.4	1.2	1.3	6.7	<8.2	3.2	3.2	2.5	3	3.5	3	1.3	1.7	2.6	2
Pyrene	250	0.62	0.72	0.74	<4	<6.6	<1.6	1.6	1.1	1	1.2	1.2	1.3	1.6	0.95	0.62

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

Shaded results indicate concentrations greater than the enforcement standards.

Only Detected compounds are listed on this table. See laboratory analytical reports for list of results.

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

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

Table 2, MW-8

Parameters	WDNR Enforcement Standard	MW-8	MW-8 DUP	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8
		11/16/2004	11/16/2004	11/15/2005	8/13/2008	7/22/2009	4/22/2010	10/20/2010	4/14/2011	11/4/2011	8/21/2012
VOC											
Acetone	1,000	---	---	---	<500	<10,000	<10,000	<10,000	<12,500	<1250	<6250
Benzene	5	74,000	72,000	73,000	122,000	109,000	152,000	103,000	58,500	104,000	103,000
Bromobenzene	None	---	---	<510	<50	<1000	<1000	<1000	<2,000	<50	<43.0
2-Butanone (MEK)	460	---	---	---	<200	<4000	<4000	<4000	<2,000	<200	<1000
Chloroethane	400	---	---	<610	<50	<1000	<1000	<1000	<500	<50	<108
Chloroform	6	---	---	<230	<50	<1000	<1000	<1000	<500	<50	<72.5
Chloromethane	3	---	---	<150	<50	<4000	<4000	<4000	<2,000	<200	<206
Ethylbenzene	700	980	880	510	1,220	1,100	1,700	1,070	771	981	952
Isopropylbenzene (Cumene)	None	---	---	<370	<50	<1000	<1000	<1000	<500	<50	<38.0
p-Isopropyltoluene	None	---	---	<420	<50	<1000	<1000	<1000	<500	<50	<43.0
Naphthalene	100	---	---	680	776	<4000	<4000	<4000	<2,000	624	<34.0
n-Propylbenzene	None	---	---	<510	<50	<1000	<1000	<1000	<500	<50	<39.0
Styrene	100	---	---	2000	5300	4010	5210	2590	3310	3710	3510
Toluene	1,000	51000	48000	51000	80200	79800	112000	75100	43800	64500	69300
1,2,4-Trimethylbenzene	480 ^a	---	---	<610	694	<1000	1050	<1000	<500	551	<35.5
1,3,5-Trimethylbenzene	480 ^a	---	---	<520	378	<1000	<1000	<1000	<500	298	<43.5
m&p-Xylene	10,000 ^b	14000	12000	9900	18800	16800	19400	16600	11400	12600	14000
o-Xylene	10,000 ^b	6500	5600	2200	4720	3850	4590	4110	2710	3500	3740
PAH											
1-Methylnaphthalene	None	690	3300	61	---	---	---	---	---	---	---
2-Chloronaphthalene	None	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	None	830	3900	44	---	---	---	---	---	---	---
Acenaphthene	None	1000	5200	37	55.7	61.6	65.7	70.2	48.7	51.8	40.9
Acenaphthylene	None	130	<770	4.7	9.3	9.5	10.4	9.5	7.8	6.8	6
Anthracene	3,000	520	2800	7.9	6.5	5.7	6.5	6.7	6.3	4.5	4.2
Benzo(a)anthracene	None	300	1600	<1.7	0.53	0.41	0.62	0.38	0.35	0.2	0.14
Benzo(a)pyrene	0.2	230	1200	<1.9	0.24	0.12	0.24	0.13	0.14	<0.040	<0.010
Benzo(b)fluoranthene	0.2	<110	<720	<1.7	0.21	0.25	<0.30	0.12	0.12	<0.040	<0.010
Benzo(g,h,i)perylene	None	<130	<830	<2.0	0.11	0.23	0.062	0.059	0.056	<0.040	<0.010
Benzo(k)fluoranthene	None	140	<770	<2.0	0.12	0.047	0.092	0.041	0.05	<0.040	<0.010
Chrysene	0.2	290	1600	<2.0	0.52	0.35	0.42	0.33	0.29	0.16	0.13
Dibenz(a,h)anthracene	None	<140	<880	---	<0.041	<0.041	<0.041	<0.04	<0.041	<0.040	<0.0091
Dibenzofuran	None	---	---	---	---	---	---	---	---	---	---
Fluoranthene	400	790	4400	6.6	5.1	4.4	4.5	4.4	3.7	2.9	2.5
Fluorene	400	410	2100	11	17.7	18.6	19.7	20.4	14.2	15.2	11.1
Indeno(1,2,3-cd)pyrene	None	<110	<680	<2.0	0.076	<0.041	0.046	0.04	<0.041	<0.040	<0.010
Naphthalene	100	1400	4700	380	512	541	702	676	438	501	375
Phenanthrene	None	1900	10000	35	29.9	32.8	28.6	30	23.2	21.7	19.4
Pyrene	250	1000	5300	8.6	5.7	5.9	5.3	5	4.6	3.3	2.8

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

Shaded results indicate concentrations greater than the enforcement standards.

Only Detected compounds are listed on this table. See laboratory analytical reports for list of results.

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

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

Table 2, MW-9

Parameters	WDNR Enforcement Standard	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9
		11/16/2004	11/15/2005	8/13/2008	7/22/2009	4/22/2010	10/20/2010	4/14/2011	11/4/2011	8/22/2012
VOC										
Acetone	1,000	---	---	<2,500	<2,500	<1,000	<1,000	<2,500	<1250	<625
Benzene	5	54,000	29,000	24,700	20,600	8,990	16,900	11,200	6,520	10,700
Bromobenzene	None	---	<200	<250	<250	<100	<100	<100	<50	<4.3
2-Butanone (MEK)	460	---	---	<1,000	<1,000	<400	<400	<400	<200	<100
Chloroethane	400	---	<240	<250	<250	<100	<100	<100	<50	<10.8
Chloroform	6	---	<92	<250	<250	<100	<100	<100	<50	<7.2
Chloromethane	3	---	<60	<250	<1,000	<400	<400	<400	<200	<20.6
Ethylbenzene	700	870	530	565	449	266	235	386	127	221
Isopropylbenzene (Cumene)	None	---	<150	<250	<250	<100	<100	<100	<50	<3.8
p-Isopropyltoluene	None	---	<170	<250	<250	<100	<100	<100	<50	<4.3
Naphthalene	100	---	340	<1,000	<1,000	<400	<400	501	<200	<3.4
n-Propylbenzene	None	---	<200	<250	<250	<100	<100	<100	<50	<3.9
Styrene	100	---	<220	<250	<250	<100	<100	<100	<50	<3.0
Toluene	1,000	13000	6700	1850	2170	1310	571	2800	526	343
1,2,4-Trimethylbenzene	480 ^a	---	<240	<250	<250	<100	<100	<100	<50	<3.6
1,3,5-Trimethylbenzene	480 ^a	---	<210	<250	<250	<100	<100	<100	<50	<4.4
m&p-Xylene	10,000 ^b	2700	2200	673	800	578	440	968	245	187
o-Xylene	10,000 ^b	780	420	<250	<250	164	111	240	63.5	64.9
PAH										
1-Methylnaphthalene	None	100	42	---	---	---	---	---	---	---
2-Chloronaphthalene	None	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	None	110	44	---	---	---	---	---	---	---
Acenaphthene	None	100	39	49.9	40.9	49.9	30.8	184	53.3	29.1
Acenaphthylene	None	<19	1.6	1.1	<0.82	1.2	0.046	9.6	1.7	0.53
Anthracene	3,000	<18	8.4	4.7	5.8	5.8	4.3	68	11.1	5
Benzo(a)anthracene	None	<20	<1.7	0.75	<0.82	0.71	0.54	43.5	4.6	0.58
Benzo(a)pyrene	0.2	<18	<1.9	0.38	<0.82	0.34	0.29	35.7	4	0.35
Benzo(b)fluoranthene	0.2	<18	<1.7	0.34	<0.82	0.31	0.25	28.2	3.1	0.27
Benzo(g,h,i)perylene	None	<21	<2.0	0.18	<0.82	0.089	0.13	16.3	1.7	0.14
Benzo(k)fluoranthene	None	<19	<2.0	0.14	<0.82	0.13	0.085	10.5	1.1	0.089
Chrysene	0.2	<16	<2.0	0.64	<0.82	0.48	0.46	36.2	4	0.51
Dibenz(a,h)anthracene	None	<22	---	<0.041	<0.82	<0.041	<0.04	4.1	0.42	<0.0093
Dibenzofuran	None	---	---	---	---	---	---	---	---	---
Fluoranthene	400	<16	4.8	3.9	3.1	3.7	3.2	84.6	13.1	3.7
Fluorene	400	31	12	13.7	10.8	16.8	8.9	70.5	17.8	8.4
Indeno(1,2,3-cd)pyrene	None	<17	<2.0	0.13	<0.82	0.071	0.094	11.5	1.2	0.099
Naphthalene	100	310	160	108	132	100	35.9	348	139	27.7
Phenanthrene	None	78	33	26.7	23.5	30.6	30.1	232	48.6	26
Pyrene	250	<16	6.3	5	4.2	4.8	4.1	121	16.5	4.4

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

Shaded results indicate concentrations greater than the enforcement standards.

Only Detected compounds are listed on this table. See laboratory analytical reports for list of results.

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

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

Table 2, MW-10

Parameters	WDNR Enforcement Standard	MW-10	MW-10	MW-10	MW-10 DUP	MW-10	MW-10 DUP	MW-10	MW-10	MW-10 DUP	MW-10	MW-10	MW-10
		11/16/2004	11/15/2005	8/12/2008	8/12/2008	7/22/2009	7/22/2009	4/21/2010	10/20/2010	10/20/2010	4/14/2011	11/4/2011	8/21/2012
VOC													
Acetone	1,000	---	---	<500	<500	<20	<20	<20	<500	<500	<625	<1250	<625
Benzene	5	9,900	13,000	7,160	7,840	270	252	6,010	6,890	7,290	2,330	4,830	3,860
Bromobenzene	None	---	<100	<50	<50	<2.0	<2.0	<2.0	<50	<50	<25	<50	<4.3
2-Butanone (MEK)	460	---	---	<200	<200	<8.0	<8.0	<8.0	<200	<200	<100	<200	<100
Chloroethane	400	---	<120	<50	<50	<2.0	<2.0	<2.0	<50	<50	<25	<50	<10.8
Chloroform	6	---	<46	<50	<50	<2.0	<2.0	<2.0	<50	<50	<25	<50	<7.2
Chloromethane	3	---	<30	<50	<50	<8.0	<8.0	<8.0	<200	<200	<100	<200	<20.6
Ethylbenzene	700	340	240	158	199	6.1	6.9	206	150	154	105	107	<4.0
Isopropylbenzene (Cumene)	None	---	<74	<50	<50	<2.0	<2.0	5.2	<50	<50	<25	<50	<3.8
p-Isopropyltoluene	None	---	<84	<50	<50	<2.0	<2.0	8.3	<50	<50	<25	<50	<4.3
Naphthalene	100	---	240	<200	<200	<8.0	<8.0	117	<200	<200	<100	<200	<3.4
n-Propylbenzene	None	---	<100	<50	<50	<2.0	<2.0	<2.0	<50	<50	<25	<50	<3.9
Styrene	100	---	<110	<50	<50	<2.0	<2.0	44.1	<50	<50	25	<50	<3.0
Toluene	1,000	34	5100	333	1280	18.4	19.9	1600	1300	1450	1070	1040	<3.8
1,2,4-Trimethylbenzene	480 ^a	---	<120	<50	55.2	2	<2.0	36.7	<50	<50	<25	<50	<3.6
1,3,5-Trimethylbenzene	480 ^a	---	<100	<50	<50	<2.0	<2.0	13.6	<50	<50	<25	<50	<4.4
m&p-Xylene	10,000 ^b	<37	770	<100	262	7.7	7.9	655	381	440	376	305	<5.5
o-Xylene	10,000 ^b	100	180	64.1	120	3.6	3.6	172	119	130	92.8	86.4	<5.2
PAH													
1-Methylnaphthalene	None	84	41	---	---	---	---	---	---	---	---	---	---
2-Chloronaphthalene	None	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	None	5	18	---	---	---	---	---	---	---	---	---	---
Acenaphthene	None	75	38	44	40.2	2.4	2.8	35.1	47.3	48.4	15.9	41.4	33.3
Acenaphthylene	None	<1.9	2.9	0.9	0.88	<0.042	0.082	0.99	0.6	0.83	0.52	0.81	0.52
Anthracene	3,000	4.1	8.6	1.6	1.7	0.19	0.22	2.1	2.1	2.9	1.5	2.3	1.5
Benzo(a)anthracene	None	<2.0	3.9	1.1	1.1	0.11	0.11	0.46	0.55	0.41	0.31	0.4	0.24
Benzo(a)pyrene	0.2	<1.8	2.7	1.1	0.98	0.11	0.1	0.31	0.51	0.29	0.19	0.36	0.27
Benzo(b)fluoranthene	0.2	<1.8	<1.7	0.91	0.86	0.23	0.22	<0.30	0.37	0.22	0.16	0.29	0.2
Benzo(g,h,i)perylene	None	<2.1	<2.0	0.66	0.61	0.25	0.24	0.088	0.27	0.15	0.088	0.19	0.15
Benzo(k)fluoranthene	None	<1.9	<2.0	0.4	0.36	<0.042	<0.040	0.12	0.15	0.089	0.059	0.095	0.077
Chrysene	0.2	<1.6	4.5	1.2	1.1	0.097	0.11	0.36	0.54	0.39	0.29	0.38	0.25
Dibenz(a,h)anthracene	None	<2.2	---	<0.041	<0.041	<0.042	<0.040	<0.040	0.067	<0.04	<0.41	<0.41	<0.0092
Dibenzofuran	None	---	---	---	---	---	---	---	---	---	---	---	---
Fluoranthene	400	5.3	11	3.5	3.2	0.26	0.27	1.6	2.6	2.3	1.3	1.9	1.2
Fluorene	400	18	11	9.5	9.1	0.55	0.66	8.5	11.6	10.9	4.2	9.1	6.7
Indeno(1,2,3-cd)pyrene	None	<1.7	<2.0	0.47	0.43	0.048	0.048	0.069	0.18	0.1	0.064	0.13	0.098
Naphthalene	100	36	110	30.9	32.6	1.9	2.2	73.1	66.4	61.6	42.4	87.9	2.5
Phenanthrene	None	31	30	13.6	12.2	0.61	0.77	9.4	12.6	13.4	5.6	8.8	7
Pyrene	250	6.1	15	4.6	4.3	0.37	0.4	2	3.5	3.1	1.9	2.4	1.5

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

Shaded results indicate concentrations greater than the enforcement standards.

Only Detected compounds are listed on this table. See laboratory analytical reports for list of results.

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

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

Table 2, MW-11

Parameters	WDNR Enforcement Standard	MW-11	MW-11	MW-11 DUP	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11
		11/16/2004	11/15/2005	11/15/2005	8/12/2008	7/22/2009	4/22/2010	10/20/2010	4/14/2011	11/4/2011	8/21/2012
VOC											
Acetone	1,000	---	---	---	<10	<10	<10	<10	<25	<25	<12.5
Benzene	5	0.95	1.4	1.4	2.5	3.4	<1	<1	<1	2.5	2.6
Bromobenzene	None	---	<0.82	<0.82	<1	<1	<1	<1	<1	<1	<0.086
2-Butanone (MEK)	460	---	---	---	<4	<4	<4	<4	<4	<4	<2.0
Chloroethane	400	---	<0.97	<0.97	<1	<1	<1	<1	<1	<1	<0.22
Chloroform	6	---	<0.37	<0.37	<1	<1	<1	<1	<1	<1	<0.14
Chloromethane	3	---	0.25	<0.24	<1	<4	<4	<4	<4	<4	<0.41
Ethylbenzene	700	0.56	0.91	1.0	1.2	3.5	<1	<1	<1	<1	3.2
Isopropylbenzene (Cumene)	None	---	<0.59	<0.59	<1	<1	<1	<1	<1	<1	<0.076
p-Isopropyltoluene	None	---	<0.67	<0.67	<1	<1	<1	<1	<1	<1	<0.086
Naphthalene	100	---	29	33	25.1	13.8	<4	<4	<4	7.6	59.9
n-Propylbenzene	None	---	<0.81	<0.81	<1	<1	<1	<1	<1	<1	<0.078
Styrene	100	---	<0.86	<0.86	<1	<1	<1	<1	<1	<1	<0.060
Toluene	1,000	<3.6	<0.67	<0.67	1.1	<1	<1	<1	<1	<1	<0.077
1,2,4-Trimethylbenzene	480 ^a	---	<2.9	<3.0	1.7	3	<1	<1	1.8	1.2	4.2
1,3,5-Trimethylbenzene	480 ^a	---	<0.83	<0.83	<1	<1	<1	<1	<1	<1	<0.087
m&p-Xylene	10,000 ^b	1.7	<1.8	<1.8	<2	<2	<2	<2	<2	<2	<0.11
o-Xylene	10,000 ^b	3.9	1.4	1.5	1.5	1.8	<1	<1	1.4	<1	2.7
PAH											
1-Methylnaphthalene	None	10	9.4	9.9	---	---	---	---	---	---	---
2-Chloronaphthalene	None	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	None	1.3	1.2	1.2	---	---	---	---	---	---	---
Acenaphthene	None	8.4	8.7	9.6	9.9	11.2	4.4	4.4	1.8	7.8	13.5
Acenaphthylene	None	<0.39	0.1	0.11	0.15	<0.041	<0.041	<0.040	<0.041	0.06	0.11
Anthracene	3,000	<0.35	0.12	0.13	0.12	0.14	0.071	0.044	<0.041	0.091	0.14
Benzo(a)anthracene	None	<0.39	0.017	0.018	<0.041	<0.041	<0.041	<0.040	<0.041	<0.041	<0.0082
Benzo(a)pyrene	0.2	<0.36	0.019	<0.019	<0.041	0.044	<0.041	<0.040	<0.041	<0.041	<0.010
Benzo(b)fluoranthene	0.2	<0.36	<0.017	<0.017	<0.041	<0.041	<0.31	<0.040	<0.041	<0.041	<0.010
Benzo(g,h,i)perylene	None	<0.41	<0.020	<0.020	<0.041	<0.041	<0.041	<0.040	<0.041	<0.041	<0.010
Benzo(k)fluoranthene	None	<0.39	<0.020	<0.020	<0.041	<0.041	<0.041	<0.040	<0.041	<0.041	<0.0092
Chrysene	0.2	<0.33	<0.020	<0.020	<0.041	<0.041	<0.041	<0.040	<0.041	<0.041	<0.0092
Dibenz(a,h)anthracene	None	<0.44	---	---	<0.041	<0.041	<0.041	<0.040	<0.041	<0.041	<0.0092
Dibenzofuran	None	---	---	---	---	---	---	---	---	---	---
Fluoranthene	400	<0.33	<0.059	0.059	0.044	0.12	<0.041	<0.040	<0.041	<0.041	0.058
Fluorene	400	1.2	0.73	0.79	2.4	1.8	0.78	0.69	0.33	1.2	2.3
Indeno(1,2,3-cd)pyrene	None	<0.34	<0.020	<0.020	<0.041	<0.041	<0.041	<0.040	<0.041	<0.041	<0.010
Naphthalene	100	19	17	18	13.9	7.1	0.92	0.64	0.49	4.8	29.8
Phenanthrene	None	1	0.39	0.46	0.9	0.87	0.23	0.31	0.18	0.74	1.4
Pyrene	250	<0.33	0.085	0.089	0.049	0.14	0.043	0.042	<0.041	<0.041	0.042

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

Shaded results indicate concentrations greater than the enforcement standards.

Only Detected compounds are listed on this table. See laboratory analytical reports for list of results.

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

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

Table 2, MW-15

Parameters	WDR Enforcement Standard	MW-15	MW-15 DUP	MW-15	MW-15	MW-15 DUP	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15
		11/14/2005	11/14/2005	10/24/2006	8/12/2008	8/12/2008	7/22/2009	4/21/2010	10/20/2010	4/14/2011	11/4/2011	8/22/2012
VOC												
Acetone	1,000	---	---	<5.0	<10	<10	<10	<10	<10	<25	<25	<12.5
Benzene	5	23	21	23.2	51.5	48.6	50.7	15.7	44.3	83	30	53.8
Bromobenzene	None	<0.82	<0.82	<1.0	<1	<1	<1	<1	<1	<1	<1	<0.086
2-Butanone (MEK)	460	---	---	<5.0	<4	<4	<4	<4	<4	<4	<4	<2.0
Chloroethane	400	<0.97	<0.97	<1.0	<1	<1	<1	<1	<1	<1	<1	<0.22
Chloroform	6	<0.37	<0.37	<1.0	<1	<1	<1	<1	<1	<1	<1	<0.14
Chloromethane	3	<0.24	<0.24	<1.0	<1	1.1	<4	<4	<4	<4	<4	<0.41
Ethylbenzene	700	6.8	5	5	<1	<1	4.7	<1	<1	3.5	<1	<0.081
Isopropylbenzene (Cumene)	None	4.3	4	4.4	1.0	1.0	3.1	<1	<1	2.2	<1	<0.076
p-Isopropyltoluene	None	<0.67	<0.67	<1.0	<1	<1	<1	<1	<1	<1	<1	<0.086
Naphthalene	100	110	90	79.7	4.9	5.0	63.4	11.4	7.2	12.7	7.9	6.3
n-Propylbenzene	None	1.6	1.4	1.5	<1	<1	1	<1	<1	<1	<1	<0.078
Styrene	100	<0.86	<0.86	<1.0	<1	<1	<1	<1	<1	<1	<1	<0.060
Toluene	1,000	<0.67	<0.67	<1.0	<1	<1	<1	<1	<1	<1	<1	<0.077
1,2,4-Trimethylbenzene	480 ^a	25	23	17.7	1.6	1.7	14	2.4	1.7	9.5	1.9	2.5
1,3,5-Trimethylbenzene	480 ^a	3.6	2.9	1.7	<1	<1	<1	<1	<1	<1	<1	<0.087
m&p-Xylene	10,000 ^b	<1.8	<1.8	<2.0	<2	<2	<2	<2	2.3	<2	<2	<0.11
o-Xylene	10,000 ^b	2.8	2.2	2.4	1.1	1.1	2.3	<1	<1	1.1	<1	<0.10
PAH												
1-Methylnaphthalene	None	45	57	38.4	---	---	---	---	---	---	---	---
2-Chloronaphthalene	None	---	---	0.075	---	---	---	---	---	---	---	---
2-Methylnaphthalene	None	17	20	9.4	---	---	---	---	---	---	---	---
Acenaphthene	None	43	51	49.6	52.4	49.9	56.2	89.7	97	33.8	63.3	54.1
Acenaphthylene	None	<1.7	0.71	<0.04	0.88	0.74	<0.042	2.1	1.5	0.22	1.6	1.5
Anthracene	3,000	3.5	4.2	2.8	0.85	0.89	1.5	1	1.1	0.79	1.3	0.75
Benzo(a)anthracene	None	0.27	<0.33	0.23	0.18	0.18	0.16	0.19	0.15	0.086	0.22	0.25
Benzo(a)pyrene	0.2	0.11	<0.39	<0.04	0.053	0.047	<0.042	0.061	<0.04	<0.041	0.12	0.19
Benzo(b)fluoranthene	0.2	0.054	<0.33	0.16	0.049	0.048	<0.042	<0.31	<0.04	<0.041	0.086	0.13
Benzo(g,h,i)perylene	None	0.054	<0.41	<0.04	<0.041	<0.041	<0.042	<0.041	<0.04	<0.041	<0.041	0.058
Benzo(k)fluoranthene	None	0.063	<0.41	<0.04	<0.041	<0.041	<0.042	<0.041	<0.04	<0.041	<0.041	0.061
Chrysene	0.2	0.22	<0.40	0.19	0.21	0.2	0.14	0.17	0.13	0.072	0.2	0.24
Dibenz(a,h)anthracene	None	---	---	---	<0.041	<0.041	<0.042	<0.041	<0.04	<0.041	<0.041	<0.0098
Dibenzofuran	None	---	---	0.61	---	---	---	---	---	---	---	---
Fluoranthene	400	<3.3	2.2	1.9	1.5	1.5	1	1.3	1.3	0.68	1.3	1.2
Fluorene	400	7.3	10	10.2	9.9	9.6	10.6	16.5	15.8	6.7	14.6	9.6
Indeno(1,2,3-cd)pyrene	None	0.037	<0.40	<0.04	<0.041	<0.041	<0.042	<0.041	<0.04	<0.041	<0.041	0.044
Naphthalene	100	83	93	49.8	2.8	2.8	39.4	7	5.7	6	4.2	2.4
Phenanthrene	None	16	22	14.9	7.6	7.8	10.2	7.5	5.6	4.7	5.2	0.62
Pyrene	250	<3.1	2.6	2.5	1.6	1.7	1.2	1.3	1.4	0.81	1.5	1.3

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

Shaded results indicate concentrations greater than the enforcement standards.

Only Detected compounds are listed on this table. See laboratory analytical reports for list of results.

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

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

Table 2, MW-20

Parameters	Enforcement Standard	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20DUP
		11/14/2005	10/24/2006	8/13/2008	7/22/2009	4/21/2010	10/20/2010	4/14/2011	11/4/2011	8/22/2012	8/22/2012
VOC											
Acetone	1,000	---	<5.0	<100	<250	<50	<20	<25	<1250	<1250	<1250
Benzene	5	3,800	5,830	16,000	2,770	378	15,500	106	14,700	10,400	10,300
Bromobenzene	None	<41	<1.0	<10	<25	<5	<2	<1	<50	<8.6	<10.1
2-Butanone (MEK)	460	---	<5.0	<40	<100	<20	<8	<4	<200	<200	<200
Chloroethane	400	<48	<1.0	<10	<25	<5	<2	<1	<50	<21.5	<21.5
Chloroform	6	<18	<1.0	<10	<25	<5	<2	<1	<50	<14.5	<14.5
Chloromethane	3	<12	<1.0	<10	<100	<5	<2	<4	<200	<41.3	<41.3
Ethylbenzene	700	43	10.1	30.4	<25	<5	42	1.1	127	<8.1	<8.1
Isopropylbenzene (Cumene)	None	<30	6.7	<10	<25	<20	8.3	1.7	<50	<7.6	<7.6
p-Isopropyltoluene	None	<34	<1.0	<10	<25	<5	<2	<1	<50	<8.6	<8.6
Naphthalene	100	280	41.1	<40	<100	<20	65.9	4.9	<200	<6.8	<6.8
n-Propylbenzene	None	<40	3.1	<10	<25	<5	3.7	<1	<50	<7.8	<7.8
Styrene	100	<43	<1.0	<10	<25	<5	<2	<1	<50	<6.0	<6.0
Toluene	1,000	<34	<1.0	<10	<25	<5	<2	<1	<50	<7.7	<7.7
1,2,4-Trimethylbenzene	480 ^a	<48	31	18.6	<25	7.8	38.4	8	<50	<7.1	<7.1
1,3,5-Trimethylbenzene	480 ^a	<42	1.3	<10	<25	<5	<2	<1	<50	<8.7	<8.7
m&p-Xylene	10,000 ^b	<90	<1.0	<20	<50	<10	4.9	<2	245	<11.0	<11.0
o-Xylene	10,000 ^b	<42	12.6	20	<25	<5	39.3	1.8	63.5	<10.5	<10.5
PAH											
1-Methylnaphthalene	None	18	29.5	---	---	---	---	---	---	---	---
2-Chloronaphthalene	None	---	<0.04	---	---	---	---	---	---	---	---
2-Methylnaphthalene	None	1.4	1.5	---	---	---	---	---	---	---	---
Acenaphthene	None	14	27.1	55.4	33.5	36.2	74.6	23.7	61.8	52.4	52.4
Acenaphthylene	None	<0.86	<0.04	<0.04	<0.041	0.21	0.4	0.13	0.3	0.3	0.3
Anthracene	3,000	<1.2	0.2	0.17	0.21	0.2	0.41	0.24	0.18	0.41	0.41
Benzo(a)anthracene	None	<1.7	<0.04	<0.04	<0.041	<0.041	<0.04	<0.041	<0.043	<0.0082	<0.0082
Benzo(a)pyrene	0.2	<1.9	<0.04	<0.04	<0.041	<0.041	<0.04	<0.041	<0.043	<0.010	<0.010
Benzo(b)fluoranthene	0.2	<1.7	<0.04	<0.04	<0.041	<0.31	<0.04	<0.041	<0.043	<0.010	<0.010
Benzo(g,h,i)perylene	None	<2.0	<0.04	<0.04	<0.041	<0.041	<0.04	<0.041	<0.043	<0.010	<0.010
Benzo(k)fluoranthene	None	<2.0	<0.04	<0.04	<0.041	<0.041	<0.04	<0.041	<0.043	<0.0093	<0.0093
Chrysene	0.2	<2.0	<0.04	<0.04	<0.041	<0.041	<0.04	<0.041	<0.043	<0.0093	<0.0093
Dibenz(a,h)anthracene	None	---	---	<0.04	<0.041	<0.041	<0.04	<0.041	<0.043	<0.0093	<0.0093
Dibenzofuran	None	---	0.19	---	---	---	---	---	---	---	---
Fluoranthene	400	<1.6	0.34	0.25	0.29	0.23	0.36	0.27	0.23	0.65	0.67
Fluorene	400	<0.96	3.3	3.5	2.4	2.6	6.7	1.9	4.1	4.1	4.1
Indeno(1,2,3-cd)pyrene	None	<2.0	<0.04	<0.04	<0.041	<0.041	<0.04	<0.041	<0.043	<0.010	<0.010
Naphthalene	100	130	21.4	28.6	5.1	1.7	43.4	3.2	13.8	4.6	5.1
Phenanthrene	None	<1.2	1.2	0.95	1.1	1.1	1.9	1.3	0.6	1.8	1.9
Pyrene	250	<1.5	0.29	0.19	0.28	0.17	0.27	0.21	0.18	0.45	0.48

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

Shaded results indicate concentrations greater than the enforcement standards.

Only Detected compounds are listed on this table. See laboratory analytical reports for list of results.

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

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

Table 2, MW-22

Parameters	WDNR Enforcement Standard	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22
		11/15/2005	10/24/2006	8/13/2008	7/22/2009	4/22/2010	10/28/2010	4/14/2011	11/4/2011	8/22/2012
VOC										
Acetone	1,000	---	171	195	145	139	140	97.3	130	179
Benzene	5	10	6.4	10.7	5.4	5.3	4.0	4.9	4.5	4.6
Bromobenzene	None	<0.82	<1.0	<1	<1	<1	<1	<1	<1	<0.086
2-Butanone (MEK)	460	---	10.5	9.5	10.0	11.4	8.8	5	12.1	11.9
Chloroethane	400	<0.97	<1.0	<1	<1	<1	<1	<1	<1	<0.22
Chloroform	6	<0.37	1.1	<1	<1	<1	<1	<1	<1	<0.14
Chloromethane	3	0.48	<1.0	<1	4.1	<4	<4	<4	<4	<0.21
Ethylbenzene	700	<0.54	<1.0	<1	<1	<1	<1	<1	<1	<0.081
Isopropylbenzene (Cumene)	None	<0.59	<1.0	<1	<1	1.4	1.1	1.2	1.8	<0.076
p-Isopropyltoluene	None	<0.67	2.3	2.8	<1	2.7	1.4	1.3	2.5	1.2
Naphthalene	100	2.7	2.9	<4	<4	<4	<4	<4	<4	<0.068
n-Propylbenzene	None	<0.81	<1.0	<1	<1	<1	<1	<1	<1	<0.078
Styrene	100	<0.86	<1.0	<1	<1	<1	<1	<1	<1	<0.060
Toluene	1,000	1.5	1.8	1.9	1.8	1.7	1.3	1.4	1.8	1.6
1,2,4-Trimethylbenzene	480 ^a	<0.97	<1.0	<1	<1	8.6	7.7	10.3	13.6	7.3
1,3,5-Trimethylbenzene	480 ^a	<0.83	<1.0	<1	<1	4.8	4.4	5.8	7.6	4.3
m&p-Xylene	10,000 ^b	<1.8	<2.0	<2	<2	<2	<2	<2	<2	<0.11
o-Xylene	10,000 ^b	<0.83	<1.0	<1	<1	2.5	1.8	1.9	2.2	1.3
PAH										
1-Methylnaphthalene	None	1.7	0.25	---	---	---	---	---	---	---
2-Chloronaphthalene	None	---	<0.04	---	---	---	---	---	---	---
2-Methylnaphthalene	None	1.2	0.17	---	---	---	---	---	---	---
Acenaphthene	None	1.9	0.14	0.43	0.089	0.11	0.1	0.11	0.079	0.13
Acenaphthylene	None	0.12	<0.04	<0.041	<0.041	<0.041	<0.40	<0.041	<0.043	<0.044
Anthracene	3,000	0.98	0.05	0.29	<0.041	<0.041	<0.40	<0.041	<0.043	<0.0089
Benzo(a)anthracene	None	0.4	0.052	0.32	<0.041	<0.041	<0.40	<0.041	<0.043	<0.0089
Benzo(a)pyrene	0.2	0.21	<0.04	0.22	<0.041	<0.041	<0.40	<0.041	<0.043	<0.011
Benzo(b)fluoranthene	0.2	<0.17	0.16	0.19	<0.041	<0.041	<0.40	<0.041	<0.043	<0.011
Benzo(g,h,i)perylene	None	<0.20	0.26	0.11	<0.041	<0.041	<0.40	<0.041	<0.043	<0.011
Benzo(k)fluoranthene	None	<0.20	<0.04	0.082	<0.041	<0.041	<0.40	<0.041	<0.043	<0.010
Chrysene	0.2	0.38	0.057	0.36	<0.041	<0.041	<0.40	<0.041	<0.043	<0.010
Dibenz(a,h)anthracene	None	---	---	<0.041	<0.041	<0.041	<0.40	<0.041	<0.043	<0.010
Dibenzofuran	None	---	<0.04	---	---	---	---	---	---	---
Fluoranthene	400	1.1	0.083	0.68	<0.041	<0.041	<0.40	<0.041	<0.043	<0.013
Fluorene	400	0.71	<0.04	0.16	<0.041	<0.041	<0.40	<0.041	<0.043	<0.0044
Indeno(1,2,3-cd)pyrene	None	<0.20	<0.04	0.071	<0.041	<0.041	<0.40	<0.041	<0.043	<0.011
Naphthalene	100	3.4	0.52	0.84	0.5	0.41	0.5	0.52	0.47	0.48
Phenanthrene	None	3.1	0.21	1.1	0.072	0.087	0.061	0.047	<0.043	0.1
Pyrene	250	1.5	0.1	0.99	<0.041	0.043	<0.40	<0.041	<0.043	<0.014

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

Shaded results indicate concentrations greater than the enforcement standards.

Only Detected compounds are listed on this table. See laboratory analytical reports for list of results.

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

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

Appendix A

Groundwater Sample Collection Forms



DAILY FIELD LOG

~~82.99~~ 82.99 Skirene
~~169.~~
 \$59 Cindy

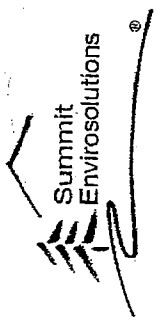
Project Name: SWLTP Project No.: 2118-0001
 Date: 8/21/12 Completed By: PRB/RRE
 Project Location: Superior, WI Weather: SUNNY

Expenses		Equipment	
Mileage _____ miles	Hotel \$ _____	PID _____ days	Truck _____ days
Meals \$ _____ (B) \$ _____ (L) \$ _____ (D)	Other: _____	WLI _____ days	Bailers _____ #
Other: _____		Other: _____	

Work Performed

9:45-12:15 Mob. St. Paul to Superior
 12:15-12:40 Lunch
 12:40-13:50 Bought Ice
 At site
 PPE & Setup
 Water Levels
 13:50 Checked in @ Plant (Met Ruby)
 1905 leave site 3 monitoring wells tested
 1926 Arrive at Hotel American Inn.

 700 Leave hotel to Menards
 730 picked up Bolts, nuts & washers for transducer install.
 800 At site test MW-20 & MW-15 & MW-27
 11:30 lunch
 12:00 sampled MW-7, MW-8, MW-9
 15:15 left site
 15:45 on the road to St. Paul
 3x30PST - 2136-0001
 Pw1 117TOL + 10
 Pw2 82TOL + 10
 Pw3 95TOL + 10



Page 2 of 2

GROUNDWATER ELEVATION DATA

Project Name SUNLTP, Superior M&P Summit Project No. 2118-0001
 Project Location Superior, WI
 Completed By PRB/RPE
 Weather SUNNY Measuring Device _____ Date 8/21/12
 Well Depths: (check one) Measured Historical Data Used

Well No.	Time	Top of Casing	Depth to Water	Groundwater Elevation	Depth to Product	Product Thickness	Previous water level data reviewed		Well Depth	Measurements performed by	Remarks
							Yes	NA*			
* MW-9	14:59		8.6				9.63				
MW-3	15:08		6.72				8.82				Protective Boat Casing NO CAP FOR PORT OR CASING
MW-4	15:14		6.21				6.97				DIFF-LOCK NIM Seal Cap
* MW-8	15:30		12.6				13.27				
* MW-7	15:26		12.37				12.90				
MW-12	14:18		5.97								By 3/4" protected cap - Ratchet NO ground seal
MWMB	15:18		5.62								

Notes: * Sample to be collected

*explain NA in Notes



GROUNDWATER ELEVATION DATA

Project Name SNL+P, Superior, MG-P Summit Project No. 2118-0001

Project Location Superior, WI

Completed By ARB/RRF Date 8/21/12

Weather SUNNY Measuring Device _____ Well Depths (check one) Measured Historical Data Used

(From 11/3/11)

Well No.	Time	Top of Casing	Depth to Water	Groundwater Elevation	Depth to Product	Product Thickness	Previous water level data reviewed Yes NA*	Well Depth	Measurements performed by	Remarks
MW-1	13:15		6.95				7.54			100% difficult to open PVC cap with holes
MW-2	13:22		6.34				6.74			" "
MW-5	13:28		7.73				8.98			" "
MW-6	13:34		10.19				11.12			" "
MW-11	14:45		8.07				8.35			100% difficult to open. 100% difficult
MW-22	13:45		6.82				7.97			100% difficult to open
MW-15	14:31		7.52				7.59			
MW-20	14:28		8.83				4.05			Key 5/16" Holes
MW-10	14:50		4.04				4.80			Picture of CURRENT CASING

Notes: * Sample to be collected

*explain NA in Notes

LOW FLOW GROUNDWATER SAMPLING INFORMATION

Sample Point: MW-8

Client: Superior, Water, Light & Power Summit Project No.: 2118-0001

Project Location: Superior, WI Samples Collected By: BMG/PRB/PRE

Date: 8/22/12 Start Time: 13:12 Finish Time: 14:20 Weather Conditions: _____

Sample Point Type: (Well) Piezometer/Other Casing Type: PVC

Depth To Water (From TOC): _____ Well Depth (From TOC): _____ Casing Diameter 2"

Purging Method: Peristaltic pump and disposable tubing

Field Testing Equipment Used: Horiba

Calibration data can be found in the project file.

Stabilization Data

Time	Volume Removed (gal)	Temp. (deg C)	PH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Ordor
13:12									
13:26									
13:42		24.98	12.34	3.86	0.0	1.27	-371	clear	NA
13:47		25.19	12.43	3.98	0.0	1.67	-372	clear	NA
13:52		25.54	12.47	4.53	0.0	1.58	-374	clear	NA
13:57		25.69	12.49	4.84	0.0	1.53	-373	clear	NA
<i>Stabalization Limits:</i>									

Flow (ml/min)
 108
 118
 118
 118

Stabilization Notes: _____

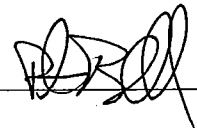
Sample Collection

Sample Collection Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-8	VOA	3	HCl	VOA	1300
"	1 L Amber	2	NA	PAH	1300

Duplicate collected Duplicate ID #: _____

Comments SMP=12'. Last time pumped ~ 0.5h @ 125 ml/min. Sample label time = 1300

Signature: 

Date: 8/22/12

SUMMIT ENVIROSOLUTIONS, INC.

LOW FLOW GROUNDWATER SAMPLING INFORMATION

Sample Point: MW22

Client: Superior, Water, Light & Power Summit Project No.: 2118-0001

Project Location: Superior, WI Samples Collected By: BMG/PRB/RRE

Date: 8/22/12 Start Time: _____ Finish Time: _____ Weather Conditions: _____

8/21/12 (PRB 8/27/12)

Sample Point Type: Well Piezometer/Other _____ Casing Type: PVC

Depth To Water (From TOC): _____ Well Depth (From TOC): _____ Casing Diameter 2"

Purging Method: Peristaltic pump and disposable tubing

Field Testing Equipment Used: Horiba

Calibration data can be found in the project file.

Stabilization Data

Time	Volume Removed (gal)	Temp. (deg C)	PH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Order	Flow (ml/min)
<u>17:38</u>										<u>8</u>
<u>17:52</u>										<u>110</u>
<u>18:05</u>		<u>25.74</u>	<u>12.70</u>	<u>8.25 us/cm</u>	<u>0.0</u>	<u>.85</u>	<u>-123</u>	<u>clear</u>	<u>NA</u>	
<u>18:10</u>		<u>24.41</u>	<u>12.83</u>	<u>8.42</u>	<u>0.0</u>	<u>.41</u>	<u>-136</u>	<u>clear</u>	<u>NA</u>	
<u>* Battery to Pump Died Sampling / Stabilization Suspended until 8/22/12</u>										
<i>Stabilization Limits:</i>										

Stabilization Notes: _____

Sample Collection

Sample Collection Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
	<u>VOA</u>		<u>HCl</u>	<u>VOA</u>	
	<u>1 L Amber</u>		<u>NA</u>	<u>PAH</u>	

Duplicate collected Duplicate ID #: _____

Comments SMP=10'. Pumped ~ 0.5 ltr's last time

Signature: _____ Date: _____

SUMMIT ENVIROSOLUTIONS, INC.

LOW FLOW GROUNDWATER SAMPLING INFORMATION

Sample Point: MW22
 Client: Superior, Water, Light & Power Summit Project No.: 2118-0001
 Project Location: Superior, WI Samples Collected By: BMG/PRB/RRE
 Date: 8/22/17 Start Time: 10:20 Finish Time: 11:30 Weather Conditions: Sunny

Sample Point Type: Well/Piezometer/Other _____ Casing Type: PVC
 Depth To Water (From TOC): _____ Well Depth (From TOC): _____ Casing Diameter 2"

Purging Method: Peristaltic pump and disposable tubing
 Field Testing Equipment Used: Horiba
 Calibration data can be found in the project file.

.1 .1 5 25 .2 30
 Stabilization Data

Time	Volume Removed (gal)	Temp. (deg C)	PH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Order
1021									
1024									
1030		22.43	7.62	0.0	150	8.72	54	clear	NA
1054		21.49	12.87	8.41	0.0	1.93	-179	clear	NA
1059		20.03	12.89	8.71	0.0	1.71	-185	clear	NA
1104		19.01	12.91	8.89	0.0	1.65	-171	clear	NA
Stabalization Limits:									

Flow ml/min
 110
 110

Stabilization Notes: _____

Sample Collection

Sample Collection Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
	VOA		NI	VOA	11:10
	1L Amber		NA	PAH	11:10

Duplicate collected Duplicate ID #: _____

Comments SMP=10' Pumped ~ .5 Hrs last time
*while testing - witness concrete mixer being washed down into the site - maybe has some correlation to the pH?

Signature: [Signature] Date: 8/22/17

LOW FLOW GROUNDWATER SAMPLING INFORMATION

Sample Point: MW-20

Client: Superior, Water, Light & Power Summit Project No.: 2118-0001

Project Location: Superior, WI Samples Collected By: BMG/PRB/PRE

Date: 8/22/12 Start Time: ~8:00 Finish Time: ~9:40 Weather Conditions: SUNNY

Sample Point Type: Well/Piezometer/Other _____ Casing Type: PVC

Depth To Water (From TOC): _____ Well Depth (From TOC): _____ Casing Diameter 2"

Purging Method: Peristaltic pump and disposable tubing

Field Testing Equipment Used: Hanna

Calibration data can be found in the project file.

.1 .1 .2 30
Stabilization Data

Time	Volume Removed (gal)	Temp. (deg C)	PH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Order
807									
817									
847		18.23	6.97	1.03	0.4	0.0	-47	trace org. particulates	slight
852		18.43	6.71	1.03	.6	0.0	-52	"	"
857		18.67	6.68	1.02	.6	0.0	-57	"	"
900		18.79	6.67	1.02	.4	0.0	-58	"	"
<i>Stabalization Limits:</i>									

Flow (ml/min)
 0
 110
 110
 "
 "
 "

W.L. (F.S.)
 3.84
 3.81

Stabilization Notes: _____

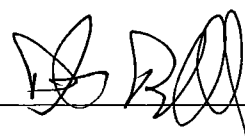
Sample Collection

Sample Collection Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
	VOA	6 (3-20)(3-20D)	HCl		900
	1 L Amber	4(2-20)(2-20D)	NA		900

Duplicate collected Duplicate ID #: MW-20D 9:00

Comments Smp = 10'. Last time pumped ~ hour @ 170 ml/min

Signature: 

Date: 8/22/12

LOW FLOW GROUNDWATER SAMPLING INFORMATION

Sample Point: MW-9

Client: Superior, Water, Light & Power Summit Project No.: 2118-0001

Project Location: Superior, WI Samples Collected By: BMG/PRB/RRE

Date: 8/22/12 Start Time: 12:20 Finish Time: 13:20 Weather Conditions: Sunny

Sample Point Type: Well Piezometer/Other _____ Casing Type: PVC

Depth To Water (From TOC): _____ Well Depth (From TOC): _____ Casing Diameter 2"

Purging Method: Peristaltic pump and disposable tubing

Field Testing Equipment Used: Hol'ber

Calibration data can be found in the project file.

Stabilization Data

Time	Volume Removed (gal)	Temp. (deg C)	PH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Order	Flow (ml/min)
8:64 1221										Ø
8:89 1224										104
1233		20.15	8.85	1.09	0.0	1.18	-126	clear	slight	110
1238		23.67	8.14	1.13	0.0	.71	-183	clear	slight	
1243		21.53	7.94	1.20	0.0	.61	-255	clear	slight	
1248		20.64	7.94	1.23	0.0	.59	-285	clear	slight	
1253		20.30	7.96	1.25	0.0	.56	-302	clear	slight	
Stabilization Limits:										

Stabilization Notes: _____

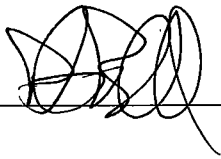
Sample Collection

Sample Collection Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
	VOA		HCl	VOA	1250
	1L Amber		NA	PAH	1250

Duplicate collected Duplicate ID #: _____

Comments SMP=12'. Last time pumped ~20min @ 170ml/min

Signature: 

Date: 8/22/12

SUMMIT ENVIROSOLUTIONS, INC.

LOW FLOW GROUNDWATER SAMPLING INFORMATION

Sample Point: MW-7

Client: Superior, Water, Light & Power Summit Project No.: 2118-0001

Project Location: Superior, WI Samples Collected By: BMG/PRB/RRE

Date: 8/22/12 Start Time: 12:46 Finish Time: 13:55 Weather Conditions: Sunny

Sample Point Type: Well Piezometer/Other Casing Type: PVC

Depth To Water (From TOC): Well Depth (From TOC): Casing Diameter 2"

Purging Method: Peristaltic pump and disposable tubing

Field Testing Equipment Used: Horiba

Calibration data can be found in the project file.

0.1 0.1 5 45 0.2 30 Stabilization Data

Table with columns: Time, Volume Removed (gal), Temp. (deg C), PH, Spec. Cond (umhos), Turbidity (NTUs), DO, ORP, Color, Ordor, Flow (ml/min). Includes handwritten data for various times and flow rates.

Stabilization Notes:

Sample Collection

Sample Collection Method: Peristaltic pump and disposable tubing

Table with columns: Sample ID, Container Type, No. of Containers, Preservation, Analysis, Time. Includes handwritten entries for MW-7 and 1L Amber containers.

Duplicate collected Duplicate ID #:

Comments SMP = 12'. Last time dumped ~ 0.5 hr @ 160 ml/min. Set tubing to ~14' b/c DEW -> SMP. Sample label time = 13:30 started sampling @ 13:30

Signature: [Handwritten Signature]

Date: 8/22/12

SUMMIT ENVIROSOLUTIONS, INC.

LOW FLOW GROUNDWATER SAMPLING INFORMATION

Sample Point: MW-11

Client: Superior, Water, Light & Power Summit Project No.: 2118-0001

Project Location: Superior, WI Samples Collected By: BMG/PRB/PRE

Date: 8-21-12 Start Time: 16:00 Finish Time: Weather Conditions: SUNNY ~75°F

Sample Point Type: Well/Piezometer/Other Casing Type: PVC

Depth To Water (From TOC): Well Depth (From TOC): Casing Diameter 2"

Purging Method: Peristaltic pump and disposable tubing

Field Testing Equipment Used: Horiba

Calibration data can be found in the project file.

Stabilization Data: +/-0.1 +/-0.1 +/-5 25 +/-0.2 +/-30

Table with columns: Time, Volume Removed (gal), Temp. (deg C), PH, Spec. Cond (umhos), Turbidity (NTUs), DO, ORP, Color, Ordor, Flow (ml/min). Includes handwritten data points and flow rate notes.

Stabilization Limits: 17:19 21.84 5.77 1.19 0.0 0.0 -62 " "

Stabilization Notes: 17:21 21.73 5.74 1.19 0.0 0.0 -61 " "

Sample Collection

Sample Collection Method: Peristaltic pump and disposable tubing

Table with columns: Sample ID, Container Type, No. of Containers, Preservation, Analysis, Time. Includes handwritten entries for MW-11 and PAH analysis.

Duplicate collected Duplicate ID #:

Comments SMP=9'. Last time pumped ~15 MN. Sample Time = 16:40 Sample Label time = 17:30 Actually collected starting @ 17:22

Signature: [Handwritten Signature] Date: 8/21/12

75 1ml = 0.034 oz 100ml = 3.4oz 200ml = 6.8oz

SUMMIT ENVIROSOLUTIONS, INC.

LOW FLOW GROUNDWATER SAMPLING INFORMATION

Sample Point: MW-10
Client: Superior, Water, Light & Power Summit Project No.: 2118-0001
Project Location: Superior, WI Samples Collected By: BMG/PRB/PRE
Date: 8/21/12 Start Time: 17:50 Finish Time: Weather Conditions: Sunny ~ 75°F

Sample Point Type: Well/Piezometer/Other Casing Type: PVC
Depth To Water (From TOC): 4.04 Well Depth (From TOC): Casing Diameter 2"

Purging Method: Peristaltic pump and disposable tubing

Field Testing Equipment Used:

Calibration data can be found in the project file.

4.04 HPLC

0.1 0.1 5 Stabilization Data 25 0.2 -30

Table with 10 columns: Time, Volume Removed (gal), Temp. (deg C), PH, Spec. Cond (umhos), Turbidity (NTUs), DO, ORP, Color, Ordor. Includes handwritten notes like 'Some Black Specs' and 'L+Blw color'.

Flow (ml/min) 199 to #36

Stabilization Notes:

Sample Collection

Sample Collection Method: Peristaltic pump and disposable tubing

Table with 6 columns: Sample ID, Container Type, No. of Containers, Preservation, Analysis, Time. Includes entries for MW-10 with VOA and PAH analysis.

Duplicate collected Duplicate ID #:

Comments SMP = 8'. Last time pumped ~ 0.25 hr @ 200ml/min w/ Black Particulate in water. Sample Label time 18:40

Signature: [Handwritten Signature] Date: 8/21/12

LOW FLOW GROUNDWATER SAMPLING INFORMATION

Sample Point: MW-15

Client: Superior, Water, Light & Power Summit Project No.: 2118-0001

Project Location: Superior, WI Samples Collected By: BMG/PRB/RRE

Date: 8/22/12 Start Time: 8:16 Finish Time: _____ Weather Conditions: Sunny 70°F

Sample Point Type: Well/Piezometer/Other Casing Type: PVC

Depth To Water (From TOC): _____ Well Depth (From TOC): _____ Casing Diameter 2"

Purging Method: Peristaltic pump and disposable tubing

Field Testing Equipment Used: Horiba

Calibration data can be found in the project file.

0.1 0.1 5 45 0.2 30
Stabilization Data

Time	Volume Removed (gal)	Temp. (deg C)	PH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Order	Flow (ml/min)
7:59										0
8:11										
7:90 8:12								Slight yellow particles	slight	140
8:26		17.31	6.67	4.60	0.2	0.1	-68	"	"	"
8:31		17.09	6.63	4.66	.6	0.0	-70	"	"	"
8:36		17.02	6.61	4.72	0.7	0.0	-73	"	"	"
Stabilization Limits:										

Stabilization Notes: _____

Sample Collection

Sample Collection Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-15	VOA	3	HCl	VOA	8:40
"	1 L Amber	2	NA	PAH	"

Duplicate collected Duplicate ID #: _____

Comments SMP = 13'. Last time Pumped ~ 20 min. Sampleable time: 8:40. Sampled @ 8:40

Signature: [Signature] Date: 8/22/12

LOW FLOW GROUNDWATER SAMPLING INFORMATION

Sample Point: MW-6

Client: Superior, Water, Light & Power Summit Project No.: 2118-0001

Project Location: Superior, WI Samples Collected By: BMG/PRB/RRE

Date: 8/21/12 Start Time: 15:45 Finish Time: ~17:20 Weather Conditions: Sunny ~75°F

Sample Point Type: (Well) Piezometer/Other Casing Type: PVC
 Depth To Water (From TOC): _____ Well Depth (From TOC): _____ Casing Diameter 2"

Purging Method: Peristaltic pump and disposable tubing

Field Testing Equipment Used: Horiba

Calibration data can be found in the project file.

± 0.1 ± 0.1 $\pm 5.0 \mu S/cm$ ± 1000 ± 1000 $\pm 0.2 mg/l$ $\pm 30 mV$
 Stabilization Data

WL (ft)	Time	Volume Removed (gal)	Temp. (deg C)	PH	Spec. Cond (umhos)	Turbidity (NTUs)	DO	ORP	Color	Order	Flow (ml/min)
1025											
1045	15:48										126
	16:19										122
	16:21		27.39	6.50	3.93 mS/cm	0.0	1.16	-213	Clear	NA	122
	16:29		26.20	6.19	4.05	3.2	0.15	-219	"	"	11
	16:34		25.67	6.03	4.17	3.2	0.0	-228	"	"	
	16:39		26.24	5.89	4.25	1.1	0.0	-233	"	"	
Stabilization Limits:											

Stabilization Notes:

16:44	25.00	5.74	4.31	0.0	0.0	-237	"	"
16:48	24.90	5.68	4.32	0.0	0.0	-239	"	"
16:50	24.85	5.64	4.36	0.0	0.0	-240	"	"

Sample Collection

Sample Collection Method: Peristaltic pump and disposable tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-6	VOA	3	HCL	VOA	16:40
"	1L Amber	2	NA	PAH	16:40

Duplicate collected Duplicate ID #: _____

Comments SMP = 12.5' Last time pumped 125 Hrs
Label Sample Time = 16:40, Actually collected @ 16:50
 * Note Temp values seem too high so not used in stabilization

Signature: [Signature] Date: 8-21-12

Appendix B

Laboratory Analytical Report

September 06, 2012

Bill Gregg
Summit Envirosolutions
1217 Bandana Blvd
Saint Paul, MN 55108

RE: Project: Superior MGP 2118-0001
Pace Project No.: 10203311

Dear Bill Gregg:

Enclosed are the analytical results for sample(s) received by the laboratory on August 23, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mariah Peronto

mariah.peronto@pacelabs.com
Project Manager

Enclosures

cc: Peter Bell, Summit Envirosolutions



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01

Alaska Certification #: UST-078

Alaska Certification #MN00064

Arizona Certification #: AZ-0014

Arkansas Certification #: 88-0680

California Certification #: 01155CA

Colorado Certification #Pace

Connecticut Certification #: PH-0256

EPA Region 8 Certification #: Pace

Florida/NELAP Certification #: E87605

Georgia Certification #: 959

Hawaii Certification #Pace

Idaho Certification #: MN00064

Illinois Certification #: 200011

Kansas Certification #: E-10167

Louisiana Certification #: 03086

Louisiana Certification #: LA080009

Maine Certification #: 2007029

Maryland Certification #: 322

Michigan DEQ Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace

Montana Certification #: MT CERT0092

Nebraska Certification #: Pace

Nevada Certification #: MN_00064

New Jersey Certification #: MN-002

New York Certification #: 11647

North Carolina Certification #: 530

North Dakota Certification #: R-036

North Dakota Certification #: R-036A

Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507

Oregon Certification #: MN200001

Oregon Certification #: MN300001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification

Tennessee Certification #: 02818

Texas Certification #: T104704192

Utah Certification #: MN00064

Virginia/DCLS Certification #: 002521

Virginia/VELAP Certification #: 460163

Washington Certification #: C754

West Virginia Certification #: 382

Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

Page 2 of 54

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SAMPLE SUMMARY

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10203311001	MW-6	Water	08/21/12 16:40	08/23/12 14:11
10203311002	MW-7	Water	08/22/12 13:30	08/23/12 14:11
10203311003	MW-8	Water	08/22/12 13:00	08/23/12 14:11
10203311004	MW-9	Water	08/22/12 12:50	08/23/12 14:11
10203311005	MW-10	Water	08/21/12 18:40	08/23/12 14:11
10203311006	MW-11	Water	08/21/12 17:30	08/23/12 14:11
10203311007	MW-15	Water	08/22/12 08:40	08/23/12 14:11
10203311008	MW-20	Water	08/22/12 09:00	08/23/12 14:11
10203311009	MW-20D	Water	08/22/12 09:00	08/23/12 14:11
10203311010	MW-22	Water	08/22/12 11:10	08/23/12 14:11
10203311011	Trip Blanks	Water	08/22/12 00:00	08/23/12 14:11

REPORT OF LABORATORY ANALYSIS

Page 3 of 54

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SAMPLE ANALYTE COUNT

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10203311001	MW-6	EPA 8270 by SIM	DRE	18
		EPA 8260	SE	73
10203311002	MW-7	EPA 8270 by SIM	DRE	18
		EPA 8260	SE	73
10203311003	MW-8	EPA 8270 by SIM	DRE	18
		EPA 8260	SE	73
10203311004	MW-9	EPA 8270 by SIM	DRE	18
		EPA 8260	SE	73
10203311005	MW-10	EPA 8270 by SIM	DRE	18
		EPA 8260	SE	73
10203311006	MW-11	EPA 8270 by SIM	DRE	18
		EPA 8260	SE	73
10203311007	MW-15	EPA 8270 by SIM	DRE	18
		EPA 8260	SE	73
10203311008	MW-20	EPA 8270 by SIM	DRE	18
		EPA 8260	SE	73
10203311009	MW-20D	EPA 8270 by SIM	DRE	18
		EPA 8260	SE	73
10203311010	MW-22	EPA 8270 by SIM	DRE	18
		EPA 8260	SE	73
10203311011	Trip Blanks	EPA 8260	SE	73
		EPA 8260	SE	73

REPORT OF LABORATORY ANALYSIS

Page 4 of 54

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ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-6 **Lab ID: 10203311001** Collected: 08/21/12 16:40 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270 MSSV PAH by SIM									
Analytical Method: EPA 8270 by SIM					Preparation Method: EPA 3510				
Acenaphthene	3.1 ug/L		0.040	0.0050	1	08/28/12 10:39	09/02/12 16:27	83-32-9	
Acenaphthylene	0.13 ug/L		0.040	0.0040	1	08/28/12 10:39	09/02/12 16:27	208-96-8	
Anthracene	0.37 ug/L		0.040	0.0080	1	08/28/12 10:39	09/02/12 16:27	120-12-7	
Benzo(a)anthracene	0.068 ug/L		0.040	0.0080	1	08/28/12 10:39	09/02/12 16:27	56-55-3	
Benzo(a)pyrene	ND ug/L		0.040	0.010	1	08/28/12 10:39	09/02/12 16:27	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.040	0.010	1	08/28/12 10:39	09/02/12 16:27	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.040	0.010	1	08/28/12 10:39	09/02/12 16:27	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.040	0.0090	1	08/28/12 10:39	09/02/12 16:27	207-08-9	
Chrysene	0.078 ug/L		0.040	0.0090	1	08/28/12 10:39	09/02/12 16:27	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.040	0.0090	1	08/28/12 10:39	09/02/12 16:27	53-70-3	
Fluoranthene	0.74 ug/L		0.040	0.012	1	08/28/12 10:39	09/02/12 16:27	206-44-0	
Fluorene	0.51 ug/L		0.040	0.0040	1	08/28/12 10:39	09/02/12 16:27	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.040	0.010	1	08/28/12 10:39	09/02/12 16:27	193-39-5	
Naphthalene	5.6 ug/L		0.040	0.0060	1	08/28/12 10:39	09/02/12 16:27	91-20-3	
Phenanthrene	2.6 ug/L		0.040	0.0080	1	08/28/12 10:39	09/02/12 16:27	85-01-8	
Pyrene	0.83 ug/L		0.040	0.013	1	08/28/12 10:39	09/02/12 16:27	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	63 %		58-125		1	08/28/12 10:39	09/02/12 16:27	321-60-8	
Terphenyl-d14 (S)	86 %		75-125		1	08/28/12 10:39	09/02/12 16:27	1718-51-0	

8260 VOC									
Analytical Method: EPA 8260									
Acetone	ND ug/L		25.0	12.5	1		08/26/12 05:21	67-64-1	
Allyl chloride	ND ug/L		4.0	1.8	1		08/26/12 05:21	107-05-1	
Benzene	2.2 ug/L		1.0	0.062	1		08/26/12 05:21	71-43-2	
Bromobenzene	ND ug/L		1.0	0.086	1		08/26/12 05:21	108-86-1	
Bromochloromethane	ND ug/L		1.0	0.32	1		08/26/12 05:21	74-97-5	
Bromodichloromethane	ND ug/L		1.0	0.11	1		08/26/12 05:21	75-27-4	
Bromoform	ND ug/L		4.0	0.068	1		08/26/12 05:21	75-25-2	
Bromomethane	ND ug/L		4.0	0.36	1		08/26/12 05:21	74-83-9	
2-Butanone (MEK)	ND ug/L		4.0	2.0	1		08/26/12 05:21	78-93-3	
n-Butylbenzene	ND ug/L		1.0	0.15	1		08/26/12 05:21	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	0.10	1		08/26/12 05:21	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	0.10	1		08/26/12 05:21	98-06-6	
Carbon tetrachloride	ND ug/L		1.0	0.16	1		08/26/12 05:21	56-23-5	
Chlorobenzene	ND ug/L		1.0	0.10	1		08/26/12 05:21	108-90-7	
Chloroethane	ND ug/L		1.0	0.22	1		08/26/12 05:21	75-00-3	
Chloroform	ND ug/L		1.0	0.14	1		08/26/12 05:21	67-66-3	
Chloromethane	ND ug/L		4.0	0.41	1		08/26/12 05:21	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	0.50	1		08/26/12 05:21	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	0.068	1		08/26/12 05:21	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		4.0	0.62	1		08/26/12 05:21	96-12-8	
Dibromochloromethane	ND ug/L		1.0	0.10	1		08/26/12 05:21	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	0.091	1		08/26/12 05:21	106-93-4	
Dibromomethane	ND ug/L		4.0	0.21	1		08/26/12 05:21	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	0.36	1		08/26/12 05:21	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	0.11	1		08/26/12 05:21	541-73-1	

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 5 of 54

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ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-6		Lab ID: 10203311001	Collected: 08/21/12 16:40	Received: 08/23/12 14:11	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC									
Analytical Method: EPA 8260									
1,4-Dichlorobenzene	ND	ug/L	1.0	0.064	1		08/26/12 05:21	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		08/26/12 05:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.11	1		08/26/12 05:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.37	1		08/26/12 05:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.19	1		08/26/12 05:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		08/26/12 05:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.15	1		08/26/12 05:21	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	0.11	1		08/26/12 05:21	75-43-4	
1,2-Dichloropropane	ND	ug/L	4.0	0.27	1		08/26/12 05:21	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.081	1		08/26/12 05:21	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	0.15	1		08/26/12 05:21	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.35	1		08/26/12 05:21	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	0.090	1		08/26/12 05:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	0.37	1		08/26/12 05:21	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	2.0	1		08/26/12 05:21	60-29-7	
Ethylbenzene	1.3	ug/L	1.0	0.081	1		08/26/12 05:21	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	0.19	1		08/26/12 05:21	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.076	1		08/26/12 05:21	98-82-8	
p-Isopropyltoluene	2.0	ug/L	1.0	0.086	1		08/26/12 05:21	99-87-6	
Methylene Chloride	ND	ug/L	4.0	2.0	1		08/26/12 05:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	4.0	2.0	1		08/26/12 05:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.088	1		08/26/12 05:21	1634-04-4	
Naphthalene	12.9	ug/L	4.0	0.068	1		08/26/12 05:21	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.078	1		08/26/12 05:21	103-65-1	
Styrene	ND	ug/L	1.0	0.060	1		08/26/12 05:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.36	1		08/26/12 05:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.097	1		08/26/12 05:21	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.13	1		08/26/12 05:21	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	0.97	1		08/26/12 05:21	109-99-9	
Toluene	ND	ug/L	1.0	0.077	1		08/26/12 05:21	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.13	1		08/26/12 05:21	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.25	1		08/26/12 05:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.19	1		08/26/12 05:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		08/26/12 05:21	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.083	1		08/26/12 05:21	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.13	1		08/26/12 05:21	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	0.33	1		08/26/12 05:21	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	0.18	1		08/26/12 05:21	76-13-1	
1,2,4-Trimethylbenzene	1.1	ug/L	1.0	0.071	1		08/26/12 05:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.087	1		08/26/12 05:21	108-67-8	
Vinyl chloride	ND	ug/L	0.40	0.16	1		08/26/12 05:21	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.22	1		08/26/12 05:21	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.11	1		08/26/12 05:21	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.10	1		08/26/12 05:21	95-47-6	
Surrogates									
Dibromofluoromethane (S)	100 %		75-125		1		08/26/12 05:21	1868-53-7	

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REPORT OF LABORATORY ANALYSIS

Page 6 of 54

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ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Sample: MW-6 Lab ID: 10203311001 Collected: 08/21/12 16:40 Received: 08/23/12 14:11 Matrix: Water									
8260 VOC Analytical Method: EPA 8260									
Surrogates									
1,2-Dichloroethane-d4 (S)	98 %		75-125		1		08/26/12 05:21	17060-07-0	
Toluene-d8 (S)	100 %		75-125		1		08/26/12 05:21	2037-26-5	
4-Bromofluorobenzene (S)	99 %		75-125		1		08/26/12 05:21	460-00-4	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-7 **Lab ID: 10203311002** Collected: 08/22/12 13:30 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510									
Acenaphthene	1.8 ug/L		0.046	0.0057	1	08/29/12 07:13	08/30/12 12:13	83-32-9	
Acenaphthylene	0.51 ug/L		0.046	0.0046	1	08/29/12 07:13	08/30/12 12:13	208-96-8	
Anthracene	0.76 ug/L		0.046	0.0092	1	08/29/12 07:13	08/30/12 12:13	120-12-7	
Benzo(a)anthracene	0.046 ug/L		0.046	0.0092	1	08/29/12 07:13	08/30/12 12:13	56-55-3	
Benzo(a)pyrene	0.062 ug/L		0.046	0.011	1	08/29/12 07:13	08/30/12 12:13	50-32-8	
Benzo(b)fluoranthene	0.055 ug/L		0.046	0.011	1	08/29/12 07:13	08/30/12 12:13	205-99-2	
Benzo(g,h,i)perylene	0.058 ug/L		0.046	0.011	1	08/29/12 07:13	08/30/12 12:13	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.046	0.010	1	08/29/12 07:13	08/30/12 12:13	207-08-9	
Chrysene	0.055 ug/L		0.046	0.010	1	08/29/12 07:13	08/30/12 12:13	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.046	0.010	1	08/29/12 07:13	08/30/12 12:13	53-70-3	
Fluoranthene	0.52 ug/L		0.046	0.014	1	08/29/12 07:13	08/30/12 12:13	206-44-0	
Fluorene	1.2 ug/L		0.046	0.0046	1	08/29/12 07:13	08/30/12 12:13	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.046	0.011	1	08/29/12 07:13	08/30/12 12:13	193-39-5	
Naphthalene	103 ug/L		2.3	0.34	50	08/29/12 07:13	08/31/12 14:26	91-20-3	
Phenanthrene	2.0 ug/L		0.046	0.0092	1	08/29/12 07:13	08/30/12 12:13	85-01-8	
Pyrene	0.62 ug/L		0.046	0.015	1	08/29/12 07:13	08/30/12 12:13	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	79 %		58-125		1	08/29/12 07:13	08/30/12 12:13	321-60-8	
Terphenyl-d14 (S)	84 %		75-125		1	08/29/12 07:13	08/30/12 12:13	1718-51-0	

8260 VOC Analytical Method: EPA 8260									
Acetone	ND ug/L		12500	6250	500		08/26/12 07:07	67-64-1	
Allyl chloride	ND ug/L		2000	885	500		08/26/12 07:07	107-05-1	
Benzene	78200 ug/L		500	31.0	500		08/26/12 07:07	71-43-2	
Bromobenzene	ND ug/L		500	43.0	500		08/26/12 07:07	108-86-1	
Bromochloromethane	ND ug/L		500	160	500		08/26/12 07:07	74-97-5	
Bromodichloromethane	ND ug/L		500	53.0	500		08/26/12 07:07	75-27-4	
Bromoform	ND ug/L		2000	34.0	500		08/26/12 07:07	75-25-2	
Bromomethane	ND ug/L		2000	178	500		08/26/12 07:07	74-83-9	
2-Butanone (MEK)	ND ug/L		2000	1000	500		08/26/12 07:07	78-93-3	
n-Butylbenzene	ND ug/L		500	73.0	500		08/26/12 07:07	104-51-8	
sec-Butylbenzene	ND ug/L		500	51.5	500		08/26/12 07:07	135-98-8	
tert-Butylbenzene	ND ug/L		500	52.0	500		08/26/12 07:07	98-06-6	
Carbon tetrachloride	ND ug/L		500	81.0	500		08/26/12 07:07	56-23-5	
Chlorobenzene	ND ug/L		500	50.5	500		08/26/12 07:07	108-90-7	
Chloroethane	ND ug/L		500	108	500		08/26/12 07:07	75-00-3	
Chloroform	ND ug/L		500	72.5	500		08/26/12 07:07	67-66-3	
Chloromethane	ND ug/L		2000	206	500		08/26/12 07:07	74-87-3	
2-Chlorotoluene	ND ug/L		500	250	500		08/26/12 07:07	95-49-8	
4-Chlorotoluene	ND ug/L		500	34.0	500		08/26/12 07:07	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2000	308	500		08/26/12 07:07	96-12-8	
Dibromochloromethane	ND ug/L		500	51.0	500		08/26/12 07:07	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		500	45.5	500		08/26/12 07:07	106-93-4	
Dibromomethane	ND ug/L		2000	105	500		08/26/12 07:07	74-95-3	
1,2-Dichlorobenzene	ND ug/L		500	178	500		08/26/12 07:07	95-50-1	
1,3-Dichlorobenzene	ND ug/L		500	54.0	500		08/26/12 07:07	541-73-1	

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REPORT OF LABORATORY ANALYSIS

Page 8 of 54

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ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-7		Lab ID: 10203311002	Collected: 08/22/12 13:30	Received: 08/23/12 14:11	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC Analytical Method: EPA 8260									
1,4-Dichlorobenzene	ND	ug/L	500	32.0	500		08/26/12 07:07	106-46-7	
Dichlorodifluoromethane	ND	ug/L	500	100	500		08/26/12 07:07	75-71-8	
1,1-Dichloroethane	ND	ug/L	500	55.0	500		08/26/12 07:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	500	186	500		08/26/12 07:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	500	94.5	500		08/26/12 07:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	500	42.5	500		08/26/12 07:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	500	73.0	500		08/26/12 07:07	156-60-5	
Dichlorofluoromethane	ND	ug/L	500	57.0	500		08/26/12 07:07	75-43-4	
1,2-Dichloropropane	ND	ug/L	2000	136	500		08/26/12 07:07	78-87-5	
1,3-Dichloropropane	ND	ug/L	500	40.5	500		08/26/12 07:07	142-28-9	
2,2-Dichloropropane	ND	ug/L	2000	74.0	500		08/26/12 07:07	594-20-7	
1,1-Dichloropropene	ND	ug/L	500	176	500		08/26/12 07:07	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2000	45.0	500		08/26/12 07:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2000	187	500		08/26/12 07:07	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	2000	1000	500		08/26/12 07:07	60-29-7	
Ethylbenzene	1690	ug/L	500	40.5	500		08/26/12 07:07	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2500	94.0	500		08/26/12 07:07	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	500	38.0	500		08/26/12 07:07	98-82-8	
p-Isopropyltoluene	ND	ug/L	500	43.0	500		08/26/12 07:07	99-87-6	
Methylene Chloride	ND	ug/L	2000	1000	500		08/26/12 07:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2000	1000	500		08/26/12 07:07	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	500	44.0	500		08/26/12 07:07	1634-04-4	
Naphthalene	ND	ug/L	2000	34.0	500		08/26/12 07:07	91-20-3	
n-Propylbenzene	ND	ug/L	500	39.0	500		08/26/12 07:07	103-65-1	
Styrene	ND	ug/L	500	30.0	500		08/26/12 07:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	500	182	500		08/26/12 07:07	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/L	500	48.5	500		08/26/12 07:07	79-34-5	
Tetrachloroethene	ND	ug/L	500	65.5	500		08/26/12 07:07	127-18-4	
Tetrahydrofuran	ND	ug/L	5000	484	500		08/26/12 07:07	109-99-9	
Toluene	40600	ug/L	500	38.5	500		08/26/12 07:07	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	500	66.5	500		08/26/12 07:07	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	500	124	500		08/26/12 07:07	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	500	93.5	500		08/26/12 07:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	500	75.5	500		08/26/12 07:07	79-00-5	
Trichloroethene	ND	ug/L	500	41.5	500		08/26/12 07:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	500	63.5	500		08/26/12 07:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2000	164	500		08/26/12 07:07	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	500	92.5	500		08/26/12 07:07	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	500	35.5	500		08/26/12 07:07	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	500	43.5	500		08/26/12 07:07	108-67-8	
Vinyl chloride	ND	ug/L	200	79.0	500		08/26/12 07:07	75-01-4	
Xylene (Total)	6170	ug/L	1500	108	500		08/26/12 07:07	1330-20-7	
m&p-Xylene	4850	ug/L	1000	55.0	500		08/26/12 07:07	179601-23-1	
o-Xylene	1320	ug/L	500	52.5	500		08/26/12 07:07	95-47-6	
Surrogates									
Dibromofluoromethane (S)	99 %		75-125		500		08/26/12 07:07	1868-53-7	

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 9 of 54

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ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-7		Lab ID: 10203311002		Collected: 08/22/12 13:30	Received: 08/23/12 14:11	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC		Analytical Method: EPA 8260							
Surrogates									
1,2-Dichloroethane-d4 (S)	98 %		75-125		500		08/26/12 07:07	17060-07-0	
Toluene-d8 (S)	100 %		75-125		500		08/26/12 07:07	2037-26-5	
4-Bromofluorobenzene (S)	99 %		75-125		500		08/26/12 07:07	460-00-4	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-8 **Lab ID: 10203311003** Collected: 08/22/12 13:00 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270 MSSV PAH by SIM									
Analytical Method: EPA 8270 by SIM					Preparation Method: EPA 3510				
Acenaphthene	40.9	ug/L	0.81	0.10	20	08/29/12 07:13	08/31/12 14:05	83-32-9	
Acenaphthylene	6.0	ug/L	0.041	0.0041	1	08/29/12 07:13	08/30/12 12:35	208-96-8	
Anthracene	4.2	ug/L	0.041	0.0081	1	08/29/12 07:13	08/30/12 12:35	120-12-7	
Benzo(a)anthracene	0.14	ug/L	0.041	0.0081	1	08/29/12 07:13	08/30/12 12:35	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.010	1	08/29/12 07:13	08/30/12 12:35	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.010	1	08/29/12 07:13	08/30/12 12:35	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.010	1	08/29/12 07:13	08/30/12 12:35	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.0091	1	08/29/12 07:13	08/30/12 12:35	207-08-9	
Chrysene	0.13	ug/L	0.041	0.0091	1	08/29/12 07:13	08/30/12 12:35	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.0091	1	08/29/12 07:13	08/30/12 12:35	53-70-3	
Fluoranthene	2.5	ug/L	0.041	0.012	1	08/29/12 07:13	08/30/12 12:35	206-44-0	
Fluorene	11.1	ug/L	0.81	0.081	20	08/29/12 07:13	08/31/12 14:05	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.010	1	08/29/12 07:13	08/30/12 12:35	193-39-5	
Naphthalene	375	ug/L	8.1	1.2	200	08/29/12 07:13	08/31/12 13:43	91-20-3	
Phenanthrene	19.4	ug/L	0.81	0.16	20	08/29/12 07:13	08/31/12 14:05	85-01-8	
Pyrene	2.8	ug/L	0.041	0.013	1	08/29/12 07:13	08/30/12 12:35	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	84 %		58-125		1	08/29/12 07:13	08/30/12 12:35	321-60-8	
Terphenyl-d14 (S)	96 %		75-125		1	08/29/12 07:13	08/30/12 12:35	1718-51-0	

8260 VOC Analytical Method: EPA 8260

Acetone	ND	ug/L	12500	6250	500		08/26/12 07:22	67-64-1	
Allyl chloride	ND	ug/L	2000	885	500		08/26/12 07:22	107-05-1	
Benzene	103000	ug/L	500	31.0	500		08/26/12 07:22	71-43-2	
Bromobenzene	ND	ug/L	500	43.0	500		08/26/12 07:22	108-86-1	
Bromochloromethane	ND	ug/L	500	160	500		08/26/12 07:22	74-97-5	
Bromodichloromethane	ND	ug/L	500	53.0	500		08/26/12 07:22	75-27-4	
Bromoform	ND	ug/L	2000	34.0	500		08/26/12 07:22	75-25-2	
Bromomethane	ND	ug/L	2000	178	500		08/26/12 07:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	2000	1000	500		08/26/12 07:22	78-93-3	
n-Butylbenzene	ND	ug/L	500	73.0	500		08/26/12 07:22	104-51-8	
sec-Butylbenzene	ND	ug/L	500	51.5	500		08/26/12 07:22	135-98-8	
tert-Butylbenzene	ND	ug/L	500	52.0	500		08/26/12 07:22	98-06-6	
Carbon tetrachloride	ND	ug/L	500	81.0	500		08/26/12 07:22	56-23-5	
Chlorobenzene	ND	ug/L	500	50.5	500		08/26/12 07:22	108-90-7	
Chloroethane	ND	ug/L	500	108	500		08/26/12 07:22	75-00-3	
Chloroform	ND	ug/L	500	72.5	500		08/26/12 07:22	67-66-3	
Chloromethane	ND	ug/L	2000	206	500		08/26/12 07:22	74-87-3	
2-Chlorotoluene	ND	ug/L	500	250	500		08/26/12 07:22	95-49-8	
4-Chlorotoluene	ND	ug/L	500	34.0	500		08/26/12 07:22	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2000	308	500		08/26/12 07:22	96-12-8	
Dibromochloromethane	ND	ug/L	500	51.0	500		08/26/12 07:22	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	500	45.5	500		08/26/12 07:22	106-93-4	
Dibromomethane	ND	ug/L	2000	105	500		08/26/12 07:22	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	500	178	500		08/26/12 07:22	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	500	54.0	500		08/26/12 07:22	541-73-1	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-8		Lab ID: 10203311003	Collected: 08/22/12 13:00	Received: 08/23/12 14:11	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC Analytical Method: EPA 8260									
1,4-Dichlorobenzene	ND	ug/L	500	32.0	500		08/26/12 07:22	106-46-7	
Dichlorodifluoromethane	ND	ug/L	500	100	500		08/26/12 07:22	75-71-8	
1,1-Dichloroethane	ND	ug/L	500	55.0	500		08/26/12 07:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	500	186	500		08/26/12 07:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	500	94.5	500		08/26/12 07:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	500	42.5	500		08/26/12 07:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	500	73.0	500		08/26/12 07:22	156-60-5	
Dichlorofluoromethane	ND	ug/L	500	57.0	500		08/26/12 07:22	75-43-4	
1,2-Dichloropropane	ND	ug/L	2000	136	500		08/26/12 07:22	78-87-5	
1,3-Dichloropropane	ND	ug/L	500	40.5	500		08/26/12 07:22	142-28-9	
2,2-Dichloropropane	ND	ug/L	2000	74.0	500		08/26/12 07:22	594-20-7	
1,1-Dichloropropene	ND	ug/L	500	176	500		08/26/12 07:22	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2000	45.0	500		08/26/12 07:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2000	187	500		08/26/12 07:22	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	2000	1000	500		08/26/12 07:22	60-29-7	
Ethylbenzene	952	ug/L	500	40.5	500		08/26/12 07:22	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2500	94.0	500		08/26/12 07:22	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	500	38.0	500		08/26/12 07:22	98-82-8	
p-Isopropyltoluene	ND	ug/L	500	43.0	500		08/26/12 07:22	99-87-6	
Methylene Chloride	ND	ug/L	2000	1000	500		08/26/12 07:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	2000	1000	500		08/26/12 07:22	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	500	44.0	500		08/26/12 07:22	1634-04-4	
Naphthalene	ND	ug/L	2000	34.0	500		08/26/12 07:22	91-20-3	
n-Propylbenzene	ND	ug/L	500	39.0	500		08/26/12 07:22	103-65-1	
Styrene	3510	ug/L	500	30.0	500		08/26/12 07:22	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	500	182	500		08/26/12 07:22	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/L	500	48.5	500		08/26/12 07:22	79-34-5	
Tetrachloroethene	ND	ug/L	500	65.5	500		08/26/12 07:22	127-18-4	
Tetrahydrofuran	ND	ug/L	5000	484	500		08/26/12 07:22	109-99-9	
Toluene	69300	ug/L	500	38.5	500		08/26/12 07:22	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	500	66.5	500		08/26/12 07:22	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	500	124	500		08/26/12 07:22	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	500	93.5	500		08/26/12 07:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	500	75.5	500		08/26/12 07:22	79-00-5	
Trichloroethene	ND	ug/L	500	41.5	500		08/26/12 07:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	500	63.5	500		08/26/12 07:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2000	164	500		08/26/12 07:22	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	500	92.5	500		08/26/12 07:22	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	500	35.5	500		08/26/12 07:22	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	500	43.5	500		08/26/12 07:22	108-67-8	
Vinyl chloride	ND	ug/L	200	79.0	500		08/26/12 07:22	75-01-4	
Xylene (Total)	17700	ug/L	1500	108	500		08/26/12 07:22	1330-20-7	
m&p-Xylene	14000	ug/L	1000	55.0	500		08/26/12 07:22	179601-23-1	
o-Xylene	3740	ug/L	500	52.5	500		08/26/12 07:22	95-47-6	
Surrogates									
Dibromofluoromethane (S)	98 %		75-125		500		08/26/12 07:22	1868-53-7	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Sample: MW-8									
Lab ID: 10203311003									
Collected: 08/22/12 13:00									
Received: 08/23/12 14:11									
Matrix: Water									
8260 VOC									
Analytical Method: EPA 8260									
Surrogates									
1,2-Dichloroethane-d4 (S)	97 %		75-125		500		08/26/12 07:22	17060-07-0	
Toluene-d8 (S)	100 %		75-125		500		08/26/12 07:22	2037-26-5	
4-Bromofluorobenzene (S)	99 %		75-125		500		08/26/12 07:22	460-00-4	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-9 **Lab ID: 10203311004** Collected: 08/22/12 12:50 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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8270 MSSV PAH by SIM

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510

Acenaphthene	29.1	ug/L	0.21	0.026	5	08/29/12 07:13	08/31/12 14:48	83-32-9	
Acenaphthylene	0.53	ug/L	0.041	0.0041	1	08/29/12 07:13	08/30/12 12:57	208-96-8	
Anthracene	5.0	ug/L	0.041	0.0082	1	08/29/12 07:13	08/30/12 12:57	120-12-7	
Benzo(a)anthracene	0.58	ug/L	0.041	0.0082	1	08/29/12 07:13	08/30/12 12:57	56-55-3	
Benzo(a)pyrene	0.35	ug/L	0.041	0.010	1	08/29/12 07:13	08/30/12 12:57	50-32-8	
Benzo(b)fluoranthene	0.27	ug/L	0.041	0.010	1	08/29/12 07:13	08/30/12 12:57	205-99-2	
Benzo(g,h,i)perylene	0.14	ug/L	0.041	0.010	1	08/29/12 07:13	08/30/12 12:57	191-24-2	
Benzo(k)fluoranthene	0.089	ug/L	0.041	0.0093	1	08/29/12 07:13	08/30/12 12:57	207-08-9	
Chrysene	0.51	ug/L	0.041	0.0093	1	08/29/12 07:13	08/30/12 12:57	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.0093	1	08/29/12 07:13	08/30/12 12:57	53-70-3	
Fluoranthene	3.7	ug/L	0.041	0.012	1	08/29/12 07:13	08/30/12 12:57	206-44-0	
Fluorene	8.4	ug/L	0.041	0.0041	1	08/29/12 07:13	08/30/12 12:57	86-73-7	
Indeno(1,2,3-cd)pyrene	0.099	ug/L	0.041	0.010	1	08/29/12 07:13	08/30/12 12:57	193-39-5	
Naphthalene	27.7	ug/L	0.21	0.031	5	08/29/12 07:13	08/31/12 14:48	91-20-3	
Phenanthrene	26.0	ug/L	0.21	0.041	5	08/29/12 07:13	08/31/12 14:48	85-01-8	
Pyrene	4.4	ug/L	0.041	0.013	1	08/29/12 07:13	08/30/12 12:57	129-00-0	

Surrogates

2-Fluorobiphenyl (S)	50	%	58-125		1	08/29/12 07:13	08/30/12 12:57	321-60-8	S0
Terphenyl-d14 (S)	46	%	75-125		1	08/29/12 07:13	08/30/12 12:57	1718-51-0	S0

8260 VOC

Analytical Method: EPA 8260

Acetone	ND	ug/L	1250	625	50		08/26/12 06:21	67-64-1	
Allyl chloride	ND	ug/L	200	88.5	50		08/26/12 06:21	107-05-1	
Benzene	10700	ug/L	50.0	3.1	50		08/26/12 06:21	71-43-2	
Bromobenzene	ND	ug/L	50.0	4.3	50		08/26/12 06:21	108-86-1	
Bromochloromethane	ND	ug/L	50.0	16.0	50		08/26/12 06:21	74-97-5	
Bromodichloromethane	ND	ug/L	50.0	5.3	50		08/26/12 06:21	75-27-4	
Bromoform	ND	ug/L	200	3.4	50		08/26/12 06:21	75-25-2	
Bromomethane	ND	ug/L	200	17.8	50		08/26/12 06:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	200	100	50		08/26/12 06:21	78-93-3	
n-Butylbenzene	ND	ug/L	50.0	7.3	50		08/26/12 06:21	104-51-8	
sec-Butylbenzene	ND	ug/L	50.0	5.2	50		08/26/12 06:21	135-98-8	
tert-Butylbenzene	ND	ug/L	50.0	5.2	50		08/26/12 06:21	98-06-6	
Carbon tetrachloride	ND	ug/L	50.0	8.1	50		08/26/12 06:21	56-23-5	
Chlorobenzene	ND	ug/L	50.0	5.0	50		08/26/12 06:21	108-90-7	
Chloroethane	ND	ug/L	50.0	10.8	50		08/26/12 06:21	75-00-3	
Chloroform	ND	ug/L	50.0	7.2	50		08/26/12 06:21	67-66-3	
Chloromethane	ND	ug/L	200	20.6	50		08/26/12 06:21	74-87-3	
2-Chlorotoluene	ND	ug/L	50.0	25.0	50		08/26/12 06:21	95-49-8	
4-Chlorotoluene	ND	ug/L	50.0	3.4	50		08/26/12 06:21	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	200	30.8	50		08/26/12 06:21	96-12-8	
Dibromochloromethane	ND	ug/L	50.0	5.1	50		08/26/12 06:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	50.0	4.6	50		08/26/12 06:21	106-93-4	
Dibromomethane	ND	ug/L	200	10.5	50		08/26/12 06:21	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	50.0	17.8	50		08/26/12 06:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	50.0	5.4	50		08/26/12 06:21	541-73-1	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-9 Lab ID: 10203311004 Collected: 08/22/12 12:50 Received: 08/23/12 14:11 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC Analytical Method: EPA 8260									
1,4-Dichlorobenzene	ND	ug/L	50.0	3.2	50		08/26/12 06:21	106-46-7	
Dichlorodifluoromethane	ND	ug/L	50.0	10.0	50		08/26/12 06:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	50.0	5.5	50		08/26/12 06:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	50.0	18.6	50		08/26/12 06:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	9.4	50		08/26/12 06:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	50.0	4.2	50		08/26/12 06:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	50.0	7.3	50		08/26/12 06:21	156-60-5	
Dichlorofluoromethane	ND	ug/L	50.0	5.7	50		08/26/12 06:21	75-43-4	
1,2-Dichloropropane	ND	ug/L	200	13.6	50		08/26/12 06:21	78-87-5	
1,3-Dichloropropane	ND	ug/L	50.0	4.0	50		08/26/12 06:21	142-28-9	
2,2-Dichloropropane	ND	ug/L	200	7.4	50		08/26/12 06:21	594-20-7	
1,1-Dichloropropene	ND	ug/L	50.0	17.6	50		08/26/12 06:21	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	200	4.5	50		08/26/12 06:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	200	18.7	50		08/26/12 06:21	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	200	100	50		08/26/12 06:21	60-29-7	
Ethylbenzene	221	ug/L	50.0	4.0	50		08/26/12 06:21	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	250	9.4	50		08/26/12 06:21	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	50.0	3.8	50		08/26/12 06:21	98-82-8	
p-Isopropyltoluene	ND	ug/L	50.0	4.3	50		08/26/12 06:21	99-87-6	
Methylene Chloride	ND	ug/L	200	100	50		08/26/12 06:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	200	100	50		08/26/12 06:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	50.0	4.4	50		08/26/12 06:21	1634-04-4	
Naphthalene	ND	ug/L	200	3.4	50		08/26/12 06:21	91-20-3	
n-Propylbenzene	ND	ug/L	50.0	3.9	50		08/26/12 06:21	103-65-1	
Styrene	ND	ug/L	50.0	3.0	50		08/26/12 06:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	50.0	18.2	50		08/26/12 06:21	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/L	50.0	4.8	50		08/26/12 06:21	79-34-5	
Tetrachloroethene	ND	ug/L	50.0	6.6	50		08/26/12 06:21	127-18-4	
Tetrahydrofuran	ND	ug/L	500	48.4	50		08/26/12 06:21	109-99-9	
Toluene	343	ug/L	50.0	3.8	50		08/26/12 06:21	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	50.0	6.6	50		08/26/12 06:21	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	50.0	12.4	50		08/26/12 06:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	50.0	9.4	50		08/26/12 06:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	50.0	7.6	50		08/26/12 06:21	79-00-5	
Trichloroethene	ND	ug/L	50.0	4.2	50		08/26/12 06:21	79-01-6	
Trichlorofluoromethane	ND	ug/L	50.0	6.4	50		08/26/12 06:21	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	200	16.4	50		08/26/12 06:21	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	50.0	9.2	50		08/26/12 06:21	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	50.0	3.6	50		08/26/12 06:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	50.0	4.4	50		08/26/12 06:21	108-67-8	
Vinyl chloride	ND	ug/L	20.0	7.9	50		08/26/12 06:21	75-01-4	
Xylene (Total)	252	ug/L	150	10.8	50		08/26/12 06:21	1330-20-7	
m&p-Xylene	187	ug/L	100	5.5	50		08/26/12 06:21	179601-23-1	
o-Xylene	64.9	ug/L	50.0	5.2	50		08/26/12 06:21	95-47-6	
Surrogates									
Dibromofluoromethane (S)	99 %		75-125		50		08/26/12 06:21	1868-53-7	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-9 **Lab ID: 10203311004** Collected: 08/22/12 12:50 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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8260 VOC Analytical Method: EPA 8260

Surrogates

1,2-Dichloroethane-d4 (S)	98 %		75-125		50		08/26/12 06:21	17060-07-0	
Toluene-d8 (S)	99 %		75-125		50		08/26/12 06:21	2037-26-5	
4-Bromofluorobenzene (S)	98 %		75-125		50		08/26/12 06:21	460-00-4	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-10 **Lab ID: 10203311005** Collected: 08/21/12 18:40 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270 MSSV PAH by SIM									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510									
Acenaphthene	33.3	ug/L	0.41	0.051	10	08/28/12 10:39	09/06/12 13:46	83-32-9	
Acenaphthylene	0.52	ug/L	0.041	0.0041	1	08/28/12 10:39	09/02/12 16:48	208-96-8	
Anthracene	1.5	ug/L	0.041	0.0082	1	08/28/12 10:39	09/02/12 16:48	120-12-7	
Benzo(a)anthracene	0.24	ug/L	0.041	0.0082	1	08/28/12 10:39	09/02/12 16:48	56-55-3	
Benzo(a)pyrene	0.27	ug/L	0.041	0.010	1	08/28/12 10:39	09/02/12 16:48	50-32-8	
Benzo(b)fluoranthene	0.20	ug/L	0.041	0.010	1	08/28/12 10:39	09/02/12 16:48	205-99-2	
Benzo(g,h,i)perylene	0.15	ug/L	0.041	0.010	1	08/28/12 10:39	09/02/12 16:48	191-24-2	
Benzo(k)fluoranthene	0.077	ug/L	0.041	0.0092	1	08/28/12 10:39	09/02/12 16:48	207-08-9	
Chrysene	0.25	ug/L	0.041	0.0092	1	08/28/12 10:39	09/02/12 16:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.0092	1	08/28/12 10:39	09/02/12 16:48	53-70-3	
Fluoranthene	1.2	ug/L	0.041	0.012	1	08/28/12 10:39	09/02/12 16:48	206-44-0	
Fluorene	6.7	ug/L	0.041	0.0041	1	08/28/12 10:39	09/02/12 16:48	86-73-7	
Indeno(1,2,3-cd)pyrene	0.098	ug/L	0.041	0.010	1	08/28/12 10:39	09/02/12 16:48	193-39-5	
Naphthalene	2.5	ug/L	0.041	0.0061	1	08/28/12 10:39	09/02/12 16:48	91-20-3	
Phenanthrene	7.0	ug/L	0.041	0.0082	1	08/28/12 10:39	09/02/12 16:48	85-01-8	
Pyrene	1.5	ug/L	0.041	0.013	1	08/28/12 10:39	09/02/12 16:48	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	69 %		58-125		1	08/28/12 10:39	09/02/12 16:48	321-60-8	
Terphenyl-d14 (S)	85 %		75-125		1	08/28/12 10:39	09/02/12 16:48	1718-51-0	

8260 VOC									
Analytical Method: EPA 8260									
Acetone	ND	ug/L	1250	625	50		08/26/12 06:06	67-64-1	
Allyl chloride	ND	ug/L	200	88.5	50		08/26/12 06:06	107-05-1	
Benzene	3860	ug/L	50.0	3.1	50		08/26/12 06:06	71-43-2	
Bromobenzene	ND	ug/L	50.0	4.3	50		08/26/12 06:06	108-86-1	
Bromochloromethane	ND	ug/L	50.0	16.0	50		08/26/12 06:06	74-97-5	
Bromodichloromethane	ND	ug/L	50.0	5.3	50		08/26/12 06:06	75-27-4	
Bromoform	ND	ug/L	200	3.4	50		08/26/12 06:06	75-25-2	
Bromomethane	ND	ug/L	200	17.8	50		08/26/12 06:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	200	100	50		08/26/12 06:06	78-93-3	
n-Butylbenzene	ND	ug/L	50.0	7.3	50		08/26/12 06:06	104-51-8	
sec-Butylbenzene	ND	ug/L	50.0	5.2	50		08/26/12 06:06	135-98-8	
tert-Butylbenzene	ND	ug/L	50.0	5.2	50		08/26/12 06:06	98-06-6	
Carbon tetrachloride	ND	ug/L	50.0	8.1	50		08/26/12 06:06	56-23-5	
Chlorobenzene	ND	ug/L	50.0	5.0	50		08/26/12 06:06	108-90-7	
Chloroethane	ND	ug/L	50.0	10.8	50		08/26/12 06:06	75-00-3	
Chloroform	ND	ug/L	50.0	7.2	50		08/26/12 06:06	67-66-3	
Chloromethane	ND	ug/L	200	20.6	50		08/26/12 06:06	74-87-3	
2-Chlorotoluene	ND	ug/L	50.0	25.0	50		08/26/12 06:06	95-49-8	
4-Chlorotoluene	ND	ug/L	50.0	3.4	50		08/26/12 06:06	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	200	30.8	50		08/26/12 06:06	96-12-8	
Dibromochloromethane	ND	ug/L	50.0	5.1	50		08/26/12 06:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	50.0	4.6	50		08/26/12 06:06	106-93-4	
Dibromomethane	ND	ug/L	200	10.5	50		08/26/12 06:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	50.0	17.8	50		08/26/12 06:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	50.0	5.4	50		08/26/12 06:06	541-73-1	

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REPORT OF LABORATORY ANALYSIS

Page 17 of 54

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ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-10 Lab ID: 10203311005 Collected: 08/21/12 18:40 Received: 08/23/12 14:11 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC Analytical Method: EPA 8260									
1,4-Dichlorobenzene	ND	ug/L	50.0	3.2	50		08/26/12 06:06	106-46-7	
Dichlorodifluoromethane	ND	ug/L	50.0	10.0	50		08/26/12 06:06	75-71-8	
1,1-Dichloroethane	ND	ug/L	50.0	5.5	50		08/26/12 06:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	50.0	18.6	50		08/26/12 06:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	9.4	50		08/26/12 06:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	50.0	4.2	50		08/26/12 06:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	50.0	7.3	50		08/26/12 06:06	156-60-5	
Dichlorofluoromethane	ND	ug/L	50.0	5.7	50		08/26/12 06:06	75-43-4	
1,2-Dichloropropane	ND	ug/L	200	13.6	50		08/26/12 06:06	78-87-5	
1,3-Dichloropropane	ND	ug/L	50.0	4.0	50		08/26/12 06:06	142-28-9	
2,2-Dichloropropane	ND	ug/L	200	7.4	50		08/26/12 06:06	594-20-7	
1,1-Dichloropropene	ND	ug/L	50.0	17.6	50		08/26/12 06:06	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	200	4.5	50		08/26/12 06:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	200	18.7	50		08/26/12 06:06	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	200	100	50		08/26/12 06:06	60-29-7	
Ethylbenzene	ND	ug/L	50.0	4.0	50		08/26/12 06:06	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	250	9.4	50		08/26/12 06:06	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	50.0	3.8	50		08/26/12 06:06	98-82-8	
p-Isopropyltoluene	ND	ug/L	50.0	4.3	50		08/26/12 06:06	99-87-6	
Methylene Chloride	ND	ug/L	200	100	50		08/26/12 06:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	200	100	50		08/26/12 06:06	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	50.0	4.4	50		08/26/12 06:06	1634-04-4	
Naphthalene	ND	ug/L	200	3.4	50		08/26/12 06:06	91-20-3	
n-Propylbenzene	ND	ug/L	50.0	3.9	50		08/26/12 06:06	103-65-1	
Styrene	ND	ug/L	50.0	3.0	50		08/26/12 06:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	50.0	18.2	50		08/26/12 06:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	50.0	4.8	50		08/26/12 06:06	79-34-5	
Tetrachloroethene	ND	ug/L	50.0	6.6	50		08/26/12 06:06	127-18-4	
Tetrahydrofuran	ND	ug/L	500	48.4	50		08/26/12 06:06	109-99-9	
Toluene	ND	ug/L	50.0	3.8	50		08/26/12 06:06	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	50.0	6.6	50		08/26/12 06:06	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	50.0	12.4	50		08/26/12 06:06	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	50.0	9.4	50		08/26/12 06:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	50.0	7.6	50		08/26/12 06:06	79-00-5	
Trichloroethene	ND	ug/L	50.0	4.2	50		08/26/12 06:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	50.0	6.4	50		08/26/12 06:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	200	16.4	50		08/26/12 06:06	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	50.0	9.2	50		08/26/12 06:06	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	50.0	3.6	50		08/26/12 06:06	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	50.0	4.4	50		08/26/12 06:06	108-67-8	
Vinyl chloride	ND	ug/L	20.0	7.9	50		08/26/12 06:06	75-01-4	
Xylene (Total)	ND	ug/L	150	10.8	50		08/26/12 06:06	1330-20-7	
m&p-Xylene	ND	ug/L	100	5.5	50		08/26/12 06:06	179601-23-1	
o-Xylene	ND	ug/L	50.0	5.2	50		08/26/12 06:06	95-47-6	
Surrogates									
Dibromofluoromethane (S)	98 %		75-125		50		08/26/12 06:06	1868-53-7	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001
Pace Project No.: 10203311

Sample: MW-10		Lab ID: 10203311005	Collected: 08/21/12 18:40	Received: 08/23/12 14:11	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC		Analytical Method: EPA 8260							
Surrogates									
1,2-Dichloroethane-d4 (S)	98 %		75-125		50		08/26/12 06:06	17060-07-0	
Toluene-d8 (S)	100 %		75-125		50		08/26/12 06:06	2037-26-5	
4-Bromofluorobenzene (S)	91 %		75-125		50		08/26/12 06:06	460-00-4	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-11 Lab ID: 10203311006 Collected: 08/21/12 17:30 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270 MSSV PAH by SIM									
Analytical Method: EPA 8270 by SIM					Preparation Method: EPA 3510				
Acenaphthene	13.5 ug/L		0.41	0.051	10	08/28/12 10:39	09/06/12 14:07	83-32-9	
Acenaphthylene	0.11 ug/L		0.041	0.0041	1	08/28/12 10:39	09/02/12 17:10	208-96-8	
Anthracene	0.14 ug/L		0.041	0.0082	1	08/28/12 10:39	09/02/12 17:10	120-12-7	
Benzo(a)anthracene	ND ug/L		0.041	0.0082	1	08/28/12 10:39	09/02/12 17:10	56-55-3	
Benzo(a)pyrene	ND ug/L		0.041	0.010	1	08/28/12 10:39	09/02/12 17:10	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.041	0.010	1	08/28/12 10:39	09/02/12 17:10	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.041	0.010	1	08/28/12 10:39	09/02/12 17:10	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.041	0.0092	1	08/28/12 10:39	09/02/12 17:10	207-08-9	
Chrysene	ND ug/L		0.041	0.0092	1	08/28/12 10:39	09/02/12 17:10	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.041	0.0092	1	08/28/12 10:39	09/02/12 17:10	53-70-3	
Fluoranthene	0.058 ug/L		0.041	0.012	1	08/28/12 10:39	09/02/12 17:10	206-44-0	
Fluorene	2.3 ug/L		0.041	0.0041	1	08/28/12 10:39	09/02/12 17:10	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.041	0.010	1	08/28/12 10:39	09/02/12 17:10	193-39-5	
Naphthalene	29.8 ug/L		0.41	0.061	10	08/28/12 10:39	09/06/12 14:07	91-20-3	
Phenanthrene	1.4 ug/L		0.041	0.0082	1	08/28/12 10:39	09/02/12 17:10	85-01-8	
Pyrene	0.042 ug/L		0.041	0.013	1	08/28/12 10:39	09/02/12 17:10	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	71 %		58-125		1	08/28/12 10:39	09/02/12 17:10	321-60-8	
Terphenyl-d14 (S)	89 %		75-125		1	08/28/12 10:39	09/02/12 17:10	1718-51-0	

8260 VOC Analytical Method: EPA 8260

Acetone	ND ug/L		25.0	12.5	1		08/26/12 05:36	67-64-1	
Allyl chloride	ND ug/L		4.0	1.8	1		08/26/12 05:36	107-05-1	
Benzene	2.6 ug/L		1.0	0.062	1		08/26/12 05:36	71-43-2	
Bromobenzene	ND ug/L		1.0	0.086	1		08/26/12 05:36	108-86-1	
Bromochloromethane	ND ug/L		1.0	0.32	1		08/26/12 05:36	74-97-5	
Bromodichloromethane	ND ug/L		1.0	0.11	1		08/26/12 05:36	75-27-4	
Bromoform	ND ug/L		4.0	0.068	1		08/26/12 05:36	75-25-2	
Bromomethane	ND ug/L		4.0	0.36	1		08/26/12 05:36	74-83-9	
2-Butanone (MEK)	ND ug/L		4.0	2.0	1		08/26/12 05:36	78-93-3	
n-Butylbenzene	ND ug/L		1.0	0.15	1		08/26/12 05:36	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	0.10	1		08/26/12 05:36	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	0.10	1		08/26/12 05:36	98-06-6	
Carbon tetrachloride	ND ug/L		1.0	0.16	1		08/26/12 05:36	56-23-5	
Chlorobenzene	ND ug/L		1.0	0.10	1		08/26/12 05:36	108-90-7	
Chloroethane	ND ug/L		1.0	0.22	1		08/26/12 05:36	75-00-3	
Chloroform	ND ug/L		1.0	0.14	1		08/26/12 05:36	67-66-3	
Chloromethane	ND ug/L		4.0	0.41	1		08/26/12 05:36	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	0.50	1		08/26/12 05:36	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	0.068	1		08/26/12 05:36	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		4.0	0.62	1		08/26/12 05:36	96-12-8	
Dibromochloromethane	ND ug/L		1.0	0.10	1		08/26/12 05:36	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	0.091	1		08/26/12 05:36	106-93-4	
Dibromomethane	ND ug/L		4.0	0.21	1		08/26/12 05:36	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	0.36	1		08/26/12 05:36	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	0.11	1		08/26/12 05:36	541-73-1	

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 20 of 54

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ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-11 **Lab ID: 10203311006** Collected: 08/21/12 17:30 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260 VOC Analytical Method: EPA 8260									
1,4-Dichlorobenzene	ND	ug/L	1.0	0.064	1		08/26/12 05:36	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		08/26/12 05:36	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.11	1		08/26/12 05:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.37	1		08/26/12 05:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.19	1		08/26/12 05:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		08/26/12 05:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.15	1		08/26/12 05:36	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	0.11	1		08/26/12 05:36	75-43-4	
1,2-Dichloropropane	ND	ug/L	4.0	0.27	1		08/26/12 05:36	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.081	1		08/26/12 05:36	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	0.15	1		08/26/12 05:36	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.35	1		08/26/12 05:36	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	0.090	1		08/26/12 05:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	0.37	1		08/26/12 05:36	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	2.0	1		08/26/12 05:36	60-29-7	
Ethylbenzene	3.2	ug/L	1.0	0.081	1		08/26/12 05:36	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	0.19	1		08/26/12 05:36	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.076	1		08/26/12 05:36	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.086	1		08/26/12 05:36	99-87-6	
Methylene Chloride	ND	ug/L	4.0	2.0	1		08/26/12 05:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	4.0	2.0	1		08/26/12 05:36	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.088	1		08/26/12 05:36	1634-04-4	
Naphthalene	59.9	ug/L	4.0	0.068	1		08/26/12 05:36	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.078	1		08/26/12 05:36	103-65-1	
Styrene	ND	ug/L	1.0	0.060	1		08/26/12 05:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.36	1		08/26/12 05:36	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.097	1		08/26/12 05:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.13	1		08/26/12 05:36	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	0.97	1		08/26/12 05:36	109-99-9	
Toluene	ND	ug/L	1.0	0.077	1		08/26/12 05:36	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.13	1		08/26/12 05:36	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.25	1		08/26/12 05:36	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.19	1		08/26/12 05:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		08/26/12 05:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.083	1		08/26/12 05:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.13	1		08/26/12 05:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	0.33	1		08/26/12 05:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	0.18	1		08/26/12 05:36	76-13-1	
1,2,4-Trimethylbenzene	4.2	ug/L	1.0	0.071	1		08/26/12 05:36	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.087	1		08/26/12 05:36	108-67-8	
Vinyl chloride	ND	ug/L	0.40	0.16	1		08/26/12 05:36	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.22	1		08/26/12 05:36	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.11	1		08/26/12 05:36	179601-23-1	
o-Xylene	2.7	ug/L	1.0	0.10	1		08/26/12 05:36	95-47-6	
Surrogates									
Dibromofluoromethane (S)	99 %		75-125		1		08/26/12 05:36	1868-53-7	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-11 **Lab ID: 10203311006** Collected: 08/21/12 17:30 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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8260 VOC Analytical Method: EPA 8260

Surrogates

1,2-Dichloroethane-d4 (S)	99 %		75-125		1		08/26/12 05:36	17060-07-0	
Toluene-d8 (S)	99 %		75-125		1		08/26/12 05:36	2037-26-5	
4-Bromofluorobenzene (S)	97 %		75-125		1		08/26/12 05:36	460-00-4	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-15 **Lab ID: 10203311007** Collected: 08/22/12 08:40 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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8270 MSSV PAH by SIM

Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510

Acenaphthene	54.1 ug/L		0.43	0.054	10	08/29/12 07:13	08/31/12 15:09	83-32-9	
Acenaphthylene	1.5 ug/L		0.043	0.0043	1	08/29/12 07:13	08/30/12 13:18	208-96-8	
Anthracene	0.75 ug/L		0.043	0.0087	1	08/29/12 07:13	08/30/12 13:18	120-12-7	
Benzo(a)anthracene	0.25 ug/L		0.043	0.0087	1	08/29/12 07:13	08/30/12 13:18	56-55-3	
Benzo(a)pyrene	0.19 ug/L		0.043	0.011	1	08/29/12 07:13	08/30/12 13:18	50-32-8	
Benzo(b)fluoranthene	0.13 ug/L		0.043	0.011	1	08/29/12 07:13	08/30/12 13:18	205-99-2	
Benzo(g,h,i)perylene	0.058 ug/L		0.043	0.011	1	08/29/12 07:13	08/30/12 13:18	191-24-2	
Benzo(k)fluoranthene	0.061 ug/L		0.043	0.0098	1	08/29/12 07:13	08/30/12 13:18	207-08-9	
Chrysene	0.24 ug/L		0.043	0.0098	1	08/29/12 07:13	08/30/12 13:18	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.043	0.0098	1	08/29/12 07:13	08/30/12 13:18	53-70-3	
Fluoranthene	1.2 ug/L		0.043	0.013	1	08/29/12 07:13	08/30/12 13:18	206-44-0	
Fluorene	9.6 ug/L		0.043	0.0043	1	08/29/12 07:13	08/30/12 13:18	86-73-7	
Indeno(1,2,3-cd)pyrene	0.044 ug/L		0.043	0.011	1	08/29/12 07:13	08/30/12 13:18	193-39-5	
Naphthalene	2.4 ug/L		0.043	0.0065	1	08/29/12 07:13	08/30/12 13:18	91-20-3	
Phenanthrene	0.62 ug/L		0.043	0.0087	1	08/29/12 07:13	08/30/12 13:18	85-01-8	
Pyrene	1.3 ug/L		0.043	0.014	1	08/29/12 07:13	08/30/12 13:18	129-00-0	

Surrogates

2-Fluorobiphenyl (S)	77 %		58-125		1	08/29/12 07:13	08/30/12 13:18	321-60-8	
Terphenyl-d14 (S)	90 %		75-125		1	08/29/12 07:13	08/30/12 13:18	1718-51-0	

8260 VOC

Analytical Method: EPA 8260

Acetone	ND ug/L		25.0	12.5	1		08/26/12 05:51	67-64-1	
Allyl chloride	ND ug/L		4.0	1.8	1		08/26/12 05:51	107-05-1	
Benzene	53.8 ug/L		1.0	0.062	1		08/26/12 05:51	71-43-2	
Bromobenzene	ND ug/L		1.0	0.086	1		08/26/12 05:51	108-86-1	
Bromochloromethane	ND ug/L		1.0	0.32	1		08/26/12 05:51	74-97-5	
Bromodichloromethane	ND ug/L		1.0	0.11	1		08/26/12 05:51	75-27-4	
Bromoform	ND ug/L		4.0	0.068	1		08/26/12 05:51	75-25-2	
Bromomethane	ND ug/L		4.0	0.36	1		08/26/12 05:51	74-83-9	
2-Butanone (MEK)	ND ug/L		4.0	2.0	1		08/26/12 05:51	78-93-3	
n-Butylbenzene	ND ug/L		1.0	0.15	1		08/26/12 05:51	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	0.10	1		08/26/12 05:51	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	0.10	1		08/26/12 05:51	98-06-6	
Carbon tetrachloride	ND ug/L		1.0	0.16	1		08/26/12 05:51	56-23-5	
Chlorobenzene	ND ug/L		1.0	0.10	1		08/26/12 05:51	108-90-7	
Chloroethane	ND ug/L		1.0	0.22	1		08/26/12 05:51	75-00-3	
Chloroform	ND ug/L		1.0	0.14	1		08/26/12 05:51	67-66-3	
Chloromethane	ND ug/L		4.0	0.41	1		08/26/12 05:51	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	0.50	1		08/26/12 05:51	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	0.068	1		08/26/12 05:51	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		4.0	0.62	1		08/26/12 05:51	96-12-8	
Dibromochloromethane	ND ug/L		1.0	0.10	1		08/26/12 05:51	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	0.091	1		08/26/12 05:51	106-93-4	
Dibromomethane	ND ug/L		4.0	0.21	1		08/26/12 05:51	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	0.36	1		08/26/12 05:51	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	0.11	1		08/26/12 05:51	541-73-1	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-15 Lab ID: 10203311007 Collected: 08/22/12 08:40 Received: 08/23/12 14:11 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC Analytical Method: EPA 8260									
1,4-Dichlorobenzene	ND	ug/L	1.0	0.064	1		08/26/12 05:51	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		08/26/12 05:51	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.11	1		08/26/12 05:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.37	1		08/26/12 05:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.19	1		08/26/12 05:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		08/26/12 05:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.15	1		08/26/12 05:51	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	0.11	1		08/26/12 05:51	75-43-4	
1,2-Dichloropropane	ND	ug/L	4.0	0.27	1		08/26/12 05:51	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.081	1		08/26/12 05:51	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	0.15	1		08/26/12 05:51	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.35	1		08/26/12 05:51	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	0.090	1		08/26/12 05:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	0.37	1		08/26/12 05:51	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	2.0	1		08/26/12 05:51	60-29-7	
Ethylbenzene	ND	ug/L	1.0	0.081	1		08/26/12 05:51	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	0.19	1		08/26/12 05:51	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.076	1		08/26/12 05:51	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.086	1		08/26/12 05:51	99-87-6	
Methylene Chloride	ND	ug/L	4.0	2.0	1		08/26/12 05:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	4.0	2.0	1		08/26/12 05:51	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.088	1		08/26/12 05:51	1634-04-4	
Naphthalene	6.3	ug/L	4.0	0.068	1		08/26/12 05:51	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.078	1		08/26/12 05:51	103-65-1	
Styrene	ND	ug/L	1.0	0.060	1		08/26/12 05:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.36	1		08/26/12 05:51	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.097	1		08/26/12 05:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.13	1		08/26/12 05:51	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	0.97	1		08/26/12 05:51	109-99-9	
Toluene	ND	ug/L	1.0	0.077	1		08/26/12 05:51	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.13	1		08/26/12 05:51	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.25	1		08/26/12 05:51	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.19	1		08/26/12 05:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		08/26/12 05:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.083	1		08/26/12 05:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.13	1		08/26/12 05:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	0.33	1		08/26/12 05:51	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	0.18	1		08/26/12 05:51	76-13-1	
1,2,4-Trimethylbenzene	2.5	ug/L	1.0	0.071	1		08/26/12 05:51	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.087	1		08/26/12 05:51	108-67-8	
Vinyl chloride	ND	ug/L	0.40	0.16	1		08/26/12 05:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.22	1		08/26/12 05:51	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.11	1		08/26/12 05:51	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.10	1		08/26/12 05:51	95-47-6	
Surrogates									
Dibromofluoromethane (S)	98 %		75-125		1		08/26/12 05:51	1868-53-7	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-15 **Lab ID: 10203311007** Collected: 08/22/12 08:40 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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8260 VOC Analytical Method: EPA 8260

Surrogates

1,2-Dichloroethane-d4 (S)	98 %		75-125		1		08/26/12 05:51	17060-07-0	
Toluene-d8 (S)	99 %		75-125		1		08/26/12 05:51	2037-26-5	
4-Bromofluorobenzene (S)	99 %		75-125		1		08/26/12 05:51	460-00-4	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-20 **Lab ID: 10203311008** Collected: 08/22/12 09:00 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510									
Acenaphthene	52.4	ug/L	0.41	0.052	10	08/29/12 07:13	08/31/12 15:30	83-32-9	
Acenaphthylene	0.30	ug/L	0.041	0.0041	1	08/29/12 07:13	08/30/12 13:40	208-96-8	
Anthracene	0.41	ug/L	0.041	0.0082	1	08/29/12 07:13	08/30/12 13:40	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	0.0082	1	08/29/12 07:13	08/30/12 13:40	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.010	1	08/29/12 07:13	08/30/12 13:40	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.010	1	08/29/12 07:13	08/30/12 13:40	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.010	1	08/29/12 07:13	08/30/12 13:40	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.0093	1	08/29/12 07:13	08/30/12 13:40	207-08-9	
Chrysene	ND	ug/L	0.041	0.0093	1	08/29/12 07:13	08/30/12 13:40	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.0093	1	08/29/12 07:13	08/30/12 13:40	53-70-3	
Fluoranthene	0.65	ug/L	0.041	0.012	1	08/29/12 07:13	08/30/12 13:40	206-44-0	
Fluorene	4.1	ug/L	0.041	0.0041	1	08/29/12 07:13	08/30/12 13:40	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.010	1	08/29/12 07:13	08/30/12 13:40	193-39-5	
Naphthalene	4.6	ug/L	0.041	0.0062	1	08/29/12 07:13	08/30/12 13:40	91-20-3	
Phenanthrene	1.8	ug/L	0.041	0.0082	1	08/29/12 07:13	08/30/12 13:40	85-01-8	
Pyrene	0.45	ug/L	0.041	0.013	1	08/29/12 07:13	08/30/12 13:40	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	77 %		58-125		1	08/29/12 07:13	08/30/12 13:40	321-60-8	
Terphenyl-d14 (S)	94 %		75-125		1	08/29/12 07:13	08/30/12 13:40	1718-51-0	

8260 VOC Analytical Method: EPA 8260									
Acetone	ND	ug/L	2500	1250	100		08/26/12 06:36	67-64-1	
Allyl chloride	ND	ug/L	400	177	100		08/26/12 06:36	107-05-1	
Benzene	10400	ug/L	100	6.2	100		08/26/12 06:36	71-43-2	
Bromobenzene	ND	ug/L	100	8.6	100		08/26/12 06:36	108-86-1	
Bromochloromethane	ND	ug/L	100	31.9	100		08/26/12 06:36	74-97-5	
Bromodichloromethane	ND	ug/L	100	10.6	100		08/26/12 06:36	75-27-4	
Bromoform	ND	ug/L	400	6.8	100		08/26/12 06:36	75-25-2	
Bromomethane	ND	ug/L	400	35.6	100		08/26/12 06:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	400	200	100		08/26/12 06:36	78-93-3	
n-Butylbenzene	ND	ug/L	100	14.6	100		08/26/12 06:36	104-51-8	
sec-Butylbenzene	ND	ug/L	100	10.3	100		08/26/12 06:36	135-98-8	
tert-Butylbenzene	ND	ug/L	100	10.4	100		08/26/12 06:36	98-06-6	
Carbon tetrachloride	ND	ug/L	100	16.2	100		08/26/12 06:36	56-23-5	
Chlorobenzene	ND	ug/L	100	10.1	100		08/26/12 06:36	108-90-7	
Chloroethane	ND	ug/L	100	21.5	100		08/26/12 06:36	75-00-3	
Chloroform	ND	ug/L	100	14.5	100		08/26/12 06:36	67-66-3	
Chloromethane	ND	ug/L	400	41.3	100		08/26/12 06:36	74-87-3	
2-Chlorotoluene	ND	ug/L	100	50.0	100		08/26/12 06:36	95-49-8	
4-Chlorotoluene	ND	ug/L	100	6.8	100		08/26/12 06:36	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	400	61.5	100		08/26/12 06:36	96-12-8	
Dibromochloromethane	ND	ug/L	100	10.2	100		08/26/12 06:36	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	100	9.1	100		08/26/12 06:36	106-93-4	
Dibromomethane	ND	ug/L	400	21.0	100		08/26/12 06:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	100	35.6	100		08/26/12 06:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	100	10.8	100		08/26/12 06:36	541-73-1	

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 26 of 54

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ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-20 Lab ID: 10203311008 Collected: 08/22/12 09:00 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260 VOC Analytical Method: EPA 8260									
1,4-Dichlorobenzene	ND ug/L		100	6.4	100		08/26/12 06:36	106-46-7	
Dichlorodifluoromethane	ND ug/L		100	20.1	100		08/26/12 06:36	75-71-8	
1,1-Dichloroethane	ND ug/L		100	11.0	100		08/26/12 06:36	75-34-3	
1,2-Dichloroethane	ND ug/L		100	37.1	100		08/26/12 06:36	107-06-2	
1,1-Dichloroethene	ND ug/L		100	18.9	100		08/26/12 06:36	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		100	8.5	100		08/26/12 06:36	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		100	14.6	100		08/26/12 06:36	156-60-5	
Dichlorofluoromethane	ND ug/L		100	11.4	100		08/26/12 06:36	75-43-4	
1,2-Dichloropropane	ND ug/L		400	27.1	100		08/26/12 06:36	78-87-5	
1,3-Dichloropropane	ND ug/L		100	8.1	100		08/26/12 06:36	142-28-9	
2,2-Dichloropropane	ND ug/L		400	14.8	100		08/26/12 06:36	594-20-7	
1,1-Dichloropropene	ND ug/L		100	35.3	100		08/26/12 06:36	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		400	9.0	100		08/26/12 06:36	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		400	37.4	100		08/26/12 06:36	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		400	200	100		08/26/12 06:36	60-29-7	
Ethylbenzene	ND ug/L		100	8.1	100		08/26/12 06:36	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		500	18.8	100		08/26/12 06:36	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L		100	7.6	100		08/26/12 06:36	98-82-8	
p-Isopropyltoluene	ND ug/L		100	8.6	100		08/26/12 06:36	99-87-6	
Methylene Chloride	ND ug/L		400	200	100		08/26/12 06:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		400	200	100		08/26/12 06:36	108-10-1	
Methyl-tert-butyl ether	ND ug/L		100	8.8	100		08/26/12 06:36	1634-04-4	
Naphthalene	ND ug/L		400	6.8	100		08/26/12 06:36	91-20-3	
n-Propylbenzene	ND ug/L		100	7.8	100		08/26/12 06:36	103-65-1	
Styrene	ND ug/L		100	6.0	100		08/26/12 06:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		100	36.5	100		08/26/12 06:36	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND ug/L		100	9.7	100		08/26/12 06:36	79-34-5	
Tetrachloroethene	ND ug/L		100	13.1	100		08/26/12 06:36	127-18-4	
Tetrahydrofuran	ND ug/L		1000	96.7	100		08/26/12 06:36	109-99-9	
Toluene	ND ug/L		100	7.7	100		08/26/12 06:36	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		100	13.3	100		08/26/12 06:36	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		100	24.7	100		08/26/12 06:36	120-82-1	
1,1,1-Trichloroethane	ND ug/L		100	18.7	100		08/26/12 06:36	71-55-6	
1,1,2-Trichloroethane	ND ug/L		100	15.1	100		08/26/12 06:36	79-00-5	
Trichloroethene	ND ug/L		100	8.3	100		08/26/12 06:36	79-01-6	
Trichlorofluoromethane	ND ug/L		100	12.7	100		08/26/12 06:36	75-69-4	
1,2,3-Trichloropropane	ND ug/L		400	32.8	100		08/26/12 06:36	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		100	18.5	100		08/26/12 06:36	76-13-1	
1,2,4-Trimethylbenzene	ND ug/L		100	7.1	100		08/26/12 06:36	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		100	8.7	100		08/26/12 06:36	108-67-8	
Vinyl chloride	ND ug/L		40.0	15.8	100		08/26/12 06:36	75-01-4	
Xylene (Total)	ND ug/L		300	21.5	100		08/26/12 06:36	1330-20-7	
m&p-Xylene	ND ug/L		200	11.0	100		08/26/12 06:36	179601-23-1	
o-Xylene	ND ug/L		100	10.5	100		08/26/12 06:36	95-47-6	
Surrogates									
Dibromofluoromethane (S)	100 %		75-125		100		08/26/12 06:36	1868-53-7	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-20 **Lab ID: 10203311008** Collected: 08/22/12 09:00 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
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8260 VOC Analytical Method: EPA 8260

Surrogates

1,2-Dichloroethane-d4 (S)	100 %	75-125	100	08/26/12 06:36	17060-07-0
Toluene-d8 (S)	100 %	75-125	100	08/26/12 06:36	2037-26-5
4-Bromofluorobenzene (S)	99 %	75-125	100	08/26/12 06:36	460-00-4

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-20D **Lab ID: 10203311009** Collected: 08/22/12 09:00 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510									
Acenaphthene	53.9 ug/L		0.40	0.050	10	08/29/12 07:13	08/31/12 15:52	83-32-9	
Acenaphthylene	0.31 ug/L		0.040	0.0040	1	08/29/12 07:13	08/30/12 14:01	208-96-8	
Anthracene	0.43 ug/L		0.040	0.0080	1	08/29/12 07:13	08/30/12 14:01	120-12-7	
Benzo(a)anthracene	ND ug/L		0.040	0.0080	1	08/29/12 07:13	08/30/12 14:01	56-55-3	
Benzo(a)pyrene	ND ug/L		0.040	0.010	1	08/29/12 07:13	08/30/12 14:01	50-32-8	
Benzo(b)fluoranthene	ND ug/L		0.040	0.010	1	08/29/12 07:13	08/30/12 14:01	205-99-2	
Benzo(g,h,i)perylene	ND ug/L		0.040	0.010	1	08/29/12 07:13	08/30/12 14:01	191-24-2	
Benzo(k)fluoranthene	ND ug/L		0.040	0.0090	1	08/29/12 07:13	08/30/12 14:01	207-08-9	
Chrysene	ND ug/L		0.040	0.0090	1	08/29/12 07:13	08/30/12 14:01	218-01-9	
Dibenz(a,h)anthracene	ND ug/L		0.040	0.0090	1	08/29/12 07:13	08/30/12 14:01	53-70-3	
Fluoranthene	0.67 ug/L		0.040	0.012	1	08/29/12 07:13	08/30/12 14:01	206-44-0	
Fluorene	4.1 ug/L		0.040	0.0040	1	08/29/12 07:13	08/30/12 14:01	86-73-7	
Indeno(1,2,3-cd)pyrene	ND ug/L		0.040	0.010	1	08/29/12 07:13	08/30/12 14:01	193-39-5	
Naphthalene	5.1 ug/L		0.040	0.0060	1	08/29/12 07:13	08/30/12 14:01	91-20-3	
Phenanthrene	1.9 ug/L		0.040	0.0080	1	08/29/12 07:13	08/30/12 14:01	85-01-8	
Pyrene	0.48 ug/L		0.040	0.013	1	08/29/12 07:13	08/30/12 14:01	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	80 %		58-125		1	08/29/12 07:13	08/30/12 14:01	321-60-8	
Terphenyl-d14 (S)	98 %		75-125		1	08/29/12 07:13	08/30/12 14:01	1718-51-0	

8260 VOC Analytical Method: EPA 8260									
Acetone	ND ug/L		2500	1250	100		08/26/12 06:52	67-64-1	
Allyl chloride	ND ug/L		400	177	100		08/26/12 06:52	107-05-1	
Benzene	10300 ug/L		100	6.2	100		08/26/12 06:52	71-43-2	
Bromobenzene	ND ug/L		100	8.6	100		08/26/12 06:52	108-86-1	
Bromochloromethane	ND ug/L		100	31.9	100		08/26/12 06:52	74-97-5	
Bromodichloromethane	ND ug/L		100	10.6	100		08/26/12 06:52	75-27-4	
Bromoform	ND ug/L		400	6.8	100		08/26/12 06:52	75-25-2	
Bromomethane	ND ug/L		400	35.6	100		08/26/12 06:52	74-83-9	
2-Butanone (MEK)	ND ug/L		400	200	100		08/26/12 06:52	78-93-3	
n-Butylbenzene	ND ug/L		100	14.6	100		08/26/12 06:52	104-51-8	
sec-Butylbenzene	ND ug/L		100	10.3	100		08/26/12 06:52	135-98-8	
tert-Butylbenzene	ND ug/L		100	10.4	100		08/26/12 06:52	98-06-6	
Carbon tetrachloride	ND ug/L		100	16.2	100		08/26/12 06:52	56-23-5	
Chlorobenzene	ND ug/L		100	10.1	100		08/26/12 06:52	108-90-7	
Chloroethane	ND ug/L		100	21.5	100		08/26/12 06:52	75-00-3	
Chloroform	ND ug/L		100	14.5	100		08/26/12 06:52	67-66-3	
Chloromethane	ND ug/L		400	41.3	100		08/26/12 06:52	74-87-3	
2-Chlorotoluene	ND ug/L		100	50.0	100		08/26/12 06:52	95-49-8	
4-Chlorotoluene	ND ug/L		100	6.8	100		08/26/12 06:52	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		400	61.5	100		08/26/12 06:52	96-12-8	
Dibromochloromethane	ND ug/L		100	10.2	100		08/26/12 06:52	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		100	9.1	100		08/26/12 06:52	106-93-4	
Dibromomethane	ND ug/L		400	21.0	100		08/26/12 06:52	74-95-3	
1,2-Dichlorobenzene	ND ug/L		100	35.6	100		08/26/12 06:52	95-50-1	
1,3-Dichlorobenzene	ND ug/L		100	10.8	100		08/26/12 06:52	541-73-1	

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REPORT OF LABORATORY ANALYSIS

Page 29 of 54

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ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-20D Lab ID: 10203311009 Collected: 08/22/12 09:00 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8260 VOC Analytical Method: EPA 8260									
1,4-Dichlorobenzene	ND ug/L		100	6.4	100		08/26/12 06:52	106-46-7	
Dichlorodifluoromethane	ND ug/L		100	20.1	100		08/26/12 06:52	75-71-8	
1,1-Dichloroethane	ND ug/L		100	11.0	100		08/26/12 06:52	75-34-3	
1,2-Dichloroethane	ND ug/L		100	37.1	100		08/26/12 06:52	107-06-2	
1,1-Dichloroethene	ND ug/L		100	18.9	100		08/26/12 06:52	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		100	8.5	100		08/26/12 06:52	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		100	14.6	100		08/26/12 06:52	156-60-5	
Dichlorofluoromethane	ND ug/L		100	11.4	100		08/26/12 06:52	75-43-4	
1,2-Dichloropropane	ND ug/L		400	27.1	100		08/26/12 06:52	78-87-5	
1,3-Dichloropropane	ND ug/L		100	8.1	100		08/26/12 06:52	142-28-9	
2,2-Dichloropropane	ND ug/L		400	14.8	100		08/26/12 06:52	594-20-7	
1,1-Dichloropropene	ND ug/L		100	35.3	100		08/26/12 06:52	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		400	9.0	100		08/26/12 06:52	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		400	37.4	100		08/26/12 06:52	10061-02-6	
Diethyl ether (Ethyl ether)	ND ug/L		400	200	100		08/26/12 06:52	60-29-7	
Ethylbenzene	ND ug/L		100	8.1	100		08/26/12 06:52	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		500	18.8	100		08/26/12 06:52	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L		100	7.6	100		08/26/12 06:52	98-82-8	
p-Isopropyltoluene	ND ug/L		100	8.6	100		08/26/12 06:52	99-87-6	
Methylene Chloride	ND ug/L		400	200	100		08/26/12 06:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		400	200	100		08/26/12 06:52	108-10-1	
Methyl-tert-butyl ether	ND ug/L		100	8.8	100		08/26/12 06:52	1634-04-4	
Naphthalene	ND ug/L		400	6.8	100		08/26/12 06:52	91-20-3	
n-Propylbenzene	ND ug/L		100	7.8	100		08/26/12 06:52	103-65-1	
Styrene	ND ug/L		100	6.0	100		08/26/12 06:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		100	36.5	100		08/26/12 06:52	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND ug/L		100	9.7	100		08/26/12 06:52	79-34-5	
Tetrachloroethene	ND ug/L		100	13.1	100		08/26/12 06:52	127-18-4	
Tetrahydrofuran	ND ug/L		1000	96.7	100		08/26/12 06:52	109-99-9	
Toluene	ND ug/L		100	7.7	100		08/26/12 06:52	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		100	13.3	100		08/26/12 06:52	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		100	24.7	100		08/26/12 06:52	120-82-1	
1,1,1-Trichloroethane	ND ug/L		100	18.7	100		08/26/12 06:52	71-55-6	
1,1,2-Trichloroethane	ND ug/L		100	15.1	100		08/26/12 06:52	79-00-5	
Trichloroethene	ND ug/L		100	8.3	100		08/26/12 06:52	79-01-6	
Trichlorofluoromethane	ND ug/L		100	12.7	100		08/26/12 06:52	75-69-4	
1,2,3-Trichloropropane	ND ug/L		400	32.8	100		08/26/12 06:52	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug/L		100	18.5	100		08/26/12 06:52	76-13-1	
1,2,4-Trimethylbenzene	ND ug/L		100	7.1	100		08/26/12 06:52	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		100	8.7	100		08/26/12 06:52	108-67-8	
Vinyl chloride	ND ug/L		40.0	15.8	100		08/26/12 06:52	75-01-4	
Xylene (Total)	ND ug/L		300	21.5	100		08/26/12 06:52	1330-20-7	
m&p-Xylene	ND ug/L		200	11.0	100		08/26/12 06:52	179601-23-1	
o-Xylene	ND ug/L		100	10.5	100		08/26/12 06:52	95-47-6	
Surrogates									
Dibromofluoromethane (S)	101 %		75-125		100		08/26/12 06:52	1868-53-7	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-20D		Lab ID: 10203311009	Collected: 08/22/12 09:00	Received: 08/23/12 14:11	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC		Analytical Method: EPA 8260							
Surrogates									
1,2-Dichloroethane-d4 (S)	99 %		75-125		100		08/26/12 06:52	17060-07-0	
Toluene-d8 (S)	99 %		75-125		100		08/26/12 06:52	2037-26-5	
4-Bromofluorobenzene (S)	98 %		75-125		100		08/26/12 06:52	460-00-4	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-22 **Lab ID: 10203311010** Collected: 08/22/12 11:10 Received: 08/23/12 14:11 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270 MSSV PAH by SIM									
Analytical Method: EPA 8270 by SIM					Preparation Method: EPA 3510				
Acenaphthene	0.13	ug/L	0.044	0.0056	1	08/29/12 07:13	08/30/12 14:23	83-32-9	
Acenaphthylene	ND	ug/L	0.044	0.0044	1	08/29/12 07:13	08/30/12 14:23	208-96-8	
Anthracene	ND	ug/L	0.044	0.0089	1	08/29/12 07:13	08/30/12 14:23	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.044	0.0089	1	08/29/12 07:13	08/30/12 14:23	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.044	0.011	1	08/29/12 07:13	08/30/12 14:23	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.044	0.011	1	08/29/12 07:13	08/30/12 14:23	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.044	0.011	1	08/29/12 07:13	08/30/12 14:23	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.044	0.010	1	08/29/12 07:13	08/30/12 14:23	207-08-9	
Chrysene	ND	ug/L	0.044	0.010	1	08/29/12 07:13	08/30/12 14:23	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.044	0.010	1	08/29/12 07:13	08/30/12 14:23	53-70-3	
Fluoranthene	ND	ug/L	0.044	0.013	1	08/29/12 07:13	08/30/12 14:23	206-44-0	
Fluorene	ND	ug/L	0.044	0.0044	1	08/29/12 07:13	08/30/12 14:23	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.044	0.011	1	08/29/12 07:13	08/30/12 14:23	193-39-5	
Naphthalene	0.48	ug/L	0.044	0.0067	1	08/29/12 07:13	08/30/12 14:23	91-20-3	
Phenanthrene	0.10	ug/L	0.044	0.0089	1	08/29/12 07:13	08/30/12 14:23	85-01-8	
Pyrene	ND	ug/L	0.044	0.014	1	08/29/12 07:13	08/30/12 14:23	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	73 %		58-125		1	08/29/12 07:13	08/30/12 14:23	321-60-8	
Terphenyl-d14 (S)	97 %		75-125		1	08/29/12 07:13	08/30/12 14:23	1718-51-0	

8260 VOC Analytical Method: EPA 8260

Acetone	179	ug/L	25.0	12.5	1		08/27/12 20:21	67-64-1	
Allyl chloride	ND	ug/L	4.0	1.8	1		08/27/12 20:21	107-05-1	
Benzene	4.6	ug/L	1.0	0.062	1		08/27/12 20:21	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.086	1		08/27/12 20:21	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.32	1		08/27/12 20:21	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		08/27/12 20:21	75-27-4	
Bromoform	ND	ug/L	4.0	0.068	1		08/27/12 20:21	75-25-2	
Bromomethane	ND	ug/L	4.0	0.36	1		08/27/12 20:21	74-83-9	
2-Butanone (MEK)	11.9	ug/L	4.0	2.0	1		08/27/12 20:21	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		08/27/12 20:21	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.10	1		08/27/12 20:21	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.10	1		08/27/12 20:21	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	0.16	1		08/27/12 20:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.10	1		08/27/12 20:21	108-90-7	
Chloroethane	ND	ug/L	1.0	0.22	1		08/27/12 20:21	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		08/27/12 20:21	67-66-3	
Chloromethane	ND	ug/L	4.0	0.41	1		08/27/12 20:21	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.50	1		08/27/12 20:21	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.068	1		08/27/12 20:21	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	0.62	1		08/27/12 20:21	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.10	1		08/27/12 20:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.091	1		08/27/12 20:21	106-93-4	
Dibromomethane	ND	ug/L	4.0	0.21	1		08/27/12 20:21	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.36	1		08/27/12 20:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.11	1		08/27/12 20:21	541-73-1	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-22		Lab ID: 10203311010	Collected: 08/22/12 11:10	Received: 08/23/12 14:11	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC Analytical Method: EPA 8260									
1,4-Dichlorobenzene	ND	ug/L	1.0	0.064	1		08/27/12 20:21	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		08/27/12 20:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.11	1		08/27/12 20:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.37	1		08/27/12 20:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.19	1		08/27/12 20:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		08/27/12 20:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.15	1		08/27/12 20:21	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	0.11	1		08/27/12 20:21	75-43-4	
1,2-Dichloropropane	ND	ug/L	4.0	0.27	1		08/27/12 20:21	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.081	1		08/27/12 20:21	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	0.15	1		08/27/12 20:21	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.35	1		08/27/12 20:21	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	0.090	1		08/27/12 20:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	0.37	1		08/27/12 20:21	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	2.0	1		08/27/12 20:21	60-29-7	
Ethylbenzene	ND	ug/L	1.0	0.081	1		08/27/12 20:21	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	0.19	1		08/27/12 20:21	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.076	1		08/27/12 20:21	98-82-8	
p-Isopropyltoluene	1.2	ug/L	1.0	0.086	1		08/27/12 20:21	99-87-6	
Methylene Chloride	ND	ug/L	4.0	2.0	1		08/27/12 20:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	4.0	2.0	1		08/27/12 20:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.088	1		08/27/12 20:21	1634-04-4	
Naphthalene	ND	ug/L	4.0	0.068	1		08/27/12 20:21	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.078	1		08/27/12 20:21	103-65-1	
Styrene	ND	ug/L	1.0	0.060	1		08/27/12 20:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.36	1		08/27/12 20:21	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.097	1		08/27/12 20:21	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.13	1		08/27/12 20:21	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	0.97	1		08/27/12 20:21	109-99-9	
Toluene	1.6	ug/L	1.0	0.077	1		08/27/12 20:21	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.13	1		08/27/12 20:21	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.25	1		08/27/12 20:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.19	1		08/27/12 20:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		08/27/12 20:21	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.083	1		08/27/12 20:21	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.13	1		08/27/12 20:21	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	0.33	1		08/27/12 20:21	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	0.18	1		08/27/12 20:21	76-13-1	
1,2,4-Trimethylbenzene	7.3	ug/L	1.0	0.071	1		08/27/12 20:21	95-63-6	
1,3,5-Trimethylbenzene	4.3	ug/L	1.0	0.087	1		08/27/12 20:21	108-67-8	
Vinyl chloride	ND	ug/L	0.40	0.16	1		08/27/12 20:21	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.22	1		08/27/12 20:21	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.11	1		08/27/12 20:21	179601-23-1	
o-Xylene	1.3	ug/L	1.0	0.10	1		08/27/12 20:21	95-47-6	
Surrogates									
Dibromofluoromethane (S)	105 %		75-125		1		08/27/12 20:21	1868-53-7	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: MW-22		Lab ID: 10203311010		Collected: 08/22/12 11:10	Received: 08/23/12 14:11	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC		Analytical Method: EPA 8260							
Surrogates									
1,2-Dichloroethane-d4 (S)	103 %		75-125		1		08/27/12 20:21	17060-07-0	
Toluene-d8 (S)	99 %		75-125		1		08/27/12 20:21	2037-26-5	
4-Bromofluorobenzene (S)	100 %		75-125		1		08/27/12 20:21	460-00-4	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: Trip Blanks									
Lab ID: 10203311011									
Collected: 08/22/12 00:00									
Received: 08/23/12 14:11									
Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC									
Analytical Method: EPA 8260									
Acetone	ND	ug/L	25.0	12.5	1		08/27/12 18:53	67-64-1	
Allyl chloride	ND	ug/L	4.0	1.8	1		08/27/12 18:53	107-05-1	
Benzene	ND	ug/L	1.0	0.062	1		08/27/12 18:53	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.086	1		08/27/12 18:53	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.32	1		08/27/12 18:53	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		08/27/12 18:53	75-27-4	
Bromoform	ND	ug/L	4.0	0.068	1		08/27/12 18:53	75-25-2	
Bromomethane	ND	ug/L	4.0	0.36	1		08/27/12 18:53	74-83-9	
2-Butanone (MEK)	4.4	ug/L	4.0	2.0	1		08/27/12 18:53	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		08/27/12 18:53	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.10	1		08/27/12 18:53	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.10	1		08/27/12 18:53	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	0.16	1		08/27/12 18:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.10	1		08/27/12 18:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.22	1		08/27/12 18:53	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		08/27/12 18:53	67-66-3	
Chloromethane	ND	ug/L	4.0	0.41	1		08/27/12 18:53	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.50	1		08/27/12 18:53	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.068	1		08/27/12 18:53	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	0.62	1		08/27/12 18:53	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.10	1		08/27/12 18:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.091	1		08/27/12 18:53	106-93-4	
Dibromomethane	ND	ug/L	4.0	0.21	1		08/27/12 18:53	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.36	1		08/27/12 18:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.11	1		08/27/12 18:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.064	1		08/27/12 18:53	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		08/27/12 18:53	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.11	1		08/27/12 18:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.37	1		08/27/12 18:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.19	1		08/27/12 18:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		08/27/12 18:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.15	1		08/27/12 18:53	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	0.11	1		08/27/12 18:53	75-43-4	
1,2-Dichloropropane	ND	ug/L	4.0	0.27	1		08/27/12 18:53	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.081	1		08/27/12 18:53	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	0.15	1		08/27/12 18:53	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.35	1		08/27/12 18:53	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	0.090	1		08/27/12 18:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	0.37	1		08/27/12 18:53	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	2.0	1		08/27/12 18:53	60-29-7	
Ethylbenzene	ND	ug/L	1.0	0.081	1		08/27/12 18:53	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	0.19	1		08/27/12 18:53	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.076	1		08/27/12 18:53	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.086	1		08/27/12 18:53	99-87-6	
Methylene Chloride	4.1	ug/L	4.0	2.0	1		08/27/12 18:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	4.0	2.0	1		08/27/12 18:53	108-10-1	

ANALYTICAL RESULTS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Sample: Trip Blanks		Lab ID: 10203311011	Collected: 08/22/12 00:00	Received: 08/23/12 14:11	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC									
Analytical Method: EPA 8260									
Methyl-tert-butyl ether	ND	ug/L	1.0	0.088	1		08/27/12 18:53	1634-04-4	
Naphthalene	ND	ug/L	4.0	0.068	1		08/27/12 18:53	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.078	1		08/27/12 18:53	103-65-1	
Styrene	ND	ug/L	1.0	0.060	1		08/27/12 18:53	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.36	1		08/27/12 18:53	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.097	1		08/27/12 18:53	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.13	1		08/27/12 18:53	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	0.97	1		08/27/12 18:53	109-99-9	
Toluene	ND	ug/L	1.0	0.077	1		08/27/12 18:53	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.13	1		08/27/12 18:53	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.25	1		08/27/12 18:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.19	1		08/27/12 18:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		08/27/12 18:53	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.083	1		08/27/12 18:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.13	1		08/27/12 18:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	0.33	1		08/27/12 18:53	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	0.18	1		08/27/12 18:53	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.071	1		08/27/12 18:53	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.087	1		08/27/12 18:53	108-67-8	
Vinyl chloride	ND	ug/L	0.40	0.16	1		08/27/12 18:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.22	1		08/27/12 18:53	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.11	1		08/27/12 18:53	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.10	1		08/27/12 18:53	95-47-6	
Surrogates									
Dibromofluoromethane (S)	105 %		75-125		1		08/27/12 18:53	1868-53-7	
1,2-Dichloroethane-d4 (S)	103 %		75-125		1		08/27/12 18:53	17060-07-0	
Toluene-d8 (S)	97 %		75-125		1		08/27/12 18:53	2037-26-5	
4-Bromofluorobenzene (S)	102 %		75-125		1		08/27/12 18:53	460-00-4	

QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

QC Batch: MSV/21218 Analysis Method: EPA 8260
 QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 465 W
 Associated Lab Samples: 10203311001, 10203311002, 10203311003, 10203311004, 10203311005, 10203311006, 10203311007, 10203311008, 10203311009

METHOD BLANK: 1274527 Matrix: Water
 Associated Lab Samples: 10203311001, 10203311002, 10203311003, 10203311004, 10203311005, 10203311006, 10203311007, 10203311008, 10203311009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	08/26/12 02:05	
1,1,1-Trichloroethane	ug/L	ND	1.0	08/26/12 02:05	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	08/26/12 02:05	
1,1,2-Trichloroethane	ug/L	ND	1.0	08/26/12 02:05	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	08/26/12 02:05	
1,1-Dichloroethane	ug/L	ND	1.0	08/26/12 02:05	
1,1-Dichloroethene	ug/L	ND	1.0	08/26/12 02:05	
1,1-Dichloropropene	ug/L	ND	1.0	08/26/12 02:05	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	08/26/12 02:05	
1,2,3-Trichloropropane	ug/L	ND	4.0	08/26/12 02:05	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	08/26/12 02:05	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	08/26/12 02:05	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	08/26/12 02:05	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	08/26/12 02:05	
1,2-Dichlorobenzene	ug/L	ND	1.0	08/26/12 02:05	
1,2-Dichloroethane	ug/L	ND	1.0	08/26/12 02:05	
1,2-Dichloropropane	ug/L	ND	4.0	08/26/12 02:05	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	08/26/12 02:05	
1,3-Dichlorobenzene	ug/L	ND	1.0	08/26/12 02:05	
1,3-Dichloropropane	ug/L	ND	1.0	08/26/12 02:05	
1,4-Dichlorobenzene	ug/L	ND	1.0	08/26/12 02:05	
2,2-Dichloropropane	ug/L	ND	4.0	08/26/12 02:05	
2-Butanone (MEK)	ug/L	ND	4.0	08/26/12 02:05	
2-Chlorotoluene	ug/L	ND	1.0	08/26/12 02:05	
4-Chlorotoluene	ug/L	ND	1.0	08/26/12 02:05	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	4.0	08/26/12 02:05	
Acetone	ug/L	ND	25.0	08/26/12 02:05	
Allyl chloride	ug/L	ND	4.0	08/26/12 02:05	
Benzene	ug/L	ND	1.0	08/26/12 02:05	
Bromobenzene	ug/L	ND	1.0	08/26/12 02:05	
Bromochloromethane	ug/L	ND	1.0	08/26/12 02:05	
Bromodichloromethane	ug/L	ND	1.0	08/26/12 02:05	
Bromoform	ug/L	ND	4.0	08/26/12 02:05	
Bromomethane	ug/L	ND	4.0	08/26/12 02:05	
Carbon tetrachloride	ug/L	ND	1.0	08/26/12 02:05	
Chlorobenzene	ug/L	ND	1.0	08/26/12 02:05	
Chloroethane	ug/L	ND	1.0	08/26/12 02:05	
Chloroform	ug/L	ND	1.0	08/26/12 02:05	
Chloromethane	ug/L	ND	4.0	08/26/12 02:05	
cis-1,2-Dichloroethene	ug/L	ND	1.0	08/26/12 02:05	
cis-1,3-Dichloropropene	ug/L	ND	4.0	08/26/12 02:05	

QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

METHOD BLANK: 1274527

Matrix: Water

Associated Lab Samples: 10203311001, 10203311002, 10203311003, 10203311004, 10203311005, 10203311006, 10203311007, 10203311008, 10203311009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/L	ND	1.0	08/26/12 02:05	
Dibromomethane	ug/L	ND	4.0	08/26/12 02:05	
Dichlorodifluoromethane	ug/L	ND	1.0	08/26/12 02:05	
Dichlorofluoromethane	ug/L	ND	1.0	08/26/12 02:05	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	08/26/12 02:05	
Ethylbenzene	ug/L	ND	1.0	08/26/12 02:05	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	08/26/12 02:05	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	08/26/12 02:05	
m&p-Xylene	ug/L	ND	2.0	08/26/12 02:05	
Methyl-tert-butyl ether	ug/L	ND	1.0	08/26/12 02:05	
Methylene Chloride	ug/L	ND	4.0	08/26/12 02:05	
n-Butylbenzene	ug/L	ND	1.0	08/26/12 02:05	
n-Propylbenzene	ug/L	ND	1.0	08/26/12 02:05	
Naphthalene	ug/L	ND	4.0	08/26/12 02:05	
o-Xylene	ug/L	ND	1.0	08/26/12 02:05	
p-Isopropyltoluene	ug/L	ND	1.0	08/26/12 02:05	
sec-Butylbenzene	ug/L	ND	1.0	08/26/12 02:05	
Styrene	ug/L	ND	1.0	08/26/12 02:05	
tert-Butylbenzene	ug/L	ND	1.0	08/26/12 02:05	
Tetrachloroethene	ug/L	ND	1.0	08/26/12 02:05	
Tetrahydrofuran	ug/L	ND	10.0	08/26/12 02:05	
Toluene	ug/L	ND	1.0	08/26/12 02:05	
trans-1,2-Dichloroethene	ug/L	ND	1.0	08/26/12 02:05	
trans-1,3-Dichloropropene	ug/L	ND	4.0	08/26/12 02:05	
Trichloroethene	ug/L	ND	1.0	08/26/12 02:05	
Trichlorofluoromethane	ug/L	ND	1.0	08/26/12 02:05	
Vinyl chloride	ug/L	ND	0.40	08/26/12 02:05	
Xylene (Total)	ug/L	ND	3.0	08/26/12 02:05	
1,2-Dichloroethane-d4 (S)	%	98	75-125	08/26/12 02:05	
4-Bromofluorobenzene (S)	%	99	75-125	08/26/12 02:05	
Dibromofluoromethane (S)	%	99	75-125	08/26/12 02:05	
Toluene-d8 (S)	%	99	75-125	08/26/12 02:05	

LABORATORY CONTROL SAMPLE: 1274528

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	53.1	106	75-125	
1,1,1-Trichloroethane	ug/L	50	47.2	94	73-128	
1,1,2,2-Tetrachloroethane	ug/L	50	49.8	100	75-125	
1,1,2-Trichloroethane	ug/L	50	51.9	104	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	50	49.5	99	63-125	
1,1-Dichloroethane	ug/L	50	46.6	93	72-126	
1,1-Dichloroethene	ug/L	50	50.5	101	73-129	
1,1-Dichloropropene	ug/L	50	45.8	92	72-128	

QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

LABORATORY CONTROL SAMPLE: 1274528

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,3-Trichlorobenzene	ug/L	50	50.1	100	73-125	
1,2,3-Trichloropropane	ug/L	50	51.6	103	75-125	
1,2,4-Trichlorobenzene	ug/L	50	50.5	101	74-125	
1,2,4-Trimethylbenzene	ug/L	50	49.4	99	75-126	
1,2-Dibromo-3-chloropropane	ug/L	50	51.4	103	75-125	
1,2-Dibromoethane (EDB)	ug/L	50	51.0	102	75-125	
1,2-Dichlorobenzene	ug/L	50	50.2	100	75-125	
1,2-Dichloroethane	ug/L	50	49.3	99	75-132	
1,2-Dichloropropane	ug/L	50	48.5	97	75-125	
1,3,5-Trimethylbenzene	ug/L	50	48.5	97	75-126	
1,3-Dichlorobenzene	ug/L	50	49.6	99	75-125	
1,3-Dichloropropane	ug/L	50	50.6	101	75-125	
1,4-Dichlorobenzene	ug/L	50	49.1	98	75-125	
2,2-Dichloropropane	ug/L	50	43.6	87	72-133	
2-Butanone (MEK)	ug/L	50	46.2	92	52-138	
2-Chlorotoluene	ug/L	50	47.5	95	74-125	
4-Chlorotoluene	ug/L	50	48.4	97	75-125	
4-Methyl-2-pentanone (MIBK)	ug/L	50	49.4	99	75-125	
Acetone	ug/L	125	120	96	30-150	
Allyl chloride	ug/L	50	52.3	105	75-132	
Benzene	ug/L	50	45.7	91	75-132	
Bromobenzene	ug/L	50	49.9	100	75-125	
Bromochloromethane	ug/L	50	50.5	101	75-126	
Bromodichloromethane	ug/L	50	49.5	99	75-125	
Bromoform	ug/L	50	46.2	92	75-125	
Bromomethane	ug/L	50	31.8	64	52-150	
Carbon tetrachloride	ug/L	50	47.3	95	73-132	
Chlorobenzene	ug/L	50	49.2	98	75-125	
Chloroethane	ug/L	50	44.8	90	75-143	
Chloroform	ug/L	50	48.5	97	75-128	
Chloromethane	ug/L	50	40.2	80	56-136	
cis-1,2-Dichloroethene	ug/L	50	48.8	98	75-125	
cis-1,3-Dichloropropene	ug/L	50	49.6	99	75-125	
Dibromochloromethane	ug/L	50	53.0	106	75-125	
Dibromomethane	ug/L	50	49.7	99	75-125	
Dichlorodifluoromethane	ug/L	50	42.4	85	50-137	
Dichlorofluoromethane	ug/L	50	45.7	91	68-133	
Diethyl ether (Ethyl ether)	ug/L	50	52.3	105	75-125	
Ethylbenzene	ug/L	50	47.4	95	75-125	
Hexachloro-1,3-butadiene	ug/L	25	23.9	96	57-132	
Isopropylbenzene (Cumene)	ug/L	50	48.4	97	75-125	
m&p-Xylene	ug/L	100	98.3	98	75-125	
Methyl-tert-butyl ether	ug/L	50	48.7	97	74-130	
Methylene Chloride	ug/L	50	46.6	93	62-127	
n-Butylbenzene	ug/L	50	49.6	99	68-128	
n-Propylbenzene	ug/L	50	48.1	96	74-125	
Naphthalene	ug/L	50	50.8	102	75-125	
o-Xylene	ug/L	50	50.5	101	75-125	

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 39 of 54

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QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

LABORATORY CONTROL SAMPLE: 1274528

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
p-Isopropyltoluene	ug/L	50	49.1	98	75-125	
sec-Butylbenzene	ug/L	50	48.6	97	71-125	
Styrene	ug/L	50	50.3	101	75-125	
tert-Butylbenzene	ug/L	50	47.8	96	73-125	
Tetrachloroethene	ug/L	50	48.1	96	75-125	
Tetrahydrofuran	ug/L	500	462	92	75-128	
Toluene	ug/L	50	48.4	97	75-125	
trans-1,2-Dichloroethene	ug/L	50	46.6	93	75-125	
trans-1,3-Dichloropropene	ug/L	50	52.8	106	75-125	
Trichloroethene	ug/L	50	48.0	96	75-125	
Trichlorofluoromethane	ug/L	50	44.7	89	64-139	
Vinyl chloride	ug/L	50	42.7	85	75-150	
Xylene (Total)	ug/L	150	149	99	75-125	
1,2-Dichloroethane-d4 (S)	%			96	75-125	
4-Bromofluorobenzene (S)	%			100	75-125	
Dibromofluoromethane (S)	%			99	75-125	
Toluene-d8 (S)	%			101	75-125	

MATRIX SPIKE SAMPLE: 1274860

Parameter	Units	10203091003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.36	50	54.0	108	75-125	
1,1,1-Trichloroethane	ug/L	<0.19	50	54.7	109	75-145	
1,1,2,2-Tetrachloroethane	ug/L	<0.097	50	48.6	97	75-125	
1,1,2-Trichloroethane	ug/L	<0.15	50	49.7	99	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	<0.18	50	65.5	131	75-150	
1,1-Dichloroethane	ug/L	<0.11	50	51.1	102	75-139	
1,1-Dichloroethene	ug/L	<0.19	50	59.1	118	75-148	
1,1-Dichloropropene	ug/L	<0.35	50	53.4	107	75-148	
1,2,3-Trichlorobenzene	ug/L	<0.13	50	49.3	99	75-127	
1,2,3-Trichloropropane	ug/L	<0.33	50	50.2	100	75-125	
1,2,4-Trichlorobenzene	ug/L	<0.25	50	50.4	101	75-126	
1,2,4-Trimethylbenzene	ug/L	<0.071	50	51.6	103	75-135	
1,2-Dibromo-3-chloropropane	ug/L	<0.62	50	48.8	98	75-125	
1,2-Dibromoethane (EDB)	ug/L	<0.091	50	49.2	98	75-125	
1,2-Dichlorobenzene	ug/L	<0.36	50	50.3	101	75-125	
1,2-Dichloroethane	ug/L	<0.37	50	48.6	97	75-139	
1,2-Dichloropropane	ug/L	<0.27	50	49.1	98	75-131	
1,3,5-Trimethylbenzene	ug/L	<0.087	50	51.4	103	75-134	
1,3-Dichlorobenzene	ug/L	<0.11	50	51.0	102	75-125	
1,3-Dichloropropane	ug/L	<0.081	50	48.7	97	75-127	
1,4-Dichlorobenzene	ug/L	<0.064	50	50.0	100	75-125	
2,2-Dichloropropane	ug/L	<0.15	50	52.9	106	75-150	
2-Butanone (MEK)	ug/L	<2.0	50	45.3	91	50-138	
2-Chlorotoluene	ug/L	<0.50	50	50.7	101	75-134	
4-Chlorotoluene	ug/L	<0.068	50	50.7	101	75-130	
4-Methyl-2-pentanone (MIBK)	ug/L	<2.0	50	48.6	97	75-125	

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 40 of 54

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QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

MATRIX SPIKE SAMPLE: 1274860		10203091003	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Acetone	ug/L	<12.5	125	115	92	30-142	
Allyl chloride	ug/L	<1.8	50	58.1	116	75-146	
Benzene	ug/L	<0.062	50	49.8	100	75-146	
Bromobenzene	ug/L	<0.086	50	50.8	102	75-125	
Bromochloromethane	ug/L	<0.32	50	50.9	102	75-129	
Bromodichloromethane	ug/L	<0.11	50	50.5	101	75-130	
Bromoform	ug/L	<0.068	50	45.2	90	75-125	
Bromomethane	ug/L	<0.36	50	42.4	85	52-150	
Carbon tetrachloride	ug/L	<0.16	50	57.7	115	75-150	
Chlorobenzene	ug/L	<0.10	50	50.7	101	75-127	
Chloroethane	ug/L	<0.22	50	52.2	104	75-146	
Chloroform	ug/L	<0.14	50	51.9	104	75-137	
Chloromethane	ug/L	<0.41	50	51.7	103	64-150	
cis-1,2-Dichloroethene	ug/L	<0.085	50	51.9	104	75-139	
cis-1,3-Dichloropropene	ug/L	<0.090	50	50.3	101	75-129	
Dibromochloromethane	ug/L	<0.10	50	51.9	104	75-125	
Dibromomethane	ug/L	<0.21	50	50.2	100	75-126	
Dichlorodifluoromethane	ug/L	<0.20	50	60.6	121	75-150	
Dichlorofluoromethane	ug/L	<0.11	50	51.2	102	75-143	
Diethyl ether (Ethyl ether)	ug/L	<2.0	50	51.7	103	71-133	
Ethylbenzene	ug/L	<0.081	50	50.9	102	75-132	
Hexachloro-1,3-butadiene	ug/L	<0.19	25	27.1	108	62-147	
Isopropylbenzene (Cumene)	ug/L	<0.076	50	52.3	105	75-135	
m&p-Xylene	ug/L	<0.11	100	103	103	75-131	
Methyl-tert-butyl ether	ug/L	<0.088	50	48.7	97	71-137	
Methylene Chloride	ug/L	<2.0	50	48.8	98	57-134	
n-Butylbenzene	ug/L	<0.15	50	53.4	107	74-139	
n-Propylbenzene	ug/L	<0.078	50	52.3	105	75-137	
Naphthalene	ug/L	<0.068	50	49.6	99	75-129	
o-Xylene	ug/L	<0.10	50	51.5	103	75-128	
p-Isopropyltoluene	ug/L	<0.086	50	52.8	106	75-135	
sec-Butylbenzene	ug/L	<0.10	50	53.2	106	75-137	
Styrene	ug/L	<0.060	50	51.3	103	75-126	
tert-Butylbenzene	ug/L	<0.10	50	52.0	104	75-133	
Tetrachloroethene	ug/L	12.8	50	65.1	105	75-138	
Tetrahydrofuran	ug/L	<0.97	500	459	92	74-128	
Toluene	ug/L	<0.077	50	51.4	103	75-131	
trans-1,2-Dichloroethene	ug/L	<0.15	50	53.7	107	75-140	
trans-1,3-Dichloropropene	ug/L	<0.37	50	51.6	103	75-129	
Trichloroethene	ug/L	0.42J	50	53.1	105	75-132	
Trichlorofluoromethane	ug/L	<0.13	50	59.6	119	75-150	
Vinyl chloride	ug/L	<0.16	50	56.3	113	75-150	
Xylene (Total)	ug/L	<0.22	150	155	103	75-129	
1,2-Dichloroethane-d4 (S)	%				94	75-125	
4-Bromofluorobenzene (S)	%				99	75-125	
Dibromofluoromethane (S)	%				99	75-125	
Toluene-d8 (S)	%				100	75-125	

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 41 of 54

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QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

SAMPLE DUPLICATE: 1274861

Parameter	Units	10203091004 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.36	ND		30	
1,1,1-Trichloroethane	ug/L	<0.19	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	<0.097	ND		30	
1,1,2-Trichloroethane	ug/L	<0.15	ND		30	
1,1,2-Trichlorotrifluoroethane	ug/L	<0.18	ND		30	
1,1-Dichloroethane	ug/L	<0.11	ND		30	
1,1-Dichloroethene	ug/L	<0.19	ND		30	
1,1-Dichloropropene	ug/L	<0.35	ND		30	
1,2,3-Trichlorobenzene	ug/L	<0.13	ND		30	
1,2,3-Trichloropropane	ug/L	<0.33	ND		30	
1,2,4-Trichlorobenzene	ug/L	<0.25	ND		30	
1,2,4-Trimethylbenzene	ug/L	0.12J	.13J		30	
1,2-Dibromo-3-chloropropane	ug/L	<0.62	ND		30	
1,2-Dibromoethane (EDB)	ug/L	<0.091	ND		30	
1,2-Dichlorobenzene	ug/L	<0.36	ND		30	
1,2-Dichloroethane	ug/L	<0.37	ND		30	
1,2-Dichloropropane	ug/L	<0.27	ND		30	
1,3,5-Trimethylbenzene	ug/L	<0.087	ND		30	
1,3-Dichlorobenzene	ug/L	<0.11	ND		30	
1,3-Dichloropropane	ug/L	<0.081	ND		30	
1,4-Dichlorobenzene	ug/L	<0.064	ND		30	
2,2-Dichloropropane	ug/L	<0.15	ND		30	
2-Butanone (MEK)	ug/L	<2.0	ND		30	
2-Chlorotoluene	ug/L	<0.50	ND		30	
4-Chlorotoluene	ug/L	<0.068	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	<2.0	ND		30	
Acetone	ug/L	<12.5	ND		30	
Allyl chloride	ug/L	<1.8	ND		30	
Benzene	ug/L	0.33J	.29J		30	
Bromobenzene	ug/L	<0.086	ND		30	
Bromochloromethane	ug/L	<0.32	ND		30	
Bromodichloromethane	ug/L	<0.11	ND		30	
Bromoform	ug/L	<0.068	ND		30	
Bromomethane	ug/L	<0.36	ND		30	
Carbon tetrachloride	ug/L	<0.16	ND		30	
Chlorobenzene	ug/L	<0.10	ND		30	
Chloroethane	ug/L	<0.22	ND		30	
Chloroform	ug/L	<0.14	ND		30	
Chloromethane	ug/L	<0.41	ND		30	
cis-1,2-Dichloroethene	ug/L	<0.085	ND		30	
cis-1,3-Dichloropropene	ug/L	<0.090	ND		30	
Dibromochloromethane	ug/L	<0.10	ND		30	
Dibromomethane	ug/L	<0.21	ND		30	
Dichlorodifluoromethane	ug/L	<0.20	ND		30	
Dichlorofluoromethane	ug/L	<0.11	ND		30	
Diethyl ether (Ethyl ether)	ug/L	<2.0	ND		30	
Ethylbenzene	ug/L	<0.081	ND		30	
Hexachloro-1,3-butadiene	ug/L	<0.19	ND		30	

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 42 of 54

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QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

SAMPLE DUPLICATE: 1274861

Parameter	Units	10203091004 Result	Dup Result	RPD	Max RPD	Qualifiers
Isopropylbenzene (Cumene)	ug/L	<0.076	ND		30	
m&p-Xylene	ug/L	0.19J	.14J		30	
Methyl-tert-butyl ether	ug/L	<0.088	ND		30	
Methylene Chloride	ug/L	<2.0	ND		30	
n-Butylbenzene	ug/L	<0.15	ND		30	
n-Propylbenzene	ug/L	<0.078	ND		30	
Naphthalene	ug/L	57.6	46.6	21	30	
o-Xylene	ug/L	<0.10	ND		30	
p-Isopropyltoluene	ug/L	<0.086	ND		30	
sec-Butylbenzene	ug/L	<0.10	ND		30	
Styrene	ug/L	<0.060	ND		30	
tert-Butylbenzene	ug/L	<0.10	ND		30	
Tetrachloroethene	ug/L	<0.13	ND		30	
Tetrahydrofuran	ug/L	<0.97	ND		30	
Toluene	ug/L	0.26J	.22J		30	
trans-1,2-Dichloroethene	ug/L	<0.15	ND		30	
trans-1,3-Dichloropropene	ug/L	<0.37	ND		30	
Trichloroethene	ug/L	<0.083	ND		30	
Trichlorofluoromethane	ug/L	<0.13	ND		30	
Vinyl chloride	ug/L	<0.16	ND		30	
Xylene (Total)	ug/L	0.28J	ND		30	
1,2-Dichloroethane-d4 (S)	%	99	97	2		
4-Bromofluorobenzene (S)	%	98	98	.5		
Dibromofluoromethane (S)	%	100	99	2		
Toluene-d8 (S)	%	99	100	.2		

QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

QC Batch: MSV/21233 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 465 W
Associated Lab Samples: 10203311010, 10203311011

METHOD BLANK: 1275625 Matrix: Water

Associated Lab Samples: 10203311010, 10203311011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	08/27/12 18:24	
1,1,1-Trichloroethane	ug/L	ND	1.0	08/27/12 18:24	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	08/27/12 18:24	
1,1,2-Trichloroethane	ug/L	ND	1.0	08/27/12 18:24	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	08/27/12 18:24	
1,1-Dichloroethane	ug/L	ND	1.0	08/27/12 18:24	
1,1-Dichloroethene	ug/L	ND	1.0	08/27/12 18:24	
1,1-Dichloropropene	ug/L	ND	1.0	08/27/12 18:24	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	08/27/12 18:24	
1,2,3-Trichloropropane	ug/L	ND	4.0	08/27/12 18:24	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	08/27/12 18:24	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	08/27/12 18:24	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	08/27/12 18:24	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	08/27/12 18:24	
1,2-Dichlorobenzene	ug/L	ND	1.0	08/27/12 18:24	
1,2-Dichloroethane	ug/L	ND	1.0	08/27/12 18:24	
1,2-Dichloropropane	ug/L	ND	4.0	08/27/12 18:24	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	08/27/12 18:24	
1,3-Dichlorobenzene	ug/L	ND	1.0	08/27/12 18:24	
1,3-Dichloropropane	ug/L	ND	1.0	08/27/12 18:24	
1,4-Dichlorobenzene	ug/L	ND	1.0	08/27/12 18:24	
2,2-Dichloropropane	ug/L	ND	4.0	08/27/12 18:24	
2-Butanone (MEK)	ug/L	ND	4.0	08/27/12 18:24	
2-Chlorotoluene	ug/L	ND	1.0	08/27/12 18:24	
4-Chlorotoluene	ug/L	ND	1.0	08/27/12 18:24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	4.0	08/27/12 18:24	
Acetone	ug/L	ND	25.0	08/27/12 18:24	
Allyl chloride	ug/L	ND	4.0	08/27/12 18:24	
Benzene	ug/L	ND	1.0	08/27/12 18:24	
Bromobenzene	ug/L	ND	1.0	08/27/12 18:24	
Bromochloromethane	ug/L	ND	1.0	08/27/12 18:24	
Bromodichloromethane	ug/L	ND	1.0	08/27/12 18:24	
Bromoform	ug/L	ND	4.0	08/27/12 18:24	
Bromomethane	ug/L	ND	4.0	08/27/12 18:24	
Carbon tetrachloride	ug/L	ND	1.0	08/27/12 18:24	
Chlorobenzene	ug/L	ND	1.0	08/27/12 18:24	
Chloroethane	ug/L	ND	1.0	08/27/12 18:24	
Chloroform	ug/L	ND	1.0	08/27/12 18:24	
Chloromethane	ug/L	ND	4.0	08/27/12 18:24	
cis-1,2-Dichloroethene	ug/L	ND	1.0	08/27/12 18:24	
cis-1,3-Dichloropropene	ug/L	ND	4.0	08/27/12 18:24	
Dibromochloromethane	ug/L	ND	1.0	08/27/12 18:24	
Dibromomethane	ug/L	ND	4.0	08/27/12 18:24	

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 44 of 54

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QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

METHOD BLANK: 1275625 Matrix: Water

Associated Lab Samples: 10203311010, 10203311011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	08/27/12 18:24	
Dichlorofluoromethane	ug/L	ND	1.0	08/27/12 18:24	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	08/27/12 18:24	
Ethylbenzene	ug/L	ND	1.0	08/27/12 18:24	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	08/27/12 18:24	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	08/27/12 18:24	
m&p-Xylene	ug/L	ND	2.0	08/27/12 18:24	
Methyl-tert-butyl ether	ug/L	ND	1.0	08/27/12 18:24	
Methylene Chloride	ug/L	ND	4.0	08/27/12 18:24	
n-Butylbenzene	ug/L	ND	1.0	08/27/12 18:24	
n-Propylbenzene	ug/L	ND	1.0	08/27/12 18:24	
Naphthalene	ug/L	ND	4.0	08/27/12 18:24	
o-Xylene	ug/L	ND	1.0	08/27/12 18:24	
p-Isopropyltoluene	ug/L	ND	1.0	08/27/12 18:24	
sec-Butylbenzene	ug/L	ND	1.0	08/27/12 18:24	
Styrene	ug/L	ND	1.0	08/27/12 18:24	
tert-Butylbenzene	ug/L	ND	1.0	08/27/12 18:24	
Tetrachloroethene	ug/L	ND	1.0	08/27/12 18:24	
Tetrahydrofuran	ug/L	ND	10.0	08/27/12 18:24	
Toluene	ug/L	ND	1.0	08/27/12 18:24	
trans-1,2-Dichloroethene	ug/L	ND	1.0	08/27/12 18:24	
trans-1,3-Dichloropropene	ug/L	ND	4.0	08/27/12 18:24	
Trichloroethene	ug/L	ND	1.0	08/27/12 18:24	
Trichlorofluoromethane	ug/L	ND	1.0	08/27/12 18:24	
Vinyl chloride	ug/L	ND	0.40	08/27/12 18:24	
Xylene (Total)	ug/L	ND	3.0	08/27/12 18:24	
1,2-Dichloroethane-d4 (S)	%	104	75-125	08/27/12 18:24	
4-Bromofluorobenzene (S)	%	102	75-125	08/27/12 18:24	
Dibromofluoromethane (S)	%	104	75-125	08/27/12 18:24	
Toluene-d8 (S)	%	99	75-125	08/27/12 18:24	

LABORATORY CONTROL SAMPLE: 1275626

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	44.6	89	75-125	
1,1,1-Trichloroethane	ug/L	50	43.1	86	73-128	
1,1,2,2-Tetrachloroethane	ug/L	50	45.9	92	75-125	
1,1,2-Trichloroethane	ug/L	50	45.9	92	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	50	36.0	72	63-125	
1,1-Dichloroethane	ug/L	50	45.1	90	72-126	
1,1-Dichloroethene	ug/L	50	44.7	89	73-129	
1,1-Dichloropropene	ug/L	50	44.7	89	72-128	
1,2,3-Trichlorobenzene	ug/L	50	43.7	87	73-125	
1,2,3-Trichloropropane	ug/L	50	46.5	93	75-125	
1,2,4-Trichlorobenzene	ug/L	50	44.9	90	74-125	

QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

LABORATORY CONTROL SAMPLE: 1275626

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	50	43.6	87	75-126	
1,2-Dibromo-3-chloropropane	ug/L	50	44.7	89	75-125	
1,2-Dibromoethane (EDB)	ug/L	50	46.2	92	75-125	
1,2-Dichlorobenzene	ug/L	50	42.8	86	75-125	
1,2-Dichloroethane	ug/L	50	46.5	93	75-132	
1,2-Dichloropropane	ug/L	50	44.1	88	75-125	
1,3,5-Trimethylbenzene	ug/L	50	42.5	85	75-126	
1,3-Dichlorobenzene	ug/L	50	42.7	85	75-125	
1,3-Dichloropropane	ug/L	50	45.0	90	75-125	
1,4-Dichlorobenzene	ug/L	50	42.7	85	75-125	
2,2-Dichloropropane	ug/L	50	45.9	92	72-133	
2-Butanone (MEK)	ug/L	50	45.9	92	52-138	
2-Chlorotoluene	ug/L	50	42.5	85	74-125	
4-Chlorotoluene	ug/L	50	42.7	85	75-125	
4-Methyl-2-pentanone (MIBK)	ug/L	50	45.5	91	75-125	
Acetone	ug/L	125	109	87	30-150	
Allyl chloride	ug/L	50	48.5	97	75-132	
Benzene	ug/L	50	44.2	88	75-132	
Bromobenzene	ug/L	50	44.2	88	75-125	
Bromochloromethane	ug/L	50	47.6	95	75-126	
Bromodichloromethane	ug/L	50	43.9	88	75-125	
Bromoform	ug/L	50	46.7	93	75-125	
Bromomethane	ug/L	50	37.2	74	52-150	
Carbon tetrachloride	ug/L	50	43.4	87	73-132	
Chlorobenzene	ug/L	50	42.8	86	75-125	
Chloroethane	ug/L	50	45.9	92	75-143	
Chloroform	ug/L	50	45.1	90	75-128	
Chloromethane	ug/L	50	42.2	84	56-136	
cis-1,2-Dichloroethene	ug/L	50	46.0	92	75-125	
cis-1,3-Dichloropropene	ug/L	50	45.1	90	75-125	
Dibromochloromethane	ug/L	50	47.0	94	75-125	
Dibromomethane	ug/L	50	46.3	93	75-125	
Dichlorodifluoromethane	ug/L	50	31.6	63	50-137	
Dichlorofluoromethane	ug/L	50	45.3	91	68-133	
Diethyl ether (Ethyl ether)	ug/L	50	49.3	99	75-125	
Ethylbenzene	ug/L	50	42.2	84	75-125	
Hexachloro-1,3-butadiene	ug/L	25	23.0	92	57-132	
Isopropylbenzene (Cumene)	ug/L	50	42.0	84	75-125	
m&p-Xylene	ug/L	100	85.0	85	75-125	
Methyl-tert-butyl ether	ug/L	50	47.7	95	74-130	
Methylene Chloride	ug/L	50	45.0	90	62-127	
n-Butylbenzene	ug/L	50	43.8	88	68-128	
n-Propylbenzene	ug/L	50	41.8	84	74-125	
Naphthalene	ug/L	50	47.4	95	75-125	
o-Xylene	ug/L	50	43.0	86	75-125	
p-Isopropyltoluene	ug/L	50	43.5	87	75-125	
sec-Butylbenzene	ug/L	50	43.0	86	71-125	
Styrene	ug/L	50	44.8	90	75-125	

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 46 of 54

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QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

LABORATORY CONTROL SAMPLE: 1275626

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/L	50	42.6	85	73-125	
Tetrachloroethene	ug/L	50	42.6	85	75-125	
Tetrahydrofuran	ug/L	500	465	93	75-128	
Toluene	ug/L	50	42.9	86	75-125	
trans-1,2-Dichloroethene	ug/L	50	46.2	92	75-125	
trans-1,3-Dichloropropene	ug/L	50	47.5	95	75-125	
Trichloroethene	ug/L	50	43.6	87	75-125	
Trichlorofluoromethane	ug/L	50	40.0	80	64-139	
Vinyl chloride	ug/L	50	41.3	83	75-150	
Xylene (Total)	ug/L	150	128	85	75-125	
1,2-Dichloroethane-d4 (S)	%			100	75-125	
4-Bromofluorobenzene (S)	%			101	75-125	
Dibromofluoromethane (S)	%			105	75-125	
Toluene-d8 (S)	%			101	75-125	

MATRIX SPIKE SAMPLE: 1275662

Parameter	Units	10203352001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	50	46.5	93	75-125	
1,1,1-Trichloroethane	ug/L	ND	50	49.2	98	75-145	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	45.7	91	75-125	
1,1,2-Trichloroethane	ug/L	ND	50	45.4	91	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	50	58.4	117	75-150	
1,1-Dichloroethane	ug/L	ND	50	48.7	97	75-139	
1,1-Dichloroethene	ug/L	ND	50	51.3	103	75-148	
1,1-Dichloropropene	ug/L	ND	50	50.6	101	75-148	
1,2,3-Trichlorobenzene	ug/L	ND	50	45.8	92	75-127	
1,2,3-Trichloropropane	ug/L	ND	50	45.8	92	75-125	
1,2,4-Trichlorobenzene	ug/L	ND	50	46.8	94	75-126	
1,2,4-Trimethylbenzene	ug/L	ND	50	48.8	98	75-135	
1,2-Dibromo-3-chloropropane	ug/L	ND	50	42.9	86	75-125	
1,2-Dibromoethane (EDB)	ug/L	ND	50	45.3	91	75-125	
1,2-Dichlorobenzene	ug/L	ND	50	45.4	91	75-125	
1,2-Dichloroethane	ug/L	ND	50	46.9	94	75-139	
1,2-Dichloropropane	ug/L	ND	50	46.9	94	75-131	
1,3,5-Trimethylbenzene	ug/L	ND	50	47.9	96	75-134	
1,3-Dichlorobenzene	ug/L	ND	50	46.3	93	75-125	
1,3-Dichloropropane	ug/L	ND	50	44.9	90	75-127	
1,4-Dichlorobenzene	ug/L	ND	50	45.7	91	75-125	
2,2-Dichloropropane	ug/L	ND	50	52.3	105	75-150	
2-Butanone (MEK)	ug/L	ND	50	42.9	86	50-138	
2-Chlorotoluene	ug/L	ND	50	47.1	94	75-134	
4-Chlorotoluene	ug/L	ND	50	46.7	93	75-130	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	44.3	89	75-125	
Acetone	ug/L	ND	125	115	92	30-142	
Allyl chloride	ug/L	ND	50	53.3	107	75-146	
Benzene	ug/L	0.10J	50	48.0	96	75-146	

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 47 of 54

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QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

MATRIX SPIKE SAMPLE: 1275662		10203352001	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Bromobenzene	ug/L	ND	50	46.6	93	75-125	
Bromochloromethane	ug/L	ND	50	48.4	97	75-129	
Bromodichloromethane	ug/L	ND	50	45.2	90	75-130	
Bromoform	ug/L	ND	50	45.1	90	75-125	
Bromomethane	ug/L	ND	50	45.9	92	52-150	
Carbon tetrachloride	ug/L	ND	50	49.9	100	75-150	
Chlorobenzene	ug/L	ND	50	45.4	91	75-127	
Chloroethane	ug/L	ND	50	49.7	99	75-146	
Chloroform	ug/L	ND	50	49.0	98	75-137	
Chloromethane	ug/L	ND	50	44.7	89	64-150	
cis-1,2-Dichloroethene	ug/L	ND	50	49.0	98	75-139	
cis-1,3-Dichloropropene	ug/L	ND	50	46.1	92	75-129	
Dibromochloromethane	ug/L	ND	50	46.7	93	75-125	
Dibromomethane	ug/L	ND	50	46.3	93	75-126	
Dichlorodifluoromethane	ug/L	ND	50	48.8	98	75-150	
Dichlorofluoromethane	ug/L	ND	50	49.9	100	75-143	
Diethyl ether (Ethyl ether)	ug/L	ND	50	48.8	98	71-133	
Ethylbenzene	ug/L	ND	50	46.3	93	75-132	
Hexachloro-1,3-butadiene	ug/L	ND	25	24.9	100	62-147	
Isopropylbenzene (Cumene)	ug/L	ND	50	47.6	95	75-135	
m&p-Xylene	ug/L	ND	100	94.1	94	75-131	
Methyl-tert-butyl ether	ug/L	ND	50	47.5	95	71-137	
Methylene Chloride	ug/L	ND	50	47.0	94	57-134	
n-Butylbenzene	ug/L	ND	50	51.3	103	74-139	
n-Propylbenzene	ug/L	ND	50	48.2	96	75-137	
Naphthalene	ug/L	ND	50	47.6	95	75-129	
o-Xylene	ug/L	ND	50	47.0	94	75-128	
p-Isopropyltoluene	ug/L	ND	50	50.8	102	75-135	
sec-Butylbenzene	ug/L	ND	50	50.4	101	75-137	
Styrene	ug/L	ND	50	46.9	94	75-126	
tert-Butylbenzene	ug/L	ND	50	49.1	98	75-133	
Tetrachloroethene	ug/L	ND	50	48.5	97	75-138	
Tetrahydrofuran	ug/L	ND	500	443	89	74-128	
Toluene	ug/L	ND	50	46.3	93	75-131	
trans-1,2-Dichloroethene	ug/L	ND	50	50.4	101	75-140	
trans-1,3-Dichloropropene	ug/L	ND	50	48.0	96	75-129	
Trichloroethene	ug/L	ND	50	48.3	97	75-132	
Trichlorofluoromethane	ug/L	ND	50	52.3	105	75-150	
Vinyl chloride	ug/L	ND	50	47.3	95	75-150	
Xylene (Total)	ug/L	ND	150	141	94	75-129	
1,2-Dichloroethane-d4 (S)	%				100	75-125	
4-Bromofluorobenzene (S)	%				100	75-125	
Dibromofluoromethane (S)	%				103	75-125	
Toluene-d8 (S)	%				99	75-125	

QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

SAMPLE DUPLICATE: 1275663

Parameter	Units	10203352002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,1-Dichloropropene	ug/L	ND	ND		30	
1,2,3-Trichlorobenzene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2,4-Trichlorobenzene	ug/L	ND	ND		30	
1,2,4-Trimethylbenzene	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3,5-Trimethylbenzene	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,3-Dichloropropane	ug/L	ND	ND		30	
1,4-Dichlorobenzene	ug/L	ND	ND		30	
2,2-Dichloropropane	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	ND	ND		30	
2-Chlorotoluene	ug/L	ND	ND		30	
4-Chlorotoluene	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		30	
Acetone	ug/L	ND	ND		30	
Allyl chloride	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Bromobenzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Dichlorofluoromethane	ug/L	ND	ND		30	
Diethyl ether (Ethyl ether)	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Hexachloro-1,3-butadiene	ug/L	ND	ND		30	

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 49 of 54

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QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

SAMPLE DUPLICATE: 1275663

Parameter	Units	10203352002 Result	Dup Result	RPD	Max RPD	Qualifiers
Isopropylbenzene (Cumene)	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
n-Butylbenzene	ug/L	ND	ND		30	
n-Propylbenzene	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
p-Isopropyltoluene	ug/L	ND	ND		30	
sec-Butylbenzene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
tert-Butylbenzene	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Tetrahydrofuran	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	105	106	1		
4-Bromofluorobenzene (S)	%	102	103	.3		
Dibromofluoromethane (S)	%	106	108	2		
Toluene-d8 (S)	%	99	99	.1		

QUALITY CONTROL DATA

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

QC Batch: OEXT/19526 Analysis Method: EPA 8270 by SIM
 QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by SIM MSSV
 Associated Lab Samples: 10203311001, 10203311005, 10203311006

METHOD BLANK: 1275882 Matrix: Water

Associated Lab Samples: 10203311001, 10203311005, 10203311006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	09/02/12 15:22	
Acenaphthylene	ug/L	ND	0.040	09/02/12 15:22	
Anthracene	ug/L	ND	0.040	09/02/12 15:22	
Benzo(a)anthracene	ug/L	ND	0.040	09/02/12 15:22	
Benzo(a)pyrene	ug/L	ND	0.040	09/02/12 15:22	
Benzo(b)fluoranthene	ug/L	ND	0.040	09/02/12 15:22	
Benzo(g,h,i)perylene	ug/L	ND	0.040	09/02/12 15:22	
Benzo(k)fluoranthene	ug/L	ND	0.040	09/02/12 15:22	
Chrysene	ug/L	ND	0.040	09/02/12 15:22	
Dibenz(a,h)anthracene	ug/L	ND	0.040	09/02/12 15:22	
Fluoranthene	ug/L	ND	0.040	09/02/12 15:22	
Fluorene	ug/L	ND	0.040	09/02/12 15:22	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	09/02/12 15:22	
Naphthalene	ug/L	ND	0.040	09/02/12 15:22	
Phenanthrene	ug/L	ND	0.040	09/02/12 15:22	
Pyrene	ug/L	ND	0.040	09/02/12 15:22	
2-Fluorobiphenyl (S)	%	73	58-125	09/02/12 15:22	
Terphenyl-d14 (S)	%	89	75-125	09/02/12 15:22	

LABORATORY CONTROL SAMPLE & LCSD: 1275883

1275884

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acenaphthene	ug/L	1	0.64	0.68	64	68	56-125	5	20	
Acenaphthylene	ug/L	1	0.62	0.65	62	65	55-125	5	20	
Anthracene	ug/L	1	0.79	0.80	79	80	63-125	1	20	
Benzo(a)anthracene	ug/L	1	0.75	0.77	75	77	61-125	3	20	
Benzo(a)pyrene	ug/L	1	0.81	0.84	81	84	67-125	4	20	
Benzo(b)fluoranthene	ug/L	1	0.84	0.92	84	92	64-125	9	20	
Benzo(g,h,i)perylene	ug/L	1	0.83	0.84	83	84	68-125	2	20	
Benzo(k)fluoranthene	ug/L	1	0.84	0.88	84	88	60-125	5	20	
Chrysene	ug/L	1	0.83	0.85	83	85	67-125	2	20	
Dibenz(a,h)anthracene	ug/L	1	0.85	0.87	85	87	60-125	3	20	
Fluoranthene	ug/L	1	0.82	0.84	82	84	64-125	3	20	
Fluorene	ug/L	1	0.66	0.70	66	70	62-125	6	20	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.84	0.86	84	86	67-125	3	20	
Naphthalene	ug/L	1	0.63	0.92	63	92	53-125	38	20	D6
Phenanthrene	ug/L	1	0.78	0.82	78	82	64-125	6	20	
Pyrene	ug/L	1	0.75	0.78	75	78	64-125	4	20	
2-Fluorobiphenyl (S)	%				71	75	58-125			
Terphenyl-d14 (S)	%				85	90	75-125			

Date: 09/06/2012 03:12 PM

REPORT OF LABORATORY ANALYSIS

Page 51 of 54

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QUALITY CONTROL DATA

Project: Superior MGP 2118-0001
Pace Project No.: 10203311

QC Batch: OEXT/19535 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 10203311002, 10203311003, 10203311004, 10203311007, 10203311008, 10203311009, 10203311010

METHOD BLANK: 1276659 Matrix: Water
Associated Lab Samples: 10203311002, 10203311003, 10203311004, 10203311007, 10203311008, 10203311009, 10203311010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	08/30/12 11:09	
Acenaphthylene	ug/L	ND	0.040	08/30/12 11:09	
Anthracene	ug/L	ND	0.040	08/30/12 11:09	
Benzo(a)anthracene	ug/L	ND	0.040	08/30/12 11:09	
Benzo(a)pyrene	ug/L	ND	0.040	08/30/12 11:09	
Benzo(b)fluoranthene	ug/L	ND	0.040	08/30/12 11:09	
Benzo(g,h,i)perylene	ug/L	ND	0.040	08/30/12 11:09	
Benzo(k)fluoranthene	ug/L	ND	0.040	08/30/12 11:09	
Chrysene	ug/L	ND	0.040	08/30/12 11:09	
Dibenz(a,h)anthracene	ug/L	ND	0.040	08/30/12 11:09	
Fluoranthene	ug/L	ND	0.040	08/30/12 11:09	
Fluorene	ug/L	ND	0.040	08/30/12 11:09	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	08/30/12 11:09	
Naphthalene	ug/L	ND	0.040	08/30/12 11:09	
Phenanthrene	ug/L	ND	0.040	08/30/12 11:09	
Pyrene	ug/L	ND	0.040	08/30/12 11:09	
2-Fluorobiphenyl (S)	%	82	58-125	08/30/12 11:09	
Terphenyl-d14 (S)	%	90	75-125	08/30/12 11:09	

LABORATORY CONTROL SAMPLE & LCSD:		1276660	1276661									
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers		
Acenaphthene	ug/L	1	0.70	0.71	70	71	56-125	.5	20			
Acenaphthylene	ug/L	1	0.66	0.67	66	67	55-125	1	20			
Anthracene	ug/L	1	0.80	0.79	80	79	63-125	.7	20			
Benzo(a)anthracene	ug/L	1	0.76	0.75	76	75	61-125	.5	20			
Benzo(a)pyrene	ug/L	1	0.87	0.86	87	86	67-125	1	20			
Benzo(b)fluoranthene	ug/L	1	0.88	0.87	88	87	64-125	1	20			
Benzo(g,h,i)perylene	ug/L	1	0.84	0.83	84	83	68-125	2	20			
Benzo(k)fluoranthene	ug/L	1	0.86	0.85	86	85	60-125	1	20			
Chrysene	ug/L	1	0.82	0.81	82	81	67-125	.7	20			
Dibenz(a,h)anthracene	ug/L	1	0.86	0.84	86	84	60-125	2	20			
Fluoranthene	ug/L	1	0.86	0.83	86	83	64-125	3	20			
Fluorene	ug/L	1	0.74	0.73	74	73	62-125	2	20			
Indeno(1,2,3-cd)pyrene	ug/L	1	0.84	0.83	84	83	67-125	1	20			
Naphthalene	ug/L	1	0.67	0.67	67	67	53-125	.1	20			
Phenanthrene	ug/L	1	0.83	0.81	83	81	64-125	2	20			
Pyrene	ug/L	1	0.75	0.72	75	72	64-125	4	20			
2-Fluorobiphenyl (S)	%				77	79	58-125					
Terphenyl-d14 (S)	%				83	83	75-125					

QUALIFIERS

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSSV/8504

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

ANALYTE QUALIFIERS

D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

S0 Surrogate recovery outside laboratory control limits.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Superior MGP 2118-0001

Pace Project No.: 10203311

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10203311001	MW-6	EPA 3510	OEXT/19526	EPA 8270 by SIM	MSSV/8504
10203311002	MW-7	EPA 3510	OEXT/19535	EPA 8270 by SIM	MSSV/8492
10203311003	MW-8	EPA 3510	OEXT/19535	EPA 8270 by SIM	MSSV/8492
10203311004	MW-9	EPA 3510	OEXT/19535	EPA 8270 by SIM	MSSV/8492
10203311005	MW-10	EPA 3510	OEXT/19526	EPA 8270 by SIM	MSSV/8504
10203311006	MW-11	EPA 3510	OEXT/19526	EPA 8270 by SIM	MSSV/8504
10203311007	MW-15	EPA 3510	OEXT/19535	EPA 8270 by SIM	MSSV/8492
10203311008	MW-20	EPA 3510	OEXT/19535	EPA 8270 by SIM	MSSV/8492
10203311009	MW-20D	EPA 3510	OEXT/19535	EPA 8270 by SIM	MSSV/8492
10203311010	MW-22	EPA 3510	OEXT/19535	EPA 8270 by SIM	MSSV/8492
10203311001	MW-6	EPA 8260	MSV/21218		
10203311002	MW-7	EPA 8260	MSV/21218		
10203311003	MW-8	EPA 8260	MSV/21218		
10203311004	MW-9	EPA 8260	MSV/21218		
10203311005	MW-10	EPA 8260	MSV/21218		
10203311006	MW-11	EPA 8260	MSV/21218		
10203311007	MW-15	EPA 8260	MSV/21218		
10203311008	MW-20	EPA 8260	MSV/21218		
10203311009	MW-20D	EPA 8260	MSV/21218		
10203311010	MW-22	EPA 8260	MSV/21233		
10203311011	Trip Blanks	EPA 8260	MSV/21233		



CHAIN-OF-CUSTODY / Analytical Request Document

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

10203311

Section A Required Client Information: Company: Summit EnviroSolutions Address: 1217 Bandana Blvd St. Paul, MN 55108 Email To: bgregg@summit.com Phone: 651-262-4236 Requested Due Date/TAT: STD		Section B Required Project Information: Report To: Bill Gregg Copy To: Bill Gregg Purchase Order No.: 2118-0001 Project Name: Superior MGP Project Number: 2118-0001		Section C Invoice Information: Attention: Bill Gregg Company Name: Summit EnviroSolutions Address: Pace Quote Reference: Pace Project Manager: Pace Profile #:	
REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER		Site Location STATE: WI		Requested Analysis Filtered (Y/N)	

ITEM #	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIFE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test Y/N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
				COMPOSITE START	COMPOSITE END/GRAB			DATE	TIME	DATE	TIME	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ O ₃			
1	MW-6	GW		8/21/12	16:40		5	X										X		001
2	MW-7	GW		8/21/12	13:30		1	X										X		002
3	MW-8	GW		8/22/12	13:00		1	X										X		003
4	MW-9	GW		8/22/12	12:50		1	X										X		004
5	MW-10	GW		8/21/12	18:40		1	X										X		005
6	MW-11	GW		8/21/12	17:30		1	X										X		006
7	MW-15	GW		8/22/12	8:40		1	X										X		007
8	MW-20	GW		8/22/12	9:00		1	X										X		008
9	MW-20D	GW		8/22/12	9:00		1	X										X		009
10	MW-22	GW		8/22/12	11:10		1	X										X		010
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Bill Gregg / Summit Env	8/23/12	14:11	CSL pac	8/23/12	14:11	Temp in °C 24 08 1.5
							Received on Cooler (Y/N) Custody Sealed Samples Intact

Temp in °C
24
08
1.5

Received on
Cooler (Y/N)
Custody Sealed
Samples Intact

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: Bill Gregg
 SIGNATURE of SAMPLER: [Signature]
 DATE Signed (MM/DD/YY): 8/23/12



Document Name:
Sample Condition Upon Receipt Form
 Document No.:
 F-MN-L-213-rev.03

Document Revised: 19Jun2012
 Page 1 of 1
 Issuing Authority:
 Pace Minnesota Quality Office

Sample Condition
 Upon Receipt

Client Name: Summit Environmental Project #:

WO# : 10203311

 10203311

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other:

Tracking Number: _____

Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No Optional: Proj. Due Date: Proj. Name:

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

Thermometer Used: 80344042 80512447 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature: 24, 0.84:5 Biological Tissue Frozen? Yes No Date and Initials of Person Examining Contents: 8/23/12 SM
 Temp should be above freezing to 6°C

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name and Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12. TB not on the COC
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>		
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl < 2; NaOH > 12)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed: <u>SM</u> Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14. 2 vials MW9 have Headspace
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15. 2 WT TBs
Trip Blank Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>0803124</u>		

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review:

Mannah Kumb

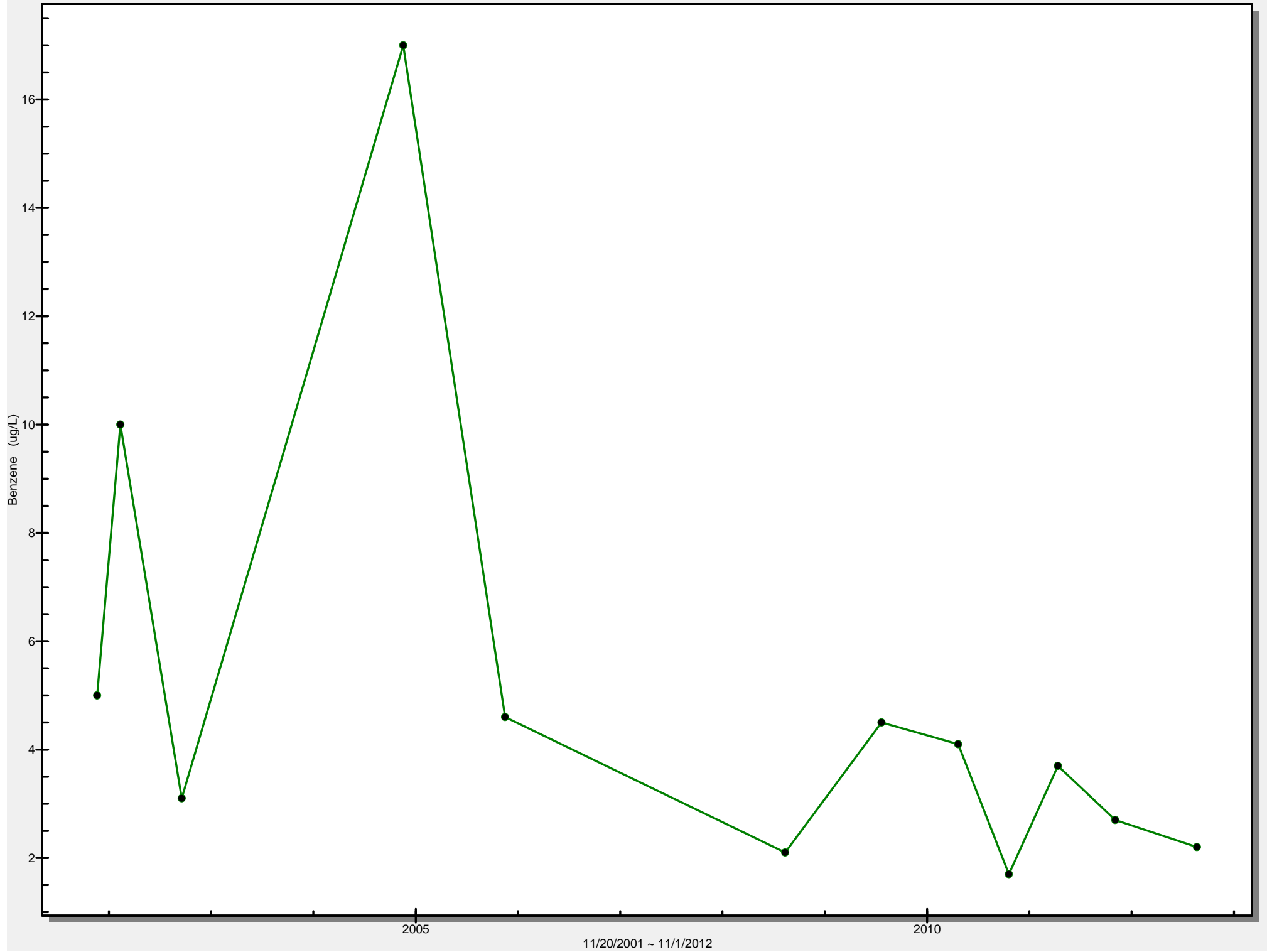
Date: 8/24/12

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

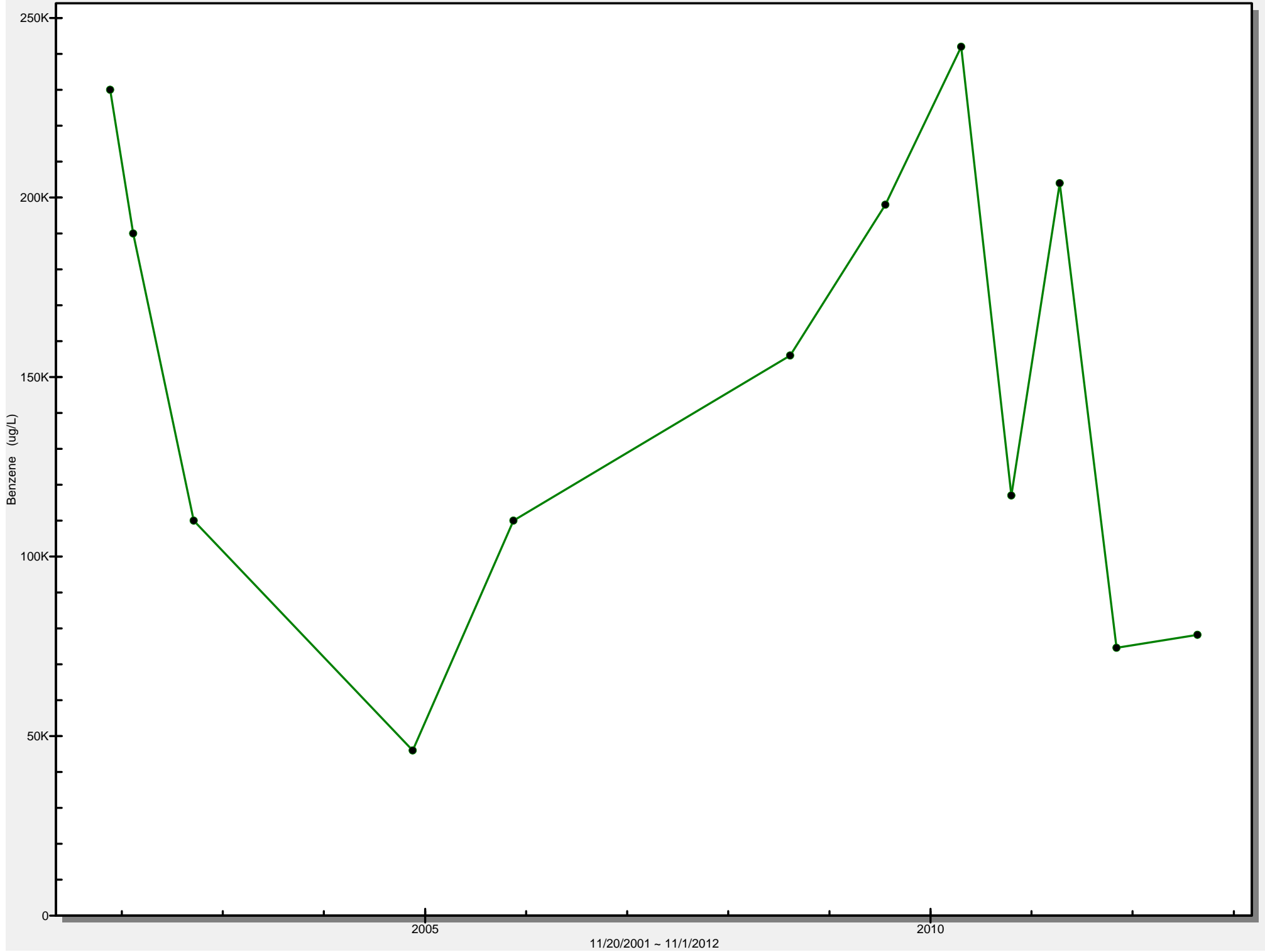
Appendix C

Benzene and Naphthalene Concentration Graphs

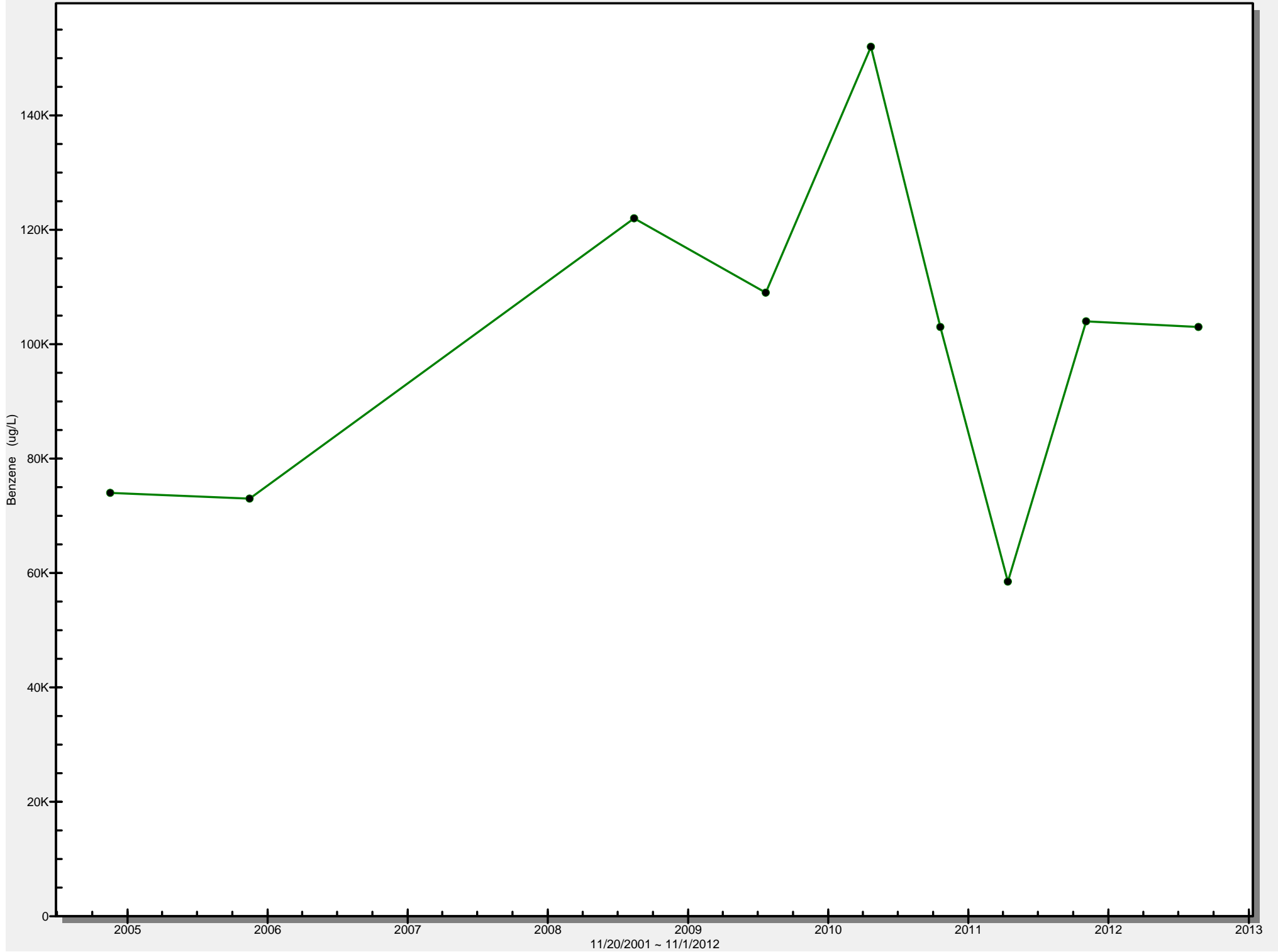
Well MW-6
Benzene (VOC)



Well MW-7
Benzene (VOC)

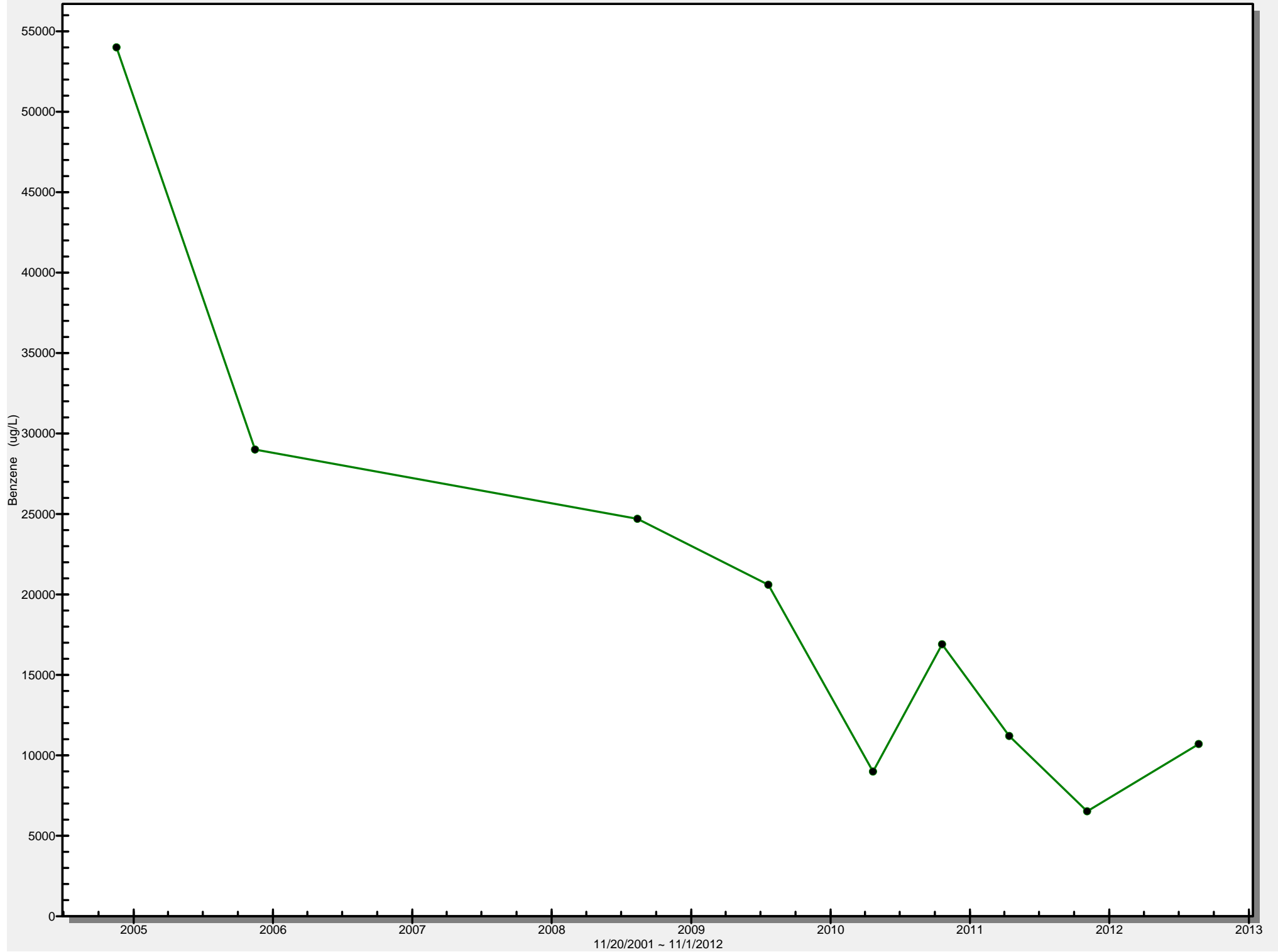


Well MW-8
Benzene (VOC)

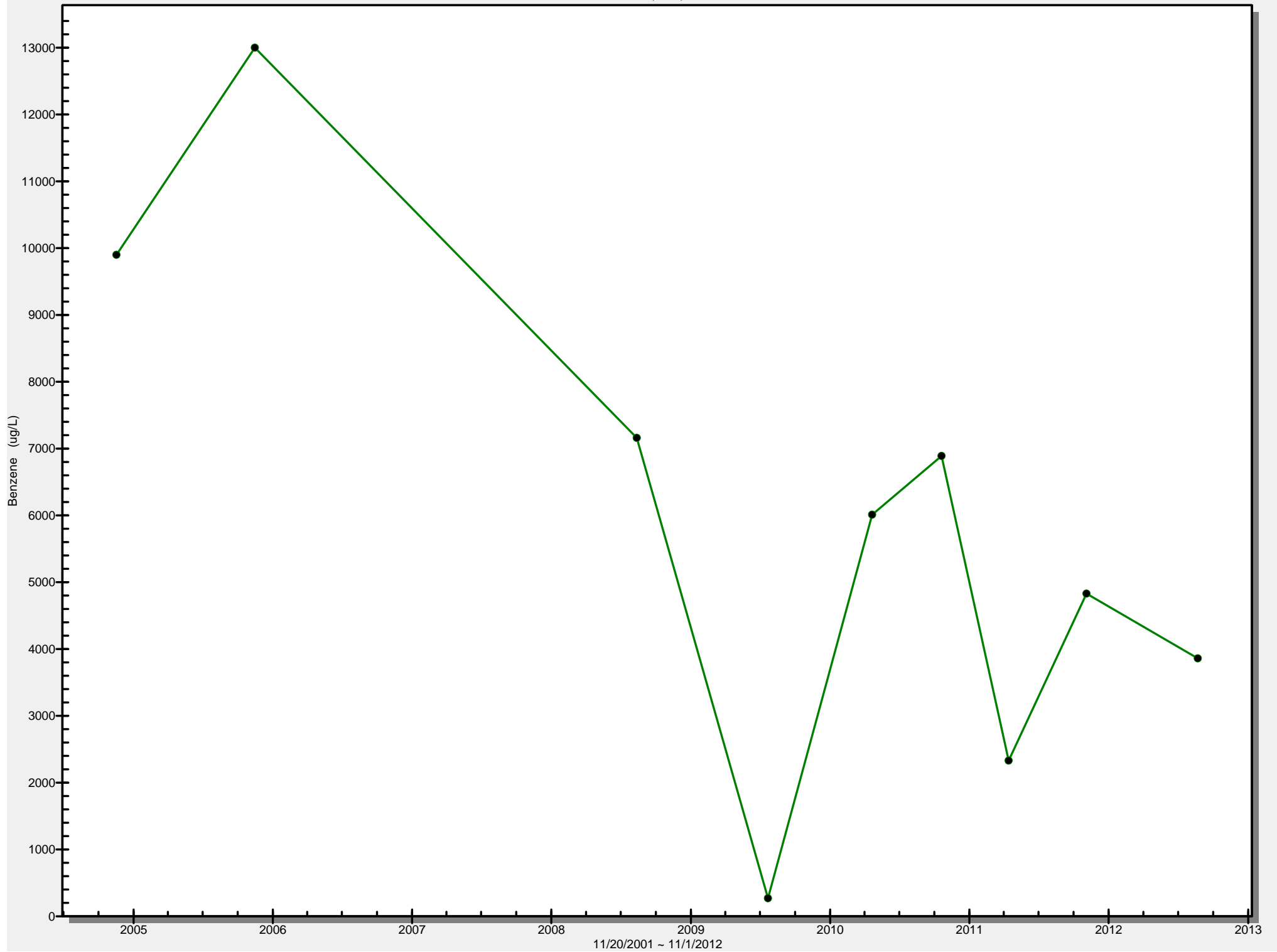


11/20/2001 ~ 11/1/2012

Well MW-9
Benzene (VOC)

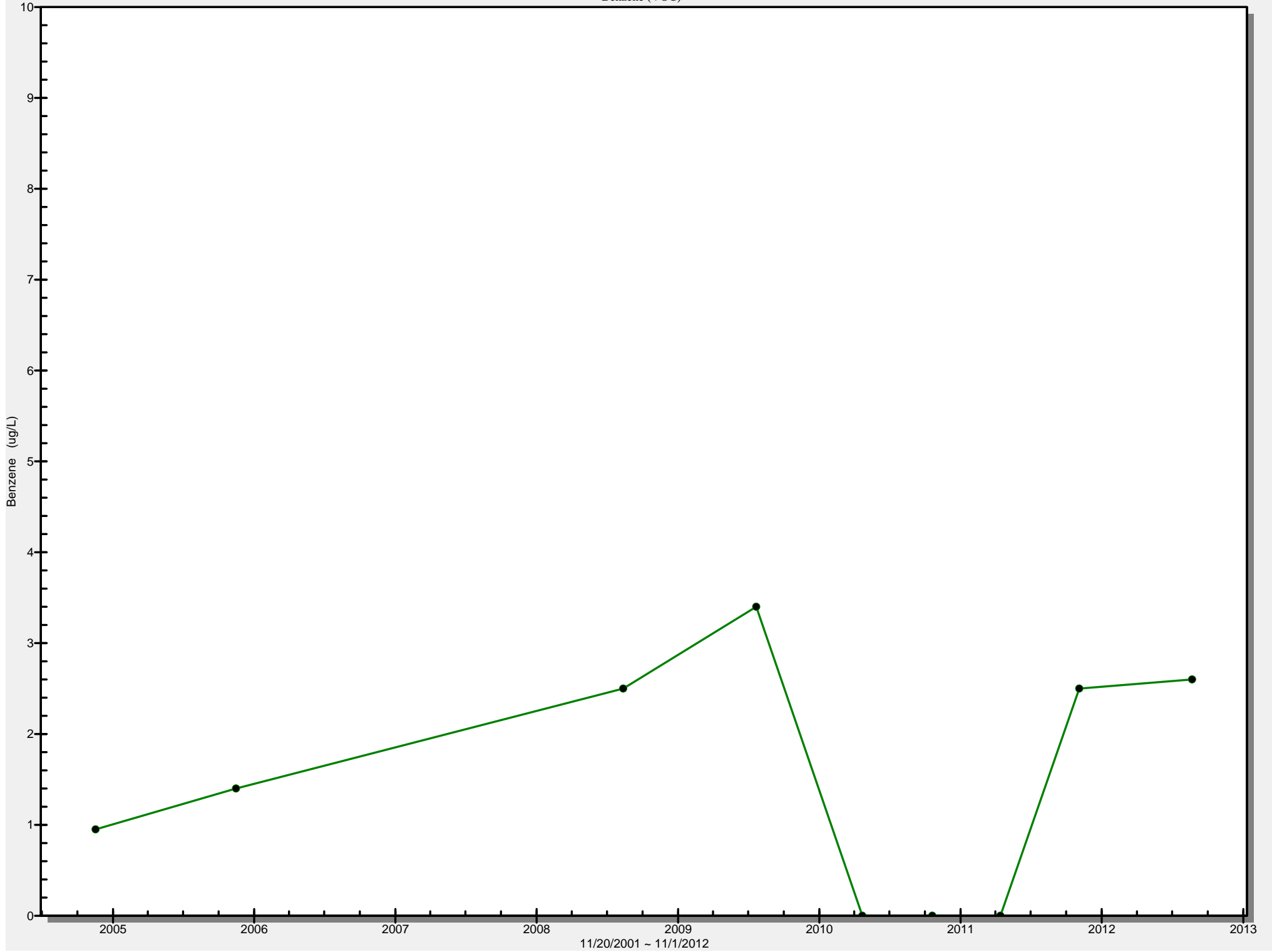


Well MW-10
Benzene (VOC)



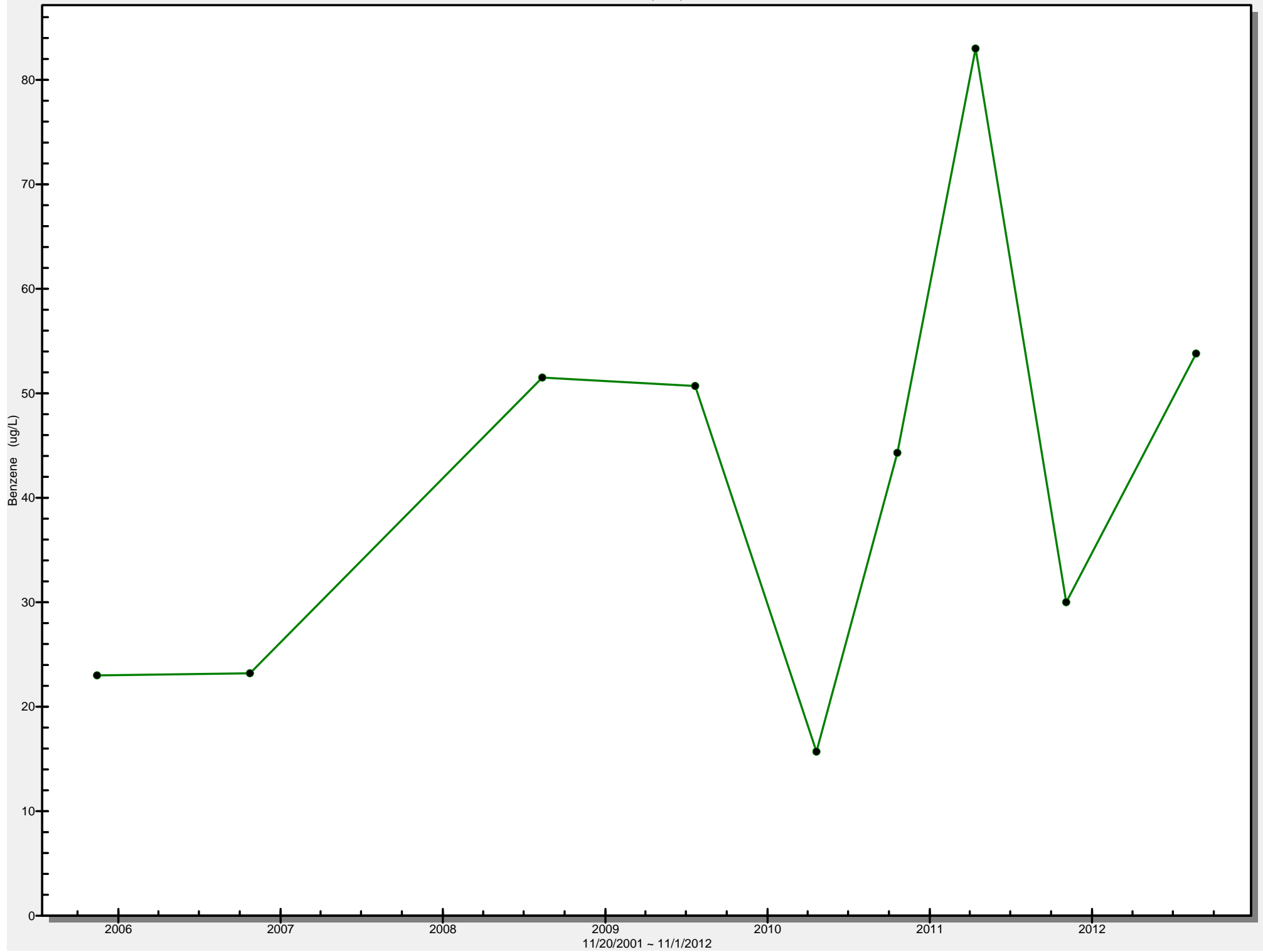
Well MW-11

Benzene (VOC)



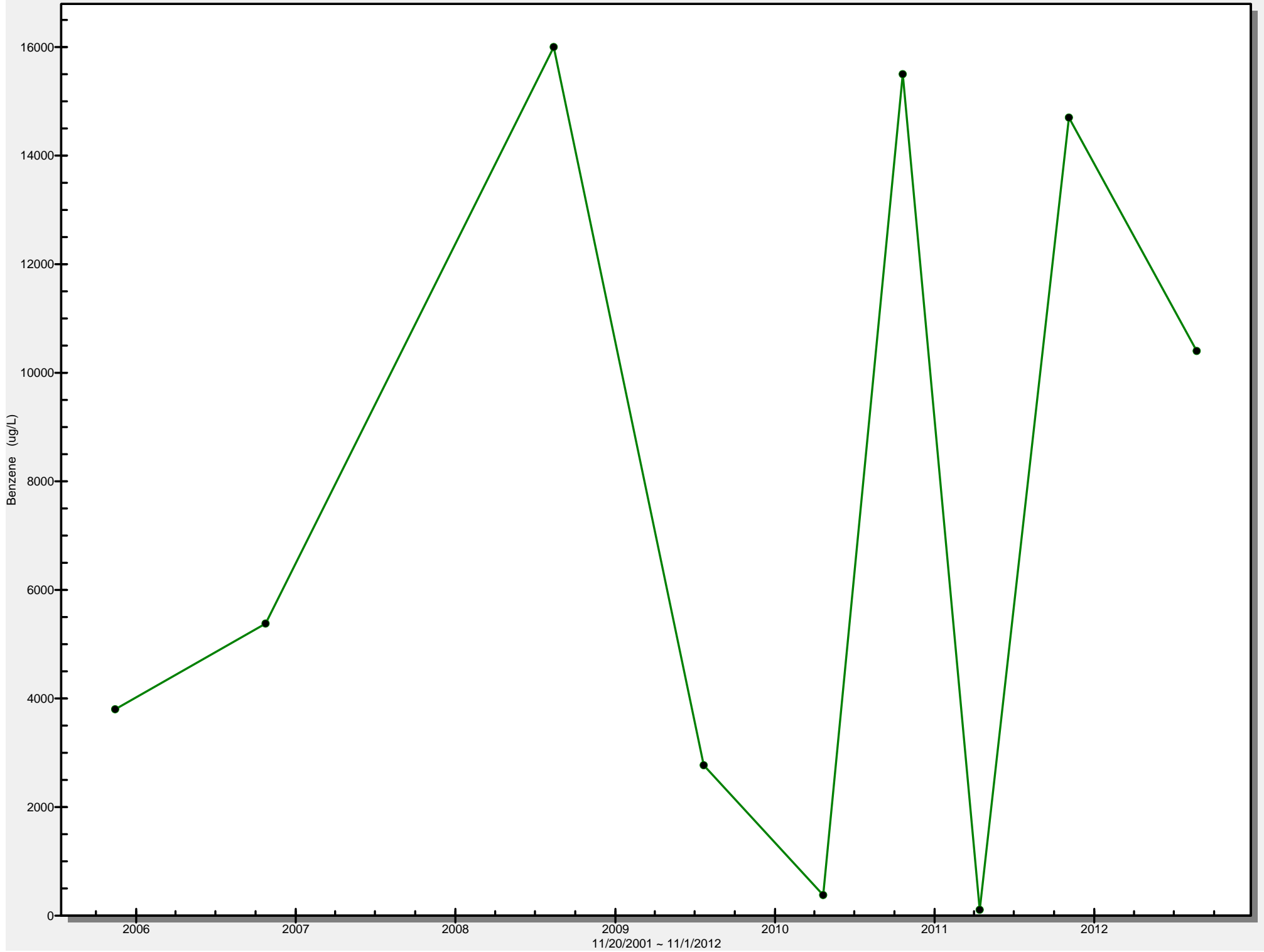
11/20/2001 ~ 11/1/2012

Well MW-15
Benzene (VOC)

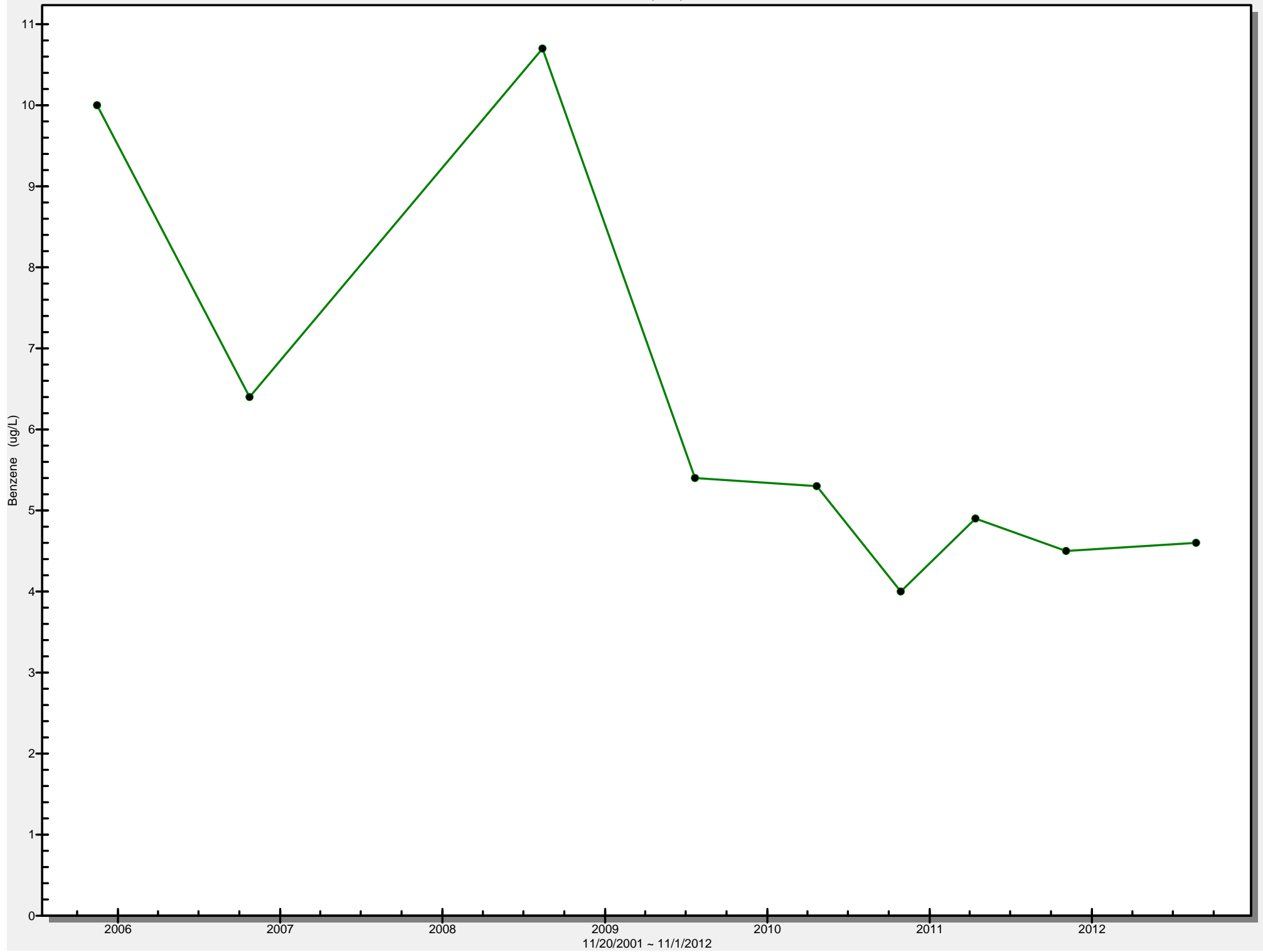


11/20/2001 ~ 11/1/2012

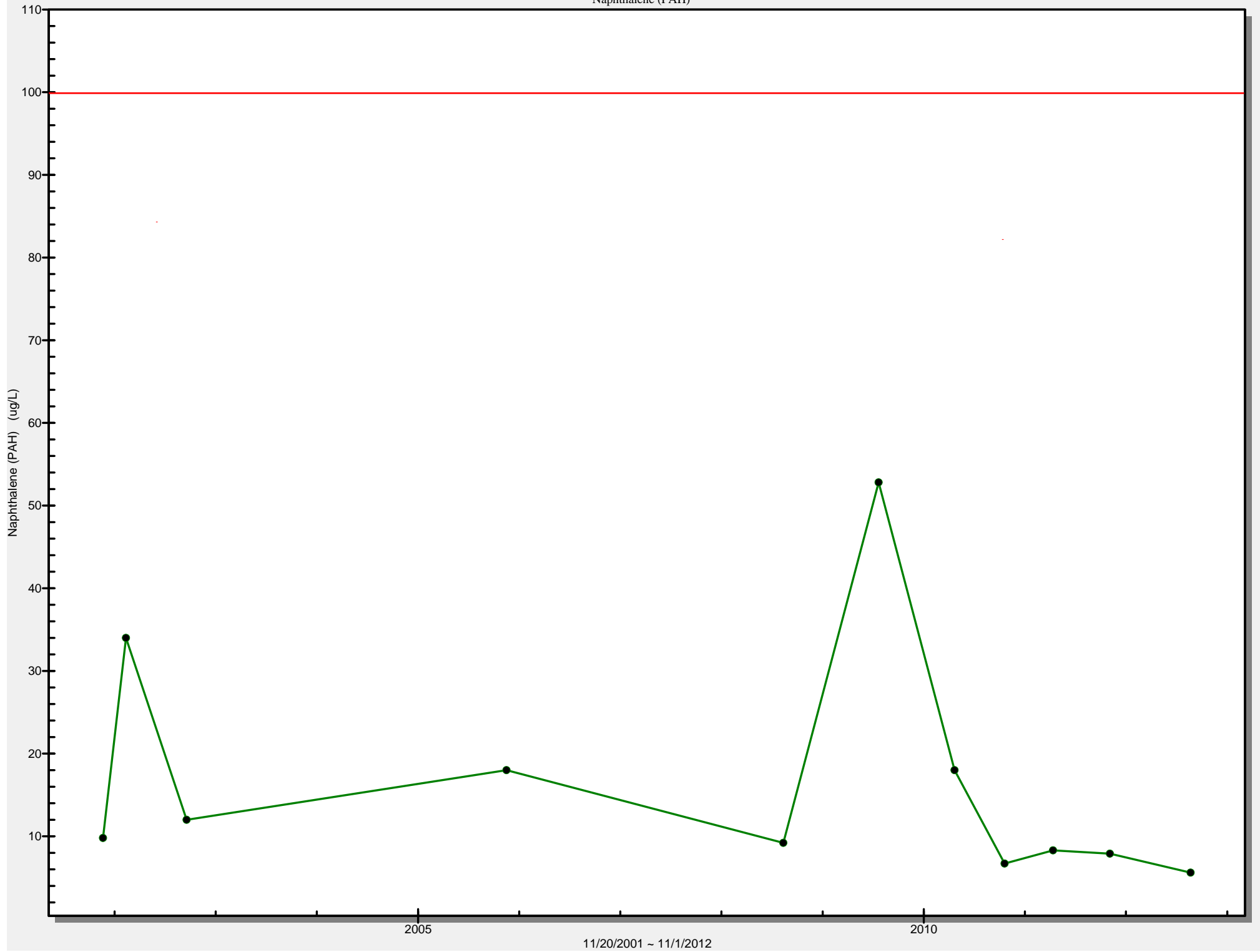
Well MW-20
Benzene (VOC)



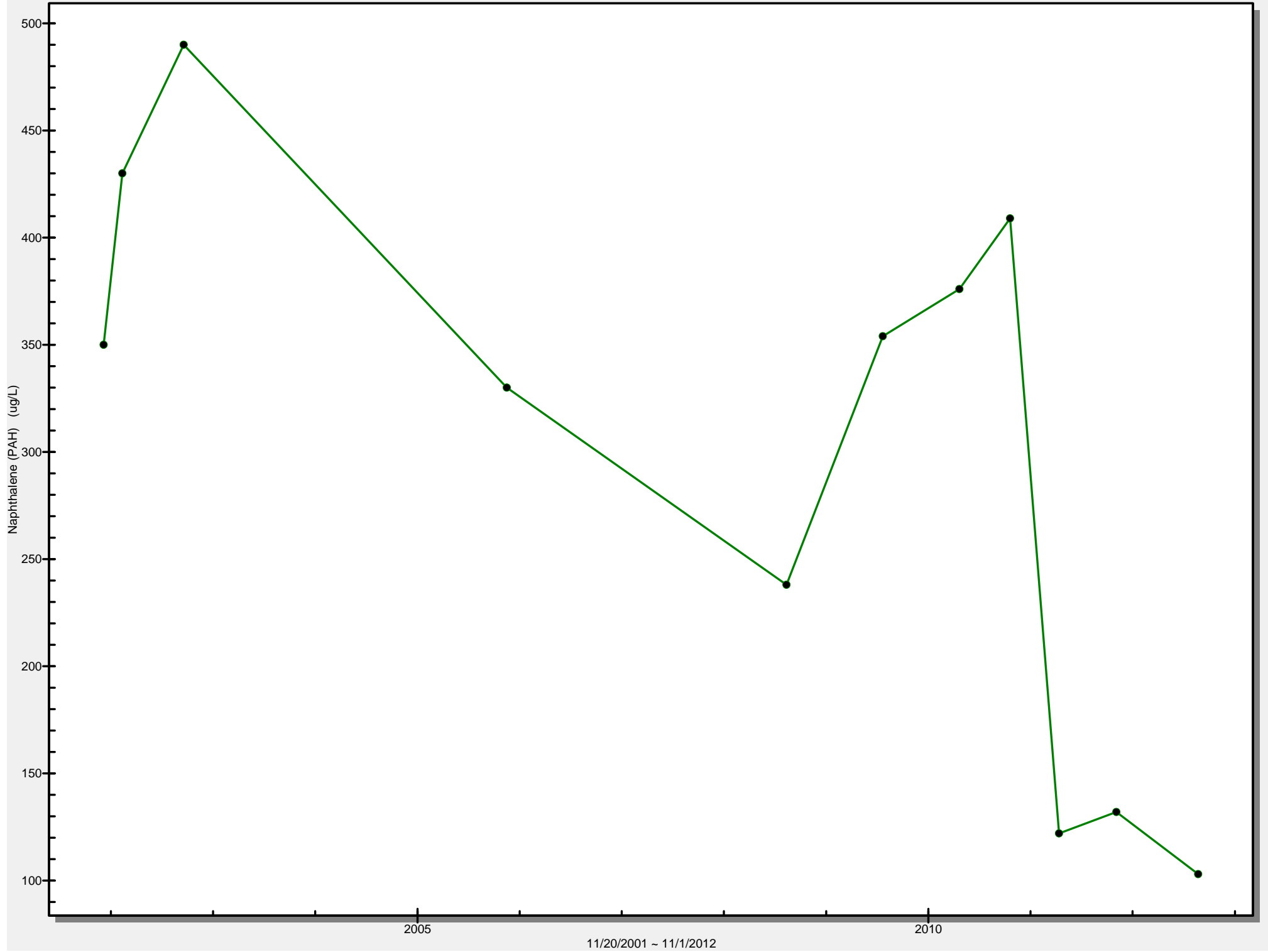
Well MW-22
Benzene (VOC)



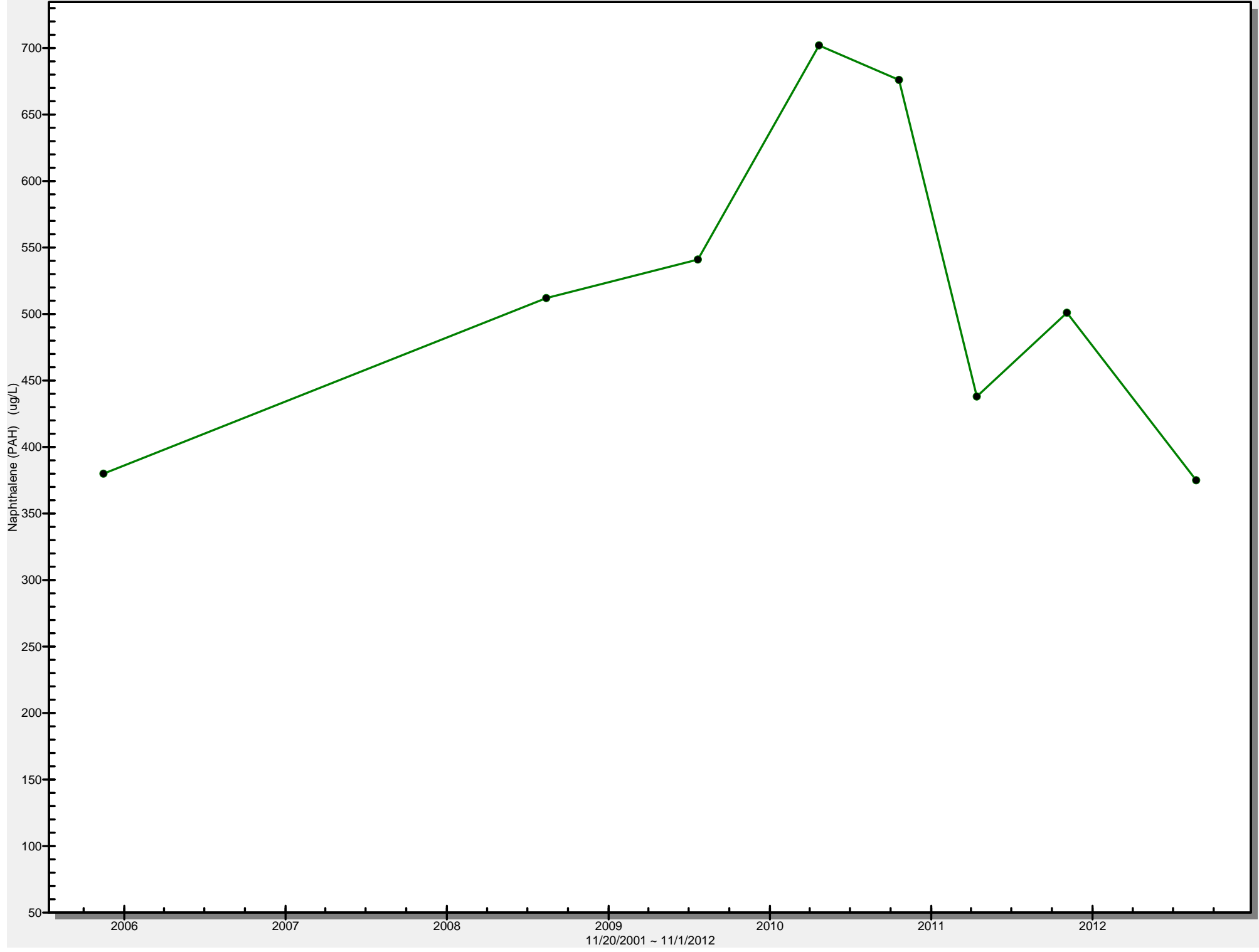
Well MW-6
Naphthalene (PAH)



Well MW-7
Naphthalene (PAH)



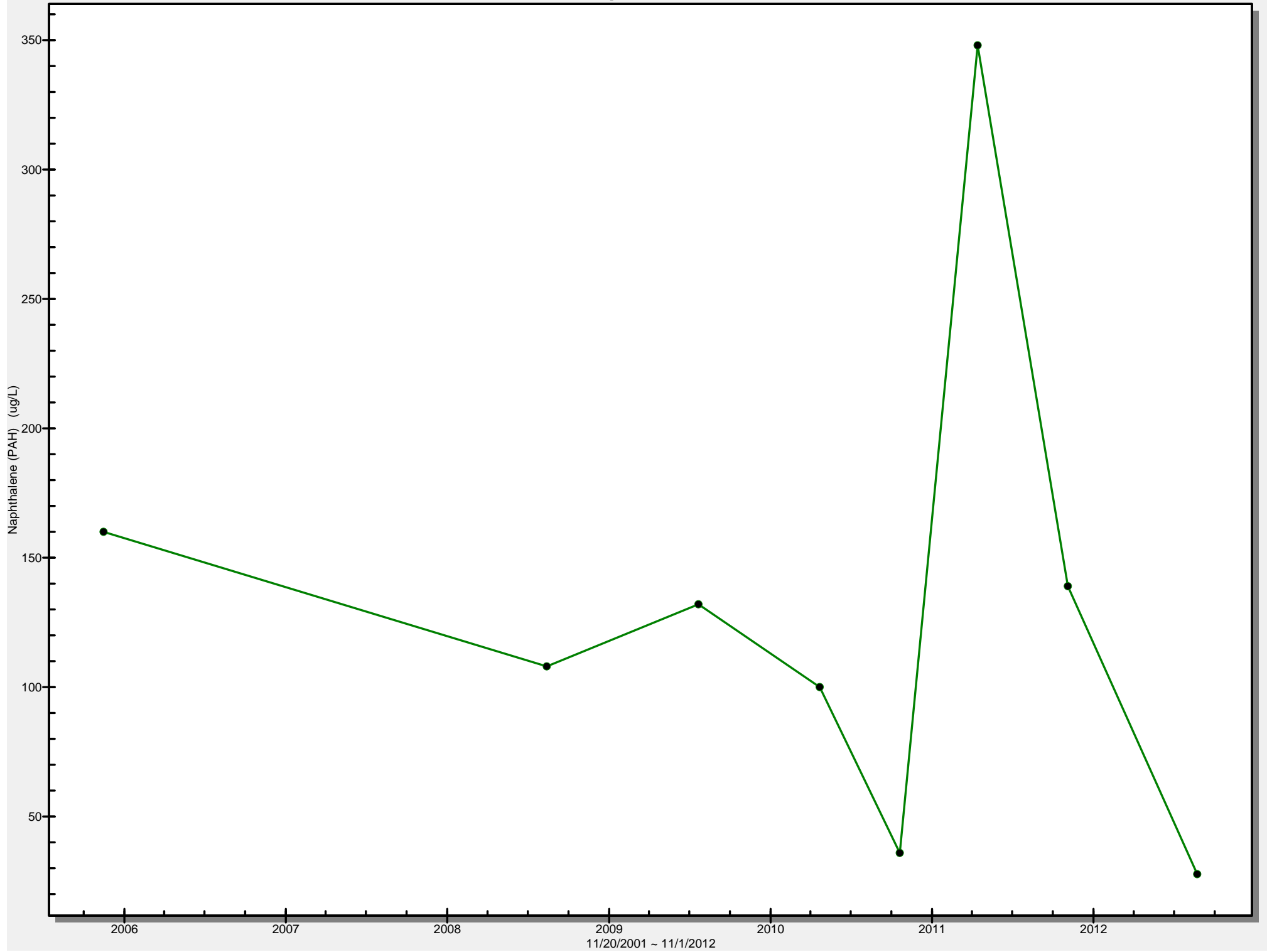
Well MW-8
Naphthalene (PAH)



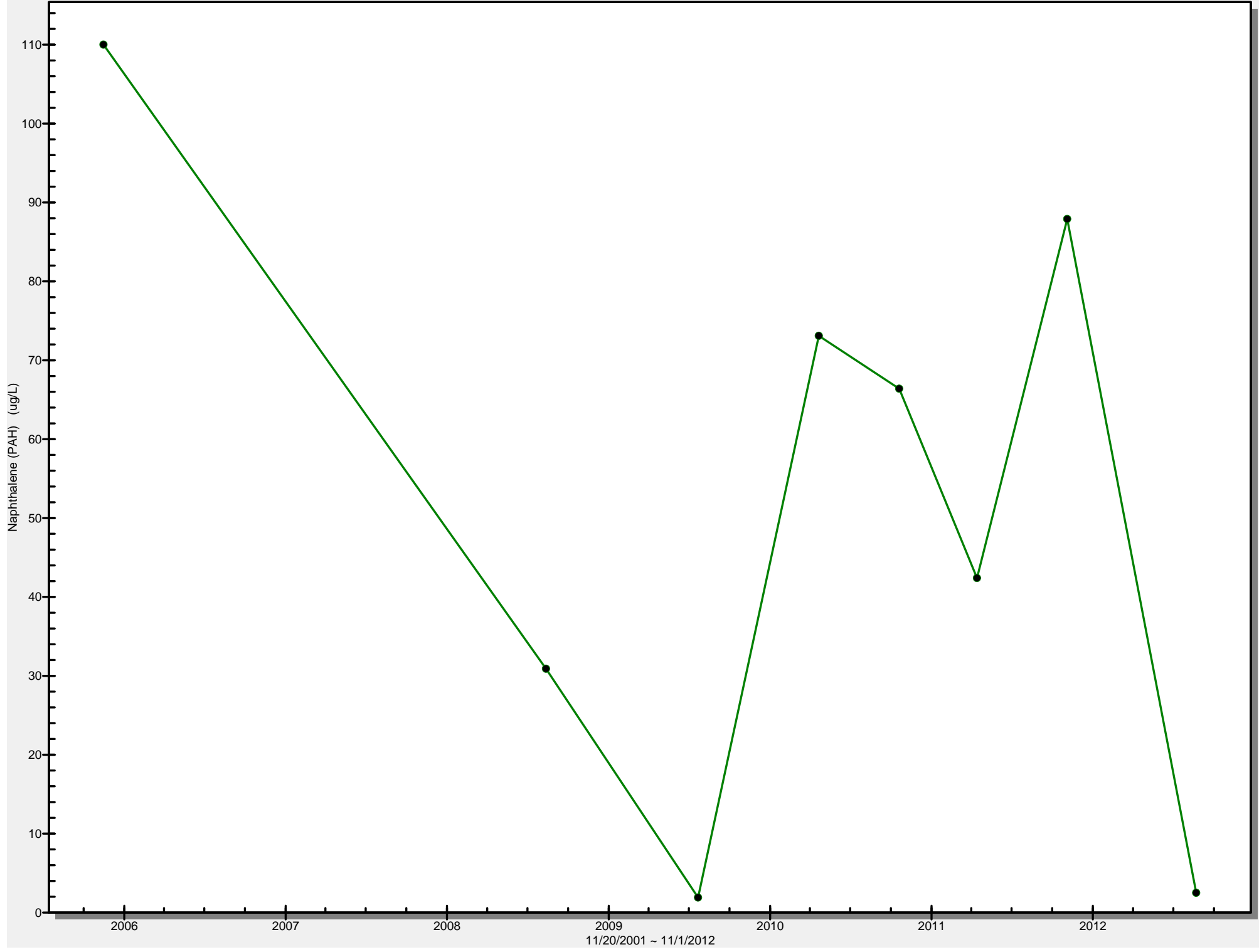
11/20/2001 ~ 11/1/2012

Well MW-9

Naphthalene (PAH)



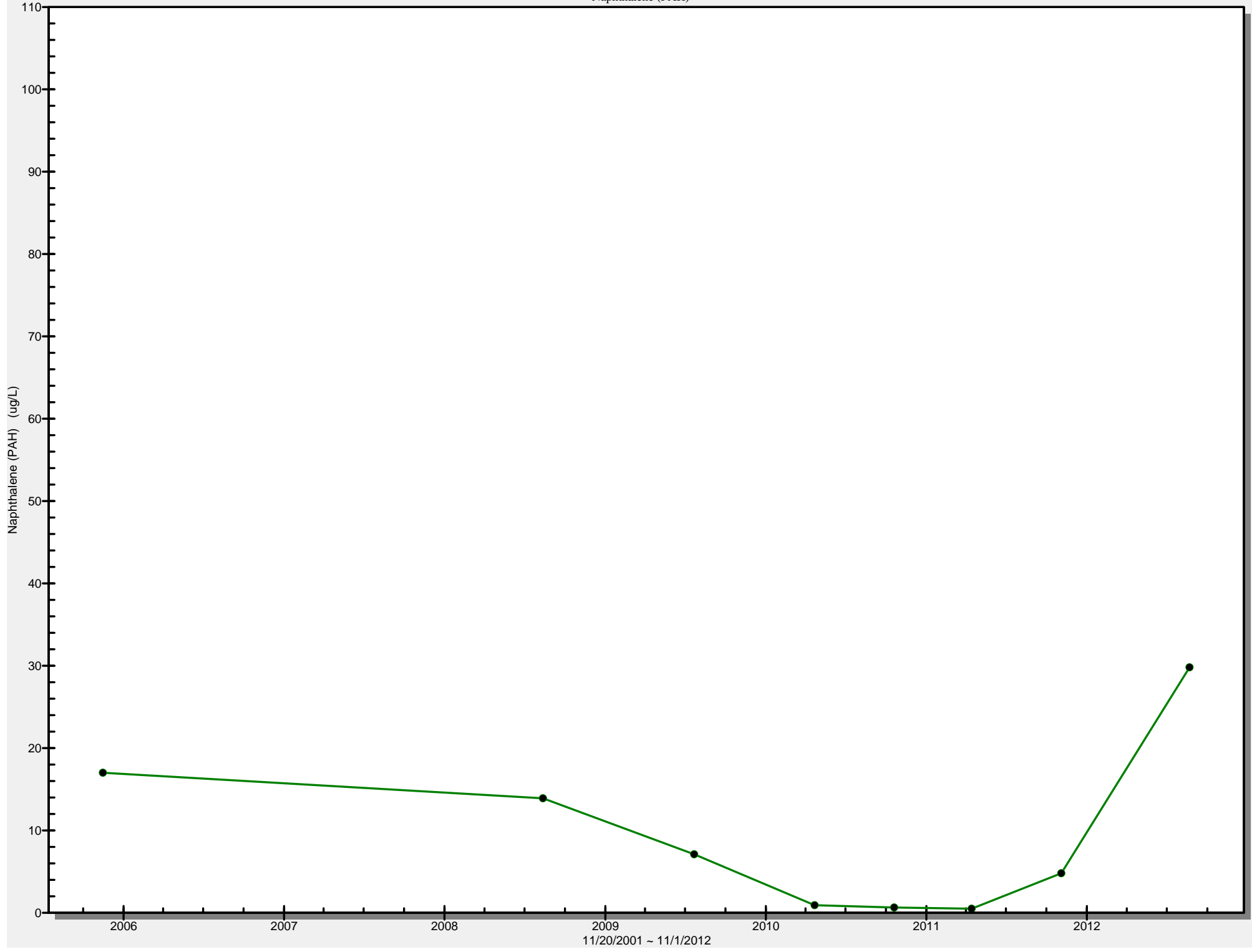
Well MW-10
Naphthalene (PAH)



11/20/2001 ~ 11/1/2012

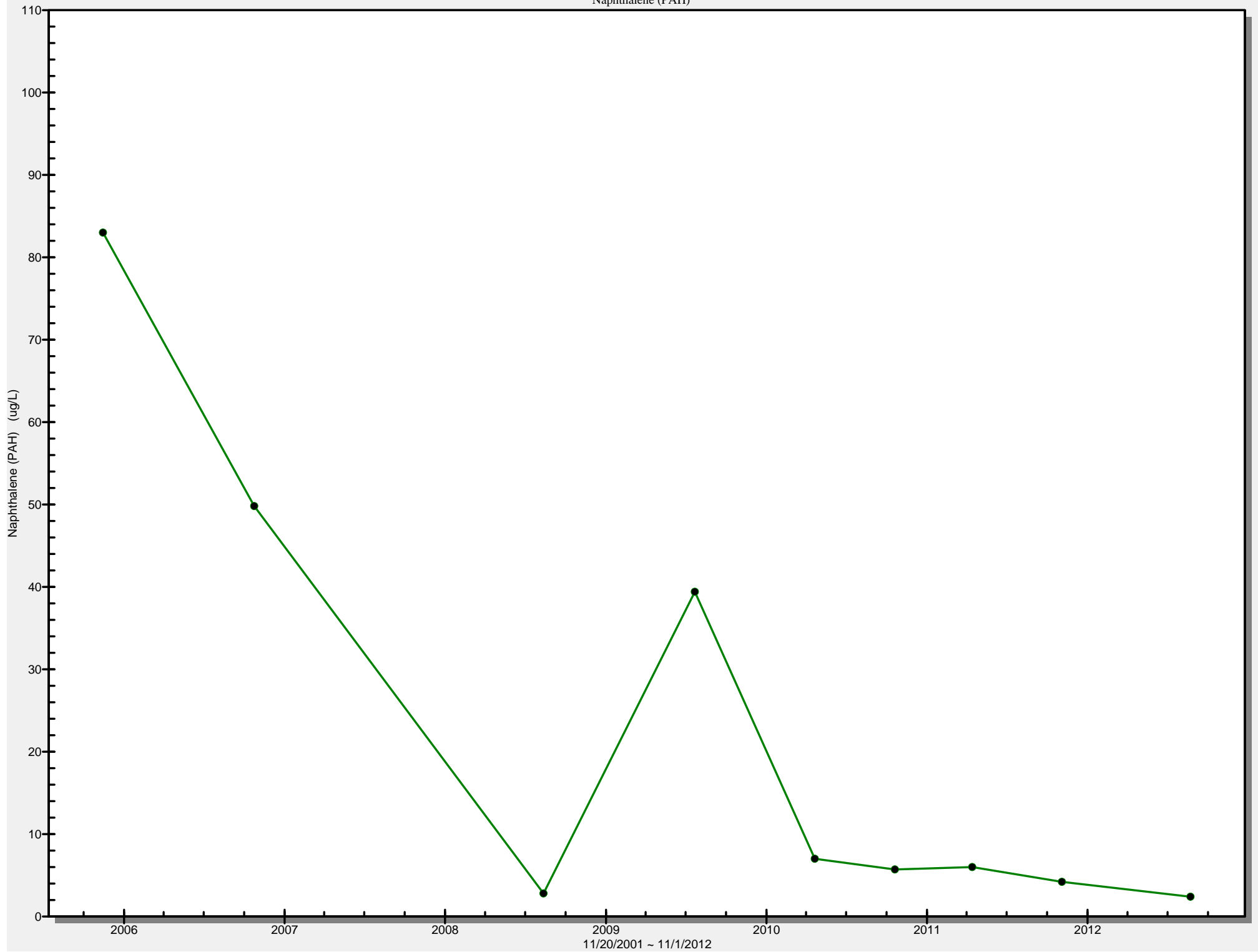
Well MW-11

Naphthalene (PAH)

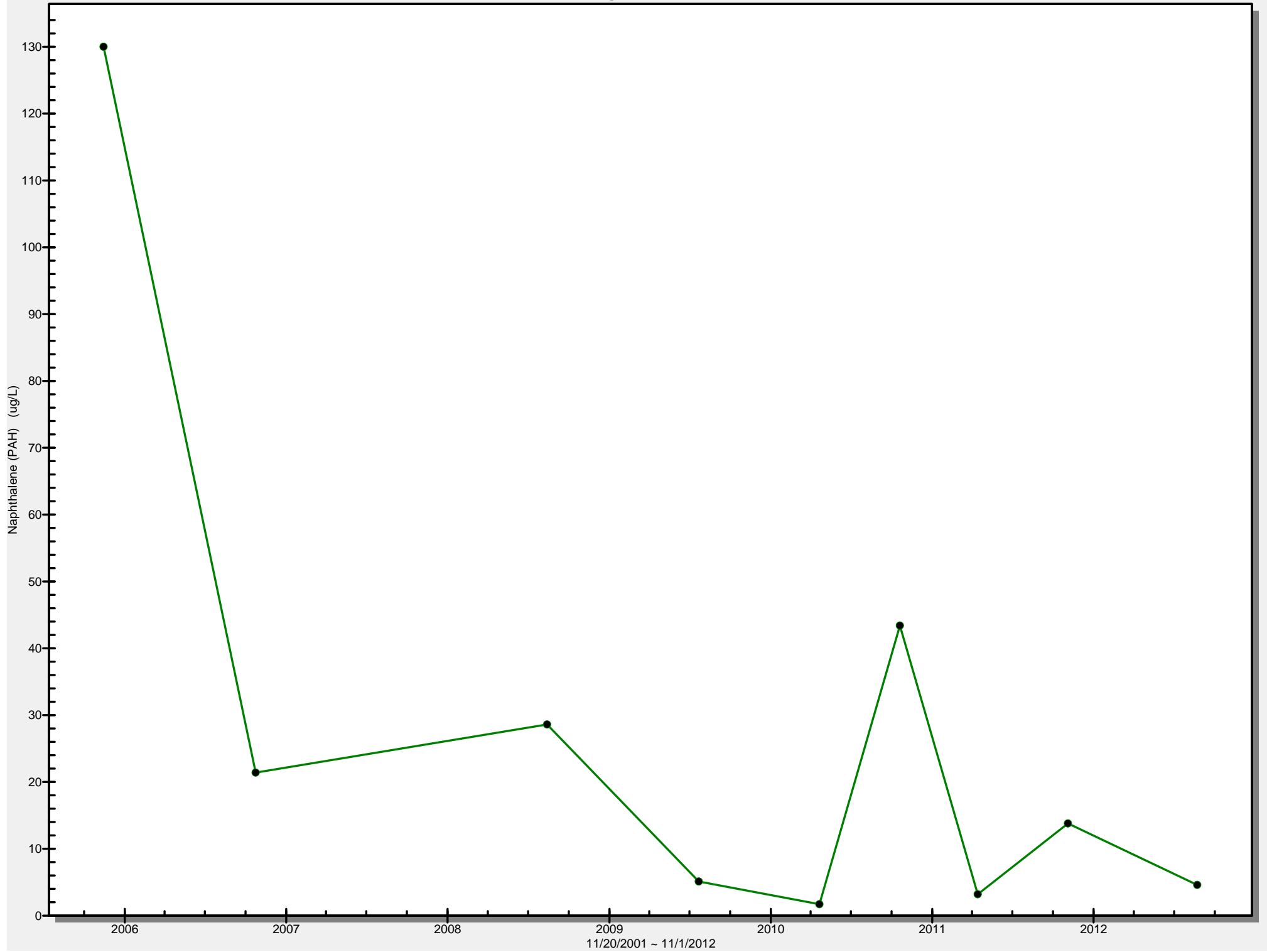


11/20/2001 ~ 11/1/2012

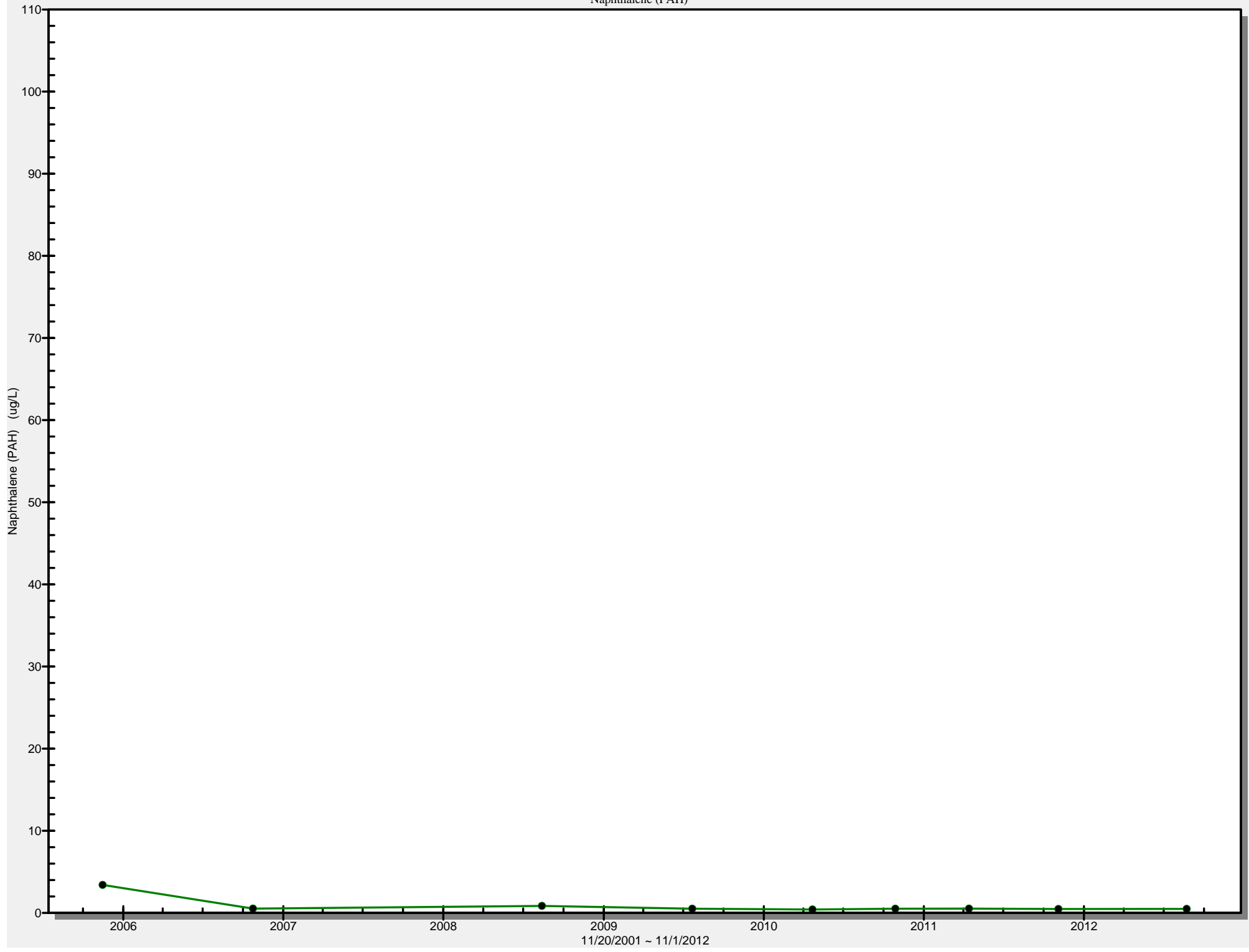
Well MW-15
Naphthalene (PAH)



Well MW-20
Naphthalene (PAH)



Well MW-22
Naphthalene (PAH)



11/20/2001 ~ 11/1/2012

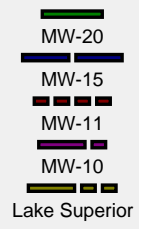
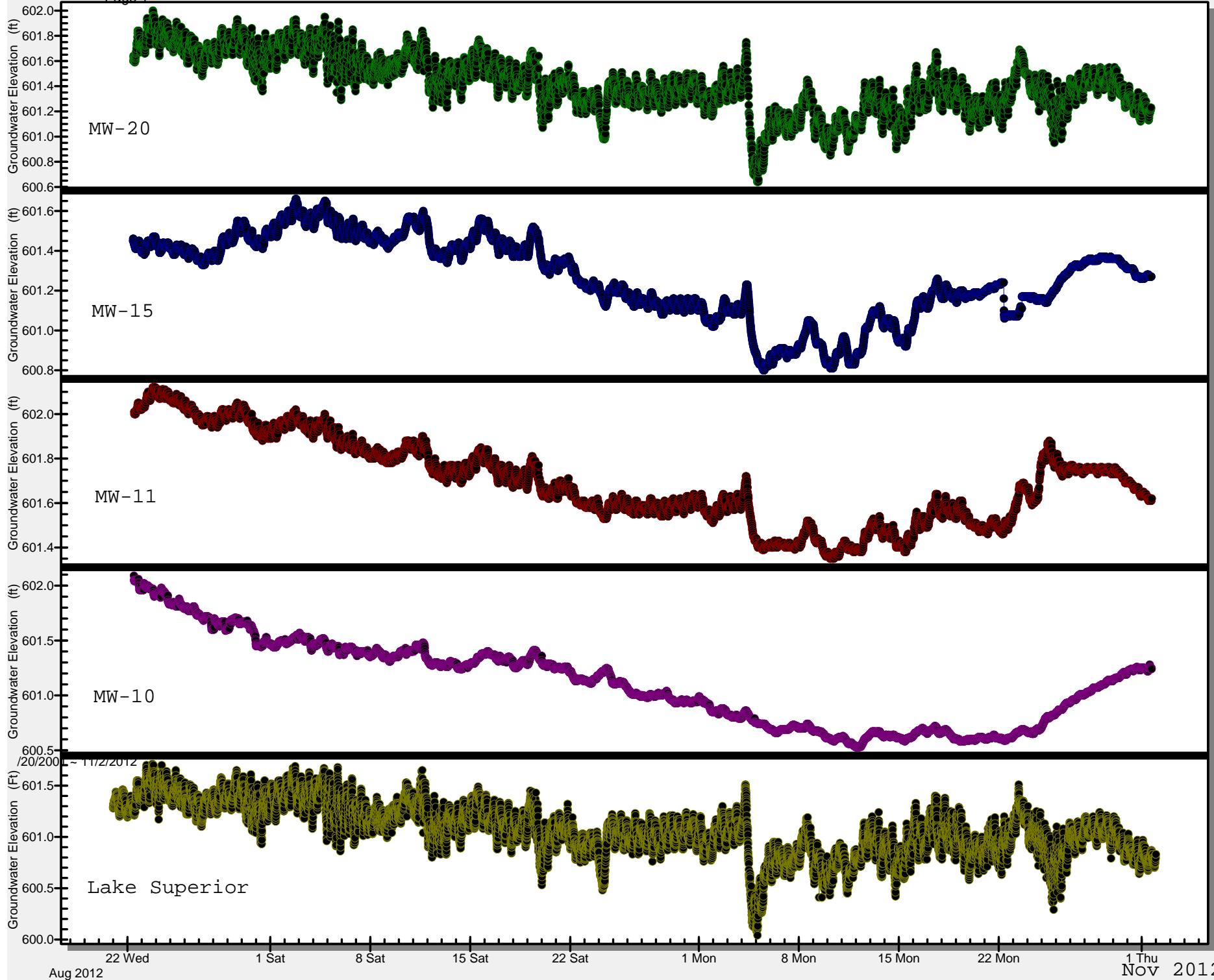
Appendix D

Transducer Data and NOAA Data for Lake Superior

Water Elevation

Instrumented Wells and Lake Superior

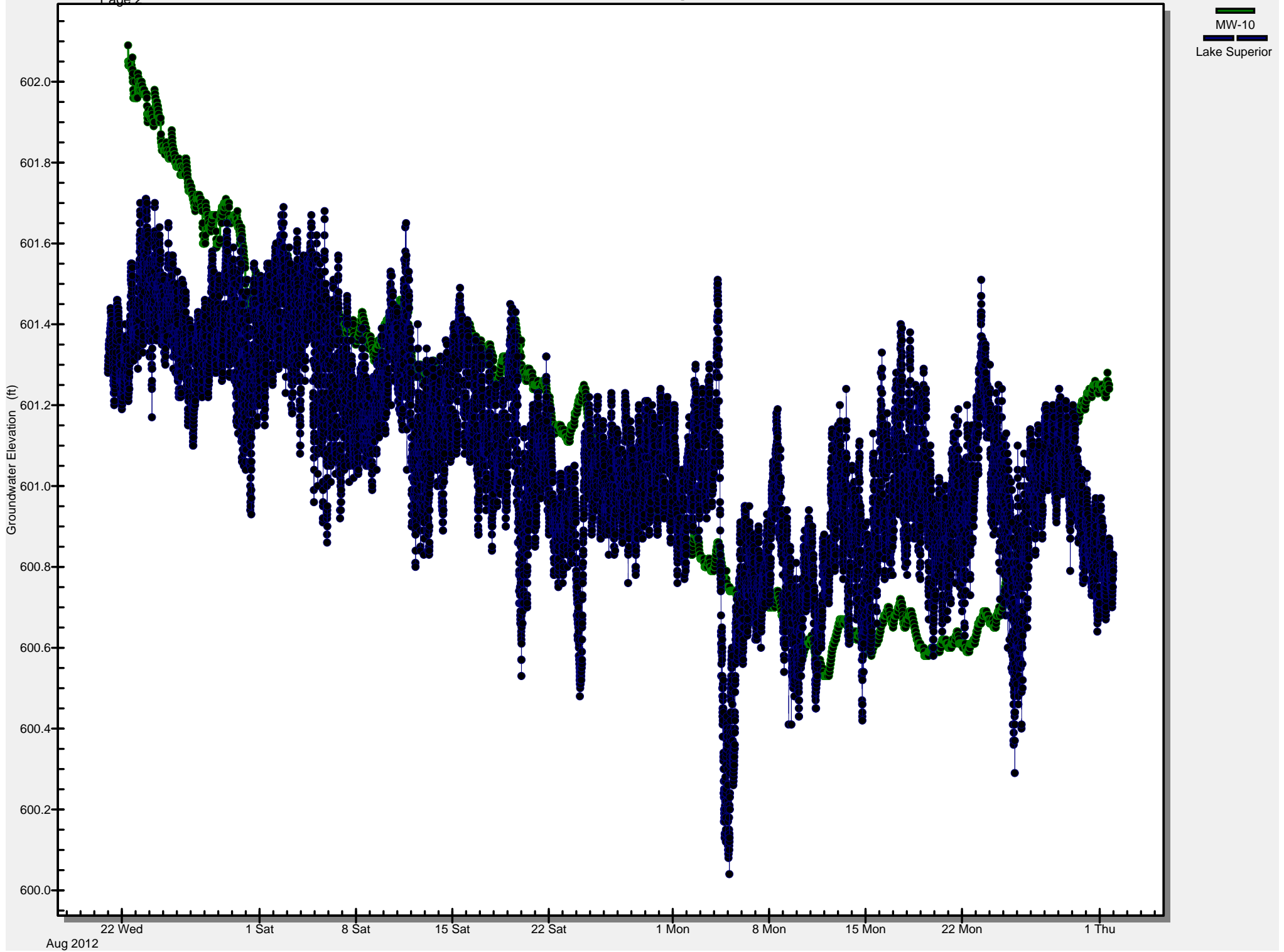
Page 1



Water Elevation

MW-10 and Lake Superior

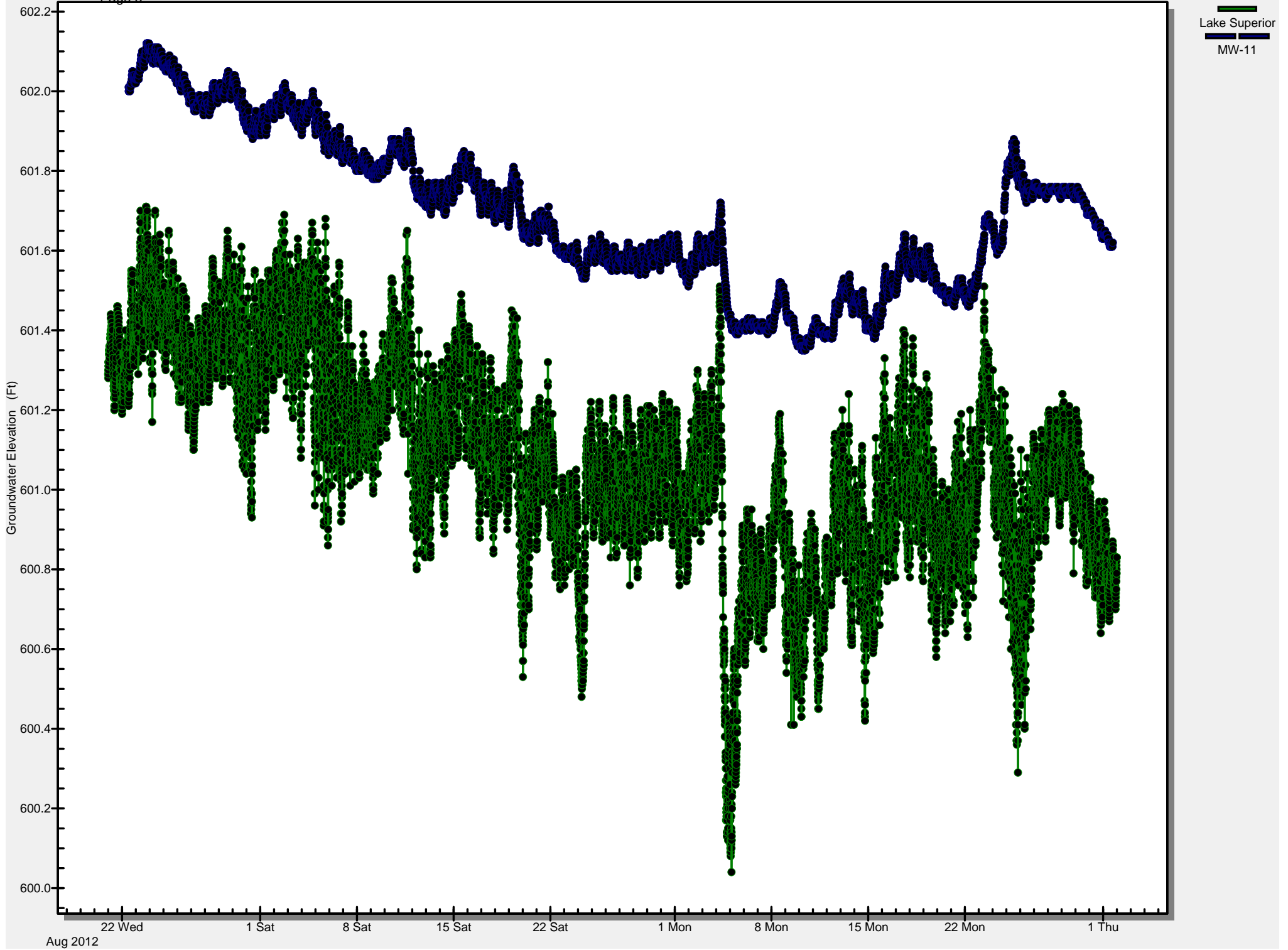
Page 2



Water Elevation

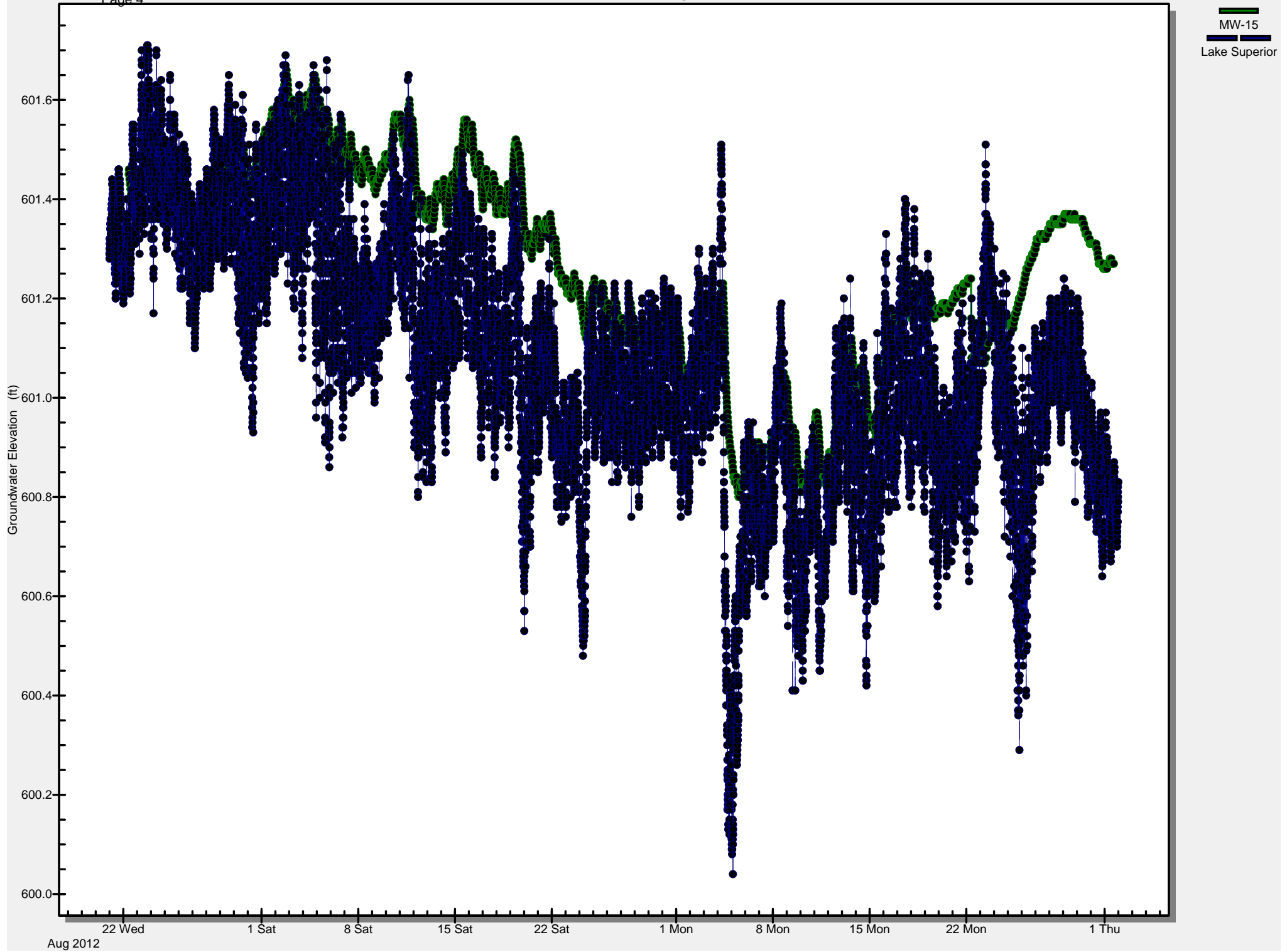
MW-11 and Lake Superior

Page 3



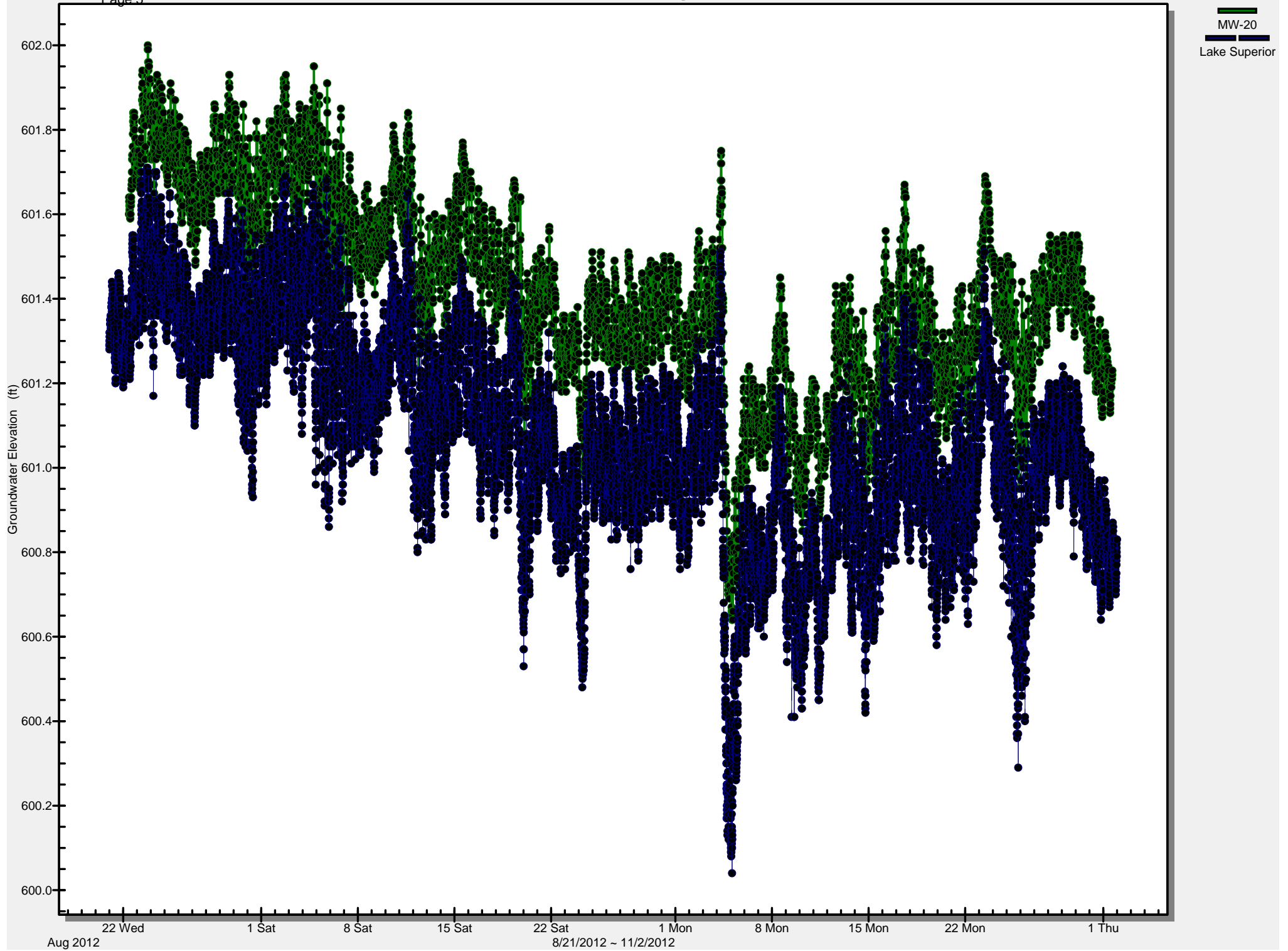
Water Elevation

MW-15 and Lake Superior



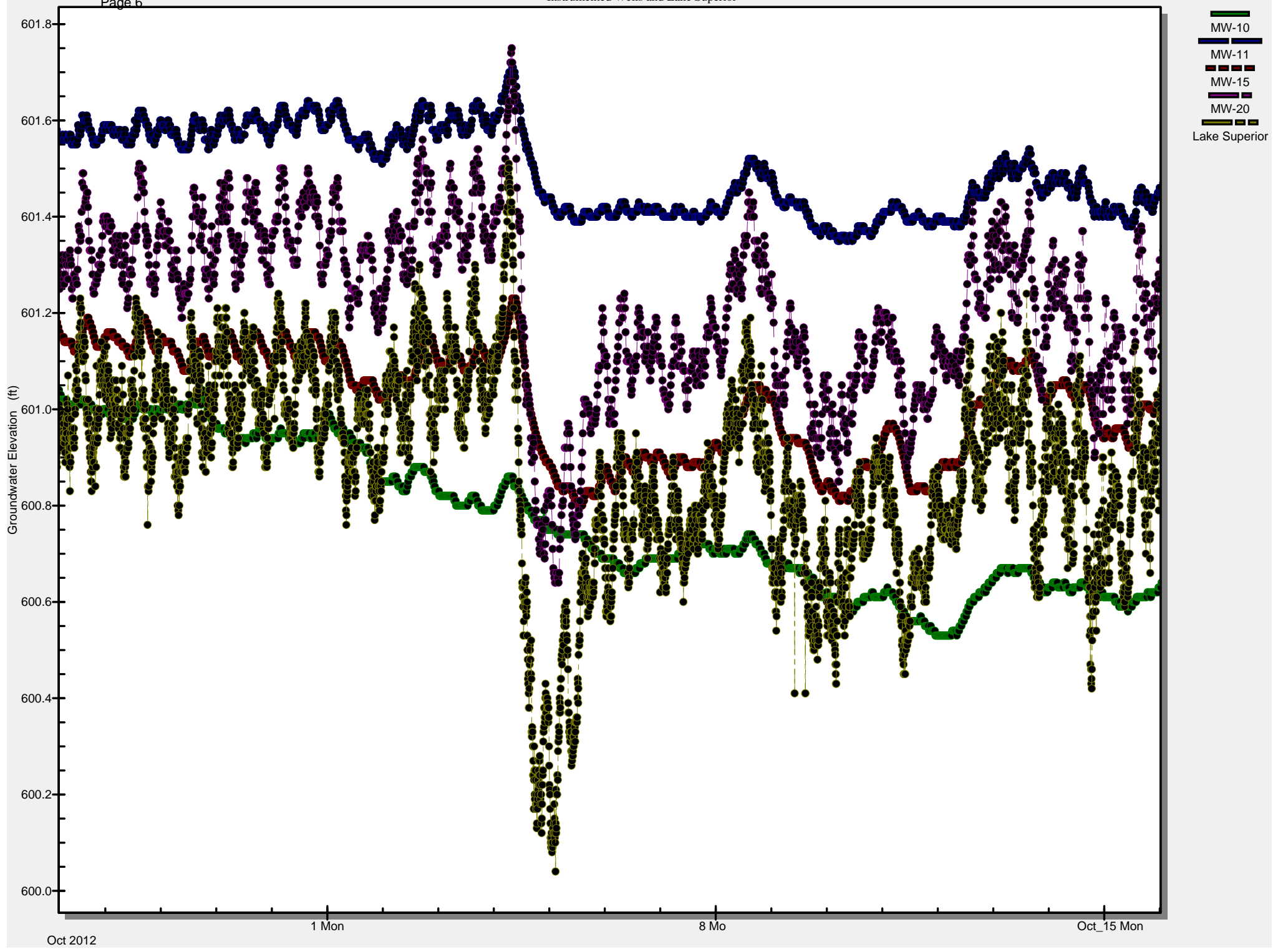
Water Elevation

MW-20 and Lake Superior



Water Elevation

Instrumented Wells and Lake Superior



- MW-10
- MW-11
- MW-15
- MW-20
- Lake Superior