



# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TTY 800-366-6888 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

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July 24, 2012

North Dakota Department of Health  
Division of Water Quality  
918 East Divide Avenue  
Bismarck, ND 58501-1947

RE: June 2012 Devils Lake Outlets Monthly Discharge and Water Quality Reports

Enclosed are the monthly discharge reports for the Devils Lake Outlets for the month of June 2012 and summaries of sample results and flow data. The West End Outlet was operated continuously throughout the reported period. On June 12<sup>th</sup> a repaired pump was installed and the West End Outlet began discharging at full capacity (250 cfs).

Construction on the East End Outlet was completed during June, and discharges resulting from testing began on June 20<sup>th</sup>. Because of the testing, flow rates were varied throughout the remainder of the month.

The attached tables contain average daily outlet discharge flow rate and water quality results from samples collected from both outlets and the corresponding upstream and downstream locations. Also included are average daily stream flow data and conductivity data obtained from the USGS gaging stations located upstream and downstream of the outlets.

If you have any questions, please contact me at 701-328-4948.

Sincerely,

Jonathan Kelsch P.E.  
Head, Construction Section  
JK:MSW:416-10

OUTLET OPERATOR NAME/ADDRESS

NAME: ND State Water Commission  
 ADDRESS: 900 E Boulevard Avenue,  
 Bismarck ND 58505

MONTHLY DISCHARGE REPORT

LOCATION: WEST END OUTLET

FACILITY: Devils Lake Outlet Project

MONITORING PERIOD	
START DATE	END DATE
6/1/12	6/30/12

LOCATION: Benson Co, ND

Devils Lake West Outlet discharged 12,755 ac-ft over 30 Days

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.30	8.81	8.50	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	NA	NA	NA	µS/cm	Continuous	Recorder
SULFATE	551	577	565	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	555	575	565	mg/L	2 x Week	GRAB
OUTLET DISCHARGE	166	252	215	cfs	Continuous	Recorder
SIGNATURE				6/22/12	701-328-4948	
NAME AND TITLE	JONATHAN KELSCH, HEAD, CONSTRUCTION SECTION			DATE	TELEPHONE NUMBER	

COMMENT AND EXPLANATION OF ANY VIOLATIONS

Summary of individual sample results and flow data for outlet, upstream & downstream monitoring locations attached.

- Notes:
- Analytical data statistics include data qualified by the laboratory as 'suspect' due to elevated sample temperature during storage and transport
  - ac-ft - Acre feet
  - SU - Standard Units
  - µS/cm - Microsiemens per Centimeter at 25 degrees Celsius
  - mg/L - Milligrams per liter or parts per million
  - cfs - Cubic feet per second
  - NA - Not available

OUTLET OPERATOR NAME/ADDRESS

NAME: ND State Water Commission  
 ADDRESS: 900 E Boulevard Avenue,  
 Bismarck ND 58505

MONTHLY DISCHARGE REPORT

LOCATION: EAST END OUTLET

FACILITY: Devils Lake Outlet Project

MONITORING PERIOD	
START DATE	END DATE
6/1/12	6/30/12

LOCATION: Ramsey, Benson, Nelson, ND

Devils Lake East Outlet discharged 3,489 ac-ft over 11 Days

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.68	8.68	8.68	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	NA	NA	NA	µS/cm	Continuous	Recorder
SULFATE	982	982	982	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	NC	NC	NC	mg/L	2 x Week	GRAB
OUTLET DISCHARGE	0	375	160	cfs	Continuous	Recorder
SIGNATURE				6/22/12	701-328-4948	
NAME AND TITLE	JONATHAN KELSCH, HEAD, CONSTRUCTION SECTION			DATE	TELEPHONE NUMBER	

COMMENT AND EXPLANATION OF ANY VIOLATIONS

Summary of individual sample results and flow data for outlet, upstream & downstream monitoring locations attached.

- Notes:
- Analytical data statistics include data qualified by the laboratory as 'suspect' due to elevated sample temperature during storage and transport
  - ac-ft - Acre feet
  - SU - Standard Units
  - µS/cm - Microsiemens per Centimeter at 25 degrees Celsius
  - mg/L - Milligrams per liter or parts per million
  - cfs - Cubic feet per second
  - NA - Not available

OUTLET OPERATOR NAME/ADDRESS

NAME: ND State Water Commission  
 ADDRESS: 900 E Boulevard Avenue,  
 Bismarck ND 58505

MONTHLY DISCHARGE REPORT

LOCATION: UPSTREAM OF THE WEST END OUTLET (FLORA)

FACILITY: Devils Lake Outlet Project

LOCATION: Benson Co, ND

MONITORING PERIOD	
START DATE	END DATE
6/1/12	6/30/12

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.20	8.44	8.31	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	1,430	1,640	1,544	µS/cm	Continuous	Recorder
SULFATE	362	394	383	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	367	392	382	mg/L	2 x Week	GRAB
FLOW, INSTREAM	34	81	57	cfs	Continuous	Recorder
SIGNATURE				6/22/12	701-328-4948	
NAME AND TITLE				JONATHAN KELSCH, HEAD, CONSTRUCTION SECTION	DATE	TELEPHONE NUMBER
COMMENT AND EXPLANATION OF ANY VIOLATIONS						
<p><b>Summary of individual sample results and flow data for outlet, upstream &amp; downstream monitoring locations attached.</b></p>						

**Notes:**  
 Analytical data statistics include data qualified by the laboratory as 'suspect' due to elevated sample temperature during storage and transport  
 SU - Standard Units  
 µS/cm - Microsiemens per Centimeter at 25 degrees Celsius  
 mg/L - Milligrams per liter or parts per million  
 cfs - Cubic feet per second  
 USGS streamflow and specific conductance data courtesy of the USGS  
 USGS data are provisional and subject to revision

OUTLET OPERATOR NAME/ADDRESS

NAME: ND State Water Commission  
 ADDRESS: 900 E Boulevard Avenue,  
 Bismarck ND 58505

MONTHLY DISCHARGE REPORT

LOCATION: DOWNSTREAM OF THE WEST END OUTLET (BREMEN)  
 UPSTREAM OF THE EAST END OUTLET

FACILITY: Devils Lake Outlet Project

MONITORING PERIOD	
START DATE	END DATE
6/1/12	6/30/12

LOCATION: Eddy Co, ND

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.37	8.70	8.47	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	1,810	1,920	1,860	µS/cm	Continuous	Recorder
SULFATE	518	543	531	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	515	541	528	mg/L	2 x Week	GRAB
FLOW, INSTREAM	244	318	285	cfs	Continuous	Recorder
SIGNATURE				6/22/12	701-328-4948	
NAME AND TITLE	JONATHAN KELSCH, HEAD, CONSTRUCTION SECTION			DATE	TELEPHONE NUMBER	
COMMENT AND EXPLANATION OF ANY VIOLATIONS						
Summary of individual sample results and flow data for outlet, upstream & downstream monitoring locations attached.						

**Notes:**  
 Analytical data statistics include data qualified by the laboratory as 'suspect' due to elevated sample temperature during storage and transport  
 SU - Standard Units  
 µS/cm - Microsiemens per Centimeter at 25 degrees Celsius  
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 cfs - Cubic feet per second  
 USGS streamflow and specific conductance data courtesy of the USGS  
 USGS data are provisional and subject to revision

OUTLET OPERATOR NAME/ADDRESS

NAME: ND State Water Commission  
 ADDRESS: 900 E Boulevard Avenue,  
 Bismarck ND 58505

MONTHLY DISCHARGE REPORT

LOCATION: DOWNSTREAM OF THE EAST END OUTLET (PEKIN)

FACILITY: Devils Lake Outlet Project

MONITORING PERIOD	
START DATE	END DATE
6/1/12	6/30/12

LOCATION: Nelson Co, ND

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.27	8.47	8.36	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	NM	NM	NM	µS/cm	Continuous	Recorder
SULFATE	420	490	450	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	412	469	447	mg/L	2 x Week	GRAB
FLOW, INSTREAM	NM	NM	NM	cfs	Continuous	Recorder
SIGNATURE				6/22/12	701-328-4948	
NAME AND TITLE				JONATHAN KELSCH, HEAD, CONSTRUCTION SECTION		
COMMENT AND EXPLANATION OF ANY VIOLATIONS						
<p><b>Summary of individual sample results and flow data for outlet, upstream &amp; downstream monitoring locations attached.</b></p>						

**Notes:**  
 Analytical data statistics include data qualified by the laboratory as 'suspect' due to elevated sample temperature during storage and transport  
 SU - Standard Units  
 µS/cm - Microsiemens per Centimeter at 25 degrees Celsius  
 mg/L - Milligrams per liter or parts per million  
 cfs - Cubic feet per second

**Daily Outlet Discharge and Upstream and Downstream Flows  
Devils Lake Outlets**

Date	Above West End Outlet - Sheyenne River near Flora		West End Outlet		Below West End Outlet/Above East End Outlet -Sheyenne River near Bremen		East End Outlet		Below East End Outlet - Tolna Coulee near Tolna		Below East End Outlet - Sheyenne River near Cooperstown	
	Average Streamflow USGS Gage (cfs)	Average Specific Conductance USGS Gage (µS/cm)	Average Daily Outlet Discharge (cfs)	Total Daily Volume (ft <sup>3</sup> )	Average Streamflow USGS Gage (cfs)	Average Specific Conductance USGS Gage (µS/cm)	Average Daily Outlet Discharge (cfs)	Total Daily Volume (ft <sup>3</sup> )	Average Streamflow USGS Gage (cfs)	Average Specific Conductance USGS Gage (µS/cm)	Average Streamflow USGS Gage (cfs)	Average Specific Conductance USGS Gage (µS/cm)
6/1/12	67	1,560	169	14,601,855	259	1,820	-	-	-	-	383	1,570
6/2/12	67	1,570	170	14,695,207	261	1,820	-	-	-	-	390	1,570
6/3/12	68	1,570	174	14,976,421	258	1,830	-	-	-	-	377	1,560
6/4/12	63	1,560	166	14,299,249	255	1,840	-	-	-	-	362	1,550
6/5/12	59	1,550	175	15,063,814	244	1,840	-	-	-	-	350	-
6/6/12	55	1,550	170	14,658,853	248	1,850	-	-	-	-	340	-
6/7/12	58	1,550	168	14,502,940	266	1,810	-	-	-	-	335	-
6/8/12	64	1,620	169	14,558,178	268	1,830	-	-	-	-	345	1,600
6/9/12	81	1,500	171	14,715,229	278	1,860	-	-	-	-	326	-
6/10/12	81	1,470	168	14,508,858	284	1,820	-	-	-	-	309	1,630
6/11/12	62	1,470	171	14,747,923	277	1,810	-	-	4	-	299	1,640
6/12/12	54	1,430	178	15,334,309	253	1,830	-	-	1	-	306	1,640
6/13/12	63	1,520	252	21,716,489	270	1,840	-	-	14	-	318	1,650
6/14/12	61	1,550	248	21,419,773	315	1,860	-	-	-	-	341	1,650
6/15/12	56	1,550	252	21,710,893	314	1,870	-	-	-	-	375	1,590
6/16/12	56	1,550	251	21,660,098	318	1,860	-	-	-	-	359	1,600
6/17/12	57	1,560	247	21,304,838	312	1,860	-	-	-	-	340	1,610
6/18/12	57	1,540	243	20,999,981	313	1,870	-	-	-	-	335	1,610
6/19/12	59	1,510	242	20,864,944	314	1,870	-	-	15	2,830	370	1,630
6/20/12	60	1,490	247	21,329,584	318	1,860	101	8,690,000	-	2,830	413	1,620
6/21/12	56	1,510	243	20,990,270	310	1,870	0	0	-	2,840	433	1,550
6/22/12	55	1,530	244	21,078,126	305	1,870	10	900,000	21	2,870	427	1,550
6/23/12	55	1,530	249	21,493,241	306	1,880	97	8,400,000	-	2,870	424	1,540
6/24/12	53	1,520	233	20,129,459	307	1,880	5	400,000	-	2,870	413	1,540
6/25/12	49	1,530	233	20,055,708	302	1,890	78	6,700,000	-	2,890	391	1,610
6/26/12	46	1,560	232	20,010,400	297	1,900	356	30,800,000	-	2,910	383	1,660
6/27/12	41	1,590	246	21,226,989	290	1,910	375	32,400,000	380	2,910	374	1,680
6/28/12	38	1,600	239	20,576,028	278	1,920	274	23,700,000	303	2,910	363	1,680
6/29/12	35	1,640	246	21,247,319	270	1,920	231	20,000,000	221	2,920	370	1,700
6/30/12	34	1,640	245	21,131,122	268	1,920	231	20,000,000	224	2,920	470	1,730
<b>Minimum</b>	34	1,430	166	14,299,249	244	1,810	0	0	1	2,830	299	1,540
<b>Maximum</b>	81	1,640	252	21,716,489	318	1,920	375	32,400,000	380	2,920	470	1,730
<b>Average</b>	57	1,544	215	18,520,270	285	1,860	160	13,817,273	131	2,881	367	1,614

<b>Total (ft<sup>3</sup>)</b>	555,608,096	<b>Total (ft<sup>3</sup>)</b>	151,990,000
<b>Total (Mgal)</b>	4,156	<b>Total (Mgal)</b>	1,137
<b>Total (Ac-ft)</b>	12,755	<b>Total (Ac-ft)</b>	3,489

**Notes:**

- cfs - cubic feet per second
- µS/cm - Microsiemens per Centimeter at 25 degrees Celsius
- ft<sup>3</sup> - cubic feet
- Mgal - Millions of Gallons
- Ac ft - Acre Feet
- USGS streamflow and specific conductance data are preliminary and courtesy of the USGS

**Sheyenne River Upstream of West End Outlet near Flora  
Monthly Water Quality Summary  
Devils Lake Outlet Discharge Report**

Date	Time	Specific Conductance USGS Gage (µS/cm)	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	No. of days included in the 7 day Rolling Average
6/1/12	-	-	-	-	-	-	-
6/2/12	-	-	-	-	-	-	-
6/3/12	-	-	-	-	-	-	-
6/4/12	-	-	-	-	-	-	-
6/5/12	8:15	1,540	8.21	392	389	NA	7
6/6/12	8:55	1,540	8.20	382	387	NA	7
6/7/12	-	-	-	-	-	-	-
6/8/12	-	-	-	-	-	-	-
6/9/12	-	-	-	-	-	-	-
6/10/12	-	-	-	-	-	-	-
6/11/12	-	-	-	-	-	-	-
6/12/12	8:25	1,400	8.27	384	383	65	7
6/13/12	8:55	1,430	8.34	389	387	NA	7
6/14/12	-	-	-	-	-	-	-
6/15/12	-	-	-	-	-	-	-
6/16/12	-	-	-	-	-	-	-
6/17/12	-	-	-	-	-	-	-
6/18/12	-	-	-	-	-	-	-
6/19/12	8:25	1,510	8.32	362	376	NA	7
6/20/12	-	-	-	-	-	-	-
6/21/12	11:30	1,500	8.44	371	367	NA	7
6/22/12	-	-	-	-	-	-	-
6/23/12	-	-	-	-	-	-	-
6/24/12	-	-	-	-	-	-	-
6/25/12	-	-	-	-	-	-	-
6/26/12	8:25	1,550	8.31	389	380	42	7
6/27/12	-	-	-	-	-	-	-
6/28/12	8:40	1,590	8.42	394	392	NA	7
6/29/12	-	-	-	-	-	-	-
6/30/12	-	-	-	-	-	-	-
Minimum		1,400	8.20	362	367	42	
Maximum		1,590	8.44	394	392	65	
Average		1,508	8.31	383	382	54	

**Notes:**

µS/cm - Microsiemens per Centimeter at 25 degrees Celsius

mg/L - Milligrams per liter or parts per million

NA - Not Analyzed

USGS streamflow and specific conductance data courtesy of the USGS

USGS data are provisional and subject to revision

*Italicized font denotes preliminary laboratory result*

**Yellow shading denotes sample temperatures at laboratory receipt were above analytical method preservation requirements. Results must be considered suspect**



**West End Outlet  
Monthly Water Quality Summary  
Devils Lake Outlet Discharge Report**

Date	Time	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	No. of days included in the 7 day Rolling Average
6/1/12	-	-	-	-	-	-
6/2/12	-	-	-	-	-	-
6/3/12	-	-	-	-	-	-
6/4/12	-	-	-	-	-	-
6/5/12	8:25	8.43	560	563	NA	7
6/6/12	9:10	8.56	559	561	NA	7
6/7/12	-	-	-	-	-	-
6/8/12	-	-	-	-	-	-
6/9/12	-	-	-	-	-	-
6/10/12	-	-	-	-	-	-
6/11/12	-	-	-	-	-	-
6/12/12	8:30	8.30	551	555	6	7
6/13/12	9:05	8.57	573	562	NA	7
6/14/12	-	-	-	-	-	-
6/15/12	-	-	-	-	-	-
6/16/12	-	-	-	-	-	-
6/17/12	-	-	-	-	-	-
6/18/12	-	-	-	-	-	-
6/19/12	8:40	8.39	577	575	NA	7
6/20/12	-	-	-	-	-	-
6/21/12	11:15	8.81	559	568	NA	7
6/22/12	-	-	-	-	-	-
6/23/12	-	-	-	-	-	-
6/24/12	-	-	-	-	-	-
6/25/12	-	-	-	-	-	-
6/26/12	8:35	8.41	570	565	12	7
6/27/12	-	-	-	-	-	-
6/28/12	8:50	8.54	568	569	NA	7
6/29/12	-	-	-	-	-	-
6/30/12	-	-	-	-	-	-
<b>Minimum</b>		8.30	551	555	6	
<b>Maximum</b>		8.81	577	575	12	
<b>Average</b>		8.50	565	565	9	

**Notes:**

mg/L - Milligrams per liter or parts per million

NA - Not Analyzed

*Italicized font denotes preliminary laboratory result*

Yellow shading denotes sample temperatures at laboratory receipt were above analytical method preservation requirements. Results must be considered suspect



**Sheyenne River Downstream of West End Outlet/Upstream of East End Outlet near Bremen  
Monthly Water Quality Summary  
Devils Lake Outlet Discharge Report**

Date	Time	Specific Conductance USGS Gage (µS/cm)	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	No. of days included in the 7 day Rolling Average
6/1/12	-	-	-	-	-	-	-
6/2/12	-	-	-	-	-	-	-
6/3/12	-	-	-	-	-	-	-
6/4/12	-	-	-	-	-	-	-
6/5/12	7:50	1,840	8.37	518	515	NA	7
6/6/12	8:35	1,840	8.41	520	517	NA	7
6/7/12	-	-	-	-	-	-	-
6/8/12	-	-	-	-	-	-	-
6/9/12	-	-	-	-	-	-	-
6/10/12	-	-	-	-	-	-	-
6/11/12	-	-	-	-	-	-	-
6/12/12	8:00	1,820	8.37	523	522	53	7
6/13/12	8:30	1,800	8.46	535	529	NA	7
6/14/12	-	-	-	-	-	-	-
6/15/12	-	-	-	-	-	-	-
6/16/12	-	-	-	-	-	-	-
6/17/12	-	-	-	-	-	-	-
6/18/12	-	-	-	-	-	-	-
6/19/12	7:55	1,870	8.42	543	539	NA	7
6/20/12	-	-	-	-	-	-	-
6/21/12	11:45	1,860	8.70	525	534	NA	7
6/22/12	-	-	-	-	-	-	-
6/23/12	-	-	-	-	-	-	-
6/24/12	-	-	-	-	-	-	-
6/25/12	-	-	-	-	-	-	-
6/26/12	8:00	1,900	8.44	538	532	208	7
6/27/12	-	-	-	-	-	-	-
6/28/12	8:20	1,910	8.56	543	541	NA	7
6/29/12	-	-	-	-	-	-	-
6/30/12	-	-	-	-	-	-	-
<b>Minimum</b>		1,800	8.37	518	515	53	
<b>Maximum</b>		1,910	8.70	543	541	208	
<b>Average</b>		1,855	8.47	531	528	131	

**Notes:**

µS/cm - Microsiemens per Centimeter at 25 degrees Celsius

mg/L - Milligrams per liter or parts per million

NA - Not Analyzed

USGS streamflow and specific conductance data courtesy of the USGS

USGS data are provisional and subject to revision

*Italicized font denotes preliminary laboratory result*

**Yellow shading denotes sample temperatures at laboratory receipt were above analytical method preservation requirements. Results must be considered suspect**



**East End Outlet  
Monthly Water Quality Summary  
Devils Lake Outlet Discharge Report**

Date	Time	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	No. of days included in the 7 day Rolling Average
6/1/12	-	-	-	-	-	-
6/2/12	-	-	-	-	-	-
6/3/12	-	-	-	-	-	-
6/4/12	-	-	-	-	-	-
6/5/12	-	-	-	-	-	-
6/6/12	-	-	-	-	-	-
6/7/12	-	-	-	-	-	-
6/8/12	-	-	-	-	-	-
6/9/12	-	-	-	-	-	-
6/10/12	-	-	-	-	-	-
6/11/12	-	-	-	-	-	-
6/12/12	-	-	-	-	-	-
6/13/12	-	-	-	-	-	-
6/14/12	-	-	-	-	-	-
6/15/12	-	-	-	-	-	-
6/16/12	-	-	-	-	-	-
6/17/12	-	-	-	-	-	-
6/18/12	-	-	-	-	-	-
6/19/12	-	-	-	-	-	-
6/20/12	-	-	-	-	-	-
6/21/12	-	-	-	-	-	-
6/22/12	-	-	-	-	-	-
6/23/12	-	-	-	-	-	-
6/24/12	-	-	-	-	-	-
6/25/12	-	-	-	-	-	-
6/26/12	-	-	-	-	-	-
6/27/12	-	-	-	-	-	-
6/28/12	11:30	8.68	982	NC	NA	-
6/29/12	-	-	-	-	-	-
6/30/12	-	-	-	-	-	-
<b>Minimum</b>		8.68	982	NC	NC	
<b>Maximum</b>		8.68	982	NC	NC	
<b>Average</b>		8.68	982	NC	NC	

**Notes:**

mg/L - Milligrams per liter or parts per million

NA - Not Analyzed

NC - Not Calculated

Yellow shading denotes sample temperatures at laboratory receipt were above analytical method preservation requirements. Results must be considered suspect



**Sheyenne River Downstream of East End Outlet near Pekin  
Monthly Water Quality Summary  
Devils Lake Outlet Discharge Report**

Date	Time	pH	Sulfate (mg/L)	7 Day Rolling Average of Sulfate (mg/L)	Total Suspended Solids (mg/L)	No. of days included in the 7 day Rolling Average
6/1/12	9:15	8.39	420	412	NA	7
6/2/12	-	-	-	-	-	-
6/3/12	-	-	-	-	-	-
6/4/12	-	-	-	-	-	-
6/5/12	9:50	8.32	452	436	NA	7
6/6/12	15:15	8.33	453	442	NA	7
6/7/12	-	-	-	-	-	-
6/8/12	-	-	-	-	-	-
6/9/12	-	-	-	-	-	-
6/10/12	-	-	-	-	-	-
6/11/12	-	-	-	-	-	-
6/12/12	10:00	8.29	447	450	139	7
6/13/12	13:20	8.46	470	459	NA	7
6/14/12	-	-	-	-	-	-
6/15/12	-	-	-	-	-	-
6/16/12	-	-	-	-	-	-
6/17/12	-	-	-	-	-	-
6/18/12	-	-	-	-	-	-
6/19/12	10:15	8.27	430	450	93	7
6/20/12	-	-	-	-	-	-
6/21/12	14:20	8.47	448	439	NA	7
6/22/12	-	-	-	-	-	-
6/23/12	-	-	-	-	-	-
6/24/12	-	-	-	-	-	-
6/25/12	-	-	-	-	-	-
6/26/12	10:15	8.30	490	469	90	7
6/27/12	-	-	-	-	-	-
6/28/12	12:15	8.38	440	465	NA	7
6/29/12	-	-	-	-	-	-
6/30/12	-	-	-	-	-	-
<b>Minimum</b>		8.27	420	412	90	
<b>Maximum</b>		8.47	490	469	139	
<b>Average</b>		8.36	450	447	107	

**Notes:**

µS/cm - Microsiemens per Centimeter at 25 degrees Celsius

mg/L - Milligrams per liter or parts per million

NA - Not Analyzed

*Italicized font denotes preliminary laboratory result*

Yellow shading denotes sample temperatures at laboratory receipt were above analytical method preservation requirements. Results must be considered suspect

