

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>

June 30, 2014

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

RE: May 2014 Devils Lake Outlets Monthly Discharge and Water Quality Report

Enclosed are the monthly discharge reports for the Devils Lake Outlets for the month of May 2014 and summaries of water quality sample results and flow data. The East End Outlet began discharging on May 12th, 2014, but discharges were reduced to approximately 150 cfs due to high baseflow in the Sheyenne River. Repairs to the West End Outlet have been completed, and it began limited discharges (approximately 50 to 130 cfs) on May 20th.

The attached tables contain average daily outlet discharges and water quality results from samples collected from the 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
5/1/14	5/31/14

LOCATION: Benson Co, ND

Devils Lake West Outlet discharged 1,874 ac-ft over 12 Days

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.43	8.60	8.53	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	NA	NA	NA	µS/cm	Continuous	Recorder
SULFATE	521	575	547	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	533	575	552	mg/L	2 x Week	GRAB
OUTLET DISCHARGE	32	134	79	cfs	Continuous	Recorder
SIGNATURE	<i>Jonathan Kelsch</i>			6/30/14	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:

- 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
5/1/14	5/31/14

LOCATION: Ramsey, Benson, Nelson, ND

Devils Lake East Outlet discharged 5,581 ac-ft over 20 Days

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.57	8.73	8.66	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	NA	NA	NA	µS/cm	Continuous	Recorder
SULFATE	874	932	909	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	891	925	910	mg/L	2 x Week	GRAB
OUTLET DISCHARGE	69	148	141	cfs	Continuous	Recorder
SIGNATURE				6/30/14	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:

- 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

MONITORING PERIOD	
START DATE	END DATE
5/1/14	5/31/14

LOCATION: Benson Co, ND

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.20	8.46	8.37	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	1,190	1,550	1,392	µS/cm	Continuous	Recorder
SULFATE	387	425	408	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	393	421	409	mg/L	2 x Week	GRAB
FLOW, INSTREAM	215	459	295	cfs	Continuous	Recorder
SIGNATURE				6/30/14	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:

- 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
5/1/14	5/31/14

LOCATION: Eddy Co, ND

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.29	8.46	8.38	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	1,290	1,660	1,476	µS/cm	Continuous	Recorder
SULFATE	388	452	428	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	406	449	424	mg/L	2 x Week	GRAB
FLOW, INSTREAM	281	529	345	cfs	Continuous	Recorder
SIGNATURE				6/30/14	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:

- 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 EAST END OUTLET (PEKIN)

FACILITY: Devils Lake Outlet Project

MONITORING PERIOD	
START DATE	END DATE
5/1/14	5/31/14

LOCATION: Nelson Co, ND

PARAMETER	MINIMUM	MAXIMUM	AVERAGE	UNITS	SAMPLING FREQUENCY	TYPE
pH	8.22	8.68	8.44	SU	2 x Week	GRAB
SPECIFIC CONDUCTANCE	NA	NA	NA	µS/cm	Continuous	Recorder
SULFATE	267	491	393	mg/L	2 x Week	GRAB
7 DAY AVERAGE OF SULFATE	267	471	372	mg/L	2 x Week	GRAB
FLOW, INSTREAM	NA	NA	NA	cfs	Continuous	Recorder
SIGNATURE				6/30/14	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:

- 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

**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 (ft³)	Average Streamflow USGS Gage (cfs)	Average Specific Conductance USGS Gage (µS/cm)	Average Daily Outlet Discharge (cfs)	Total Daily Volume (ft³)	Average Streamflow USGS Gage (cfs)	Average Specific Conductance USGS Gage (µS/cm)	Average Streamflow USGS Gage (cfs)	Average Specific Conductance USGS Gage (µS/cm)
5/1/14	459	1,260	-	-	529	1,400	-	-	0	-	864	973
5/2/14	424	1,220	-	-	481	1,350	-	-	0	-	890	986
5/3/14	402	1,210	-	-	440	1,320	-	-	0	-	924	962
5/4/14	387	1,200	-	-	411	1,310	-	-	0	-	940	973
5/5/14	365	1,190	-	-	396	1,300	-	-	0	-	956	1,020
5/6/14	342	1,190	-	-	376	1,290	-	-	0	-	964	1,100
5/7/14	319	1,200	-	-	356	1,300	-	-	0	-	960	1,150
5/8/14	301	1,230	-	-	335	1,310	-	-	0	-	946	1,190
5/9/14	290	1,260	-	-	315	1,360	-	-	0	-	924	1,210
5/10/14	278	1,280	-	-	304	1,390	-	-	0	-	894	1,200
5/11/14	293	1,300	-	-	326	1,410	-	-	0	-	864	1,190
5/12/14	320	1,320	-	-	345	1,460	69	5,931,000	0	-	838	1,190
5/13/14	340	1,330	-	-	357	1,470	145	12,561,000	95	-	812	1,180
5/14/14	330	1,380	-	-	359	1,480	145	12,508,000	140	-	794	1,180
5/15/14	316	1,460	-	-	345	1,490	144	12,473,000	145	-	801	1,170
5/16/14	307	1,460	-	-	332	1,490	144	12,476,000	143	2,750	824	1,150
5/17/14	294	1,460	-	-	319	1,490	144	12,466,000	140	2,750	856	1,160
5/18/14	278	1,460	-	-	306	1,490	144	12,470,000	138	2,740	883	1,210
5/19/14	267	1,480	-	-	306	1,510	144	12,465,000	142	2,700	893	1,250
5/20/14	266	1,500	32	2,775,000	289	1,540	144	12,441,000	143	2,730	895	1,270
5/21/14	264	1,500	50	4,307,000	308	-	144	12,409,000	139	2,740	885	1,350
5/22/14	250	1,500	52	4,524,000	320	-	145	12,546,000	138	-	869	1,430
5/23/14	233	1,510	51	4,441,000	309	1,600	146	12,621,000	139	-	853	1,440
5/24/14	219	1,530	50	4,298,000	291	1,610	146	12,620,000	140	-	839	1,440
5/25/14	215	1,550	51	4,419,000	284	1,610	146	12,619,000	139	-	826	1,460
5/26/14	221	1,540	49	4,210,000	281	1,620	146	12,635,000	139	-	812	1,450
5/27/14	224	1,550	103	8,918,000	283	1,620	146	12,650,000	139	-	797	1,480
5/28/14	236	1,540	133	11,531,000	332	1,650	131	11,347,000	133	-	780	1,490
5/29/14	243	1,520	133	11,511,000	359	1,660	147	12,725,000	135	-	757	1,530
5/30/14	232	1,510	106	9,137,000	355	1,650	148	12,823,000	137	-	741	1,550
5/31/14	225	1,500	134	11,551,000	344	1,620	143	12,337,000	137	-	746	1,570
Minimum	215	1190	32	2,775,000	281	1290	69	5,931,000	0	2700	741	962
Maximum	459	1550	134	11,551,000	529	1660	148	12,823,000	145	2750	964	1570
Average	295	1392	79	6,801,833	345	1476	141	12,156,150	84	2735	859	1255

Total (ft³)	81,622,000
Total (Mgal)	611
Total (Ac-ft)	1,874

Total (ft³)	243,123,000
Total (Mgal)	1,819
Total (Ac-ft)	5,581

Notes:

- cfs - cubic feet per second
- µS/cm - Microsiemens per Centimeter at 25 degrees Celsius
- ft³ - cubic feet
- Mgal - Millions of Gallons
- Ac ft - Acre Feet
- USGS streamflow and specific conductance data are preliminary and courtesy of the USGS
- NC - Not calculated



**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
5/1/14	-	-	-	-	-	-	-
5/2/14	-	-	-	-	-	-	-
5/3/14	-	-	-	-	-	-	-
5/4/14	-	-	-	-	-	-	-
5/5/14	-	-	-	-	-	-	-
5/6/14	-	-	-	-	-	-	-
5/7/14	-	-	-	-	-	-	-
5/8/14	-	-	-	-	-	-	-
5/9/14	-	-	-	-	-	-	-
5/10/14	-	-	-	-	-	-	-
5/11/14	-	-	-	-	-	-	-
5/12/14	-	-	-	-	-	-	-
5/13/14	-	-	-	-	-	-	-
5/14/14	7:58	1,350	8.46	408	408	NA	7
5/15/14	8:50	1,470	8.34	415	412	NA	7
5/16/14	-	-	-	-	-	-	-
5/17/14	-	-	-	-	-	-	-
5/18/14	-	-	-	-	-	-	-
5/19/14	-	-	-	-	-	-	-
5/20/14	8:00	1,500	8.45	425	416	29	-
5/21/14	-	-	-	-	-	-	-
5/22/14	-	-	-	-	-	-	-
5/23/14	8:35	1,510	8.31	416	421	NA	7
5/24/14	-	-	-	-	-	-	-
5/25/14	-	-	-	-	-	-	-
5/26/14	-	-	-	-	-	-	-
5/27/14	-	-	-	-	-	-	-
5/28/14	7:50	1,540	8.43	398	407	NA	7
5/29/14	-	-	-	-	-	-	-
5/30/14	9:15	1,500	8.20	387	393	NA	7
5/31/14	-	-	-	-	-	-	-
Minimum		1,350	8.20	387	393	29	
Maximum		1,540	8.46	425	421	29	
Average		1,478	8.37	408	409	29	

Notes:

µS/cm - Microsiemens per Centimeter at 25 degrees Celsius
 mg/L - Milligrams per liter or parts per million
 NA - Not Analyzed
 USGS specific conductance data courtesy of the USGS
 USGS data are provisional and subject to revision
 Italic font denotes preliminary result



**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
5/1/14	-	-	-	-	-	-
5/2/14	-	-	-	-	-	-
5/3/14	-	-	-	-	-	-
5/4/14	-	-	-	-	-	-
5/5/14	-	-	-	-	-	-
5/6/14	-	-	-	-	-	-
5/7/14	-	-	-	-	-	-
5/8/14	-	-	-	-	-	-
5/9/14	-	-	-	-	-	-
5/10/14	-	-	-	-	-	-
5/11/14	-	-	-	-	-	-
5/12/14	-	-	-	-	-	-
5/13/14	-	-	-	-	-	-
5/14/14	-	-	-	-	-	-
5/15/14	-	-	-	-	-	-
5/16/14	-	-	-	-	-	-
5/17/14	-	-	-	-	-	-
5/18/14	-	-	-	-	-	-
5/19/14	-	-	-	-	-	-
5/20/14	-	-	-	-	-	-
5/21/14	-	-	-	-	-	-
5/22/14	-	-	-	-	-	-
5/23/14	8:20	8.60	575	575	NA	7
5/24/14	-	-	-	-	-	-
5/25/14	-	-	-	-	-	-
5/26/14	-	-	-	-	-	-
5/27/14	-	-	-	-	-	-
5/28/14	8:10	8.55	521	548	NA	7
5/29/14	-	-	-	-	-	-
5/30/14	9:03	8.43	544	533	NA	7
5/31/14	-	-	-	-	-	-
Minimum		8.43	521	533	-	
Maximum		8.60	575	575	-	
Average		8.53	547	552	-	

Notes:

mg/L - Milligrams per liter or parts per million

NA - Not Analyzed

Italic font denotes preliminary result



**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
5/1/14	-	-	-	-	-	-	-
5/2/14	-	-	-	-	-	-	-
5/3/14	-	-	-	-	-	-	-
5/4/14	-	-	-	-	-	-	-
5/5/14	-	-	-	-	-	-	-
5/6/14	-	-	-	-	-	-	-
5/7/14	-	-	-	-	-	-	-
5/8/14	-	-	-	-	-	-	-
5/9/14	-	-	-	-	-	-	-
5/10/14	-	-	-	-	-	-	-
5/11/14	-	-	-	-	-	-	-
5/12/14	-	-	-	-	-	-	-
5/13/14	-	-	-	-	-	-	-
5/14/14	7:30	1,460	8.43	408	408	NA	7
5/15/14	9:10	1,490	8.33	423	416	NA	7
5/16/14	-	-	-	-	-	-	-
5/17/14	-	-	-	-	-	-	-
5/18/14	-	-	-	-	-	-	-
5/19/14	-	-	-	-	-	-	-
5/20/14	7:20	1,530	8.46	388	406	55	7
5/21/14	-	-	-	-	-	-	-
5/22/14	-	-	-	-	-	-	-
5/23/14	9:00	1,590	8.37	449	419	NA	7
5/24/14	-	-	-	-	-	-	-
5/25/14	-	-	-	-	-	-	-
5/26/14	-	-	-	-	-	-	-
5/27/14	-	-	-	-	-	-	-
5/28/14	7:25	1,640	8.41	446	448	NA	7
5/29/14	-	-	-	-	-	-	-
5/30/14	9:38	1,660	8.29	452	449	NA	7
5/31/14	-	-	-	-	-	-	-
Minimum		1,460	8.29	388	406	55	
Maximum		1,660	8.46	452	449	55	
Average		1,562	8.38	428	424	55	

Notes:

µS/cm - Microsiemens per Centimeter at 25 degrees Celsius
 mg/L - Milligrams per liter or parts per million
 NA - Not Analyzed
 USGS specific conductance data courtesy of the USGS
 USGS data are provisional and subject to revision
 Italic font denotes preliminary result



**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
5/1/14	-	-	-	-	-	-
5/2/14	-	-	-	-	-	-
5/3/14	-	-	-	-	-	-
5/4/14	-	-	-	-	-	-
5/5/14	-	-	-	-	-	-
5/6/14	-	-	-	-	-	-
5/7/14	-	-	-	-	-	-
5/8/14	-	-	-	-	-	-
5/9/14	-	-	-	-	-	-
5/10/14	-	-	-	-	-	-
5/11/14	-	-	-	-	-	-
5/12/14	-	-	-	-	-	-
5/13/14	-	-	-	-	-	-
5/14/14	-	-	-	-	-	-
5/15/14	10:25	8.57	917	917	NA	7
5/16/14	-	-	-	-	-	-
5/17/14	-	-	-	-	-	-
5/18/14	-	-	-	-	-	-
5/19/14	-	-	-	-	-	-
5/20/14	9:20	8.68	932	925	<5	7
5/21/14	-	-	-	-	-	-
5/22/14	-	-	-	-	-	-
5/23/14	10:20	8.73	916	924	NA	7
5/24/14	-	-	-	-	-	-
5/25/14	-	-	-	-	-	-
5/26/14	-	-	-	-	-	-
5/27/14	-	-	-	-	-	-
5/28/14	9:15	8.72	874	895	NA	7
5/29/14	-	-	-	-	-	-
5/30/14	8:30	8.60	908	891	NA	7
5/31/14	-	-	-	-	-	-
Minimum		8.57	874	891	-	
Maximum		8.73	932	925	-	
Average		8.66	909	910	-	

Notes:

mg/L - Milligrams per liter or parts per million
 NA - Not Analyzed due to operation constraints
 Italic font denotes preliminary result



**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
5/1/14	-	-	-	-	-	-
5/2/14	-	-	-	-	-	-
5/3/14	-	-	-	-	-	-
5/4/14	-	-	-	-	-	-
5/5/14	-	-	-	-	-	-
5/6/14	-	-	-	-	-	-
5/7/14	-	-	-	-	-	-
5/8/14	-	-	-	-	-	-
5/9/14	-	-	-	-	-	-
5/10/14	-	-	-	-	-	-
5/11/14	-	-	-	-	-	-
5/12/14	-	-	-	-	-	-
5/13/14	-	-	-	-	-	-
5/14/14	9:50	8.45	267	267	NA	7
5/15/14	10:05	8.68	327	297	NA	7
5/16/14	-	-	-	-	-	-
5/17/14	-	-	-	-	-	-
5/18/14	-	-	-	-	-	-
5/19/14	-	-	-	-	-	-
5/20/14	10:20	8.45	414	336	45	-
5/21/14	-	-	-	-	-	-
5/22/14	-	-	-	-	-	-
5/23/14	9:55	8.39	411	413	NA	7
5/24/14	-	-	-	-	-	-
5/25/14	-	-	-	-	-	-
5/26/14	-	-	-	-	-	-
5/27/14	-	-	-	-	-	-
5/28/14	9:50	8.46	491	451	NA	7
5/29/14	-	-	-	-	-	-
5/30/14	8:00	8.22	450	471	NA	7
5/31/14	-	-	-	-	-	-
Minimum		8.22	267	267	45	
Maximum		8.68	491	471	45	
Average		8.44	393	372	45	

Notes:

mg/L - Milligrams per liter or parts per million

NA - Not Analyzed

Italic font denotes preliminary result

Bold font denotes sample sulfate concentration exceeds 750 mg/L

