Appendix 6: Data Summary for Birch Lake (69-0003-00)

BIRCH LAKE (69-0003-00)

KEY

Sulfate measurement below 10 mg/L

Sulfate measurement above 10 mg/L

Highlighted due to multiple samples collected on this date

wid	type	Sample Date	Station ID	Sample Fraction	Parameter	Units	Result	Sample Depth	Sample Depth Units	Detect Description	Analytic Method
69-0003-00	Lake	5/25/2011	69-0003-00-203	Total	Sulfate as SO4	mg/L	5.86	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/23/2011	69-0003-00-203	Total	Sulfate as SO4	mg/L	7.84	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/23/2011	69-0003-00-204	Total	Sulfate as SO4	mg/L	3.07	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/25/2011	69-0003-00-203	Total	Sulfate as SO4	mg/L	6.98	2	m	Sulfate in Water by Turbidimeter	D516
<u>69-0003-00</u> <u>69-0003-00</u>	Lake Lake	7/25/2011 8/25/2011	69-0003-00-204 69-0003-00-203	Total Total	Sulfate as SO4 Sulfate as SO4	mg/L	<u>3</u> 8.5	2	m	Sulfate in Water by Turbidimeter Sulfate in Water by Turbidimeter	D516 D516
69-0003-00	Lake	8/25/2011	69-0003-00-203	Total	Sulfate as SO4	mg/L mg/L	<u>8.5</u> 3	2	m m	Sulfate in Water by Turbidimeter	D516 D516
69-0003-00	Lake	8/30/2011	69-0003-00-205	Total	Sulfate as SO4	mg/L	3.58	(null)	m	Determination of Inorganic Anions by Ion Chromatography	300
69-0003-00	Lake	9/26/2011	69-0003-00-203	Total	Sulfate as SO4	mg/L	8.62	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/26/2011	69-0003-00-204	Total	Sulfate as SO4	mg/L	3.74	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	5/16/2012	69-0003-00-203	Total	Sulfate as SO4	mg/L	13.4	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	5/16/2012	69-0003-00-204	Total	Sulfate as SO4	mg/L	4.21	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/21/2012	69-0003-00-203	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/21/2012	69-0003-00-204	Total	Sulfate as SO4	mg/L mg/L	4.65	2	m	Sulfate in Water by Turbidimeter	D516
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69-0003-00	Lake	7/18/2012	69-0003-00-203	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/18/2012	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516 D516
69-0003-00	Lake	8/16/2012	69-0003-00-203	Total	Sulfate as SO4	mg/L	3	2	m	, ,	
69-0003-00	Lake	8/16/2012	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	
69-0003-00	Lake	9/10/2012	69-0003-00-205	Total	Sulfate as SO4	mg/L	0.55	0.1	m	Determination of Inorganic Anions in Drinking Water by Ion Chromatography	300.1
69-0003-00	Lake	9/10/2012	69-0003-00-205	Total	Sulfate as SO4	mg/L	8.61	(null)	m	Determination of Inorganic Anions in Drinking Water by Ion Chromatography	300.1
69-0003-00	Lake	9/18/2012	69-0003-00-203	Total	Sulfate as SO4	mg/L	7.29	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/18/2012	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	5/30/2013	69-0003-00-203	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	5/30/2013	69-0003-00-204	Total	Sulfate as SO4	mg/L	15.9	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/17/2013	69-0003-00-203	Total	Sulfate as SO4	mg/L	14.7	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/17/2013	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/15/2013	69-0003-00-203	Total	Sulfate as SO4	mg/L	11.6	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/15/2013	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	8/19/2013	69-0003-00-203	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	8/19/2013	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/16/2013	69-0003-00-203	Total	Sulfate as SO4	mg/L	5.82	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/16/2013	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake		69-0003-00-203	Total	Sulfate as SO4	mg/L	7.47	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake		69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/19/2014	69-0003-00-203	Total	Sulfate as SO4	mg/L	6.45	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/19/2014	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/14/2014	69-0003-00-203	Total	Sulfate as SO4	mg/L	8.03	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/14/2014	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	8/11/2014	69-0003-00-203	Total	Sulfate as SO4	mg/L	7.91	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	8/11/2014	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516

69-0003-00	Lake	9/15/2014	69-0003-00-203	Total	Sulfate as SO4	mg/L	9.98	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/15/2014	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	5/18/2015	69-0003-00-203	Total	Sulfate as SO4	mg/L	13.2	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	5/18/2015	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/15/2015	69-0003-00-203	Total	Sulfate as SO4	mg/L	12.6	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/15/2015	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/28/2015	69-0003-00-203	Total	Sulfate as SO4	mg/L	10.7	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/28/2015	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	8/17/2015	69-0003-00-203	Total	Sulfate as SO4	mg/L	10.2	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	8/17/2015	69-0003-00-204	Total	Sulfate as SO4	mg/L	6.71	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/21/2015	69-0003-00-203	Total	Sulfate as SO4	mg/L	9.3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/21/2015	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/15/2016	69-0003-00-203	Total	Sulfate as SO4	mg/L	7.28	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/15/2016	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/20/2016	69-0003-00-203	Total	Sulfate as SO4	mg/L	3.24	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/20/2016	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	8/17/2016	69-0003-00-203	Total	Sulfate as SO4	mg/L	6.77	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	8/17/2016	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/21/2016	69-0003-00-203	Total	Sulfate as SO4	mg/L	7.46	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/21/2016	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	5/17/2017	69-0003-00-203	Total	Sulfate as SO4	mg/L	32.6	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	5/17/2017	69-0003-00-204	Total	Sulfate as SO4	mg/L	11.7	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/21/2017	69-0003-00-203	Total	Sulfate as SO4	mg/L	9.2	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/21/2017	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/19/2017	69-0003-00-203	Total	Sulfate as SO4	mg/L	7.62	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/19/2017	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	8/16/2017	69-0003-00-203	Total	Sulfate as SO4	mg/L	6.37	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	8/16/2017	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/20/2017	69-0003-00-203	Total	Sulfate as SO4	mg/L	6.36	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/20/2017	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	5/22/2018	69-0003-00-203	Total	Sulfate as SO4	mg/L	9.57	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	5/22/2018	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/27/2018	69-0003-00-203	Total	Sulfate as SO4	mg/L	7.43	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	6/27/2018	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/24/2018	69-0003-00-203	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	7/24/2018	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	8/28/2018	69-0003-00-203	Total	Sulfate as SO4	mg/L	6.29	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	8/28/2018	69-0003-00-204	Total	Sulfate as SO4	mg/L	3	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/18/2018	69-0003-00-203	Total	Sulfate as SO4	mg/L	7.33	2	m	Sulfate in Water by Turbidimeter	D516
69-0003-00	Lake	9/18/2018	69-0003-00-204	Total	Sulfate as SO4	mg/L	4.15	2	m	Sulfate in Water by Turbidimeter	D516

5/25/2011	5.86
6/23/2011	7.84
7/25/2011	6.98
8/25/2011	8.5
8/30/2011	3.58
9/26/2011	8.62
5/16/2012	13.4
6/21/2012	4.65
7/18/2012	3
8/16/2012	3
9/10/2012	8.61
9/18/2012	7.29
5/30/2013	15.9

6/17/2013	14.7	
7/15/2013	11.6	
8/19/2013	3	
9/16/2013	5.82	
5/27/2014	7.47	
6/19/2014	6.45	
7/14/2014	8.03	
8/11/2014	7.91	
9/15/2014	9.98	
5/18/2015	13.2	
6/15/2015	12.6	
7/28/2015	10.7	
8/17/2015	10.2	
9/21/2015	9.3	
6/15/2016	7.28	
7/20/2016	3.24	
8/17/2016	6.77	
9/21/2016	7.46	
5/17/2017	32.6	
6/21/2017	9.2	
7/19/2017	7.62	
8/16/2017	6.37	
9/20/2017	6.36	
5/22/2018	9.57	
6/27/2018	7.43	
7/24/2018	3	
8/28/2018	6.29	
9/18/2018	7.33	

N	41
Number of Observations greater than 10 mg/L	9
Percent Observations above 10 mg/L	22%
Average	8.505
StDev	4.984
Min	3.000
Max	32.600