

Eagle Mine Data - 2016
Mine Permit Surface Water Quality Monitoring Data
Q2 STRM001 (Background)
Eagle Mine

Parameter	Unit	Permit RL	STRM001 Seasonal Benchmark	Q2 Results (2012-2016)				
			Q2	Q2 2012	Q2 2013	Q2 2014	Q2 2015	Q2 2016
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				3/19/12	5/7/13	4/23/14	5/4/15	5/4/16
Field								
D.O.	ppm	--	--	7.4	7.5	7.8	6.4	7.1
Flow	cfs	--	--	NM	0.4	1.0	0.6	0.4
pH	SU	--	6.2-7.2	6.2	6.2	6.6	6.1	6.7
Specific Conductance	µS/cm @ 25°C	--	--	27	27	27	38	39
Temperature	°C	--	--	11	9.8	1.7	15	5.0
Metals								
Aluminum	ug/L	50	200	<50	<50	<50	<50	<50
Antimony	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	10	40	<10	<10	<10	11	<10
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50	<50	<50	<50 e
Cadmium	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Chromium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	1,616	260 e	320	350	510	350 e
Lead	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	10	40	<10	<10	<10 e	<10	<10
Manganese	ug/L	10	179	<10	<10	<10	27	16
Mercury	ng/L	0.500	3.58	2.50	3.35	2.31 e	1.52	1.42
Molybdenum	ug/L	10	40	<10	<10	<10	<10	<10
Nickel	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Selenium	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0 e
Silver	ug/L	0.20	0.80	<0.20 e	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10	<10
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	40	12	10	9.8	30	18
Alkalinity, Carbonate	mg/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	1.0	7.3	1.4	1.4	1.1	<1.0	<1.0
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	<0.050 e	<0.050 e	<0.050	<0.050 e
Sulfate	mg/L	1.0	10	<1.0	<1.0	<1.0 e	<1.0	<1.0 e
Major Cations								
Calcium	mg/L	0.50	11	3.7	3.1	3.5	5.4	5.5
Magnesium	mg/L	0.50	2.4	0.82	0.72	0.81	1.2	1.2
Potassium	mg/L	0.50	2.00	<0.50	<0.50	<0.50	0.61	0.52
Sodium	mg/L	0.50	2.0	0.50	<0.50	0.51	0.86	0.82
General								
Hardness	mg/L	3	36	13	11	12	18	19
TDS	mg/L	50	200	<50	<50	<50	54	<50

Eagle Mine Data - 2016
Mine Permit Surface Water Quality Monitoring Data
Q2 STRM002 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRM002 Seasonal Benchmark	Q2 Results (2012-2016)				
			Q2	Q2 2012	Q2 2013	Q2 2014	Q2 2015	Q2 2016
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				3/19/12	5/1/13	4/24/14	4/29/15	4/20/16
Field								
D.O.	ppm	--	--	9.6	12	11	10	11
Flow	cfs	--	--	7.3	11	3.9	3.9	3.8
pH	SU	--	6.5-7.5	6.3	6.3	7.1	6.7	6.6
Specific Conductance	µS/cm @ 25°C	--	--	28	23	37	42	38
Temperature	°C	--	--	8.5	3.8	3.7	10	6.1
Metals								
Aluminum	ug/L	50	200	70	89	65	79	160
Antimony	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	10	40	<10	<10	<10	<10	<10
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50	<50	<50	<50 e
Cadmium	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Chromium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	651	290 e	250	260	220	350 e
Lead	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	10	40	<10	<10	<10 e	<10	<10
Manganese	ug/L	10	58	<10	10	<10	<10	18
Mercury	ng/L	0.500	5.77	4.27	5.54	4.74 e	4.09	4.90
Molybdenum	ug/L	10	40	<10	<10	<10	<10	<10
Nickel	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	3.4
Selenium	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0 e
Silver	ug/L	0.20	0.80	<0.20 e	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10	<10
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	34	12	8.2	14	21	18
Alkalinity, Carbonate	mg/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	1.0	4.0	1.5	1.7	1.3	1.3	1.3
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	<0.050 e	<0.050 e	<0.050	<0.050 e
Sulfate	mg/L	1.0	6.2	<1.0	<1.0	<1.0 e	<1.0	<5.0 e
Major Cations								
Calcium	mg/L	0.50	10	4.0	3.0	5.0	5.9	5.2
Magnesium	mg/L	0.50	2.0	0.88	0.70	1.1	1.3	1.2
Potassium	mg/L	0.50	2.00	<0.50	0.53	0.52	0.51	0.54
Sodium	mg/L	0.50	2.00	<0.50	<0.50	0.79	0.60	0.70
General								
Hardness	mg/L	3	32	14	10	17	20	18
TDS	mg/L	50	200	<50	<50	52	<50	<50

Explanations of abbreviations are included on the final page of this table.

Q2 STRM002 (Compliance)

Eagle Mine Data - 2016
Mine Permit Surface Water Quality Monitoring Data
Q2 STRM004 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRM004 Seasonal Benchmark	Q2 Results (2012-2016)				
			Q2	Q2 2012	Q2 2013	Q2 2014	Q2 2015	Q2 2016
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				3/19/12	4/30/13	4/21/14	4/30/15	5/4/16
Field								
D.O.	ppm	--	--	11	13	12	12	12
Flow	cfs	--	--	17	49	23	8.4	7.8
pH	SU	--	7.3-8.3	7.0	7.1	7.3	7.4	7.4
Specific Conductance	µS/cm @ 25°C	--	--	60	41	48	73	73
Temperature	°C	--	--	9.0	3.1	4.1	5.7	5.5
Metals								
Aluminum	ug/L	50	993	320	750	750	120	120
Antimony	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	10	40	<10	11	11	<10	<10
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50	<50	<50	<50 e
Cadmium	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Chromium	ug/L	1.0	4.0	1.1	2.0	1.2	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	1.2	1.5	1.3	<1.0	<1.0
Iron	ug/L	20	984	490 e	840	800	210	260 e
Lead	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	10	40	<10	<10	<10 e	<10	<10
Manganese	ug/L	10	61	22	45	55	13	16
Mercury	ng/L	0.500	14.15	6.97	9.52	13 e	4.23	3.98
Molybdenum	ug/L	10	40	<10	<10	<10	<10	<10
Nickel	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Selenium	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0 e
Silver	ug/L	0.20	0.80	<0.20 e	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10	<10
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	52	28	18	24	37	40
Alkalinity, Carbonate	mg/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	1.0	4.0	1.6	1.0	1.1	<1.0	<1.0
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	0.050	0.20	0.090	0.11 e	0.16 e	<0.050	0.064 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0 e	<1.0	<1.0 e
Major Cations								
Calcium	mg/L	0.50	16	8.8	6.3	9.5	9.5	13
Magnesium	mg/L	0.50	3.0	1.9	1.5	2.2	2.0	2.7
Potassium	mg/L	0.50	2.0	0.57	0.63	0.73	0.51	0.62
Sodium	mg/L	0.50	2.0	0.66	0.54	0.85	0.76	1.0
General								
Hardness	mg/L	3	54	30	22	33	32	44
TDS	mg/L	50	200	60	<50	64	70	70

Explanations of abbreviations are included on the final page of this table.

Q2 STRM004 (Compliance)

Eagle Mine Data - 2016
Mine Permit Surface Water Quality Monitoring Data
Q2 STRM005 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRM005 Seasonal Benchmark	Q2 Results (2012-2016)				
			Q2	Q2 2012	Q2 2013	Q2 2014	Q2 2015	Q2 2016
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				3/19/12	5/1/13	4/24/14	4/30/15	4/20/16
Field								
D.O.	ppm	--	--	12	14	13	12	12
Flow	cfs	--	--	242	745	215	64	110
pH	SU	--	6.6-7.6	6.5	5.5	7.2	7.4	7.2
Specific Conductance	µS/cm @ 25°C	--	--	44	25	51	88	65
Temperature	°C	--	--	7.9	3.1	2.5	7.4	5.5
Metals								
Aluminum	ug/L	50	568	290	510	300	86	170
Antimony	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	10	40	11	<10	10	10	<10
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50	<50	<50	<50 e
Cadmium	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Chromium	ug/L	1.0	4.0	1.0	1.3	<1.0	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	2.4	1.8	1.4	<1.0	1.4
Iron	ug/L	20	470	340 e	420	280	160	200 e
Lead	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	10	40	<10	<10	<10 e	<10	<10
Manganese	ug/L	10	40	19	23	17	13	13
Mercury	ng/L	0.500	11.15	6.73	9.03	8.16 e	3.81	6.30
Molybdenum	ug/L	10	40	<10	<10	<10	<10	<10
Nickel	ug/L	1.0	4.0	1.0	<1.0	<1.0	<1.0	<1.0
Selenium	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0 e
Silver	ug/L	0.20	0.80	<0.20 e	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	89	54	<10	<10	<10	<10
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	66	22	9.7	19	46	32
Alkalinity, Carbonate	mg/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	1.0	4.0	1.5	1.6	1.4	<1.0	1.3
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	0.050	0.20	0.085	0.15 e	0.080 e	<0.050	<0.050 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0 e	<1.0	<1.0 e
Major Cations								
Calcium	mg/L	0.50	19	7.9	4.1	7.1	12	9.6
Magnesium	mg/L	0.50	3.9	1.4	0.87	1.5	2.5	2.0
Potassium	mg/L	0.50	2.0	1.2	0.56	<0.50	<0.50	0.55
Sodium	mg/L	0.50	2.0	0.82	<0.50	0.70	0.91	0.90
General								
Hardness	mg/L	3	65	25	14	24	40	32
TDS	mg/L	50	200	62	<50	<50	68	58

Explanations of abbreviations are included on the final page of this table.

Q2 STRM005 (Compliance)

Eagle Mine Data - 2016
Mine Permit Surface Water Quality Monitoring Data
Q2 STRE001 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE001 Seasonal Benchmark	Q2 Results (2012-2016)				
			Q2	Q2 2012	Q2 2013	Q2 2014	Q2 2015	Q2 2016
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				3/19/12	4/30/13	4/22/14	5/5/15	5/5/16
Field								
D.O.	ppm	--	--	12	12	12	11	11
Flow	cfs	--	--	NM	NM	43	15	17
pH	SU	--	7.0-8.0	7.1	6.8	7.3	7.6	7.9
Specific Conductance	µS/cm @ 25°C	--	--	60	38	66	117	114
Temperature	°C	--	--	5.2	2.8	2.3	9.6	9.6
Metals								
Aluminum	ug/L	50	339	130	310	170	82	67
Antimony	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	1.0	4.0	<1.0	<1.0	<1.0	1.1	1.1
Barium	ug/L	10	40	<10	<10	<10	<10	<10
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50	<50	<50	<50 e
Cadmium	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Chromium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	327	160 e	320	220	160	110 e
Lead	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	10	40	<10	<10	<10 e	<10	<10
Manganese	ug/L	10	40	<10	24	13	23	13
Mercury	ng/L	0.500	8.59	4.72	7.35	6.83 e	2.13	1.73
Molybdenum	ug/L	10	40	<10	<10	<10	<10	<10
Nickel	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Selenium	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0 e
Silver	ug/L	0.20	0.80	<0.20 e	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10	<10
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	81	27	17	27	59	59
Alkalinity, Carbonate	mg/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	1.0	4.0	1.3	1.5	1.2	<1.0	1.1
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	0.050	0.20	0.075	0.088 e	0.094 e	<0.050	0.061 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0 e	<1.0	<1.0 e
Major Cations								
Calcium	mg/L	0.50	24	8.3	5.8	11	16	17
Magnesium	mg/L	0.50	4.6	1.7	1.3	2.2	3.4	3.5
Potassium	mg/L	0.50	2.0	<0.50	0.52	0.54	0.56	0.59
Sodium	mg/L	0.50	2.0	0.67	0.58	0.90	1.1	1.1
General								
Hardness	mg/L	3	78	28	20	37	54	57
TDS	mg/L	50	200	62	<50	70	88	102

Explanations of abbreviations are included on the final page of this table.

Q2 STRE001 (Compliance)

Eagle Mine Data - 2016
Mine Permit Surface Water Quality Monitoring Data
Q2 STRE002 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE002 Seasonal Benchmark	Q2 Results (2012-2016)				
			Q2	Q2 2012	Q2 2013	Q2 2014	Q2 2015	Q2 2016
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				3/19/12	5/6/13	4/22/14	4/30/15	5/5/16
Field								
D.O.	ppm	--	--	11	13	13	12	12
Flow	cfs	--	--	36	75	NM	NM	22
pH	SU	--	7.6-8.6	7.1	7.1	7.4	7.7	8.1
Specific Conductance	µS/cm @ 25°C	--	--	84	64	59	102	110
Temperature	°C	--	--	7.4	2.5	1.1	5.5	6.3
Metals								
Aluminum	ug/L	50	200	79	210	200	140	68
Antimony	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	1.0	4.0	<1.0	<1.0	<1.0	1.1	1.0
Barium	ug/L	10	40	<10	<10	<10	11	<10
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50	<50	<50	<50 e
Cadmium	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Chromium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	194	160 e	180	240	170	110 e
Lead	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	10	40	<10	<10	<10 e	<10	<10
Manganese	ug/L	10	40	<10	10	15	18	10
Mercury	ng/L	0.500	4.84	4.04	6.66	8.46 e	5.49	2.13
Molybdenum	ug/L	10	40	<10	<10	<10	<10	<10
Nickel	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Selenium	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0 e
Silver	ug/L	0.20	0.80	<0.20 e	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10	<10
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	81	39	26	23	52	57
Alkalinity, Carbonate	mg/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	1.0	4.0	1.2	1.3	1.4	<1.0	1.1
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	0.063 e	0.10 e	0.069	0.054 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0 e	<1.0	<1.0 e
Major Cations								
Calcium	mg/L	0.50	24	13	8.1	9.1	14	16
Magnesium	mg/L	0.50	4.7	2.6	1.7	1.9	3.0	3.4
Potassium	mg/L	0.50	2.0	0.53	0.58	0.50	0.52	0.65
Sodium	mg/L	0.50	2.0	0.90	0.84	0.74	0.99	1.0
General								
Hardness	mg/L	3	80	43	27	31	47	54
TDS	mg/L	50	200	78	<50	56	72	84

Eagle Mine Data - 2016
Mine Permit Surface Water Quality Monitoring Data
Q2 STRE005 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE005 Seasonal Benchmark	Q2 Results (2012-2016)				
			Q2	Q2 2012	Q2 2013	Q2 2014	Q2 2015	Q2 2016
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				3/19/12	4/30/13	4/22/14	4/30/15	4/26/16
Field								
D.O.	ppm	--	--	11	13	13	12	12
Flow	cfs	--	--	2.8	17	4.5	1.1	3.0
pH	SU	--	6.8-7.8	7.2	7.0	7.4	7.5	7.5
Specific Conductance	µS/cm @ 25°C	--	--	72	37	56	97	62
Temperature	°C	--	--	9.8	1.8	1.2	5.7	5.1
Metals								
Aluminum	ug/L	50	1,722	63	1,200	270	<50	260
Antimony	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	10	40	<10	13	<10	<10	<10
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50	<50	<50	<50 e
Cadmium	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Chromium	ug/L	1.0	4.0	<1.0	1.9	1.3	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	1.8	1.0	<1.0	<1.0
Iron	ug/L	20	1,218	200 e	1,000	340	110	340 e
Lead	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	10	40	<10	<10	<10 e	<10	<10
Manganese	ug/L	10	93	12	77	23	14	23
Mercury	ng/L	0.500	17.2	4.16	13.8	7.82 e	2.26	8.35
Molybdenum	ug/L	10	40	<10	<10	<10	<10	<10
Nickel	ug/L	1.0	4.0	<1.0	1.8	<1.0	<1.0	<1.0
Selenium	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0 e
Silver	ug/L	0.20	0.80	<0.20 e	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10	<10
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	60	34	17	24	50	32
Alkalinity, Carbonate	mg/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	1.0	4.0	1.3	1.2	1.0	<1.0	<1.0
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	0.074 e	0.13 e	0.060	0.052 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0 e	<1.0	<1.0 e
Major Cations								
Calcium	mg/L	0.50	17	11	5.7	9.3	14	10
Magnesium	mg/L	0.50	3.0	2.0	1.3	1.8	2.6	2.0
Potassium	mg/L	0.50	2.0	0.55	0.58	0.52	<0.50	0.59
Sodium	mg/L	0.50	2.0	0.71	<0.50	0.64	0.77	0.84
General								
Hardness	mg/L	3	55	36	20	31	46	33
TDS	mg/L	50	200	58	<50	68	68	56

Eagle Mine Data - 2016
Mine Permit Surface Water Quality Monitoring Data
Q2 STRE009 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE009 Seasonal Benchmark	Q2 Results (2012-2016)				
			Q2	Q2 2012	Q2 2013	Q2 2014	Q2 2015	Q2 2016
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				3/19/12	4/29/13	4/23/14	4/29/15	4/26/16
Field								
D.O.	ppm	--	--	11	13	12	11	13
Flow	cfs	--	--	9.7	10	6.1	4.8	6.7
pH	SU	--	6.9-7.9	7.1	7.3	7.6	7.7	7.4
Specific Conductance	µS/cm @ 25°C	--	--	64	61	89	99	82
Temperature	°C	--	--	8.0	1.8	5.5	9.4	3.8
Metals								
Aluminum	ug/L	50	405	320	240	140	85	200
Antimony	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	10	40	<10	<10	13	<10	<10
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50	<50	<50	<50 e
Cadmium	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Chromium	ug/L	1.0	4.0	1.0	<1.0	<1.0	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	1.1	2.1	<1.0	<1.0
Iron	ug/L	20	400	320 e	240	150	94	260 e
Lead	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	10	40	<10	<10	<10 e	<10	<10
Manganese	ug/L	10	40	19	14	12	<10	13
Mercury	ng/L	0.500	6.58	5.24	4.43	4.06 e	2.17	4.96
Molybdenum	ug/L	10	40	<10	<10	<10	<10	<10
Nickel	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Selenium	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0 e
Silver	ug/L	0.20	0.80	<0.20 e	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	17	<10	<10	<10
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	57	32	31	41	51	43
Alkalinity, Carbonate	mg/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	1.0	4.0	1.1	1.0	<1.0	<1.0	<1.0
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	0.15
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	0.051 e	<0.050 e	<0.050	<0.050 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0 e	<1.0	<1.0 e
Major Cations								
Calcium	mg/L	0.50	17	9.7	9.4	13	15	13
Magnesium	mg/L	0.50	3.3	1.9	1.9	2.6	2.9	3.0
Potassium	mg/L	0.50	2.0	<0.50	0.53	<0.50	<0.50	0.55
Sodium	mg/L	0.50	2.0	0.70	0.76	0.82	0.81	1.1
General								
Hardness	mg/L	3	56	32	31	43	49	45
TDS	mg/L	50	200	58	68	58	54	74

Eagle Mine Data - 2016
Mine Permit Surface Water Quality Monitoring Data
Q2 STRE010 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE010 Seasonal Benchmark	Q2 Results (2012-2016)				
			Q2	Q2 2012	Q2 2013	Q2 2014	Q2 2015	Q2 2016
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				3/19/12	4/29/13	4/22/14	4/30/15	4/26/16
Field								
D.O.	ppm	--	--	11	13	13	12	12
Flow	cfs	--	--	9.7	7.4	7.0	3.4	6.2
pH	SU	--	6.9-7.9	7.1	7.3	7.5	7.5	7.4
Specific Conductance	µS/cm @ 25°C	--	--	64	61	73	100	74
Temperature	°C	--	--	8.0	1.8	2.4	4.7	3.8
Metals								
Aluminum	ug/L	50	431	320	230	220	63	180
Antimony	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	10	40	<10	<10	<10	<10	<10
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50	<50	<50	<50 e
Cadmium	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Chromium	ug/L	1.0	4.0	1.0	<1.0	<1.0	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	514	320 e	230	320	110	210 e
Lead	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	10	40	<10	<10	<10 e	<10	<10
Manganese	ug/L	10	43	19	15	30	<10	20
Mercury	ng/L	0.500	9.72	5.24	4.82	7.60 e	2.64	6.21
Molybdenum	ug/L	10	40	<10	<10	<10	<10	<10
Nickel	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Selenium	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0 e
Silver	ug/L	0.20	0.80	<0.20 e	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10	<10
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	55	32	29	32	50	38
Alkalinity, Carbonate	mg/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	1.0	4.0	1.1	1.3	<1.0	1.1	1.0
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	0.083 e	0.087 e	0.082	0.072 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0 e	<1.0	<1.0 e
Major Cations								
Calcium	mg/L	0.50	16	9.7	8.6	12	14	12
Magnesium	mg/L	0.50	3.0	1.9	1.6	2.2	2.7	2.3
Potassium	mg/L	0.50	2.0	<0.50	0.65	0.56	<0.50	0.61
Sodium	mg/L	0.50	2.0	0.70	0.79	0.73	0.80	0.86
General								
Hardness	mg/L	3	52	32	28	39	46	39
TDS	mg/L	50	200	58	64	70	70	58

Explanations of abbreviations are included on the final page of this table.

Q2 STRE010 (Compliance)

Eagle Mine Data - 2016
Mine Permit Surface Water Quality Monitoring Data
Q2 YDRM002 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	YDRM002 Seasonal Benchmark	Q2 Results (2012-2016)				
			Q2	Q2 2012	Q2 2013	Q2 2014	Q2 2015	Q2 2016
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				3/19/12	5/1/13	4/24/14	5/4/15	5/4/16
Field								
D.O.	ppm	--	--	11	12	12	8.8	10
Flow	cfs	--	--	199	449	127	86	63
pH	SU	--	6.1-7.1	5.0	5.8	6.7	6.3	6.4
Specific Conductance	µS/cm @ 25°C	--	--	17	19	25	29	31
Temperature	°C	--	--	9.2	0.7	0.8	12	7.0
Metals								
Aluminum	ug/L	50	200	140	120	140	160	99
Antimony	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	10	40	<10	<10	<10	<10	<10
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50	<50	<50	<50 e
Cadmium	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Chromium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10
Copper	ug/L	1.0	6.8	<1.0	<1.0	<1.0	4.1 s	<1.0
Iron	ug/L	20	1,192	310 e	260	390	460	390 e
Lead	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	10	40	<10	<10	<10 e	<10	<10
Manganese	ug/L	10	50	15	28	22	19	18
Mercury	ng/L	0.500	8.13	6.15	5.76	7.00 e	6.91	6.28
Molybdenum	ug/L	10	40	<10	<10	<10	<10	<10
Nickel	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Selenium	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0 e
Silver	ug/L	0.20	0.80	<0.20 e	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10	<10
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	30	5.5	4.8	5.2	11	16
Alkalinity, Carbonate	mg/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	1.0	4.0	1.3	1.3	1.5	<1.0	1.1
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	0.050	0.20	0.085	0.13	0.13 e	<0.050	<0.050 e
Sulfate	mg/L	1.0	10	<1.0	<1.0	<1.0 e	<1.0	<1.0 e
Major Cations								
Calcium	mg/L	0.50	10	2.6	2.0	3.4	4.8	4.5
Magnesium	mg/L	0.50	2.1	0.62	0.53	0.78	1.1	1.0
Potassium	mg/L	0.50	2.0	<0.50	<0.50	<0.50	<0.50	<0.50
Sodium	mg/L	0.50	2.0	<0.50	<0.50	0.53	0.63	0.61
General								
Hardness	mg/L	3	32	9	7	12	17	15
TDS	mg/L	50	200	56	<50	58	58	<50

Explanations of abbreviations are included on the final page of this table.

Q2 YDRM002 (Compliance)

Eagle Mine Data - 2016
Mine Permit Surface Water Quality Monitoring Data
Q2 CDRM004 (Reference)
Eagle Mine

Parameter	Unit	Permit RL	CDRM004 Seasonal Benchmark	Q2 Results (2012-2016)				
			Q2	Q2 2012	Q2 2013	Q2 2014	Q2 2015	Q2 2016
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				3/19/12	4/29/13	4/21/14	5/5/15	5/5/16
Field								
D.O.	ppm	--	--	12	13	13	12	13
Flow	cfs	--	--	32	109	52	15	17
pH	SU	--	7.2-8.2	7.2	7.7	7.4	7.3	8.0
Specific Conductance	µS/cm @ 25°C	--	--	88	55	73	116	109
Temperature	°C	--	--	7.8	1.9	2.2	7.1	4.2
Metals								
Aluminum	ug/L	50	258	<50	240	220	<50	<50
Antimony	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	1.0	4.0	1.1	<1.0	<1.0	1.2	1.0
Barium	ug/L	10	40	<10	<10	<10	10	10
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50	<50	<50	<50 e
Cadmium	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Chromium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	1.1	<1.0	<1.0	<1.0
Iron	ug/L	20	358	160 e	330	310	110	87 e
Lead	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lithium	ug/L	10	40	<10	<10	<10 e	<10	<10
Manganese	ug/L	10	57	11	48	48	16	11
Mercury	ng/L	0.500	8.12	3.25	5.91	7.63 e	1.43	1.59
Molybdenum	ug/L	10	40	<10	<10	<10	<10	<10
Nickel	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Selenium	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0 e
Silver	ug/L	0.20	0.80	<0.20 e	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10	<10
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	85	41	28	31	60	59
Alkalinity, Carbonate	mg/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	1.0	4.0	1.4	1.4	<1.0	<1.0	<1.0
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	0.096 e	0.10 e	0.10	0.10 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0 e	<1.0	<1.0 e
Major Cations								
Calcium	mg/L	0.50	25	14	8.1	11	17	17
Magnesium	mg/L	0.50	4.0	2.5	1.5	2.0	3.0	3.1
Potassium	mg/L	0.50	2.0	0.50	0.51	0.55	0.57	0.61
Sodium	mg/L	0.50	2.0	0.86	0.61	0.89	1.0	1.0
General								
Hardness	mg/L	3	80	45	26	36	55	55
TDS	mg/L	50	200	72	68	98	78	86

Eagle Mine Data - 2016
Mine Permit Surface Water Quality Monitoring Data
Abbreviations & Data Qualifiers
Eagle Mine

Abbreviation or Data Qualifier	Explanation
a	Estimated value. Duplicate precision for this parameter exceeded quality control limit.
b	Estimated value. Sample received after EPA established hold time expired.
e	Estimated value. The laboratory statement of data qualifications indicates that a quality control limit for this parameter was exceeded.
NM	Not measured.
p	Pending. Some parameters/locations require additional baseline data to calculate a benchmark.
Q	Quarter.
R	Measured value was rejected based on quality control procedures.
RL	Laboratory reporting limit.
s	Potential false positive value. Compound present in blank sample.
t	Trending. Benchmarks are not proposed for baseline datasets that appear to be trending (using samples collected through Q4 2012) because the data do not represent a random distribution about the baseline mean. Trend analysis is recommended in place of benchmark screening for parameters that appear to be trending.
	Value is equal to or above site-specific benchmark. An exceedance occurs if there are 2 consecutive seasonal sampling events (e.g., Q1 2012 & Q1 2013) with a value equal to or greater than the benchmark.