

Table 2
Mine Permit Surface Water Quality Monitoring Data Q2 2019
Q2 CDRM004 (Reference)
Eagle Mine

Parameter	Unit	Permit RL	CDRM004 Seasonal Benchmark	Q2 Results (2015-2019)				
			Q2	Q2 2015	Q2 2016	Q2 2017	Q2 2018	Q2 2019
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
			5/5/15	5/5/16	4/13/17	5/22/18	5/30/19	
Field								
D.O.	ppm	--	--	12	13	13	11	11
Flow	cfs	--	--	15	17	24	11	16
pH	SU	--	7.2-8.2	7.3	8.0	7.4	7.5	7.4
Specific Conductance	µS/cm @ 25°C	--	--	116	109	98	132	117
Temperature	°C	--	--	7.1	4.2	3.4	10	9.8
Metals								
Aluminum	ug/L	50	258	<50	<50	<50	<50.0 e	<50.0
Antimony	ug/L	2.0	8.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	1.0	4.0	1.2	1.0	<1.0	1.5	1.4
Barium	ug/L	10	40	10	10	<10	12	12
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50 e	<50	<50.0	<50.0
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	<10.0	<10.0
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	358	110	87 e	120	107 e	107
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	<10.0	<10.0
Manganese	ug/L	10	57	16	11	<10	16.4	11.4
Mercury	ng/L	0.500	8.12	1.43	1.59	2.24	1.17	0.71
Molybdenum	ug/L	10	40	<10	<10	<10	<10.0	<10.0
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 e	<2.0 e	<2.0	<2.0
Silver	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	85	60	59	48	66.3 a	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	<1.0	<1.0	1.1	1.4	<1.0 e
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10 e
Nitrogen, Nitrate	mg/L	0.050	0.20	0.10	0.10 e	0.070	0.099 e	0.054 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0 e	<1.0 e	<1.0 e	1.9
Major Cations								
Calcium	mg/L	0.50	25	17	17	15	18.2	18.9
Magnesium	mg/L	0.50	4.0	3.0	3.1	2.7	3.4	3.1
Potassium	mg/L	0.50	2.0	0.57	0.61	<0.50	0.67 e	0.68
Sodium	mg/L	0.50	2.0	1.0	1.0	1.0	1.2 e	1.0
General								
Hardness	mg/L	3	80	55	55	49	59	60
TDS	mg/L	50	200	78	86	66	84	63

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

Q2 CDRM004 (Reference)

Table 2
Mine Permit Surface Water Quality Monitoring Data Q2 2019
Q2 STRM001 (Background)
Eagle Mine

Parameter	Unit	Permit RL	STRM001 Seasonal Benchmark	Q2 Results (2015-2019)				
			Q2	Q2 2015	Q2 2016	Q2 2017	Q2 2018	Q2 2019
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
			5/4/15	5/4/16	4/10/17	5/16/18	6/4/19	
Field								
D.O.	ppm	--	--	6.4	7.1	8.5	6.9	4.5
Flow	cfs	--	--	0.6	0.4	NM	0.4	0.9
pH	SU	--	6.2-7.2	6.1	6.7	6.8	6.5	6.7
Specific Conductance	µS/cm @ 25°C	--	--	38	39	27	44	33
Temperature	°C	--	--	15	5.0	3.6	12	13
Metals								
Aluminum	ug/L	50	200	<50	<50	65	<50.0 e	<50.0
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	10.7	<10.0
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50 e	<50	<50.0	<50.0
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	<10.0	<10.0
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	1,616	510	350 e	290	354 e	301
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	<10.0	<10.0
Manganese	ug/L	10	179	27	16	<10	19.8	11.4
Mercury	ng/L	0.500	3.58	1.52	1.42	4.23	1.11	0.98
Molybdenum	ug/L	10	40	<10	<10	<10	<10.0	<10.0
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 e	<2.0 e	<2.0	<2.0
Silver	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	40	30	18	11	21.7 a	13.4
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	<1.0	<1.0	1.2	1.2	<1.0 e
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10 e
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	<0.050 e	<0.050	<0.050 e	<0.050 e
Sulfate	mg/L	1.0	10	<1.0	<1.0 e	<1.0 e	<1.0 e	<1.0
Major Cations								
Calcium	mg/L	0.50	11	5.4	5.5	3.8	5.6	4.3
Magnesium	mg/L	0.50	2.4	1.2	1.2	0.87	1.3	1.0
Potassium	mg/L	0.50	2.0	0.61	0.52	0.74	0.57 e	<0.50
Sodium	mg/L	0.50	2.0	0.86	0.82	0.60	0.73 e	<1.0
General								
Hardness	mg/L	3	36	18	19	13	19	15
TDS	mg/L	50	200	54	<50	54	<50.0	<50.0

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

Q2 STRM001 (Background)

Table 2
Mine Permit Surface Water Quality Monitoring Data Q2 2019
Q2 STRM002 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRM002	Q2 Results (2015-2019)					
			Seasonal Benchmark	Q2	Q2 2015	Q2 2016	Q2 2017	Q2 2018	Q2 2019
				Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				4/29/15	4/20/16	4/12/17	5/16/18	6/4/19	
Field									
D.O.	ppm	--	--	10	11	12	9.1	9.1	
Flow	cfs	--	--	3.9	3.8	2.8	2.4	2.5	
pH	SU	--	6.5-7.5	6.7	6.6	6.4	7.1	6.7	
Specific Conductance	µS/cm @ 25°C	--	--	42	38	40	57	44	
Temperature	°C	--	--	10	6.1	3.5	14	11	
Metals									
Aluminum	ug/L	50	200	79	160	80	79.7 e	67.6	
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	<10.0	<10.0	
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Boron	ug/L	50	200	<50	<50 e	<50	<50.0	<50.0	
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	<10.0	<10.0	
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Iron	ug/L	20	651	220	350 e	250	315 e	289	
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	<10.0	<10.0	
Manganese	ug/L	10	58	<10	18	<10	21.2	15.1	
Mercury	ng/L	0.500	5.77	4.09	4.90	3.81	2.00	1.64	
Molybdenum	ug/L	10	40	<10	<10	<10	<10.0	<10.0	
Nickel	ug/L	1.0	4.0	<1.0	3.4	<1.0	<1.0	<1.0	
Selenium	ug/L	2.0	8.0	<2.0	<2.0 e	<2.0 e	<2.0	<2.0	
Silver	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20	
Zinc	ug/L	10	40	<10	<10	<10	<10.0	<10.0	
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	34	21	18	18	27.6 a	20.3	
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	1.4	1.6	<1.0 e	
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10 e	
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	<0.050 e	<0.050	<0.050 e	<0.050 e	
Sulfate	mg/L	1.0	6.2	<1.0	<5.0 e	<1.0 e	<1.0 e	1.7	
Major Cations									
Calcium	mg/L	0.50	10	5.9	5.2	5.9	7.7	6.1	
Magnesium	mg/L	0.50	2.0	1.3	1.2	1.3	1.6	1.3	
Potassium	mg/L	0.50	2.00	0.51	0.54	0.61	0.61 e	0.56	
Sodium	mg/L	0.50	2.00	0.60	0.70	0.73	0.82 e	<1.0	
General									
Hardness	mg/L	3	32	20	18	20	26	21	
TDS	mg/L	50	200	<50	<50	64	146	<50.0	

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

Q2 STRM002 (Compliance)

Table 2
Mine Permit Surface Water Quality Monitoring Data Q2 2019
Q2 STRM004 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRM004 Seasonal Benchmark	Q2 Results (2015-2019)				
			Q2	Q2 2015	Q2 2016	Q2 2017	Q2 2018	Q2 2019
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
			4/30/15	5/4/16	4/10/17	5/15/18	5/29/19	
Field								
D.O.	ppm	--	--	12	12	12	11	11
Flow	cfs	--	--	8.4	7.8	29	7.4	11
pH	SU	--	7.3-8.3	7.4	7.4	7.6	7.8	7.3
Specific Conductance	µS/cm @ 25°C	--	--	73	73	61	91	73
Temperature	°C	--	--	5.7	5.5	4.7	9.5	10
Metals								
Aluminum	ug/L	50	993	120	120	950	135 e	121
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	1.6	<1.0	<1.0
Barium	ug/L	10	40	<10	<10	16	<10.0	<10.0
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50 e	<50	<50.0	<50.0
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	2.1	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10.0	<10.0
Copper	ug/L	1.0	4.0	<1.0	<1.0	1.8	<1.0	<1.0
Iron	ug/L	20	984	210	260 e	1,300	256 e	241
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	<10.0	<10.0
Manganese	ug/L	10	61	13	16	77	17.1	16.3
Mercury	ng/L	0.500	14.15	4.23	3.98	13.4	2.54	2.02
Molybdenum	ug/L	10	40	<10	<10	<10	<10.0	<10.0
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 e	<2.0 e	<2.0	<2.0
Silver	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	52	37	40	29	45.5 a	35.6
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	<1.0	<1.0	1.2	<1.0	<1.0 e
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10 e
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	0.064 e	0.12	0.060 e	<0.050 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0 e	<1.0 e	<1.0 e	1.8
Major Cations								
Calcium	mg/L	0.50	16	9.5	13	9.5	13.1	10.9
Magnesium	mg/L	0.50	3.0	2.0	2.7	2.1	2.7	2.2
Potassium	mg/L	0.50	2.0	0.51	0.62	0.79	0.72 e	0.64
Sodium	mg/L	0.50	2.0	0.76	1.0	0.79	1.3 e	<1.0
General								
Hardness	mg/L	3	54	32	44	32	44	36
TDS	mg/L	50	200	70	70	104	124	<50.0

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

Q2 STRM004 (Compliance)

Table 2
Mine Permit Surface Water Quality Monitoring Data Q2 2019
Q2 STRM005 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRM005 Seasonal Benchmark	Q2 Results (2015-2019)				
			Q2	Q2 2015	Q2 2016	Q2 2017	Q2 2018	Q2 2019
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
			4/30/15	4/20/16	4/12/17	5/16/18	5/29/19	
Field								
D.O.	ppm	--	--	12	12	13	11	11
Flow	cfs	--	--	64	110	83	52	77
pH	SU	--	6.6-7.6	7.4	7.2	7.1	7.6	7.2
Specific Conductance	µS/cm @ 25°C	--	--	88	65	77	112	91
Temperature	°C	--	--	7.4	5.5	1.7	12	12
Metals								
Aluminum	ug/L	50	568	86	170	120	104 e	109
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	13.1	12.2
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50 e	<50	<50.0	<50.0
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	<10.0	<10.0
Copper	ug/L	1.0	4.0	<1.0	1.4	<1.0	<1.0	<1.0
Iron	ug/L	20	470	160	200 e	240	169 e	184
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	<10.0	<10.0
Manganese	ug/L	10	40	13	13	15	15.7	12.5
Mercury	ng/L	0.500	11.15	3.81	6.30	4.17	2.55	2.33
Molybdenum	ug/L	10	40	<10	<10	<10	<10.0	<10.0
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 e	<2.0 e	<2.0	<2.0
Silver	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	89	<10	<10	<10	<10.0	20
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	66	46	32	37	54.2 a	44.5
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	<1.0	1.3	1.5	<1.0	<1.0 e
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10 e
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	<0.050 e	0.075	<0.050 e	<0.050 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0 e	<1.0 e	<1.0 e	2.3
Major Cations								
Calcium	mg/L	0.50	19	12	9.6	10	15.2	13.2
Magnesium	mg/L	0.50	3.9	2.5	2.0	2.1	3.3	2.5
Potassium	mg/L	0.50	2.0	<0.50	0.55	0.52	0.74 e	0.69
Sodium	mg/L	0.50	2.0	0.91	0.90	0.93	1.1 e	<1.0
General								
Hardness	mg/L	3	65	40	32	34	52	43
TDS	mg/L	50	200	68	58	118	60	<50.0

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

Q2 STRM005 (Compliance)

Table 2
Mine Permit Surface Water Quality Monitoring Data Q2 2019
Q2 STRE001 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE001 Seasonal Benchmark	Q2 Results (2015-2019)				
			Q2	Q2 2015	Q2 2016	Q2 2017	Q2 2018	Q2 2019
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				5/5/15	5/5/16	4/13/17	5/15/18	5/29/19
Field								
D.O.	ppm	--	--	11	11	12	11	11
Flow	cfs	--	--	15	17	22	15	19
pH	SU	--	7.0-8.0	7.6	7.9	7.3	7.7	7.6
Specific Conductance	µS/cm @ 25°C	--	--	117	114	98	124	113
Temperature	°C	--	--	9.6	9.6	6.2	9.9	12
Metals								
Aluminum	ug/L	50	339	82	67	130	89.7 e	75.2
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	1.1	<1.0	<1.0	1.0
Barium	ug/L	10	40	<10	<10	<10	10.2	<10.0
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50 e	<50	<50.0	<50.0
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	<10.0	<10.0
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	327	160	110 e	130	136 e	93
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	<10.0	<10.0
Manganese	ug/L	10	40	23	13	11	16.1	10.5
Mercury	ng/L	0.500	8.59	2.13	1.73	2.81	1.87	1.41
Molybdenum	ug/L	10	40	<10	<10	<10	<10.0	<10.0
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 e	<2.0 e	<2.0	<2.0
Silver	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	81	59	59	49	61.4 a	54.9
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	<1.0	1.1	1.4	1.0	<1.0 e
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10 e
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	0.061 e	0.058	<0.050 e	<0.050 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0 e	<1.0 e	<1.0 e	2.9
Major Cations								
Calcium	mg/L	0.50	24	16	17	14	18.3	16.9
Magnesium	mg/L	0.50	4.6	3.4	3.5	2.9	3.8	3.3
Potassium	mg/L	0.50	2.0	0.56	0.59	0.54	0.69 e	0.68
Sodium	mg/L	0.50	2.0	1.1	1.1	1.0	1.4 e	1.1
General								
Hardness	mg/L	3	78	54	57	47	61	56
TDS	mg/L	50	200	88	102	76	194	<50.0

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

Q2 STRE001 (Compliance)

Table 2
Mine Permit Surface Water Quality Monitoring Data Q2 2019
Q2 STRE002 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE002	Q2 Results (2015-2019)					
			Seasonal Benchmark	Q2	Q2 2015	Q2 2016	Q2 2017	Q2 2018	Q2 2019
				Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				4/30/15	5/5/16	4/13/17	5/22/18	5/30/19	
Field									
D.O.	ppm	--	--	12	12	13	11	11	
Flow	cfs	--	--	NM	22	33	14	21	
pH	SU	--	7.6-8.6	7.7	8.1	7.4	7.8	7.6	
Specific Conductance	µS/cm @ 25°C	--	--	102	110	92	132	116	
Temperature	°C	--	--	5.5	6.3	4.3	12	10	
Metals									
Aluminum	ug/L	50	200	140	68	140	106 e	60.2	
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	11	<10	<10	12	11.7	
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Boron	ug/L	50	200	<50	<50 e	<50	<50.0	<50.0	
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	<10.0	<10.0	
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Iron	ug/L	20	194	170	110 e	150	129 e	139	
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	<10.0	<10.0	
Manganese	ug/L	10	40	18	10	<10	17.1	13.1	
Mercury	ng/L	0.500	4.84	5.49	2.13	3.44	1.64	0.90	
Molybdenum	ug/L	10	40	<10	<10	<10	<10.0	<10.0	
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 e	<2.0 e	<2.0	<2.0	
Silver	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20	
Zinc	ug/L	10	40	<10	<10	<10	<10.0	<10.0	
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	81	52	57	44	63.4 a	56.9	
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	<1.0	1.1	1.3	1.3	<1.0 e	
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10 e	
Nitrogen, Nitrate	mg/L	0.050	0.20	0.069	0.054 e	0.058	<0.050 e	<0.050 e	
Sulfate	mg/L	1.0	4.0	<1.0	<1.0 e	<1.0 e	1.5 e	2.9	
Major Cations									
Calcium	mg/L	0.50	24	14	16	13	16.7	18.2	
Magnesium	mg/L	0.50	4.7	3.0	3.4	2.7	3.9	3.7	
Potassium	mg/L	0.50	2.0	0.52	0.65	0.54	0.66 e	0.81	
Sodium	mg/L	0.50	2.0	0.99	1.0	1.0	1.2 e	1.2	
General									
Hardness	mg/L	3	80	47	54	44	58	61	
TDS	mg/L	50	200	72	84	64	72	<50.0	

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

Q2 STRE002 (Compliance)

Table 2
Mine Permit Surface Water Quality Monitoring Data Q2 2019
Q2 STRE005 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE005 Seasonal Benchmark	Q2 Results (2015-2019)				
			Q2	Q2 2015	Q2 2016	Q2 2017	Q2 2018	Q2 2019
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
			4/30/15	4/26/16	4/10/17	5/15/18	5/29/19	
Field								
D.O.	ppm	--	--	12	12	12	11	10
Flow	cfs	--	--	1.1	3.0	6.1	2.0	1.1
pH	SU	--	6.8-7.8	7.5	7.5	7.1	7.7	7.4
Specific Conductance	µS/cm @ 25°C	--	--	97	62	71	105	104
Temperature	°C	--	--	5.7	5.1	4.9	9.7	11
Metals								
Aluminum	ug/L	50	1,722	<50	260	570	69.2 e	<50.0
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	12	<10.0	<10.0
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50 e	<50	<50.0	<50.0
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	<10.0	<10.0
Copper	ug/L	1.0	4.0	<1.0	<1.0	1.2	<1.0	<1.0
Iron	ug/L	20	1,218	110	340 e	820	196 e	112
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	<10.0	<10.0
Manganese	ug/L	10	93	14	23	64	21.8	14.7
Mercury	ng/L	0.500	17.2	2.26	8.35	8.41	1.95	1.39
Molybdenum	ug/L	10	40	<10	<10	<10	<10.0	<10.0
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 e	<2.0 e	<2.0	<2.0
Silver	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	60	50	32	28	107 a	51.9
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	<1.0	<1.0	1.4	<1.0	<1.0 e
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10 e
Nitrogen, Nitrate	mg/L	0.050	0.20	0.060	0.052 e	0.10	<0.050 e	<0.050 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0 e	<1.0 e	<1.0 e	1.7
Major Cations								
Calcium	mg/L	0.50	17	14	10	11	15.3	15.6
Magnesium	mg/L	0.50	3.0	2.6	2.0	2.2	2.8	2.7
Potassium	mg/L	0.50	2.0	<0.50	0.59	0.74	0.71 e	0.69
Sodium	mg/L	0.50	2.0	0.77	0.84	0.84	1.2 e	<1.0
General								
Hardness	mg/L	3	55	46	33	37	50	50
TDS	mg/L	50	200	68	56	62	<50.0	<50.0

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

Q2 STRE005 (Compliance)

Table 2
Mine Permit Surface Water Quality Monitoring Data Q2 2019
Q2 STRE009 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE009 Seasonal Benchmark	Q2 Results (2015-2019)				
			Q2	Q2 2015	Q2 2016	Q2 2017	Q2 2018	Q2 2019
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
			4/29/15	4/26/16	4/10/17	5/15/18	5/29/19	
Field								
D.O.	ppm	--	--	11	13	12	11	10
Flow	cfs	--	--	4.8	6.7	7.9	4.4	5.2
pH	SU	--	6.9-7.9	7.7	7.4	7.1	7.7	7.0
Specific Conductance	µS/cm @ 25°C	--	--	99	82	82	114	108
Temperature	°C	--	--	9.4	3.8	4.3	12	8.1
Metals								
Aluminum	ug/L	50	405	85	200	430	57.2 e	53.9
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	11	<10.0	<10.0
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50 e	<50	<50.0	<50.0
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	1.3	<1.0	<1.0
Cobalt	ug/L	10	40	<10	<10	<10	<10.0	<10.0
Copper	ug/L	1.0	4.0	<1.0	<1.0	1.1	<1.0	<1.0
Iron	ug/L	20	400	94	260 e	540	92 e	68
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	<10.0	<10.0
Manganese	ug/L	10	40	<10	13	41	10.2	<10.0
Mercury	ng/L	0.500	6.58	2.17	4.96	7.94	1.09	0.94
Molybdenum	ug/L	10	40	<10	<10	<10	<10.0	<10.0
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 e	<2.0 e	<2.0	<2.0
Silver	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	57	51	43	39	57.4 a	53.2
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	<1.0	<1.0	2.1	1.0	<1.0 e
Fluoride	mg/L	0.10	0.40	<0.10	0.15	<0.10	<0.10	<0.10 e
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	<0.050 e	<0.050	<0.050 e	<0.050 e
Sulfate	mg/L	1.0	4.0	<1.0	<1.0 e	<1.0 e	<1.0 e	2.8
Major Cations								
Calcium	mg/L	0.50	17	15	13	13	15.9	16.1
Magnesium	mg/L	0.50	3.3	2.9	3.0	2.6	3.1	3.0
Potassium	mg/L	0.50	2.0	<0.50	0.55	0.72	0.52 e	0.60
Sodium	mg/L	0.50	2.0	0.81	1.1	0.81	1.2 e	<1.0
General								
Hardness	mg/L	3	56	49	45	43	52	52
TDS	mg/L	50	200	54	74	68	98	<50.0

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

Q2 STRE009 (Compliance)

Table 2
Mine Permit Surface Water Quality Monitoring Data Q2 2019
Q2 STRE010 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	STRE010	Q2 Results (2015-2019)					
			Seasonal Benchmark	Q2	Q2 2015	Q2 2016	Q2 2017	Q2 2018	Q2 2019
				Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
				4/30/15	4/26/16	4/10/17	5/15/18	5/29/19	
Field									
D.O.	ppm	--	--	12	12	12	12	11	
Flow	cfs	--	--	3.4	6.2	7.8	3.0	3.6	
pH	SU	--	6.9-7.9	7.5	7.4	7.0	7.8	7.1	
Specific Conductance	µS/cm @ 25°C	--	--	100	74	71	114	104	
Temperature	°C	--	--	4.7	3.8	4.1	8.3	7.7	
Metals									
Aluminum	ug/L	50	431	63	180	400	71.6 e	62.9	
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	11	<10.0	<10.0	
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Boron	ug/L	50	200	<50	<50 e	<50	<50.0	<50.0	
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	1.5	<1.0	<1.0	
Cobalt	ug/L	10	40	<10	<10	<10	<10.0	<10.0	
Copper	ug/L	1.0	4.0	<1.0	<1.0	1.2	<1.0	<1.0	
Iron	ug/L	20	514	110	210 e	660	112 e	89	
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	<10.0	<10.0	
Manganese	ug/L	10	43	<10	20	61	10.3	<10.0	
Mercury	ng/L	0.500	9.72	2.64	6.21	9.79	1.71	1.15	
Molybdenum	ug/L	10	40	<10	<10	<10	<10.0	<10.0	
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 e	<2.0 e	<2.0	<2.0	
Silver	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20	
Zinc	ug/L	10	40	<10	<10	<10	<10.0	<10.0	
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	55	50	38	33	60.9 a	51.7	
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 e	
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10 e	
Nitrogen, Nitrate	mg/L	0.050	0.20	0.082	0.072 e	0.099	0.083 e	0.08 e	
Sulfate	mg/L	1.0	4.0	<1.0	<1.0 e	<1.0 e	<1.0 e	2.4	
Major Cations									
Calcium	mg/L	0.50	16	14	12	11	16.8	15.9	
Magnesium	mg/L	0.50	3.0	2.7	2.3	2.1	3.1	2.8	
Potassium	mg/L	0.50	2.0	<0.50	0.61	0.65	0.63 e	0.70	
Sodium	mg/L	0.50	2.0	0.80	0.86	0.76	1.1 e	<1.0	
General									
Hardness	mg/L	3	52	46	39	36	55	51	
TDS	mg/L	50	200	70	58	66	56	<50.0	

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

Q2 STRE010 (Compliance)

Table 2
Mine Permit Surface Water Quality Monitoring Data Q2 2019
Q2 YDRM002 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	YDRM002 Seasonal Benchmark	Q2 Results (2015-2019)				
			Q2	Q2 2015	Q2 2016	Q2 2017	Q2 2018	Q2 2019
			Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff	Spring Snowmelt & Runoff
			5/4/15	5/4/16	4/12/17	5/16/18	6/4/19	
Field								
D.O.	ppm	--	--	8.8	10	13	8.9	9.1
Flow	cfs	--	--	86	63	NM	42	33
pH	SU	--	6.1-7.1	6.3	6.4	6.3	6.8	6.8
Specific Conductance	µS/cm @ 25°C	--	--	29	31	20	34	39
Temperature	°C	--	--	12	7.0	1.0	12	12
Metals								
Aluminum	ug/L	50	200	160	99	170	175 e	103
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	<10.0	<10.0
Beryllium	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0
Boron	ug/L	50	200	<50	<50 e	<50	<50.0	<50.0
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	<10.0	<10.0
Copper	ug/L	1.0	6.8	4.1 s	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	1,192	460	390 e	430	653 e	593
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	<10.0	<10.0
Manganese	ug/L	10	50	19	18	16	26.9	31.2
Mercury	ng/L	0.500	8.13	6.91	6.28	5.85	3.59	1.89
Molybdenum	ug/L	10	40	<10	<10	<10	<10.0	<10.0
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 e	<2.0 e	<2.0	<2.0
Silver	ug/L	0.20	0.80	<0.20	<0.20	<0.20	<0.20	<0.20
Zinc	ug/L	10	40	<10	<10	<10	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	2.0	30	11	16	7.1	14.8 a	15
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	<1.0	1.1	1.1	1.5	<1.0 e
Fluoride	mg/L	0.10	0.40	<0.10	<0.10	<0.10	<0.10	<0.10 e
Nitrogen, Nitrate	mg/L	0.050	0.20	<0.050	<0.050 e	0.11	<0.050 e	<0.050 e
Sulfate	mg/L	1.0	10	<1.0	<1.0 e	<1.0 e	<5.0 e	2.1
Major Cations								
Calcium	mg/L	0.50	10	4.8	4.5	2.8	4.6	5.5
Magnesium	mg/L	0.50	2.1	1.1	1.0	0.69	1.1	1.3
Potassium	mg/L	0.50	2.0	<0.50	<0.50	<0.50	<0.50 e	<0.50
Sodium	mg/L	0.50	2.0	0.63	0.61	<0.50	0.61 e	<1.0
General								
Hardness	mg/L	3	32	17	15	10	16	19
TDS	mg/L	50	200	58	<50	160	<50.0	<50.0

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

Q2 YDRM002 (Compliance)

Table 2
Mine Permit Surface Water Quality Monitoring Data
Explanation of Abbreviations and Data Qualifiers
Eagle Project

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 at a compliance monitoring location. 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. Color as column header also indicates data are for a compliance monitoring locations.
	Value is equal to or above site-specific benchmark at the background (STRM001) or reference (CDRM004) monitoring location. Color also indicates background monitoring location when applied to column headers.
Q1	First quarter (Winter Baseflow).
Q2	Second quarter (Spring Snowmelt & Runoff).
Q3	Third quarter (Summer Baseflow).
Q4	Fourth quarter (Fall Rain).