

Mine Permit Surface Water Quality Monitoring Data 2016
Q3 STRM005 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	Seasonal Benchmark	Q3 Results (2012-2016)					
				Q3	Q3 2012	Q3 2013	Q3 2014	Q3 2015	Q3 2016
			Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow
				8/9/12	8/12/13	8/13/14	8/18/15	8/9/16	
Field									
D.O.	ppm	--	--	10	11	11	8.9	10	
Flow	cfs	--	--	26	27	32	24	27	
pH	SU	--	6.6-7.6	7.2	7.4	7.5	8.1	7.9	
Specific Conductance	µS/cm @ 25°C	--	--	146	112	131	142	122	
Temperature	°C	--	--	14	14	14	16	18	
Metals									
Aluminum	ug/L	50	--	--	--	--	--	--	
Antimony	ug/L	2.0	--	--	--	--	--	--	
Arsenic	ug/L	1.0	4.0	<1.0	1.7 e	1.0	1.1	<1.0	
Barium	ug/L	10	--	--	--	--	--	--	
Beryllium	ug/L	1.0	--	--	--	--	--	--	
Boron	ug/L	50	200	<50	<50	<50 e	<50	<50 e	
Cadmium	ug/L	0.20	--	--	--	--	--	--	
Chromium	ug/L	1.0	--	--	--	--	--	--	
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	201	150	180 e	180 e	150	160	
Lead	ug/L	1.0	--	--	--	--	--	--	
Lithium	ug/L	10	--	--	--	--	--	--	
Manganese	ug/L	10	40	<10	11	12 e	12	11	
Mercury	ng/L	0.500	2.00	0.502	0.967	1.19	0.961	0.914	
Molybdenum	ug/L	10	--	--	--	--	--	--	
Nickel	ug/L	1.0	4.0	<1.0	<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	<2.0 e
Silver	ug/L	0.20	--	--	--	--	--	--	
Zinc	ug/L	10	40	<10	<10	<10	<10	<10	<10
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	--	--	--	--	--	--	
Alkalinity, Carbonate	mg/L	2.0	--	--	--	--	--	--	
Chloride	mg/L	1.0	--	--	--	--	--	--	
Fluoride	mg/L	0.10	--	--	--	--	--	--	
Nitrogen, Nitrate	mg/L	0.050	--	--	--	--	--	--	
Sulfate	mg/L	1.0	4.0	2.6	1.6	1.4	2.3	2.7	
Major Cations									
Calcium	mg/L	0.50	--	--	--	--	--	--	
Magnesium	mg/L	0.50	--	--	--	--	--	--	
Potassium	mg/L	0.50	--	--	--	--	--	--	
Sodium	mg/L	0.50	--	--	--	--	--	--	
General									
Hardness	mg/L	3	--	--	--	--	--	--	
TDS	mg/L	50	200	82	56 e	<50 e	66	92	

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

Q3 STRM005 (Compliance)

Mine Permit Surface Water Quality Monitoring Data 2016
Q3 STRM001 (Background)
Eagle Mine

Parameter	Unit	Permit RL	Seasonal Benchmark	Q3 Results (2012-2016)					
				Q3	Q3 2012	Q3 2013	Q3 2014	Q3 2015	Q3 2016
			Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow
				8/9/12	8/12/13	8/13/14	8/18/15	8/9/16	
Field									
D.O.	ppm	--	--	3.7	4.1	4.6	5.7	3.4	
Flow	cfs	--	--	0.3	0.3	0.2	<0.1	0.1	
pH	SU	--	6.2-7.2	6.3	6.5	6.9	6.7	6.3	
Specific Conductance	µS/cm @ 25°C	--	--	63	55	56	56	60	
Temperature	°C	--	--	18	13	16	16	16	
Metals									
Aluminum	ug/L	50	--	--	--	--	--	--	
Antimony	ug/L	2.0	--	--	--	--	--	--	
Arsenic	ug/L	1.0	4.0	<1.0	<1.0 e	<1.0	<1.0	<1.0	
Barium	ug/L	10	--	--	--	--	--	--	
Beryllium	ug/L	1.0	--	--	--	--	--	--	
Boron	ug/L	50	200	<50	<50	<50 e	<50	<50 e	
Cadmium	ug/L	0.20	--	--	--	--	--	--	
Chromium	ug/L	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	1.1	<1.0	
Iron	ug/L	20	6,195	1,200	1,500 e	700 e	760	840	
Lead	ug/L	1.0	--	--	--	--	--	--	
Lithium	ug/L	10	--	--	--	--	--	--	
Manganese	ug/L	10	392	78	48	40 e	53	62	
Mercury	ng/L	0.500	2.85	0.708	0.777	0.806	1.07	1.16	
Molybdenum	ug/L	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	--	--	--	--	--	--	
Zinc	ug/L	10	40	<10	12	<10	<10	<10	
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	--	--	--	--	--	--	
Alkalinity, Carbonate	mg/L	2.0	--	--	--	--	--	--	
Chloride	mg/L	1.0	--	--	--	--	--	--	
Fluoride	mg/L	0.10	--	--	--	--	--	--	
Nitrogen, Nitrate	mg/L	0.050	--	--	--	--	--	--	
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Major Cations									
Calcium	mg/L	0.50	--	--	--	--	--	--	
Magnesium	mg/L	0.50	--	--	--	--	--	--	
Potassium	mg/L	0.50	--	--	--	--	--	--	
Sodium	mg/L	0.50	--	--	--	--	--	--	
General									
Hardness	mg/L	3	--	--	--	--	--	--	
TDS	mg/L	50	200	<50	56 e	<50.0 e	98	50 s	

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

Q3 STRM001 (Background)

Mine Permit Surface Water Quality Monitoring Data 2016
Q3 STRM002 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	Seasonal Benchmark	Q3 Results (2012-2016)					
				Q3	Q3 2012	Q3 2013	Q3 2014	Q3 2015	Q3 2016
			Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow
				8/9/12	8/12/13	8/13/14	8/17/15	8/9/16	
Field									
D.O.	ppm	--	--	8.9	9.2	9.4	7.4	7.2	
Flow	cfs	--	--	1.3	1.5	1.8	1.2	1.1	
pH	SU	--	6.3-7.3	6.7	6.5	6.5	7.3	6.8	
Specific Conductance	µS/cm @ 25°C	--	--	76	51	68	76	66	
Temperature	°C	--	--	14	15	15	19	18	
Metals									
Aluminum	ug/L	50	--	--	--	--	--	--	--
Antimony	ug/L	2.0	--	--	--	--	--	--	--
Arsenic	ug/L	1.0	4.0	<1.0	1.3 e	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	10	--	--	--	--	--	--	--
Beryllium	ug/L	1.0	--	--	--	--	--	--	--
Boron	ug/L	50	200	<50	<50	<50 e	<50	<50 e	<50
Cadmium	ug/L	0.20	--	--	--	--	--	--	--
Chromium	ug/L	1.0	--	--	--	--	--	--	--
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	703	320	240 e	220 e	270	250	
Lead	ug/L	1.0	--	--	--	--	--	--	--
Lithium	ug/L	10	--	--	--	--	--	--	--
Manganese	ug/L	10	40	11	<10	<10 e	10	<10	
Mercury	ng/L	0.500	2.36	0.957	1.48	0.967	1.60	1.46	
Molybdenum	ug/L	10	--	--	--	--	--	--	--
Nickel	ug/L	1.0	4.0	<1.0	<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	<2.0 e
Silver	ug/L	0.20	--	--	--	--	--	--	--
Zinc	ug/L	10	40	<10	<10	<10	<10	<10	<10
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	--	--	--	--	--	--	--
Alkalinity, Carbonate	mg/L	2.0	--	--	--	--	--	--	--
Chloride	mg/L	1.0	--	--	--	--	--	--	--
Fluoride	mg/L	0.10	--	--	--	--	--	--	--
Nitrogen, Nitrate	mg/L	0.050	--	--	--	--	--	--	--
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Major Cations									
Calcium	mg/L	0.50	--	--	--	--	--	--	--
Magnesium	mg/L	0.50	--	--	--	--	--	--	--
Potassium	mg/L	0.50	--	--	--	--	--	--	--
Sodium	mg/L	0.50	--	--	--	--	--	--	--
General									
Hardness	mg/L	3	--	--	--	--	--	--	--
TDS	mg/L	50	200	50	<50 e	<50 e	50	58	

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

Q3 STRM002 (Compliance)

Mine Permit Surface Water Quality Monitoring Data 2016
Q3 STRM004 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	Seasonal Benchmark	Q3 Results (2012-2016)					
				Q3	Q3 2012	Q3 2013	Q3 2014	Q3 2015	Q3 2016
			Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow
				8/8/12	8/12/13	8/12/14	8/17/15	8/10/16	
Field									
D.O.	ppm	--	--	9.8	9.9	10	9.3	9.2	
Flow	cfs	--	--	4.1	4.7	6.1	3.2	4.1	
pH	SU	--	7.2-8.2	7.4	7.7	7.7	7.9	7.4	
Specific Conductance	µS/cm @ 25°C	--	--	103	98	100	103	91	
Temperature	°C	--	--	14	13	12	16	16	
Metals									
Aluminum	ug/L	50	--	--	--	--	--	--	--
Antimony	ug/L	2.0	--	--	--	--	--	--	--
Arsenic	ug/L	1.0	4.0	1.4	2.1 e	1.5	1.2	1.5	
Barium	ug/L	10	--	--	--	--	--	--	--
Beryllium	ug/L	1.0	--	--	--	--	--	--	--
Boron	ug/L	50	200	<50	<50	<50 e	<50	<50 e	
Cadmium	ug/L	0.20	--	--	--	--	--	--	--
Chromium	ug/L	1.0	--	--	--	--	--	--	--
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	500	240	180 e	460 e	190	200	
Lead	ug/L	1.0	--	--	--	--	--	--	--
Lithium	ug/L	10	--	--	--	--	--	--	--
Manganese	ug/L	10	40	11	12	32 e	13	14	
Mercury	ng/L	0.500	3.47	1.20	<0.500	2.99	1.90	3.74	
Molybdenum	ug/L	10	--	--	--	--	--	--	--
Nickel	ug/L	1.0	4.0	<1.0	<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	<2.0 e
Silver	ug/L	0.20	--	--	--	--	--	--	--
Zinc	ug/L	10	40	<10	<10	<10	<10	<10	<10
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	--	--	--	--	--	--	--
Alkalinity, Carbonate	mg/L	2.0	--	--	--	--	--	--	--
Chloride	mg/L	1.0	--	--	--	--	--	--	--
Fluoride	mg/L	0.10	--	--	--	--	--	--	--
Nitrogen, Nitrate	mg/L	0.050	--	--	--	--	--	--	--
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Major Cations									
Calcium	mg/L	0.50	--	--	--	--	--	--	--
Magnesium	mg/L	0.50	--	--	--	--	--	--	--
Potassium	mg/L	0.50	--	--	--	--	--	--	--
Sodium	mg/L	0.50	--	--	--	--	--	--	--
General									
Hardness	mg/L	3	--	--	--	--	--	--	--
TDS	mg/L	50	200	52	<50 e	80 e	68	108	

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

Q3 STRM004 (Compliance)

Mine Permit Surface Water Quality Monitoring Data 2016
Q3 STRE001 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	Seasonal Benchmark	Q3 Results (2012-2016)					
				Q3	Q3 2012	Q3 2013	Q3 2014	Q3 2015	Q3 2016
			Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow
				8/9/12	8/12/13	8/13/14	8/19/15	8/12/16	
Field									
D.O.	ppm	--	--	10	11	10	9.7	9.0	
Flow	cfs	--	--	11	13	10	9.7	18	
pH	SU	--	7.1-8.1	7.3	7.6	7.6	7.8	7.5	
Specific Conductance	µS/cm @ 25°C	--	--	136	136	136	125	111	
Temperature	°C	--	--	10	9.1	11	14	14	
Metals									
Aluminum	ug/L	50	--	--	--	--	--	--	
Antimony	ug/L	2.0	--	--	--	--	--	--	
Arsenic	ug/L	1.0	4.0	1.1	<1.0 e	1.2	1.4	1.4	
Barium	ug/L	10	--	--	--	--	--	--	
Beryllium	ug/L	1.0	--	--	--	--	--	--	
Boron	ug/L	50	200	<50	<50	<50 e	<50	<50 e	
Cadmium	ug/L	0.20	--	--	--	--	--	--	
Chromium	ug/L	1.0	--	--	--	--	--	--	
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	109	95	77 e	72 e	81	180	
Lead	ug/L	1.0	--	--	--	--	--	--	
Lithium	ug/L	10	--	--	--	--	--	--	
Manganese	ug/L	10	40	13	13	<10 e	14	21	
Mercury	ng/L	0.500	2.00	<0.500	0.647	<0.500	0.885	2.22	
Molybdenum	ug/L	10	--	--	--	--	--	--	
Nickel	ug/L	1.0	4.0	<1.0	<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	<2.0 e
Silver	ug/L	0.20	--	--	--	--	--	--	
Zinc	ug/L	10	40	<10	<10	<10	<10	<10	<10
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	--	--	--	--	--	--	
Alkalinity, Carbonate	mg/L	2.0	--	--	--	--	--	--	
Chloride	mg/L	1.0	--	--	--	--	--	--	
Fluoride	mg/L	0.10	--	--	--	--	--	--	
Nitrogen, Nitrate	mg/L	0.050	--	--	--	--	--	--	
Sulfate	mg/L	1.0	4.0	3.6	3.4	2.9	2.7	<1.0	
Major Cations									
Calcium	mg/L	0.50	--	--	--	--	--	--	
Magnesium	mg/L	0.50	--	--	--	--	--	--	
Potassium	mg/L	0.50	--	--	--	--	--	--	
Sodium	mg/L	0.50	--	--	--	--	--	--	
General									
Hardness	mg/L	3	--	--	--	--	--	--	
TDS	mg/L	50	200	68	60 e	52 e	92	118	

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

Q3 STRE001 (Compliance)

Mine Permit Surface Water Quality Monitoring Data 2016
Q3 STRE002 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	Seasonal Benchmark	Q3 Results (2012-2016)					
				Q3	Q3 2012	Q3 2013	Q3 2014	Q3 2015	Q3 2016
			Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow
				8/7/12	8/12/13	8/12/14	8/17/15	8/10/16	
Field									
D.O.	ppm	--	--	9.9	10	10	9.7	9.8	
Flow	cfs	--	--	14	14	13	6.6	12	
pH	SU	--	7.4-8.4	7.7	7.9	7.7	8.0	7.8	
Specific Conductance	µS/cm @ 25°C	--	--	140	139	137	141	125	
Temperature	°C	--	--	16	12	12	15	15	
Metals									
Aluminum	ug/L	50	--	--	--	--	--	--	--
Antimony	ug/L	2.0	--	--	--	--	--	--	--
Arsenic	ug/L	1.0	4.0	1.5	2.0 e	1.4	1.2	1.5	
Barium	ug/L	10	--	--	--	--	--	--	--
Beryllium	ug/L	1.0	--	--	--	--	--	--	--
Boron	ug/L	50	200	<50	<50	<50 e	<50	<50 e	
Cadmium	ug/L	0.20	--	--	--	--	--	--	--
Chromium	ug/L	1.0	--	--	--	--	--	--	--
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	191	140	99 e	170 e	81	110	
Lead	ug/L	1.0	--	--	--	--	--	--	--
Lithium	ug/L	10	--	--	--	--	--	--	--
Manganese	ug/L	10	40	13	<10	14 e	10	14	
Mercury	ng/L	0.500	2.00	0.903	<0.500	1.10	0.994	1.06	
Molybdenum	ug/L	10	--	--	--	--	--	--	--
Nickel	ug/L	1.0	4.0	<1.0	<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	<2.0 e
Silver	ug/L	0.20	--	--	--	--	--	--	--
Zinc	ug/L	10	40	<10	<10	<10	<10	<10	<10
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	--	--	--	--	--	--	--
Alkalinity, Carbonate	mg/L	2.0	--	--	--	--	--	--	--
Chloride	mg/L	1.0	--	--	--	--	--	--	--
Fluoride	mg/L	0.10	--	--	--	--	--	--	--
Nitrogen, Nitrate	mg/L	0.050	--	--	--	--	--	--	--
Sulfate	mg/L	1.0	4.0	3.1	3.5	<1.0	2.9	3.4	
Major Cations									
Calcium	mg/L	0.50	--	--	--	--	--	--	--
Magnesium	mg/L	0.50	--	--	--	--	--	--	--
Potassium	mg/L	0.50	--	--	--	--	--	--	--
Sodium	mg/L	0.50	--	--	--	--	--	--	--
General									
Hardness	mg/L	3	--	--	--	--	--	--	--
TDS	mg/L	50	200	64	54 e	98 e	86	102	

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

Q3 STRE002 (Compliance)

Mine Permit Surface Water Quality Monitoring Data 2016
Q3 STRE005 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	Seasonal Benchmark	Q3 Results (2012-2016)					
				Q3	Q3 2012	Q3 2013	Q3 2014	Q3 2015	Q3 2016
			Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow
				8/7/12	8/12/13	8/13/14	8/17/15	8/10/16	
Field									
D.O.	ppm	--	--	8.6	10	9.7	8.8	8.2	
Flow	cfs	--	--	0.6	0.6	0.4	0.2	0.2	
pH	SU	--	7.3-8.3	7.5	7.7	7.8	8.0	7.8	
Specific Conductance	µS/cm @ 25°C	--	--	136	133	132	138	136	
Temperature	°C	--	--	18	12	14	18	18	
Metals									
Aluminum	ug/L	50	--	--	--	--	--	--	--
Antimony	ug/L	2.0	--	--	--	--	--	--	--
Arsenic	ug/L	1.0	4.0	<1.0	<1.0 e	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	10	--	--	--	--	--	--	--
Beryllium	ug/L	1.0	--	--	--	--	--	--	--
Boron	ug/L	50	200	<50	<50	<50 e	<50	<50 e	
Cadmium	ug/L	0.20	--	--	--	--	--	--	--
Chromium	ug/L	1.0	--	--	--	--	--	--	--
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	501	430	350 e	250 e	230	330	
Lead	ug/L	1.0	--	--	--	--	--	--	--
Lithium	ug/L	10	--	--	--	--	--	--	--
Manganese	ug/L	10	40	27	29	22 e	25	47	
Mercury	ng/L	0.500	2.00	1.11	1.09	0.813	1.16	2.47	
Molybdenum	ug/L	10	--	--	--	--	--	--	--
Nickel	ug/L	1.0	4.0	<1.0	<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	<2.0 e
Silver	ug/L	0.20	--	--	--	--	--	--	--
Zinc	ug/L	10	40	<10	<10	<10	<10	<10	<10
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	--	--	--	--	--	--	--
Alkalinity, Carbonate	mg/L	2.0	--	--	--	--	--	--	--
Chloride	mg/L	1.0	--	--	--	--	--	--	--
Fluoride	mg/L	0.10	--	--	--	--	--	--	--
Nitrogen, Nitrate	mg/L	0.050	--	--	--	--	--	--	--
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Major Cations									
Calcium	mg/L	0.50	--	--	--	--	--	--	--
Magnesium	mg/L	0.50	--	--	--	--	--	--	--
Potassium	mg/L	0.50	--	--	--	--	--	--	--
Sodium	mg/L	0.50	--	--	--	--	--	--	--
General									
Hardness	mg/L	3	--	--	--	--	--	--	--
TDS	mg/L	50	200	82	60 e	<50 e	92	116	

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

Q3 STRE005 (Compliance)

Mine Permit Surface Water Quality Monitoring Data 2016
Q3 STRE009 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	Seasonal Benchmark	Q3 Results (2012-2016)					
				Q3	Q3 2012	Q3 2013	Q3 2014	Q3 2015	Q3 2016
			Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow
				8/7/12	8/12/13	8/13/14	8/17/15	8/10/16	
Field									
D.O.	ppm	--	--	9.4	11	10	7.5	10	
Flow	cfs	--	--	3.7	22	3.5	2.7	3.8	
pH	SU	--	7.2-8.2	7.1	7.8	7.5	8.4	7.7	
Specific Conductance	µS/cm @ 25°C	--	--	122	118	119	75	106	
Temperature	°C	--	--	14	11	11	16	15	
Metals									
Aluminum	ug/L	50	--	--	--	--	--	--	
Antimony	ug/L	2.0	--	--	--	--	--	--	
Arsenic	ug/L	1.0	4.0	1.3	<1.0 e	1.3	1.4	1.0	
Barium	ug/L	10	--	--	--	--	--	--	
Beryllium	ug/L	1.0	--	--	--	--	--	--	
Boron	ug/L	50	200	<50	<50	<50 e	<50	<50 e	
Cadmium	ug/L	0.20	--	--	--	--	--	--	
Chromium	ug/L	1.0	--	--	--	--	--	--	
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	224	180	100 e	100 e	170	72	
Lead	ug/L	1.0	--	--	--	--	--	--	
Lithium	ug/L	10	--	--	--	--	--	--	
Manganese	ug/L	10	36	23	13	13 e	30	<10	
Mercury	ng/L	0.500	2.85	2.08	0.885	0.718	1.99	0.906	
Molybdenum	ug/L	10	--	--	--	--	--	--	
Nickel	ug/L	1.0	4.0	<1.0	<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	<2.0 e
Silver	ug/L	0.20	--	--	--	--	--	--	
Zinc	ug/L	10	40	11	<10	<10	<10	<10	<10
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	--	--	--	--	--	--	
Alkalinity, Carbonate	mg/L	2.0	--	--	--	--	--	--	
Chloride	mg/L	1.0	--	--	--	--	--	--	
Fluoride	mg/L	0.10	--	--	--	--	--	--	
Nitrogen, Nitrate	mg/L	0.050	--	--	--	--	--	--	
Sulfate	mg/L	1.0	4.0	1.4	2.3	1.4	1.1	2.2	
Major Cations									
Calcium	mg/L	0.50	--	--	--	--	--	--	
Magnesium	mg/L	0.50	--	--	--	--	--	--	
Potassium	mg/L	0.50	--	--	--	--	--	--	
Sodium	mg/L	0.50	--	--	--	--	--	--	
General									
Hardness	mg/L	3	--	--	--	--	--	--	
TDS	mg/L	50	200	68	52 e	68 e	72	84	

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

Q3 STRE009 (Compliance)

Mine Permit Surface Water Quality Monitoring Data 2016
Q3 STRE010 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	Seasonal Benchmark	Q3 Results (2012-2016)					
				Q3	Q3 2012	Q3 2013	Q3 2014	Q3 2015	Q3 2016
			Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow
				8/7/12	8/12/13	8/13/14	8/17/15	8/10/16	
Field									
D.O.	ppm	--	--	10	11	11	10	11	
Flow	cfs	--	--	2.6	2.7	2.2	1.9	2.5	
pH	SU	--	7.2-8.2	7.4	7.8	7.7	7.7	7.7	
Specific Conductance	µS/cm @ 25°C	--	--	129	123	124	124	110	
Temperature	°C	--	--	12	9.4	9.9	11	12	
Metals									
Aluminum	ug/L	50	--	--	--	--	--	--	--
Antimony	ug/L	2.0	--	--	--	--	--	--	--
Arsenic	ug/L	1.0	4.0	<1.0	<1.0 e	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	10	--	--	--	--	--	--	--
Beryllium	ug/L	1.0	--	--	--	--	--	--	--
Boron	ug/L	50	200	<50	<50	<50 e	<50	<50 e	
Cadmium	ug/L	0.20	--	--	--	--	--	--	--
Chromium	ug/L	1.0	--	--	--	--	--	--	--
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	135	88	71 e	98 e	120	86	
Lead	ug/L	1.0	--	--	--	--	--	--	--
Lithium	ug/L	10	--	--	--	--	--	--	--
Manganese	ug/L	10	40	13	12	17 e	16	10	
Mercury	ng/L	0.500	2.00	0.974	0.858	1.18	1.44	0.908	
Molybdenum	ug/L	10	--	--	--	--	--	--	--
Nickel	ug/L	1.0	4.0	<1.0	<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	<2.0 e
Silver	ug/L	0.20	--	--	--	--	--	--	--
Zinc	ug/L	10	40	<10	<10	<10	<10	<10	<10
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	--	--	--	--	--	--	--
Alkalinity, Carbonate	mg/L	2.0	--	--	--	--	--	--	--
Chloride	mg/L	1.0	--	--	--	--	--	--	--
Fluoride	mg/L	0.10	--	--	--	--	--	--	--
Nitrogen, Nitrate	mg/L	0.050	--	--	--	--	--	--	--
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Major Cations									
Calcium	mg/L	0.50	--	--	--	--	--	--	--
Magnesium	mg/L	0.50	--	--	--	--	--	--	--
Potassium	mg/L	0.50	--	--	--	--	--	--	--
Sodium	mg/L	0.50	--	--	--	--	--	--	--
General									
Hardness	mg/L	3	--	--	--	--	--	--	--
TDS	mg/L	50	200	58	60 e	70 e	86	96	

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

Q3 STRE010 (Compliance)

Mine Permit Surface Water Quality Monitoring Data 2016
Q3 YDRM002 (Compliance)
Eagle Mine

Parameter	Unit	Permit RL	Seasonal Benchmark	Q3 Results (2012-2016)					
				Q3	Q3 2012	Q3 2013	Q3 2014	Q3 2015	Q3 2016
			Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow
				8/9/12	8/12/13	8/13/14	8/18/15	8/9/16	
Field									
D.O.	ppm	--	--	8.4	8.6	7.7	7.6	7.9	
Flow	cfs	--	--	7.5	11	12	8.5	7.0	
pH	SU	--	6.6-7.6	7.3	6.5	7.1	7.7	7.1	
Specific Conductance	µS/cm @ 25°C	--	--	83	56	81	90	70	
Temperature	°C	--	--	16	16	16	18	20	
Metals									
Aluminum	ug/L	50	--	--	--	--	--	--	--
Antimony	ug/L	2.0	--	--	--	--	--	--	--
Arsenic	ug/L	1.0	4.0	<1.0	1.6 e	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	10	--	--	--	--	--	--	--
Beryllium	ug/L	1.0	--	--	--	--	--	--	--
Boron	ug/L	50	200	<50	<50	<50 e	<50	<50 e	<50
Cadmium	ug/L	0.20	--	--	--	--	--	--	--
Chromium	ug/L	1.0	--	--	--	--	--	--	--
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	1,270	830	1,200 e	820 e	1,000	930	
Lead	ug/L	1.0	--	--	--	--	--	--	--
Lithium	ug/L	10	--	--	--	--	--	--	--
Manganese	ug/L	10	40	27	34	24 e	26	27	
Mercury	ng/L	0.500	3.10	1.65	2.49	1.52	1.67	1.92	
Molybdenum	ug/L	10	--	--	--	--	--	--	--
Nickel	ug/L	1.0	4.0	<1.0	<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	<2.0 e
Silver	ug/L	0.20	--	--	--	--	--	--	--
Zinc	ug/L	10	40	<10	<10	<10	<10	<10	<10
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	--	--	--	--	--	--	--
Alkalinity, Carbonate	mg/L	2.0	--	--	--	--	--	--	--
Chloride	mg/L	1.0	--	--	--	--	--	--	--
Fluoride	mg/L	0.10	--	--	--	--	--	--	--
Nitrogen, Nitrate	mg/L	0.050	--	--	--	--	--	--	--
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	2.9	<1.0	<1.0	
Major Cations									
Calcium	mg/L	0.50	--	--	--	--	--	--	--
Magnesium	mg/L	0.50	--	--	--	--	--	--	--
Potassium	mg/L	0.50	--	--	--	--	--	--	--
Sodium	mg/L	0.50	--	--	--	--	--	--	--
General									
Hardness	mg/L	3	--	--	--	--	--	--	--
TDS	mg/L	50	200	62	<50.0 e	<50.0 e	84	62	

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

Q3 YDRM002 (Compliance)

Mine Permit Surface Water Quality Monitoring Data 2016
Q3 CDRM004 (Reference)
Eagle Mine

Parameter	Unit	Permit RL	Seasonal Benchmark	Q3 Results (2012-2016)					
				Q3	Q3 2012	Q3 2013	Q3 2014	Q3 2015	Q3 2016
			Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow	Summer Baseflow
				8/7/12	8/12/13	8/12/14	8/19/15	8/12/16	
Field									
D.O.	ppm	--	--	9.9	10	10	9.8	9.4	
Flow	cfs	--	--	10	11	15	6.7	25	
pH	SU	--	7.2-8.2	7.5	7.8	7.7	7.9	7.2	
Specific Conductance	µS/cm @ 25°C	--	--	153	145	147	152	124	
Temperature	°C	--	--	14	12	12	14	15	
Metals									
Aluminum	ug/L	50	--	--	--	--	--	--	
Antimony	ug/L	2.0	--	--	--	--	--	--	
Arsenic	ug/L	1.0	4.0	3.1	3.3 e	2.8	3.0	3.2	
Barium	ug/L	10	--	--	--	--	--	--	
Beryllium	ug/L	1.0	--	--	--	--	--	--	
Boron	ug/L	50	200	<50	<50	<50 e	<50	<50 e	
Cadmium	ug/L	0.20	--	--	--	--	--	--	
Chromium	ug/L	1.0	--	--	--	--	--	--	
Cobalt	ug/L	10	40	<10	<10	<10	<10	<10	<10
Copper	ug/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Iron	ug/L	20	309	230	130 e	290 e	170	340	
Lead	ug/L	1.0	--	--	--	--	--	--	
Lithium	ug/L	10	--	--	--	--	--	--	
Manganese	ug/L	10	44	36	19	33 e	30	37	
Mercury	ng/L	0.500	2.00	0.922	0.877	1.45	1.12	2.63	
Molybdenum	ug/L	10	--	--	--	--	--	--	
Nickel	ug/L	1.0	4.0	<1.0	<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	<2.0 e
Silver	ug/L	0.20	--	--	--	--	--	--	
Zinc	ug/L	10	40	<10	<10	<10	<10	<10	<10
Major Anions									
Alkalinity, Bicarbonate	mg/L	2.0	--	--	--	--	--	--	
Alkalinity, Carbonate	mg/L	2.0	--	--	--	--	--	--	
Chloride	mg/L	1.0	--	--	--	--	--	--	
Fluoride	mg/L	0.10	--	--	--	--	--	--	
Nitrogen, Nitrate	mg/L	0.050	--	--	--	--	--	--	
Sulfate	mg/L	1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Major Cations									
Calcium	mg/L	0.50	--	--	--	--	--	--	
Magnesium	mg/L	0.50	--	--	--	--	--	--	
Potassium	mg/L	0.50	--	--	--	--	--	--	
Sodium	mg/L	0.50	--	--	--	--	--	--	
General									
Hardness	mg/L	3	--	--	--	--	--	--	
TDS	mg/L	50	200	96	64 e	106 e	144	144	

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

Q3 CDRM004 (Reference)

Mine Permit Surface Water Quality Monitoring Data
Footnote Explanation
Eagle Project

Footnote	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.
Note:	Date shown is the date analytical samples were collected. Flow measurements may have been made on a different day.
	Value is equal to or above site-specific benchmark. An exceedance occurs when a value is equal to or greater than the benchmark for 2 consecutive seasons at a compliance monitoring location.