Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL023B (UMB)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/08/18[T]	Q1 2019 03/07/19[T]
Field				
D.O.[1]	ppm	--	**0.1**	<0.1
ORP	mV	--	**-211**	**-250**
pH	SU	7.8-8.8	**8.6**	**8.3**
Specific Conductance	µS/cm @ 25°C	--	**121**	**127**
Temperature	°C	--	**6.0**	**6.6**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1413.66**	**1413.78**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.5	<2.0	<2.0
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	159	**50.9**	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	**1.4**	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	67	**61.2**	**58.5**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.050 e	<0.050 e
Sulfate	mg/L	8.0	**3.8** e	**3.8**
Major Cations				
Calcium	mg/L	16	**--**	**--**
Magnesium	mg/L	3.7	**--**	**--**
Potassium	mg/L	2.0	--	--
Sodium	mg/L	11	**5.3**	**6.6** e
General				
Hardness	mg/L	55	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL024A (UMB)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/07/18[T]	Q1 2019 03/20/19[T]
Field				
D.O.[1]	ppm	--	**11**	**11**
ORP	mV	--	**102**	**56**
pH	SU	6.1-7.1	**6.3**	**6.4**
Specific Conductance	µS/cm @ 25°C	--	**211**	**357**
Temperature	°C	--	**8.6**	**9.3**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1418.12**	**1417.61**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	86	**--**	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	105	<20.0	**83.1** e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	**0.710**
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	**--**	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	24	**38.1**	**41.4**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.0	**35.3**	**79.8** e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.20	**0.81** e	**2.4** e
Sulfate	mg/L	8.0	**5.0** e	**6.3**
Major Cations				
Calcium	mg/L	48	**--**	--
Magnesium	mg/L	8.1	**--**	--
Potassium	mg/L	3.7	**--**	--
Sodium	mg/L	2.0	**23.6**	**39.6** e
General				
Hardness	mg/L	153	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL025A (Background)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/06/18[T]		Q1 2019 03/06/19[T]	
Field						
D.O.[1]	ppm	--	**12**		**11**	
ORP	mV	--	**159**		**53**	
pH	SU	6.4-7.4	**6.6**		**7.2**	
Specific Conductance	µS/cm @ 25°C	--	**52**		**64**	
Temperature	°C	--	**7.4**		**7.0**	
Turbidity	NTU	--	<1		<1	
Water Elevation	ft MSL	--	**1416.97**		**1416.59**	
Metals						
Aluminum	ug/L	200	--		--	
Antimony	ug/L	5.5	--		--	
Arsenic	ug/L	6.0	<2.0		<2.0	
Barium	ug/L	80	--		--	
Beryllium	ug/L	2.5	--		--	
Boron	ug/L	400	<100		<100	
Cadmium	ug/L	2.0	--		--	
Chromium	ug/L	20	--		--	
Cobalt	ug/L	40	--		--	
Copper	ug/L	20	<5.0		<5.0	
Iron	ug/L	126	<20.0		<50.0	e
Lead	ug/L	4.0	--		--	
Lithium	ug/L	32	--		--	
Manganese	ug/L	80	<20.0		<20.0	
Mercury	ng/L	2.00	<0.500		<0.50	
Molybdenum	ug/L	40	--		--	
Nickel	ug/L	100	<25.0		<25.0	
Selenium	ug/L	4.0	<1.0		<1.0	
Silver	ug/L	0.80	--		--	
Strontium	ug/L	200	--		--	
Thallium	ug/L	2.0	--		--	
Vanadium	ug/L	4.0	<1.0		<1.0	
Zinc	ug/L	40	<10.0		<10.0	
Major Anions						
Alkalinity, Bicarbonate	mg/L	25	**22.7**		**27.5**	
Alkalinity, Carbonate	mg/L	8.0	<2.0		<2.0	
Chloride	mg/L	4.0	<1.0		<1.0	e
Fluoride	mg/L	0.40	--		--	
Nitrogen, Nitrate	mg/L	1.1	**0.25**	e	**0.37**	e
Sulfate	mg/L	8.0	**2.2**	e	**2.0**	
Major Cations						
Calcium	mg/L	8.5	**--**		**--**	
Magnesium	mg/L	2.0	**--**		**--**	
Potassium	mg/L	2.0	**--**		**--**	
Sodium	mg/L	2.0	**0.83**		<1.0	e
General						
Hardness	mg/L	28	**--**		**--**	

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL025B (Background)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/06/18[T]	Q1 2019 03/06/19[T]
Field				
D.O.[1]	ppm	--	**11**	**11**
ORP	mV	--	**105**	**21**
pH	SU	8.5-9.5	**9.0**	**9.1**
Specific Conductance	µS/cm @ 25°C	--	**73**	**71**
Temperature	°C	--	**7.2**	**7.4**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1416.87**	**1416.47**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	56	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	**1.2**	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	36	**25.8**	**28.4**
Alkalinity, Carbonate	mg/L	12	**4.0**	**2.4**
Chloride	mg/L	4.0	<1.0	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.20	**0.15** e	**0.17** e
Sulfate	mg/L	8.0	<2.0 e	<2.0
Major Cations				
Calcium	mg/L	10	**--**	**--**
Magnesium	mg/L	2.0	**--**	**--**
Potassium	mg/L	2.0	--	--
Sodium	mg/L	4.5	**1.4**	**1.5** e
General				
Hardness	mg/L	33	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL025D (Background)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/05/18[T]	Q1 2019 02/12/19[T]
Field				
D.O.[1]	ppm	--	**5.1**	**4.5**
ORP	mV	--	**127**	**147**
pH	SU	8.2-9.2	**8.7**	**9.0**
Specific Conductance	µS/cm @ 25°C	--	**108**	**100**
Temperature	°C	--	**7.1**	**7.1**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1412.99**	**1412.85**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.5	**2.7**	**3.0**
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	137	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	**0.720**
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	**4.1**	**4.1**
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	52	**45.1**	**43.8**
Alkalinity, Carbonate	mg/L	14	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.20	**0.10** e	**0.10** b,e
Sulfate	mg/L	8.0	**5.3** e	**5.1**
Major Cations				
Calcium	mg/L	12	**--**	**--**
Magnesium	mg/L	2.7	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	12	**3.5**	**3.4** e
General				
Hardness	mg/L	42	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL026A (Background)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/05/18[T]	Q1 2019 02/12/19[T]
Field				
D.O.[1]	ppm	--	**11**	**10**
ORP	mV	--	**167**	**183**
pH	SU	6.2-7.2	**6.6**	**6.9**
Specific Conductance	µS/cm @ 25°C	--	**159**	**138**
Temperature	°C	--	**7.8**	**6.2**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1416.66**	**1416.43**
Metals				
Aluminum	ug/L	236	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	368	**94.8**	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	**0.70**	**0.750**
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	114	**73.7**	**69.2**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.73	**0.67** e	**0.72** b,e
Sulfate	mg/L	8.0	**3.2** e	**2.1**
Major Cations				
Calcium	mg/L	40.0	**--**	**--**
Magnesium	mg/L	5.9	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	2.4	**1.5**	**1.5** e
General				
Hardness	mg/L	124	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL026D (Background)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/05/18[T]	Q1 2019 02/12/19[T]
Field				
D.O.[1]	ppm	--	**12**	**11**
ORP	mV	--	**125**	**155**
pH	SU	8.4-9.4	**8.8**	**9.2**
Specific Conductance	µS/cm @ 25°C	--	**74**	**66**
Temperature	°C	--	**7.2**	**7.4**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1409.86**	**1409.67**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	80	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	31	**28.8**	**29.9**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.20	**0.13** e	**0.15** b,e
Sulfate	mg/L	8.0	<2.0 e	<2.0
Major Cations				
Calcium	mg/L	13	**--**	**--**
Magnesium	mg/L	2.4	**--**	**--**
Potassium	mg/L	2.0	--	--
Sodium	mg/L	2.0	**0.68**	<1.0 e
General				
Hardness	mg/L	43	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL026E (Background)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/06/18[T]	Q1 2019 03/06/19[T]
Field				
D.O.[1]	ppm	--	**0.6**	<0.1
ORP	mV	--	**-154**	**-175**
pH	SU	8.1-9.1	**8.6**	**8.7**
Specific Conductance	µS/cm @ 25°C	--	**130**	**127**
Temperature	°C	--	**7.2**	**7.1**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1409.88**	**1409.29**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	7.8	**7.5**	**7.8**
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	80	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	**--**	**--**
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	91	**53.5**	**54.3**
Alkalinity, Carbonate	mg/L	8.0	**2.0**	<2.0
Chloride	mg/L	4.0	<1.0	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.050 e	<0.050 e
Sulfate	mg/L	8.6	**7.7** e	**7.7**
Major Cations				
Calcium	mg/L	17	**--**	**--**
Magnesium	mg/L	4.3	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	2.0	**1.6**	**1.7** e
General				
Hardness	mg/L	60	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL044B (UMB)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/07/18[T]	Q1 2019 03/07/19[T]
Field				
D.O.[1]	ppm	--	**1.4**	**0.5**
ORP	mV	--	**-263**	**-86**
pH	SU	8.3-9.3	**9.5**	**9.3**
Specific Conductance	µS/cm @ 25°C	--	**88**	**79**
Temperature	°C	--	**7.6**	**5.6**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1414.56**	**1414.09**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	80	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	**0.940**
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	64	**16.6**	**32.8**
Alkalinity, Carbonate	mg/L	8.0	**10.2**	**7.8**
Chloride	mg/L	4.0	**1.4**	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.050 e	<0.050 e
Sulfate	mg/L	24	**6.0** e	**6.8**
Major Cations				
Calcium	mg/L	17	**--**	**--**
Magnesium	mg/L	4.0	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	2.6	**2.6**	**2.8** e
General				
Hardness	mg/L	58	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL060A (TDRSA-CWB)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/06/18[T]	Q1 2019 03/11/19[T]
Field				
D.O.[1]	ppm	--	**11**	**11**
ORP	mV	--	**41**	**35**
pH	SU	8.1-9.1	**8.7**	**8.6**
Specific Conductance	µS/cm @ 25°C	--	**89**	**95**
Temperature	°C	--	**8.0**	**7.8**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1405.42**	**1404.61**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	7.2	**4.2**	**4.2**
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	80	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	**1.4**	**1.1**
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	62	**41.8**	**43.3**
Alkalinity, Carbonate	mg/L	8.0	**2.7**	<2.0
Chloride	mg/L	4.0	**1.5**	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.20	**0.32** e	**0.31** e
Sulfate	mg/L	8.0	<2.0 e	<2.0
Major Cations				
Calcium	mg/L	17	**--**	**--**
Magnesium	mg/L	4.2	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	2.1	**0.68**	<1.0 e
General				
Hardness	mg/L	61	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL061A (TDRSA-CWB)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/06/18[T]	Q1 2019 03/11/19[T]
Field				
D.O.[1]	ppm	--	**11**	**11**
ORP	mV	--	**41**	**178**
pH	SU	8.1-9.1	**8.6**	**8.6**
Specific Conductance	µS/cm @ 25°C	--	**113**	**97**
Temperature	°C	--	**7.7**	**7.5**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1406.77**	**1406.04**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	80	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	40	**48.5**	**58.4**
Alkalinity, Carbonate	mg/L	8.0	**4.0**	<2.0
Chloride	mg/L	4.0	<1.0	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.27	**0.37** e	**0.36** e
Sulfate	mg/L	8.0	<2.0 e	<2.0
Major Cations				
Calcium	mg/L	15	**--**	**--**
Magnesium	mg/L	2.2	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	2.0	**0.77**	<1.0 e
General				
Hardness	mg/L	37	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL062A (TDRSA-CWB)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/06/18[T]	Q1 2019 03/20/19[T]
Field				
D.O.[1]	ppm	--	**8.6**	**8.3**
ORP	mV	--	**40**	**23**
pH	SU	8.3-9.3	**7.5**	**7.6**
Specific Conductance	µS/cm @ 25°C	--	**580**	**624**
Temperature	°C	--	**7.8**	**7.6**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1408.09**	**1407.64**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	**--**	**--**
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	80	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	**--**	**--**
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	48	**190**	**194**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.0	**69.6**	**76.1** e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.41	**1.1** e	**1.2** e
Sulfate	mg/L	8.0	**2.5** e	**3.0**
Major Cations				
Calcium	mg/L	12	**--**	**--**
Magnesium	mg/L	2.2	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	2.0	**20.5**	**26.6** e
General				
Hardness	mg/L	40	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL063A (TDRSA-CWB)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/07/18[T]	Q1 2019 02/19/19[T]
Field				
D.O.[1]	ppm	--	**9.4**	**10**
ORP	mV	--	**87**	**138**
pH	SU	8.1-9.1	**7.7**	**7.6**
Specific Conductance	µS/cm @ 25°C	--	**579**	**530**
Temperature	°C	--	**8.0**	**8.0**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1401.58**	**1401.30**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	**--**	**--**
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	80	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	**--**	**--**
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	42	**184**	**196**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.0	**69.7**	**80.9** e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.29	**0.88** e	**0.98** e
Sulfate	mg/L	8.0	**2.4** e	**2.5**
Major Cations				
Calcium	mg/L	12	**--**	**--**
Magnesium	mg/L	2.0	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	2.0	**14.5**	**19.5** e
General				
Hardness	mg/L	40	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL064D (UMB)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/07/18[T]	Q1 2019 03/07/19[T]
Field				
D.O.[1]	ppm	--	**0.2**	**0.1**
ORP	mV	--	**-474**	**-287**
pH	SU	8.0-9.0	**9.0**	**8.8**
Specific Conductance	µS/cm @ 25°C	--	**149**	**101**
Temperature	°C	--	**7.0**	**6.9**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1416.20**	**1415.53**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	80	**26.2**	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	**--**	**--**
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	82	**76.5**	**70.3**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.2	**3.1**	**1.9** e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.050 e	<0.050 e
Sulfate	mg/L	8.0	<2.0 e	<2.0
Major Cations				
Calcium	mg/L	22	**--**	**--**
Magnesium	mg/L	3.3	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	6.9	**3.7**	**4.1** e
General				
Hardness	mg/L	51	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL065D (UMB)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/08/18[T]	Q1 2019 03/11/19[T]
Field				
D.O.[1]	ppm	--	**0.1**	**6.5**
ORP	mV	--	**-183**	**-138**
pH	SU	7.9-8.9	**8.6**	**8.5**
Specific Conductance	µS/cm @ 25°C	--	**150**	**124**
Temperature	°C	--	**6.8**	**6.7**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1415.83**	**1415.41**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.6	**3.3**	**3.7**
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	80	**65.5**	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	**--**	**--**
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	86	**79.6**	**74.9**
Alkalinity, Carbonate	mg/L	8.7	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0 e
Fluoride	mg/L	0.40	**--**	**--**
Nitrogen, Nitrate	mg/L	0.20	<0.050 e	<0.050 e
Sulfate	mg/L	8.0	<2.0 e	<2.0
Major Cations				
Calcium	mg/L	14	**--**	**--**
Magnesium	mg/L	4.8	**--**	**--**
Potassium	mg/L	3.0	**--**	**--**
Sodium	mg/L	12	**9.1**	**9.6** e
General				
Hardness	mg/L	53	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL066D (UMB)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/07/18[T]	Q1 2019 03/07/19[T]
Field				
D.O.[1]	ppm	--	**2.4**	**10**
ORP	mV	--	**-66**	**106**
pH	SU	8.7-9.7	**8.8**	**8.9**
Specific Conductance	µS/cm @ 25°C	--	**166**	**134**
Temperature	°C	--	**7.4**	**4.8**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1415.25**	**1414.65**
Metals				
Aluminum	ug/L	557	**--**	**--**
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	8.9	**9.7**	**9.6**
Barium	ug/L	80	**--**	**--**
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	288	**470**	**498** e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	**1.15**	**1.11**
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	**1.2**	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	367	**--**	**--**
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	**2.0**	**1.1**
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	61	**67.3**	**65.2**
Alkalinity, Carbonate	mg/L	52	**6.1**	**9.0**
Chloride	mg/L	4.0	**1.1**	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.050 e	<0.050 e
Sulfate	mg/L	11	**8.9** e	**8.0**
Major Cations				
Calcium	mg/L	58	**--**	**--**
Magnesium	mg/L	2.9	**--**	**--**
Potassium	mg/L	2.6	**--**	**--**
Sodium	mg/L	8.0	**18.1**	**21.3** e
General				
Hardness	mg/L	146	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL067A (TDRSA-CWB)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/07/18[T]	Q1 2019 03/11/19[T]
Field				
D.O.[1]	ppm	--	**8.8**	**10**
ORP	mV	--	**99**	**211**
pH	SU	5.6-6.6	**6.3**	**6.7**
Specific Conductance	µS/cm @ 25°C	--	**468**	**200**
Temperature	°C	--	**7.9**	**7.6**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1415.01**	**1414.66**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	**--**	**--**
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	80	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	**1.49**	**2.14**
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	**--**	**--**
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	51	**61.2**	**58.6**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.0	**96.6**	**41.8** e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.25	**0.54** e	**0.24** e
Sulfate	mg/L	8.4	**6.4** e	**2.7**
Major Cations				
Calcium	mg/L	8.2	**--**	**--**
Magnesium	mg/L	2.0	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	2.0	**68.2**	**43.6** e
General				
Hardness	mg/L	26	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL068A (Background)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/07/18[T]	Q1 2019 03/06/19[T]
Field				
D.O.[1]	ppm	--	**13**	**12**
ORP	mV	--	**153**	**186**
pH	SU	6.2-7.2	**6.5**	**6.7**
Specific Conductance	µS/cm @ 25°C	--	**46**	**34**
Temperature	°C	--	**7.4**	**7.5**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1422.38**	**1421.92**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	80	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	**1.1**	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	35	**21.9**	**20.9**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.20	<0.050 e	<0.050 e
Sulfate	mg/L	8.0	<2.0 e	<2.0
Major Cations				
Calcium	mg/L	6.7	**--**	**--**
Magnesium	mg/L	2.0	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	2.0	**0.70**	<1.0 e
General				
Hardness	mg/L	21	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL068B (Background)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/07/18[T]	Q1 2019 03/06/19[T]
Field				
D.O.[1]	ppm	--	**12**	**11**
ORP	mV	--	**63**	**144**
pH	SU	8.4-9.4	**9.1**	**9.2**
Specific Conductance	µS/cm @ 25°C	--	**70**	**52**
Temperature	°C	--	**7.3**	**7.1**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1414.02**	**1413.59**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	184	**30.3**	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	**1.8**	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	30	**24.5**	**22.8**
Alkalinity, Carbonate	mg/L	9.9	**4.1**	<2.0
Chloride	mg/L	4.0	<1.0	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.20	**0.057** e	**0.061** e
Sulfate	mg/L	8.0	**2.2** e	**2.3**
Major Cations				
Calcium	mg/L	9.4	**--**	**--**
Magnesium	mg/L	2.0	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	2.0	**0.84**	<1.0 e
General				
Hardness	mg/L	31	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL068D (Background)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/07/18[T]	Q1 2019 03/06/19[T]
Field				
D.O.[1]	ppm	--	**4.5**	**6.7**
ORP	mV	--	**40**	**130**
pH	SU	8.0-9.0	**8.5**	**8.5**
Specific Conductance	µS/cm @ 25°C	--	**128**	**98**
Temperature	°C	--	**7.1**	**6.2**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1414.07**	**1413.62**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	7.2	**5.8**	**5.7**
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	119	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.12	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	**3.8**	**3.9**
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	67	**60.2**	**48.7**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.0	**1.2**	<1.0 e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.21	<0.050 e	<0.050 e
Sulfate	mg/L	10	**5.2** e	**5.3**
Major Cations				
Calcium	mg/L	16	**--**	**--**
Magnesium	mg/L	3.9	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	6.1	**4.3**	**4.0** e
General				
Hardness	mg/L	52	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL069A (Background)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/08/18[T]	Q1 2019 03/06/19[T]
Field				
D.O.[1]	ppm	--	**7.2**	**7.4**
ORP	mV	--	**68**	**195**
pH	SU	7.8-8.8	**6.9**	**6.9**
Specific Conductance	µS/cm @ 25°C	--	**612**	**381**
Temperature	°C	--	**6.9**	**7.4**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1383.73**	**1383.20**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	**--**	**--**
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	**--**	**--**
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	80	**295**	**53.4** e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	**40.8**	<20.0
Mercury	ng/L	2.00	**10.8**	**3.84**
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	138	**171**	**173**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.0	**88.9**	**35.9** e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.57	**0.86** e	**0.71** e
Sulfate	mg/L	8.0	**9.2** e	**9.4**
Major Cations				
Calcium	mg/L	35	**--**	**--**
Magnesium	mg/L	18	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	2.0	**46.6**	**24.7** e
General				
Hardness	mg/L	162	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL071A (TDRSA-CWB)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/07/18[T]	Q1 2019 02/19/19[T]
Field				
D.O.[1]	ppm	--	**11**	**10**
ORP	mV	--	**90**	**165**
pH	SU	8.1-9.1	**7.5**	**7.7**
Specific Conductance	µS/cm @ 25°C	--	**572**	**431**
Temperature	°C	--	**8.3**	**8.2**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1405.92**	**1405.18**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	**--**	**--**
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	--	--
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	7.9
Iron	ug/L	178	<20.0	<50.0 e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	**1.2**	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	**--**	**--**
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	44	**149**	**123**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.0	**21.7**	**18.7** e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.31	**29.1** e	**27.5** e
Sulfate	mg/L	8.0	**7.9** e	**8.6**
Major Cations				
Calcium	mg/L	12	**--**	**--**
Magnesium	mg/L	2.0	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	2.0	**10.4**	**12** e
General				
Hardness	mg/L	38	**--**	**--**

Table 1
Mine Permit Groundwater Quality Monitoring Data
QAL074A (Septic & WWTP)
Eagle Mine

Parameter	Unit	Benchmark	Q4 2018 11/06/18[T]	Q1 2019 02/19/19[T]
Field				
D.O.[1]	ppm	--	**10**	**9.1**
ORP	mV	--	**74**	**134**
pH	SU	8.4-9.4	**8.4**	**8.3**
Specific Conductance	µS/cm @ 25°C	--	**309**	**282**
Temperature	°C	--	**8.0**	**7.0**
Turbidity	NTU	--	<1	<1
Water Elevation	ft MSL	--	**1404.73**	**1403.22**
Metals				
Aluminum	ug/L	200	--	--
Antimony	ug/L	5.5	--	--
Arsenic	ug/L	6.0	<2.0	<2.0
Barium	ug/L	80	--	--
Beryllium	ug/L	2.5	--	--
Boron	ug/L	400	<100	<100
Cadmium	ug/L	2.0	--	--
Chromium	ug/L	20	**--**	**--**
Cobalt	ug/L	40	--	--
Copper	ug/L	20	<5.0	<5.0
Iron	ug/L	212	**59.9**	**95.2** e
Lead	ug/L	4.0	--	--
Lithium	ug/L	32	--	--
Manganese	ug/L	80	<20.0	<20.0
Mercury	ng/L	2.00	<0.500	<0.50
Molybdenum	ug/L	40	--	--
Nickel	ug/L	100	<25.0	<25.0
Selenium	ug/L	4.0	<1.0	<1.0
Silver	ug/L	0.80	--	--
Strontium	ug/L	200	--	--
Thallium	ug/L	2.0	--	--
Vanadium	ug/L	4.0	<1.0	<1.0
Zinc	ug/L	40	<10.0	<10.0
Major Anions				
Alkalinity, Bicarbonate	mg/L	39	**75.8**	**76.1**
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0
Chloride	mg/L	4.0	**47.8**	**28.4** e
Fluoride	mg/L	0.40	--	--
Nitrogen, Nitrate	mg/L	0.43	**0.94** e	**0.92** e
Sulfate	mg/L	8.0	**7.6** e	**4.8**
Major Cations				
Calcium	mg/L	31	**--**	**--**
Magnesium	mg/L	5.9	**--**	**--**
Potassium	mg/L	2.0	**--**	**--**
Sodium	mg/L	3.5	**18.2**	**21** e
General				
Hardness	mg/L	103	**--**	**--**

Table 1
Groundwater Quality Data
Mine Permit Monitoring
Explanation of Abbreviations and Data Qualifiers
Eagle Project

Abbreviation or Data Qualifier	Explanation
[1]	Many D.O. values are elevated due to well screen configuration and aquifer characteristics and the low-flow sampling method. Super-saturated DO values are rejected (see R data qualifier) as not being representative of true conditions.
a	Estimated value. Duplicate precision for this parameter exceeded quality control limit.
b	Estimated value. Sample received after EPA established hold time expired.
BP	Below pump. Maximum water elevation is shown.
CWB	Contact Water Basin
D	Sample for metal and major cation parameters was filtered and values are dissolved concentrations.
e	Estimated value. The laboratory statement of data qualifications indicates that a quality control limit for this parameter was exceeded.
f	Value should be considered an estimate because field stabilization was not achieved of at least one parameter.
i	Insufficient water for collection of field parameters and/or sample.
J	Estimated value. Reported concentration is between the method detection limit and reporting limit.
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.
T	Sample was not filtered and all values are total concentrations.
TDRSA	Temporary Development Rock Storage Area
UMB	Underground Mine Boundary
	Value is equal to or above site-specific benchmark at a compliance monitoring location. An exceedance occurs if there are 2 consecutive sampling events with a value equal to or greater than the benchmark. Color also indicates compliance monitoring location when applied to column headers.
	Value is equal to or above site-specific benchmark at a background monitoring location. Color also indicates background monitoring location when applied to column headers.