

**Mine Permit Groundwater Quality Monitoring Data
QAL023B (UMB)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/09/16 ^T	Q2 2016 05/18/16 ^T	Q3 2016 08/83/16 ^T
Field					
D.O. ¹	ppm	--	0.3	0.2	0.3
ORP	mV	--	-137	-33	-73
pH	SU	7.8-8.8	7.2	7.0	8.1
Specific Conductance	μS/cm @ 25°C	--	122	120	123
Temperature	°C	--	5.2	7.7	10
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1414.99	1415.28	1414.96
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.5	<2.0	<2.0	<2.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	159	60	72	49
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	67	66	66	62
Alkalinity, Carbonate	mg/L	8.0	<2.0 e	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0	<1.0
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.20	<0.050	<0.050	<0.050 e
Sulfate	mg/L	8.0	3.7	3.5	4.3
Major Cations					
Calcium	mg/L	16	--	12 e	--
Magnesium	mg/L	3.7	--	3.0	--
Potassium	mg/L	2.0	--	<0.50	--
Sodium	mg/L	11	9.8	10	9.8
General					
Hardness	mg/L	55	--	42	--

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

QAL023B (UMB)

**Mine Permit Groundwater Quality Monitoring Data
QAL024A (UMB)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/04/16 ^T	Q2 2016 05/17/16 ^T	Q3 2016 08/04/16 ^T
Field					
D.O. ¹	ppm	--	11	11	11
ORP	mV	--	179	196	217
pH	SU	6.1-7.1	6.4	6.5	6.3
Specific Conductance	µS/cm @ 25°C	--	551	421	392
Temperature	°C	--	7.6	7.6	8.7
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1416.87	1417.64	1417.45
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	86	--	51	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	105	35	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	0.585	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	84	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	24	40	37	47
Alkalinity, Carbonate	mg/L	8.0	<2.0 e	<2.0	<2.0
Chloride	mg/L	4.0	150	110	86
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.20	2.8	1.9	1.5 e
Sulfate	mg/L	8.0	4.1	7.6	7.7
Major Cations					
Calcium	mg/L	48	--	30 e	--
Magnesium	mg/L	8.1	--	5.8	--
Potassium	mg/L	3.7	--	2.5	--
Sodium	mg/L	2.0	40	45	33
General					
Hardness	mg/L	153	--	99	--

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

QAL024A (UMB)

**Mine Permit Groundwater Quality Monitoring Data
QAL025A (Background)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/08/16 ^T	Q2 2016 05/16/16 ^T	Q3 2016 08/04/16 ^T
Field					
D.O. ¹	ppm	--	12	12	13
ORP	mV	--	165	106	73
pH	SU	6.4-7.4	7.2	6.6	7.5
Specific Conductance	µS/cm @ 25°C	--	76	53	59
Temperature	°C	--	6.4	7.5	7.6
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1415.74	1416.02	1416.53
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	126	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	25	35	29	27
Alkalinity, Carbonate	mg/L	8.0	<2.0 e	<2.0	<2.0
Chloride	mg/L	4.0	1.3	1.1	1.2
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	1.1	0.60	0.92	0.55 e
Sulfate	mg/L	8.0	2.5	<2.0	<2.0
Major Cations					
Calcium	mg/L	8.5	--	7.3 e	--
Magnesium	mg/L	2.0	--	1.5	--
Potassium	mg/L	2.0	--	0.80	--
Sodium	mg/L	2.0	0.94	1.0	1.1
General					
Hardness	mg/L	28	--	24	--

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

QAL025A (Background)

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

Parameter	Unit	Benchmark	Q1 2016 02/08/16 ^T	Q2 2016 05/16/16 ^T	Q3 2016 08/04/16 ^T
Field					
D.O. ¹	ppm	--	11	12	12
ORP	mV	--	118	81	51
pH	SU	8.5-9.5	9.0	8.8	9.2
Specific Conductance	μS/cm @ 25°C	--	68	62	67
Temperature	°C	--	6.7	7.0	7.6
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1415.61	1415.91	1416.41
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	56	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	1.1	1.1	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	36	27	27	28
Alkalinity, Carbonate	mg/L	12	8.0 e	9.1	7.1
Chloride	mg/L	4.0	<1.0	<1.0	<1.0
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.20	0.13	0.12	0.10 e,s
Sulfate	mg/L	8.0	2.2	<2.0	2.2
Major Cations					
Calcium	mg/L	10	--	9.4 e	--
Magnesium	mg/L	2.0	--	1.7	--
Potassium	mg/L	2.0	--	<0.50	--
Sodium	mg/L	4.5	1.9	1.9	1.8
General					
Hardness	mg/L	33	--	30	--

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

QAL025B (Background)

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

Parameter	Unit	Benchmark	Q1 2016 02/02/16 ^T	Q2 2016 05/09/16 ^T	Q3 2016 08/02/16 ^T
Field					
D.O. ¹	ppm	--	5.6	6.1	6.3
ORP	mV	--	13	62	33
pH	SU	8.2-9.2	8.7	8.5	9.0
Specific Conductance	μS/cm @ 25°C	--	89	86	95
Temperature	°C	--	7.0	7.3	7.5
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1411.74	1411.53	1412.34
Metals					
Aluminum	ug/L	200	--	110	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.5	2.6	3.1	2.8
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	137	48	70	62
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	3.8	4.3	4.1
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	52	59	43	42
Alkalinity, Carbonate	mg/L	14	5.0 e	2.0	3.0
Chloride	mg/L	4.0	<1.0	<1.0	<1.0
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.20	0.16	0.17	0.16 e
Sulfate	mg/L	8.0	4.6	4.7	5.1
Major Cations					
Calcium	mg/L	12	--	11 e	--
Magnesium	mg/L	2.7	--	2.7	--
Potassium	mg/L	2.0	--	0.61	--
Sodium	mg/L	12	4.1	4.4	3.9
General					
Hardness	mg/L	42	--	39	--

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

QAL025D (Background)

**Mine Permit Groundwater Quality Monitoring Data
QAL026A (Background)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/02/16 ^T	Q2 2016 05/09/16 ^T	Q3 2016 08/02/16 ^T
Field					
D.O. ¹	ppm	--	14	i	11
ORP	mV	--	101	i	84
pH	SU	6.2-7.2	6.3	i	7.0
Specific Conductance	μS/cm @ 25°C	--	165	i	153
Temperature	°C	--	5.9	i	11
Turbidity	NTU	--	<1	i	<1
Water Elevation	ft MSL	--	1415.70	<1461.1 BP	1416.40
Metals					
Aluminum	ug/L	236	--	i	--
Antimony	ug/L	5.5	--	i	--
Arsenic	ug/L	6.0	<2.0	i	<2.0
Barium	ug/L	80	--	i	--
Beryllium	ug/L	2.5	--	i	--
Boron	ug/L	400	<100	i	<100
Cadmium	ug/L	2.0	--	i	--
Chromium	ug/L	20	--	i	--
Cobalt	ug/L	40	--	i	--
Copper	ug/L	20	<5.0	i	<5.0
Iron	ug/L	368	90	i	310
Lead	ug/L	4.0	--	i	--
Lithium	ug/L	32	--	i	--
Manganese	ug/L	80	<20	i	<20 e
Mercury	ng/L	2.00	<0.500	i	0.576
Molybdenum	ug/L	40	--	i	--
Nickel	ug/L	100	<25	i	<25
Selenium	ug/L	4.0	<1.0	i	<1.0 e
Silver	ug/L	0.80	--	i	--
Strontium	ug/L	200	--	i	--
Thallium	ug/L	2.0	--	i	--
Vanadium	ug/L	4.0	<1.0	i	<1.0
Zinc	ug/L	40	<10	i	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	114	93	i	83
Alkalinity, Carbonate	mg/L	8.0	<2.0 e	i	<2.0
Chloride	mg/L	4.0	1.2	i	<1.0
Fluoride	mg/L	0.40	--	i	--
Nitrogen, Nitrate	mg/L	0.73	1.3	i	1.2 e
Sulfate	mg/L	8.0	<2.0	i	2.0
Major Cations					
Calcium	mg/L	40.0	--	i	--
Magnesium	mg/L	5.9	--	i	--
Potassium	mg/L	2.0	--	i	--
Sodium	mg/L	2.4	1.5	i	1.4
General					
Hardness	mg/L	124	--	i	--

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

QAL026A (Background)

**Mine Permit Groundwater Quality Monitoring Data
QAL026D (Background)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/02/16 ^T	Q2 2016 05/09/16 ^T	Q3 2016 08/02/16 ^T
Field					
D.O. ¹	ppm	--	12	12	12
ORP	mV	--	21	65	56
pH	SU	8.4-9.4	8.9	8.4	8.9
Specific Conductance	µS/cm @ 25°C	--	60	60	65
Temperature	°C	--	7.0	7.4	8.0
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1408.61	1408.33	1409.04
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	80	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	31	31	30	31
Alkalinity, Carbonate	mg/L	8.0	4.0 e	4.0	4.0
Chloride	mg/L	4.0	<1.0	<1.0	<1.0
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.20	0.10	0.10	0.094 e,s
Sulfate	mg/L	8.0	2.0	<2.0	<2.0
Major Cations					
Calcium	mg/L	13	--	9.6 e	--
Magnesium	mg/L	2.4	--	1.5	--
Potassium	mg/L	2.0	--	0.50	--
Sodium	mg/L	2.0	0.65	0.73	0.65
General					
Hardness	mg/L	43	--	30	--

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

QAL026D (Background)

**Mine Permit Groundwater Quality Monitoring Data
QAL026E (Background)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/08/16 ^T	Q2 2016 05/16/16 ^T	Q3 2016 08/04/16 ^T
Field					
D.O. ¹	ppm	--	0.1	1.0	1.0
ORP	mV	--	-140	-1	-55
pH	SU	8.1-9.1	8.4	8.4	9.1
Specific Conductance	µS/cm @ 25°C	--	120	112	121
Temperature	°C	--	6.7	7.1	7.7
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1408.71	1403.74	1409.14
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	7.8	7.4	7.1	7.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	80	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	61	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	91	58	59	56
Alkalinity, Carbonate	mg/L	8.0	<2.0 e	<2.0	<2.0
Chloride	mg/L	4.0	<1.0	<1.0	<1.0
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.20	<0.050	<0.050	<0.050 e
Sulfate	mg/L	8.6	7.3	7.3	7.0
Major Cations					
Calcium	mg/L	17	--	16 e	--
Magnesium	mg/L	4.3	--	4.2	--
Potassium	mg/L	2.0	--	1.9	--
Sodium	mg/L	2.0	1.7	1.7	1.7
General					
Hardness	mg/L	60	--	57	--

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

QAL026E (Background)

**Mine Permit Groundwater Quality Monitoring Data
QAL044B (UMB)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/09/16 ^T	Q2 2016 05/18/16 ^T	Q3 2016 08/08/16 ^T
Field					
D.O. ¹	ppm	--	1.0	1.0	1.0
ORP	mV	--	-388	-103	-132
pH	SU	8.3-9.3	9.0	9.3	9.5
Specific Conductance	µS/cm @ 25°C	--	70	63	75
Temperature	°C	--	6.3	7.9	8.4
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1414.11	1414.23	1414.42
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	2.1
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	80	65	31	23
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	64	30	21	18
Alkalinity, Carbonate	mg/L	8.0	4.0 e	10	14
Chloride	mg/L	4.0	1.5	1.2	1.1
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.20	<0.050	<0.050	<0.050 e
Sulfate	mg/L	24	7.5	8.1	7.4
Major Cations					
Calcium	mg/L	17	--	8.3 e	--
Magnesium	mg/L	4.0	--	1.8	--
Potassium	mg/L	2.0	--	0.52	--
Sodium	mg/L	2.6	2.4	2.5	2.5
General					
Hardness	mg/L	58	--	28	--

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

QAL044B (UMB)

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

Parameter	Unit	Benchmark	Q1 2016 02/04/16 ^T	Q2 2016 05/16/16 ^T	Q3 2016 08/03/16 ^T
Field					
D.O. ¹	ppm	--	12	11	11
ORP	mV	--	55	124	268
pH	SU	8.1-9.1	8.4	8.8	8.7
Specific Conductance	µS/cm @ 25°C	--	68	72	75
Temperature	°C	--	7.6	7.3	9.3
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1404.18	1403.86	1404.59
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	7.2	5.4	5.9	5.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	80	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	1.3	1.3	1.3
Zinc	ug/L	40	11	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	62	36	34	36
Alkalinity, Carbonate	mg/L	8.0	2.0 e	<2.0	2.0
Chloride	mg/L	4.0	<1.0	<1.0	1.1
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.20	0.15	0.15	0.16 e
Sulfate	mg/L	8.0	<2.0	<2.0	2.2
Major Cations					
Calcium	mg/L	17	--	10 e	--
Magnesium	mg/L	4.2	--	2.5	--
Potassium	mg/L	2.0	--	0.69	--
Sodium	mg/L	2.1	0.76	0.78	0.79
General					
Hardness	mg/L	61	--	35	--

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

QAL060A (TDRSA-CWB)

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

Parameter	Unit	Benchmark	Q1 2016 02/04/16 ^T	Q2 2016 05/16/16 ^T	Q3 2016 08/03/16 ^T
Field					
D.O. ¹	ppm	--	11	11	11
ORP	mV	--	32	131	249
pH	SU	8.1-9.1	8.7	8.8	8.7
Specific Conductance	µS/cm @ 25°C	--	68	74	75
Temperature	°C	--	7.6	7.2	8.6
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1405.52	1406.21	1405.92
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	80	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	40	36	38	28
Alkalinity, Carbonate	mg/L	8.0	3.0 e	2.0	5.1
Chloride	mg/L	4.0	<1.0	<1.0	1.2
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.27	0.27	0.29	0.26 e
Sulfate	mg/L	8.0	<2.0	<2.0	<2.0
Major Cations					
Calcium	mg/L	15	--	11 e	--
Magnesium	mg/L	2.2	--	2.0	--
Potassium	mg/L	2.0	--	<0.50	--
Sodium	mg/L	2.0	0.65	0.63	0.72
General					
Hardness	mg/L	37	--	36	--

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

QAL061A (TDRSA-CWB)

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

Parameter	Unit	Benchmark	Q1 2016 02/04/16 ^T	Q2 2016 05/16/16 ^T	Q3 2016 08/03/16 ^T
Field					
D.O. ¹	ppm	--	10	10	10
ORP	mV	--	45	116	136
pH	SU	8.3-9.3	8.3	7.9	8.0
Specific Conductance	μS/cm @ 25°C	--	312	338	328
Temperature	°C	--	7.1	7.2	8.3
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1406.88	1406.54	1407.27
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	80	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	63	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	48	110	110	120
Alkalinity, Carbonate	mg/L	8.0	<2.0 e	<2.0	<2.0
Chloride	mg/L	4.0	45	43	39
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.41	0.39	0.40	0.41 e
Sulfate	mg/L	8.0	<2.0	<2.0	2.3
Major Cations					
Calcium	mg/L	12	--	45 e	--
Magnesium	mg/L	2.2	--	9.1	--
Potassium	mg/L	2.0	--	1.6	--
Sodium	mg/L	2.0	5.2	9.2	13
General					
Hardness	mg/L	40	--	150	--

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

QAL062A (TDRSA-CWB)

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

Parameter	Unit	Benchmark	Q1 2016 02/04/16 ^T	Q2 2016 05/17/16 ^T	Q3 2016 08/04/16 ^T
Field					
D.O. ¹	ppm	--	10	10	10
ORP	mV	--	-40	121	189
pH	SU	8.1-9.1	8.5	8.4	8.1
Specific Conductance	µS/cm @ 25°C	--	147	188	218
Temperature	°C	--	7.5	7.9	8.9
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1400.77	1400.31	1401.35
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	80	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	42	76	94	100
Alkalinity, Carbonate	mg/L	8.0	3.0 e	<2.0	<2.0
Chloride	mg/L	4.0	3.5	7.5	14
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.29	0.28	0.39	0.45 e
Sulfate	mg/L	8.0	<2.0	<2.0	<2.0
Major Cations					
Calcium	mg/L	12	--	32 e	--
Magnesium	mg/L	2.0	--	5.6	--
Potassium	mg/L	2.0	--	1.1	--
Sodium	mg/L	2.0	1.0	1.2	1.2
General					
Hardness	mg/L	40	--	103	--

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

QAL063A (TDRSA-CWB)

**Mine Permit Groundwater Quality Monitoring Data
QAL064D (UMB)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/11/16 ^T	Q2 2016 05/17/16 ^T	Q3 2016 08/04/16 ^T
Field					
D.O. ¹	ppm	--	<0.1	<0.1	0.2
ORP	mV	--	-96	-169	-206
pH	SU	8.0-9.0	8.1	8.4	8.4
Specific Conductance	µS/cm @ 25°C	--	146	140	153
Temperature	°C	--	6.4	6.7	7.5
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1415.06	1415.80	1416.26
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	80	44	36	26
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	110	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	82	77	79	74
Alkalinity, Carbonate	mg/L	8.0	2.0 e	<2.0	4.0
Chloride	mg/L	4.2	2.4	2.3	2.1
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.20	<0.050	<0.050	<0.050 e
Sulfate	mg/L	8.0	<2.0	2.6	<2.0
Major Cations					
Calcium	mg/L	22	--	20 e	--
Magnesium	mg/L	3.3	--	4.2	--
Potassium	mg/L	2.0	--	1.3	--
Sodium	mg/L	6.9	4.4	4.3	4.1
General					
Hardness	mg/L	51	--	67	--

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

QAL064D (UMB)

**Mine Permit Groundwater Quality Monitoring Data
QAL065D (UMB)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/09/16 ^T	Q2 2016 05/18/16 ^T	Q3 2016 08/08/16 ^T
Field					
D.O. ¹	ppm	--	0.1	0.2	0.6
ORP	mV	--	-215	-176	-120
pH	SU	7.9-8.9	8.6	8.5	8.4
Specific Conductance	µS/cm @ 25°C	--	150	143	144
Temperature	°C	--	6.2	6.7	7.8
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1415.84	1416.26	1415.92
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.6	3.3	3.3	3.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	80	55	61	52
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	210	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	86	77	79	78
Alkalinity, Carbonate	mg/L	8.7	6.0 e	2.0	3.0
Chloride	mg/L	4.0	1.1	<1.0	<1.0
Fluoride	mg/L	0.40	--	0.15	--
Nitrogen, Nitrate	mg/L	0.20	<0.050	<0.050	<0.050 e
Sulfate	mg/L	8.0	<2.0	<2.0	<2.0
Major Cations					
Calcium	mg/L	14	--	13 e	--
Magnesium	mg/L	4.8	--	4.4	--
Potassium	mg/L	3.0	--	2.6	--
Sodium	mg/L	12	11	11	10
General					
Hardness	mg/L	53	--	51	--

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

QAL065D (UMB)

**Mine Permit Groundwater Quality Monitoring Data
QAL066D (UMB)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/09/16 ^T	Q2 2016 05/18/16 ^D	Q3 2016 08/08/16 ^T
Field					
D.O. ¹	ppm	--	1.5	1.1	2.3
ORP	mV	--	-253	12	-44
pH	SU	8.7-9.7	9.9	9.1	9.0
Specific Conductance	µS/cm @ 25°C	--	118	125	141
Temperature	°C	--	5.1	8.6	11.4
Turbidity	NTU	--	<1	272	293
Water Elevation	ft MSL	--	1415.01	1415.09	1415.12
Metals					
Aluminum	ug/L	557	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	8.9	9.0	9.3	9.3
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	288	1300	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	3.89	0.679	1.23
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	367	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	2.2	1.8	1.4
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	61	44	60	55
Alkalinity, Carbonate	mg/L	52	16 e	6.1	15
Chloride	mg/L	4.0	2.0	1.1	2.0
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.20	<0.050	<0.050	0.052 e,s
Sulfate	mg/L	11	15	15	19
Major Cations					
Calcium	mg/L	58	--	10 e	--
Magnesium	mg/L	2.9	--	1.7	--
Potassium	mg/L	2.6	--	1.1	--
Sodium	mg/L	8.0	14	16	18
General					
Hardness	mg/L	146	--	32	--

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

QAL066D (UMB)

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

Parameter	Unit	Benchmark	Q1 2016 02/04/16 ^T	Q2 2016 05/16/16 ^T	Q3 2016 08/03/16 ^T
Field					
D.O. ¹	ppm	--	9.1	8.9	8.8
ORP	mV	--	259	262	310
pH	SU	5.6-6.6	6.1	6.1	6.1
Specific Conductance	µS/cm @ 25°C	--	2160	2314	2010
Temperature	°C	--	7.5	7.9	8.9
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1414.06	1413.65	1414.31
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	220	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	80	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	2.07	2.38	2.33
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	180	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	1.1	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	51	50	48	51
Alkalinity, Carbonate	mg/L	8.0	<2.0 e	<2.0	<2.0
Chloride	mg/L	4.0	730	730	590
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.25	2.0	2.1	2.2 e
Sulfate	mg/L	8.4	13	16	18
Major Cations					
Calcium	mg/L	8.2	--	32 e	--
Magnesium	mg/L	2.0	--	18	--
Potassium	mg/L	2.0	--	4.6	--
Sodium	mg/L	2.0	430	440	380
General					
Hardness	mg/L	26	--	154	--

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

QAL067A (TDRSA-CWB)

**Mine Permit Groundwater Quality Monitoring Data
QAL068A (Background)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/08/16 ^T	Q2 2016 05/16/16 ^T	Q3 2016 08/04/16 ^T
Field					
D.O. ¹	ppm	--	12	12	12
ORP	mV	--	93	109	210
pH	SU	6.2-7.2	6.7	6.4	6.5
Specific Conductance	µS/cm @ 25°C	--	37	42	37
Temperature	°C	--	7.2	7.4	7.9
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1421.61	1420.57	1422.03
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	80	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	35	21	25	11
Alkalinity, Carbonate	mg/L	8.0	<2.0 e	<2.0	<2.0
Chloride	mg/L	4.0	1.4	<1.0	<1.0
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.20	<0.050	<0.050	<0.050 e
Sulfate	mg/L	8.0	<2.0	<2.0	<2.0
Major Cations					
Calcium	mg/L	6.7	--	6.3 e	--
Magnesium	mg/L	2.0	--	1.2	--
Potassium	mg/L	2.0	--	1.1	--
Sodium	mg/L	2.0	0.69	0.76	0.64
General					
Hardness	mg/L	21	--	21	--

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

QAL068A (Background)

**Mine Permit Groundwater Quality Monitoring Data
QAL068B (Background)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/08/16 ^T	Q2 2016 05/16/16 ^T	Q3 2016 08/04/16 ^T
Field					
D.O. ¹	ppm	--	12	12	12
ORP	mV	--	20	72	36
pH	SU	8.4-9.4	9.0	8.8	9.1
Specific Conductance	µS/cm @ 25°C	--	59	57	62
Temperature	°C	--	6.9	7.2	7.9
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1412.87	1412.39	1413.42
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	184	<20	<20	22
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	1.1	1.1	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	30	27	31	26
Alkalinity, Carbonate	mg/L	9.9	7.0 e	2.0	8.1
Chloride	mg/L	4.0	1.2	<1.0	1.0
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.20	0.068	0.064	<0.050 e
Sulfate	mg/L	8.0	2.5	2.0	2.5
Major Cations					
Calcium	mg/L	9.4	--	8.9 e	--
Magnesium	mg/L	2.0	--	1.8	--
Potassium	mg/L	2.0	--	0.62	--
Sodium	mg/L	2.0	0.98	0.98	0.89
General					
Hardness	mg/L	31	--	30	--

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

QAL068B (Background)

**Mine Permit Groundwater Quality Monitoring Data
QAL068D (Background)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/08/16 ^T	Q2 2016 05/16/16 ^T	Q3 2016 08/04/16 ^T
Field					
D.O. ¹	ppm	--	2.6	4.5	4.1
ORP	mV	--	-83	5	-44
pH	SU	8.0-9.0	8.4	8.3	8.9
Specific Conductance	μS/cm @ 25°C	--	115	111	122
Temperature	°C	--	6.1	7.3	--
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1413.03	1412.52	1413.47
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	7.2	5.2	4.8	4.5
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	119	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.12	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	3.0	2.5	2.5
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	67	61	59	59
Alkalinity, Carbonate	mg/L	8.0	<2.0 e	<2.0	2.0
Chloride	mg/L	4.0	1.2	1.1	1.0
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.21	<0.050	<0.050	<0.050 e
Sulfate	mg/L	10	5.5	5.6	5.1
Major Cations					
Calcium	mg/L	16	--	14 e	--
Magnesium	mg/L	3.9	--	3.9	--
Potassium	mg/L	2.0	--	1.2	--
Sodium	mg/L	6.1	4.4	4.6	4.3
General					
Hardness	mg/L	52	--	51	--

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

QAL068D (Background)

**Mine Permit Groundwater Quality Monitoring Data
QAL069A (Background)
Eagle Mine**

Parameter	Unit	Benchmark	Q1 2016 02/08/16 ^T	Q2 2016 05/17/16 ^T	Q3 2016 08/03/16 ^T
Field					
D.O. ¹	ppm	--	7.7	8.1	4.9
ORP	mV	--	137	166	27
pH	SU	7.8-8.8	7.0	7.1	8.0
Specific Conductance	μS/cm @ 25°C	--	429	376	533
Temperature	°C	--	6.7	7.9	8.7
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1381.38	1381.68	1382.35
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	80	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	2.35	2.25	29.2
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	69	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	138	210	210	230
Alkalinity, Carbonate	mg/L	8.0	<2.0 e	<2.0	<2.0
Chloride	mg/L	4.0	15	4.1	38
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.57	1.3	0.98	0.81 e
Sulfate	mg/L	8.0	8.6	7.5	6.1
Major Cations					
Calcium	mg/L	35	--	50 e	--
Magnesium	mg/L	18	--	21	--
Potassium	mg/L	2.0	--	1.9	--
Sodium	mg/L	2.0	13	6.6	12
General					
Hardness	mg/L	162	--	211	--

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

QAL069A (Background)

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

Parameter	Unit	Benchmark	Q1 2016 02/08/16 ^T	Q2 2016 05/17/16 ^T	Q3 2016 08/03/16 ^T
Field					
D.O. ¹	ppm	--	11	11	11
ORP	mV	--	20	62	30
pH	SU	8.1-9.1	8.0	7.8	8.7
Specific Conductance	µS/cm @ 25°C	--	345	418	559
Temperature	°C	--	7.3	8.0	8.6
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1403.89	1404.82	1405.57
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	25	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	178	<20	<20	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	<0.500	<0.500	<0.500
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	73	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	44	120	140	150
Alkalinity, Carbonate	mg/L	8.0	<2.0 e	<2.0	<2.0
Chloride	mg/L	4.0	25	36	29
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.31	10	14	27 e
Sulfate	mg/L	8.0	7.3	7.0	6.6
Major Cations					
Calcium	mg/L	12	--	67 e	--
Magnesium	mg/L	2.0	--	10	--
Potassium	mg/L	2.0	--	1.3	--
Sodium	mg/L	2.0	10	8.2	17
General					
Hardness	mg/L	38	--	209	--

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

QAL071A (TDRSA-CWB)

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

Parameter	Unit	Benchmark	Q1 2016 02/16/16 ^T	Q2 2016 05/17/16 ^T	Q3 2016 08/08/16 ^T
Field					
D.O. ¹	ppm	--	11	11	7.9
ORP	mV	--	138	59	-15
pH	SU	8.4-9.4	8.6	8.6	9.1
Specific Conductance	µS/cm @ 25°C	--	267	245	277
Temperature	°C	--	5.3	10	16
Turbidity	NTU	--	<1	<1	<1
Water Elevation	ft MSL	--	1403.03	1403.77	1404.69
Metals					
Aluminum	ug/L	200	--	<50	--
Antimony	ug/L	5.5	--	<5.0	--
Arsenic	ug/L	6.0	<2.0	<2.0	<2.0
Barium	ug/L	80	--	<20	--
Beryllium	ug/L	2.5	--	<1.0	--
Boron	ug/L	400	<100	<100	<100
Cadmium	ug/L	2.0	--	<0.50	--
Chromium	ug/L	20	--	<5.0	--
Cobalt	ug/L	40	--	<10	--
Copper	ug/L	20	<5.0	<5.0	<5.0
Iron	ug/L	212	45	31	<20
Lead	ug/L	4.0	--	<1.0	--
Lithium	ug/L	32	--	<8.0	--
Manganese	ug/L	80	<20	<20	<20 e
Mercury	ng/L	2.00	0.954	0.817	1.92
Molybdenum	ug/L	40	--	<10	--
Nickel	ug/L	100	<25	<25	<25
Selenium	ug/L	4.0	<1.0	<1.0 e	<1.0 e
Silver	ug/L	0.80	--	<0.20	--
Strontium	ug/L	200	--	<50	--
Thallium	ug/L	2.0	--	<2.0	--
Vanadium	ug/L	4.0	<1.0	<1.0	<1.0
Zinc	ug/L	40	<10	<10	<10 e
Major Anions					
Alkalinity, Bicarbonate	mg/L	39	43	49	44
Alkalinity, Carbonate	mg/L	8.0	<2.0 e	<2.0	2.0
Chloride	mg/L	4.0	47	53	50
Fluoride	mg/L	0.40	--	<0.10	--
Nitrogen, Nitrate	mg/L	0.43	1.6	1.3	1.3 e
Sulfate	mg/L	8.0	6.8	6.9	6.7
Major Cations					
Calcium	mg/L	31	--	32 e	--
Magnesium	mg/L	5.9	--	6.4	--
Potassium	mg/L	2.0	--	1.1	--
Sodium	mg/L	3.5	6.8	9.1	9.2
General					
Hardness	mg/L	103	--	106	--

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

QAL074A (Septic & WWTP)

**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.
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. An exceedance occurs if there are 2 consecutive sampling events with a value equal to or greater than the benchmark at a compliance monitoring location.