

**2016**  
**Mine Permit Surface Water Quality Monitoring Data**  
**HMP-009 (Compliance)**  
**Humboldt Mill**

Parameter	Unit	Recommended Benchmark 2014	Q1 2016 2/22/16	Q2 2016 5/16/16	Q3 2016 8/23/16	
<b>Field</b>						
D.O. <sup>1</sup>	ppm	--	NM	11	14	
ORP	mV	--	NM	178	31	
pH	SU	7.0-8.0	NM	7.2	6.8	
Specific Conductance	µS/cm	--	NM	637	544	
Temperature	°C	--	NM	7.8	21	
Turbidity	NTU	--	NM	3.5	7.3	
Flow	cfs	--	NM	NM	NM	
<b>Metals</b>						
Aluminum	ug/L	200 (p)	--	--	<50	
Antimony	ug/L	11.5	--	--	5.3	
Arsenic	ug/L	2.2	NM	<1.0	<1.0	
Barium	ug/L	27	--	--	13	
Beryllium	ug/L	0.67	--	--	<1.0	
Boron	ug/L	113	--	--	87	
Cadmium	ug/L	0.1	--	--	<0.02	
Chromium	ug/L	1.3	--	--	<1.0	
Cobalt	ug/L	3.0	--	--	1.7	
Copper	ug/L	7.9	NM	5.3	3.5	
Iron	ug/L	1620	NM	83	89	
Lead	ug/L	1.0	NM	0.03	0.02	e
Lithium	ug/L	5.3	--	--	<8.0	
Manganese	ug/L	337	NM	23	21	
Mercury	ng/L	1.1	NM	0.86	1.5	
Molybdenum	ug/L	13	--	--	9.5	
Nickel	ug/L	17	NM	9.8	6.8	
Selenium	ug/L	0.36	--	--	3.03	
Silver	ug/L	0.12	--	--	<0.20	
Thallium	ug/L	0.68	--	--	<1.0	
Vanadium	ug/L	1.7	--	--	<1.0	
Zinc	ug/L	6.1	NM	0.40	0.77	
<b>Major Anions</b>						
Alkalinity, Bicarbonate	mg/L	124	NM	92	89	
Alkalinity, Carbonate	mg/L	2.0	NM	<2.0	<2.0	
Chloride	mg/L	15	NM	29	30	
Fluoride	mg/L	0.41	NM	0.15	<0.10	
Nitrogen, Ammonia	mg/L	2.0 (P)	NM	<0.5	<0.5	
Nitrogen, Nitrate	mg/L	2.5	NM	<0.50	<0.50	
Nitrogen, Nitrite	mg/L	0.34	NM	<0.50	<0.50	
Sulfate	mg/L	138	NM	180	150	
Sulfide	mg/L	3.0	NM	<5.0	<5.0	e
<b>Major Cations</b>						
Calcium	mg/L	68	NM	51	48	
Magnesium	mg/L	26	NM	25	20	
Potassium	mg/L	9.4	NM	8.5	6.9	
Sodium	mg/L	15	NM	33	27	
<b>General</b>						
Hardness	mg/L	251	NM	230	220	
Total Dissolved Solids	mg/L	361	NM	414	450	
Total Suspended Solids	mg/L	13	NM	<3.3	<3.3	

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

HMP-009 (Compliance)

**2016**  
**Mine Permit Surface Water Quality Monitoring Data**  
**HMWQ-004 (Compliance)**  
**Humboldt Mill**

Parameter	Unit	Recom- mended Benchmark 2014	Q1 2016 2/22/16	Q2 2016 5/16/16	Q3 2016 8/23/16
<b>Field</b>					
D.O. <sup>1</sup>	ppm	--	NM	NM	NM
ORP	mV	--	NM	NM	NM
pH	SU	5.7-6.7	NM	NM	NM
Specific Conductance	µS/cm	--	NM	NM	NM
Temperature	°C	--	NM	NM	NM
Turbidity	NTU	--	NM	NM	NM
Flow	cfs	--	NM	NM	NM
<b>Metals</b>					
Aluminum	ug/L	200 (p)	--	--	NM
Antimony	ug/L	2.3	--	--	NM
Arsenic	ug/L	35	NM	NM	NM
Barium	ug/L	118	--	--	NM
Beryllium	ug/L	4.0 (p)	--	--	NM
Boron	ug/L	36	--	--	NM
Cadmium	ug/L	0.10	--	--	NM
Chromium	ug/L	14	--	--	NM
Cobalt	ug/L	3.0	--	--	NM
Copper	ug/L	11	NM	NM	NM
Iron	ug/L	73,409	NM	NM	NM
Lead	ug/L	2.1	NM	NM	NM
Lithium	ug/L	16	--	--	NM
Manganese	ug/L	2541	NM	NM	NM
Mercury	ng/L	43	NM	NM	NM
Molybdenum	ug/L	4.7	--	--	NM
Nickel	ug/L	5.6	NM	NM	NM
Selenium	ug/L	0.44	--	--	NM
Silver	ug/L	0.35	--	--	NM
Thallium	ug/L	4.0 (P)	--	--	NM
Vanadium	ug/L	39	--	--	NM
Zinc	ug/L	44	NM	NM	NM
<b>Major Anions</b>					
Alkalinity, Bicarbonate	mg/L	68	NM	NM	NM
Alkalinity, Carbonate	mg/L	8.0 (P)	NM	NM	NM
Chloride	mg/L	68	NM	NM	NM
Fluoride	mg/L	0.23	NM	NM	NM
Nitrogen, Ammonia	mg/L	1.9	NM	NM	NM
Nitrogen, Nitrate	mg/L	2.0 (P)	NM	NM	NM
Nitrogen, Nitrite	mg/L	2.0 (P)	NM	NM	NM
Sulfate	mg/L	4.0 (P)	NM	NM	NM
Sulfide	mg/L	20 (P)	NM	NM	NM
<b>Major Cations</b>					
Calcium	mg/L	21	NM	NM	NM
Magnesium	mg/L	8.1	NM	NM	NM
Potassium	mg/L	3.3	NM	NM	NM
Sodium	mg/L	49	NM	NM	NM
<b>General</b>					
Hardness	mg/L	88	NM	NM	NM
Total Dissolved Solids	mg/L	209	NM	NM	NM
Total Suspended Solids	mg/L	353	NM	NM	NM

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

HMWQ-004 (Compliance)

**2016**  
**Mine Permit Surface Water Quality Monitoring Data**  
**MER-001 (Reference)**  
**Humboldt Mill**

Parameter	Unit	Recom- mended Benchmark 2014	Q1 2016 2/22/16	Q2 2016 5/16/16	Q3 2016 8/23/16	
<b>Field</b>						
D.O. <sup>1</sup>	ppm	--	10	9.8	6.9	
ORP	mV	--	180	341	129	
pH	SU	6.1-7.1	6.1	5.9	6.4	
Specific Conductance	µS/cm	--	83	66	67	
Temperature	°C	--	0.1	8.6	17	
Turbidity	NTU	--	6.7	2.1	7.3	
Flow	cfs	--	NM	NM	NM	
<b>Metals</b>						
Aluminum	ug/L	200 (p)	--	--	<50	
Antimony	ug/L	0.73	--	--	<1.0	
Arsenic	ug/L	3.4	<1.0	<1.0	1.7	
Barium	ug/L	12	--	--	8.8	
Beryllium	ug/L	0.73	--	--	<1.0	
Boron	ug/L	14.8	--	--	<10	
Cadmium	ug/L	0.10	--	--	<0.1	
Chromium	ug/L	1.2	--	--	<1.0	
Cobalt	ug/L	0.42	--	--	0.19	e
Copper	ug/L	0.86	0.44	0.58	0.58	
Iron	ug/L	3255	1200	880	1800	
Lead	ug/L	0.35	0.11	0.12	0.19	e
Lithium	ug/L	5.7	--	--	<8.0	
Manganese	ug/L	226	72	81	91	
Mercury	ng/L	8.5	2.5	3.8	5.9	
Molybdenum	ug/L	1.0	--	--	<1.0	
Nickel	ug/L	1.0	0.52	0.57	0.75	
Selenium	ug/L	0.19	--	--	0.48	
Silver	ug/L	0.12	--	--	<0.20	
Thallium	ug/L	0.75	--	--	<1.0	
Vanadium	ug/L	1.5	--	--	<1.0	
Zinc	ug/L	2.6	1.6	1.7	1.7	e
<b>Major Anions</b>						
Alkalinity, Bicarbonate	mg/L	50	25	22	27	
Alkalinity, Carbonate	mg/L	2.0	<2.0	<2.0	<2.0	
Chloride	mg/L	13	5.2	5.2	7.5	
Fluoride	mg/L	0.19	<0.10	<0.10	<0.10	
Nitrogen, Ammonia	mg/L	2.0 (P)	<0.50	<0.50	<0.50	
Nitrogen, Nitrate	mg/L	0.34	<0.50	<0.50	<0.50	
Nitrogen, Nitrite	mg/L	0.36	<0.50	<0.50	<0.50	
Sulfate	mg/L	10	3.3	<1.0	<1.0	
Sulfide	mg/L	3.2	<5.0	<5.0	<5.0	e
<b>Major Cations</b>						
Calcium	mg/L	15	8.5	6.9	8.4	
Magnesium	mg/L	4.1	2.4	2.2	2.2	
Potassium	mg/L	1.0	0.57	0.52	0.61	
Sodium	mg/L	6.9	3.1	3.2	4.1	
<b>General</b>						
Hardness	mg/L	56	34	26	36	
Total Dissolved Solids	mg/L	111	62	58	104	
Total Suspended Solids	mg/L	4.0	<3.3	<3.3	<3.3	

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

MER-001 (Reference)

**2016**  
**Mine Permit Surface Water Quality Monitoring Data**  
**MER-002 (Compliance)**  
**Humboldt Mill**

Parameter	Unit	Recom- mended Benchmark 2014	Q1 2016 2/22/16	Q2 2016 5/16/16	Q3 2016 8/23/16	
<b>Field</b>						
D.O. <sup>1</sup>	ppm	--	10	9.2	6.6	
ORP	mV	--	141	148	88	
pH	SU	6.0-7.0	6.3	6.8	6.5	
Specific Conductance	µS/cm	--	118	79	78	
Temperature	°C	--	0	9.2	17	
Turbidity	NTU	--	5.7	2.3	8.5	
Flow	cfs	--	17	38	75	
<b>Metals</b>						
Aluminum	ug/L	200 (p)	--	--	<50	
Antimony	ug/L	0.72	--	--	<1.0	
Arsenic	ug/L	5.1	1.1	<1.0	2.4	
Barium	ug/L	20	--	--	10	
Beryllium	ug/L	0.73	--	--	<1.0	
Boron	ug/L	14	--	--	<10	
Cadmium	ug/L	0.09	--	--	<0.02	
Chromium	ug/L	1.2	--	--	<0.1	
Cobalt	ug/L	0.65	--	--	1.7	e
Copper	ug/L	0.90	0.42	0.57	0.56	
Iron	ug/L	6440	1600	1100	2200	
Lead	ug/L	0.37	0.10	0.11	0.21	
Lithium	ug/L	5.7	--	--	<8.0	
Manganese	ug/L	560	150	96	110	
Mercury	ng/L	7.5	2.4	3.7	6.4	
Molybdenum	ug/L	0.73	--	--	<1.0	
Nickel	ug/L	1.2	0.96	0.62	0.83	
Selenium	ug/L	0.19	--	--	0.44	
Silver	ug/L	0.12	--	--	<0.20	
Thallium	ug/L	0.73	--	--	<1.0	
Vanadium	ug/L	3.0	--	--	<1.0	
Zinc	ug/L	3.0	1.5	1.7	2.3	e
<b>Major Anions</b>						
Alkalinity, Bicarbonate	mg/L	53	30	21	27	
Alkalinity, Carbonate	mg/L	2.0	<2.0	<2.0	<2.0	
Chloride	mg/L	16	7.6	6.4	9.6	
Fluoride	mg/L	0.19	<0.10	<0.10	<0.10	
Nitrogen, Ammonia	mg/L	2.0 (P)	<0.50	<0.50	<0.50	
Nitrogen, Nitrate	mg/L	0.40	<0.50	<0.50	<0.50	
Nitrogen, Nitrite	mg/L	0.37	<0.50	<0.50	<0.50	
Sulfate	mg/L	14	13	3.9	<1.0	
Sulfide	mg/L	3.2	<5.0	<5.0	<5.0	e
<b>Major Cations</b>						
Calcium	mg/L	18	11	8.3	8.8	
Magnesium	mg/L	4.9	3.4	2.4	2.4	
Potassium	mg/L	1.2	0.94	0.62	0.63	
Sodium	mg/L	9.4	5.0	4.2	5.0	
<b>General</b>						
Hardness	mg/L	67	40	30	34	
Total Dissolved Solids	mg/L	125	72	56	114	
Total Suspended Solids	mg/L	12	<3.3	<3.3	<3.3	

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

MER-002 (Compliance)

**2016**  
**Mine Permit Surface Water Quality Monitoring Data**  
**MER-003 (Compliance)**  
**Humboldt Mill**

Parameter	Unit	Recom- mended Benchmark 2014	Q1 2016 2/22/16	Q2 2016 5/16/16	Q3 2016 8/23/16
<b>Field</b>					
D.O. <sup>1</sup>	ppm	--	10	9.4	6.6
ORP	mV	--	148	89	211
pH	SU	6.0-7.0	6.0	6.7	5.5
Specific Conductance	µS/cm	--	130	112	85
Temperature	°C	--	0.1	9.2	16
Turbidity	NTU	--	6.2	2.5	8.8
Flow	cfs	--	NM	NM	42.3
<b>Metals</b>					
Aluminum	ug/L	200 (p)	--	--	<50
Antimony	ug/L	0.70	--	--	<1.0
Arsenic	ug/L	3.3	1.2	<1.0	2.4
Barium	ug/L	15	--	--	10
Beryllium	ug/L	0.73	--	--	<1.0
Boron	ug/L	15	--	--	10
Cadmium	ug/L	0.09	--	--	<0.1
Chromium	ug/L	0.85	--	--	<1.0
Cobalt	ug/L	0.65	--	--	0.33
Copper	ug/L	0.92	0.43	0.55	0.55
Iron	ug/L	4268	1700	1200	2300
Lead	ug/L	0.35	0.09	0.10	0.18
Lithium	ug/L	5.7	--	--	<8.0
Manganese	ug/L	280	170	110	100
Mercury	ng/L	7.6	2.2	3.7	6.1
Molybdenum	ug/L	0.80	--	--	<1.0
Nickel	ug/L	1.3	1.2	0.95	1.1
Selenium	ug/L	0.20	--	--	0.53
Silver	ug/L	0.12	--	--	<0.20
Thallium	ug/L	0.70	--	--	<1.0
Vanadium	ug/L	1.2	--	--	<1.0
Zinc	ug/L	2.9	1.6	1.9	2.5
<b>Major Anions</b>					
Alkalinity, Bicarbonate	mg/L	56	32	25	27
Alkalinity, Carbonate	mg/L	2.0	<2.0	<2.0	<2.0
Chloride	mg/L	19	8.9	9.4	10
Fluoride	mg/L	0.29	<0.10	<0.10	<0.10
Nitrogen, Ammonia	mg/L	2.0 (P)	<0.50	<0.50	<0.50
Nitrogen, Nitrate	mg/L	0.34	<0.50	<0.50	<0.50
Nitrogen, Nitrite	mg/L	0.37	<0.50	<0.50	<0.50
Sulfate	mg/L	16	14	11	<1.0
Sulfide	mg/L	3.2	<5.0	<5.0	<5.0
<b>Major Cations</b>					
Calcium	mg/L	19	12	9.8	9.5
Magnesium	mg/L	5.3	3.7	3.0	2.6
Potassium	mg/L	1.4	1.1	0.87	0.75
Sodium	mg/L	11	5.8	6.2	5.6
<b>General</b>					
Hardness	mg/L	71	40	34	38
Total Dissolved Solids	mg/L	141	78	82	112
Total Suspended Solids	mg/L	3.1	<3.3	<3.3	<3.3

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

MER-003 (Compliance)

**2016**  
**Mine Permit Surface Water Quality Monitoring5Data**  
**WBR-001 (Reference)**  
**Humboldt Mill**

Parameter	Unit	Recom- mended Benchmark 2014	Q1 2016 2/22/16	Q2 2016 5/16/16	Q3 2016 8/23/16
<b>Field</b>					
D.O. <sup>1</sup>	ppm	--	10	8.0	3.8
ORP	mV	--	253	165	90
pH	SU	5.0-6.0	6.0	5.3	5.5
Specific Conductance	µS/cm	--	110	99	64
Temperature	°C	--	0.3	13	19
Turbidity	NTU	--	3.2	3.5	21
Flow	cfs	--	NM	NM	NM
<b>Metals</b>					
Aluminum	ug/L	200 (p)	--	--	210
Antimony	ug/L	0.70	--	--	<1.0
Arsenic	ug/L	8.7	1.2	1.2	1.6
Barium	ug/L	26	--	--	12
Beryllium	ug/L	0.73	--	--	<1.0
Boron	ug/L	12.7	--	--	<10
Cadmium	ug/L	0.06	--	--	<0.1
Chromium	ug/L	2.7	--	--	<1.0
Cobalt	ug/L	0.85	--	--	0.33
Copper	ug/L	1.0	0.62	0.63	0.81
Iron	ug/L	11056	1800	1200	1700
Lead	ug/L	1.8	1.0	0.69	1.0
Lithium	ug/L	8.6	--	--	<8.0
Manganese	ug/L	641	150	77	89
Mercury	ng/L	17.0	7.5	7.0	12
Molybdenum	ug/L	8.1	--	--	<1.0
Nickel	ug/L	1.9	0.73	0.67	1.0
Selenium	ug/L	0.33	--	--	0.33
Silver	ug/L	0.12	--	--	<0.20
Thallium	ug/L	0.70	--	--	<1.0
Vanadium	ug/L	4.2	--	--	1.1
Zinc	ug/L	9.2	6.0	4.9	9.6
<b>Major Anions</b>					
Alkalinity, Bicarbonate	mg/L	15	5.5	4.5	7.8
Alkalinity, Carbonate	mg/L	2.0	<2.0	<2.0	<2.0
Chloride	mg/L	24	15	23	12
Fluoride	mg/L	0.26	<0.10	<0.10	<0.10
Nitrogen, Ammonia	mg/L	0.78	<0.50	<0.50	<0.50
Nitrogen, Nitrate	mg/L	0.34	<0.50	<0.50	<0.50
Nitrogen, Nitrite	mg/L	0.37	<0.50	<0.50	<0.50
Sulfate	mg/L	9.3	<1.0	<1.0	<1.0
Sulfide	mg/L	3.2	<5.0	<5.0	<5.0
<b>Major Cations</b>					
Calcium	mg/L	8.3	5.1	4.5	4.4
Magnesium	mg/L	3.3	2.0	1.8	1.7
Potassium	mg/L	2.6	0.89	0.69	0.67
Sodium	mg/L	11	6.8	11	5.6
<b>General</b>					
Hardness	mg/L	38	35	20	22
Total Dissolved Solids	mg/L	204	108	92	136
Total Suspended Solids	mg/L	34	<3.3	<3.3	<3.3

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

WBR-001 (Reference)

**2016**  
**Mine Permit Surface Water Quality Monitoring Data**  
**WBR-002 (Compliance)**  
**Humboldt Mill**

Parameter	Unit	Recom- mended Benchmark 2014	Q1 2016 2/22/16	Q2 2016 5/16/16	Q3 2016 8/23/16
<b>Field</b>					
D.O. <sup>1</sup>	ppm	--	6.9	8.7	1.8
ORP	mV	--	160	125	175
pH	SU	6.3-7.3	6.0	6.8	6.3
Specific Conductance	µS/cm	--	233	161	175
Temperature	°C	--	0.2	10	19
Turbidity	NTU	--	33	29	24
Flow	cfs	--	NM	NM	NM
<b>Metals</b>					
Aluminum	ug/L	200 (p)	--	--	<50
Antimony	ug/L	0.72	--	--	<1.0
Arsenic	ug/L	10	3.4	2.0	3.4
Barium	ug/L	19	--	--	11
Beryllium	ug/L	0.73	--	--	<1.0
Boron	ug/L	18	--	--	14
Cadmium	ug/L	0.09	--	--	<0.1
Chromium	ug/L	10	--	--	<1.0
Cobalt	ug/L	0.80	--	--	0.53
Copper	ug/L	1.3	1.0	1.9	1.3
Iron	ug/L	15593	8300	3300	7300
Lead	ug/L	0.25	0.33	0.42	0.42
Lithium	ug/L	5.6	--	--	<8.0
Manganese	ug/L	1295	400	94	190
Mercury	ng/L	4.3	3.2	3.1	2.2
Molybdenum	ug/L	2.8	--	--	<1.0
Nickel	ug/L	1.9	2.4	2.2	2.3
Selenium	ug/L	0.18	--	--	0.72
Silver	ug/L	0.12	--	--	<0.20
Thallium	ug/L	0.72	--	--	<1.0
Vanadium	ug/L	0.8	--	--	<1.0
Zinc	ug/L	4.5	3.7	4.7	4.3
<b>Major Anions</b>					
Alkalinity, Bicarbonate	mg/L	41	28	12	25
Alkalinity, Carbonate	mg/L	2.0	<2.0	<2.0	<2.0
Chloride	mg/L	56	47	37	42
Fluoride	mg/L	0.31	<0.10	<0.10	0.11
Nitrogen, Ammonia	mg/L	0.61	<0.50	<0.50	<0.50
Nitrogen, Nitrate	mg/L	0.36	<0.50	<0.50	<0.50
Nitrogen, Nitrite	mg/L	0.37	<0.50	<0.50	<0.50
Sulfate	mg/L	10	2.0	5.0	<1.0
Sulfide	mg/L	3.2	<5.0	<5.0	<5.0
<b>Major Cations</b>					
Calcium	mg/L	13	11	6.1	8.4
Magnesium	mg/L	5.8	5.1	3.1	4.0
Potassium	mg/L	2.7	1.8	1.8	0.94
Sodium	mg/L	28	23	18	21
<b>General</b>					
Hardness	mg/L	56	50	28	40
Total Dissolved Solids	mg/L	182	172	92	158
Total Suspended Solids	mg/L	9.8	10	9.3	8.3

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

WBR-002 (Compliance)

**2016**  
**Mine Permit Surface Water Quality Monitoring Data**  
**WBR-003 (Compliance)**  
**Humboldt Mill**

Parameter	Unit	Recom- mended Benchmark 2014	Q1 2016 2/22/16	Q2 2016 5/16/16	Q3 2016 8/23/16
<b>Field</b>					
D.O. <sup>1</sup>	ppm	--	3.6	NM	1.3
ORP	mV	--	117	125	90
pH	SU	6.1-7.1	6.0	6.7	6.1
Specific Conductance	µS/cm	--	226	151	118
Temperature	°C	--	0.2	12	17
Turbidity	NTU	--	19	10	21
Flow	cfs	--	NM	NM	NM
<b>Metals</b>					
Aluminum	ug/L	200 (p)	--	--	<50
Antimony	ug/L	0.70	--	--	<1.0
Arsenic	ug/L	4.4	2.4	1.3	1.8
Barium	ug/L	19	--	--	11
Beryllium	ug/L	0.70	--	--	<1.0
Boron	ug/L	19	--	--	13
Cadmium	ug/L	0.09	--	--	<0.1
Chromium	ug/L	0.74	--	--	<1.0
Cobalt	ug/L	1.2	--	--	0.33
Copper	ug/L	1.0	0.52	0.55	0.65
Iron	ug/L	11315	9600	4600	4700
Lead	ug/L	0.44	0.39	0.13	0.23
Lithium	ug/L	5.5	--	--	<8.0
Manganese	ug/L	2101	1400	320	210
Mercury	ng/L	6.0	3.7	3.3	5.4
Molybdenum	ug/L	1.9	--	--	<1.0
Nickel	ug/L	1.8	1.7	1.5	1.5
Selenium	ug/L	0.19	--	--	0.39
Silver	ug/L	0.12	--	--	<0.20
Thallium	ug/L	0.72	--	--	<1.0
Vanadium	ug/L	0.82	--	--	<1.0
Zinc	ug/L	10	5.3	1.5	4.0
<b>Major Anions</b>					
Alkalinity, Bicarbonate	mg/L	56	45	31	26
Alkalinity, Carbonate	mg/L	2.0	<2.0	<2.0	<2.0
Chloride	mg/L	43	35	25	23
Fluoride	mg/L	0.34	<0.10	0.10	0.10
Nitrogen, Ammonia	mg/L	2.0 (P)	<0.50	<0.50	<0.50
Nitrogen, Nitrate	mg/L	0.30	<0.50	<0.50	<0.50
Nitrogen, Nitrite	mg/L	0.37	<0.50	<0.50	<0.50
Sulfate	mg/L	14	<1.0	<1.0	<1.0
Sulfide	mg/L	3.2	<5.0	<5.0	<5.0
<b>Major Cations</b>					
Calcium	mg/L	16	13	10	8.1
Magnesium	mg/L	6.6	5.5	4.3	3.5
Potassium	mg/L	2.0	1.7	1.5	1.1
Sodium	mg/L	21	16	13	12
<b>General</b>					
Hardness	mg/L	69	56	40	32
Total Dissolved Solids	mg/L	184	136	114	136
Total Suspended Solids	mg/L	15	12	7	12

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

WBR-003 (Compliance)



**2016**  
**Mine Permit Surface Water Quality Monitoring Data**  
**Abbreviations & Data Qualifiers**  
**Humboldt Mill**

<b>Notes:</b>
Benchmarks are calculated based on guidance from Eagles Mine's Development of Site Specific Benchmarks for Mine Permit Water Quality Monitoring.
Results in <b>bold</b> text indicate that the parameter was detected at a level greater than the laboratory reporting limit.
Highlighted Cell = 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.
(p) = Due to less than two detections in baseline dataset, benchmark defaulted to four times the reporting limit.
--Denotes no benchmark required or parameter was not required to be collected during the sampling quarter.
e = estimated value. The laboratory statement of data qualifications indicates that a quality control limit for this parameter was exceeded.
NM = Not measured.