Table 1 - September 2011 Soil Sampling Analytical Results
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Analyte		COPCs			Soil Quality Indicators			Soil Quality Metals									
		Metals		Acidity	Chloride	Sulfate	Percent Solids										
		Arsenic	Copper					Aluminum	Antimony	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Lead
Units		mg/kg	mg/kg	pH units	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
U.S. EPA National Database of Screening Levels or CalEPA Human-Exposure Based Screening Numbers[1]		0.07*	3,000*	NA	NA	NA	NA	77,400	3.0*	5200*	150*	15,600	1.7*	NA	100,000*	2.34	150*
Sample ID	**Description**																
GE-SO-01	Dry, loose, sandy silt with oxide staining in top 1 inch, top of repository drainage (0-3 inches)	**27**	77	5 J	<10	110	84	12,000	<2.1	50	0.14	<10	0.28 J	3,000	160	**14**	7.1
GE-SO-02	Loose, orange silt/sand, just down the drainage from GE-SO-01 (0-6 inches)	**55**	180	5.1 J	48	2,100	96	12,000	<2.4	27	0.18	6.4 J	<1.2	2,800	140	**17**	13
GE-SO-03	Dry orange sand/silt farther downgrade in drainage below repository (0-6 inches)	**17**	210	4.1 J	39	4,500	54	2,700	<3.7	13	<0.18	<18	<3.7	1,000	32	**14**	30
GE-SO-04	Grey silt/sand, same location as GE-SO-03 (8-12 inches)	**24**	120	4.6 J	9.4 J	590	70	17,000	<2.9	96	0.23	14	0.71	4,000	160	**62**	5.2
GE-SO-05	Moist orange/brown/green silt/clay/mud from excavated pit at repository toe (0-6 inches)	**590**	810	6.2 J	<40	6,800	25	11,000	<7.9 J	29	<0.40	<40	**2.3**	2,000	120	**160**	29
GE-SO-805	Field duplicate of GE-SO-05	**540**	790	5.7 J	<41	7,300	25	10,000	<8.1	26	<0.41	<41	**2.0**	1,800	120	**160**	28
GE-SO-06	Unexcavated wet orange silty/clay at repository toe (0-6 inches)	**180**	200	2.3 J	<25	12,000	39	1,100	<5.1	6.6 J	<0.25	<25	<5.1	630	31	**11**	33
GE-SO-07	Surface of sandy soil coated in white precipitate near seep	**2.5**	39	5.7 J	12	17,000	93	13,000	<2.1	28	0.14	7.7 J	0.29 J	4,500	300	**28**	3.0 J
GE-SO-08	Red/orange material from seeping bank	**23**	250	3.3 J	<16	4,800	64	9,300	<3.1	11	<0.16	9.8 J	<1.6	2,000	250	**17**	17

Table 1 - September 2011 Soil Sampling Analytical Results
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Analyte		Soil Quality Metals										
		Magnesium	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Vanadium**	**Zinc**
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
U.S. EPA National Database of Screening Levels or CalEPA Human-Exposure Based Screening Numbers[1]		NA	NA	1.02 (1.8*)	380*	1,550 (1600*)	380*	380*	NA	5.0*	394 (530*)	23,000*
Sample ID	**Description**											
GE-SO-01	Dry, loose, sandy silt with oxide staining in top 1 inch, top of repository drainage (0-3 inches)	22,000	220	0.30	<5.2	180	<2.1	<1	170	<5.2	47	60
GE-SO-02	Loose, orange silt/sand, just down the drainage from GE-SO-01 (0-6 inches)	15,000	190	0.12	<5.9	140	4.7 J	0.59 J	150	<5.9	43	220
GE-SO-03	Dry orange sand/silt farther downgrade in drainage below repository (0-6 inches)	2,100	85	0.061	<9.2	42	12 J	1.2 J	88 J	<9.2	11	250
GE-SO-04	Grey silt/sand, same location as GE-SO-03 (8-12 inches)	21,000	270	0.072	<7.1	290	<2.9	<1.4	250	<7.1	64	290
GE-SO-05	Moist orange/brown/green silt/clay/mud from excavated pit at repository toe (0-6 inches)	9,900	370	0.079 J	<20	320	5.5 J	<4	<200	<20	21	3,500
GE-SO-805	Field duplicate of GE-SO-05	9,200	330	0.080 J	<20	330	6.6 J	<4.1	<200	<20	19	3,500
GE-SO-06	Unexcavated wet orange silty/clay at repository toe (0-6 inches)	1,100	70	0.063	<13	16	<20	<2.5	<130	<13	5.6	500
GE-SO-07	Surface of sandy soil coated in white precipitate near seep	43,000	430	<0.027	<5.4	360	<2.1	<1.1	87	<5.4	48	100
GE-SO-08	Red/orange material from seeping bank	28,000	230	0.15	<7.8	230	<6.2	<1.6	62 J	<7.8	32	210

Notes:
mg/kg - milligrams per kilogram dry weight
<n - Not detected in samples above the stated reporting limit n
Bold - exceeds one or more screening levels
J = The reported result for this analyte should be considered an estimated value.
COPC = contaminant of primary concern
NA = not available
[1] U.S. EPA National Database of Screening Levels are chronic levels based on residential values retrieved in September 2011. Values noted with an asterisk (*) come from the California EPA Human-Exposure Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil, January 2005. When presented alone, these values are lower than the corresponding U.S. EPA standards. When presented in parentheses, these values are greater than the corresponding U.S. EPA standards.
Acidity analyzed by EPA Method 9040
Anions analyzed by EPA Method 300A
Metals analyzed by EPA Method 6010B/7471A
All analyses performed by the U.S. EPA Region 9 Laboratory in Richmond, CA.

Table 2 - September 2011 Field Water Quality Parameters
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Sample Location	Description	Acidity	Conductivity	Turbidity	Dissolved Oxygen	Temperature	Oxidation Reduction Potential
		pH units	µS/cm	NTU	mg/L	˚C	mV
GE-SW-01	Indian Creek, downstream of Deer Lick Creek	7.95	257	4.0	11.28	11.88	176
GE-SW-02	Deer Lick Creek, upstream of Indian Creek	8.06	339	4.3	12.05	10.73	161
GE-SW-03	Indian Creek, downstream of side channel	7.89	247	0.9	11.49	12.78	166
GE-SW-04	Side channel (collector of repository), upstream of Indian Creek	8.07	1000	5.1	11.31	17.43	152
GE-SW-05	Indian Creek, downstream of seeps	7.70	254	0.0	11.30	15.07	24
GE-SW-06/806	Indian Creek above Site/field duplicate	7.95	236	2.5	11.87	15.88	135
GE-SW-07	Luther and Baker Gulches, upstream of Site influence	7.57	426	2.5	11.03	15.66	145
GE-SW-08	Luther Gulch, upstream of Indian Creek	7.82	276	7.1	11.78	13.38	140
GE-SW-12	Background sample, upstream of all known mine influence	7.85	235	2.9	11.29	15.58	142
GE-SE-01	Milky water ponded on side of Indian Creek - no visible seep	6.50	466	45.0	9.35	21.08	41
GE-SE-02/802	Main seep flowing from bank/field duplicate	6.06	831	NA	12.58	14.31	15

Notes:
µS/cm - microSiemens per centimeter
NTU - Nephelometric Turbidity Units
mg/L - milligrams per liter
˚C - degrees Celsius
mV - millivolts
All measurements taken using a Horiba U22 Water Quality Monitoring Meter

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Project No.: 002693.2151.01RA

Table 3 - September 2011 Water Sampling Analytical Results
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Analyte		COPCs			Water Quality Parameters				Water Quality Metals						
		Arsenic	**Copper**	**Acidity**	**Chlorides**	**Sulfate**	**Hardness**	**TDS**	**Aluminum**	**Antimony**	**Barium**	**Beryllium**	**Boron**	**Cadmium**	**Calcium**
Units		ug/L	ug/L	pH units	mg/L	mg/L	as mg/L CaCO3 (Calculated)	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U.S. EPA National Water Quality Standards or North Coast Basin Plan[1]		5*	13[2]	<7.0*, >8.5*	230	NA	60*	NA	100	NA	1000*	NA	100	0.25 (10*)	NA
Sample ID	**Description**														
GE-SW-01	Indian Creek, downstream of Deer Lick Creek	<1 / <1	<2 / <2	8 J	0.97 J	5.4	**86 / 86**	100	<20 / <20	<1 / <1	13 / 13	<0.50 / <0.50	<100 / <100	<1 / <1	17,000 / 17,000
GE-SW-02	Deer Lick Creek, upstream of Indian Creek	<1 / <1	**17 / 17**	8 J	14	**29**	**94 / 93**	140	<20 / <20	<1 / <1	30 / 31	<0.50 / <0.50	210 / 220	<1 / <1	21,000 / 20,000
GE-SW-03	Indian Creek, downstream of side channel	<1 / <1	<2 / <2	8.1 J	1.0	5.9	**87 / 87**	98	<20 / <20	<1 / <1	13 / 13	<0.50 / <0.50	<100 / <100	<1 / <1	17,000 / 17,000
GE-SW-04	Side channel (collector of repository), upstream of Indian Creek	<1 / <1	<2 / <2	8.2 J	26	**340**	**430 / 440**	**630**	<20 / <20	<1 / <1	96 / 98	<0.50 / <0.50	140 / 140	<1 / <1	**77,000 / 77,000**
GE-SW-05	Indian Creek, downstream of seeps	<1 / <1	<2 / <2	8 J	0.98 J	7.8	**88 / 89**	100	<20 / 12 J	<1 / <1	12 / 13	<0.50 / <0.50	<100 / <100	<1 / <1	17,000 / 17,000
GE-SW-06	Indian Creek above Site	<1 / <1	<2 / <2	8.2 J	0.92 J	3.1	**84 / 85**	93	<20 / 21 J	<1 / <1	12 / 13	<0.50 / <0.50	<100 / <100	<1 / <1	17,000 / 17,000
GE-SW-806	Field duplicate of GE-SW-06	<1 / <1	<2 / 0.93 J	8.2 J	0.92 J	3.1	**85 / 85**	97	<20 / <20	<1 / <1	12 / 12	<0.50 / <0.50	<100 / <100	<1 / <1	17,000 / 17,000
GE-SW-07	Luther and Baker Gulches, upstream of Site influence	<1 / <1	1.4 J / 1.1 J	7.8 J	1.3	40	**130 / 130**	180	<20 / <20	<1 / <1	20 / 21	<0.50 / <0.50	<100 / <100	<1 / <1	18,000 / 18,000
GE-SW-08	Luther Gulch, upstream of Indian Creek	0.62 J / 0.63 J	2.8 / 2.1	8.2 J	1.1	8.3	**140 / 140**	150	10 J / <20	<1 / <1	15 / 16	<0.50 / <0.50	<100 / <100	<1 / <1	18,000 / 18,000
GE-SW-12	Background sample, upstream of all known mine influence	<1 / <1	<2 / <2	8.2 J	0.93 J	2.3	**84 / 86**	99	<20 / <20	<1 / <1	12 / 12	<0.50 / <0.50	<100 / <100	<1 / <1	17,000 / 17,000
GE-SE-01	Milky water ponded on side of Indian Creek - no visible seep	<1 / <1	<2 / **15**	7 J	1.0	**58**	**120 / 120**	160	<20 / **100**	<1 / <1	14 / 16	<0.50 / <0.50	<100 / <100	<1 / <1	21,000 / 21,000
GE-SE-02	Main seep flowing from bank	**11 / 11**	1.6 J / <2	**6.4 J**	1.2	**260**	**170 / 160**	**460**	39 / 24	<1 / <1	17 / 17	<0.50 / <0.50	<100 / <100	<1 / <1	29,000 / 29,000
GE-SE-802	Field duplicate of GE-SE-02	**11 / 11**	2.0 J / 1.3	**6.3 J**	1.3	**250**	**170 / 160**	**470**	24 / 33	<1 / <1	17 / 17	<0.50 / <0.50	<100 / <100	<1 / <1	28,000 / 29,000

Table 3 - September 2011 Water Sampling Analytical Results
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Analyte		Water Quality Metals													
		Chromium	**Cobalt**	**Lead**	**Magnesium**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Vanadium**	**Zinc**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U.S. EPA National Water Quality Standards or North Coast Basin Plan[1]		50*	NA	2.5	NA	NA	0.77 (2*)	NA	52	5	3.2[3]	NA	NA	NA	120
Sample ID	**Description**														
GE-SW-01	Indian Creek, downstream of Deer Lick Creek	2.0 / 1.8	<0.50 / 1.7	<2 / <2	11,000/ 11,000	1.3 J / 3.4	<0.03 / <0.03	<0.50 / <0.50	8.4 / 7.2	<1 / <1	<0.50 / <0.50	3,100/ 3,000	<2 / <2	<4 / <4	3.5 U / <5
GE-SW-02	Deer Lick Creek, upstream of Indian Creek	<1 / <1	0.28 J / <0.50	<2 / <2	10,000 / 10,000	<2 / 1.1 J	<0.03 / <0.03	<0.50 / <0.50	2.7 / 2.4	<1 / <1	<0.50 / <0.50	**13,000 / 12,000**	<2 / <2	<4 / <4	14 / 10
GE-SW-03	Indian Creek, downstream of side channel	2.1 / 1.9	<0.50 / 2.1	<2 / <2	11,000/ 11,000	1.5 J / 4.0	<0.03 / <0.03	<0.50 / <0.50	7.2 / 7.0	<1 / <1	<0.50 / <0.50	3,100/ 3,100	<2 / <2	<4 / <4	3.4 U / 2.5 J
GE-SW-04	Side channel (collector of repository), upstream of Indian Creek	0.78 J / 0.92 J	1.9 / 0.67	<2 / <2	**59,000 / 59,000**	5.2 / 3.1	<0.03 / <0.03	<0.50 / <0.50	**82 / 80**	<1 / <1	<0.50 / <0.50	**17,000 / 17,000**	<2 / <2	<4 / <4	5.7 U / 5.5
GE-SW-05	Indian Creek, downstream of seeps	2.0 / 1.6	1.5 / 1.4	<2 / <2	11,000/ 11,000	5.7 / 5.7	<0.03 / <0.03	<0.50 / <0.50	8.0 / 7.6	<1 / <1	<0.50 / <0.50	3,400/ 3,400	<2 / <2	<4 / <4	9.4 U / 5.5
GE-SW-06	Indian Creek above Site	2.1 / 2.0	<0.50 / 1.3 J	<2 / <2	10,000 / 10,000	<2 / 2.4	<0.03 / <0.03	<0.50 / <0.50	6.3 / 5.9	<1 / <1	<0.50 / <0.50	2,500 / 2,400	<2 / <2	<4 / <4	<5 / <5
GE-SW-806	Field duplicate of GE-SW-06	2.1 / 2.0	<0.50 / 0.93	<2 / <2	10,000 / 10,000	<2 / 2.0	<0.03 / <0.03	<0.50 / <0.50	6.4 / 6.0	<1 / <1	<0.50 / <0.50	2,500 / 2,500	<2 / <2	<4 / <4	3.3 J/ <5
GE-SW-07	Luther and Baker Gulches, upstream of Site influence	1.8 / 1.6	0.26 J / 0.40 J	<2 / <2	20,000 / 20,000	<2 / <2	<0.03 / <0.03	0.31 J / 0.31 J	12 / 11	<1 / <1	<0.50 / <0.50	**16,000 / 16,000**	<2 / <2	<4 / <4	5.1 U / 3.3 J
GE-SW-08	Luther Gulch, upstream of Indian Creek	1.3 / 1.3	<0.50 / 0.39 J	<2 / <2	23,000 / 23,000	<2 / <2	<0.03 / <0.03	<0.50 / <0.50	8.1 / 7.3	<1 / <1	<0.50 / <0.50	2,600 / 2,500	<2 / <2	<4 / <4	8.3 U / 6.9
GE-SW-12	Background sample, upstream of all known mine influence	2.1 / 2.0	<0.50 / 0.89	<2 / <2	10,000/ 11,000	<2 / 2.0	<0.03 / <0.03	<0.50 / <0.50	6.3 / 5.8	<1 / <1	<0.50 / <0.50	2,100 / 2,100	<2 / <2	<4 / <4	3.3 U / <5
GE-SE-01	Milky water ponded on side of Indian Creek - no visible seep	<1 / 1.8	**46 / 44**	<2 / <2	15,000 / 15,000	**150 / 140**	<0.03 / <0.03	<0.50 / <0.50	**58 / 58**	0.53 J / 0.60 J	<0.50 / <0.50	3,500 / 3,400	<2 / <2	<4 / <4	**170 / 190**
GE-SE-02	Main seep flowing from bank	0.74 J / <1	**270 / 270**	<2 / <2	24,000 / 23,000	**650 / 640**	<0.03 / <0.03	<0.50 / <0.50	**89 / 85**	3.2 / 3.0	<0.50 / <0.50	3,000 / 2,900	<2 / <2	<4 / <4	**1,500 / 1,500**
GE-SE-802	Field duplicate of GE-SE-02	<1 / <1	**260 / 270**	<2 / <2	22,000 / 23,000	**630 / 650**	<0.03 / <0.03	<0.50 / <0.50	**86 / 90**	2.8 / 2.9	<0.50 / <0.50	2,900 / 3,000	<2 / <2	<4 / <4	**1,400 / 1,500**

Notes:
mg/L = milligrams per liter
ug/L = micrograms per liter
CaCO3 = calcium carbonate
COPCs = contaminants of primary concern
TDS = total dissolved solids
NA = not available
##/## = [total or dissolved metals analysis result]/[total or dissolved metals analysis result]
<n = Not detected in samples above the stated reporting limit n
J = The reported result for this analyte should be considered an estimated value.
U = The reported result for this analyte is below the laboratory detection limits.
Bold - exceeds one or more screening levels or four times the background sample concentration
[1] U.S. EPA National Recommended Water Quality Standards values are Chronic Contaminant Concentrations for Freshwater 2009 update. Values noted with an asterisk (*) come from the North Coast Basin Plan Water Quality Objectives 2001 update using the Mid Klamath River Hydrologic Area for "Other Streams". When presented alone, these values are lower than the corresponding U.S. EPA standards. When presented in parentheses, these values are greater than the corresponding U.S. EPA standards.
[2] The water quality value for copper is based on 100 mg/L as CaCO3 and has not been modified by sample based on actual hardness results.
[3] The value for silver is based on Acute Contaminant Concentrations, as no Chronic value is provided.
Metals analyzed by EPA Method 200.7 and 245.1 (total metals) / EPA Method 200.8 and 245.1(dissolved metals)
Chloride and sulfate analyzed by EPA Method 300.0
Hardness analyzed as CaCO3 by EPA Method 2340B
Acidity analyzed by EPA Method 9040
TDS analyzed by EPA Method 2540C
All analyses performed by the U.S. EPA Region 9 Laboratory in Richmond, CA

Table 4 - February 2012 Field Water Quality Parameters
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Sample Location	Description	Acidity	Conductivity	Total Dissolved Solids	Dissolved Oxygen	Temperature	Oxidation Reduction Potential
		pH units	µS/cm	g/L	mg/L	˚C	mV
GE-SW-01	Indian Creek, downstream of Deer Lick Creek	6.22	0.083	0.083	13.7	5.51	116
GE-SW-02	Deer Lick Creek, upstream of Indian Creek	6.25	0.103	0.100	18.5	7.61	87
GE-SW-03	Indian Creek, downstream of side channel	6.43	0.080	0.083	17.6	5.61	99
GE-SW-04	Side channel (collector of repository), upstream of Indian Creek	6.38	0.950	0.097	13.8	6.05	133
GE-SW-05/805	Indian Creek, downstream of seeps/field duplicate	4.37	0.082	0.084	26.0	5.92	214
GE-SW-06	Indian Creek above Site at confluence with Luther/Baker Side Channel	5.36	0.082	0.083	13.9	6.28	227
GE-SW-07	Luther and Baker Gulch Side Channel, upstream of Site influence	6.25	0.111	0.111	13.3	6.82	326
GE-SW-08	Luther Gulch, upstream of Indian Creek	6.29	0.130	0.120	13.1	7.80	313
GE-SW-09	Baker Gulch downstream of mine infilltraiton gallery	6.57	0.534	0.504	11.1	8.68	154
GE-SW-10	Baker Gulch upstream of confluence with mine infiltration gallery	6.76	0.182	0.176	14.5	7.74	264
GE-SW-11	Mine infiltration gallery drainage channel	6.30	0.658	0.628	7.8	8.29	331
GE-SW-12	Background sample, upstream of all known mine influence	6.01	0.078	0.080	13.1	6.25	327
GE-SE-01	Location of milky seep from Sept event, no visible indication of seep	5.03	0.083	0.084	14.6	5.99	183
GE-SE-02/802	Main seep flowing from bank/field duplicate	2.65	4.048	3.660	9.2	10.31	374
GE-SE-03	Water in excavated pit at toe of capped tailings	3.25	1.812	1.594	3.9	11.40	280

Notes:
µS/cm - microSiemens per centimeter
NTU - Nephelometric Turbidity Units
mg/L - milligrams per liter
g/L - grams per liter
˚C - degrees Celsius
mV - millivolts
All measurements taken using a YSI-556 Multi-parameter water quality instrument

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Project No.: 002693.2151.01RA

Table 5 - February 2012 Water Sampling Analytical Results
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Analyte		COPCs			Water Quality Parameters				Water Quality Metals		
		Arsenic	**Copper**	**pH**	**Chloride**	**Sulfate**	**Hardness**	**TDS**	**Aluminum**	**Antimony**	**Barium**
Units		ug/L	ug/L	pH units	mg/L	mg/L	as mg/L CaCO3 (Calculated)	mg/L	ug/L	ug/L	ug/L
U.S. EPA National Water Quality Standards or North Coast Basin Plan[1]		5*	13[2]	<7.0*, >8.5*	230	NA	60*	NA	100	NA	1000*
Sample ID	**Date**										
GE2-SE-01	Milky water	0.50 U	2.9	7.7 J	0.57 J	4.8	**64**	79	100 U	20 U	8.4 J
GE2-SE-01-filtered		0.50 U	2.2	NA	NA	NA	**63**	NA	100 U	20 U	8.4 J
GE2-SE-02	Main seep	**16**	**38000**	**3 J**	0.71 J	**6600**	**2100**	**7500**	**370000**	20 U	21
GE2-SE-02-filtered		**18**	**37000**	NA	NA	NA	**2100**	NA	**360000**	11 J	20
GE2-SE-802	Duplicate of GE2-SE-02	**14**	**37000**	**3.2 J**	0.7 J	**6600**	**2100**	**7600**	**360000**	20 U	21
GE2-SE-802-filtered		**15**	**37000**	NA	NA	NA	**2100**	NA	**360000**	20 U	21
GE2-SE-03	Ponded water in excavation pit	**15**	**3700**	**3.6 J**	1.1	**1900**	**670**	**2400**	**18000**	20 U	25
GE2-SE-03-filtered		**13**	**3600**	NA	NA	NA	**670**	NA	**18000**	20 U	25
GE2-SW-01	Indian Creek Downstream of Deer Lick Creek	0.50 U	10 U	7.7 J	0.63 J	3.5	**62**	67	100 U	20 U	8.6 J
GE2-SW-01-filtered		0.50 U	10 U	NA	NA	NA	**62**	NA	100 U	20 U	8.2 J
GE2-SW-02	Deer Lick Creek	0.50 U	**13**	7.8 J	2.9	**19**	**64**	86	100 U	20 U	13
GE2-SW-02-filtered		0.50 U	**13**	NA	NA	NA	**63**	NA	100 U	20 U	13
GE2-SW-03	Indian Creek, downstream of side channel	0.50 U	10 U	7.8 J	0.6 J	3.4	**63**	74	100 U	20 U	8.3 J
GE2-SW-03-filtered		0.50 U	10 U	NA	NA	NA	**61**	NA	100 U	20 U	8.3 J
GE2-SW-04	Side channel, upstream of Indian Creek	0.50 U	10 U	7.7 J	1.2	**15**	**68**	89	100 U	20 U	9.8 J
GE2-SW-04-filtered		0.50 U	10 U	NA	NA	NA	**68**	NA	100 U	20 U	9.8 J
GE2-SW-05	Indian Creek, downstream of seeps	0.50 U	10 U	7.8 J	0.57 J	4.3	**63**	92	100 U	20 U	8.3 J
GE2-SW-05-filtered		0.50 U	10 U	NA	NA	NA	**61**	NA	100 U	20 U	8.1 J
GE2-SW-805	Duplicate of GE2-SW-05	0.50 U	10 U	7.8 J	0.57 J	4.4	**63**	80	100 U	20 U	8.2 J
GE2-SW-805-filtered		0.50 U	10 U	NA	NA	NA	**63**	NA	100 U	20 U	7.9 J
GE2-SW-06	Indian Creek upstream of site	0.50 U	10 U	7.8 J	0.56 J	3.2	**62**	66	100 U	20 U	7.8 J
GE2-SW-06-filtered		0.50 U	10 U	NA	NA	NA	**61**	NA	100 U	20 U	7.7 J
GE2-SW-07	Luther and Baker Gulches combined, upstream of site	0.26 J	10 U	7.9 J	0.79 J	**15**	**76**	100	100 U	20 U	10
GE2-SW-07-filtered		0.50 U	10 U	NA	NA	NA	**75**	NA	100 U	5 U	9.7 J
GE2-SW-08	Luther Gulch, upstream of Indian Creek	0.57	10 U	8.1 J	1	**11**	**100**	130	100 U	20 U	13
GE2-SW-08-filtered		0.55	10 U	NA	NA	NA	**100**	NA	100 U	20 U	13
GE2-SW-09	Baker Gulch, downstream of infiltration gallery	0.50 U	10 U	7.5 J	2.7	**280**	**150**	**510**	100 U	20 U	16
GE2-SW-09-filtered		0.50 U	10 U	NA	NA	NA	**150**	NA	100 U	20 U	16
GE2-SW-10	Baker Gulch	0.50 U	2 U	7.9 J	2.6	3.1	**120**	150	100 U	20 U	9 J
GE2-SW-10-filtered		0.50 U	2 U	NA	NA	NA	**120**	NA	100 U	20 U	8.3 J
GE2-SW-11	Mine Infiltration Gallery	0.50 U	1.7 J	7.2 J	2.6	**400**	**140**	**650**	100 U	20 U	13
GE2-SW-11-filtered		0.50 U	1.9 J	NA	NA	NA	**170**	NA	100 U	20 U	15
GE2-SW-12	Indian Creek Background Sample	0.50 U	2 U	7.7 J	0.6 J	2	**60**	70	100 U	20 U	7.8 J
GE2-SW-12-filtered		0.50 U	2 U	NA	NA	NA	59	NA	100 U	20 U	7.9 J

TDD No.: TO2 09-11-08-0001
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Table 5 - February 2012 Water Sampling Analytical Results
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Analyte		Water Quality Metals								
		Beryllium	**Boron**	**Cadmium**	**Calcium**	**Chromium**	**Cobalt**	**Lead**	**Magnesium**	**Manganese**
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U.S. EPA National Water Quality Standards or North Coast Basin Plan[1]		NA	100	0.25 (10*)	NA	50*	NA	2.5	NA	NA
Sample ID	**Date**									
GE2-SE-01	Milky water	1 U	100 U	0.4 U	9800	10 U	10 U	1 U	9600	3.8 J
GE2-SE-01-filtered		1 U	100 U	0.4 U	9700	10 U	10 U	1 U	9500	4.1 J
GE2-SE-02	Main seep	1.6	100 U	**37**	**170000**	**580**	**6000**	0.76 J	**420000**	**6800**
GE2-SE-02-filtered		1.6	100 U	**36**	**160000**	**560**	**5800**	2 U	**410000**	**6600**
GE2-SE-802	Duplicate of GE2-SE-02	1.6	100 U	**35**	**160000**	**550**	**5800**	2 U	**410000**	**6600**
GE2-SE-802-filtered		1.5	100 U	**35**	**160000**	**550**	**5800**	2 U	**410000**	**6700**
GE2-SE-03	Ponded water in excavated trench	1 U	100 U	**6.3**	**92000**	24	**2300**	0.64 J	**110000**	**8000**
GE2-SE-03-filtered		1 U	100 U	**6.3**	**91000**	21	**2300**	0.58 J	**110000**	**8000**
GE2-SW-01	Indian Creek Downstream of Deer Lick Creek	1 U	100 U	0.4 U	9600	10 U	10 U	1 U	9200	5 U
GE2-SW-01-filtered		1 U	100 U	0.4 U	9600	10 U	10 U	1 U	9200	5 U
GE2-SW-02	Deer Lick Creek	1 U	100 U	0.4 U	14000	10 U	10 U	1 U	7200	5 U
GE2-SW-02-filtered		1 U	100 U	0.4 U	13000	10 U	10 U	1 U	7100	5 U
GE2-SW-03	Indian Creek, downstream of side channel	1 U	100 U	0.4 U	9600	10 U	10 U	1 U	9400	5 U
GE2-SW-03-filtered		1 U	100 U	0.4 U	9300	10 U	10 U	1 U	9200	5 U
GE2-SW-04	Side channel, upstream of Indian Creek	1 U	100 U	0.4 U	10000	10 U	5.2 J	1 U	10000	25
GE2-SW-04-filtered		1 U	100 U	0.4 U	11000	10 U	5.1 J	1 U	10000	25
GE2-SW-05	Indian Creek, downstream of seeps	1 U	100 U	0.4 U	9600	10 U	10 U	1 U	9500	2.8 J
GE2-SW-05-filtered		1 U	100 U	0.4 U	9300	10 U	10 U	1 U	9200	2.8 J
GE2-SW-805	Duplicate of GE2-SW-05	1 U	100 U	0.4 U	9700	10 U	10 U	1 U	9500	2.9 J
GE2-SW-805-filtered		1 U	100 U	0.4 U	9600	10 U	10 U	1 U	9500	2.8 J
GE2-SW-06	Indian Creek upstream of site	1 U	100 U	0.4 U	9500	10 U	10 U	1 U	9300	5 U
GE2-SW-06-filtered		1 U	100 U	0.4 U	9300	10 U	10 U	1 U	9200	5 U
GE2-SW-07	Luther and Baker Gulches combined, upstream of site	1 U	100 U	0.4 U	12000	10 U	10 U	1 U	12000	5 U
GE2-SW-07-filtered		1 U	100 U	0.4 U	11000	10 U	10 U	1 U	11000	5 U
GE2-SW-08	Luther Gulch, upstream of Indian Creek	1 U	100 U	0.4 U	15000	10 U	10 U	1 U	16000	5 U
GE2-SW-08-filtered		1 U	100 U	0.4 U	15000	10 U	10 U	1 U	16000	5 U
GE2-SW-09	Baker Gulch, downstream of infiltration gallery	1 U	100 U	0.4 U	26000	10 U	10 U	1 U	21000	5 U
GE2-SW-09-filtered		1 U	100 U	0.4 U	26000	10 U	10 U	1 U	21000	3.9 J
GE2-SW-10	Baker Gulch	1 U	100 U	0.4 U	5700	10 U	10 U	1 U	27000	5 U
GE2-SW-10-filtered		1 U	100 U	0.4 U	5500	10 U	10 U	1 U	26000	5 U
GE2-SW-11	Mine Infiltration Gallery	1 U	100 U	0.4 U	29000	10 U	10 U	1 U	16000	5 U
GE2-SW-11-filtered		1 U	100 U	0.4 U	35000	10 U	10 U	1 U	20000	5 U
GE2-SW-12	Indian Creek Background Sample	1 U	100 U	0.4 U	9100	10 U	10 U	1 U	9000	5 U
GE2-SW-12-filtered		1 U	100 U	0.4 U	9000	10 U	10 U	1 U	8900	5 U

Table 5 - February 2012 Water Sampling Analytical Results
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Analyte		Water Quality Metals								
		Mercury	Molybdenum	Nickel	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
U.S. EPA National Water Quality Standards or North Coast Basin Plan[1]		0.77 (2*)	NA	52	5	3.2[3]	NA	NA	NA	120
Sample ID	**Date**									
GE2-SE-01	Milky water	0.03 U	20 U	8.9 J	1 U	0.25 U	1700	1 U	10 U	5.6 J
GE2-SE-01-filtered		0.03 U	20 U	8.6 J	1 U	0.25 U	1700	1 U	10 U	5.2 J
GE2-SE-02	Main seep	0.03 U	20 U	**3000**	**5.4 J**	0.5 U	4200	1 U	**14**	**14000**
GE2-SE-02-filtered		0.03 U	20 U	**3000**	3.7 J	0.5 U	4200	2 U	**14**	**14000**
GE2-SE-802	Duplicate of GE2-SE-02	0.03 U	20 U	**3000**	3.7 J	0.5 U	4200	2 U	**14**	**14000**
GE2-SE-802-filtered		0.03 U	20 U	**3000**	3.6 J	0.5 U	4200	2 U	**13**	**14000**
GE2-SE-03	Ponded water in excavated trench	0.03 U	20 U	**2100**	1.7 J	0.5 U	4200	1 U	10 U	**15000**
GE2-SE-03-filtered		0.03 U	20 U	**2100**	1.7 J	0.5 U	4100	1 U	10 U	**15000**
GE2-SW-01	Indian Creek Downstream of Deer Lick Creek	0.03 U	20 U	7.9 J	1 U	0.25 U	1700	1 U	10 U	10 U
GE2-SW-01-filtered		0.03 U	20 U	7.6 J	1 U	0.25 U	1700	1 U	10 U	10 U
GE2-SW-02	Deer Lick Creek	0.03 U	20 U	10 U	1 U	0.25 U	4400	1 U	10 U	9.2 J
GE2-SW-02-filtered		0.03 U	20 U	10 U	1 U	0.25 U	4400	1 U	10 U	8.9 J
GE2-SW-03	Indian Creek, downstream of side channel	0.03 U	20 U	8.4 J	1 U	0.25 U	1600	1 U	10 U	10 U
GE2-SW-03-filtered		0.03 U	20 U	7.7 J	1 U	0.25 U	1600	1 U	10 U	10 U
GE2-SW-04	Side channel, upstream of Indian Creek	0.03 U	20 U	22	1 U	0.25 U	1900	1 U	10 U	23
GE2-SW-04-filtered		0.03 U	20 U	22	1 U	0.25 U	2000	1 U	10 U	22
GE2-SW-05	Indian Creek, downstream of seeps	0.03 U	20 U	8.5 J	1 U	0.25 U	1600	1 U	10 U	10 U
GE2-SW-05-filtered		0.03 U	20 U	8.1 J	1 U	0.25 U	1600	1 U	10 U	10 U
GE2-SW-805	Duplicate of GE2-SW-05	0.03 U	20 U	8.6 J	1 U	0.25 U	1700	1 U	10 U	10 U
GE2-SW-805-filtered		0.03 U	20 U	8.4 J	1 U	0.25 U	1600	1 U	10 U	10 U
GE2-SW-06	Indian Creek upstream of site	0.03 U	20 U	8 J	1 U	0.25 U	1500	1 U	10 U	10 U
GE2-SW-06-filtered		0.03 U	20 U	7.2 J	1 U	0.25 U	1700	1 U	10 U	10 U
GE2-SW-07	Luther and Baker Gulches combined, upstream of site	0.03 U	20 U	8.1 J	1 U	0.25 U	**5400**	1 U	10 U	10 U
GE2-SW-07-filtered		0.03 U	20 U	7.8 J	1 U	0.25 U	20	1 U	10 U	10 U
GE2-SW-08	Luther Gulch, upstream of Indian Creek	0.03 U	20 U	6 J	1 U	0.25 U	2300	1 U	10 U	10
GE2-SW-08-filtered		0.03 U	20 U	5.8 J	1 U	0.25 U	2300	1 U	10 U	7.4 J
GE2-SW-09	Baker Gulch, downstream of infiltration gallery	0.03 U	20 U	22	1 U	0.25 U	**99000**	1 U	10 U	10 U
GE2-SW-09-filtered		0.03 U	20 U	22	0.5 J	0.25 U	**100000**	1 U	10 U	10 U
GE2-SW-10	Baker Gulch	0.03 U	20 U	11	1 U	0.25 U	**10000**	1 U	10 U	10 U
GE2-SW-10-filtered		0.03 U	20 U	11	0.51 J	0.25 U	**9900**	1 U	10 U	10 U
GE2-SW-11	Mine Infiltration Gallery	0.03 U	20 U	22	1 U	0.25 U	**110000**	1 U	10 U	10 U
GE2-SW-11-filtered		0.03 U	20 U	24	0.5 J	0.25 U	**130000**	1 U	10 U	10 U
GE2-SW-12	Indian Creek Background Sample	0.03 U	20 U	7.8 J	1 U	0.25 U	1300	1 U	10 U	10 U
GE2-SW-12-filtered		0.03 U	20 U	7.1 J	1 U	0.25 U	1100	1 U	10 U	10 U

Notes:

mg/L = milligrams per liter

ug/L = micrograms per liter

CaCO3 = calcium carbonate

COPCs = contaminants of primary concern

TDS = total dissolved solids

NA = not available/not analyzed

J = The reported result for this analyte should be considered an estimated value.

U = The reported result for this Analyte is not detected above the referenced laboratory detection limit of ##.

Bold - exceeds one or more screening levels or four times the background sample concentration

[1] U.S. EPA National Recommended Water Quality Standards values are Chronic Contaminant Concentrations for Freshwater 2009 update. Values noted with an asterisk (*) come from the North Coast Basin Plan Water Quality Objectives 2001 update using the Mid Klamath River Hydrologic Area for "Other Streams". When presented alone, these values are lower than the corresponding U.S. EPA standards. When presented in parentheses, these values are greater than the corresponding U.S. EPA standards.

[2] The water quality value for copper is based on 100 mg/L as CaCO3 and has not been modified by sample based on actual hardness results.

[3] The value for silver is based on Acute Contaminant Concentrations, as no Chronic value is provided.

Metals analyzed by EPA Method 200.7 and 245.1 (total metals) / EPA Method 200.8 and 245.1(dissolved metals)

Chloride and sulfate analyzed by EPA Method 300.0

Hardness analyzed as CaCO3 by EPA Method 2340B

Acidity analyzed by EPA Method 9040

TDS analyzed by EPA Method 2540C

All analyses performed by the U.S. EPA Region 9 Laboratory in Richmond, CA

Table 6- May 2012 Field Water Quality Parameters
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Sample Location	Description	Acidity	Conductivity	Dissolved Oxygen	Temperature	Oxidation Reduction Potential
		pH units	µS/cm	mg/L	˚C	mV
GE3-SW-01	Indian Creek, downstream of Deer Lick Creek	6.20	84	11.3	11.51	608
GE3-SW-02	Deer Lick Creek, upstream of Indian Creek	7.67	165	11.3	10.80	250
GE3-SW-03	Indian Creek, downstream of side channel	5.07	90	11.8	8.20	331
GE3-SW-04	Side channel (collector of repository), upstream of Indian Creek	6.60	95	11.9	9.20	65
GE3-SW-05	Indian Creek, downstream of seeps/field duplicate	5.77	85	4.5	9.85	36
GE3-SW-07	Luther and Baker Gulch Side Channel, upstream of Site influence	5.40	110	11.4	11.45	273
GE3-SW-08	Luther Gulch, upstream of Indian Creek	7.98	218	10.7	12.77	156
GE3-SW-09	Baker Gulch downstream of mine infilltraiton gallery	6.65	871	8.8	10.36	92
GE3-SW-10	Baker Gulch upstream of confluence with mine infiltration gallery	7.56	283	10.9	9.85	113
GE3-SW-11	Mine infiltration gallery drainage channel	6.60	816	5.2	10.65	51
GE3-SW-12	Background sample, upstream of all known mine influence	5.50	79	12.1	7.99	170
GE3-SW-20	Isolated wetands outflow from repository toes	6.04	352	6.6	10.55	77
GE3-SW-21	Deer Lick Creek, downstream of decomissioned fire road	6.00	113	10.6	11.91	258
GE3-SW-22	Deer Lick Creek, US of crossing of decomissioned fire road	-6.46	102	10.3	11.82	937
GE3-SE-01/801	Location of milky seep from Sept event, no visible indication of seep	6.96	56	11.8	9.88	-10
GE3-SE-02/802	Main seep flowing from bank/field duplicate	3.46	3172	4.9	19.97	350
GE3-SE-03	Water seeping from toe of capped tailings	5.66	1231	5.1	14.15	30

Notes:
µS/cm - microSiemens per centimeter
mg/L - milligrams per liter
˚C - degrees Celsius
mV - millivolts
All measurements taken using a YSI-556 Multi-parameter water quality instrument.
All data is suspect. The instrument was functioning poorly with sensor readings jumping, drifting continually, and/or reporting negative values.

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Table 7 - May 2012 Water Sampling Analytical Results
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Analyte		COPCs			Water Quality Parameters				Water Quality Metals		
		Arsenic	Copper	pH	Chloride	Sulfate	Hardness	TDS	Aluminum	Antimony	Barium
Units		ug/L	ug/L	pH units	mg/L	mg/L	as mg/L CaCO3 (Calculated)	mg/L	mg/L	mg/L	mg/L
U.S. EPA National Water Quality Standards or North Coast Basin Plan[1]		5*	13[2]	<7.0*, >8.5*	230	NA	60*	NA	0.1	NA	1
Sample ID	**Date**										
GE3-SE-01	Milky water	2	2	7.7	0.58	2.7	42.1	39	0.053	0.002	0.0055
GE3-SE-01-filtered		2U	2U	NA	NA	NA	pending	NA	0.05U	0.002U	0.0059
GE3-SE-801	Duplicate of GE2-SE-01	2U	2U	7.7	0.54	2.8	42.1	41	0.043	0.002U	0.0054
GE3-SE-801-filtered		2U	2U	NA	NA	NA	pending	NA	0.05U	0.002U	0.0057
GE3-SE-02	Main seep	1.7	**6000**	**3.3**	1.9	**2320**	**822**	**3680**	**45.5**	0.002U	0.0086
GE3-SE-02-filtered		2	**5000**	NA	NA	NA	pending	NA	**49.8**	0.002U	0.01
GE3-SE-802	Duplicate of GE2-SE-02	2.1	**5900**	**3.3**	1.9	**2700**	**818**	**3590**	**46.5**	0.002U	0.0087
GE3-SE-802-filtered		1.2	**4500**	NA	NA	NA	pending	NA	**34.2**	0.002U	0.01
GE3-SE-03	Water seeping from toe of capped tailings	**51**	**39**	**5.6**	1.8	**916**	**303**	1110	**0.35**	0.002U	0.014
GE3-SE-03-filtered		**47**	**28**	NA	NA	NA	pending	NA	**0.16**	0.002U	0.016
GE3-SW-01	Indian Creek Downstream of Deer Lick Creek	2U	2U	7.6	0.59	2.2	45.1	53	0.043	0.002U	0.0059
GE3-SW-01-filtered		2U	2U	NA	NA	NA	pending	NA	0.05U	0.002U	0.0057
GE3-SW-02	Deer Lick Creek	2U	**29**	7.8	2.9	**25.4**	**84.6**	112	0.05U	0.002U	0.013
GE3-SW-02-filtered		2U	**28**	NA	NA	NA	pending	NA	0.05U	0.002U	0.013
GE3-SW-03	Indian Creek, downstream of side channel	2U	2U	7.7	0.56	2.2	45.9	46	0.045	0.002U	0.006
GE3-SW-03-filtered		2U	2U	NA	NA	NA	pending	NA	0.05U	0.002U	0.0058
GE3-SW-04	Side channel, upstream of Indian Creek	2U	2U	7.7	0.63	3.8	48.7	48	0.053	0.002U	0.0061
GE3-SW-04-filtered		2U	2U	NA	NA	NA	pending	NA	0.05U	0.002U	0.006
GE3-SW-05	Indian Creek, downstream of seeps	2U	1.2	7.6	0.54	2.9	47.6	52	0.052	0.002U	0.0059
GE3-SW-05-filtered		2U	1	NA	NA	NA	pending	NA	0.05U	0.002U	0.0058
GE3-SW-07	Luther and Baker Gulches combined, upstream of site	2U	2U	7.8	0.62	5.1	58.3	56	0.037	0.002U	0.0068
GE3-SW-07-filtered		2U	2U	NA	NA	NA	pending	NA	0.05U	0.002U	0.0069
GE3-SW-08	Luther Gulch, upstream of Indian Creek	2U	3.5	8.1	1.1	**7.9**	**119**	108	0.05U	0.002U	0.012
GE3-SW-08-filtered		2U	3.5	NA	NA	NA	pending	NA	0.05U	0.002U	0.012
GE3-SW-09	Baker Gulch, downstream of infiltration gallery	2U	2.5	7.7	2.2	**327**	**193**	588	**0.18**	0.002U	0.021
GE3-SW-09-filtered		2U	2U	NA	NA	NA	pending	NA	0.05U	0.002U	0.0069
GE3-SW-10	Baker Gulch	2U	3.8	8	2.4	3.1	**131**	177	0.05U	0.002U	0.0091
GE3-SW-10-filtered		2U	2U	NA	NA	NA	pending	NA	0.05U	0.002U	0.0087
GE3-SW-11	Mine Infiltration Gallery	2U	2	7.4	1.7	**310**	**176**	581	0.05U	0.002U	0.011
GE3-SW-11-filtered		2U	1.7	NA	NA	NA	pending	NA	0.05U	0.002U	0.011
GE3-SW-12	Indian Creek Background Sample	2U	2U	7.8	0.51	1.6	39.9	51	0.07	0.002U	0.0053
GE3-SW-12-filtered		2U	2U	NA	NA	NA	pending	NA	0.092	0.002U	0.0056
GE3-SW-20	Isolated wetands outflow from repository toes	2U	**31**	**6.3**	5.3	**128**	**129**	219	**0.88**	0.002U	0.014
GE3-SW-20-filtered		2U	12	NA	NA	NA	pending	NA	0.05U	0.002U	0.016
GE3-SW-21	Deer Lick Creek, downstream of decomissioned fire road	2U	2U	7.8	0.77	**7.4**	50.2	69	0.05U	0.002U	0.0045
GE3-SW-21-filtered		2U	2U	NA	NA	NA	pending	NA	0.05U	0.002U	0.0047
GE3-SW-22	Deer Lick Creek, upstream of crossing of decomissioned fire	2U	2U	7.6	0.72	**7**	45	65	0.05U	0.002U	0.0056
GE3-SW-22-filtered		2U	2U	NA	NA	NA	pending	NA	0.05U	0.002U	0.0059

Data Validation Pending

Table 7 - May 2012 Water Sampling Analytical Results
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Analyte		Water Quality Metals									
		Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Iron	Lead	Magnesium	Manganese
Units		mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U.S. EPA National Water Quality Standards or North Coast Basin Plan[1]		NA	0.1	0.00025 (.01*)	NA	.05*	NA	NA	0.0025	NA	NA
Sample ID	**Date**										
GE3-SE-01	Milky water	0.001	0.05	**0.001**	8.1	0.0023	**0.00072**	**0.18**	0.001	5.3	0.0027
GE3-SE-01-filtered		0.001U	0.05U	0.001U	8.1	0.0021	**0.00098**	**0.17**	0.001U	4.9	0.0024
GE3-SE-801	Duplicate of GE2-SE-01	0.001U	0.05U	0.001U	7.9	0.0045	**0.00076**	**0.19**	0.001U	5.4	0.003
GE3-SE-801-filtered		0.001U	0.05U	0.001U	7.9	0.0022	**0.0013**	**0.17**	0.001U	4.6	0.003
GE3-SE-02	Main seep	0.00034	0.022	**0.011**	**129**	**0.074**	**2.2**	**597**	0.001U	**121**	**4**
GE3-SE-02-filtered		0.00031	0.018	**0.013**	**110**	**0.065**	**1.9**	**616**	0.001U	**129**	**3.4**
GE3-SE-802	Duplicate of GE2-SE-02	0.00033	0.022	**0.011**	**124**	**0.071**	**2.2**	**602**	0.001U	**123**	**3.9**
GE3-SE-802-filtered		0.00032	0.017	**0.013**	**103**	**0.058**	**1.7**	**579**	0.001U	**90**	**3.1**
GE3-SE-03	Water seeping from toe of capped tailings	0.001U	0.05U	0.001U	**43.4**	0.002U	**0.56**	**244**	0.001U	**47.2**	**3.5**
GE3-SE-03-filtered		0.001U	0.05U	0.001U	**43.9**	0.002U	**0.53**	**237**	0.001U	**42.4**	**3.4**
GE3-SW-01	Indian Creek Downstream of Deer Lick Creek	0.001U	0.05U	0.001U	8.4	0.0045	0.001U	0.035	0.001U	5.9	0.0016
GE3-SW-01-filtered		0.001U	0.05U	0.001U	7.7	0.0037	0.001U	0.05U	0.001U	4.4	0.00083
GE3-SW-02	Deer Lick Creek	0.001U	0.044	0.001U	16.7	0.0023	0.0006	0.05U	0.001U	10.4	0.001
GE3-SW-02-filtered		0.001U	0.037	0.001U	15	0.002	0.0008	0.05U	0.001U	7.5	0.0013
GE3-SW-03	Indian Creek, downstream of side channel	0.001U	0.05U	0.001U	8.4	0.0036	0.001U	0.036	0.001U	6	0.0016
GE3-SW-03-filtered		0.001U	0.05U	0.001U	7.6	0.0033	0.001U	0.05U	0.001U	4.5	0.00061
GE3-SW-04	Side channel, upstream of Indian Creek	0.001U	0.05U	0.001U	8.8	0.0037	0.0013	0.21	0.001U	6.5	0.0064
GE3-SW-04-filtered		0.001U	0.05U	0.001U	8	0.0032	0.0012	0.12	0.001U	4.8	0.0054
GE3-SW-05	Indian Creek, downstream of seeps	0.001U	0.05U	0.001U	8.7	0.0038	0.001	0.24	0.001U	6.3	0.0035
GE3-SW-05-filtered		0.001U	0.05U	0.001U	7.9	0.0025	0.0011	0.2	0.001U	4.7	0.0028
GE3-SW-07	Luther and Baker Gulches combined, upstream of site	0.001U	0.05U	0.001U	9.8	0.0024	0.001U	0.05U	0.001U	8.2	0.0021
GE3-SW-07-filtered		0.001U	0.05U	0.001U	9	0.0028	0.001U	0.05U	0.001U	6.4	0.00046
GE3-SW-08	Luther Gulch, upstream of Indian Creek	0.001U	0.05U	0.001U	15.4	0.002U	0.001U	0.05U	0.001U	19.6	0.0007
GE3-SW-08-filtered		0.001U	0.05U	0.001U	14.5	0.0024	0.001U	0.05U	0.001U	16.2	0.001U
GE3-SW-09	Baker Gulch, downstream of infiltration gallery	0.001U	0.027	0.001U	**30.3**	0.0024	0.0021	0.33	0.001U	**28.5**	0.018
GE3-SW-09-filtered		0.001U	0.05U	0.001U	9.1	0.0028	0.001U	0.05U	0.001U	6.3	0.00046
GE3-SW-10	Baker Gulch	0.001U	0.016	0.001U	6.1	0.0017	0.0011	0.05U	0.001U	28	0.00062
GE3-SW-10-filtered		0.001U	0.016	0.001U	6	0.0025	0.0012	0.05U	0.001U	**28.3**	0.001U
GE3-SW-11	Mine Infiltration Gallery	0.001U	0.041	0.001U	34	0.0015	0.00071	0.049	0.001U	22.2	0.0052
GE3-SW-11-filtered		0.001U	0.039	0.001U	31.7	0.002	0.00071	0.05U	0.001U	18.3	0.003
GE3-SW-12	Indian Creek Background Sample	0.001U	0.05U	0.001U	7.9	0.0023	0.001U	0.05U	0.001U	4.9	0.001
GE3-SW-12-filtered		0.001U	0.05U	0.001U	7.6	0.0025	0.001U	0.05U	0.001U	4.2	0.001U
GE3-SW-20	Isolated wetands outflow from repository toes	0.001U	0.029	0.001U	20.4	0.0025	**0.11**	**18.5**	0.001U	19.1	**0.46**
GE3-SW-20-filtered		0.001U	0.027	0.001U	20.3	0.002U	**0.1**	**16.1**	0.001U	18.1	**0.46**
GE3-SW-21	Deer Lick Creek, downstream of decomissioned fire road	0.001U	0.05U	0.001U	10.7	0.002U	0.001U	0.05U	0.001U	5.7	0.00093
GE3-SW-21-filtered		0.001U	0.05U	0.001U	10.7	0.002U	0.0014	0.05U	0.001U	5.4	0.0025
GE3-SW-22	Deer Lick Creek, upstream of crossing of decomissioned fire	0.001U	0.05U	0.001U	9.4	0.002U	0.001U	0.05U	0.001U	5.2	0.00067
GE3-SW-22-filtered		0.001U	0.05U	0.001U	9.1	0.002U	0.00081	0.05U	0.001U	4.6	0.0031

Data Validation Pending

Table 7 - May 2012 Water Sampling Analytical Results
Grey Eagle Tailings Removal Assessment
Happy Camp, Siskiyou County, CA

Analyte		Water Quality Metals									
		Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Units		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
U.S. EPA National Water Quality Standards or North Coast Basin Plan[1]		0.00077 (.002*)	NA	0.052	NA	0.005	.0032[3]	NA	NA	NA	0.012
Sample ID	**Date**										
GE3-SE-01	Milky water	0.0002	pending	0.0071	0.3	0.002	0.001	pending	0.001	0.01	0.004
GE3-SE-01-filtered		0.0002U	pending	0.0065	0.3	0.002U	0.001U	pending	0.001U	0.01U	0.0054
GE3-SE-801	Duplicate of GE2-SE-01	0.0002U	pending	0.0073	0.35	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SE-801-filtered		0.0002U	pending	0.0065	0.28	0.002U	0.001U	pending	0.001U	0.01U	0.0047
GE3-SE-02	Main seep	0.0002U	pending	**0.83**	**1.1**	0.0022	0.00077	pending	0.001U	0.01U	**7.6**
GE3-SE-02-filtered		0.0002U	pending	**0.7**	**0.91**	0.0017	0.00069	pending	0.001U	0.01U	**7**
GE3-SE-802	Duplicate of GE2-SE-02	0.0002U	pending	**0.82**	**1.1**	0.0024	0.00075	pending	0.001U	0.01U	**7.5**
GE3-SE-802-filtered		0.0002U	pending	**0.63**	**0.84**	0.0014	0.00063	pending	0.001U	0.01U	**6.3**
GE3-SE-03	Water seeping from toe of capped tailings	0.0002U	pending	**0.46**	**1.4**	0.002U	0.001U	pending	0.001U	0.01U	**2.8**
GE3-SE-03-filtered		0.0002U	pending	**0.43**	**1.4**	0.002U	0.001U	pending	0.001U	0.01U	**2.7**
GE3-SW-01	Indian Creek Downstream of Deer Lick Creek	0.0002U	pending	0.0072	0.33	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-01-filtered		0.0002U	pending	0.0063	0.28	0.002U	0.001U	pending	0.001U	0.01U	0.0045
GE3-SW-02	Deer Lick Creek	0.0002U	pending	0.0018	0.43	0.002U	0.001U	pending	0.001U	0.01U	0.016
GE3-SW-02-filtered		0.0002U	pending	0.0017	0.36	0.002U	0.001U	pending	0.001U	0.01U	0.018
GE3-SW-03	Indian Creek, downstream of side channel	0.0002U	pending	0.0073	0.33	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-03-filtered		0.0002U	pending	0.0063	0.28	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-04	Side channel, upstream of Indian Creek	0.0002U	pending	0.0092	0.34	0.002U	0.001U	pending	0.001U	0.01U	0.0067
GE3-SW-04-filtered		0.0002U	pending	0.0083	0.29	0.002U	0.001U	pending	0.001U	0.01U	0.0092
GE3-SW-05	Indian Creek, downstream of seeps	0.0002U	pending	0.0073	0.34	0.002U	0.001U	pending	0.001U	0.01U	0.0051
GE3-SW-05-filtered		0.0002U	pending	0.0066	0.29	0.002U	0.001U	pending	0.001U	0.01U	0.0064
GE3-SW-07	Luther and Baker Gulches combined, upstream of site	0.0002U	pending	0.007	0.39	0.002U	0.001U	pending	0.001U	0.01U	0.0051
GE3-SW-07-filtered		0.0002U	pending	0.0062	0.35	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-08	Luther Gulch, upstream of Indian Creek	0.0002U	pending	0.0069	0.7	0.002U	0.001U	pending	0.001U	0.01U	0.0074
GE3-SW-08-filtered		0.0002U	pending	0.0075	**0.64**	0.002U	0.001U	pending	0.001U	0.01U	0.01
GE3-SW-09	Baker Gulch, downstream of infiltration gallery	0.0002U	pending	0.034	0.51	0.002U	0.001U	pending	0.001U	0.01U	0.0055
GE3-SW-09-filtered		0.0002U	pending	0.0063	0.35	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-10	Baker Gulch	0.0002U	pending	0.013	0.22	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-10-filtered		0.0002U	pending	0.012	0.22	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-11	Mine Infiltration Gallery	0.0002U	pending	0.023	**0.77**	0.002U	0.001U	pending	0.001U	0.01U	0.0061
GE3-SW-11-filtered		0.0002U	pending	0.022	0.48	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-12	Indian Creek Background Sample	0.0002U	pending	0.0068	0.28	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-12-filtered		0.0002U	pending	0.0062	0.27	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-20	Isolated wetands outflow from repository toes	0.0002U	pending	**0.15**	0.56	0.002U	0.001U	pending	0.001U	0.01U	**0.37**
GE3-SW-20-filtered		0.0002U	pending	**0.15**	0.55	0.002U	0.001U	pending	0.001U	0.01U	**0.37**
GE3-SW-21	Deer Lick Creek, downstream of decomissioned fire road	0.0002U	pending	0.002U	0.47	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-21-filtered		0.0002U	pending	0.0001	0.44	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-22	Deer Lick Creek, upstream of crossing of decomissioned fire	0.00016	pending	0.00029	0.49	0.002U	0.001U	pending	0.001U	0.01U	0.005U
GE3-SW-22-filtered		0.0002U	pending	0.00035	0.44	0.002U	0.001U	pending	0.001U	0.01U	0.007

Data Validation Pending

Notes:

mg/L = milligrams per liter

ug/L = micrograms per liter

CaCO3 = calcium carbonate

COPCs = contaminants of primary concern

TDS = total dissolved solids

COPCs = contaminants of primary concern

TDS = total dissolved solids

NA = not analyzed

pending - Change in laboraotory resulted in different standard reporting list. Results are pending but per direction of U.S. EPA, publication of report will not be delayed.

J = The reported result for this analyte should be considered an estimated value.

U = The reported result for this Analyte is not detected above the referenced laboratory detection limit of ##.

Bold - exceeds one or more screening levels or four times the background sample concentration

[1] U.S. EPA National Recommended Water Quality Standards values are Chronic Contaminant Concentrations for Freshwater 2009 update. Values noted with an asterisk (*) come from the North Coast Basin Plan Water Quality Objectives 2001 update using the Mid Klamath River Hydrologic Area for "Other Streams". When presented alone, these values are lower than the corresponding U.S. EPA standards. When presented in parentheses, these values are greater than the corresponding U.S. EPA standards.

[2] The water quality value for copper is based on 100 mg/L as CaCO3 and has not been modified by sample based on actual hardness results.

[3] The value for silver is based on Acute Contaminant Concentrations, as no Chronic value is provided.

Metals analyzed by EPA Method 200.7 and 245.1 (total metals) / EPA Method 200.8 and 245.1(dissolved metals)

Chloride and sulfate analyzed by EPA Method 300.0

Hardness analyzed as CaCO3 by EPA Method 2340B

Acidity analyzed by EPA Method 9040