Tables

TABLE 1 - SURFACE WATER ANALYTICAL RESULTS
AKERS MINE SITE INSPECTION

Sample ID	Date	Total Recoverable TAL Metals, µg/L																							
		Aluminum	Antimony	Arsenic 3	Arsenic 5	Arsenic	Barium	Beryllium	Cadium	Calcium	Chromium, Total	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Tallium	Vanadium	Zinc
Adit																										
AD-SFW-04	06/26/04	<32.8U	<3.4U	<2U	**6.1**	**13.2**	<5U	<0.3U	<0.6U	46,600	<1.1U	<1.7U	3.9B	<47.8U	<1.5U	4,960B	1B	<0.1U	<1.6U	2,250B	<3.2U	<2.1U	7,720	<3.8U	<1.6U	29.6
Stream Samples																										
ST-SFW-01	06/26/04	<32.8U	<3.4U	<2U	<2U	<3U	**28.6B**	<0.3U	<0.6U	22,800	<1.1U	<1.7U	<2.6U	<47.8U	<1.5U	6,060	5.2B	<0.1U	<1.6U	1,580B	<3.2U	<2.1U	4,470B	<3.8U	<1.6U	<1.8U
ST-SFW-02	06/25/04	59.8B	<3.4U	<2U	<2U	**3.5B**	**27.1B**	<0.3U	<0.6U	23,500	<1.1U	<1.7U	<2.6U	55.2B	**1.6B**	5,830	3.4B	<0.1U	<1.6U	1,530B	<3.2U	<2.1U	4,520B	<3.8U	<1.6U	11B
ST-SFW-03	06/25/04	<32.8U	<3.4U	<2U	<2U	**5.3B**	**25.3B**	<0.3U	<0.6U	24,900	<1.1U	<1.7U	<2.6U	<47.8U	<1.5U	5,820	3.4B	<0.1U	<1.6U	1,470B	<3.2U	<2.1U	4,600B	<3.8U	<1.6U	5.8B
Comparison Criteria																										
EPA - Ecological [1]		87	30	NA	3.1	150	4	0.66	1.1-1.7*	NA	86-150*	23	16-29*	1,000	1.0-2.1*	NA	120	0.77	68-120*	NA	5	0.36	NA	12	20	140-250*
EPA - Human Health [2]		NA	5.6	NA	NA	0.018	1000	NA	NA	NA	NA	NA	1,300	300	NA	NA	50	NA	610	NA	170	NA	NA	0.24	NA	7,400
ORNL PRG - Ecological [3]		87	30	190	3.1	NA	4	0.66	1.1	NA	11	23	12	1,000	3.2	NA	120	1.3	160	NA	0.39	0.36	NA	9	20	110
OR - Ecological [4]		87	1600	150	48	NA	4	5.3	1.2-2.0*	116,000	100-180*	23	16-29*	1,000	1.4-3.3*	82,000	120	0.012	69-124*	53,000	5	0.12	680,000	40	20	140-250*
OR - Human Health [5]		NA	146	NA	NA	0.0022	1000	0.0068	10	NA	50	NA	NA	300	50	NA	50	0.144	13.4	NA	10	50	NA	13	NA	NA

Sample ID	Date	Laboratory General Chemistry, mg/L										Field Parameters						
		Total Alkalinity	Alkalinity, Bicarbonate	Alkalinity, Carbonate	Alkalinity, Hydroxide	Hardness	Sulfate	Suspended Solids, Total	Suspended Solids, Volatile	Total Dissolved Solids	Total Organic Carbon	Temperature, °C	pH	Conductivity, mS	Dissolved Oxygen, mg/L	Oxygen Reduction Potential, mV	Turbidity, NTUs	Flow Rate cfs
Adit																		
AD-SFW-04	06/26/04	134	134	<1U	<1U	280	17.4	1.8	<5U	182	<1U	8.23	8.03	0.265	8.97	250.9	0.4	0.05
Stream Samples																		
ST-SFW-01	06/26/04	89.4	89.4	<1U	<1U	144	4.8	<0.56U	<5U	107	1.3	9.54	8.19	0.158	9.41	220.8	0.6	0.3
ST-SFW-02	06/25/04	90.7	90.7	<1U	<1U	152	5.5	4.8	<5U	114	2.3	11.46	8.36	0.143	9.39	240.6	1.7	0.4
ST-SFW-03	06/25/04	90.6	90.6	<1U	<1U	172	6.1	3.1	<5U	<5U	1.5	9.11	8.35	0.169	9.67	240.1	0.8	0.3
Comparison Criteria																		
EPA - Ecological [1]		NA	NA	NA	NA	>20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPA - Human Health [2]		NA	NA	NA	NA	NA	NA	NA	NA	250	NA	NA	NA	NA	NA	NA	NA	NA
ORNL PRG - Ecological [3]		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OR - Ecological [4]		NA	NA	NA	NA	NA	NA	NA	NA	500	NA	NA	NA	NA	NA	NA	NA	NA
OR - Human Health [5]		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes

- **Bold results indicate concentrations above the lowest applicable comparison criterion.**

* Hardness-based criteria for cadmium, chromium, copper, lead, nickel, and zinc were calculated for each sample. The range of calculated criteria is indicated.

< = Result is less than the reporting limit.
B = The result reported is less than the reporting limit but greater than the instrument detection limit.
NA = Not available.
U = Analyte was analyzed for but not detected above the reporting limit.

Units:

°C = Degrees celcius
cfs = Cubic feet per second
ft/sec = Feet per second
mg/L = Milligrams per liter
mS/cm = Millisiemens per centimeter
mV = Millivolts
ug/L = Micrograms per liter
NTU = Nephelometric turbidity units

Comparison Criteria:

(1) EPA Ecological - Criteria are the lowest of:
- USEPA (2002a) recommended ambient water quality criteria for freshwater aquatic organisms, chronic; if none were available, used Tier II secondary chronic values calculated by Oak Ridge National Laboratory (Suter & Tsao 1996).

(2) EPA Human Health - Criteria are the lowest of:
- USEPA (2002a) recommended ambient water quality criteria for protection of human consumption of fish
- USEPA (2003b) revised recommended ambient water quality criteria for protection of human consumption of fish

(3) ORNL PRGs - Oak Ridge National Laboratory Preliminary Remediation Goals for Ecological Endpoints (Efroymson et al 1997c) - lowest chronic value used.

(4) Oregon Ecological - Criteria are the lowest of:
- ODEQ (2004) Water Quality Criteria, Protection of Aquatic Life, Fresh Chronic Criteria (OAR 340-041-001) for dissolved forms.
- ODEQ (1998) Guidance for Ecological Risk Assessment, Level II Screening Values for surface water.

(5) Oregon Human Health - ODEQ (2004) Water Quality Criteria, Protection of Human Health, Water and Fish Ingestion (OAR-340-041-001).