Table 2. Above-Ground Tank Inventory

Location		Capacity (gallons)	Type Contents	Secondary Containment	Volume Remaining
1	Truck Shop (inside)	500	Used oil	Unknown	None
2	North of Truck Shop (outside)	1,800	Used Oil	Yes	None
3	North End of Truck Shop	~5,000	Oil	Yes	None
4	North End of Truck Shop	~5,000	Oil	Yes	None
5	North End of Truck Shop	3,000	Oil	Yes	None
6	Filling Station #1	10,000	Diesel	Yes	None
7	Filling Station #1	1,000	Gasoline	No	None
8	Acid Tanks	5,000	Sulfuric acid	Yes	None
9	Acid Tanks	5,000	Sulfuric acid	Yes	None
10	Acid Tanks	50,000	Sulfuric acid	Yes	None
11	Acid Tanks	5,000	Sulfuric acid	No	None

Table 3. Analysis Methods and Detection Limits for Soil

Analysis	Method / Procedure	Detection Limit
Static Acid-Base Accounting (ABA), with reporting for acid potential (AP), neutralization potential (NP), net neutralization potential (NNP), and ratios for NP/AP.	BC-Acid Rock Drainage Prediction Manual, 6.2-11 Modified ABA or As referenced.	NA
pH	SW 9045 EPA 150.1	1.0 pH units
Specific conductivity	SM 2510B	1.0 umhos/cm
Gasoline and Diesel Range Organics (GRO/DRO) and Total Petroleum Hydrocarbons (TPH)	EPA Method 8015B modified full range	Diesel- 10 mg/kg Gasoline- 10 mg/kg Oil- 50 mg/kg
Volatile Organic Compounds (VOC)	EPA Method 8260B	20 to 40 µg/kg *
Semi-volatile Organic Compounds (SVOC)	EPA Method 8270C	660 to 13,000 µg/kg *
Polychorinated Biphenyls (PCB)	EPA Method 8082	33 µg/kg *
Organochlorine Pesticides (OP)	EPA Method 8081A	Depends on compound *
Chlorinated Herbicides (CH)	EPA Method 8151A	Depends on compound *
RADIONUCLIDES		
Uranium	EPA Method SW – 6020	0.1 pCi/g-dry
Radium 226	EPA Method E903.0	1.4 pCi/g-dry
Radium 228	EPA Method E904.0	0.8 pCi/g-dry
METALS/INORGANICS- WHOLE ROCK ANALYSIS		
Aluminum	SW – 846 6010B	0.05 mg/kg
Antimony	SW – 846 6020	1 mg/kg
Arsenic	SW – 846 6020	1 mg/kg
Barium	SW – 846 6020	1 mg/kg
Beryllium	SW – 846 6010B	0.1 mg/kg
Boron	SW – 846 6010B	0.05 mg/kg
Cadmium	SW – 846 6020	1 mg/kg
Calcium	SW – 846 6010B	0.1 mg/kg
Chromium	SW – 846 6020	1 mg/kg
Cobalt	SW – 846 6020	1 mg/kg
Copper	SW – 846 6020	1 mg/kg
Iron	SW – 846 6010B	0.05 mg/kg
Lead	SW – 846 6020	1 mg/kg
Magnesium	SW – 846 6010B	0.1 mg/kg
Manganese	SW – 846 6020	1 mg/kg
Mercury	SW - 846 7471	0.05 mg/kg
Molybdenum	SW – 846 6020	1 mg/kg
Nickel	SW – 846 6020	1 mg/kg
Potassium	SW – 846 6010B	0.5 mg/kg
Selenium	SW – 846 6020	1 mg/kg
Silver	SW – 846 6020	1 mg/kg
Sodium	SW – 846 6010B	0.1 mg/kg
Thallium	SW – 846 6020	1 mg/kg
Vanadium	SW – 846 6020	1 mg/kg
Zinc	SW – 846 6020	10 mg/kg

ASTM= American Society for Testing and Materials
EPA= Environmental Protection Agency
SM= Standard Methods
NA= Not applicable

* Refer to Appendix C

Table 4. Analysis Methods and Detection Limits for Water

Parameter or Analyte	Phase	Method	Detection Limit	Units
Alkalinity Total	Total	SM 2320 B	1.0	mg/l (as $CaCO_3$)
Alkalinity/Bicarbonate	Total	SM 2320 B	1.0	mg/l (as $CaCO_3$)
Alkalinity/Carbonate	Total	SM 2320 B	1.0	mg/l (as $CaCO_3$)
Alkalinity/Hydroxide	Total	SM 2320 B	1.0	mg/l (as $CaCO_3$)
Aluminum – ICP-OES	Total & Dissolved	EPA 200.7	0.05	mg/l
Antimony – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Arsenic – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Barium – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Beryllium – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Boron – ICP-OES	Total & Dissolved	EPA 200.7	0.01	mg/l
Cadmium – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Calcium – ICP-OES	Total & Dissolved	EPA 200.7	0.1	mg/l
Chloride – Ion Chromatography	Total	EPA 300.0	0.5	mg/l
Chromium – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Cobalt – ICP-MS	Total & Dissolved	EPA 200.8	0.0005	mg/l
Copper – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Fluoride - Ion Chromatography	Total	EPA 300.0	0.1	mg/l
Iron – ICP-OES	Total & Dissolved	EPA 200.7	0.05	mg/l
Lead – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Magnesium – ICP-OES	Total & Dissolved	EPA 200.7	0.1	mg/l
Manganese – ICP-MS	Total & Dissolved	EPA 200.8	0.0005	mg/l
Mercury – AA Cold Vapor	Total & Dissolved	EPA 245.1	0.0002	mg/l
Molybdenum -ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Nickel – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Potassium – ICP-OES	Total & Dissolved	EPA 200.7	0.5	mg/l
Selenium – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Silver – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Sodium – ICP-OES	Total & Dissolved	EPA 200.7	0.1	mg/l
Thallium – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Vanadium – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Zinc – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Sulfate – Ion Chromatography	Total	EPA 300.0	0.2	mg/l
Nitrate – N- Ion Chromatography	Total	EPA 300.0	0.05	mg/l N
Hardness, as CaCO3	Total	EPA 130.2 (SM 2340 C)	0.1	mg/l (as CaCO3)
pH	Total	EPA 150.1 (SM 4500 H+B)	1	pH Units
pH - Temperature	Total	EPA 150.1 (SM 4500 H+B)	--	°C
Suspended Solids	Total	EPA 160.2 (SM 2540 D)	5	mg/l
Total Dissolved Solids	Total	EPA 160.1 (SM 2540 C)	10	mg/l
Total Petroleum Hydrocarbons	Total	EPA 8015B	0.1	mg/l
Turbidity	Total	EPA 180.1 (SM 2130 B)	0.1	NTU
Volatile Organic Compounds	Total	EPA 8260B	0.001 to 0.003 *	mg/l
Semi-Volatile Organic Compounds	Total	EPA SW8270C	0.01 to 0.2 *	mg/l
Poly-chlorinated Biphenyls (PCB)	Total	EPA 608/SW8082	0.001 *	mg/l
Chlorinated Herbicides	Total	EPA 615/SW8151A	0.001 to 0.2 *	mg/l
Organo-Pesticides	Total	EPA 608/SW8081A	0.00005 to 0.005 *	mg/l
Uranium	Total	EPA E908.0	0.001	mg/l
Radium 226	Total	EPA E903.0	0.2	pCi/L
Radium 228	Total	EPA E904.0	1	pCi/L

* Refer to Appendix C

Table 5: Proposed Analytical Trigger Levels for the Process Areas[3]

Analyte	Region 9 Industrial PRGs (mg/kg)	Comparison to EPA Background Sample Values (BK-1) (mg/kg)
Aluminum	100,000	5,300
Antimony	410	not available
Arsenic	100[1, 2]	not available
Barium	67,000	not available
Beryllium	1,900[2]	not available
Boron	100,000	not available
Cadmium	450	0.47
Calcium	not available	not available
Chromium (total chromium)	450[2]	not available
Cobalt	1,900[2]	2.8
Copper	41,000	42
Iron	100,000	5,300
Lead	750	2.4
Magnesium	not available	2,500
Manganese	19,000	140
Mercury	310	not detected
Molybdenum	5,100	not available
Nickel	20,000	6.3
Potassium	not available	not detected
Selenium	5,100	not available
Silver	5,100	not available
Sodium	not available	not available
Thallium	67	not available
Vanadium	7,200	not available
Zinc	100,000	not available

1 Upper limit of background values for arsenic from Shacklette and Boerngen (1984)
2 Cancer end-point values (arsenic is the only COC with both cancer and non-cancer end-points)
3 Analytical trigger levels for uranium, radium 226, and radium 228 will be determined based on future assessment of background values at the mine site for these constituents.