TABLES

SECTION 2

637160

TABLE 2-1
BALLARD MINE WASTE ROCK DUMP AND MINE PIT AREAS AND VOLUMES

Waste Rock Dump/ Mine Pit	Net Fill (cu. yd.)	Net Cut (cu. yd.)	2D Area(1) (sq. ft.)	3D Area(2) (sq. ft.)
MWD080	4,990,000	---	3,520,000	3,670,000
MWD081	3,920,000	---	2,060,000	2,180,000
MWD082	3,040,000	---	3,170,000	3,330,000
MWD083	608,000	---	727,000	760,000
MWD084	1,140,000	---	1,270,000	1,320,000
MWD093	5,060,000	---	2,860,000	3,030,000
MMP035	---	13,200,000	4,030,000	4,730,000
MMP036	---	5,850,000	2,680,000	2,970,000
MMP037	---	2,660,000	1,020,000	1,150,000
MMP038	---	21,800	56,200	60,200
MMP039	---	844,000	1,030,000	1,100,000
MMP040	---	1,230,000	905,000	982,000
TOTAL	**18,800,000**	**23,800,000**	**23,300,000**	**25,300,000**
Acres:			**534**	**581**

Notes:
Calculated areas and volumes have been rounded to three significant figures.
(1) - 2D area is the area in a horizontal map view.
(2) - 3D area is the surface area that accounts for topography.
--- = not applicable

TABLE 2-2
HENRY MINE WASTE ROCK DUMP AND MINE PIT AREAS AND VOLUMES

Waste Rock Dump/ Mine Pit	Net Fill[1] (cu. yd.)	Net Cut[2] (cu. yd.)	2D Area[3] (sq. ft.)	3D Area[4] (sq. ft.)
MWD085	2,500,000	---	2,850,000	2,890,000
MWD086	11,200,000	---	12,100,000	12,400,000
MWD087	6,570,000	---	3,760,000	3,870,000
MWD088	3,650,000	---	3,190,000	3,260,000
MWD090	8,390,000	---	4,340,000	4,480,000
MMP041[5]	---	6,500,000	4,230,000	4,900,000
MMP042	---	837,000	1,640,000	1,700,000
MMP043	---	11,500,000	6,140,000	6,610,000
MMP044[5]	---	13,600,000	3,960,000	4,640,000
TOTAL	**32,300,000**	**32,400,000**	**42,200,000**	**44,800,000**
Acres:			**969**	**1,030**

Notes:
Calculated areas and volumes have been rounded to three significant figures.
(1) - Fill volumes and areas are for the external waste rock dumps; the portion of the dump within mine pit boundaries is not included.
(2) - Net cut volume is from below original grade and does not include backfilled volume of the mine pits.
(3) - 2D area is the area in a horizontal map view.
(4) - 3D area is the surface area that accounts of the topography.
(5) - Pits MMP041and MMP044 contain un-backfilled volume.
--- = not applicable

TABLE 2-3
ENOCH VALLEY MINE WASTE ROCK DUMP AND MINE PIT AREAS AND VOLUMES

Waste Rock Dump/ Mine Pit	Net Fill(1) (cu. yd.)	Net Cut (cu. yd.)	2D Area(2) (sq. ft.)	3D Area(3) (sq. ft.)
MWD091	8,130,000	---	8,910,000(4)	10,500,000(4)
MWD092	14,100,000	---	10,600,000	10,800,000
MMP045(5)	---	8,500,000	2,200,000	2,600,000
MMP045(6)	---	3,380,000	--	--
TOTAL	**22,200,000**	**11,900,000**	**21,700,000**	**23,900,000**
Acres:			**498**	**549**

Notes:
Calculated areas and volumes have been rounded to three significant figures.
(1) - Fill volume is for the external waste rock dumps; the portion of the dumps within mine pit boundaries is not included.
(2) - 2D area is the area in a horizontal map view.
(3) - 3D area is the surface area that accounts of the topography.
(4) - Includes external waste rock dumps and backfill areas.
(5) - Un-backfilled portion of mine pit
(1) (6) - Net cut volume above backfill, below original grade, and does not include backfilled volume.
--- = not applicable

TABLE 2-4 ENOCH VALLEY WEATHER STATION CLIMATE DATA[a]													
	Jan	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual**
Avg. Monthly Precipitation (in.)	2.34	1.99	1.51	1.58	2.26	1.70	0.51	1.04	1.30	1.65	1.36	1.75	19.0
Avg. Monthly Min. Temperature (ºF)	-12.9	-11.4	-7.30	6.97	20.4	26.7	34.3	32.5	22.7	11.8	1.98	-13.7	9.34
Avg. Monthly Temperature (ºF)	16.0	19.2	26.3	34.9	46.0	54.4	64.8	60.2	49.3	38.1	28.5	19.8	38.1
Avg. Monthly Max. Temperature (ºF)	41.8	44.5	52.4	64.8	74.0	81.4	89.1	86.9	81.3	68.4	55.3	43.9	65.3

Notes:
a - Data is derived from the Enoch Valley Mine weather station climate readings compiled from 1997-2000 and 2005-2008.

TABLE 2-5 ESTIMATED AVERAGE PRECIPITATION AND TEMPERATURE AT BLACKFOOT BRIDGE[a]													
	Jan	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual**
Avg. Monthly Precipitation (in.)	1.24	1.25	1.40	1.51	2.38	1.63	1.17	1.35	1.43	1.40	1.22	1.19	17.2
Avg. Monthly Min. Temperature (ºF)	14.3	17.5	24.5	33.1	40.5	46.6	50.8	49.9	43.3	33.3	23.3	16.3	32.8
Avg. Monthly Temperature (ºF)	16.4	17.6	26.3	33.0	41.0	49.1	59.6	55.3	45.1	35.4	25.2	22.7	35.5
Avg. Monthly Max. Temperature (ºF)	25.2	29.5	38.7	49.8	60.8	71.3	79.8	79.3	69.3	53.8	38.5	28.1	52.0

Notes:
a - Data is derived from climate readings taken at 13 area weather stations, as described in BLM (2009)

TABLE 2-6 BALLARD MINE SURFACE WATER DISCHARGES				
P4 Monitoring Location**	**Annual Runoff Discharge* (cfs)**		**Annual Baseflow Discharge* (cfs)**	
	2007	**2008**	**2007**	**2008**
Ballard Creek				
MST066	0.064	0	0	dry
MST067	0	0.034	dry	dry
Wooley Valley Creek				
MST088	dry	2.6	dry	dry
MST089	0.026	0.26	dry	dry
MST090	0.054	0.071	dry	dry

Notes:
cfs = cubic feet per second
dry = no water present
0 = water present but there was no observed flow or flow was so small as not to be measurable with standard equipment.
* - Runoff measurement are typically in May and baseflow measurements typically in September.
** - Monitoring locations shown on Drawing 2-4

TABLE 2-7 HENRY MINE SURFACE WATER DISCHARGES				
P4 Monitoring Location**	**Annual Runoff Discharge* (cfs)**		**Annual Baseflow Discharge* (cfs)**	
	2007	**2008**	**2007**	**2008**
Little Blackfoot River				
MST044	2.5	4.8	1.5	0.59
MST045	2.2	6.5	1.5	0.80
MST234	10	12	7.0	7.6
Lone Pine Creek				
MST054	0.37	0.95	0.13	0.26
Long Valley Creek				
MST050	0	0.0013	0	0
MST277	0	0	dry	dry

Notes:
cfs = cubic feet per second
dry = no water present
0 = water present but there was no observed flow or flow was so small as not to be measurable with standard equipment.
* - Runoff measurement are typically in May and baseflow measurements typically in September.
** - Monitoring locations shown on Drawing 2-4

TABLE 2-8 ENOCH VALLEY MINE SURFACE WATER DISCHARGES				
P4 Monitoring Location**	Annual Runoff Discharge* (cfs)		Annual Baseflow Discharge* (cfs)	
	2007	2008	2007	2008
Angus Creek				
MST127	4.7	9.1	0.11	0.37
MST128	3.7	7.8	0.34	0.33
MST129	2.2	5.1	0.99	0
MST132	4.1	8.6	0.39	0.20
Rasmussen Creek				
MST131	0.87	1.8	0.044	0.29
MST133	0.19	1.5	dry	dry
MST134	0	3.2	dry	dry
MST135	0	0.59	dry	dry
MST136	dry	0.0020	dry	dry

Notes:
cfs = cubic feet per second
dry = no water present
0 = water present but there was no observed flow or flow was so small as not to be measurable with standard equipment.
* - Runoff measurement are typically in May and baseflow measurements typically in September.
** - Monitoring locations shown on Drawing 2-4

TABLE 2-9 BLACKFOOT RIVER DISCHARGES				
P4 Monitoring Location**	Annual Runoff Discharge* (cfs)		Annual Baseflow Discharge* (cfs)	
	2007	2008	2007	2008
MST019	82	465	22	37
MST020	100	-	23	31
MST022	88	-	25	42
MST023	180	-	29	37
MST026	84	603	28	47
MST027	136	315	27	50
MST028	120	261	25	31
MST232	106	-	31	41

Notes:
(-) Flow measurement not collected because river was not safe to enter.
* - Runoff measurement are typically in May and baseflow measurements typically in September.
** - Monitoring locations shown on Drawing 2-4

TABLE 2-10 MINE AREA PONDS						
Pond	**Mine**	**Site ID**	**Approx. Area (acres)**	**Perennial**	**Potential Overflow Location**	**Use/Features**
Dredge Pond	Ballard	MSP010	<0.10	No	Closed basin.	Adjacent to paved haul road, supports some willows.
Upper Elk Pond	Ballard	MSP011	0.17	No	Tributary to Blackfoot River	Supports many willows, below waste rock.
Lower Elk Pond	Ballard	MSP012	0.14	No	Tributary to Blackfoot River	Supports many willows, below waste rock.
NE Pond	Ballard	MSP013	<0.10	No	Tributary to Wooley Valley Creek	In grassy area below waste rock, shallow, quick to dry.
Henry Pond	Henry	MSP014	5.80	Yes	Tributary to Lone Pine Creek	No riparian vegetation.
Smith Pond	Henry	MSP015	1.28	No	Tributary to Little Blackfoot River	Adjacent to Henry haul road, supports some willows, used by livestock.
Center Pond	Henry	MSP016	0.71	Yes	Tributary to Little Blackfoot River	Large, below waste rock, supports few willows.
South Pond	Enoch Valley	MSP017	2.69	Yes	South Pond extension then tributary to Angus Creek (Outfall 5[1])	Large, supports riparian grasses and many willows.
Keyhole Pond	Enoch Valley	MSP018	<0.10	Yes	South Pond (MSP017)	Small, below reclaimed waste rock, supports riparian grasses and willows.
Bat Cave Pond	Enoch Valley	MSP019	0.29	Yes	South Pond (MSP017)	On reclaimed pit backfill and lined with bentonite, supports some riparian grasses.
West Pond	Enoch Valley	MSP020	3.99	No	Smaller secondary ponds then Rasmussen Creek (Outfall 4[1])	Large, borders native land and reclaimed waste rock, supports some willows.

TABLE 2-10 (continued) MINE AREA PONDS						
Pond	**Mine**	**Site ID**	**Approx. Area (acres)**	**Perennial**	**Potential Overflow Location**	**Use/Features**
Stock Pond	Enoch Valley	MSP021	1.62	Yes	Bat Cave Pond (MSP019)	Used for road dust control water, on reclaimed waste rock, supports some willows.
Tipple Pond(2)	Enoch Valley	MSP022	0.36	Yes	Tipple pond series(3) then possibly to Rasmussen Creek headwater (Outfall 3(1))	Used for road dust control water, small, no riparian vegetation.
Office Pond(4)	Enoch Valley	MSP023	0.64	No	Rasmussen Creek headwater(5) (Outfall 3(1))	Facilities stock pond, small, some riparian vegetation.
Shop Pond	Enoch Valley	MSP031	0.30	No	Pumped to Tipple Pond, possibly Rasmussen Creek headwater (Outfall 2(1))	Supports some willows, many riparian grasses, has supported nesting Sandhill Cranes.
South Pit Pond	Henry	MSP055	0.12	No	Closed basin	Open pit pond, small, no riparian vegetation.
Pit #4 Stock Pond	Ballard	MSP059	<0.10	No	Closed basin	Small un-backfilled pit pond, supports many willows.
Pit #6 Pond	Ballard	MSP062	0.21	No	Closed basin	Small, in partially backfilled pit, supports many willows.

Notes:
(1) Enoch Valley SWPPP outfall.
(2) Uppermost of a four pond stormwater system. The other ponds generally do not contain water except during runoff or large storm events.
(3) The Tipple Pond listed here is the first in a series of four stormwater ponds. The other three ponds in the series are smaller and typically go dry. Tipple pond is currently managed by flow to the other ponds in series, excess water is pumping back to first pond (MSP022), to Enoch Valley mine pit, or used for dust control.
(4) The Office Pond was formerly identified as the Haul Road Pond; however, the designation MSP023 has not changed.
(5) Water flow that historically went to the Office Pond (MSP023) was diverted to the Tipple Pond (MSP022) and as a result, MSP023 rarely contains water.

TABLE 2-11
GENERALIZED STRATIGRAPHY OF THE PROJECT AREA [1]

	AGE	FORMATION	MEMBERS	GENERAL DESCRIPTION	HYDROGEOLOGIC CHARACTERISTICS [2]
CENOZOIC	Quaternary	ALLUVIUM (Qal and Qw)	--	Alluvium or colluvium.	Supports local groundwater flow system.
CENOZOIC	Quaternary/ Tertiary	BASALT (Qb)	--	Basalt flows, basalt ash.	Can support intermediate groundwater flow system where fractured, but generally supports local systems.
MESOZOIC	Triassic	THAYNES (Ŧt)	Several Members	Mostly limestone with sandstone layers. Some siltstone and shale members.	Supports intermediate groundwater flow system.
MESOZOIC	Triassic	DINWOODY FM (Ŧd)	Upper Unit	Gray, fossiliferous limestone interbedded with olive-brown calcareous siltstone.	Supports intermediate groundwater flow system.
MESOZOIC	Triassic	DINWOODY FM (Ŧd)	Woodside Shale	Reddish-brown siltstone and shale. Discontinuous in program area.	Does not support groundwater flow system.
MESOZOIC	Triassic	DINWOODY FM (Ŧd)	Lower Unit	Olive-brown calcareous siltstone and shale with thin-bedded limestone.	Supports intermediate groundwater flow system.
PALEOZOIC	Permian	PHOSPHORIA FM (Pp)	Retort Phosphatic Shale	Phosphatic shale. Discontinuous in area of Sites.	Does not support groundwater flow system. Low hydraulic conductivity layer.
PALEOZOIC	Permian	PHOSPHORIA FM (Pp)	Cherty Shale	Thin-bedded dark-brown to black cherty mudstone, siliceous shale and argillaceous chert.	Does not support groundwater flow system. Low hydraulic conductivity layer.
PALEOZOIC	Permian	PHOSPHORIA FM (Pp)	Rex Chert	Thick-bedded black to white chert with some mudstone and some limestone lenses.	May support isolated groundwater flow where highly fractured in areas.
PALEOZOIC	Permian	PHOSPHORIA FM (Pp)	Meade Peak Phosphatic Shale (Ppm)	Dark-brown to black mudstone, limestone and phosphorite. Meade Peak member is typically mined.	Does not support groundwater flow system. Low hydraulic conductivity layer.
PALEOZOIC	Permian/ Pennsylvanian	PARK CITY FM [3]	Grandeur Limestone	Light gray dolomite and cherty dolomite with some sandstone. Discontinuous in area of Sites. Mapped with Wells Fm.	May support a flow system, but is not present throughout the Sites. It appears to be present at Ballard, but not Henry or Enoch Valley.
PALEOZOIC	Permian/ Pennsylvanian	WELLS FM (ℙw)	Upper Unit (ℙwu)	Light gray to reddish-brown sandstone, some interbedded limestone and dolomite.	Supports groundwater flow systems, which may be regional.
PALEOZOIC	Permian/ Pennsylvanian	WELLS FM (ℙw)	Lower Unit (ℙl)	Medium bedded gray cherty limestone, some interbedded sandstone.	Supports groundwater flow systems, which may be regional.
PALEOZOIC	Mississippian	BRAZER OR MONROE CANYON FM (Mb)	Brazer Limestone	Light gray limestone with interbedded sandstone, occasionally with grey and green shale. Not exposed or intersected by drilling in the area of the sites.	--

Notes:
1. Stratigraphy based on Ralston, et al., 1980 and Ralston, et al., 1983.
2. Notes on hydrologic characteristics are based on several sources of information. Information not available for all units.
3. Often mapped as part of the Wells Formation.

TABLE 2-12 AGE, SEX, AND RACIAL DISTRIBUTION IN 2000										
Age (years)	**> 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65+**
	252	256	316	316	225	368	511	409	270	458
Gender	**Female**	**Male**								
	1,732	1,649								
Race or Ethnicity	**White**	**Black or African American**	**Native American or Native Alaskan**	**Asian**	**Native Hawaiian or Other Pacific Islander**	**Other**	**Two or More Races**	**Hispanic or Latino[a]**		
	3,267	1	3	5	7	40	58	98		
Total Population	3,381									

Notes:
[a] Hispanic or Latino persons may be of any race and are considered an ethnic group rather than a racial group.
Source: U. S. Census, 2000

TABLE 2-13 EMPLOYMENT DISTRIBUTION BY ECONOMIC SECTOR IN 2000															
Total Labor Force	**Agriculture, Forestry, Fishing and Hunting, or Mining**	**Construction**	**Manufacturing**	**Wholesale Trade**	**Retail Trade**	**Transportation and Warehousing, and Utilities**	**Information**	**Finance, Insurance, Real Estate, Rental and Leasing**	**Professional, Scientific, Management, Administrative, and Waste Management Services**	**Educational, Health, and Social Services**	**Arts, Entertainment, Recreation, Accommodation and Food Services**	**Other Services**	**Public Administration**	**Unemployed**	**Population 16 Years and Older**
1,429	128	204	294	20	132	37	4	26	45	241	109	59	40	90	2,422

Source: U.S. Census, 2000

TABLE 2-14
PRE-2003 AOC SAMPLING SUMMARY

	Surface Water	Groundwater	Surface-Expressed Groundwater	Sediment	Salmonids	Forage Fish	Benthic Macroinvertebrates	Macrophytes	Periphyton	Plankton	Riparian Soil	Riparian Vegetation	Upland Soil	Upland Vegetation	Cattle	Bird Eggs	Elk	Small Mammals	Terrestrial Invertebrates
September 1997	6	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 1998	18	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 1998	-	-	-	-	-	-	-	-	-	-	-	-	5	10	-	-	-	-	-
September 1998	18	1	1	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	160	-	-
May 1999	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	215	-	-	-
June 1999	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 1999	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 1999	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 1999	35	-	-	33	15	11	21	20	7	10	-	22	-	-	-	-	-	-	-
October 1999	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 1999	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December 1999	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54	-	-
January 2000	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February 2000	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2000	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2000	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2000	36	-	2	1	9	17	23	19	8	10	-	-	-	-	-	334	-	-	-
July 2000	-	-	-	-	-	-	-	-	-	-	-	-	133	83	-	-	-	-	-
May 2001	54	-	19	-	-	-	-	-	-	-	-	-	8	-	-	369	-	-	-
August 2001	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-
August-September 2001	-	-	-	-	-	-	-	-	-	-	-	-	10	6	-	-	-	-	-
September 2001	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	15	18
May 2002	54	-	32	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2002	6	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2002	23	-	25	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November 2002	4	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
January 2003	5	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2003	5	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April 2003	7	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2003	7	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2003	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July 2003	6	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes: The total numbers of stations sampled per sampling event are provided.

TABLE 2-15
POST-2003 AOC SAMPLING SUMMARY

	Surface Water	Groundwater	Surface-Expressed Groundwater	Direct Push Shallow Ground Water	Direct Push Shallow Ground Water (MBWs)	Sediment	Salmonids	Forage Fish	Benthic Macroinvertebrates	Macrophytes	Periphyton	Plankton	Riparian Soil	Riparian Vegetation	Upland Soil	Upland Vegetation	Cattle	Bird Eggs	Elk	Small Mammals	Terrestrial Invertebrates
May 2004	55	19	44	-	-	99	5	31	-	-	-	-	-	3	-	3	-	-	-	-	-
June 2004	-	-	-	-	-	-	-	-	66	-	-	-	-	3	-	3	-	-	-	-	-
July 2004	-	-	-	-	-	-	-	-	-	-	-	-	-	3	138	133	-	-	-	-	-
August 2004	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3	-	-	-	-	-
September 2004	-	5	17	-	-	-	-	-	-	-	-	-	113	113	-	3	-	-	-	-	-
October 2004	-	9	-	-	-	-	-	-	-	-	-	-	-	3	-	3	-	-	-	-	-
June 2005	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
October 2005	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2006	40	6	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2007	38	-	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2007	28	20	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2008	38	32	41	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2008	29	30	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May 2009	22	24	12	23	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June-July 2009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	226	428	-	-	-	-	-
August 2009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	-	-	-	-	-
September 2009	4	9	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes: The total numbers of stations sampled per sampling event are provided.

TABLE 2-16
SUMMARY OF ANALYTICAL PARAMETERS BY MEDIUM

	Surface Water		Groundwater		Surface-Expressed Groundwater		Direct Push Shallow Groundwater		Direct Push Shallow Groundwater (MBWs)		Sediment	Salmonids	Forage Fish	Benthic Macroinvertebrates	Macrophytes	Periphyton	Plankton	Riparian Soil	Riparian Vegetation	Upland Soil	Upland Vegetation	Cattle	Bird Eggs	Elk	Small Mammals	Terrestrial Invertebrates
	T	D	T	D	T	D	T	D	T	D																
Aluminum	L	L	L	M	L	L	N	N	A	N	N	N	N	N	N	N	N	M	L	L	L	N	N	N	A	A
Antimony	N	L	L	L	L	L	N	N	N	N	N	N	N	N	N	N	N	M	L	L	L	N	N	N	A	A
Arsenic	N	L	L	L	L	L	N	N	N	N	N	N	N	N	N	N	N	M	L	L	L	N	N	N	A	A
Barium	N	L	L	L	L	L	N	N	N	N	N	N	N	N	N	N	N	M	L	L	L	N	N	N	A	A
Beryllium	N	L	L	L	L	L	N	N	N	N	N	N	N	N	N	N	N	M	L	L	L	N	N	N	A	A
Boron	N	N	L	L	L	L	N	N	N	N	N	N	N	N	N	N	N	N	L	L	L	N	N	N	A	A
Cadmium	L	M	M	M	L	M	N	N	A	N	A	A	A	M	A	A	A	A	L	M	M	A	A	A	A	A
Calcium	L	M	M	M	L	M	N	N	N	A	M	N	N	N	N	N	N	N	N	M	N	A	N	N	N	N
Chloride	N	M	N	A	N	M	N	N	N	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Chromium	L	L	M	M	L	L	N	N	A	N	M	N	N	N	N	N	N	A	L	M	L	N	N	N	A	A
Cobalt	N	L	L	L	L	L	N	N	N	N	L	N	N	N	N	N	N	N	N	N	L	N	N	N	N	N
Copper	N	L	L	L	L	L	N	N	N	N	L	N	N	N	N	N	N	A	L	M	L	A	N	M	A	A
Fluoride	N	N	L	N	L	L	N	N	N	N	N	N	N	N	N	N	N	N	N	L	N	N	N	N	N	N
Gross Alpha	N	N	L	N	L	N	N	N	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Gross Beta	N	N	L	N	L	N	N	N	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Iron	N	L	M	M	L	L	N	N	A	A	M	N	N	N	N	N	N	N	L	M	L	A	N	M	N	N
Lead	N	L	L	L	L	L	N	N	N	N	N	N	N	N	N	N	N	M	L	L	L	A	N	M	A	A
Magnesium	L	M	L	M	L	M	N	N	N	A	M	N	N	N	N	N	N	N	N	L	N	A	N	N	N	N
Manganese	L	L	M	M	L	L	N	N	A	N	L	N	N	N	N	N	N	M	N	A	L	A	N	M	A	A

TABLE 2-16
SUMMARY OF ANALYTICAL PARAMETERS BY MEDIUM

	Surface Water		Groundwater		Surface-Expressed Groundwater		Direct Push Shallow Groundwater		Direct Push Shallow Groundwater (MBWs)		Sediment	Salmonids	Forage Fish	Benthic Macroinvertebrates	Macrophytes	Periphyton	Plankton	Riparian Soil	Riparian Vegetation	Upland Soil	Upland Vegetation	Cattle	Bird Eggs	Elk	Small Mammals	Terrestrial Invertebrates
	T	D	T	D	T	D	T	D	T	D																
Mercury	N	L	L	L	L	L	N	N	N	N	N	N	N	N	N	N	N	M	L	L	L	N	N	N	A	A
Molybdenum	N	L	L	L	L	L	N	N	N	N	N	N	N	N	N	N	N	M	L	M	L	A	N	M	A	A
Nickel	L	M	M	M	L	M	N	N	A	N	M	L	L	N	N	N	N	N	N	A	L	N	N	N	A	A
NO_2/NO_3 as N	N	N	M	N	L	N	N	N	A	N	N	N	N	N	N	N	N	N	N	L	N	N	N	N	N	N
N Kjeldahl	L	N	L	N	L	N	N	N	N	N	N	N	N	N	N	N	N	N	N	L	N	N	N	N	N	N
Phosphorus	N	N	L	N	L	N	N	N	N	N	N	N	N	N	N	N	N	N	N	L	N	A	N	N	N	N
Phosphorus (ortho)	N	N	N	N	N	L	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Potassium	L	M	L	M	L	M	N	N	N	A	M	N	N	N	N	N	N	N	N	M	N	N	N	N	N	N
Selenium	A	N	M	M	A	L	N	A	A	N	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Selenium (extractable)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	L	N	N	N	N	N	N
Selenium (selenite)	N	N	N	L	N	L	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Selenium (selenate)	N	N	N	L	N	L	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Silver	N	L	L	L	L	L	N	N	N	N	N	N	N	N	N	N	N	M	L	L	L	N	N	N	A	A
Sodium	L	M	L	M	L	M	N	N	N	A	M	N	N	N	N	N	N	M	N	M	N	N	N	N	N	N
Sulfate	N	M	N	A	L	N	N	N	N	A	M	N	N	N	N	N	N	N	N	L	L	N	N	N	N	N
TDS	L	N	M	N	L	N	N	N	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Thallium	N	L	L	L	L	L	N	N	N	N	N	N	N	N	N	N	N	M	L	M	L	N	N	N	A	A
TOC	N	N	L	N	L	N	N	N	N	N	A	N	N	N	N	N	N	N	N	L	N	N	N	N	N	N
Total Alk.	M	N	N	A	M	N	N	N	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

TABLE 2-16
SUMMARY OF ANALYTICAL PARAMETERS BY MEDIUM

	Surface Water		Groundwater		Surface-Expressed Groundwater		Direct Push Shallow Groundwater		Direct Push Shallow Groundwater (MBWs)		Sediment	Salmonids	Forage Fish	Benthic Macroinvertebrates	Macrophytes	Periphyton	Plankton	Riparian Soil	Riparian Vegetation	Upland Soil	Upland Vegetation	Cattle	Bird Eggs	Elk	Small Mammals	Terrestrial Invertebrates
	T	D	T	D	T	D	T	D	T	D																
TSS	L	N	M	N	L	N	N	N	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Uranium	N	L	L	L	L	L	N	N	N	N	N	N	N	N	N	N	N	N	N	L	L	N	N	N	A	A
Vanadium	L	M	M	M	L	M	N	N	A	N	M	L	L	N	N	N	N	N	L	A	L	N	N	N	A	A
Zinc	L	M	M	M	L	M	N	N	A	N	M	L	L	N	N	N	N	N	L	A	M	A	N	M	A	A

Notes:
T - Total Fraction
D - Dissolved Fraction
A - Constituent was analyzed for in all events the medium was sampled
M - Constituent was analyzed for in most events the medium was sampled (≥ one-half)
L - Constituent was analyzed for in limited events the medium was sampled (< one-half)
N - Never sampled for in this medium

TABLE 2-17 SUMMARY OF EE/CA MONITORING WELLS				
Monitoring Well	**Mine**	**Year Installed**	**System Monitored**	**Notes**
MMW006	Ballard	2007(1)	Wells Fm.	
MMW007	Enoch Valley	2007	Alluvial/Dinwoody	Well in uppermost Dinwoody Fm. and alluvium but is considered to be alluvial system.
MMW008	Enoch Valley	2007	Alluvial/Dinwoody	Well in uppermost Dinwoody Fm. and alluvium but is considered to be alluvial system.
MMW009	Enoch Valley	2007	Wells Fm.	
MMW010	Henry	2007	Alluvial	
MMW011	Henry	2007	Wells Fm.	
MMW012	Enoch Valley	2007	Alluvial	
MMW013	Enoch Valley	2007	Dinwoody Fm.	
MMW014	Henry	2007	Alluvial	
MW-15A	Ballard	2006	Alluvial	Installed for Blackfoot Bridge EIS
MW-16A	Ballard	2006	Alluvial	Installed for Blackfoot Bridge EIS
MMW017	Ballard	2007	Alluvial	
MMW018	Ballard	2007	Alluvial/Dinwoody	Well in uppermost Dinwoody Fm. and alluvium but is considered to be alluvial system.
MMW019	Henry	2007	(Phosphoria Fm.)	
MMW020	Ballard	2007	Wells Fm.	Installed as replacement for MMW001
MMW021	Ballard	2007	Wells Fm.	Installed as replacement for MMW002
MMW022	Henry	2007	Dinwoody Fm.	
MMW023	Henry	2007	Wells Fm.	
MMW024	Enoch Valley	2008(2)	Dinwoody Fm.	
MMW025	Enoch Valley	2008	Dinwoody Fm.	
MMW026	Enoch Valley	2008	Wells Fm.	
MMW027	Enoch Valley	2008	Dinwoody Fm.	
MMW028	Henry	2008	Dinwoody Fm.	
MMW029	Ballard	2008	Dinwoody Fm.	
MMW030	Ballard	2008	Wells Fm.	
MMW031	Ballard	2008	Wells Fm.	
MMW032	Ballard	2009(3)	Alluvial/Dinwoody	
MMW033	Ballard	2009	(Phosphoria Fm.)	
MMW034	Enoch Valley	2009	Dinwoody Fm.	
MMW035	Enoch Valley	2009	Dinwoody Fm.	
MMW036	Enoch Valley	2009	Basalt	Dinwoody Fm. was not encountered at location, only permeable basalt.

Notes:
(1) - Well construction summary for 2007 reported in MWH (2008b).
(2) - Well construction summary for 2008 reported in MWH (2009d).
(3) - Well construction summary for 2009 contained in Appendix A.

TABLES

SECTION 3

TABLE 3-1 SCREENING LEVEL SUMMARY BY MEDIA					
Analyte	**Soil Screening Value[a] (mg/kg)**	**Vegetation Screening Value[b] (mg/kg)**	**Surface Water Screening Value (mg/l)**	**Sediment Screening Value (mg/kg)**	**Groundwater Screening Value (mg/l)**
Aluminum	77,000	1,000	0.087[c]	25.5[d]	0.2[e]
Antimony	31	--	0.030[f]	3[g]	0.006[e]
Arsenic	0.39	30	0.150[h]	5.9[i]	0.01[j]
Barium	15,000	--	0.003[f]	--	2[e]
Beryllium	160	--	0.0006[f]	--	0.004[e]
Boron	16,000	150	0.0016[f]	--	7.3[k]
Cadmium	70	10	0.0006[h,l]	0.583[d]	0.005[e]
Chloride	--	--	--	--	250[e]
Chromium	120,000	100	0.011[h,l,m]	36.286[d]	0.1[e]
Cobalt	23	25	0.003[f]	50[o]	0.011[k]
Copper	3,100	40	0.011[h,l]	35.7[i]	1.3[e]
Fluoride	--	--	--	--	4[e]
Iron	55,000	500	0.158[p]	2[o]	0.3[e]
Lead	400	100	0.0025[h,l]	35[i]	0.015[e]
Manganese	1,800	2,000	0.12[n]	460[o]	0.05[e]
Mercury	5.6	--	0.00077[f]	0.174[i]	0.002[e]
Molybdenum	390	5	0.034[f]	--	0.18[k]
Nickel	1,500	100	0.052[h,l]	18[i]	0.73[k]
Nitrate	130,000	--	--	--	10[e]
Nitrite	7,800	--	--	--	1[e]
Selenium	390	5	0.005[h,m]	4[q]	0.05[e]
Silver	390	--	0.00036[f]	0.5[o]	0.1[e]
Sulfate	--	--	--	--	250[e]
TDS	--	--	--	--	500[e]
Thallium	5	--	0.00003[f]	--	0.002[e]
Uranium	230	--	0.142[n]	--	0.03[j]
Vanadium	390	50	0.02[n]	57[r]	0.26[k]
Zinc	23,000	500	0.12[h,l]	98[d]	5[e]
pH	--	--	--	--	6.5-8.5[e]

Notes:

[a] USEPA Regional Screening Levels for Soil, Residential, Source: ORNL December 2009 http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm

[b] Mineral tolerance of animals, second revised edition, 2005 National Research Council, published by the National Academics Press, WA DC, 496 pages

[c] National Recommended Water Quality Criteria (USEPA, 2009); Freshwater Standards for Chronic Criteria (CCC)

[d] The ARCS TEL for freshwater sediment in NOAA SQuiRT (Buchman, 2008)

[e] State of Idaho Ground Water Quality Rule (IDAPA 58.01.11). Note that secondary MCLs are listed for pH, aluminum, chloride, iron, manganese, pH, silver, sulfate, TDS and zinc

[f] Chronic freshwater screening value in NOAA SQuiRT (Buchman, 2008)

[g] Buchman, M. 1999. NOAA HAZMAT Report 99-1.

[h] State of Idaho Surface Water Quality for Aquatic Life (IDAPA 58.01.02); Chronic Criteria (CCC)

[i] TEL for freshwater sediment in NOAA SQuiRT (Buchman, 2008)

[j] USEPA primary and secondary Maximum Contaminant Level (MCL), National Primary Drinking Water Regulations, EPA.

[k] USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Site

[l] Aquatic life criteria for these metals are expressed as function of total hardness.

[m] Criterion is expressed as total recoverable (unfiltered concentration).

[n] Tier II Secondary Chronic Value. Source: ORNL, 1996.

[o] Guidelines for the protection and management of aquatic sediment quality in Ontario Aug 1993.

[p] Lowest Chronic Value (LCV) observed for fresh water daphnids. Source: ORNL, 1996.

[q] Screening value from Van Derveer and Canton (1997)

[r] Freshwater sediment screening value not available; screening value presented based on the marine sediment AET (Buchman, 2008)

TABLE 3-2

BALLARD MINE - SUMMARY OF SOIL EXCEEDANCES
(Page 1 of 6)

				Analyte (mg/Kg, dry weight)						
Sample Identification	Collection Date	Sample Medium	Sample Type	Arsenic	Cadmium	Cobalt	Manganese	Nickel	Selenium	Vanadium
			Screening Value:	0.39	70	23	1800	1500	390	390
MBB001 (Ballard Background)										
0906-MBB001-01-SS	7/10/2009	Soil	Primary	2.96	1.40	5.27	437	13.0	0.304	14.8
0906-MBB001-02-SS	7/10/2009	Soil	Primary	3.27	1.58	5.51	455	13.2	0.361	15.4
0906-MBB001-03-SS	7/10/2009	Soil	Primary	3.38	1.48	5.32	405	17.1	0.379	17.5
0906-MBB001-04-SS	7/10/2009	Soil	Primary	2.99	1.79	4.83	424	14.2	0.414	16.0
0906-MBB001-05-SS	7/9/2009	Soil	Primary	2.55	1.63	4.11	419	13.5 J-	0.250 J-	10.7 J+
0906-MBB001-06-SS	7/10/2009	Soil	Primary	3.48	2.26	3.86	442	14.9	0.418	16.3 J+
0906-MBB001-07-SS-1	7/10/2009	Soil	Triplicate	3.48	2.13	3.39	327	12.4	0.366	15.4 J+
0906-MBB001-07-SS-2	7/10/2009	Soil	Triplicate	3.42	2.61	3.44	327	13.0	0.417	17.2
0906-MBB001-07-SS-3	7/10/2009	Soil	Triplicate	3.02	2.15	3.29	356	12.2	0.281	12.9 J+
0906-MBB001-07-SS-avg	7/10/2009	Soil	Averaged	3.31	2.3	3.37	337	12.5	0.355	15.2 J+
0906-MBB001-08-SS	7/9/2009	Soil	Primary	2.69	1.42	4.53	352	13.3 J-	0.391 J-	13.8 J+
0906-MBB001-09-SS	7/9/2009	Soil	Primary	2.64	2.85	4.47	462	13.9 J-	0.376 J-	12.9 J+
0906-MBB001-10-SS	7/10/2009	Soil	Primary	3.66	3.39	3.89	360	20.2	0.485	17.9 J+
MBS001 (Ballard Mine Shop)										
0906-MBS001-01-SS	7/9/2009	Soil	Primary	8.88	46.9	2.78	169	103 J-	23.1 J-	376 J+
0906-MBS001-02-SS	7/9/2009	Soil	Primary	13.9	81	4.02	249	109 J-	17.7 J-	662 J+
0906-MBS001-03-SS	7/9/2009	Soil	Primary	12.3	56.3	4.83	216	143 J-	32.9 J-	289 J+
0906-MBS001-04-SS	7/9/2009	Soil	Primary	14.4	83.2	3.39	130	161 J-	35.4 J-	790 J+
0906-MBS001-05-SS	7/9/2009	Soil	Primary	12.2	71.4	3.24	123	142 J-	35.4 J-	535 J+
MDS030 (Dump Seep)										
SSMDS030-0-C(5)	9/11/2004	Soil	Primary	NS	7 J	NS	NS	53 J	10.2	92.7
MDS031 (Dump Seep)										
SSMDS031-0-C(5)	9/11/2004	Soil	Primary	NS	3.2 J	NS	NS	55.1 J	3.5	68.7
MDS032 (Dump Seep)										
SSMDS032-0-C(5)	9/11/2004	Soil	Primary	NS	7 J	NS	NS	68 J	162	66
MDS033 (Dump Seep)										
SSMDS033-0-C(5)	9/11/2004	Soil	Primary	NS	52.6 J	NS	NS	772 J	24	121
MHR001 (Historic Haul Road)										
0906-MHR001-01-SS	7/9/2009	Soil	Primary	6.71	2.57	11.7	1090	42.8 J-	1.72 J-	28.8 J+
0906-MHR001-02-SS	7/8/2009	Soil	Primary	4.73 J+	1.44	8.95	1780	22.5	0.572	18.8
0906-MHR001-03-SS	7/8/2009	Soil	Primary	4.41 J+	2.10	8.44	318 J	138	3.88	12.1
0906-MHR001-04-SS	7/9/2009	Soil	Primary	5.19	4.87	11.0	3620	37.2 J-	1.34 J-	34.0 J+
0906-MHR001-05-SS	7/8/2009	Soil	Primary	4.55 J+	18.4	8.57	1740	48.7	2.92	106
0906-MHR001-06-SS	7/8/2009	Soil	Primary	12.4 J	36.8 J+	5.22	234 J	148	18.9 J	266
0906-MHR001-07-SS-1	7/8/2009	Soil	Triplicate	18.4 J	42.6 J+	7.16	252 J	198	25.9 J	292
0906-MHR001-07-SS-2	7/8/2009	Soil	Triplicate	17.9 J	43.0 J+	5.77	361 J	201	26.7 J	273
0906-MHR001-07-SS-3	7/8/2009	Soil	Triplicate	16.2 J	45.2 J+	6.04	385 J	193	22.0 J	234
0906-MHR001-07-SS-avg	7/8/2009	Soil	Averaged	17.5 J	43.6 J+	6.32	333 J	197	24.9 J	266
0906-MHR001-08-SS	7/8/2009	Soil	Primary	5.66 J	10.8 J+	5.81	412 J	87.5	3.96 J	51.2
0906-MHR001-09-SS	7/8/2009	Soil	Primary	4.73 J	8.69 J+	5.23	501 J	69.3	3.07 J	35.8
0906-MHR001-10-SS	7/8/2009	Soil	Primary	9.45 J	24.3 J+	4.76	335 J	113	12.7 J	108
MMP035 (Mine Pit)										
0906-MMP035-01-SS	7/8/2009	Soil	Primary	24.0 J+	36.2	4.10	154	212	28.0	248
0906-MMP035-03-SS	7/8/2009	Soil	Primary	28.7 J+	9.78	6.04	186	334	39.4	116
0906-MMP035-04-SS	7/9/2009	Soil	Primary	36.7	32.8	7.49	289	349 J-	65.5 J-	269 J+
0906-MMP035-05-SS	7/9/2009	Soil	Primary	22.3	50.4	6.55	256	273 J-	66.3 J-	342 J+
0906-MMP035-06-SS	7/9/2009	Soil	Primary	13.7	105	2.54	98.8	186 J-	22.0 J-	690 J+
0906-MMP035-07-SS-1	7/9/2009	Soil	Triplicate	30.7	25.8	6.90	212	323 J-	152 J-	189 J+
0906-MMP035-07-SS-2	7/9/2009	Soil	Triplicate	31.1	24.4	6.13	244	309 J-	109 J-	218 J+
0906-MMP035-07-SS-3	7/9/2009	Soil	Triplicate	27.4	26.2	7.06	290	276 J-	130 J-	222 J+
0906-MMP035-07-SS-avg	7/9/2009	Soil	Averaged	29.7	25.5	6.7	249	303 J-	130 J-	210 J+
0906-MMP035-08-SS	7/9/2009	Soil	Primary	15.5	8.17	7.00	324	204 J-	26.7 J-	65.6 J+
0906-MMP035-09-SS	7/9/2009	Soil	Primary	11.3	9.41	7.73	287	139 J-	22.3 J-	60.7 J+
0906-MMP035-10-SS	7/8/2009	Soil	Primary	23.9 J+	30.6	7.87	258	301	60.5	203
0906-MMP035-AL01-SS	7/9/2009	Soil	Primary	27.7	52.5	5.89	218	265 J-	73.4 J-	593 J+
MMP036 (Mine Pit)										
0906-MMP036-02-SS	6/23/2009	Soil	Primary	10.6	34.0 J+	4.08	255	116	5.84	321
0906-MMP036-03-SS	6/22/2009	Soil	Primary	22.5	109	4.25	118	240	18.7 J	433
0906-MMP036-04-SS	6/22/2009	Soil	Primary	37.3	140	6.85	403	282	31.7 J	598
0906-MMP036-05-SS	6/22/2009	Soil	Primary	27.5	167	4.03	128	249	28.0 J	534

TABLE 3-2

BALLARD MINE - SUMMARY OF SOIL EXCEEDANCES
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				Analyte (mg/Kg, dry weight)						
Sample Identification	**Collection Date**	**Sample Medium**	**Sample Type**	**Arsenic**	**Cadmium**	**Cobalt**	**Manganese**	**Nickel**	**Selenium**	**Vanadium**
			Screening Value:	**0.39**	**70**	**23**	**1800**	**1500**	**390**	**390**
0906-MMP036-06-SS	6/22/2009	Soil	Primary	**22.7**	**51.1**	**7.65**	**216**	**196**	**17.1 J**	**263**
0906-MMP036-07-SS-1	6/22/2009	Soil	Triplicate	**21.7**	**82.9**	**6.37**	**392**	**174**	**13.3 J**	**160**
0906-MMP036-07-SS-2	6/22/2009	Soil	Triplicate	**19.3**	**22.9**	**5.06**	**162**	**139**	**21.0 J**	**127**
0906-MMP036-07-SS-3	6/22/2009	Soil	Triplicate	**16.2**	**30.7**	**9.54**	**227**	**176**	**10.6 J**	**161**
0906-MMP036-07-SS-avg	6/22/2009	Soil	Averaged	**19.1**	**45.5**	**6.99**	**260**	**163**	**15 J**	**149**
0906-MMP036-08-SS	6/22/2009	Soil	Primary	**22.2**	**61.1**	**5.16**	**180**	**176**	**28.7 J**	**282**
0906-MMP036-09-SS	6/22/2009	Soil	Primary	**17.1**	**45.0**	**5.74**	**232**	**148**	**18.4 J**	**270**
0906-MMP036-10-SS	6/22/2009	Soil	Primary	**10.9**	**8.00**	**8.19**	**176**	**124**	**14.9 J**	**57.9**
0906-MMP036-AL01-SS	6/23/2009	Soil	Primary	**27**	**77.1 J+**	**5.24**	**205**	**315**	**39.5**	**508**
SSMMP036-1-C(5)	7/17/2004	Soil	Primary	NS	**15.9**	NS	**2.6**	**4.8**	<0.01	**1.8**
MRV011 (Reservoir Delta)										
SSMRV011-0-C(5)	9/11/2004	Soil	Primary	NS	**1.08**	NS	NS	**11.3 J**	**0.5 J**	**21.4 J**
MSG003 (Spring)										
SSMSG003-0-C(5)	9/8/2004	Soil	Primary	NS	**9.54**	NS	NS	**74.5**	**52 J-**	**87**
MSG004 (Spring)										
RDMSG004-0-C(5)	9/15/2004	Road Soil	Primary	NS	**4.19**	NS	NS	**52.4 J**	**3.8**	**53.4**
SSMSG004-0-C(11)	9/9/2004	Soil	Primary	NS	**10.5**	NS	NS	**71.3**	**6.3 J-**	**85**
MSG005 (Spring)										
RDMSG005-0-C(5)	9/15/2004	Road Soil	Primary	NS	NS	NS	NS	NS	**3.5**	NS
SSMSG005-1-C(5)QA1	9/10/2004	Soil	Triplicate	NS	**1.23 J**	NS	NS	**15 J**	**16**	**30**
SSMSG005-1-C(5)QA2	9/10/2004	Soil	Triplicate	NS	**1.36 J**	NS	NS	**14.7 J**	**17.1**	**30**
SSMSG005-1-C(5)QA3	9/10/2004	Soil	Triplicate	NS	**1.35 J**	NS	NS	**13.9 J**	**17.2**	**30.4**
SSMSG005-1-C(5)QA4	9/10/2004	Soil	Triplicate	NS	NS	NS	NS	NS	NS	NS
SSMSG005-1-C(5)QA-avg	9/10/2004	Soil	Averaged	NS	**1.31 J**	NS	NS	**14.5 J**	**16.8**	**30.1**
MSG006 (Spring)										
RDMSG006-0-C(5)	9/15/2004	Road Soil	Primary	NS	**2.62**	NS	NS	**43.4 J**	**5**	**51.7**
SSMSG006-0-C(5)	9/10/2004	Soil	Primary	NS	**1.43 J**	NS	NS	**11.2 J**	**570**	**24.4**
MSP010 (Pond)										
SSMSP010-0-C(5)	9/11/2004	Soil	Primary	NS	**22.5**	NS	NS	**1620 J**	**53**	**207**
MSP011 (Pond)										
SSMSP011-0-C(5)	9/8/2004	Soil	Primary	NS	**110**	NS	NS	**193**	**48 J-**	**571**
MSP012 (Pond)										
SSMSP012-0-C(7)	9/8/2004	Soil	Primary	NS	**131**	NS	NS	**162**	**38 J-**	**773**
MSP013 (Pond)										
SSMSP013-0-C(5)	9/9/2004	Soil	Primary	NS	**30.4**	NS	NS	**140**	**24 J-**	**232**
MSP059 (Pond)										
SSMSP059-0-C(7)	9/8/2004	Soil	Primary	NS	**27.7**	NS	NS	**231**	**39 J-**	**298**
MSP062 (Pond)										
SSMSP062-0-C(5)	9/10/2004	Soil	Primary	NS	**126 J**	NS	NS	**255 J**	**20.5**	**646**
MST019 (Stream)										
SSMST019-0-C(5)	9/11/2004	Soil	Primary	NS	**3.74**	NS	NS	**14.8 J-**	**1.5 J**	**40.7 J-**
MST020 (Stream)										
SSMST020-1-C(5)QA1	9/14/2004	Soil	Triplicate	NS	**1.15**	NS	NS	**16.4 J**	**1.8 J**	**31.7**
SSMST020-1-C(5)QA2	9/14/2004	Soil	Triplicate	NS	**1.11**	NS	NS	**15.4 J**	**1.6 J**	**29.9**
SSMST020-1-C(5)QA3	9/14/2004	Soil	Triplicate	NS	**1.12**	NS	NS	**15.8 J**	**1.7 J**	**30**
SSMST020-1-C(5)QA-avg	9/14/2004	Soil	Averaged	NS	**1.13**	NS	NS	**15.9 J**	**1.7 J**	**30.5**
MST021 (Stream)										
SSMST021-0-C(5)	9/10/2004	Soil	Primary	NS	**1.58**	NS	NS	**22.3 J**	**1.2 J**	**33.1 J**
MST022 (Stream)										
SSMST022-1-C(6)QA1	9/10/2004	Soil	Triplicate	NS	**2 J**	NS	NS	**11.7 J**	**1 J**	**26.2 J**
SSMST022-1-C(6)QA2	9/10/2004	Soil	Triplicate	NS	**1.82 J**	NS	NS	**12.8 J**	**0.9 J**	**26.3 J**
SSMST022-1-C(6)QA3	9/10/2004	Soil	Triplicate	NS	**1.73 J**	NS	NS	**13.7 J**	**0.9 J**	**26.1 J**
SSMST022-1-C(6)QA-avg	9/10/2004	Soil	Averaged	NS	**1.85 J**	NS	NS	**12.7 J**	**0.933 J**	**26.2 J**
MST066 (Stream)										
SSMST066-0-C(5)	9/8/2004	Soil	Primary	NS	**2.85**	NS	NS	**20.1**	**9.8 J-**	**62.2**
MST067 (Stream)										
SSMST067-0-C(5)	9/8/2004	Soil	Primary	NS	**23.5**	NS	NS	**104**	**39 J-**	**207**
MST068 (Stream)										
SSMST068-0-C(5)	9/10/2004	Soil	Primary	NS	**34.8 J**	NS	NS	**109 J**	**25.4**	**351**

TABLE 3-2

BALLARD MINE - SUMMARY OF SOIL EXCEEDANCES
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				Analyte (mg/Kg, dry weight)						
Sample Identification	**Collection Date**	**Sample Medium**	**Sample Type**	**Arsenic**	**Cadmium**	**Cobalt**	**Manganese**	**Nickel**	**Selenium**	**Vanadium**
			Screening Value:	**0.39**	**70**	**23**	**1800**	**1500**	**390**	**390**
MST069 (Stream)										
SSMST069-0-C(5)	9/8/2004	Soil	Primary	NS	**4.21**	NS	NS	**23**	**2.8 J-**	**44.8**
MST088 (Stream)										
SSMST088-0-C(7)	9/9/2004	Soil	Primary	NS	**2.57**	NS	NS	**20.7**	<0.5 UJ	**42.9**
MST089 (Stream)										
SSMST089-0-C(6)	9/9/2004	Soil	Primary	NS	**4.74**	NS	NS	**24**	**6.6 J-**	**46.4**
MST090 (Stream)										
SSMST090-0-C(5)	9/9/2004	Soil	Primary	NS	**1.66**	NS	NS	**10.7**	<0.5 UJ	**23.2**
MST092 (Stream)										
SSMST092-1-C(5)QA1	9/9/2004	Soil	Triplicate	NS	**6.14**	NS	NS	**35.9**	**19.4 J-**	**75.7**
SSMST092-1-C(5)QA2	9/9/2004	Soil	Triplicate	NS	**5.95**	NS	NS	**34.7**	**18.4 J-**	**72.8**
SSMST092-1-C(5)QA3	9/9/2004	Soil	Triplicate	NS	**5.95**	NS	NS	**36**	**18.6 J-**	**74.3**
SSMST092-1-C(5)QA4	9/9/2004	Soil	Triplicate	NS	NS	NS	NS	NS	NS	NS
SSMST092-1-C(5)QA-avg	9/9/2004	Soil	Averaged	NS	**6.01**	NS	NS	**35.5**	**18.8 J-**	**74.3**
MST094 (Stream)										
SSMST094-0-C(5)	9/9/2004	Soil	Primary	NS	**1.43**	NS	NS	**23.9**	**0.7 J-**	**44.3**
MST095 (Stream)										
SSMST095-0-C(6)	9/9/2004	Soil	Primary	NS	**15.5**	NS	NS	**70.2**	**15 J-**	**208**
MST096 (Stream)										
SSMST096-0-C(5)	9/10/2004	Soil	Primary	NS	**0.44 J**	NS	NS	**16.7 J**	**1.3 J**	**31.1**
MST230 (Stream)										
SSMST230-0-C(5)	9/14/2004	Soil	Primary	NS	**0.91**	NS	NS	**12.8 J**	**1.9 J**	**22.1**
MST231 (Stream)										
SSMST231-0-C(8)	9/10/2004	Soil	Primary	NS	**1.13**	NS	NS	**12.5 J**	<0.5	**21.7 J**
MST232 (Stream)										
SSMST232-1-C(5)QA1	9/10/2004	Soil	Triplicate	NS	**1.93**	NS	NS	**15.1 J**	<0.5	**30.4 J**
SSMST232-1-C(5)QA2	9/10/2004	Soil	Triplicate	NS	**2.08**	NS	NS	**16.8 J**	<0.5	**33.1 J**
SSMST232-1-C(5)QA3	9/10/2004	Soil	Triplicate	NS	**1.98**	NS	NS	**14.5 J**	<0.5	**30.1 J**
SSMST232-1-C(5)QA-avg	9/10/2004	Soil	Averaged	NS	**2**	NS	NS	**15.5 J**	<0.5	**31.2 J**
MST272 (Stream)										
SSMST272-0-C(5)	9/9/2004	Soil	Primary	NS	**5.57**	NS	NS	**33.6**	**2.5 J-**	**92.8**
MST273 (Stream)										
SSMST273-0-C(5)	9/9/2004	Soil	Primary	NS	**3.62**	NS	NS	**21.2**	**6.9 J-**	**43.1**
MWD080 (Waste Rock Dump)										
0906-MWD080-01-SS	7/8/2009	Soil	Primary	**23.3 J+**	**25.7**	**7.86**	**1470**	**228**	**33.8**	**130**
0906-MWD080-02-SS	6/23/2009	Soil	Primary	**35.8 J**	**13.8**	**7.76**	**224 J**	**312**	**136 J**	**121**
0906-MWD080-03-SS	6/23/2009	Soil	Primary	**31.9 J**	**31.7**	**9.75**	**146 J**	**263**	**209 J**	**277**
0906-MWD080-04-SS	7/8/2009	Soil	Primary	**13.6 J+**	**14.4**	**8.24**	**906 J**	**155**	**13.2**	**89.1**
0906-MWD080-05-SS	6/23/2009	Soil	Primary	**44.4 J**	**17.8**	**7.36**	**297 J**	**359**	**106 J**	**164**
0906-MWD080-06-SS	6/23/2009	Soil	Primary	**45.5 J**	**11.8**	**6.82**	**215 J**	**369**	**198 J**	**143**
0906-MWD080-07-SS-1	6/23/2009	Soil	Triplicate	**27.6**	**36.1 J+**	**7.51**	**245 J**	**243**	**115**	**173**
0906-MWD080-07-SS-2	6/23/2009	Soil	Triplicate	**22.2**	**26.6 J+**	**7.09**	**296 J**	**210**	**70.2**	**145**
0906-MWD080-07-SS-3	6/23/2009	Soil	Triplicate	**25.2**	**28.0 J+**	**7.12**	**314 J**	**231**	**70.6**	**155**
0906-MWD080-07-SS-avg	6/23/2009	Soil	Averaged	**25**	**30.2 J+**	**7.24**	**285 J**	**228**	**85.3**	**158**
0906-MWD080-08-SS	7/8/2009	Soil	Primary	**24.5 J+**	**38.7**	**5.84**	**318 J**	**189**	**80.1**	**188**
0906-MWD080-09-SS	7/8/2009	Soil	Primary	**15.8 J+**	**27.2**	**5.54**	**267 J**	**144**	**56.1**	**151**
0906-MWD080-10-SS	7/8/2009	Soil	Primary	**3.84 J+**	**11.3**	**2.66**	**94.4 J**	**36.4**	**9.55**	**64.8**
SSMWD080-1-C(5)	7/17/2004	Soil	Primary	NS	**24**	NS	**3.5**	**35.6**	**1.91**	**6.5**
SSMWD080-2-C(5)	7/17/2004	Soil	Primary	NS	**33.9**	NS	**0.7**	**12.2**	**0.35**	**13.9**
SSMWD080-3-C(5)	7/17/2004	Soil	Primary	NS	**7.9**	NS	**1.2**	**6.5**	**0.26**	**4**
SSMWD080-4-C(5)	7/17/2004	Soil	Primary	NS	**14**	NS	**1.8**	**20.9**	**0.68**	**5.1**
MWD081 (Waste Rock Dump)										
0906-MWD081-01-SS	6/17/2009	Soil	Primary	**21.6**	**63.6**	**7.98**	**362**	**240**	**25.3**	**505**
0906-MWD081-02-SS	6/17/2009	Soil	Primary	**15.8**	**52.5**	**7.12**	**1040**	**157**	**22.5**	**504**
0906-MWD081-03-SS	6/17/2009	Soil	Primary	**37.1**	**26.3**	**25.6**	**225**	**319**	**99.5**	**170**
0906-MWD081-04-SS	6/17/2009	Soil	Primary	**30.1**	**23.4**	**7.18**	**299**	**297**	**71.2**	**162**
0906-MWD081-05-SS	6/18/2009	Soil	Primary	**32.1**	**25.2 J+**	**5.37 J-**	**162**	**292**	**69.7 J**	**143**
0906-MWD081-06-SS	6/18/2009	Soil	Primary	**35.1**	**11.9 J+**	**7.78 J-**	**117**	**325**	**141 J**	**103**
0906-MWD081-08-SS	6/18/2009	Soil	Primary	**36.5**	**34.8 J+**	**6.00 J-**	**192**	**303**	**84.8 J**	**255**
0906-MWD081-09-SS	6/18/2009	Soil	Primary	**23.3**	**99.5 J+**	**4.21 J-**	**187**	**247**	**40.2 J**	**808**

TABLE 3-2

BALLARD MINE - SUMMARY OF SOIL EXCEEDANCES
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				Analyte (mg/Kg, dry weight)						
Sample Identification	Collection Date	Sample Medium	Sample Type	Arsenic	Cadmium	Cobalt	Manganese	Nickel	Selenium	Vanadium
			Screening Value:	0.39	70	23	1800	1500	390	390
0906-MWD081-10-SS	6/18/2009	Soil	Primary	21	63.4 J+	4.61 J-	228	215	36.2 J	563
0906-MWD081-AL03-SS-1	6/23/2009	Soil	Triplicate	19.7	72.3 J+	4.57	112	177	35.7	632
0906-MWD081-AL03-SS-2	6/23/2009	Soil	Triplicate	24.6	84.6 J+	5.78	113	167	41.2	555
0906-MWD081-AL03-SS-3	6/23/2009	Soil	Triplicate	21.3	71.4 J+	4.17	122	188	37.6	691
0906-MWD081-AL03-SS-avg	6/23/2009	Soil	Averaged	21.9	76.1 J+	4.84	116	177	38.2	626
MWD082 (Waste Rock Dump)										
0906-MWD082-01-SS	7/8/2009	Soil	Primary	25.3 J	24.1 J+	11.7	366 J	270	25.9 J	169
0906-MWD082-02-SS	7/8/2009	Soil	Primary	34.7 J	14.6 J+	8.04	405 J	387	31.0 J	132
0906-MWD082-03-SS	6/23/2009	Soil	Primary	35.7	45.6 J+	13.8	741 J	402	35.3	342
0906-MWD082-04-SS	6/23/2009	Soil	Primary	8.08	4.92 J+	6.77	222 J	121	3.51	43.8
0906-MWD082-05-SS	6/23/2009	Soil	Primary	16.8	17.2 J+	8.02	254 J	180	17.0	79.0
0906-MWD082-06-SS	6/22/2009	Soil	Primary	21	27.8	6.86	588	253	40.5 J	92.3
0906-MWD082-07-SS-1	7/8/2009	Soil	Triplicate	8.36 J	7.54 J+	6.69	286 J	119	6.94 J	44.2
0906-MWD082-07-SS-2	7/8/2009	Soil	Triplicate	8.42 J	3.86 J+	8.07	273 J	129	5.48 J	29.4
0906-MWD082-07-SS-3	7/8/2009	Soil	Triplicate	8.49 J	3.59 J+	7.06	270 J	117	4.99 J	28.1
0906-MWD082-07-SS-avg	7/8/2009	Soil	Averaged	8.42 J	5 J+	7.27	276 J	122	5.8 J	33.9
0906-MWD082-08-SS	6/23/2009	Soil	Primary	32.7	29.5 J+	8.23	150 J	453	156	129
0906-MWD082-09-SS	6/22/2009	Soil	Primary	25.5	25.1	6.95	282	179	39.1 J	138
0906-MWD082-10-SS	6/22/2009	Soil	Primary	7.68	5.46	11.5	1320	154	4.04 J	33.5 J+
SSMWD082-10-C(5)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	20.9 J-	NS
SSMWD082-11-C(5)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	16.2 J-	NS
SSMWD082-12-C(5)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	10.8 J-	NS
SSMWD082-13-C(5)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	5.4 J-	NS
SSMWD082-14-C(5)QA1	7/19/2004	Soil	Triplicate	NS	NS	NS	NS	NS	63	NS
SSMWD082-14-C(5)QA2	7/19/2004	Soil	Triplicate	NS	NS	NS	NS	NS	62	NS
SSMWD082-14-C(5)QA3	7/19/2004	Soil	Triplicate	NS	NS	NS	NS	NS	60	NS
SSMWD082-14-C(5)QA-avg	7/19/2004	Soil	Averaged	NS	NS	NS	NS	NS	61.7	NS
SSMWD082-15-C(5)	7/19/2004	Soil	Primary	NS	NS	NS	NS	NS	54	NS
SSMWD082-16-C(5)	7/19/2004	Soil	Primary	NS	NS	NS	NS	NS	53	NS
SSMWD082-17-C(6)	7/19/2004	Soil	Primary	NS	NS	NS	NS	NS	71	NS
SSMWD082-18-C(5)	7/19/2004	Soil	Primary	NS	NS	NS	NS	NS	65	NS
SSMWD082-19-C(11)	7/19/2004	Soil	Primary	NS	NS	NS	NS	NS	53	NS
SSMWD082-1-C(5)	7/16/2004	Soil	Primary	NS	10.8	NS	3.3	18.8	0.86	1.6
SSMWD082-1-C(6)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	70 J-	NS
SSMWD082-20-C(5)	7/19/2004	Soil	Primary	NS	NS	NS	NS	NS	42	NS
SSMWD082-21-C(9)	7/19/2004	Soil	Primary	NS	NS	NS	NS	NS	14.1	NS
SSMWD082-22-C(5)	7/19/2004	Soil	Primary	NS	NS	NS	NS	NS	11	NS
SSMWD082-23-C(7)	7/19/2004	Soil	Primary	NS	NS	NS	NS	NS	8.9	NS
SSMWD082-24-C(6)	7/19/2004	Soil	Primary	NS	NS	NS	NS	NS	8.5	NS
SSMWD082-25-C(5)	7/19/2004	Soil	Primary	NS	NS	NS	NS	NS	5.9	NS
SSMWD082-26-C(5)	7/19/2004	Soil	Primary	NS	NS	NS	NS	NS	4.8	NS
SSMWD082-2-C(1)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	54 J-	NS
SSMWD082-2-C(5)	7/16/2004	Soil	Primary	NS	27.1	NS	0.9	12.5	0.52	10.8
SSMWD082-3-C(5)	7/16/2004	Soil	Primary	NS	22.7	NS	2.3	8.3	0.5	4.8
SSMWD082-3-C(5)QA1	7/6/2004	Soil	Primary	NS	24.3	NS	2.8	8	0.41	4.9
SSMWD082-3-C(9)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	65 J-	NS
SSMWD082-4-C(6)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	58 J-	NS
SSMWD082-5-C(5)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	49 J-	NS
SSMWD082-6-C(7)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	59 J-	NS
SSMWD082-7-C(12)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	51 J-	NS
SSMWD082-8-C(7)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	28 J-	NS
SSMWD082-9-C(7)	7/18/2004	Soil	Primary	NS	NS	NS	NS	NS	19.8 J-	NS
MWD083 (Waste Rock Dump)										
0906-MWD083-01-SS	6/21/2009	Soil	Primary	10.7	3.74	15.9	5180	106	2.94 J	28.8
0906-MWD083-02-SS	6/21/2009	Soil	Primary	16.1	14.5	7.72	351	165	9.92 J	71.3
0906-MWD083-03-SS	6/21/2009	Soil	Primary	11.5	6.22	8.75	1280	115	6.34 J	44.4
0906-MWD083-04-SS	6/21/2009	Soil	Primary	13.3	21.3	6.99	467	142	9.87 J	103
0906-MWD083-05-SS	6/21/2009	Soil	Primary	12.1	11.4	7.32	445	148	9.63 J	70.6
0906-MWD083-06-SS	6/18/2009	Soil	Primary	6.26	6.80 J+	6.75 J-	575	51.2	5.29 J	40.1
0906-MWD083-07-SS-1	6/18/2009	Soil	Triplicate	10.7	7.59 J+	4.05 J-	95.2	116	10.6 J	45.1
0906-MWD083-07-SS-2	6/18/2009	Soil	Triplicate	10.8	12.9 J+	7.07 J-	212	117	13.9 J	73.2
0906-MWD083-07-SS-3	6/18/2009	Soil	Triplicate	9.71	7.28 J+	6.60 J-	192	102	9.71 J	58.9

TABLE 3-2

BALLARD MINE - SUMMARY OF SOIL EXCEEDANCES
(Page 5 of 6)

				Analyte (mg/Kg, dry weight)						
Sample Identification	Collection Date	Sample Medium	Sample Type	Arsenic	Cadmium	Cobalt	Manganese	Nickel	Selenium	Vanadium
			Screening Value:	0.39	70	23	1800	1500	390	390
0906-MWD083-07-SS-avg	6/18/2009	Soil	Averaged	10.4	9.26 J+	5.91 J-	166	112	11.4 J	59.1
0906-MWD083-08-SS	6/23/2009	Soil	Primary	3.51	1.94 J+	6.44	534	17.7	0.874	16.9
0906-MWD083-09-SS	6/18/2009	Soil	Primary	15.4	26.2 J+	5.81 J-	274	132	23.7 J	165
0906-MWD083-AL01-SS	6/23/2009	Soil	Primary	9.28	12.5 J+	7.16	322	77.0	12.2	70.0
MWD084 (Waste Rock Dump)										
0906-MWD084-01-SS	6/20/2009	Soil	Primary	21.7	30.9	6.25	379	205	17.3 J	249
0906-MWD084-02-SS	6/20/2009	Soil	Primary	7.8	12.7	4.17	214	89.9	2.67	83.0
0906-MWD084-03-SS	6/20/2009	Soil	Primary	20.6	30.7	10.0	294	198	35.5	134
0906-MWD084-04-SS	6/20/2009	Soil	Primary	25.3	46.3	6.15	259	290	44.9 J	305
0906-MWD084-07-SS-1	6/20/2009	Soil	Triplicate	6.56	4.77	10.2	2430	48.7	3.38	34.1
0906-MWD084-07-SS-2	6/20/2009	Soil	Triplicate	7.58	7.09	13.6	2640	68.2	4.58 J	56.4
0906-MWD084-07-SS-3	6/20/2009	Soil	Triplicate	8.32	6.76	9.80	1870	72.0	5.35	39.2
0906-MWD084-07-SS-avg	6/20/2009	Soil	Averaged	7.49	6.21	11.2	2310	63	4.44 J	43.2
0906-MWD084-09-SS	6/20/2009	Soil	Primary	25.5	32.8	7.95	517	266	101	173
0906-MWD084-10-SS	6/20/2009	Soil	Primary	38.5	18.3	7.77	353	635	162 J	251
0906-MWD084-AL02-SS	6/20/2009	Soil	Primary	15.9	22.0	6.99	399	168	24.9 J	128
0906-MWD084-AL04-SS	6/23/2009	Soil	Primary	29.7	77.8 J+	5.81	248	246	51.2	478
0906-MWD084-AL05-SS	7/10/2009	Soil	Primary	10.1	19.9	4.31	219	130	16.3	90.0 J+
SSMWD084-1-C(5)	7/16/2004	Soil	Primary	NS	37.6	NS	2.4	21.4	0.12	3.2
MWD093 (Waste Rock Dump)										
0906-MWD093-01-SS	6/21/2009	Soil	Primary	31.5	28.8	6.16	251	314	49.5 J	194
0906-MWD093-02-SS	6/21/2009	Soil	Primary	26.1	18.7	8.58	262	247	174 J	109
0906-MWD093-03-SS	6/21/2009	Soil	Primary	30.4	43.2	7.41	274	284	88.4 J	251
0906-MWD093-04-SS	6/21/2009	Soil	Primary	32.7	37.1	6.97	194	350	49.8 J	250
0906-MWD093-05-SS	6/21/2009	Soil	Primary	30.9 J	22.2	8.15	229	355	42.3 J	171 J+
0906-MWD093-06-SS	6/21/2009	Soil	Primary	16.4 J	21.2	10.0	206	185	13.3 J	110 J+
0906-MWD093-07-SS-1	6/21/2009	Soil	Triplicate	10.7 J	6.89	7.76	463	132	7.17 J	48.5 J+
0906-MWD093-07-SS-2	6/21/2009	Soil	Triplicate	11.3 J	14.9	7.34	188	152	6.87 J	75.2 J+
0906-MWD093-07-SS-3	6/21/2009	Soil	Triplicate	21.9 J	10.2	6.06	220	218	18.2 J	96.9 J+
0906-MWD093-07-SS-avg	6/21/2009	Soil	Averaged	14.6 J	10.7	7.05	290	167	10.7 J	73.5 J+
0906-MWD093-08-SS	6/21/2009	Soil	Primary	29.6 J	49.7	6.35	250	308	35.6 J	237 J+
0906-MWD093-10-SS	6/21/2009	Soil	Primary	8.73 J	7.52	7.26	321	134	9.46 J	55.2 J+
0906-MWD093-AL01-SS	6/23/2009	Soil	Primary	22.4	58.4 J+	5.65	269 J	191	35.9	473

TABLE 3-2

BALLARD MINE - SUMMARY OF SOIL EXCEEDANCES
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Notes:

Result is greater than screening value

NS - not sampled

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Source for Screening Values (see also Table 3-1):

Soil	USEPA Regional Screening Levels for Soil, Residential (source: ORNL, December 2009).

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.

The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-3
BALLARD MINE
2009 SOIL SAMPLING CONCENTRATION RANGES AND SCREENING LEVEL EXCEEDANCES (mg/kg dw)[1]

Analyte	SL	Background (n=10)	Waste Rock Dumps (n=60)	[n] > SL	Partially Backfilled Pits (n=20)	[n] > SL	Historic Ore Haul Road (n=10)	[n] > SL	Historic Facility (n=5)	[n] > SL
Selenium	390	0.25 - 0.49	0.87 - 209	0	5.84 - 130	0	0.57 - 24.9	0	17.7 - 35.4	0
Arsenic	0.39	2.55-3.66	3.51-45.5	60	10.6-37.3	20	4.41-17.5	10	8.88-14.4	5
Cadmium	70	1.40-3.39	1.94-99.5	3	8.00-167	5	1.44-43.6	0	46.9-83.2	3
Cobalt	23	3.37-5.51	2.66-25.6	1	2.54-7.87	0	4.76-11.7	0	2.78-4.83	0
Manganese	1800	337-462	94.4-5180	2	98.8-403	0	234-3620	1	123-249	0
Vanadium	390	10.7-17.9	16.9-808	7	57.9-598	6	12.1-266	0	289-790	3

Notes:
n = total number of samples
[n] = sample concentration
SL = screening level
1 - Triplicate samples are treated as a single sample as described in Appendix A.
Shaded results indicate those which ranges contain exceedances.

TABLE 3-4
BALLARD MINE
RIPARIAN HABITAT ASSESSMENT DATA MATRIX

Station	Category	Amphibians	Swimming birds	Marsh-nesting birds	Cavity-nesting birds	Birds that forage at water's edge	Aerial-foraging birds	Open cup-nesting birds	Small mammals	Water dependent medium-sized mammals	Upland medium-sized mammals	Game mammals	Livestock	Sept 2004 Soil Selenium Concentration (mg/kg dw)	Sept 2004 Vegetation Selenium Concentration (mg/kg dw)	Habitat Quality Ranking
MSG006	spring	0	0	1	0	0	1	1	1	0	1	1	1	570	17	1
MSP010	pond	1	1	0	1	0	0	1	0	0	0	1	1	53	27	3
MSP011	pond	1	0	0	1	1	0	1	0	0	1	1	1	48	8.5	3
MSP012	pond	1	0	0	1	0	0	1	1	0	1	1	1	38	10	3
MSP059	pond	1	1	0	0	1	0	1	0	0	1	1	1	39	16	3
MSP062	pond	1	0	0	1	1	0	1	1	0	1	1	1	21	3.2	3
MST066	stream	0	0	0	0	0	1	1	0	0	1	0	1	9.8	0.25	1
MST067	stream	0	0	0	0	0	1	1	1	0	1	0	1	39	0.60	1
MST069	stream	0	0	0	0	0	1	1	1	0	1	0	1	2.8	3.1	1
MST089	stream	0	0	0	0	0	1	0	1	0	1	0	1	6.6	0.25	1
MST090	stream	0	0	0	0	0	1	1	1	0	1	1	1	0.25	0.25	1
MST092	stream	0	0	0	0	0	1	1	1	0	1	1	1	19	0.25	1
MST093	stream	0	0	0	0	0	1	1	1	0	1	1	1	0.50	0.25	1
MST094	stream	0	0	0	0	0	1	1	1	0	1	1	1	0.70	0.25	1
MST095	stream	0	0	0	0	0	1	1	1	0	1	1	1	15	13	1
MST096	ponded stream	1	1	1	0	0	0	1	1	0	1	1	1	1.3	2.4	4
MST272	stream	0	0	1	0	0	1	1	1	0	1	1	1	2.5	0.25	1
MST273	stream	0	0	0	0	0	1	0	1	0	1	0	1	6.9	0.25	1

Notes:
Non-detected concentrations are presented as one-half the minimum detection limit. The minimum detection limit for both media was 0.5 mg/kg dw.
Habitat Quality Ranking
1—high quality aquatic and terrestrial habitat
2—high quality aquatic, but low quality terrestrial habitat
3—low quality aquatic, but high quality terrestrial habitat
4—low quality aquatic and terrestrial habitat

TABLE 3-5

BALLARD MINE - SUMMARY OF VEGETATION EXCEEDANCES
(Page 1 of 10)

				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Cadmium**	**Molybdenum**	**Selenium**
			Screening Value:	**10**	**5**	**5**
BALLARD (Not Determined)						
0908-BALLARD-CS-ARLU	8/25/2009	ARLU	Primary	**1.22 J**	<1.47	**1.17**
0908-BALLARD-CS-JUSC-LEAF	8/25/2009	JUSC-LEAF	Primary	**0.252 J**	**4.29**	<0.499
0908-BALLARD-CS-JUSC-STEM	8/25/2009	JUSC-STEM	Primary	**0.425 J**	**1.74 J**	**0.483 J**
MBB001 (Ballard Background)						
0906-MBB001-01-FB	7/10/2009	FB	Primary	**0.478**	**2.43 J**	**0.730**
0906-MBB001-01-GS	7/10/2009	GS	Primary	**0.110 J**	**3.30**	**0.285**
0906-MBB001-01-SL-AMAL	7/10/2009	SL-AMAL	Primary	**0.239 J**	**2.17 J**	**0.532**
0906-MBB001-01-SL-POTR	7/10/2009	SL-POTR	Primary	**0.898 J**	<1.49	**0.463**
0906-MBB001-01-SL-SYAL	7/10/2009	SL-SYAL	Primary	**0.0361 J**	**2.71 J**	**0.291**
0906-MBB001-01-SM-AMAL	7/10/2009	SM-AMAL	Primary	**0.366 J**	<1.49	<0.0990
0906-MBB001-01-SM-POTR	7/10/2009	SM-POTR	Primary	**1.34 J**	<1.49	<0.0949
0906-MBB001-01-SM-SYAL	7/10/2009	SM-SYAL	Primary	**0.0874 J**	<1.49	**0.134 J**
0906-MBB001-02-GF	7/10/2009	GF	Primary	**0.218 J**	**2.93 J**	**0.270**
0906-MBB001-02-SL-AMAL	7/10/2009	SL-AMAL	Primary	**0.400 J**	**1.80 J**	**0.613**
0906-MBB001-02-SL-POTR	7/10/2009	SL-POTR	Primary	**1.20**	<1.49	**0.126 J**
0906-MBB001-02-SM-AMAL	7/10/2009	SM-AMAL	Primary	**0.613**	<1.54	<0.100
0906-MBB001-02-SM-POTR	7/10/2009	SM-POTR	Primary	**1.30**	<1.49	**0.129 J**
0906-MBB001-03-GF	7/10/2009	GF	Primary	**0.370**	**3.01**	**0.390**
0906-MBB001-03-SL-SYAL	7/10/2009	SL-SYAL	Primary	**0.0531 J**	<1.50	**0.103 J**
0906-MBB001-03-SM-SYAL	7/10/2009	SM-SYAL	Primary	**0.139**	<1.50	<0.0992
0906-MBB001-04-GF	7/10/2009	GF	Primary	**0.130**	**1.74 J**	**0.685**
0906-MBB001-04-SL-AMAL	7/10/2009	SL-AMAL	Primary	**0.289**	<1.50	<0.100
0906-MBB001-04-SL-POTR	7/10/2009	SL-POTR	Primary	**1.16**	<1.48	<0.0956
0906-MBB001-04-SL-SYAL	7/10/2009	SL-SYAL	Primary	**0.0983**	**1.71 J**	**0.835**
0906-MBB001-04-SM-AMAL	7/10/2009	SM-AMAL	Primary	**0.362**	<1.50	<0.0996
0906-MBB001-04-SM-POTR	7/10/2009	SM-POTR	Primary	**1.95**	<1.50	**0.283**
0906-MBB001-04-SM-SYAL	7/10/2009	SM-SYAL	Primary	**0.197**	<1.49	**3.18**
0906-MBB001-05-FB	7/9/2009	FB	Primary	**0.138**	**20.6**	**4.41**
0906-MBB001-05-GS	7/9/2009	GS	Primary	**0.173**	**206**	**0.347**
0906-MBB001-06-GF	7/10/2009	GF	Primary	**0.535 J**	**99.6**	**0.200**
0906-MBB001-06-SL-PRVI	7/10/2009	SL-PRVI	Primary	**0.0273 J**	**10.4**	**0.579**
0906-MBB001-06-SM-PRVI	7/10/2009	SM-PRVI	Primary	**0.0915 J**	**24.4**	**0.179 J**
0906-MBB001-07-GF-1	7/10/2009	GF	Triplicate	**0.242 J**	**1.91 J**	**1.70**
0906-MBB001-07-GF-2	7/10/2009	GF	Triplicate	**0.374**	**1.75 J**	**0.205**
0906-MBB001-07-GF-3	7/10/2009	GF	Triplicate	**0.413 J**	**147**	**0.229**
0906-MBB001-07-GF-avg	7/10/2009	GF	Averaged	**0.343 J**	**50.2 J**	**0.711**
0906-MBB001-07-SL-1-SYAL	7/10/2009	SL-SYAL	Triplicate	**0.0602 J**	<1.50	**0.498**
0906-MBB001-07-SL-2-SYAL	7/10/2009	SL-SYAL	Triplicate	**0.0646 J**	**2.17 J**	<0.0980
0906-MBB001-07-SL-3-SYAL	7/10/2009	SL-SYAL	Triplicate	**0.0676 J**	<1.49	**1.37**
0906-MBB001-07-SL-avg-SYAL	7/10/2009	SL-SYAL	Averaged	**0.0641 J**	**2.17 J**	**0.934**
0906-MBB001-07-SM-1-SYAL	7/10/2009	SM-SYAL	Triplicate	**0.264 J**	<1.49	**0.161 J**
0906-MBB001-07-SM-2-SYAL	7/10/2009	SM-SYAL	Triplicate	**0.207**	<1.49	**0.430**
0906-MBB001-07-SM-3-SYAL	7/10/2009	SM-SYAL	Triplicate	**0.161 J**	<1.49	<0.0977
0906-MBB001-07-SM-avg-SYAL	7/10/2009	SM-SYAL	Averaged	**0.211 J**	<1.49	**0.296 J**
0906-MBB001-08-FB	7/9/2009	FB	Primary	**0.466**	**4.60**	**1.63**
0906-MBB001-08-GS	7/9/2009	GS	Primary	**0.219**	**4.61**	**0.318**

TABLE 3-5

BALLARD MINE - SUMMARY OF VEGETATION EXCEEDANCES
(Page 2 of 10)

				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Cadmium**	**Molybdenum**	**Selenium**
			Screening Value:	**10**	**5**	**5**
0906-MBB001-09-GF	7/9/2009	GF	Primary	**0.313**	**5.63**	**1.77**
0906-MBB001-09-SL-AMAL	7/9/2009	SL-AMAL	Primary	**0.345**	**2.45 J**	**1.16**
0906-MBB001-09-SM-AMAL	7/9/2009	SM-AMAL	Primary	**0.357**	<1.48	**0.272**
0906-MBB001-10-FB	7/10/2009	FB	Primary	**0.131**	**2.34 J-**	**0.243 J**
0906-MBB001-10-GS	7/10/2009	GS	Primary	**0.380**	**240 J-**	**0.308 J**
0906-MBB001-10-SL-POTR	7/10/2009	SL-POTR	Primary	**0.394**	<1.50 UJ	**0.166 J**
0906-MBB001-10-SM-POTR	7/10/2009	SM-POTR	Primary	**0.332**	<1.48 UJ	**0.598 J**
0908-MBB001-01-FB	8/25/2009	FB	Primary	**0.337**	**5.08**	**0.549 J+**
0908-MBB001-05-FB	8/25/2009	FB	Primary	**0.375**	**2.66 J**	**0.671**
0908-MBB001-08-FB	8/25/2009	FB	Primary	**0.261**	**4.79**	**0.423**
0908-MBB001-10-FB	8/25/2009	FB	Primary	**0.180**	**2.52 J**	**0.661**
MBS001 (Ballard Mine Shop)						
0906-MBS001-01-GF	7/9/2009	GF	Primary	**2.94**	**10.5**	**12**
0906-MBS001-02-GF	7/9/2009	GF	Primary	**1.40**	**1.96 J**	**4.35**
0906-MBS001-03-GF	7/9/2009	GF	Primary	**1.05**	**425**	**6.47**
0906-MBS001-04-GF	7/9/2009	GF	Primary	**0.147**	**3.15**	**23.2**
0906-MBS001-05-GF	7/9/2009	GF	Primary	**1.72**	**9.73**	**27.5**
MDS030 (Dump Seep)						
VEMDS030-0-C(5)	9/11/2004	Vegetation	Primary	**0.18 JT**	**0.33 J+T**	**2 JT**
MDS031 (Dump Seep)						
VEMDS031-0-C(5)	9/11/2004	Vegetation	Primary	**0.76 T**	**1.43 T**	**11.5 T**
MDS032 (Dump Seep)						
VEMDS032-0-C(5)	9/11/2004	Vegetation	Primary	**0.2 JT**	<0.1 UT	**11 T**
MDS033 (Dump Seep)						
VEMDS033-0-C(5)	9/11/2004	Vegetation	Primary	**0.52 J+T**	**1.3 J+T**	**6.7 T**
MHR001 (Historic Haul Road)						
0906-MHR001-01-GF	7/9/2009	GF	Primary	**0.170**	**8.11**	**0.379**
0906-MHR001-02-GF	7/8/2009	GF	Primary	**0.226**	**9.56**	**1.39**
0906-MHR001-03-GF	7/8/2009	GF	Primary	**1.25**	**2.57 J**	**7.94**
0906-MHR001-04-FB	7/9/2009	FB	Primary	**0.494**	<1.50	**1.18**
0906-MHR001-04-GS	7/9/2009	GS	Primary	**0.0825 J**	<1.49	**0.493**
0906-MHR001-05-GF	7/8/2009	GF	Primary	**0.206**	<1.48	**0.386 J**
0906-MHR001-05-SL-SYAL	7/8/2009	SL-SYAL	Primary	**0.0643 J**	<1.49	**0.365 J**
0906-MHR001-05-SM-SYAL	7/8/2009	SM-SYAL	Primary	**0.397**	<1.47	**1.76 J**
0906-MHR001-06-GF	7/8/2009	GF	Primary	**1.14**	**6.17**	**1.06 J**
0906-MHR001-07-GF-1	7/8/2009	GF	Triplicate	**1.05**	**9.27**	**62.4 J**
0906-MHR001-07-GF-2	7/8/2009	GF	Triplicate	**0.727**	**6.58**	**75.8 J**
0906-MHR001-07-GF-3	7/8/2009	GF	Triplicate	**0.714**	**6.38**	**69.5 J**
0906-MHR001-07-GF-avg	7/8/2009	GF	Averaged	**0.83**	**7.41**	**69.2 J**
0906-MHR001-08-GF	7/8/2009	GF	Primary	**0.732**	**2.86 J**	**0.785 J**
0906-MHR001-09-GF	7/8/2009	GF	Primary	**0.280**	<1.49	**0.609 J**
0906-MHR001-10-GF	7/8/2009	GF	Primary	**0.339**	**4.28**	**4.72 J**
0908-MHR001-04-FB	8/25/2009	FB	Primary	**0.103**	<1.48	**0.923**
MMP035 (Mine Pit)						
0906-MMP035-01-GF	7/8/2009	GF	Primary	**0.769**	**11.7**	**8.92 J**
0906-MMP035-01-SF-AMAL	7/8/2009	SL-AMAL	Primary	**0.312**	**3.55**	**13.8 J**
0906-MMP035-01-SL-AMAL	7/8/2009	SL-AMAL	Primary	**0.516**	**4.66**	**29.7 J**
0906-MMP035-01-SL-CAAR	7/8/2009	SL-CAAR	Primary	**1.39**	**2.19 J**	**8.03 J**

TABLE 3-5

BALLARD MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Cadmium**	**Molybdenum**	**Selenium**
			Screening Value:	**10**	**5**	**5**
0906-MMP035-01-SL-PUTR	7/8/2009	SL-PUTR	Primary	**0.395**	**16.7**	**18.7 J**
0906-MMP035-01-SM-AMAL	7/8/2009	SM-AMAL	Primary	**0.571**	<1.48	**10.6 J**
0906-MMP035-01-SM-CAAR	7/8/2009	SM-CAAR	Primary	**1.04**	**10.2**	**2.33 J**
0906-MMP035-01-SM-PUTR	7/8/2009	SM-PUTR	Primary	**0.802**	**4.03**	**6.55 J**
0906-MMP035-03-GF	7/8/2009	GF	Primary	**0.413**	**28.8**	**12.6 J**
0906-MMP035-03-SF-CAAR	7/8/2009	SF-CAAR	Primary	**0.321**	**4.78**	**3.45**
0906-MMP035-03-SL-CAAR	7/8/2009	SL-CAAR	Primary	**0.780**	**3.43**	**12.0 J**
0906-MMP035-03-SM-CAAR	7/8/2009	SM-CAAR	Primary	**1.06**	**14.9**	**5.79 J**
0906-MMP035-04-GF	7/9/2009	GF	Primary	**0.898**	**11.2**	**27.6 J**
0906-MMP035-05-GF	7/9/2009	GF	Primary	**2.20**	**10.6 J-**	**30.4 J**
0906-MMP035-06-FB	7/9/2009	FB	Primary	**2.10**	**13.3 J-**	**19.9 J**
0906-MMP035-06-GS	7/9/2009	GS	Primary	**4.43**	**9.96 J-**	**4.21 J**
0906-MMP035-07-GF-1	7/9/2009	GF	Triplicate	**0.618**	**5.16 J-**	**124 J**
0906-MMP035-07-GF-2	7/9/2009	GF	Triplicate	**0.579**	**6.15 J-**	**111 J**
0906-MMP035-07-GF-3	7/9/2009	GF	Triplicate	**0.638**	**6.62 J-**	**130 J**
0906-MMP035-07-GF-avg	7/9/2009	GF	Averaged	**0.612**	**5.98 J-**	**122 J**
0906-MMP035-08-GF	7/9/2009	GF	Primary	**0.274**	**8.47 J-**	**76.7 J**
0906-MMP035-09-GF	7/9/2009	GF	Primary	**0.317**	**3.48 J-**	**53.5 J**
0906-MMP035-10-GF	7/8/2009	GF	Primary	**0.717**	**11.4**	**20.0 J**
0906-MMP035-AL01-GF	7/9/2009	GF	Primary	**0.707**	**8.14 J-**	**77.6 J**
0908-MMP035-06-FB	8/25/2009	FB	Primary	**4.05 J**	**76**	**54**
MMP036 (Mine Pit)						
0906-MMP036-02-GF	6/23/2009	GF	Primary	**2.56**	**9.47**	**15.9 J**
0906-MMP036-03-GF	6/22/2009	GF	Primary	**2.86**	**2.70 J**	**0.368**
0906-MMP036-04-FB	6/22/2009	FB	Primary	**21.5**	**2.60 J**	**141**
0906-MMP036-04-GS	6/22/2009	GS	Primary	**2.01**	**3.23**	**23.5**
0906-MMP036-05-GF	6/22/2009	GF	Primary	**4.52**	**6.12**	**1.05**
0906-MMP036-06-GF	6/22/2009	GF	Primary	**1.10**	**4.18**	**20.4**
0906-MMP036-07-GF-1	6/22/2009	GF	Triplicate	**1.45**	**5.08**	**0.778**
0906-MMP036-07-GF-2	6/22/2009	GF	Triplicate	**2.15**	**9.18**	**0.444**
0906-MMP036-07-GF-3	6/22/2009	GF	Triplicate	**2.16**	**11.7**	**0.538**
0906-MMP036-07-GF-avg	6/22/2009	GF	Averaged	**1.92**	**8.65**	**0.587**
0906-MMP036-08-GF	6/22/2009	GF	Primary	**2.00**	<1.49	**0.913**
0906-MMP036-09-GF	6/22/2009	GF	Primary	**2.25**	**7.19**	**1.89**
0906-MMP036-10-GF	6/22/2009	GF	Primary	**1.10**	**5.39**	**7.08**
0906-MMP036-AL01-GF	6/23/2009	GF	Primary	**1.72**	**5.15**	**10.7 J**
0908-MMP036-04-FB	8/25/2009	FB	Primary	**6.54 J**	**1.96 J**	**1010**
0908-MMP036-CS-PRVI-FRUIT	8/25/2009	PRVI-FRUIT	Primary	**0.0257 J**	<1.49	**0.722 J**
0908-MMP036-CS-PRVI-LEAF	8/25/2009	PRVI-LEAF	Primary	<0.0249	<1.49	**1.80**
0908-MMP036-CS-PRVI-STEM	8/25/2009	PRVI-STEM	Primary	**0.0352 J**	<1.50	**1.97**
MRV011 (Reservoir Delta)						
VEMRV011-0-C(5)	9/11/2004	Vegetation	Primary	**0.08 JT**	**0.47 J+T**	<0.5 UT
MSG003 (Spring)						
VEMSG003-0-C(5)	9/8/2004	Vegetation	Primary	**0.87 T**	**0.94 T**	**9.3 T**
MSG004 (Spring)						
VEMSG004-0-C(11)	9/9/2004	Vegetation	Primary	**0.23 JT**	**3.89 T**	**1.3 JT**
MSG005 (Spring)						
VEMSG005-1-C(5)QA1	9/10/2004	Vegetation	Triplicate	**0.27 J+T**	**0.74 J+T**	**1 JT**

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BALLARD MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Cadmium**	**Molybdenum**	**Selenium**
			Screening Value:	**10**	**5**	**5**
VEMSG005-1-C(5)QA2	9/10/2004	Vegetation	Triplicate	**0.26 J+T**	**0.75 J+T**	**0.9 JT**
VEMSG005-1-C(5)QA3	9/10/2004	Vegetation	Triplicate	**0.26 J+T**	**0.83 J+T**	**0.9 JT**
VEMSG005-1-C(5)QA4	9/10/2004	Vegetation	Triplicate	NS	NS	NS
VEMSG005-1-C(5)QA-avg	9/10/2004	Vegetation	Averaged	**0.263 J+T**	**0.773 J+T**	**0.933 JT**
MSG006 (Spring)						
VEMSG006-0-C(5)	9/10/2004	Vegetation	Primary	**0.19 JT**	**0.87 T**	**17.2 T**
MSP010 (Pond)						
VEMSP010-0-C(5)	9/11/2004	Vegetation	Primary	**2.75 T**	**4.83 T**	**26.8 T**
MSP011 (Pond)						
VEMSP011-0-C(5)	9/8/2004	Vegetation	Primary	**2.02 T**	**3.07 T**	**8.5 T**
MSP012 (Pond)						
VEMSP012-0-C(7)	9/8/2004	Vegetation	Primary	**4.39 T**	**6.14 T**	**10 T**
MSP013 (Pond)						
VEMSP013-0-C(5)	9/9/2004	Vegetation	Primary	**0.92 T**	**3.53 T**	**23 T**
MSP059 (Pond)						
VEMSP059-0-C(7)	9/8/2004	Vegetation	Primary	**2.77 T**	**45.9 T**	**16 T**
MSP062 (Pond)						
VEMSP062-0-C(5)	9/10/2004	Vegetation	Primary	**11.1 T**	**12.1 T**	**3.2 T**
MST019 (Stream)						
VEMST019-0-C(5)	9/11/2004	Vegetation	Primary	**0.63 T**	**0.88 T**	<0.5 UT
MST020 (Stream)						
VEMST020-1-C(5)QA1	9/14/2004	Vegetation	Triplicate	**0.09 JT**	**0.53 T**	<0.5 UT
VEMST020-1-C(5)QA2	9/14/2004	Vegetation	Triplicate	**0.09 JT**	**0.51 T**	<0.5 UT
VEMST020-1-C(5)QA3	9/14/2004	Vegetation	Triplicate	**0.1 JT**	**0.53 T**	<0.5 UT
VEMST020-1-C(5)QA-avg	9/14/2004	Vegetation	Averaged	**0.0933 JT**	**0.523 T**	<0.5 UT
MST021 (Stream)						
052404VEMST021-1-C7	5/24/2004	Vegetation	Primary	NS	NS	<0.5 UT
061604VEMST021-1-C(5	6/16/2004	Vegetation	Primary	NS	NS	<0.5 UJT
071504VEMST021-1-C(5)	7/15/2004	Vegetation	Primary	NS	NS	<0.5 UT
081604VEMST021-1-C(5)	8/16/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMST021-0-C(5)	9/10/2004	Vegetation	Primary	<0.05 UT	**0.57 J+T**	<0.5 UT
VEMST021-1-C(5)QA1	10/18/2004	Vegetation	Triplicate	NS	NS	<0.5 UJT
VEMST021-1-C(5)QA2	10/18/2004	Vegetation	Triplicate	NS	NS	<0.5 UJT
VEMST021-1-C(5)QA3	10/18/2004	Vegetation	Triplicate	NS	NS	<0.5 UJT
VEMST021-1-C(5)QA-avg	10/18/2004	Vegetation	Averaged	NS	NS	<0.5 UJT
MST022 (Stream)						
VEMST022-1-C(6)QA1	9/10/2004	Vegetation	Triplicate	**0.25 J+T**	**0.64 JT**	<0.5 UT
VEMST022-1-C(6)QA2	9/10/2004	Vegetation	Triplicate	**0.21 J+T**	**0.78 JT**	<0.5 UT
VEMST022-1-C(6)QA3	9/10/2004	Vegetation	Triplicate	**0.41 J+T**	**0.9 JT**	<0.5 UT
VEMST022-1-C(6)QA4	9/10/2004	Vegetation	Triplicate	NS	NS	NS
VEMST022-1-C(6)QA-avg	9/10/2004	Vegetation	Averaged	**0.29 J+T**	**0.773 JT**	<0.5 UT
MST066 (Stream)						
VEMST066-0-C(5)	9/8/2004	Vegetation	Primary	**0.37 T**	**1.32 T**	<0.5 UT
MST067 (Stream)						
VEMST067-0-C(5)	9/8/2004	Vegetation	Primary	**0.26 JT**	**0.47 T**	**0.6 JT**
MST068 (Stream)						
VEMST068-0-C(5)	9/10/2004	Vegetation	Primary	**0.09 JT**	**2.33 T**	**40 T**

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BALLARD MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Cadmium**	**Molybdenum**	**Selenium**
			Screening Value:	**10**	**5**	**5**
MST069 (Stream)						
VEMST069-0-C(5)	9/8/2004	Vegetation	Primary	**0.34 T**	**0.54 T**	**3.1 T**
MST088 (Stream)						
VEMST088-0-C(7)	9/9/2004	Vegetation	Primary	**0.56 T**	**1.41 T**	<0.5 UT
MST089 (Stream)						
VEMST089-0-C(6)	9/9/2004	Vegetation	Primary	**0.36 T**	**1.24 T**	<0.5 UT
MST090 (Stream)						
VEMST090-0-C(5)	9/9/2004	Vegetation	Primary	**0.24 JT**	**1.15 T**	<0.5 UT
MST092 (Stream)						
VEMST092-1-C(5)QA1	9/9/2004	Vegetation	Triplicate	**0.54 T**	**2.16 T**	<0.5 UT
VEMST092-1-C(5)QA2	9/9/2004	Vegetation	Triplicate	**0.53 T**	**2.11 T**	<0.5 UT
VEMST092-1-C(5)QA3	9/9/2004	Vegetation	Triplicate	**0.51 T**	**2.65 T**	<0.5 UT
VEMST092-1-C(5)QA-avg	9/9/2004	Vegetation	Averaged	**0.527 T**	**2.31 T**	<0.5 UT
MST094 (Stream)						
VEMST094-0-C(5)	9/9/2004	Vegetation	Primary	**0.12 JT**	**1.2 T**	<0.5 UT
MST095 (Stream)						
VEMST095-0-C(6)	9/9/2004	Vegetation	Primary	**1.17 T**	**2.25 T**	**12.5 T**
MST096 (Stream)						
VEMST096-0-C(5)	9/10/2004	Vegetation	Primary	**0.22 JT**	**0.6 T**	**2.4 JT**
MST230 (Stream)						
VEMST230-0-C(5)	9/14/2004	Vegetation	Primary	**0.06 JT**	**0.46 T**	<0.5 UT
MST231 (Stream)						
052404VEMST231-1-C6	5/24/2004	Vegetation	Primary	NS	NS	<0.5 UT
061604VEMST231-1-C(6	6/16/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMST231-0-C(5)	10/18/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMST231-0-C(8)	9/10/2004	Vegetation	Primary	<0.05 UT	**1.25 T**	<0.5 UT
VEMST231-1-C(6)	7/15/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMST231-1-C(7)	8/16/2004	Vegetation	Primary	NS	NS	<0.5 UJT
MST232 (Stream)						
VEMST232-1-C(5)QA1	9/10/2004	Vegetation	Triplicate	**0.07 JT**	**1.94 T**	<0.5 UT
VEMST232-1-C(5)QA2	9/10/2004	Vegetation	Triplicate	<0.05 UT	**2.18 T**	<0.5 UT
VEMST232-1-C(5)QA3	9/10/2004	Vegetation	Triplicate	<0.05 UT	**2.08 T**	<0.5 UT
VEMST232-1-C(5)QA4	9/10/2004	Vegetation	Triplicate	NS	NS	NS
VEMST232-1-C(5)QA-avg	9/10/2004	Vegetation	Averaged	**0.07 JT**	**2.07 T**	<0.5 UT
MST272 (Stream)						
VEMST272-0-C(5)	9/9/2004	Vegetation	Primary	**0.38 T**	**2.44 T**	<0.5 UT
MST273 (Stream)						
VEMST273-0-C(5)	9/9/2004	Vegetation	Primary	**0.18 JT**	**0.78 T**	<0.5 UT
MWD080 (Waste Rock Dump)						
0906-MWD080-01-GF	7/8/2009	GF	Primary	**0.477**	**4.61**	**86.1 J**
0906-MWD080-01-SL-PUTR	7/8/2009	SL-PUTR	Primary	**0.135**	<1.49	**124 J**
0906-MWD080-01-SL-SYAL	7/8/2009	SL-SYAL	Primary	**0.114**	**2.15 J**	**189 J**
0906-MWD080-01-SM-PUTR	7/8/2009	SM-PUTR	Primary	**0.296**	<1.50	**22.6 J**
0906-MWD080-01-SM-SYAL	7/8/2009	SM-SYAL	Primary	**0.355**	<1.48	**17.7 J**
0906-MWD080-02-GF	6/23/2009	GF	Primary	**1.05**	**14.6**	**53**
0906-MWD080-03-FB	6/23/2009	FB	Primary	**0.841**	**1.76 J**	**84.1**
0906-MWD080-03-GS	6/23/2009	GS	Primary	**1.16**	**6.8**	**69.1**

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BALLARD MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Cadmium**	**Molybdenum**	**Selenium**
			Screening Value:	**10**	**5**	**5**
0906-MWD080-03-SL-PUTR	6/23/2009	SL-PUTR	Primary	**0.260**	**8.82**	**42.7**
0906-MWD080-03-SM-PUTR	6/23/2009	SM-PUTR	Primary	**0.465**	<1.45	**12.5**
0906-MWD080-04-GF	7/8/2009	GF	Primary	**0.244**	**5.73**	**3.90 J**
0906-MWD080-05-GF	6/23/2009	GF	Primary	**0.591**	**13.1**	**77.2**
0906-MWD080-06-FB	6/23/2009	FB	Primary	**0.591**	**10.4**	**234 J**
0906-MWD080-06-GS	6/23/2009	GS	Primary	**0.420**	**10.7**	**121**
0906-MWD080-07-GF-1	6/23/2009	GF	Triplicate	**1.66**	**4.89**	**47.2**
0906-MWD080-07-GF-2	6/23/2009	GF	Triplicate	**1.28**	**3.70**	**28.1**
0906-MWD080-07-GF-3	6/23/2009	GF	Triplicate	**1.81**	**6.06**	**28.7 J**
0906-MWD080-07-GF-avg	6/23/2009	GF	Averaged	**1.58**	**4.88**	**34.7 J**
0906-MWD080-08-GF	7/8/2009	GF	Primary	**0.549**	**8.9**	**24.2 J**
0906-MWD080-09-GF	7/8/2009	GF	Primary	**0.753**	**4.76**	**13.3 J**
0906-MWD080-10-GF	7/8/2009	GF	Primary	**0.630**	**6.22**	**27.0 J**
0908-MWD080-03-FB	8/25/2009	FB	Primary	**0.770 J**	**66.5**	**123**
0908-MWD080-06-FB	8/25/2009	FB	Primary	**1.34 J**	**26.3**	**229**
MWD081 (Waste Rock Dump)						
061604VEMWD081-1-C(5	6/16/2004	Vegetation	Primary	NS	NS	<0.5 UJT
071404VEMWD081-1-C(5)	7/14/2004	Vegetation	Primary	NS	NS	<0.5 UT
081604VEMWD081-1-C(5)	8/16/2004	Vegetation	Primary	NS	NS	<0.5 UJT
0906-MWD081-01-GF	6/17/2009	GF	Primary	**2.80**	**12.7**	**10.2 J**
0906-MWD081-02-GF	6/17/2009	GF	Primary	**2.99**	**8.7**	**8.20 J**
0906-MWD081-03-GF	6/17/2009	GF	Primary	**1.23**	**2.63 J**	**11.2 J**
0906-MWD081-04-FB	6/17/2009	FB	Primary	**0.265**	<1.87	**12.7 J**
0906-MWD081-04-GS	6/17/2009	GS	Primary	**0.721**	**11.4**	**8.57 J**
0906-MWD081-05-GF	6/18/2009	GF	Primary	**1.54**	**13.6**	**14.3 J+**
0906-MWD081-06-GF	6/18/2009	GF	Primary	**1.89**	**8.49**	**18.6 J+**
0906-MWD081-08-GF	6/18/2009	GF	Primary	**0.965**	**7.99**	**27.0 J+**
0906-MWD081-09-GF	6/18/2009	GF	Primary	**4.47**	**10**	**38.6 J+**
0906-MWD081-09-SL-PUTR	6/18/2009	SL-PUTR	Primary	**0.785**	<1.47	**34.5 J+**
0906-MWD081-09-SM-PUTR	6/18/2009	SM-PUTR	Primary	**1.17**	<1.48	**8.97 J+**
0906-MWD081-10-GF	6/18/2009	GF	Primary	**2.51**	**9.1**	**27.6**
0906-MWD081-AL03-GF-1	6/23/2009	GF	Triplicate	**4.68**	**21.5**	**9.75 J**
0906-MWD081-AL03-GF-2	6/23/2009	GF	Triplicate	**4.97**	**17.9**	**21.3 J**
0906-MWD081-AL03-GF-3	6/23/2009	GF	Triplicate	**3.96**	**18.8**	**12.6 J**
0906-MWD081-AL03-GF-avg	6/23/2009	GF	Averaged	**4.54**	**19.4**	**14.6 J**
0908-MWD081-04-FB	8/25/2009	FB	Primary	**0.526 J**	**5.98**	**1.67**
091504VEMWD081-0-C(5)	9/15/2004	Vegetation	Primary	**0.95 J+T**	**3.34 T**	<0.5 UT
101804VEMWD081-0-C(5)	10/18/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD081-1-C7-QA1	5/24/2004	Vegetation	Triplicate	NS	NS	<0.5 UT
VEMWD081-1-C7-QA2	5/24/2004	Vegetation	Triplicate	NS	NS	<0.5 UT
VEMWD081-1-C7-QA3	5/24/2004	Vegetation	Triplicate	NS	NS	<0.5 UT
VEMWD081-1-C7-QA-avg	5/24/2004	Vegetation	Averaged	NS	NS	<0.5 UT
MWD082 (Waste Rock Dump)						
0906-MWD082-01-GS	7/8/2009	GS	Primary	**0.905**	**22.9**	**2.42 J**
0906-MWD082-02-GF	7/8/2009	GF	Primary	**0.362**	**29.5**	**52.3 J**
0906-MWD082-03-GF	6/23/2009	GF	Primary	**2.50**	**11.3**	**366 J**
0906-MWD082-04-GF	6/23/2009	GF	Primary	**0.217**	**9.86**	**0.304 J**
0906-MWD082-05-GF	6/23/2009	GF	Primary	**1.49**	**19**	**0.499 J**

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BALLARD MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Cadmium**	**Molybdenum**	**Selenium**
			Screening Value:	**10**	**5**	**5**
0906-MWD082-06-GF	6/22/2009	GF	Primary	**0.702**	**3.50**	**3.06 J**
0906-MWD082-07-GF-1	7/8/2009	GF	Triplicate	**0.247**	**13.8**	**0.506 J**
0906-MWD082-07-GF-2	7/8/2009	GF	Triplicate	**0.252**	**7.21**	**0.379 J**
0906-MWD082-07-GF-3	7/8/2009	GF	Triplicate	**0.212**	**13.7**	**0.260 J**
0906-MWD082-07-GF-avg	7/8/2009	GF	Averaged	**0.237**	**11.6**	**0.382 J**
0906-MWD082-08-GF	6/23/2009	GF	Primary	**0.498**	**10.9**	**63.0 J**
0906-MWD082-09-GF	6/22/2009	GF	Primary	**0.684**	<26.8	**22.7 J**
0906-MWD082-10-GF	6/22/2009	GF	Primary	**0.405**	**7.5**	**5.53 J**
0906-MWD082-10-SL-POTR	6/22/2009	SL-POTR	Primary	**2.99**	<1.46	**1.79 J**
0906-MWD082-10-SM-POTR	6/22/2009	SM-POTR	Primary	**3.83**	<1.47	**0.484 J**
0908-MWD082-01-FB	8/25/2009	FB	Primary	**3.09**	**18.9**	**5.37**
VEMWD082-10-C(5)	7/18/2004	Vegetation	Primary	NS	NS	**8 T**
VEMWD082-11-C(5)	7/18/2004	Vegetation	Primary	NS	NS	**7.7 T**
VEMWD082-12-C(5)	7/18/2004	Vegetation	Primary	NS	NS	**2.7 JT**
VEMWD082-13-C(5)	7/18/2004	Vegetation	Primary	NS	NS	**3.8 T**
VEMWD082-14-C(5)QA1	7/19/2004	Vegetation	Triplicate	NS	NS	**59 T**
VEMWD082-14-C(5)QA2	7/19/2004	Vegetation	Triplicate	NS	NS	**58 T**
VEMWD082-14-C(5)QA3	7/19/2004	Vegetation	Triplicate	NS	NS	**58 T**
VEMWD082-14-C(5)QA-avg	7/19/2004	Vegetation	Averaged	NS	NS	**58.3 T**
VEMWD082-15-C(5)	7/19/2004	Vegetation	Primary	NS	NS	**68 J-T**
VEMWD082-16-C(5)	7/19/2004	Vegetation	Primary	NS	NS	**46 J-T**
VEMWD082-17-C(6)	7/19/2004	Vegetation	Primary	NS	NS	**57 J-T**
VEMWD082-18-C(5)	7/19/2004	Vegetation	Primary	NS	NS	**49 J-T**
VEMWD082-19-C(11)	7/19/2004	Vegetation	Primary	NS	NS	**35 J-T**
VEMWD082-1-C(6)	7/18/2004	Vegetation	Primary	NS	NS	**53 T**
VEMWD082-20-C(5)	7/19/2004	Vegetation	Primary	NS	NS	**17.2 J-T**
VEMWD082-21-C(9)	7/19/2004	Vegetation	Primary	NS	NS	**8.3 J-T**
VEMWD082-22-C(5)	7/19/2004	Vegetation	Primary	NS	NS	**8.4 J-T**
VEMWD082-23-C(7)	7/19/2004	Vegetation	Primary	NS	NS	**5.9 J-T**
VEMWD082-24-C(6)	7/19/2004	Vegetation	Primary	NS	NS	**3.2 J-T**
VEMWD082-25-C(5)	7/19/2004	Vegetation	Primary	NS	NS	**1.7 J-T**
VEMWD082-26-C(5)	7/19/2004	Vegetation	Primary	NS	NS	**2.6 J-T**
VEMWD082-2-C(10)	7/18/2004	Vegetation	Primary	NS	NS	**67 T**
VEMWD082-3-C(9)	7/18/2004	Vegetation	Primary	NS	NS	**54 T**
VEMWD082-4-C(6)	7/18/2004	Vegetation	Primary	NS	NS	**46 T**
VEMWD082-5-C(5)	7/18/2004	Vegetation	Primary	NS	NS	**50 T**
VEMWD082-6-C(7)	7/18/2004	Vegetation	Primary	NS	NS	**25.2 T**
VEMWD082-7-C(12)	7/18/2004	Vegetation	Primary	NS	NS	**17.2 T**
VEMWD082-8-C(7)	7/18/2004	Vegetation	Primary	NS	NS	**8.7 T**
VEMWD082-9-C(7)	7/18/2004	Vegetation	Primary	NS	NS	**16.6 T**
MWD083 (Waste Rock Dump)						
0906-MWD083-01-FB	6/21/2009	FB	Primary	**1.28**	**2.54 J**	**2.34**
0906-MWD083-01-GS	6/21/2009	GS	Primary	**0.230**	**4.38**	**0.320**
0906-MWD083-02-GF	6/21/2009	GF	Primary	**1.28**	**13.9**	**0.388**
0906-MWD083-03-GF	6/21/2009	GF	Primary	**0.792**	**4.64**	**0.917**
0906-MWD083-04-GF	6/21/2009	GF	Primary	**0.715**	**3.72**	**0.310**
0906-MWD083-05-GF	6/21/2009	GF	Primary	**1.09**	**7.01**	**1.36**
0906-MWD083-06-GF	6/18/2009	GF	Primary	**0.452**	**3.92**	**6.51 J+**

TABLE 3-5

BALLARD MINE - SUMMARY OF VEGETATION EXCEEDANCES
(Page 8 of 10)

				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Cadmium**	**Molybdenum**	**Selenium**
			Screening Value:	**10**	**5**	**5**
0906-MWD083-07-GF-1	6/18/2009	GF	Triplicate	**0.733**	**5.02**	**1.64**
0906-MWD083-07-GF-2	6/18/2009	GF	Triplicate	**0.523**	**1.76 J**	**4.53**
0906-MWD083-07-GF-3	6/18/2009	GF	Triplicate	**0.674**	**2.44 J**	**1.77**
0906-MWD083-07-GF-avg	6/18/2009	GF	Averaged	**0.643**	**3.07 J**	**2.65**
0906-MWD083-08-GF	6/23/2009	GF	Primary	**1.28**	**4.46**	**0.851 J**
0906-MWD083-09-GF	6/18/2009	GF	Primary	**0.661**	**3.62**	**54.4**
0906-MWD083-AL01-GF	6/23/2009	GF	Primary	**0.626**	**2.04 J**	**12.1 J**
0908-MWD083-01-FB	8/25/2009	FB	Primary	**0.861 J**	**1.85 J**	**4.97**
0908-MWD083-CS-POTR-LEAF	8/25/2009	POTR-LEAF	Primary	**1.86**	<1.48	**2.21**
0908-MWD083-CS-POTR-STEM	8/25/2009	POTR-STEM	Primary	**2.80**	<1.50	**2.54**
MWD084 (Waste Rock Dump)						
0906-MWD084-01-GF	6/20/2009	GF	Primary	**1.60**	**41.9**	**6.60 J**
0906-MWD084-02-GF	6/20/2009	GF	Primary	**1.53**	**45.8**	**3.83 J**
0906-MWD084-03-GF	6/20/2009	GF	Primary	**1.38**	**101**	**73.6**
0906-MWD084-04-GF	6/20/2009	GF	Primary	**1.71**	**30**	**108 J**
0906-MWD084-07-GF-1	6/20/2009	GF	Triplicate	**0.263**	**4.40**	**2.15 J**
0906-MWD084-07-GF-2	6/20/2009	GF	Triplicate	**0.148**	**2.10 J**	**0.700 J**
0906-MWD084-07-GF-3	6/20/2009	GF	Triplicate	**0.173**	**3.78**	**3.32 J**
0906-MWD084-07-GF-avg	6/20/2009	GF	Averaged	**0.195**	**3.43 J**	**2.06 J**
0906-MWD084-07-SL-2-ARTR	6/20/2009	SL-ARTR	Triplicate	**0.388**	<1.48	**0.491**
0906-MWD084-07-SL-3-SYAL	6/20/2009	SL-SYAL	Triplicate	**0.0498 J**	**1.70 J**	**0.796 J**
0906-MWD084-07-SL-avg-ARTR	6/20/2009	SL-ARTR	Averaged	**0.388**	<1.48	**0.491**
0906-MWD084-07-SL-avg-SYAL	6/20/2009	SL-SYAL	Averaged	**0.0498 J**	**1.7 J**	**0.796 J**
0906-MWD084-07-SM-2-ARTR	6/20/2009	SM-ARTR	Triplicate	**0.609**	**1.82 J**	**0.757 J**
0906-MWD084-07-SM-3-SYAL	6/20/2009	SM-SYAL	Triplicate	**0.349**	<1.41	**0.602 J**
0906-MWD084-07-SM-avg-ARTR	6/20/2009	SM-ARTR	Averaged	**0.609**	**1.82 J**	**0.757 J**
0906-MWD084-07-SM-avg-SYAL	6/20/2009	SM-SYAL	Averaged	**0.349**	<1.41	**0.602 J**
0906-MWD084-09-GF	6/20/2009	GF	Primary	**1.28**	**10.3**	**146 J**
0906-MWD084-10-GF	6/20/2009	GF	Primary	**1.43**	**7**	**72.0 J**
0906-MWD084-AL02-GF	6/20/2009	GF	Primary	**1.95**	**14.6**	**36.1 J**
0906-MWD084-AL04-GF	6/23/2009	GF	Primary	**3.32**	**4.48**	**58.9 J**
0906-MWD084-AL05-FB	7/10/2009	FB	Primary	**1.96**	**17.4 J-**	**135 J**
0906-MWD084-AL05-GS	7/10/2009	GS	Primary	**0.777**	**15.4 J-**	**38.5 J**
0908-MWD084-AL05-FB	8/25/2009	FB	Primary	**0.961**	**23.3**	**239**
MWD093 (Waste Rock Dump)						
0906-MWD093-01-GF	6/21/2009	GF	Primary	**0.852**	**4.71**	**2.84**
0906-MWD093-02-GS	6/21/2009	GS	Primary	**0.415**	**6.02**	**34.6**
0906-MWD093-03-GF	6/21/2009	GF	Primary	**1.13**	**7.38**	**116**
0906-MWD093-04-GF	6/21/2009	GF	Primary	**1.20**	**4.78**	**9.41**
0906-MWD093-05-GF	6/21/2009	GF	Primary	**0.931**	**18**	**6.91**
0906-MWD093-06-GF	6/21/2009	GF	Primary	**1.52**	**12**	**1.19**
0906-MWD093-07-GF-1	6/21/2009	GF	Triplicate	**0.616**	**3.76**	**0.949**
0906-MWD093-07-GF-2	6/21/2009	GF	Triplicate	**1.27**	**5.97**	**0.471**
0906-MWD093-07-GF-3	6/21/2009	GF	Triplicate	**0.625**	**3.95**	**2.57**
0906-MWD093-07-GF-avg	6/21/2009	GF	Averaged	**0.837**	**4.56**	**1.33**
0906-MWD093-08-GF	6/21/2009	GF	Primary	**3.05**	**11.1**	**27.2**
0906-MWD093-10-GF	6/21/2009	GF	Primary	**0.506**	**8.15**	**5.43**
0906-MWD093-AL01-GF	6/23/2009	GF	Primary	**3.30**	**6.56**	**13.3 J**

TABLE 3-5

BALLARD MINE - SUMMARY OF VEGETATION EXCEEDANCES
(Page 9 of 10)

				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Cadmium**	**Molybdenum**	**Selenium**
			Screening Value:	**10**	**5**	**5**
0908-MWD093-02-FB	8/25/2009	FB	Primary	**1.25 J**	**18.4**	**81.1**
0908-MWD093-CS-ARTR-LEAF	8/25/2009	ARTR-LEAF	Primary	**1.07**	<1.48	**2.16**
0908-MWD093-CS-ARTR-STEM	8/25/2009	ARTR-STEM	Primary	**1.78**	<1.49	**1.57**

TABLE 3-5

BALLARD MINE - SUMMARY OF VEGETATION EXCEEDANCES
(Page 10 of 10)

Notes:

Allium - onion (scientific name undetermined)
AMAL - serviceberry (*Amelanchier alnifolia*)
AR - active ore haul road
ARLU - white sagebrush (*Artemisia ludoviciana*)
ARTR - big sagebrush (*Artemisia tridentata*)
BB - Ballard Mine background
BE - Enoch Valley Mine background
BH - Henry Mine background
BS - Ballard Mine shop
CAAR - Siberian peashrub (*Caragana arborescens*)
CHNA - yellow Rabbitbrush (*Chrysothamnus viscidiflorus*)*
CS - Culturally Significant plants
FB - forb
GF - grasses and forbs
GS - grass
HR - historic ore haul road
JUSC - Rocky Mountain juniper (*Juniperus scopulorum*)
POTR - quaking aspen (*Populus tremuloides*)
PRVI - chokecherry (*Prunus virginiana*)
PUTR - antelope bitterbrush (*Purshia tridentata*)
ROWI - Wood's rose (*Rosa woodsii*)
SF - shrub fruit
SL - shrub leaves
SM - shrub stems
SYAL - mountain strawberry (*Symphoricarpos oreophilus*)
TA - Enoch Valley Minte tipple area
VE - vegetation sample
WD - waste rock dump
Wild St - wild strawberry

* The current symbol for yellow Rabbitbrush is "CHVI8."

Result is greater than screening value
Method detection limit for non-detected value is greater than the screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
K	Serial dilutions not performed for samples analyzed by this method (EPA 200.7; 200.8).
T	Laboratory SOP does not address biotic matrices; biotic-specific LCS/SRM not analyzed.

Source for Screening Values (see also Table 3-1):

Vegetation	Mineral tolerance of animals, second revised edition, 2005 National Research Council, published by the national academics press, WA DC, pp. 13-14.

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.

The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-6
BALLARD MINE
2004 SEASONAL VEGETATION SELENIUM CONCENTRATIONS (mg/kg dw)

Station Name	Station ID	May	Jun	Jul	Aug	Sep	Oct
Ballard Mine Pit #1 Overburden Dump #2	MWD081	ND	ND	ND	ND	ND	ND

Notes:
ND = concentration was less than the detection limit of 0.5 mg/kg dw.

TABLE 3-7
BALLARD MINE
2009 GRASS/FORB SAMPLING CONCENTRATION RANGES AND SCREENING LEVEL EXCEEDANCES (mg/kg dw)[1]

Analyte	SL	Background Range (n=6)	Waste Rock Dumps (n=53)	[n] > SL	Partially Backfilled Pits (n=18)	[n] > SL	Historic Ore Haul Road (n=9)	[n] > SL	Historic Facility (n=5)	[n] > SL
Selenium	5	0.20-1.77	0.30-366	37	0.37-122	13	0.38-69.2	2	4.35-27.5	4
Molybdenum	5	1.74-99.6	2.04-101	35	1.49U-28.8	14	2.57-9.56	4	1.96-425	3

Notes:
n - total number of samples
[n] - sample concentration
SL - screening level
1 - Triplicate samples are treated as a single sample as described in Appendix A.
Shaded results indicate those which ranges contain exceedances.

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

(Page 1 of 56)

Location:	MDS030		MDS030		MDS030		MDS030		MDS030		MDS030		MDS030		MDS030		MDS030	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep	
Sample ID:	051104SWMDS030-0-F		051104SWMDS030-0-U		SWMDS030-0-F		SWMDS030-0-U		050206GWMDS030-0-F		050206GWMDS030-0-U		051007SWMDS030-0-F		051007SWMDS030-0-U		091407GWMDS030-0-F	
Collection Date:	5/11/2004		5/11/2004		9/11/2004		9/11/2004		5/2/2006		5/2/2006		5/10/2007		5/10/2007		9/14/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		**0.07 JK**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		<0.0001 UK		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		**0.0021 K**		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		<0.0006 UK		NS		NS		NS	
Selenium	NS		**0.52**	0.005	NS		**0.57**	0.005	NS		**0.45**	0.005	NS		**0.73**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		**0.001 JK**	0.02	NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		<0.002 UK		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		NS		NS		**0.044 K**	0.003	NS		NS		NS		**0.055 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		**0.03 JK**	0.0016
Cadmium, dissolved	<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127
Chromium, dissolved	**0.0015 K**	0.231	NS		<0.0001	0.231	NS		**0.0021 K**	0.231	NS		**0.0018 K**	0.231	NS		<0.0001 UK	0.231
Cobalt, dissolved	NS		NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		NS		<0.01 UK	0.0371	NS		NS		NS		<0.01 UK	0.0371
Iron, dissolved	NS		NS		NS		NS		<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158
Lead, dissolved	NS		NS		NS		NS		<0.0001 UK	0.0109	NS		NS		NS		<0.0001 UK	0.0109
Molybdenum, dissolved	NS		NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	**0.0031 K**	0.168	NS		**0.005 K**	0.168	NS		<0.0006 UK	0.168	NS		**0.0014 JK**	0.168	NS		**0.0035 K**	0.168
Selenium, dissolved	**0.42**	0.005	NS		**0.59**	0.005	NS		**0.44 J-**	0.005	NS		NS		NS		**0.9**	0.005
Silver, dissolved	NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0002 UK	0.00003
Vanadium, dissolved	**0.0009 JK**	0.02	NS		**0.00054 K**	0.02	NS		**0.0005 JK**	0.02	NS		**0.001 JK**	0.02	NS		**0.0012 K**	0.02
Zinc, dissolved	**0.003 JK**	0.382	NS		<0.002 UK	0.382	NS		**0.003 JK**	0.382	NS		**0.002 JK**	0.382	NS		<0.002 UK	0.382

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MDS030		MDS030		MDS030		MDS030		MDS030		MDS030		MDS030		MDS030		MDS030	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep	
Sample ID:	091407GWMDS030-0-U		050708GWMDS030-0-F		050708GWMDS030-0-U		091608GWMDS030-0-F		091608GWMDS030-0-U		0905GWMDS030-F		0905GWMDS030-U		0909GWMDS030-F		0909GWMDS030-U	
Collection Date:	9/14/2007		5/7/2008		5/7/2008		9/16/2008		9/16/2008		5/30/2009		5/30/2009		9/22/2009		9/22/2009	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	**1.8 J+K**	0.087	NS		**0.28 J+K**	0.087	NS		**1.97**	0.087	NS		NS		NS		NS	
Barium	**0.064 K**	0.003	NS		**0.049 K**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium	<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron	**0.03 JK**	0.0016	NS		<0.03 UK	0.0016	NS		NS		NS		NS		NS		NS	
Cadmium	<0.0002 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.000625		NS		<0.000125		NS		**0.000155 J**	
Chromium	**0.0059 K**	0.231	NS		**0.001 K**	0.231	NS		**0.00642 J**		NS		NS		NS		NS	
Cobalt	<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Copper, total	<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		NS		NS		NS		NS		NS	
Iron	**1.63 K**	0.158	NS		**0.2 J+K**	0.158	NS		**1.53**	0.158	NS		NS		NS		NS	
Lead	**0.0009 J+K**	0.0109	NS		**0.0002 JK**	0.0109	NS		NS		NS		NS		NS		NS	
Molybdenum	<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		NS	
Nickel	**0.0051 K**	0.168	NS		**0.0024 JK**	0.168	NS		**0.00715 J**		NS		NS		NS		NS	
Selenium	**0.92**	0.005	NS		**0.45**	0.005	NS		**0.893**	0.005	NS		**0.866**	0.005	NS		**0.814**	0.005
Silver	<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium	<0.0001 UK	0.00003	NS		<0.0002 UK	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium	**0.0041 K**	0.02	NS		**0.0012 J+K**	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		**0.0176**	0.02
Zinc	**0.01 K {J+}**	0.382	NS		**0.002 JK**	0.382	NS		<0.0250		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		**0.05 JK**	0.087	NS		<0.0500	0.087	NS		NS		NS		NS		NS	
Barium, dissolved	NS		**0.043 K**	0.003	NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		**0.03 JK**	0.0016	NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00127	NS		<0.000625	0.00127	NS		<0.000125	0.00127	NS		**0.000166 J**	0.00127	NS	
Chromium, dissolved	NS		<0.0001 UK	0.231	NS		<0.00250	0.231	NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0371	NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		<0.0250	0.158	NS		NS		NS		NS		NS	
Lead, dissolved	NS		<0.0001 UK	0.0109	NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0031 K**	0.168	NS		<0.00500	0.168	NS		NS		NS		NS		NS	
Selenium, dissolved	NS		**0.49**	0.005	NS		**0.86**	0.005	NS		NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0009 JK**	0.02	NS		<0.00500	0.02	NS		NS		NS		NS		NS	
Zinc, dissolved	NS		<0.002 UK	0.382	NS		<0.0250	0.382	NS		NS		NS		NS		NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MDS031		MDS031		MDS031		MDS031		MDS031		MDS031		MDS031		MDS031		MDS031	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep	
Sample ID:	051104SWMDS031-0-F		051104SWMDS031-0-U		SWMDS031-0-F		SWMDS031-0-U		050206GWMDS031-0-F		050206GWMDS031-0-U		051007SWMDS031-0-F		051007SWMDS031-0-U		050708GWMDS031-0-F	
Collection Date:	5/11/2004		5/11/2004		9/11/2004		9/11/2004		5/2/2006		5/2/2006		5/10/2007		5/10/2007		5/7/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		**1.01 J+K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		**0.0003 JK**		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		**0.0023 K**		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		**0.0037 K**		NS		NS		NS	
Selenium	NS		**0.38**	0.005	NS		**0.38**	0.005	NS		**0.57**	0.005	NS		**0.77**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		**0.0013 K**	0.02	NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		**0.009 JK**		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		<0.03 UK	0.087	NS		NS		NS		**0.04 J+K**	0.087
Barium, dissolved	NS		NS		NS		NS		**0.059 K**	0.003	NS		NS		NS		**0.044 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		**0.03 JK**	0.0016
Cadmium, dissolved	<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		**0.0002 JK**	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127
Chromium, dissolved	**0.0011 K**	0.231	NS		<0.0001	0.231	NS		**0.0022 K**	0.231	NS		**0.0015 K**	0.230	NS		<0.0004 UK	0.231
Cobalt, dissolved	NS		NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		NS		<0.01 UK	0.0371	NS		NS		NS		<0.01 UK	0.0371
Iron, dissolved	NS		NS		NS		NS		<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158
Lead, dissolved	NS		NS		NS		NS		<0.0001 UK	0.0109	NS		NS		NS		<0.0001 UK	0.0109
Molybdenum, dissolved	NS		NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	**0.0011 K**	0.168	NS		**0.0057 K**	0.168	NS		**0.0036 K**	0.168	NS		**0.0022 JK**	0.168	NS		**0.0048 K**	0.168
Selenium, dissolved	**0.45**	0.005	NS		**0.43**	0.005	NS		**0.48 J-**	0.005	NS		NS		NS		**0.43**	0.005
Silver, dissolved	NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003
Vanadium, dissolved	**0.00099 K**	0.02	NS		**0.00075 K**	0.02	NS		**0.0007 JK**	0.02	NS		**0.0011 K**	0.02	NS		**0.0012 K**	0.02
Zinc, dissolved	<0.002 UK	0.382	NS		**0.002 JK**	0.382	NS		**0.008 JK**	0.382	NS		**0.002 JK**	0.382	NS		<0.002 UK	0.382

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MDS031		MDS031		MDS031		MDS032		MDS032		MDS032		MDS032		MDS032		MDS032	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep	
Sample ID:	050708GWMDS031-0-U		091608GWMDS031-0-F		091608GWMDS031-0-U		051104SWMDS032-0-F		051104SWMDS032-0-U		SWMDS032-0-F		SWMDS032-0-U		050206GWMDS032-0-F		050206GWMDS032-0-U	
Collection Date:	5/7/2008		9/16/2008		9/16/2008		5/11/2004		5/11/2004		9/11/2004		9/11/2004		5/2/2006		5/2/2006	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	**0.24 K**	0.087	NS		**0.521**	0.087	NS		NS		NS		NS		NS		NS	
Barium	**0.043 K**	0.003	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	**0.04 JK**	0.0016	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	**0.0002 JK**	0.00127	NS		<0.000625		NS		NS		NS		NS		NS		**0.0002 JK**	
Chromium	**0.003 K**	0.231	NS		<0.00515		NS		NS		NS		NS		NS		**0.0006 K**	
Cobalt	<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	<0.01 UK	0.0371	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	**0.31 K**	0.158	NS		**0.48**	0.158	NS		NS		NS		NS		NS		NS	
Lead	**0.0001 JK**	0.0109	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	<0.01 UK	0.034	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	**0.0088 K**	0.168	NS		**0.00933 J**		NS		NS		NS		NS		NS		**0.0052 K**	
Selenium	**0.42**	0.005	NS		**0.728**	0.005	NS		**0.5**	0.005	NS		**0.29**	0.005	NS		**1.46**	0.005
Silver	<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	**0.0001 JK**	0.00003	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	**0.0018 K**	0.02	NS		<0.00500	0.02	NS		NS		NS		NS		NS		**0.0009 JK**	0.02
Zinc	**0.012 J+K**	0.382	NS		<0.0250		NS		NS		NS		NS		NS		**0.012 K**	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.0500	0.087	NS		NS		NS		NS		NS		<0.03 UK	0.087	NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.056 K**	0.003	NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000625	0.00127	NS		<0.0001 UK	0.00127	NS		**0.0001 JK**	0.00127	NS		**0.0002 JK**	0.00127	NS	
Chromium, dissolved	NS		<0.00250	0.231	NS		<0.0005 UK	0.231	NS		<0.0001	0.231	NS		**0.0004 JK**	0.231	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.0371	NS	
Iron, dissolved	NS		<0.0250	0.158	NS		NS		NS		NS		NS		<0.02 UK	0.158	NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.0109	NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel, dissolved	NS		**0.00514 J**	0.168	NS		**0.0067 K**	0.168	NS		**0.0108 K**	0.168	NS		**0.0051 K**	0.168	NS	
Selenium, dissolved	NS		**0.718**	0.005	NS		**0.45**	0.005	NS		**0.29**	0.005	NS		**1.25**	0.005	NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		<0.00500	0.02	NS		**0.0011 K**	0.02	NS		**0.00081 K**	0.02	NS		**0.0004 JK**	0.02	NS	
Zinc, dissolved	NS		<0.0250	0.382	NS		**0.004 JK**	0.382	NS		**0.006 JK**	0.382	NS		**0.01 K**	0.382	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MDS032		MDS032		MDS032		MDS032		MDS032		MDS032		MDS033		MDS033		MDS033	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep	
Sample ID:	051007SWMDS032-0-F		051007SWMDS032-0-U		091307GWMDS032-0-F		091307GWMDS032-0-U		050708GWMDS032-0-F		050708GWMDS032-0-U		051104SWMDS033-0-F		051104SWMDS033-0-U		050206GWMDS033-0-F	
Collection Date:	5/10/2007		5/10/2007		9/13/2007		9/13/2007		5/7/2008		5/7/2008		5/11/2004		5/11/2004		5/2/2006	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**0.24 K**	0.087	NS		**2.69 K**	0.087	NS		**1.41 J+K**	0.087	NS		NS		NS	
Barium	NS		NS		NS		**0.077 K**	0.003	NS		**0.067 K**	0.003	NS		NS		NS	
Beryllium	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS	
Boron	NS		NS		NS		**0.05 JK**	0.0016	NS		**0.07 K**	0.0016	NS		NS		NS	
Cadmium	NS		NS		NS		**0.001 K**	0.00127	NS		**0.0014 K**	0.00127	NS		NS		NS	
Chromium	NS		NS		NS		**0.0087 K**	0.231	NS		**0.0055 K**	0.231	NS		NS		NS	
Cobalt	NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS	
Copper, total	NS		NS		NS		<0.01 UK	0.0371	NS		**0.01 JK**	0.0371	NS		NS		NS	
Iron	NS		NS		NS		**2.29 K**	0.158	NS		**1.4 J+K**	0.158	NS		NS		NS	
Lead	NS		NS		NS		**0.0014 K**	0.0109	NS		**0.0012 K**	0.0109	NS		NS		NS	
Molybdenum	NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS	
Nickel	NS		NS		NS		**0.0148 K**	0.168	NS		**0.0178 K**	0.168	NS		NS		NS	
Selenium	NS		**0.9**	0.005	NS		**0.69**	0.005	NS		**0.75**	0.005	NS		**1.48**	0.005	NS	
Silver	NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS	
Thallium	NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS	
Vanadium	NS		NS		NS		**0.0068 K**	0.02	NS		**0.0063 K**	0.02	NS		NS		NS	
Zinc	NS		NS		NS		**0.038 K**	0.382	NS		**0.045 K**	0.382	NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		<0.03 UK	0.087	NS		**0.07 J+K**	0.087	NS		NS		NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		**0.057 K**	0.003	NS		**0.051 K**	0.003	NS		NS		NS		**0.095 K**	0.003
Beryllium, dissolved	NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		**0.05 JK**	0.0016	NS		**0.05 K**	0.0016	NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		**0.0002 JK**	0.00127	NS		**0.0003 JK**	0.00127
Chromium, dissolved	**0.0009 K**	0.231	NS		**0.0002 JK**	0.231	NS		<0.0001 UK	0.231	NS		**0.0007 K**	0.231	NS		**0.0018 K**	0.231
Cobalt, dissolved	NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		NS		NS		<0.01 UK	0.0371
Iron, dissolved	NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158
Lead, dissolved	NS		NS		<0.0001 UK	0.0109	NS		<0.0001 UK	0.0109	NS		NS		NS		<0.0001 UK	0.0109
Molybdenum, dissolved	NS		NS		<0.01 UK	0.034	NS		**0.01 JK**	0.034	NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	**0.0058 K**	0.168	NS		**0.0062 K**	0.168	NS		**0.0086 K**	0.168	NS		**0.011 K**	0.168	NS		**0.0066 K**	0.168
Selenium, dissolved	NS		NS		**0.57**	0.005	NS		**0.56**	0.005	NS		**1.4**	0.005	NS		**1.14**	0.005
Silver, dissolved	NS		NS		<0.01 UK	0.00036	NS		**0.01 J-K**	0.00036	NS		NS		NS		<0.01 UK	0.00036
Thallium, dissolved	NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003
Vanadium, dissolved	**0.0021 K**	0.02	NS		**0.0023 K**	0.02	NS		**0.0017 K**	0.02	NS		**0.00163 K**	0.02	NS		**0.0009 JK**	0.02
Zinc, dissolved	**0.005 JK**	0.382	NS		**0.003 JK**	0.382	NS		**0.003 JK**	0.382	NS		**0.007 JK**	0.382	NS		**0.011 K**	0.382

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MDS033		MDS033		MDS033		MDS033		MDS033		MDS033		MDS033		MRV011		MRV011	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Reservoir Delta		Reservoir Delta	
Sample ID:	050206GWMDS033-0-U		051407SWMDS033-0-F		051407SWMDS033-0-U		091307GWMDS033-0-F		091307GWMDS033-0-U		050708GWMDS033-0-F		050708GWMDS033-0-U		052104SWMRV011-0-F		052104SWMRV011-0-U	
Collection Date:	5/2/2006		5/14/2007		5/14/2007		9/13/2007		9/13/2007		5/7/2008		5/7/2008		5/21/2004		5/21/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		**1.61 K**	0.087	NS		**2.02 K**	0.087	NS		**0.89 J+K**	0.087	NS		NS	
Barium	NS		NS		NS		NS		**0.072 K**	0.003	NS		**0.029 JK**	0.003	NS		NS	
Beryllium	NS		NS		NS		NS		<0.002 UK	0.0006	NS		<0.004 UK	0.0006	NS		NS	
Boron	NS		NS		NS		NS		**0.05 JK**	0.0016	NS		<0.05 UK	0.0016	NS		NS	
Cadmium	**0.0008 K**		NS		NS		NS		**0.0007 K**	0.00127	NS		**0.001 K**	0.00126	NS		NS	
Chromium	**0.0131 K**		NS		NS		NS		**0.0165 K**	0.231	NS		**0.0074 K**	0.228	NS		NS	
Cobalt	NS		NS		NS		NS		<0.01 UK	0.003	NS		<0.02 UK	0.003	NS		NS	
Copper, total	NS		NS		NS		NS		<0.01 UK	0.0371	NS		<0.02 UK	0.0367	NS		NS	
Iron	NS		NS		NS		NS		**1.93 K**	0.158	NS		**0.79 J+K**	0.158	NS		NS	
Lead	NS		NS		NS		NS		**0.0008 J+K**	0.0109	NS		**0.0007 K**	0.0108	NS		NS	
Molybdenum	NS		NS		NS		NS		<0.01 UK	0.034	NS		<0.02 UK	0.034	NS		NS	
Nickel	**0.0175 K**		NS		NS		NS		**0.0212 K**	0.168	NS		**0.0184 K**	0.166	NS		NS	
Selenium	**1.67**	0.005	NS		**0.052**	0.005	NS		**2.2**	0.005	NS		**0.66**	0.005	NS		**0.002 J**	0.005
Silver	NS		NS		NS		NS		<0.01 UK	0.00036	NS		<0.02 UK	0.00036	NS		NS	
Thallium	NS		NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0005 UK	0.00003	NS		NS	
Vanadium	**0.0083 K**	0.02	NS		NS		NS		**0.0071 K**	0.02	NS		**0.0062 K**	0.02	NS		NS	
Zinc	**0.049 K**		NS		NS		NS		**0.044 K**	0.382	NS		**0.041 K**	0.378	NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		<0.03 UK	0.087	NS		**0.06 JK**	0.087	NS		NS		NS	
Barium, dissolved	NS		NS		NS		**0.065 K**	0.003	NS		**0.024 K**	0.003	NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS	
Boron, dissolved	NS		NS		NS		**0.05 JK**	0.0016	NS		**0.03 JK**	0.0016	NS		NS		NS	
Cadmium, dissolved	NS		**0.0002 JK**	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.000917	NS	
Chromium, dissolved	NS		**0.0001 JK**	0.231	NS		**0.0001 JK**	0.231	NS		<0.0002 UK	0.231	NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS	
Copper, dissolved	NS		NS		NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		NS		NS	
Iron, dissolved	NS		NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		NS		NS	
Lead, dissolved	NS		NS		NS		<0.0001 UK	0.0109	NS		<0.0001 UK	0.0109	NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS	
Nickel, dissolved	NS		**0.008 JK**	0.168	NS		**0.0114 K**	0.168	NS		**0.0057 K**	0.168	NS		**0.0004 JK**	0.104	NS	
Selenium, dissolved	NS		NS		NS		**1.56**	0.005	NS		**0.38**	0.005	NS		NS		NS	
Silver, dissolved	NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UJK	0.00036	NS		NS		NS	
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS	
Vanadium, dissolved	NS		**0.0013 JK**	0.02	NS		**0.0019 K**	0.02	NS		**0.0017 K**	0.02	NS		**0.00104 K**	0.02	NS	
Zinc, dissolved	NS		**0.008 JK**	0.382	NS		**0.004 JK**	0.382	NS		**0.003 JK**	0.382	NS		<0.002 UK	0.237	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MRV011		MRV011		MRV011		MRV011		MRV011		MRV011		MRV011		MRV011		MRV011	
Location Type:	Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta	
Sample ID:	050706SWMRV011-0-F		050706SWMRV011-0-U		051407SWMRV011-0-F		051407SWMRV011-0-U		090807SWMRV011-0-F		090807SWMRV011-0-U		051308SWMRV011-0-F		051308SWMRV011-0-U		091908SWMRV011-0-F	
Collection Date:	5/7/2006		5/7/2006		5/14/2007		5/14/2007		9/8/2007		9/8/2007		5/13/2008		5/13/2008		9/19/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		<0.06 UK	0.087	NS		**0.05 JK {J+}**	0.087	NS		**1.26 J+K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.006**	0.005	NS		**0.004 J**	0.005	NS		<0.001	0.005	NS		**0.004 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	**0.04 JK {J+}**	0.087	NS		NS		NS		NS		NS		NS		NS		<0.0500	0.087
Barium, dissolved	**0.067 K**	0.003	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.000798	NS		<0.0001	0.000929	NS		<0.0001 UK	0.000929	NS		**0.0001 JK**	0.000706	NS		<0.000125	0.00127
Chromium, dissolved	**0.0002 JK**	0.119	NS		<0.0001	0.148	NS		<0.0001 UK	0.148	NS		<0.0001 UK	0.100	NS		**0.00218 J+**	0.231
Cobalt, dissolved	<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	<0.01 UK	0.0187	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	<0.02 UK	0.158	NS		NS		NS		NS		NS		NS		NS		<0.0250	0.158
Lead, dissolved	<0.0001 UK	0.00471	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	<0.01 UK	0.034	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.0011 JK**	0.0851	NS		**0.0011 JK**	0.106	NS		**0.0014 JK**	0.106	NS		**0.003 K**	0.0712	NS		**0.00260 J**	0.168
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.0004 JK**	0.02	NS		**0.0007 JK**	0.02	NS		**0.0011 J+K**	0.02	NS		**0.0015 K**	0.02	NS		<0.00500	0.02
Zinc, dissolved	**0.002 JK**	0.193	NS		<0.002 UJK	0.242	NS		<0.002 UK	0.242	NS		**0.012 K**	0.162	NS		<0.00500	0.382

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MRV011		MSG003		MSG003		MSG003		MSG003		MSG003		MSG003		MSG003		MSG003	
Location Type:	Reservoir Delta		Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	091908SWMRV011-0-U		051104SWMSG003-0-F		051104SWMSG003-0-U		SWMSG003-0-F		SWMSG003-0-U		050206GWMSG003-0-F		050206GWMSG003-0-U		051007SWMSG003-1-F		051007SWMSG003-1-U	
Collection Date:	9/19/2008		5/11/2004		5/11/2004		9/8/2004		9/8/2004		5/2/2006		5/2/2006		5/10/2007		5/10/2007	
Sample Type:	Surface Water		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		<0.03 UK	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		<0.0001 UK		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		**0.001 K {J+}**		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		<0.0006 UK		NS		NS	
Selenium	**0.00176 J**	0.005	NS		**0.47**	0.005	NS		**0.44**	0.005	NS		**0.48**	0.005	NS		**0.57**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		**0.0011 K**	0.02	NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		<0.002 UK		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		<0.03 UK	0.087	NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		**0.043 K**	0.003	NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS	
Chromium, dissolved	NS		**0.0009 K**	0.231	NS		**0.0005 JK**	0.231	NS		**0.001 K**	0.231	NS		**0.0017 K**	0.231	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.0371	NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		<0.02 UK	0.158	NS		NS		NS	
Lead, dissolved	NS		NS		NS		NS		NS		<0.0001 UK	0.0109	NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		NS		NS	
Nickel, dissolved	NS		**0.0025 K**	0.168	NS		**0.0066 K**	0.168	NS		<0.0006 UK	0.168	NS		**0.0012 JK**	0.168	NS	
Selenium, dissolved	NS		**0.39**	0.005	NS		**0.46**	0.005	NS		**0.46 J-**	0.005	NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS	
Vanadium, dissolved	NS		**0.00106 K**	0.02	NS		**0.00087 K**	0.02	NS		**0.0007 JK**	0.02	NS		**0.0011 K**	0.02	NS	
Zinc, dissolved	NS		<0.002 UK	0.382	NS		<0.002 UK	0.382	NS		<0.002 UK	0.382	NS		<0.002 UK	0.382	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSG003		MSG003		MSG003		MSG003		MSG003		MSG003		MSG003		MSG003		MSG003	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	051007SWMSG003-2-F		051007SWMSG003-2-U		051007SWMSG003-3-F		051007SWMSG003-3-U		051007SWMSG003-avg-F		051007SWMSG003-avg-		091207GWMSG003-1-F		091207GWMSG003-1-U		091207GWMSG003-2-F	
Collection Date:	5/10/2007		5/10/2007		5/10/2007		5/10/2007		5/10/2007		5/10/2007		9/12/2007		9/12/2007		9/12/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		**0.043 K**	0.003	NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron	NS		NS		NS		NS		NS		NS		NS		**0.02 JK**	0.0016	NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00127	NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		**0.001 K**	0.231	NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.0371	NS	
Iron	NS		NS		NS		NS		NS		NS		NS		<0.02 UK	0.158	NS	
Lead	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.0109	NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		**0.0015 JK**	0.168	NS	
Selenium	NS		**0.58**	0.005	NS		**0.56**	0.005	NS		**0.57**	0.005	NS		**0.48**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		**0.001 K**	0.02	NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		**0.002 JK**	0.382	NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		**0.04 JK**	0.087	NS		**0.04 JK**	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		**0.046 K**	0.003	NS		**0.044 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		**0.03 JK**	0.0016	NS		**0.03 JK**	0.0016
Cadmium, dissolved	<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127
Chromium, dissolved	**0.0014 K**	0.231	NS		**0.0014 K**	0.231	NS		**0.0015 K**	0.231	NS		**0.0004 JK**	0.231	NS		<0.0001 UK	0.231
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371
Iron, dissolved	NS		NS		NS		NS		NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158
Lead, dissolved	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.0109	NS		<0.0001 UK	0.0109
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034
Nickel, dissolved	**0.0012 JK**	0.168	NS		**0.0011 JK**	0.168	NS		**0.00117 JK**	0.168	NS		**0.002 JK**	0.168	NS		**0.0021 JK**	0.168
Selenium, dissolved	NS		NS		NS		NS		NS		NS		**0.57**	0.005	NS		**0.56**	0.005
Silver, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036
Thallium, dissolved	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		**0.0001 JK**	0.00003
Vanadium, dissolved	**0.0011 K**	0.02	NS		**0.0011 K**	0.02	NS		**0.0011 K**	0.02	NS		**0.0011 K**	0.02	NS		**0.0011 K**	0.02
Zinc, dissolved	**0.002 JK**	0.382	NS		<0.002 UK	0.382	NS		**0.002 JK**	0.382	NS		<0.002 UK	0.382	NS		<0.002 UK	0.382

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSG003		MSG003		MSG003		MSG003		MSG003		MSG003		MSG003		MSG003		MSG003	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	091207GWMSG003-2-U		091207GWMSG003-3-F		091207GWMSG003-3-U		091207GWMSG003-avg-		091207GWMSG003-avg-		050708GWMSG003-0-F		050708GWMSG003-0-U		091608GWMSG003-0-F		091608GWMSG003-0-U	
Collection Date:	9/12/2007		9/12/2007		9/12/2007		9/12/2007		9/12/2007		5/7/2008		5/7/2008		9/16/2008		9/16/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.0500	0.087
Barium	**0.043 K**	0.003	NS		**0.042 K**	0.003	NS		**0.0427 K**	0.003	NS		**0.04 K**	0.003	NS		NS	
Beryllium	<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS	
Boron	**0.02 JK**	0.0016	NS		**0.02 JK**	0.0016	NS		**0.02 JK**	0.0016	NS		**0.03 JK**	0.0016	NS		NS	
Cadmium	<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.000625	
Chromium	**0.0013 K**	0.230	NS		**0.0013 K**	0.230	NS		**0.0012 K**	0.231	NS		<0.0001 UK	0.231	NS		<0.00250	
Cobalt	<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS	
Copper, total	<0.01 UK	0.0371	NS		<0.01 UK	0.0370	NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		NS	
Iron	<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.0250	0.158
Lead	<0.0001 UK	0.0109	NS		<0.0001 UK	0.0109	NS		<0.0001 UK	0.0109	NS		<0.0001 UK	0.0109	NS		NS	
Molybdenum	<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS	
Nickel	**0.002 JK**	0.168	NS		**0.0017 JK**	0.168	NS		**0.00173 JK**	0.168	NS		**0.0048 K**	0.168	NS		<0.00500	
Selenium	**0.54**	0.005	NS		**0.57**	0.005	NS		**0.53**	0.005	NS		**0.37**	0.005	NS		**0.64**	0.005
Silver	<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS	
Thallium	<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		**0.0002 JK**	0.00003	NS		NS	
Vanadium	**0.001 K**	0.02	NS		**0.001 JK**	0.02	NS		**0.001 JK**	0.02	NS		**0.0009 JK**	0.02	NS		<0.00500	0.02
Zinc	<0.002 UK	0.382	NS		<0.002 UK	0.382	NS		**0.002 JK**	0.382	NS		<0.002 UK	0.382	NS		<0.0250	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		**0.05 JK**	0.087	NS		**0.0433 JK**	0.087	NS		**0.06 J+K**	0.087	NS		<0.0500	0.087	NS	
Barium, dissolved	NS		**0.041 K**	0.003	NS		**0.0437 K**	0.003	NS		**0.041 K**	0.003	NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS	
Boron, dissolved	NS		**0.02 JK**	0.0016	NS		**0.0267 JK**	0.0016	NS		**0.02 JK**	0.0016	NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.000625	0.00127	NS	
Chromium, dissolved	NS		<0.0001 UK	0.231	NS		**0.0004 JK**	0.231	NS		<0.0001 UK	0.231	NS		<0.00287	0.231	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.0250	0.158	NS	
Lead, dissolved	NS		<0.0001 UK	0.0109	NS		<0.0001 UK	0.0109	NS		<0.0001 UK	0.0109	NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS	
Nickel, dissolved	NS		**0.0022 JK**	0.168	NS		**0.0021 JK**	0.168	NS		**0.0032 K**	0.168	NS		<0.00500	0.168	NS	
Selenium, dissolved	NS		**0.56**	0.005	NS		**0.563**	0.005	NS		**0.37**	0.005	NS		**0.653**	0.005	NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UJK	0.00036	NS		NS		NS	
Thallium, dissolved	NS		**0.0001 JK**	0.00003	NS		**0.0001 JK**	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS	
Vanadium, dissolved	NS		**0.0011 K**	0.02	NS		**0.0011 K**	0.02	NS		**0.0012 K**	0.02	NS		<0.00500	0.02	NS	
Zinc, dissolved	NS		<0.002 UK	0.382	NS		<0.002 UK	0.382	NS		<0.002 UK	0.382	NS		<0.0250	0.382	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSG004		MSG004		MSG004		MSG004		MSG004		MSG004		MSG004		MSG004		MSG004	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	051204SWMSG004-0-F		051204SWMSG004-0-U		SWMSG004-0-F		SWMSG004-0-U		050906GWMSG004-1-F		050906GWMSG004-1-U		050906GWMSG004-2-F		050906GWMSG004-2-U		050906GWMSG004-3-F	
Collection Date:	5/12/2004		5/12/2004		9/9/2004		9/9/2004		5/9/2006		5/9/2006		5/9/2006		5/9/2006		5/9/2006	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		**0.0001 JK**		NS		<0.0001 UK		NS	
Chromium	NS		NS		NS		NS		NS		**0.0013 K**		NS		**0.0013 K**		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		**0.001 JK**		NS		**0.001 JK**		NS	
Selenium	NS		**0.016**	0.005	NS		**0.031**	0.005	NS		**0.044**	0.005	NS		**0.048**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		**0.0012 K**	0.02	NS		**0.0012 K**	0.02	NS	
Zinc	NS		NS		NS		NS		NS		**0.004 JK**		NS		**0.003 JK**		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		NS		NS		**0.024 K**	0.003	NS		**0.027 K**	0.003	NS		**0.028 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.00100	NS		<0.0001 UK	0.00108	NS		<0.0001 UK	0.000978	NS		<0.0001 UK	0.00100	NS		<0.0001 UK	0.00101
Chromium, dissolved	**0.0006 K**	0.165	NS		<0.0003	0.183	NS		**0.0013 K**	0.160	NS		**0.0013 K**	0.165	NS		**0.0012 K**	0.167
Cobalt, dissolved	NS		NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		NS		<0.01 UK	0.0253	NS		<0.01 UK	0.0262	NS		<0.01 UK	0.0265
Iron, dissolved	NS		NS		NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158
Lead, dissolved	NS		NS		NS		NS		<0.0001 UK	0.00686	NS		<0.0001 UK	0.00717	NS		<0.0001 UK	0.00728
Molybdenum, dissolved	NS		NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034
Nickel, dissolved	**0.0023 K**	0.119	NS		**0.0089 K**	0.132	NS		**0.0008 JK**	0.115	NS		**0.0008 JK**	0.119	NS		**0.0008 JK**	0.121
Selenium, dissolved	**0.009**	0.005	NS		**0.018**	0.005	NS		**0.044**	0.005	NS		**0.044**	0.005	NS		**0.043**	0.005
Silver, dissolved	NS		NS		NS		NS		<0.01 UJK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036
Thallium, dissolved	NS		NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003
Vanadium, dissolved	**0.00157 K**	0.02	NS		**0.00516 K**	0.02	NS		**0.001 K**	0.02	NS		**0.001 K**	0.02	NS		**0.001 K**	0.02
Zinc, dissolved	**0.003 JK**	0.270	NS		<0.002 UK	0.301	NS		**0.003 JK**	0.261	NS		**0.01 K**	0.271	NS		**0.003 JK**	0.274

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSG004		MSG004		MSG004		MSG004		MSG004		MSG004		MSG004		MSG004		MSG004	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	050906GWMSG004-3-U		050906GWMSG004-avg-		050906GWMSG004-avg-		050907SWMSG004-0-F		050907SWMSG004-0-U		051508GWMSG004-0-F		051508GWMSG004-0-U		091708GWMSG004-0-F		091708GWMSG004-0-U	
Collection Date:	5/9/2006		5/9/2006		5/9/2006		5/9/2007		5/9/2007		5/15/2008		5/15/2008		9/17/2008		9/17/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		**4.21 K**	0.087	NS		**1.32 J+K**	0.087	NS		**0.496**	0.087
Barium	NS		NS		NS		NS		NS		NS		**0.052 K**	0.003	NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS	
Boron	NS		NS		NS		NS		NS		NS		**0.02 JK**	0.0016	NS		NS	
Cadmium	<0.0001 UK		NS		**0.0001 JK**		NS		NS		NS		<0.0001 UK	0.000920	NS		**0.000465 J**	
Chromium	**0.0012 K**		NS		**0.00127 K**		NS		NS		NS		**0.0041 K**	0.146	NS		**0.0208**	
Cobalt	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		<0.01 UK	0.0230	NS		NS	
Iron	NS		NS		NS		NS		NS		NS		**0.97 J+K**	0.158	NS		**1.36**	0.158
Lead	NS		NS		NS		NS		NS		NS		**0.0011 K**	0.00612	NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		NS	
Nickel	**0.001 JK**		NS		**0.001 JK**		NS		NS		NS		**0.0023 JK**	0.105	NS		**0.0166**	
Selenium	**0.05**	0.005	NS		**0.0473**	0.005	NS		**0.015**	0.005	NS		**0.005 J-**	0.005	NS		**0.0135**	0.005
Silver	NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS	
Vanadium	**0.0012 K**	0.02	NS		**0.0012 K**	0.02	NS		NS		NS		**0.0027 K**	0.02	NS		<0.00500	0.02
Zinc	**0.004 JK**		NS		**0.00367 JK**		NS		NS		NS		**0.009 JK**	0.238	NS		**0.0562 J**	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087	NS		<0.0500	0.087	NS	
Barium, dissolved	NS		**0.0263 K**	0.003	NS		NS		NS		**0.041 K**	0.003	NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.0016	NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000998	NS		<0.0001 UK	0.000994	NS		<0.0001 UK	0.000931	NS		<0.000125	0.00113	NS	
Chromium, dissolved	NS		**0.00127 K**	0.164	NS		<0.0001 UK	0.163	NS		<0.0001 UK	0.149	NS		**0.00123 J**	0.195	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0260	NS		NS		NS		<0.01 UK	0.0235	NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158	NS		**0.0305 J**	0.158	NS	
Lead, dissolved	NS		<0.0001 UK	0.00711	NS		NS		NS		<0.0001 UK	0.00626	NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034	NS		NS		NS	
Nickel, dissolved	NS		**0.0008 JK**	0.118	NS		**0.0042 K**	0.117	NS		**0.0019 JK**	0.107	NS		**0.00482**	0.141	NS	
Selenium, dissolved	NS		**0.0437**	0.005	NS		NS		NS		**0.006**	0.005	NS		**0.011**	0.005	NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS	
Vanadium, dissolved	NS		**0.001 K**	0.02	NS		<0.0002 UK	0.02	NS		<0.0002 UK	0.02	NS		<0.0250	0.02	NS	
Zinc, dissolved	NS		**0.00533 JK**	0.269	NS		**0.002 JK**	0.267	NS		**0.008 JK**	0.243	NS		**0.00525 J**	0.322	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSG004		MSG004		MSG005		MSG005		MSG005		MSG005		MSG005		MSG005		MSG005	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	0905GWMSG004-F		0905GWMSG004-U		051204SWMSG005-0-F		051204SWMSG005-0-U		SWMSG005-1-F		SWMSG005-1-U		SWMSG005-2-F		SWMSG005-2-U		SWMSG005-3-F	
Collection Date:	5/30/2009		5/30/2009		5/12/2004		5/12/2004		9/9/2004		9/9/2004		9/9/2004		9/9/2004		9/9/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		**0.000602**		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.022**	0.005	NS		**0.007**	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		<0.00500	0.02	NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.000125	0.00102	NS		<0.0001 UK	0.00108	NS		<0.0001 UK	0.00108	NS		<0.0001 UK	0.00108	NS		<0.0001 UK	0.00108
Chromium, dissolved	NS		NS		**0.0005 JK**	0.183	NS		**0.0005 JK**	0.183	NS		**0.0005 JK**	0.184	NS		**0.0006 JK**	0.183
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		NS		<0.0002 UK	0.133	NS		**0.0039 K**	0.132	NS		**0.004 K**	0.133	NS		**0.0039 K**	0.132
Selenium, dissolved	NS		NS		**0.007**	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		NS		<0.00024	0.02	NS		**0.00006 JK**	0.02	NS		**0.00018 JK**	0.02	NS		**0.00015 JK**	0.02
Zinc, dissolved	NS		NS		**0.003 JK**	0.302	NS		<0.002 UK	0.301	NS		<0.002 UK	0.302	NS		<0.002 UK	0.301

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	**MSG005**		**MSG005**		**MSG005**		**MSG005**		**MSG005**		**MSG005**		**MSG005**		**MSG005**		**MSG005**	
Location Type:	**Spring**		**Spring**		**Spring**		**Spring**		**Spring**		**Spring**		**Spring**		**Spring**		**Spring**	
Sample ID:	**SWMSG005-3-U**		**SWMSG005-avg-F**		**SWMSG005-avg-U**		**050306GWMSG005-1-F**		**050306GWMSG005-1-U**		**050306GWMSG005-2-F**		**050306GWMSG005-2-U**		**050306GWMSG005-3-F**		**050306GWMSG005-3-U**	
Collection Date:	**9/9/2004**		**9/9/2004**		**9/9/2004**		**5/3/2006**		**5/3/2006**		**5/3/2006**		**5/3/2006**		**5/3/2006**		**5/3/2006**	
Sample Type:	**Groundwater**		**Groundwater**		**Groundwater**		**Groundwater**		**Groundwater**		**Groundwater**		**Groundwater**		**Groundwater**		**Groundwater**	
	Triplicate		**Averaged**		**Averaged**		**Triplicate**		**Triplicate**		**Triplicate**		**Triplicate**		**Triplicate**		**Triplicate**	
	Result	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		<0.0001 UK		NS		<0.0001 UK		NS		<0.0001 UK	
Chromium	NS		NS		NS		NS		**0.0007 K**		NS		**0.0006 K**		NS		**0.0006 K**	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		<0.0006 UK		NS		<0.0006 UK		NS		<0.0006 UK	
Selenium	**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		**0.01**	0.005	NS		**0.01**	0.005	NS		**0.01**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		**0.0004 JK**	0.02	NS		**0.0003 JK**	0.02	NS		**0.0004 JK**	0.02
Zinc	NS		NS		NS		NS		**0.003 JK**		NS		**0.002 JK**		NS		**0.002 JK**	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS	
Barium, dissolved	NS		NS		NS		**0.031 K**	0.003	NS		**0.032 K**	0.003	NS		**0.031 K**	0.003	NS	
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00108	NS		<0.0001 UK	0.00102	NS		<0.0001 UK	0.00102	NS		<0.0001 UK	0.00102	NS	
Chromium, dissolved	NS		**0.000533 JK**	0.183	NS		**0.0005 JK**	0.170	NS		**0.0005 K**	0.170	NS		**0.0005 JK**	0.170	NS	
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS	
Copper, dissolved	NS		NS		NS		<0.01 UK	0.0269	NS		<0.01 UK	0.0270	NS		<0.01 UK	0.0269	NS	
Iron, dissolved	NS		NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS	
Lead, dissolved	NS		NS		NS		<0.0001 UK	0.00742	NS		<0.0001 UK	0.00745	NS		**0.0001 JK**	0.00742	NS	
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS	
Nickel, dissolved	NS		**0.00393 K**	0.132	NS		<0.0006 UK	0.122	NS		<0.0006 UK	0.123	NS		<0.0006 UK	0.122	NS	
Selenium, dissolved	NS		**0.004 J**	0.005	NS		**0.012**	0.005	NS		**0.012**	0.005	NS		**0.007 J-**	0.005	NS	
Silver, dissolved	NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS	
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		**0.00013 JK**	0.02	NS		<0.0002 UK	0.02	NS		<0.0002 UK	0.02	NS		<0.0002 UK	0.02	NS	
Zinc, dissolved	NS		<0.002 UK	0.301	NS		<0.002 UK	0.278	NS		<0.002 UK	0.279	NS		<0.002 UK	0.278	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSG005		MSG005		MSG005		MSG005		MSG005		MSG005		MSG005		MSG005		MSG005	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	050306GWMSG005-avg-		050306GWMSG005-avg-		050907SWMSG005-0-F		050907SWMSG005-0-U		091107GWMSG005-0-F		091107GWMSG005-0-U		051508GWMSG005-0-F		051508GWMSG005-0-U		091708GWMSG005-1-F	
Collection Date:	5/3/2006		5/3/2006		5/9/2007		5/9/2007		9/11/2007		9/11/2007		5/15/2008		5/15/2008		9/17/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Averaged		Averaged		Primary		Primary		Primary		Primary		Primary		Primary		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		**0.06 JK**	0.087	NS	
Barium	NS		NS		NS		NS		NS		**0.05 K**	0.003	NS		**0.032 K**	0.003	NS	
Beryllium	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS	
Boron	NS		NS		NS		NS		NS		**0.02 JK**	0.0016	NS		**0.02 JK**	0.0016	NS	
Cadmium	NS		<0.0001 UK		NS		NS		NS		<0.0001 UK	0.00102	NS		<0.0001 UK	0.00106	NS	
Chromium	NS		**0.000633 K**		NS		NS		NS		<0.0005 UK	0.169	NS		<0.0003 UK	0.178	NS	
Cobalt	NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS	
Copper, total	NS		NS		NS		NS		NS		<0.01 UK	0.0267	NS		<0.01 UK	0.0283	NS	
Iron	NS		NS		NS		NS		NS		**0.19 K**	0.158	NS		**0.11 K**	0.158	NS	
Lead	NS		NS		NS		NS		NS		<0.0001 UK	0.00736	NS		<0.0001 UK	0.00787	NS	
Molybdenum	NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS	
Nickel	NS		<0.0006 UK		NS		NS		NS		**0.001 JK**	0.122	NS		**0.0007 JK**	0.128	NS	
Selenium	NS		**0.01**	0.005	NS		**0.007**	0.005	NS		**0.002 J**	0.005	NS		**0.015**	0.005	NS	
Silver	NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS	
Thallium	NS		NS		NS		NS		NS		<0.0002 UK	0.00003	NS		<0.0001 UK	0.00003	NS	
Vanadium	NS		**0.000367 JK**	0.02	NS		NS		NS		**0.0004 JK**	0.02	NS		**0.0002 JK**	0.02	NS	
Zinc	NS		**0.00233 JK**		NS		NS		NS		**0.017 K {J+}**	0.276	NS		**0.002 JK**	0.292	NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.0500	0.087
Barium, dissolved	**0.0313 K**	0.003	NS		NS		NS		**0.052 K**	0.003	NS		**0.032 K**	0.003	NS		NS	
Beryllium, dissolved	<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		NS		**0.02 JK**	0.0016	NS		<0.01 UK	0.0016	NS		NS	
Cadmium, dissolved	<0.0001 UK	0.00102	NS		<0.0001 UK	0.00107	NS		<0.0001 UK	0.00107	NS		<0.0001 UK	0.00103	NS		<0.000125	0.00105
Chromium, dissolved	**0.0005 JK**	0.170	NS		<0.0001 UK	0.180	NS		**0.0001 JK**	0.182	NS		<0.0001 UK	0.171	NS		<0.00193	0.176
Cobalt, dissolved	<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	<0.01 UK	0.0269	NS		NS		NS		<0.01 UK	0.0290	NS		<0.01 UK	0.0272	NS		NS	
Iron, dissolved	<0.02 UK	0.158	NS		NS		NS		**0.03 JK**	0.158	NS		<0.02 UK	0.158	NS		<0.0250	0.158
Lead, dissolved	**0.0001 JK**	0.00742	NS		NS		NS		<0.0001 UK	0.00813	NS		<0.0001 UK	0.00751	NS		NS	
Molybdenum, dissolved	<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS	
Nickel, dissolved	<0.0006 UK	0.122	NS		**0.004 K**	0.130	NS		**0.0012 JK**	0.132	NS		**0.0024 JK**	0.124	NS		**0.00309 J**	0.127
Selenium, dissolved	**0.0103 J-**	0.005	NS		NS		NS		**0.002 J**	0.005	NS		**0.014**	0.005	NS		**0.00475**	0.005
Silver, dissolved	<0.01 UK	0.00036	NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UJK	0.00036	NS		NS	
Thallium, dissolved	<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS	
Vanadium, dissolved	<0.0002 UK	0.02	NS		<0.0002 UK	0.02	NS		**0.0005 JK**	0.02	NS		<0.0002 UK	0.02	NS		<0.0250	0.02
Zinc, dissolved	<0.002 UK	0.278	NS		<0.002 UK	0.296	NS		**0.009 JK**	0.300	NS		**0.004 JK**	0.281	NS		**0.00647 J**	0.289

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSG005		MSG005		MSG005		MSG005		MSG005		MSG005		MSG005		MSG005		MSG005	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	091708GWMSG005-1-U		091708GWMSG005-2-F		091708GWMSG005-2-U		091708GWMSG005-3-F		091708GWMSG005-3-U		091708GWMSG005-avg-		091708GWMSG005-avg-		0905GWMSG005-1-F		0905GWMSG005-1-U	
Collection Date:	9/17/2008		9/17/2008		9/17/2008		9/17/2008		9/17/2008		9/17/2008		9/17/2008		5/30/2009		5/30/2009	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	<0.0500	0.087	NS		<0.0500	0.087	NS		<0.0500	0.087	NS		<0.0500	0.087	NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	<0.000125		NS		<0.000125		NS		<0.000125		NS		<0.000125		NS		<0.000125	
Chromium	<0.00171		NS		**0.00118 J**		NS		**0.00194 J**		NS		**0.00156 J**		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	**0.0376 J**	0.158	NS		**0.0351 J**	0.158	NS		**0.0368 J**	0.158	NS		**0.0365 J**	0.158	NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	**0.00203 J**		NS		**0.00242 J**		NS		**0.00242 J**		NS		**0.00229 J**		NS		NS	
Selenium	**0.00460**	0.005	NS		**0.00499**	0.005	NS		**0.00467**	0.005	NS		**0.00475**	0.005	NS		**0.00668**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	<0.0250	0.02	NS		<0.0250	0.02	NS		<0.00500	0.02	NS		<0.0250	0.02	NS		<0.00500	0.02
Zinc	**0.00962 J**		NS		**0.00858 J**		NS		**0.00877 J**		NS		**0.00899 J**		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.0500	0.087	NS		<0.0500	0.087	NS		<0.0500	0.087	NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000125	0.00102	NS		<0.000125	0.00104	NS		<0.000125	0.00104	NS		<0.000125	0.00102	NS	
Chromium, dissolved	NS		**0.000994 J**	0.169	NS		**0.00121 J**	0.174	NS		**0.0011 J**	0.173	NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		<0.0250	0.158	NS		<0.0250	0.158	NS		<0.0250	0.158	NS		NS		NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.00232 J**	0.122	NS		**0.00222 J**	0.126	NS		**0.00254 J**	0.125	NS		NS		NS	
Selenium, dissolved	NS		**0.00433**	0.005	NS		**0.00476**	0.005	NS		**0.00461**	0.005	NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.00500	0.02	NS		<0.0250	0.02	NS		<0.0250	0.02	NS		NS		NS	
Zinc, dissolved	NS		**0.00629 J**	0.278	NS		**0.00640 J**	0.286	NS		**0.00639 J**	0.284	NS		NS		NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSG005		MSG005		MSG005		MSG005		MSG005		MSG005		MSG006		MSG006		MSG006	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	0905GWMSG005-2-F		0905GWMSG005-2-U		0905GWMSG005-3-F		0905GWMSG005-3-U		0905GWMSG005-avg-F		0905GWMSG005-avg-U		051404SWMSG006-0-F		051404SWMSG006-0-U		SWMSG006-0-F	
Collection Date:	5/30/2009		5/30/2009		5/30/2009		5/30/2009		5/30/2009		5/30/2009		5/14/2004		5/14/2004		9/10/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		<0.000125		NS		<0.000125		NS		<0.000125		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.00655**	0.005	NS		**0.00655**	0.005	NS		**0.00659**	0.005	NS		**0.22**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.000125	0.00103	NS		<0.000125	0.00103	NS		<0.000125	0.00103	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127
Chromium, dissolved	NS		NS		NS		NS		NS		NS		**0.0008 K**	0.231	NS		<0.0001	0.231
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		NS		NS		NS		NS		NS		<0.0002 UK	0.168	NS		**0.0072 K**	0.168
Selenium, dissolved	NS		NS		NS		NS		NS		NS		**0.213**	0.005	NS		**0.26**	0.005
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		NS		NS		NS		NS		NS		**0.00073 K**	0.02	NS		**0.00106 K**	0.02
Zinc, dissolved	NS		NS		NS		NS		NS		NS		<0.002 UK	0.382	NS		**0.003 JK**	0.382

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSG006		MSG006		MSG006		MSG006		MSG006		MSG006		MSG006		MSG006		MSG006	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	SWMSG006-0-U		050306GWMSG006-0-F		050306GWMSG006-0-U		050907SWMSG006-0-F		050907SWMSG006-0-U		091207GWMSG006-0-F		091207GWMSG006-0-U		051508GWMSG006-0-F		051508GWMSG006-0-U	
Collection Date:	9/10/2004		5/3/2006		5/3/2006		5/9/2007		5/9/2007		9/12/2007		9/12/2007		5/15/2008		5/15/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		**0.17 JK**	0.087	NS		**0.24 K**	0.087	NS		**0.27 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		**0.063 K**	0.003	NS		**0.052 K**	0.003
Beryllium	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006
Boron	NS		NS		NS		NS		NS		NS		<0.01 UK	0.0016	NS		**0.03 JK**	0.0016
Cadmium	NS		NS		**0.0002 JK**		NS		NS		NS		<0.0001 UK	0.00127	NS		**0.0003 JK**	0.00127
Chromium	NS		NS		**0.0005 K**		NS		NS		NS		<0.0005 UK	0.231	NS		<0.0004 UK	0.231
Cobalt	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003
Copper, total	NS		NS		NS		NS		NS		NS		<0.01 UK	0.0371	NS		**0.03 JK**	0.0371
Iron	NS		NS		NS		NS		NS		NS		**0.5 K**	0.158	NS		**0.3 K**	0.158
Lead	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.0109	NS		<0.0001 UK	0.0109
Molybdenum	NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034
Nickel	NS		NS		**0.0197 K**		NS		NS		NS		**0.0045 K**	0.168	NS		**0.0124 K**	0.168
Selenium	**0.28**	0.005	NS		**0.181**	0.005	NS		**0.26**	0.005	NS		**0.018**	0.005	NS		**0.098**	0.005
Silver	NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036
Thallium	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003
Vanadium	NS		NS		**0.0041 K**	0.02	NS		NS		NS		**0.0022 K**	0.02	NS		**0.0031 K**	0.02
Zinc	NS		NS		**0.018 K**		NS		NS		NS		**0.004 JK**	0.382	NS		**0.03 K**	0.382
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		**0.04 JK {J+}**	0.087	NS		NS		NS		**0.18 JK**	0.087	NS		<0.03 UK	0.087	NS	
Barium, dissolved	NS		**0.048 K**	0.003	NS		NS		NS		**0.063 K**	0.003	NS		**0.048 K**	0.003	NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		NS		NS		NS		NS		**0.01 JK**	0.0016	NS		**0.03 JK**	0.0016	NS	
Cadmium, dissolved	NS		**0.0001 JK**	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		**0.0001 JK**	0.00127	NS	
Chromium, dissolved	NS		**0.0004 JK**	0.231	NS		<0.0001 UK	0.231	NS		<0.0001 UK	0.231	NS		<0.0001 UK	0.231	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS	
Copper, dissolved	NS		<0.01 UK	0.0371	NS		NS		NS		**0.38 K**	0.0371	NS		<0.01 UK	0.0371	NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		**0.1 K**	0.158	NS		<0.02 UK	0.158	NS	
Lead, dissolved	NS		<0.0001 UK	0.0109	NS		NS		NS		<0.0001 UK	0.0109	NS		<0.0001 UK	0.0109	NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034	NS		**0.01 JK**	0.034	NS	
Nickel, dissolved	NS		**0.0185 K**	0.168	NS		**0.013 K**	0.168	NS		**0.0037 K**	0.168	NS		**0.0134 K**	0.168	NS	
Selenium, dissolved	NS		**0.138 J-**	0.005	NS		NS		NS		**0.017**	0.005	NS		**0.098**	0.005	NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UJK	0.00036	NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		**0.0016 K**	0.02	NS		<0.0002 UK	0.02	NS		**0.0016 K**	0.02	NS		**0.0012 J+K**	0.02	NS	
Zinc, dissolved	NS		**0.018 K**	0.382	NS		<0.002 UK	0.382	NS		<0.002 UK	0.382	NS		**0.032 K**	0.382	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSG006		MSG006		MSG006		MSG006		MSG007		MSG007		MSG007		MSG007		MSG007	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	091808GWMSG006-0-F		091808GWMSG006-0-U		0905GWMSG006-F		0905GWMSG006-U		051006GWMSG007-0-F		051006GWMSG007-0-U		051407SWMSG007-0-F		051407SWMSG007-0-U		091407GWMSG007-0-F	
Collection Date:	9/19/2008		9/19/2008		5/30/2009		5/30/2009		5/10/2006		5/10/2006		5/14/2007		5/14/2007		9/14/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**0.87**	0.087	NS		NS		NS		NS		NS		**0.49 K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		**0.000285 J**		NS		<0.000125		NS		**0.0001 JK**		NS		NS		NS	
Chromium	NS		**0.00505 J+**		NS		NS		NS		**0.0017 K**		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		**0.839**	0.158	NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		**0.00900**		NS		NS		NS		**0.0022 JK**		NS		NS		NS	
Selenium	NS		**0.0234**	0.005	NS		**0.0669**	0.005	NS		**0.008**	0.005	NS		**0.003 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		**0.0031 K**	0.02	NS		NS		NS	
Zinc	NS		**0.0144 J**		NS		NS		NS		**0.008 JK**		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.0500	0.087	NS		NS		NS		**0.07 JK**	0.087	NS		NS		NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		NS		NS		**0.023 K**	0.003	NS		NS		NS		**0.06 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		**0.02 JK**	0.0016
Cadmium, dissolved	<0.000125	0.00127	NS		<0.000125	0.00127	NS		<0.0001 UK	0.000884	NS		<0.0001	0.000958	NS		<0.0001 UK	0.00103
Chromium, dissolved	**0.00221 J+**	0.231	NS		NS		NS		**0.0003 JK**	0.138	NS		<0.0001	0.155	NS		<0.0001 UK	0.172
Cobalt, dissolved	NS		NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		NS		<0.01 UK	0.0217	NS		NS		NS		<0.01 UK	0.0273
Iron, dissolved	**0.0297 J**	0.158	NS		NS		NS		**0.04 JK**	0.158	NS		NS		NS		**0.39 K**	0.158
Lead, dissolved	NS		NS		NS		NS		<0.0001 UK	0.00570	NS		NS		NS		<0.0001 UK	0.00754
Molybdenum, dissolved	NS		NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	**0.00731**	0.168	NS		NS		NS		**0.0007 JK**	0.0990	NS		**0.0006 JK**	0.111	NS		**0.002 JK**	0.124
Selenium, dissolved	**0.0232**	0.005	NS		NS		NS		**0.005 J**	0.005	NS		NS		NS		**0.001 J**	0.005
Silver, dissolved	NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0002 UK	0.00003
Vanadium, dissolved	<0.00500	0.02	NS		NS		NS		**0.0005 JK**	0.02	NS		<0.0002	0.02	NS		**0.0007 JK**	0.02
Zinc, dissolved	<0.00500	0.382	NS		NS		NS		**0.004 JK**	0.225	NS		<0.002 UJK	0.253	NS		**0.002 JK**	0.282

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSG007		MSG007		MSG007		MSG007		MSG007		MSG007		MSG007		MSG008		MSG008	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	091407GWMSG007-0-U		051508GWMSG007-0-F		051508GWMSG007-0-U		091808GWMSG007-0-F		091808GWMSG007-0-U		0905GWMSG007-F		0905GWMSG007-U		052208GWMSG008-0-F		052208GWMSG008-0-U	
Collection Date:	9/14/2007		5/15/2008		5/15/2008		9/18/2008		9/18/2008		5/30/2009		5/30/2009		5/22/2008		5/22/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	**3.36 J+K**	0.087	NS		**0.65 J+K**	0.087	NS		**4.38**	0.087	NS		NS		NS		**0.25 K**	0.087
Barium	**0.088 K**	0.003	NS		**0.029 K**	0.003	NS		NS		NS		NS		NS		**0.065 K**	0.003
Beryllium	<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		<0.002 UK	0.0006
Boron	**0.02 JK**	0.0016	NS		**0.02 JK**	0.0016	NS		NS		NS		NS		NS		**0.03 JK**	0.0016
Cadmium	<0.0002 UK	0.00105	NS		<0.0001 UK	0.000920	NS		**0.000288 J**		NS		**0.000245 J**		NS		<0.0002 UK	0.00127
Chromium	**0.003 K**	0.177	NS		**0.001 K**	0.146	NS		**0.00742**		NS		NS		NS		**0.265 K**	0.231
Cobalt	<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		<0.01 UK	0.003
Copper, total	<0.01 UK	0.0281	NS		<0.01 UK	0.0230	NS		NS		NS		NS		NS		**0.01 JK**	0.0371
Iron	**4.22 K**	0.158	NS		**0.67 J+K**	0.158	NS		**3.94**	0.158	NS		NS		NS		<0.03 UK	0.158
Lead	**0.002 K**	0.00782	NS		**0.0004 JK**	0.00612	NS		NS		NS		NS		NS		**0.001 K**	0.0109
Molybdenum	<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		<0.01 UK	0.034
Nickel	**0.0035 K**	0.128	NS		**0.0012 JK**	0.105	NS		**0.00593**		NS		NS		NS		**0.181 K**	0.168
Selenium	**0.003 J**	0.005	NS		**0.02 J-**	0.005	NS		**0.0131**	0.005	NS		**0.0396**	0.005	NS		**0.34**	0.005
Silver	<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		<0.01 UK	0.00036
Thallium	<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		<0.0002 UK	0.00003
Vanadium	**0.0057 K**	0.02	NS		**0.0016 K**	0.02	NS		**0.00967 J**	0.02	NS		<0.00500	0.02	NS		<0.0007 UK	0.02
Zinc	**0.012 K {J+}**	0.290	NS		**0.004 JK**	0.238	NS		**0.0291 J**		NS		NS		NS		<0.004 UK	0.382
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		<0.0500	0.087	NS		NS		NS		**0.23 K**	0.087	NS	
Barium, dissolved	NS		**0.022 K**	0.003	NS		NS		NS		NS		NS		**0.061 K**	0.003	NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		<0.01 UK	0.0016	NS		NS		NS		NS		NS		**0.02 JK**	0.0016	NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000920	NS		<0.000125	0.000938	NS		<0.000125	0.000898	NS		**0.0002 JK**	0.00127	NS	
Chromium, dissolved	NS		<0.0001 UK	0.146	NS		<0.00194	0.150	NS		NS		NS		<0.0001 UK	0.231	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Copper, dissolved	NS		<0.01 UK	0.0230	NS		NS		NS		NS		NS		**0.02 JK**	0.0371	NS	
Iron, dissolved	NS		**0.05 K**	0.158	NS		**0.0405 J**	0.158	NS		NS		NS		**0.09 K**	0.158	NS	
Lead, dissolved	NS		<0.0001 UK	0.00612	NS		NS		NS		NS		NS		<0.0001 UK	0.0109	NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel, dissolved	NS		**0.0017 JK**	0.105	NS		**0.00303 J**	0.108	NS		NS		NS		**0.0059 K**	0.168	NS	
Selenium, dissolved	NS		**0.02**	0.005	NS		**0.00522**	0.005	NS		NS		NS		**0.35**	0.005	NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		<0.0002 UK	0.02	NS		<0.00500	0.02	NS		NS		NS		**0.0022 K**	0.02	NS	
Zinc, dissolved	NS		<0.002 UK	0.238	NS		<0.00500	0.245	NS		NS		NS		**0.003 JK**	0.382	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSP010		MSP010		MSP010		MSP010		MSP010		MSP011		MSP011		MSP011		MSP011	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	051504SWMSP010-0-F		051504SWMSP010-0-U		050406SWMSP010-0-F		050406SWMSP010-0-U		050406SWMSP010-0-U		051204SWMSP011-1-F		051204SWMSP011-1-U		051204SWMSP011-2-F		051204SWMSP011-2-U	
Collection Date:	5/15/2004		5/15/2004		5/4/2006		5/4/2006		5/6/2006		5/12/2004		5/12/2004		5/12/2004		5/12/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.63**	0.005	NS		NS		**1.07**	0.005	NS		**0.047**	0.005	NS		**0.049**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		**0.03 JK {J+}**	0.087	NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		**0.023 K**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	**0.0008 K**	0.00127	NS		**0.0018 K**	0.00127	NS		NS		**0.001 K**	0.000590	NS		**0.0011 K**	0.000595	NS	
Chromium, dissolved	NS		NS		**0.009 K**	0.231	NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		<0.01 UK	0.0371	NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		<0.02 UK	0.158	NS		NS		NS		NS		NS		NS	
Lead, dissolved	NS		NS		<0.0001 UK	0.0109	NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		**0.02 JK**	0.034	NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.0252 K**	0.168	NS		**0.0239 K**	0.168	NS		NS		**0.0099 K**	0.0547	NS		**0.0099 K**	0.0555	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		<0.01 UJK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.0155 K**	0.02	NS		**0.0125 K**	0.02	NS		NS		**0.0124 K**	0.02	NS		**0.0126 K**	0.02	NS	
Zinc, dissolved	**0.009 JK**	0.382	NS		**0.038 K**	0.382	NS		NS		**0.01 JK**	0.124	NS		**0.011 K**	0.126	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSP011		MSP011		MSP011		MSP011		MSP011		MSP011		MSP011		MSP011		MSP011	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	051204SWMSP011-3-F		051204SWMSP011-3-U		051204SWMSP011-avg-F		051204SWMSP011-avg-U		050406SWMSP011-0-F		050406SWMSP011-0-U		050406SWMSP011-0-U		051007SWMSP011-0-F		051007SWMSP011-0-U	
Collection Date:	5/12/2004		5/12/2004		5/12/2004		5/12/2004		5/4/2006		5/4/2006		5/6/2006		5/10/2007		5/10/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		<0.03 UK	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.049**	0.005	NS		**0.0483**	0.005	NS		NS		**0.043**	0.005	NS		**0.043**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		<0.03 UK	0.087	NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		**0.024 K**	0.003	NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	**0.001 JK**	0.000591	NS		**0.00103 JK**	0.000593	NS		**0.0001 JK**	0.000810	NS		NS		**0.0005 K**	0.000618	NS	
Chromium, dissolved	NS		NS		NS		NS		**0.0003 JK**	0.122	NS		NS		**0.0007 K**	0.0831	NS	
Cobalt, dissolved	NS		NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		<0.01 UK	0.0191	NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		<0.02 UK	0.158	NS		NS		NS		NS	
Lead, dissolved	NS		NS		NS		NS		<0.0001 UK	0.00485	NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		NS	
Nickel, dissolved	**0.0099 K**	0.0549	NS		**0.0099 K**	0.0551	NS		**0.001 JK**	0.0871	NS		NS		**0.0104 K**	0.0585	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		<0.01 UJK	0.00036	NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS	
Vanadium, dissolved	**0.0127 K**	0.02	NS		**0.0126 K**	0.02	NS		**0.0008 JK**	0.02	NS		NS		**0.0102 K**	0.02	NS	
Zinc, dissolved	**0.011 JK**	0.125	NS		**0.0107 JK**	0.125	NS		**0.003 JK**	0.198	NS		NS		**0.008 JK**	0.133	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSP011		MSP011		MSP011		MSP011		MSP011		MSP011		MSP011		MSP011		MSP012	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	050808GWMSP011-1-F		050808GWMSP011-1-U		050808GWMSP011-2-F		050808GWMSP011-2-U		050808GWMSP011-3-F		050808GWMSP011-3-U		050808GWMSP011-avg-F		050808GWMSP011-avg-		051204SWMSP012-0-F	
Collection Date:	5/8/2008		5/8/2008		5/8/2008		5/8/2008		5/8/2008		5/8/2008		5/8/2008		5/8/2008		5/12/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**0.11 JK**	0.087	NS		**0.14 JK**	0.087	NS		**0.1 JK**	0.087	NS		**0.117 JK**	0.087	NS	
Barium	NS		**0.008 JK**	0.003	NS		**0.008 JK**	0.003	NS		**0.008 JK**	0.003	NS		**0.008 JK**	0.003	NS	
Beryllium	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS	
Boron	NS		**0.03 JK**	0.0016	NS		**0.02 JK**	0.0016	NS		**0.03 JK**	0.0016	NS		**0.0267 JK**	0.0016	NS	
Cadmium	NS		**0.0016 K**	0.000479	NS		**0.0015 K**	0.000475	NS		**0.0016 K**	0.000479	NS		**0.00157 K**	0.000477	NS	
Chromium	NS		**0.0021 K**	0.0579	NS		**0.0022 K**	0.0573	NS		**0.0022 K**	0.0579	NS		**0.00217 K**	0.0577	NS	
Cobalt	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS	
Copper, total	NS		<0.01 UK	0.00878	NS		<0.01 UK	0.00867	NS		<0.01 UK	0.00878	NS		<0.01 UK	0.00875	NS	
Iron	NS		**0.12 K**	0.158	NS		**0.14 K**	0.158	NS		**0.13 K**	0.158	NS		**0.13 K**	0.158	NS	
Lead	NS		<0.0001 UK	0.00181	NS		<0.0001 UK	0.00178	NS		**0.0002 JK**	0.00181	NS		**0.0002 JK**	0.00180	NS	
Molybdenum	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS	
Nickel	NS		**0.0078 K**	0.0403	NS		**0.0075 K**	0.0399	NS		**0.0077 K**	0.0403	NS		**0.00767 K**	0.0402	NS	
Selenium	NS		**0.069**	0.005	NS		**0.071**	0.005	NS		**0.07**	0.005	NS		**0.07**	0.005	NS	
Silver	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS	
Thallium	NS		**0.0002 JK**	0.00003	NS		<0.0002 UK	0.00003	NS		<0.0002 UK	0.00003	NS		**0.0002 JK**	0.00003	NS	
Vanadium	NS		**0.015 K**	0.02	NS		**0.0146 K**	0.02	NS		**0.0146 K**	0.02	NS		**0.0147 K**	0.02	NS	
Zinc	NS		**0.027 K**	0.0915	NS		**0.026 K**	0.0905	NS		**0.027 K**	0.0915	NS		**0.0267 K**	0.0912	NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		NS	
Barium, dissolved	<0.008 UK	0.003	NS		<0.009 UK	0.003	NS		<0.006 UK	0.003	NS		<0.003 UK	0.003	NS		NS	
Beryllium, dissolved	<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	**0.01 JK**	0.0016	NS		**0.02 JK**	0.0016	NS		**0.02 JK**	0.0016	NS		**0.0167 JK**	0.0016	NS		NS	
Cadmium, dissolved	**0.0005 K**	0.000497	NS		**0.0005 K**	0.000493	NS		**0.0005 K**	0.000490	NS		**0.0005 K**	0.000493	NS		**0.0015 K**	0.000615
Chromium, dissolved	<0.0002 UK	0.0611	NS		<0.0002 UK	0.0605	NS		<0.0003 UK	0.0598	NS		<0.0001 UK	0.0605	NS		NS	
Cobalt, dissolved	<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	**0.02 JK**	0.00928	NS		<0.01 UK	0.00918	NS		<0.01 UK	0.00908	NS		**0.02 JK**	0.00918	NS		NS	
Iron, dissolved	<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		NS	
Lead, dissolved	<0.0001 UK	0.00195	NS		<0.0001 UK	0.00192	NS		<0.0001 UK	0.00189	NS		<0.0001 UK	0.00192	NS		NS	
Molybdenum, dissolved	<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS	
Nickel, dissolved	**0.0073 K**	0.0426	NS		**0.0068 K**	0.0421	NS		**0.0069 K**	0.0417	NS		**0.007 K**	0.0421	NS		**0.0081 K**	0.0582
Selenium, dissolved	**0.068 J-**	0.005	NS		**0.068 J-**	0.005	NS		**0.067 J-**	0.005	NS		**0.0677 J-**	0.005	NS		NS	
Silver, dissolved	<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036	NS		NS	
Thallium, dissolved	**0.0001 JK**	0.00003	NS		**0.0001 JK**	0.00003	NS		**0.0001 JK**	0.00003	NS		**0.0001 JK**	0.00003	NS		NS	
Vanadium, dissolved	**0.0144 K**	0.02	NS		**0.0144 K**	0.02	NS		**0.0144 K**	0.02	NS		**0.0144 K**	0.02	NS		**0.027 K**	0.02
Zinc, dissolved	**0.012 K**	0.0968	NS		**0.006 JK**	0.0957	NS		**0.01 K {J+}**	0.0947	NS		**0.00933 JK**	0.0957	NS		**0.01 JK**	0.132

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSP012		MSP012		MSP012		MSP012		MSP012		MSP012		MSP012		MSP012		MSP013	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	051204SWMSP012-0-U		050406SWMSP012-0-F		050406SWMSP012-0-U		050406SWMSP012-0-U		050907SWMSP012-0-F		050907SWMSP012-0-U		050808GWMSP012-0-F		050808GWMSP012-0-U		050406SWMSP013-0-F	
Collection Date:	5/12/2004		5/4/2006		5/4/2006		5/6/2006		5/9/2007		5/9/2007		5/8/2008		5/8/2008		5/4/2006	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		<0.03 UK	0.087	NS		**0.13 JK**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		**0.006 JK**	0.003	NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron	NS		NS		NS		NS		NS		NS		NS		**0.02 JK**	0.0016	NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		**0.0019 K**	0.000511	NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		**0.0091 K**	0.0636	NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00968	NS	
Iron	NS		NS		NS		NS		NS		NS		NS		**0.17 K**	0.158	NS	
Lead	NS		NS		NS		NS		NS		NS		NS		**0.0001 JK**	0.00205	NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		**0.0094 K**	0.0444	NS	
Selenium	**0.115**	0.005	NS		NS		**0.073 J-**	0.005	NS		**0.145**	0.005	NS		**0.12**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		**0.0296 K**	0.02	NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		**0.028 K**	0.101	NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		NS		<0.03 UK	0.087	NS		**0.05 JK {J+}**	0.087
Barium, dissolved	NS		**0.006 JK**	0.003	NS		NS		NS		NS		<0.005 UK	0.003	NS		**0.01 JK**	0.003
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		**0.01 JK**	0.0016	NS		NS	
Cadmium, dissolved	NS		**0.0008 K**	0.000522	NS		NS		**0.0008 K**	0.000701	NS		**0.0004 JK**	0.000529	NS		**0.0015 K**	0.000556
Chromium, dissolved	NS		**0.0025 K**	0.0655	NS		NS		**0.0012 J+K**	0.0993	NS		**0.0014 K**	0.0667	NS		**0.0026 K**	0.0717
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003
Copper, dissolved	NS		<0.01 UK	0.00998	NS		NS		NS		NS		<0.01 UK	0.0102	NS		<0.01 UK	0.0110
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158
Lead, dissolved	NS		<0.0001 UK	0.00213	NS		NS		NS		NS		<0.0001 UK	0.00219	NS		<0.0001 UK	0.00241
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		NS		<0.01 UK	0.034	NS		**0.01 JK**	0.034
Nickel, dissolved	NS		**0.0048 K**	0.0458	NS		NS		**0.0105 K**	0.0704	NS		**0.0071 K**	0.0467	NS		**0.0155 K**	0.0502
Selenium, dissolved	NS		NS		NS		NS		NS		NS		**0.118 J-**	0.005	NS		NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		**0.0001 JK**	0.00003	NS		NS		NS		NS		**0.0001 JK**	0.00003	NS		<0.0001 UK	0.00003
Vanadium, dissolved	NS		**0.0227 K**	0.02	NS		NS		**0.0273 K**	0.02	NS		**0.0256 K**	0.02	NS		**0.0135 K**	0.02
Zinc, dissolved	NS		**0.007 JK**	0.104	NS		NS		**0.007 JK**	0.160	NS		<0.002 UK	0.106	NS		**0.038 K**	0.114

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSP013		MSP013		MSP013		MSP059		MSP059		MSP059		MSP059		MSP059		MSP059	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	050406SWMSP013-0-U		051608GWMSP013-0-F		051608GWMSP013-0-U		051204SWMSP059-0-F		051204SWMSP059-0-U		050406SWMSP059-0-F		050406SWMSP059-0-U		050406SWMSP059-0-U		051007SWMSP059-0-F	
Collection Date:	5/4/2006		5/16/2008		5/16/2008		5/12/2004		5/12/2004		5/4/2006		5/4/2006		5/6/2006		5/10/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		**1.26 J+K**	0.087	NS		NS		NS		NS		NS		NS	
Barium	NS		NS		**0.01 JK**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron	NS		NS		**0.02 JK**	0.0016	NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		**0.0032 K**	0.000533	NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		**0.0257 K**	0.0674	NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		<0.01 UK	0.0103	NS		NS		NS		NS		NS		NS	
Iron	NS		NS		**1.38 K**	0.158	NS		NS		NS		NS		NS		NS	
Lead	NS		NS		**0.0006 J+K**	0.00222	NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		**0.01 JK**	0.034	NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		**0.0247 K**	0.0471	NS		NS		NS		NS		NS		NS	
Selenium	**0.2**	0.005	NS		**0.16**	0.005	NS		**0.029**	0.005	NS		NS		**0.024 J-**	0.005	NS	
Silver	NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		**0.0006 K**	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		**0.0452 K**	0.02	NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		**0.099 K**	0.107	NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		**0.09 JK**	0.087	NS		NS		NS		**0.35 K**	0.087	NS		NS		NS	
Barium, dissolved	NS		<0.003 UK	0.003	NS		NS		NS		**0.018 K**	0.003	NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS	
Boron, dissolved	NS		<0.01 UK	0.0016	NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0011 K**	0.000320	NS		**0.0004 JK**	0.000508	NS		**0.0009 K**	0.000482	NS		NS		**0.0013 K**	0.000467
Chromium, dissolved	NS		**0.0041 K**	0.0328	NS		NS		NS		**0.003 K**	0.0586	NS		NS		**0.0088 K**	0.0560
Cobalt, dissolved	NS		<0.02 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.00485	NS		NS		NS		<0.01 UK	0.00888	NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		**0.14 K**	0.158	NS		NS		NS	
Lead, dissolved	NS		<0.0001 UK	0.000840	NS		NS		NS		<0.0001 UK	0.00184	NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034	NS		NS		NS	
Nickel, dissolved	NS		**0.0127 K**	0.0224	NS		**0.0072 K**	0.0440	NS		**0.012 K**	0.0408	NS		NS		**0.0171 K**	0.0389
Selenium, dissolved	NS		**0.16**	0.005	NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		<0.01 UJK	0.00036	NS		NS		NS	
Thallium, dissolved	NS		**0.0001 JK**	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS	
Vanadium, dissolved	NS		**0.0169 K**	0.02	NS		**0.0116 K**	0.02	NS		**0.0067 K**	0.02	NS		NS		**0.0106 K**	0.02
Zinc, dissolved	NS		**0.02 K**	0.0509	NS		**0.007 JK**	0.0999	NS		**0.022 K**	0.0926	NS		NS		**0.045 K**	0.0884

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSP059		MSP059		MSP059		MSP062		MSP062		MSP062		MSP062		MSP062		MSP062	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	051007SWMSP059-0-U		051608GWMSP059-0-F		051608GWMSP059-0-U		051204SWMSP062-0-F		051204SWMSP062-0-U		050406SWMSP062-0-F		050406SWMSP062-0-U		050406SWMSP062-0-U		050808GWMSP062-0-F	
Collection Date:	5/10/2007		5/16/2008		5/16/2008		5/12/2004		5/12/2004		5/4/2006		5/4/2006		5/6/2006		5/8/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	**8.47 J+K**	0.087	NS		**5.73 K**	0.087	NS		NS		NS		NS		NS		NS	
Barium	NS		NS		**0.033 K**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron	NS		NS		**0.03 JK**	0.0016	NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		**0.0034 K**	0.000463	NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		**0.0574 K**	0.0553	NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		**0.01 JK**	0.00837	NS		NS		NS		NS		NS		NS	
Iron	NS		NS		**5.42 K**	0.158	NS		NS		NS		NS		NS		NS	
Lead	NS		NS		**0.0019 K**	0.00170	NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		**0.0413 K**	0.0385	NS		NS		NS		NS		NS		NS	
Selenium	**0.027**	0.005	NS		**0.018 J-**	0.005	NS		**0.002 J**	0.005	NS		NS		**0.001 J-**	0.005	NS	
Silver	NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		<0.0004 UK	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		**0.0392 K**	0.02	NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		**0.189 K**	0.0873	NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		**0.34 K**	0.087	NS		NS		NS		<0.03 UK	0.087	NS		NS		**0.11 J+K**	0.087
Barium, dissolved	NS		**0.014 JK**	0.003	NS		NS		NS		**0.009 JK**	0.003	NS		NS		<0.004 UK	0.003
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		**0.03 JK**	0.0016	NS		NS		NS		NS		NS		NS		**0.03 JK**	0.0016
Cadmium, dissolved	NS		**0.0008 K**	0.000407	NS		**0.0021 JK**	0.000788	NS		**0.0016 K**	0.000745	NS		NS		**0.0017 K**	0.000381
Chromium, dissolved	NS		**0.0089 K**	0.0461	NS		NS		NS		**0.0006 K**	0.108	NS		NS		**0.0031 K**	0.0420
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		<0.01 UK	0.00692	NS		NS		NS		<0.01 UK	0.0169	NS		NS		<0.01 UK	0.00628
Iron, dissolved	NS		**0.17 K**	0.158	NS		NS		NS		<0.02 UK	0.158	NS		NS		**0.06 K**	0.158
Lead, dissolved	NS		<0.0001 UK	0.00133	NS		NS		NS		<0.0001 UK	0.00415	NS		NS		<0.0001 UK	0.00117
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		**0.01 JK**	0.034	NS		NS		<0.01 UK	0.034
Nickel, dissolved	NS		**0.0086 K**	0.0318	NS		**0.015 K**	0.0836	NS		**0.0088 K**	0.0770	NS		NS		**0.0049 K**	0.0289
Selenium, dissolved	NS		**0.014 J-**	0.005	NS		NS		NS		NS		NS		NS		<0.001	0.005
Silver, dissolved	NS		<0.01 UK	0.00036	NS		NS		NS		<0.01 UJK	0.00036	NS		NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		**0.0002 JK**	0.00003	NS		NS		**0.0001 JK**	0.00003
Vanadium, dissolved	NS		**0.008 K**	0.02	NS		**0.0062 K**	0.02	NS		**0.0036 K**	0.02	NS		NS		**0.0028 K**	0.02
Zinc, dissolved	NS		**0.021 K**	0.0723	NS		**0.02 JK**	0.190	NS		**0.018 K**	0.175	NS		NS		**0.011 K {J+}**	0.0657

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSP062		MST019		MST019		MST019		MST019		MST019		MST019		MST019		MST019	
Location Type:	Pond		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050808GWMSP062-0-U		052004SWMST019-0-F		052004SWMST019-0-U		051206SWMST019-0-F		051206SWMST019-0-U		051507SWMST019-1-F		051507SWMST019-1-U		051507SWMST019-2-F		051507SWMST019-2-U	
Collection Date:	5/8/2008		5/20/2004		5/20/2004		5/12/2006		5/12/2006		5/15/2007		5/15/2007		5/15/2007		5/15/2007	
Sample Type:	Groundwater		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	**0.38 K**	0.087	NS		NS		NS		NS		NS		**0.35 K**	0.087	NS		**0.34 K**	0.087
Barium	**0.005 JK**	0.003	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	**0.03 JK**	0.0016	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	**0.0032 K**	0.000377	NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	**0.0088 K**	0.0413	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	<0.01 UK	0.00617	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	**0.44 K**	0.158	NS		NS		NS		NS		NS		NS		NS		NS	
Lead	**0.0004 JK**	0.00115	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	<0.01 UK	0.034	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	**0.007 K**	0.0284	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		**0.003 J**	0.005	NS		**0.008**	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005
Silver	<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	**0.0007 K**	0.00003	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	**0.0074 K**	0.02	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	**0.042 K**	0.0646	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		**0.05 JK {J+}**	0.087	NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		**0.067 K**	0.003	NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0002 UK	0.000858	NS		<0.0001 UK	0.000793	NS		<0.0001 UK	0.000877	NS		<0.0001 UK	0.000877	NS	
Chromium, dissolved	NS		NS		NS		<0.0002 UK	0.118	NS		**0.0006 K**	0.137	NS		**0.0007 K**	0.137	NS	
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		<0.01 UK	0.0185	NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		<0.02 UK	0.158	NS		NS		NS		NS		NS	
Lead, dissolved	NS		NS		NS		**0.0001 JK**	0.00466	NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0005 JK**	0.0946	NS		**0.0011 JK**	0.0843	NS		**0.001 JK**	0.0978	NS		**0.001 JK**	0.0978	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		<0.01 UJK	0.00036	NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0009 K**	0.02	NS		<0.0002 UK	0.02	NS		**0.0013 K**	0.02	NS		**0.0013 K**	0.02	NS	
Zinc, dissolved	NS		<0.004 UK	0.215	NS		<0.002 UK	0.192	NS		<0.002 UK	0.222	NS		<0.002 UK	0.222	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST019		MST019		MST019		MST019		MST019		MST019		MST019		MST019		MST019	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051507SWMST019-3-F		051507SWMST019-3-U		051507SWMST019-avg-F		051507SWMST019-avg-U		090907SWMST019-0-F		090907SWMST019-0-U		051308SWMST019-0-F		051308SWMST019-0-U		091508SWMST019-0-F	
Collection Date:	5/15/2007		5/15/2007		5/15/2007		5/15/2007		9/9/2007		9/9/2007		5/13/2008		5/13/2008		9/15/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**0.37 K**	0.087	NS		**0.353 K**	0.087	NS		**0.26 K**	0.087	NS		**0.1 JK**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.003 J**	0.005	NS		**0.00367 J**	0.005	NS		<0.001	0.005	NS		**0.004 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.0500	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.000865	NS		<0.0001 UK	0.000872	NS		<0.0001 UK	0.000734	NS		<0.0001 UK	0.000695	NS		<0.000125	0.000742
Chromium, dissolved	**0.0006 K**	0.134	NS		**0.000633 K**	0.136	NS		<0.0001 UK	0.106	NS		<0.0001 UK	0.0982	NS		**0.000528 J**	0.108
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.0250	0.158
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.001 JK**	0.0958	NS		**0.001 JK**	0.0970	NS		**0.001 JK**	0.0753	NS		**0.0017 JK**	0.0696	NS		**0.00150 J**	0.0766
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.0013 K**	0.02	NS		**0.0013 K**	0.02	NS		**0.0012 J+K**	0.02	NS		**0.0012 K**	0.02	NS		<0.00500	0.02
Zinc, dissolved	<0.002 UK	0.218	NS		<0.002 UK	0.221	NS		<0.002 UK	0.171	NS		**0.007 JK**	0.158	NS		**0.00544 J**	0.174

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST019		MST019		MST019		MST019		MST019		MST020		MST020		MST020		MST020	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	091508SWMST019-0-U		0905SWMST019-F		0905SWMST019-U		0909SWMST019-F		0909SWMST019-U		052004SWMST020-0-F		052004SWMST020-0-U		051206SWMST020-0-F		051206SWMST020-0-U	
Collection Date:	9/15/2008		5/4/2009		5/4/2009		9/21/2009		9/21/2009		5/20/2004		5/20/2004		5/12/2006		5/12/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.00166**	0.005	NS		**0.00431 J**	0.005	NS		**0.00231**	0.005	NS		**0.002 J**	0.005	NS		**0.007**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.03 JK {J+}**	0.087	NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.068 K**	0.003	NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.000134 J**	0.000645	NS		<0.000125	0.000780	NS		<0.0001	0.000821	NS		<0.0001 UK	0.000787	NS	
Chromium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0002 UK	0.117	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.0183	NS	
Iron, dissolved	NS		**0.259**	0.158	NS		<0.0250	0.158	NS		NS		NS		<0.02 UK	0.158	NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.0001 JK**	0.00460	NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel, dissolved	NS		NS		NS		NS		NS		**0.0014 JK**	0.0888	NS		**0.0012 JK**	0.0835	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UJK	0.00036	NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		**0.00092 JK**	0.02	NS		<0.0002 UK	0.02	NS	
Zinc, dissolved	NS		NS		NS		NS		NS		<0.002 UJK	0.202	NS		**0.002 JK**	0.190	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST020		MST020		MST020		MST020		MST020		MST020		MST020		MST020		MST020	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051407SWMST020-0-F		051407SWMST020-0-U		091407SWMST020-0-F		091407SWMST020-0-U		051408SWMST020-0-F		051408SWMST020-0-U		091508SWMST020-0-F		091508SWMST020-0-U		0905SWMST020-F	
Collection Date:	5/14/2007		5/14/2007		9/14/2007		9/14/2007		5/14/2008		5/14/2008		9/15/2008		9/15/2008		5/4/2009	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**0.31 K**	0.087	NS		**0.14 JK**	0.087	NS		**1.2 J+K**	0.087	NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.004 J**	0.005	NS		<0.001	0.005	NS		**0.005 J**	0.005	NS		**0.00154 J+**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		<0.0500	0.087	NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	**0.0002 JK**	0.000870	NS		<0.0001 UK	0.000753	NS		<0.0001 UK	0.000734	NS		<0.000125	0.000742	NS		<0.000125	0.000666
Chromium, dissolved	<0.0001	0.135	NS		<0.0001 UK	0.110	NS		<0.0001 UK	0.106	NS		<0.000500	0.108	NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		<0.0250	0.158	NS		**0.0574 J+/B**	0.158
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.001 JK**	0.0966	NS		**0.0009 JK**	0.0782	NS		**0.0028 JK**	0.0753	NS		**0.00159 J**	0.0766	NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.0012 JK**	0.02	NS		<0.0008 UK	0.02	NS		**0.0013 K**	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02
Zinc, dissolved	**0.003 JK**	0.220	NS		<0.002 UK	0.178	NS		**0.005 JK**	0.171	NS		**0.00622 J**	0.174	NS		NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	**MST020**		**MST020**		**MST020**		**MST021**		**MST021**		**MST021**		**MST021**		**MST021**		**MST021**	
Location Type:	**Stream**		**Stream**		**Stream**		**Stream**		**Stream**		**Stream**		**Stream**		**Stream**		**Stream**	
Sample ID:	**0905SWMST020-U**		**0909SWMST020-F**		**0909SWMST020-U**		**052004SWMST021-1-F**		**052004SWMST021-1-U**		**052004SWMST021-2-F**		**052004SWMST021-2-U**		**052004SWMST021-3-F**		**052004SWMST021-3-U**	
Collection Date:	**5/4/2009**		**9/21/2009**		**9/21/2009**		**5/20/2004**		**5/20/2004**		**5/20/2004**		**5/20/2004**		**5/20/2004**		**5/20/2004**	
Sample Type:	**Surface Water**		**Surface Water**		**Surface Water**		**Surface Water**		**Surface Water**		**Surface Water**		**Surface Water**		**Surface Water**		**Surface Water**	
	Primary		**Primary**		**Primary**		**Triplicate**		**Triplicate**		**Triplicate**		**Triplicate**		**Triplicate**		**Triplicate**	
	Result	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.00421 J**	0.005	NS		**0.00203**	0.005	NS		**0.002 J**	0.005	NS		**0.003 J**	0.005	NS		**0.002 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000125	0.000805	NS		<0.0001	0.000826	NS		<0.0002 UK	0.000844	NS		<0.0001	0.000826	NS	
Chromium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		<0.0250	0.158	NS		NS		NS		NS		NS		NS		NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		NS		NS		**0.0013 JK**	0.0895	NS		**0.0013 JK**	0.0925	NS		**0.0014 JK**	0.0896	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.00500	0.02	NS		**0.00092 JK**	0.02	NS		**0.001 K**	0.02	NS		**0.00093 JK**	0.02	NS	
Zinc, dissolved	NS		NS		NS		<0.002 UJK	0.204	NS		<0.004 UK	0.210	NS		<0.002 UJK	0.204	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST021		MST021		MST021		MST021		MST022		MST022		MST022		MST022		MST022	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	052004SWMST021-avg-F		052004SWMST021-avg-U		051206SWMST021-0-F		051206SWMST021-0-U		051904SWMST022-0-F		051904SWMST022-0-U		051206SWMST022-0-F		051206SWMST022-0-U		051407SWMST022-0-F	
Collection Date:	5/20/2004		5/20/2004		5/12/2006		5/12/2006		5/19/2004		5/19/2004		5/12/2006		5/12/2006		5/14/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Averaged		Averaged		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.00233 J**	0.005	NS		**0.007**	0.005	NS		**0.003 J**	0.005	NS		**0.007**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		**0.05 JK {J+}**	0.087	NS		NS		NS		<0.03 UK	0.087	NS		NS	
Barium, dissolved	NS		NS		**0.069 K**	0.003	NS		NS		NS		**0.068 K**	0.003	NS		NS	
Beryllium, dissolved	NS		NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0002	0.000832	NS		<0.0001 UK	0.000793	NS		<0.0001	0.000832	NS		<0.0001 UK	0.000780	NS		<0.0001	0.000880
Chromium, dissolved	NS		NS		<0.0003 UK	0.118	NS		NS		NS		<0.0001 UK	0.116	NS		<0.0001	0.137
Cobalt, dissolved	NS		NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	NS		NS		<0.01 UK	0.0185	NS		NS		NS		<0.01 UK	0.0180	NS		NS	
Iron, dissolved	NS		NS		<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158	NS		NS	
Lead, dissolved	NS		NS		**0.0002 JK**	0.00466	NS		NS		NS		**0.0002 JK**	0.00452	NS		NS	
Molybdenum, dissolved	NS		NS		<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034	NS		NS	
Nickel, dissolved	**0.00133 JK**	0.0905	NS		**0.0012 JK**	0.0843	NS		**0.0013 JK**	0.0905	NS		**0.0011 JK**	0.0823	NS		**0.0009 JK**	0.0982
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		<0.01 UJK	0.00036	NS		NS		NS		<0.01 UJK	0.00036	NS		NS	
Thallium, dissolved	NS		NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS		NS	
Vanadium, dissolved	**0.00095 JK**	0.02	NS		<0.0002 UK	0.02	NS		**0.00087 JK**	0.02	NS		<0.0002 UK	0.02	NS		**0.0007 JK**	0.02
Zinc, dissolved	<0.004 UJK	0.206	NS		<0.002 UK	0.192	NS		<0.002 UJK	0.206	NS		**0.002 JK**	0.187	NS		**0.004 JK**	0.223

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST022		MST022		MST022		MST022		MST022		MST022		MST022		MST022		MST022	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051407SWMST022-0-U		090907SWMST022-0-F		090907SWMST022-0-U		051408SWMST022-1-F		051408SWMST022-1-U		051408SWMST022-2-F		051408SWMST022-2-U		051408SWMST022-3-F		051408SWMST022-3-U	
Collection Date:	5/14/2007		9/9/2007		9/9/2007		5/14/2008		5/14/2008		5/14/2008		5/14/2008		5/14/2008		5/14/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	**0.31 K**	0.087	NS		**0.1 JK**	0.087	NS		**1.62 K**	0.087	NS		**1.57 K**	0.087	NS		**1.74 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.004 J**	0.005	NS		<0.001	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000745	NS		<0.0001 UK	0.000701	NS		<0.0001 UK	0.000698	NS		<0.0001 UK	0.000695	NS	
Chromium, dissolved	NS		<0.0001 UK	0.108	NS		<0.0001 UK	0.0993	NS		<0.0001 UK	0.0988	NS		<0.0001 UK	0.0982	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0009 JK**	0.0770	NS		**0.0022 JK**	0.0704	NS		**0.0021 JK**	0.0700	NS		**0.003 JK**	0.0696	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.0009 UK	0.02	NS		**0.0015 K**	0.02	NS		**0.0013 K**	0.02	NS		**0.0014 K**	0.02	NS	
Zinc, dissolved	NS		<0.002 UK	0.175	NS		**0.004 JK**	0.160	NS		**0.005 JK**	0.159	NS		**0.005 JK**	0.158	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST022		MST022		MST022		MST022		MST066		MST066		MST066		MST066		MST066	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051408SWMST022-avg-F		051408SWMST022-avg-U		091608SWMST022-0-F		091608SWMST022-0-U		051804SWMST066-0-F		051804SWMST066-0-U		051006GWMST066-0-F		051006GWMST066-0-U		051407SWMST066-0-F	
Collection Date:	5/14/2008		5/14/2008		9/16/2008		9/16/2008		5/18/2004		5/18/2004		5/10/2006		5/10/2006		5/14/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Averaged		Averaged		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**1.64 K**	0.087	NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		<0.0005 UK		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		**0.0009 JK**		NS	
Selenium	NS		**0.004 J**	0.005	NS		**0.00146**	0.005	NS		**0.001 J**	0.005	NS		**0.045**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		**0.0059 K**	0.02	NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		**0.004 JK**		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		<0.0500	0.087	NS		NS		NS		<0.03 UK	0.087	NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		**0.047 K**	0.003	NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.000698	NS		<0.000125	0.000772	NS		<0.0002 UK	0.000848	NS		<0.0001 UK	0.000915	NS		<0.0001	0.000870
Chromium, dissolved	<0.0001 UK	0.0988	NS		<0.000500	0.114	NS		<0.0004 UK	0.130	NS		**0.0004 JK**	0.145	NS		<0.0001	0.135
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.0229	NS		NS	
Iron, dissolved	NS		NS		<0.0250	0.158	NS		NS		NS		<0.02 UK	0.158	NS		NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00607	NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		NS	
Nickel, dissolved	**0.00243 JK**	0.0700	NS		**0.00157 J**	0.0811	NS		**0.0048 K**	0.0930	NS		**0.0008 JK**	0.104	NS		**0.0008 JK**	0.0966
Selenium, dissolved	NS		NS		NS		NS		**0.002 J**	0.005	NS		**0.048**	0.005	NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS	
Vanadium, dissolved	**0.0014 K**	0.02	NS		<0.00500	0.02	NS		**0.0044 K**	0.02	NS		**0.0059 K**	0.02	NS		**0.0063 JK**	0.02
Zinc, dissolved	**0.00467 JK**	0.159	NS		<0.00500	0.184	NS		**0.012 JK**	0.211	NS		**0.004 JK**	0.237	NS		**0.006 JK**	0.220

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST066		MST066		MST066		MST066		MST066		MST066		MST066		MST067		MST067	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051407SWMST066-0-U		091407SWMST066-0-F		091407SWMST066-0-U		050908SWMST066-0-F		050908SWMST066-0-U		0905SWMST066-F		0905SWMST066-U		051104SWMST067-0-F		051104SWMST067-0-U	
Collection Date:	5/14/2007		9/14/2007		9/14/2007		5/9/2008		5/9/2008		5/4/2009		5/4/2009		5/11/2004		5/11/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	<0.15 UK	0.087	NS		**1.59 K**	0.087	NS		<0.07 UK	0.087	NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.023**	0.005	NS		<0.001	0.005	NS		**0.019**	0.005	NS		**0.0524 J**	0.005	NS		**0.029**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00110	NS		<0.0001 UK	0.000855	NS		<0.000125	0.000818	NS		**0.0013 K**	0.00127	NS	
Chromium, dissolved	NS		<0.0001 UK	0.188	NS		<0.0001 UK	0.132	NS		NS		NS		**0.0006 K**	0.231	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		**0.0287 J+/B**	0.158	NS		NS		NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0052 K**	0.136	NS		**0.0022 JK**	0.0943	NS		NS		NS		**0.0125 K**	0.168	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.01**	0.005	NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0108 K**	0.02	NS		<0.0002 UK	0.02	NS		<0.00500	0.02	NS		**0.00841 K**	0.02	NS	
Zinc, dissolved	NS		<0.002 UK	0.309	NS		<0.002 UK	0.214	NS		NS		NS		**0.027 K**	0.382	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST067		MST067		MST067		MST067		MST067		MST067		MST067		MST067		MST068	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050206GWMST067-0-F		050206GWMST067-0-U		050907SWMST067-0-F		050907SWMST067-0-U		050708GWMST067-0-F		050708GWMST067-0-U		0905SWMST067-F		0905SWMST067-U		051006GWMST068-0-F	
Collection Date:	5/2/2006		5/2/2006		5/9/2007		5/9/2007		5/7/2008		5/7/2008		5/4/2009		5/4/2009		5/10/2006	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Surface Water		Surface Water		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		**0.36 K**	0.087	NS		<0.3 UJK	0.087	NS		NS		NS	
Barium	NS		NS		NS		NS		NS		**0.05 JK**	0.003	NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		<0.01 UK	0.0006	NS		NS		NS	
Boron	NS		NS		NS		NS		NS		<0.08 UK	0.0016	NS		NS		NS	
Cadmium	NS		**0.0046 K**		NS		NS		NS		**0.0018 K**	0.00127	NS		NS		NS	
Chromium	NS		**0.0008 K**		NS		NS		NS		**0.0001 JK**	0.231	NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		<0.05 UK	0.003	NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		<0.05 UK	0.0371	NS		NS		NS	
Iron	NS		NS		NS		NS		NS		<0.1 UK	0.158	NS		NS		NS	
Lead	NS		NS		NS		NS		NS		<0.0001 UK	0.0109	NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		<0.05 UK	0.034	NS		NS		NS	
Nickel	NS		**0.0167 K**		NS		NS		NS		**0.0105 K**	0.168	NS		NS		NS	
Selenium	NS		**0.56**	0.005	NS		**0.022**	0.005	NS		**0.41**	0.005	NS		**0.867 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		<0.05 UK	0.00036	NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		<0.0002 UK	0.00003	NS		NS		NS	
Vanadium	NS		**0.0246 K**	0.02	NS		NS		NS		**0.0257 K**	0.02	NS		NS		NS	
Zinc	NS		**0.105 K**		NS		NS		NS		**0.036 K**	0.382	NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.03 UK	0.087	NS		NS		NS		**0.07 JK**	0.087	NS		NS		NS		<0.03 UK	0.087
Barium, dissolved	**0.071 K**	0.003	NS		NS		NS		**0.048 K**	0.003	NS		NS		NS		**0.056 K**	0.003
Beryllium, dissolved	<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		**0.04 JK**	0.0016	NS		NS		NS		NS	
Cadmium, dissolved	**0.0044 K**	0.00127	NS		**0.0014 K**	0.00127	NS		**0.0016 K**	0.00127	NS		**0.00231**	0.00127	NS		**0.0018 K**	0.00127
Chromium, dissolved	**0.0009 K**	0.231	NS		<0.0001 UK	0.231	NS		<0.0001 UK	0.231	NS		NS		NS		**0.0012 K**	0.231
Cobalt, dissolved	<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	<0.01 UK	0.0371	NS		NS		NS		<0.01 UK	0.0371	NS		NS		NS		<0.01 UK	0.0371
Iron, dissolved	<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158	NS		<0.0250	0.158	NS		<0.02 UK	0.158
Lead, dissolved	**0.0003 JK**	0.0109	NS		NS		NS		<0.0001 UK	0.0109	NS		NS		NS		<0.0003 UK	0.0109
Molybdenum, dissolved	**0.02 JK**	0.034	NS		NS		NS		**0.03 JK**	0.034	NS		NS		NS		**0.16 K**	0.034
Nickel, dissolved	**0.0171 K**	0.168	NS		**0.008 K**	0.168	NS		**0.0128 K**	0.168	NS		NS		NS		**0.0243 K**	0.168
Selenium, dissolved	**0.47 J-**	0.005	NS		NS		NS		**0.44**	0.005	NS		NS		NS		**0.7**	0.005
Silver, dissolved	<0.01 UK	0.00036	NS		NS		NS		<0.01 UJK	0.00036	NS		NS		NS		<0.01 UK	0.00036
Thallium, dissolved	**0.0001 JK**	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		**0.0002 JK**	0.00003
Vanadium, dissolved	**0.0238 K**	0.02	NS		**0.0113 K**	0.02	NS		**0.0263 K**	0.02	NS		**0.0233**	0.02	NS		**0.0229 K**	0.02
Zinc, dissolved	**0.116 K**	0.382	NS		**0.029 K**	0.382	NS		**0.035 K**	0.382	NS		NS		NS		**0.044 K**	0.382

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST068		MST068		MST068		MST069		MST069		MST069		MST069		MST069		MST069	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051006GWMST068-0-U		050708GWMST068-0-F		050708GWMST068-0-U		051004SWMST069-0-F		051004SWMST069-0-U		SWMST069-0-F		SWMST069-0-U		050806GWMST069-1-F		050806GWMST069-1-U	
Collection Date:	5/10/2006		5/7/2008		5/7/2008		5/10/2004		5/10/2004		9/8/2004		9/8/2004		5/8/2006		5/8/2006	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		<0.07 UJK	0.087	NS		NS		NS		NS		NS		NS	
Barium	NS		NS		**0.037 K**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron	NS		NS		**0.05 J+K**	0.0016	NS		NS		NS		NS		NS		NS	
Cadmium	**0.0027 K**		NS		**0.0015 K**	0.00117	NS		NS		NS		NS		NS		**0.0002 JK**	
Chromium	**0.0012 K**		NS		**0.0014 K**	0.205	NS		NS		NS		NS		NS		**0.0008 K**	
Cobalt	NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		<0.01 UK	0.0329	NS		NS		NS		NS		NS		NS	
Iron	NS		NS		<0.02 UK	0.158	NS		NS		NS		NS		NS		NS	
Lead	NS		NS		**0.0002 JK**	0.00945	NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		**0.15 K**	0.034	NS		NS		NS		NS		NS		NS	
Nickel	**0.0228 K**		NS		**0.0135 K**	0.149	NS		NS		NS		NS		NS		**0.0095 K**	
Selenium	**0.78**	0.005	NS		**0.48**	0.005	NS		**0.6**	0.005	NS		**0.48**	0.005	NS		**0.001 J**	0.005
Silver	NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		**0.0006 J+K**	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium	**0.0214 K**	0.02	NS		**0.0404 K**	0.02	NS		NS		NS		NS		NS		**0.0012 K**	0.02
Zinc	**0.045 K**		NS		**0.034 K**	0.339	NS		NS		NS		NS		NS		**0.016 K**	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		**0.04 JK**	0.087	NS		NS		NS		NS		NS		<0.03 UK	0.087	NS	
Barium, dissolved	NS		**0.037 K**	0.003	NS		NS		NS		NS		NS		**0.072 K**	0.003	NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		**0.04 JK**	0.0016	NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0012 K**	0.00120	NS		**0.0001 JK**	0.00127	NS		<0.0001 UK	0.00127	NS		**0.0002 JK**	0.00127	NS	
Chromium, dissolved	NS		<0.0004 UK	0.214	NS		**0.0007 K**	0.231	NS		<0.0002	0.231	NS		**0.0006 K**	0.231	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Copper, dissolved	NS		<0.01 UK	0.0344	NS		NS		NS		NS		NS		<0.01 UK	0.0371	NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		NS		NS		<0.02 UK	0.158	NS	
Lead, dissolved	NS		<0.0001 UK	0.00999	NS		NS		NS		NS		NS		<0.0001 UK	0.0109	NS	
Molybdenum, dissolved	NS		**0.15 K**	0.034	NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel, dissolved	NS		**0.0146 K**	0.156	NS		**0.0251 K**	0.168	NS		**0.037 K**	0.168	NS		**0.0098 K**	0.168	NS	
Selenium, dissolved	NS		**0.49**	0.005	NS		**0.64**	0.005	NS		**0.49**	0.005	NS		**0.41**	0.005	NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		**0.043 K**	0.02	NS		**0.00114 K**	0.02	NS		**0.00111 K**	0.02	NS		**0.0023 K**	0.02	NS	
Zinc, dissolved	NS		**0.029 K**	0.355	NS		**0.009 JK**	0.382	NS		**0.011 K**	0.382	NS		**0.019 K**	0.382	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST069		MST069		MST069		MST069		MST069		MST069		MST069		MST069		MST069	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050806GWMST069-2-F		050806GWMST069-2-U		050806GWMST069-3-F		050806GWMST069-3-U		050806GWMST069-avg-F		050806GWMST069-avg-U		050907SWMST069-0-F		050907SWMST069-0-U		091307GWMST069-0-F	
Collection Date:	5/8/2006		5/8/2006		5/8/2006		5/8/2006		5/8/2006		5/8/2006		5/9/2007		5/9/2007		9/13/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		**0.28 K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		**0.0003 JK**		NS		**0.0002 JK**		NS		**0.000233 JK**		NS		NS		NS	
Chromium	NS		**0.0006 K**		NS		**0.0005 K**		NS		**0.000633 K**		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		**0.0089 K**		NS		**0.0088 K**		NS		**0.00907 K**		NS		NS		NS	
Selenium	NS		**0.35**	0.005	NS		**0.36**	0.005	NS		**0.237 J**	0.005	NS		**1.05**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		**0.001 JK**	0.02	NS		**0.0009 JK**	0.02	NS		**0.00103 JK**	0.02	NS		NS		NS	
Zinc	NS		**0.015 K**		NS		**0.015 K**		NS		**0.0153 K**		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		NS		NS		<0.06 UK	0.087
Barium, dissolved	**0.074 K**	0.003	NS		**0.074 K**	0.003	NS		**0.0733 K**	0.003	NS		NS		NS		**0.047 K**	0.003
Beryllium, dissolved	<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		<0.004 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		**0.04 JK**	0.0016
Cadmium, dissolved	**0.0002 JK**	0.00127	NS		**0.0002 JK**	0.00127	NS		**0.0002 JK**	0.00127	NS		**0.0004 JK**	0.00127	NS		<0.0002 UK	0.00127
Chromium, dissolved	**0.0006 K**	0.231	NS		**0.0005 K**	0.231	NS		**0.000567 K**	0.231	NS		**0.0008 J+K**	0.231	NS		<0.0002 UK	0.231
Cobalt, dissolved	<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		<0.02 UK	0.003
Copper, dissolved	<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		NS		NS		<0.02 UK	0.0371
Iron, dissolved	<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		NS		NS		<0.04 UK	0.158
Lead, dissolved	<0.0001 UK	0.0109	NS		<0.0001 UK	0.0109	NS		<0.0001 UK	0.0109	NS		NS		NS		<0.0002 UK	0.0109
Molybdenum, dissolved	<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS		<0.02 UK	0.034
Nickel, dissolved	**0.0093 K**	0.168	NS		**0.0092 K**	0.168	NS		**0.00943 K**	0.168	NS		**0.0238 K**	0.168	NS		**0.029 K**	0.168
Selenium, dissolved	**0.41**	0.005	NS		**0.38**	0.005	NS		**0.38**	0.005	NS		NS		NS		**0.75**	0.005
Silver, dissolved	<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS		<0.02 UK	0.00036
Thallium, dissolved	<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0003 UK	0.00003
Vanadium, dissolved	**0.0022 K**	0.02	NS		**0.0022 K**	0.02	NS		**0.00223 K**	0.02	NS		**0.0014 K**	0.02	NS		**0.002 JK**	0.02
Zinc, dissolved	**0.016 K**	0.382	NS		**0.015 K**	0.382	NS		**0.0167 K**	0.382	NS		**0.015 K**	0.382	NS		**0.015 JK**	0.382

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST069		MST069		MST069		MST069		MST069		MST069		MST069		MST069		MST069	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	091307GWMST069-0-U		050708GWMST069-0-F		050708GWMST069-0-U		091608GWMST069-0-F		091608GWMST069-0-U		0905SWMST069-F		0905SWMST069-U		0905GWMST069-F		0905GWMST069-U	
Collection Date:	9/13/2007		5/7/2008		5/7/2008		9/16/2008		9/16/2008		5/4/2009		5/4/2009		5/31/2009		5/31/2009	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Surface Water		Surface Water		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	<0.17 UK	0.087	NS		<0.15 UJK	0.087	NS		<0.0500	0.087	NS		NS		NS		NS	
Barium	**0.054 K**	0.003	NS		**0.041 K**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium	<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron	**0.29 K**	0.0016	NS		<0.04 UK	0.0016	NS		NS		NS		NS		NS		NS	
Cadmium	**0.0004 JK**	0.00127	NS		**0.001 K**	0.00127	NS		<0.00125		NS		NS		NS		**0.00153**	
Chromium	**0.0006 K**	0.231	NS		**0.0003 JK**	0.231	NS		<0.00500		NS		NS		NS		NS	
Cobalt	<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Copper, total	<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		NS		NS		NS		NS		NS	
Iron	**0.1 J+K**	0.158	NS		**0.04 J+K**	0.158	NS		**0.0359 J**	0.158	NS		NS		NS		NS	
Lead	**0.0002 JK**	0.0109	NS		<0.0001 UK	0.0109	NS		NS		NS		NS		NS		NS	
Molybdenum	<0.01 UK	0.034	NS		**0.01 JK**	0.034	NS		NS		NS		NS		NS		NS	
Nickel	**0.0286 K**	0.168	NS		**0.0244 K**	0.168	NS		**0.0382 J**		NS		NS		NS		NS	
Selenium	**0.034**	0.005	NS		**0.87**	0.005	NS		**1.15**	0.005	NS		**1.20 J**	0.005	NS		**1.65**	0.005
Silver	<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium	**0.0002 JK**	0.00003	NS		<0.0002 UK	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium	**0.0019 K**	0.02	NS		<0.0008 UK	0.02	NS		<0.0250	0.02	NS		NS		NS		<0.00500	0.02
Zinc	**0.02 K**	0.382	NS		**0.032 K**	0.382	NS		**0.0595 J**		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		**0.04 J+K**	0.087	NS		<0.0500	0.087	NS		NS		NS		NS		NS	
Barium, dissolved	NS		**0.039 K**	0.003	NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		**0.04 JK**	0.0016	NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0005 K**	0.00127	NS		<0.00125	0.00127	NS		**0.000777**	0.00127	NS		**0.000859**	0.00127	NS	
Chromium, dissolved	NS		<0.0001 UK	0.231	NS		<0.00500	0.231	NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0371	NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		<0.0250	0.158	NS		<0.0250	0.158	NS		NS		NS	
Lead, dissolved	NS		<0.0001 UK	0.0109	NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		**0.01 JK**	0.034	NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.029 K**	0.168	NS		**0.0386 J**	0.168	NS		NS		NS		NS		NS	
Selenium, dissolved	NS		**0.92**	0.005	NS		**1.19**	0.005	NS		NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0011 K**	0.02	NS		<0.0250	0.02	NS		<0.00500	0.02	NS		NS		NS	
Zinc, dissolved	NS		**0.03 K**	0.382	NS		**0.0543 J**	0.382	NS		NS		NS		NS		NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST069		MST069		MST069		MST069		MST088		MST088		MST088		MST088		MST088	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	0909SWMST069-F		0909SWMST069-U		0909GWMST069-F		0909GWMST069-U		050906SWMST088-1-F		050906SWMST088-1-U		050906SWMST088-2-F		050906SWMST088-2-U		050906SWMST088-3-F	
Collection Date:	9/21/2009		9/21/2009		9/22/2009		9/22/2009		5/9/2006		5/9/2006		5/9/2006		5/9/2006		5/9/2006	
Sample Type:	Surface Water		Surface Water		Groundwater		Groundwater		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		**0.00175**		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**1.31**	0.005	NS		**1.4**	0.005	NS		<0.001	0.005	NS		**0.012**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		**0.0397**	0.02	NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		NS		NS		**0.023 K**	0.003	NS		**0.025 K**	0.003	NS		**0.024 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	**0.00155 J**	0.00127	NS		**0.0014**	0.00127	NS		<0.0001 UK	0.000766	NS		<0.0001 UK	0.000774	NS		<0.0001 UK	0.000782
Chromium, dissolved	NS		NS		NS		NS		**0.0003 JK**	0.113	NS		**0.0003 JK**	0.114	NS		**0.0002 JK**	0.116
Cobalt, dissolved	NS		NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		NS		<0.01 UK	0.0176	NS		<0.01 UK	0.0179	NS		<0.01 UK	0.0181
Iron, dissolved	<0.0250	0.158	NS		NS		NS		**0.06 K**	0.158	NS		**0.06 K**	0.158	NS		**0.06 K**	0.158
Lead, dissolved	NS		NS		NS		NS		<0.0001 UK	0.00438	NS		<0.0001 UK	0.00446	NS		<0.0001 UK	0.00455
Molybdenum, dissolved	NS		NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034
Nickel, dissolved	NS		NS		NS		NS		**0.0015 JK**	0.0803	NS		**0.0015 JK**	0.0815	NS		**0.0018 JK**	0.0827
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036
Thallium, dissolved	NS		NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003
Vanadium, dissolved	**0.0301**	0.02	NS		NS		NS		**0.0014 K**	0.02	NS		**0.0014 K**	0.02	NS		**0.0014 K**	0.02
Zinc, dissolved	NS		NS		NS		NS		**0.003 JK**	0.182	NS		**0.004 JK**	0.185	NS		**0.005 JK**	0.188

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST088		MST088		MST088		MST088		MST088		MST089		MST089		MST089		MST089	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050906SWMST088-3-U		050906SWMST088-avg-F		050906SWMST088-avg-U		050908SWMST088-0-F		050908SWMST088-0-U		051404SWMST089-0-F		051404SWMST089-0-U		050906GWMST089-0-F		050906GWMST089-0-U	
Collection Date:	5/9/2006		5/9/2006		5/9/2006		5/9/2008		5/9/2008		5/14/2004		5/14/2004		5/9/2006		5/9/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		**0.18 JK**	0.087	NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		**0.0004 JK**	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		**0.0015 JK**	
Selenium	**0.011**	0.005	NS		**0.0115**	0.005	NS		**0.007**	0.005	NS		**0.001 J**	0.005	NS		**0.025**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		**0.0017 K**	0.02
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		**0.002 JK**	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		NS		NS		**0.11 JK**	0.087	NS	
Barium, dissolved	NS		**0.024 K**	0.003	NS		NS		NS		NS		NS		**0.032 K**	0.003	NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000774	NS		**0.0001 JK**	0.000570	NS		<0.0002 UK	0.000779	NS		<0.0001 UK	0.000838	NS	
Chromium, dissolved	NS		**0.000267 JK**	0.114	NS		<0.0001 UK	0.0741	NS		**0.0004 JK**	0.115	NS		**0.0003 JK**	0.128	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Copper, dissolved	NS		<0.01 UK	0.0179	NS		NS		NS		NS		NS		<0.01 UK	0.0201	NS	
Iron, dissolved	NS		**0.06 K**	0.158	NS		NS		NS		NS		NS		**0.04 JK**	0.158	NS	
Lead, dissolved	NS		<0.0001 UK	0.00446	NS		NS		NS		NS		NS		<0.0001 UK	0.00516	NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel, dissolved	NS		**0.0016 JK**	0.0815	NS		**0.0022 JK**	0.0520	NS		**0.0038 K**	0.0822	NS		**0.0016 JK**	0.0915	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		<0.001	0.005	NS		**0.027**	0.005	NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		**0.0014 K**	0.02	NS		**0.0023 K**	0.02	NS		**0.0017 K**	0.02	NS		**0.0019 K**	0.02	NS	
Zinc, dissolved	NS		**0.004 JK**	0.185	NS		**0.007 JK**	0.118	NS		<0.004 UK	0.187	NS		**0.003 JK**	0.208	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST089		MST089		MST089		MST089		MST089		MST089		MST090		MST090		MST090	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050807SWMST089-0-F		050807SWMST089-0-U		051508SWMST089-0-F		051508SWMST089-0-U		0905SWMST089-F		0905SWMST089-U		051404SWMST090-0-F		051404SWMST090-0-U		050807SWMST090-0-F	
Collection Date:	5/8/2007		5/8/2007		5/15/2008		5/15/2008		5/6/2009		5/6/2009		5/14/2004		5/14/2004		5/8/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		<0.03 UK	0.087	NS		**0.07 J+K**	0.087	NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		**0.004 J**	0.005	NS		**0.0361 J**	0.005	NS		**0.001 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.000785	NS		<0.0001 UK	0.000660	NS		<0.000125	0.000648	NS		<0.0005 UK	0.000874	NS		<0.0001 UK	0.000850
Chromium, dissolved	<0.0003 UK	0.117	NS		<0.0001 UK	0.0913	NS		NS		NS		NS		NS		<0.0002 UK	0.131
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		**0.0388 J**	0.158	NS		NS		NS		NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.0022 JK**	0.0831	NS		**0.0025 JK**	0.0645	NS		NS		NS		**0.001 JK**	0.0973	NS		**0.0011 JK**	0.0935
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.002 K**	0.02	NS		**0.0028 K**	0.02	NS		<0.00500	0.02	NS		**0.0029 K**	0.02	NS		**0.0007 JK**	0.02
Zinc, dissolved	<0.002 UK	0.189	NS		**0.005 JK**	0.147	NS		NS		NS		<0.01 UK	0.221	NS		<0.002 UK	0.213

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST090		MST090		MST090		MST090		MST090		MST092		MST092		MST092		MST092	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050807SWMST090-0-U		051508SWMST090-0-F		051508SWMST090-0-U		0905SWMST090-F		0905SWMST090-U		051404SWMST092-0-F		051404SWMST092-0-U		050906SWMST092-0-F		050906SWMST092-0-U	
Collection Date:	5/8/2007		5/15/2008		5/15/2008		5/6/2009		5/6/2009		5/14/2004		5/14/2004		5/9/2006		5/9/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	<0.03 UK	0.087	NS		**0.08 JK**	0.087	NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		<0.001	0.005	NS		<0.000500	0.005	NS		**0.006**	0.005	NS		**0.044**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.03 JK {J+}**	0.087	NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.033 K**	0.003	NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000780	NS		<0.000125	0.000627	NS		<0.0005 UK	0.000615	NS		<0.0001 UK	0.000927	NS	
Chromium, dissolved	NS		<0.0001 UK	0.116	NS		NS		NS		NS		NS		**0.0004 JK**	0.148	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.0233	NS	
Iron, dissolved	NS		NS		NS		**0.0366 J**	0.158	NS		NS		NS		**0.04 JK**	0.158	NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00621	NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel, dissolved	NS		**0.0027 JK**	0.0823	NS		NS		NS		**0.009 K**	0.0581	NS		**0.0034 K**	0.106	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		**0.0009 JK**	0.02	NS		<0.00500	0.02	NS		**0.0022 K**	0.02	NS		**0.0022 K**	0.02	NS	
Zinc, dissolved	NS		**0.004 JK**	0.187	NS		NS		NS		<0.01 UK	0.132	NS		**0.004 JK**	0.241	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST092		MST092		MST092		MST092		MST092		MST092		MST094		MST094		MST094	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050807SWMST092-0-F		050807SWMST092-0-U		051508SWMST092-0-F		051508SWMST092-0-U		0905SWMST092-F		0905SWMST092-U		051304SWMST094-0-F		051304SWMST094-0-U		050906GWMST094-0-F	
Collection Date:	5/8/2007		5/8/2007		5/15/2008		5/15/2008		5/6/2009		5/6/2009		5/13/2004		5/13/2004		5/9/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		<0.03 UK	0.087	NS		**0.04 JK**	0.087	NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		**0.007**	0.005	NS		**0.0721 J**	0.005	NS		**0.023**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		**0.014 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.000880	NS		<0.0002 UK	0.000887	NS		<0.000125	0.000740	NS		NS		NS		<0.0001 UK	0.000651
Chromium, dissolved	<0.0002 UK	0.137	NS		<0.0001 UK	0.139	NS		NS		NS		NS		NS		**0.0002 JK**	0.0896
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.0138
Iron, dissolved	NS		NS		NS		NS		**0.0387 J**	0.158	NS		NS		NS		<0.02 UK	0.158
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00323
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	**0.0014 JK**	0.0982	NS		**0.0033 K**	0.0994	NS		NS		NS		**0.0005 J-K**	0.0974	NS		<0.0006 UK	0.0632
Selenium, dissolved	NS		NS		NS		NS		NS		NS		**0.021 J-**	0.005	NS		**0.001 J**	0.005
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003
Vanadium, dissolved	**0.0007 JK**	0.02	NS		**0.0021 K**	0.02	NS		<0.00500	0.02	NS		**0.0017 J-K**	0.02	NS		**0.0008 JK**	0.02
Zinc, dissolved	**0.002 JK**	0.223	NS		**0.007 JK**	0.226	NS		NS		NS		NS		NS		<0.002 UK	0.144

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST094		MST094		MST094		MST094		MST094		MST094		MST094		MST095		MST095	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050906GWMST094-0-U		050907SWMST094-0-F		050907SWMST094-0-U		051508GWMST094-0-F		051508GWMST094-0-U		0905SWMST094-F		0905SWMST094-U		051404SWMST095-0-F		051404SWMST095-0-U	
Collection Date:	5/9/2006		5/9/2007		5/9/2007		5/15/2008		5/15/2008		5/7/2009		5/7/2009		5/14/2004		5/14/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Surface Water		Surface Water		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		<0.03 UK	0.087	NS		**0.14 JK**	0.087	NS		NS		NS		NS	
Barium	NS		NS		NS		NS		**0.018 JK**	0.003	NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS	
Boron	NS		NS		NS		NS		**0.01 JK**	0.0016	NS		NS		NS		NS	
Cadmium	<0.0001 UK		NS		NS		NS		<0.0001 UK	0.000726	NS		NS		NS		NS	
Chromium	**0.0005 JK**		NS		NS		NS		<0.0001 UK	0.104	NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		<0.01 UK	0.0162	NS		NS		NS		NS	
Iron	NS		NS		NS		NS		**0.14 K**	0.158	NS		NS		NS		NS	
Lead	NS		NS		NS		NS		<0.0001 UK	0.00396	NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		NS	
Nickel	<0.0006 UK		NS		NS		NS		**0.0017 JK**	0.0741	NS		NS		NS		NS	
Selenium	**0.002 J**	0.005	NS		<0.001	0.005	NS		**0.002 J**	0.005	NS		**0.00305**	0.005	NS		**0.059**	0.005
Silver	NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		<0.0002 UK	0.00003	NS		NS		NS		NS	
Vanadium	**0.0007 JK**	0.02	NS		NS		NS		**0.0013 K**	0.02	NS		NS		NS		NS	
Zinc	<0.002 UK		NS		NS		NS		**0.026 K**	0.168	NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		<0.03 UK	0.087	NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		**0.014 JK**	0.003	NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		**0.02 JK**	0.0016	NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000858	NS		<0.0001 UK	0.000734	NS		<0.000125	0.000621	NS		**0.0002 J-K**	0.00127	NS	
Chromium, dissolved	NS		<0.0001 UK	0.132	NS		<0.0001 UK	0.106	NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		<0.01 UK	0.0165	NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		<0.02 UK	0.158	NS		<0.0250	0.158	NS		NS		NS	
Lead, dissolved	NS		NS		NS		<0.0001 UK	0.00404	NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0036 K**	0.0947	NS		**0.0018 JK**	0.0753	NS		NS		NS		**0.0068 J-K**	0.168	NS	
Selenium, dissolved	NS		NS		NS		**0.002 J**	0.005	NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		<0.01 UJK	0.00036	NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.0002 UK	0.02	NS		<0.0007 UK	0.02	NS		<0.00500	0.02	NS		**0.0023 J-K**	0.02	NS	
Zinc, dissolved	NS		<0.002 UK	0.215	NS		**0.002 JK**	0.171	NS		NS		NS		**0.013 J-K**	0.382	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST095		MST095		MST095		MST095		MST095		MST095		MST095		MST095		MST096	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050306GWMST095-0-F		050306GWMST095-0-U		050907SWMST095-0-F		050907SWMST095-0-U		051508GWMST095-0-F		051508GWMST095-0-U		0905SWMST095-F		0905SWMST095-U		051404SWMST096-0-F	
Collection Date:	5/3/2006		5/3/2006		5/9/2007		5/9/2007		5/15/2008		5/15/2008		5/7/2009		5/7/2009		5/14/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Surface Water		Surface Water		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		<0.03 UK	0.087	NS		**0.61 J+K**	0.087	NS		NS		NS	
Barium	NS		NS		NS		NS		NS		**0.072 K**	0.003	NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS	
Boron	NS		NS		NS		NS		NS		**0.03 JK**	0.0016	NS		NS		NS	
Cadmium	NS		**0.0006 K**		NS		NS		NS		**0.0005 JK**	0.00127	NS		NS		NS	
Chromium	NS		**0.0009 K**		NS		NS		NS		<0.0003 UK	0.231	NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		**0.01 JK**	0.0371	NS		NS		NS	
Iron	NS		NS		NS		NS		NS		**0.46 J+K**	0.158	NS		NS		NS	
Lead	NS		NS		NS		NS		NS		<0.0001 UK	0.0109	NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		NS		NS	
Nickel	NS		**0.0695 K**		NS		NS		NS		**0.017 K**	0.168	NS		NS		NS	
Selenium	NS		**0.39**	0.005	NS		**0.073**	0.005	NS		**0.23 J-**	0.005	NS		**0.446**	0.005	NS	
Silver	NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS	
Vanadium	NS		**0.0036 K**	0.02	NS		NS		NS		**0.0061 K**	0.02	NS		NS		NS	
Zinc	NS		**0.105 K**		NS		NS		NS		**0.026 K**	0.382	NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087	NS		NS		NS		NS	
Barium, dissolved	**0.047 K**	0.003	NS		NS		NS		**0.061 K**	0.003	NS		NS		NS		NS	
Beryllium, dissolved	<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		**0.02 JK**	0.0016	NS		NS		NS		NS	
Cadmium, dissolved	**0.0005 K**	0.00127	NS		**0.0002 JK**	0.00113	NS		**0.0004 JK**	0.00127	NS		**0.000248 J**	0.00127	NS		<0.0001 UK	0.00109
Chromium, dissolved	**0.003 K**	0.231	NS		<0.0001 UK	0.197	NS		<0.0001 UK	0.231	NS		NS		NS		**0.0002 JK**	0.186
Cobalt, dissolved	<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		NS	
Copper, dissolved	<0.01 UK	0.0371	NS		NS		NS		<0.01 UK	0.0371	NS		NS		NS		NS	
Iron, dissolved	<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158	NS		<0.0250	0.158	NS		NS	
Lead, dissolved	<0.0001 UK	0.0109	NS		NS		NS		<0.0001 UK	0.0109	NS		NS		NS		NS	
Molybdenum, dissolved	**0.01 JK**	0.034	NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		NS	
Nickel, dissolved	**0.0665 K**	0.168	NS		**0.0108 K**	0.142	NS		**0.0167 K**	0.168	NS		NS		NS		**0.0005 JK**	0.134
Selenium, dissolved	**0.38**	0.005	NS		NS		NS		**0.25**	0.005	NS		NS		NS		**0.016**	0.005
Silver, dissolved	<0.01 UK	0.00036	NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS	
Thallium, dissolved	<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS	
Vanadium, dissolved	**0.0013 K**	0.02	NS		**0.0058 K**	0.02	NS		**0.0058 K**	0.02	NS		<0.00500	0.02	NS		**0.00072 K**	0.02
Zinc, dissolved	**0.101 K**	0.382	NS		**0.013 K**	0.324	NS		**0.023 K**	0.382	NS		NS		NS		**0.017 K**	0.306

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST096		MST096		MST096		MST096		MST096		MST096		MST096		MST096		MST096	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051404SWMST096-0-U		SWMST096-0-F		SWMST096-0-U		050306GW		050306GWMST096-0-U		051808GWMST096-0-F		051808GWMST096-0-U		091708GWMST096-0-F		091708GWMST096-0-U	
Collection Date:	5/14/2004		9/10/2004		9/10/2004		5/3/2006		5/3/2006		5/18/2008		5/18/2008		9/17/2008		9/17/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		**0.16 J+K**	0.087	NS		**1.9**	0.087
Barium	NS		NS		NS		NS		NS		NS		**0.035 K**	0.003	NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS	
Boron	NS		NS		NS		NS		NS		NS		**0.02 JK**	0.0016	NS		NS	
Cadmium	NS		NS		NS		NS		<0.0001 UK		NS		<0.0001 UK	0.00105	NS		<0.000125	
Chromium	NS		NS		NS		NS		**0.0007 K**		NS		<0.0002 UK	0.177	NS		**0.00322**	
Cobalt	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		<0.01 UK	0.0281	NS		NS	
Iron	NS		NS		NS		NS		NS		NS		**0.08 J+K**	0.158	NS		**1.45**	0.158
Lead	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00782	NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		NS	
Nickel	NS		NS		NS		NS		<0.0006 UK		NS		**0.0013 JK**	0.128	NS		**0.00327 J**	
Selenium	**0.02**	0.005	NS		**0.027**	0.005	NS		**0.052**	0.005	NS		**0.031**	0.005	NS		**0.0302**	0.005
Silver	NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS	
Vanadium	NS		NS		NS		NS		**0.0008 JK**	0.02	NS		**0.0013 K**	0.02	NS		<0.00500	0.02
Zinc	NS		NS		NS		NS		**0.004 JK**		NS		**0.003 JK**	0.290	NS		**0.0108 J**	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.0500	0.087	NS	
Barium, dissolved	NS		NS		NS		**0.033 K**	0.003	NS		**0.035 K**	0.003	NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.0016	NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00113	NS		<0.0001 UK	0.00113	NS		**0.0001 JK**	0.00104	NS		<0.000125	0.00104	NS	
Chromium, dissolved	NS		<0.0001	0.196	NS		**0.0004 JK**	0.196	NS		<0.0001 UK	0.174	NS		**0.000773 J**	0.174	NS	
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS	
Copper, dissolved	NS		NS		NS		<0.01 UK	0.0313	NS		<0.01 UK	0.0276	NS		NS		NS	
Iron, dissolved	NS		NS		NS		<0.02 UK	0.158	NS		**0.05 JK**	0.158	NS		<0.0250	0.158	NS	
Lead, dissolved	NS		NS		NS		<0.0001 UK	0.00892	NS		<0.0001 UK	0.00765	NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS	
Nickel, dissolved	NS		**0.0036 K**	0.142	NS		<0.0006 UK	0.142	NS		**0.0024 JK**	0.125	NS		**0.00429**	0.125	NS	
Selenium, dissolved	NS		**0.027**	0.005	NS		**0.041 J-**	0.005	NS		**0.032**	0.005	NS		**0.0298**	0.005	NS	
Silver, dissolved	NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS	
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS	
Vanadium, dissolved	NS		**0.00013 JK**	0.02	NS		<0.0002 UK	0.02	NS		**0.0014 K**	0.02	NS		<0.00500	0.02	NS	
Zinc, dissolved	NS		<0.002 UK	0.324	NS		**0.003 JK**	0.323	NS		**0.009 JK**	0.285	NS		<0.00500 UJ	0.285	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST096		MST096		MST230		MST230		MST230		MST230		MST230		MST230		MST230	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	0905GWMST096-F		0905GWMST096-U		052004SWMST230-1-F		052004SWMST230-1-U		052004SWMST230-2-F		052004SWMST230-2-U		052004SWMST230-3-F		052004SWMST230-3-U		052004SWMST230-avg-F	
Collection Date:	5/31/2009		5/31/2009		5/20/2004		5/20/2004		5/20/2004		5/20/2004		5/20/2004		5/20/2004		5/20/2004	
Sample Type:	Groundwater		Groundwater		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		<0.000125		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.0638**	0.005	NS		**0.003 J**	0.005	NS		**0.003 J**	0.005	NS		**0.002 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		<0.00500	0.02	NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.000125	0.00112	NS		<0.0001 UK	0.000832	NS		<0.0001 UK	0.000830	NS		<0.0001	0.000828	NS		<0.0001	0.000830
Chromium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		NS		**0.0004 JK**	0.0905	NS		**0.0003 JK**	0.0903	NS		**0.0013 JK**	0.0898	NS		**0.000667 JK**	0.0903
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		NS		**0.00101 K**	0.02	NS		**0.001 K**	0.02	NS		**0.00091 JK**	0.02	NS		**0.000973 JK**	0.02
Zinc, dissolved	NS		NS		<0.002 UK	0.206	NS		<0.002 UK	0.205	NS		<0.002 UJK	0.204	NS		<0.002 UJK	0.205

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	**MST230**		**MST231**		**MST231**		**MST231**		**MST231**		**MST231**		**MST231**		**MST231**		**MST231**	
Location Type:	**Stream**		**Stream**		**Stream**		**Stream**		**Stream**		**Stream**		**Stream**		**Stream**		**Stream**	
Sample ID:	**052004SWMST230-avg-U**		**052104SWMST231-1-F**		**052104SWMST231-1-U**		**052104SWMST231-2-F**		**052104SWMST231-2-U**		**052104SWMST231-3-F**		**052104SWMST231-3-U**		**052104SWMST231-avg-F**		**052104SWMST231-avg-U**	
Collection Date:	**5/20/2004**		**5/21/2004**		**5/21/2004**		**5/21/2004**		**5/21/2004**		**5/21/2004**		**5/21/2004**		**5/21/2004**		**5/21/2004**	
Sample Type:	**Surface Water**		**Surface Water**		**Surface Water**		**Surface Water**		**Surface Water**		**Surface Water**		**Surface Water**		**Surface Water**		**Surface Water**	
	Averaged		**Triplicate**		**Triplicate**		**Triplicate**		**Triplicate**		**Triplicate**		**Triplicate**		**Averaged**		**Averaged**	
	Result	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**	**Result**	**SL**
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.00267 J**	0.005	NS		**0.002 J**	0.005	NS		**0.002 J**	0.005	NS		**0.002 J**	0.005	NS		**0.002 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0002 UK	0.000924	NS		<0.0002 UK	0.000926	NS		<0.0002 UK	0.000912	NS		<0.0002 UK	0.000920	NS	
Chromium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0007 JK**	0.106	NS		**0.0007 JK**	0.106	NS		**0.0005 JK**	0.104	NS		**0.000633 JK**	0.105	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.001 K**	0.02	NS		**0.001 K**	0.02	NS		**0.001 K**	0.02	NS		**0.001 K**	0.02	NS	
Zinc, dissolved	NS		<0.004 UK	0.240	NS		<0.004 UK	0.241	NS		<0.004 UK	0.236	NS		<0.004 UK	0.239	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST231		MST231		MST232		MST232		MST232		MST232		MST232		MST232		MST232	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050706SWMST231-0-F		050706SWMST231-0-U		052104SWMST232-0-F		052104SWMST232-0-U		050706SWMST232-1-F		050706SWMST232-1-U		050706SWMST232-2-F		050706SWMST232-2-U		050706SWMST232-3-F	
Collection Date:	5/7/2006		5/7/2006		5/21/2004		5/21/2004		5/7/2006		5/7/2006		5/7/2006		5/7/2006		5/7/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.008**	0.005	NS		**0.002 J**	0.005	NS		**0.007**	0.005	NS		**0.007**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087
Barium, dissolved	**0.063 K**	0.003	NS		NS		NS		**0.064 K**	0.003	NS		**0.063 K**	0.003	NS		**0.063 K**	0.003
Beryllium, dissolved	<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.000808	NS		<0.0001 UK	0.000926	NS		<0.0001 UK	0.000800	NS		<0.0001 UK	0.000798	NS		<0.0001 UK	0.000800
Chromium, dissolved	**0.0001 JK**	0.122	NS		NS		NS		**0.0001 JK**	0.120	NS		**0.0001 JK**	0.119	NS		**0.0001 JK**	0.120
Cobalt, dissolved	<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003
Copper, dissolved	<0.01 UK	0.0190	NS		NS		NS		<0.01 UK	0.0188	NS		<0.01 UK	0.0187	NS		<0.01 UK	0.0188
Iron, dissolved	<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158
Lead, dissolved	<0.0004 UK	0.00483	NS		NS		NS		<0.0004 UK	0.00474	NS		**0.0006 K**	0.00471	NS		<0.0005 UK	0.00474
Molybdenum, dissolved	<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034
Nickel, dissolved	**0.0019 JK**	0.0867	NS		**0.0008 JK**	0.106	NS		**0.0012 JK**	0.0855	NS		**0.0012 JK**	0.0851	NS		**0.0012 JK**	0.0855
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	<0.01 UJK	0.00036	NS		NS		NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036
Thallium, dissolved	<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003
Vanadium, dissolved	<0.0002 UK	0.02	NS		**0.00106 K**	0.02	NS		<0.0002 UK	0.02	NS		<0.0002 UK	0.02	NS		<0.0002 UK	0.02
Zinc, dissolved	**0.005 JK**	0.197	NS		<0.002 UK	0.241	NS		<0.002 UK	0.194	NS		<0.002 UK	0.193	NS		**0.002 JK**	0.194

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST232		MST232		MST232		MST232		MST232		MST232		MST232		MST232		MST232	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050706SWMST232-3-U		050706SWMST232-avg-F		050706SWMST232-avg-U		051407SWMST232-1-F		051407SWMST232-1-U		051407SWMST232-2-F		051407SWMST232-2-U		051407SWMST232-3-F		051407SWMST232-3-U	
Collection Date:	5/7/2006		5/7/2006		5/7/2006		5/14/2007		5/14/2007		5/14/2007		5/14/2007		5/14/2007		5/14/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Averaged		Averaged		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		**0.25 K**	0.087	NS		**0.24 K**	0.087	NS		**0.26 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.008**	0.005	NS		**0.00733**	0.005	NS		**0.003 J**	0.005	NS		**0.003 J**	0.005	NS		**0.004 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		**0.0633 K**	0.003	NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000800	NS		<0.0001	0.000910	NS		<0.0001	0.000920	NS		<0.0001	0.000917	NS	
Chromium, dissolved	NS		**0.0001 JK**	0.120	NS		<0.0001	0.144	NS		<0.0001	0.146	NS		<0.0001	0.146	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0188	NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		NS		NS		NS		NS	
Lead, dissolved	NS		**0.0006 K**	0.00474	NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0012 JK**	0.0855	NS		**0.001 JK**	0.103	NS		**0.001 JK**	0.105	NS		**0.0009 JK**	0.104	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.0002 UK	0.02	NS		**0.001 JK**	0.02	NS		**0.0009 JK**	0.02	NS		**0.0009 JK**	0.02	NS	
Zinc, dissolved	NS		**0.002 JK**	0.194	NS		<0.002 UJK	0.235	NS		<0.002 UJK	0.238	NS		<0.002 UJK	0.238	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST232		MST232		MST232		MST232		MST232		MST232		MST232		MST232		MST232	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051407SWMST232-avg-F		051407SWMST232-avg-U		090807SWMST232-0-F		090807SWMST232-0-U		051308SWMST232-1-F		051308SWMST232-1-U		051308SWMST232-2-F		051308SWMST232-2-U		051308SWMST232-3-F	
Collection Date:	5/14/2007		5/14/2007		9/8/2007		9/8/2007		5/13/2008		5/13/2008		5/13/2008		5/13/2008		5/13/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Averaged		Averaged		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**0.25 K**	0.087	NS		**0.12 JK**	0.087	NS		**1.5 K**	0.087	NS		**1.62 J+K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.00333 J**	0.005	NS		<0.001	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001	0.000915	NS		<0.0001 UK	0.000943	NS		<0.0001	0.000706	NS		**0.0001 JK**	0.000706	NS		<0.0001 UK	0.000729
Chromium, dissolved	<0.0001	0.145	NS		<0.0001 UK	0.151	NS		<0.0001 UK	0.100	NS		<0.0001 UK	0.100	NS		<0.0001 UK	0.105
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.000967 JK**	0.104	NS		**0.0018 JK**	0.109	NS		**0.0028 JK**	0.0712	NS		**0.003 JK**	0.0712	NS		**0.0018 JK**	0.0745
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.000933 JK**	0.02	NS		<0.0008 UK	0.02	NS		**0.0017 K**	0.02	NS		**0.0012 K**	0.02	NS		**0.0014 J+K**	0.02
Zinc, dissolved	<0.002 UJK	0.237	NS		**0.009 JK**	0.247	NS		**0.011 JK**	0.162	NS		**0.013 K**	0.162	NS		**0.002 JK**	0.169

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST232		MST232		MST232		MST232		MST232		MST272		MST272		MST272		MST272	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051308SWMST232-3-U		051308SWMST232-avg-F		051308SWMST232-avg-U		091508SWMST232-0-F		091508SWMST232-0-U		051404SWMST272-0-F		051404SWMST272-0-U		050906SWMST272-0-F		050906SWMST272-0-U	
Collection Date:	5/13/2008		5/13/2008		5/13/2008		9/15/2008		9/15/2008		5/14/2004		5/14/2004		5/9/2006		5/9/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	**1.24 K**	0.087	NS		**1.45 J+K**	0.087	NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		**0.00127 J+**	0.005	NS		<0.001	0.005	NS		**0.01**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		<0.0500	0.087	NS		NS		NS		**0.07 JK**	0.087	NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.028 K**	0.003	NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0001 JK**	0.000715	NS		<0.000125	0.000880	NS		NS		NS		<0.0001 UK	0.000785	NS	
Chromium, dissolved	NS		<0.0001 UK	0.102	NS		**0.000636 J**	0.137	NS		NS		NS		**0.0003 JK**	0.117	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.0182	NS	
Iron, dissolved	NS		NS		NS		<0.0250	0.158	NS		NS		NS		**0.07 K**	0.158	NS	
Lead, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00457	NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel, dissolved	NS		**0.00253 JK**	0.0725	NS		**0.00185 J**	0.0982	NS		**0.0012 J-K**	0.116	NS		**0.0014 JK**	0.0831	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		**0.00143 J+K**	0.02	NS		<0.00500	0.02	NS		**0.0111 J-K**	0.02	NS		**0.0014 K**	0.02	NS	
Zinc, dissolved	NS		**0.00867 JK**	0.165	NS		**0.00663 J**	0.223	NS		NS		NS		**0.003 JK**	0.189	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST273		MST273		MST273		MST273		MST278		MST278		MST279		MST279		MST279	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051404SWMST273-0-F		051404SWMST273-0-U		050906SWMST273-0-F		050906SWMST273-0-U		051006SWMST278-0-F		051006SWMST278-0-U		050807SWMST279-0-F		050807SWMST279-0-U		091507GWMST279-0-F	
Collection Date:	5/14/2004		5/14/2004		5/9/2006		5/9/2006		5/10/2006		5/10/2006		5/8/2007		5/8/2007		9/15/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		**0.26 K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Chromium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Lead	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		**0.016**	0.005	NS		**0.122**	0.005	NS		**0.001 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		**0.026 K**	0.003	NS		**0.03 K**	0.003	NS		NS		NS		**0.051 K**	0.003
Beryllium, dissolved	NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		**0.02 JK**	0.0016
Cadmium, dissolved	NS		NS		<0.0001 UK	0.000787	NS		**0.0007 K**	0.000994	NS		<0.0001 UK	0.000880	NS		<0.0001 UK	0.000974
Chromium, dissolved	NS		NS		**0.0003 JK**	0.117	NS		**0.0008 K**	0.163	NS		<0.0004 UK	0.137	NS		<0.0001 UK	0.159
Cobalt, dissolved	NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		<0.01 UK	0.0183	NS		<0.01 UK	0.0259	NS		NS		NS		<0.01 UK	0.0251
Iron, dissolved	NS		NS		**0.05 JK**	0.158	NS		<0.02 UK	0.158	NS		NS		NS		**0.06 K**	0.158
Lead, dissolved	NS		NS		<0.0001 UK	0.00460	NS		<0.0001 UK	0.00705	NS		NS		NS		<0.0001 UK	0.00680
Molybdenum, dissolved	NS		NS		<0.01 UK	0.034	NS		**0.02 JK**	0.034	NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	**0.004 J-K**	0.133	NS		**0.0016 JK**	0.0835	NS		**0.0066 K**	0.117	NS		**0.0014 JK**	0.0982	NS		**0.0029 JK**	0.114
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.001	0.005
Silver, dissolved	NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003
Vanadium, dissolved	**0.0046 J-K**	0.02	NS		**0.0016 K**	0.02	NS		**0.0073 K**	0.02	NS		**0.0009 JK**	0.02	NS		**0.0012 K**	0.02
Zinc, dissolved	NS		NS		**0.003 JK**	0.190	NS		**0.017 K**	0.267	NS		<0.002 UK	0.223	NS		<0.002 UK	0.259

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST279		MST279		MST279		MST279		MST279	
Location Type:	Stream		Stream		Stream		Stream		Stream	
Sample ID:	091507GWMST279-0-U		050908GWMST279-0-F		050908GWMST279-0-U		091908GWMST279-0-F		091908GWMST279-0-U	
Collection Date:	9/15/2007		5/9/2008		5/9/2008		9/18/2008		9/18/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)										
Aluminum	**1.73 J+K**	0.087	NS		**0.07 JK**	0.087	NS		**5.65**	0.087
Barium	**0.065 K**	0.003	NS		**0.025 K**	0.003	NS		NS	
Beryllium	<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS	
Boron	**0.03 JK**	0.0016	NS		**0.03 JK**	0.0016	NS		NS	
Cadmium	<0.0001 UK	0.000977	NS		<0.0001 UK	0.000761	NS		**0.000478 J**	
Chromium	**0.0048 K**	0.159	NS		<0.0001 UK	0.112	NS		**0.0108**	
Cobalt	<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS	
Copper, total	<0.01 UK	0.0252	NS		<0.01 UK	0.0174	NS		NS	
Iron	**1.69 K**	0.158	NS		**0.1 K**	0.158	NS		**5.17**	0.158
Lead	**0.001 J+K**	0.00683	NS		<0.0001 UK	0.00432	NS		NS	
Molybdenum	<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS	
Nickel	**0.0041 K**	0.114	NS		<0.0012 UK	0.0794	NS		**0.0142**	
Selenium	<0.001	0.005	NS		<0.001	0.005	NS		**0.00248**	0.005
Silver	<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS	
Thallium	<0.0003 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS	
Vanadium	**0.0028 K**	0.02	NS		**0.0012 J+K**	0.02	NS		**0.0136**	0.02
Zinc	**0.011 K {J+}**	0.260	NS		<0.002 UK	0.181	NS		**0.0432**	
Dissolved Metals (mg/L)										
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		<0.0500	0.087	NS	
Barium, dissolved	NS		**0.026 K**	0.003	NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS	
Boron, dissolved	NS		**0.02 JK**	0.0016	NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000777	NS		<0.000125	0.000908	NS	
Chromium, dissolved	NS		<0.0001 UK	0.115	NS		**0.00241**	0.143	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0180	NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		**0.0315 J**	0.158	NS	
Lead, dissolved	NS		<0.0001 UK	0.00449	NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS	
Nickel, dissolved	NS		**0.0018 JK**	0.0819	NS		**0.00476**	0.103	NS	
Selenium, dissolved	NS		<0.001	0.005	NS		**0.00161**	0.005	NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS	
Vanadium, dissolved	NS		**0.0014 K**	0.02	NS		<0.00500	0.02	NS	
Zinc, dissolved	NS		<0.002 UK	0.186	NS		**0.00539 J**	0.234	NS	

TABLE 3-8

BALLARD MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Notes:
NS - not sampled
SL - screening level
F - filtered
U - unfiltered
Avg - average

Result is greater than screening value
Method detection limit for non-detected value is greater than the screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
K	Serial dilutions not performed for samples analyzed by this method (EPA 200.7; 200.8).

Sources for Screening Values (see also Table 3-1):

Surface Water	Unless identified otherwise below, screening levels are the chronic freshwater screening value in NOAA SQuiRT (Buchman, 2008).
	Screening levels for aluminum is the Freshwater Standards for Chronic Criteria (CCC) from the National Recommended Water Quality Criteria (USEPA, 2009).
	Screening values for arsenic, cadmium, chromium, copper, lead, nickel, selenium, and zinc are the CCCs from the State of Idaho Surface Water Quality for Aquatic Life (IDAPA 58.01.02); those for cadmium, chromium, copper, lead, nickel, and zinc are expressed as a function of total hardness. Screening levels for cadmium and selenium are expressed as total recoverable (unfiltered concentration).
	The screening level for iron is the Lowest Chronic Value (LCV) observed for fresh water daphnids (source: ORNL, 1996).
	The screening levels for manganese, uranium, and vanadium are the Tier II Secondary Chronic Values (source: ORNL, 1996).

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.
The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-9 SPRING, SEEP, AND STREAM HEADWATER RECESSION CONSTANT (*K*) VALUES		
	Average	**Final**
Ballard Mine		
MDS030	0.964	0.960
MSG003	1.000	0.998
MSG004	0.905	0.888
MSG005	0.970	0.993
MST067	0.944	0.957
MST069	0.989	1.000
MST095	0.925	0.887
MST096	0.979	0.949
Henry Mine		
MDS016	0.932	0.932
MDS022	0.990	1.014
MSG002	0.992	0.989
Enoch Valley Mine		
MDS026	0.994	0.994
MSG001	0.991	0.999

Notes:
Average – the average recession constant of each time-step on the hydrograph.
Final – the recession constant for the final time-step in the hydrograph.

TABLE 3-10

BALLARD MINE - SUMMARY OF SEDIMENT EXCEEDANCES
(Page 1 of 3)

					Analyte (mg/Kg, dry weight)					
Location	Location Type	Sample Identification	Collection Date	Sample Type	Cadmium	Chromium	Nickel	Selenium	Vanadium	Zinc
				Screening Level:	0.583	36.286	18	4	57	98
MDS030	Dump Seep	051104SEMDS030-0	5/11/2004	Primary	3.27	37.9	25.3	250 J-	39.1	89 J
MDS031	Dump Seep	051104SEMDS031-0	5/11/2004	Primary	8.32	110	96.8	83 J-	57	348 J
MDS032	Dump Seep	051104SEMDS032-0	5/11/2004	Primary	8.29	75.1	78.1	1300 J-	44.7	263 J
MDS033	Dump Seep	051104SEMDS033-0	5/11/2004	Primary	6.28	125	98.5	470 J-	62.2	295 J
MRV011	Reservoir Delta	052104SEMRV011-0	5/21/2004	Primary	1.18	20.6	11.6 J	1 J	20.9	46
MSG003	Spring	051104SEMSG003-0	5/11/2004	Primary	11.2	136	72.9	180 J-	97.1	328 J
MSG004	Spring	051204SEMSG004-0	5/12/2004	Primary	9.1	486	312 J	29.4 J-	55.7 J	340 J
MSG005	Spring	051204SEMSG005-0	5/12/2004	Primary	1.48	29.3 J	26.2 J	8.8 J-	32.8 J	92 J
MSG006	Spring	051504SEMSG006-0	5/14/2004	Primary	1.27	36.8	17.2	290	33.6	73
MSP010	Pond	051504SEMSP010-0	5/15/2004	Primary	25.6	593	249	114	202	940
MSP011	Pond	051204SEMSP011-1-Q1	5/12/2004	Triplicate	67	613	102 J	36 J-	474	710
MSP011	Pond	051204SEMSP011-1-Q2	5/12/2004	Triplicate	66	610	100 J	30 J-	456	710
MSP011	Pond	051204SEMSP011-1-Q3	5/12/2004	Triplicate	67.5	630	105 J	35 J-	485	730
MSP011	Pond	051204SEMSP011-1-Q-avg	5/12/2004	Averaged	66.8	618	102 J	33.7 J-	472	717
MSP012	Pond	051204SEMSP012-0	5/12/2004	Primary	138	734	192 J	63 J-	535	1520
MSP059	Pond	051204SEMSP059-0	5/12/2004	Primary	43.4	672	341 J	49 J-	657	1750
MSP062	Pond	051204SEMSP062-0	5/12/2004	Primary	118	740	375 J	58 J-	920	2360
MST019	Stream	052004SEMST019-0	5/20/2004	Primary	1.24	20	7.7	0.7 J	17.1 J	31 J
MST020	Stream	052004SEMST020-0	5/20/2004	Primary	1.48	30.7	13.3 J	<0.5	30.1 J	45 J
MST021	Stream	052004SEMST021-1-QA1	5/20/2004	Triplicate	1.54	26.5	7.3	0.5 J	20 J	30 J
MST021	Stream	052004SEMST021-1-QA2	5/20/2004	Triplicate	1.23	32.1	8.7	<0.5	20.9 J	29 J
MST021	Stream	052004SEMST021-1-QA3	5/20/2004	Triplicate	1.61	29.3	8.3	<0.5	18.3 J	30 J
MST021	Stream	052004SEMST021-1-QA-avg	5/20/2004	Averaged	1.46	29.3	8.1	0.5 J	19.7 J	29.7 J
MST022	Stream	051904SEMST022-0	5/19/2004	Primary	1.38	25.4	7.3	0.5 J	18.7 J	26 J
MST066	Stream	051804SEMST066-0	5/18/2004	Primary	2.34	23.6	15.2	3.2 J	44.1	75
MST067	Stream	051104SEMST067-0	5/11/2004	Primary	34.2	196	161	82 J-	268	886 J
MST069	Stream	051004SEMST069-0	5/10/2004	Primary	11.1	31 J	83.8 J	420 J-	26.6 J	311 J
MST089	Stream	051404SEMST089-0	5/14/2004	Primary	5.45	41.5	27.8	14.7	47.6	171
MST090	Stream	051404SEMST090-0	5/14/2004	Primary	0.93 J-	22.4	10 J	0.6 J	26.8	58 J
MST092	Stream	051404SEMST092-0	5/14/2004	Primary	9.29 J-	98.7	50.2 J	57	94.2	315 J

TABLE 3-10

BALLARD MINE - SUMMARY OF SEDIMENT EXCEEDANCES
(Page 2 of 3)

					Analyte (mg/Kg, dry weight)					
Location	Location Type	Sample Identification	Collection Date	Sample Type	Cadmium	Chromium	Nickel	Selenium	Vanadium	Zinc
				Screening Level:	0.583	36.286	18	4	57	98
MST094	Stream	051304SEMST094-0	5/13/2004	Primary	**1.28 J-**	**39.8**	**24.1 J**	**8.2**	**42.6**	**103 J**
MST095	Stream	051404SEMST095-0	5/14/2004	Primary	**10.5 J-**	**94.7**	**57.5 J**	**22**	**85.9**	**252 J**
MST096	Stream	051404SEMST096-0	5/14/2004	Primary	**0.55 J-**	**29**	**13.7 J**	**16.8**	**25**	**80 J**
MST230	Stream	052004SEMST230-1-QA1	5/20/2004	Triplicate	**3.65**	**40.8 J**	**9**	**0.7 J**	**35.1**	**40**
MST230	Stream	052004SEMST230-1-QA2	5/20/2004	Triplicate	**2.57**	**35.9 J**	**9.1**	**0.8 J**	**23.8**	**34**
MST230	Stream	052004SEMST230-1-QA3	5/20/2004	Triplicate	**2.52**	**33.1 J**	**9.5**	**1 J**	**23.4**	**33**
MST230	Stream	052004SEMST230-1-QA-avg	5/20/2004	Averaged	**2.91**	**36.6 J**	**9.2**	**0.833 J**	**27.4**	**35.7**
MST231	Stream	052104SEMST231-QA1	5/21/2004	Triplicate	**0.67**	**9.68**	**6.5 J**	<0.5	**9.51**	**24**
MST231	Stream	052104SEMST231-QA2	5/21/2004	Triplicate	**0.7**	**10.1**	**6.9 J**	<0.5	**9.87**	**24**
MST231	Stream	052104SEMST231-QA3	5/21/2004	Triplicate	**0.7**	**9.97**	**6.7 J**	<0.5	**9.68**	**23**
MST231	Stream	052104SEMST231-QA-avg	5/21/2004	Averaged	**0.69**	**9.92**	**6.7 J**	<0.5	**9.69**	**23.7**
MST232	Stream	052104SEMST232-0	5/21/2004	Primary	**1.09**	**16**	**10.2 J**	**1.2 J**	**16.3**	**40**
MST272	Stream	051404SEMST272-0	5/14/2004	Primary	**4.1**	**42.1**	**27.7**	**2 J**	**65.1**	**149**
MST273	Stream	051404SEMST273-0	5/14/2004	Primary	**2.79**	**30.8**	**18.9**	**1.7 J**	**36.7**	**104**

TABLE 3-10

BALLARD MINE - SUMMARY OF SEDIMENT EXCEEDANCES
(Page 3 of 3)

Notes:

Result is greater than screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sources for Screening Values (see also Table 3-1):

Sediment

Screening levels for aluminum, cadmium, chromium, and zinc are the ARCS threshold effects levels (TELs) for freshwater sediment in NOAA SQuiRT (Buchman, 2008).
Screening level for antimony is from Buchman, M. 1999. NOAA HAZMAT Report 99-1.
Screening levels for arsenic, copper, lead, mercury, and nickel are the TEL for freshwater sediment in NOAA SQuiRT (Buchman, 2008).

Screening levels for cobalt, iron, manganese, and silver are from Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario, August 1993.
Screening level for selenium is from Van Derveer and Canton (1997).
Screening level for vanadium is from the marine sediment AET (Buchman, 2008).

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.
The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-11 BALLARD MINE GROUNDWATER MONITORING LOCATIONS						
Mine	Station Description	Location		Station Number	Station Type	Groundwater System Monitored and Screened Interval (ft bgs)
		Latitude	Longitude			
Ballard	Torgeson Well	42 49 29.52	111 29 45.56	MAW008	AW	ND
	Short Creek	42 49 04.15	111 29 25.80	MBW006	BW	Alluvial 14-9
	Blackfoot River Road @ Monsanto Haul Road	42 49 12.96	111 29 48.71	MBW009	BW	Alluvial 11-6
	Ballard Creek	42 49 23.46	111 29 38.93	MBW011	BW	Alluvial 15-10
	Ballard, Western Shallow	42 50 01.91	111 29 54.83	MBW026	BW	Alluvial 11-6
	Ballard, Western Deeper	42 50 02.23	111 29 54.34	MBW027	BW	Alluvial 16-11
	Torgeson	42 49 34.44	111 29 42.93	MBW028	BW	Alluvial 21-16
	Holmgren	42 49 33.92	111 28 11.14	MBW032	BW	Alluvial 15-10
	Wooley Valley Creek	42 50 03.76	111 27 56.21	MBW048	BW	Alluvial 9-4
	Wooley Valley Creek	42 49 40	111 27 10	MBW130	BW	Alluvial 25-20
	Wooley Valley Creek	42 50 24	111 28 33	MBW131	BW	Alluvial 8-3
	West Ballard Mine area downgradient of MWD081	42 48 40	111 29 43	MBW135	BW	Alluvial 20-15
	Godfrey House Well	42 49 26.39	111 33 14.40	MDW004	DW	ND
	South of West Ballard Pit; south of waste rock dumps	42 49 20.0	111 29 03.0	MMW006	MW	Wells Formation 330-310
	Northwest of Ballard Mine into Long Valley Creek alluvial flow field	42 49 59.6	111 29 47.4	MMW017	MW	Alluvial 56-36
	East of Ballard Mine in Wooley Valley alluvial flow field	42 49 39.4	111 28 04.5	MMW018	MW	Alluvial 33-18
	East side of West Ballard Pit (MMP035); replacement of MMW001	42 49 36.4	111 29 03.3	MMW020	MW	Wells Formation 408-388
	West side of West Ballard Pit (MMP035); replacement of MMW002	42 49 35.6	111 29 23.9	MMW021	MW	Wells Formation 250-230
	East Ballard mine area in the vicinity of MMW018	42 49 37.78	111 28 08.74	MMW029	MW	Dinwoody Formation 60-45
	Along the southwestern portion of Ballard Mine in the vicinity of MMW016A	42 49 10.72	111 29 17.03	MMW030	MW	Wells Formation 155-135
	Along the western perimeter of Ballard Mine in the vicinity and north of MMW017	42 50 11.87	111 29 43.05	MMW031	MW	Wells Formation 200-180
	Adjacent to MWD084	42 50 09.3	111 28 21.8	MMW032	MW	Alluvial 65-55
	Deeper well nested with MMW029	42 49 35.3	111 2811.9	MMW033	MW	Dinwoody Formation 148 – 128
	West Ballard Mine near MST068	42 49 35.99	111 29 36.55	MW-15A	MW	Alluvial 40-30
	Southwest Ballard Mine near MST069	42 49 08.83	111 29 16.53	MW-16A	MW	Alluvial 30-20

Notes:
Location (GPS) coordinates use the NAD27 datum and are presented in ddd mm ss.ss format (degrees minutes seconds).
ND - Not determined

TABLE 3-11 BALLARD MINE GROUNDWATER MONITORING LOCATIONS						
Mine	Station Description	Location		Station Number	Station Type	Groundwater System Monitored and Screened Interval (ft bgs)
		Latitude	Longitude			
AW - Agricultural Well BW - Borehole Monitoring Well DW - Domestic Well MW - Monitoring Well PW - Production Well						

TABLE 3-12

BALLARD MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 1 of 10)

Well Name:			MAW008	MBW006	MBW009	MBW011	MBW026	MBW027	MBW028
Collection Date:			09/26/08	05/10/09	05/10/09	05/10/09	05/11/09	05/11/09	05/11/09
Well Type:			AW	BW	BW	BW	BW	BW	BW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Total Metals									
Aluminum	mg/L	0.2	**1.09**	<0.0500	**0.0793 J**	<0.0500	**14.4**	**0.283**	**0.114**
Antimony	mg/L	0.006	NS	NS	NS	NS	NS	NS	NS
Arsenic	mg/L	0.01	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/L	0.005	**0.000334 J**	<0.000125	**0.00106**	**0.000170 J**	**0.000893**	**0.000331 J**	**0.000490 J**
Iron	mg/L	0.3	**5.73**	**0.0297 J**	**0.0927 J**	**0.0954 J**	**17.5**	**0.402**	**0.167**
Manganese	mg/L	0.05	**0.244**	**0.0158**	**0.495**	**0.096**	**0.0691**	**0.00508**	**0.176**
Selenium	mg/L	0.05	**0.0709**	**0.3**	**0.0117**	**0.569**	**0.221**	**0.21**	**0.894**
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	<0.0500	NS	NS	NS	NS	NS	NS
Antimony, dissolved	mg/L	0.006	NS	NS	NS	NS	NS	NS	NS
Arsenic, dissolved	mg/L	0.01	NS	NS	NS	NS	NS	NS	NS
Cadmium, dissolved	mg/L	0.005	<0.000125	NS	NS	NS	NS	NS	NS
Iron, dissolved	mg/L	0.3	**0.0330 J**	<0.0250	**0.0305 J**	**0.0434 J**	**0.249**	<0.0250	<0.0250
Manganese, dissolved	mg/L	0.05	**0.0921**	NS	NS	NS	NS	NS	NS
Selenium, dissolved	mg/L	0.05	**0.0729**	NS	NS	NS	NS	NS	NS
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**472**	**808**	**800**	**506**	**554**	**508**	**1090**
Sulfate	mg/L	250	**62.0**	**375**	**334**	**163**	**157**	**182**	**474**

TABLE 3-12

BALLARD MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MBW032	MBW048	MBW130	MBW131	MBW135	MDW004	MDW004
Collection Date:			05/12/09	05/12/09	05/15/09	05/15/09	05/15/09	05/22/04	05/19/08
Well Type:			BW	BW	BW	BW	BW	DW	DW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Total Metals									
Aluminum	mg/L	0.2	<0.0500	**0.181**	NS	NS	NS	NS	<0.03 UK
Antimony	mg/L	0.006	NS	NS	NS	NS	NS	NS	
Arsenic	mg/L	0.01	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/L	0.005	**0.000923**	<0.000125	NS	NS	NS	<0.0002 UK	<0.0001 UK
Iron	mg/L	0.3	**0.0786 J**	**0.278**	NS	NS	NS	NS	**0.05 JK**
Manganese	mg/L	0.05	**0.00883**	**0.278**	NS	NS	NS	NS	**0.002 JK**
Selenium	mg/L	0.05	**0.605**	<0.000500	NS	NS	NS	<0.001	**0.002 J**
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	NS	NS	NS	NS	NS	NS	<0.03 UK
Antimony, dissolved	mg/L	0.006	NS	NS	NS	NS	NS	NS	NS
Arsenic, dissolved	mg/L	0.01	NS	NS	NS	NS	NS	NS	NS
Cadmium, dissolved	mg/L	0.005	NS	NS	NS	NS	NS	<0.0002 UK	<0.0001 UK
Iron, dissolved	mg/L	0.3	<0.0250	**0.159**	NS	NS	NS	NS	<0.02 UK
Manganese, dissolved	mg/L	0.05	NS	NS	NS	NS	NS	NS	**0.003 JK**
Selenium, dissolved	mg/L	0.05	NS	NS	**0.00223**	<0.000500	<0.000759	<0.001	<0.001
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**1860**	**116**	NS	NS	NS	NS	**330 J-**
Sulfate	mg/L	250	**867**	**6.68**	NS	NS	NS	**15.1**	**14.7**

TABLE 3-12

BALLARD MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MMW001	MMW001	MMW001	MMW001	MMW001	MMW001	MMW001
Collection Date:			05/21/04	10/07/04	10/07/04	06/23/05	11/01/05	05/18/06	10/16/07
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Primary	Primary	Averaged Triplicate	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Total Metals									
Aluminum	mg/L	0.2	NS	NS	NS	NS	NS	NS	**0.75 K****
Antimony	mg/L	0.006	NS	NS	NS	NS	NS	NS	<0.0004 UK
Arsenic	mg/L	0.01	NS	NS	NS	NS	NS	NS	0.006 K
Cadmium	mg/L	0.005	NS	NS	NS	NS	**<0.05 UK**	**0.0215 K**	0.0025 K
Iron	mg/L	0.3	NS	NS	NS	NS	**<0.2 UK**	NS	**0.64 K**
Manganese	mg/L	0.05	NS	NS	NS	NS	**0.3 JK**	NS	**0.189 K**
Selenium	mg/L	0.05	NS	NS	NS	NS	**0.069**	**0.131**	0.028
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	NS	NS	NS	<0.03 UK	<0.03 UK	<0.03 UK	<0.03 UK
Antimony, dissolved	mg/L	0.006	NS	NS	NS	NS	NS	<0.0004 UK	<0.0004 UK
Arsenic, dissolved	mg/L	0.01	NS	NS	NS	NS	NS	0.0008 JK	0.0039 K
Cadmium, dissolved	mg/L	0.005	0.0033 K	**0.00593 K**	**0.0058 K**	**0.0061 K**	0.0029 K	0.005 K	0.0013 K
Iron, dissolved	mg/L	0.3	NS	NS	NS	<0.01 UK	<0.02 UK	<0.02 UK	0.02 JK
Manganese, dissolved	mg/L	0.05	NS	NS	NS	0.0312 K	**0.0585 K**	0.0071 K	**0.143 K**
Selenium, dissolved	mg/L	0.05	0.046	0.017**	**0.017**	**0.067**	**0.072**	**0.125**	0.023
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	NS	NS	NS	NS	NS	**550**	500 J-
Sulfate	mg/L	250	99.6	99.3	98	122	98.1	149	117 J-

TABLE 3-12

BALLARD MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 4 of 10)

Well Name:			MMW006	MMW006	MMW006	MMW006	MMW017	MMW017	MMW017
Collection Date:			10/17/07	05/20/08	09/24/08	06/03/09	09/19/07	05/13/08	09/23/08
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Averaged Triplicate	Primary	Averaged Triplicate	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Total Metals									
Aluminum	mg/L	0.2	<0.03 UK	**0.08 J+K**	<0.05	NS	**0.21 J+K**	<0.04 UJK	<0.0500
Antimony	mg/L	0.006	<0.0004 UK	NS	NS	NS	<0.008 UK	<0.0004 UK	NS
Arsenic	mg/L	0.01	**0.0032 K**	NS	NS	NS	**0.0035 K**	**0.0023 J+K**	NS
Cadmium	mg/L	0.005	<0.0001 UK	<0.0001 UK	<0.000125	NS	**0.0005 K**	**0.0018 K**	**0.000558**
Iron	mg/L	0.3	<0.02 UK	**0.04 J+K**	<0.025	NS	**0.23 J+K**	**0.02 JK**	<0.0250
Manganese	mg/L	0.05	**0.00107 JK**	**0.0021 JK**	**0.000824 J**	NS	**0.48 K**	**0.0395 K**	**0.0130**
Selenium	mg/L	0.05	**0.08**	**0.069**	**0.0715 J**	**0.0699**	**0.13**	**0.103**	**0.101**
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	<0.03 UK	<0.03 UK	<0.05	NS	<0.03 UK	<0.03 UK	<0.0500
Antimony, dissolved	mg/L	0.006	<0.0004 UK	NS	NS	NS	<0.0004 UK	<0.0004 UK	NS
Arsenic, dissolved	mg/L	0.01	**0.00367 K**	NS	NS	NS	**0.0036 K**	**0.0048 J+K**	NS
Cadmium, dissolved	mg/L	0.005	<0.0001 UK	<0.0001 UK	<0.000125	NS	**0.0005 JK**	**0.0006 K**	**0.000566**
Iron, dissolved	mg/L	0.3	<0.02 UK	<0.02 UK	<0.025	NS	<0.02 UK	<0.02 UK	<0.0250
Manganese, dissolved	mg/L	0.05	**0.00117 JK**	<0.0005 UK	**0.00257 J**	NS	**0.533 K**	**0.0174 K**	**0.00843**
Selenium, dissolved	mg/L	0.05	**0.0767**	**0.059**	**0.0694 J**	NS	**0.13**	**0.103**	**0.0994**
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**280 J-**	**290 J-**	**303**	**402**	**1000 J-**	**1000 J-**	**1060**
Sulfate	mg/L	250	**60.6**	**59.1**	**58**	**58.1**	**461**	**452**	**446**

TABLE 3-12

BALLARD MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 5 of 10)

Well Name:			MMW017	MMW018	MMW018	MMW018	MMW018	MMW020	MMW020
Collection Date:			06/03/09	09/17/07	05/19/08	09/23/08	06/02/09	10/16/07	05/20/08
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Primary	Averaged Triplicate	Averaged Triplicate	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Total Metals									
Aluminum	mg/L	0.2	NS	<0.03 UK	<0.03 UK	<0.0500	NS	**0.24 K**	<0.03 UK
Antimony	mg/L	0.006	NS	<0.0004 UK	<0.0004 UK	NS	NS	**0.0013 JK**	NS
Arsenic	mg/L	0.01	NS	**0.0008 JK**	**0.00137**	NS	NS	**0.0012 K**	NS
Cadmium	mg/L	0.005	NS	<0.0001 UK	<0.0001 UK	<0.000125	NS	**0.0081 K**	**0.0092 K**
Iron	mg/L	0.3	NS	**0.0533 JK**	**0.0367 JK**	<0.0250	NS	**0.37 K**	**0.13 K**
Manganese	mg/L	0.05	NS	**0.0157 K**	**0.0653 K**	**0.0208**	NS	**0.081 K**	**0.0143 K**
Selenium	mg/L	0.05	**0.0937**	**0.029**	**0.027**	**0.0274**	**0.0276**	**0.017**	**0.01**
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	NS	<0.04 UK	<0.03 UK	<0.0500	NS	<0.03 UK	<0.03 UK
Antimony, dissolved	mg/L	0.006	NS	<0.0004 UK	<0.0004 UK	NS	NS	**0.0007 JK**	NS
Arsenic, dissolved	mg/L	0.01	NS	**0.000567 JK**	<0.0005 UK	NS	NS	**0.0013 K**	NS
Cadmium, dissolved	mg/L	0.005	NS	<0.0001 UK	<0.0001 UK	<0.000125	NS	**0.0078 K**	**0.0098 K**
Iron, dissolved	mg/L	0.3	NS	<0.0267 UK	<0.02 UK	<0.0250	NS	**0.05 JK**	**0.04 JK**
Manganese, dissolved	mg/L	0.05	NS	**0.000933 JK**	**0.0395 K**	**0.0147**	NS	**0.0851 K**	**0.0149 K**
Selenium, dissolved	mg/L	0.05	NS	**0.0277**	**0.0257**	**0.0270**	NS	**0.016**	**0.009**
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**1060**	**250 J-**	**280 J-**	**292**	**268**	**500 J-**	**490 J-**
Sulfate	mg/L	250	**447**	**48.4**	**60**	**50.2**	**42.9**	**127**	**131**

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BALLARD MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MMW020	MMW020	MMW020	MMW021	MMW021	MMW021	MMW021
Collection Date:			09/23/08	06/05/09	09/23/09	10/16/07	05/19/08	09/22/08	06/02/09
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Total Metals									
Aluminum	mg/L	0.2	**0.115**	NS	NS	<0.03 UK	<0.03 UK	<0.0500	NS
Antimony	mg/L	0.006	NS	NS	NS	**0.0006 JK**	NS	NS	NS
Arsenic	mg/L	0.01	NS	NS	NS	**0.0015 K**	NS	NS	NS
Cadmium	mg/L	0.005	**0.0108**	NS	NS	<0.0001 UK	<0.0001 UK	<0.000125	NS
Iron	mg/L	0.3	**1.12**	NS	NS	**0.05 JK**	**0.05 J+K**	<0.0250	NS
Manganese	mg/L	0.05	**0.0232**	NS	NS	**0.17 K**	**0.0061 K**	**0.00126 J**	NS
Selenium	mg/L	0.05	**0.00881**	**0.221**	**0.193**	**0.047**	**0.049**	**0.0495**	**0.0488**
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	<0.0500	NS	NS	<0.03 UK	<0.03 UK	<0.0500	NS
Antimony, dissolved	mg/L	0.006	NS	NS	NS	**0.0006 JK**	NS	NS	NS
Arsenic, dissolved	mg/L	0.01	NS	NS	NS	**0.0022 K**	NS	NS	NS
Cadmium, dissolved	mg/L	0.005	**0.00951**	NS	NS	<0.0001 UK	<0.0001 UK	<0.000125	NS
Iron, dissolved	mg/L	0.3	**0.0294 J**	NS	NS	<0.02 UK	<0.02 UK	<0.0250	NS
Manganese, dissolved	mg/L	0.05	**0.0191**	NS	NS	**0.167 K**	<0.0005 UK	<0.000500	NS
Selenium, dissolved	mg/L	0.05	**0.00497**	NS	NS	**0.042**	**0.048**	**0.0491**	NS
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**524**	**624**	**496**	**380 J-**	**380 J-**	**424**	**408**
Sulfate	mg/L	250	**113**	**183**	**197**	**48.5**	**44.6**	**45.2**	**46.1**

TABLE 3-12

BALLARD MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MMW029	MMW029	MMW029	MMW030	MMW030	MMW031	MMW031
Collection Date:			09/22/08	05/14/09	09/21/09	09/21/08	05/19/09	09/20/08	05/13/09
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Total Metals									
Aluminum	mg/L	0.2	<0.0500	<0.0500	<0.0500	<0.0500	**0.426**	<0.0500	<0.0500
Antimony	mg/L	0.006	NS	<0.000250	<0.00100	NS	**0.00269**	NS	<0.000250
Arsenic	mg/L	0.01	NS	<0.00500	<0.00125	NS	**0.0267**	NS	**0.000456 J**
Cadmium	mg/L	0.005	<0.000125	<0.000125	<0.000125	<0.000125	<0.000125	<0.000125	<0.000125
Iron	mg/L	0.3	<0.0250	<0.0250	**0.0396 J+/B**	<0.0250	**0.353**	<0.0250	<0.0250
Manganese	mg/L	0.05	**0.0445**	**0.00223**	**0.00594**	**0.0846**	**0.0923**	**0.00149 J**	<0.000500
Selenium	mg/L	0.05	**0.806**	**0.685**	**0.865**	<0.000500	**0.00116**	**0.000874 J**	**0.000683 J**
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	<0.0500	NS	NS	**0.106**	NS	<0.0500	NS
Antimony, dissolved	mg/L	0.006	NS	NS	NS	NS	NS	NS	NS
Arsenic, dissolved	mg/L	0.01	NS	NS	NS	NS	NS	NS	NS
Cadmium, dissolved	mg/L	0.005	<0.000125	NS	NS	<0.000125	NS	<0.000125	NS
Iron, dissolved	mg/L	0.3	<0.0250	<0.0250	<0.0250	**0.0833 J**	<0.0250	**0.0255 J**	<0.0250
Manganese, dissolved	mg/L	0.05	**0.0431**	NS	NS	**0.101**	NS	**0.00236**	NS
Selenium, dissolved	mg/L	0.05	**0.764**	NS	NS	**0.000572 J**	NS	**0.00124 J**	NS
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**1330**	**1170**	**1200**	**234**	**282**	**156**	**156**
Sulfate	mg/L	250	**547**	**556**	**582**	**15.0**	**16.4**	**3.21**	**6.10**

TABLE 3-12

BALLARD MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MMW032	MMW033	MW15A	MW15A	MW15A	MW15A	MW15A
Collection Date:			09/25/09	09/25/09	11/15/06	04/20/07	08/10/07	05/12/08	10/18/08
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Total Metals									
Aluminum	mg/L	0.2	**0.718**	**1.74**	**0.15**	**8.17 J**	**0.86**	**159**	**0.11 J**
Antimony	mg/L	0.006	NS	NS	<0.003	<0.003	<0.003	NS	NS
Arsenic	mg/L	0.01	NS	NS	**0.023**	**0.018**	<0.003	**0.041**	**0.014**
Cadmium	mg/L	0.005	**0.000433 J**	<0.000125	<0.0001	**0.0007**	<0.0001	**0.017**	0.0003
Iron	mg/L	0.3	**0.396**	**1.16**	**0.16**	**7.46**	**0.91**	**199**	**0.13 J**
Manganese	mg/L	0.05	**0.0491**	**0.344**	**2.050**	**0.13**	**0.012**	**4.60**	<0.005 J
Selenium	mg/L	0.05	**0.00267**	**0.00577**	**0.520**	**0.81**	**1.99**	**1.07**	**1.40**
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	NS	NS	<0.05	<0.05	**0.08**	**0.47**	<0.05
Antimony, dissolved	mg/L	0.006	NS	NS	<0.003	<0.003	<0.003	NS	NS
Arsenic, dissolved	mg/L	0.01	NS	NS	0.022	0.012	0.041	**0.011**	**0.009**
Cadmium, dissolved	mg/L	0.005	NS	NS	<0.0001	**0.0002**	**0.0003**	**0.0003**	**0.0003**
Iron, dissolved	mg/L	0.3	**0.0301 J**	<0.0250	**0.05**	<0.05	**0.07**	**0.35**	<0.05
Manganese, dissolved	mg/L	0.05	NS	NS	**1.98**	**0.017**	**0.008**	**0.010**	<0.005
Selenium, dissolved	mg/L	0.05	NS	NS	**0.59**	**0.8**	**1.94**	**1.15**	**1.48**
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**248**	**266**	**1270**	**612**	**1180**	**1350**	**1370**
Sulfate	mg/L	250	**9.96**	**30.9**	**673**	**295**	**535**	**644**	**790 J**

TABLE 3-12

BALLARD MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MW15A	MW16A	MW16A	MW16A	MW16A	MW16A	MW16A
Collection Date:			06/05/09	11/15/06	04/18/07	08/10/07	05/12/08	10/18/08	06/04/09
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Total Metals									
Aluminum	mg/L	0.2	**0.262**	**4.19**	<0.05	**0.84**	<0.05	<0.05 J	<0.0500
Antimony	mg/L	0.006	<0.000527	<0.003	<0.003	<0.003	NS	NS	<0.000250
Arsenic	mg/L	0.01	<0.0125	**0.004**	<0.003	<0.003	<0.003	<0.003	**0.00112**
Cadmium	mg/L	0.005	**0.000285 J**	**0.0002**	<0.0001	<0.0001	<0.0001	<0.0001	<0.000125
Iron	mg/L	0.3	**0.268**	**4.24**	**0.29 J**	**1.47**	**0.42**	**0.67 J**	**0.562**
Manganese	mg/L	0.05	**0.0336**	**0.080**	**1.71 J**	**1.86**	**1.48**	**1.4 J**	**1.81**
Selenium	mg/L	0.05	**1.67**	**0.054**	**0.11**	**0.049**	**0.070**	**0.016**	**0.0180**
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	NS	<0.05	<0.05	<0.05	<0.05	<0.05	NS
Antimony, dissolved	mg/L	0.006	NS	<0.003	<0.003	<0.003	NS	NS	NS
Arsenic, dissolved	mg/L	0.01	NS	0.003	<0.003	<0.003	<0.003	<0.003	NS
Cadmium, dissolved	mg/L	0.005	NS	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	NS
Iron, dissolved	mg/L	0.3	<0.0250	<0.05	**0.29**	**0.44**	**0.40**	**0.67**	**0.573**
Manganese, dissolved	mg/L	0.05	NS	**0.006**	**1.7**	**1.61**	**1.46**	**1.5**	NS
Selenium, dissolved	mg/L	0.05	NS	**0.056**	**0.11**	**0.05**	**0.074**	**0.021**	NS
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**1580**	**238**	**1480 H**	**1450**	**1560**	**1570**	**1700**
Sulfate	mg/L	250	**650**	**27**	**905**	**769**	**819**	**870 J**	**748**

TABLE 3-12

BALLARD MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Notes:
AW - agricultural well
BW - direct-push alluvial aquifer well
DW - domestic well
MW - monitoring well
NS- not sampled
PW - production well

	Result is greater than screening value
	Method detection limit for non-detected value is greater than the screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
K	Serial dilutions not performed for samples analyzed by this method (EPA 200.7; 200.8).
H	Qualified data, received past holding time.

Sources for Screening Values (see also Table 3-1):

Groundwater	Unless identified otherwise below, screening levels are from State of Idaho Ground Water Quality Rule (IDAPA 58.01.11). Screening levels for pH, aluminum, chloride, iron, manganese, pH, silver, sulfate, TDS, and zinc are Secondary Maximum Contaminant Levels (MCLs). Screening values for arsenic and uranium are USEPA primary and secondary MCLs, National Primary Drinking Water Regulations, EPA. Screening values for boron, cobalt, molybdenum, nickel, and vanadium are USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites.

Sources for Data:
Data from 2006, 2007, and 2008 for MW-15A and MW-16A were collected by Whetstone Associates as part of baseline studies for the Blackfoot Bridge EIS (BLM,2009). MWH started sampling and reporting data from these wells in 2009 as part of the 2009 AOC/CO. All other data were collected per the 2009 AOC/CO or the 2004 AOC/CO.

Triplicate Results:
"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.
The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-13 BALLARD MINE STREAM HABITAT ASSESSMENT DATA MATRIX				
Station	**May 2004 [Se]sw, mg/L**	**May 2004 [Se]sed, mg/kg dw**	**RBS (Habitat Score)**	**Fish Presence**
MST066	0.0010	3.2	40	No
MST067	0.029	82	44	No
MST069	0.60	420	40	No
MST089	0.0010	15	30	No
MST090	0.0010	0.60	41	No
MST092	0.0060	57	41	No
MST093**	0.00050	0.25	35	No
MST094	0.023	8.2	29	No
MST095	0.059	22	50	No
MST096	0.02	17	46	No
MST272	0.00050	2.0	30	No
MST273	0.00050	1.7	30	No

Notes:
Non-detected concentrations have been censored at one-half the MDL. The MDL for surface water was 0.0010 mg/L and for sediment was 0.50 mg/kg dw.
** - Regional background station
[Se]sw, mg/L – concentration of selenium in surface reported in mg/L
[Se]sed, mg/kg dw – concentration of selenium in sediment, reported in mg/kg on a dw basis

TABLE 3-14
BALLARD MINE
HISTORICAL BENTHIC MACROINVERTEBRATE SELENIUM CONCENTRATIONS (mg/kg dw)

Ballard Mine Station	Station ID	June 2004	Flag
Ballard Mine Southeast Spring	MSG006	86	J
Tributary, above Blackfoot River	MST066	170	UJ
Tributary, below Ballard Mine	MST069	313	J
Wooley Valley Creek, below North Fork Wooley Valley Creek	MST089	21	UJ
Wooley Valley Creek, above North Fork Wooley Valley Creek	MST090	1300	UJ
North Fork Wooley Valley Creek, above Wooley Valley Creek	MST092	8.3	UJ
North Fork Wooley Valley Creek, above Ballard Mine	MST093**	8.3	UJ
Spring-fed tributary #1 of North Fork Wooley Valley Creek, below Ballard Mine	MST094	17	J
Wooley Valley Creek, above Loadout Creek at road	MST272	9.5	UJ
Wooley Valley Creek, above ponding and below MST089	MST273	170	UJ

Notes:
** - Regional background station
Flags:
U – Non-detect (Non-detected concentrations were censored and value presented is equal to the MDL)
J – Estimated result

TABLE 3-15 BALLARD MINE HISTORICAL SMALL MAMMAL SELENIUM CONCENTRATIONS (mg/kg dw)					
Ballard Mine Station	Station ID	Species		Sept 2001	Flag
		Common Name	Scientific Name		
Ballard Mine Pit #1 Overburden Dump #2	MWD081-Quadrat1	deer mouse	P. maniculatus	6.5	J
	MWD081-Quadrat2	deer mouse	P. maniculatus	11.0	J
	MWD081-Quadrat3	deer mouse	P. maniculatus	9.0	J
Notes: J – Estimated result					

TABLE 3-16 BALLARD MINE HISTORICAL TERRESTRIAL INVERTEBRATE SELENIUM CONCENTRATIONS (mg/kg dw)			
Ballard Mine Station	Station ID - Sample Type	Sept 2001	Flag
Ballard Mine Pit #1 Overburden Dump #2	MWD081-Quadrat1 - Insects	30	
	MWD081-Quadrat2 - Insects	29	
	MWD081-Quadrat3 - Insects	30	

TABLE 3-17 BALLARD MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Soils	2004	1) 26 locations on 2 transects	Se	See Drawing 3-3	See Section 3.2.1.1 Se ranged from 4.8 to 71 mg/kg dw.	The nature and extent of surface soil impacts at the Ballard Mine has been defined adequately so that if necessary, risk assessments and the feasibility study (FS) can be conducted for the non-radiogenic COPCs. However for radiogenic risks, to reduce the uncertainty in the inherently conservative risk calculations, site-specific uranium isotopes data for soil and radon and gamma measurements will be collected both on site and in a background area(s). In addition, soil samples will be collected throughout the Ballard Shop area to evaluate if there were leaks/spill of organic compounds during the operation of the facility. A data gap also has been identified for sediment (see below) and this carries forward to riparian soils. Therefore some additional limited sampling of riparian soil is needed. Finally, further evaluation of existing background data is needed to statisticall quantify background concentrations..
	2009	2) 105 composite samples	Sb, As, B, Cd, Cr, Co, Cu, Mn, Hg, Mo, Ni, Se, Ag, Tl, U, V, Zn	See Drawing 3-5	See Section 3.2.1.2 - Isolated exceedances of Cd, Co, Mn and V above screening levels (SLs). - As exceedances above SL. - As background above SL. - As ranged from 3.51 to 45.5 mg/kg dw - Elevated Se above background. - Se ranged from 24.9 to 209 mg/kg dw.	
	2004	3) 26 riparian soil samples	Cd, Cr, Cu, Mo, Ni, Se, V, Zn	See Drawing 3-6	See Section 3.2.1.3 - Isolated exceedances of Cd, Ni, and V above SLs. - 1 Se exceedance above SL. - Se ranged from 0.25 to 570 mg/kg dw.	

TABLE 3-17 BALLARD MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Vegetation	2004	1) 26 locations on 2 transects	Se	See Drawing 3-4	See Section 3.2.2.1 Se ranged from1.7 to 68 mg/kg dw.	The nature and extent of vegetation impacts at the Ballard Mine has been defined adequately so that risk assessments and the FS can be conducted. As a result, no further field characterization is necessary. However, further evaluation of existing background data is needed.
	2004	2) Composite samples monthly (i.e. for 6 months)	Se	See Drawing 3-6	See Section 3.2.2.2 Monthly vegetation samples were below the detection limit.	
	2009	3) 189 samples	Sb, As, B, Cd, Cr, Co, Cu, Mn, Hg, Mo, Ni, Se, Ag, Tl, U, V, Zn	See Drawing 3-7	See Section 3.2.2.3 - Mo and Se exceedances of SLs. - Mo background also exceeded SLs. - Mo ranged from 1.49 to 425 mg/kg. - Se ranged from 0.30 to 366 mg/kg dw. - 1 Cd exceedance of SL of 21.5 mg/kg dw	
	2004	4) 26 riparian samples	Cd, Cu, Mo, Se, Zn	See Drawing 3-6	See Section 3.2.2.4 - Isolated Cd and Mo exceedances of SLs. - Se exceedances of SLs.	

TABLE 3-17 BALLARD MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
					- Se ranged from 0.25 to 27 mg/kg dw.	
Surface Water	Fall and Spring 1997 - 2009	41 sampling stations	Metals Cations Anions General Water Quality Parameters Field Parameters	See Drawings 3-8 to 3-12	See Section 3.2.3.1 Al, Ba, B, Cd, Cu, Fe, Mn, Ag, Tl, Se, and V exceeded SLs.	The nature and extent of surface water impacts at the Ballard Mine has been defined adequately so that if necessary, risk assessments and the FS can be conducted. As a result, no further field characterization is required. However, ongoing monitoring is necessary to collect baseline effectiveness monitoring of potential future remedies. Further evaluation of existing background data is needed.
Sediment	5 events: Fall 1998, Fall 1999, Spring 2002, Fall 2002, and Spring 2004	27 sampling stations	Metals Cations Anions pH TOC	See Drawings 3-9, 3-11, and 3-13	See Section 3.2.3.2 Cd, Ni, Se, V, and Zn exceeded SLs.	The spatial characterization of sediment impacts at the Ballard Mine has been defined adequately so that if necessary, risk assessments and the FS can be conducted. However, a data gap relating to COPC coverage in sediments has been identified and will be addressed by the Fall 2010 sampling event as described in Appendix D1. In addition further evaluation of existing background data is needed.

TABLE 3-17 BALLARD MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Groundwater	Fall and Spring 2004 - 2009	25 wells	Metals Cations Anions General Water Quality Parameters General Field Parameters	See Drawings 3-15 to 3-19	See Section 3.2.4 - Isolated exceedances of As and Sb of SLs - Elevated concentrations of Al, Fe, Mn - Se, SO_4, and TDS exceedances above SLs - Se ranged from non-detect to 1.67 mg/L. - Se exceeds screening level in shallow, intermediate, and deep groundwater.	The nature and extent for groundwater at the Ballard Mine has been defined except for limited areas as discussed in Section 4.0, Data Gaps.
Aquatic Biota						
Stream Habitat Assessment	2004	13 stations	NA	See Drawing 3-21	See Section 3.2.5.1 RBS scores from 29 to 52 out of 200	The nature and extent for stream habitat data at the Ballard Mine has been defined adequately so that if necessary, risk assessments and the FS can be conducted. As a result, no further characterization is needed.

TABLE 3-17 BALLARD MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Fish	2004	NA	NA	See Drawings 3-20 and 3-21	See Section 3.2.5.2 No fish were found and the stream habitat assessment indicated poor fish habitat.	Nature and extent information for fish data at the Ballard Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.
Benthic Macroinvertebrates	2004	10 stations	Se	See Drawing 3-21	See Section 3.2.5.3 Se ranged from 17 to 313 mg/kg dw. All selenium results exceeded the screening level. In addition the MDL was usually above the SL.	Nature and extent information for benthic macroinvertebrate data at the Ballard Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.

TABLE 3-17 BALLARD MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Terrestrial Biota						
Elk	1999 2000	160 elk 54 elk	Ca and Se Cd, Cu, Fe, Pb, Mn, Mo, Se, and Zn	See Drawings 3-22 and 3-26	See Section 3.2.6.1 Se ranged from 0.65 to 39 mg/kg dw in elk livers Se ranged from 0.60 to 41 mg/kg dw in elk livers	Nature and extent information for elk data at the Ballard Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.
Bird Eggs	1999 2000 2001	215 eggs 334 eggs 369 eggs	Cd and Se Cd and Se Se	See Drawings 3-23 to 3-26	See Section 3.2.6.2 Se ranged from 0.61 to 21.3 mg/kg dw Se ranged from 0.29 to 25 mg/kg dw Se ranged from 1.3 to 31.9 mg/kg dw	Nature and extent information for bird egg data at the Ballard Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.
Cattle	See Section 3.3.6.3 Henry Mine	See Section 3.3.6.3 Henry Mine	See Section 3.3.6.3 Henry Mine	See Section 3.3.6.3 Henry Mine	See Section 3.3.6.3 Henry Mine	See Section 3.3.6.3 Henry Mine

TABLE 3-17 BALLARD MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Small Mammals	2001	3 quadrat samples	Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb , Mn, Hg, Mo Ni, Se, Ag, Th, V, U, and Zn	See Drawings 3-22 and 3-26	See Section 3.2.6.4 Se ranged from 6.5 to 11 mg/kg dw	Nature and extent information for small mammals data at the Ballard Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.
Terrestrial Invertebrates	2001	3 quadrat samples	Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb , Mn, Hg, Mo Ni, Se, Ag, Th, V, U, and Zn	See Drawings 3-22 and 3-26	See Section 3.2.6.5 Se ranged from 29 to 30 mg/kg dw	Nature and extent information for terrestrial invertebrates data at the Ballard Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.

TABLE 3-18

HENRY MINE - SUMMARY OF SOIL EXCEEDANCES
(Page 1 of 5)

				Analyte (mg/Kg, dry weight)				
Sample Identification	**Date**	**Medium**	**Type**	**Arsenic**	**Cadmium**	**Manganese**	**Selenium**	**Vanadium**
			Screening Value:	**0.39**	**70**	**1800**	**390**	**390**
MBH002 (Henry Background)								
0906-MBH002-01-SS	6/18/2009	Soil	Primary	**8.1**	**0.881**	**2120**	**0.643 J**	**26.2**
0906-MBH002-02-SS	6/18/2009	Soil	Primary	**8.25**	**1.15**	**2840**	**1.26**	**26.6**
0906-MBH002-03-SS	6/18/2009	Soil	Primary	**7.47**	**1.10**	**2540**	**1.02**	**26.5**
0906-MBH002-04-SS	6/18/2009	Soil	Primary	**9.01**	**0.790**	**2190**	**0.874 J**	**27.1**
0906-MBH002-05-SS	6/18/2009	Soil	Primary	**8**	**0.997 J+**	**1890**	**0.736 J**	**22.9**
0906-MBH002-06-SS	6/17/2009	Soil	Primary	**7.15**	**0.572**	**2730**	**0.626**	**25.0**
0906-MBH002-07-SS-1	6/16/2009	Soil	Triplicate	**9.47 J+**	**0.818 J+**	**2600 J**	**0.745 J+**	**27.1**
0906-MBH002-07-SS-2	6/16/2009	Soil	Triplicate	**8.37 J+**	**0.983 J+**	**2600 J**	**0.666 J+**	**28.1**
0906-MBH002-07-SS-3	6/16/2009	Soil	Triplicate	**7.95 J+**	**1.08 J+**	**2700 J**	**0.741 J+**	**23.7**
0906-MBH002-07-SS-avg	6/16/2009	Soil	Averaged	**8.6 J+**	**0.96 J+**	**2630 J**	**0.717 J+**	**26.3**
0906-MBH002-08-SS	6/18/2009	Soil	Primary	**8.58**	**0.746 J+**	**1500**	**0.477 J**	**22.4**
0906-MBH002-09-SS	6/16/2009	Soil	Primary	**6.60 J+**	**0.858 J+**	**3990 J**	**0.863 J+**	**22.2**
0906-MBH002-10-SS	6/18/2009	Soil	Primary	**7.24**	**0.792 J+**	**2920**	**0.677 J**	**23.0**
MDS016 (Dump Seep)								
SSMDS016-0-C(5)	9/11/2004	Soil	Primary	NS	**16.1 J**	NS	**7.8**	**150**
MDS022 (Dump Seep)								
SSMDS022-0-C(5)	9/10/2004	Soil	Primary	NS	**3.04 J**	NS	**6.9**	**47.7**
MHR002 (Historic Haul Road)								
0906-MHR002-01-SS	6/18/2009	Soil	Primary	**14.4**	**19.4 J+**	**410**	**21.1 J**	**110**
0906-MHR002-02-SS	6/18/2009	Soil	Primary	**13.2**	**20.6 J+**	**447**	**19.0 J**	**145**
0906-MHR002-03-SS	6/19/2009	Soil	Primary	**8.9**	**29.3**	**939**	**8.05 J**	**160 J+**
0906-MHR002-04-SS	6/19/2009	Soil	Primary	**16.1**	**32.9**	**148**	**12.7 J**	**234 J+**
0906-MHR002-05-SS	6/18/2009	Soil	Primary	**7.26**	**37.4**	**204**	**9.27**	**149**
0906-MHR002-06-SS	6/18/2009	Soil	Primary	**10.5**	**31.3**	**230**	**7.45**	**117**
0906-MHR002-07-SS-1	6/18/2009	Soil	Triplicate	**19.2**	**114**	**140**	**16.6**	**1370**
0906-MHR002-07-SS-2	6/18/2009	Soil	Triplicate	**15.4**	**54.0**	**808**	**10.5**	**240**
0906-MHR002-07-SS-3	6/18/2009	Soil	Triplicate	**7.3**	**10.4**	**481**	**2.94**	**58.6**
0906-MHR002-07-SS-avg	6/18/2009	Soil	Averaged	**14**	**59.5**	**476**	**10**	**556**
0906-MHR002-08-SS	6/18/2009	Soil	Primary	**33.4**	**32.4**	**197**	**57.1**	**199**
0906-MHR002-09-SS	6/18/2009	Soil	Primary	**45.5**	**39.4**	**228**	**47.6**	**110**
0906-MHR002-10-SS	6/18/2009	Soil	Primary	**26.1**	**34.1**	**186**	**21.6**	**77.1**
MRV016 (Reservoir Delta)								
SSMRV016-0-C(5)	9/11/2004	Soil	Primary	NS	**1.06**	NS	**1.6 J**	**13.7 J-**
MSG002 (Spring)								
SSMSG002-0-C(5)	9/13/2004	Soil	Primary	NS	**0.92 J+**	NS	<0.5	**42.7 J**
MSP014 (Pond)								
SSMSP014-0-C(5)	9/13/2004	Soil	Primary	NS	**5.78**	NS	**11.5**	**65**
MSP015 (Pond)								
SSMSP015-0-C(6)	9/13/2004	Soil	Primary	NS	**5.67**	NS	**24**	**66.1**
MSP016 (Pond)								
SSMSP016-0-C(5)	9/13/2004	Soil	Primary	NS	**20.5**	NS	**45**	**215**
MSP055 (Pond)								
SSMSP055-0-C(10)	9/13/2004	Soil	Primary	NS	**67.3**	NS	**28**	**773**
MST043 (Stream)								
SSMST043-0-C(5)	9/11/2004	Soil	Primary	NS	**0.83**	NS	**1.1 J**	**26.8 J**
MST044 (Stream)								
SSMST044-0-C(6)	9/14/2004	Soil	Primary	NS	**2.84**	NS	**5.3 J-**	**38.3**
MST045 (Stream)								
SSMST045-0-C(5)	9/14/2004	Soil	Primary	NS	**0.92**	NS	**1.5 J-**	**23.8**
MST046 (Stream)								
SSMST046-0-C(5)	9/13/2004	Soil	Primary	NS	**1.17**	NS	**1.1 J-**	**25.2**
MST047 (Stream)								

TABLE 3-18

HENRY MINE - SUMMARY OF SOIL EXCEEDANCES
(Page 2 of 5)

				Analyte (mg/Kg, dry weight)				
Sample Identification	**Date**	**Medium**	**Type**	**Arsenic**	**Cadmium**	**Manganese**	**Selenium**	**Vanadium**
			Screening Value:	**0.39**	**70**	**1800**	**390**	**390**
SSMST047-0-C(6)	9/13/2004	Soil	Primary	NS	**1.3**	NS	**1.1 J-**	**28.5**
MST050 (Stream)								
SSMST050-0-C(5)	9/10/2004	Soil	Primary	NS	**1.26**	NS	<0.5	**32 J**
MST051 (Stream)								
SSMST051-1-C(5)QA1	9/14/2004	Soil	Triplicate	NS	**3.71**	NS	**1.8 J-**	**51.6**
SSMST051-1-C(5)QA2	9/14/2004	Soil	Triplicate	NS	**4.16**	NS	**1.8 J-**	**56.4**
SSMST051-1-C(5)QA3	9/14/2004	Soil	Triplicate	NS	**3.58**	NS	**1.9 J-**	**49.7**
SSMST051-1-C(5)QA-avg	9/14/2004	Soil	Averaged	NS	**3.82**	NS	**1.83 J-**	**52.6**
MST052 (Stream)								
SSMST052-0-C(5)	9/14/2004	Soil	Primary	NS	**6.58**	NS	**3.4 J-**	**80.1**
MST053 (Stream)								
SSMST053-1-C(5)QA1	9/13/2004	Soil	Triplicate	NS	**1.18**	NS	**1 J-**	**29.3**
SSMST053-1-C(5)QA2	9/13/2004	Soil	Triplicate	NS	**1.16**	NS	**0.9 J-**	**27.3**
SSMST053-1-C(5)QA3	9/13/2004	Soil	Triplicate	NS	**1.19**	NS	**0.9 J-**	**27.7**
SSMST053-1-C(5)QA4	9/13/2004	Soil	Triplicate	NS	NS	NS	NS	NS
SSMST053-1-C(5)QA-avg	9/13/2004	Soil	Averaged	NS	**1.18**	NS	**0.933 J-**	**28.1**
MST054 (Stream)								
SSMST054-0-C(5)	9/13/2004	Soil	Primary	NS	**1.72**	NS	**1.4 J-**	**27.4**
MST055 (Stream)								
SSMST055-0-C(5)	9/12/2004	Soil	Primary	NS	**1.53**	NS	<0.5	**26.3 J-**
MST056 (Stream)								
SSMST056-0-C(5)	9/13/2004	Soil	Primary	NS	**1.71**	NS	**1 J-**	**31.6**
MST057 (Stream)								
SSMST057-0-C(5)	9/13/2004	Soil	Primary	NS	**5.72 J+**	NS	**3.1**	**30.4 J**
MST058 (Stream)								
SSMST058-0-C(5)	9/13/2004	Soil	Primary	NS	**2.46 J+**	NS	**1.3 J**	**36.1 J**
MST062 (Stream)								
SSMST062-0-C(5)	9/12/2004	Soil	Primary	NS	**1.15**	NS	<0.5	**20.1 J-**
MST063 (Stream)								
SSMST063-0-C(5)	9/14/2004	Soil	Primary	NS	**4.63**	NS	**4.3 J-**	**55.2**
MST064 (Stream)								
SSMST064-0-C(5)	9/13/2004	Soil	Primary	NS	**6.62 J+**	NS	**1.7 J**	**57 J**
MST234 (Stream)								
SSMST234-0-C(5)	9/11/2004	Soil	Primary	NS	**0.95**	NS	<0.5	**17.7 J**
MST270 (Stream)								
SSMST270-0-C(5)	9/10/2004	Soil	Primary	NS	**3.2**	NS	**1.6 J**	**50.6 J**
MST271 (Stream)								
SSMST271-0-C(5)	9/14/2004	Soil	Primary	NS	**1.75 J+**	NS	<0.5	**42.8 J**
MST276 (Stream)								
SSMST276-0-C(5)	9/13/2004	Soil	Primary	NS	**7.74 J+**	NS	**1.5 J**	**48.4 J**
MST277 (Stream)								
SSMST277-0-C(5)	9/14/2004	Soil	Primary	NS	**3.4 J+**	NS	**0.7 J**	**57.3 J**
MWD085 (Waste Rock Dump)								
0906-MWD085-01-SS	6/17/2009	Soil	Primary	**36.7**	**27.9**	**228**	**56.6 J**	**218 J+**
0906-MWD085-02-SS	6/17/2009	Soil	Primary	**29.4**	**43.7**	**193**	**29.6 J**	**300 J+**
0906-MWD085-03-SS	6/16/2009	Soil	Primary	**36.5**	**45.5 J+**	**490**	**39.3 J+**	**151**
0906-MWD085-04-SS	6/16/2009	Soil	Primary	**22.1**	**35.5 J+**	**396**	**31.5 J+**	**148**
0906-MWD085-05-SS	6/16/2009	Soil	Primary	**32.3**	**46.6 J+**	**296**	**43.9 J+**	**163**
0906-MWD085-06-SS	6/23/2009	Soil	Primary	**25.6**	**42.2 J+**	**320 J**	**28.7**	**160**
0906-MWD085-07-SS-1	6/17/2009	Soil	Triplicate	**3.84**	**3.85**	**613**	**1.48 J**	**23.6 J+**
0906-MWD085-07-SS-2	6/17/2009	Soil	Triplicate	**3.93**	**3.90**	**683**	**1.14 J**	**24.5 J+**
0906-MWD085-07-SS-3	6/17/2009	Soil	Triplicate	**6.91**	**19.7**	**655**	**8.55 J**	**104 J+**

TABLE 3-18

HENRY MINE - SUMMARY OF SOIL EXCEEDANCES
(Page 3 of 5)

				Analyte (mg/Kg, dry weight)				
Sample Identification	**Date**	**Medium**	**Type**	**Arsenic**	**Cadmium**	**Manganese**	**Selenium**	**Vanadium**
			Screening Value:	**0.39**	**70**	**1800**	**390**	**390**
0906-MWD085-07-SS-avg	6/17/2009	Soil	Averaged	**4.89**	**9.15**	**650**	**3.72 J**	**50.7 J+**
0906-MWD085-08-SS	6/17/2009	Soil	Primary	**4.38**	**3.74**	**941**	**1.20 J**	**24.9 J+**
0906-MWD085-09-SS	6/17/2009	Soil	Primary	**40.7**	**25.9**	**175**	**91.8**	**251**
0906-MWD085-10-SS	6/17/2009	Soil	Primary	**28.5**	**32.8**	**363**	**70.3**	**263**
SSMWD085-14-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	**41**	NS
SSMWD085-15-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	**52**	NS
SSMWD085-16-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	**41**	NS
SSMWD085-17-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	**42**	NS
SSMWD085-18-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	**1.5 J**	NS
SSMWD085-19-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD085-20-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD085-21-C(6)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD085-22-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD085-23-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD085-24-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD085-25-C(6)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
MWD086 (Waste Rock Dump)								
0906-MWD086-01-SS	6/16/2009	Soil	Primary	**33.4**	**37.5 J+**	**287**	**46.4 J+**	**97.6**
0906-MWD086-02-SS	6/15/2009	Soil	Primary	**4**	**2.85**	**684**	**0.687 J**	**27.3 J+**
0906-MWD086-03-SS	6/15/2009	Soil	Primary	**29**	**48.9**	**264**	**47.9**	**386 J+**
0906-MWD086-04-SS	6/15/2009	Soil	Primary	**29**	**45.6**	**315**	**59.6**	**265 J+**
0906-MWD086-05-SS	6/15/2009	Soil	Primary	**18.8**	**18.7**	**222**	**10.5**	**123 J+**
0906-MWD086-06-SS	6/15/2009	Soil	Primary	**13**	**3.79**	**402**	**9.44**	**39.7 J+**
0906-MWD086-07-SS-1	6/17/2009	Soil	Triplicate	**12.3**	**7.58**	**428**	**11.3**	**75.4**
0906-MWD086-07-SS-2	6/17/2009	Soil	Triplicate	**13.8**	**5.34**	**398**	**9.43**	**57.9**
0906-MWD086-07-SS-3	6/17/2009	Soil	Triplicate	**12.3**	**5.52**	**396**	**9.77**	**57.8**
0906-MWD086-07-SS-avg	6/17/2009	Soil	Averaged	**12.8**	**6.15**	**407**	**10.2**	**63.7**
0906-MWD086-08-SS	6/15/2009	Soil	Primary	**4.5**	**2.13**	**1230**	**2.86**	**22.3 J+**
0906-MWD086-09-SS	6/16/2009	Soil	Primary	**6.05**	**2.24 J+**	**2040**	**4.51 J+**	**28.7**
0906-MWD086-10-SS	6/16/2009	Soil	Primary	**24.6**	**28.5 J+**	**510**	**28.5 J+**	**141**
SMWD086-18-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	**0.8 J-**	NS
SSMWD086-10-C(6)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD086-11-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD086-12-C(6)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD086-13-C(8)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD086-14-C(16)	7/22/2004	Soil	Primary	NS	NS	NS	**12.4 J-**	NS
SSMWD086-15-C(9)	7/22/2004	Soil	Primary	NS	NS	NS	**13.6 J-**	NS
SSMWD086-16-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	**12.6 J-**	NS
SSMWD086-17-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	**2.3 J-**	NS
SSMWD086-19-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5 UJ	NS
SSMWD086-1-C(16)QA1	7/22/2004	Soil	Triplicate	NS	NS	NS	**8.9 J-**	NS
SSMWD086-1-C(16)QA2	7/22/2004	Soil	Triplicate	NS	NS	NS	**9.8 J-**	NS
SSMWD086-1-C(16)QA3	7/22/2004	Soil	Triplicate	NS	NS	NS	**9 J-**	NS
SSMWD086-1-C(16)QA-avg	7/22/2004	Soil	Averaged	NS	NS	NS	**9.23 J-**	NS
SSMWD086-20-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5 UJ	NS
SSMWD086-21-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5 UJ	NS
SSMWD086-22-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	**0.7 J-**	NS
SSMWD086-23-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD086-24-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD086-25-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD086-26-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5	NS
SSMWD086-2-C5(5)	7/22/2004	Soil	Primary	NS	NS	NS	**13.3 J-**	NS
SSMWD086-3-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	**11.2 J-**	NS
SSMWD086-4-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	**0.9 J-**	NS
SSMWD086-5-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5 UJ	NS

TABLE 3-18

HENRY MINE - SUMMARY OF SOIL EXCEEDANCES
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				Analyte (mg/Kg, dry weight)				
Sample Identification	**Date**	**Medium**	**Type**	**Arsenic**	**Cadmium**	**Manganese**	**Selenium**	**Vanadium**
			Screening Value:	**0.39**	**70**	**1800**	**390**	**390**
SSMWD086-6-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5 UJ	NS
SSMWD086-7-C(5)	7/22/2004	Soil	Primary	NS	NS	NS	<0.5 UJ	NS
SSMWD086-8-C(7)	7/22/2004	Soil	Primary	NS	NS	NS	**0.5 J-**	NS
SSMWD086-9-C(6)	7/22/2004	Soil	Primary	NS	NS	NS	**0.6 J-**	NS
MWD087 (Waste Rock Dump)								
0906-MWD087-01-SS	6/15/2009	Soil	Primary	**25.8**	**25.5**	**497**	**19.7**	**168 J+**
0906-MWD087-02-SS	6/15/2009	Soil	Primary	**27**	**30.9**	**179**	**96.2**	**182 J+**
0906-MWD087-03-SS	6/15/2009	Soil	Primary	**16**	**47.5**	**68.8**	**12.0**	**230 J+**
0906-MWD087-04-SS	6/15/2009	Soil	Primary	**32.1**	**35.5**	**408**	**31.4**	**273 J+**
0906-MWD087-05-SS	6/16/2009	Soil	Primary	**21.8**	**27.0 J+**	**136**	**32.5 J+**	**167**
0906-MWD087-06-SS	6/16/2009	Soil	Primary	**28.6**	**41.5 J+**	**292**	**24.8 J+**	**258**
0906-MWD087-07-SS-1	6/16/2009	Soil	Triplicate	**29.6**	**39.1 J+**	**313**	**37.2 J+**	**284**
0906-MWD087-07-SS-2	6/16/2009	Soil	Triplicate	**30.8**	**41.3 J+**	**376**	**36.1 J+**	**214**
0906-MWD087-07-SS-3	6/16/2009	Soil	Triplicate	**30.4**	**36.8 J+**	**350**	**30.6 J+**	**212**
0906-MWD087-07-SS-avg	6/16/2009	Soil	Averaged	**30.3**	**39.1 J+**	**346**	**34.6 J+**	**237**
0906-MWD087-08-SS	6/16/2009	Soil	Primary	**21.9**	**24.8 J+**	**289**	**25.0 J+**	**197**
0906-MWD087-09-SS	6/16/2009	Soil	Primary	**30.1**	**35.8 J+**	**280**	**49.1 J+**	**194**
0906-MWD087-10-SS	6/16/2009	Soil	Primary	**22.9**	**28.0 J+**	**165**	**29.6 J+**	**165**
MWD088 (Waste Rock Dump)								
0906-MWD088-01-SS-1	6/15/2009	Soil	Triplicate	**27.7**	**23.7**	**198**	**39.1**	**155 J+**
0906-MWD088-01-SS-2	6/15/2009	Soil	Triplicate	**25.2**	**25.7**	**203**	**26.6**	**154 J+**
0906-MWD088-01-SS-3	6/15/2009	Soil	Triplicate	**25.6**	**24.1**	**213**	**32.7**	**136 J+**
0906-MWD088-01-SS-avg	6/15/2009	Soil	Averaged	**26.2**	**24.5**	**205**	**32.8**	**148 J+**
0906-MWD088-02-SS	6/23/2009	Soil	Primary	**14.7**	**39.3 J+**	**296 J**	**21.8**	**158**
0906-MWD088-03-SS	6/15/2009	Soil	Primary	**25.1**	**22.3**	**710**	**10.1**	**149 J+**
0906-MWD088-04-SS	6/16/2009	Soil	Primary	**33.0 J+**	**29.2 J+**	**202 J**	**35.3 J+**	**205**
0906-MWD088-06-SS	6/15/2009	Soil	Primary	**7.92**	**6.33**	**1650**	**2.62**	**38.7 J+**
0906-MWD088-07-SS	6/16/2009	Soil	Primary	**30.0 J+**	**58.2 J+**	**267 J**	**55.4 J+**	**584**
0906-MWD088-08-SS	6/16/2009	Soil	Primary	**44.5 J+**	**28.5 J+**	**165 J**	**53.1 J+**	**332**
0906-MWD088-09-SS	6/23/2009	Soil	Primary	**17.9**	**22.7 J+**	**334 J**	**16.1**	**147**
0906-MWD088-10-SS	6/16/2009	Soil	Primary	**22.3 J+**	**25.1 J+**	**249 J**	**13.7 J+**	**180**
0906-MWD088-AL01-SS	6/19/2009	Soil	Primary	**34**	**33.1**	**189**	**31.8 J**	**256 J+**
MWD090 (Waste Rock Dump)								
0906-MWD090-01-SS	6/16/2009	Soil	Primary	**8.85**	**12.6 J+**	**893**	**8.45 J+**	**81.8**
0906-MWD090-02-SS	6/17/2009	Soil	Primary	**7.89**	**19.1**	**1870**	**8.64**	**117**
0906-MWD090-03-SS	6/16/2009	Soil	Primary	**13.8**	**35.7 J+**	**413**	**34.4 J+**	**143**
0906-MWD090-04-SS	6/17/2009	Soil	Primary	**34.9**	**45.5**	**266**	**318**	**412**
0906-MWD090-05-SS	6/16/2009	Soil	Primary	**21**	**36.2 J+**	**123**	**36.8 J+**	**255**
0906-MWD090-06-SS	6/16/2009	Soil	Primary	**30.4**	**36.0 J+**	**269**	**41.2 J+**	**227**
0906-MWD090-07-SS1	6/16/2009	Soil	Triplicate	**24.1**	**28.8 J+**	**318**	**29.2 J+**	**144**
0906-MWD090-07-SS2	6/16/2009	Soil	Triplicate	**21.5**	**27.0 J+**	**283**	**28.5 J+**	**184**
0906-MWD090-07-SS3	6/16/2009	Soil	Triplicate	**25.6 J+**	**30.9 J+**	**292 J**	**35.2 J+**	**213**
0906-MWD090-07-SS-avg	6/16/2009	Soil	Averaged	**23.7 J+**	**28.9 J+**	**298 J**	**31 J+**	**180**
0906-MWD090-08-SS	6/16/2009	Soil	Primary	**29.3 J+**	**21.6 J+**	**182 J**	**146 J+**	**205**
0906-MWD090-09-SS	6/16/2009	Soil	Primary	**23.7 J+**	**33.2 J+**	**646 J**	**62.4 J+**	**322**
0906-MWD090-10-SS	6/16/2009	Soil	Primary	**25.8 J+**	**38.3 J+**	**225 J**	**95.6 J+**	**271**

TABLE 3-18

HENRY MINE - SUMMARY OF SOIL EXCEEDANCES
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Notes:

Result is greater than screening value

NS - not sampled

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
K	Serial dilutions not performed for samples analyzed by this method (EPA 200.7; 200.8).
T	Laboratory SOP does not address biotic matrices; biotic-specific LCS/SRM not analyzed.

Source for Screening Values (see also Table 3-1):

Soil	USEPA Regional Screening Levels for Soil, Residential (source: ORNL, December 2009).

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.

The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-19
HENRY MINE
2009 SOIL SAMPLING CONCENTRATION RANGES AND SCREENING LEVEL EXCEEDANCES (mg/kg dw)[1]

Analyte	SL	Background (n=10)	Waste Rock Dumps (n=50)	[n] > SL	Historic Ore Haul Road (n=10)	[n] > SL
Selenium	390	0.48 - 1.26	0.69-318	0	7.45-57.1	0
Arsenic	0.39	6.60 - 9.01	4.38-44.50	50	7.26-45.5	10
Cadmium	70	0.572 - 1.15	2.13-48.9	0	10.4-114	1
Manganese	1800	1500 - 3990	68.8-2040	2	148-939	0
Vanadium	390	22.2 - 27.1	22.3-584	2	77.1-556	1

Notes:
n - total number of samples
[n] - sample concentration
SL - screening level
1 - Triplicate samples are treated as a single sample as described in Appendix A.
Shaded results indicate those which ranges contain exceedances of screening level.

TABLE 3-20
HENRY MINE
RIPARIAN HABITAT ASSESSMENT DATA MATRIX

Station	Category	Amphibians	Swimming birds	Marsh-nesting birds	Cavity-nesting birds	Birds that forage at water's edge	Aerial-foraging birds	Open cup-nesting birds	Small mammals	Water dependent medium-sized mammals	Upland medium-sized mammals	Game mammals	Livestock	Sept 2004 Soil Selenium Concentration (mg/kg dw)	Sept 2004 Vegetation Selenium Concentration (mg/kg dw)	Habitat Quality Ranking
MDS022	ponded seep	1	1	1	0	0	1	1	1	0	1	1	1	6.9	0.25	4
MSP014	pond	1	1	1	1	1	1	1	1	0	1	1	1	12	3.3	1
MSP015	pond	1	1	0	1	1	0	1	0	0	1	1	1	24	25	3
MSP016	pond	1	1	0	1	0	0	1	1	0	1	1	1	45	6.5	3
MSP055	pond	0	0	0	0	1	0	0	0	0	0	0	0	28	65	4
MST044	stream	0	0	0	1	0	1	1	1	0	1	1	1	5.3	7.9	4
MST045	ponded stream	1	1	0	1	1	1	0	1	0	1	1	1	1.5	0.25	3
MST046	stream	1	1	0	0	0	1	1	0	0	1	0	1	1.1	0.25	2
MST047	stream	1	1	0	0	0	1	1	0	0	1	0	1	1.1	0.25	2
MST049	ponded stream	1	1	0	1	0	0	1	1	0	1	1	1	0.25	0.25	3
MST050	ponded stream	1	1	0	1	1	1	0	1	0	1	1	1	0.25	0.25	3
MST054	stream	1	0	0	0	0	1	0	0	0	0	0	1	1.4	0.25	2
MST055	stream	1	0	0	0	0	1	1	0	0	0	0	1	0.25	0.25	2
MST057	ponded stream	1	0	0	1	0	1	1	1	0	1	1	1	3.1	0.25	4
MST058	stream	0	0	0	0	0	1	1	1	0	1	1	1	1.3	0.25	1
MST062	stream	0	0	0	0	0	1	0	0	0	0	0	1	0.25	0.25	2
MST063	stream	0	0	0	0	0	1	1	1	0	1	1	1	4.3	0.25	1
MST064	stream	1	0	1	0	0	1	1	1	0	1	1	1	1.7	0.25	4
MST275	ponded stream	1	1	0	1	1	1	1	0	0	1	1	1	0.25	0.25	3
MST276	stream	1	0	1	0	0	1	1	1	0	1	1	1	1.5	0.25	4
MST277	stream	1	0	0	0	0	1	1	0	0	0	1	1	0.70	0.25	2

Notes:
Non-detected concentrations are presented as one-half the MDL. The MDL for both media was 0.5 mg/kg dw.
Habitat Quality Ranking
1—high quality aquatic and terrestrial habitat
2—high quality aquatic, but low quality terrestrial habitat
3—low quality aquatic, but high quality terrestrial habitat
4—low quality aquatic and terrestrial habitat

TABLE 3-21

HENRY MINE - SUMMARY OF VEGETATION EXCEEDANCES
(Page 1 of 8)

				Analyte (mg/Kg, dry weight)	
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Molybdenum**	**Selenium**
			Screening Value:	**5**	**5**
MBH002 (Henry Background)					
0906-MBH002-01-GF	6/18/2009	GF	Primary	<1.49	**0.383 J+**
0906-MBH002-01-SL-ARTR	6/18/2009	SL-ARTR	Primary	<1.43	**0.722**
0906-MBH002-01-SM-ARTR	6/18/2009	SM-ARTR	Primary	<1.39	**0.581**
0906-MBH002-02-GF	6/18/2009	GF	Primary	**2.63 J**	**0.456 J+**
0906-MBH002-02-SL-ARTR	6/18/2009	SL-ARTR	Primary	<1.48	**0.318 J+**
0906-MBH002-02-SM-ARTR	6/18/2009	SM-ARTR	Primary	<1.46	<0.123 UJ
0906-MBH002-03-GF	6/18/2009	GF	Primary	**1.84 J**	**0.941**
0906-MBH002-03-SL-AMAL	6/18/2009	SL-AMAL	Primary	<1.46	**0.575**
0906-MBH002-03-SL-ARTR	6/18/2009	SL-ARTR	Primary	<1.46	**0.594**
0906-MBH002-03-SM-AMAL	6/18/2009	SM-AMAL	Primary	<1.49	**0.324 J+**
0906-MBH002-03-SM-ARTR	6/18/2009	SM-ARTR	Primary	<1.44	**0.239 J+**
0906-MBH002-04-GF	6/18/2009	GF	Primary	**1.77 J**	**1.12**
0906-MBH002-05-FB	6/18/2009	FB	Primary	<1.48	**0.518**
0906-MBH002-05-GS	6/18/2009	GS	Primary	**1.89 J**	**0.265 J+**
0906-MBH002-05-SL-ARTR	6/18/2009	SL-ARTR	Primary	<1.49	**0.340**
0906-MBH002-05-SL-PUTR	6/18/2009	SL-PUTR	Primary	<1.49	**0.169 J+/B**
0906-MBH002-05-SL-SYAL	6/18/2009	SL-SYAL	Primary	<1.49	**0.216 J+/B**
0906-MBH002-05-SM-ARTR	6/18/2009	SM-ARTR	Primary	<2.90	**0.145 J+/B**
0906-MBH002-05-SM-PUTR	6/18/2009	SM-PUTR	Primary	<1.49	**0.153 J+/B**
0906-MBH002-05-SM-SYAL	6/18/2009	SM-SYAL	Primary	<1.48	**0.110 J+/B**
0906-MBH002-06-GF	6/17/2009	GF	Primary	**2.01 J**	**0.296 J+/B**
0906-MBH002-06-SL-SYAL	6/17/2009	SL-SYAL	Primary	**1.54 J**	**0.209 J+/B**
0906-MBH002-06-SM-SYAL	6/17/2009	SM-SYAL	Primary	<1.49	**0.108 J+/B**
0906-MBH002-07-GF-1	6/16/2009	GF	Triplicate	<1.44	**0.373**
0906-MBH002-07-GF-2	6/16/2009	GF	Triplicate	**2.25 J**	**0.318**
0906-MBH002-07-GF-3	6/16/2009	GF	Triplicate	<1.46	**0.287**
0906-MBH002-07-GF-avg	6/16/2009	GF	Averaged	**2.25 J**	**0.326**
0906-MBH002-07-SL-1-ARTR	6/16/2009	SL-ARTR	Triplicate	<1.45	**0.689**
0906-MBH002-07-SL-1-PUTR	6/16/2009	SL-PUTR	Primary	<1.49	**0.237**
0906-MBH002-07-SL-2-ARTR	6/16/2009	SL-ARTR	Triplicate	<1.49	**0.467**
0906-MBH002-07-SL-2-SYAL	6/16/2009	SL-SYAL	Triplicate	<1.48	**0.199**
0906-MBH002-07-SL-3-SYAL	6/16/2009	SL-SYAL	Triplicate	**2.32 J**	**0.551**
0906-MBH002-07-SL-avg-ARTR	6/16/2009	SL-ARTR	Averaged	<1.49	**0.578**
0906-MBH002-07-SL-avg-SYAL	6/16/2009	SL-SYAL	Averaged	**2.32 J**	**0.375**
0906-MBH002-07-SM-1-ARTR	6/16/2009	SM-ARTR	Triplicate	**2.23 J**	**0.234**
0906-MBH002-07-SM-1-PUTR	6/16/2009	SM-PUTR	Primary	<1.47	**0.109 J**
0906-MBH002-07-SM-2-ARTR	6/16/2009	SM-ARTR	Triplicate	<1.47	**0.200**
0906-MBH002-07-SM-2-SYAL	6/16/2009	SM-SYAL	Triplicate	<2.93	<0.0871
0906-MBH002-07-SM-3-SYAL	6/16/2009	SM-SYAL	Triplicate	<1.49	**0.160 J**
0906-MBH002-07-SM-avg-ARTR	6/16/2009	SM-ARTR	Averaged	**2.23 J**	**0.217**
0906-MBH002-07-SM-avg-SYAL	6/16/2009	SM-SYAL	Averaged	<2.93	**0.16 J**
0906-MBH002-08-FB	6/18/2009	FB	Primary	<1.49	**0.291 J+**
0906-MBH002-08-GS	6/18/2009	GS	Primary	**2.54 J**	**0.362 J+**
0906-MBH002-08-SL-ARTR	6/18/2009	SL-ARTR	Primary	<2.91	**0.557**
0906-MBH002-08-SL-CHNA	6/18/2009	SL-CHVI8	Primary	<2.57	**0.812**
0906-MBH002-08-SL-SYAL	6/18/2009	SL-SYAL	Primary	<2.38	**0.319 J+**
0906-MBH002-08-SM-ARTR	6/18/2009	SM-ARTR	Primary	<4.66	**0.257 J+**

TABLE 3-21

HENRY MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)	
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Molybdenum**	**Selenium**
			Screening Value:	**5**	**5**
0906-MBH002-08-SM-CHNA	6/18/2009	SM-CHVI8	Primary	<3.00	**1.20**
0906-MBH002-08-SM-SYAL	6/18/2009	SM-SYAL	Primary	<2.52	<0.0996
0906-MBH002-09-GF	6/16/2009	GF	Primary	**1.48 J**	**0.241**
0906-MBH002-09-SL-PUTR	6/16/2009	SL-PUTR	Primary	<1.48	**0.167 J**
0906-MBH002-09-SM-PUTR	6/16/2009	SM-PUTR	Primary	<1.50	**0.211**
0906-MBH002-10-FB	6/18/2009	FB	Primary	<1.50	**0.492**
0906-MBH002-10-GS	6/18/2009	GS	Primary	**2.87 J**	**0.393**
0906-MBH002-10-SL-AMAL	6/18/2009	SL-AMAL	Primary	<1.49	**0.197 J+/B**
0906-MBH002-10-SL-ARTR	6/18/2009	SL-ARTR	Primary	<1.49	**0.760**
0906-MBH002-10-SL-CHNA	6/18/2009	SL-CHVI8	Primary	<2.75	**0.637**
0906-MBH002-10-SL-PUTR	6/18/2009	SL-PUTR	Primary	<2.89	**0.415**
0906-MBH002-10-SL-SYAL	6/18/2009	SL-SYAL	Primary	**2.19 J**	**0.301**
0906-MBH002-10-SM-AMAL	6/18/2009	SM-AMAL	Primary	<2.88	**0.242 J+/B**
0906-MBH002-10-SM-ARTR	6/18/2009	SM-ARTR	Primary	<3.51	**0.232 J+/B**
0906-MBH002-10-SM-CHNA	6/18/2009	SM-CHVI8	Primary	<2.78	**0.647**
0906-MBH002-10-SM-PUTR	6/18/2009	SM-PUTR	Primary	<2.90	**0.226 J+/B**
0906-MBH002-10-SM-SYAL	6/18/2009	SM-SYAL	Primary	<4.97	**0.199 J+/B**
0908-MBH002-05-FB	8/25/2009	FB	Primary	<1.47	**1.63**
0908-MBH002-08-FB	8/25/2009	FB	Primary	<1.47	**0.832**
0908-MBH002-10-FB	8/25/2009	FB	Primary	**1.91 J**	**0.392**
0908-MBH002-CS-JUSC-LEAF	8/25/2009	JUSC-LEAF	Primary	<1.49	**0.181 J**
0908-MBH002-CS-JUSC-STEM	8/25/2009	JUSC-STEM	Primary	<1.48	**0.192 J**
MDS016 (Dump Seep)					
VEMDS016-0-C(5)	9/11/2004	Vegetation	Primary	**2.18 J+T**	**0.7 JT**
MDS022 (Dump Seep)					
VEMDS022-0-C(5)	9/10/2004	Vegetation	Primary	**3.98 T**	<0.5 UT
MHR002 (Historic Haul Road)					
0906-MHR002-01-GF	6/18/2009	GF	Primary	**8.72**	**3.07**
0906-MHR002-02-GF	6/18/2009	GF	Primary	**4.44**	**1.27**
0906-MHR002-03-GF	6/19/2009	GF	Primary	**5.17**	**8.26**
0906-MHR002-04-FB	6/19/2009	FB	Primary	**3.06**	**2.58**
0906-MHR002-04-GS	6/19/2009	GS	Primary	**2.23 J**	**1.30**
0906-MHR002-05-GF	6/18/2009	GF	Primary	**1.96 J**	**2.78**
0906-MHR002-06-GF	6/18/2009	GF	Primary	<1.46	**3.03**
0906-MHR002-07-GF-1	6/18/2009	GF	Triplicate	<1.45	**1.31**
0906-MHR002-07-GF-2	6/18/2009	GF	Triplicate	**2.49 J**	**1.60**
0906-MHR002-07-GF-3	6/18/2009	GF	Triplicate	**4.38**	**2.49**
0906-MHR002-07-GF-avg	6/18/2009	GF	Averaged	**3.44 J**	**1.8**
0906-MHR002-08-GF	6/18/2009	GF	Primary	**11.3**	**4.03 J**
0906-MHR002-09-GF	6/18/2009	GF	Primary	**11.3**	**4.13**
0906-MHR002-10-FB	6/18/2009	FB	Primary	**13.1**	**49.0 J+**
0906-MHR002-10-GS	6/18/2009	GS	Primary	**18.8**	**3.78 J+**
0908-MHR002-04-FB	8/25/2009	FB	Primary	**1.56 J**	**1.28**
0908-MHR002-10-FB	8/25/2009	FB	Primary	**2.91 J**	**4.10**
MRV016 (Reservoir Delta)					
VEMRV016-0-C(5)	9/11/2004	Vegetation	Primary	**0.31 T**	<0.5 UT
MSG002 (Spring)					
VEMSG002-0-C(5)	9/13/2004	Vegetation	Primary	**1.9 T**	<0.5 UT

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HENRY MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)	
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Molybdenum**	**Selenium**
			Screening Value:	**5**	**5**
MSP014 (Pond)					
VEMSP014-0-C(5)	9/13/2004	Vegetation	Primary	**2.26 T**	**3.3 T**
MSP015 (Pond)					
VEMSP015-0-C(6)	9/13/2004	Vegetation	Primary	**0.4 T**	**25 T**
MSP016 (Pond)					
VEMSP016-0-C(5)	9/13/2004	Vegetation	Primary	**0.65 T**	**6.5 T**
MSP055 (Pond)					
VEMSP055-0-C(10)	9/13/2004	Vegetation	Primary	**5.49 T**	**65 T**
MST043 (Stream)					
VEMST043-0-C(5)	9/11/2004	Vegetation	Primary	**1.56 T**	<0.5 UT
MST044 (Stream)					
VEMST044-0-C(6)	9/14/2004	Vegetation	Primary	**4.51 T**	**7.9 T**
MST045 (Stream)					
VEMST045-0-C(5)	9/14/2004	Vegetation	Primary	**0.63 T**	<0.5 UT
MST046 (Stream)					
VEMST046-0-C(5)	9/13/2004	Vegetation	Primary	**1.83 T**	<0.5 UT
MST047 (Stream)					
VEMST047-0-C(6)	9/13/2004	Vegetation	Primary	**1.5 T**	<0.5 UT
MST050 (Stream)					
VEMST050-0-C(5)	9/10/2004	Vegetation	Primary	**2.45 T**	<0.5 UT
MST051 (Stream)					
VEMST051-1-C(5)QA1	9/14/2004	Vegetation	Triplicate	**3.57 T**	<0.5 UT
VEMST051-1-C(5)QA2	9/14/2004	Vegetation	Triplicate	**3.44 T**	<0.5 UT
VEMST051-1-C(5)QA3	9/14/2004	Vegetation	Triplicate	**3.54 T**	<0.5 UT
VEMST051-1-C(5)QA-avg	9/14/2004	Vegetation	Averaged	**3.52 T**	<0.5 UT
MST052 (Stream)					
VEMST052-0-C(5)	9/14/2004	Vegetation	Primary	**19.3 T**	<0.5 UT
MST053 (Stream)					
VEMST053-1-C(5)QA1	9/13/2004	Vegetation	Triplicate	**1.2 T**	<0.5 UT
VEMST053-1-C(5)QA2	9/13/2004	Vegetation	Triplicate	**1.27 T**	<0.5 UT
VEMST053-1-C(5)QA3	9/13/2004	Vegetation	Triplicate	**1.22 T**	<0.5 UT
VEMST053-1-C(5)QA-avg	9/13/2004	Vegetation	Averaged	**1.23 T**	<0.5 UT
MST054 (Stream)					
VEMST054-0-C(5)	9/13/2004	Vegetation	Primary	**0.88 T**	<0.5 UT
MST055 (Stream)					
VEMST055-0-C(5)	9/12/2004	Vegetation	Primary	**0.48 T**	<0.5 UT
MST056 (Stream)					
VEMST056-0-C(5)	9/13/2004	Vegetation	Primary	**1.1 T**	<0.5 UT
MST057 (Stream)					
VEMST057-0-C(5)	9/13/2004	Vegetation	Primary	**0.72 T**	**0.5 JT**
MST058 (Stream)					
VEMST058-0-C(5)	9/13/2004	Vegetation	Primary	**1.64 T**	<0.5 UT
MST062 (Stream)					
VEMST062-0-C(5)	9/12/2004	Vegetation	Primary	**1.19 T**	<0.5 UT
MST063 (Stream)					
VEMST063-0-C(5)	9/14/2004	Vegetation	Primary	**1.24 T**	<0.5 UT
MST064 (Stream)					

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HENRY MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)	
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Molybdenum**	**Selenium**
			Screening Value:	**5**	**5**
VEMST064-0-C(5)	9/13/2004	Vegetation	Primary	**1.38 T**	<0.5 UT
MST234 (Stream)					
VEMST234-1-C(5)	9/11/2004	Vegetation	Primary	**3.33 T**	<0.5 UT
MST270 (Stream)					
VEMST270-0-C(5)	9/10/2004	Vegetation	Primary	**1.41 T**	<0.5 UT
MST271 (Stream)					
VEMST271-0-C(5)	9/14/2004	Vegetation	Primary	**0.71 T**	<0.5 UT
MST276 (Stream)					
VEMST276-0-C(5)	9/13/2004	Vegetation	Primary	**1.17 T**	<0.5 UT
MST277 (Stream)					
VEMST277-0-C(5)	9/14/2004	Vegetation	Primary	**1.32 T**	<0.5 UT
MWD085 (Waste Rock Dump)					
0906-MWD085-01-GF	6/17/2009	GF	Primary	**28**	**1.24**
0906-MWD085-02-FB	6/17/2009	FB	Primary	**7.53**	**2.31**
0906-MWD085-02-GS	6/17/2009	GS	Primary	**15.7**	**0.717**
0906-MWD085-03-FB	6/16/2009	FB	Primary	**15.9**	**6.29**
0906-MWD085-03-GS	6/16/2009	GS	Primary	**20.7**	**1.21**
0906-MWD085-04-GF	6/16/2009	GF	Primary	**12.9**	**1.56**
0906-MWD085-05-GF	6/16/2009	GF	Primary	**9.67**	**2.49**
0906-MWD085-06-GF	6/23/2009	GF	Primary	**8.89**	**1.49 J**
0906-MWD085-07-GF-1	6/17/2009	GF	Triplicate	**7.21**	**3.20 J**
0906-MWD085-07-GF-2	6/17/2009	GF	Triplicate	**4.86**	**4.06**
0906-MWD085-07-GF-3	6/17/2009	GF	Triplicate	**4.57**	**5.86**
0906-MWD085-07-GF-avg	6/17/2009	GF	Averaged	**5.55**	**4.37 J**
0906-MWD085-08-GF	6/17/2009	GF	Primary	**8.15**	**6.66**
0906-MWD085-09-GF	6/17/2009	GF	Primary	**58.4**	**3.60 J**
0906-MWD085-10-GF	6/17/2009	GF	Primary	**7.3**	**19.2 J**
0908-MWD085-02-FB	8/25/2009	FB	Primary	**5.4**	**2.48**
0908-MWD085-03-FB	8/25/2009	FB	Primary	**10.9**	**9.81**
VEMWD085-10-C(6)	7/21/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-11-C(5)	7/21/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-12-C(6)	7/21/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-13-C(6)	7/21/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-14-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-15-C(5)	7/22/2004	Vegetation	Primary	NS	**0.7 JT**
VEMWD085-16-C(5)	7/22/2004	Vegetation	Primary	NS	**1.9 JT**
VEMWD085-17-C(5)	7/22/2004	Vegetation	Primary	NS	<0.6 UT
VEMWD085-18-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-19-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-1-C(5)	7/21/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-20-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-21-C(6)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-22-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-23-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-24-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-25-C(6)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-26-C(7)QA1	7/21/2004	Vegetation	Triplicate	NS	<0.5 UT
VEMWD085-26-C(7)QA2	7/21/2004	Vegetation	Triplicate	NS	<0.5 UT

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HENRY MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)	
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Molybdenum**	**Selenium**
			Screening Value:	**5**	**5**
VEMWD085-26-C(7)QA3	7/21/2004	Vegetation	Triplicate	NS	<0.5 UT
VEMWD085-26-C(7)QA-avg	7/21/2004	Vegetation	Averaged	NS	<0.5 UT
VEMWD085-2-C(5)	7/21/2004	Vegetation	Primary	NS	**1.7 JT**
VEMWD085-3-C(5)	7/21/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-4-C(5)	7/21/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-5-C(5)	7/21/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-6-C(5)	7/21/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-7-C(6)	7/21/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-8-C(5)	7/21/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD085-9-C(5)	7/21/2004	Vegetation	Primary	NS	<0.5 UT
MWD086 (Waste Rock Dump)					
052404VEMWD086-1-C6	5/24/2004	Vegetation	Primary	NS	**3.5 T**
061604VEMWD086-1-C(5	6/16/2004	Vegetation	Primary	NS	**6.6 J-T**
0906-MWD086-01-GF	6/16/2009	GF	Primary	**7.32**	**5.98**
0906-MWD086-02-GF	6/15/2009	GF	Primary	**4.74**	**1.14**
0906-MWD086-03-GF	6/15/2009	GF	Primary	**8.68**	**8.6**
0906-MWD086-04-GF	6/15/2009	GF	Primary	**12.2**	**7.48**
0906-MWD086-05-GF	6/15/2009	GF	Primary	**5.36**	**0.765**
0906-MWD086-06-GF	6/15/2009	GF	Primary	**4.96**	**3.51**
0906-MWD086-07-FB-1	6/17/2009	FB	Primary	**9.59**	**2.17 J**
0906-MWD086-07-GS-1	6/17/2009	GS	Triplicate	**8.64**	**1.80 J**
0906-MWD086-07-GS-2	6/17/2009	GS	Triplicate	**9.91**	**1.09 J**
0906-MWD086-07-GS-3	6/17/2009	GS	Triplicate	**11.9**	**1.13 J**
0906-MWD086-07-GS-avg	6/17/2009	GS	Averaged	**10.2**	**1.34 J**
0906-MWD086-08-GF	6/15/2009	GF	Primary	**13.3**	**46**
0906-MWD086-09-GF	6/16/2009	GF	Primary	**7.85**	**35.3**
0906-MWD086-10-GF	6/16/2009	GF	Primary	**4.85**	**2.42**
0908-MWD086-07-FB-1	8/25/2009	FB	Triplicate	**6.65**	**1.88**
0908-MWD086-07-FB-2	8/25/2009	FB	Triplicate	**5.34**	**3.45**
0908-MWD086-07-FB-3	8/25/2009	FB	Triplicate	**20.1**	**9.11**
0908-MWD086-07-FB-avg	8/25/2009	FB	Averaged	**10.7**	**4.82**
0908-MWD086-CS-ARTR-LEAF	8/25/2009	ARTR-LEAF	Primary	**2.78 J**	**0.643 J**
0908-MWD086-CS-ARTR-STEM	8/25/2009	ARTR-STEM	Primary	<1.50	**0.504 J**
0908-MWD086-CS-POTR-LEAF	8/25/2009	POTR-LEAF	Primary	<1.49	**5.26**
0908-MWD086-CS-POTR-STEM	8/25/2009	POTR-STEM	Primary	<1.49	**1.23**
091504VEMWD086-0-C(5)	9/15/2004	Vegetation	Primary	**13 T**	**1 JT**
101804VEMWD086-0-C(5)	10/18/2004	Vegetation	Primary	NS	**0.8 J-T**
VEMWD086-10-C(6)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-11-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-12-C(6)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-13-C(8)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-14-C(16)	7/22/2004	Vegetation	Primary	NS	**0.9 JT**
VEMWD086-15-C(9)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-16-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-17-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-18-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-19-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-1-C(16)QA1	7/22/2004	Vegetation	Triplicate	NS	**0.6 JT**
VEMWD086-1-C(16)QA2	7/22/2004	Vegetation	Triplicate	NS	<0.5 UT

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HENRY MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)	
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Molybdenum**	**Selenium**
			Screening Value:	**5**	**5**
VEMWD086-1-C(16)QA3	7/22/2004	Vegetation	Triplicate	NS	**0.6 JT**
VEMWD086-1-C(16)QA4	7/22/2004	Vegetation	Triplicate	NS	NS
VEMWD086-1-C(16)QA-avg	7/22/2004	Vegetation	Averaged	NS	**0.6 JT**
VEMWD086-1-C(5)	7/14/2004	Vegetation	Primary	NS	**7.5 T**
VEMWD086-1-C(5)QA1	8/16/2004	Vegetation	Triplicate	NS	**5.5 J-T**
VEMWD086-1-C(5)QA2	8/16/2004	Vegetation	Triplicate	NS	**5.4 J-T**
VEMWD086-1-C(5)QA3	8/16/2004	Vegetation	Triplicate	NS	**5.4 J-T**
VEMWD086-1-C(5)QA-avg	8/16/2004	Vegetation	Averaged	NS	**5.43 J-T**
VEMWD086-20-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-21-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-22-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-23-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-24-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-25-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-26-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-2-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-3-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-4-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-5-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-6-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-7-C(5)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-8-C(7)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
VEMWD086-9-C(6)	7/22/2004	Vegetation	Primary	NS	<0.5 UT
MWD087 (Waste Rock Dump)					
0906-MWD087-01-GF	6/15/2009	GF	Primary	**19.2**	**1.56**
0906-MWD087-02-GF	6/15/2009	GF	Primary	**10.2**	**146**
0906-MWD087-03-GF	6/15/2009	GF	Primary	**48.5**	**0.921**
0906-MWD087-04-GF	6/15/2009	GF	Primary	**46.3**	**1.08**
0906-MWD087-05-GF	6/16/2009	GF	Primary	**22.2**	**1.26**
0906-MWD087-06-FB	6/16/2009	FB	Primary	**110**	**0.856**
0906-MWD087-06-GS	6/16/2009	GS	Primary	**125**	**0.587**
0906-MWD087-07-GF-1	6/16/2009	GF	Triplicate	**93.8**	**0.782**
0906-MWD087-07-GF-2	6/16/2009	GF	Triplicate	**64.9**	**1.11**
0906-MWD087-07-GF-3	6/16/2009	GF	Triplicate	**64.1**	**0.725**
0906-MWD087-07-GF-avg	6/16/2009	GF	Averaged	**74.3**	**0.872**
0906-MWD087-08-GF	6/16/2009	GF	Primary	**49.9**	**0.752**
0906-MWD087-09-GF	6/16/2009	GF	Primary	**63**	**0.451**
0906-MWD087-10-GF	6/16/2009	GF	Primary	**74.6**	**0.628**
0908-MWD087-06-FB	8/25/2009	FB	Primary	**3.78**	**7.56**
0908-MWD087-CS-ARLU	8/25/2009	ARLU	Primary	<1.50	**1.78**
MWD088 (Waste Rock Dump)					
0906-MWD088-01-GF-1	6/15/2009	GF	Triplicate	**7.64**	**1.85**
0906-MWD088-01-GF-2	6/15/2009	GF	Triplicate	**10.3**	**0.544**
0906-MWD088-01-GF-3	6/15/2009	GF	Triplicate	**13**	**0.692**
0906-MWD088-01-GF-avg	6/15/2009	GF	Averaged	**10.3**	**1.03**
0906-MWD088-02-FB	6/23/2009	FB	Primary	**7.24**	**20.2 J**
0906-MWD088-02-GS	6/23/2009	GS	Primary	**5.57**	**2.25 J**
0906-MWD088-03-GF	6/15/2009	GF	Primary	**12.9**	**0.606**

TABLE 3-21

HENRY MINE - SUMMARY OF VEGETATION EXCEEDANCES
(Page 7 of 8)

				Analyte (mg/Kg, dry weight)	
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Molybdenum**	**Selenium**
			Screening Value:	**5**	**5**
0906-MWD088-04-GF	6/16/2009	GF	Primary	**8.66**	**2.36**
0906-MWD088-06-GF	6/15/2009	GF	Primary	**6.62**	**0.648**
0906-MWD088-07-GF	6/16/2009	GF	Primary	**6.33**	**1.44**
0906-MWD088-08-GF	6/16/2009	GF	Primary	**14.9**	**0.865**
0906-MWD088-09-FB	6/23/2009	FB	Primary	**5.05**	**3.36 J**
0906-MWD088-09-GS	6/23/2009	GS	Primary	**1.53 J**	**2.22**
0906-MWD088-10-GF	6/16/2009	GF	Primary	**5.42**	**0.472**
0906-MWD088-AL01-GF	6/19/2009	GF	Primary	**11.6**	**4.52**
0908-MWD088-02-FB	8/25/2009	FB	Primary	**6.87**	**5.61**
0908-MWD088-09-FB	8/25/2009	FB	Primary	**1.71 J**	**3.29**
MWD090 (Waste Rock Dump)					
0906-MWD090-01-GF	6/16/2009	GF	Primary	**7.36**	**4.80**
0906-MWD090-02-FB	6/17/2009	FB	Primary	**2.95 J**	**2.77 J**
0906-MWD090-02-GS	6/17/2009	GS	Primary	**2.33 J**	**1.15 J**
0906-MWD090-03-GF	6/16/2009	GF	Primary	**10.7**	**65.3**
0906-MWD090-04-FB	6/17/2009	FB	Primary	**22.1**	**67.6 J**
0906-MWD090-04-GS	6/17/2009	GS	Primary	**4.85**	**139 J**
0906-MWD090-05-GF	6/16/2009	GF	Primary	**22.7**	**2.02**
0906-MWD090-06-GF	6/16/2009	GF	Primary	**24.9**	**10.3**
0906-MWD090-07-GF1	6/16/2009	GF	Triplicate	**24.5**	**1.62**
0906-MWD090-07-GF2	6/16/2009	GF	Triplicate	**16.9**	**3.61**
0906-MWD090-07-GF3	6/16/2009	GF	Triplicate	**24.2**	**1.91**
0906-MWD090-07-GF-avg	6/16/2009	GF	Averaged	**21.9**	**2.38**
0906-MWD090-08-GF	6/16/2009	GF	Primary	**7.82**	**134**
0906-MWD090-09-GF	6/16/2009	GF	Primary	**7.61**	**20.4**
0906-MWD090-10-GF	6/16/2009	GF	Primary	**6.25**	**66**
0908-MWD090-02-FB	8/25/2009	FB	Primary	**4.47**	**2.62**
0908-MWD090-04-FB	8/25/2009	FB	Primary	**23.8**	**69.1**

TABLE 3-21

HENRY MINE - SUMMARY OF VEGETATION EXCEEDANCES
(Page 8 of 8)

Notes:

Allium - onion (scientific name undetermined)
AMAL - serviceberry (*Amelanchier alnifolia*)
AR - active ore haul road
ARLU - white sagebrush (*Artemisia ludoviciana*)
ARTR - big sagebrush (*Artemisia tridentata*)
BB - Ballard Mine background
BE - Enoch Valley Mine background
BH - Henry Mine background
BS - Ballard Mine shop
CAAR - Siberian peashrub (*Caragana arborescens*)
CHNA - yellow Rabbitbrush (*Chrysothamnus viscidiflorus*)*
CS - Culturally Significant plants
FB - forb
GF - grasses and forbs
GS - grass
HR - historic ore haul road
JUSC - Rocky Mountain juniper (*Juniperus scopulorum*)
POTR - quaking aspen (*Populus tremuloides*)
PRVI - chokecherry (*Prunus virginiana*)
PUTR - antelope bitterbrush (*Purshia tridentata*)
ROWI - Wood's rose (*Rosa woodsii*)
SF - shrub fruit
SL - shrub leaves
SM - shrub stems
SYAL - mountain strawberry (*Symphoricarpos oreophilus*)
TA - Enoch Valley Minte tipple area
VE - vegetation sample
WD - waste rock dump
Wild St - wild strawberry

* The current symbol for yellow Rabbitbrush is "CHVI8."

Result is greater than screening value
Method detection limit for non-detected value is greater than the screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
K	Serial dilutions not performed for samples analyzed by this method (EPA 200.7; 200.8).
T	Laboratory SOP does not address biotic matrices; biotic-specific LCS/SRM not analyzed.

Source for Screening Values (see also Table 3-1):

Vegetation	Mineral tolerance of animals, second revised edition, 2005 National Research Council, published by the national academics press, WA DC, pp. 13-14.

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance. The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-22 HENRY MINE 2004 SEASONAL VEGETATION SELENIUM CONCENTRATIONS (mg/kg dw)							
Station Name	**Station ID**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**
Henry Mine Center Waste Dump	MWD086	3.5	6.6	7.5	5.4	1.0	0.80

Notes:
Non-detected concentrations are presented as one-half the MDL. The MDL limit was 0.5 mg/kg dw.

TABLE 3-23 HENRY MINE 2009 GRASS/FORB SAMPLING CONCENTRATION RANGES AND SCREENING LEVEL EXCEEDANCES (mg/kg dw)[1]						
Analyte	**SL**	**Background (n=7)**	**Waste Rock Dumps (n=42)**	**[n] > SL**	**Historic Ore Haul Road (n=8)**	**[n] > SL**
Selenium	5	0.24-1.12	0.45-146	13	1.27-8.26	1
Molybdenum	5	1.48-2.63	4.74-74.6	39	1.46U-11.3	4

Notes:
n - total number of samples
[n] - sample concentration
SL - screening level
1 - Triplicate samples are treated as a single sample as described in Appendix A.
Shaded results indicate those which ranges contain exceedances of the screening level.

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

(Page 1 of 33)

Location:	MDS016		MDS016		MDS016		MDS016		MDS016		MDS016		MDS022		MDS022		MDS022	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep	
Sample ID:	052204SWMDS016-0-F		052204SWMDS016-0-U		050806GWMDS016-0-F		050806GWMDS016-0-U		050807SWMDS016-0-F		050807SWMDS016-0-U		051804SWMDS022-0-F		051804SWMDS022-0-U		SWMDS022-0-F	
Collection Date:	5/22/2004		5/22/2004		5/8/2006		5/8/2006		5/8/2007		5/8/2007		5/18/2004		5/18/2004		9/10/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		<0.03 UK	0.087	NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		**0.0008 K**		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		**0.0069 K**		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		**0.018**	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		**0.0011 K**	0.02	NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		**0.014 K**		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		**0.03 JK**	0.087	NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		**0.034 K**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0002 UK	0.00127	NS		**0.0008 K**	0.00127	NS		**0.0002 JK**	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127
Cobalt, dissolved	NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		<0.02 UK	0.158	NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.0129 K**	0.168	NS		**0.0069 K**	0.168	NS		**0.0176 K**	0.168	NS		**0.0057 K**	0.168	NS		**0.0085 K**	0.168
Selenium, dissolved	<0.001	0.005	NS		**0.02**	0.005	NS		NS		NS		NS		NS		<0.001	0.005
Silver, dissolved	NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	<0.0004 UK	0.02	NS		**0.0022 K**	0.02	NS		<0.0002 UK	0.02	NS		<0.00013	0.02	NS		<0.00005	0.02
Zinc, dissolved	**0.008 JK**	0.382	NS		**0.016 K**	0.382	NS		**0.008 JK**	0.382	NS		<0.002 UK	0.382	NS		**0.002 JK**	0.382

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MDS022		MDS022		MDS022		MDS022		MDS022		MDS022		MDS022		MDS022		MDS022	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep	
Sample ID:	SWMDS022-0-U		050806GWMDS022-0-F		050806GWMDS022-0-U		050307SWMDS022-0-F		050307SWMDS022-0-U		091307GWMDS022-0-F		091307GWMDS022-0-U		051408GWMDS022-0-F		051408GWMDS022-0-U	
Collection Date:	9/10/2004		5/8/2006		5/8/2006		5/3/2007		5/3/2007		9/13/2007		9/13/2007		5/14/2008		5/14/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		<0.06 UJK	0.087	NS		**1.12 K**	0.087	NS		<0.11 UJK	0.087
Barium	NS		NS		NS		NS		NS		NS		**0.078 K**	0.003	NS		**0.041 K**	0.003
Beryllium	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006
Boron	NS		NS		NS		NS		NS		NS		**0.02 JK**	0.0016	NS		**0.02 JK**	0.0016
Cadmium	NS		NS		<0.0001 UK		NS		NS		NS		**0.0005 JK**	0.00127	NS		<0.0001 UK	0.00127
Cobalt	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003
Iron	NS		NS		NS		NS		NS		NS		**1.37 K**	0.158	NS		**1.47 K**	0.158
Nickel	NS		NS		**0.0035 K**		NS		NS		NS		**0.011 K**	0.168	NS		**0.0107 K**	0.168
Selenium	<0.001	0.005	NS		**0.005**	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005
Silver	NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036
Thallium	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0002 UK	0.00003
Vanadium	NS		NS		<0.0002 UK	0.02	NS		NS		NS		**0.0039 K**	0.02	NS		**0.0004 JK**	0.02
Zinc	NS		NS		<0.002 UK		NS		NS		NS		**0.025 K**	0.382	NS		<0.003 UK	0.382
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS	
Barium, dissolved	NS		**0.024 K**	0.003	NS		NS		NS		**0.071 K**	0.003	NS		**0.036 K**	0.003	NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		NS		NS		NS		NS		**0.02 JK**	0.0016	NS		**0.01 JK**	0.0016	NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS	
Nickel, dissolved	NS		**0.0035 K**	0.168	NS		**0.0072 K**	0.168	NS		**0.0084 K**	0.168	NS		**0.0079 K**	0.168	NS	
Selenium, dissolved	NS		**0.004 J**	0.005	NS		NS		NS		<0.001	0.005	NS		<0.001	0.005	NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UJK	0.00036	NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		**0.0004 JK**	0.02	NS		<0.0004 UK	0.02	NS		**0.002 K**	0.02	NS		<0.0003 UK	0.02	NS	
Zinc, dissolved	NS		**0.003 JK**	0.382	NS		**0.002 JK**	0.382	NS		<0.002 UK	0.382	NS		<0.002 UK	0.382	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MDS022		MDS022		MDS034		MDS034		MDS034		MDS034		MRV016		MRV016		MRV016	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Reservoir Delta		Reservoir Delta		Reservoir Delta	
Sample ID:	091808GWMDS022-0-F		091808GWMDS022-0-U		052208GWMDS034-0-F		052208GWMDS034-0-U		0905GWMDS034-F		0905GWMDS034-U		052004SWMRV016-0-F		052004SWMRV016-0-U		051007SWMRV016-0-F	
Collection Date:	9/19/2008		9/19/2008		5/22/2008		5/22/2008		5/31/2009		5/31/2009		5/20/2004		5/20/2004		5/10/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**1.09**	0.087	NS		**0.15 JK**	0.087	NS		NS		NS		NS		NS	
Barium	NS		NS		NS		**0.058 K**	0.003	NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS	
Boron	NS		NS		NS		**0.02 JK**	0.0016	NS		NS		NS		NS		NS	
Cadmium	NS		**0.000304 J**		NS		**0.0009 K**	0.00127	NS		**0.000184 J**		NS		NS		NS	
Cobalt	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS	
Iron	NS		**1.4**	0.158	NS		**0.8 K**	0.158	NS		NS		NS		NS		NS	
Nickel	NS		**0.0120**		NS		**0.0134 K**	0.168	NS		NS		NS		NS		NS	
Selenium	NS		**0.00347**	0.005	NS		**0.14**	0.005	NS		**0.0505**	0.005	NS		<0.001	0.005	NS	
Silver	NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		<0.0004 UK	0.00003	NS		NS		NS		NS		NS	
Vanadium	NS		<0.00500	0.02	NS		**0.01 K**	0.02	NS		<0.00500	0.02	NS		NS		NS	
Zinc	NS		**0.0240 J**		NS		**0.018 K**	0.382	NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.0500	0.087	NS		<0.03 UK	0.087	NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		**0.058 K**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		**0.01 JK**	0.0016	NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.000125	0.00127	NS		**0.0005 JK**	0.00127	NS		**0.000129 J**	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001	0.00127
Cobalt, dissolved	NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Iron, dissolved	<0.0250	0.158	NS		**0.16 K**	0.158	NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		**0.03 JK**	0.034	NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.00927**	0.168	NS		**0.0116 K**	0.168	NS		NS		NS		**0.0009 JK**	0.168	NS		**0.0034 JK**	0.168
Selenium, dissolved	**0.00357**	0.005	NS		**0.14**	0.005	NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	<0.00500	0.02	NS		**0.0088 K**	0.02	NS		NS		NS		**0.00094 K**	0.02	NS		<0.0008	0.02
Zinc, dissolved	**0.00547 J**	0.382	NS		**0.019 K**	0.382	NS		NS		NS		**0.004 JK**	0.382	NS		**0.009 JK**	0.382

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MRV016		MRV016		MRV016		MRV016		MRV016		MRV016		MRV016		MSG002		MSG002	
Location Type:	Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Spring		Spring	
Sample ID:	051007SWMRV016-0-U		090807SWMRV016-0-F		090807SWMRV016-0-U		051008SWMRV016-0-F		051008SWMRV016-0-U		091908SWMRV016-0-F		091908SWMRV016-0-U		050806GWMSG002-0-F		050806GWMSG002-0-U	
Collection Date:	5/10/2007		9/8/2007		9/8/2007		5/10/2008		5/10/2008		9/19/2008		9/19/2008		5/8/2006		5/8/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		**0.0022 JK**	
Selenium	<0.001	0.005	NS		<0.001	0.005	NS		**0.002 J**	0.005	NS		**0.00192**	0.005	NS		**0.001 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		**0.0005 JK**	0.02
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		**0.005 JK**	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		<0.0500	0.087	NS		<0.03 UK	0.087	NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.054 K**	0.003	NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.000125	0.00127	NS		<0.0001 UK	0.00101	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Iron, dissolved	NS		NS		NS		NS		NS		<0.0250	0.158	NS		<0.02 UK	0.158	NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel, dissolved	NS		**0.003 K**	0.168	NS		**0.004 K**	0.168	NS		**0.00484**	0.168	NS		**0.0019 JK**	0.120	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.001	0.005	NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		**0.0013 J+K**	0.02	NS		**0.0015 K**	0.02	NS		<0.00500	0.02	NS		**0.0013 K**	0.02	NS	
Zinc, dissolved	NS		**0.007 JK**	0.382	NS		**0.005 JK**	0.382	NS		**0.0133 J**	0.382	NS		**0.003 JK**	0.272	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSG002		MSG002		MSG002		MSG002		MSP014		MSP014		MSP014		MSP014		MSP014	
Location Type:	Spring		Spring		Spring		Spring		Pond		Pond		Pond		Pond		Pond	
Sample ID:	050307SWMSG002-0-F		050307SWMSG002-0-U		091808GWMSG002-0-F		091808GWMSG002-0-U		051504SWMSP014-0-F		051504SWMSP014-0-U		050406SWMSP014-1-F		050406SWMSP014-1-U		050406SWMSP014-2-F	
Collection Date:	5/3/2007		5/3/2007		9/18/2008		9/18/2008		5/15/2004		5/15/2004		5/4/2006		5/4/2006		5/4/2006	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		<0.03 UK	0.087	NS		**0.939**	0.087	NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		<0.000125		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		**0.758**	0.158	NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		**0.00319 J**		NS		NS		NS		NS		NS	
Selenium	NS		**0.012**	0.005	NS		**0.0161 J**	0.005	NS		**0.035**	0.005	NS		**0.077**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		<0.00500	0.02	NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		**0.00658 J**		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		<0.0500	0.087	NS		NS		NS		**0.04 JK**	0.087	NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		**0.028 K**	0.003	NS		**0.028 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.000808	NS		<0.000125	0.000818	NS		**0.0002 JK**	0.00127	NS		**0.0001 JK**	0.00127	NS		**0.0002 JK**	0.00127
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003
Iron, dissolved	NS		NS		<0.0250	0.158	NS		NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034
Nickel, dissolved	**0.0021 JK**	0.0867	NS		**0.00291 J**	0.0883	NS		**0.0108 K**	0.168	NS		**0.0069 K**	0.168	NS		**0.0065 K**	0.168
Selenium, dissolved	NS		NS		**0.0159 J**	0.005	NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003
Vanadium, dissolved	<0.0007 UK	0.02	NS		<0.00500	0.02	NS		**0.00277 K**	0.02	NS		**0.0022 J+K**	0.02	NS		**0.0021 J+K**	0.02
Zinc, dissolved	**0.038 K**	0.197	NS		<0.00500	0.201	NS		**0.004 JK**	0.382	NS		**0.017 K**	0.382	NS		**0.009 JK**	0.382

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSP014		MSP014		MSP014		MSP014		MSP014		MSP014		MSP014		MSP015		MSP015	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	050406SWMSP014-2-U		050406SWMSP014-3-F		050406SWMSP014-3-U		050406SWMSP014-avg-		050406SWMSP014-avg-		091808GWMSP014-0-F		091808GWMSP014-0-U		051804SWMSP015-0-F		051804SWMSP015-0-U	
Collection Date:	5/4/2006		5/4/2006		5/4/2006		5/4/2006		5/4/2006		9/18/2008		9/18/2008		5/18/2004		5/18/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		<0.0500	0.087	NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		<0.000125		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		<0.0250	0.158	NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		**0.00725**		NS		NS	
Selenium	**0.075**	0.005	NS		**0.069**	0.005	NS		**0.0737**	0.005	NS		**0.00738**	0.005	NS		**0.153**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		<0.00500	0.02	NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		<0.00500		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		**0.04 JK**	0.087	NS		**0.905**	0.087	NS		NS		NS	
Barium, dissolved	NS		**0.029 K**	0.003	NS		**0.0283 K**	0.003	NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0002 JK**	0.00127	NS		**0.000167**	0.00127	NS		<0.000125	0.00127	NS		<0.0001 UK	0.00127	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		**0.877**	0.158	NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.007 K**	0.168	NS		**0.0068 K**	0.168	NS		**0.00771**	0.168	NS		**0.0035 K**	0.168	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		**0.00813**	0.005	NS		NS		NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036	NS		NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0023 K**	0.02	NS		**0.0022 J+K**	0.02	NS		<0.00500	0.02	NS		**0.00255 K**	0.02	NS	
Zinc, dissolved	NS		**0.009 JK**	0.382	NS		**0.0117 JK**	0.382	NS		<0.00500	0.382	NS		**0.002 JK**	0.382	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSP015		MSP015		MSP016		MSP016		MSP016		MSP016		MSP016		MSP016		MSP016	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	050406SWMSP015-0-F		050406SWMSP015-0-U		051704SWMSP016-1-F		051704SWMSP016-1-U		051704SWMSP016-2-F		051704SWMSP016-2-U		051704SWMSP016-3-F		051704SWMSP016-3-U		051704SWMSP016-avg-	
Collection Date:	5/4/2006		5/4/2006		5/17/2004		5/17/2004		5/17/2004		5/17/2004		5/17/2004		5/17/2004		5/17/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.38**	0.005	NS		**0.124**	0.005	NS		**0.123 J-**	0.005	NS		**0.125**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.03 UK	0.087	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	**0.034 K**	0.003	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	**0.0007 K**	0.00127	NS		<0.0001 UK	0.00120	NS		NS		NS		<0.0001 UK	0.00120	NS		<0.0001 UK	0.00121
Cobalt, dissolved	<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	<0.02 UK	0.158	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	<0.01 UK	0.034	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.0138 K**	0.168	NS		**0.0038 K**	0.156	NS		**0.0037 J-K**	0.158	NS		**0.0037 K**	0.155	NS		**0.00373 J-K**	0.156
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	<0.01 UJK	0.00036	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.0029 K**	0.02	NS		**0.00453 K**	0.02	NS		**0.00441 J-K**	0.02	NS		**0.00464 K**	0.02	NS		**0.00453 J-K**	0.02
Zinc, dissolved	**0.04 K**	0.382	NS		<0.002 UK	0.354	NS		NS		NS		<0.002 UK	0.354	NS		<0.002 UK	0.356

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSP016		MSP016		MSP016		MSP055		MSP055		MSP055		MSP055		MSP055		MSP055	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	051704SWMSP016-avg-		050406SWMSP016-0-F		050406SWMSP016-0-U		051504SWMSP055-0-F		051504SWMSP055-0-U		050906SWMSP055-0-F		050906SWMSP055-0-U		051007SWMSP055-0-F		051007SWMSP055-0-U	
Collection Date:	5/17/2004		5/4/2006		5/4/2006		5/15/2004		5/15/2004		5/9/2006		5/9/2006		5/10/2007		5/10/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Averaged		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		<0.03 UK	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.124 J-**	0.005	NS		**0.41**	0.005	NS		**0.97**	0.005	NS		**0.34**	0.005	NS		**0.36**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087	NS		NS		NS	
Barium, dissolved	NS		**0.038 K**	0.003	NS		NS		NS		**0.006 JK**	0.003	NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00127	NS		**0.0303 K**	0.00127	NS		**0.0203 K**	0.00115	NS		**0.0352 JK**	0.00127	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158	NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		**0.04 JK**	0.034	NS		NS		NS	
Nickel, dissolved	NS		**0.0116 K**	0.168	NS		**0.565 K**	0.168	NS		**0.434 K**	0.146	NS		**1.26 K**	0.168	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		**0.0002 JK**	0.00003	NS		NS		NS	
Vanadium, dissolved	NS		**0.0031 K**	0.02	NS		**0.0376 K**	0.02	NS		**0.0689 K**	0.02	NS		**0.0281 JK**	0.02	NS	
Zinc, dissolved	NS		**0.014 K**	0.382	NS		**1.9 K**	0.382	NS		<0.01 UK	0.332	NS		**4.73 K**	0.382	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MSP055		MSP055		MST043		MST043		MST043		MST043		MST043		MST043		MST043	
Location Type:	Pond		Pond		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051508GWMSP055-0-F		051508GWMSP055-0-U		052104SWMST043-1-F		052104SWMST043-1-U		052104SWMST043-2-F		052104SWMST043-2-U		052104SWMST043-3-F		052104SWMST043-3-U		052104SWMST043-avg-	
Collection Date:	5/15/2008		5/15/2008		5/21/2004		5/21/2004		5/21/2004		5/21/2004		5/21/2004		5/21/2004		5/21/2004	
Sample Type:	Groundwater		Groundwater		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**0.11 JK**	0.087	NS		NS		NS		NS		NS		NS		NS	
Barium	NS		**0.007 JK**	0.003	NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS	
Boron	NS		<0.01 UK	0.0016	NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		**0.0194 K**	0.00115	NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS	
Iron	NS		**0.06 K**	0.158	NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		**0.397 K**	0.145	NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.53**	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS	
Silver	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		<0.0005 UK	0.00003	NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		**0.0508 K**	0.02	NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		**1.71 K**	0.329	NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.03 UK	0.087	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	**0.008 JK**	0.003	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	<0.01 UK	0.0016	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	**0.0176 K**	0.00112	NS		<0.0002 UK	0.00127	NS		<0.0001	0.00127	NS		<0.0001	0.00127	NS		<0.0002	0.00127
Cobalt, dissolved	<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	<0.02 UK	0.158	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	**0.03 JK**	0.034	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.344 K**	0.139	NS		**0.0015 JK**	0.168	NS		**0.0041 JK**	0.168	NS		**0.0038 JK**	0.168	NS		**0.00313 JK**	0.168
Selenium, dissolved	**0.53**	0.005	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	<0.01 UJK	0.00036	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	**0.0002 JK**	0.00003	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.0367 K**	0.02	NS		**0.0011 K**	0.02	NS		**0.00117 JK**	0.02	NS		**0.00115 JK**	0.02	NS		**0.00114 JK**	0.02
Zinc, dissolved	**1.79 K**	0.317	NS		**0.004 JK**	0.382	NS		**0.004 JK**	0.382	NS		**0.004 JK**	0.382	NS		**0.004 JK**	0.382

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST043		MST044		MST044		MST044		MST044		MST044		MST044		MST044		MST044	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	052104SWMST043-avg-		051904SWMST044-0-F		051904SWMST044-0-U		050907SWMST044-1-F		050907SWMST044-1-U		050907SWMST044-2-F		050907SWMST044-2-U		050907SWMST044-3-F		050907SWMST044-3-U	
Collection Date:	5/21/2004		5/19/2004		5/19/2004		5/9/2007		5/9/2007		5/9/2007		5/9/2007		5/9/2007		5/9/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Averaged		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		**0.11 JK**	0.087	NS		**0.11 JK**	0.087	NS		**0.11 JK**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00104	NS		<0.0001 UK	0.00104	NS		<0.0001 UK	0.00104	NS		<0.0001 UK	0.00105	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0008 JK**	0.126	NS		**0.0007 JK**	0.126	NS		**0.0008 JK**	0.126	NS		**0.0012 JK**	0.128	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0013 K**	0.02	NS		**0.0015 K**	0.02	NS		**0.0015 K**	0.02	NS		**0.0015 K**	0.02	NS	
Zinc, dissolved	NS		<0.002 UK	0.287	NS		<0.002 UK	0.287	NS		<0.002 UK	0.287	NS		**0.003 JK**	0.291	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST044		MSG004		MST044		MST044		MST044		MST044		MST044		MST044		MST044	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050907SWMST044-avg-		050907SWMST044-avg-		090907SWMST044-0-F		090907SWMST044-0-U		051208SWMST044-0-F		051208SWMST044-0-U		091708SWMST044-1-F		091708SWMST044-1-U		091708SWMST044-2-F	
Collection Date:	5/9/2007		5/9/2007		9/9/2007		9/9/2007		5/10/2008		5/10/2008		9/17/2008		9/17/2008		9/17/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Averaged		Averaged		Primary		Primary		Primary		Primary		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**0.11 JK**	0.087	NS		**0.08 JK**	0.087	NS		<0.08 UK	0.087	NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		**0.046**	0.005	NS		<0.001	0.005	NS		<0.000958	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		<0.0500	0.087	NS		<0.0500	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.00105	NS		<0.0001 UK	0.00110	NS		<0.0001 UK	0.000978	NS		<0.000125	0.00108	NS		<0.000125	0.00109
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		<0.0250	0.158	NS		<0.0250	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.0009 JK**	0.127	NS		**0.0013 JK**	0.136	NS		**0.002 JK**	0.115	NS		**0.00202 J**	0.134	NS		**0.00262 J**	0.134
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.0015 K**	0.02	NS		**0.002 K**	0.02	NS		**0.0885 K**	0.02	NS		<0.0250	0.02	NS		<0.0250	0.02
Zinc, dissolved	**0.003 JK**	0.289	NS		**0.005 JK**	0.310	NS		**0.002 JK**	0.261	NS		<0.00500	0.304	NS		<0.00500	0.305

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST044		MST044		MST044		MST044		MST044		MST044		MST044		MST044		MST044	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	091708SWMST044-2-U		091708SWMST044-3-F		091708SWMST044-3-U		091708SWMST044-avg-		091708SWMST044-avg-		0905SWMST044-F		0905SWMST044-U		0909SWMST044-F		0909SWMST044-U	
Collection Date:	9/17/2008		9/17/2008		9/17/2008		9/17/2008		9/17/2008		5/5/2009		5/5/2009		9/21/2009		9/21/2009	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.00123 J+**	0.005	NS		**0.00126**	0.005	NS		**0.00125 J+**	0.005	NS		**0.000801**	0.005	NS		**0.00105**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.0500	0.087	NS		<0.0500	0.087	NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000125	0.00109	NS		<0.000125	0.00109	NS		<0.000125	0.000772	NS		<0.000125	0.00104	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		<0.0250	0.158	NS		<0.0250	0.158	NS		<0.0250	0.158	NS		<0.0250	0.158	NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.00251 J**	0.134	NS		**0.00238 J**	0.134	NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.0250	0.02	NS		<0.0250	0.02	NS		<0.00500	0.02	NS		**0.00828 J**	0.02	NS	
Zinc, dissolved	NS		**0.0100 J**	0.306	NS		**0.01 J**	0.305	NS		NS		NS		NS		NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST045		MST045		MST045		MST045		MST045		MST045		MST045		MST045		MST045	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051904SWMST045-0-F		051904SWMST045-0-U		050907SWMST045-0-F		050907SWMST045-0-U		090907SWMST045-0-F		090907SWMST045-0-U		051308SWMST045-0-F		051308SWMST045-0-U		091708SWMST045-0-F	
Collection Date:	5/19/2004		5/19/2004		5/9/2007		5/9/2007		9/9/2007		9/9/2007		5/14/2008		5/14/2008		9/17/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		**0.14 JK**	0.087	NS		**0.03 JK**	0.087	NS		**0.06 J+K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.0500	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.000987	NS		<0.0001 UK	0.00105	NS		<0.0001 UK	0.00112	NS		<0.0001 UK	0.000956	NS		<0.000125	0.00110
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.0250	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.0005 JK**	0.116	NS		**0.0009 JK**	0.127	NS		**0.0013 JK**	0.139	NS		**0.0025 JK**	0.111	NS		**0.00303 J**	0.136
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.00261 K**	0.02	NS		**0.0021 K**	0.02	NS		**0.0022 K**	0.02	NS		**0.0018 K**	0.02	NS		<0.0250	0.02
Zinc, dissolved	**0.011 K**	0.265	NS		<0.002 UK	0.288	NS		**0.004 JK**	0.317	NS		**0.01 K {J+}**	0.252	NS		**0.0141 J**	0.309

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST045		MST045		MST045		MST045		MST045		MST045		MST045		MST045		MST045	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	091708SWMST045-0-U		0905SWMST045-1-F		0905SWMST045-1-U		0905SWMST045-2-F		0905SWMST045-2-U		0905SWMST045-3-F		0905SWMST045-3-U		0905SWMST045-avg-F		0905SWMST045-avg-U	
Collection Date:	9/17/2008		5/5/2009		5/5/2009		5/5/2009		5/5/2009		5/5/2009		5/5/2009		5/5/2009		5/5/2009	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.00115**	0.005	NS		**0.00107 J**	0.005	NS		**0.000965 J**	0.005	NS		**0.000883**	0.005	NS		**0.000973 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000125	0.000780	NS		<0.000125	0.000764	NS		<0.000125	0.000793	NS		<0.000125	0.000780	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		**0.0304 J**	0.158	NS		**0.0300 J**	0.158	NS		**0.0272 J**	0.158	NS		**0.0292 J**	0.158	NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02	NS	
Zinc, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST045		MST045		MST045		MST045		MST045		MST045		MST045		MST045		MST046	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	0909SWMST045-1-F		0909SWMST045-1-U		0909SWMST045-2-F		0909SWMST045-2-U		0909SWMST045-3-F		0909SWMST045-3-U		0909SWMST045-avg-F		0909SWMST045-avg-U		052104SWMST046-0-F	
Collection Date:	9/21/2009		9/21/2009		9/21/2009		5/9/2007		9/21/2009		9/21/2009		9/21/2009		9/21/2009		5/21/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.00103**	0.005	NS		**0.00172**	0.005	NS		**0.00107**	0.005	NS		**0.00127**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.000125	0.00105	NS		<0.000125	0.00102	NS		<0.000125	0.00102	NS		<0.000125	0.00103	NS		<0.0005 UK	0.000819
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	<0.0250	0.158	NS		<0.0250	0.158	NS		<0.0250	0.158	NS		<0.0250	0.158	NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.001 UK	0.0884
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.00682 J**	0.02	NS		**0.00764 J**	0.02	NS		**0.00616 J**	0.02	NS		**0.00687 J**	0.02	NS		<0.0007 UK	0.02
Zinc, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.201

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST046		MST047		MST047		MST050		MST050		MST050		MST050		MST050		MST050	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	052104SWMST046-0-U		052104SWMST047-0-F		052104SWMST047-0-U		051404SWMST050-0-F		051404SWMST050-0-U		050406SWMST050-0-F		050406SWMST050-0-U		051407SWMST050-0-F		051407SWMST050-0-U	
Collection Date:	5/21/2004		5/21/2004		5/21/2004		5/14/2004		5/14/2004		5/4/2006		5/4/2006		5/14/2007		5/14/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		**0.44 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		<0.03 UK	0.087	NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		**0.029 K**	0.003	NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.000576	NS		<0.0001 UK	0.000599	NS		<0.0001	0.000686	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		<0.02 UK	0.158	NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		NS		NS	
Nickel, dissolved	NS		**0.0014 K**	0.168	NS		**0.0019 K**	0.0528	NS		**0.0013 JK**	0.0559	NS		**0.0016 JK**	0.0683	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		<0.01 UJK	0.00036	NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS	
Vanadium, dissolved	NS		**0.00468 K**	0.02	NS		**0.0169 K**	0.02	NS		**0.0016 K**	0.02	NS		**0.0017 JK**	0.02	NS	
Zinc, dissolved	NS		**0.003 JK**	0.382	NS		<0.002 UK	0.120	NS		**0.003 JK**	0.127	NS		**0.002 JK**	0.155	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST050		MST050		MST050		MST050		MST050		MST050		MST050		MST050		MST051	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	090807SWMST050-0-F		090807SWMST050-0-U		050908SWMST050-0-F		050908SWMST050-0-U		091708SWMST050-0-F		091708SWMST050-0-U		0905SWMST050-F		0905SWMST050-U		0905SWMST051-F	
Collection Date:	9/8/2007		9/8/2007		5/9/2008		5/9/2008		9/17/2008		9/17/2008		5/4/2009		5/4/2009		5/5/2009	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**1.53 K**	0.087	NS		<0.1 UK	0.087	NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		<0.001	0.005	NS		**0.00253**	0.005	NS		**0.00249 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		<0.0500	0.087	NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.000963	NS		<0.0001 UK	0.000887	NS		<0.000125	0.000816	NS		<0.000125	0.000499	NS		<0.000125	0.000493
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		**0.0406 J**	0.158	NS		**0.0659 J+/B**	0.158	NS		**0.0281 J**	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.0092 K**	0.112	NS		**0.0042 K**	0.0994	NS		**0.0101**	0.0879	NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.0061 K**	0.02	NS		<0.0002 UK	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02
Zinc, dissolved	<0.002 UK	0.255	NS		**0.004 JK**	0.226	NS		**0.0183 J**	0.200	NS		NS		NS		NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST051		MST052		MST052		MST053		MST053		MST054		MST054		MST054		MST054	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	0905SWMS		050906SWMST052-0-F		050906SWMST052-0-U		052104SWMST053-0-F		052104SWMST053-0-U		052204SWMST054-0-F		052204SWMST054-0-U		051407SWMST054-0-F		051407SWMST054-0-U	
Collection Date:	5/5/2009		5/9/2006		5/9/2006		5/21/2004		5/21/2004		5/22/2004		5/22/2004		5/14/2007		5/14/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		**0.35 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.000705**	0.005	NS		**0.001 J**	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		**0.04 K**	0.003	NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0002 JK**	0.000648	NS		<0.0001 UK	0.000814	NS		<0.0001 UK	0.000870	NS		<0.0001	0.000896	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0027 JK**	0.0628	NS		**0.0009 JK**	0.0877	NS		**0.0007 JK**	0.0966	NS		**0.0011 JK**	0.101	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0027 K**	0.02	NS		**0.00075 K**	0.02	NS		**0.00122 K**	0.02	NS		**0.0011 JK**	0.02	NS	
Zinc, dissolved	NS		**0.008 JK**	0.143	NS		<0.002 UK	0.199	NS		<0.002 UK	0.220	NS		<0.002 UJK	0.230	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST054		MST054		MST054		MST054		MST054		MST054		MST055		MST055		MST056	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	090907SWMST054-0-F		090907SWMST054-0-U		051508SWMST054-0-F		051508SWMST054-0-U		091908SWMST054-0-F		091908SWMST054-0-U		051904SWMST055-0-F		051904SWMST055-0-U		050506SWMST056-0-F	
Collection Date:	9/9/2007		9/9/2007		5/15/2008		5/15/2008		9/19/2008		9/19/2008		5/19/2004		5/19/2004		5/5/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**3.48 K**	0.087	NS		**0.21 K**	0.087	NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		<0.001	0.005	NS		**0.00129**	0.005	NS		**0.002 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		**0.844**	0.087	NS		NS		NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		**0.052 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.000863	NS		<0.0001 UK	0.000884	NS		<0.000125	0.000868	NS		<0.0001 UK	0.000836	NS		<0.0001 UK	0.000808
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003
Iron, dissolved	NS		NS		NS		NS		**0.827**	0.158	NS		NS		NS		<0.02 UK	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	**0.0015 JK**	0.0955	NS		**0.0022 JK**	0.0990	NS		**0.00339 J**	0.0962	NS		**0.0003 JK**	0.0911	NS		**0.0015 JK**	0.0867
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003
Vanadium, dissolved	**0.0025 K**	0.02	NS		**0.0011 J+K**	0.02	NS		**0.00525 J**	0.02	NS		**0.00082 K**	0.02	NS		<0.0002 UK	0.02
Zinc, dissolved	<0.002 UK	0.217	NS		**0.003 JK**	0.225	NS		**0.00597 J**	0.219	NS		<0.002 UK	0.207	NS		**0.004 JK**	0.197

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST056		MST057		MST057		MST057		MST057		MST057		MST057		MST057		MST057	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050506SWMST056-0-U		051804SWMST057-0-F		051804SWMST057-0-U		050806SWMST057-0-F		050806SWMST057-0-U		051007SWMST057-0-F		051007SWMST057-0-U		090907SWMST057-0-F		090907SWMST057-0-U	
Collection Date:	5/5/2006		5/18/2004		5/18/2004		5/8/2006		5/8/2006		5/10/2007		5/10/2007		9/9/2007		9/9/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		**0.37 K**	0.087	NS		**0.84 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.002 J**	0.005	NS		**0.002 J**	0.005	NS		**0.012**	0.005	NS		**0.006**	0.005	NS		**0.003 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		**0.04 JK**	0.087	NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		**0.042 K**	0.003	NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0002 UK	0.000918	NS		<0.0001 UK	0.000826	NS		<0.0001	0.000965	NS		<0.0001 UK	0.00102	NS	
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		**0.02 JK**	0.158	NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		NS		NS	
Nickel, dissolved	NS		<0.0014 UK	0.105	NS		**0.0009 JK**	0.0895	NS		**0.0014 JK**	0.113	NS		**0.0014 JK**	0.123	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0011 K**	0.02	NS		**0.0015 K**	0.02	NS		<0.0009	0.02	NS		**0.0012 J+K**	0.02	NS	
Zinc, dissolved	NS		<0.004 UK	0.238	NS		<0.002 UK	0.204	NS		<0.002 UJK	0.256	NS		**0.002 JK**	0.279	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST057		MST057		MST057		MST057		MST057		MST057		MST058		MST058		MST058	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051508SWMST057-0-F		051508SWMST057-0-U		091808SWMST057-0-F		091808SWMST057-0-U		0905SWMST057-F		0905SWMST057-U		051804SWMST058-0-F		051804SWMST058-0-U		SWMST058-0-F	
Collection Date:	5/15/2008		5/15/2008		9/18/2008		9/18/2008		5/5/2009		5/5/2009		5/18/2004		5/18/2004		9/13/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**0.14 JK**	0.087	NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.009**	0.005	NS		**0.00445 J**	0.005	NS		**0.0276**	0.005	NS		<0.001	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		<0.0500	0.087	NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.000836	NS		<0.000125	0.000970	NS		<0.000125	0.000756	NS		<0.0001 UK	0.000955	NS		<0.0001 UK	0.00111
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		<0.0250	0.158	NS		**0.0519 J**	0.158	NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.0025 JK**	0.0911	NS		**0.00413**	0.113	NS		NS		NS		<0.0008 UK	0.111	NS		**0.0032 K**	0.138
Selenium, dissolved	NS		NS		NS		NS		NS		NS		<0.001	0.005	NS		<0.001	0.005
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	<0.0004 UK	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		**0.00072 K**	0.02	NS		**0.00132 K**	0.02
Zinc, dissolved	<0.002 UK	0.207	NS		<0.00500	0.258	NS		NS		NS		**0.008 JK**	0.252	NS		**0.003 JK**	0.315

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST058		MST058		MST058		MST062		MST062		MST063		MST063		MST063		MST063	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	SWMST058-0-U		050806GWMST058-0-F		050806GWMST058-0-U		051804SWMST062-0-F		051804SWMST062-0-U		051804SWMST063-0-F		051804SWMST063-0-U		050406SWMST063-1-U		050406SWMST063-2-U	
Collection Date:	9/13/2004		5/8/2006		5/8/2006		5/18/2004		5/18/2004		5/18/2004		5/18/2004		5/5/2006		5/5/2006	
Sample Type:	Groundwater		Groundwater		Groundwater		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		<0.0001 UK		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		**0.001 JK**		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		**0.009**	0.005	NS		<0.001	0.005	NS		**0.002 J**	0.005	**0.006**	0.005	**0.006**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		**0.0007 JK**	0.02	NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		**0.002 JK**		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		**0.034 K**	0.003	NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000734	NS		<0.0001 UK	0.000875	NS		<0.0001 UK	0.00116	NS		NS		NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		**0.02 JK**	0.158	NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.001 JK**	0.0753	NS		<0.0004 UK	0.0974	NS		**0.0019 K**	0.147	NS		NS		NS	
Selenium, dissolved	NS		**0.013**	0.005	NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0011 K**	0.02	NS		**0.00116 K**	0.02	NS		**0.001 K**	0.02	NS		NS		NS	
Zinc, dissolved	NS		**0.003 JK**	0.171	NS		<0.002 UK	0.221	NS		<0.002 UK	0.334	NS		NS		NS	

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HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST063		MST063		MST063		MST063		MST063		MST063		MST063		MST063		MST063	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050406SWMST063-3-U		050406SWMST063-avg-		050506SWMST063-1-F		050506SWMST063-1-U		050506SWMST063-2-F		050506SWMST063-2-U		050506SWMST063-3-F		050506SWMST063-3-U		050506SWMST063-avg-	
Collection Date:	5/5/2006		5/5/2006		5/5/2006		5/5/2006		5/5/2006		5/5/2006		5/5/2006		5/5/2006		5/5/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Averaged		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.007**	0.005	**0.00633**	0.005	NS		**0.006**	0.005	NS		**0.006**	0.005	NS		**0.006**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		**0.038 K**	0.003	NS		**0.037 K**	0.003	NS		**0.037 K**	0.003	NS		**0.0373 K**	0.003
Beryllium, dissolved	NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		NS		<0.0001 UK	0.000846	NS		<0.0001 UK	0.000848	NS		<0.0001 UK	0.000843	NS		<0.0001 UK	0.000846
Cobalt, dissolved	NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003
Iron, dissolved	NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158
Molybdenum, dissolved	NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034
Nickel, dissolved	NS		NS		**0.0007 JK**	0.0927	NS		**0.0006 JK**	0.0931	NS		**0.0006 JK**	0.0923	NS		**0.000633**	0.0927
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003
Vanadium, dissolved	NS		NS		<0.0002 UK	0.02	NS		<0.0002 UK	0.02	NS		<0.0002 UK	0.02	NS		<0.0002 UK	0.02
Zinc, dissolved	NS		NS		**0.018 K**	0.211	NS		**0.002 JK**	0.212	NS		<0.002 UK	0.210	NS		**0.01 JK**	0.211

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST063		MST063		MST063		MST063		MST063		MST064		MST064		MST064		MST064	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050506SWMST063-avg-		050307SWMST063-0-F		050307SWMST063-0-U		0905SWMST063-F		0905SWMST063-U		051804SWMST064-0-F		051804SWMST064-0-U		SWMST064-1-F		SWMST064-1-U	
Collection Date:	5/5/2006		5/3/2007		5/3/2007		5/5/2009		5/5/2009		5/18/2004		5/18/2004		9/13/2004		9/13/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Groundwater		Groundwater		Groundwater		Groundwater	
	Averaged		Primary		Primary		Primary		Primary		Primary		Primary		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		<0.1 UJK	0.087	NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.006**	0.005	NS		**0.005 J**	0.005	NS		**0.00580 J**	0.005	NS		**0.002 J**	0.005	NS		**0.002 J {J+}**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00109	NS		<0.000125	0.000943	NS		<0.0001 UK	0.000996	NS		<0.0001 UK	0.000985	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		<0.0250	0.158	NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0031 K**	0.135	NS		NS		NS		<0.0004 UK	0.118	NS		**0.0015 K**	0.116	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		**0.003 J**	0.005	NS		**0.001 J**	0.005	NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0011 J+K**	0.02	NS		<0.00500	0.02	NS		**0.00065 K**	0.02	NS		**0.00064 K**	0.02	NS	
Zinc, dissolved	NS		**0.002 JK**	0.307	NS		NS		NS		<0.002 UK	0.268	NS		<0.002 UK	0.264	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST064		MST064		MST064		MST064		MST064		MST064		MST064		MST064		MST234	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	SWMST064-2-F		SWMST064-2-U		SWMST064-3-F		SWMST064-3-U		SWMST064-avg-F		SWMST064-avg-U		050806GWMST064-0-F		050806GWMST064-0-U		052004SWMST234-1-F	
Collection Date:	9/13/2004		9/13/2004		9/13/2004		9/13/2004		9/13/2004		9/13/2004		5/8/2006		5/8/2006		5/20/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary		Primary		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		**0.0001 JK**		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		**0.0013 JK**		NS	
Selenium	NS		**0.002 J {J+}**	0.005	NS		**0.002 J {J+}**	0.005	NS		**0.002 J**	0.005	NS		**0.021**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		**0.0023 K**	0.02	NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		**0.004 JK**		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		<0.03 UK	0.087	NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		**0.081 K**	0.003	NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.000983	NS		<0.0001 UK	0.000986	NS		<0.0001 UK	0.000984	NS		<0.0001 UK	0.00126	NS		<0.0001 UK	0.00127
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		<0.02 UK	0.158	NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		NS	
Nickel, dissolved	**0.0016 K**	0.116	NS		**0.0016 K**	0.116	NS		**0.00157 K**	0.116	NS		**0.0012 JK**	0.166	NS		**0.0021 K**	0.168
Selenium, dissolved	**0.002 J**	0.005	NS		**0.001 J**	0.005	NS		**0.00133 J**	0.005	NS		**0.02**	0.005	NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS	
Vanadium, dissolved	**0.00069 K**	0.02	NS		**0.00063 K**	0.02	NS		**0.000653 K**	0.02	NS		**0.0034 K**	0.02	NS		**0.00094 K**	0.02
Zinc, dissolved	**0.006 JK**	0.263	NS		<0.002 UK	0.264	NS		**0.006 JK**	0.263	NS		**0.002 JK**	0.378	NS		**0.005 JK**	0.382

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST234		MST234		MST234		MST234		MST234		MST234		MST234		MST234		MST234	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	052004SWMST234-1-U		052004SWMST234-2-F		052004SWMST234-2-U		052004SWMST234-3-F		052004SWMST234-3-U		052004SWMST234-avg-		052004SWMST234-avg-		050706SWMST234-1-F		050706SWMST234-1-U	
Collection Date:	5/20/2004		5/20/2004		5/20/2004		5/20/2004		5/20/2004		5/20/2004		5/20/2004		5/7/2006		5/7/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.03 UK	0.087	NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.055 K**	0.003	NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00127	NS		<0.0002 UK	0.00127	NS		<0.0002 UK	0.00127	NS		<0.0001 UK	0.00119	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.02 UK	0.158	NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel, dissolved	NS		**0.0019 K**	0.168	NS		**0.0016 JK**	0.168	NS		**0.00187 JK**	0.168	NS		**0.0012 JK**	0.152	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		**0.0009 K**	0.02	NS		**0.0008 K**	0.02	NS		**0.00088 K**	0.02	NS		**0.0007 JK**	0.02	NS	
Zinc, dissolved	NS		**0.005 JK**	0.382	NS		<0.004 UK	0.382	NS		**0.005 JK**	0.382	NS		**0.005 JK**	0.346	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST234		MST234		MST234		MST234		MST234		MST234		MST234		MST234		MST234	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050706SWMST234-2-F		050706SWMST234-2-U		050706SWMST234-3-F		050706SWMST234-3-U		050706SWMST234-avg-		050706SWMST234-avg-		051007SWMST234-0-F		051007SWMST234-0-U		090907SWMST234-1-F	
Collection Date:	5/7/2006		5/7/2006		5/7/2006		5/7/2006		5/7/2006		5/7/2006		5/10/2007		5/10/2007		9/9/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary		Primary		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		**0.05 JK**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.03 UK	0.087	NS		**0.14 JK**	0.087	NS		**0.14 JK**	0.087	NS		NS		NS		NS	
Barium, dissolved	**0.054 K**	0.003	NS		**0.055 K**	0.003	NS		**0.0547 K**	0.003	NS		NS		NS		NS	
Beryllium, dissolved	<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.0001 UK	0.00119	NS		<0.0001 UK	0.00120	NS		<0.0001 UK	0.00119	NS		<0.0001	0.00127	NS		<0.0001 UK	0.00127
Cobalt, dissolved	<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		NS	
Iron, dissolved	<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		NS		NS		NS	
Molybdenum, dissolved	<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS		NS	
Nickel, dissolved	**0.0011 JK**	0.153	NS		**0.0013 JK**	0.155	NS		**0.0012 JK**	0.153	NS		**0.0026 JK**	0.168	NS		**0.0035 K**	0.168
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS		NS	
Thallium, dissolved	<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS		NS	
Vanadium, dissolved	**0.0007 JK**	0.02	NS		**0.0007 JK**	0.02	NS		**0.0007 JK**	0.02	NS		<0.0008	0.02	NS		**0.0012 J+K**	0.02
Zinc, dissolved	**0.004 JK**	0.347	NS		**0.004 JK**	0.352	NS		**0.00433 JK**	0.349	NS		**0.005 JK**	0.382	NS		**0.007 JK**	0.382

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST234		MST234		MST234		MST234		MST234		MST234		MST234		MST234		MST234	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	090907SWMST234-1-U		090907SWMST234-2-F		090907SWMST234-2-U		090907SWMST234-3-F		090907SWMST234-3-U		090907SWMST234-avg-		090907SWMST234-avg-		051008SWMST234-0-F		051008SWMST234-0-U	
Collection Date:	9/9/2007		9/9/2007		9/9/2007		9/9/2007		9/9/2007		9/9/2007		9/9/2007		5/10/2008		5/10/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		**0.03 JK**	0.087	NS		**0.03 JK**	0.087	NS		<0.11 UK	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00126	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0034 K**	0.168	NS		**0.0037 K**	0.168	NS		**0.00353 K**	0.168	NS		**0.0036 K**	0.167	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0011 J+K**	0.02	NS		**0.0012 J+K**	0.02	NS		**0.00117**	0.02	NS		**0.0672 K**	0.02	NS	
Zinc, dissolved	NS		**0.008 JK**	0.382	NS		**0.006 JK**	0.382	NS		**0.007 JK**	0.382	NS		**0.005 JK**	0.381	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST234		MST234		MST270		MST270		MST271		MST271		MST276		MST276		MST276	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	091908SWMST234-0-F		091908SWMST234-0-U		050606SWMST270-0-F		050606SWMST270-0-U		050906SWMST271-0-F		050906SWMST271-0-U		051804SWMST276-0-F		051804SWMST276-0-U		SWMST276-0-F	
Collection Date:	9/19/2008		9/19/2008		5/6/2006		5/6/2006		5/9/2006		5/9/2006		5/18/2004		5/18/2004		9/13/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.00164 J+**	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		**0.003 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.0500	0.087	NS		**0.12 JK**	0.087	NS		<0.03 UK	0.087	NS		NS		NS		NS	
Barium, dissolved	NS		NS		**0.028 K**	0.003	NS		**0.042 K**	0.003	NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.000125	0.00127	NS		<0.0001 UK	0.000642	NS		<0.0001 UK	0.000805	NS		<0.0001 UK	0.000935	NS		<0.0001 UK	0.000976
Cobalt, dissolved	NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		NS	
Iron, dissolved	<0.0250	0.158	NS		<0.02 UK	0.158	NS		**0.03 JK**	0.158	NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS		NS	
Nickel, dissolved	**0.00634**	0.168	NS		**0.0022 JK**	0.0620	NS		**0.0022 JK**	0.0863	NS		**0.0013 J+K**	0.107	NS		**0.002 K**	0.114
Selenium, dissolved	NS		NS		NS		NS		NS		NS		**0.003 J**	0.005	NS		**0.002 J**	0.005
Silver, dissolved	NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS		NS	
Thallium, dissolved	NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS		NS	
Vanadium, dissolved	<0.00500	0.02	NS		**0.0032 K**	0.02	NS		**0.002 K**	0.02	NS		**0.00108 K**	0.02	NS		**0.00086 K**	0.02
Zinc, dissolved	**0.00769 J**	0.382	NS		**0.003 JK**	0.141	NS		**0.005 JK**	0.196	NS		<0.002 UK	0.244	NS		<0.002 UK	0.260

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST276		MST276		MST276		MST276		MST276		MST276		MST276		MST276		MST276	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	SWMST276-0-U		050806GWMST276-0-F		050806GWMST276-0-U		051007SWMST276-0-F		051007SWMST276-0-U		091107GWMST276-0-F		091107GWMST276-0-U		051508GWMST276-0-F		051508GWMST276-0-U	
Collection Date:	9/13/2004		5/8/2006		5/8/2006		5/10/2007		5/10/2007		9/11/2007		9/11/2007		5/15/2008		5/15/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		**0.07 J+K**	0.087
Barium	NS		NS		NS		NS		NS		NS		**0.066 K**	0.003	NS		**0.061 K**	0.003
Beryllium	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006
Boron	NS		NS		NS		NS		NS		NS		**0.02 JK**	0.0016	NS		**0.02 JK**	0.0016
Cadmium	NS		NS		<0.0001 UK		NS		NS		NS		<0.0001 UK	0.000992	NS		<0.0001 UK	0.000958
Cobalt	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003
Iron	NS		NS		NS		NS		NS		NS		**0.03 JK**	0.158	NS		**0.03 J+K**	0.158
Nickel	NS		NS		<0.0006 UK		NS		NS		NS		**0.0009 JK**	0.117	NS		**0.0009 JK**	0.111
Selenium	**0.013**	0.005	NS		**0.005 J**	0.005	NS		**0.006**	0.005	NS		**0.003 J**	0.005	NS		**0.005 J-**	0.005
Silver	NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036
Thallium	NS		NS		NS		NS		NS		NS		**0.0006 J+K**	0.00003	NS		<0.0001 UK	0.00003
Vanadium	NS		NS		**0.0002 JK**	0.02	NS		NS		NS		**0.0006 JK**	0.02	NS		**0.0009 JK**	0.02
Zinc	NS		NS		<0.002 UK		NS		NS		NS		<0.002 UK	0.266	NS		<0.002 UK	0.253
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS	
Barium, dissolved	NS		**0.063 K**	0.003	NS		NS		NS		**0.066 K**	0.003	NS		**0.063 K**	0.003	NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS	
Boron, dissolved	NS		NS		NS		NS		NS		**0.02 JK**	0.0016	NS		<0.01 UK	0.0016	NS	
Cadmium, dissolved	NS		<0.0001 UK	0.00101	NS		<0.0001	0.00106	NS		<0.0001 UK	0.00105	NS		<0.0001 UK	0.000989	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS	
Nickel, dissolved	NS		<0.0006 UK	0.121	NS		**0.0008 JK**	0.130	NS		**0.0011 JK**	0.127	NS		**0.0021 JK**	0.117	NS	
Selenium, dissolved	NS		**0.003 J**	0.005	NS		NS		NS		**0.003 J**	0.005	NS		**0.006**	0.005	NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS	
Vanadium, dissolved	NS		**0.0009 JK**	0.02	NS		<0.0004	0.02	NS		**0.0007 JK**	0.02	NS		<0.0002 UK	0.02	NS	
Zinc, dissolved	NS		**0.002 JK**	0.275	NS		<0.002 UJK	0.295	NS		<0.002 UK	0.288	NS		<0.002 UK	0.265	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST276		MST276		MST277		MST277		MST277		MST277		MST277		MST277		MST277	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	100608GWMST276-0-F		100608GWMST276-0-U		052204SWMST277-1-F		052204SWMST277-1-U		052204SWMST277-2-F		052204SWMST277-2-U		052204SWMST277-3-F		052204SWMST277-3-U		052204SWMST277-avg-	
Collection Date:	10/6/2008		10/6/2008		5/22/2004		5/20/2004		5/22/2004		5/22/2004		5/22/2004		5/22/2004		5/22/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		**0.0933 J**	0.087	NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		<0.000125		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		**0.0752 J**	0.158	NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		**0.00332 J**		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.00354**	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		<0.00500	0.02	NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		**0.00784 J**		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	<0.0500	0.087	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	<0.000125	0.000987	NS		<0.0005 UK	0.00101	NS		<0.0005 UK	0.00101	NS		<0.0005 UK	0.00101	NS		<0.0005 UK	0.00101
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	<0.0250	0.158	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.00341 J**	0.116	NS		**0.001 JK**	0.120	NS		**0.002 JK**	0.120	NS		**0.001 JK**	0.120	NS		**0.00133 JK**	0.120
Selenium, dissolved	**0.00383**	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	<0.00500	0.02	NS		<0.0004 UK	0.02	NS		<0.0004 UK	0.02	NS		<0.0003 UK	0.02	NS		<0.0003 UK	0.02
Zinc, dissolved	**0.110**	0.265	NS		<0.01 UK	0.274	NS		<0.01 UK	0.273	NS		<0.01 UK	0.273	NS		<0.01 UK	0.273

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES

Location:	MST277		MST277		MST277		MST277		MST277		MST277		MST277		MST280		MST280	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	052204SWMST277-avg-		051006GWMST277-0-F		051006GWMST277-0-U		051407SWMST277-0-F		051407SWMST277-0-U		051508GWMST277-0-F		051508GWMST277-0-U		052208SWMST280-0-F		052208SWMST280-0-U	
Collection Date:	5/22/2004		5/10/2006		5/10/2006		5/14/2007		5/14/2007		5/15/2008		5/15/2008		5/22/2008		5/22/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Averaged		Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																		
Aluminum	NS		NS		NS		NS		<0.03 UK	0.087	NS		<0.05 UJK	0.087	NS		<0.06 UJK	0.087
Barium	NS		NS		NS		NS		NS		NS		**0.049 K**	0.003	NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS	
Boron	NS		NS		NS		NS		NS		NS		**0.02 J+K**	0.0016	NS		NS	
Cadmium	NS		NS		<0.0001 UK		NS		NS		NS		<0.0001 UK	0.000793	NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS	
Iron	NS		NS		NS		NS		NS		NS		**0.26 K**	0.158	NS		NS	
Nickel	NS		NS		**0.0008 JK**		NS		NS		NS		**0.0015 JK**	0.0843	NS		NS	
Selenium	<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		**0.29**	0.005
Silver	NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS	
Vanadium	NS		NS		**0.0039 K**	0.02	NS		NS		NS		**0.0006 JK**	0.02	NS		NS	
Zinc	NS		NS		**0.003 JK**		NS		NS		NS		**0.005 JK**	0.192	NS		NS	
Dissolved Metals (mg/L)																		
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087	NS		NS		NS	
Barium, dissolved	NS		**0.08 K**	0.003	NS		NS		NS		**0.047 K**	0.003	NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.0016	NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000841	NS		<0.0001	0.000998	NS		**0.0001 JK**	0.000764	NS		**0.0078 K**	0.00127	NS	
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		**0.14 K**	0.158	NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034	NS		NS		NS	
Nickel, dissolved	NS		**0.0007 JK**	0.0919	NS		**0.0016 JK**	0.118	NS		**0.0033 K**	0.0798	NS		**0.0646 K**	0.168	NS	
Selenium, dissolved	NS		<0.001	0.005	NS		NS		NS		<0.001	0.005	NS		NS		NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS	
Vanadium, dissolved	NS		**0.0037 K**	0.02	NS		<0.0002	0.02	NS		<0.0008 UK	0.02	NS		**0.0402 K**	0.02	NS	
Zinc, dissolved	NS		**0.005 JK**	0.209	NS		**0.004 JK**	0.269	NS		**0.011 K**	0.182	NS		**0.142 K**	0.382	NS	

TABLE 3-24

HENRY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
(Page 33 of 33)

Notes:
NS - not sampled
SL - screening level
F - filtered
U - unfiltered
Avg - average

Result is greater than screening value
Method detection limit for non-detected value is greater than the screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
K	Serial dilutions not performed for samples analyzed by this method (EPA 200.7; 200.8).

Sources for Screening Values (see also Table 3-1):

Surface Water	Unless identified otherwise below, screening levels are the chronic freshwater screening value in NOAA SQuiRT (Buchman, 2008).
	Screening levels for aluminum is the Freshwater Standards for Chronic Criteria (CCC) from the National Recommended Water Quality Criteria (USEPA, 2009).
	Screening values for arsenic, cadmium, chromium, copper, lead, nickel, selenium, and zinc are the CCCs from the State of Idaho Surface Water Quality for Aquatic Life (IDAPA 58.01.02); those for cadmium, chromium, copper, lead, nickel, and zinc are expressed as a function of total hardness. Screening levels for cadmium and selenium are expressed as total recoverable (unfiltered concentration).
	The screening level for iron is the Lowest Chronic Value (LCV) observed for fresh water daphnids (source: ORNL, 1996).
	The screening levels for manganese, uranium, and vanadium are the Tier II Secondary Chronic Values (source: ORNL, 1996).

Triplicate Results:
"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.
The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-25

HENRY MINE - SUMMARY OF SEDIMENT EXCEEDANCES
(Page 1 of 3)

					Analyte (mg/Kg, dry weight)					
Location	Location Type	Sample Identification	Collection Date	Sample Type	Cadmium	Chromium	Nickel	Selenium	Vanadium	Zinc
				Screening Level:	0.583	36.286	18	4	57	98
MDS016	Dump Seep	052204SEMDS016-0	5/22/2004	Primary	12.7	137	123 J	9.7	103 J	371 J
MDS022	Dump Seep	051804SEMDS022-0	5/18/2004	Primary	1.82	10.7	34.2	1.9 J	12.7	76
MRV016	Reservoir Delta	052004SEMRV016-0	5/20/2004	Primary	0.74	13.9	6.4	0.8 J	8.87 J	74 J
MSP014	Pond	051504SEMSP014-0	5/15/2004	Primary	21	222	104	18.9	181	621
MSP015	Pond	051804SEMSP015-0	5/18/2004	Primary	10.5	53	85.6	22 J	66	602
MSP016	Pond	051704SEMSP016-1-QA1	5/17/2004	Triplicate	38	334	105	53 J	492	977
MSP016	Pond	051704SEMSP016-1-QA2	5/17/2004	Triplicate	44.3	349	105	55 J	514	1010
MSP016	Pond	051704SEMSP016-1-QA3	5/17/2004	Triplicate	42.1	344	99.2	54 J	514	939
MSP016	Pond	051704SEMSP016-1-QA-avg	5/17/2004	Averaged	41.5	342	103	54 J	507	975
MSP055	Pond	051504SEMSP055-0	5/15/2004	Primary	104	1030	1110	148	940	7940
MST043	Stream	052104SEMST043-QA1	5/21/2004	Triplicate	1.09	25.5	13.8 J	1.5 J	22.5	89
MST043	Stream	052104SEMST043-QA2	5/21/2004	Triplicate	0.74	23.6	14.8 J	1.4 J	21.9	86
MST043	Stream	052104SEMST043-QA3	5/21/2004	Triplicate	0.88	25.1	14.5 J	2.1 J	22.3	89
MST043	Stream	052104SEMST043-QA-avg	5/21/2004	Averaged	0.903	24.7	14.4 J	1.67 J	22.2	88
MST044	Stream	051904SEMST044-0	5/19/2004	Primary	1.39	36	11.3	1.1 J	29.3 J	68 J
MST045	Stream	051904SEMST045-0	5/19/2004	Primary	0.66	24.8	12.1	1.1 J	20.9 J	49 J
MST046	Stream	052104SEMST046-0	5/21/2004	Primary	1.41	26.4	14.7 J	0.5 J	26.8	67
MST047	Stream	052104SEMST047-0	5/21/2004	Primary	0.9	28	16.2 J	<0.5	34.3	82
MST050	Stream	051404SEMST050-0	5/14/2004	Primary	3.89	37.7	26.2	2.1 J	42.6	135
MST053	Stream	052104SEMST053-0	5/21/2004	Primary	1.42	28.5	15.2 J	<0.5	29.7	63
MST054	Stream	052204SEMST054-0	5/22/2004	Primary	0.82	21	12.7 J	2 J	13.7	97
MST055	Stream	051904SEMST055-0	5/19/2004	Primary	2.16	35.4	14.4 J	1 J	40.6 J	67 J
MST057	Stream	051804SEMST057-0	5/18/2004	Primary	4.48	24.4	15	4.4 J	27.5	93
MST058	Stream	051804SEMST058-0	5/18/2004	Primary	2.1	14.2	19.7	2 J	24.9	82
MST062	Stream	051804SEMST062-0	5/18/2004	Primary	1.05	15.7	8.6	<0.6 UJ	13.3	43
MST063	Stream	051804SEMST063-0	5/18/2004	Primary	1.73	24.1	20.3	<0.6 UJ	30.9	73
MST064	Stream	051804SEMST064-0	5/18/2004	Primary	5.65	50	12.9	0.8 J	52	83
MST234	Stream	052004SEMST234-1-QA1	5/20/2004	Triplicate	0.81	20.7	16.2 J	1.7 J	13.4	98

TABLE 3-25

HENRY MINE - SUMMARY OF SEDIMENT EXCEEDANCES
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					Analyte (mg/Kg, dry weight)					
Location	Location Type	Sample Identification	Collection Date	Sample Type	Cadmium	Chromium	Nickel	Selenium	Vanadium	Zinc
				Screening Level:	0.583	36.286	18	4	57	98
MST234	Stream	052004SEMST234-1-QA2	5/20/2004	Triplicate	**0.74**	**23.5**	**12.8 J**	**1.9 J**	**12.7**	**102**
MST234	Stream	052004SEMST234-1-QA3	5/20/2004	Triplicate	**1.28**	**26.5**	**15.1 J**	**0.8 J**	**24.6**	**78**
MST234	Stream	052004SEMST234-1-QA-avg	5/20/2004	Averaged	**0.943**	**23.6**	**14.7 J**	**1.47 J**	**16.9**	**92.7**
MST276	Stream	051804SEMST276-0	5/18/2004	Primary	**4.27**	**86**	**12.5**	**2 J**	**56.5**	**42**
MST277	Stream	052204SEMST277-1-QA1	5/22/2004	Triplicate	**3.67**	**33.8 J**	**23.1**	**0.8 J**	**43.3**	**150**
MST277	Stream	052204SEMST277-1-QA2	5/22/2004	Triplicate	**3.84**	**35.8 J**	**23.3**	**0.7 J**	**47.2**	**152**
MST277	Stream	052204SEMST277-1-QA3	5/22/2004	Triplicate	**3.72**	**34.7 J**	**22.8**	**0.9 J**	**45.1**	**151**
MST277	Stream	052204SEMST277-1-QA-avg	5/22/2004	Averaged	**3.74**	**34.8 J**	**23.1**	**0.8 J**	**45.2**	**151**

TABLE 3-25

HENRY MINE - SUMMARY OF SEDIMENT EXCEEDANCES
(Page 3 of 3)

Notes:

Result is greater than screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sources for Screening Values (see also Table 3-1):

Sediment

Screening levels for aluminum, cadmium, chromium, and zinc are the ARCS threshold effects levels (TELs) for freshwater sediment in NOAA SQuiRT (Buchman, 2008).
Screening level for antimony is from Buchman, M. 1999. NOAA HAZMAT Report 99-1.
Screening levels for arsenic, copper, lead, mercury, and nickel are the TEL for freshwater sediment in NOAA SQuiRT (Buchman, 2008).

Screening levels for cobalt, iron, manganese, and silver are from Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario, August 1993.
Screening level for selenium is from Van Derveer and Canton (1997).
Screening level for vanadium is from the marine sediment AET (Buchman, 2008).

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.
The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-26 HENRY MINE GROUNDWATER MONITORING LOCATIONS						
Mine	Station Description	Location		Station Number	Station Type	Groundwater System Monitored and Screened Interval (ft bgs)
		Latitude	Longitude			
Henry	Dredge Field Well	52 51 57.01	111 29 22.21	MAW004	AW	ND
	Godfrey Field Well West	42 51 59.54	111 30 49.85	MAW006	AW	Basalt 109-89
	Godfrey Field Well North	42 52 29.99	111 29 49.20	MAW007	AW	Alluvial 119-59
	Near the Little Blackfoot River	42 54 14	111 29 23	MBW152	BW	Alluvial 15-10
	North of Henry Mine north pit	42 54 07.7	111 29 46.5	MMW004	MW	Alluvial/ Dinwoody Formation No screen
	Taylor House Well	42 52 29.99	111 26 45.99	MDW003	DW	ND
	Cedar Bay RV Park Well	42 54 32.40	111 31 51.59	MDW005	DW	Alluvial / Travertine 45-40
	Southeast of Center Henry Pit; near MPW023	42 52 22.3	111 27 51.3	MMW010	MW	Alluvial 32-12
	Northwest of Center Henry Pit; south of Little Blackfoot River	42 53 48.3	111 29 30.0	MMW011	MW	Wells Formation 115-95
	Southeast of Henry Mine center pit in Lone Pine Creek alluvial flow field	42 51 59.3	111 27 05.2	MMW014	MW	Alluvial 22-7
	North of Henry Mine center pit	42 53 50.2	111 29 25.4	MMW019	MW	Alluvial 14-4
	Northeast lobe of Henry Mine waste rock dump MWD086	42 53 09.2	111 28 18.3	MMW022	MW	Dinwoody Formation 326-306
	Henry Mine North Pit	42 54 20.50	111 30 27.50	MMW023	MW	Wells Formation 357-352
	Near the Little Blackfoot River northwest of MMW019	42 53 50.24	111 28 60.00	MMW028	MW	Dinwoody Formation 96-76
	South Henry Pit Dewatering Well	42 52 03.5	111 27 28.4	MPW022	PW	ND No Screen
	Center Henry Pit Dewatering Well	42 52 17.7	111 27 47.2	MPW023	PW	ND No Screen

Notes:
Location (GPS) coordinates use the NAD27 datum and are presented in ddd mm ss.ss format (degrees minutes seconds).
ND - Not determined
AW - Agricultural Well
BW - Borehole Monitoring Well
DW - Domestic Well
MW - Monitoring Well
PW - Production Well

TABLE 3-27

HENRY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 1 of 10)

Well Name:			MAW004	MAW004	MAW006	MAW006	MAW007	MAW007	MBW152
Collection Date:			05/21/04	06/12/08	09/15/04	06/12/08	10/06/04	06/11/08	05/16/09
Well Type:			AW	AW	AW	AW	AW	AW	BW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	NS	**0.12 JK**	NS	**0.05 JK**	NS	<0.03 UK	NS
Cadmium, dissolved	mg/L	0.005	<0.0002 UK	<0.0001 UK	<0.0001	<0.0001 UK	NS	<0.0001 UK	NS
Iron, dissolved	mg/L	0.3	NS	**3.41 K**	NS	<0.02 UK	NS	**0.84 K**	NS
Manganese, dissolved	mg/L	0.05	NS	**0.17 K**	NS	**0.0059 K**	NS	**0.354 J+K**	NS
Selenium, dissolved	mg/L	0.05	<0.001	<0.001	<0.001 UJ	<0.001	NS	<0.001	**0.00536 J**
Zinc, dissolved	mg/L	5	**0.008 JK**	**0.006 JK**	**0.022 K**	**0.031 K**	**0.053 J-K**	**0.045 K**	NS
Total Metals									
Aluminum	mg/L	0.2	NS	**0.04 JK**	NS	**4.65 K**	NS	<0.13 UK	NS
Cadmium	mg/L	0.005	<0.0002 UK	<0.0001 UK	<0.0002 UK	**0.0002 JK**	<0.0001	<0.0001 UK	NS
Iron	mg/L	0.3	NS	**3.47 K**	NS	**4.09 K**	NS	**1.27 K**	NS
Manganese	mg/L	0.05	NS	**0.16 K**	NS	**0.193 K**	NS	**0.357 K**	NS
Selenium	mg/L	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NS
Zinc	mg/L	5	**0.037 K**	**0.005 JK**	**0.036 K**	**0.04 K**	**0.087 JK**	**0.073 K**	NS
General Chemistry									
pH		6.5-8.5	NS	**7.7 J**	NS	**8.2 J**	NS	**8.2 J**	NS
Residue, Filterable (TDS)	mg/L	500	NS	**680 J-**	NS	**200 J-**	NS	**300 J-**	NS
Sulfate	mg/L	250	**7.7**	**9.3 J-**	**10.4**	**10.7**	**23.8**	**19.3**	NS

TABLE 3-27

HENRY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MDW003	MDW003	MDW005	MDW005	MMW004	MMW004	MMW004
Collection Date:			05/19/04	05/21/08	05/22/04	05/21/08	05/22/04	10/05/04	06/24/05
Well Type:			DW	DW	DW	DW	MW	MW	MW
Result Type:			Primary	Primary	Primary	Primary	Averaged Triplicate	Primary	Averaged Triplicate
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	NS	<0.03 UK	NS	<0.03 UK	NS	NS	<0.03 UK
Cadmium, dissolved	mg/L	0.005	<0.0002 UK	<0.0001 UK	<0.0002 UK	<0.0001 UK	<0.0002 UK	<0.0001 UK	<0.0001 UK
Iron, dissolved	mg/L	0.3	NS	**0.05 K**	NS	**0.06 K**	NS	NS	**0.417 K**
Manganese, dissolved	mg/L	0.05	NS	**0.862 K**	NS	**0.0049 K**	NS	NS	**0.0133 K**
Selenium, dissolved	mg/L	0.05	**0.001 J**	**0.002 J**	<0.001	**0.001 J**	<0.001	<0.001	**0.00133 J**
Zinc, dissolved	mg/L	5	<0.004 UK	**0.002 JK**	**0.056 K**	**0.084 K**	<0.004 UK	**0.051 K {J+}**	**0.0723 K**
Total Metals									
Aluminum	mg/L	0.2	NS	**0.12 JK**	NS	**0.13 JK**	NS	NS	NS
Cadmium	mg/L	0.005	<0.0002 UK	<0.0001 UK	<0.0002 UK	<0.0001 UK	NS	NS	NS
Iron	mg/L	0.3	NS	**0.19 K**	NS	**0.05 J+K**	NS	NS	NS
Manganese	mg/L	0.05	NS	**0.915 K**	NS	**0.0026 JK**	NS	NS	NS
Selenium	mg/L	0.05	**0.002 J**	**0.002 J**	<0.001	**0.002 J**	NS	NS	NS
Zinc	mg/L	5	**0.005 JK**	<0.002 UK	**0.052 K**	**0.08 K**	NS	NS	NS
General Chemistry									
pH		6.5-8.5	NS	**8 J**	NS	**7.9 J**	NS	NS	**7.73**
Residue, Filterable (TDS)	mg/L	500	NS	**220 J-**	NS	**550 J-**	NS	NS	NS
Sulfate	mg/L	250	**6.4**	**61.6**	**43.7**	**44.7**	**132**	**137**	**123**

TABLE 3-27

HENRY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MMW004	MMW004	MMW004	MMW004	MMW004	MMW004	MMW010
Collection Date:			10/30/05	05/14/06	09/15/07	05/20/08	09/22/08	06/01/09	10/17/07
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Averaged Triplicate	Averaged Triplicate	Primary	Primary	Primary	Primary	Primary
Analyte	Units	Screening Value							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	**0.0333 JK**	<0.03 UK	<0.03 UK	<0.03 UK	<0.0500	NS	**0.03 JK**
Cadmium, dissolved	mg/L	0.005	<0.0001 UK	<0.0001 UK	<0.0001 UK	<0.0001 UK	<0.000125	NS	**0.0001 JK**
Iron, dissolved	mg/L	0.3	<0.02 UK	**0.0333 JK**	<0.02 UK	**0.02 JK**	**0.0374 J**	NS	**0.05 JK**
Manganese, dissolved	mg/L	0.05	**0.0028 J+K**	**0.00243 JK**	**0.0019 JK**	**0.0031 K**	**0.00708**	NS	**3.57 K**
Selenium, dissolved	mg/L	0.05	**0.00133 J**	**0.001 J**	**0.002 J**	**0.002 J**	**0.00244**	NS	<0.001
Zinc, dissolved	mg/L	5	**0.0393 K**	**0.0413 K**	**0.009 JK**	**0.003 JK**	**0.0162 J**	NS	**0.017 K**
Total Metals									
Aluminum	mg/L	0.2	NS	NS	<0.03 UK	<0.03 UK	<0.0500	NS	<0.06 UK
Cadmium	mg/L	0.005	<0.0833 UK	<0.0001 UK	<0.0001 UK	<0.0001 UK	<0.000125	NS	**0.0001 JK**
Iron	mg/L	0.3	**0.633 K**	NS	**0.69 K**	**0.43 K**	**1.07**	NS	**0.36 K**
Manganese	mg/L	0.05	<0.433 UK	NS	**0.0097 K**	**0.0082 K**	**0.0174**	NS	**3.39 K**
Selenium	mg/L	0.05	<0.001	**0.00133 J**	**0.002 J**	**0.002 J**	**0.00254**	**0.00273**	<0.001
Zinc	mg/L	5	**477 K**	**0.138 K**	**0.006 JK**	<0.002 UK	**0.0156 J**	NS	**0.015 K {J+}**
General Chemistry									
pH		6.5-8.5	**7.7**	**7.73**	**7.9 J**	**7.9 J**	NS	NS	**7.4 J**
Residue, Filterable (TDS)	mg/L	500	NS	**483**	**460 J-**	**460 J-**	**514**	**548**	**280 J-**
Sulfate	mg/L	250	**128**	**116**	**129**	**125**	**116**	**112**	**36.7**

TABLE 3-27

HENRY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MMW010	MMW010	MMW010	MMW010	MMW011	MMW011	MMW011
Collection Date:			05/15/08	10/06/08	06/04/09	09/23/09	10/19/07	05/21/08	09/21/08
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	**0.05 J+K**	<0.0500	NS	NS	<0.03 UK	<0.03 UK	<0.0500
Cadmium, dissolved	mg/L	0.005	**0.0021 K**	**0.00544**	NS	NS	**0.0006 K**	**0.0007 K**	**0.000466 J**
Iron, dissolved	mg/L	0.3	<0.02 UK	**0.0357 J**	NS	NS	<0.02 UK	<0.02 UK	**0.0263 J**
Manganese, dissolved	mg/L	0.05	**0.872 K**	**1.12**	NS	NS	**0.0328 K**	**0.0081 K**	**0.000995 J**
Selenium, dissolved	mg/L	0.05	**0.1**	**0.0188**	NS	NS	<0.001	<0.001	**0.00129 J**
Zinc, dissolved	mg/L	5	**0.196 K**	**0.173**	NS	NS	**0.027 K**	**0.027 K**	**0.0287 {J+}**
Total Metals									
Aluminum	mg/L	0.2	**0.12 JK**	<0.0500	NS	NS	**0.24 J+K**	**0.19 JK**	<0.0500
Cadmium	mg/L	0.005	**0.0021 K**	**0.00529**	NS	NS	**0.0007 K**	**0.001 K**	**0.000439 J**
Iron	mg/L	0.3	**0.32 K**	**0.106**	NS	NS	**0.42 K**	**0.34 K**	<0.0250
Manganese	mg/L	0.05	**0.869 K**	**1.11**	NS	NS	**0.0343 K**	**0.0741 K**	**0.00201**
Selenium	mg/L	0.05	**0.1**	**0.0182**	**0.0764**	**0.0191**	<0.001	<0.001	**0.000876 J**
Zinc	mg/L	5	**0.204 K**	**0.175**	NS	NS	**0.061 K**	**0.057 K**	**0.0294**
General Chemistry									
pH		6.5-8.5	**7.6 J**	NS	NS	NS	**8 J**	**8.2 J**	NS
Residue, Filterable (TDS)	mg/L	500	**940 J-**	**1260**	**1770**	**1420**	**420 J-**	**420 J-**	**426**
Sulfate	mg/L	250	**367 J-**	**534**	**688**	**740**	**98.4**	**96.1**	**89.0**

TABLE 3-27

HENRY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MMW011	MMW014	MMW014	MMW014	MMW014	MMW019	MMW019
Collection Date:			06/02/09	09/17/07	05/13/08	09/21/08	06/03/09	09/17/07	05/14/08
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	NS	<0.12 UK	<0.03 UK	<0.0500	NS	<0.09 UK	<0.03 UK
Cadmium, dissolved	mg/L	0.005	NS	<0.0001 UK	**0.0001 JK**	<0.000125	NS	<0.0001 UK	<0.0001 UK
Iron, dissolved	mg/L	0.3	NS	**0.15 K**	**0.04 JK**	**0.0426 J**	NS	<0.04 UK	<0.02 UK
Manganese, dissolved	mg/L	0.05	NS	**0.995 K**	**0.252 K**	**0.367**	NS	**0.0083 K**	<0.0005 UK
Selenium, dissolved	mg/L	0.05	NS	<0.001	<0.001	**0.00227**	NS	<0.001	**0.005 J**
Zinc, dissolved	mg/L	5	NS	**0.006 JK**	**0.005 J+K**	<0.00500	NS	**0.002 JK**	**0.002 JK**
Total Metals									
Aluminum	mg/L	0.2	NS	<0.12 UK	<0.07 UJK	<0.0500	NS	<0.03 UK	<0.03 UK
Cadmium	mg/L	0.005	NS	**0.0001 JK**	**0.0001 JK**	<0.000125	NS	<0.0001 UK	<0.0002 UK
Iron	mg/L	0.3	NS	**0.29 K**	**0.7 K**	**0.526**	NS	<0.02 UK	**0.03 J+K**
Manganese	mg/L	0.05	NS	**0.947 K**	**0.254 K**	**0.391**	NS	**0.0107 K**	**0.001 J-K**
Selenium	mg/L	0.05	**0.00206**	<0.001	<0.001	**0.00203**	**0.00173**	<0.001	**0.004 J-**
Zinc	mg/L	5	NS	**0.005 JK**	<0.004 UK	**0.00637 J**	NS	<0.002 UK	**0.004 JK**
General Chemistry									
pH		6.5-8.5	NS	**7.5 J**	**7.9 J**	NS	NS	**7.8 J**	**8.1 J**
Residue, Filterable (TDS)	mg/L	500	**450**	**580 J-**	**450 J-**	**578**	**350**	**520 J-**	**350 J-**
Sulfate	mg/L	250	**96.8**	**35.8**	**61.9**	**36.9**	**28.6**	**159**	**93.5**

TABLE 3-27

HENRY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MMW019	MMW019	MMW022	MMW022	MMW022	MMW022	MMW023
Collection Date:			09/22/08	06/02/09	09/19/07	05/19/08	09/22/08	39966	39374
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Primary	Primary	Averaged Triplicate	Averaged Triplicate	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	<0.0500	NS	<0.03 UK	<0.03 UK	<0.0500	NS	**0.04 JK**
Cadmium, dissolved	mg/L	0.005	<0.000125	NS	<0.0001 UK	<0.0001 UK	<0.000125	NS	**0.0002 JK**
Iron, dissolved	mg/L	0.3	<0.0250	NS	<0.02 UK	<0.02 UK	<0.0250	NS	**0.5 K**
Manganese, dissolved	mg/L	0.05	**0.00954**	NS	**0.0773 K**	**0.0018 JK**	**0.00118 J**	NS	**0.952 K**
Selenium, dissolved	mg/L	0.05	**0.000665 J**	NS	**0.0163**	**0.018**	**0.0170**	NS	<0.001
Zinc, dissolved	mg/L	5	<0.00500	NS	<0.002 UK	**0.00333 JK**	<0.00500	NS	**0.328 K**
Total Metals									
Aluminum	mg/L	0.2	<0.0500	NS	**0.223 J+K**	<0.03 UK	**0.322**	NS	<0.03 UK
Cadmium	mg/L	0.005	<0.000125	NS	<0.0001 UK	<0.0001 UK	<0.000125	NS	**0.0007 K**
Iron	mg/L	0.3	<0.0250	NS	**0.163 J+K**	<0.02 UK	**0.291**	NS	**0.61 K**
Manganese	mg/L	0.05	**0.000547 J**	NS	**0.101 K**	**0.00717 K**	**0.0243**	NS	**0.936 K**
Selenium	mg/L	0.05	**0.000563 J**	**0.00541**	**0.0173**	**0.017**	**0.0175**	**0.0206**	**0.003 J**
Zinc	mg/L	5	<0.00500	NS	**0.002 JK**	**0.00233 JK**	<0.00500	NS	**0.344 K**
General Chemistry									
pH		6.5-8.5	NS	NS	**8 J**	**8 J**	NS	NS	**7.8 J**
Residue, Filterable (TDS)	mg/L	500	**554**	**308**	**600 J-**	**653 J-**	**618**	**706**	**710 J-**
Sulfate	mg/L	250	**159**	**55.9**	**235**	**260**	**239**	**246**	**211**

TABLE 3-27

HENRY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 7 of 10)

Well Name:			MMW023	MMW023	MMW023	MMW028	MMW028	MPW022	MPW022
Collection Date:			39586	39713	39965	39713	39947	38127	38266
Well Type:			MW	MW	MW	MW	MW	PW	PW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	**0.05 JK**	<0.0500	NS	<0.0500	NS	NS	NS
Cadmium, dissolved	mg/L	0.005	<0.0001 UK	<0.000125	NS	<0.000125	NS	<0.0002 UK	NS
Iron, dissolved	mg/L	0.3	**4.37 K**	**3.71**	NS	<0.0250	<0.0250	NS	NS
Manganese, dissolved	mg/L	0.05	**0.717 K**	**0.724**	NS	**0.000871 J**	NS	NS	NS
Selenium, dissolved	mg/L	0.05	<0.001	**0.000639 J**	NS	**0.00253**	NS	**0.003 J**	NS
Zinc, dissolved	mg/L	5	**0.007 JK**	**0.0174 J**	NS	<0.00500	NS	<0.004 UK	**0.101 J-K**
Total Metals									
Aluminum	mg/L	0.2	<0.03 UK	<0.0500	NS	<0.0500	<0.0500	NS	NS
Cadmium	mg/L	0.005	**0.0015 K**	**0.000765**	NS	<0.000125	<0.000125	NS	NS
Iron	mg/L	0.3	**4.97 K**	**4.13**	NS	<0.0250	<0.0250	NS	NS
Manganese	mg/L	0.05	**0.698 K**	**0.656**	NS	**0.000704 J**	**0.000563 J**	NS	NS
Selenium	mg/L	0.05	**0.004 J**	**0.00389**	**0.0170**	**0.00264**	**0.00551**	NS	NS
Zinc	mg/L	5	**0.104 K**	**0.764**	NS	<0.00500	**1.56**	NS	NS
General Chemistry									
pH		6.5-8.5	**7.7 J**	NS	NS	NS	NS	NS	NS
Residue, Filterable (TDS)	mg/L	500	**700 J-**	**768**	**818**	**484**	**402**	NS	NS
Sulfate	mg/L	250	**222**	**214**	**227**	**68.0**	**70.7**	**2.9 J**	**3.1**

TABLE 3-27

HENRY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 8 of 10)

Well Name:			MPW022	MPW022	MPW022	MPW022	MPW022	MPW022	MPW023
Collection Date:			38527	38656	38851	39344	39583	39715	38265
Well Type:			PW	PW	PW	PW	PW	PW	PW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	<0.03 UK	<0.03 UK	<0.03 UK	<0.03 UK	<0.03 UK	<0.0500	NS
Cadmium, dissolved	mg/L	0.005	<0.0001 UK	<0.0001 UK	<0.0001 UK	<0.0001 UK	<0.0001 UK	<0.000125	<0.0001 UK
Iron, dissolved	mg/L	0.3	**0.13 K**	**4.3 K**	**2.39 K**	**0.04 JK**	**0.1 K**	**0.0368 J**	NS
Manganese, dissolved	mg/L	0.05	**0.0156 K**	**0.233 K**	**0.0926 K**	**0.0279 K**	**0.0273 K**	**0.0379**	NS
Selenium, dissolved	mg/L	0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000500	<0.001
Zinc, dissolved	mg/L	5	**0.043 K {J+}**	**0.127 K {J+}**	**0.006 JK**	<0.002 UK	<0.002 UK	**0.0140 J**	**0.741 K {J+}**
Total Metals									
Aluminum	mg/L	0.2	NS	NS	NS	**0.04 J+K**	<0.03 UK	<0.0500	NS
Cadmium	mg/L	0.005	NS	<0.1 UK	<0.0001 UK	<0.0001 UK	<0.0001 UK	<0.000125	NS
Iron	mg/L	0.3	NS	**8.06 K**	NS	**1.36 K**	**0.55 K**	**0.497**	NS
Manganese	mg/L	0.05	NS	<0.5 UK	NS	**0.0412 K**	**0.0276 K**	**0.0345**	NS
Selenium	mg/L	0.05	NS	<0.001	<0.001	<0.001	<0.001	<0.000500	NS
Zinc	mg/L	5	NS	**547 K**	**0.155 K**	**0.015 K {J+}**	**0.003 JK**	**0.00924 J**	NS
General Chemistry									
pH		6.5-8.5	**8.3**	**7.7**	**7.9**	**8.5 J**	**8.7 J**	NS	NS
Residue, Filterable (TDS)	mg/L	500	NS	NS	**120**	**60 J-**	**70 J-**	**30.0 {J+}**	NS
Sulfate	mg/L	250	**2.8 J**	<0.5	<0.5	<0.5	<1.7 UJ	<0.500	**70**

TABLE 3-27

HENRY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 9 of 10)

Well Name:			MPW023	MPW023	MPW023	MPW023
Collection Date:			38525	39369	39586	39714
Well Type:			PW	PW	PW	PW
Result Type:			Primary	Primary	Primary	Primary
Analyte	Units	Screening Value				
Dissolved Metals						
Aluminum, dissolved	mg/L	0.2	<0.03 UK	<0.03 UK	<0.03 UK	<0.0500
Cadmium, dissolved	mg/L	0.005	<0.0001 UK	<0.0001 UK	<0.0001 UK	<0.000125
Iron, dissolved	mg/L	0.3	**0.2 K**	**0.24 K**	**0.2 K**	**0.230**
Manganese, dissolved	mg/L	0.05	**0.186 K**	**0.211 K**	**0.2 K**	**0.212**
Selenium, dissolved	mg/L	0.05	<0.001	<0.001	<0.001	**0.000718 J**
Zinc, dissolved	mg/L	5	**0.59 K {J+}**	**0.72 K**	**0.648 K**	**0.734**
Total Metals						
Aluminum	mg/L	0.2	NS	<0.03 UK	<0.03 UK	<0.0500
Cadmium	mg/L	0.005	NS	<0.0001 UK	<0.0001 UK	<0.000125
Iron	mg/L	0.3	NS	**0.28 K**	**0.26 K**	**0.303**
Manganese	mg/L	0.05	NS	**0.2 K**	**0.197 K**	**0.204**
Selenium	mg/L	0.05	NS	<0.001	<0.001	**0.000653 J**
Zinc	mg/L	5	NS	**0.859 K**	**0.658 K**	**0.857**
General Chemistry						
pH		6.5-8.5	**8.2**	**8.1 J**	**8.1 J**	NS
Residue, Filterable (TDS)	mg/L	500	NS	**310 J-**	**310 J-**	**304**
Sulfate	mg/L	250	**63.1**	**68.2**	**64.7**	**58.5**

TABLE 3-27

HENRY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 10 of 10)

Notes:
AW - agricultural well
BW - direct-push alluvial aquifer well
DW - domestic well
MW - monitoring well
NS- not sampled
PW - production well

Result is greater than screening value
Method detection limit for non-detected value is greater than the screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
K	Serial dilutions not performed for samples analyzed by this method (EPA 200.7; 200.8).

Sources for Screening Values (see also Table 3-1):

Groundwater Unless identified otherwise below, screening levels are from State of Idaho Ground Water Quality Rule (IDAPA 58.01.11).
Screening levels for pH, aluminum, chloride, iron, manganese, pH, silver, sulfate, TDS, and zinc are Secondary Maximum Contaminant Levels (MCLs).
Screening values for arsenic and uranium are USEPA primary and secondary MCLs, National Primary Drinking Water Regulations, EPA.
Screening values for boron, cobalt, molybdenum, nickel, and vanadium are USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites.

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.
The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-28
HENRY MINE
STREAM HABITAT ASSESSMENT DATA MATRIX

Station	May 2004 [Se]sw, mg/L	May 2004 [Se]sed, mg/kg dw	RBS (Habitat Score)	Fish Presence
MST043	0.00050	1.7	57	X
MST044	0.00050	1.1	143	X[a]
MST045	0.00050	1.1	31	X[a]
MST046	0.00050	0.50	73	X[a]
MST047	0.00050	0.25	48	X[a]
MST048*	0.00050	0.90	151	X
MST049**	0.00050	0.25	139	X[a]
MST050	0.00050	2.1	52	No
MST053	0.00050	0.25	52	X
MST054	0.00050	2.0	25	No
MST055	0.0020	1.0	43	No
MST057	0.0020	4.4	44	No
MST058	0.00050	2.0	34	No
MST062	0.00050	0.30	47	No
MST063	0.0020	0.30	29	No
MST064	0.0020	0.80	55	No
MST234	0.00050	1.5	76	X
MST254**	0.00050	0.25	103	X
MST276*	0.0030	2.0	56	No
MST277	0.00050	0.80	7	No

Notes:
Non-detected concentrations have been censored at one-half the MDL. MDL for surface water was 0.0010 mg/L and for sediment was 0.50 mg/kg dw.
* - Mine-specific background station
** - Regional background station
a - no fish observed, but presumed to be present based on hydraulic connection to adjacent stations with fish present
[Se]sw, mg/L – concentration of selenium in surface reported in mg/L
[Se]sed, mg/kg dw – concentration of selenium in sediment, reported in mg/kg on a dw basis

TABLE 3-29 HENRY MINE HISTORICAL FORAGE FISH SELENIUM CONCENTRATIONS (mg/kg dw)			
Henry Mine Station	**Station ID**	**May 2004**	**Flag**
Reservoir Delta at Little Blackfoot River	MRV016	2.8	
Little Blackfoot River, below Long Valley Creek	MST043	6.1	
Little Blackfoot River, below Reese Creek	MST048*	3.7	
Lone Pine Creek, above Little Blackfoot River	MST053	3.5	
Little Blackfoot River, above Blackfoot Reservoir	MST234	3.9	
Little Blackfoot River, upstream of Henry cutoff road	MST254**	2.4	U

Notes:
* - Mine-specific background station
** - Regional background station
U - Non-detect (Non-detected concentrations were censored and value presented is equal to the MDL)

TABLE 3-30
HENRY MINE
HISTORICAL BENTHIC MACROINVERTEBRATE SELENIUM CONCENTRATIONS
(mg/kg dw)

Henry Mine Station	Station ID	June 2004	Flag
Henry Mine South Pit Overburden Dump Limestone Drain	MDS022	130	UJ
Reservoir Delta at Little Blackfoot River	MRV016	2.9	UJ
Little Blackfoot River, below Long Valley Creek	MST043	3.2	UJ
Little Blackfoot River, immediately below Henry Mine,	MST044	8.3	UJ
Little Blackfoot River, above Henry Creek	MST045	6.3	UJ
Little Blackfoot River, below Lone Pine Creek	MST046	5.5	UJ
Little Blackfoot River, above Lone Pine Creek	MST047	13	UJ
Little Blackfoot River, below Reese Creek	MST048*	2.6	UJ
Little Blackfoot River, above Reese Creek	MST049**	3.8	J
Long Valley Creek, below Ballard Mine, (ponded area)	MST050	5.0	UJ
Lone Pine Creek, above Little Blackfoot River	MST053	4.2	UJ
Lone Pine Creek, above Spring-Fed Creek	MST054	3.1	UJ
Lone Pine Creek, below Strip Mine Creek	MST055	4.5	UJ
Lone Pine Creek, above Lone Pine Creek	MST057	6.2	J
Lone Pine Creek, above West Fork Lone Pine Creek	MST058	42	UJ
Strip Mine Creek, above Lone Pine Creek	MST062	1.7	UJ
Strip Mine Creek, below Henry Mine	MST063	15	UJ
West Fork Lone Pine Creek, above tributary	MST064	3.5	UJ
Little Blackfoot River, above Blackfoot Reservoir	MST234	1.8	UJ
Little Blackfoot River, upstream of Henry cutoff road	MST254**	1.3	UJ
North Fork Lone Pine Creek, Northeast and above East Fork Lone Pine Creek	MST275	4.2	UJ
Tributary to West Fork Lone Pine Creek, above West Fork Lone Pine Creek	MST276	2.9	J
Spring-fed tributary, above Lone Pine Creek	MST277	29	UJ

Notes:
* - Mine-specific background station
** - Regional background station
Flags:
U – Non-detect (Non-detected concentrations were censored and value presented is equal to the MDL)
J – Estimated result

TABLE 3-31 HENRY MINE HISTORICAL SMALL MAMMAL SELENIUM CONCENTRATIONS (mg/kg dw)					
Henry Mine Station	Station ID	Species		Sept 2001	Flag
		Common Name	Scientific Name		
Little Blackfoot River, above Reese Creek	MST049	least chipmunk	T. minimus	0.26	J
	MST049	least chipmunk	T. minimus	0.55	J
	MST049	deer mouse	P. maniculatus	0.45	J
Henry Mine Pit #1 Overburden Dump	MWD086-Quadrat1	deer mouse	P. maniculatus	2.2	J
	MWD086-Quadrat2	deer mouse	P. maniculatus	2.6	J
	MWD086-Quadrat3	deer mouse	P. maniculatus	2.0	J
Notes: J – Estimated result					

TABLE 3-32 HENRY MINE HISTORICAL TERRESTRIAL INVERTEBRATE SELENIUM CONCENTRATIONS (mg/kg dw)			
Henry Mine Station	Station ID - Sample Type	Sept 2001	Flag
Little Blackfoot River, above Reese Creek	MST049 - Insects	0.67	
	MST049 - Worms	21	
Henry Mine Pit #1 Overburden Dump	MWD086-Quadrat1 - Insects	7.9	
	MWD086-Quadrat2 - Insects	12	
	MWD086-Quadrat3 - Insects	10	

TABLE 3-33 HENRY MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Soils	2004	1) 52 locations on 4 transects	Se	See Drawing 3-28	See Section 3.3.1.1 Se ranged from 0.25 to 53 mg/kg dw.	The nature and extent of surface soil impacts at the Henry Mine has been defined adequately so that if necessary, risk assessments and the feasibility study (FS) can be conducted for the non-radiogenic COPCs. However for radiogenic risks, to reduce the uncertainty in the inherently conservative risk calculations, site-specific uranium isotopes data for soil and radon and gamma measurements will be collected both on site and in a background area(s). Also, a data gap has been identified for sediment (see below) and this carries forward to riparian soils. Therefore, some additional limited sampling of riparian soil is needed. Further evaluation of current background data also is needed to statistically quantify background concentrations.
	2009	2) 70 composite samples	Sb, As, B, Cd, Cr, Co, Cu, Mn, Hg, Mo, Ni, Se, Ag, Tl, U, V, Zn	See Drawing 3-30	See Section 3.3.1.2 - Isolated exceedances of Cd, Mn and V above screening levels (SLs). - As and Mn background exceeded SLs. - As and Se exceedances above SLs. - As ranged from 4.38 to 45.5 mg/kg dw - Se ranged from 57.1 to 318 mg/kg dw.	
	2004	3) 35 riparian soil samples	Cd, Cr, Cu, Mo, Ni, Se, V, Zn	See Drawing 3-6	See Section 3.3.1.3 Isolated exceedances of Cd, Ni, and V. Se exceedances. Se ranged from 0.25 to 45 mg/kg dw.	

TABLE 3-33 HENRY MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Vegetation	2004	1) 52 locations on 4 transects	Se	See Drawing 3-29	See Section 3.3.2.1 Se ranged from 0.25 to 1.9 mg/kg dw.	The nature and extent of vegetation impacts at the Henry Mine has been defined adequately so that risk assessments and the FS can be conducted. As a result, no further field characterization is necessary. However, further evaluation of existing background data is needed.
	2004	2) Composite samples monthly (i.e. for 6 months)	Se	See Drawing 3-6	See Section 3.3.2.2 Monthly vegetation Se samples ranged from 0.80 to 7.5 mg/kg dw.	
	2009	3) 170 samples	Sb, As, B, Cd, Cr, Co, Cu, Mn, Hg, Mo, Ni, Se, Ag, Tl, U, V, Zn	See Drawing 3-31	See Section 3.3.2.3 - Mo and Se exceedances above SLs. - Mo ranged from 1.46 to 74.6 mg/kg. - Se ranged from 0.45 to 146 mg/kg dw.	
	2004	4) 35 riparian samples	Cd, Cu, Mo, Se, Zn	See Drawing 3-6	See Section 3.3.2.4 Se exceedances Se ranged from 0.25 to 65 mg/kg dw.	

TABLE 3-33 HENRY MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Surface Water	Fall and Spring 1997 - 2009	31 sampling stations	Metals Cations Anions General Water Quality Parameters Field Parameters	See Drawings 3-8 to 3-10 and 3-32 to 3-33	See Section 3.3.3.1 Al, Ba, B, Cd, Fe, Mn, Ni, Tl, Se, V, and Zn exceeded SLs.	The nature and extent of surface water impacts at the Henry Mine has been defined adequately so that if necessary, risk assessments and the FS can be conducted. As a result, no further field characterization is required. However, ongoing monitoring is necessary to collect baseline effectiveness monitoring of potential future remedies. Further evaluation of existing background data is needed.
Sediment	5 events: Fall 1998, Fall 1999, Spring 2002, Fall 2002, and Spring 2004	28 sampling stations	Metals Cations Anions pH TOC	See Drawings 3-9, 3-13, and 3-32	See Section 3.3.3.2 Cd, Cr, Ni, Se, and V exceeded SLs.	The spatial characterization of sediment impacts at the Henry Mine has been defined adequately so that if necessary, risk assessments and the FS can be conducted. However, a data gap relating to COPC coverage in sediments has been identified and will be addressed by the Fall 2010 sampling event as described in Appendix D1. In addition further evaluation of existing background data is needed.

TABLE 3-33 HENRY MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Groundwater	Fall and Spring 2004 - 2009	16 wells	Metals Cations Anions General Water Quality Parameters General Field Parameters	See Drawings 3-35 and 3-36	See Section 3.3.4 - Isolated exceedances of Cd and Zn above SLs. - Elevated concentrations of Al, Fe, Mn above SLs - Se, SO_4, and TDS exceedances above SLs. - Se ranged from non-detect to 0.1 mg/L. Se exceeds standard in shallow groundwater.	The nature and extent for groundwater at the Henry Mine has been defined except for limited areas as discussed in Section 4.0.
Aquatic Biota						
Stream Habitat Assessment	2004	20 stations	NA	See Drawing 3-21	See Section 3.3.5.1 RBS scores from 31 to 151 out of 200	The nature and extent for stream habitat data at the Henry Mine has been defined adequately so that if necessary, risk assessments and the FS can be conducted. As a result, no further characterization is needed.

TABLE 3-33 HENRY MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Fish	2004	6 stations	Cd, Ni, Se, V, Zn	See Drawings 3-20 and 3-21	See Section 3.3.5.2 Forage fish Se ranged from 2.4 to 6.1 mg/kg dw. No salmonids were collected.	Nature and extent information for fish data at the Henry Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.
Benthic Macroinvertebrates	2004	23 stations	Se	See Drawing 3-21	See Section 3.3.5.3 Detected Se ranged from 2.9 to 6.2 mg/kg dw. Two of the three detected selenium results exceeded the SL In addition the MDL was usually above the SL.	Nature and extent information for benthic macroinvertebrate data at the Henry Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.

TABLE 3-33 HENRY MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Terrestrial Biota						
Elk	1999 2000	160 elk 54 elk	Ca and Se Cd, Cu, Fe, Pb, Mn, Mo, Se, and Zn	See Drawings 3-22 and 3-37	See Section 3.3.6.1 Se ranged from 0.65 to 39 mg/kg dw in elk livers Se ranged from 0.60 to 41 mg/kg dw in elk livers	Nature and extent information for elk data at the Henry Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.
Bird Eggs	1999 2000 2001	215 eggs 334 eggs 369 eggs	Cd and Se Cd and Se Se	See Drawings 3-23 to 3-25 and 3-37	See Section 3.3.6.2 Se ranged from 0.61 to 21.3 mg/kg dw Se ranged from 0.29 to 25 mg/kg dw Se ranged from 1.3 to 31.9 mg/kg dw	Nature and extent information for bird egg data at the Henry Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.

TABLE 3-33 HENRY MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Cattle	1999	20 Steers – skeletal muscle, kidney, liver, heart,	Cd, Cu, Fe, Mn, Mo, Pb, Se, Zn	See Drawing 3-37	Tissue Se ranged from 0.097 mg/kg dw in skeletal muscle to 2.2 mg/kg dw in kidney.	Nature and extent information for cattle data at the Henry Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.
Small Mammals	2001	3 quadrat samples, 1 riparian station	Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb , Mn, Hg, Mo Ni, Se, Ag, Th, V, U, and Zn	See Drawings 3-22 and 3-37	See Section 3.3.6.4 Se ranged from 0.26 to 2.6 mg/kg dw .	Nature and extent information for small mammals data at the Henry Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.

TABLE 3-33 HENRY MINE SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Terrestrial Invertebrates	2001	3 quadrat samples, 1 riparian station	Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb , Mn, Hg, Mo Ni, Se, Ag, Th, V, U, and Zn	See Drawings 3-22 and 3-37	See Section 3.3.6.5 Se ranged from 0.67 to 21 mg/kg dw	Nature and extent information for terrestrial invertebrates data at the Henry Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.

TABLE 3-34

ENOCH VALLEY MINE - SUMMARY OF SOIL EXCEEDANCES
(Page 1 of 5)

				Analyte (mg/Kg, dry weight)					
Sample Identification	**Collection Date**	**Sample Medium**	**Sample Type**	**Arsenic**	**Cadmium**	**Manganese**	**Nickel**	**Selenium**	**Vanadium**
			Screening Value:	**0.39**	**70**	**1800**	**1500**	**390**	**390**
MAR001 (Active Haul Road)									
0906-MAR001-01-SS	6/20/2009	Soil	Primary	**7.84**	**36.9**	**191**	**127**	**13.4**	**219**
0906-MAR001-02-SS	6/20/2009	Soil	Primary	**8.13**	**26.1**	**218**	**147**	**9.73**	**111**
0906-MAR001-03-SS	6/20/2009	Soil	Primary	**8.05**	**29.0**	**226**	**149**	**10.4**	**149**
0906-MAR001-04-SS	6/20/2009	Soil	Primary	**7.91**	**17.0**	**222**	**135**	**10.6**	**75.8**
0906-MAR001-05-SS	6/20/2009	Soil	Primary	**7.53**	**17.7**	**217**	**117**	**9.75**	**71.1**
MBE001 (Enoch Valley Background)									
0906-MBE001-01-SS	6/22/2009	Soil	Primary	**4.98**	**0.538**	**3460**	**27.7**	**0.640 J**	**20.2**
0906-MBE001-03-SS	6/21/2009	Soil	Primary	**6.05 J**	**1.67**	**2660**	**27.3**	**0.917 J**	**24.9 J+**
0906-MBE001-04-SS	6/21/2009	Soil	Primary	**5.37 J**	**2.52**	**2440 J**	**19.6**	**0.696 J**	**24.0 J+**
0906-MBE001-05-SS	6/21/2009	Soil	Primary	**5.62 J**	**1.11**	**2040 J**	**22.5**	**0.816 J**	**22.1 J+**
0906-MBE001-06-SS	6/21/2009	Soil	Primary	**3.77 J**	**1.14**	**1350 J**	**21.7**	**0.935 J**	**18.5 J+**
0906-MBE001-07-SS-1	6/21/2009	Soil	Triplicate	**7.47**	**9.39**	**877**	**60.4**	**6.65 J**	**53.7**
0906-MBE001-07-SS-2	6/21/2009	Soil	Triplicate	**6.99**	**7.99**	**1110**	**59.0**	**5.38 J**	**48.8**
0906-MBE001-07-SS-3	6/21/2009	Soil	Triplicate	**8.5**	**11.6**	**974**	**70.2**	**8.63 J**	**54.1**
0906-MBE001-07-SS-avg	6/21/2009	Soil	Averaged	**7.65**	**9.66**	**987**	**63.2**	**6.89 J**	**52.2**
0906-MBE001-08-SS	6/21/2009	Soil	Primary	**6.49 J**	**6.50**	**1150**	**27.2**	**1.66 J**	**31.2 J+**
0906-MBE001-09-SS	6/21/2009	Soil	Primary	**5.72**	**5.07**	**2170**	**32.2**	**0.834 J**	**29.8**
0906-MBE001-10-SS	6/21/2009	Soil	Primary	**4.54 J**	**2.04**	**1580**	**21.0**	**0.537 J**	**24.4 J+**
0906-MBE001-AH2-SS	6/22/2009	Soil	Primary	**7.05**	**8.90**	**564**	**28.4**	**2.00 J**	**36.8 J+**
MDS025 (Dump Seep)									
SSMDS025-0-C(5)	9/12/2004	Soil	Primary	NS	**35 J**	NS	**1750 J**	**50**	**232 J**
MDS026 (Dump Seep)									
SSMDS026-0-C(5)	9/12/2004	Soil	Primary	NS	**15.9 J**	NS	**52 J**	**6.5**	**123**
MSG001 (Spring)									
SSMSG001-0-C(5)	9/11/2004	Soil	Primary	NS	**0.65 J**	NS	**18.8 J**	**0.7 J**	**37.4**
MSP017 (Pond)									
SSMSP017-0-C(5)	9/12/2004	Soil	Primary	NS	**21.2 J**	NS	**84 J**	**50**	**136 J**
MSP018 (Pond)									
SSMSP018-0-C(7)	9/11/2004	Soil	Primary	NS	**102 J**	NS	**779 J**	**70**	**216 J**
MSP019 (Pond)									
SSMSP019-0-C(6)	9/11/2004	Soil	Primary	NS	**41 J**	NS	**91 J**	**9.8**	**268 J**
MSP020 (Pond)									
SSMSP020-0-C(5)	9/11/2004	Soil	Primary	NS	**23.5 J**	NS	**119 J**	**17.9**	**129 J**
MSP021 (Pond)									
SSMSP021-0-C(5)	9/11/2004	Soil	Primary	NS	**46 J**	NS	**120 J**	**42**	**291 J**
MSP022 (Pond)									
SSMSP022-0-C(6)	9/11/2004	Soil	Primary	NS	**7.1 J**	NS	**35 J**	**6.7**	**97.5 J**
MSP023 (Pond)									
SSMSP023-0-C(5)	9/11/2004	Soil	Primary	NS	**30 J**	NS	**124 J**	**25.4**	**435 J**
MSP031 (Pond)									
SSMSP031-0-C(5)	9/11/2004	Soil	Primary	NS	**12.8 J**	NS	**120 J**	**24.3**	**184 J**
MST023 (Stream)									
SSMST023-0-C(8)	9/14/2004	Soil	Primary	NS	**0.77**	NS	**10.5 J**	**1.1 J**	**17**
MST024 (Stream)									
SSMST024-0-C(11)	9/14/2004	Soil	Primary	NS	**0.72**	NS	**9 J**	**0.9 J**	**16.5**
MST025 (Stream)									
SSMST025-1-C(7)QA1	9/14/2004	Soil	Triplicate	NS	**1.1**	NS	**10.3 J**	**1 J**	**18.5**
SSMST025-1-C(7)QA2	9/14/2004	Soil	Triplicate	NS	**0.99**	NS	**10.6 J**	**0.9 J**	**19.1**
SSMST025-1-C(7)QA3	9/14/2004	Soil	Triplicate	NS	**0.96**	NS	**10.9 J**	**0.9 J**	**19.6**
SSMST025-1-C(7)QA-avg	9/14/2004	Soil	Averaged	NS	**1.02**	NS	**10.6 J**	**0.933 J**	**19.1**
MST026 (Stream)									
SSMST026-0-C(5)	9/10/2004	Soil	Primary	NS	**2.4 J**	NS	**14.7 J**	**0.8 J**	**27.1 J**
MST027 (Stream)									
SSMST027-0-C(5)	9/9/2004	Soil	Primary	NS	**0.87**	NS	**11.5**	<0.5	**20.5**

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ENOCH VALLEY MINE - SUMMARY OF SOIL EXCEEDANCES
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				Analyte (mg/Kg, dry weight)					
Sample Identification	**Collection Date**	**Sample Medium**	**Sample Type**	**Arsenic**	**Cadmium**	**Manganese**	**Nickel**	**Selenium**	**Vanadium**
			Screening Value:	**0.39**	**70**	**1800**	**1500**	**390**	**390**
MST059 (Stream)									
SSMST059-1-C(5)QA1	9/14/2004	Soil	Triplicate	NS	**2.86 J+**	NS	**23.8 J**	<0.5	**43.9 J**
SSMST059-1-C(5)QA2	9/14/2004	Soil	Triplicate	NS	**3.15 J+**	NS	**22.8 J**	<0.5	**40.6 J**
SSMST059-1-C(5)QA3	9/14/2004	Soil	Triplicate	NS	**3.01 J+**	NS	**18.2 J**	<0.5	**32.2 J**
SSMST059-1-C(5)QA-avg	9/14/2004	Soil	Averaged	NS	**3.01 J+**	NS	**21.6 J**	<0.5	**38.9 J**
MST060 (Stream)									
SSMST060-0-C(5)	9/14/2004	Soil	Primary	NS	**5.87 J+**	NS	**19.6 J**	**0.7 J**	**35.1 J**
MST061 (Stream)									
SSMST061-1-C(5)QA1	9/14/2004	Soil	Triplicate	NS	**12.7 J+**	NS	**47.9 J**	**2.3 J**	**60.2 J**
SSMST061-1-C(5)QA2	9/14/2004	Soil	Triplicate	NS	**13.4 J+**	NS	**47.7 J**	**2.1 J**	**60 J**
SSMST061-1-C(5)QA3	9/14/2004	Soil	Triplicate	NS	**12.6 J+**	NS	**47.9 J**	**2.3 J**	**62.3 J**
SSMST061-1-C(5)QA-avg	9/14/2004	Soil	Averaged	NS	**12.9 J+**	NS	**47.8 J**	**2.23 J**	**60.8 J**
MST126 (Stream)									
SSMST126-0-C(5)	9/9/2004	Soil	Primary	NS	**2.43**	NS	**23.4**	<0.5	**39**
MST127 (Stream)									
SSMST127-0-C(5)	9/9/2004	Soil	Primary	NS	**2.66**	NS	**20.8**	<0.5	**35.6**
MST131 (Stream)									
SSMST131-0-C(5)	9/9/2004	Soil	Primary	NS	**1.99**	NS	**21.4**	<0.5	**35.7**
MST132 (Stream)									
SSMST132-1-C(6)QA1	9/9/2004	Soil	Triplicate	NS	**3.25**	NS	**24.9**	<0.5	**39.2**
SSMST132-1-C(6)QA2	9/9/2004	Soil	Triplicate	NS	**3.44**	NS	**24.2**	<0.5	**39.2**
SSMST132-1-C(6)QA3	9/9/2004	Soil	Triplicate	NS	**3.29**	NS	**23.9**	<0.5	**40.3**
SSMST132-1-C(6)QA4	9/9/2004	Soil	Triplicate	NS	NS	NS	NS	NS	NS
SSMST132-1-C(6)QA-avg	9/9/2004	Soil	Averaged	NS	**3.33**	NS	**24.3**	<0.5	**39.6**
MST133 (Stream)									
SSMST133-0-C(5)	9/8/2004	Soil	Primary	NS	**2.05**	NS	**27.4**	**0.8 J**	**38.8**
MST134 (Stream)									
SSMST134-0-C(5)	9/8/2004	Soil	Primary	NS	**2.81**	NS	**24.6**	**3.7**	**40.7**
MST135 (Stream)									
SSMST135-0-C(5)	9/8/2004	Soil	Primary	NS	**2.7**	NS	**22.2**	**2.5 J**	**44.5**
MST136 (Stream)									
SSMST136-0-C(7)	9/11/2004	Soil	Primary	NS	**2.6 J**	NS	**29.7 J**	**1.3 J**	**29.5 J**
MST143 (Stream)									
SSMST143-0-C(6)	9/8/2004	Soil	Primary	NS	**3.4**	NS	**22.9**	<0.5	**47.8**
MST144 (Stream)									
SSMST144-0-C(5)	9/12/2004	Soil	Primary	NS	**8.7 J**	NS	**41 J**	**6.1**	**75.6 J**
MST269 (Stream)									
SSMST269-0-C(5)	9/12/2004	Soil	Primary	NS	**26.3 J**	NS	**205 J**	**14.3**	**235**
MTA001 (Tipple Area)									
0906-MTA001-01-SS	6/19/2009	Soil	Primary	**7.78**	**29.7**	**716**	**65.6**	**13.2 J**	**174 J+**
0906-MTA001-02-SS	6/19/2009	Soil	Primary	**5.69**	**0.967**	**1640**	**21.4**	**0.821 J**	**21.1 J+**
0906-MTA001-03-SS	6/19/2009	Soil	Primary	**7.59**	**25.7**	**758**	**82.7**	**10.5 J**	**152 J+**
0906-MTA001-04-SS	6/19/2009	Soil	Primary	**13.2**	**72.2**	**284**	**163**	**39.7 J**	**575 J+**
0906-MTA001-05-SS	6/19/2009	Soil	Primary	**5.2**	**0.497**	**506**	**22.8**	**0.733 J**	**22.5 J+**
MWD091 (Waste Rock Dump)									
SSMWD091-10-C(6)	7/19/2004	Soil	Primary	NS	NS	NS	NS	<0.5	NS
SSMWD091-11-C(5)	7/19/2004	Soil	Primary	NS	NS	NS	NS	<0.5	NS
SSMWD091-12-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**1.2 J-**	NS
SSMWD091-13-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**0.8 J-**	NS
SSMWD091-14-C(5)QA1	7/20/2004	Soil	Triplicate	NS	NS	NS	NS	**4.1 J-**	NS
SSMWD091-14-C(5)QA2	7/20/2004	Soil	Triplicate	NS	NS	NS	NS	**3.7 J-**	NS
SSMWD091-14-C(5)QA3	7/20/2004	Soil	Triplicate	NS	NS	NS	NS	**4.3 J-**	NS
SSMWD091-14-C(5)QA-avg	7/20/2004	Soil	Averaged	NS	NS	NS	NS	**4.03 J-**	NS
SSMWD091-15-C(6)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**23.3 J-**	NS
SSMWD091-16-C(10)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**112 J-**	NS

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ENOCH VALLEY MINE - SUMMARY OF SOIL EXCEEDANCES
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				Analyte (mg/Kg, dry weight)					
Sample Identification	**Collection Date**	**Sample Medium**	**Sample Type**	**Arsenic**	**Cadmium**	**Manganese**	**Nickel**	**Selenium**	**Vanadium**
			Screening Value:	**0.39**	**70**	**1800**	**1500**	**390**	**390**
SSMWD091-17-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**1.2 J-**	NS
SSMWD091-18-C(6)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**0.8 J-**	NS
SSMWD091-19-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	<0.5 UJ	NS
SSMWD091-1-C(6)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**19.2**	NS
SSMWD091-20-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**0.5 J-**	NS
SSMWD091-21-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**0.7 J**	NS
SSMWD091-22-C(8)	7/20/2004	Soil	Primary	NS	NS	NS	NS	<0.5 UJ	NS
SSMWD091-23-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	<0.5 UJ	NS
SSMWD091-24-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**2.2 J-**	NS
SSMWD091-25-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**3.3 J-**	NS
SSMWD091-26-C(7)	7/20/2004	Soil	Primary	NS	NS	NS	NS	<0.5 UJ	NS
SSMWD091-27-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**4.9 J-**	NS
SSMWD091-28-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**4.2 J-**	NS
SSMWD091-29-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**2.8 J-**	NS
SSMWD091-2-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**17**	NS
SSMWD091-30-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**7.7 J-**	NS
SSMWD091-31-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**2.4 J-**	NS
SSMWD091-32-C(9)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**3.2**	NS
SSMWD091-33-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**4.1**	NS
SSMWD091-34-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**3.6**	NS
SSMWD091-35-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**2.6 J**	NS
SSMWD091-36-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**2.2 J**	NS
SSMWD091-37-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**2.3 J**	NS
SSMWD091-38-C(10)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**2.4 J**	NS
SSMWD091-39-C(7)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**3.5**	NS
SSMWD091-3-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**141**	NS
SSMWD091-4-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	**0.9 J**	NS
SSMWD091-5-C(5)	7/20/2004	Soil	Primary	NS	NS	NS	NS	<0.5	NS
SSMWD091-6-C(6)	7/20/2004	Soil	Primary	NS	NS	NS	NS	<0.5	NS
SSMWD091-7-C(5)	7/19/2004	Soil	Primary	NS	NS	NS	NS	<0.5	NS
SSMWD091-8-C(5)	7/19/2004	Soil	Primary	NS	NS	NS	NS	<0.5	NS
SSMWD091-9-C(7)	7/19/2004	Soil	Primary	NS	NS	NS	NS	<0.5	NS
MWD091N (Waste Rock Dump)									
0906-MWD091N-01-SS	6/22/2009	Soil	Primary	**5.52**	**5.82**	**492**	**34.2**	**6.03 J**	**37.0 J+**
0906-MWD091N-02-SS	6/22/2009	Soil	Primary	**5.81**	**9.64**	**490**	**54.4**	**5.21 J**	**55.5**
0906-MWD091N-03-SS	6/20/2009	Soil	Primary	**24.2**	**16.0**	**260**	**117**	**13.2**	**75.9**
0906-MWD091N-04-SS	6/22/2009	Soil	Primary	**8.73**	**15.0**	**368**	**118**	**16.7 J**	**69.4**
0906-MWD091N-05-SS	6/20/2009	Soil	Primary	**6.17**	**6.50**	**449**	**60.5**	**2.01**	**35.5**
0906-MWD091N-06-SS	6/20/2009	Soil	Primary	**15.2**	**46.5**	**414**	**176**	**18.6**	**229**
0906-MWD091N-07-SS-1	6/22/2009	Soil	Triplicate	**27.7**	**52.7**	**198**	**256**	**42.6 J**	**220**
0906-MWD091N-07-SS-2	6/22/2009	Soil	Triplicate	**28.6**	**60.9**	**197**	**263**	**45.9 J**	**260**
0906-MWD091N-07-SS-3	6/22/2009	Soil	Triplicate	**27.9**	**46.6**	**222**	**269**	**33.5 J**	**234**
0906-MWD091N-07-SS-avg	6/22/2009	Soil	Averaged	**28.1**	**53.4**	**206**	**263**	**40.7 J**	**238**
0906-MWD091N-08-SS	6/22/2009	Soil	Primary	**24.5**	**38.9**	**247**	**237**	**128 J**	**235**
0906-MWD091N-09-SS	6/20/2009	Soil	Primary	**6.41**	**1.96**	**278**	**96.5**	**10.0**	**17.3**
0906-MWD091N-10-SS	6/20/2009	Soil	Primary	**5.6**	**6.70**	**619**	**47.6**	**3.62**	**32.5**
MWD091S (Waste Rock Dump)									
0906-MWD091S-01-SS	6/19/2009	Soil	Primary	**5.39**	**1.87**	**1600**	**21.0**	**0.528 J**	**26.8**
0906-MWD091S-02-SS	6/19/2009	Soil	Primary	**18.7**	**37.5**	**206**	**159**	**23.4 J**	**236**
0906-MWD091S-03-SS	6/21/2009	Soil	Primary	**10.9 J**	**27.5**	**373**	**110**	**10.2 J**	**173 J+**
0906-MWD091S-04-SS	6/19/2009	Soil	Primary	**8.91**	**27.9**	**944**	**104**	**9.21 J**	**173**
0906-MWD091S-05-SS	6/19/2009	Soil	Primary	**7.21**	**37.3**	**319**	**92.8**	**9.77 J**	**251**
0906-MWD091S-06-SS	6/19/2009	Soil	Primary	**12.1**	**21.5**	**487**	**164**	**29.0 J**	**127**
0906-MWD091S-07-SS-1	6/19/2009	Soil	Triplicate	**6.06**	**11.2**	**989**	**60.2**	**12.6 J**	**55.3**
0906-MWD091S-07-SS-2	6/19/2009	Soil	Triplicate	**7.83**	**14.3**	**804**	**90.8**	**13.9 J**	**91.4**
0906-MWD091S-07-SS-3	6/19/2009	Soil	Triplicate	**6.68**	**11.9**	**1350**	**77.7**	**13.8 J**	**78.8**
0906-MWD091S-07-SS-avg	6/19/2009	Soil	Averaged	**6.86**	**12.5**	**1050**	**76.2**	**13.4 J**	**75.2**
0906-MWD091S-08-SS	6/19/2009	Soil	Primary	**20.8**	**22.2**	**472**	**240**	**46.5 J**	**170**

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ENOCH VALLEY MINE - SUMMARY OF SOIL EXCEEDANCES
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				Analyte (mg/Kg, dry weight)					
Sample Identification	Collection Date	Sample Medium	Sample Type	Arsenic	Cadmium	Manganese	Nickel	Selenium	Vanadium
			Screening Value:	0.39	70	1800	1500	390	390
0906-MWD091S-09-SS	6/19/2009	Soil	Primary	12.8	9.59	980	114	17.0 J	80.8
0906-MWD091S-10-SS	6/19/2009	Soil	Primary	7.48	13.0	503	85.2	13.6 J	68.0
MWD092 (Waste Rock Dump)									
0906-MWD092-01-SS	6/19/2009	Soil	Primary	7.84	24.0	333	82.1	10.4 J	111
0906-MWD092-02-SS	6/21/2009	Soil	Primary	15.7	34.2	44.8	162	27.0 J	126
0906-MWD092-03-SS	6/19/2009	Soil	Primary	9.98	54.0	359	168	19.8 J	215 J+
0906-MWD092-04-SS	6/21/2009	Soil	Primary	27.8	36.7	76.1	217	113 J	232
0906-MWD092-05-SS	6/21/2009	Soil	Primary	30.2	14.0	214	218	34.3 J	117
0906-MWD092-06-SS	6/19/2009	Soil	Primary	28.6	36.8	74.1	241	40.6 J	238 J+
0906-MWD092-07-SS-1	6/19/2009	Soil	Triplicate	10.8	46.9	383	113	11.6 J	205 J+
0906-MWD092-07-SS-2	6/19/2009	Soil	Triplicate	20.6	57.2	124	96.1	11.6 J	139 J+
0906-MWD092-07-SS-3	6/19/2009	Soil	Triplicate	17.1	45.4	245	151	83.7 J	278 J+
0906-MWD092-07-SS-avg	6/19/2009	Soil	Averaged	16.2	49.8	251	120	35.6 J	207 J+
0906-MWD092-08-SS	6/19/2009	Soil	Primary	13.5	55.6	45.7	117	34.8 J	324 J+
0906-MWD092-09-SS	6/20/2009	Soil	Primary	24.5	40.2	36.0	88.7	16.7	434
0906-MWD092-10-SS	6/20/2009	Soil	Primary	5.42	4.38	632	30.8	10.8	30.9
0906-MWD092-CS-SS	6/20/2009	Soil	Primary	4.57	1.48	1130	25.8	1.40	20.2

TABLE 3-34

ENOCH VALLEY MINE - SUMMARY OF SOIL EXCEEDANCES
(Page 5 of 5)

Notes:

Result is greater than screening value

NS - not sampled

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Source for Screening Values (see also Table 3-1):

Soil	USEPA Regional Screening Levels for Soil, Residential (source: ORNL, December 2009).

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.

The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-35
ENOCH VALLEY MINE
2009 SOIL SAMPLING CONCENTRATION RANGES AND SCREENING LEVEL EXCEEDANCES (mg/kg dw)[1]

Analyte	SL	Background (n=10)	Waste Rock Dumps (n=30)	[n] > SL	Active Facilities (n=10)	[n] > SL
Selenium	390	0.54-6.89	0.53-113	0	0.73-39.7	0
Arsenic	0.39	3.77-7.65	5.39-20.8	30	5.2-13.2	10
Cadmium	70	0.54-9.66	1.87-37.5	0	0.5-72.2	1
Vanadium	390	18.5-52.2	17.3-238	1	21.1-575	1

Notes:
n - total number of samples
[n] - sample concentration
SL - screening level
1 - Triplicate samples are treated as a single sample as described in Appendix A.
Shaded results indicate those which ranges contain exceedances of the screening level.

TABLE 3-36
ENOCH VALLEY MINE
RIPARIAN HABITAT ASSESSMENT DATA MATRIX

Station	Category	Amphibians	Swimming birds	Marsh-nesting birds	Cavity-nesting birds	Birds that forage at water's edge	Aerial-foraging birds	Open cup-nesting birds	Small mammals	Water dependent medium-sized mammals	Upland medium-sized mammals	Game mammals	Livestock	Sept 2004 Soil Selenium Concentration (mg/kg dw)	Sept 2004 Vegetation Selenium Concentration (mg/kg dw)	Habitat Quality Ranking
MSP017	pond	1	1	1	1	1	1	1	1	0	1	1	1	50	11	1
MSP018	pond	1	1	1	1	1	1	1	1	0	1	1	1	70	17	1
MSP019	pond	1	1	0	1	0	1	0	1	0	1	1	1	9.8	6.4	2
MSP020	pond	1	1	1	1	1	1	1	1	0	1	1	1	18	15	1
MSP021	pond	1	1	0	1	0	1	1	1	0	1	1	1	42	11	2
MSP022	pond	1	1	0	1	1	1	1	1	0	1	1	1	6.7	2.8	2
MSP023	pond	1	1	1	1	0	1	1	1	0	1	1	1	25	3.4	1
MSP031	pond	1	1	1	1	1	1	1	1	0	1	1	1	24	3.6	1
MST130	stream	0	0	0	1	0	1	1	1	0	1	1	1	2.3	0.25	4
MST133	semi-ponded stream	0	1	0	0	0	0	1	1	0	1	1	1	0.80	0.25	4
MST134	stream	0	0	0	0	0	1	1	1	0	1	1	1	3.7	0.25	1
MST135	stream	0	0	1	0	0	1	1	1	0	1	1	1	2.5	0.25	1
MST136	stream	0	0	0	0	0	1	1	1	0	1	1	1	1.3	0.25	1
MST143	semi-ponded stream	0	1	0	0	0	1	1	0	0	1	1	1	0.25	0.25	4
MST144	stream	0	0	0	0	0	1	1	1	0	1	1	1	6.1	1.6	1
MST274	stream	0	0	0	0	0	1	1	0	0	1	1	1	1.0	0.25	1

Notes:
Non-detected concentrations are presented as one-half the MDL. The MDL for both media was 0.5 mg/kg dw.

Habitat Quality Ranking
1—high quality aquatic and terrestrial habitat
2—high quality aquatic, but low quality terrestrial habitat
3—low quality aquatic, but high quality terrestrial habitat
4—low quality aquatic and terrestrial habitat

TABLE 3-37

ENOCH VALLEY MINE - SUMMARY OF VEGETATION EXCEEDANCES
(Page 1 of 7)

				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Boron**	**Molybdenum**	**Selenium**
			Screening Value:	**150**	**5**	**5**
MAR001 (Active Haul Road)						
0906-MAR001-01-GF	6/20/2009	GF	Primary	**7.67**	<1.48	**1.54**
0906-MAR001-03-GF	6/20/2009	GF	Primary	**45.9**	**7.93**	**16**
MBE001 (Enoch Valley Background)						
0906-MBE001-01-FB	6/22/2009	FB	Primary	**19.3**	<1.45	**0.456**
0906-MBE001-01-GS	6/22/2009	GS	Primary	**2.76 J**	**1.98 J**	**0.921**
0906-MBE001-01-SL-AMAL	6/22/2009	SL-AMAL	Primary	**24.5**	<1.49	<0.0936
0906-MBE001-01-SL-ARTR	6/22/2009	SL-ARTR	Primary	**35.3**	<1.50	**1.06**
0906-MBE001-01-SL-PRVI	6/22/2009	SL-PRVI	Primary	**16.8**	<1.49	**0.100 J**
0906-MBE001-01-SL-PUTR	6/22/2009	SL-PUTR	Primary	**20.9**	<1.49	**0.176 J**
0906-MBE001-01-SL-ROWI	6/22/2009	SL-ROWI	Primary	**26.4**	<3.69	<0.198
0906-MBE001-01-SL-SYAL	6/22/2009	SL-SYAL	Primary	**364**	<15.0	**0.124 J**
0906-MBE001-01-SM-AMAL	6/22/2009	SM-AMAL	Primary	**20.7**	<1.50	<0.0988
0906-MBE001-01-SM-ARTR	6/22/2009	SM-ARTR	Primary	**16.4**	<1.50	**0.344**
0906-MBE001-01-SM-PRVI	6/22/2009	SM-PRVI	Primary	**16.1**	<1.49	<0.0933
0906-MBE001-01-SM-PUTR	6/22/2009	SM-PUTR	Primary	**11.9**	<1.50	<0.0992
0906-MBE001-01-SM-ROWI	6/22/2009	SM-ROWI	Primary	**40.0**	<3.15	<0.0911
0906-MBE001-01-SM-SYAL	6/22/2009	SM-SYAL	Primary	**11.5**	<1.44	**0.0992 J**
0906-MBE001-03-GF	6/21/2009	GF	Primary	**13.7**	**1.77 J**	**0.392**
0906-MBE001-03-SL-PRVI	6/21/2009	SL-PRVI	Primary	**17.0**	<1.50	**0.383 J+**
0906-MBE001-03-SL-SYAL	6/21/2009	SL-SYAL	Primary	**28.2**	<1.49	**0.250 J+**
0906-MBE001-03-SM-PRVI	6/21/2009	SM-PRVI	Primary	<43.1	<25.9	<0.0988
0906-MBE001-03-SM-SYAL	6/21/2009	SM-SYAL	Primary	**7.53**	<1.50	**0.345 J+**
0906-MBE001-04-CS-WILD ST	6/21/2009	CS-WILD ST	Primary	**20.5**	**1.63 J**	<0.379
0906-MBE001-04-GF	6/21/2009	GF	Primary	**24.2**	**1.98 J**	**0.636**
0906-MBE001-04-SL-PRVI	6/21/2009	SL-PRVI	Primary	**13.3**	<1.50	**0.298**
0906-MBE001-04-SL-SYAL	6/21/2009	SL-SYAL	Primary	**27.4**	<1.50	**0.146 J**
0906-MBE001-04-SM-PRVI	6/21/2009	SM-PRVI	Primary	**11.8**	<1.48	<0.0988
0906-MBE001-04-SM-SYAL	6/21/2009	SM-SYAL	Primary	**6.45**	<1.65	**0.125 J**
0906-MBE001-05-GF	6/21/2009	GF	Primary	**14.9**	<1.49	**0.359**
0906-MBE001-06-GF	6/21/2009	GF	Primary	**10.8**	**3.63**	**0.560**
0906-MBE001-07-FB-1	6/21/2009	FB	Triplicate	**28.8**	**9.15**	**5.28**
0906-MBE001-07-FB-2	6/21/2009	FB	Triplicate	**17.9**	**6.58**	**6.42**
0906-MBE001-07-FB-3	6/21/2009	FB	Triplicate	**34.7**	**11**	**3.35**
0906-MBE001-07-FB-avg	6/21/2009	FB	Averaged	**27.1**	**8.91**	**5.02**
0906-MBE001-07-GS-1	6/21/2009	GS	Triplicate	**3.04 J**	**8.18**	**2.63**
0906-MBE001-07-GS-2	6/21/2009	GS	Triplicate	<2.39	**5.75**	**3.17**
0906-MBE001-07-GS-3	6/21/2009	GS	Triplicate	<2.48	**10.4**	**3.97**
0906-MBE001-07-GS-avg	6/21/2009	GS	Averaged	**3.04 J**	**8.11**	**3.26**
0906-MBE001-07-SL-ARTR-1	6/21/2009	SL-ARTR	Triplicate	**23.2**	<1.49	**2.08**
0906-MBE001-07-SL-ARTR-3	6/21/2009	SL-ARTR	Triplicate	**21.0**	<1.50	**1.21**
0906-MBE001-07-SL-ARTR-avg	6/21/2009	SL-ARTR	Averaged	**22.1**	<1.50	**1.65**
0906-MBE001-07-SM-ARTR-1	6/21/2009	SM-ARTR	Triplicate	**23.6**	<1.49	**1.47**
0906-MBE001-07-SM-ARTR-3	6/21/2009	SM-ARTR	Triplicate	**21.9**	<1.49	**1.14**
0906-MBE001-07-SM-ARTR-avg	6/21/2009	SM-ARTR	Averaged	**22.8**	<1.49	**1.31**
0906-MBE001-08-GF	6/21/2009	GF	Primary	**20.2**	**1.71 J**	**0.471 J+**
0906-MBE001-08-SL-SYAL	6/21/2009	SL-SYAL	Primary	**18.7**	<1.50	**0.223 J+**
0906-MBE001-08-SM-SYAL	6/21/2009	SM-SYAL	Primary	**6.32**	<1.41	**0.429**
0906-MBE001-09-FB	6/21/2009	FB	Primary	**26.4**	<1.40	**0.764**
0906-MBE001-09-GS	6/21/2009	GS	Primary	<8.06	<4.84	**1.09**
0906-MBE001-09-SL-AMAL	6/21/2009	SL-AMAL	Primary	**24.2**	**7.53**	**0.214 J+**
0906-MBE001-09-SL-ARTR	6/21/2009	SL-ARTR	Primary	**21.9**	<1.45	**1.21**
0906-MBE001-09-SL-POTR	6/21/2009	SL-POTR	Primary	**13.2**	<1.49	**0.246 J+**

TABLE 3-37

ENOCH VALLEY MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Boron**	**Molybdenum**	**Selenium**
			Screening Value:	**150**	**5**	**5**
0906-MBE001-09-SL-SYAL	6/21/2009	SL-SYAL	Primary	**20.7**	<1.50	**0.255 J+**
0906-MBE001-09-SM-AMAL	6/21/2009	SM-AMAL	Primary	**13.8**	<1.50	<0.149
0906-MBE001-09-SM-ARTR	6/21/2009	SM-ARTR	Primary	**18.7**	<3.55	**0.746**
0906-MBE001-09-SM-POTR	6/21/2009	SM-POTR	Primary	**12.6**	<1.50	**0.251 J+**
0906-MBE001-09-SM-SYAL	6/21/2009	SM-SYAL	Primary	**11.4**	<1.49	**0.274 J+**
0906-MBE001-10-GF	6/21/2009	GF	Primary	**24.4**	<1.46	**0.593**
0906-MBE001-10-SL-SYAL	6/21/2009	SL-SYAL	Primary	**20.0**	<1.48	**0.362**
0906-MBE001-10-SM-SYAL	6/21/2009	SM-SYAL	Primary	**8.72**	<1.46	**0.287**
0906-MBE001-AL02-GF	6/22/2009	GF	Primary	**26.3**	<1.50	**0.419**
0906-MBE001-AL02-SL-ARTR	6/22/2009	SL-ARTR	Primary	**22.7**	<1.50	**0.380**
0906-MBE001-AL02-SL-PUTR	6/22/2009	SL-PUTR	Primary	**27.4**	<1.50	**0.325**
0906-MBE001-AL02-SL-SYAL	6/22/2009	SL-SYAL	Primary	**18.5**	<1.50	**0.214**
0906-MBE001-AL02-SM-ARTR	6/22/2009	SM-ARTR	Primary	**29.5**	<1.50	**0.259**
0906-MBE001-AL02-SM-PUTR	6/22/2009	SM-PUTR	Primary	**19.5**	<1.50	**0.381**
0906-MBE001-AL02-SM-SYAL	6/22/2009	SM-SYAL	Primary	**13.8**	<1.50	**0.182 J**
0908-MBE001-01-FB	8/24/2009	FB	Primary	**68.3**	**1.65 J**	**0.633 J**
0908-MBE001-07-FB-1	8/24/2009	FB	Triplicate	**54.1**	**30.2**	**10.4**
0908-MBE001-07-FB-2	8/24/2009	FB	Triplicate	**35.0**	**8.17**	**2.89**
0908-MBE001-07-FB-3	8/24/2009	FB	Triplicate	**79.1**	**13.5**	**8.55**
0908-MBE001-07-FB-avg	8/24/2009	FB	Averaged	**56.1**	**17.3**	**7.28**
0908-MBE001-09-FB	8/24/2009	FB	Primary	**37.5**	**2.01 J**	**0.778 J**
MDS025 (Dump Seep)						
VEMDS025-0-C(5)	9/12/2004	Vegetation	Primary	NS	**20.4 JT**	**13.5 T**
MDS026 (Dump Seep)						
VEMDS026-0-C(5)	9/12/2004	Vegetation	Primary	NS	**0.66 J+T**	**0.6 JT**
MSG001 (Spring)						
VEMSG001-0-C(5)	9/11/2004	Vegetation	Primary	NS	**4.61 J+T**	<0.5 UT
MSP017 (Pond)						
VEMSP017-0-C(5)	9/12/2004	Vegetation	Primary	NS	**2.76 JT**	**11.3 T**
MSP018 (Pond)						
VEMSP018-0-C(7)	9/11/2004	Vegetation	Primary	NS	**3.95 T**	**17.1 T**
MSP019 (Pond)						
VEMSP019-0-C(6)	9/11/2004	Vegetation	Primary	NS	**0.85 T**	**6.4 T**
MSP020 (Pond)						
VEMSP020-0-C(5)	9/11/2004	Vegetation	Primary	NS	**0.75 T**	**15.2 T**
MSP021 (Pond)						
VEMSP021-0-C(5)	9/11/2004	Vegetation	Primary	NS	**1.19 T**	**11 T**
MSP022 (Pond)						
VEMSP022-0-C(6)	9/11/2004	Vegetation	Primary	NS	**1.84 T**	**2.8 JT**
MSP023 (Pond)						
VEMSP023-0-C(5)	9/11/2004	Vegetation	Primary	NS	**3.76 JT**	**3.4 T**
MSP031 (Pond)						
VEMSP031-0-C(6)	9/11/2004	Vegetation	Primary	NS	**16.9 JT**	**3.6 T**
MST023 (Stream)						
VEMST023-0-C(8)	9/14/2004	Vegetation	Primary	NS	**2.1 T**	<0.5 UT
MST024 (Stream)						
VEMST024-0-C(11)	9/14/2004	Vegetation	Primary	NS	**2.69 T**	<0.5 UT
MST025 (Stream)						
VEMST025-1-C(7)	9/14/2004	Vegetation	Primary	NS	**1.39 T**	<0.5 UT
MST026 (Stream)						
VEMST026-0-C(5)	9/10/2004	Vegetation	Primary	NS	**2.08 T**	<0.5 UT
MST027 (Stream)						
052404VEMST027-1-C7	5/24/2004	Vegetation	Primary	NS	NS	<0.5 UT

TABLE 3-37

ENOCH VALLEY MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Boron**	**Molybdenum**	**Selenium**
			Screening Value:	**150**	**5**	**5**
061604VEMST027-1-C(5	6/16/2004	Vegetation	Primary	NS	NS	<0.5 UJT
090904VEMST027-0-C(5)	9/9/2004	Vegetation	Primary	NS	**1.95 T**	<0.5 UJT
101804VEMST027-0-C(5)	10/18/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMST027-1-C(5)	8/16/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMST027-1-c(5)QA1	7/15/2004	Vegetation	Triplicate	NS	NS	<0.5 UT
VEMST027-1-c(5)QA2	7/15/2004	Vegetation	Triplicate	NS	NS	<0.5 UT
VEMST027-1-c(5)QA3	7/15/2004	Vegetation	Triplicate	NS	NS	<0.5 UT
VEMST027-1-c(5)QA-avg	7/15/2004	Vegetation	Averaged	NS	NS	<0.5 UT
MST059 (Stream)						
VEMST059-1-C(5)QA1	9/14/2004	Vegetation	Triplicate	NS	**5.43 T**	<0.5 UT
VEMST059-1-C(5)QA2	9/14/2004	Vegetation	Triplicate	NS	**5.63 T**	<0.5 UT
VEMST059-1-C(5)QA3	9/14/2004	Vegetation	Triplicate	NS	**5.44 T**	<0.5 UT
VEMST059-1-C(5)QA-avg	9/14/2004	Vegetation	Averaged	NS	**5.5 T**	<0.5 UT
MST060 (Stream)						
VEMST060-0-C(5)	9/14/2004	Vegetation	Primary	NS	**5.03 T**	<0.5 UT
MST061 (Stream)						
VEMST061-1-C(5)QA1	9/14/2004	Vegetation	Triplicate	NS	**5.41 T**	**0.9 JT**
VEMST061-1-C(5)QA2	9/14/2004	Vegetation	Triplicate	NS	**5.03 T**	**1.1 JT**
VEMST061-1-C(5)QA3	9/14/2004	Vegetation	Triplicate	NS	**4.81 T**	**0.9 JT**
VEMST061-1-C(5)QA-avg	9/14/2004	Vegetation	Averaged	NS	**5.08 T**	**0.967 JT**
MST126 (Stream)						
VEMST126-0-C(5)	9/9/2004	Vegetation	Primary	NS	**1.57 T**	<0.5 UJT
MST127 (Stream)						
VEMST127-0-C(5)	9/9/2004	Vegetation	Primary	NS	**0.54 T**	<0.5 UJT
MST131 (Stream)						
VEMST131-0-C(5)	9/9/2004	Vegetation	Primary	NS	**0.72 T**	<0.5 UJT
MST132 (Stream)						
VEMST132-1-C(6)QA1	9/9/2004	Vegetation	Triplicate	NS	**1.08 T**	<0.5 UJT
VEMST132-1-C(6)QA2	9/9/2004	Vegetation	Triplicate	NS	**1.1 T**	<0.5 UJT
VEMST132-1-C(6)QA3	9/9/2004	Vegetation	Triplicate	NS	**1.06 T**	<0.5 UJT
VEMST132-1-C(6)QA4	9/9/2004	Vegetation	Triplicate	NS	NS	NS
VEMST132-1-C(6)QA-avg	9/9/2004	Vegetation	Averaged	NS	**1.08 T**	<0.5 UJT
MST133 (Stream)						
VEMST133-0-C(5)	9/8/2004	Vegetation	Primary	NS	**0.53 T**	<0.5 UJT
MST134 (Stream)						
VEMST134-0-C(5)	9/8/2004	Vegetation	Primary	NS	**1.22 T**	<0.5 UJT
MST135 (Stream)						
VEMST135-0-C(5)	9/8/2004	Vegetation	Primary	NS	**0.7 T**	<0.5 UJT
MST136 (Stream)						
VEMST136-0-C(7)	9/11/2004	Vegetation	Primary	NS	**1.14 JT**	<0.5 UT
MST143 (Stream)						
VEMST143-0-C(6)	9/8/2004	Vegetation	Primary	NS	**0.48 T**	<0.5 UJT
MST144 (Stream)						
VEMST144-0-C(5)	9/12/2004	Vegetation	Primary	NS	**0.74 JT**	**1.6 JT**
MST269 (Stream)						
VEMST269-0-C(5)	9/12/2004	Vegetation	Primary	NS	**1.21 J+T**	**1.5 JT**
MTA001 (Tipple Area)						
0906-MTA001-01-GF	6/19/2009	GF	Primary	**3.03 J**	**2.64 J**	**2.26**
0906-MTA001-02-GF	6/19/2009	GF	Primary	**22.3**	<1.50	**0.694**
0906-MTA001-03-GF	6/19/2009	GF	Primary	**22.1**	**10.6**	**3.02**
0906-MTA001-04-GF	6/19/2009	GF	Primary	**5.35**	**1.75 J**	**5.56**
0906-MTA001-05-GF	6/19/2009	GF	Primary	**3.39 J**	**4.12**	**0.388**
MWD091 (Waste Rock Dump)						

TABLE 3-37

ENOCH VALLEY MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Boron**	**Molybdenum**	**Selenium**
			Screening Value:	**150**	**5**	**5**
052404VEMWD091-1-C7	5/24/2004	Vegetation	Primary	NS	NS	**24.9 T**
061604VEMWD091-1-C(5	6/16/2004	Vegetation	Primary	NS	NS	**10 J-T**
071404VEMWD091-1-C(5)	7/14/2004	Vegetation	Primary	NS	NS	**1.3 JT**
081604VEMWD091-1-C(5)	8/16/2004	Vegetation	Primary	NS	NS	**8.1 J-T**
0908-MWD091-CS-JUSC-LEAF	8/24/2009	JUSC-LEAF	Primary	**13.9**	<1.47	**1.67 J**
0908-MWD091-CS-JUSC-STEM	8/24/2009	JUSC-STEM	Primary	**10.4**	<1.50	**1.05 J**
0908-MWD091-CS-POTR-LEAF	8/24/2009	POTR-LEAF	Primary	**115**	<1.49	**4.46**
0908-MWD091-CS-POTR-STEM	8/24/2009	POTR-STEM	Primary	**17.5**	<1.50	**1.44**
091504VEMWD091-0-C(5)	9/15/2004	Vegetation	Primary	NS	**3.74 T**	**0.8 JT**
101804VEMWD091-0-C(5)	10/18/2004	Vegetation	Primary	NS	NS	**3.1 J-T**
VEMWD091-10-C(6)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-11-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-12-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-13-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-14-C(5)QA1	7/20/2004	Vegetation	Triplicate	NS	NS	**10.4 T**
VEMWD091-14-C(5)QA2	7/20/2004	Vegetation	Triplicate	NS	NS	**10.7 T**
VEMWD091-14-C(5)QA3	7/20/2004	Vegetation	Triplicate	NS	NS	**10.2 T**
VEMWD091-14-C(5)QA-avg	7/20/2004	Vegetation	Averaged	NS	NS	**10.4 T**
VEMWD091-15-C(6)	7/20/2004	Vegetation	Primary	NS	NS	**10.3 T**
VEMWD091-16-C(10)	7/20/2004	Vegetation	Primary	NS	NS	**7 T**
VEMWD091-17-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-18-C(6)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-19-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-1-C(6)	7/20/2004	Vegetation	Primary	NS	NS	**15.6 J-T**
VEMWD091-20-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-21-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-22-C(8)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-23-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-24-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-25-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-26-C(7)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-27-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-28-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-29-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-2-C(5)	7/20/2004	Vegetation	Primary	NS	NS	**7.1 J-T**
VEMWD091-30-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-31-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-32-C(9)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-33-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-34-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-35-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-36-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-37-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-38-C(10)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-39-C(7)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-3-C(5)	7/20/2004	Vegetation	Primary	NS	NS	**3.3 J-T**
VEMWD091-40-C(5)	7/21/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-41-C(5)	7/21/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-42-C(5)	7/21/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-43-C(5)	7/21/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-44-C(14)	7/21/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-44-C(5)	7/21/2004	Vegetation	Primary	NS	NS	<0.6 UT
VEMWD091-45-C(5)	7/21/2004	Vegetation	Primary	NS	NS	<0.5 UT

TABLE 3-37

ENOCH VALLEY MINE - SUMMARY OF VEGETATION EXCEEDANCES
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				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Boron**	**Molybdenum**	**Selenium**
			Screening Value:	**150**	**5**	**5**
VEMWD091-47-C(6)	7/21/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-48-C(5)	7/21/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-49-C(5)	7/21/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-4-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-50-C(7)	7/21/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-51-C(9)	7/21/2004	Vegetation	Primary	NS	NS	<0.5 UT
VEMWD091-52-C(13)QA1	7/21/2004	Vegetation	Triplicate	NS	NS	<0.5 UT
VEMWD091-52-C(13)QA2	7/21/2004	Vegetation	Triplicate	NS	NS	<0.5 UT
VEMWD091-52-C(13)QA3	7/21/2004	Vegetation	Triplicate	NS	NS	<0.5 UT
VEMWD091-52-C(13)QA-avg	7/21/2004	Vegetation	Averaged	NS	NS	<0.5 UT
VEMWD091-5-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-6-C(6)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-7-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.6 UJT
VEMWD091-8-C(5)	7/20/2004	Vegetation	Primary	NS	NS	<0.5 UJT
VEMWD091-9-C(7)	7/20/2004	Vegetation	Primary	NS	NS	<0.6 UT
MWD091N (Waste Rock Dump)						
0906-MWD091N-01-GF	6/22/2009	GF	Primary	**5.46**	**1.96 J**	**4.55 J**
0906-MWD091N-02-GF	6/22/2009	GF	Primary	**2.65 J**	**11.2**	**23.9 J**
0906-MWD091N-03-GF	6/20/2009	GF	Primary	**3.92 J**	**10.4**	**7.16**
0906-MWD091N-04-GS	6/22/2009	GS	Primary	**2.69 J**	**4.74**	**5.89 J**
0906-MWD091N-05-GF	6/20/2009	GF	Primary	**10.7**	**7.13**	**2.20**
0906-MWD091N-06-GS	6/20/2009	GS	Primary	**3.54 J**	**6.37**	**6.19**
0906-MWD091N-07-FB-1	6/22/2009	FB	Triplicate	**23.6**	**24.4**	**11.7**
0906-MWD091N-07-FB-2	6/22/2009	FB	Triplicate	**32.4**	**23.8**	**61.5**
0906-MWD091N-07-FB-3	6/22/2009	FB	Triplicate	**28.5**	**27.3**	**7.75**
0906-MWD091N-07-FB-avg	6/22/2009	FB	Averaged	**28.2**	**25.2**	**27**
0906-MWD091N-07-GS-1	6/22/2009	GS	Triplicate	**14.6**	<1.48	**1.55**
0906-MWD091N-07-GS-2	6/22/2009	GS	Triplicate	**13.2**	**47.3**	**2.42**
0906-MWD091N-07-GS-3	6/22/2009	GS	Triplicate	**2.94 J**	**13.7**	**1.32**
0906-MWD091N-07-GS-avg	6/22/2009	GS	Averaged	**10.2 J**	**30.5**	**1.76**
0906-MWD091N-08-GF	6/22/2009	GF	Primary	**7.37**	**25.6**	**27.7 J**
0906-MWD091N-09-GF	6/20/2009	GF	Primary	**4.38 J**	**2.95 J**	**1.75**
0906-MWD091N-10-FB	6/20/2009	FB	Primary	**50.4**	**8.25**	**8.75**
0906-MWD091N-10-GS	6/20/2009	GS	Primary	**4.69 J**	**7.71**	**4.65**
0908-MWD091N-04-FB	8/24/2009	FB	Primary	**42.3**	**4.56**	**7.09**
0908-MWD091N-06-FB	8/24/2009	FB	Primary	**26.0**	**19**	**34.5**
0908-MWD091N-07-FB-1	8/24/2009	FB	Triplicate	**21.3**	**11.2**	**8.78 J**
0908-MWD091N-07-FB-2	8/24/2009	FB	Triplicate	**51.3**	**30.9**	**76.0 J**
0908-MWD091N-07-FB-3	8/24/2009	FB	Triplicate	**35.7**	**8.14**	**22.4 J**
0908-MWD091N-07-FB-avg	8/24/2009	FB	Averaged	**36.1**	**16.7**	**35.7 J**
0908-MWD091N-10-FB	8/24/2009	FB	Primary	**25.0**	**5.35**	**13.7 J**
MWD091S (Waste Rock Dump)						
0906-MWD091S-01-GF	6/19/2009	GF	Primary	**10.3**	<1.48	**0.564**
0906-MWD091S-02-GF	6/19/2009	GF	Primary	**5.56**	**11.8**	**26.4 J**
0906-MWD091S-03-FB	6/21/2009	FB	Primary	**23.6**	**6.85**	**4.35**
0906-MWD091S-03-GS	6/21/2009	GS	Primary	**2.59 J**	**7.73**	**4.04**
0906-MWD091S-04-GF	6/19/2009	GF	Primary	**12.2**	**3.87**	**0.996 J**
0906-MWD091S-05-GF	6/19/2009	GF	Primary	**6.51**	**9.24**	**3.87**
0906-MWD091S-06-GF	6/19/2009	GF	Primary	**3.78 J**	**6.42**	**10.6**
0906-MWD091S-07-FB-1	6/19/2009	FB	Triplicate	**23.9**	**4.53**	**7.18**
0906-MWD091S-07-FB-2	6/19/2009	FB	Triplicate	**35.3**	**4.56**	**4.15**
0906-MWD091S-07-FB-3	6/19/2009	FB	Triplicate	**25.8**	**5.91**	**3.31**
0906-MWD091S-07-FB-avg	6/19/2009	FB	Averaged	**28.3**	**5**	**4.88**

TABLE 3-37

ENOCH VALLEY MINE - SUMMARY OF VEGETATION EXCEEDANCES
(Page 6 of 7)

				Analyte (mg/Kg, dry weight)		
Sample Identification	**Collection Date**	**Vegetation Type**	**Sample Type**	**Boron**	**Molybdenum**	**Selenium**
			Screening Value:	**150**	**5**	**5**
0906-MWD091S-07-GS-1	6/19/2009	GS	Triplicate	**3.94 J**	**3.96**	**4.85**
0906-MWD091S-07-GS-2	6/19/2009	GS	Triplicate	**7.69**	**1.92 J**	**2.50**
0906-MWD091S-07-GS-3	6/19/2009	GS	Triplicate	**6.90**	**2.48 J**	**3.30**
0906-MWD091S-07-GS-avg	6/19/2009	GS	Averaged	**6.18 J**	**2.79 J**	**3.55**
0906-MWD091S-08-GF	6/19/2009	GF	Primary	**5.83**	**20.7**	**5.02**
0906-MWD091S-09-GF	6/19/2009	GF	Primary	**6.61**	**5.83**	**3.04**
0906-MWD091S-10-GS	6/19/2009	GS	Primary	**22.6**	**4.81**	**4.41 J**
0908-MWD091S-03-FB	8/24/2009	FB	Primary	**37.2**	**11.9**	**3.93 J**
0908-MWD091S-07-FB-1	8/24/2009	FB	Triplicate	**25.3**	**4.50**	**10.5 J**
0908-MWD091S-07-FB-2	8/24/2009	FB	Triplicate	**20.3**	**5.56**	**13.4 J**
0908-MWD091S-07-FB-3	8/24/2009	FB	Triplicate	**23.3**	**1.93 J**	**6.52 J**
0908-MWD091S-07-FB-avg	8/24/2009	FB	Averaged	**23.0**	**4.00 J**	**10.1 J**
0908-MWD091S-10-FB	8/24/2009	FB	Primary	**20.2**	**11.5**	**3.22 J**
MWD092 (Waste Rock Dump)						
0906-MWD092-01-GF	6/19/2009	GF	Primary	**26.7**	**6.48**	**1.88 J**
0906-MWD092-02-GF	6/21/2009	GF	Primary	**2.53 J**	**8.39**	**20.3**
0906-MWD092-03-GF	6/19/2009	GF	Primary	**11.2**	**7.19**	**18**
0906-MWD092-04-FB	6/21/2009	FB	Primary	**20.6**	**14.4**	**105**
0906-MWD092-04-GS	6/21/2009	GS	Primary	**2.61 J**	**10.1**	**25.5**
0906-MWD092-05-GF	6/21/2009	GF	Primary	**4.03 J**	**33.9**	**29**
0906-MWD092-06-GF	6/19/2009	GF	Primary	**4.94**	**11.5**	**4.92**
0906-MWD092-07-GF-1	6/19/2009	GF	Triplicate	**3.99 J**	**4.46**	**46.4**
0906-MWD092-07-GF-2	6/19/2009	GF	Triplicate	**5.58**	**5.24**	**14.3**
0906-MWD092-07-GF-3	6/19/2009	GF	Triplicate	**5.67**	**4.20**	**63.3**
0906-MWD092-07-GF-avg	6/19/2009	GF	Averaged	**5.08 J**	**4.63**	**41.3**
0906-MWD092-07-SL-1-PUTR	6/19/2009	SL-PUTR	Triplicate	**11.6 J**	<3.50	**15.4**
0906-MWD092-07-SL-2-PUTR	6/19/2009	SL-PUTR	Triplicate	**11.7**	**1.73 J**	**20.5**
0906-MWD092-07-SL-avg-PUTR	6/19/2009	SL-PUTR	Averaged	**11.7 J**	**1.73 J**	**18**
0906-MWD092-07-SM-1-PUTR	6/19/2009	SM-PUTR	Triplicate	**6.07 J**	<2.72	**6.73**
0906-MWD092-07-SM-2-PUTR	6/19/2009	SM-PUTR	Triplicate	**6.56**	<1.41	**7.76**
0906-MWD092-07-SM-avg-PUTR	6/19/2009	SM-PUTR	Averaged	**6.32 J**	<2.72	**7.25**
0906-MWD092-08-GF	6/19/2009	GF	Primary	<2.46	**7.36**	**71.1**
0906-MWD092-09-FB	6/20/2009	FB	Primary	**26.4**	**8.1**	**12.7**
0906-MWD092-09-GS	6/20/2009	GS	Primary	**3.65 J**	**4.22**	**6.79**
0906-MWD092-10-FB	6/20/2009	FB	Primary	**21.8**	**2.57 J**	**19.8**
0906-MWD092-10-GS	6/20/2009	GS	Primary	**5.04**	**4.02**	**11.7**
0906-MWD092-10-SL-ARTR	6/20/2009	SL-ARTR	Primary	**18.4**	<1.49	**8.26**
0906-MWD092-10-SM-ARTR	6/20/2009	SM-ARTR	Primary	**29.4**	<1.50	**13.5**
0906-MWD092-CS-ALLIUM(BULB)	6/20/2009	CS-ALLIUM	Primary	**7.50**	<1.48	**0.686 J**
0906-MWD092-CS-ALLIUM(STEM)	6/20/2009	Allium(stem)	Primary	**20.0**	**2.09 J**	**1.31**
0908-MWD092-04-FB	8/24/2009	FB	Primary	**16.0**	**11.7**	**120**
0908-MWD092-09-FB	8/24/2009	FB	Primary	**15.1**	**5.99**	**63.8 J**
0908-MWD092-10-FB	8/24/2009	FB	Primary	**29.5**	**4.54**	**16.9 J**
0908-MWD092-CS-ARLU	8/24/2009	ARLU	Primary	**24.2**	<1.45	**12.3 J**
0908-MWD092-CS-ARTR-LEAF	8/24/2009	ARTR-LEAF	Primary	**27.2**	<1.49	**8.00 J**
0908-MWD092-CS-ARTR-STEM	8/24/2009	ARTR-STEM	Primary	**17.6**	<1.49	**3.98 J**

TABLE 3-37

ENOCH VALLEY MINE - SUMMARY OF VEGETATION EXCEEDANCES
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Notes:

Allium - onion (scientific name undetermined)
AMAL - serviceberry (*Amelanchier alnifolia*)
AR - active ore haul road
ARLU - white sagebrush (*Artemisia ludoviciana*)
ARTR - big sagebrush (*Artemisia tridentata*)
BB - Ballard Mine background
BE - Enoch Valley Mine background
BH - Henry Mine background
BS - Ballard Mine shop
CAAR - Siberian peashrub (*Caragana arborescens*)
CHNA - yellow Rabbitbrush (*Chrysothamnus viscidiflorus*)*
CS - Culturally Significant plants
FB - forb
GF - grasses and forbs
GS - grass
HR - historic ore haul road
JUSC - Rocky Mountain juniper (*Juniperus scopulorum*)
POTR - quaking aspen (*Populus tremuloides*)
PRVI - chokecherry (*Prunus virginiana*)
PUTR - antelope bitterbrush (*Purshia tridentata*)
ROWI - Wood's rose (*Rosa woodsii*)
SF - shrub fruit
SL - shrub leaves
SM - shrub stems
SYAL - mountain strawberry (*Symphoricarpos oreophilus*)
TA - Enoch Valley Minte tipple area
VE - vegetation sample
WD - waste rock dump
Wild St - wild strawberry

* The current symbol for yellow Rabbitbrush is "CHVI8."

Result is greater than screening value
Method detection limit for non-detected value is greater than the screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
K	Serial dilutions not performed for samples analyzed by this method (EPA 200.7; 200.8).
T	Laboratory SOP does not address biotic matrices; biotic-specific LCS/SRM not analyzed.

Source for Screening Values (see also Table 3-1):

Vegetation	Mineral tolerance of animals, second revised edition, 2005 National Research Council, published by the national academics press, WA DC, pp. 13-14.

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance. The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-38 ENOCH VALLEY MINE 2004 SEASONAL VEGETATION SELENIUM CONCENTRATIONS (mg/kg dw)							
Station Name	**Station ID**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**
Enoch Valley Mine Waste Dump	MWD091	25	10	1.3	8.1	0.80	3.1
Notes: Non-detected concentrations are presented as one-half the MDL. The MDL was 0.5 mg/kg dw.							

TABLE 3-39 ENOCH VALLEY MINE 2009 GRASS/FORB SAMPLING CONCENTRATION RANGES AND SCREENING LEVEL EXCEEDANCES (mg/kg dw)[1]						
Analyte	**SL**	**Background (n=7)**	**Waste Rock Dumps (n=30)**	**[n] > SL**	**Active Facilities (n=7)**	**[n] > SL**
Selenium	5	0.36-0.64	0.56-71.1	11	0.39-16.0	2
Molybdenum	5	1.46U-3.63	1.48U-33.9	15	1.48U-10.6	2
Notes: n - total number of samples [n] - sample concentration SL - screening level 1 - Triplicate samples are treated as a single sample as described in Appendix A. Shaded results indicate those which ranges contain exceedances of the screening level.						

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MDS025		MDS025		MDS025		MDS025		MDS025		MDS025		MDS025		MDS025	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep	
Sample ID:	051504SWMDS025-0-F		051504SWMDS025-0-U		050706GWMDS025-0-F		050706GWMDS025-0-U		050607SWMDS025-0-U		0905SWMDS025-F		0905SWMDS025-U		0905GWMDS025-F	
Collection Date:	5/14/2004		5/14/2004		5/7/2006		5/7/2006		5/6/2007		5/9/2009		5/9/2009		5/31/2009	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Surface Water		Surface Water		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		<0.03 UK	0.087	NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		**0.0029 K**		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		**0.0321 K**		NS		NS		NS		NS	
Selenium	NS		**0.016**	0.005	NS		**1.74**	0.005	**0.056**	0.005	NS		**0.0815**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		**0.106 K**	0.02	NS		NS		NS		NS	
Zinc	NS		NS		NS		**0.044 K**		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		<0.03 UK	0.087	NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		<0.003 UK	0.003	NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	**0.0005 K**	0.00127	NS		**0.0012 K**	0.000961	NS		<0.0002 UK	0.00127	**0.000467 J**	0.00127	NS		**0.000297 J**	0.00127
Cobalt, dissolved	NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		<0.01 UK	0.0246	NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		<0.02 UK	0.158	NS		NS		**0.562**	0.158	NS		NS	
Molybdenum, dissolved	NS		NS		**0.02 JK**	0.034	NS		NS		NS		NS		NS	
Nickel, dissolved	**0.187 K**	0.168	NS		**0.0189 K**	0.112	NS		**0.183 K**	0.168	NS		NS		NS	
Selenium, dissolved	**0.013**	0.005	NS		**1.52**	0.005	NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		<0.01 UJK	0.00036	NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.00106 K**	0.02	NS		**0.0748 K**	0.02	NS		**0.0052 K**	0.02	<0.00500	0.02	NS		NS	
Zinc, dissolved	**0.049 K**	0.382	NS		**0.023 K**	0.254	NS		**0.064 K**	0.382	NS		NS		NS	

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MDS025		MDS026		MDS026		MDS026		MDS026		MDS026		MDS026		MDS026	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep	
Sample ID:	0905GWMDS025-U		051704SWMDS026-0-F		051704SWMDS026-0-U		SWMDS026-0-F		SWMDS026-0-U		050706GWMDS026-0-F		050706GWMDS026-0-U		050807SWMDS026-0-F	
Collection Date:	5/31/2009		5/17/2004		5/17/2004		9/12/2004		9/12/2004		5/7/2006		5/7/2006		5/8/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	**0.00137**		NS		NS		NS		NS		NS		**0.0399 K**		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		**0.0527 K**		NS	
Selenium	**0.235**	0.005	NS		**0.43**	0.005	NS		**0.006**	0.005	NS		**0.084**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	**0.00541 J**	0.02	NS		NS		NS		NS		NS		**0.0089 K**	0.02	NS	
Zinc	NS		NS		NS		NS		NS		NS		**0.127 K**		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		<0.03 UK	0.087	NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		**0.03 K**	0.003	NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0017 K**	0.00127	NS		**0.0001 JK**	0.00127	NS		**0.0034 K**	0.00127	NS		**0.0007 K**	0.00127
Cobalt, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.0371	NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		**0.03 JK**	0.158	NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		NS	
Nickel, dissolved	NS		**0.0135 K**	0.168	NS		**0.0087 K**	0.168	NS		**0.0339 K**	0.168	NS		**0.0224 K**	0.168
Selenium, dissolved	NS		**0.32**	0.005	NS		**0.006**	0.005	NS		**0.054**	0.005	NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		<0.01 UJK	0.00036	NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS	
Vanadium, dissolved	NS		**0.00336 K**	0.02	NS		**0.00089 K**	0.02	NS		<0.0006 UK	0.02	NS		<0.0002 UK	0.02
Zinc, dissolved	NS		**0.016 K**	0.382	NS		**0.004 JK**	0.382	NS		**0.046 K**	0.382	NS		**0.01 K**	0.382

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MDS026		MDS026		MDS026		MDS026		MDS026		MDS026		MDS026		MDS026	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep	
Sample ID:	050807SWMDS026-0-U		091207GWMDS026-0-F		091207GWMDS026-0-U		051608GWMDS026-0-F		051608GWMDS026-0-U		091608GWMDS026-0-F		091608GWMDS026-0-U		0905GWMDS026-1-F	
Collection Date:	5/8/2007		9/12/2007		9/12/2007		5/16/2008		5/16/2008		9/16/2008		9/16/2008		5/29/2009	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		**0.04 JK**	0.087	NS		**0.0857 J**	0.087	NS	
Barium	NS		NS		**0.023 K**	0.003	NS		**0.029 K**	0.003	NS		NS		NS	
Beryllium	NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS	
Boron	NS		NS		**0.01 JK**	0.0016	NS		<0.01 UK	0.0016	NS		NS		NS	
Cadmium	NS		NS		<0.0001 UK	0.00127	NS		**0.0096 K**	0.00127	NS		**0.000466 J**		NS	
Cobalt	NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS	
Copper, total	NS		NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		NS		NS	
Iron	NS		NS		**0.03 JK {J+}**	0.158	NS		**0.29 K**	0.158	NS		**0.321**	0.158	NS	
Molybdenum	NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS	
Nickel	NS		NS		**0.0099 K**	0.168	NS		**0.0533 K**	0.168	NS		**0.0109**		NS	
Selenium	**0.157**	0.005	NS		**0.019**	0.005	NS		**0.19**	0.005	NS		**0.019**	0.005	NS	
Silver	NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS	
Thallium	NS		NS		<0.0002 UK	0.00003	NS		<0.0002 UK	0.00003	NS		NS		NS	
Vanadium	NS		NS		**0.0008 JK**	0.02	NS		**0.005 JK**	0.02	NS		<0.0250	0.02	NS	
Zinc	NS		NS		**0.004 JK**	0.382	NS		**0.04 K**	0.382	NS		**0.0127 J**		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		**0.13 JK**	0.087	NS		**0.09 J+K**	0.087	NS		<0.0500	0.087	NS		NS	
Barium, dissolved	NS		**0.026 K**	0.003	NS		**0.025 K**	0.003	NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		NS	
Boron, dissolved	NS		<0.01 UK	0.0016	NS		**0.01 JK**	0.0016	NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0001 JK**	0.00127	NS		**0.0012 K**	0.00127	NS		<0.000125	0.00127	NS		**0.000211 J**	0.00127
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		NS		NS		NS	
Iron, dissolved	NS		**0.03 JK**	0.158	NS		**0.1 K**	0.158	NS		<0.0250	0.158	NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		**0.01 JK**	0.034	NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0088 K**	0.168	NS		**0.0268 K**	0.168	NS		**0.0106**	0.168	NS		NS	
Selenium, dissolved	NS		**0.019**	0.005	NS		**0.19**	0.005	NS		**0.0161**	0.005	NS		NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		<0.01 UJK	0.00036	NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0008 JK**	0.02	NS		<0.0002 UK	0.02	NS		<0.0250	0.02	NS		NS	
Zinc, dissolved	NS		**0.004 JK**	0.382	NS		**0.027 K**	0.382	NS		**0.0107 J**	0.382	NS		NS	

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MDS026		MDS026		MDS026		MDS026		MDS026		MDS026		MDS026		MDS026	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep	
Sample ID:	0905GWMDS026-1-U		0905GWMDS026-2-F		0905GWMDS026-2-U		0905GWMDS026-3-F		0905GWMDS026-3-U		0905GWMDS026-avg-F		0905GWMDS026-avg-U		0909GWMDS026-1-F	
Collection Date:	5/29/2009		5/29/2009		5/29/2009		5/29/2009		5/29/2009		5/29/2009		5/29/2009		9/22/2009	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	**0.000626**		NS		**0.000631**		NS		**0.000547**		NS		**0.000601**		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.195 J**	0.005	NS		**0.190 J**	0.005	NS		**0.199 J**	0.005	NS		**0.195 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	<0.00500	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02	NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.000228 J**	0.00127	NS		**0.000236 J**	0.00127	NS		**0.000225 J**	0.00127	NS		**0.000208 J**	0.00127
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MDS026		MDS026		MDS026		MDS026		MDS026		MDS026		MDS026		MSG001	
Location Type:	Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Dump Seep		Spring	
Sample ID:	0909GWMDS026-1-U		0909GWMDS026-2-F		0909GWMDS026-2-U		0909GWMDS026-3-F		0909GWMDS026-3-U		0909GWMDS026-avg-F		0909GWMDS026-avg-U		051904SWMSG001-0-F	
Collection Date:	9/22/2009		9/22/2009		9/22/2009		9/22/2009		9/22/2009		9/22/2009		9/22/2009		5/19/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	**0.000251 J**		NS		**0.000315 J**		NS		**0.000239 J**		NS		**0.000268 J**		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.108**	0.005	NS		**0.116 J**	0.005	NS		**0.0904**	0.005	NS		**0.105 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	**0.031**	0.02	NS		**0.0295**	0.02	NS		**0.0303**	0.02	NS		**0.0303**	0.02	NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.000219 J**	0.00127	NS		**0.000184 J**	0.00127	NS		**0.000204 J**	0.00127	NS		<0.0002 UK	0.000892
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.0005 JK**	0.100
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.001	0.005
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0002 UK	0.02
Zinc, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.004 UK	0.228

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSG001		MSG001		MSG001		MSG001		MSG001		MSG001		MSG001		MSG001	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	051904SWMSG001-0-U		SWMSG001-1-F		SWMSG001-1-U		SWMSG001-2-F		SWMSG001-2-U		SWMSG001-3-F		SWMSG001-3-U		SWMSG001-avg-F	
Collection Date:	5/19/2004		9/11/2004		9/11/2004		9/11/2004		9/11/2004		9/11/2004		9/11/2004		9/11/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000883	NS		<0.0001 UK	0.000886	NS		<0.0001 UK	0.000885	NS		<0.0001 UK	0.000885
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0021 K**	0.0988	NS		**0.0019 K**	0.0993	NS		**0.002 K**	0.0990	NS		**0.002 K**	0.0990
Selenium, dissolved	NS		**0.002 J**	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		**0.002 J**	0.005
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.00005 UK	0.02	NS		<0.00005 UK	0.02	NS		<0.00005 UK	0.02	NS		<0.00005 UK	0.02
Zinc, dissolved	NS		<0.002 UK	0.225	NS		<0.002 UK	0.226	NS		<0.002 UK	0.225	NS		<0.002 UK	0.225

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSG001		MSG001		MSG001		MSG001		MSG001		MSG001		MSG001		MSG001	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	SWMSG001-avg-U		050906GWMSG001-0-F		050906GWMSG001-0-U		050707SWMSG001-1-F		050707SWMSG001-1-U		050707SWMSG001-2-F		050707SWMSG001-2-U		050707SWMSG001-3-F	
Collection Date:	9/11/2004		5/9/2006		5/9/2006		5/7/2007		5/7/2007		5/7/2007		5/7/2007		5/7/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Averaged		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		<0.0001 UK		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		<0.0006 UK		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		<0.001	0.005	NS		**0.002 J**	0.005	NS		**0.002 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		<0.0002 UK	0.02	NS		NS		NS		NS		NS	
Zinc	NS		NS		<0.002 UK		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		**0.126 K**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000863	NS		<0.0001 UK	0.000913	NS		<0.0001 UK	0.000915	NS		<0.0001 UK	0.000910
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0210	NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		<0.0006 UK	0.0955	NS		<0.0006 UK	0.104	NS		<0.0006 UK	0.104	NS		<0.0006 UK	0.103
Selenium, dissolved	NS		<0.001	0.005	NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.0002 UK	0.02	NS		<0.0002 UK	0.02	NS		**0.0002 JK**	0.02	NS		**0.0002 JK**	0.02
Zinc, dissolved	NS		<0.002 UK	0.217	NS		**0.003 JK**	0.236	NS		<0.002 UK	0.237	NS		<0.002 UK	0.235

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSG001		MSG001		MSG001		MSG001		MSG001		MSG001		MSG001		MSG001	
Location Type:	Spring		Spring		Spring		Spring		Spring		Spring		Spring		Spring	
Sample ID:	050707SWMSG001-3-U		050707SWMSG001-avg-F		050707SWMSG001-avg-U		091107GWMSG001-0-F		091107GWMSG001-0-U		051608GWMSG001-0-F		051608GWMSG001-0-U		092108GWMSG001-0-F	
Collection Date:	5/7/2007		5/7/2007		5/7/2007		9/11/2007		9/11/2007		5/16/2008		5/16/2008		9/21/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		**0.04 JK**	0.087	NS	
Barium	NS		NS		NS		NS		**0.138 K**	0.003	NS		**0.134 K**	0.003	NS	
Beryllium	NS		NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS	
Boron	NS		NS		NS		NS		**0.01 JK**	0.0016	NS		**0.02 JK**	0.0016	NS	
Cadmium	NS		NS		NS		NS		<0.0001 UK	0.000888	NS		<0.0001 UK	0.000903	NS	
Cobalt	NS		NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS	
Copper, total	NS		NS		NS		NS		<0.01 UK	0.0219	NS		<0.01 UK	0.0224	NS	
Iron	NS		NS		NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS	
Molybdenum	NS		NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS	
Nickel	NS		NS		NS		NS		**0.0011 JK**	0.0995	NS		**0.0007 JK**	0.102	NS	
Selenium	**0.002 J**	0.005	NS		**0.002 J**	0.005	NS		**0.001 J**	0.005	NS		**0.002 J**	0.005	NS	
Silver	NS		NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS	
Thallium	NS		NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS	
Vanadium	NS		NS		NS		NS		**0.0003 JK**	0.02	NS		**0.0002 JK**	0.02	NS	
Zinc	NS		NS		NS		NS		<0.002 UK	0.226	NS		<0.002 UK	0.232	NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.0500	0.087
Barium, dissolved	NS		NS		NS		**0.14 K**	0.003	NS		**0.13 K**	0.003	NS		NS	
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		**0.02 JK**	0.0016	NS		<0.01 UK	0.0016	NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000913	NS		<0.0001 UK	0.000917	NS		<0.0001 UK	0.000880	NS		<0.000125	0.000877
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	NS		NS		NS		<0.01 UK	0.0230	NS		<0.01 UK	0.0216	NS		NS	
Iron, dissolved	NS		NS		NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.0250	0.158
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS	
Nickel, dissolved	NS		<0.0006 UK	0.104	NS		**0.001 JK**	0.104	NS		**0.002 JK**	0.0982	NS		**0.00185 J**	0.0978
Selenium, dissolved	NS		NS		NS		<0.001	0.005	NS		**0.001 J**	0.005	NS		**0.00199**	0.005
Silver, dissolved	NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS	
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS	
Vanadium, dissolved	NS		**0.0002 JK**	0.02	NS		**0.0003 JK**	0.02	NS		<0.0002 UK	0.02	NS		<0.00500	0.02
Zinc, dissolved	NS		**0.003 JK**	0.236	NS		<0.002 UK	0.238	NS		<0.002 UK	0.223	NS		<0.00500	0.222

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSG001		MSP017		MSP017		MSP017		MSP017		MSP017		MSP017		MSP017	
Location Type:	Spring		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	092108GWMSG001-0-U		051704SWMSP017-1-F		051704SWMSP017-1-U		051704SWMSP017-2-F		051704SWMSP017-2-U		051704SWMSP017-3-F		051704SWMSP017-3-U		051704SWMSP017-avg-F	
Collection Date:	9/21/2008		5/17/2004		5/17/2004		5/17/2004		5/17/2004		5/17/2004		5/17/2004		5/17/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	<0.0500	0.087	NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	<0.000125		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	<0.0250	0.158	NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	**0.00183 J**		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.00240**	0.005	NS		**0.49**	0.005	NS		**0.53**	0.005	NS		**0.54**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	<0.00500	0.02	NS		NS		NS		NS		NS		NS		NS	
Zinc	<0.00500		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0003 JK**	0.00127	NS		**0.0003 J-K**	0.00127	NS		**0.0003 JK**	0.00127	NS		**0.0003 JK**	0.00127
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0121 K**	0.168	NS		**0.012 J-K**	0.168	NS		**0.0109 K**	0.168	NS		**0.0117 J-K**	0.168
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.00257 K**	0.02	NS		**0.00247 J-K**	0.02	NS		**0.00251 K**	0.02	NS		**0.00252 J-K**	0.02
Zinc, dissolved	NS		**0.012 K**	0.382	NS		**0.012 J-K**	0.382	NS		**0.012 K**	0.382	NS		**0.012 J-K**	0.382

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP017		MSP017		MSP017		MSP017		MSP017		MSP017		MSP017		MSP017	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	051704SWMSP017-avg-U		050606SWMSP017-0-F		050606SWMSP017-0-U		050607SWMSP017-0-F		050607SWMSP017-0-U		091207GWMSP017-0-F		091207GWMSP017-0-U		051608GWMSP017-0-F	
Collection Date:	5/17/2004		5/6/2006		5/6/2006		5/6/2007		5/6/2007		9/12/2007		9/12/2007		5/16/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Averaged		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		**0.07 JK**	0.087	NS		<0.03 UK	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		**0.012 JK**	0.003	NS	
Beryllium	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron	NS		NS		NS		NS		NS		NS		<0.01 UK	0.0016	NS	
Cadmium	NS		NS		NS		NS		NS		NS		<0.0002 UK	0.00127	NS	
Cobalt	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Copper, total	NS		NS		NS		NS		NS		NS		<0.01 UK	0.0371	NS	
Iron	NS		NS		NS		NS		NS		NS		**0.03 JK {J+}**	0.158	NS	
Molybdenum	NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel	NS		NS		NS		NS		NS		NS		**0.0107 K**	0.168	NS	
Selenium	**0.52**	0.005	NS		**0.37**	0.005	NS		**1.09**	0.005	NS		**0.031**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium	NS		NS		NS		NS		NS		NS		<0.0004 UK	0.00003	NS	
Vanadium	NS		NS		NS		NS		NS		NS		**0.004 K**	0.02	NS	
Zinc	NS		NS		NS		NS		NS		NS		**0.005 JK**	0.382	NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		**0.07 JK**	0.087	NS		<0.03 UK	0.087
Barium, dissolved	NS		**0.016 K**	0.003	NS		NS		NS		**0.019 JK**	0.003	NS		**0.013 JK**	0.003
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.0016	NS		**0.01 JK**	0.0016
Cadmium, dissolved	NS		**0.0014 K**	0.00109	NS		<0.0001 UK	0.00127	NS		**0.0001 JK**	0.00127	NS		**0.0008 K**	0.00127
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		**0.03 JK**	0.003	NS		<0.01 UK	0.003
Copper, dissolved	NS		<0.01 UK	0.0297	NS		NS		NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371
Iron, dissolved	NS		<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158	NS		**0.02 JK**	0.158
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		**0.01 JK**	0.034	NS		<0.01 UK	0.034
Nickel, dissolved	NS		**0.0302 K**	0.135	NS		**0.0202 K**	0.168	NS		**0.0109 K**	0.168	NS		**0.0199 K**	0.168
Selenium, dissolved	NS		NS		NS		NS		NS		**0.03**	0.005	NS		**1.06 J-**	0.005
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0002 UK	0.00003	NS		<0.0001 UK	0.00003
Vanadium, dissolved	NS		**0.0073 K**	0.02	NS		**0.0016 K**	0.02	NS		**0.0039 K**	0.02	NS		**0.0045 K**	0.02
Zinc, dissolved	NS		**0.089 K**	0.306	NS		**0.014 K**	0.382	NS		<0.002 UK	0.382	NS		**0.058 K**	0.382

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP017		MSP017		MSP017		MSP018		MSP018		MSP018		MSP018		MSP018	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	051608GWMSP017-0-U		091608GWMSP017-0-F		091608GWMSP017-0-U		051204SWMSP018-0-F		051204SWMSP018-0-U		050606SWMSP018-0-F		050606SWMSP018-0-U		050807SWMSP018-0-F	
Collection Date:	5/16/2008		9/16/2008		9/16/2008		5/11/2004		5/11/2004		5/6/2006		5/6/2006		5/8/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.08 JK**	0.087	NS		<0.0500	0.087	NS		NS		NS		NS		NS	
Barium	**0.014 JK**	0.003	NS		NS		NS		NS		NS		NS		NS	
Beryllium	<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS	
Boron	<0.01 UK	0.0016	NS		NS		NS		NS		NS		NS		NS	
Cadmium	**0.001 K**	0.00127	NS		<0.000625		NS		NS		NS		NS		NS	
Cobalt	<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS	
Copper, total	<0.01 UK	0.0371	NS		NS		NS		NS		NS		NS		NS	
Iron	**0.06 K**	0.158	NS		**0.108**	0.158	NS		NS		NS		NS		NS	
Molybdenum	<0.01 UK	0.034	NS		NS		NS		NS		NS		NS		NS	
Nickel	**0.0201 K**	0.168	NS		**0.0132 J**		NS		NS		NS		NS		NS	
Selenium	**0.98**	0.005	NS		**0.0783**	0.005	NS		**0.43**	0.005	NS		**0.4**	0.005	NS	
Silver	<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS		NS	
Thallium	<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS		NS	
Vanadium	**0.0046 K**	0.02	NS		<0.0250	0.02	NS		NS		NS		NS		NS	
Zinc	**0.066 K**	0.382	NS		<0.0250		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		<0.0500	0.087	NS		NS		NS		**0.91 K**	0.087	NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		**0.013 K**	0.003	NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000625	0.00127	NS		**0.0743 K**	0.00127	NS		**0.125 K**	0.00127	NS		**0.0269 K**	0.00127
Cobalt, dissolved	NS		NS		NS		NS		NS		**0.03 JK**	0.003	NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.0371	NS		NS	
Iron, dissolved	NS		<0.0250	0.158	NS		NS		NS		<0.02 UK	0.158	NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		**0.02 JK**	0.034	NS		NS	
Nickel, dissolved	NS		**0.0141 J**	0.168	NS		**1.85 K**	0.168	NS		**2.17 K**	0.168	NS		**1.78 K**	0.168
Selenium, dissolved	NS		**0.0762**	0.005	NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		<0.01 UJK	0.00036	NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		**0.0013 K**	0.00003	NS		NS	
Vanadium, dissolved	NS		<0.0250	0.02	NS		**0.0862 K**	0.02	NS		**0.125 K**	0.02	NS		**0.0892 K**	0.02
Zinc, dissolved	NS		<0.0250	0.382	NS		**7.19 K**	0.382	NS		**10.2 K**	0.382	NS		**5.75 K**	0.382

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP018		MSP018		MSP018		MSG004		MSP018		MSP018		MSP018		MSP019	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	050807SWMSP018-0-U		091107GWMSP018-0-F		091107GWMSP018-0-U		051408GWMSP018-0-F		051408GWMSP018-0-U		091608GWMSP018-0-F		091608GWMSP018-0-U		051204SWMSP019-0-F	
Collection Date:	5/8/2007		9/11/2007		9/11/2007		5/14/2008		5/14/2008		9/16/2008		9/16/2008		5/11/2004	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.28 K**	0.087	NS		**0.07 JK**	0.087	NS		**0.31 K**	0.087	NS		<0.0500	0.087	NS	
Barium	NS		NS		**0.019 JK**	0.003	NS		**0.014 JK**	0.003	NS		NS		NS	
Beryllium	NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS	
Boron	NS		NS		**0.03 JK**	0.0016	NS		**0.02 JK**	0.0016	NS		NS		NS	
Cadmium	NS		NS		**0.004 K**	0.00127	NS		**0.085 K**	0.00127	NS		**0.0145**		NS	
Cobalt	NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS	
Copper, total	NS		NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		NS		NS	
Iron	NS		NS		**0.06 K**	0.158	NS		**0.05 K**	0.158	NS		<0.0250	0.158	NS	
Molybdenum	NS		NS		**0.01 JK**	0.034	NS		**0.03 JK**	0.034	NS		NS		NS	
Nickel	NS		NS		**0.278 K**	0.168	NS		**1.37 K**	0.168	NS		**0.612**		NS	
Selenium	**0.53**	0.005	NS		**0.022**	0.005	NS		**0.61**	0.005	NS		**0.167**	0.005	NS	
Silver	NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS	
Thallium	NS		NS		<0.0001 UK	0.00003	NS		**0.0008 K**	0.00003	NS		NS		NS	
Vanadium	NS		NS		**0.0203 K**	0.02	NS		**0.106 K**	0.02	NS		**0.0192**	0.02	NS	
Zinc	NS		NS		**0.243 K**	0.382	NS		**5.99 K**	0.382	NS		**1.03**		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		**0.24 JK**	0.087	NS		**0.13 JK**	0.087	NS		<0.0500	0.087	NS		NS	
Barium, dissolved	NS		**0.018 JK**	0.003	NS		**0.014 JK**	0.003	NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.004 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		NS	
Boron, dissolved	NS		<0.02 UK	0.0016	NS		**0.01 JK**	0.0016	NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0006 JK**	0.00127	NS		**0.0714 K**	0.00127	NS		<0.000625	0.00127	NS		**0.0001 JK**	0.00109
Cobalt, dissolved	NS		<0.02 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		NS	
Copper, dissolved	NS		<0.02 UK	0.0371	NS		<0.01 UK	0.0371	NS		NS		NS		NS	
Iron, dissolved	NS		<0.04 UK	0.158	NS		<0.02 UK	0.158	NS		<0.0250	0.158	NS		NS	
Molybdenum, dissolved	NS		**0.03 JK**	0.034	NS		**0.04 JK**	0.034	NS		NS		NS		NS	
Nickel, dissolved	NS		**0.273 K**	0.168	NS		**1.4 K**	0.168	NS		**0.614**	0.168	NS		**0.018 K**	0.134
Selenium, dissolved	NS		**0.029**	0.005	NS		**0.53 J-**	0.005	NS		**0.191**	0.005	NS		NS	
Silver, dissolved	NS		<0.02 UK	0.00036	NS		<0.01 UJK	0.00036	NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0004 UK	0.00003	NS		**0.0009 K**	0.00003	NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0194 K**	0.02	NS		**0.113 K**	0.02	NS		**0.0140**	0.02	NS		**0.0178 K**	0.02
Zinc, dissolved	NS		**0.137 K**	0.382	NS		**5.94 K**	0.382	NS		**0.814**	0.382	NS		**0.006 JK**	0.305

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP019		MSP019		MSP019		MSP019		MSP019		MSP019		MSP019		MSP019	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	051204SWMSP019-0-U		050606SWMSP019-0-F		050606SWMSP019-0-U		050407SWMSP019-0-F		050407SWMSP019-0-U		091107GWMSP019-1-F		091107GWMSP019-1-U		091107GWMSP019-2-F	
Collection Date:	5/11/2004		5/6/2006		5/6/2006		5/6/2007		5/6/2007		9/11/2007		9/11/2007		9/11/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		**0.009 JK**	0.003	NS	
Beryllium	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron	NS		NS		NS		NS		NS		NS		**0.03 JK**	0.0016	NS	
Cadmium	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00127	NS	
Cobalt	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Copper, total	NS		NS		NS		NS		NS		NS		<0.01 UK	0.0371	NS	
Iron	NS		NS		NS		NS		NS		NS		**0.14 K**	0.158	NS	
Molybdenum	NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel	NS		NS		NS		NS		NS		NS		**0.0138 K**	0.168	NS	
Selenium	**0.049**	0.005	NS		**0.092**	0.005	NS		**0.077**	0.005	NS		**0.009**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	
Vanadium	NS		NS		NS		NS		NS		NS		**0.0044 K**	0.02	NS	
Zinc	NS		NS		NS		NS		NS		NS		**0.002 JK**	0.382	NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		**0.1 JK**	0.087	NS		NS		NS		<0.03 UK	0.087	NS		**0.04 JK**	0.087
Barium, dissolved	NS		**0.02 K**	0.003	NS		NS		NS		**0.012 JK**	0.003	NS		**0.01 JK**	0.003
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		**0.03 JK**	0.0016	NS		**0.02 JK**	0.0016
Cadmium, dissolved	NS		**0.0014 K**	0.000798	NS		<0.0001 UK	0.00126	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003
Copper, dissolved	NS		<0.01 UK	0.0187	NS		NS		NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371
Iron, dissolved	NS		**0.04 JK**	0.158	NS		NS		NS		**0.02 JK**	0.158	NS		**0.04 JK**	0.158
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034	NS		**0.02 JK**	0.034
Nickel, dissolved	NS		**0.0206 K**	0.0851	NS		**0.0133 K**	0.166	NS		**0.014 K**	0.168	NS		**0.0138 JK**	0.168
Selenium, dissolved	NS		NS		NS		NS		NS		**0.009**	0.005	NS		**0.009**	0.005
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003
Vanadium, dissolved	NS		**0.0126 K**	0.02	NS		**0.0095 K**	0.02	NS		**0.0046 K**	0.02	NS		**0.0045 JK**	0.02
Zinc, dissolved	NS		**0.056 K**	0.193	NS		**0.002 JK**	0.377	NS		**0.003 JK**	0.382	NS		<0.002 UK	0.382

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP019		MSP019		MSP019		MSP019		MSP019		MSP019		MSP019		MSP019	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	091107GWMSP019-2-U		091107GWMSP019-3-F		091107GWMSP019-3-U		091107GWMSP019-avg-F		091107GWMSP019-avg-U		051408GWMSP019-0-F		051408GWMSP019-0-U		091908GWMSP019-0-F	
Collection Date:	9/11/2007		9/11/2007		9/11/2007		9/11/2007		9/11/2007		5/14/2008		5/14/2008		9/19/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		**0.22 K**	0.087	NS	
Barium	**0.01 JK**	0.003	NS		**0.009 JK**	0.003	NS		**0.00933 JK**	0.003	NS		**0.017 JK**	0.003	NS	
Beryllium	<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS	
Boron	**0.03 JK**	0.0016	NS		**0.03 JK**	0.0016	NS		**0.03 JK**	0.0016	NS		**0.02 JK**	0.0016	NS	
Cadmium	<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		<0.0001 UK	0.00127	NS		**0.0019 K**	0.000865	NS	
Cobalt	<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS	
Copper, total	<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0210	NS	
Iron	**0.14 K**	0.158	NS		**0.15 K**	0.158	NS		**0.143 K**	0.158	NS		**0.2 K**	0.158	NS	
Molybdenum	**0.01 JK**	0.034	NS		<0.01 UK	0.034	NS		**0.01 JK**	0.034	NS		<0.01 UK	0.034	NS	
Nickel	**0.0139 K**	0.168	NS		**0.0136 K**	0.168	NS		**0.0138 K**	0.168	NS		**0.0238 K**	0.0958	NS	
Selenium	**0.009**	0.005	NS		**0.009**	0.005	NS		**0.009**	0.005	NS		**0.099**	0.005	NS	
Silver	<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS	
Thallium	<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		**0.0006 J+K**	0.00003	NS	
Vanadium	**0.0046 K**	0.02	NS		**0.0045 K**	0.02	NS		**0.0045 K**	0.02	NS		**0.0159 K**	0.02	NS	
Zinc	**0.002 JK**	0.382	NS		**0.002 JK**	0.382	NS		**0.002 JK**	0.382	NS		**0.076 K**	0.218	NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		**0.04 JK**	0.087	NS		<0.03 UK	0.087	NS		<0.0500	0.087
Barium, dissolved	NS		**0.011 JK**	0.003	NS		**0.011 JK**	0.003	NS		**0.017 JK**	0.003	NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		**0.03 JK**	0.0016	NS		**0.0267 JK**	0.0016	NS		**0.02 JK**	0.0016	NS		NS	
Cadmium, dissolved	NS		<0.0001 UJK	0.00127	NS		<0.0001 UJK	0.00127	NS		**0.0009 K**	0.000922	NS		<0.000125	0.00127
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0231	NS		NS	
Iron, dissolved	NS		**0.03 JK**	0.158	NS		**0.03 JK**	0.158	NS		<0.02 UK	0.158	NS		<0.0250	0.158
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		**0.02 JK**	0.034	NS		**0.02 JK**	0.034	NS		NS	
Nickel, dissolved	NS		**0.016 JK**	0.168	NS		**0.0146 JK**	0.168	NS		**0.0224 K**	0.105	NS		**0.0211**	0.168
Selenium, dissolved	NS		**0.009**	0.005	NS		**0.009**	0.005	NS		**0.093 J-**	0.005	NS		**0.0189**	0.005
Silver, dissolved	NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		<0.01 UJK	0.00036	NS		NS	
Thallium, dissolved	NS		<0.0005 UK	0.00003	NS		<0.0005 UK	0.00003	NS		**0.0001 JK**	0.00003	NS		NS	
Vanadium, dissolved	NS		**0.003 JK**	0.02	NS		**0.00403 JK**	0.02	NS		**0.0161 K**	0.02	NS		<0.00500	0.02
Zinc, dissolved	NS		<0.01 UK	0.382	NS		**0.003 JK**	0.382	NS		**0.052 K**	0.239	NS		**0.00548 J**	0.382

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP019		MSP020		MSP020		MSP020		MSP020		MSP020		MSP020		MSP020	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	091908GWMSP019-0-U		051504SWMSP020-0-F		051504SWMSP020-0-U		050606SWMSP020-0-F		050606SWMSP020-0-U		050607SWMSP020-0-F		050607SWMSP020-0-U		091307GWMSP020-0-F	
Collection Date:	9/19/2008		5/15/2004		5/15/2004		5/6/2006		5/6/2006		5/6/2007		5/6/2007		9/13/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	<0.0500	0.087	NS		NS		NS		NS		NS		**0.17 JK**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	<0.000125		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	**0.0557 J**	0.158	NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	**0.0214**		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.0198**	0.005	NS		**0.09**	0.005	NS		**0.082**	0.005	NS		**0.045**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	<0.00500	0.02	NS		NS		NS		NS		NS		NS		NS	
Zinc	**0.00684 J**		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		NS		**0.023 K**	0.003	NS		NS		NS		**0.023 K**	0.003
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.06 K**	0.0016
Cadmium, dissolved	NS		**0.002 K**	0.00113	NS		**0.0056 K**	0.00105	NS		<0.0004 UK	0.000785	NS		<0.0001 UK	0.00127
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		<0.01 UK	0.0280	NS		NS		NS		<0.01 UK	0.0371
Iron, dissolved	NS		NS		NS		<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		**0.01 JK**	0.034
Nickel, dissolved	NS		**0.0318 K**	0.142	NS		**0.0631 K**	0.127	NS		**0.009 K**	0.0831	NS		**0.0165 K**	0.168
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.04**	0.005
Silver, dissolved	NS		NS		NS		<0.01 UJK	0.00036	NS		NS		NS		<0.01 UK	0.00036
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003
Vanadium, dissolved	NS		**0.0172 K**	0.02	NS		**0.0145 K**	0.02	NS		**0.0124 K**	0.02	NS		**0.0309 K**	0.02
Zinc, dissolved	NS		**0.032 K**	0.322	NS		**0.167 K**	0.289	NS		**0.004 JK**	0.189	NS		<0.002 UK	0.382

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP020		MSP020		MSP020		MSP020		MSP020		MSP021		MSP021		MSP021	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	091307GWMSP020-0-U		051308GWMSP020-0-F		051308GWMSP020-0-U		091908GWMSP020-0-F		091908GWMSP020-0-U		051204SWMSP021-0-F		051204SWMSP021-0-U		050606SWMSP021-1-F	
Collection Date:	9/13/2007		5/13/2008		5/13/2008		9/19/2008		9/19/2008		5/12/2004		5/12/2004		5/6/2006	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.95 K**	0.087	NS		**1.11 J+K**	0.087	NS		**0.0773 J**	0.087	NS		NS		NS	
Barium	**0.033 K**	0.003	NS		**0.031 K**	0.003	NS		NS		NS		NS		NS	
Beryllium	<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS	
Boron	**0.06 K**	0.0016	NS		**0.01 JK**	0.0016	NS		NS		NS		NS		NS	
Cadmium	**0.0013 K**	0.00127	NS		**0.0018 K**	0.000657	NS		**0.000142 J**		NS		NS		NS	
Cobalt	<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS	
Copper, total	<0.01 UK	0.0371	NS		<0.01 UK	0.0140	NS		NS		NS		NS		NS	
Iron	**0.6 K**	0.158	NS		**0.73 K**	0.158	NS		**0.168**	0.158	NS		NS		NS	
Molybdenum	**0.02 JK**	0.034	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS	
Nickel	**0.0223 K**	0.168	NS		**0.0215 K**	0.0641	NS		**0.0171**		NS		NS		NS	
Selenium	**0.04**	0.005	NS		**0.067**	0.005	NS		**0.0259**	0.005	NS		**0.18**	0.005	NS	
Silver	<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS	
Thallium	**0.0002 JK**	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS	
Vanadium	**0.0391 K**	0.02	NS		**0.0055 K**	0.02	NS		**0.00968 J**	0.02	NS		NS		NS	
Zinc	**0.04 K**	0.382	NS		**0.126 K**	0.146	NS		**0.0104 J**		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		**0.15 JK**	0.087	NS		<0.0500	0.087	NS		NS		NS		**0.16 JK**	0.087
Barium, dissolved	NS		**0.025 K**	0.003	NS		NS		NS		NS		NS		**0.031 K**	0.003
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		<0.01 UK	0.0016	NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0008 K**	0.000654	NS		<0.000125	0.00100	NS		**0.0098 K**	0.00127	NS		**0.0086 K**	0.00127
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		<0.01 UK	0.0139	NS		NS		NS		NS		NS		**0.01 JK**	0.0371
Iron, dissolved	NS		**0.06 K**	0.158	NS		**0.0395 J**	0.158	NS		NS		NS		<0.02 UK	0.158
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		**0.02 JK**	0.034
Nickel, dissolved	NS		**0.0173 J+K**	0.0637	NS		**0.0173**	0.119	NS		**0.116 K**	0.168	NS		**0.0862 K**	0.168
Selenium, dissolved	NS		**0.066**	0.005	NS		**0.027**	0.005	NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		NS		NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		**0.0001 JK**	0.00003
Vanadium, dissolved	NS		**0.0054 K**	0.02	NS		**0.00814 J**	0.02	NS		**0.0364 K**	0.02	NS		**0.0256 K**	0.02
Zinc, dissolved	NS		**0.028 J+K**	0.145	NS		**0.00609 J**	0.270	NS		**0.397 K**	0.382	NS		**0.418 K**	0.382

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP021		MSP021		MSP021		MSP021		MSP021		MSP021		MSP021		MSP021	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	050606SWMSP021-1-U		050606SWMSP021-2-F		050606SWMSP021-2-U		050606SWMSP021-3-F		050606SWMSP021-3-U		050606SWMSP021-avg-F		050606SWMSP021-avg-U		050807SWMSP021-1-F	
Collection Date:	5/6/2006		5/9/2007		5/6/2006		5/6/2006		5/6/2006		5/6/2006		5/6/2006		5/8/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.15**	0.005	NS		**0.153**	0.005	NS		**0.152**	0.005	NS		**0.152**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		**0.16 JK**	0.087	NS		NS	
Barium, dissolved	NS		**0.03 K**	0.003	NS		**0.029 K**	0.003	NS		**0.03 K**	0.003	NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0086 K**	0.00127	NS		**0.0086 K**	0.00127	NS		**0.0086 K**	0.00127	NS		**0.004 K**	0.00127
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0371	NS		**0.01 JK**	0.0371	NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		NS	
Molybdenum, dissolved	NS		**0.02 JK**	0.034	NS		**0.02 JK**	0.034	NS		**0.02 JK**	0.034	NS		NS	
Nickel, dissolved	NS		**0.0872 K**	0.168	NS		**0.0891 K**	0.168	NS		**0.0875 K**	0.168	NS		**0.0842 J+K**	0.168
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036	NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		**0.0001 JK**	0.00003	NS		NS	
Vanadium, dissolved	NS		**0.0262 K**	0.02	NS		**0.0268 K**	0.02	NS		**0.0262 K**	0.02	NS		**0.0236 K**	0.02
Zinc, dissolved	NS		**0.416 K**	0.382	NS		**0.424 K**	0.382	NS		**0.419 K**	0.382	NS		**0.219 K**	0.382

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP021		MSP021		MSP021		MSP021		MSP021		MSP021		MSP021		MSP021	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	050807SWMSP021-1-U		050807SWMSP021-2-F		050807SWMSP021-2-U		050807SWMSP021-3-F		050807SWMSP021-3-U		050807SWMSP021-avg-F		050807SWMSP021-avg-U		091207GWMSP021-0-F	
Collection Date:	5/8/2007		5/8/2007		5/8/2007		5/8/2007		5/8/2007		5/8/2007		5/8/2007		9/12/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.23**	0.005	NS		**0.23**	0.005	NS		**0.23**	0.005	NS		**0.23**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.13 JK**	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.005 JK**	0.003
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.08 K**	0.0016
Cadmium, dissolved	NS		**0.004 K**	0.00127	NS		**0.0041 K**	0.00127	NS		**0.00403 K**	0.00127	NS		<0.0001 UK	0.00127
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.0371
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.02 UK	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	NS		**0.0833 J+K**	0.168	NS		**0.0853 J+K**	0.168	NS		**0.0843 J+K**	0.168	NS		**0.0186 K**	0.168
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.026**	0.005
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003
Vanadium, dissolved	NS		**0.0238 K**	0.02	NS		**0.0236 K**	0.02	NS		**0.0237 K**	0.02	NS		**0.0083 K**	0.02
Zinc, dissolved	NS		**0.221 K**	0.382	NS		**0.224 K**	0.382	NS		**0.221 K**	0.382	NS		**0.002 JK**	0.382

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP021		MSP021		MSP021		MSP021		MSP021		MSP021		MSP021		MSP021	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	091207GWMSP021-0-U		051608GWMSP021-0-F		051608GWMSP021-0-U		091908GWMSP021-1-F		091908GWMSP021-1-U		091908GWMSP021-2-F		091908GWMSP021-2-U		091908GWMSP021-3-F	
Collection Date:	9/12/2007		5/16/2008		5/16/2008		9/19/2008		9/19/2008		9/19/2008		9/19/2008		9/19/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	<0.03 UK	0.087	NS		**0.12 JK**	0.087	NS		<0.0500	0.087	NS		<0.0500	0.087	NS	
Barium	**0.004 JK**	0.003	NS		**0.015 JK**	0.003	NS		NS		NS		NS		NS	
Beryllium	<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS	
Boron	**0.08 K**	0.0016	NS		**0.04 JK**	0.0016	NS		NS		NS		NS		NS	
Cadmium	<0.0002 UK	0.00127	NS		**0.0027 K**	0.00105	NS		<0.000125		NS		<0.000125		NS	
Cobalt	<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS	
Copper, total	<0.01 UK	0.0371	NS		<0.01 UK	0.0279	NS		NS		NS		NS		NS	
Iron	**0.08 K**	0.158	NS		**0.11 K**	0.158	NS		<0.0250	0.158	NS		**0.102**	0.158	NS	
Molybdenum	<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS	
Nickel	**0.0183 K**	0.168	NS		**0.0351 K**	0.127	NS		**0.0311**		NS		**0.0370**		NS	
Selenium	**0.027**	0.005	NS		**0.12**	0.005	NS		**0.0249**	0.005	NS		**0.0281 J**	0.005	NS	
Silver	<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS	
Thallium	<0.0001 UK	0.00003	NS		<0.0002 UK	0.00003	NS		NS		NS		NS		NS	
Vanadium	**0.0083 K**	0.02	NS		**0.0183 K**	0.02	NS		<0.00500	0.02	NS		**0.00600 J**	0.02	NS	
Zinc	**0.01 JK {J+}**	0.382	NS		**0.124 K**	0.288	NS		**0.00564 J**		NS		**0.00849 J**		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		**0.05 J+K**	0.087	NS		<0.0500	0.087	NS		<0.0500	0.087	NS		<0.0500	0.087
Barium, dissolved	NS		**0.012 JK**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		**0.04 JK**	0.0016	NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.002 K**	0.00105	NS		<0.000125	0.00127	NS		<0.000125	0.00127	NS		<0.000125	0.00127
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0279	NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		**0.0952 J**	0.158	NS		<0.0250	0.158	NS		<0.0250	0.158
Molybdenum, dissolved	NS		**0.02 JK**	0.034	NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0303 K**	0.127	NS		**0.0342**	0.168	NS		**0.0331**	0.168	NS		**0.0324**	0.168
Selenium, dissolved	NS		**0.12**	0.005	NS		**0.0259**	0.005	NS		**0.0285 J**	0.005	NS		**0.0281**	0.005
Silver, dissolved	NS		<0.01 UJK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0166 K**	0.02	NS		<0.00500	0.02	NS		**0.00525 J**	0.02	NS		**0.00692 J**	0.02
Zinc, dissolved	NS		**0.063 K**	0.289	NS		**0.00721 J**	0.382	NS		**0.00778 J**	0.382	NS		**0.00647 J**	0.382

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP021		MSP021		MSP021		MSP022		MSP022		MSP022		MSP022		MSP022	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	091908GWMSP021-3-U		091908GWM		091908GWMSP021-avg-U		051104SWMSP022-0-F		051104SWMSP022-0-U		050606SWMSP022-0-F		050606SWMSP022-0-U		050707SWMSP022-0-F	
Collection Date:	9/19/2008		9/19/2008		9/19/2008		5/11/2004		5/11/2004		5/6/2006		5/6/2006		5/7/2007	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	<0.0500	0.087	NS		<0.0500	0.087	NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	**0.000172 J**		NS		**0.000172 J**		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	**0.0904 J**	0.158	NS		**0.0962 J**	0.158	NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	**0.0318**		NS		**0.0333**		NS		NS		NS		NS		NS	
Selenium	**0.0272**	0.005	NS		**0.0267 J**	0.005	NS		**0.041**	0.005	NS		**0.014**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	**0.00654 J**	0.02	NS		**0.00627 J**	0.02	NS		NS		NS		NS		NS	
Zinc	**0.00731 J**		NS		**0.00715 J**		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		<0.0500	0.087	NS		NS		NS		<0.03 UK	0.087	NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		**0.058 K**	0.003	NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000125	0.00127	NS		**0.0001 JK**	0.00127	NS		<0.0001 UK	0.000940	NS		<0.0004 UK	0.00127
Cobalt, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.0238	NS		NS	
Iron, dissolved	NS		**0.0952 J**	0.158	NS		NS		NS		<0.02 UK	0.158	NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		NS	
Nickel, dissolved	NS		**0.0332**	0.168	NS		**0.0039 K**	0.168	NS		**0.0012 JK**	0.108	NS		**0.0041 K**	0.168
Selenium, dissolved	NS		**0.0275 J**	0.005	NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		<0.01 UJK	0.00036	NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS	
Vanadium, dissolved	NS		**0.00609 J**	0.02	NS		**0.00928 K**	0.02	NS		**0.0137 K**	0.02	NS		**0.0132 K**	0.02
Zinc, dissolved	NS		**0.00715 J**	0.382	NS		<0.002 UK	0.382	NS		<0.002 UK	0.246	NS		**0.003 JK**	0.382

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP022		MSP022		MSP022		MSP022		MSP022		MSP023		MSP023		MSP023	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	050707SWMSP022-0-U		091307GWMSP022-0-F		091307GWMSP022-0-U		051808GWMSP022-0-F		051808GWMSP022-0-U		051204SWMSP023-0-F		051204SWMSP023-0-U		050606SWMSP023-0-F	
Collection Date:	5/7/2007		9/13/2007		9/13/2007		5/18/2008		5/18/2008		5/12/2004		5/12/2004		5/6/2006	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.43 K**	0.087	NS		<0.07 UK	0.087	NS		**0.1 JK**	0.087	NS		NS		NS	
Barium	NS		NS		**0.089 K**	0.003	NS		**0.06 K**	0.003	NS		NS		NS	
Beryllium	NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS	
Boron	NS		NS		**0.4 K**	0.0016	NS		**0.22 K**	0.0016	NS		NS		NS	
Cadmium	NS		NS		**0.0002 JK**	0.00127	NS		**0.0004 JK**	0.00101	NS		NS		NS	
Cobalt	NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS	
Copper, total	NS		NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0264	NS		NS		NS	
Iron	NS		NS		<0.03 UK	0.158	NS		**0.12 K**	0.158	NS		NS		NS	
Molybdenum	NS		NS		**0.02 JK**	0.034	NS		<0.01 UK	0.034	NS		NS		NS	
Nickel	NS		NS		**0.0082 K**	0.168	NS		**0.0028 JK**	0.120	NS		NS		NS	
Selenium	**0.035**	0.005	NS		**0.025**	0.005	NS		**0.009**	0.005	NS		**0.041**	0.005	NS	
Silver	NS		NS		<0.01 UK	0.00036	NS		<0.01 UK	0.00036	NS		NS		NS	
Thallium	NS		NS		**0.0004 JK**	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS	
Vanadium	NS		NS		**0.0421 K**	0.02	NS		**0.0102 K**	0.02	NS		NS		NS	
Zinc	NS		NS		**0.005 JK**	0.382	NS		**0.004 JK**	0.272	NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087
Barium, dissolved	NS		**0.09 K**	0.003	NS		**0.054 K**	0.003	NS		NS		NS		**0.013 K**	0.003
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		**0.4 K**	0.0016	NS		**0.21 K**	0.0016	NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0001 JK**	0.00127	NS		<0.0001 UK	0.000996	NS		**0.0002 JK**	0.00104	NS		**0.0002 JK**	0.000805
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		<0.01 UK	0.0371	NS		<0.01 UK	0.0259	NS		NS		NS		<0.01 UK	0.0189
Iron, dissolved	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS		NS		**0.05 K**	0.034
Nickel, dissolved	NS		**0.0077 K**	0.168	NS		**0.0029 JK**	0.118	NS		**0.0058 K**	0.126	NS		**0.0028 JK**	0.0863
Selenium, dissolved	NS		**0.022**	0.005	NS		**0.01**	0.005	NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		<0.01 UJK	0.00036	NS		NS		NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		<0.0002 UK	0.00003	NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003
Vanadium, dissolved	NS		**0.0384 K**	0.02	NS		**0.0087 K**	0.02	NS		**0.0563 K**	0.02	NS		**0.0571 K**	0.02
Zinc, dissolved	NS		<0.002 UK	0.382	NS		**0.002 JK**	0.268	NS		**0.006 JK**	0.287	NS		<0.002 UK	0.196

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP023		MSP031		MSP031		MSP031		MSP031		MSP031		MSP031		MSP031	
Location Type:	Pond		Pond		Pond		Pond		Pond		Pond		Pond		Pond	
Sample ID:	050606SWMSP023-0-U		051104SWMSP031-0-F		051104SWMSP031-0-U		050606SWMSP031-0-F		050606SWMSP031-0-U		050707SWMSP031-0-F		050707SWMSP031-0-U		051308GWMSP031-0-F	
Collection Date:	5/6/2006		5/11/2004		5/11/2004		5/6/2006		5/6/2006		5/7/2007		5/7/2007		5/13/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		<0.03 UK	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.031**	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		**0.002 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		<0.03 UK	0.087	NS		NS		NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		NS		**0.043 K**	0.003	NS		NS		NS		**0.071 K**	0.003
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.07 K**	0.0016
Cadmium, dissolved	NS		<0.0001 UK	0.000747	NS		**0.0002 JK**	0.000660	NS		<0.0001 UK	0.000896	NS		**0.0002 JK**	0.000831
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		<0.01 UK	0.0141	NS		NS		NS		<0.01 UK	0.0198
Iron, dissolved	NS		NS		NS		**0.08 K**	0.158	NS		NS		NS		**0.03 JK**	0.158
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	NS		**0.002 K**	0.0773	NS		**0.0052 K**	0.0645	NS		**0.0079 K**	0.101	NS		**0.005 K**	0.0903
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.002 J-**	0.005
Silver, dissolved	NS		NS		NS		<0.01 UJK	0.00036	NS		NS		NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		**0.0001 JK**	0.00003
Vanadium, dissolved	NS		**0.00409 K**	0.02	NS		**0.0043 K**	0.02	NS		**0.003 K**	0.02	NS		**0.0033 K**	0.02
Zinc, dissolved	NS		<0.002 UK	0.176	NS		**0.004 JK**	0.147	NS		**0.004 JK**	0.230	NS		**0.007 JK**	0.205

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MSP031		MST023		MST023		MST023		MST023		MST023		MST023		MST023	
Location Type:	Pond		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051308GWMSP031-0-U		051904SWMST023-0-F		051904SWMST023-0-U		051106SWMST023-0-F		051106SWMST023-0-U		051407SWMST023-0-F		051407SWMST023-0-U		091007SWMST023-0-F	
Collection Date:	5/13/2008		5/19/2004		5/19/2004		5/11/2006		5/11/2006		5/14/2007		5/14/2007		9/10/2007	
Sample Type:	Groundwater		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.08 JK**	0.087	NS		NS		NS		NS		NS		**0.24 K**	0.087	NS	
Barium	**0.071 K**	0.003	NS		NS		NS		NS		NS		NS		NS	
Beryllium	<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS	
Boron	**0.07 K**	0.0016	NS		NS		NS		NS		NS		NS		NS	
Cadmium	**0.0003 JK**	0.000785	NS		NS		NS		NS		NS		NS		NS	
Cobalt	<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS	
Copper, total	<0.01 UK	0.0182	NS		NS		NS		NS		NS		NS		NS	
Iron	**0.14 K**	0.158	NS		NS		NS		NS		NS		NS		NS	
Molybdenum	<0.01 UK	0.034	NS		NS		NS		NS		NS		NS		NS	
Nickel	**0.0061 K**	0.0831	NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.003 J**	0.005	NS		<0.001	0.005	NS		**0.005 J**	0.005	NS		**0.004 J**	0.005	NS	
Silver	<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS		NS	
Thallium	<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS		NS	
Vanadium	**0.004 K**	0.02	NS		NS		NS		NS		NS		NS		NS	
Zinc	**0.012 J+K**	0.189	NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		**0.05 JK {J+}**	0.087	NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		**0.063 K**	0.003	NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000852	NS		<0.0001 UK	0.000782	NS		<0.0001 UJK	0.000855	NS		<0.0001 UK	0.000800
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		<0.01 UK	0.0181	NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		<0.02 UK	0.158	NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0011 K**	0.0937	NS		**0.0011 JK**	0.0827	NS		**0.001 JK**	0.0943	NS		**0.0022 JK**	0.0855
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.00181 K**	0.02	NS		**0.0007 JK**	0.02	NS		**0.0008 JK**	0.02	NS		**0.0012 K**	0.02
Zinc, dissolved	NS		**0.006 JK**	0.213	NS		**0.005 JK**	0.188	NS		**0.003 JK**	0.214	NS		<0.002 UK	0.194

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST023		MST023		MST023		MST023		MST023		MST023		MST023		MST023	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	091007SWMST023-0-U		051408SWMST023-1-F		051408SWMST023-1-U		051408SWMST023-2-F		051408SWMST023-2-U		051408SWMST023-3-F		051408SWMST023-3-U		051408SWMST023-avg-F	
Collection Date:	9/10/2007		5/14/2008		5/14/2008		5/14/2008		5/14/2008		5/14/2008		5/14/2008		5/14/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	<0.03 UK	0.087	NS		**1.67 K**	0.087	NS		**1.42 K**	0.087	NS		**1.52 K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.001 J**	0.005	NS		**0.004 J**	0.005	NS		**0.005 J**	0.005	NS		**0.004 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000689	NS		<0.0001 UK	0.000692	NS		<0.0001 UJK	0.000695	NS		<0.0001 UJK	0.000692
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0028 JK**	0.0687	NS		**0.0019 JK**	0.0691	NS		**0.0029 JK**	0.0696	NS		**0.00253 JK**	0.0691
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0016 K**	0.02	NS		**0.0017 K**	0.02	NS		**0.0017 K**	0.02	NS		**0.00167 K**	0.02
Zinc, dissolved	NS		<0.002 UJK	0.156	NS		**0.003 JK**	0.157	NS		**0.004 JK**	0.158	NS		**0.0035 JK**	0.157

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST023		MST023		MST023		MST024		MST024		MST025		MST025		MST026	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051408SWMST023-avg-U		091608SWMST023-0-F		091608SWMST023-0-U		051904SWMST024-0-F		051904SWMST024-0-U		051904SWMST025-0-F		051904SWMST025-0-U		051704SWMST026-0-F	
Collection Date:	5/14/2008		9/16/2008		9/16/2008		5/19/2004		5/19/2004		5/19/2004		5/19/2004		5/17/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Averaged		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**1.54 K**	0.087	NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.00433 J**	0.005	NS		**0.00194**	0.005	NS		**0.003 J**	0.005	NS		**0.002 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		<0.0500	0.087	NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000125	0.000795	NS		<0.0001 UJK	0.000826	NS		<0.0001 UK	0.000833	NS		<0.0001 UK	0.000852
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		<0.0250	0.158	NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.00212 J**	0.0847	NS		**0.0015 JK**	0.0895	NS		**0.0003 JK**	0.0907	NS		<0.0007 UK	0.0937
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.00500	0.02	NS		**0.00077 JK**	0.02	NS		**0.00086 K**	0.02	NS		**0.00087 K**	0.02
Zinc, dissolved	NS		**0.00508 J**	0.193	NS		<0.002 UJK	0.204	NS		<0.002 UK	0.206	NS		<0.002 UK	0.213

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST026		MST026		MST026		MST026		MST026		MST026		MST026		MST026	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051704SWMST026-0-U		051407SWMST026-1-F		051407SWMST026-1-U		051407SWMST026-2-F		051407SWMST026-2-U		051407SWMST026-3-F		051407SWMST026-3-U		051407SWMST026-avg-F	
Collection Date:	5/17/2004		5/14/2007		5/14/2007		5/14/2007		5/14/2007		5/14/2007		5/14/2007		5/14/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		<0.18 UK	0.087	NS		<0.17 UK	0.087	NS		<0.19 UK	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.007**	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UJK	0.000850	NS		<0.0001 UJK	0.000858	NS		<0.0001 UJK	0.000855	NS		<0.0001 UJK	0.000855
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0008 JK**	0.0935	NS		**0.0009 JK**	0.0947	NS		**0.0008 JK**	0.0943	NS		**0.000833 JK**	0.0943
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0006 JK**	0.02	NS		**0.0006 JK**	0.02	NS		**0.0007 JK**	0.02	NS		**0.000633 JK**	0.02
Zinc, dissolved	NS		<0.002 UJK	0.213	NS		<0.002 UJK	0.215	NS		**0.003 JK**	0.214	NS		**0.003 JK**	0.214

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST026		MST026		MST026		MST026		MST026		MST026		MST026		MST026	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051407SWMST026-avg-U		091007SWMST026-1-F		091007SWMST026-1-U		091007SWMST026-2-F		091007SWMST026-2-U		091007SWMST026-3-F		091007SWMST026-3-U		091007SWMST026-avg-F	
Collection Date:	5/14/2007		9/10/2007		9/10/2007		9/10/2007		9/10/2007		9/10/2007		9/10/2007		9/10/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Averaged		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		**0.03 JK {J+}**	0.087	NS		<0.03 UK	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.004 J**	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000795	NS		<0.0001 UK	0.000780	NS		<0.0001 UK	0.000785	NS		<0.0001 UK	0.000787
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0022 JK**	0.0847	NS		**0.0021 JK**	0.0823	NS		**0.0022 JK**	0.0831	NS		**0.00217 JK**	0.0835
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0012 K**	0.02	NS		**0.0013 K**	0.02	NS		**0.0014 K**	0.02	NS		**0.0013 K**	0.02
Zinc, dissolved	NS		<0.002 UK	0.193	NS		<0.002 UK	0.187	NS		<0.002 UK	0.189	NS		<0.002 UK	0.190

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST026		MST026		MST026		MST026		MST026		MST026		MST026		MST026	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	091007SWMST026-avg-U		051408SWMST026-1-F		051408SWMST026-1-U		051408SWMST026-2-F		051408SWMST026-2-U		051408SWMST026-3-F		051408SWMST026-3-U		051408SWMST026-avg-F	
Collection Date:	9/10/2007		5/14/2008		5/14/2008		5/14/2008		5/14/2008		5/14/2008		5/14/2008		5/14/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Averaged		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.03 JK**	0.087	NS		**1.63 K**	0.087	NS		**1.77 K**	0.087	NS		**1.82 K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000681	NS		<0.0001 UK	0.000678	NS		<0.0001 UK	0.000675	NS		<0.0001 UK	0.000678
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0016 JK**	0.0675	NS		**0.0016 JK**	0.0670	NS		**0.0019 JK**	0.0666	NS		**0.0017 JK**	0.0670
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0013 K**	0.02	NS		**0.0015 K**	0.02	NS		**0.0012 K**	0.02	NS		**0.00133 K**	0.02
Zinc, dissolved	NS		**0.004 JK**	0.153	NS		**0.008 JK**	0.152	NS		<0.002 UK	0.151	NS		**0.006 JK**	0.152

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST026		MST026		MST026		MST027		MST027		MST027		MST027		MST027	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051408SWMST026-avg-U		091508SWMST026-0-F		091508SWMST026-0-U		051404SWMST027-0-F		051404SWMST027-0-U		051106SWMST027-0-F		051106SWMST027-0-U		050607SWMST027-0-F	
Collection Date:	5/14/2008		9/15/2008		9/15/2008		5/14/2004		5/14/2004		5/11/2006		5/11/2006		5/6/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Averaged		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**1.74 K**	0.087	NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.004 J**	0.005	NS		**0.00155**	0.005	NS		**0.008**	0.005	NS		**0.005 J-**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		<0.0500	0.087	NS		NS		NS		<0.03 UK	0.087	NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		**0.064 K**	0.003	NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000125	0.000798	NS		NS		NS		<0.0001 UK	0.000774	NS		<0.0001 UK	0.000813
Cobalt, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.0179	NS		NS	
Iron, dissolved	NS		<0.0250	0.158	NS		NS		NS		<0.02 UK	0.158	NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		NS	
Nickel, dissolved	NS		**0.00151 J**	0.0851	NS		NS		NS		**0.0007 JK**	0.0815	NS		**0.0021 JK**	0.0875
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS	
Vanadium, dissolved	NS		<0.00500	0.02	NS		**0.0007 J-K**	0.02	NS		**0.0007 JK**	0.02	NS		<0.0009 UK	0.02
Zinc, dissolved	NS		**0.0165 J**	0.193	NS		NS		NS		<0.002 UK	0.185	NS		<0.002 UK	0.199

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST027		MST027		MST027		MST027		MST027		MST027		MST027		MST126	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050607SWMST027-0-U		090907SWMST027-0-F		090907SWMST027-0-U		051408SWMST027-0-F		051408SWMST027-0-U		091608SWMST027-0-F		091608SWMST027-0-U		051704SWMST126-1-F	
Collection Date:	5/6/2007		9/9/2007		9/9/2007		5/14/2008		5/14/2008		9/16/2008		9/16/2008		5/17/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.6 K**	0.087	NS		<0.03 UK	0.087	NS		**1.4 J+K**	0.087	NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.009**	0.005	NS		<0.001	0.005	NS		**0.004 J**	0.005	NS		**0.00126**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		<0.0500	0.087	NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000821	NS		<0.0001 UK	0.000686	NS		<0.000125	0.000823	NS		<0.0001 UK	0.000886
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		<0.0250	0.158	NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0011 JK**	0.0887	NS		**0.0023 JK**	0.0683	NS		**0.00159 J**	0.0891	NS		**0.0011 K**	0.0993
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.0008 UK	0.02	NS		**0.0013 K**	0.02	NS		<0.00500	0.02	NS		**0.00072 K**	0.02
Zinc, dissolved	NS		<0.002 UK	0.202	NS		**0.006 JK**	0.155	NS		<0.00500	0.203	NS		<0.002 UK	0.226

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST126		MST126		MST126		MST126		MST126		MST126		MST126		MST126	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051704SWMST126-1-U		051704SWMST126-2-F		051704SWMST126-2-U		051704SWMST126-3-F		051704SWMST126-3-U		051704SWMST126-avg-F		051704SWMST126-avg-U		050606SWMST126-0-F	
Collection Date:	5/17/2004		5/17/2004		5/17/2004		5/17/2004		5/17/2004		5/17/2004		5/17/2004		5/6/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.14 JK**	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.032 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000879	NS		<0.0001 UK	0.000877	NS		<0.0001 UK	0.000881	NS		<0.0001 UK	0.000706
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.0156
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.07 K**	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	NS		**0.001 J+K**	0.0981	NS		<0.001 UK	0.0978	NS		**0.00105 J+K**	0.0984	NS		**0.0019 JK**	0.0712
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003
Vanadium, dissolved	NS		**0.00073 K**	0.02	NS		**0.00072 K**	0.02	NS		**0.000723 K**	0.02	NS		<0.0002 UK	0.02
Zinc, dissolved	NS		<0.002 UK	0.223	NS		<0.002 UK	0.222	NS		<0.002 UK	0.224	NS		**0.007 JK**	0.162

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST126		MST127		MST127		MST127		MST127		MST127		MST127		MST127	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050606SWMST126-0-U		051304SWMST127-0-F		051304SWMST127-0-U		050606SWMST127-0-F		050606SWMST127-0-U		050407SWMST127-0-F		050407SWMST127-0-U		090907SWMST127-0-F	
Collection Date:	5/6/2006		5/13/2004		5/13/2004		5/6/2006		5/6/2006		5/4/2007		5/4/2007		9/9/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		**0.95 J+K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.004 J**	0.005	NS		<0.001	0.005	NS		**0.004 J**	0.005	NS		<0.001	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		**0.11 JK**	0.087	NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		**0.032 K**	0.003	NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000689	NS		<0.0001 UK	0.000737	NS		<0.0001 UK	0.000846	NS		<0.0001 UK	0.000933
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		<0.01 UK	0.0166	NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		**0.05 K**	0.158	NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0008 JK**	0.0687	NS		**0.0023 JK**	0.0758	NS		**0.0025 JK**	0.0927	NS		**0.0018 JK**	0.107
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0006 K**	0.02	NS		<0.0002 UK	0.02	NS		<0.0008 UK	0.02	NS		**0.002 K**	0.02
Zinc, dissolved	NS		**0.002 JK**	0.156	NS		**0.005 JK**	0.172	NS		<0.002 UK	0.211	NS		**0.003 JK**	0.244

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST127		MST127		MST127		MST127		MST127		MST127		MST127		MST127	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	090907SWMST127-0-U		051408SWMST127-0-F		051408SWMST127-0-U		051608SWMST127-0-F		051608SWMST127-0-U		091708SWMST127-1-F		091708SWMST127-1-U		091708SWMST127-2-F	
Collection Date:	9/9/2007		5/14/2008		5/14/2008		5/16/2008		5/16/2008		9/17/2008		9/17/2008		9/17/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**3.32 K**	0.087	NS		**0.48 K**	0.087	NS		**0.32 K**	0.087	NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		**0.005**	0.005	NS		**0.005 J-**	0.005	NS		**0.00196**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		<0.0500	0.087	NS		<0.0500	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000737	NS		<0.0001 UK	0.000764	NS		<0.000125	0.000863	NS		<0.000125	0.000863
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		<0.0250	0.158	NS		<0.0250	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0029 JK**	0.0758	NS		**0.0026 JK**	0.0798	NS		**0.00201 J**	0.0955	NS		**0.00203 J**	0.0955
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0011 J+K**	0.02	NS		**0.0008 JK**	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02
Zinc, dissolved	NS		**0.006 JK**	0.172	NS		**0.007 JK**	0.182	NS		<0.00500	0.217	NS		**0.00747 J**	0.217

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST127		MST127		MST127		MST127		MST127		MST131		MST131		MST131	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	091708SWMST127-2-U		091708SWMST127-3-F		091708SWMST127-3-U		091708SWMST127-avg-F		091708SWMST127-avg-U		051004SWMST131-0-F		051004SWMST131-0-U		050606SWMST131-0-F	
Collection Date:	9/17/2008		9/17/2008		9/17/2008		9/17/2008		9/17/2008		5/10/2004		5/10/2004		5/6/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.00134**	0.005	NS		**0.00176**	0.005	NS		**0.00169**	0.005	NS		**0.002 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		<0.0500	0.087	NS		<0.0500	0.087	NS		NS		NS		**0.19 JK**	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.039 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000125	0.000870	NS		<0.000125	0.000865	NS		<0.0001 UK	0.000793	NS		<0.0001 UK	0.000663
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.0142
Iron, dissolved	NS		**0.0444 J**	0.158	NS		**0.0444 J**	0.158	NS		NS		NS		**0.1 K**	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	NS		**0.00186 J**	0.0966	NS		**0.00197 J**	0.0958	NS		**0.0006 JK**	0.0844	NS		**0.0028 JK**	0.0649
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003
Vanadium, dissolved	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		**0.00115 K**	0.02	NS		**0.001 JK**	0.02
Zinc, dissolved	NS		<0.00500	0.220	NS		**0.00747 J**	0.218	NS		<0.002 UJK	0.192	NS		**0.003 JK**	0.148

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST131		MST131		MST131		MST131		MST131		MST131		MST131		MST131	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050606SWMST131-0-U		050307SWMST131-0-F		050307SWMST131-0-U		091007SWMST131-0-F		091007SWMST131-0-U		051808SWMST131-0-F		051808SWMST131-0-U		091808SWMST131-0-F	
Collection Date:	5/6/2006		5/20/2004		5/4/2007		9/10/2007		9/10/2007		5/18/2008		5/18/2008		9/18/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		**0.82 J+K**	0.087	NS		**0.17 JK**	0.087	NS		**0.44 J+K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.005**	0.005	NS		**0.002 J**	0.005	NS		**0.002 J**	0.005	NS		**0.002 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0500	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000785	NS		<0.0001 UK	0.000808	NS		<0.0001 UK	0.000715	NS		<0.000125	0.000780
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0250	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.003 JK**	0.0831	NS		**0.0028 JK**	0.0867	NS		**0.0033 K**	0.0725	NS		**0.00246 J**	0.0823
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.001 UK	0.02	NS		**0.002 K**	0.02	NS		**0.0021 JK**	0.02	NS		<0.00500	0.02
Zinc, dissolved	NS		<0.002 UK	0.189	NS		<0.002 UK	0.197	NS		**0.004 JK**	0.165	NS		<0.00500	0.187

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST131		MST131		MST131		MST132		MST132		MST132		MST132		MST132	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	091808SWMST131-0-U		0905SWMST131-F		0905SWMST131-U		051204SWMST132-0-F		051204SWMST132-0-U		050606SWMST132-0-F		050606SWMST132-0-U		050407SWMST132-0-F	
Collection Date:	9/18/2008		5/7/2009		5/7/2009		5/12/2004		5/12/2004		5/6/2006		5/6/2006		5/4/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.00216**	0.005	NS		**0.00207**	0.005	NS		<0.001	0.005	NS		**0.004 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		**0.07 JK**	0.087	NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		**0.032 K**	0.003	NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000125	0.000462	NS		<0.0001 UK	0.000877	NS		<0.0001 UK	0.000742	NS		<0.0001 UK	0.000858
Cobalt, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.0168	NS		NS	
Iron, dissolved	NS		**0.116**	0.158	NS		NS		NS		**0.03 JK**	0.158	NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		NS	
Nickel, dissolved	NS		NS		NS		**0.0005 JK**	0.0977	NS		**0.0014 JK**	0.0766	NS		**0.0026 JK**	0.0947
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS	
Vanadium, dissolved	NS		<0.00500	0.02	NS		**0.00045 K**	0.02	NS		<0.0002 UK	0.02	NS		<0.0007 UK	0.02
Zinc, dissolved	NS		NS		NS		<0.002 UK	0.222	NS		**0.003 JK**	0.174	NS		<0.002 UK	0.215

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST132		MST132		MST132		MST132		MST132		MST132		MST132		MST132	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050407SWMST132-0-U		091007SWMST132-0-F		091007SWMST132-0-U		051808SWMST132-0-F		051808SWMST132-0-U		091808SWMST132-0-F		091808SWMST132-0-U		0905SWMST132-1-F	
Collection Date:	5/4/2007		9/10/2007		9/10/2007		5/18/2008		5/18/2008		9/18/2008		9/18/2008		5/7/2009	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.46 J+K**	0.087	NS		**0.27 K**	0.087	NS		**0.2 K**	0.087	NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		<0.001	0.005	NS		**0.004 J**	0.005	NS		**0.00130**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		<0.0500	0.087	NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000922	NS		<0.0001 UK	0.000828	NS		<0.000125	0.000833	NS		<0.000125	0.000583
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		<0.0250	0.158	NS		**0.0654 J**	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0034 K**	0.105	NS		**0.0026 JK**	0.0899	NS		**0.00354 J**	0.0907	NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0021 K**	0.02	NS		<0.0002 UK	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02
Zinc, dissolved	NS		<0.002 UK	0.239	NS		**0.002 JK**	0.204	NS		<0.00500	0.206	NS		NS	

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST132		MST132		MST132		MST132		MST132		MST132		MST132		MST133	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	0905SWMST132-1-U		0905SWMST132-2-F		0905SWMST132-2-U		0905SWMST132-3-F		0905SWMST132-3-U		0905SWMST132-avg-F		0905SWMST132-avg-U		051004SWMST133-0-F	
Collection Date:	5/7/2009		5/7/2009		5/7/2009		5/7/2009		5/7/2009		5/7/2009		5/7/2009		5/10/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.00359**	0.005	NS		**0.00331**	0.005	NS		**0.00393**	0.005	NS		**0.00361**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000125	0.000580	NS		<0.000125	0.000583	NS		<0.000125	0.000583	NS		<0.0001 UK	0.000677
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		**0.0628 J**	0.158	NS		**0.0574 J**	0.158	NS		**0.0619 J**	0.158	NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.0015 K**	0.0669
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		<0.00500	0.02	NS		**0.00095 K**	0.02
Zinc, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.152

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST133		MST133		MST133		MST133		MST133		MST133		MST133		MST133	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051004SWMST133-0-U		050606SWMST133-0-F		050606SWMST133-0-U		050707SWMST133-1-F		050707SWMST133-1-U		050707SWMST133-2-F		050707SWMST133-2-U		050707SWMST133-3-F	
Collection Date:	5/10/2004		5/6/2006		5/6/2006		5/7/2007		5/7/2007		5/7/2007		5/7/2007		5/7/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		**0.5 K**	0.087	NS		**0.49 K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.004 J**	0.005	NS		**0.007**	0.005	NS		**0.001 J**	0.005	NS		**0.001 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		**0.44 K**	0.087	NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		**0.034 K**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000556	NS		<0.0001 UK	0.000615	NS		<0.0001 UK	0.000618	NS		<0.0001 UK	0.000618
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0110	NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		**0.22 K**	0.158	NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0021 JK**	0.0502	NS		**0.0013 JK**	0.0581	NS		**0.0013 JK**	0.0585	NS		**0.0013 JK**	0.0585
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		<0.0002 UK	0.02	NS		**0.0011 K**	0.02	NS		**0.0011 K**	0.02	NS		**0.001 K**	0.02
Zinc, dissolved	NS		**0.007 JK**	0.114	NS		**0.003 JK**	0.132	NS		**0.002 JK**	0.133	NS		**0.005 JK**	0.133

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST133		MST133		MST133		MST133		MST133		MST133		MST133		MST134	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050707SWMST133-3-U		050707SWMST133-avg-F		050707SWMST133-avg-U		051308SWMST133-0-F		051308SWMST133-0-U		0905SWMST133-F		0905SWMST133-U		051104SWMST134-0-U	
Collection Date:	5/7/2007		5/7/2007		5/7/2007		5/13/2008		5/13/2008		5/8/2009		5/8/2009		5/11/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.52 K**	0.087	NS		**0.503 K**	0.087	NS		**1.12 K**	0.087	NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.001 J**	0.005	NS		**0.001 J**	0.005	NS		<0.001	0.005	NS		**0.00239**	0.005	**0.004 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000618	NS		<0.0001 UK	0.000407	NS		<0.000125	0.000405	NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		**0.149**	0.158	NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0013 JK**	0.0585	NS		**0.0017 JK**	0.0318	NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.00107 K**	0.02	NS		**0.0015 K**	0.02	NS		<0.00500	0.02	NS		NS	
Zinc, dissolved	NS		**0.00333 JK**	0.133	NS		**0.004 JK**	0.0723	NS		NS		NS		NS	

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST134		MST134		MST134		MST134		MST134		MST134		MST134		MST134	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051204SWMST134-0-F		050606SWMST134-0-F		050606SWMST134-0-U		050707SWMST134-1-F		050707SWMST134-1-U		050707SWMST134-2-F		050707SWMST134-2-U		050707SWMST134-3-F	
Collection Date:	5/11/2004		5/6/2006		5/6/2006		5/7/2007		5/7/2007		5/7/2007		5/7/2007		5/7/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		**0.05 JK**	0.087	NS		<0.03 UK	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		NS		**0.011**	0.005	NS		**0.001 J**	0.005	NS		**0.001 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		**0.05 JK {J+}**	0.087	NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		**0.037 K**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	**0.0001 JK**	0.000861	<0.0001 UK	0.000580	NS		<0.0001 UK	0.000675	NS		<0.0001 UK	0.000672	NS		<0.0001 UK	0.000672
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0116	NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		**0.03 JK**	0.158	NS		NS		NS		NS		NS		NS	
Molybdenum, dissolved	NS		<0.01 UK	0.034	NS		NS		NS		NS		NS		NS	
Nickel, dissolved	**0.0026 K**	0.0952	**0.0021 JK**	0.0533	NS		**0.0028 JK**	0.0666	NS		**0.0028 JK**	0.0662	NS		**0.003 JK**	0.0662
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	**0.00115 K**	0.02	<0.0002 UK	0.02	NS		**0.0009 JK**	0.02	NS		**0.0008 JK**	0.02	NS		**0.0008 JK**	0.02
Zinc, dissolved	**0.002 JK**	0.217	**0.005 JK**	0.121	NS		**0.002 JK**	0.151	NS		<0.002 UK	0.150	NS		**0.004 JK**	0.150

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST134		MST134		MST134		MST134		MST134		MST135		MST135		MST135	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050707SWMST134-3-U		050707SWMST134-avg-F		050707SWMST134-avg-U		051308SWMST134-0-F		051308SWMST134-0-U		051104SWMST135-0-F		051104SWMST135-0-U		050606SWMST135-0-F	
Collection Date:	5/7/2007		5/7/2007		5/7/2007		5/13/2008		5/13/2008		5/11/2004		5/11/2004		5/6/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.04 JK**	0.087	NS		**0.045 JK**	0.087	NS		**1.34 J+K**	0.087	NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.002 J**	0.005	NS		**0.00133 J**	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.42 K**	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.03 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000672	NS		**0.0002 JK**	0.000407	NS		<0.0001 UK	0.000770	NS		<0.0001 UK	0.000440
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.00775
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.2 K**	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	NS		**0.00287 JK**	0.0662	NS		**0.0034 K**	0.0318	NS		<0.0009 UK	0.0807	NS		**0.0019 JK**	0.0357
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003
Vanadium, dissolved	NS		**0.000833 JK**	0.02	NS		**0.0022 K**	0.02	NS		**0.00134 K**	0.02	NS		<0.0002 UK	0.02
Zinc, dissolved	NS		**0.003 JK**	0.150	NS		**0.014 K**	0.0723	NS		<0.002 UK	0.184	NS		**0.01 K**	0.0809

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST135		MST135		MST135		MST135		MST135		MST136		MST136		MST136	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050606SWMST135-0-U		050707SWMST135-0-F		050707SWMST135-0-U		051308SWMST135-0-U		051308SWMST1355-0-F		051104SWMST136-0-F		051104SWMST136-0-U		050906GWMST136-0-F	
Collection Date:	5/6/2006		5/7/2007		5/7/2007		5/13/2008		5/13/2008		5/11/2004		5/11/2004		5/9/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		**0.17 JK**	0.087	**1.64 K**	0.087	NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	<0.001	0.005	NS		<0.001	0.005	<0.001	0.005	NS		NS		**0.016**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.03 UK	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		**0.077 K**	0.003
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000349	NS		NS		**0.0001 JK**	0.000354	**0.0001 JK**	0.00127	NS		**0.0002 JK**	0.000920
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.003
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.0230
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.02 UK	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UK	0.034
Nickel, dissolved	NS		**0.0025 JK**	0.0255	NS		NS		**0.002 JK**	0.0260	**0.0031 K**	0.168	NS		**0.001 JK**	0.105
Selenium, dissolved	NS		NS		NS		NS		NS		**0.016**	0.005	NS		**0.02**	0.005
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.01 UJK	0.00036
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003
Vanadium, dissolved	NS		**0.0011 K**	0.02	NS		NS		**0.0022 K**	0.02	**0.00219 K**	0.02	NS		**0.0012 K**	0.02
Zinc, dissolved	NS		**0.004 JK**	0.0578	NS		NS		**0.008 JK**	0.0589	<0.002 UK	0.382	NS		**0.004 JK**	0.238

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST136		MST136		MST136		MST136		MST136		MST137		MST137		MST137	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050906GWMST136-0-U		051508GWMST136-0-F		051508GWMST136-0-U		0905SWMST136-F		0905SWMST136-U		050307SWMST137-0-F		050307SWMST137-0-U		051808SWMST137-0-F	
Collection Date:	5/9/2006		5/15/2008		5/15/2008		5/8/2009		5/8/2009		5/4/2007		5/4/2007		5/18/2008	
Sample Type:	Groundwater		Groundwater		Groundwater		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		**0.28 K**	0.087	NS		NS		NS		**0.3 J+K**	0.087	NS	
Barium	NS		NS		**0.093 K**	0.003	NS		NS		NS		NS		NS	
Beryllium	NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS	
Boron	NS		NS		**0.1 K**	0.0016	NS		NS		NS		NS		NS	
Cadmium	**0.0003 JK**		NS		**0.0002 JK**	0.000865	NS		NS		NS		NS		NS	
Cobalt	NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS	
Copper, total	NS		NS		<0.01 UK	0.0210	NS		NS		NS		NS		NS	
Iron	NS		NS		**0.18 K**	0.158	NS		NS		NS		NS		NS	
Molybdenum	NS		NS		<0.01 UK	0.034	NS		NS		NS		NS		NS	
Nickel	**0.0011 JK**		NS		**0.0022 JK**	0.0958	NS		NS		NS		NS		NS	
Selenium	**0.019**	0.005	NS		**0.021**	0.005	NS		**0.0136**	0.005	NS		**0.007**	0.005	NS	
Silver	NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS	
Thallium	NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS	
Vanadium	**0.0013 K**	0.02	NS		**0.0029 K**	0.02	NS		NS		NS		NS		NS	
Zinc	**0.004 JK**		NS		**0.006 JK**	0.218	NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		<0.03 UK	0.087	NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		**0.09 K**	0.003	NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		**0.09 K**	0.0016	NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		**0.0001 JK**	0.000843	NS		**0.000140 J**	0.000731	NS		<0.0002 UK	0.000860	NS		**0.0002 JK**	0.000729
Cobalt, dissolved	NS		<0.01 UK	0.003	NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		<0.01 UK	0.0203	NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		<0.02 UK	0.158	NS		<0.0250	0.158	NS		NS		NS		NS	
Molybdenum, dissolved	NS		**0.01 JK**	0.034	NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0027 JK**	0.0923	NS		NS		NS		**0.0046 K**	0.0951	NS		**0.0055 K**	0.0745
Selenium, dissolved	NS		**0.022**	0.005	NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0019 K**	0.02	NS		<0.00500	0.02	NS		<0.001 UK	0.02	NS		<0.0004 UK	0.02
Zinc, dissolved	NS		**0.004 JK**	0.210	NS		NS		NS		**0.007 JK**	0.216	NS		**0.012 K**	0.169

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST137		MST143		MST143		MST143		MST143		MST143		MST143		MST143	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051808SWMST137-0-U		051104SWMST143-0-F		051104SWMST143-0-U		050606SWMST143-0-F		050606SWMST143-0-U		050407SWMST143-0-F		050407SWMST143-0-U		051608SWMST143-1-F	
Collection Date:	5/18/2008		5/11/2004		5/11/2004		5/6/2006		5/6/2006		5/4/2007		5/4/2007		5/16/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.57 K**	0.087	NS		NS		NS		NS		NS		**0.48 J+K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.01**	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		**0.15 JK**	0.087	NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		**0.044 K**	0.003	NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0002 UK	0.000992	NS		**0.0001 JK**	0.000734	NS		<0.0002 UK	0.000793	NS		<0.0001 UK	0.000675
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		<0.01 UK	0.0165	NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		**0.12 K**	0.158	NS		NS		NS		NS	
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0052 K**	0.117	NS		**0.0038 K**	0.0753	NS		**0.0058 K**	0.0843	NS		**0.0031 K**	0.0666
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0012 K**	0.02	NS		<0.0002 UK	0.02	NS		<0.0009 UK	0.02	NS		**0.0011 JK**	0.02
Zinc, dissolved	NS		<0.004 UK	0.267	NS		**0.01 K**	0.171	NS		**0.009 JK**	0.192	NS		**0.008 JK**	0.151

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST143		MST143		MST143		MST088		MST143		MST143		MST143		MST143	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051608SWMST143-1-U		051608SWMST143-2-F		051608SWMST143-2-U		051608SWMST143-3-F		051608SWMST143-3-U		051608SWMST143-avg-F		051608SWMST143-avg-U		091608SWMST143-0-F	
Collection Date:	5/16/2008		5/16/2008		5/16/2008		5/16/2008		5/16/2008		5/16/2008		5/16/2008		9/16/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.75 J+K**	0.087	NS		**0.69 J+K**	0.087	NS		**0.69 J+K**	0.087	NS		**0.71 J+K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	**0.003 J**	0.005	NS		**0.002 J**	0.005	NS		**0.002 J**	0.005	NS		**0.00233 J**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		NS		NS	
Zinc	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0500	0.087
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.0001 UK	0.000669	NS		<0.0001 UK	0.000689	NS		<0.0001 UK	0.000678	NS		<0.000125	0.000795
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		<0.0250	0.158
Molybdenum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel, dissolved	NS		**0.0037 K**	0.0658	NS		**0.0033 K**	0.0687	NS		**0.00337 K**	0.0670	NS		**0.00240 J**	0.0847
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium, dissolved	NS		**0.0011 JK**	0.02	NS		**0.0012 JK**	0.02	NS		**0.00113 JK**	0.02	NS		<0.00500	0.02
Zinc, dissolved	NS		**0.008 JK**	0.149	NS		**0.013 K**	0.156	NS		**0.00967 JK**	0.152	NS		**0.00683 J**	0.193

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST143		MST143		MST143		MST144		MST144		MST144		MST144		MST144	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	091608SWMST143-0-U		0905SWMST143-F		0905SWMST143-U		051504SWMST144-0-F		051504SWMST144-0-U		050906GWMST144-0-F		050906GWMST144-0-U		051308SWMST144-0-F	
Collection Date:	9/16/2008		5/8/2009		5/8/2009		5/15/2004		5/15/2004		5/9/2006		5/9/2006		5/13/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Boron	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium	NS		NS		NS		NS		NS		NS		**0.0052 K**		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Copper, total	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Molybdenum	NS		NS		NS		NS		NS		NS		NS		NS	
Nickel	NS		NS		NS		NS		NS		NS		**0.111 K**		NS	
Selenium	**0.00263**	0.005	NS		**0.00221**	0.005	NS		**0.229**	0.005	NS		**0.153**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Vanadium	NS		NS		NS		NS		NS		NS		**0.0074 K**	0.02	NS	
Zinc	NS		NS		NS		NS		NS		NS		**0.46 K**		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		**0.04 JK {J+}**	0.087	NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		**0.059 K**	0.003	NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cadmium, dissolved	NS		<0.000125	0.000657	NS		**0.0001 JK**	0.00127	NS		**0.0054 K**	0.00127	NS		**0.0008 K**	0.00109
Cobalt, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.0371	NS		NS	
Iron, dissolved	NS		**0.0619 J**	0.158	NS		NS		NS		<0.02 UK	0.158	NS		NS	
Molybdenum, dissolved	NS		NS		NS		NS		NS		<0.01 UK	0.034	NS		NS	
Nickel, dissolved	NS		NS		NS		**0.0015 K**	0.168	NS		**0.106 K**	0.168	NS		**0.0111 K**	0.135
Selenium, dissolved	NS		NS		NS		**0.18**	0.005	NS		**0.146**	0.005	NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		<0.01 UJK	0.00036	NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS	
Vanadium, dissolved	NS		<0.00500	0.02	NS		**0.00058 K**	0.02	NS		**0.0071 K**	0.02	NS		**0.0056 K**	0.02
Zinc, dissolved	NS		NS		NS		**0.004 JK**	0.382	NS		**0.466 K**	0.382	NS		**0.038 K**	0.306

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ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST144		MST144		MST144		MST269		MST269		MST269		MST269		MST269	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051308SWMST144-0-U		0905GWMST144-F		0905GWMST144-U		050706GWMST269-0-F		050706GWMST269-0-U		051608GWMST269-0-F		051608GWMST269-0-U		0905SWMST269-F	
Collection Date:	5/13/2008		5/29/2009		5/29/2009		5/7/2006		5/7/2006		5/16/2008		5/16/2008		5/8/2009	
Sample Type:	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	**0.07 JK**	0.087	NS		NS		NS		NS		NS		**0.58 K**	0.087	NS	
Barium	NS		NS		NS		NS		NS		NS		**0.023 K**	0.003	NS	
Beryllium	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Boron	NS		NS		NS		NS		NS		NS		**0.12 K**	0.0016	NS	
Cadmium	NS		NS		<0.000125		NS		**0.0002 JK**		NS		**0.0088 K**	0.00103	NS	
Cobalt	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Copper, total	NS		NS		NS		NS		NS		NS		<0.01 UK	0.0274	NS	
Iron	NS		NS		NS		NS		NS		NS		**0.34 K**	0.158	NS	
Molybdenum	NS		NS		NS		NS		NS		NS		<0.01 UK	0.034	NS	
Nickel	NS		NS		NS		NS		**0.0012 JK**		NS		**0.153 K**	0.125	NS	
Selenium	**0.21**	0.005	NS		**0.174 J**	0.005	NS		<0.001	0.005	NS		**0.071 J-**	0.005	NS	
Silver	NS		NS		NS		NS		NS		NS		<0.01 UK	0.00036	NS	
Thallium	NS		NS		NS		NS		NS		NS		**0.0007 K**	0.00003	NS	
Vanadium	NS		NS		<0.00500	0.02	NS		**0.001 JK**	0.02	NS		**0.0129 K**	0.02	NS	
Zinc	NS		NS		NS		NS		**0.004 JK**		NS		**0.696 K**	0.284	NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		**0.03 JK {J+}**	0.087	NS		**0.09 JK**	0.087	NS		NS	
Barium, dissolved	NS		NS		NS		**0.048 K**	0.003	NS		**0.022 K**	0.003	NS		NS	
Beryllium, dissolved	NS		NS		NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		NS	
Boron, dissolved	NS		NS		NS		NS		NS		**0.12 K**	0.0016	NS		NS	
Cadmium, dissolved	NS		<0.000125	0.00127	NS		**0.0002 JK**	0.000515	NS		**0.007 K**	0.00103	NS		<0.000125	0.000505
Cobalt, dissolved	NS		NS		NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		NS	
Copper, dissolved	NS		NS		NS		<0.01 UK	0.00978	NS		<0.01 UK	0.0273	NS		NS	
Iron, dissolved	NS		NS		NS		<0.02 UK	0.158	NS		**0.03 JK**	0.158	NS		**0.0277 J+B**	0.158
Molybdenum, dissolved	NS		NS		NS		<0.01 UK	0.034	NS		<0.01 UK	0.034	NS		NS	
Nickel, dissolved	NS		NS		NS		**0.0011 JK**	0.0449	NS		**0.129 K**	0.124	NS		NS	
Selenium, dissolved	NS		NS		NS		<0.001	0.005	NS		**0.067 J-**	0.005	NS		NS	
Silver, dissolved	NS		NS		NS		<0.01 UJK	0.00036	NS		<0.01 UK	0.00036	NS		NS	
Thallium, dissolved	NS		NS		NS		<0.0001 UK	0.00003	NS		**0.0002 JK**	0.00003	NS		NS	
Vanadium, dissolved	NS		NS		NS		<0.0003 UK	0.02	NS		**0.0095 K**	0.02	NS		<0.00500	0.02
Zinc, dissolved	NS		NS		NS		**0.003 JK**	0.102	NS		**0.424 K**	0.282	NS		NS	

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST269	
Location Type:	Stream	
Sample ID:	0905SWMST269-U	
Collection Date:	5/8/2009	
Sample Type:	Surface Water	
	Primary	
	Result	SL
Total Metals (mg/L)		
Aluminum	NS	
Barium	NS	
Beryllium	NS	
Boron	NS	
Cadmium	NS	
Cobalt	NS	
Copper, total	NS	
Iron	NS	
Molybdenum	NS	
Nickel	NS	
Selenium	**0.00523**	0.005
Silver	NS	
Thallium	NS	
Vanadium	NS	
Zinc	NS	
Dissolved Metals (mg/L)		
Aluminum, dissolved	NS	
Barium, dissolved	NS	
Beryllium, dissolved	NS	
Boron, dissolved	NS	
Cadmium, dissolved	NS	
Cobalt, dissolved	NS	
Copper, dissolved	NS	
Iron, dissolved	NS	
Molybdenum, dissolved	NS	
Nickel, dissolved	NS	
Selenium, dissolved	NS	
Silver, dissolved	NS	
Thallium, dissolved	NS	
Vanadium, dissolved	NS	
Zinc, dissolved	NS	

TABLE 3-40

ENOCH VALLEY MINE - SUMMARY OF SURFACE WATER EXCEEDANCES
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Notes:
NS - not sampled
SL - screening level
F - filtered
U - unfiltered
Avg - average

Result is greater than screening value
Method detection limit for non-detected value is greater than the screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
K	Serial dilutions not performed for samples analyzed by this method (EPA 200.7; 200.8).

Sources for Screening Values (see also Table 3-1):

Surface Water	Unless identified otherwise below, screening levels are the chronic freshwater screening value in NOAA SQuiRT (Buchman, 2008).
	Screening levels for aluminum is the Freshwater Standards for Chronic Criteria (CCC) from the National Recommended Water Quality Criteria (USEPA, 2009).
	Screening values for arsenic, cadmium, chromium, copper, lead, nickel, selenium, and zinc are the CCCs from the State of Idaho Surface Water Quality for Aquatic Life (IDAPA 58.01.02); those for cadmium, chromium, copper, lead, nickel, and zinc are expressed as a function of total hardness. Screening levels for cadmium and selenium are expressed as total recoverable (unfiltered concentration).
	The screening level for iron is the Lowest Chronic Value (LCV) observed for fresh water daphnids (source: ORNL, 1996).
	The screening levels for manganese, uranium, and vanadium are the Tier II Secondary Chronic Values (source: ORNL, 1996).

Triplicate Results:
"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.
The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-41

ENOCH VALLEY MINE - SUMMARY OF SEDIMENT EXCEEDANCES
(Page 1 of 3)

					Analyte (mg/Kg, dry weight)					
Location	Location Type	Sample Identification	Collection Date	Sample Type	Cadmium	Chromium	Nickel	Selenium	Vanadium	Zinc
				Screening Level:	0.583	36.286	18	4	57	98
MDS025	Dump Seep	051504SEMDS025-0	5/15/2004	Primary	33.5 J-	734	180 J	104	239	800 J
MDS026	Dump Seep	051704SEMDS026-0	5/17/2004	Primary	105	334	221	550 J	129	434
MSG001	Spring	051904SEMSG001-0	5/19/2004	Primary	0.64	22.8	20.7 J	0.6 J	35 J	71 J
MSP017	Pond	051704SEMSP017-0	5/17/2004	Primary	12.1	132	83.1	34 J	64.1	446
MSP018	Pond	051204SEMSP018-0	5/12/2004	Primary	1290	76 J	2580 J	152 J-	321	25800
MSP019	Pond	051204SEMSP019-0	5/12/2004	Primary	1.17	20.5 J	21.8 J	<0.6 UJ	32.5 J	69 J
MSP020	Pond	051504SEMSP020-0	5/15/2004	Primary	23.3	167	164	12.4	93	952
MSP021	Pond	051204SEMSP021-1-QA1	5/12/2004	Triplicate	24.8	192	131	24 J-	132	862 J
MSP021	Pond	051204SEMSP021-2-QA2	5/12/2004	Triplicate	24.1	184	131	23 J-	118	881 J
MSP021	Pond	051204SEMSP021-3-QA3	5/12/2004	Triplicate	24.7	196	131	23 J-	142	884 J
MSP021	Pond	051204SEMSP021-4-QA-avg	5/12/2004	Averaged	24.5	191	131	23.3 J-	131	876 J
MSP022	Pond	051104SEMSP022-0	5/12/2004	Primary	32.9	294	150 J	25.2 J-	436	1190
MSP023	Pond	051204SEMSP023-0	5/12/2004	Primary	22.9 J-	340	123 J	24.9	402	731 J
MSP031	Pond	051104SEMSP031-0	5/10/2004	Primary	4.79	26.1	20.5	<0.6 UJ	37.3	100 J
MST023	Stream	051904SEMST023-0	5/19/2004	Primary	1.81	30.2	6.8	1 J	21.7 J	26 J
MST024	Stream	051904SEMST024-0	5/19/2004	Primary	1.49	24.6	8.7	0.8 J	22.5 J	34 J
MST025	Stream	051904SEMST025-0	5/19/2004	Primary	0.55	12.4	6.4	1.5 J	13.3 J	30 J
MST026	Stream	051704SEMST026-0	5/17/2004	Primary	0.56 J-	13.2	7.6 J	2.3 J	14.4	33 J
MST027	Stream	051404SEMST027-0	5/14/2004	Primary	0.58 J-	14	7.8 J	1.3 J	15.2	32 J
MST126	Stream	051704SEMST126-1-QA1	5/17/2004	Triplicate	5.29 J-	54.7	20.5 J	<0.5	56.6	75 J
MST126	Stream	051704SEMST126-1-QA2	5/17/2004	Triplicate	6.33 J-	57.8	21.4 J	<0.5	56.8	83 J
MST126	Stream	051704SEMST126-1-QA3	5/17/2004	Triplicate	7.24 J-	74	21.6 J	1.4 J	90.8	91 J
MST126	Stream	051704SEMST126-1-QA-avg	5/17/2004	Averaged	6.29 J-	62.2	21.2 J	1.4 J	68.1	83 J
MST127	Stream	051304SEMST127-0	5/13/2004	Primary	2.4 J-	36	24.9 J	0.6 J	37.9	108 J
MST131	Stream	051004SEMST131-0	5/10/2004	Primary	4.05	28.7	21.9	<0.6 UJ	39.3	77 J
MST132	Stream	051204SEMST132-0-	5/12/2004	Primary	2.51	31.4 J	24.3 J	1 J-	37 J	103 J
MST133	Stream	051004SEMST133-0	5/11/2004	Primary	2.62	30.4	31.1	1.8 J-	45.5	130 J
MST134	Stream	051104SEMST134-0	5/11/2004	Primary	2.44	26	22.8	1.1 J-	38.5	109 J

TABLE 3-41

ENOCH VALLEY MINE - SUMMARY OF SEDIMENT EXCEEDANCES
(Page 2 of 3)

					Analyte (mg/Kg, dry weight)					
Location	**Location Type**	**Sample Identification**	**Collection Date**	**Sample Type**	**Cadmium**	**Chromium**	**Nickel**	**Selenium**	**Vanadium**	**Zinc**
				Screening Level:	**0.583**	**36.286**	**18**	**4**	**57**	**98**
MST135	Stream	051104SEMST135-0	5/11/2004	Primary	**3.28**	**26.4 J**	**20.7 J**	**3 J-**	**40.4 J**	**123 J**
MST136	Stream	051104SEMST136-0	5/11/2004	Primary	**3.15**	**25.8**	**23.7**	**0.7 J-**	**40.4**	**101 J**
MST143	Stream	051104SEMST143-0	5/11/2004	Primary	**4**	**29.2**	**21.6**	<0.6 UJ	**37.3**	**96 J**
MST144	Stream	051504SEMST144-0	5/15/2004	Primary	**2.63**	**29**	**23.3**	**7.6**	**36.8**	**95**

TABLE 3-41

ENOCH VALLEY MINE - SUMMARY OF SEDIMENT EXCEEDANCES
(Page 3 of 3)

Notes:

Result is greater than screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sources for Screening Values (see also Table 3-1):

Sediment	Screening levels for aluminum, cadmium, chromium, and zinc are the ARCS threshold effects levels (TELs) for freshwater sediment in NOAA SQuiRT (Buchman, 2008). Screening level for antimony is from Buchman, M. 1999. NOAA HAZMAT Report 99-1. Screening levels for arsenic, copper, lead, mercury, and nickel are the TEL for freshwater sediment in NOAA SQuiRT (Buchman, 2008). Screening levels for cobalt, iron, manganese, and silver are from Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario, August 1993. Screening level for selenium is from Van Derveer and Canton (1997). Screening level for vanadium is from the marine sediment AET (Buchman, 2008).

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.

The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-42
ENOCH VALLEY MINE
GROUNDWATER MONITORING LOCATIONS

Mine	Station Description	Location		Station Number	Station Type	Groundwater System Monitored and Screened Interval (ft bgs)
		Latitude	Longitude			
Enoch Valley	School Bus Well	42 53 15.00	111 26 39.99	MAW001	AW	
	Sharp Field Well	42 53 51.00	111 26 41.99	MAW002	AW	
	Peterson Field Well	42 53 24.00	111 27 21.59	MAW003	AW	
	Vasser Windmill Well	42 51 44.32	111 23 08.79	MAW005	AW	
	Rasmussen Creek	42 51 55.52	111 24 04.12	MBW085	BW	Alluvial 12.25-7.25
	Rasmussen Road and Agrium Haul Road intersection	42 51 38.34	111 23 44.32	MBW087	BW	Alluvial 12-7
	Agrium Haul Road North	42 51 57.08	111 23 28.14	MBW099	BW	Alluvial 29-24
	Western Enoch Valley, East of fence	42 53 28.32	111 25 55.86	MBW107	BW	Alluvial 40-35
	Western Enoch Valley ,West of fence	42 53 34.67	111 26 13.72	MBW112	BW	Alluvial 18-13
	Thompson House Well	42 54 17.99	111 26 49.20	MDW002	DW	Alluvial/Thaynes 180-160, 30-20
	Ellis House Well	42 54 43.20	111 28 47.99	MDW006	DW	ND
	South of EVM South Dump; near edge of dump footprint	42 51 48.5	111 23 34.4	MMW007	MW	Alluvial 90-70
	South of EVM South Dump; south and downgradient of MMW007	42 51 48.6	111 23 29.8	MMW008	MW	Alluvial/Dinwoody Formation 197-177
	Central North Dump (MWD091)	42 53 34.6	111 25 33.8	MMW009	MW	Wells Formation 554-549
	Northwest of EVM North Dump in Lone Pine Creek alluvial flow field	42 53 28.75	111 25 53.34	MMW012	MW	Alluvial 52-28
	Southwest of EVM in Rasmussen Creek alluvial flow field	42 52 05.7	111 24 12.0	MMW013	MW	Dinwoody Formation 35-25
	Along the south end of Enoch Valley Mine, near MMW013	42 52 11.73	111 24 11.86	MMW024	MW	Dinwoody Formation 200-180
	Along the south end of Enoch Valley Mine, near MMW007	42 51 49.16	111 23 31.95	MMW025	MW	Dinwoody Formation 200-180
	Northeast of MPW006/MMW008	42 51 56.48	111 23 25.75	MMW026	MW	Wells Formation 355-335
	Near MMW012	42 53 28.97	111 25 53.50	MMW027	MW	Dinwoody Formation 120-100
	Deeper well nested with MMW013	42 52 09.1	111 24 14.8	MMW034	MW	Dinwoody Formation 156-136
	Deeper well nested with MMW027	42 53 29.5	111 25 54.3	MMW035	MW	Dinwoody Formation 199 – 179
	Well west of MMW027	42 53 26.7	111 26 05.6	MMW036	MW	Alluvial 135 – 115
	EVM Shop/Office	42 52 37.40	111 25 16.52	MPW019	PW	ND 235-175

Notes:
Location (GPS) coordinates use the NAD27 datum and are presented in ddd mm ss.ss format (degrees minutes seconds).

TABLE 3-42 ENOCH VALLEY MINE GROUNDWATER MONITORING LOCATIONS						
Mine	Station Description	Location		Station Number	Station Type	Groundwater System Monitored and Screened Interval (ft bgs)
		Latitude	Longitude			

ND - Not determined
AW - Agricultural Well
BW - Borehole Monitoring Well
DW - Domestic Well
MW - Monitoring Well

TABLE 3-43

ENOCH VALLEY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 1 of 10)

Well Name:			MAW001	MAW001	MAW002	MAW002	MAW003	MAW003	MAW005
Collection Date:			05/17/04	05/20/08	05/19/04	06/11/08	05/19/04	05/19/08	05/17/04
Well Type:			AW	AW	AW	AW	AW	AW	AW
Result Type:			Averaged Triplicate	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	NS	<0.03 UK	NS	<0.03 UK	NS	<0.03 UK	NS
Iron, dissolved	mg/L	0.3	NS	**0.04 JK**	NS	**0.54 K**	NS	<0.02 UK	NS
Lead, dissolved	mg/L	0.015	NS	NS	NS	NS	NS	NS	NS
Manganese, dissolved	mg/L	0.05	NS	<0.0014 UK	NS	**0.141 K**	NS	<0.0005 UK	NS
Selenium, dissolved	mg/L	0.05	<0.001	**0.002 J**	<0.001	**0.002 J**	<0.001	**0.002 J**	<0.001
Zinc, dissolved	mg/L	5	**0.017 JK**	<0.008 UJK	**0.026 K**	**0.105 K**	**0.179 K**	**0.017 J+K**	**2.91 K**
Total Metals									
Aluminum	mg/L	0.2	NS	**0.04 J+K**	NS	<0.04 UK	NS	<0.03 UK	NS
Iron	mg/L	0.3	NS	**0.09 J+K**	NS	**0.48 K**	NS	<0.02 UK	NS
Lead	mg/L	0.015	NS	NS	NS	NS	NS	NS	NS
Manganese	mg/L	0.05	NS	**0.0185 K**	NS	**0.114 K**	NS	**0.0006 JK**	NS
Selenium	mg/L	0.05	<0.001	**0.002 J**	<0.001	**0.002 J**	<0.001	**0.002 J**	<0.001
Zinc	mg/L	5	**0.0237 JK**	**0.009 JK**	**0.038 K**	**0.075 K**	**0.296 K**	**0.014 K**	**21.3 K**
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	NS	**240 J-**	NS	**240 J-**	NS	**250 J-**	NS
Sulfate	mg/L	250	**11.2**	**13.9**	<0.5	**9.9**	**6.4**	**13.9**	**268**

TABLE 3-43

ENOCH VALLEY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 2 of 10)

Well Name:			MAW005	MBW085	MBW087	MBW099	MBW107	MDW001	MDW001
Collection Date:			12/03/08	05/13/09	05/09/09	05/12/09	06/04/09	05/19/04	05/19/08
Well Type:			AW	BW	BW	BW	BW	DW	DW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	<0.0500	NS	NS	<0.0500	<0.0500	NS	<0.03 UK
Iron, dissolved	mg/L	0.3	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	NS	<0.02 UK
Lead, dissolved	mg/L	0.015	NS	NS	NS	NS	NS	NS	NS
Manganese, dissolved	mg/L	0.05	**0.00139 J**	NS	NS	**0.0385**	**0.00517**	NS	<0.0005 UK
Selenium, dissolved	mg/L	0.05	<0.000500	NS	NS	<0.000500	**0.00356**	<0.001	<0.001
Zinc, dissolved	mg/L	5	**2.19**	NS	NS	**0.217**	<0.00500	**0.02 JK**	**0.032 K**
Total Metals									
Aluminum	mg/L	0.2	<0.0500	<0.0500	**0.358**	NS	NS	NS	<0.03 UK
Iron	mg/L	0.3	**0.0780 J**	**0.276**	**0.338**	NS	NS	NS	**0.04 JK**
Lead	mg/L	0.015	NS	NS	NS	NS	NS	NS	NS
Manganese	mg/L	0.05	**0.00204**	**0.00510 J**	**0.157**	NS	NS	NS	**0.0013 JK**
Selenium	mg/L	0.05	**0.000763 J**	**0.00131**	**0.000798 J**	NS	NS	<0.001	<0.001
Zinc	mg/L	5	**2.48**	**0.00695**	**0.0244 J**	NS	NS	**0.021 K {J+}**	**0.031 K**
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**712**	**228**	**342**	**128 J-**	**292 J-**	NS	**280 J-**
Sulfate	mg/L	250	**276**	**33.4**	**27.4**	**19.4**	**21.8**	**11.2**	**6.4**

TABLE 3-43

ENOCH VALLEY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 3 of 10)

Well Name:			MDW002	MDW002	MDW006	MDW006	MMW007	MMW007	MMW007
Collection Date:			05/19/04	06/10/08	05/22/04	06/11/08	10/18/07	05/21/08	09/23/08
Well Type:			DW	DW	DW	DW	MW	MW	MW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	NS	**0.04 JK**	NS	<0.03 UK	<0.03 UK	<0.03 UK	<0.0500
Iron, dissolved	mg/L	0.3	NS	<0.02 UK	NS	<0.02 UK	<0.02 UK	<0.02 UK	<0.0250
Lead, dissolved	mg/L	0.015	NS	NS	NS	NS	<0.0001 UK	<0.0001 UK	NS
Manganese, dissolved	mg/L	0.05	NS	**0.0008 JK**	NS	**0.0065 K**	**0.0715 K**	<0.0005 UK	**0.582**
Selenium, dissolved	mg/L	0.05	<0.001	<0.001	<0.001	<0.001	**0.002 J**	**0.005 J**	**0.00256 J**
Zinc, dissolved	mg/L	5	**0.06 K**	**0.329 K**	**0.033 K**	**0.195 K**	**0.003 JK**	**0.004 JK**	<0.00500
Total Metals									
Aluminum	mg/L	0.2	NS	**0.04 JK**	NS	<0.05 UK	**0.47 K**	**0.09 JK**	**0.417**
Iron	mg/L	0.3	NS	<0.03 UK	NS	**0.05 JK**	**0.35 K**	<0.02 UK	**0.357**
Lead	mg/L	0.015	NS	NS	NS	NS	**0.0004 JK**	<0.0001 UK	NS
Manganese	mg/L	0.05	NS	**0.0006 JK**	NS	**0.0063 K**	**0.0804 K**	**0.0015 JK**	**0.61**
Selenium	mg/L	0.05	<0.001	<0.001	<0.001	<0.001	**0.002 J**	**0.005 J**	**0.00237 J**
Zinc	mg/L	5	**0.045 K**	**0.309 K**	**0.035 K**	**0.185 K**	**0.006 JK**	<0.002 UK	**0.00526 J**
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	NS	**240 J-**	NS	**420 J-**	**170 J-**	**230 J-**	**210**
Sulfate	mg/L	250	**44.2**	**21.7**	**103**	**110**	**21**	**8.8**	**55.1**

TABLE 3-43

ENOCH VALLEY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 4 of 10)

Well Name:			MMW007	MMW008	MMW008	MMW008	MMW008	MMW009	MMW009
Collection Date:			06/01/09	10/18/07	05/20/08	09/21/08	06/01/09	10/26/07	05/20/08
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Averaged Triplicate
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	NS	**0.03 JK**	<0.03 UK	<0.0500	NS	<0.03 UK	<0.03 UK
Iron, dissolved	mg/L	0.3	NS	<0.02 UK	**0.03 JK**	**0.0354 J**	NS	**0.04 JK**	**1.02 K**
Lead, dissolved	mg/L	0.015	NS	<0.0001 UK	NS	NS	NS	<0.0001 UK	<0.0005 UK
Manganese, dissolved	mg/L	0.05	NS	**0.167 K**	**0.388 K**	**0.39**	NS	**0.131 K**	**0.386 K**
Selenium, dissolved	mg/L	0.05	NS	<0.001	<0.001	**0.000754 J**	NS	**0.002 J**	<0.001
Zinc, dissolved	mg/L	5	NS	**0.004 JK**	<0.008 UJK	**0.0125 J**	NS	**0.186 K**	**0.00233**
Total Metals							NS		
Aluminum	mg/L	0.2	NS	**3.18 K**	**2.56 J+K**	**8.75**	NS	<0.03 UK	**0.127 J+K**
Iron	mg/L	0.3	NS	**2.77 K**	**2.15 J+K**	**6.96**	NS	**0.05 JK**	**0.603 J+K**
Lead	mg/L	0.015	NS	**0.0012 K**	NS	NS	NS	**0.0001 JK**	**0.0174 J+K**
Manganese	mg/L	0.05	NS	**0.339 K**	**0.269 K**	**0.456**	NS	**0.138 K**	**0.184 K**
Selenium	mg/L	0.05	**0.00119**	<0.001	<0.001	**0.00138 J**	**0.000606 J**	**0.001 J**	<0.001
Zinc	mg/L	5	NS	**0.011 K {J+}**	**0.015 K**	**0.326**		**0.185 K**	**0.0493 K**
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**196**	**150 J-**	**180 J-**	**184**	**176**	**410 J-**	**363 J-**
Sulfate	mg/L	250	**35.1**	**9.2**	**35.9**	**29.6**	**16.7**	**87.7**	**61.2**

TABLE 3-43

ENOCH VALLEY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 5 of 10)

Well Name:			MMW009	MMW009	MMW013	MMW013	MMW013	MMW013	MMW013
Collection Date:			09/25/08	06/04/09	09/18/07	05/15/08	09/21/08	06/03/09	09/21/09
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Averaged Triplicate	Primary	Primary	Primary	Primary	Averaged Triplicate	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	<0.05	NS	<0.14 UK	<0.03 UK	<0.0500	NS	NS
Iron, dissolved	mg/L	0.3	**0.577**	**0.388**	<0.04 UK	<0.02 UK	<0.0250	NS	NS
Lead, dissolved	mg/L	0.015	NS	NS	<0.0001 UK	NS	NS	NS	NS
Manganese, dissolved	mg/L	0.05	**0.14**	NS	**0.005 K**	**0.0006 JK**	**0.00293**	NS	NS
Selenium, dissolved	mg/L	0.05	<0.0005	NS	**0.06**	**0.055**	**0.0883**	NS	NS
Zinc, dissolved	mg/L	5	<0.0268	NS	<0.002 UK	<0.002 UK	<0.00500	NS	NS
Total Metals									
Aluminum	mg/L	0.2	**2.27**	**0.863**	<0.09 UK	**0.14 JK**	<0.0500	NS	NS
Iron	mg/L	0.3	**2.04**	**1.1**	**0.14 K**	**0.07 K**	**0.0379 J**	NS	NS
Lead	mg/L	0.015	NS	**0.00218**	<0.0002 UK	NS	NS	NS	NS
Manganese	mg/L	0.05	**0.159**	**0.112**	**0.152 K**	**0.0482 K**	**0.0346**	NS	NS
Selenium	mg/L	0.05	**0.00104 J**	<0.000500	<0.001	**0.051**	**0.0909**	**0.106**	**0.124**
Zinc	mg/L	5	**0.163 J-**	**0.0430**	<0.002 UK	<0.002 UK	**0.00759 J**	NS	NS
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**358**	**412**	**640 J-**	**670 J-**	**652**	**564**	**562**
Sulfate	mg/L	250	**55.7 J-**	**55.3**	**274**	**332**	**261**	**219**	**258**

TABLE 3-43

ENOCH VALLEY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
(Page 6 of 10)

Well Name:			MMW024	MMW024	MMW024	MMW025	MMW025	MMW026	MMW026
Collection Date:			09/23/08	39715	39952	39716	39952	39728	39962
Well Type:			MW	MW	MW	MW	MW	MW	MW
Result Type:			Primary	Averaged Triplicate	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	<0.0500	<0.05	NS	<0.0500	NS	<0.0500	NS
Iron, dissolved	mg/L	0.3	<0.0250	**0.0305 J**	<0.0250	**0.0417 J**	<0.0250	<0.0250	**0.0513 J**
Lead, dissolved	mg/L	0.015	NS	NS	NS	NS	NS	NS	NS
Manganese, dissolved	mg/L	0.05	**0.00209**	**0.00867**	NS	**0.0304**	NS	**0.00553**	NS
Selenium, dissolved	mg/L	0.05	**0.0147 J**	**0.0135**	NS	**0.000610 J**	NS	**0.00120**	NS
Zinc, dissolved	mg/L	5	**0.00670 J**	**0.0098 J**	NS	<0.00500	NS	**0.111**	NS
Total Metals									
Aluminum	mg/L	0.2	**0.254**	**0.323**	<0.0500	**1.38**	**0.216**	<0.0500	<0.0500
Iron	mg/L	0.3	**0.245**	**0.285**	<0.0250	**1.01**	**0.155**	<0.0250	**0.0382 J**
Lead	mg/L	0.015	NS	NS	<0.000250	NS	<0.000250	NS	<0.000250
Manganese	mg/L	0.05	**0.00753**	**0.0105**	**0.000688 J**	**0.0699**	**0.0209**	**0.00544**	**0.0440**
Selenium	mg/L	0.05	**0.0137 J**	**0.0137**	**0.0243**	**0.000879 J**	**0.00168**	**0.00130**	**0.00107 J**
Zinc	mg/L	5	**0.00995 J**	**0.012 J**	<0.00500	<0.00578 UJ	<0.00502	**0.111**	**0.00831 J**
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**456**	**501**	**618**	**184**	**204**	**276**	**414**
Sulfate	mg/L	250	**188**	**190**	**246**	**9.66 J-**	**13.9**	**19.5**	**19.7**

TABLE 3-43

ENOCH VALLEY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MMW027	MMW027	MMW034	MMW035	MMW036	MPW006	MPW006
Collection Date:			39714	39961	40078	40078	40078	38124	38245
Well Type:			MW	MW	MW	MW	MW	PW	PW
Result Type:			Primary	Primary	Primary	Averaged Triplicate	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	<0.0500	NS	NS	NS	NS	NS	NS
Iron, dissolved	mg/L	0.3	<0.0250	<0.0250	**0.0258 J**	<0.025	<0.0250	NS	NS
Lead, dissolved	mg/L	0.015	NS	NS	NS	NS	NS	NS	NS
Manganese, dissolved	mg/L	0.05	**0.00954**	NS	NS	NS	NS	NS	NS
Selenium, dissolved	mg/L	0.05	**0.309**	NS	NS	NS	NS	<0.001	<0.001 UJ
Zinc, dissolved	mg/L	5	<0.00500	NS	NS	NS	NS	**0.051 K**	**0.318 K**
Total Metals									
Aluminum	mg/L	0.2	<0.0500	<0.0500	**0.153**	<0.05	**0.426**	NS	NS
Iron	mg/L	0.3	<0.0250	<0.0250	**0.119**	**0.0291 J**	**0.198**	NS	NS
Lead	mg/L	0.015	NS	<0.000250	NS	NS	NS	NS	NS
Manganese	mg/L	0.05	**0.0105**	**0.00115 J**	**0.00968**	**0.00797**	**0.0124**	NS	NS
Selenium	mg/L	0.05	**0.314**	**0.329 J**	**0.0762**	**0.772**	**0.00593**	NS	NS
Zinc	mg/L	5	<0.00500	<0.00500	**0.00734 J**	**0.00506**	<0.00500	NS	NS
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	**698**	**2010**	**536**	**1140**	**306**	NS	NS
Sulfate	mg/L	250	**229**	**227**	**209**	**447**	**25.4**	**124**	**171**

TABLE 3-43

ENOCH VALLEY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Well Name:			MPW019	MPW019	MPW019	MPW019	MPW019	MPW019	MPW019
Collection Date:			38124	38245	38525	38851	39340	39586	39714
Well Type:			PW	PW	PW	PW	PW	PW	PW
Result Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analyte	**Units**	**Screening Value**							
Dissolved Metals									
Aluminum, dissolved	mg/L	0.2	NS	NS	<0.03 UK	<0.03 UK	<0.03 UK	<0.03 UK	<0.0500
Iron, dissolved	mg/L	0.3	NS	NS	**0.16 K**	**0.35 K**	**0.37 K**	**0.2 K**	**0.0595 J**
Lead, dissolved	mg/L	0.015	NS	NS	NS	<0.0001 UK	<0.0003 UK	NS	NS
Manganese, dissolved	mg/L	0.05	NS	NS	**0.0472 K**	**0.0755 K**	**0.0434 K**	**0.0469 K**	**0.0360**
Selenium, dissolved	mg/L	0.05	<0.001	<0.001 UJ	**0.001 J**	<0.001	<0.001	**0.001 J**	**0.00142**
Zinc, dissolved	mg/L	5	**0.036 K**	**0.012 K**	**0.026 K {J+}**	**0.568 K**	**0.058 K**	**0.234 K**	**0.0344 {J+}**
Total Metals									
Aluminum	mg/L	0.2	NS	NS	NS	NS	<0.03 UK	<0.03 UK	<0.0500
Iron	mg/L	0.3	NS	NS	NS	NS	**0.58 K**	**1.68 K**	**0.125**
Lead	mg/L	0.015	NS	NS	NS	NS	**0.0015 K**	NS	NS
Manganese	mg/L	0.05	NS	NS	NS	NS	**0.0464 K**	**0.0524 K**	**0.0360**
Selenium	mg/L	0.05	NS	NS	NS	<0.001	<0.001	**0.001 J**	**0.00149**
Zinc	mg/L	5	NS	NS	NS	**0.699 K**	**0.07 K**	**0.284 K**	**0.0339**
General Chemistry									
Residue, Filterable (TDS)	mg/L	500	NS	NS	NS	**250**	**230 J-**	**270 J-**	**258**
Sulfate	mg/L	250	**8.3**	**9.8**	**8.3**	**8.1**	**8.9**	**10.1**	**9.70**

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ENOCH VALLEY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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		Well Name:	MPW020
		Collection Date:	38265
		Well Type:	PW
		Result Type:	Primary
Analyte	**Units**	**Screening Value**	
Dissolved Metals			
Aluminum, dissolved	mg/L	0.2	NS
Iron, dissolved	mg/L	0.3	NS
Lead, dissolved	mg/L	0.015	NS
Manganese, dissolved	mg/L	0.05	NS
Selenium, dissolved	mg/L	0.05	<0.001
Zinc, dissolved	mg/L	5	**0.005 JK**
Total Metals			NS
Aluminum	mg/L	0.2	NS
Iron	mg/L	0.3	NS
Lead	mg/L	0.015	NS
Manganese	mg/L	0.05	NS
Selenium	mg/L	0.05	NS
Zinc	mg/L	5	NS
General Chemistry			
Residue, Filterable (TDS)	mg/L	500	NS
Sulfate	mg/L	250	**98**

TABLE 3-43

ENOCH VALLEY MINE - SUMMARY OF GROUNDWATER EXCEEDANCES
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Notes:
AW - agricultural well
BW - direct-push alluvial aquifer well
DW - domestic well
MW - monitoring well
NS- not sampled
PW - production well

Result is greater than screening value
Method detection limit for non-detected value is greater than the screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
K	Serial dilutions not performed for samples analyzed by this method (EPA 200.7; 200.8).

Sources for Screening Values (see also Table 3-1):

Groundwater Unless identified otherwise below, screening levels are from State of Idaho Ground Water Quality Rule (IDAPA 58.01.11).
Screening levels for pH, aluminum, chloride, iron, manganese, pH, silver, sulfate, TDS, and zinc are Secondary Maximum Contaminant Levels (MCLs).
Screening values for arsenic and uranium are USEPA primary and secondary MCLs, National Primary Drinking Water Regulations, EPA.
Screening values for boron, cobalt, molybdenum, nickel, and vanadium are USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites.

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.
The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-44
ENOCH VALLEY MINE
STREAM HABITAT ASSESSMENT DATA MATRIX

Station	May 2004 [Se]sw, mg/L	May 2004 [Se]sed, mg/kg dw	RBS (Habitat Score)	Fish Presence
MST126	0.00050	0.75	139	X
MST127	0.00050	0.60	52	X
MST128*	0.0010	0.90	133	X
MST129*	0.0010	1.2	104	X
MST130*	0.00050	14	87	X[a]
MST131	0.0020	0.30	85	X
MST132	0.00050	1.0	131	X
MST133	0.0040	1.8	48	X[a]
MST134	0.0040	1.1	25	No
MST135	0.00050	3.0	24	No
MST136	0.016	0.70	49	No
MST143	0.00050	0.30	8	No
MST144	0.23	7.6	3	No
MST274*	0.0030	2.5	35	No
MST275	0.00050	0.30	4	No

Notes:
Non-detected concentrations have been censored at one-half the MDLThe MDL for surface water was 0.0010 mg/L and for sediment was 0.50 mg/kg dw.
* - Mine-specific background station
a - no fish observed, but presumed to be present based on hydraulic connection to adjacent stations with fish present
[Se]sw, mg/L – concentration of selenium in surface reported in mg/L
[Se]sed, mg/kg dw – concentration of selenium in sediment, reported in mg/kg on a dw basis

TABLE 3-45 ENOCH VALLEY MINE HISTORICAL SALMONID SELENIUM CONCENTRATIONS (mg/kg dw)					
Enoch Valley Mine Station	**Station ID**	**Sept 1999**	**Flag**	**May 2004**	**Flag**
Angus Creek, above Blackfoot River	MST126	-		4.1	
Angus Creek, above Rasmussen Creek	MST128*	-		4.8	
Angus Creek, below Wooley Valley Mine	MST129*	1.2		6.7	
Notes: * - Mine-specific background station All salmonid results were analyzed by fillet.					

TABLE 3-46 ENOCH VALLEY MINE HISTORICAL FORAGE FISH SELENIUM CONCENTRATIONS (mg/kg dw)							
Enoch Valley Mine Station	**Station ID**	**Sept 1999**	**Flag**	**May 2000**	**Flag**	**May 2004**	**Flag**
Angus Creek, above Blackfoot River	MST126	-		-		9.6	
Angus Creek, below No Name Creek	MST127	5.4		3.7		4.8	
Angus Creek, above Rasmussen Creek	MST128*	-		-		4.5	
Angus Creek, below Wooley Valley Mine	MST129*	3.4		15		5.8	
Rassmussen Creek, above Angus Creek	MST131	-		-		6.3	
Angus Creek, below Rasmussen Creek	MST132	-		-		8.8	
Notes: * - Mine-specific background station							

TABLE 3-47
ENOCH VALLEY MINE
HISTORICAL BENTHIC MACROINVERTEBRATE SELENIUM CONCENTRATIONS (mg/kg dw)

Enoch Valley Mine Station	Station ID	Sept 1999	Flag	May 2000	Flag	June 2004	Flag
Angus Creek, above Blackfoot River	MST126	-		-		8.3	J
Angus Creek, below No Name Creek	MST127	4.5		5.7		3.4	J
Angus Creek, above Rasmussen Creek	MST128*	-		-		6.4	UJ
Angus Creek, R-B&M-10, below Wooley Valley Mine	MST129*	6.2		17		13	J
Angus Creek, R-B&M-10, below Upper Angus Creek Reservoir	MST130*	12		18		8.4	J
Rasmussen Creek, above Angus Creek	MST131	-		-		5.3	J
Angus Creek, below Rasmussen Creek	MST132	-		-		1.2	UJ
Rasmussen Creek, below Enoch Valley Mine	MST133	-		-		21	UJ
Rasmussen Creek, below West Pond Creek	MST134	-		-		8.3	J
Rasmussen Creek, above West Pond Creek	MST135	-		-		170	UJ
Rasmussen Creek headwaters, near Enoch Valley Mine Shop Pond	MST136	-		-		83	UJ
East Fork Rasmussen Creek, above Rasmussen Creek	MST143	-		-		170	UJ
West Fork Rasmussen Creek, above Rasmussen Creek	MST274*	-		-		6.1	J

Notes:
* - Mine-specific background station
Flags:
U - Non-detect (Non-detected concentrations were censored and value presented is equal to the MDL)
J - Estimated result

TABLE 3-48 ENOCH VALLEY MINE HISTORICAL SMALL MAMMAL SELENIUM CONCENTRATIONS (mg/kg dw)					
Enoch Valley Mine Station	Station ID	Species		Sept 2001	Flag
		Common Name	Scientific Name		
Angus Creek, below Upper Angus Creek Reservoir	MST130*	deer mouse	P. maniculatus	0.57	J
	MST130*	deer mouse	P. maniculatus	0.54	J
	MST130*	deer mouse	P. maniculatus	0.76	J
Notes: * - Mine-specific background station J – Estimated result					

TABLE 3-49 ENOCH VALLEY MINE HISTORICAL TERRESTRIAL INVERTEBRATE SELENIUM CONCENTRATIONS (mg/kg dw)			
Enoch Valley Mine Station	Station ID - Sample Type	Sept 2001	Flag
Angus Creek, below Upper Angus Creek Reservoir	MST130* - Insects	3.2	
	MST130* - Worms	55	
* - Mine-specific background station			

TABLE 3-50 ENOCH VALLEY SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Soils	2004	1) 52 locations on 4 transects	Se	See Drawing 3-39	See Section 3.4.1.1 Se ranged from 0.25 to 140 mg/kg dw.	The nature and extent of surface soil impacts at the Enoch Mine has been defined adequately so that if necessary, risk assessments and the feasibility study (FS) can be conducted for the non-radiogenic COPCs. However for radiogenic risks, to reduce the uncertainty in the inherently conservative risk calculations, site-specific uranium isotopes data for soil and radon and gamma measurements will be collected both on site and in a background area(s). Also, a data gap has been identified for sediment (see below) and this carries forward to riparian soils. Therefore some additional limited sampling of riparian soil is needed. Further evaluation of existing background data is needed to statistically quantify background concentrations.
	2009	2) 51 composite samples	Sb, As, B, Cd, Cr, Co, Cu, Mn, Hg, Mo, Ni, Se, Ag, Tl, U, V, Zn	See Drawing 3-41	See Section 3.4.1.2 - Isolated exceedances of Cd, Ni and V above screening levels (SLs). - As and Mn background above SLs. - As and Se exceedances above SLs. - As ranged from 5.2 to 20.8 mg/kg dw - Se ranged from 39.7 to 113 mg/kg dw.	
	2004	3) 31 riparian soil samples	Cd, Cr, Cu, Mo, Ni, Se, V, Zn	See Drawing 3-6	See Section 3.4.1.3 - Isolated exceedances of Cd, Ni, and V above SLs. - Se exceedances above SLs. - Se ranged from 0.25 to 70 mg/kg dw.	

TABLE 3-50 ENOCH VALLEY SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Vegetation	2004	1) 52 locations on 4 transects	Se	See Drawing 3-40	See Section 3.4.2.1 Se ranged from 0.25 to 16 mg/kg dw.	The nature and extent of vegetation impacts at the Enoch Valley Mine has been defined adequately so that risk assessments and the FS can be conducted. As a result, no further field characterization is necessary. However, further evaluation of existing background data is needed.
	2004	2) Composite samples monthly (i.e. for 6 months)	Se	See Drawing 3-6	See Section 3.4.2.2 Monthly vegetation Se samples ranged from 0.80 to 25 mg/kg dw.	
	2009	3) 121 samples	Sb, As, B, Cd, Cr, Co, Cu, Mn, Hg, Mo, Ni, Se, Ag, Tl, U, V, Zn	See Drawing 3-42	See Section 3.4.2.3 - One boron exceedance of background above the SL. - Mo and Se exceedances above the SLs. - Mo ranged from 1.48 to 33.9 mg/kg. - Se ranged from 0.39 to 71.1 mg/kg dw.	
	2004	4) 31 riparian samples	Cd, Cu, Mo, Se, Zn	See Drawing 3-6	See Section 3.4.2.4 Se exceedances Se ranged from 0.25 to 17 mg/kg dw.	

TABLE 3-50 ENOCH VALLEY SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Surface Water	Fall and Spring 1997 - 2009	31 sampling stations	Metals Cations Anions General Water Quality Parameters Field Parameters	See Drawings 3-8 to 3-10 and 3-43 to 3-44	See Section 3.4.3.1 Al, Ba, B, Cd, Fe, Mn, Ni, Tl, Se, V, and Zn exceeded SLs.	The nature and extent of surface water impacts at the Enoch Valley Mine has been defined adequately so that if necessary, risk assessments and the FS can be conducted. As a result, no further field characterization is required. However, ongoing monitoring is necessary to collect baseline effectiveness monitoring of potential future remedies. Further evaluation of existing background data is needed.
Sediment	5 events: Fall 1998, Fall 1999, Spring 2002, Fall 2002, and Spring 2004	26 sampling stations	Metals Cations Anions pH TOC	See Drawings 3-9, 3-13, and 3-43	See Section 3.4.3.2 Cd, Cr, Ni, Se, and V exceeded SLs.	The spatial characterization of sediment impacts at the Enoch Valley Mine has been defined adequately so that if necessary, risk assessments and the FS can be conducted. However, a data gap relating to COPC coverage in sediments has been identified and will be addressed by the Fall 2010 sampling event as described in Appendix D1. In addition further evaluation of existing background data is needed.

TABLE 3-50 ENOCH VALLEY SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Groundwater	Fall and Spring 2004 - 2009	24 wells	Metals Cation Anions General Water Quality Parameters General Field Parameters	See Drawings 3-45 and 3-46	See Section 3.4.4 - Isolated exceedances of Pb and Zn above SLs. - Elevated concentrations of Al, Fe, Mn above SLs. - Se, SO_4, and TDS exceedances above SLs. - Se ranged from non-detect to 0.772 mg/L. - Se exceeds standard in shallow and intermediate groundwater flow systems.	The nature and extent for stream habitat data at the Enoch Valley Mine has been defined except for limited areas as discussed in Section 4.0.
Aquatic Biota						
Stream Habitat Assessment	2004	15 stations	NA	See Drawing 3-21	See Section 3.4.5.1 RBS scores from 3 to 139 out of 200	The nature and extent for stream habitat data at the Enoch Valley Mine has been defined adequately so that if necessary, risk assessments and the FS can be conducted. As a result, no further characterization is needed.

TABLE 3-50 ENOCH VALLEY SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Fish	1999, 2000, 2004	6 stations	Cd, Ni, Se, V, Zn	See Drawings 3-20 and 3-21	See Section 3.4.5.2 Forage fish Se ranged from 3.4 to 15 mg/kg dw. Salmonid Se ranged from 1.2 to 6.7 mg/kg dw.	Nature and extent information for fish data at the Enoch Valley Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.

TABLE 3-50 ENOCH VALLEY SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Benthic Macroinvertebrates	1999, 2000, 2004	13 stations	Se	See Drawing 3-21	See Section 3.4.5.3 Se ranged from 3.4 to 18 mg/kg dw. All selenium results exceeded the screening level. In addition the MDL was usually above the screening level.	Nature and extent information for benthic macroinvertebrate data at the Enoch Valley Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.
Terrestrial Biota						
Elk	1999 2000	160 elk 54 elk	Ca and Se Cd, Cu, Fe, Pb, Mn, Mo, Se, and Zn	See Drawings 3-22 and 3-47	See Section 3.4.6.1 Se ranged from 0.65 to 39 mg/kg dw in elk livers Se ranged from 0.60 to 41 mg/kg dw in elk livers	Nature and extent information for elk data at the Enoch Valley Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.

TABLE 3-50 ENOCH VALLEY SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Bird Eggs	1999 2000 2001	215 eggs 334 eggs 369 eggs	Cd and Se Cd and Se Se	See Drawings 3-23 to 3-25 and 3-47	See Section 3.4.6.2 Se ranged from 0.61 to 21.3 mg/kg dw Se ranged from 0.29 to 25 mg/kg dw Se ranged from 1.3 to 31.9 mg/kg dw	Nature and extent information for bird egg data at the Enoch Valley Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.
Cattle	See Section 3.3.6.3 Henry Mine	See Section 3.3.6.3 Henry Mine	See Section 3.3.6.3 Henry Mine	See Section 3.3.6.3 Henry Mine	See Section 3.3.6.3 Henry Mine	See Section 3.3.6.3 Henry Mine
Small Mammals	2001	1 riparian station	Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb , Mn, Hg, Mo Ni, Se, Ag, Th, V, U, and Zn	See Drawings 3-22 and 3-47	See Section 3.4.6.4 Se ranged from 0.54 to 0.76 mg/kg dw.	Nature and extent information for small mammals data at the Enoch Valley Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.

TABLE 3-50 ENOCH VALLEY SUMMARY OF INVESTIGATION FINDINGS BY MEDIUM						
Medium	**Dates Sampled**	**Approximate Number of Sampling Locations**	**Analytes Sampled**	**Location of Samples Collected**	**Investigation Results Summary**	**Summary Assessment**
Terrestrial Invertebrates	2001	1 riparian station	Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb , Mn, Hg, Mo Ni, Se, Ag, Th, V, U, and Zn	See Drawings 3-22 and 3-47	See Section 3.4.6.5 Se ranged from 3.2 to 55 mg/kg dw	Nature and extent information for terrestrial invertebrates data at the Enoch Valley Mine are adequate for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The potential need for additional sampling of this media will be evaluated pending results of the risk assessment for the P4 mines.

TABLE 3-51 BLACKFOOT RIVER RIPARIAN SOIL SELENIUM CONCENTRATIONS (mg/kg dw)			
Station Name	**Station ID**	**Sept 2004**	**Flag**
Reservoir Delta at Blackfoot River	MRV011	0.50	
Blackfoot River, below Ballard Creek	MST019	1.5	
Blackfoot River, below State Land Creek	MST020	1.7	
Blackfoot River, below Trail Creek	MST021	1.2	
Blackfoot River, below Wooley Valley Creek	MST022	0.93	
Blackfoot River, below Dry Valley Creek, (1997 #20)	MST023	1.1	
Blackfoot River, above Dry Valley Creek, (1997 #19)	MST024	0.90	
Blackfoot River, below Wooley Range Ridge Creek	MST025	0.93	
Blackfoot River, above Wooley Range Ridge Creek	MST026	0.80	
Blackfoot River, below Angus Creek	MST027	0.50	U
Blackfoot River, above Diamond Creek Rd.	MST028	0.50	U
Blackfoot River, above Spring Creek	MST029	0.50	U
Blackfoot River, below Spring Creek	MST229	1.0	
Blackfoot River, above State Land Creek	MST230	1.9	
Blackfoot River, below Woodall Mountain Creek	MST231	0.50	U
Blackfoot River, above Blackfoot Reservoir	MST232	0.50	U
Notes: U – Non-detect (Non-detected concentrations were censored and value presented is equal to the MDL)			

TABLE 3-52 BLACKFOOT RIVER 2004 SEASONAL VEGETATION SELENIUM CONCENTRATIONS (mg/kg dw)							
Station Name	**Station ID**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**
Blackfoot River, below Trail Creek	MST021	0.25	0.25	0.25	NS	0.25	0.25
Blackfoot River, below Angus Creek	MST027	0.25	0.25	0.25	0.25	0.25	0.25
Blackfoot River, below Woodall Mtn. Creek	MST231	0.25	0.25	0.25	0.25	0.25	0.25
Notes: Non-detected concentrations are presented as one-half the MDL. The MDL was 0.5 mg/kg dw.							

TABLE 3-53
BLACKFOOT RIVER
RIPARIAN VEGETATION SELENIUM CONCENTRATIONS (mg/kg dw)

Station Name	Station ID	Sept 1999	Flag	Sept 2004	Flag
Reservoir Delta at Blackfoot River	MRV011	0.66		0.50	U
Blackfoot River, below Ballard Creek	MST019	1.0		0.50	U
Blackfoot River, below State Land Creek	MST020	-		0.50	U
Blackfoot River, below Trail Creek	MST021	0.90		0.50	U
Blackfoot River, below Wooley Valley Creek	MST022	-		0.50	U
Blackfoot River, below Dry Valley Creek, (1997 #20)	MST023	1.9		0.50	U
Blackfoot River, above Dry Valley Creek, (1997 #19)	MST024	-		0.50	U
Blackfoot River, below Wooley Range Ridge Creek	MST025	-		0.50	U
Blackfoot River, above Wooley Range Ridge Creek	MST026	0.41		0.50	U
Blackfoot River, below Angus Creek	MST027	-		0.50	U
Blackfoot River, above Diamond Creek Rd.	MST028	-		0.50	U
Blackfoot River, above Spring Creek	MST029	0.076		0.50	U
Blackfoot River, below Spring Creek	MST229	0.43		0.50	U
Blackfoot River, above State Land Creek	MST230	-		0.50	U
Blackfoot River, below Woodall Mountain Creek	MST231	-		0.50	U
Blackfoot River, above Blackfoot Reservoir	MST232	0.80		0.50	U

Notes:
U – Non-detect (Non-detected concentrations were censored and value presented is equal to the MDL)

TABLE 3-54

BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
(Page 1 of 25)

Location:	MRV011		MRV011		MRV011		MRV011		MRV011		MRV011		MRV011		MRV011	
Location Type:	Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta	
Sample ID:	052104SWMRV011-0-F		052104SWMRV011-0-U		050706SWMRV011-0-F		050706SWMRV011-0-U		051407SWMRV011-0-F		051407SWMRV011-0-U		090807SWMRV011-0-F		090807SWMRV011-0-U	
Collection Date:	5/21/2004		5/21/2004		5/7/2006		5/7/2006		5/14/2007		5/14/2007		9/8/2007		9/8/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		<0.06 UK	0.087	NS		**0.05 JK {J+}**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.002 J**	0.005	NS		**0.006**	0.005	NS		**0.004 J**	0.005	NS		<0.001	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		**0.04 JK {J+}**	0.087	NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		**0.067 K**	0.003	NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		<0.02 UK	0.158	NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS	

TABLE 3-54

BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
(Page 2 of 25)

Location:	MRV011		MRV011		MRV011		MRV011		MST019		MST019		MST019		MST019	
Location Type:	Reservoir Delta		Reservoir Delta		Reservoir Delta		Reservoir Delta		Stream		Stream		Stream		Stream	
Sample ID:	051308SWMRV011-0-F		051308SWMRV011-0-U		091908SWMRV011-0-F		091908SWMRV011-0-U		052004SWMST019-0-F		052004SWMST019-0-U		051206SWMST019-0-F		051206SWMST019-0-U	
Collection Date:	5/13/2008		5/13/2008		9/19/2008		9/19/2008		5/20/2004		5/20/2004		5/12/2006		5/12/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		**1.26 J+K**	0.087	NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.004 J**	0.005	NS		**0.00176 J**	0.005	NS		**0.003 J**	0.005	NS		**0.008**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		<0.0500	0.087	NS		NS		NS		**0.05 JK {J+}**	0.087	NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		**0.067 K**	0.003	NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		<0.002 UK	0.0006	NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UK	0.003	NS	
Iron, dissolved	NS		NS		<0.0250	0.158	NS		NS		NS		<0.02 UK	0.158	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		<0.01 UJK	0.00036	NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		<0.0001 UK	0.00003	NS	

TABLE 3-54

BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
(Page 3 of 25)

Location:	MST019		MST019		MST019		MST019		MST019		MST019		MST019		MST019	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051507SWMST019-1-F		051507SWMST019-1-U		051507SWMST019-2-F		051507SWMST019-2-U		051507SWMST019-3-F		051507SWMST019-3-U		051507SWMST019-avg-F		051507SWMST019-avg-U	
Collection Date:	5/15/2007		5/15/2007		5/15/2007		5/15/2007		5/15/2007		5/15/2007		5/15/2007		5/15/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		**0.35 K**	0.087	NS		**0.34 K**	0.087	NS		**0.37 K**	0.087	NS		**0.353 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		**0.003 J**	0.005	NS		**0.00367 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST019		MST019		MST019		MST019		MST019		MST019		MST019		MST019	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	090907SWMST019-0-F		090907SWMST019-0-U		051308SWMST019-0-F		051308SWMST019-0-U		091508SWMST019-0-F		091508SWMST019-0-U		0905SWMST019-F		0905SWMST019-U	
Collection Date:	9/9/2007		9/9/2007		5/13/2008		5/13/2008		9/15/2008		9/15/2008		5/4/2009		5/4/2009	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		**0.26 K**	0.087	NS		**0.1 JK**	0.087	NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		**0.004 J**	0.005	NS		**0.00166**	0.005	NS		**0.00431 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		<0.0500	0.087	NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		<0.0250	0.158	NS		**0.259**	0.158	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST019		MST019		MST020		MST020		MST020		MST020		MST020		MST020	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	0909SWMST019-F		0909SWMST019-U		052004SWMST020-0-F		052004SWMST020-0-U		051206SWMST020-0-F		051206SWMST020-0-U		051407SWMST020-0-F		051407SWMST020-0-U	
Collection Date:	9/21/2009		9/21/2009		5/20/2004		5/20/2004		5/12/2006		5/12/2006		5/14/2007		5/14/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		**0.31 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.00231**	0.005	NS		**0.002 J**	0.005	NS		**0.007**	0.005	NS		**0.004 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		**0.03 JK {J+}**	0.087	NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		**0.068 K**	0.003	NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		<0.01 UK	0.003	NS		NS		NS	
Iron, dissolved	<0.0250	0.158	NS		NS		NS		<0.02 UK	0.158	NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		<0.01 UJK	0.00036	NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST020		MST020		MST020		MST020		MST020		MST020		MST020		MST020	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	091407SWMST020-0-F		091407SWMST020-0-U		051408SWMST020-0-F		051408SWMST020-0-U		091508SWMST020-0-F		091508SWMST020-0-U		0905SWMST020-F		0905SWMST020-U	
Collection Date:	9/14/2007		9/14/2007		5/14/2008		5/14/2008		9/15/2008		9/15/2008		5/4/2009		5/4/2009	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		**0.14 JK**	0.087	NS		**1.2 J+K**	0.087	NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		**0.005 J**	0.005	NS		**0.00154 J+**	0.005	NS		**0.00421 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		<0.0500	0.087	NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		<0.0250	0.158	NS		**0.0574 J+/B**	0.158	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST020		MST020		MST021		MST021		MST021		MST021		MST021		MST021	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	0909SWMST020-F		0909SWMST020-U		052004SWMST021-1-F		052004SWMST021-1-U		052004SWMST021-2-F		052004SWMST021-2-U		052004SWMST021-3-F		052004SWMST021-3-U	
Collection Date:	9/21/2009		9/21/2009		5/20/2004		5/20/2004		5/20/2004		5/20/2004		5/20/2004		5/20/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.00203**	0.005	NS		**0.002 J**	0.005	NS		**0.003 J**	0.005	NS		**0.002 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	<0.0250	0.158	NS		NS		NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST021		MST021		MST021		MST021		MST022		MST022		MST022		MST022	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	052004SWMST021-avg-F		052004SWMST021-avg-U		051206SWMST021-0-F		051206SWMST021-0-U		051904SWMST022-0-F		051904SWMST022-0-U		051206SWMST022-0-F		051206SWMST022-0-U	
Collection Date:	5/20/2004		5/20/2004		5/12/2006		5/12/2006		5/19/2004		5/19/2004		5/12/2006		5/12/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Averaged		Averaged		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.00233 J**	0.005	NS		**0.007**	0.005	NS		**0.003 J**	0.005	NS		**0.007**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		**0.05 JK {J+}**	0.087	NS		NS		NS		<0.03 UK	0.087	NS	
Barium, dissolved	NS		NS		**0.069 K**	0.003	NS		NS		NS		**0.068 K**	0.003	NS	
Beryllium, dissolved	NS		NS		<0.002 UK	0.0006	NS		NS		NS		<0.002 UK	0.0006	NS	
Cobalt, dissolved	NS		NS		<0.01 UK	0.003	NS		NS		NS		<0.01 UK	0.003	NS	
Iron, dissolved	NS		NS		<0.02 UK	0.158	NS		NS		NS		<0.02 UK	0.158	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		<0.01 UJK	0.00036	NS		NS		NS		<0.01 UJK	0.00036	NS	
Thallium, dissolved	NS		NS		<0.0001 UK	0.00003	NS		NS		NS		<0.0001 UK	0.00003	NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST022		MST022		MST022		MST022		MST022		MST022		MST022		MST022	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051407SWMST022-0-F		051407SWMST022-0-U		090907SWMST022-0-F		090907SWMST022-0-U		051408SWMST022-1-F		051408SWMST022-1-U		051408SWMST022-2-F		051408SWMST022-2-U	
Collection Date:	5/14/2007		5/14/2007		9/9/2007		9/9/2007		5/14/2008		5/14/2008		5/14/2008		5/14/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		**0.31 K**	0.087	NS		**0.1 JK**	0.087	NS		**1.62 K**	0.087	NS		**1.57 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.004 J**	0.005	NS		<0.001	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST022		MST022		MST022		MST022		MST022		MST022		MST023		MST023	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051408SWMST022-3-F		051408SWMST022-3-U		051408SWMST022-avg-F		051408SWMST022-avg-U		091608SWMST022-0-F		091608SWMST022-0-U		051904SWMST023-0-F		051904SWMST023-0-U	
Collection Date:	5/14/2008		5/14/2008		5/14/2008		5/14/2008		9/16/2008		9/16/2008		5/19/2004		5/19/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface		Surface Water		Surface Water	
	Triplicate		Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		**1.74 K**	0.087	NS		**1.64 K**	0.087	NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		**0.00146**	0.005	NS		<0.001	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		<0.0500	0.087	NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		<0.0250	0.158	NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST023		MST023		MST023		MST023		MST023		MST023		MST023		MST023	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051106SWMST023-0-F		051106SWMST023-0-U		051407SWMST023-0-F		051407SWMST023-0-U		091007SWMST023-0-F		091007SWMST023-0-U		051408SWMST023-1-F		051408SWMST023-1-U	
Collection Date:	5/11/2006		5/11/2006		5/14/2007		5/14/2007		9/10/2007		9/10/2007		5/14/2008		5/14/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		**0.24 K**	0.087	NS		<0.03 UK	0.087	NS		**1.67 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.005 J**	0.005	NS		**0.004 J**	0.005	NS		**0.001 J**	0.005	NS		**0.004 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	**0.05 JK {J+}**	0.087	NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	**0.063 K**	0.003	NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	<0.002 UK	0.0006	NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	<0.01 UK	0.003	NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	<0.02 UK	0.158	NS		NS		NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	<0.01 UK	0.00036	NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	<0.0001 UK	0.00003	NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST023		MST023		MST023		MST023		MST023		MST023		MST023		MST023	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051408SWMST023-2-F		051408SWMST023-2-U		051408SWMST023-3-F		051408SWMST023-3-U		051408SWMST023-avg-F		051408SWMST023-avg-U		091608SWMST023-0-F		091608SWMST023-0-U	
Collection Date:	5/14/2008		5/14/2008		5/14/2008		5/14/2008		5/14/2008		5/14/2008		9/16/2008		9/16/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		**1.42 K**	0.087	NS		**1.52 K**	0.087	NS		**1.54 K**	0.087	NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.005 J**	0.005	NS		**0.004 J**	0.005	NS		**0.00433 J**	0.005	NS		**0.00194**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		<0.0500	0.087	NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		<0.0250	0.158	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST024		MST024		MST025		MST025		MST026		MST026		MST026		MST026	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051904SWMST024-0-F		051904SWMST024-0-U		051904SWMST025-0-F		051904SWMST025-0-U		051704SWMST026-0-F		051704SWMST026-0-U		051407SWMST026-1-F		051407SWMST026-1-U	
Collection Date:	5/19/2004		5/19/2004		5/19/2004		5/19/2004		5/17/2004		5/17/2004		5/14/2007		5/14/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		<0.18 UK	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.003 J**	0.005	NS		**0.002 J**	0.005	NS		**0.007**	0.005	NS		**0.004 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST026		MST026		MST026		MST026		MST026		MST026		MST026		MST026	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051407SWMST026-2-F		051407SWMST026-2-U		051407SWMST026-3-F		051407SWMST026-3-U		051407SWMST026-avg-F		051407SWMST026-avg-U		091007SWMST026-1-F		091007SWMST026-1-U	
Collection Date:	5/14/2007		5/14/2007		5/14/2007		5/14/2007		5/14/2007		5/14/2007		9/10/2007		9/10/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		<0.17 UK	0.087	NS		<0.19 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		<0.001	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST026		MST026		MST026		MST026		MST026		MST026		MST026		MST026	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	091007SWMST026-2-F		091007SWMST026-2-U		091007SWMST026-3-F		091007SWMST026-3-U		091007SWMST026-avg-F		091007SWMST026-avg-U		051408SWMST026-1-F		051408SWMST026-1-U	
Collection Date:	9/10/2007		9/10/2007		9/10/2007		9/10/2007		9/10/2007		9/10/2007		5/14/2008		5/14/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		**0.03 JK {J+}**	0.087	NS		<0.03 UK	0.087	NS		**0.03 JK**	0.087	NS		**1.63 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		<0.001	0.005	NS		<0.001	0.005	NS		**0.004 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST026		MST026		MST026		MST026		MST026		MST026		MST026		MST026	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051408SWMST026-2-F		051408SWMST026-2-U		051408SWMST026-3-F		051408SWMST026-3-U		051408SWMST026-avg-F		051408SWMST026-avg-U		091508SWMST026-0-F		091508SWMST026-0-U	
Collection Date:	5/14/2008		5/14/2008		5/14/2008		5/14/2008		5/14/2008		5/14/2008		9/15/2008		9/15/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		**1.77 K**	0.087	NS		**1.82 K**	0.087	NS		**1.74 K**	0.087	NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		**0.00155**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		<0.0500	0.087	NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		<0.0250	0.158	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST027		MST027		MST027		MST027		MST027		MST027		MST027		MST027	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051404SWMST027-0-F		051404SWMST027-0-U		051106SWMST027-0-F		051106SWMST027-0-U		050607SWMST027-0-F		050607SWMST027-0-U		090907SWMST027-0-F		090907SWMST027-0-U	
Collection Date:	5/14/2004		5/14/2004		5/11/2006		5/11/2006		5/6/2007		5/6/2007		9/9/2007		9/9/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		**0.6 K**	0.087	NS		<0.03 UK	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.008**	0.005	NS		**0.005 J-**	0.005	NS		**0.009**	0.005	NS		<0.001	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		<0.03 UK	0.087	NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		**0.064 K**	0.003	NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		<0.002 UK	0.0006	NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		<0.01 UK	0.003	NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		<0.02 UK	0.158	NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		<0.01 UK	0.00036	NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		<0.0001 UK	0.00003	NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST027		MST027		MST027		MST027		MST230		MST230		MST230		MST230	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051408SWMST027-0-F		051408SWMST027-0-U		091608SWMST027-0-F		091608SWMST027-0-U		052004SWMST230-1-F		052004SWMST230-1-U		052004SWMST230-2-F		052004SWMST230-2-U	
Collection Date:	5/14/2008		5/14/2008		9/16/2008		9/16/2008		5/20/2004		5/20/2004		5/20/2004		5/20/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		**1.4 J+K**	0.087	NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.004 J**	0.005	NS		**0.00126**	0.005	NS		**0.003 J**	0.005	NS		**0.003 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		<0.0500	0.087	NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		<0.0250	0.158	NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST230		MST230		MST230		MST230		MST231		MST231		MST231		MST231	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	052004SWMST230-3-F		052004SWMST230-3-U		052004SWMST230-avg-F		052004SWMST230-avg-U		052104SWMST231-1-F		052104SWMST231-1-U		052104SWMST231-2-F		052104SWMST231-2-U	
Collection Date:	5/20/2004		5/20/2004		5/20/2004		5/20/2004		5/21/2004		5/21/2004		5/21/2004		5/21/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Averaged		Averaged		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.002 J**	0.005	NS		**0.00267 J**	0.005	NS		**0.002 J**	0.005	NS		**0.002 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

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BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST231		MST231		MST231		MST231		MST231		MST231		MST232		MST232	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	052104SWMST231-3-F		052104SWMST231-3-U		052104SWMST231-avg-F		052104SWMST231-avg-U		050706SWMST231-0-F		050706SWMST231-0-U		052104SWMST232-0-F		052104SWMST232-0-U	
Collection Date:	5/21/2004		5/21/2004		5/21/2004		5/21/2004		5/7/2006		5/7/2006		5/21/2004		5/21/2004	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Averaged		Averaged		Primary		Primary		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.002 J**	0.005	NS		**0.002 J**	0.005	NS		**0.008**	0.005	NS		**0.002 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		<0.03 UK	0.087	NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		**0.063 K**	0.003	NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		<0.002 UK	0.0006	NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		<0.01 UK	0.003	NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		<0.02 UK	0.158	NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		<0.01 UJK	0.00036	NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		<0.0001 UK	0.00003	NS		NS		NS	

TABLE 3-54

BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
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Location:	MST232		MST232		MST232		MST232		MST232		MST232		MST232		MST232	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	050706SWMST232-1-F		050706SWMST232-1-U		050706SWMST232-2-F		050706SWMST232-2-U		050706SWMST232-3-F		050706SWMST232-3-U		050706SWMST232-avg-F		050706SWMST232-avg-U	
Collection Date:	5/7/2006		5/7/2006		5/7/2006		5/7/2006		5/7/2006		5/7/2006		5/7/2006		5/7/2006	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		NS		NS		NS		NS		NS		NS		NS	
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.007**	0.005	NS		**0.007**	0.005	NS		**0.008**	0.005	NS		**0.00733**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS		<0.03 UK	0.087	NS	
Barium, dissolved	**0.064 K**	0.003	NS		**0.063 K**	0.003	NS		**0.063 K**	0.003	NS		**0.0633 K**	0.003	NS	
Beryllium, dissolved	<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS		<0.002 UK	0.0006	NS	
Cobalt, dissolved	<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS		<0.01 UK	0.003	NS	
Iron, dissolved	<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS		<0.02 UK	0.158	NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036	NS		<0.01 UJK	0.00036	NS	
Thallium, dissolved	<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS		<0.0001 UK	0.00003	NS	

TABLE 3-54

BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
(Page 22 of 25)

Location:	MST232		MST232		MST232		MST232		MST232		MST232		MST232		MST232	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	051407SWMST232-1-F		051407SWMST232-1-U		051407SWMST232-2-F		051407SWMST232-2-U		051407SWMST232-3-F		051407SWMST232-3-U		051407SWMST232-avg-F		051407SWMST232-avg-U	
Collection Date:	5/14/2007		5/14/2007		5/14/2007		5/14/2007		5/14/2007		5/14/2007		5/14/2007		5/14/2007	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Averaged		Averaged	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		**0.25 K**	0.087	NS		**0.24 K**	0.087	NS		**0.26 K**	0.087	NS		**0.25 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		**0.003 J**	0.005	NS		**0.003 J**	0.005	NS		**0.004 J**	0.005	NS		**0.00333 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

TABLE 3-54

BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
(Page 23 of 25)

Location:	MST232		MST232		MST232		MST232		MST232		MST232		MST232		MST232	
Location Type:	Stream		Stream		Stream		Stream		Stream		Stream		Stream		Stream	
Sample ID:	090807SWMST232-0-F		090807SWMST232-0-U		051308SWMST232-1-F		051308SWMST232-1-U		051308SWMST232-2-F		051308SWMST232-2-U		051308SWMST232-3-F		051308SWMST232-3-U	
Collection Date:	9/8/2007		9/8/2007		5/13/2008		5/13/2008		5/13/2008		5/13/2008		5/13/2008		5/13/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water		Surface Water	
	Primary		Primary		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate		Triplicate	
	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)																
Aluminum	NS		**0.12 JK**	0.087	NS		**1.5 K**	0.087	NS		**1.62 J+K**	0.087	NS		**1.24 K**	0.087
Barium	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS		NS		NS		NS		NS	
Iron	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium	NS		<0.001	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005	NS		**0.004 J**	0.005
Silver	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium	NS		NS		NS		NS		NS		NS		NS		NS	
Dissolved Metals (mg/L)																
Aluminum, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Barium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Iron, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Selenium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS		NS		NS		NS		NS	

TABLE 3-54

BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
(Page 24 of 25)

Location:	MST232		MST232		MST232		MST232	
Location Type:	Stream		Stream		Stream		Stream	
Sample ID:	051308SWMST232-avg-F		051308SWMST232-avg-U		091508SWMST232-0-F		091508SWMST232-0-U	
Collection Date:	5/13/2008		5/13/2008		9/15/2008		9/15/2008	
Sample Type:	Surface Water		Surface Water		Surface Water		Surface Water	
	Averaged		Averaged		Primary		Primary	
	Result	SL	Result	SL	Result	SL	Result	SL
Total Metals (mg/L)								
Aluminum	NS		**1.45 J+K**	0.087	NS		NS	
Barium	NS		NS		NS		NS	
Beryllium	NS		NS		NS		NS	
Cobalt	NS		NS		NS		NS	
Iron	NS		NS		NS		NS	
Selenium	NS		**0.004 J**	0.005	NS		**0.00127 J+**	0.005
Silver	NS		NS		NS		NS	
Thallium	NS		NS		NS		NS	
Dissolved Metals (mg/L)								
Aluminum, dissolved	NS		NS		<0.0500	0.087	NS	
Barium, dissolved	NS		NS		NS		NS	
Beryllium, dissolved	NS		NS		NS		NS	
Cobalt, dissolved	NS		NS		NS		NS	
Iron, dissolved	NS		NS		<0.0250	0.158	NS	
Selenium, dissolved	NS		NS		NS		NS	
Silver, dissolved	NS		NS		NS		NS	
Thallium, dissolved	NS		NS		NS		NS	

TABLE 3-54

BLACKFOOT RIVER - SUMMARY OF SURFACE WATER EXCEEDANCES
(Page 25 of 25)

Notes:
NS - not sampled
SL - screening level
F - filtered
U - unfiltered
Avg - average

Result is greater than screening value
Method detection limit for non-detected value is greater than the screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
K	Serial dilutions not performed for samples analyzed by this method (EPA 200.7; 200.8).

Sources for Screening Values (see also Table 3-1):

Surface Water: Unless identified otherwise below, screening levels are the chronic freshwater screening value in NOAA SQuiRT (Buchman, 2008).
Screening levels for aluminum is the Freshwater Standards for Chronic Criteria (CCC) from the National Recommended Water Quality Criteria (USEPA, 2009).
Screening values for arsenic, cadmium, chromium, copper, lead, nickel, selenium, and zinc are the CCCs from the State of Idaho Surface Water Quality for Aquatic Life (IDAPA 58.01.02); those for cadmium, chromium, copper, lead, nickel, and zinc are expressed as a function of total hardness. Screening levels for cadmium and selenium are expressed as total recoverable (unfiltered concentration).
The screening level for iron is the Lowest Chronic Value (LCV) observed for fresh water daphnids (source: ORNL, 1996).
The screening levels for manganese, uranium, and vanadium are the Tier II Secondary Chronic Values (source: ORNL, 1996).

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.
The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-55

BLACKFOOT RIVER - SUMMARY OF SEDIMENT EXCEEDANCES
(Page 1 of 2)

					Analyte (mg/Kg, dry weight)					
Location	Location Type	Sample Identification	Collection Date	Sample Type	Cadmium	Chromium	Nickel	Selenium	Vanadium	Zinc
				Screening Level:	0.583	36.286	18	4	57	98
MRV011	Reservoir Delta	052104SEMRV011-0	5/21/2004	Primary	**1.18**	**20.6**	**11.6 J**	**1 J**	**20.9**	**46**
MST019	Stream	052004SEMST019-0	5/20/2004	Primary	**1.24**	**20**	**7.7**	**0.7 J**	**17.1 J**	**31 J**
MST020	Stream	052004SEMST020-0	5/20/2004	Primary	**1.48**	**30.7**	**13.3 J**	<0.5	**30.1 J**	**45 J**
MST021	Stream	052004SEMST021-1-QA1	5/20/2004	Triplicate	**1.54**	**26.5**	**7.3**	**0.5 J**	**20 J**	**30 J**
MST021	Stream	052004SEMST021-1-QA2	5/20/2004	Triplicate	**1.23**	**32.1**	**8.7**	<0.5	**20.9 J**	**29 J**
MST021	Stream	052004SEMST021-1-QA3	5/20/2004	Triplicate	**1.61**	**29.3**	**8.3**	<0.5	**18.3 J**	**30 J**
MST021	Stream	052004SEMST021-1-QA-avg	5/20/2004	Averaged	**1.46**	**29.3**	**8.1**	**0.5 J**	**19.7 J**	**J**
MST022	Stream	051904SEMST022-0	5/19/2004	Primary	**1.38**	**25.4**	**7.3**	**0.5 J**	**18.7 J**	**26 J**
MST023	Stream	051904SEMST023-0	5/19/2004	Primary	**1.81**	**30.2**	**6.8**	**1 J**	**21.7 J**	**26 J**
MST024	Stream	051904SEMST024-0	5/19/2004	Primary	**1.49**	**24.6**	**8.7**	**0.8 J**	**22.5 J**	**34 J**
MST025	Stream	051904SEMST025-0	5/19/2004	Primary	**0.55**	**12.4**	**6.4**	**1.5 J**	**13.3 J**	**30 J**
MST026	Stream	051704SEMST026-0	5/17/2004	Primary	**0.56 J-**	**13.2**	**7.6 J**	**2.3 J**	**14.4**	**33 J**
MST027	Stream	051404SEMST027-0	5/14/2004	Primary	**0.58 J-**	**14**	**7.8 J**	**1.3 J**	**15.2**	**32 J**
MST230	Stream	052004SEMST230-1-QA1	5/20/2004	Triplicate	**3.65**	**40.8 J**	**9**	**0.7 J**	**35.1**	**40**
MST230	Stream	052004SEMST230-1-QA2	5/20/2004	Triplicate	**2.57**	**35.9 J**	**9.1**	**0.8 J**	**23.8**	**34**
MST230	Stream	052004SEMST230-1-QA3	5/20/2004	Triplicate	**2.52**	**33.1 J**	**9.5**	**1 J**	**23.4**	**33**
MST230	Stream	052004SEMST230-1-QA-avg	5/20/2004	Averaged	**2.91**	**36.6 J**	**9.2**	**0.833 J**	**27.4**	**35.7**
MST231	Stream	052104SEMST231-QA1	5/21/2004	Triplicate	**0.67**	**9.68**	**6.5 J**	<0.5	**9.51**	**24**
MST231	Stream	052104SEMST231-QA2	5/21/2004	Triplicate	**0.7**	**10.1**	**6.9 J**	<0.5	**9.87**	**24**
MST231	Stream	052104SEMST231-QA3	5/21/2004	Triplicate	**0.7**	**9.97**	**6.7 J**	<0.5	**9.68**	**23**
MST231	Stream	052104SEMST231-QA-avg	5/21/2004	Averaged	**0.69**	**9.92**	**6.7 J**	<0.5	**9.69**	**23.7**
MST232	Stream	052104SEMST232-0	5/21/2004	Primary	**1.09**	**16**	**10.2 J**	**1.2 J**	**16.3**	**40**

TABLE 3-55

BLACKFOOT RIVER - SUMMARY OF SEDIMENT EXCEEDANCES
(Page 2 of 2)

Notes:

Result is greater than screening value

Flag Definition:

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximated concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
J+/B	Result is estimated and biased high; associated field blank contained target analyte.
R	The result is unusable. The sample result is rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Sources for Screening Values (see also Table 3-1):

Sediment

Screening levels for aluminum, cadmium, chromium, and zinc are the ARCS threshold effects levels (TELs) for freshwater sediment in NOAA SQuiRT (Buchman, 2008).

Screening level for antimony is from Buchman, M. 1999. NOAA HAZMAT Report 99-1.

Screening levels for arsenic, copper, lead, mercury, and nickel are the TEL for freshwater sediment in NOAA SQuiRT (Buchman, 2008).

Screening levels for cobalt, iron, manganese, and silver are from Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario, August 1993.

Screening level for selenium is from Van Derveer and Canton (1997).

Screening level for vanadium is from the marine sediment AET (Buchman, 2008).

Triplicate Results:

"Primary" indicates locations where only one sample was collected from a given location. "Triplicate" indicates locations where a total of three samples were collected from a given location for the purpose of quality assurance.

The average value for triplicate samples is calculated as follows: (a) the mean of three detected values, (b) the mean of two detected values if result of one triplicate is not detected, (c) the detected value if results of two triplicates are not detected, or (d) less than the highest method detection limit if all triplicate results are not detected.

TABLE 3-56
BLACKFOOT RIVER
STREAM HABITAT ASSESSMENT DATA MATRIX

Station	May 2004 [Se]sw, mg/L	May 2004 [Se]sed, mg/kg dw	RBS (Habitat Score)	Fish Presence
MST019	0.0030	0.70	144	X
MST020	0.0020	0.25	112	X
MST021	0.0023	0.25	69	X
MST022	0.0030	0.50	113	X
MST023	0.00050	1.0	145	X
MST024	0.0030	0.80	101	X
MST025	0.0020	1.5	139	X
MST026	0.0070	2.3	129	X
MST027	0.0080	1.3	107	X
MST028*	0.0050	0.90	94	X
MST029*	0.00050	0.25	107	X
MST229*	0.0050	2.7	107	X
MST230	0.0027	0.83	116	X
MST231	0.0020	0.25	88	X
MST232	0.0020	1.2	115	X

Notes:
Non-detected concentrations have been censored at one-half the MDL.
The MDL for surface water was 0.0010 mg/L and for sediment was 0.50 mg/kg dw.
* - Mine-specific background station
[Se]sw, mg/L – concentration of selenium in surface reported in mg/L
[Se]sed, mg/kg dw – concentration of selenium in sediment, reported in mg/kg on a dw basis

TABLE 3-57
BLACKFOOT RIVER
HISTORICAL SALMONID SELENIUM CONCENTRATIONS (mg/kg dw)

Blackfoot River Station	Station ID	Sept 1999	Flag	May 2000	Flag	May 2004	Flag
Blackfoot River, below Ballard Creek	MST019	0.87		8.6		-	
Blackfoot River, below Trail Creek	MST021	3.6		5.3		-	
Blackfoot River, below Dry Valley Creek	MST023	1.2		5.2		6.0	
Blackfoot River, above Wooley Range Ridge Creek	MST026	6.1		9.7		-	
Blackfoot River, below Angus Creek	MST027	-		-		6.1	
Blackfoot River, above Spring Creek	MST029*	4.3		6.2		-	
Blackfoot River, below Spring Creek	MST229*	3.3		4.9		-	
Blackfoot River, above Blackfoot Reservoir	MST232	4.2		4.8		-	

Notes:
* - Mine-specific background station

TABLE 3-58 BLACKFOOT RIVER HISTORICAL FORAGE FISH SELENIUM CONCENTRATIONS (mg/kg dw)							
Blackfoot River Station	**Station ID**	**Sept 1999**	**Flag**	**May 2000**	**Flag**	**May 2004**	**Flag**
Reservoir Delta at Blackfoot River	MRV011	-		-		4.1	
Blackfoot River, below Ballard Creek	MST019	10		7.1		8.8	
Blackfoot River, below State Land Creek	MST020	-		-		11	
Blackfoot River, below Trail Creek	MST021	8.1		11		9.6	
Blackfoot River, below Wooley Valley Creek	MST022	-		-		12	
Blackfoot River, below Dry Valley Creek	MST023	6.9		10		11	
Blackfoot River, above Dry Valley Creek	MST024	-		-		14	
Blackfoot River, below Wooley Range Ridge Creek	MST025	-		-		12	
Blackfoot River, above Wooley Range Ridge Creek	MST026	7.5		9.5		1.8	
Blackfoot River, below Angus Creek	MST027	-		-		9.1	
Blackfoot River, above Diamond Creek Rd.	MST028*	-		-		6.6	
Blackfoot River, above Spring Creek	MST029*	-		7.3		12	
Blackfoot River, below Spring Creek	MST229*	4.7		4.7		15	
Blackfoot River, above State Land Creek	MST230	-		-		9.0	
Blackfoot River, below Woodall Mountain Creek	MST231	-		-		9.5	
Blackfoot River, above Blackfoot Reservoir	MST232	5.9		4.1		9.6	
Notes: * - Mine-specific background station							

TABLE 3-59
BLACKFOOT RIVER
HISTORICAL BENTHIC MACROINVERTEBRATE SELENIUM CONCENTRATIONS (mg/kg dw)

Blackfoot River Station	Station ID	Sept 1999	Flag	May 2000	Flag	June 2004	Flag
Reservoir Delta at Blackfoot River	MRV011	10		-		42	UJ
Blackfoot River, below Ballard Creek	MST019	4.7		12		7.1	J
Blackfoot River, below State Land Creek	MST020	-		-		7.5	UJ
Blackfoot River, below Trail Creek	MST021	1.9		4.2		10	J
Blackfoot River, below Wooley Valley Creek	MST022	-		-		4.2	J
Blackfoot River, below Dry Valley Creek	MST023	5.8		4.7		9.6	J
Blackfoot River, above Dry Valley Creek	MST024	-		-		10	J
Blackfoot River, below Wooley Range Ridge Creek	MST025	-		-		7.9	UJ
Blackfoot River, above Wooley Range Ridge Creek	MST026	2.7		5.4		6.1	UJ
Blackfoot River, below Angus Creek	MST027	-		-		12	J
Blackfoot River, above Diamond Creek Rd.	MST028*	-		-		9.4	J
Blackfoot River, above Spring Creek	MST029*	2.7		1.0		1.2	J
Blackfoot River, below Spring Creek	MST229*	5.0		7.4		12	J
Blackfoot River, above State Land Creek	MST230	-		-		13	J
Blackfoot River, below Woodall Mountain Creek	MST231	-		-		27	J
Blackfoot River, above Blackfoot Reservoir	MST232	-		4.6		14	UJ

Notes:
* - Mine-specific background station
Flags:
U – Non-detect (Non-detected concentrations were censored and value presented is equal to the MDL)
J – Estimated result

TABLE 3-60 BLACKFOOT RIVER HISTORICAL SMALL MAMMAL SELENIUM CONCENTRATIONS (mg/kg dw)					
Blackfoot River Station	**Station ID**	**Species**		**Sept 2001**	**Flag**
		Common Name	**Scientific Name**		
Blackfoot River, above Wooley Range Ridge Creek	MST026	w. harvest mouse	R. megalotis	1.7	J
	MST026	deer mouse	P. maniculatus	0.42	J
	MST026	least chipmunk	T. minimus	0.35	J
Notes: J – Estimated result					

TABLE 3-61 BLACKFOOT RIVER HISTORICAL TERRESTRIAL INVERTEBRATE SELENIUM CONCENTRATIONS (mg/kg dw)			
Blackfoot River Station	**Station ID - Sample Type**	**Sept 2001**	**Flag**
Blackfoot River, above Wooley Range Ridge Creek	MST026 - Insects	3.3	
	MST026 - Worms	38	

TABLE 3-62 PROPOSED ASSESSMENT ENDPOINTS AND INDICATOR RECEPTORS				
Feeding Guild	**Assessment Endpoint**	**Receptor**	**Measures of**	
			Exposure	**Effect**
2 ˚ Consumers Amphibians	Protect amphibians from acute (mortality) and chronic (e.g., reproductive impairment) adverse effects from direct and/or secondary exposure to metals resulting from phosphate mining activities.	Frog	Measured surface water COPEC concentrations	· Compare measured surface water concentration with acceptable levels
2 ˚ Consumers Benthic Fish	Protect benthic fish species from acute (mortality) and chronic (e.g., reproductive impairment) adverse effects from direct and/or secondary exposure to metals resulting from phosphate mining activities.	Sculpin	Measured fish tissue COPEC concentrations	· Compare measured tissue concentration with acceptable levels
2 ˚ Consumers Pelagic Fish	Protect pelagic fish species from acute (mortality) and chronic (e.g., reproductive impairment) adverse effects from direct and/or secondary exposure to metals resulting from phosphate mining activities.	Yellowstone Cutthroat Trout	Measured fish tissue COPEC concentrations	· Compare measured tissue concentration with acceptable levels
1 ˚ Consumers Terrestrial Herbivore	Protect herbivorous mammals (avian and terrestrial predator prey items) by limiting acute and adverse effects from exposure to metals resulting from phosphate mining activities.	Meadow Vole	Calculated daily dosage using exposure models, measured chemical concentrations in abiotic and biotic media, and food web interactions.	· Compare calculated dose to NOAEL dosages for similar prey species.
	Protect large herbivorous mammals (game species) by limiting acute and adverse effects from exposure to metals resulting from phosphate mining activities.	Elk	· Calculated daily dosage using exposure models, measured chemical concentrations in abiotic and biotic media, and food web interactions. · Measured elk tissue COPEC concentrations.	· Compare calculated dose to NOAEL dosages for similar species. · Compare measured tissue concentration with acceptable levels
	Protect grazing livestock by limiting acute and adverse effects from exposure to metals resulting from phosphate mining activities.	Beef Cattle	· Calculated daily dosage using exposure models, measured chemical concentrations in abiotic and biotic media, and food web interactions.· Measured COPEC concentrations in beef cattle tissue.	· Compare calculated dose to NOAEL dosages for similar species.· Compare measured tissue concentration with acceptable levels

TABLE 3-62 PROPOSED ASSESSMENT ENDPOINTS AND INDICATOR RECEPTORS				
			Measures of	
Feeding Guild	Assessment Endpoint	Receptor	Exposure	Effect
1 ˚ Consumers Avian Herbivore	Protect herbivorous bird species from acute (mortality) and chronic (e.g., reproductive impairment) adverse effects from direct and/or secondary exposure to metals resulting from phosphate mining activities.	American Goldfinch	· Calculate daily dosage using exposure models, measured chemical concentrations in abiotic and biotic media, and food web interactions. · Measured COPEC concentrations in bird eggs.	· Compare calculated dose to NOAEL dosages for similar species. · Compare measured egg concentration with acceptable levels
2 ˚ Consumers Terrestrial Omnivore	Protect small omnivorous mammals (avian and terrestrial predator prey items) by limiting acute and adverse effects from exposure to metals resulting from phosphate mining activities.	Deer Mouse	· Calculated daily dosage using exposure models, measured chemical concentrations in abiotic and biotic media, and food web interactions. · Measured COPEC concentrations in mouse tissue.	· Compare calculated dose to NOAEL dosages for similar species. · Compare measured tissue concentration with acceptable levels
	Protect omnivorous mammals by limiting acute and adverse effects from exposure to metals resulting from phosphate mining activities.	Raccoon	· Calculated daily dosage using exposure models, measured chemical concentrations in abiotic and biotic media, and food web interactions.	· Compare calculated dose to NOAEL dosages for similar prey species.
2 ˚ Consumers Avian Omnivore	Protect omnivorous bird species from acute (mortality) and chronic (e.g., reproductive impairment) adverse effects from direct and/or secondary exposure to metals resulting from phosphate mining activities.	American Robin	· Calculate daily dosage using exposure models, measured chemical concentrations in abiotic and biotic media, and food web interactions. · Measured COPEC concentrations in bird eggs.	· Compare calculated dose to NOAEL dosages for similar species. · Compare measured egg concentration with acceptable levels
	Protect omnivorous water bird species from acute (mortality) and chronic (e.g., reproductive impairment) adverse effects from direct and/or secondary exposure to metals resulting from phosphate mining activities.	Mallard	· Calculate daily dosage using exposure models, measured chemical concentrations in abiotic and biotic media, and food web interactions. · Measured COPEC concentrations in bird eggs.	· Compare calculated dose to NOAEL dosages for similar species. · Compare measured egg concentration with acceptable levels

TABLE 3-62 PROPOSED ASSESSMENT ENDPOINTS AND INDICATOR RECEPTORS				
Feeding Guild	**Assessment Endpoint**	**Receptor**	**Measures of**	
			Exposure	**Effect**
3 ˚ Consumers Terrestrial Predator	Protect upper trophic level aquatic feeding terrestrial species from acute (mortality) and chronic (e.g., reproductive impairment) adverse effects from direct and/or secondary exposure to metals resulting from phosphate mining activities.	Mink	· Calculated daily dosage using exposure models, measured chemical concentrations in abiotic and biotic media, and food web interactions.	· Compare calculated dose to NOAEL dosages for similar prey species.
	Protect upper trophic level terrestrial species from acute (mortality) and chronic (e.g., reproductive impairment) adverse effects from direct and/or secondary exposure to metals resulting from phosphate mining activities.	Coyote	· Calculated daily dosage using exposure models, measured chemical concentrations in abiotic and biotic media, and food web interactions.	· Compare calculated dose to NOAEL dosages for similar prey species.
3 ˚ Consumers Avian Predator	Protect upper trophic level aquatic feeding avian species from acute (mortality) and chronic (e.g., reproductive impairment) adverse effects from direct and/or secondary exposure to metals resulting from phosphate mining activities.	Great Blue Heron	· Calculated daily dosage using exposure models, measured chemical concentrations in abiotic and biotic media, and food web interactions.	· Compare calculated dose to NOAEL dosages for similar prey species.
	Protect upper trophic level avian species from acute (mortality) and chronic (e.g., reproductive impairment) adverse effects from direct and/or secondary exposure to metals resulting from phosphate mining activities.	Northern Harrier	· Calculated daily dosage using exposure models, measured chemical concentrations in abiotic and biotic media, and food web interactions.	· Compare calculated dose to NOAEL dosages for similar prey species.

Notes:

COPEC - chemical of potential concern

NOAEL - no observed adverse effects level

TABLE 3-63
SUMMARY OF ENVIRONMENTAL DATA AND REQUESTED USES

Data Set	Dates of Collection	Data Quality Note	Scoping and Characterization	Risk Assessment	Feasibility Study
Groundwater	1998	Data collected under specific environmental data collection programs and plans. Data were not validated to current standards. However, data collection and analysis are well documented. These data could be evaluated and validated for higher level data uses, as necessary.	X		X
SEGW	1997 - 2003		X		X
Surface Water	1997 - 2003		X		X
Sediment	1998 - 2002		X		X
Fish	1998 - 2000		X		
Aquatic Invertebrates	1999 & 2000		X		
Riparian Soil	2001		X		
Riparian Vegetation	1999 & 2001		X		
Upland Soil	1998, 2000 & 2001		X		X
Upland Vegetation	1998, 2000 & 2001		X		X
Small Mammals	2001		X		
Terrestrial Invertebrates	2002		X		
Cattle	1999 & 2000	Data quality and limitations assessed herein can be validated to current standards	X	X	X
Bird Egg	1999 - 2001		X	X	X
Elk	1999 & 2000		X	X	X
Groundwater	2004 - 2009	Validated to current validation standards – Unrestricted, relevant use during the RI/FS.	X	X	X
SEGW	2004 - 2009		X	X	X
Surface Water	2004 - 2009		X	X	X
Sediment	2004 & 2007		X	X	X
Fish	2004		X	X	X
Benthic Macroinverts.	2004		X	X	X
Riparian Soil	2004		X	X	X
Riparian Vegetation	2004		X	X	X
Upland Soil	2004 & 2009		X	X	X
Upland Vegetation	2004 & 2009		X	X	X

Notes:
SEGW - Surface Expressions of Groundwater such as springs, seeps and headwater stream baseflow.
Aquatic Invertebrates - macroinvertebrates, macrophytes, periphyton, and plankton.

SECTION 4

TABLES

TABLE 4-1 POTENTIAL FEDERAL CHEMICAL-SPECIFIC ARARS FOR THE P4 SITES		
Standard or Requirement	**Citation**	**Description**
Safe Drinking Water Act	42 USC §§ 300f et seq.	Protection of public water systems and underground sources of drinking water. May be ARAR for groundwater used to supply public water systems.
National Primary Drinking Water Regulations	40 CFR Part 141	Establishes health-based standards (MCLs) for public water systems. May be ARAR for groundwater.
Clean Water Act	33 USC §§ 1251 et seq.	Water Pollution Prevention and Control.
National Recommended Water Quality Criteria[1]	Section 304(a) of CWA	Recommended water quality criteria for the protection of aquatic life and human health in surface water. May be ARAR for surface water.
Superfund Amendments and Reauthorization Act (SARA Title III)	42 USC § 11001 et seq.	Applies if herbicides are used. May be ARAR if selective vegetation eradication is part of a remedial action (e.g., removal of selenium hyper-accumulators).
Resource Conservation and Recovery Act	42 USC §§ 6901 et seq. 40 CFR Parts 260-268	Management of solid waste. Defines threshold levels and criteria to determine if a material is hazardous waste.
National Secondary Drinking Water Regulations	40 CFR Part 143	Establishes welfare-based standards (secondary MCLs) for public water systems. May be ARAR for groundwater.
NOAA Benchmarks[2] - TBC	Buchman (2008)	Benchmarks for freshwater sediments, surface water and soil.
Maximum Tolerated Levels (MTLs) in animal feed –TBC	National Research Council, 2005	Guidelines for concentrations in animal feed.

Notes:

[1] National Recommended Water Quality Criteria were most recently updated in 2009 and are available at http://www.epa.gov/ost/criteria/wqctable/.
[2] NOAA freshwater sediment benchmarks were most recently updated in 2008 and are available at http://response.restoration.noaa.gov/book_shelf/122_NEW-SQuiRTs.pdf.
Standard or requirement in italics with TBC is a "to be considered" guideline.

TABLE 4-2 POTENTIAL STATE CHEMICAL-SPECIFIC ARARS FOR THE P4 SITES		
Standard or Requirement	**Citation**	**Description**
Idaho Water Quality Standards	IDAPA 58.01.02	Water quality standards and wastewater treatment requirements, including: water quality criteria for aquatic life use designations (.250), Designations of surface waters found within Salmon Basin (.130), General surface water quality criteria (.200), Mixing zone policy (.060).
Idaho Ground Water Quality Rule	IDAPA 58.01.11.200	Numerical and narrative standards that may be ARAR for groundwater of the state.
Administrative Policy on Protection of waters of the State	IDAPA 58.01.02.050.02	Protects surface and groundwater for beneficial uses.
Antidegradation Policy	IDAPA 58.01.02.051	Requires that existing water uses and water quality be maintained and protected.
Idaho Rules for Public Drinking Water Systems	IDAPA 58.01.08	Regulates quality of public drinking water.
Rules and Standards for Hazardous Waste	IDAPA 58.01.05	Rules and standards for hazardous waste. May be ARAR if hazardous waste is identified or generated.
Solid Waste Management Rules	IDAPA 58.01.06	Rules and standards for solid waste.
Rules for the Control of Air Pollution	IDAPA 58.01.01	Including .650 and .651. Could be ARAR during remediation.
Idaho State's Veterinarian's Office opinion on selenium levels in forage – TBC	----	Recommends a maximum of 5 ppm (dw) selenium in livestock forage.

Notes:

Standard or requirement in italics with TBC is a "to be considered" guideline.

TABLE 4-3
POTENTIAL FEDERAL LOCATION AND ACTION SPECIFIC ARARS FOR THE P4 SITES

Standard or Requirement	Citation	Description	Location (L) or Action (A) Specific
Mineral Leasing Act	30 USC §181 et seq, 43 CFR 3500-3599	The portions of the act that govern reclamation at mine sites on Federal lands may be ARAR.	A, L
Federal Land Policy and Management Act	43 USC §1701-1795	The portions of the act that govern natural resources and present and future land use on Federal lands may be ARAR.	L
Caribou-Targhee Land Use Management Plan (National Forest Management Act)	16 USC §1601-1614, 38 CFR 219	This law may be ARAR if on-site actions will involve or impact US Forest Service lands.	L
Protection of Wetlands	40 CFR § 6.302	Regulates and minimizes impacts to wetlands. May be ARAR if any Site remediation or reclamation contains wetlands.	A (L)
Protection of Floodplains	40 CFR § 6.302 and Appendix A	Regulates construction in floodplains. May be ARAR if any Site remediation or reclamation extends into a floodplain (low probability).	A (L)
Fish and Wildlife Coordination Act	16 USC §661 40CFR §6.302	Requires that federal agencies involved in actions that will result in control or modification of any natural stream or water body must protect fish and wildlife resources that may be affected by the actions.	A
Endangered Species Act	7 USC §135, 16 USC §400, 16 USC §1531 et. seq, 40 CFR 6.302, 50 CFR 402	This law may be ARAR if on-site activities may jeopardize threatened and endangered species or adversely modify their habitat.	A (L)
Bald and Golden Eagle Protection Act	16 USC §688 et. seq, 50 CFR 22	This law may be ARAR if on-site activities may harm a bald or golden eagle, their nest, or eggs.	A (L)
National Pollutant Discharge Elimination System (NPDES) Regulations	40 CFR §§ 122 to 125	Requirements for actions involving effluent discharges to surface water. This may be ARAR if water treatment is used as part of a remedy.	A
Clean Water Act	CWA Section 301[b]	Requirements for best treatment and control technology prior to discharge. This may be ARAR if water treatment is used as part of a remedy.	A
	CWA Section 404	Requirements for dredging and filling in U.S. waters, including wetlands. May be ARAR if a remedial action involves dredging or filling in U.S. waters, mostly likely wetlands.	A (L)

TABLE 4-3 POTENTIAL FEDERAL LOCATION AND ACTION SPECIFIC ARARS FOR THE P4 SITES Page 2 of 2			
Standard or Requirement	**Citation**	**Description**	**Location (L) or Action (A) Specific**
Clean Air Act	42 USC §§ 7409 et seq.; 40 CFR 50	Requirements for maintaining air quality. May be ARAR during remediation construction.	A
National Historic Preservation Act	16 USC. § 470f; 36 CFR. Parts 60, 63 and 800; 40 CFR. § 6.301	Requirements for preservation of historical or archaeological sites. Unlikely to be ARAR within current Site boundaries. However, may be ARAR in the unlikely case where land is disturbed outside of current boundaries (e.g., borrow areas).	A, L
The Archaeological and Historic Preservation Act	40 CFR. § 6.301		A, L
Native American Graves Protection and Repatriation Act	25 USC §3001 et seq	This law may be ARAR if any Native American grave sites are discovered during any actions. This is unlikely unless new areas outside of current Site boundaries are disturbed.	L
Rivers and Harbors Act	33 USC §§ 401 et seq., 33 CFR Parts 320-330	Requirements for minimizing adverse effects from dredge and fill work within U.S. navigable waters and their tributaries.	A (L)
RCRA Requirement for Hazardous Waste Transport	RCRA 42 USC § 6901 et seq.; 40 CFR 261; 40 CFR 262; 49 CFR Parts 171-180	Requirements for handling and transporting hazardous waste may be ARAR if any hazardous waste is transported during remediation.	A
Surface Mining Control and Reclamation Act	30 USC § 1201, 30 CFR Part 816, 30 CFR Part 784	Permanent program performance standards – surface mining activities. Minimum requirements for reclamation and operations.	A
Considering Wetlands at CERCLA Sites Guidance - TBC	OSWER 9280.03, May 1994	Guidance to evaluate potential impacts on wetlands. Would apply if any Site remediation or reclamation contains wetlands (probable).	A

Notes:

Standard or requirement in italics with TBC is a “to be considered” guideline.

TABLE 4-4
POTENTIAL STATE LOCATION AND ACTION SPECIFIC ARARS FOR THE P4 SITES

Standard or Requirement	Citation	Description	Location (L) or Action (A) Specific
Protection of Animals and Birds	Idaho Code §36-1102	Prohibits intentional disturbance or destruction of eggs or nests. Potentially ARAR if remedial activities necessitate disruption of bird nests in forested, meadow or wetland areas.	L (A)
Non-point Source Discharges	IDAPA 58.01.02.350	Regulates non-point source discharges, designates approved BMWs and provides additional protection for ORW. May be ARAR for mining wastes defined as non-point sources.	A
Well Construction Standard Rules	IDAPA 37.03.09	Regulates well construction and abandonment.	A
Idaho Exploration and Surface Mining Regulations	IDAPA 20.03.02	Requirements for borrow sources of material (e.g., soils, gravel). May be ARAR if off-site borrow sources are developed for remediation.	A
Idaho Water Quality Standards and Wastewater Treatment Requirements	IDAPA 58.01.02	Requirements for actions involving effluent discharges to surface water. May be ARAR if water treatment is part of the remedial action.	A
Surface Mining	Idaho Code §§47-1501 to 1519 and IDAPA 20.02.140	Establishes standards and authorizes rules for reclaiming lands affected by surface exploration and mining, including recontouring, erosion control, and revegetation. Where surface mining wastes are already in existence, this section may fall into the realm of relevant and appropriate. May be ARAR for contouring, erosion control, and revegetation during remediation.	A
Solid Waste Management Rules	IDAPA 58.01.06	Requirements for sites with residual metals concentrations that are at or above risk or regulatory levels after remediation. May be ARAR for remedial alternatives.	A
Hazardous Waste and Hazardous Waste Management Act of 1983	IDAPA 58.01.05 and 1993 Session Law, Ch. 291, Sections 1-8	Potentially ARAR for management of investigation-derived wastes and remediation wastes.	A
Site Specific Surface Water Quality Criteria	IDAPA 58.01.02.275 to 280	Establishes surface water quality standards for water discharged from dams, reservoirs and hydroelectric facilities and for other named waters.	L

TABLE 4-4
POTENTIAL STATE LOCATION AND ACTION SPECIFIC ARARS FOR THE P4 SITES

Standard or Requirement	Citation	Description	Location (L) or Action (A) Specific
Fences in General (LEAs)	Idaho Code §§35-101 to 112	Establishes construction requirements, such as height and distance between posts, for all types of fences. Defines who is responsible for construction and maintenance of enclosure and partition fences. May be ARAR if fencing is required to protect installment(s) associated with remediation.	A
Idaho Rules for Control of Fugitive Dust	IDAPA 58.01.01.577 and 650-651	Requirements for maintaining air quality. May be ARAR during remedial construction.	A
Idaho Toxic Air Pollutants	IDAPA 58.01.01.585-586	Requirements for maintaining air quality (none currently nor will they be likely associated with any remedial action).	A
Preservation of Historical Sites	Idaho Statutes Title 67, Chapters 46 and 41	Requirements for protection of public lands and preservation of historical or archaeological sites in consideration of waste disposal. Unlikely to be ARAR within current Site boundaries. However, may be ARAR in the unlikely case where land is disturbed outside of current boundaries (e.g., borrow areas).	A
Stream Channel Alteration Rules	Idaho Code §§42-3801-3812 and IDAPA 37.03.07	Requirements for stream channel alteration (unlikely to be ARAR at Sites).	A
Idaho Classification and Protection of Wildlife Rule - TBC	IDAPA 13.01.06.300	Classifies fish and wildlife species; identifies threatened or endangered species; and specifies wildlife species that are protected from taking and possessing. To be considered during ecological risk assessment.	L
Idaho Land Remediation Rules	IDAPA 58.01.18.027	Requirements for land remediation need to be considered when evaluating existing reclamation, but may be ARAR if new reclamation is part of remedy.	A
Soil Salvage Guidelines - TBC	Jones (2003) for USFS	Guidelines for the Salvage of Topsoil and Shale Used to Reclaim and Provide Seed Bed for Phosphate Mine Reclamation.	A, L
Guidance for Determining Background in Groundwater - TBC	IDEQ (2009)	Statistical guidance for determining background groundwater quality and degradation.	A

TABLE 4-4
POTENTIAL STATE LOCATION AND ACTION SPECIFIC ARARS FOR THE P4 SITES

Standard or Requirement	Citation	Description	Location (L) or Action (A) Specific
IDEQ Area Wide Risk Management Plan - TBC	IDEQ (2004a)	Guidance document for regional removal action goals and objectives, and action levels.	A
Guidance document for regional removal action goals and objectives, and action levels - TBC	Idaho Department of Environmental Quality, December 2003	Guidance document for risk-based decision-making using human health and transport models. May be taken into consideration in areas where ecological risks are not a factor.	A, L
Variances from water quality standards - TBC	IDAPA 58.01.02.260	Establishes procedures and requirements for water quality variance. To be considered if site-specific variances are proposed for a particular location or source.	A
IDEQ Risk-based decision making for remedial action guidance - TBC	December 2003	Guidance document for risk-based decision-making using human health and transport models. To be considered for risk-based decision-making.	A
IDEQ Non-point source management plan - TBC		Guidance to protect or restore (where possible) the beneficial uses of the State's surface water and groundwater.	L

Notes:

Standard or requirement in italics with TBC is a "to be considered" guideline.

TABLE 4-5 GROUNDWATER MONITORING DATA QUALITY OBJECTIVES Page 1 of 2	
Step 1 - **State the Problem**	Historical mining operations at P4's Sites have resulted in mine waste materials being potential sources of selenium and other constituents to the environment. In general, the predominant mobilization mechanism for COPCs from these potential source areas occur during the spring runoff via surface water and shallow groundwater transport of dissolved constituents. However, deeper infiltration to intermediate or regional groundwater systems is also possible. The primary components of the conceptual model that support the DQOs are summarized as follows for groundwater: • Source – COPCs present in interburden and overburden rocks deposited in waste rock dumps, but possibly present in mine pits and other facilities, that are able to enter groundwater systems due to seepage and/or runoff and infiltration. • Release mechanisms – Exposure to air and water results in mobilization of COPCs from increased surface area; precipitation may leach and mobilize COPCs primarily during spring runoff to receiving groundwater. • Exposure pathways – Primary exposure through direct contact, ingestion of COPCs, irrigation, and watering of livestock. • Receptors – Seasonal ranchers and potential residents. The planning team, decision makers, and principal data users include P4 and the A/T.
Step 2 – Identify the Goals of the Study	Are COPCs in groundwater elevated above the appropriate screening levels, thus posing a potential risk to human health and ecological receptors, and are there sufficient data available to characterize nature and extent, perform the risk assessments (HHRA and ERA), and proceed to the FS? <u>Alternative actions:</u> 1. Install monitoring locations and monitor existing and/or new groundwater wells and/or direct push borings for COPCs. 2. No Action. Monitoring locations and analyte lists are of adequate quality, quantity and groundwater monitoring in proper locations to characterize groundwater. Data will be evaluated in the RI Report, HHRA, and ERA.
Step 3 – Identify Information	The information inputs for the decision process include the following items that may exist or will need to be created: • List of COPCs. • Current conceptual site models. • Sample location maps (spatial coverage of existing data). • Historic surface water and groundwater data (use of existing data will be dependent upon evaluations of data usability). • Hydrogeologic information such as flow directions, flow rates, and distance of wells to seeps and springs. • Existing site characterization, groundwater quality sampling and analysis plans and procedures. • Risk-based screening benchmarks for analytes and ARARs.

TABLE 4-5 GROUNDWATER MONITORING DATA QUALITY OBJECTIVES Page 2 of 2	
Step 4 – Define the Boundaries of the Study	Population of Interest: Metals/metalloids and general groundwater quality parameters. Spatial boundaries: Groundwater monitoring locations, including surface expressions of groundwater, characterizing impacted groundwater at the P4 Sites. Vertical boundary: Screened depth of groundwater monitoring well and practical depth of monitoring well installation. Temporal boundary: The temporal boundary for groundwater monitoring at all proposed stations is spring during peak flow (i.e., peak potential loading). This is due to the nature of contaminant transport positively correlating with spring runoff and the potential hydraulic connections between the shallow alluvial system and surface water. However, some locations will also be monitored in the fall. Groundwater data trending back to 2004 will generally be used for evaluating temporal trends. However, most monitoring well data has been collected since 2007. These data will be used for evaluating risk and ARARs compliance. Scale of Decision Making: Spatially-relevant groundwater monitoring locations from each sampling event.
Step 5 – Develop Analytic Approach	The applicable and relevant compliance thresholds linked to protection of human and ecological receptors will be used. If a monitoring location COPC concentration is equal to or exceeds applicable standards at boundary locations then the need for further downgradient boundary monitoring will be evaluated, if practicable, otherwise the impacted groundwater is considered bounded by the existing monitoring locations and no further characterization is necessary. The data will be evaluated during the RI/FS.
Step 6 – Specify Performance or Acceptance Criteria	No decision errors will be established. To control decision errors, only quantitative data with known accuracy and precision documentation will be used for comparison to standards. Best professional judgment will be used to evaluate the hydrogeologic factors associated with the groundwater monitoring stations, and how these factors may be relevant to the need for additional information. Analytical parameters will be compared to the applicable groundwater quality risk-based screening levels and ARARs. The precision, accuracy, representativeness, comparability, and completeness criteria and the minimum detection limits will be used to evaluate the usability of analytical data in making decisions about characterization of groundwater and at a minimum will help ensure that data collected for the RI/FS is above adequate quality. Measurement errors will be minimized by implementing standard operating procedures for the sample collection, handling, preparation and analysis methods. All data must meet approved usability as defined in the project *QAPP Addendum* (MWH, 2009f and Appendix D5).
Step 7 – Develop the Plan for Obtaining Data	This DQO has been used to help guide the data gap assessment that is presented in Section 4.4, and the existing groundwater data were reviewed as part of the preparation of this Work Plan. The sampling rationale and design based on existing data are presented in the *2009 Groundwater Monitoring SAP* and *2010 Groundwater Monitoring Memorandum* in Appendix D4. The sampling design included evaluation of data gaps for the shallow/alluvial, Dinwoody Formation, and Wells Formation hydrostratigraphic units. The sampling design will be further evaluated if future groundwater monitoring suggests that the proposed locations and analytes are not sufficient to assist in and complete groundwater characterization. The field methods and quality assurance requirements are presented in the *2009 Groundwater Sampling and Analysis Plan* (MWH, 2009c).

TABLE 4-6 SURFACE WATER MONITORING DATA QUALITY OBJECTIVES Page 1 of 2	
Step 1 – **State the Problem**	Historical mining operations at the Sites have resulted in mine waste materials being potential sources of selenium and other constituents to the environment. In general, the predominant mobilization mechanism for COPCs from these potential source areas occurs during the spring runoff via runoff and infiltration. The primary components of the conceptual model that support the DQOs are summarized as follows for surface water: • Source – COPCs present in interburden and overburden rocks deposited in waste rock dumps, but possibly present in mine pits and other facilities that is able to enter surface water bodies due to springs and seeps and/or runoff. • Release mechanisms – Exposure to air and water results in mobilization of COPCs from increased surface area; precipitation may leach and mobilize COPCs primarily during spring runoff to receiving surface water bodies. • Exposure pathways – Primary exposure through ingestion, dermal contact, uptake of COPCs by plants or animals. • Receptors – Recreational receptors, Native Americans, seasonal ranchers, potential residents, as well as livestock, wildlife, and other ecological receptors. The planning team, decision makers and principal data users include P4 and the A/T.
Step 2 – Identify the Goal of the Study	Are COPCs in surface water elevated above the appropriate screening levels that may pose risks to human health and ecological receptors, and is there sufficient data available to characterize nature and extent, perform the risk assessments (HHRA and ERA), and proceed to the FS? <u>Alternative actions:</u> 1. Evaluate the need to need to monitor existing and/or new surface water locations. 2. No Action - station data and analyte list are of adequate quality, quantity, and stations are in proper locations to characterize surface water. Data will be evaluated in the RI Report, HHRA, and ERA.
Step 3 – Identify Information Inputs	The information inputs for the decision process include the following items that may exist or will need to be created: • List of COPCs. • Current conceptual site models. • Existing facilities investigation information to be updated as needed (inventory and spatial delineation of potential source areas). • Sample location maps. • Historic surface water and groundwater data; data will be analyzed with appropriate methods for determining inorganic concentrations with detection limits suitable for comparison to risk-based screening levels. • Existing site characterization surface water quality sampling and analysis plans and procedures. • Risk-based screening benchmarks for analytes.

TABLE 4-6 SURFACE WATER MONITORING DATA QUALITY OBJECTIVES Page 2 of 2	
Step 4 – Define the Boundaries of the Study	Population of Interest: Metals/metalloids and general water quality parameters in surface water Spatial boundaries: Surface water monitoring locations downgradient of potential source areas at Ballard, Henry, and Enoch Valley mine areas Vertical boundary: Mid-depth of the river or stream at surface water monitoring locations Temporal boundary: Surface water sample collection is planned during the peak flow (i.e., peak potential loading). However, some locations where surface flow is continuous are also monitored in the fall. Scale of Decision Making: Spatially-relevant surface water monitoring locations from each sampling event Practical Constraints Sampling to occur during peak flow in May and low-flow in September
Step 5 – Develop the Analytic Approach	The applicable and relevant compliance thresholds linked to protection of human and ecological receptors will be used. If a monitoring location COPC concentration is equal to or exceeds applicable standards then further downstream monitoring will be evaluated, if practicable, otherwise the surface water monitoring point is considered sufficient and no further characterization is necessary. The data will be evaluated in the RI/FS.
Step 6 – Specify Performance of Acceptance Criteria	No decision errors will be established. To control decision errors, only quantitative data with acceptable accuracy and precision documentation will be used for comparison to standards. Best professional judgment will be used to evaluate the hydrologic factors associated with the established surface water monitoring stations, and how these factors may be relevant to the need for additional information. Analytical parameters will be compared to the applicable surface water quality risk-based screening level and ARARs. The precision, accuracy, representativeness, comparability, and completeness criteria and the minimum detection limits will be used to evaluate the usability of analytical data in making decisions about characterization of surface water quality and at a minimum will help ensure that data collected for the RI/FS is above adequate quality. Measurement errors will be minimized by implementing standard operating procedures for the sample collection, handling, preparation and analysis methods. All data must meet approved usability as defined in the *QAPP Addendum* (MWH, 2009f and Appendix D5).
Step 7 – Develop the Plan for Obtaining Data	This DQO has been used to help guide the data gap assessment that is presented in Section 4.4. P4 and the A/T now believe there are adequate and extensive surface water data to support the development RI/FS process including the baseline risk assessment. However, there is concern that a significant time gap in the surface water monitoring data set could occur in 2009 and 2010 during which time additional groundwater characterization will occur. Continued surface water monitoring downgradient of potential P4 sources will be conducted to provide an annual baseline record of conditions, both spatially and temporally, in order to more effectively evaluate potential future remedies' effectiveness and evaluate long-term trends. The monitoring will be performed according to the approved *2009 and 2010 Surface Water Monitoring Sampling and Analysis Plan* (MWH, 2009a).

TABLE 4-7 SEDIMENT DATA QUALITY OBJECTIVES Page 1 of 2	
Step 1 - **State the Problem**	Historical mining operations at the Sites have resulted in mine waste materials being potential sources of selenium and other constituents to the environment. Enriched concentrations in geologic material, and oxidation, leaching, and mobilization of elements in waste rock can result in the release of elevated concentrations of COPCs into the environment from potential source areas. In general, the predominant mobilization mechanism for COPCs from these potential source areas occurs during the spring runoff via runoff and infiltration. The primary components of the conceptual model that support the DQOs are summarized as follows for sediment: • Source – COPCs present in interburden and overburden rocks deposited in waste rock dumps, but possibly present in mine pits and other facilities that is able to enter the environment by physical transport of sediment in runoff and/or via water transport and sorption to sediments. • Release mechanisms – Exposure to air and water results in mobilization of COPCs from increased surface area; precipitation may leach and mobilize COPCs in sediment primarily during spring runoff to the environment. • Exposure pathways – Primary exposure through uptake of COPCs in sediment by plants and aquatic biota. • Receptors – Recreational receptors, Native Americans, potential residents, as well as other ecological receptors. The planning team, decision makers and principal data users include P4 and the A/T.
Step 2 – Identify the Goal of the Study	Are COPCs in sediments elevated above the appropriate screening levels that may pose risks to human health and ecological receptors, and is there sufficient data available to characterize nature and extent and seasonal variability in sediments, perform the risk assessment (HHRA and ERA), and proceed to the FS? <u>Alternative actions:</u> 1. Collect sediment data to provide additional COPC data and spatial coverage. 2. No Action – Existing data are of adequate quality, quantity, and in proper locations to characterize sediments. Data will be evaluated in the RI Report, HHRA, and ERA.
Step 3 – Identify Information Inputs	The information inputs for the decision process include the following items that may exist or will need to be created. • List of COPCs. • Current conceptual site models. • Existing facilities investigation information to be updated as needed (inventory and spatial delineation of potential source areas). • Sample location maps. • Historic sediment data (use of existing data will be dependent upon evaluations of data usability); data will be analyzed with appropriate methods for determining inorganic concentrations with detection limits suitable for comparison to risk-based screening levels. • Existing site characterization sediment sampling and analysis plans and procedures. • Risk-based screening benchmarks for analytes.

TABLE 4-7 SEDIMENT DATA QUALITY OBJECTIVES Page 2 of 2	
Step 4 – Define the Boundaries of the Study	Population of Interest: Metals/metalloids in sediment. Spatial boundaries: Sediments in surface water bodies in and around Ballard, Henry, and Enoch Valley Mine areas. Vertical boundary: Sediments below water column in streams and ponds (no deeper than six inches below the water-sediment interface. Temporal boundary: It is assumed that sediment quality will not change during the seasons in the water bodies potentially assessed.
Step 5 – Develop the Analytic Approach	The applicable and relevant compliance thresholds linked to protection of human and ecological receptors will be used. If available data (existing) are not suitable to characterize nature and extent (e.g., lack sufficient COPCs), and do not provide a reliable estimate of potential source area concentrations, then additional data will be collected. Otherwise, the data will be considered adequate for characterization. The data will be evaluated in the RI and FS.
Step 6 – Specify Performance or Acceptance Criteria	No decision errors will be established. To control decision errors, only quantitative data with known accuracy and precision documentation will be used for comparison to standards. Analytical parameters will be compared to the applicable risk-based screening levels. The precision, accuracy, representativeness, comparability, and completeness criteria and the minimum detection limits will be used to evaluate the usability of analytical data in making decisions about characterization of sediment and at a minimum will help ensure that data collected for the RI/FS is above adequate quality. Measurement errors will be minimized by implementing standard operating procedures for the sample collection, handling, preparation and analysis methods. All data must meet approved usability as defined in the *QAPP/QAPP Addenda* and any data collected will be analyzed per the *QAPP Addenda* (MWH, 2009f and Appendix D5).
Step 7 – Design Plan for Obtaining Data	This DQO has been used to help guide the data gap assessment that is presented in Section 4.4. The existing sediment data were reviewed as part of the preparation of this the Work Plan (see summary in Section 4.4). There is a concern that sediments have not been sampled for the common COPC analyte list as other media. The sediment sampling rationale and design based on existing data are presented in Appendix D1. The field methods and quality assurance requirements are presented in the FSP located in Appendix D1.

TABLE 4-8 SOIL DATA QUALITY OBJECTIVES Page 1 of 2	
Step 1 - **State the Problem**	Historical mining operations at the Sites have resulted in mine waste materials being potential sources of selenium and other constituents to the environment. Enriched concentrations in geologic material, and oxidation, leaching, and mobilization of elements in waste rock can result in the release of elevated concentrations of COPCs into the environment from potential source areas. In general, the predominant mobilization mechanism for COPCs from these potential source areas occurs during the spring runoff via runoff and infiltration. However, elevated concentrations in soil can be a source of direct exposure to potential receptors and also be a source of COPCs for uptake into vegetation. The primary components of the conceptual model that support the DQOs are summarized as follows for soil: • Source – COPCs present in interburden and overburden rocks deposited in waste rock dumps, but possibly present in mine pits and other facilities that is able to enter the environment by physical transport of soil in runoff. • Release mechanisms – Exposure to air and water results in mobilization of COPCs from increased surface area; precipitation may leach soils, transport soils, and mobilize COPCs primarily during spring runoff to the environment. • Exposure pathways – Primary exposure through ingestion, dermal contact, uptake by plants and animals. • Receptors – Recreational receptors, Native Americans, seasonal ranchers, potential residents, as well as livestock, wildlife, and other ecological receptors. The planning team, decision makers and principal data users include P4 and the A/T.
Step 2 – Identify the Goal of the Study	Are COPCs in soils elevated above the appropriate screening levels that may pose risks to human health and ecological receptors, and is there sufficient data available to characterize nature and extent and variability in soils, perform the risk assessment (HHRA and ERA), and proceed to the FS? <u>Alternative actions:</u> 1. Collect soil data to provide additional COPC data and spatial coverage. 2. No Action – Existing data are of adequate quality, quantity, and in proper locations to characterize soils. Data will be evaluated in the RI Report, HHRA, and ERA.
Step 3 – Identify Information Inputs	The information inputs for the decision process include the following items that may exist or will need to be created. • List of COPCs. • Current conceptual site models. • Existing facilities investigation information to be updated as needed (inventory and spatial delineation of potential source areas). • Sample location maps. • Historic soil data (use of existing data will be dependent upon evaluations of data usability); data will be analyzed with appropriate methods for determining inorganic concentrations with detection limits suitable for comparison to risk-based screening levels. • Existing data on type and abundance of soil and vegetative cover. • Existing site characterization soil sampling and analysis plans and procedures. • Risk-based screening benchmarks for analytes.

TABLE 4-8 SOIL DATA QUALITY OBJECTIVES Page 2 of 2	
Step 4 – Define the Boundaries of the Study	Population of Interest: Metals/metalloids in soil. Spatial boundaries: Potential source areas as well as riparian areas in and around Ballard, Henry, and Enoch Valley Mine areas. Vertical boundary: Maximum depth will be 6 inches below the ground surface. Temporal boundary: It is assumed that soil quality will not change during the seasons.
Step 5 – Develop the Analytic Approach	The applicable and relevant compliance thresholds linked to protection of human and ecological receptors will be used. If available data (existing) are not suitable to characterize nature and extent (lack sufficient COPCs or method detection limits exceed screening levels), and do not provide a reliable estimate of potential source area concentrations, then additional data will be collected. Otherwise the data will be considered adequate for characterization, and the data will be evaluated in the RI/FS.
Step 6 – Specify Performance or Acceptance Criteria	No decision errors will be established. To control decision errors, only quantitative data with known and acceptable accuracy and precision documentation will be used for comparison to standards. Analytical parameters will be compared to the applicable risk-based screening levels. The precision, accuracy, representativeness, comparability, and completeness criteria and the minimum detection limits will be used to evaluate the usability of analytical data in making decisions about characterization of soil and at a minimum will help ensure that data collected for the RI/FS is above adequate quality. Measurement errors will have been minimized by implementing standard operating procedures for the sample collection, handling, preparation and analysis methods. All data must meet approved usability as defined in the *QAPP Addenda* MWH, 2009f and Appendix D5. In addition, data should be collected consistent with the procedures and methods indicated in the approved *Supplemental Mine Waste Rock Dump and Facility Soil and Vegetation Characterization Work Plan* (MWH, 2009e).
Step 7 – Develop the Plan for Obtaining Data	The primary purpose of these DQOs is to help guide the data gap assessment that is presented in Section 4.4. The existing soil data were reviewed as part of the preparation of this the Work Plan (see Section 4.4). There is adequate and extensive source area soil data to support the development RI/FS process including the baseline risk assessment. However, there is a concern that riparian soil locations have not been sampled for the common COPC analyte list. The riparian soil sampling rationale and design based on existing data are presented in Appendix D1. The field methods and quality assurance requirements are presented in the FSP located in Appendix D1.

TABLE 4-9 VEGETATION DATA QUALITY OBJECTIVES Page 1 of 2	
Step 1 - **State the Problem**	Historical mining operations at the Sites have resulted in mine waste materials being potential sources of selenium and other constituents to the environment. Enriched concentrations in geologic material, and oxidation, leaching, and mobilization of elements in waste rock can result in the release of elevated concentrations of COPCs into the environment from potential source areas. In general, the predominant mobilization mechanism for COPCs from these potential source areas occurs during the spring runoff via runoff and infiltration. The primary components of the conceptual model that support the DQOs are summarized as follows for vegetation: • Source – COPCs present in interburden and overburden rocks deposited in waste rock dumps, but possibly present in mine pits and other facilities that is able to enter the environment. • Release mechanisms – Exposure to air and water results in mobilization of COPCs from increased surface area of soils; plants may uptake COPCs from soils on facility source areas or near impacted surface water bodies. • Exposure pathways – Primary exposure through ingestion and uptake of COPCs via the vegetation. • Receptors – Recreational receptors, Native Americans, seasonal ranchers, potential residents, as well as livestock, wildlife, and other ecological receptors. The planning team, decision makers and principal data users include P4 and the A/T.
Step 2 – Identify the Goal of the Study	Are COPCs in vegetation elevated above the appropriate screening levels that may pose risks to human health and ecological receptors, and is there sufficient data available to characterize nature and extent and seasonal variability in vegetation, perform the risk assessments (HHRA and ERA), and proceed to the FS? <u>Alternative actions:</u> 1. Collect vegetation data to provide additional COPC data and spatial coverage. 2. No Action – Existing data are of adequate quality, quantity, and in proper locations to characterize vegetation. Data will be evaluated in the RI Report, HHRA, and ERA.
Step 3 – Identify Information Inputs	The information inputs for the decision process include the following items that may exist or will need to be created. • List of COPCs. • Current conceptual site models. • Existing facilities investigation information to be updated as needed (inventory and spatial delineation of potential source areas). • Sample location maps. • Historic vegetation data; data will be analyzed with appropriate methods for determining inorganic concentrations with detection limits suitable for comparison to risk-based screening levels. • Existing data on type and abundance of soil and vegetative cover. • Existing site characterization vegetation sampling and analysis plans and procedures. • Risk-based screening benchmarks for analytes. • Existing and new data on the type, abundance, and relative distribution of hyper-accumulators and culturally significant vegetation. • New data on the seasonal variability of COPC uptake in vegetation.

TABLE 4-9 VEGETATION DATA QUALITY OBJECTIVES Page 2 of 2	
Step 4 – Define the Boundaries of the Study	Population of Interest: Metals/metalloids in vegetation. Spatial boundaries: Potential source areas as well as riparian areas in and around Ballard, Henry, and Enoch Valley Mine areas. Vertical boundary: Edible above ground vegetative growth. Temporal boundary: Vegetation sample will be evaluated in spring and fall to evaluate any potential seasonal variability.
Step 5 – Develop the Analytic Approach	The applicable and relevant compliance thresholds linked to protection of human and ecological receptors will be used. If available data (existing) are not suitable to characterize nature and extent (lack sufficient COPCs), and do not provide a reliable estimate of potential source area concentrations, then additional data will be collected. Otherwise the data will be considered adequate for characterization. The data will be evaluated in the RI and FS.
Step 6 – Specify Performance or Acceptance Criteria	No decision errors will be established. To control decision errors, only quantitative data with acceptable accuracy and precision documentation will be used for comparison to standards. Analytical parameters will be compared to the applicable risk-based screening levels. The precision, accuracy, representativeness, comparability, and completeness criteria and the minimum detection limits will be used to evaluate the usability of analytical data in making decisions about characterization of vegetation and at a minimum will help ensure that data collected for the RI/FS is above adequate quality. Measurement errors will be minimized by implementing standard operating procedures for the sample collection, handling, preparation and analysis methods. All data must meet approved usability as defined in the *QAPP Addenda* (MWH, 2009f) *and* Appendix D5.
Step 7 – Develop the Plan for Obtaining Data	The existing vegetation data were reviewed as part of the preparation of this the Work Plan. There is adequate and extensive vegetation data to support the development RI/FS process including the baseline risk assessment. This DQO has been used to help guide the data gap assessment that is presented in Section 4.4.

TABLE 4-10 TERRESTRIAL AND AQUATIC BIOTA DATA QUALITY OBJECTIVES Page 1 of 2	
Step 1 -State the Problem	Historical mining operations at P4's Sites have resulted in mine waste materials being potential sources of COPCs to the environment. In general, the predominant mobilization mechanism for COPCs from these potential source areas occur during the spring runoff via surface water and shallow groundwater transport, and sediment transport of constituents. Levels of COPCs may be elevated in terrestrial and aquatic biotic media as a result of increased exposures related to the historical phosphate mining. The quantified threat to human health or the environment, if any, is not well defined. The primary components of the conceptual model that support the DQOs are summarized as follows for biotic media. • Source – COPCs present in interburden and overburden rocks deposited in waste rock dumps, but possibly present in mine pits and other facilities that is able to enter the environment. • Release mechanisms – Exposure to air and water results in mobilization of COPCs from increased surface area; precipitation may leach and mobilize COPCs primarily during spring runoff to receiving soils, sediments, and surface water bodies. • Exposure pathways – Primary exposure through ingestion, inhalation or direct uptake of COPCs by plant or animals. • Receptors – Livestock, wildlife, or human direct ingestion of plants or animals with elevated COPCs. The planning team, decision makers, and principal data users include P4 and the A/T.
Step 2 – Identify the Goal of the Study	Are COPC concentration data in biotic media elevated above the appropriate screening levels that may pose risks to human and ecological receptors, and is there sufficient data available to support the HHRA/ERA and proceed to the FS? <u>Alternative actions:</u> 1. Evaluate the need to collect additional biotic data to provide supporting data for the HHRA and ERA. 2. No action. Existing data are of adequate quality and quantity to characterize COPC exposures to biotic media during the HHRA and ERA and proceed to the FS.
Step 3 – Identify Information Inputs	The information inputs for the decision process includes that following items that may exist or will need to be collected: • List of COPCs. • Conceptual site models. • Sample location maps (spatial coverage of existing data). • Biotic COPC data (existing; use of existing data will be dependent upon evaluations of data usability and data validation). • Laboratory quality information. • Risk-based screening benchmarks for analytes.

TABLE 4-10 TERRESTRIAL AND AQUATIC BIOTA DATA QUALITY OBJECTIVES Page 2 of 2	
Step 4 – Define the Boundaries of the Study	Population of Interest: Metals/metalloids in biotic tissue. Spatial boundaries: Biotic monitoring locations from the Southeast Idaho Phosphate Resource Area. Vertical boundary: Not Applicable. Temporal boundary: Existing biotic data from the period of sampling record. Decision will be result of iterative process that will continue through the completion of the risk assessment. Scale of Decision Making: Spatially-relevant biotic monitoring locations from each sampling event within the Southeast Idaho Phosphate Resource Area.
Step 5 – Develop the Analytic Approach	The applicable and relevant compliance thresholds linked to protection of human and ecological receptors will be used to screen the biotic data for the HHRA and ERA. If a the biotic data are data are not sufficient quantity and quality as supporting lines of evidence for the HHRA and ERA, then the need for further data collection will be evaluated, otherwise no further data is necessary. This in part will be driven by assessment of primary media data (groundwater, surface water, sediment, soil and vegetation) during the risk assessment, and therefore is an iterative process. The data will be evaluated in the RI and FS.
Step 6 – Specify Performance of Acceptance Criteria	No decision errors will be established. To control decision errors, only quantitative data with acceptable accuracy and precision documentation will be used for comparison to standards. Analytical parameters will be compared to the applicable risk-based screening levels. The precision, accuracy, representativeness, comparability, and completeness criteria and the minimum detection limits will be used to evaluate the usability of analytical data in making decisions about the biotic data and at a minimum will help ensure that data collected for the RI/FS is above adequate quality. Data will be validated to the extent possible, with any qualifiers assigned. Use of data will be limited to the restrictions of qualifiers, if any.
Step 7 – Develop the Plan for Obtaining Data	The existing biotic environmental data have been evaluated for quality and intended final use by reviewing laboratory quality data and risk assessment needs. The DQOs will be reviewed if additional data is collected. Additional samples may be collected during the RI/FS, if and as necessary, to increase the confidence of the HHRA and ERA decisions.

TABLE 4-11 BALLARD MINE DATA GAP ANALYSIS – PRIMARY MEDIA Page 1 of 4						
Primary Medium	**Location of Summary Information[1]**	**Has Background been established?**	**Are Existing Data Adequate for these RI/FS Evaluations?**			**Data Gap Assessment Summary**
			Nature and Extent	**Risk Assessment**	**Feasibility Study**	
Source Materials	Section 3.1	Adequate Data Exist	Yes	Yes	Yes	The nature and extent of source materials been defined adequately by the USGS and others so that if necessary, risk assessments and the feasibility study (FS) can be conducted. As a result, no further field characterization is necessary.
Soils	See Section 3.2.1 See Tables 3-2, 3-3, and 3-4 See Drawings 3-3, 3-5 and 3-6	Adequate Data Exist to characterize non-radiogenic risk only, further investigations will be necessary for radiogenic risks.	Yes – majority of site soils No – riparian soil No – Ballard shop area for organic compounds. No – radiogenic data in mined areas	Yes – majority of site soils No – riparian soil No – Ballard shop area for organic compounds. No – radiogenic data in mined areas	No – Some material property data is needed to conduct alternative evaluation.	The nature and extent of surface soil impacts at the Ballard Mine has been defined adequately so that if necessary, risk assessments can be conducted for the non-radiogenic COPCs. However for radiogenic risks, to reduce the uncertainty in the inherently conservative risk calculations, site-specific uranium isotopes data for soil and radon and gamma measurements will be collected both on site and in a background area(s). In addition, soil samples will be collected throughout the Ballard Shop area to evaluate if there were leaks/spill of organic compounds during the operation of the facility. Also, a data gap has been identified for sediment (see below) and this carries forward to riparian soils. Therefore some additional limited sampling of riparian soil is needed. In addition, some material properties data (soil hydraulic parameters) is needed for

TABLE 4-11 BALLARD MINE DATA GAP ANALYSIS – PRIMARY MEDIA Page 2 of 4						
Primary Medium	**Location of Summary Information[1]**	**Has Background been established?**	**Are Existing Data Adequate for these RI/FS Evaluations?**			**Data Gap Assessment Summary**
			Nature and Extent	**Risk Assessment**	**Feasibility Study**	
						evaluation of cover soils. Further evaluation of existing background data is needed to statistically quantify background concentrations.
Vegetation	See Section 3.2.2 See Tables 3-5, 3-6, and 3-7 See Drawings 3-4, 3-6 and 3-7	Adequate Data Exist	Yes	Yes	Yes	The nature and extent of vegetation impacts at the Ballard Mine has been defined adequately so that risk assessments and the FS can be conducted. As a result, no further field characterization is necessary. However, further evaluation of existing background data is needed to statistically quantify background concentrations.
Surface Water	See Section 3.2.3.1 See Tables 3-8 and 3-9 See Drawings 3-8 and 3-12	Adequate Data Exist	Yes	Yes	Yes	The nature and extent of surface water contamination at the Ballard Mine has been defined adequately so that if necessary, risk assessments and the FS can be conducted. As a result, no further characterization is necessary. Monitoring of surface water will be required to collect baseline data to help evaluate the effectiveness of potential future remedies. Further evaluation of existing background data is needed to statistically quantify background concentrations.

TABLE 4-11 BALLARD MINE DATA GAP ANALYSIS – PRIMARY MEDIA Page 3 of 4						
Primary Medium	**Location of Summary Information[1]**	**Has Background been established?**	**Are Existing Data Adequate for these RI/FS Evaluations?**			**Data Gap Assessment Summary**
			Nature and Extent	**Risk Assessment**	**Feasibility Study**	
Sediment	See Section 3.2.3.2 See Table 3-10 See Drawings 3-9, 3-11, and 3-13	Adequate Data Exist	No	No	Yes	The nature and extent of sediment impacts at the Ballard Mine has been defined adequately for most COPCs so that if necessary, risk assessments and the FS can be conducted. However, some COPC concentrations in soil that exceed sediment screening criteria have not been measured in sediment. Further, there is evidence of soil erosion to the stream systems at the Site. Therefore, a data gap has been identified for the unmeasured soil COPCs in streams. In addition, further evaluation of existing background data is needed to statistically quantify background concentrations.
Groundwater	See Section 3.2.4 See Table 3-12 See Drawings 3-15 to 3-19	Adequate Data Exist	No	Yes - Sufficient for screening level analysis because contaminated areas with highest concentrations have been characterized	Treatability for MNA and in-situ remediation	<u>West Side of Mine</u> 1. Shallow Groundwater – west of BH137 – BH141, and BH143 - None (basalt area – limited shallow alluvial groundwater available for sampling but available data indicate concentrations below standard) 2. Shallow Groundwater–downgradient of BH125 / BH136 (near Blackfoot River)

TABLE 4-11
BALLARD MINE DATA GAP ANALYSIS – PRIMARY MEDIA

Primary Medium	Location of Summary Information[1]	Has Background been established?	Are Existing Data Adequate for these RI/FS Evaluations?			Data Gap Assessment Summary
			Nature and Extent	Risk Assessment	Feasibility Study	
						3. Shallow Groundwater – BH149 area (tributary to Little Blackfoot River) 4. Shallow Groundwater –for organic compounds downgradient of Ballard shop area 5. Dinwoody Formation – None 6. Wells Formation – Mine Interior groundwater flow (no action recommended) <u>East Side of Mine</u> 1. Shallow Groundwater – None 2. Dinwoody Formation – None 3. Wells Formation – None <u>Feasibility Data</u> 1. Data to support MNA 2. Data (pilot testing) to support in-situ groundwater remediation, and ex-situ seep water remediation 3. Data to support infiltration studies for in-place soil/cover material

Notes:

[1]Table 3-17 provides a summary of the nature and extent for primary media at the Ballard Mine.

MNA = Monitored Natural Attenuation

TABLE 4-12 HENRY MINE DATA GAP ANALYSIS – PRIMARY MEDIA Page 1 of 4						
Primary Medium	**Location of Summary Information[1]**	**Has Background been established?**	**Are Existing Data Adequate for these RI/FS Evaluations?**			**Data Gap Assessment Summary**
			Nature and Extent	**Risk Assessment**	**Feasibility Study**	
Source Materials	Section 3.1	Adequate Data Exist	Yes	Yes	Yes	The nature and extent of source materials has been defined adequately by the USGS and others so that if necessary, risk assessments and the feasibility study (FS) can be conducted. As a result, no further field characterization is necessary.
Soils	See Section 3.3.1 See Tables 3-18, 3-19, and 3-20 See Drawings 3-6, 3-28 and 3-30	Adequate Data Exist to characterize non-radiogenic risk only, further investigations will be necessary for radiogenic risks.	Yes – majority of site soils No – riparian soil No – Ballard shop area for organic compounds. No – radiogenic data in mined areas	Yes – majority of site soils No – riparian soil No – Ballard shop area for organic compounds. No – radiogenic data in mined areas	No – Some material property data is needed to conduct alternative evaluation.	The nature and extent of surface soil impacts at the Henry Mine has been defined adequately so that if necessary, risk assessments can be conducted for the non-radiogenic COPCs. However for radiogenic risks, to reduce the uncertainty in the inherently conservative risk calculations, site-specific uranium isotopes data for soil and radon and gamma measurements will be collected both on site and in a background area(s). Also, a data gap has been identified for sediment (see below) and this carries forward to riparian soils. Therefore some additional limited sampling of riparian soil is needed. In addition, some material properties data (soil hydraulic parameters) is needed for evaluation of cover soils.

TABLE 4-12 HENRY MINE DATA GAP ANALYSIS – PRIMARY MEDIA Page 2 of 4						
Primary Medium	**Location of Summary Information[1]**	**Has Background been established?**	**Are Existing Data Adequate for these RI/FS Evaluations?**			**Data Gap Assessment Summary**
			Nature and Extent	**Risk Assessment**	**Feasibility Study**	
						Further evaluation of existing background data is needed to statistically quantify background concentrations.
Vegetation	See Section 3.3.2 See Tables 3-21, 3-22, and 3-23 See Drawings 3-6, 3-29 and 3-31	Adequate Data Exist	Yes	Yes	Yes	The nature and extent of vegetation impacts at the Henry Mine has been defined adequately so that risk assessments and the FS can be conducted. As a result, no further field characterization is necessary. However, further evaluation of existing background data is needed to statistically quantify background concentrations.
Surface Water	See Section 3.3.3.1 See Table 3-24 See Drawings 3-8, 3-9, 3-10, 3-32 and 3-33	Adequate Data Exist	Yes	Yes	Yes	The nature and extent of surface water contamination at the Henry Mine has been defined adequately so that if necessary, risk assessments and the FS can be conducted. As a result, no further characterization is required. Monitoring of surface water will be required to collect baseline data to help evaluate the effectiveness of potential future remedies. Further evaluation of existing background data is needed to statistically quantify background concentrations.

TABLE 4-12 HENRY MINE DATA GAP ANALYSIS – PRIMARY MEDIA Page 3 of 4						
Primary Medium	**Location of Summary Information[1]**	**Has Background been established?**	**Are Existing Data Adequate for these RI/FS Evaluations?**			**Data Gap Assessment Summary**
			Nature and Extent	**Risk Assessment**	**Feasibility Study**	
Sediment	See Section 3.3.3.2 See Table 3-25 See Drawings 3-9, 3-13, and 3-32	Adequate Data Exist	Yes	No	Yes	The nature and extent of sediment impacts at the Henry Mine has been defined adequately for most COPCs so that risk assessments and the FS can be conducted. However, some COPC concentrations in soil that exceed sediment screening criteria have not been measured in sediment. However, soil erosion appears not have occurred to streams. Therefore, a limited data gap has been identified for the unmeasured soil COPCs in streams and Site ponds with aquatic habitat. However, further evaluation of existing background data is needed to statistically quantify background concentrations.

TABLE 4-12
HENRY MINE DATA GAP ANALYSIS – PRIMARY MEDIA

Primary Medium	Location of Summary Information[1]	Has Background been established?	Are Existing Data Adequate for these RI/FS Evaluations?			Data Gap Assessment Summary
			Nature and Extent	Risk Assessment	Feasibility Study	
Groundwater	See Section 3.3.4 See Table 3-27 See Drawings 3-35 and 3-36	Adequate Data Exist	No	Sufficient for screening level analysis because contaminated areas with highest concentrations have been characterized	Treatability for MNA and in-situ remediation	<u>North Side of Mine</u> 1. Shallow Groundwater - None 2. Dinwoody Formation - None 3. Wells Formation - None <u>South Side of Mine</u> 1. Shallow Groundwater–BH157/BH158 area 2. Dinwoody Formation - None 3. Wells Formation - None <u>Feasibility Data</u> 1. Data to support MNA 2. Data to support infiltration studies for in-place soil/cover material

Notes:
[1]Table 3-33 provides a summary of the nature and extent for primary media at the Henry Mine.
MNA = Monitored Natural Attenuation

TABLE 4-13 ENOCH VALLEY MINE DATA GAP ANALYSIS – PRIMARY MEDIA Page 1 of 4						
Primary Medium	**Location of Summary Information[1]**	**Has Background been established?**	**Are Existing Data Adequate for these RI/FS Evaluations?**			**Data Gap Assessment Summary**
			Nature and Extent	**Risk Assessment**	**Feasibility Study**	
Source Materials	Section 3.1	Adequate Data Exist	Yes	Yes	Yes	The nature and extent of source materials has been defined adequately by the USGS and others so that if necessary, risk assessments and the feasibility study (FS) can be conducted. As a result, no further field characterization is necessary.
Soils	See Section 3.4.1 See Tables 3-34, 3-35, and 3-36 See Drawings 3-6, 3-39 and 3-41	Adequate Data Exist to characterize non-radiogenic risk only, further investigations will be necessary for radiogenic risks.	Yes – majority of site soils No – riparian soil No – Ballard shop area for organic compounds. No – radiogenic data in mined areas	Yes – majority of site soils No – riparian soil No – Ballard shop area for organic compounds. No – radiogenic data in mined areas	No – Some material property data is needed to conduct alternative evaluation.	The nature and extent of surface soil impacts at the Enoch Valley Mine has been defined adequately so that if necessary, risk assessments can be conducted for the non-radiogenic COPCs. However for radiogenic risks, to reduce the uncertainty in the inherently conservative risk calculations, site-specific uranium isotopes data for soil and radon and gamma measurements will be collected both on site and in a background area(s). Also, a data gap has been identified for sediment (see below) and this carries forward to riparian soils. Therefore some additional limited sampling of riparian soil is needed. In addition, some material properties data (soil hydraulic parameters) is needed for evaluation of cover soils.

TABLE 4-13 ENOCH VALLEY MINE DATA GAP ANALYSIS – PRIMARY MEDIA Page 2 of 4						
Primary Medium	**Location of Summary Information[1]**	**Has Background been established?**	**Are Existing Data Adequate for these RI/FS Evaluations?**			**Data Gap Assessment Summary**
			Nature and Extent	**Risk Assessment**	**Feasibility Study**	
						Further evaluation of existing background data is needed to statistically quantify background concentrations.
Vegetation	See Section 3.4.2 See Tables 3-37, 3-38, and 3-39 See Drawings 3-6, 3-40 and 3-42	Adequate Data Exist	Yes	Yes	Yes	The nature and extent of vegetation impacts at the Enoch Valley Mine has been defined adequately so that risk assessments and the FS can be conducted. As a result, no further field characterization is necessary. However, further evaluation of existing background data is needed to statistically quantify background concentrations.
Surface Water	See Section 3.4.3.1 See Table 3-40 See Drawings 3-8, 3-9, 3-10, 3-43 and 3-44	Adequate Data Exist	Yes	Yes	Yes	The nature and extent of surface water contamination at the Enoch Valley Mine has been defined adequately so that if necessary, risk assessments and the FS can be conducted. As a result, no further characterization is necessary. Monitoring of surface water will be required to collect baseline data to help evaluate the effectiveness of potential future remedies. Further evaluation of existing background data is needed to statistically quantify background concentrations.

TABLE 4-13 ENOCH VALLEY MINE DATA GAP ANALYSIS – PRIMARY MEDIA Page 3 of 4						
Primary Medium	**Location of Summary Information[1]**	**Has Background been established?**	**Are Existing Data Adequate for these RI/FS Evaluations?**			**Data Gap Assessment Summary**
			Nature and Extent	**Risk Assessment**	**Feasibility Study**	
Sediment	See Section 3.4.3.2 See Table 3-41 See Drawings 3-9, 3-13, and 3-43	Adequate Data Exist	Yes	Yes	Yes	The nature and extent of sediment impacts at the Henry Mine has been defined adequately for most COPC so that risk assessments and the FS can be conducted. However, some COPC concentrations in soil that exceed sediment screening criteria have not been measured in sediment. However, soil erosion appears not have occurred to streams. Therefore, a limited data gap has been identified for the unmeasured soil COPCs in streams and Site ponds with aquatic habitat. In addition, further evaluation of existing background data is needed to statistically quantify background concentrations.

TABLE 4-13
ENOCH VALLEY MINE DATA GAP ANALYSIS – PRIMARY MEDIA

Primary Medium	Location of Summary Information[1]	Has Background been established?	Are Existing Data Adequate for these RI/FS Evaluations?			Data Gap Assessment Summary
			Nature and Extent	Risk Assessment	Feasibility Study	
Groundwater	See Section 3.4.4 See Table 3-43 See Drawings 3-45 and 3-46	Adequate Data Exist	No	Sufficient for screening level analysis because contaminated areas with highest concentrations have been characterized	Treatability for MNA and in-situ remediation	<u>North Side of Mine</u> 1. Shallow Groundwater - None 2. Dinwoody Formation – MMW027/MMW035 area 3. Wells Formation – None <u>South Side of Mine</u> 1. Shallow Groundwater - None 2. Dinwoody Formation - None 3. Wells Formation – None <u>Feasibility Data</u> 1. Data to support MNA 2. Data (pilot testing) to support in-situ groundwater remediation, and ex-situ seep water remediation 3. Data to support infiltration studies for in-place soil/cover material

Notes:
[1]Table 3-50 provides a summary of the nature and extent for primary media at the Enoch Valley Mine.
MNA = Monitored Natural Attenuation

TABLE 4-14 BALLARD MINE DATA GAP ANALYSIS – SECONDARY MEDIA Page 1 of 3					
Secondary Medium	**Location of Summary Information[1]**	**Was Background Data Collected?**	**Are Existing Data Adequate for these RI/FS Evaluations?**		**Data Gap Assessment Summary**
		(yes/no)	**Risk Assessment**	**Feasibility Study**	
Aquatic Biota					
Stream Habitat Assessment	See Section 3.2.5.1 See Table 3-13 See Drawing 3-21	Yes	Yes	Yes	Sufficient stream habitat data have been collected at the Ballard Mine so that if necessary, risk assessments and the FS can be conducted. Data show that many streams are intermittent and represent poor quality aquatic habitat. Fish were not found and habitat assessment scores (RBS scores) ranged from 29 to 52 out of 200.
Fish	See Section 3.2.5.2 No Associated Table See Drawings 3-20 and 3-21	Yes	Yes	Yes	Sufficient fish investigations have been performed at the Ballard Mine for the intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. Fish were not located during the investigation due to the intermittent nature of the steams and the poor aquatic habitat. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.
Benthic Macroinvertebrates	See Section 3.2.5.3 See Table 3-14 See Drawing 3-21	Yes	Yes	Yes	Sufficient benthic macroinvertebrate data have been collected at the Ballard Mine for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. As indicated in Section 3.2.5.3, adequate sample mass were difficult to obtain likely as a result of poor aquatic habitat. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.

TABLE 4-14 BALLARD MINE DATA GAP ANALYSIS – SECONDARY MEDIA Page 2 of 3					
Secondary Medium	**Location of Summary Information[1]**	**Was Background Data Collected?**	**Are Existing Data Adequate for these RI/FS Evaluations?**		**Data Gap Assessment Summary**
		(yes/no)	**Risk Assessment**	**Feasibility Study**	
Terrestrial Biota					
Elk	See Section 3.2.6.1 No Associated Table See Drawings 3-22 and 3-26	Yes	Yes	Yes	Sufficient elk data have been collected around the P4 Sites for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.
Bird Eggs	See Section 3.2.6.2 No Associated Table See Drawings 3-23 to 3-26	Yes	Yes	Yes	Sufficient bird egg data have been collected around the P4 Sites their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.
Cattle	Section 3.3.6.3 Henry Mine	Yes	Section 3.3.6.3 Henry Mine	Section 3.3.6.3 Henry Mine	Refer to Section 3.3.6.3 Henry Mine for discussion of cattle tissue studies
Small Mammals	See Section 3.2.6.4 See Table 3-15 Drawings 3-22 and 3-26	Yes	Yes	Yes	Sufficient small mammal data have been collected at the Ballard Mine for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.

TABLE 4-14 BALLARD MINE DATA GAP ANALYSIS – SECONDARY MEDIA Page 3 of 3					
Secondary Medium	**Location of Summary Information[1]**	**Was Background Data Collected?**	**Are Existing Data Adequate for these RI/FS Evaluations?**		**Data Gap Assessment Summary**
		(yes/no)	**Risk Assessment**	**Feasibility Study**	
Terrestrial Invertebrates	See Section 3.2.6.5 See Table 3-16 Drawings 3-22 and 3-26	Yes	Yes	Yes	Sufficient terrestrial invertebrate data have been collected at the Ballard Mine for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.

Notes:
[1]Table 3-17 provides a summary of the nature and extent for secondary media at the Ballard Mine.

TABLE 4-15 HENRY MINE DATA GAP ANALYSIS – SECONDARY MEDIA Page 1 of 3					
Secondary Medium	**Location of Summary Information[1]**	**Was Background Data Collected?**	**Are Existing Data Adequate for these RI/FS Evaluations?**		**Data Gap Assessment Summary**
		(yes/no)	**Risk Assessment**	**Feasibility Study**	
Aquatic Biota					
Stream Habitat Assessment	See Section 3.3.5.1 See Table 3-28 See Drawing 3-21	Yes	Yes	Yes	Sufficient stream habitat data have been collected at the Henry Mine so that if necessary, risk assessments and the FS can be conducted.
Fish	See Section 3.3.5.2 See Table 3-29 See Drawings 3-20 and 3-21	Yes	Yes	Yes	Sufficient fish data have been collected at the Henry Mine for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.
Benthic Macroinvertebrates	See Section 3.3.5.3 See Table 3-30 See Drawing 3-21	Yes	Yes	Yes	Sufficient benthic macroinvertebrate data have been collected at the Henry Mine for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.

TABLE 4-15 HENRY MINE DATA GAP ANALYSIS – SECONDARY MEDIA Page 2 of 3					
Secondary Medium	**Location of Summary Information[1]**	**Was Background Data Collected?**	**Are Existing Data Adequate for these RI/FS Evaluations?**		**Data Gap Assessment Summary**
		(yes/no)	**Risk Assessment**	**Feasibility Study**	
Terrestrial Biota					
Elk	See Section 3.3.6.1 No Associated Table See Drawings 3-22 and 3-26	Yes	Yes	Yes	Sufficient elk data have been collected around the P4 Sites for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.
Bird Eggs	See Section 3.3.6.2 No Associated Table See Drawings 3-23 to 3-26	Yes	Yes	Yes	Sufficient bird egg data have been collected around the P4 Sites for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.
Cattle	See Section 3.3.6.2 No Associated Table See Drawings 3-37	Yes	Yes	Yes	Sufficient cattle data have been collected at the Henry Mine for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.

TABLE 4-15
HENRY MINE DATA GAP ANALYSIS – SECONDARY MEDIA

Secondary Medium	Location of Summary Information[1]	Was Background Data Collected? (yes/no)	Are Existing Data Adequate for these RI/FS Evaluations? Risk Assessment	Feasibility Study	Data Gap Assessment Summary
Small Mammals	See Section 3.3.6.4 See Table 3-31 See Drawings 3-22 and 3-37	Yes	Yes	Yes	Sufficient small mammal data have been collected at the Henry Mine for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.
Terrestrial Invertebrates	See Section 3.2.6.5 See Table 3-32 See Drawings 3-22 and 3-37	Yes	Yes	Yes	Sufficient terrestrial invertebrate data have been collected at the Henry Mine for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.

Notes:

[1]Table 3-33 provides a summary of the nature and extent for secondary media at the Henry Mine.

TABLE 4-16 ENOCH VALLEY MINE DATA GAP ANALYSIS – SECONDARY MEDIA Page 1 of 3					
Secondary Medium	**Location of Summary Information[1]**	**Was Background Data Collected?**	**Are Existing Data Adequate for these RI/FS Evaluations?**		**Data Gap Assessment Summary**
		(yes/no)	**Risk Assessment**	**Feasibility Study**	
Aquatic Biota					
Stream Habitat Assessment	See Section 3.4.5.1 See Table 3-44 See Drawing 3-21	Yes	Yes	Yes	Sufficient stream habitat data have been collected at the Enoch Valley Mine so that if necessary, risk assessments and the FS can be conducted.
Fish	See Section 3.4.5.2 See Tables 3-45 and 3-46 See Drawings 3-20 and 3-21	Yes	Yes	Yes	Sufficient fish data have been collected at the Enoch Valley Mine for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.
Benthic Macroinvertebrates	See Section 3.4.5.3 See Table 3-47 See Drawing 3-21	Yes	Yes	Yes	Sufficient benthic macroinvertebrate data have been collected at the Enoch Valley Mine for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.

TABLE 4-16 ENOCH VALLEY MINE DATA GAP ANALYSIS – SECONDARY MEDIA Page 2 of 3					
Secondary Medium	**Location of Summary Information[1]**	**Was Background Data Collected?**	**Are Existing Data Adequate for these RI/FS Evaluations?**		**Data Gap Assessment Summary**
		(yes/no)	**Risk Assessment**	**Feasibility Study**	
Terrestrial Biota					
Elk	See Section 3.4.6.1 No Associated Table See Drawings 3-22 and 3-26	Yes	Yes	Yes	Sufficient elk data have been collected around P4 Sites for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.
Bird Eggs	See Section 3.4.6.2 No Associated Table See Drawings 3-23 to 3-26	Yes	Yes	Yes	Sufficient bird egg data have been collected around the P4 Sites for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.
Cattle	Section 3.3.6.3 Henry Mine	Yes	Section 3.3.6.3 Henry Mine	Section 3.3.6.3 Henry Mine	Refer to Section 3.3.6.3 Henry Mine for discussion of cattle tissue studies
Small Mammals	See Section 3.4.6.4 See Table 3-48 See Drawings 3-22 and 3-47	Yes	Yes	Yes	Sufficient small mammal data have been collected at the Enoch Valley Mine for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.

TABLE 4-16
ENOCH VALLEY MINE DATA GAP ANALYSIS – SECONDARY MEDIA

Secondary Medium	Location of Summary Information[1]	Was Background Data Collected?	Are Existing Data Adequate for these RI/FS Evaluations?		Data Gap Assessment Summary
		(yes/no)	Risk Assessment	Feasibility Study	
Terrestrial Invertebrates	See Section 3.4.6.5 See Table 3-49 See Drawings 3-22 and 3-47	Yes	Yes	Yes	Sufficient terrestrial invertebrate data have been collected at the Enoch Valley Mine for their intended purpose as additional lines of evidence in the human health and/or ecological risk assessment. The need for additional sampling of this media could be a possible outcome of the risk assessment for the P4 Sites.

Notes:

[1]Table 3-50 provides a summary of the nature and extent for secondary media at the Enoch Valley Mine.