

## **Appendix G**

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**Table G-1. Analytical results for PHASE2RA tundra soil (site)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume)		pH (pH wet)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)	Cobalt (mg/kg dry)
						(% wet)						
AC-R	ECO-R	7/1/2004	TS-0056	0		72.2	7.3	1.19 J	8.76	770	4.88	11.7
ARC-R	ECO-R	7/1/2004	TS-0057-D	1		72.1	7.3	1.94 J	8.93	3,500	10.8	10.5
ARC-R	ECO-R	7/1/2004	TS-0057-D	2		68.4	7.1	0.87 J	9.3	3,850	7.97	10.3
NLF	ECO-P	7/2/2004	TS-0059	0		96.0	7.3	0.34 J	6.35	153	0.437	8.35
NLK	ECO-P	6/30/2004	TS-0054	0		31.0	5.6	0.31 J	16.6	264	2.47	7.54
OR-R	ECO-R	7/1/2004	TS-0055	0		64.5	7.0	0.27 J	6.09	424	0.590	13.0
PLNL	ECO-P	6/29/2004	TS-0053	0		13.5	6.5	2.8 J	13.0	429	17.7	8.84
TP-4	ECO-R	6/17/2004	TS-0012	0		14.0	5.6	1.1	6.2	8,130	3.07	8.86
TP1-0100	ECO-P	6/17/2004	TS-0009	0		11.5	6.7	5.81	3.7	355	27.2	7.7
TP1-1000	ECO-P	6/17/2004	TS-0008	0		20.4	4.7	2.59	1.4	202	8.71	2.62
TP3	ECO-R	6/20/2004	TS-0017	0		20.9	7.0	0.25	1.4	790 J	2.16	9.3 J
TT2-0010	ECO-P	6/17/2004	TS-0011	0		53.5	6.9	2.33	7.8	2,540	18.6	11.6
TT2-0100	ECO-P	6/16/2004	TS-0007	0		22.0	6.0	2.42	4.5	868	9.18	8.21
TT2-1000	ECO-P	6/15/2004	TS-0005	0		21.1	4.8	0.41	1.6	238	1.1	11.4
TT2_0020	ECO-P	6/17/2004	TS-0010	0		67.1	6.8	2.48	5.8	1,910	13.0	9.42
TT3-0010	ECO-R	6/18/2004	TS-0013	0		42.0	7.1	0.83	4.3	2,390	7.47	10.7
TT3-0100	ECO-R	6/20/2004	TS-0019-D	1		23.3	6.2	1.01	2.1	461 J	1.2	3.69 J
TT3-0100	ECO-R	6/20/2004	TS-0019-D	2		33.5	6.4	0.66	0.8	254 J	0.475	2.12 J
TT3-1000	ECO-R	6/20/2004	TS-0018	0		21.1	4.0	0.5	0.7	154 J	0.568	0.73 J
TT3_0020	ECO-R	6/20/2004	TS-0021	0		51.7	7.4	1.12	3.8	3,260 J	8.75	8.42 J
TT5_0010	ECO-P	6/12/2004	TS-0003	0		42.9	6.7	2.75	8.0	1,200	20.6	18.6
TT5_0020	ECO-P	6/12/2004	TS-0002	0		62.9	6.6	5.35	8.9	1,840	45.3	10.4
TT5_0100	ECO-P	6/16/2004	TS-0006	0		34.7	6.4	2.46	5.3	1,200	24.0	8.18
TT5_1000	ECO-P	6/13/2004	TS-0004	0		19.0	4.5	0.83	1.8	15.3	4.08	6.82
TT5_2000	ECO-P	6/12/2004	TS-0001	0		18.9	4.5	0.56	0.5	96.0	1.31	1.97
TT6_0010	ECO-M	6/25/2004	TS-0035	0		54.1	6.9	1.92	9.1	6,950 J	5.47	9.11 J
TT6_0100	ECO-M	6/21/2004	TS-0023	0		26.3	5.6	2.03	4.9	6,360 J	5.06	3.3 J
TT6_1000	ECO-M	6/21/2004	TS-0022	0		20.8	6.6	1.22	2.9	1,290 J	6.11	1.87 J
TT6_2000	ECO-M	6/22/2004	TS-0026	0		35.8	5.8	1.1	2.4	1,330 J	3.14	2.87 J
TT7_0010	ECO-M	6/22/2004	TS-0025	0		35.8	4.1	11.1	13.9	5,520 J	36.3	4.39 J
TT7_1000	ECO-M	6/22/2004	TS-0024	0		64.0	6.6	1.39	8.3	451 J	4.11	5.35 J
TT7_2000	ECO-M	7/4/2004	TS-0061-D	1		57.0	7.0	0.98 J	6.14	525	6.36	5.65
TT7_2000	ECO-M	7/4/2004	TS-0061-D	2		76.8	6.0	0.95 J	5.6	413	3.05	5.64
TT8_0010	ECO-R	6/19/2004	TS-0016	0		66.5	7.1	1.07	4.1	1,900	4.72	6.5
TT8_0050	ECO-R	6/27/2004	TS-0052	0		20.5	7.5	1.19 J	2.71	2,010 J	6.6 J	6.3 J
TT8_0100	ECO-R	6/19/2004	TS-0015	0		19.2	6.9	1.25	3.0	1,470	3.83	5.48
TT8_0150	ECO-R	6/27/2004	TS-0051	0		15.5	7.6	1.0 J	4.05	2,130 J	8.36 J	7.66 J
TT8_0200	ECO-R	6/27/2004	TS-0037	0		15.0	7.5	0.7 J	1.6	605 J	2.49 J	2.40 J
TT8_0250	ECO-R	6/27/2004	TS-0050	0		15.2	7.3	1.18 J	2.0	977 J	5.36 J	5.45 J

**Table G-1. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume)		pH (pH wet)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)	Cobalt (mg/kg dry)
						(% wet)						
TT8_0300	ECO-R	6/27/2004	TS-0038	0		23.5	7.5	0.7 <i>J</i>	0.8	321 <i>J</i>	1.68 <i>J</i>	1.27 <i>J</i>
TT8_0350	ECO-R	6/27/2004	TS-0049	0		24.3	7.7	0.56 <i>J</i>	1.1	512 <i>J</i>	2.58 <i>J</i>	1.98 <i>J</i>
TT8_0400	ECO-R	6/27/2004	TS-0039	0		15.1	7.3	0.89 <i>J</i>	1.3	971 <i>J</i>	2.59 <i>J</i>	16.2 <i>J</i>
TT8_0450	ECO-R	6/27/2004	TS-0048	0		27.3	6.6	0.54 <i>J</i>	0.7	352 <i>J</i>	0.87 <i>J</i>	4.76 <i>J</i>
TT8_0500	ECO-R	6/27/2004	TS-0040	0		22.6	6.5	0.54 <i>J</i>	0.6	500 <i>J</i>	1.81 <i>J</i>	6.45 <i>J</i>
TT8_0550	ECO-R	6/27/2004	TS-0047	0		22.4	7.4	0.41 <i>J</i>	0.4	210 <i>J</i>	0.72 <i>J</i>	1.02 <i>J</i>
TT8_0600	ECO-R	6/27/2004	TS-0041	0		14.6	5.7	0.34 <i>J</i>	1.8	340 <i>J</i>	0.9 <i>J</i>	8.57 <i>J</i>
TT8_0650	ECO-R	6/27/2004	TS-0046	0		13.8	6.0	0.34 <i>J</i>	0.9	352 <i>J</i>	1.63 <i>J</i>	6.23 <i>J</i>
TT8_0700	ECO-R	6/27/2004	TS-0042	0		12.0	5.8	0.81 <i>J</i>	0.6	202 <i>J</i>	1.18 <i>J</i>	1.68 <i>J</i>
TT8_0750	ECO-R	6/27/2004	TS-0045	0		18.1	4.9	0.7 <i>J</i>	0.4	163 <i>J</i>	0.61 <i>J</i>	2.3 <i>J</i>
TT8_0800	ECO-R	6/27/2004	TS-0043	0		22.6	5.3	0.74 <i>J</i>	0.3	107 <i>J</i>	0.52 <i>J</i>	0.443 <i>J</i>
TT8_0900	ECO-R	6/27/2004	TS-0044	0		11.2	4.9	0.73 <i>J</i>	0.6	189 <i>J</i>	0.79 <i>J</i>	1.05 <i>J</i>
TT8_1000	ECO-R	6/19/2004	TS-0014	0		15.3	4.5	0.42	0.8	275	0.408	3.57

**Table G-1. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Copper (mg/kg dry)	Lead (mg/kg dry)	Manganese (mg/kg dry)	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Silver (mg/kg dry)
AC-R	ECO-R	7/1/2004	TS-0056	0	22.9	175	510	0.346	0.847 <i>J</i>	1.3	0.634
ARC-R	ECO-R	7/1/2004	TS-0057-D	1	38.8	469	845	0.529	2.3 <i>J</i>	1.6	1.0
ARC-R	ECO-R	7/1/2004	TS-0057-D	2	34.5	429	762	0.201	2.08 <i>J</i>	1.7	0.901
NLF	ECO-P	7/2/2004	TS-0059	0	6.84	22.3	1,000	0.009 <i>U</i>	0.508 <i>J</i>	0.3	0.084
NLK	ECO-P	6/30/2004	TS-0054	0	16.1	156	249	0.141	2.58 <i>J</i>	1.3	0.151
OR-R	ECO-R	7/1/2004	TS-0055	0	17.2	25.7	950	0.05	0.583 <i>J</i>	0.6	0.114
PLNL	ECO-P	6/29/2004	TS-0053	0	37.1	532	160	0.424	1.96 <i>J</i>	2.2	1.87
TP-4	ECO-R	6/17/2004	TS-0012	0	21.4	189	854 <i>J</i>	0.1	4.65	1.0	0.268
TP1-0100	ECO-P	6/17/2004	TS-0009	0	19.6	909	438 <i>J</i>	0.57	0.88	3.3	1.65
TP1-1000	ECO-P	6/17/2004	TS-0008	0	9.63	347	609 <i>J</i>	0.43	0.38	1.0	0.939
TP3	ECO-R	6/20/2004	TS-0017	0	11.4	55.7	249 <i>J</i>	0.20	1.8 <i>J</i>	0.6	0.148
TT2-0010	ECO-P	6/17/2004	TS-0011	0	26.1	856	799 <i>J</i>	0.52	0.91	1.4	1.28
TT2-0100	ECO-P	6/16/2004	TS-0007	0	19.3	407	1,220 <i>J</i>	0.41	0.93	1.2	0.831
TT2-1000	ECO-P	6/15/2004	TS-0005	0	7.42	35.4	4,520 <i>J</i>	0.26	0.91	0.7	0.093 <i>U</i>
TT2_0020	ECO-P	6/17/2004	TS-0010	0	22.3	615	547 <i>J</i>	0.44	1.21	0.8	1.23
TT3-0010	ECO-R	6/18/2004	TS-0013	0	18.4	407	3,380 <i>J</i>	0.3	1.12	1.2	0.378
TT3-0100	ECO-R	6/20/2004	TS-0019-D	1	6.41	48.5	155 <i>J</i>	0.12	0.49 <i>J</i>	0.4	0.357
TT3-0100	ECO-R	6/20/2004	TS-0019-D	2	3.1	20.6	74.5 <i>J</i>	0.06	0.157 <i>J</i>	0.2	0.207
TT3-1000	ECO-R	6/20/2004	TS-0018	0	6.22	13.8	140 <i>J</i>	0.19	0.896 <i>J</i>	0.4	0.087
TT3_0020	ECO-R	6/20/2004	TS-0021	0	22.4	346	820 <i>J</i>	0.43	1.03 <i>J</i>	0.7	0.619
TT5_0010	ECO-P	6/12/2004	TS-0003	0	20.6	1,210	1,860 <i>J</i>	1.75	0.89	1.5	1.91
TT5_0020	ECO-P	6/12/2004	TS-0002	0	31.0	2,280	1,230 <i>J</i>	1.5	1.33	2.8	4.06
TT5_0100	ECO-P	6/16/2004	TS-0006	0	19.8	1,060	1,560 <i>J</i>	0.25	0.84	1.9	1.25
TT5_1000	ECO-P	6/13/2004	TS-0004	0	7.93	8.62	32.5 <i>J</i>	0.33	1.16	0.9	0.264
TT5_2000	ECO-P	6/12/2004	TS-0001	0	4.82	54.1	290 <i>J</i>	0.27	0.8	0.5	0.120
TT6_0010	ECO-M	6/25/2004	TS-0035	0	45.6	349	1,020 <i>J</i>	0.25	1.95 <i>J</i>	1.5	0.726
TT6_0100	ECO-M	6/21/2004	TS-0023	0	20.1	281	534 <i>J</i>	0.27	2.47 <i>J</i>	0.9	0.486
TT6_1000	ECO-M	6/21/2004	TS-0022	0	15.8	145	429 <i>J</i>	0.22	2.09 <i>J</i>	1.6	0.697
TT6_2000	ECO-M	6/22/2004	TS-0026	0	9.71	102	595 <i>J</i>	0.24	1.56 <i>J</i>	0.8	0.714
TT7_0010	ECO-M	6/22/2004	TS-0025	0	31.8	2,630	122 <i>J</i>	1.14	5.97 <i>J</i>	3.0	3.9
TT7_1000	ECO-M	6/22/2004	TS-0024	0	9.22	201	688 <i>J</i>	0.17	27.1 <i>J</i>	1.6	0.637
TT7_2000	ECO-M	7/4/2004	TS-0061-D	1	11.3	197	639	0.261	15.8 <i>J</i>	2.1	0.578
TT7_2000	ECO-M	7/4/2004	TS-0061-D	2	9.9	111	796	0.205	15.3 <i>J</i>	1.9	0.409
TT8_0010	ECO-R	6/19/2004	TS-0016	0	15.3	226	494 <i>J</i>	0.13	0.93	1.4	0.453
TT8_0050	ECO-R	6/27/2004	TS-0052	0	16.3 <i>J</i>	372 <i>J</i>	2,020 <i>J</i>	0.3 <i>J</i>	0.755 <i>J</i>	0.7	0.457
TT8_0100	ECO-R	6/19/2004	TS-0015	0	14.9	189	2,380 <i>J</i>	0.2	1.16	1.8	0.375
TT8_0150	ECO-R	6/27/2004	TS-0051	0	20.5 <i>J</i>	419 <i>J</i>	2,620 <i>J</i>	0.19 <i>J</i>	1.1 <i>J</i>	1.0	0.315
TT8_0200	ECO-R	6/27/2004	TS-0037	0	8.0 <i>J</i>	76 <i>J</i>	710 <i>J</i>	0.1 <i>J</i>	0.629 <i>J</i>	0.9	0.171
TT8_0250	ECO-R	6/27/2004	TS-0050	0	11.6 <i>J</i>	144 <i>J</i>	1,030 <i>J</i>	0.21 <i>J</i>	0.756 <i>J</i>	0.8	0.366

**Table G-1. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Copper (mg/kg dry)	Lead (mg/kg dry)	Manganese (mg/kg dry)	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Silver (mg/kg dry)
TT8_0300	ECO-R	6/27/2004	TS-0038	0	6.16 <i>J</i>	53.6 <i>J</i>	1,010 <i>J</i>	0.15 <i>J</i>	0.475 <i>J</i>	0.5	0.21
TT8_0350	ECO-R	6/27/2004	TS-0049	0	7.13 <i>J</i>	83.2 <i>J</i>	924 <i>J</i>	0.16 <i>J</i>	0.519 <i>J</i>	0.4	0.107
TT8_0400	ECO-R	6/27/2004	TS-0039	0	9.75 <i>J</i>	67.8 <i>J</i>	1,300 <i>J</i>	0.21 <i>J</i>	1.23 <i>J</i>	0.9	0.253
TT8_0450	ECO-R	6/27/2004	TS-0048	0	6.2 <i>J</i>	20.1 <i>J</i>	404 <i>J</i>	0.26 <i>J</i>	1.74 <i>J</i>	0.5	0.127
TT8_0500	ECO-R	6/27/2004	TS-0040	0	6.49 <i>J</i>	52.8 <i>J</i>	1,210 <i>J</i>	0.22 <i>J</i>	0.737 <i>J</i>	0.4	0.092
TT8_0550	ECO-R	6/27/2004	TS-0047	0	4.94 <i>J</i>	18.3 <i>J</i>	563 <i>J</i>	0.14 <i>J</i>	0.485 <i>J</i>	0.3	0.062
TT8_0600	ECO-R	6/27/2004	TS-0041	0	9.92 <i>J</i>	26.6 <i>J</i>	129 <i>J</i>	0.23 <i>J</i>	1.6 <i>J</i>	0.9	0.111
TT8_0650	ECO-R	6/27/2004	TS-0046	0	7.3 <i>J</i>	47.8 <i>J</i>	572 <i>J</i>	0.1 <i>J</i>	1.1 <i>J</i>	0.3	0.089
TT8_0700	ECO-R	6/27/2004	TS-0042	0	4.95 <i>J</i>	35.2 <i>J</i>	565 <i>J</i>	0.13 <i>J</i>	1.1 <i>J</i>	0.3	0.205
TT8_0750	ECO-R	6/27/2004	TS-0045	0	3.79 <i>J</i>	18.2 <i>J</i>	232 <i>J</i>	0.1 <i>J</i>	0.588 <i>J</i>	0.2	0.076
TT8_0800	ECO-R	6/27/2004	TS-0043	0	4.72 <i>J</i>	12.8 <i>J</i>	271 <i>J</i>	0.22 <i>J</i>	0.778 <i>J</i>	0.2	0.114
TT8_0900	ECO-R	6/27/2004	TS-0044	0	5.69 <i>J</i>	33.8 <i>J</i>	580 <i>J</i>	0.11 <i>J</i>	1.08 <i>J</i>	0.4	0.044
TT8_1000	ECO-R	6/19/2004	TS-0014	0	6.15	8.46 <i>U</i>	139 <i>J</i>	0.15	1.68	0.6	0.062

**Table G-1. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
AC-R	ECO-R	7/1/2004	TS-0056	0	0.177	13.7	831
ARC-R	ECO-R	7/1/2004	TS-0057-D	1	0.765	15.7	1,960
ARC-R	ECO-R	7/1/2004	TS-0057-D	2	0.662	18.4	1,350
NLF	ECO-P	7/2/2004	TS-0059	0	0.027	10.0	150
NLK	ECO-P	6/30/2004	TS-0054	0	0.109	31.3	446
OR-R	ECO-R	7/1/2004	TS-0055	0	0.087	22.2	115
PLNL	ECO-P	6/29/2004	TS-0053	0	0.239	30.4	3,010
TP-4	ECO-R	6/17/2004	TS-0012	0	0.709	10.1	652 <i>J</i>
TP1-0100	ECO-P	6/17/2004	TS-0009	0	0.458	4.22	5,780 <i>J</i>
TP1-1000	ECO-P	6/17/2004	TS-0008	0	0.076	2.45	1,700 <i>J</i>
TP3	ECO-R	6/20/2004	TS-0017	0	0.085	6.4 <i>J</i>	412
TT2-0010	ECO-P	6/17/2004	TS-0011	0	0.456	15.1	3,830 <i>J</i>
TT2-0100	ECO-P	6/16/2004	TS-0007	0	0.218	9.62	1,900 <i>J</i>
TT2-1000	ECO-P	6/15/2004	TS-0005	0	0.061	3.76	403 <i>J</i>
TT2_0020	ECO-P	6/17/2004	TS-0010	0	0.358	11.5	2,500 <i>J</i>
TT3-0010	ECO-R	6/18/2004	TS-0013	0	0.341	15.8	1,320 <i>J</i>
TT3-0100	ECO-R	6/20/2004	TS-0019-D	1	0.071	6.94 <i>J</i>	213
TT3-0100	ECO-R	6/20/2004	TS-0019-D	2	0.028	2.36 <i>J</i>	73.1
TT3-1000	ECO-R	6/20/2004	TS-0018	0	0.063	1.5 <i>J</i>	74.9
TT3_0020	ECO-R	6/20/2004	TS-0021	0	0.317	16.5 <i>J</i>	1,380
TT5_0010	ECO-P	6/12/2004	TS-0003	0	0.455	11.6	4,330 <i>J</i>
TT5_0020	ECO-P	6/12/2004	TS-0002	0	0.824	10.1	9,120 <i>J</i>
TT5_0100	ECO-P	6/16/2004	TS-0006	0	0.368	8.25	5,120 <i>J</i>
TT5_1000	ECO-P	6/13/2004	TS-0004	0	0.072	4.64	38.9 <i>J</i>
TT5_2000	ECO-P	6/12/2004	TS-0001	0	0.036	0.98	286 <i>J</i>
TT6_0010	ECO-M	6/25/2004	TS-0035	0	1.29	19.7 <i>J</i>	1,020
TT6_0100	ECO-M	6/21/2004	TS-0023	0	0.755	7.51 <i>J</i>	764
TT6_1000	ECO-M	6/21/2004	TS-0022	0	0.38	16.0 <i>J</i>	592
TT6_2000	ECO-M	6/22/2004	TS-0026	0	0.152	6.68 <i>J</i>	307
TT7_0010	ECO-M	6/22/2004	TS-0025	0	2.28	21.6 <i>J</i>	6,770
TT7_1000	ECO-M	6/22/2004	TS-0024	0	0.532	29.2 <i>J</i>	506
TT7_2000	ECO-M	7/4/2004	TS-0061-D	1	0.666	27.6	673
TT7_2000	ECO-M	7/4/2004	TS-0061-D	2	0.60	28.1	365
TT8_0010	ECO-R	6/19/2004	TS-0016	0	0.245	15.9	976 <i>J</i>
TT8_0050	ECO-R	6/27/2004	TS-0052	0	0.211	14.0 <i>J</i>	1,830 <i>J</i>
TT8_0100	ECO-R	6/19/2004	TS-0015	0	0.214	11.2	908 <i>J</i>
TT8_0150	ECO-R	6/27/2004	TS-0051	0	0.282	16.6 <i>J</i>	1,870 <i>J</i>
TT8_0200	ECO-R	6/27/2004	TS-0037	0	0.09	5.33 <i>J</i>	570 <i>J</i>
TT8_0250	ECO-R	6/27/2004	TS-0050	0	0.138	8.03 <i>J</i>	1,230 <i>J</i>



**Table G-1. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
TT8_0300	ECO-R	6/27/2004	TS-0038	0	0.069	3.18 <i>J</i>	393 <i>J</i>
TT8_0350	ECO-R	6/27/2004	TS-0049	0	0.064	4.57 <i>J</i>	562 <i>J</i>
TT8_0400	ECO-R	6/27/2004	TS-0039	0	0.091	4.73 <i>J</i>	555 <i>J</i>
TT8_0450	ECO-R	6/27/2004	TS-0048	0	0.047	2.67 <i>J</i>	186 <i>J</i>
TT8_0500	ECO-R	6/27/2004	TS-0040	0	0.11	2.35 <i>J</i>	344 <i>J</i>
TT8_0550	ECO-R	6/27/2004	TS-0047	0	0.034	1.7 <i>J</i>	157 <i>J</i>
TT8_0600	ECO-R	6/27/2004	TS-0041	0	0.037	8.54 <i>J</i>	120 <i>J</i>
TT8_0650	ECO-R	6/27/2004	TS-0046	0	0.062	3.88 <i>J</i>	319 <i>J</i>
TT8_0700	ECO-R	6/27/2004	TS-0042	0	0.037	2.64 <i>J</i>	247 <i>J</i>
TT8_0750	ECO-R	6/27/2004	TS-0045	0	0.028	1.75 <i>J</i>	126 <i>J</i>
TT8_0800	ECO-R	6/27/2004	TS-0043	0	0.02	1.19 <i>J</i>	98.6 <i>J</i>
TT8_0900	ECO-R	6/27/2004	TS-0044	0	0.049	2.81 <i>J</i>	181 <i>J</i>
TT8_1000	ECO-R	6/19/2004	TS-0014	0	0.02	4.8	89.3 <i>J</i>

**Note:** Sampling depths 0–2 cm.

- ECO-M - stations outside the mine's solid waste permit boundary and north of Anxiety Ridge Creek
- ECO-P - stations in port ambient air boundary or  $\pm$  2 km from the DMTS road in the vicinity of the port
- ECO-R - stations  $\pm$  2 km from the DMTS road corridor, and between the port and mine assessment units
- J* - estimated value
- U* - undetected; value reported is the full detection limit

**Table G-2. Analytical results for PHASE2RA tundra soil (reference)**

Survey Station	Date	Sample ID	Field Replicate	Total Solids		pH (pH wet)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)	Cobalt (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)
				(dry wt. as % of wet wt. or volume)	(% wet)								
CL-REF-1	7/2/2004	TS-0060	0	15.3	5.4	0.17 <i>J</i>	8.57	123	0.204	3.7	9.55	11.5	
CL-REF-2	7/4/2004	TS-0064	0	34.2	4.7	0.2 <i>J</i>	11.4	206	0.524	9.7	15.4	36.0	
CL-REF3b	7/4/2004	TS-0065	0	35.4	4.6	0.13 <i>J</i>	13.1	143	1.06	4.51	10.6	31.8	
ST-REF-3	6/26/2004	TS-0036	0	55.9	5.7	0.31	9.3	259 <i>J</i>	0.513	7.6 <i>J</i>	15.7	15.3	
ST-REF-5	6/24/2004	TS-0031	0	36.3	5.2	0.21	12.1	533 <i>J</i>	0.338	11.1 <i>J</i>	11.7	10.7	
ST-REF-6	6/24/2004	TS-0033	0	49.0	5.8	0.22	6.4	377 <i>J</i>	0.321	11.7 <i>J</i>	11.5	9.81	
TP-REF-2	6/24/2004	TS-0032	0	11.6	5.2	0.42	3.3	682 <i>J</i>	0.859	8.6 <i>J</i>	11.5	23.6	
TP-REF-3	6/23/2004	TS-0027	0	32.9	5.2	0.16	2.2	409 <i>J</i>	0.256	7.22 <i>J</i>	11.9	12.8	
TP-REF-5	6/24/2004	TS-0030	0	52.1	5.0	0.17	5.1	427 <i>J</i>	0.357	10.2 <i>J</i>	13.5	9.1	
TS-REF-5	6/23/2004	TS-0028	0	17.6	3.9	0.16	0.2	141 <i>J</i>	0.215	2.35 <i>J</i>	2.2	3.58	
TS-REF-7	6/24/2004	TS-0029	0	13.6	4.5	0.24	0.3	181 <i>J</i>	0.286	4.53 <i>J</i>	6.2	7.5	
TS-REF11	6/25/2004	TS-0034	0	21.0	5.3	0.3	3.2	293 <i>J</i>	0.414	7.81 <i>J</i>	12.2	12.7	
TS-REF12	7/4/2004	TS-0063	0	22.0	3.6	0.21 <i>J</i>	0.28	24.5	0.215	0.49	3.09	5.83	

**Table G-2. (cont.)**

Survey Station	Date	Sample ID	Field Replicate	Manganese (mg/kg dry)	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Silver (mg/kg dry)	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
CL-REF-1	7/2/2004	TS-0060	0	78.4	0.069	1.13 <i>J</i>	1.1	0.069	0.021	25.7	42.4
CL-REF-2	7/4/2004	TS-0064	0	331	0.06	3.08 <i>J</i>	0.9	0.129	0.093	32.8	158
CL-REF3b	7/4/2004	TS-0065	0	81.3	0.062	1.87 <i>J</i>	0.6	0.149	0.07	27.7	168
ST-REF-3	6/26/2004	TS-0036	0	172 <i>J</i>	0.05	0.507 <i>J</i>	1.0	0.189	0.103	18.6 <i>J</i>	77.8
ST-REF-5	6/24/2004	TS-0031	0	606 <i>J</i>	0.06	1.32 <i>J</i>	0.8	0.231	0.081	33.9 <i>J</i>	53.3
ST-REF-6	6/24/2004	TS-0033	0	739 <i>J</i>	0.05	0.368 <i>J</i>	0.6	0.133	0.103	23.9 <i>J</i>	51.6
TP-REF-2	6/24/2004	TS-0032	0	645 <i>J</i>	0.08	0.622 <i>J</i>	1.0	0.189	0.083	9.53 <i>J</i>	56.2
TP-REF-3	6/23/2004	TS-0027	0	113 <i>J</i>	0.03	0.47 <i>J</i>	0.5	0.103	0.152	34.2 <i>J</i>	64.2
TP-REF-5	6/24/2004	TS-0030	0	424 <i>J</i>	0.05	0.418 <i>J</i>	0.6	0.142	0.109	30.3 <i>J</i>	47.0
TS-REF-5	6/23/2004	TS-0028	0	121 <i>J</i>	0.09	0.239 <i>J</i>	0.2 <i>U</i>	0.025	0.011	0.67 <i>J</i>	21.8
TS-REF-7	6/24/2004	TS-0029	0	665 <i>J</i>	0.11	1.74 <i>J</i>	0.2 <i>U</i>	0.027	0.022	0.9 <i>J</i>	51.8
TS-REF11	6/25/2004	TS-0034	0	3,490 <i>J</i>	0.12	0.348 <i>J</i>	0.5	0.204	0.105	11.0 <i>J</i>	56.4
TS-REF12	7/4/2004	TS-0063	0	137	0.176	0.506 <i>J</i>	0.2	0.03	0.012	0.85	58.6

**Note:** Sampling depths 0–2 cm.

*J* - estimated value

*U* - undetected; value reported is the full detection limit

**Table G-3. Analytical results for PHASE2RA stream sediment (site)**

Survey Station	Assessment		Sample ID	Field Replicate	Total Solids	Percent Clay (% unfiltered)	Percent Silt (% unfiltered)	Phi Class	Phi Class	Phi Class	Phi Class
	Unit	Date			(dry wt. as % of wet wt. or volume) (% wet)			3.00+ to 4.00 (% unfiltered)	2.00+ to 3.00 (% unfiltered)	1.00+ to 2.00 (% unfiltered)	0.00+ to 1.00 (% unfiltered)
AC-R	ECO-R	7/5/2004	SD0010	0	84.0	0.24	1.89	0.42	1.99	3.67	17.4
ARC-R	ECO-R	7/5/2004	SD0008	0	69.1	1.18	8.36	2.83	27.2	22.9	9.74
OR-R	ECO-R	7/5/2004	SD0009-D	1	71.8	1.77	9.37	2.42	22.9	34	22.6
OR-R	ECO-R	7/5/2004	SD0009-D	2	73.5	0.79	7.68	0.78	6.73	22.6	32.7

**Table G-3. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Phi Class -1.00+ to 0.00 (% unfiltered)	Phi Class -2.00+ to -1.00 (% unfiltered)	Phi Class -3.00+ to -2.00 (% unfiltered)	Cadmium (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)	Zinc (mg/kg dry)
AC-R	ECO-R	7/5/2004	SD0010	0	25.7	18.1	32.5	0.69	43.4	0.047	137
ARC-R	ECO-R	7/5/2004	SD0008	0	22.2	2.15	0.63	1.06	117	0.036	148
OR-R	ECO-R	7/5/2004	SD0009-D	1	5.65	0.64	0	0.37	33.5	0.027	84.3
OR-R	ECO-R	7/5/2004	SD0009-D	2	23.2	5.86	0.49	0.47	18.3	0.018	99.6

**Note:** Sampling depths 0–2 cm.

ECO-R - stations  $\pm$  2 km from the DMTS road corridor, and between the port and mine assessment units

*J* - estimated value

*U* - undetected; value reported is the full detection limit

**Table G-4. Analytical results for PHASE2RA stream sediment (reference)**

Survey Station	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume) (% wet)	Percent Clay (% unfiltered)	Percent Silt (% unfiltered)	Phi Class 3.00+ to 4.00 (% unfiltered)	Phi Class 2.00+ to 3.00 (% unfiltered)	Phi Class 1.00+ to 2.00 (% unfiltered)	Phi Class 0.00+ to 1.00 (% unfiltered)	Phi Class -1.00+ to 0.00 (% unfiltered)
ST-REF-3	7/5/2004	SD0012	0	69.7	1.7	7.54	4.28	25.7	32.1	20.6	3.82
ST-REF-6	7/5/2004	SD0011	0	91.3	0	0.10	0.03	0.14	0.26	1.85	11.2

**Table G-4. (cont.)**

Survey Station	Date	Sample ID	Field Replicate	Phi Class		Cadmium (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)	Zinc (mg/kg dry)
				-2.00+ to -1.00 (% unfiltered)	-3.00+ to -2.00 (% unfiltered)				
ST-REF-3	7/5/2004	SD0012	0	0.28	0.06	0.26	9.82	0.023	64.1
ST-REF-6	7/5/2004	SD0011	0	25	63.0	0.19	5.71	0.005 <i>U</i>	33.1

**Note:** Sampling depths 0–2 cm.

*J* - estimated value

*U* - undetected; value reported is the full detection limit

**Table G-5. Analytical results for PHASE2RA lagoon sediment (site)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Total Solids	Percent Clay	Percent Silt	Phi Class	Phi Class	Phi Class 1.00+	Phi Class
					(dry wt. as % of wet wt. or volume) (% wet)			(% unfiltered)	(% unfiltered)	(% unfiltered)	(% unfiltered)
NLF	ECO-P	7/2/2004	SD0003	0	79.4	0.08	1.5	0.20	0.99	2.03	7.59
NLK	ECO-P	6/30/2004	SD0002	0	36.5	6.8	35.8	4.41	14.4	8.92	9.64
PLNL	ECO-P	6/28/2004	SD0001	0	14.8	2.84	34.2	8.18	22.7	14	15.4



**Table G-5. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Phi Class	Phi Class	Phi Class	Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Lead (mg/kg dry)	Zinc (mg/kg dry)
					-1.00+ to 0.00 (% unfiltered)	-2.00+ to -1.00 (% unfiltered)	-3.00+ to -2.00 (% unfiltered)				
NLF	ECO-P	7/2/2004	SD0003	0	24	26	42.3	5.9	0.31	14.9	103
NLK	ECO-P	6/30/2004	SD0002	0	13	5.8	3.65	6.7	0.6	17.9	130
PLNL	ECO-P	6/28/2004	SD0001	0	2.15	0.24	0	10.2	15.8	481	3,210

**Note:** Sampling depths 0–2 cm.

- ECO-P - stations in port ambient air boundary or +/- 2 km from the DMTS road in the vicinity of the port
- U* - undetected; value reported is the full detection limit
- J* - estimated value

**Table G-6. Analytical results for PHASE2RA lagoon sediment (reference)**

Survey Station	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume)		Percent Clay (% unfiltered)	Percent Silt (% unfiltered)	Phi Class				
				(% wet)	(% unfiltered)			3.00+ to 4.00 (% unfiltered)	2.00+ to 3.00 (% unfiltered)	1.00+ to 2.00 (% unfiltered)	0.00+ to 1.00 (% unfiltered)	-1.00+ to 0.00 (% unfiltered)
CL-REF-1	7/2/2004	SD0004	0	22.1	2.34	59	7.48	13.5	9.2	5.73	1.03	
CL-REF-2	7/3/2004	SD0005-D	1	73.9	2.14	18.7	6.48	14.9	7	12.5	16.4	
CL-REF-2	7/3/2004	SD0005-D	2	74.4	2.11	17.9	6.23	15	7.71	10.8	16.9	
CL-REF-3	7/4/2004	SD0007	0	77.2	0.43	4.52	0.29	2.57	4.49	7.44	12.2	

**Table G-6. (cont.)**

Survey Station	Date	Sample ID	Field Replicate	Phi Class		Arsenic (mg/kg dry)	Cadmium (mg/kg dry)	Lead (mg/kg dry)	Zinc (mg/kg dry)
				-2.00+ to -1.00 (% unfiltered)	-3.00+ to -2.00 (% unfiltered)				
CL-REF-1	7/2/2004	SD0004	0	0.13	0.65	5.7	0.45	11.8	108
CL-REF-2	7/3/2004	SD0005-D	1	16.1	4.47	8.2	0.15	8.25	75.7
CL-REF-2	7/3/2004	SD0005-D	2	13.5	6.55	8.6	0.16	10.4	96.1
CL-REF-3	7/4/2004	SD0007	0	20.3	53.4	8.0	0.11	7.75	65.8

**Note:** Sampling depths 0–2 cm.

*J* - estimated value

*U* - undetected; value reported is the full detection limit

**Table G-7. Analytical results for PHASE2RA marine sediment (site)**

Survey Station	Date	Sample ID	Field Replicate	Element	Total Solids (dry wt. as % of)			Phi Class		Phi Class	Phi Class	Phi Class
					wet wt. or volume (% wet)	Percent Clay (% unfiltered)	Percent Silt (% unfiltered)	3.00+ to 4.00 (% unfiltered)	2.00+ to 3.00 (% unfiltered)	1.00+ to 2.00 (% unfiltered)	0.00+ to 1.00 (% unfiltered)	-1.00+ to 0.00 (% unfiltered)
NMA	6/8/2004	MSD-37	0	PRE-SHIP	75.2	1.6	4.0	12.0	72.2	3.0	4.6	1.3
NMA	9/14/2004	MSD-77	0	DUR-SHIP	84.7	0.56	1.35	2.95	15.9	7.52	30	19
NMAA	6/7/2004	MSD-03	0	PRE-SHIP	73.2	1.8	5.0	16.7	73.6	2.2	0.63	0.19
NMAA	9/4/2004	MSD-50	0	DUR-SHIP	74.6	1.3	6.7	17.7	70.4	1.5	0.34	0.21
NMB	6/8/2004	MSD-38	0	PRE-SHIP	69.1	2.4	8.5	22.9	64.4	0.48	0.55	1.3
NMB	9/14/2004	MSD-78	0	DUR-SHIP	92.7	0.07	0.13	0.24	0.71	0.21	0.99	8.81
NMC	6/8/2004	MSD-39	0	PRE-SHIP	97.9	0.070	5.9	0.040	0.060	0.020	0.070	0.19
NMC	9/14/2004	MSD-79	0	DUR-SHIP	98.7	0	0.06	0	0	0.1	0.01	0.26
NMD	6/7/2004	MSD-19	0	PRE-SHIP	90.2	0.89	3.0	10.4	17.8	1.4	9.3	20.1
NMD	9/9/2004	MSD-73	0	DUR-SHIP	93.7	0.13	0.26	0.06	2.07	1.16	7.77	19.6
NME	6/8/2004	MSD-35	0	PRE-SHIP	76.6	1.4	3.9	16.2	68.9	6.1	3.5	0.34
NME	9/14/2004	MSD-86	0	DUR-SHIP	76.2	0.81	1.21	5.02	59.6	15.9	12.6	1.08
NMF	6/8/2004	MSD-34	0	PRE-SHIP	79.2	1.0	1.8	9.1	80.7	5.3	0.96	0.26
NMF	9/5/2004	MSD-68	0	DUR-SHIP	78.8	0.92	1.3	12.0	82.5	2.23	0.37	0.21
NMG	6/8/2004	MSD-33	0	PRE-SHIP	89.8	0.55	1.6	6.8	12.7	0.91	1.3	13.8
NMG	9/5/2004	MSD-66	0	DUR-SHIP	96.6	0.14	0.14	0.67	0.74	0.09	0.72	12.4
NMGZ	6/7/2004	MSD-22-D	1	PRE-SHIP	94.0	0.24	0.83	2.4	2.7	0.95	4.3	12.1
NMGZ	6/7/2004	MSD-22-D	2	PRE-SHIP	94.9	0.29	0.66	1.7	2.2	0.74	3.4	10.9
NMGZ	9/9/2004	MSD-71	0	DUR-SHIP	96.4	0	0.07	0.18	0.87	0.6	2.27	6.79
NMH	6/8/2004	MSD-40	0	PRE-SHIP	96.6	0.13	0.080	0.060	0.070	0.020	0.18	12.9
NMH	9/14/2004	MSD-80-D	1	DUR-SHIP	94.4	0.47	1.56	1.28	2.46	0.37	0.81	6.31
NMH	9/14/2004	MSD-80-D	2	DUR-SHIP	91.9	0.58	2.51	1.86	4.03	0.6	0.7	5.5
NMJ	6/8/2004	MSD-41	0	PRE-SHIP	97.6	0.070	0.090	0.010	0.010	0.010	0.010	1.3
NMJ	9/14/2004	MSD-82	0	DUR-SHIP	73.1	1.55	9.07	11.1	62.5	6.58	5.17	2.55
NMK	6/8/2004	MSD-42	0	PRE-SHIP	77.7	1.2	7.6	20.9	67.6	0.90	0.32	0.53
NMK	9/14/2004	MSD-83	0	DUR-SHIP	69.8	2.48	25.8	22.6	45.4	0.59	0.19	0.12
NML	6/7/2004	MSD-16	0	PRE-SHIP	87.0	0.81	2.3	7.4	11.3	1.4	8.5	15.2
NML	9/5/2004	MSD-64	0	DUR-SHIP	87.6	0.53	0.86	0.69	2.75	1.79	10.9	24.6
NMM	6/7/2004	MSD-13	0	PRE-SHIP	92.4	0.32	0.69	2.0	1.8	0.40	7.0	20.8
NMM	9/5/2004	MSD-62	0	DUR-SHIP	72.0	3.24	11.1	0.53	3.81	4.54	12.8	21.2
NMN	6/7/2004	MSD-10	0	PRE-SHIP	79.6	2.3	13.7	9.1	30.3	5.5	5.4	8.9
NMN	9/4/2004	MSD-54	0	DUR-SHIP	83.1	1.08	3.31	1.42	21.0	11.1	18.2	17.3
NMO	6/7/2004	MSD-06	0	PRE-SHIP	74.2	1.4	2.9	13.3	79.5	2.8	0.71	0.29
NMO	9/4/2004	MSD-52	0	DUR-SHIP	78.6	0.79	2.73	13.8	78.3	2.06	0.36	0.25
NMP	6/7/2004	MSD-09	0	PRE-SHIP	70.5	1.8	5.0	21.9	72.4	0.39	0.42	0.16
NMP	9/9/2004	MSD-75	0	DUR-SHIP	73.2	1.34	3.9	25.8	68.6	0.64	0.4	0.27
NMQ	6/8/2004	MSD-36	0	PRE-SHIP	91.3	0.44	1.6	3.8	4.8	0.63	3.3	8.8
NMQ	9/14/2004	MSD-84-D	1	DUR-SHIP	97.7	0.01	0.11	0.02	0.05	0.04	0.72	5.8
NMQ	9/14/2004	MSD-84-D	2	DUR-SHIP	97.7	0	0.06	0.02	0.06	0.07	0.97	6.54
NMS	6/8/2004	MSD-30-D	1	PRE-SHIP	88.0	0.48	1.4	2.8	3.1	2.1	19.2	30.0

**Table G-7. (cont.)**

Survey Station	Date	Sample ID	Field Replicate	Element	Total Solids (dry wt. as % of wet wt. or volume)			Phi Class		Phi Class	Phi Class	Phi Class
					(% wet)	Percent Clay (% unfiltered)	Percent Silt (% unfiltered)	3.00+ to 4.00 (% unfiltered)	2.00+ to 3.00 (% unfiltered)	1.00+ to 2.00 (% unfiltered)	0.00+ to 1.00 (% unfiltered)	-1.00+ to 0.00 (% unfiltered)
NMS	6/8/2004	MSD-30-D	2	PRE-SHIP	87.8	0.56	1.6	3.6	3.3	1.7	19.8	27.2
NMS	9/5/2004	MSD-67	0	DUR-SHIP	91.4	0.31	0.86	0.51	1.28	0.65	12.1	26.6
NMT	6/8/2004	MSD-32	0	PRE-SHIP	88.6	0.78	2.8	6.9	6.1	0.48	1.7	18.9
NMT	9/5/2004	MSD-69	0	DUR-SHIP	91.5	0.42	1.69	1.35	0.86	0.15	2.14	20.8
NMU	6/8/2004	MSD-29	0	PRE-SHIP	76.0	1.3	2.6	12.8	67.0	10.0	4.0	0.89
NMU	9/5/2004	MSD-70	0	DUR-SHIP	79.5	0.83	0.99	12.8	71.6	9.51	2.54	0.70
NMV	6/8/2004	MSD-28	0	PRE-SHIP	75.9	1.3	4.7	15.0	61.4	14.3	4.5	1.2
NMV	9/14/2004	MSD-87	0	DUR-SHIP	81.3	0.67	0.89	5.14	33.4	22	14.6	7.15
NMW	6/8/2004	MSD-27	0	PRE-SHIP	77.4	1.1	1.5	7.3	36.2	31.7	16.0	3.0
NMW	9/14/2004	MSD-88	0	DUR-SHIP	78.9	0.77	0.89	8.07	61.4	23.2	4.82	0.37
NMX	6/8/2004	MSD-26	0	PRE-SHIP	82.2	0.93	1.6	6.9	37.8	33.0	16.4	2.1
NMX	9/14/2004	MSD-89	0	DUR-SHIP	75.8	1.03	1.44	7.21	60.7	19.5	5.35	1.11
NMY	6/6/2004	MSD-02	0	PRE-SHIP	74.7	1.6	4.7	17.1	60.4	10.0	4.4	1.8
NMY	9/14/2004	MSD-90	0	DUR-SHIP	75.2	1.02	2.5	7.6	68	9.16	2.99	1.07
NMZ	6/6/2004	MSD-01	0	PRE-SHIP	73.6	1.5	3.7	17.2	74.5	4.9	1.0	0.13
NMZ	9/9/2004	MSD-76	0	DUR-SHIP	77.1	1.02	2.6	15.6	73.5	3.5	0.89	0.42

**Table G-7. (cont.)**

Survey Station	Field Sample ID	Field Replicate	Element	Phi Class		Cadmium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)	Silver (mg/kg dry)	Zinc (mg/kg dry)
				-2.00+ to -1.00 (% unfiltered)	-3.00+ to -2.00 (% unfiltered)						
NMA	MSD-37	0	PRE-SHIP	0.24	0	0.0380		7.26			38.6
NMA	MSD-77	0	DUR-SHIP	14.6	7.68	0.0600 U		5.82			31.3
NMAA	MSD-03	0	PRE-SHIP	0.045	0	0.0765	7.50	11.1	0.0100	0.0340 U	43.3
NMAA	MSD-50	0	DUR-SHIP	0.1	0	0.06	4.8	9.47	0.018 U	0.02 U	41.1
NMB	MSD-38	0	PRE-SHIP	0.030	0	0.0750		7.90			45.0
NMB	MSD-78	0	DUR-SHIP	21.1	72.4	0.0700 U		6.25			42.3
NMC	MSD-39	0	PRE-SHIP	15.1	83.8	0.00700		0.840			5.60
NMC	MSD-79	0	DUR-SHIP	6.98	83.9	0.0500 U		3.07			10.7
NMD	MSD-19	0	PRE-SHIP	22.5	11.7	0.0600	8.08	14.2	0.0100	0.0280 U	43.8
NMD	MSD-73	0	DUR-SHIP	28.3	40.3	0.09	8.6	21.8	0.02 U	0.02	47.1
NME	MSD-35	0	PRE-SHIP	0	0	0.0530		10.8			41.6
NME	MSD-86	0	DUR-SHIP	0.07	1.51	0.05 U		11.3			36.4
NMF	MSD-34	0	PRE-SHIP	0.15	0	0.0410		9.55			39.0
NMF	MSD-68	0	DUR-SHIP	0.05	0	0.0500 U		9.84			40.5
NMG	MSD-33	0	PRE-SHIP	48.1	14.4	0.0270		4.99			29.9
NMG	MSD-66	0	DUR-SHIP	34.9	50.5	0.0500 U		5.60			24.8
NMGZ	MSD-22-D	1	PRE-SHIP	26.4	49.8	0.0510	4.98	12.3	0.0100 U	0.0240 U	38.7
NMGZ	MSD-22-D	2	PRE-SHIP	25.3	54.6	0.0580	5.79	9.01	0.0100 U	0.0410 U	29.1
NMGZ	MSD-71	0	DUR-SHIP	16.8	72.9	0.11	7.9	19.7	0.015 U	0.04	66.7
NMH	MSD-40	0	PRE-SHIP	62.4	24.0	0.0710		6.33			38.0
NMH	MSD-80-D	1	DUR-SHIP	66.3	19.9	0.05 U		5.03			30.3
NMH	MSD-80-D	2	DUR-SHIP	61.5	23.6	0.08 U		6.18			28.2
NMJ	MSD-41	0	PRE-SHIP	29.5	68.8	0.0590		5.15			19.6
NMJ	MSD-82	0	DUR-SHIP	0.64	0	0.07 U		7.55			39.6
NMK	MSD-42	0	PRE-SHIP	0.14	0	0.0600		7.51			41.9
NMK	MSD-83	0	DUR-SHIP	0.06	0	0.13 U		9.58			48.9
NML	MSD-16	0	PRE-SHIP	20.2	33.8	0.129	9.89	23.8	0.0100 U	0.0370 U	72.0
NML	MSD-64	0	DUR-SHIP	21.8	38.4	0.17	7.0	25.3	0.011	0.03	59.9
NMM	MSD-13	0	PRE-SHIP	27.3	41.0	0.0825	5.97	34.1 J	0.0100	0.0305	49.6
NMM	MSD-62	0	DUR-SHIP	24.2	14.6	0.21	13.1	18.6	0.033	0.07	54.4
NMN	MSD-10	0	PRE-SHIP	8.8	17.4	0.0770	7.65	12.9	0.0100	0.0540	41.6
NMN	MSD-54	0	DUR-SHIP	13.4	14.9	0.06	5.1	23.2	0.02	0.04	36.1
NMO	MSD-06	0	PRE-SHIP	0.42	0.33	0.0800	4.55	21.1	0.0100 U	0.0420 U	47.3
NMO	MSD-52	0	DUR-SHIP	0.16	0	0.07	4.7	17.7	0.016 U	0.02	45.3
NMP	MSD-09	0	PRE-SHIP	0.040	0	0.0750		15.2			48.4
NMP	MSD-75	0	DUR-SHIP	0.04	0	0.0800 U		15.2			46.9
NMQ	MSD-36	0	PRE-SHIP	20.0	57.8	0.0330		6.29			26.3
NMQ	MSD-84-D	1	DUR-SHIP	35.3	55.4	0.05 U		8.33			34.7
NMQ	MSD-84-D	2	DUR-SHIP	26.5	65.3	0.05 U		9.45			34.3
NMS	MSD-30-D	1	PRE-SHIP	25.9	15.7	0.0420		5.81			41.5

**Table G-7. (cont.)**

Survey Station	Field Sample ID	Replicate	Element	Phi Class		Cadmium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)	Silver (mg/kg dry)	Zinc (mg/kg dry)
				-2.00+ to -1.00 (% unfiltered)	-3.00+ to -2.00 (% unfiltered)						
NMS	MSD-30-D	2	PRE-SHIP	23.4	19.8	0.0330		5.76			30.7
NMS	MSD-67	0	DUR-SHIP	29.0	26.7	0.0500 <i>U</i>		5.33			40.3
NMT	MSD-32	0	PRE-SHIP	40.4	22.5	0.0330		4.92			28.6
NMT	MSD-69	0	DUR-SHIP	47.3	25.2	0.0500 <i>U</i>		3.45			23.0
NMU	MSD-29	0	PRE-SHIP	0.87	0.35	0.0470		8.63			39.1
NMU	MSD-70	0	DUR-SHIP	0.26	0	0.0600 <i>U</i>		10.2			36.4
NMV	MSD-28	0	PRE-SHIP	0.17	0	0.0630		7.39			40.8
NMV	MSD-87	0	DUR-SHIP	6.69	12.1	0.05 <i>U</i>		6.87			32.3
NMW	MSD-27	0	PRE-SHIP	1.3	1.8	0.0490		8.43			37.4
NMW	MSD-88	0	DUR-SHIP	0.06	0	0.05 <i>U</i>		7.63			35.5
NMX	MSD-26	0	PRE-SHIP	0.15	0	0.0650		9.27			42.4
NMX	MSD-89	0	DUR-SHIP	0.55	1.87	0.05 <i>U</i>		7.11			36.6
NMY	MSD-02	0	PRE-SHIP	0.45	0.54	0.0940		8.37			41.6
NMY	MSD-90	0	DUR-SHIP	1.34	0.45	0.06 <i>U</i>		8.0			38.3
NMZ	MSD-01	0	PRE-SHIP	0.09	0.3	0.0810		10.4			43.9
NMZ	MSD-76	0	DUR-SHIP	0.44	0	0.0600 <i>U</i>		10.5			42.1

**Note:**

- estimated value
- undetected; value reported is the full detection limit

**Table G-8. Analytical results for PHASE2RA marine sediment (reference)**

Survey Station	Date	Sample ID	Field Replicate	Element	Total Solids (dry wt. as % of wet wt. or volume)		Percent Clay (% unfiltered)	Percent Silt (% unfiltered)	Phi Class	Phi Class	Phi Class	Phi Class	Phi Class
					(% wet)	(% unfiltered)			3.00+ to 4.00 (% unfiltered)	2.00+ to 3.00 (% unfiltered)	1.00+ to 2.00 (% unfiltered)	0.00+ to 1.00 (% unfiltered)	-1.00+ to 0.00 (% unfiltered)
NM-R1	6/9/2004	MSD-43	0	PRE-SHIP	79.4	0.79	1.3	4.5	35.4	22.7	29.9	4.6	
NM-R1	9/4/2004	MSD-58	0	DUR-SHIP	78.9	0.73	0.45	2.59	73.1	15.9	4.17	2.39	
NM-R2	6/9/2004	MSD-47	0	PRE-SHIP	77.2	1.2	3.4	12.7	55.3	1.9	20.0	4.4	
NM-R2	9/4/2004	MSD-60	0	DUR-SHIP	76.5	1.02	2.05	13.5	55.7	1.72	2.53	3.09	
NM-REF-3	6/9/2004	MSD-45	0	PRE-SHIP	75.3	1.5	3.9	16.5	70.8	1.6	1.8	1.8	
NM-REF-3	9/4/2004	MSD-56	0	DUR-SHIP	76.3	1.2	2.89	16.4	59.9	1.93	2.72	3.15	



**Table G-8. (cont.)**

Survey Station	Date	Sample ID	Field Replicate	Element	Phi Class		Cadmium (mg/kg dry)	Copper (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)	Silver (mg/kg dry)	Zinc (mg/kg dry)
					-2.00+ to -1.00 (% unfiltered)	-3.00+ to -2.00 (% unfiltered)						
NM-R1	6/9/2004	MSD-43	0	PRE-SHIP	0.87	0.44	0.0350	5.39	4.67	0.0100	0.0270 <i>U</i>	35.2
NM-R1	9/4/2004	MSD-58	0	DUR-SHIP	0.96	0.17	0.05 <i>U</i>	4.8	4.34	0.02 <i>U</i>	0.02 <i>U</i>	29.8
NM-R2	6/9/2004	MSD-47	0	PRE-SHIP	1.2	0.53	0.0460	5.85	4.55	0.0100	0.0220 <i>U</i>	40.2
NM-R2	9/4/2004	MSD-60	0	DUR-SHIP	5.94	13.1	0.05 <i>U</i>	4.9	4.41	0.017 <i>U</i>	0.02 <i>U</i>	35.8
NM-REF-3	6/9/2004	MSD-45	0	PRE-SHIP	2.1	0.51	0.0480	5.86	4.60	0.0100	0.0220 <i>U</i>	39.5
NM-REF-3	9/4/2004	MSD-56	0	DUR-SHIP	5.33	4.21	0.05 <i>U</i>	5.4	4.37	0.019 <i>U</i>	0.02	38.2

**Note:** Sampling depths 0–2 cm.

*J* - estimated value

*U* - undetected; value reported is the full detection limit

**Table G-9. Analytical results for PHASE2RA soil invertebrates (site)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume)		Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Cobalt (mg/kg dry)
						(% wet)							
TT2-0010	ECO-P	6/24/2004	SI0011	0	20.2	202	0.063 <i>J</i>	0.17	45.3 <i>J</i>	7.13	0.56	0.139	
TT2-0100	ECO-P	6/20/2004	SI0007	0	23.8	47.6	0.021	0.1	17.5	3.09	0.4	0.066	
TT2-1000	ECO-P	6/21/2004	SI0008	0	19.2	17.4	0.005 <i>U</i>	0.07	6.89	1.14	0.3 <i>U</i>	0.062	
TT3-0010	ECO-R	7/1/2004	SI0014	0	22.9	151	0.037 <i>J</i>	0.25	71.8 <i>J</i>	4.31	0.5 <i>U</i>	0.134	
TT3-0100	ECO-R	7/1/2004	SI0015	0	23.5	79.8	0.018 <i>J</i>	0.14	29.9 <i>J</i>	4.51	0.5 <i>U</i>	0.161	
TT3-1000	ECO-R	7/2/2004	SI0016	0	26.3	12.5	0.005 <i>UJ</i>	0.06	6.82 <i>J</i>	1.05	0.5 <i>U</i>	0.031	
TT5-2000	ECO-P	6/14/2004	SI0001	0	21.1	14.1	0.009	0.2	4.61	3.53	0.3	0.059	
TT5_0010	ECO-P	6/16/2004	SI0005	0	22.3	64.1	0.163	0.2	18.8	19.9	0.4	0.102	
TT5_0010	ECO-P	6/16/2004	SI0006	0	26.5	126	0.116	0.19	32.9	3.41	0.5	0.175	
TT5_0100	ECO-P	6/21/2004	SI0009	0	13.4	212	0.100	0.18	73.3	1.17	0.5	0.20	
TT5_0100	ECO-P	6/21/2004	SI0010	0	22.2	60.7	0.062	0.16	19.6	5.11	0.4	0.131	
TT5_1000	ECO-P	6/16/2004	SI0002-D	1	22.1	19.1	0.018	0.09	6.12	4.82	0.3 <i>U</i>	0.057	
TT5_1000	ECO-P	6/16/2004	SI0002-D	2	21.2	19.0	0.014	0.13	5.4	4.56	0.3 <i>U</i>	0.051	
TT5_1000	ECO-P	6/16/2004	SI0004	0	24.4	19.5	0.022	0.1	5.76	0.379	0.3 <i>U</i>	0.054	
TT6-0010	ECO-M	7/4/2004	SI0017	0	23.4	58.0	0.017 <i>J</i>	0.12	52.5 <i>J</i>	5.98	0.5 <i>U</i>	0.07	
TT6-0100	ECO-M	6/29/2004	SI0013	0	21.2	78.3	0.027 <i>J</i>	0.13	108 <i>J</i>	13.0	0.5 <i>U</i>	0.087	
TT6-1000	ECO-M	6/25/2004	SI0012	0	21.3	15.6	0.016 <i>J</i>	0.06	12.7 <i>J</i>	5.8	0.5 <i>U</i>	0.024	

**Table G-9. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Lead (mg/kg dry)	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
TT2-0010	ECO-P	6/24/2004	SI0011	0	6.38 <i>J</i>	0.11	0.287	0.4 <i>U</i>	0.015	0.41	407 <i>J</i>
TT2-0100	ECO-P	6/20/2004	SI0007	0	2.88	0.1	0.279	0.6	0.007	0.7 <i>U</i>	236
TT2-1000	ECO-P	6/21/2004	SI0008	0	1.05	0.1	0.325	0.9	0.002	0.7 <i>U</i>	232
TT3-0010	ECO-R	7/1/2004	SI0014	0	4.3 <i>J</i>	0.21	0.274	0.4 <i>U</i>	0.014	0.49	205 <i>J</i>
TT3-0100	ECO-R	7/1/2004	SI0015	0	3.08 <i>J</i>	0.24	0.225	0.4 <i>U</i>	0.019	0.4 <i>U</i>	235 <i>J</i>
TT3-1000	ECO-R	7/2/2004	SI0016	0	0.45 <i>J</i>	0.07	0.447	0.4 <i>U</i>	0.004	0.4 <i>U</i>	171 <i>J</i>
TT5-2000	ECO-P	6/14/2004	SI0001	0	1.77	0.13	0.243	0.9	0.003	0.7 <i>U</i>	539
TT5_0010	ECO-P	6/16/2004	SI0005	0	10.1	0.18	0.211	1.6	0.018	0.7 <i>U</i>	602
TT5_0010	ECO-P	6/16/2004	SI0006	0	23.2	0.12	0.34	0.4	0.058	0.7 <i>U</i>	235
TT5_0100	ECO-P	6/21/2004	SI0009	0	24.1	0.09	0.543	0.4 <i>U</i>	0.032	0.7 <i>U</i>	274
TT5_0100	ECO-P	6/21/2004	SI0010	0	8.27	0.14	0.286	0.6	0.015	0.7 <i>U</i>	308
TT5_1000	ECO-P	6/16/2004	SI0002-D	1	2.65	0.17	0.169	0.9	0.006	0.7 <i>U</i>	488
TT5_1000	ECO-P	6/16/2004	SI0002-D	2	2.15	0.22	0.161	0.8	0.005	0.7 <i>U</i>	430
TT5_1000	ECO-P	6/16/2004	SI0004	0	3.18	0.1	0.412	0.6	0.011	0.7 <i>U</i>	143
TT6-0010	ECO-M	7/4/2004	SI0017	0	2.07 <i>J</i>	0.07	0.229	0.4 <i>U</i>	0.015	0.4 <i>U</i>	249 <i>J</i>
TT6-0100	ECO-M	6/29/2004	SI0013	0	10.1 <i>J</i>	0.12	0.335	0.4 <i>U</i>	0.02	0.4 <i>U</i>	310 <i>J</i>
TT6-1000	ECO-M	6/25/2004	SI0012	0	1.31 <i>J</i>	0.05	0.827	0.4 <i>U</i>	0.014	0.4 <i>U</i>	224 <i>J</i>

**Note:**

- ECO-M - stations outside the mine's solid waste permit boundary and north of Anxiety Ridge Creek
- ECO-P - stations in port ambient air boundary or ± 2 km from the DMTS road in the vicinity of the port
- ECO-R - stations ± 2 km from the DMTS road corridor, and between the port and mine assessment units
- J* - estimated value
- U* - undetected; value reported is the full detection limit

**Table G-10. Analytical results for PHASE2RA soil invertebrates (reference)**

Survey Station	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume) (% wet)	Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Cobalt (mg/kg dry)	Lead (mg/kg dry)
TS-REF-5	7/5/2004	SI0018	0	23.8	5.6	0.005 <i>UJ</i>	0.05	5.63 <i>J</i>	0.96	0.5 <i>U</i>	0.029	0.15 <i>J</i>

**Table G-10. (cont.)**

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Survey Station	Date	Field Sample ID	Replicate	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
TS-REF-5	7/5/2004	SI0018	0	0.09	0.324	1.3 <i>U</i>	0.002	0.4 <i>U</i>	214 <i>J</i>

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**Note:**     *J* - estimated value  
              *U* - undetected; value reported is the full detection limit

**Table G-11. Analytical results for PHASE2RA stream invertebrates (site)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume) (% wet)	Cadmium (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)	Zinc (mg/kg dry)
AC-R	ECO-R	6/27/2004	BT0004	0	14.4	0.228	4.43 <i>J</i>	0.09	87.8 <i>J</i>
ARC-R	ECO-R	6/27/2004	BT0001	0	13.6	0.803	10.9 <i>J</i>	0.07 <i>U</i>	96.2 <i>J</i>
OR-R	ECO-R	6/27/2004	BT0002-D	1	13.6	0.373	4.36 <i>J</i>	0.08	74.9 <i>J</i>
OR-R	ECO-R	6/27/2004	BT0002-D	2	15.0	0.356	5.96 <i>J</i>	0.07	83.0 <i>J</i>

**Note:** ECO-R - stations ± 2 km from the DMTS road corridor, and between the port and mine assessment units

*J* - estimated value

*U* - undetected; value reported is the full detection limit

**Table G-12. Analytical results for PHASE2RA stream invertebrates (reference)**

Survey Station	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume) (% wet)	Cadmium (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)	Zinc (mg/kg dry)
ST-REF-3	7/1/2004	BT0007	0	20.4	0.696	8.14 <i>J</i>	0.07	137 <i>J</i>
ST-REF-6	7/1/2004	BT0008	0	10.4	0.347	2.73 <i>J</i>	0.14	91.3 <i>J</i>

**Note:** *J* - estimated value  
*U* - undetected; value reported is the full detection limit

**Table G-13. Analytical results for PHASE2RA lagoon invertebrates (site)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume) (% wet)	Cadmium (mg/kg dry)	Lead (mg/kg dry)	Zinc (mg/kg dry)
NLF	ECO-P	7/2/2004	BT0009	0	10.6	1.29	8.88 <i>J</i>	258 <i>J</i>
NLK	ECO-P	6/30/2004	BT0006	0	12.2	0.425	8.59 <i>J</i>	228 <i>J</i>
PLNL	ECO-P	6/29/2004	BT0005	0	18.3	1.09	37.1 <i>J</i>	272 <i>J</i>

**Note:** ECO-P - stations in port ambient air boundary or  $\pm$  2 km from the DMTS road in the vicinity of the port  
*J* - estimated value  
*U* - undetected; value reported is the full detection limit



**Table G-14. Analytical results for PHASE2RA lagoon invertebrates (reference)**

Survey Station	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume) (% wet)	Cadmium (mg/kg dry)	Lead (mg/kg dry)	Zinc (mg/kg dry)
CL-REF-1	7/3/2004	BT0010	0	19.1	0.337	24.6 <i>J</i>	77.9 <i>J</i>
CL-REF-2	7/4/2004	BT0011	0	10.3	0.979	3.3 <i>J</i>	171 <i>J</i>

**Note:** *J* - estimated value  
*U* - undetected; value reported is the full detection limit

**Table G-15. Analytical results for PHASE2RA small mammal tissue (site)**

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Field Replicate	Mass (g)	Total Solids (dry wt. as % of wet wt. or volume)				
								(% wet)	Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)
TT2-0100	ECO-P	6/17/2004	SM0010	<i>Clethrionomys</i>	<i>rutilus</i>	0	24.8	29.0	70	0.01	0.1	35.4
TT2-0100	ECO-P	6/18/2004	SM0012	<i>Clethrionomys</i>	<i>rutilus</i>	0	20	28.3	202	0.017	0.1	21.8
TT2-0100	ECO-P	6/18/2004	SM0013	<i>Clethrionomys</i>	<i>rutilus</i>	0	16.5	25.7	352	0.025	0.11	33.6
TT2-1000	ECO-P	6/17/2004	SM0011	<i>Clethrionomys</i>	<i>rutilus</i>	0	22.1	29.2	70.8	0.005	0.09	26.4
TT3-0100	ECO-R	6/22/2004	SM0015	<i>Sorex</i>	<i>cinereus</i>	0	2	23.6	61.3	0.018	0.1	27.1
TT3-0100	ECO-R	6/22/2004	SM0016	<i>Sorex</i>	<i>tundrensis</i>	0	6.9	26.8	118	0.02	0.11	62.2
TT3-1000	ECO-R	6/22/2004	SM0014	<i>Clethrionomys</i>	<i>rutilus</i>	0	16.1	26.6	235	0.012	0.1	65.6
TT3-1000	ECO-R	6/22/2004	SM0019	<i>Sorex</i>	<i>cinereus</i>	0	3.7	23.9	14.5	0.015	0.09	60.5
TT3-1000	ECO-R	7/2/2004	SM0018	<i>Clethrionomys</i>	<i>rutilus</i>	0	20	25.8	14.2	0.005	0.08	39.0
TT3_0020	ECO-R	7/1/2004	SM0020	<i>Sorex</i>	<i>cinereus</i>	0	1.6	23.1	237	0.047	0.2	74.0
TT5-1000	ECO-P	6/14/2004	SM0001	<i>Clethrionomys</i>	<i>rutilus</i>	0	16.6	24.4	59.6	0.012	0.13	19.9
TT5-1000	ECO-P	6/15/2004	SM0003	<i>Clethrionomys</i>	<i>rutilus</i>	0	26.3	30.6	112	0.012	0.11	36.1
TT5-1000	ECO-P	6/16/2004	SM0007	<i>Clethrionomys</i>	<i>rutilus</i>	0	23	26.2	80.8	0.009	0.11	26.0
TT5-2000	ECO-P	6/13/2004	SM0006	<i>Sorex</i>	<i>cinereus</i>	0	3.4	22.2	26.7	0.037	0.12	16.6
TT5_0020	ECO-P	6/14/2004	SM0002	<i>Lemmus</i>	<i>sibiricus</i>	0	26.8	31.1	569	0.087	0.19	109
TT5_0020	ECO-P	6/15/2004	SM0004	<i>Microtus</i>	<i>oeconomus</i>	0	27.5	28.9	1,100	0.046	0.13	42.4
TT5_0020	ECO-P	6/15/2004	SM0005	<i>Lemmus</i>	<i>sibiricus</i>	0	43.4	30.6	1,200	0.039	0.14	69.5
TT5_0020	ECO-P	6/16/2004	SM0008	<i>Microtus</i>	<i>oeconomus</i>	0	25.7	27.6	279	0.051	0.16	68.8
TT5_0020	ECO-P	6/16/2004	SM0009	<i>Microtus</i>	<i>oeconomus</i>	0	19.8	24.3	2,040	0.051	0.14	55.5

**Table G-15. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Field Replicate	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Cobalt (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)
TT2-0100	ECO-P	6/17/2004	SM0010	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.227	1.9	0.213	4.18	0.027	0.622
TT2-0100	ECO-P	6/18/2004	SM0012	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.129	3.1	0.24	3.89	0.023	0.763
TT2-0100	ECO-P	6/18/2004	SM0013	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.193	2.1	0.276	4.25	0.032	0.656
TT2-1000	ECO-P	6/17/2004	SM0011	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.115	2.1	0.206	1.18	0.027	0.609
TT3-0100	ECO-R	6/22/2004	SM0015	<i>Sorex</i>	<i>cinereus</i>	0	0.091	0.9 J	0.091	4.37	0.359	0.385
TT3-0100	ECO-R	6/22/2004	SM0016	<i>Sorex</i>	<i>tundrensis</i>	0	1.02	1.4 J	0.179	8.83	13.5	0.6
TT3-1000	ECO-R	6/22/2004	SM0014	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.034	2.8 J	0.124	1.74	0.03	0.396
TT3-1000	ECO-R	6/22/2004	SM0019	<i>Sorex</i>	<i>cinereus</i>	0	0.184	0.9 J	0.103	6.79	0.194	0.272
TT3-1000	ECO-R	7/2/2004	SM0018	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.068	1.8 J	0.136	0.967	0.037	0.514
TT3_0020	ECO-R	7/1/2004	SM0020	<i>Sorex</i>	<i>cinereus</i>	0	0.448	1.3 J	0.242	6.42	0.121	0.463
TT5-1000	ECO-P	6/14/2004	SM0001	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.095	3.1	0.171	6.84	0.023	0.817
TT5-1000	ECO-P	6/15/2004	SM0003	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.199	2.3	0.189	15.5	0.021	0.51
TT5-1000	ECO-P	6/16/2004	SM0007	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.106	1.7	0.232	7.86	0.026	0.842
TT5-2000	ECO-P	6/13/2004	SM0006	<i>Sorex</i>	<i>cinereus</i>	0	0.093	1.8	0.109	14.9	0.106	0.364
TT5_0020	ECO-P	6/14/2004	SM0002	<i>Lemmus</i>	<i>sibiricus</i>	0	0.538	3.3	0.314	19.0	0.044	0.61
TT5_0020	ECO-P	6/15/2004	SM0004	<i>Microtus</i>	<i>oeconomus</i>	0	0.536	4.5	0.369	16.9	0.009 U	1.0
TT5_0020	ECO-P	6/15/2004	SM0005	<i>Lemmus</i>	<i>sibiricus</i>	0	0.255	3.7	0.36	37.6	0.034	0.468
TT5_0020	ECO-P	6/16/2004	SM0008	<i>Microtus</i>	<i>oeconomus</i>	0	0.378	3.4	0.26	7.85	0.012 U	0.678
TT5_0020	ECO-P	6/16/2004	SM0009	<i>Microtus</i>	<i>oeconomus</i>	0	0.663	2.4	0.489	11.1	0.014	1.26

**Table G-15. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Field Replicate	Selenium (mg/kg dry)	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
TT2-0100	ECO-P	6/17/2004	SM0010	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.4	0.004	0.7 U	103
TT2-0100	ECO-P	6/18/2004	SM0012	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.3 U	0.006	0.7 U	108
TT2-0100	ECO-P	6/18/2004	SM0013	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.3 U	0.008	0.7 U	114
TT2-1000	ECO-P	6/17/2004	SM0011	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.3 U	0.002	0.7 U	108
TT3-0100	ECO-R	6/22/2004	SM0015	<i>Sorex</i>	<i>cinereus</i>	0	0.7	0.009	0.7 U	91.9
TT3-0100	ECO-R	6/22/2004	SM0016	<i>Sorex</i>	<i>tundrensis</i>	0	1.2	0.011	0.7 U	125
TT3-1000	ECO-R	6/22/2004	SM0014	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.3 U	0.002 U	0.7 U	97.0
TT3-1000	ECO-R	6/22/2004	SM0019	<i>Sorex</i>	<i>cinereus</i>	0	0.8	0.01	0.7 U	101
TT3-1000	ECO-R	7/2/2004	SM0018	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.3 U	0.004	0.7 U	87.7
TT3_0020	ECO-R	7/1/2004	SM0020	<i>Sorex</i>	<i>cinereus</i>	0	0.4	0.021	0.9	130
TT5-1000	ECO-P	6/14/2004	SM0001	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.5	0.005	0.7 U	103
TT5-1000	ECO-P	6/15/2004	SM0003	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.4	0.006	0.7 U	117
TT5-1000	ECO-P	6/16/2004	SM0007	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.3 U	0.007	0.7 U	103
TT5-2000	ECO-P	6/13/2004	SM0006	<i>Sorex</i>	<i>cinereus</i>	0	0.8	0.014	0.7 U	108
TT5_0020	ECO-P	6/14/2004	SM0002	<i>Lemmus</i>	<i>sibiricus</i>	0	0.3 U	0.016	0.8	166
TT5_0020	ECO-P	6/15/2004	SM0004	<i>Microtus</i>	<i>oeconomus</i>	0	0.4	0.021	0.8	150
TT5_0020	ECO-P	6/15/2004	SM0005	<i>Lemmus</i>	<i>sibiricus</i>	0	0.3 U	0.009	0.7 U	122
TT5_0020	ECO-P	6/16/2004	SM0008	<i>Microtus</i>	<i>oeconomus</i>	0	0.3 U	0.011	0.7 U	149
TT5_0020	ECO-P	6/16/2004	SM0009	<i>Microtus</i>	<i>oeconomus</i>	0	0.3 U	0.04	0.7 U	156

**Note:** All results for whole organ.

- ECO-P - stations in port ambient air boundary or +/- 2 km from the DMTS road in the vicinity of the port
- ECO-R - stations +/- 2 km from the DMTS road corridor, and between the port and mine assessment units
- J - estimated value
- U - undetected; value reported is the full detection limit

**Table G-16. Analytical results for PHASE2RA small mammal tissue (reference)**

Survey Station	Date	Sample ID	Genus	Species	Field Replicate	Mass (g)	Total Solids (dry wt. as % of wet wt. or volume) (% wet)	Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)
TS-REF-5	7/2/2004	SM0017	<i>Clethrionomys</i>	<i>rutilus</i>	0	14	28.9	78.4	0.007	0.09	44.1	0.1	1.8 J
TS-REF-5	8/1/2004	SM0021	<i>Sorex</i>	<i>cinereus</i>	0	5.9	27.7	5 U	0.005 U	0.12	53.1	0.212	0.6
TS-REF-5	8/1/2004	SM0022	<i>Sorex</i>	<i>cinereus</i>	0	3.5	26.1	5 U	0.005 U	0.12	55.7	0.836	0.8
TS-REF-5	8/1/2004	SM0023	<i>Sorex</i>	<i>cinereus</i>	0	6.1	27.2	5.8	0.005 U	0.14	28.5	0.154	0.7

**Table G-16. (cont.)**

Survey Station	Date	Sample ID	Genus	Species	Field Replicate	Cobalt (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
TS-REF-5	7/2/2004	SM0017	<i>Clethrionomys</i>	<i>rutilus</i>	0	0.155	0.788	0.039	0.631	0.3 <i>U</i>	0.005	0.7 <i>U</i>	110
TS-REF-5	8/1/2004	SM0021	<i>Sorex</i>	<i>cinereus</i>	0	0.168	1.33	0.024	0.332	1	0.007	0.7 <i>U</i>	108
TS-REF-5	8/1/2004	SM0022	<i>Sorex</i>	<i>cinereus</i>	0	0.185	15.9	0.038	0.437	1.1	0.006	0.7 <i>U</i>	121
TS-REF-5	8/1/2004	SM0023	<i>Sorex</i>	<i>cinereus</i>	0	0.201	0.524	0.014	0.429	1	0.007	0.7 <i>U</i>	102

**Note:** All results for whole organ.

*J* - estimated value

*U* - undetected; value reported is the full detection limit

**Table G-17. Analytical results for PHASE2RA sedge and grass (site)**

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Organ	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume)				
								Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	(% wet)
ARC-R	ECO-R	7/1/2004	SE0055	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	18.2	307	0.079 U	1.13	250
NLF	ECO-P	7/2/2004	TH0001	<i>Deschampsia</i>	<i>caespitosa</i>	Whole Plant	0	25.2	21.9	0.067 U	0.11	16.4
NLK	ECO-P	6/30/2004	SE0049-D	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	1	22.4	22.1	0.1 U	0.31	29.1
NLK	ECO-P	6/30/2004	SE0049-D	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	2	24.2	30.3	0.048 U	0.45	14.8
NLK	ECO-P	6/30/2004	SE0050	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	29.1	6.3	0.15 U	0.1	21.6
OR-R	ECO-R	7/1/2004	SE0051	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	24.0	1,900	0.103 U	1.87	208
OR-R	ECO-R	7/1/2004	SE0052	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	26.9	163	0.094 U	0.23	74.0
PLNL	ECO-P	6/28/2004	SE0045	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	23.7	17.4	0.06	0.13	19.5
PLNL	ECO-P	6/28/2004	SE0046	<i>Eriophorum</i>	<i>angustifolium</i>	Whole Plant	0	26.2	4.0 U	0.053 U	0.05 U	14.5
PLNL	ECO-P	6/28/2004	SE0048	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	29.0	8.4	0.078 U	0.05 U	36.7
TP1-0100	ECO-P	6/17/2004	SE0009	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	16.8	68.1	0.74	0.43	21.4
TP1-0100	ECO-P	7/1/2004	SE0054	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	31.4	12.6	0.074 U	0.05 U	26.2
TP1-1000	ECO-P	6/17/2004	SE0008	<i>Carex</i>	sp.	Whole Plant	0	18.5	69.8	0.37	0.31	48.2
TP1-1000	ECO-P	7/1/2004	SE0053	<i>Carex</i>	sp.	Seeds	0	32.6	4.0 U	0.092 U	0.05 U	47.5
TP3	ECO-R	6/20/2004	SE0018-D	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	1	14.9	395 J	0.31 J	0.44	88.5
TP3	ECO-R	6/20/2004	SE0018-D	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	2	19.6	55.2 J	0.06 UJ	0.12	51.5
TP3	ECO-R	6/20/2004	SE0019	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	24.4	10.6 J	0.5 J	0.07 U	44.3
TP4	ECO-R	6/17/2004	SE0011	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	19.0	190	0.51	0.88	289
TP4	ECO-R	6/17/2004	SE0012	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	26.7	17.1	1.44	0.18 U	49.9
TT2-0010	ECO-P	6/17/2004	SE0010	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	34.6	69.2	0.19	0.08	85.0
TT2-0100	ECO-P	6/16/2004	SE0006	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	35.3	17.4	0.21	0.07 U	30.7
TT2-1000	ECO-P	6/16/2004	SE0005	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	36.2	7.0	0.13	0.12	20
TT3-0010	ECO-R	6/18/2004	SE0013	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	37.0	72.0	0.13	0.09	84.3
TT3-0100	ECO-R	6/20/2004	SE0022	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	33.8	17.9 J	0.03 UJ	0.07 U	44.5
TT3-1000	ECO-R	6/20/2004	SE0021	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	34.0	5.4 J	0.03 UJ	0.07 U	34.0
TT5-0010	ECO-P	6/12/2004	SE0001	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	37.6	93.8	0.22	0.13	85.8 J
TT5-0100	ECO-P	6/15/2004	SE0004	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	34.2	26.1	0.17	0.07 U	39.7
TT5-1000	ECO-P	6/13/2004	SE0002-D	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	1	36.1	8.8	0.19	0.07 U	26.6
TT5-1000	ECO-P	6/16/2004	SE0002-D	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	2	35.3	8.0	0.09 U	0.07 U	22.3
TT5-2000	ECO-P	6/15/2004	SE0003	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	35.7	5.0 U	0.08 U	0.07 U	18.6 J
TT6-0010	ECO-M	6/25/2004	SE0042	<i>Carex</i>	<i>microchaeta</i>	Blades	0	33.6	13.1	0.06 U	0.05 U	128
TT6-0100	ECO-M	6/21/2004	SE0024	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	36.4	13.8 J	0.05 U	0.05 U	47.4 J
TT6-0100	ECO-M	6/21/2004	SE0025	<i>Carex</i>	<i>bigelowii</i>	Blades	0	39.2	8.6 J	0.05 U	0.05 U	87.7 J
TT6-1000	ECO-M	6/21/2004	SE0023	<i>Carex</i>	<i>bigelowii</i>	Blades	0	38.7	5.5 UJ	0.06 U	0.05 U	33.6 J
TT6-2000	ECO-M	6/22/2004	SE0028	<i>Carex</i>	<i>podocarpa</i>	Blades	0	27.1	8.6 J	0.14 U	0.05 U	66.7 J
TT7-0010	ECO-M	6/22/2004	SE0027	<i>Carex</i>	<i>microchaeta</i>	Blades	0	32.8	12.5 J	0.1 U	0.08	77.0 J
TT7-1000	ECO-M	6/22/2004	SE0026	<i>Carex</i>	<i>scirpoidea</i>	Blades	0	32.1	12.2 J	0.08 U	0.05 U	78.4 J
TT7-2000	ECO-M	7/4/2004	SE0061	<i>Carex</i>	<i>microchaeta</i>	Blades	0	37.1	7.2	0.04 U	0.05 U	62.3
TT7-2000	ECO-M	7/4/2004	SE0062	<i>Carex</i>	<i>scirpoidea</i>	Blades	0	35.7	14.9	0.062 U	0.07 U	93.6

**Table G-17. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Organ	Field Replicate	Total Solids	Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)
								(dry wt. as % of wet wt. or volume) (% wet)				
TT8-0010	ECO-R	6/19/2004	SE0017	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	35.3	104	0.16	0.11	109
TT8-0100	ECO-R	6/19/2004	SE0015-D	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	1	34.3	24.3	0.08 U	0.07 U	72.6
TT8-0100	ECO-R	6/19/2004	SE0015-D	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	2	35.6	22.6	0.1 U	0.07 U	69.0
TT8-1000	ECO-R	6/19/2004	SE0014	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	29.1	6.9	0.07 U	0.07 U	32.3



Table G-17. (cont.)

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Organ	Field Replicate	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Cobalt (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)
ARC-R	ECO-R	7/1/2004	SE0055	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.638	3.1	0.92	14.3	0.06
NLF	ECO-P	7/2/2004	TH0001	<i>Deschampsia</i>	<i>caespitosa</i>	Whole Plant	0	0.143	0.4 J	0.27	1.94	0.035
NLK	ECO-P	6/30/2004	SE0049-D	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	1	0.177	0.4	0.45	5.17	0.022
NLK	ECO-P	6/30/2004	SE0049-D	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	2	0.051	0.3 J	0.48	1.4	0.039
NLK	ECO-P	6/30/2004	SE0050	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.056	0.4	0.22	0.28	0.037
OR-R	ECO-R	7/1/2004	SE0051	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.492	16.2	2.96	8.27	0.042
OR-R	ECO-R	7/1/2004	SE0052	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.137	0.6	0.39	2.6	0.041
PLNL	ECO-P	6/28/2004	SE0045	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.078	0.2 U	0.15	1.81	0.026
PLNL	ECO-P	6/28/2004	SE0046	<i>Eriophorum</i>	<i>angustifolium</i>	Whole Plant	0	0.034	0.4	0.03	0.76	0.045
PLNL	ECO-P	6/28/2004	SE0048	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.133	0.4	0.08	0.75	0.042
TP1-0100	ECO-P	6/17/2004	SE0009	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	1.71	6.8	2.23	48.1	0.06
TP1-0100	ECO-P	7/1/2004	SE0054	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.062	0.4	0.14	1.6	0.044
TP1-1000	ECO-P	6/17/2004	SE0008	<i>Carex</i>	sp.	Whole Plant	0	0.735	3.1	22.5	16.1	0.05
TP1-1000	ECO-P	7/1/2004	SE0053	<i>Carex</i>	sp.	Seeds	0	0.079	0.4	0.7	0.79	0.037
TP3	ECO-R	6/20/2004	SE0018-D	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	1	0.306	4.0	0.795	5.01	0.09
TP3	ECO-R	6/20/2004	SE0018-D	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	2	0.131	1.2 U	1.49	1.96	0.04
TP3	ECO-R	6/20/2004	SE0019	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.143	0.4 U	0.426	0.49	0.04
TP4	ECO-R	6/17/2004	SE0011	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.559	18.4	1.38	21.1	0.05
TP4	ECO-R	6/17/2004	SE0012	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.043	1.3 U	0.497	0.89	0.05
TT2-0010	ECO-P	6/17/2004	SE0010	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.256	1.4 U	0.133	5.63	0.05
TT2-0100	ECO-P	6/16/2004	SE0006	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.05	0.7 U	0.028	1.01	0.03
TT2-1000	ECO-P	6/16/2004	SE0005	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.021	0.3 U	0.033	0.16	0.03
TT3-0010	ECO-R	6/18/2004	SE0013	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.138	3.3	0.162	4.06	0.03
TT3-0100	ECO-R	6/20/2004	SE0022	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.052	0.4 U	0.048	0.91	0.04
TT3-1000	ECO-R	6/20/2004	SE0021	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.02	0.3 U	0.076	0.18	0.03
TT5-0010	ECO-P	6/12/2004	SE0001	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.567	1.3 U	0.159	10.8	0.05
TT5-0100	ECO-P	6/15/2004	SE0004	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.104	0.6 U	0.046	2.33	0.03
TT5-1000	ECO-P	6/13/2004	SE0002-D	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	1	0.09	0.4	0.04	2.10	0.04
TT5-1000	ECO-P	6/16/2004	SE0002-D	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	2	0.076	0.4 U	0.038	1.57	0.04
TT5-2000	ECO-P	6/15/2004	SE0003	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.036	0.3 U	0.016	0.33	0.04
TT6-0010	ECO-M	6/25/2004	SE0042	<i>Carex</i>	<i>microchaeta</i>	Blades	0	0.121	0.4 UJ	0.09	0.71	0.04
TT6-0100	ECO-M	6/21/2004	SE0024	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.053	0.3 UJ	0.01 U	0.33	0.017
TT6-0100	ECO-M	6/21/2004	SE0025	<i>Carex</i>	<i>bigelowii</i>	Blades	0	0.122	0.4 UJ	0.04	1.32	0.026
TT6-1000	ECO-M	6/21/2004	SE0023	<i>Carex</i>	<i>bigelowii</i>	Blades	0	0.038	0.5 UJ	0.03	0.5 U	0.025
TT6-2000	ECO-M	6/22/2004	SE0028	<i>Carex</i>	<i>podocarpa</i>	Blades	0	0.398	0.3 UJ	0.09	1.10	0.03
TT7-0010	ECO-M	6/22/2004	SE0027	<i>Carex</i>	<i>microchaeta</i>	Blades	0	0.403	0.3 UJ	0.11	2.24	0.022
TT7-1000	ECO-M	6/22/2004	SE0026	<i>Carex</i>	<i>scirpoidea</i>	Blades	0	0.172	0.6 UJ	0.04	5.67	0.036
TT7-2000	ECO-M	7/4/2004	SE0061	<i>Carex</i>	<i>microchaeta</i>	Blades	0	0.197	0.3	0.05	1.95	0.045
TT7-2000	ECO-M	7/4/2004	SE0062	<i>Carex</i>	<i>scirpoidea</i>	Blades	0	0.378	0.4 UJ	0.07	7.96	0.035

**Table G-17. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Organ	Field Replicate	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Cobalt (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)
TT8-0010	ECO-R	6/19/2004	SE0017	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.164	4.5	0.209	4.89	0.04
TT8-0100	ECO-R	6/19/2004	SE0015-D	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	1	0.085	0.8 U	0.069	1.17	0.03
TT8-0100	ECO-R	6/19/2004	SE0015-D	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	2	0.056	0.8 U	0.052	1.4	0.04
TT8-1000	ECO-R	6/19/2004	SE0014	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.034	0.3 U	0.019	0.34	0.02 U

Table G-17. (cont.)

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Organ	Field Replicate	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
ARC-R	ECO-R	7/1/2004	SE0055	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.309	0.3	0.027	0.7	87.4
NLF	ECO-P	7/2/2004	TH0001	<i>Deschampsia</i>	<i>caespitosa</i>	Whole Plant	0	0.199	0.1	0.006	0.3 U	51.8
NLK	ECO-P	6/30/2004	SE0049-D	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	1	0.154	0.4	0.012	0.3 U	53.2
NLK	ECO-P	6/30/2004	SE0049-D	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	2	0.131	0.2	0.003	0.3 U	36.4
NLK	ECO-P	6/30/2004	SE0050	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.581	0.1 U	0.004	0.3 U	55.3
OR-R	ECO-R	7/1/2004	SE0051	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.238	0.3	0.033	4.8	59.4
OR-R	ECO-R	7/1/2004	SE0052	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.202	0.1	0.005	0.5	57.1
PLNL	ECO-P	6/28/2004	SE0045	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.231	0.2	0.004	0.3 U	40.5
PLNL	ECO-P	6/28/2004	SE0046	<i>Eriophorum</i>	<i>angustifolium</i>	Whole Plant	0	0.077	0.1 U	0.004	0.3 U	49.7
PLNL	ECO-P	6/28/2004	SE0048	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.341	0.1 U	0.003	0.3 U	59.1
TP1-0100	ECO-P	6/17/2004	SE0009	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.261	0.3	0.085	0.4 U	351
TP1-0100	ECO-P	7/1/2004	SE0054	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.159	0.1 U	0.002 U	0.3 U	65.0
TP1-1000	ECO-P	6/17/2004	SE0008	<i>Carex</i>	sp.	Whole Plant	0	0.108	0.2 U	0.02	0.4 U	87.6
TP1-1000	ECO-P	7/1/2004	SE0053	<i>Carex</i>	sp.	Seeds	0	0.069	0.1 U	0.002 U	0.3 U	58.5
TP3	ECO-R	6/20/2004	SE0018-D	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	1	1.65	0.2 U	0.025	1.8 J	86.3
TP3	ECO-R	6/20/2004	SE0018-D	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	2	0.976	0.2 U	0.008	0.5 U	63.3
TP3	ECO-R	6/20/2004	SE0019	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	1.49	0.2 U	0.002 U	0.6 UJ	57.2
TP4	ECO-R	6/17/2004	SE0011	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.321	0.2 U	0.283	0.5	104
TP4	ECO-R	6/17/2004	SE0012	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.182	0.5 U	0.005 U	1.4 U	59.6
TT2-0010	ECO-P	6/17/2004	SE0010	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.322	0.2 U	0.007	0.4 U	89.4
TT2-0100	ECO-P	6/16/2004	SE0006	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.345	0.2 U	0.002 U	0.4 U	78.4
TT2-1000	ECO-P	6/16/2004	SE0005	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.379	0.2 U	0.002 U	0.4 U	52.5
TT3-0010	ECO-R	6/18/2004	SE0013	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.177	0.2 U	0.032	0.4 U	40.4
TT3-0100	ECO-R	6/20/2004	SE0022	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.551	0.2 U	0.002 U	0.4 U	41.3
TT3-1000	ECO-R	6/20/2004	SE0021	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.403	0.2 U	0.002 U	0.5 U	51.3
TT5-0010	ECO-P	6/12/2004	SE0001	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.239	0.2 U	0.01	0.4 U	209
TT5-0100	ECO-P	6/15/2004	SE0004	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.172	0.2 U	0.002 U	0.4 U	67.7
TT5-1000	ECO-P	6/13/2004	SE0002-D	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	1	0.490	0.2 U	0.005	0.5 U	74.9
TT5-1000	ECO-P	6/16/2004	SE0002-D	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	2	0.391	0.2 U	0.002 U	0.4 U	64.0
TT5-2000	ECO-P	6/15/2004	SE0003	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.618	0.2 U	0.009	0.5 U	72.8
TT6-0010	ECO-M	6/25/2004	SE0042	<i>Carex</i>	<i>microchaeta</i>	Blades	0	0.463	0.3	0.004	0.5 U	58.9 J
TT6-0100	ECO-M	6/21/2004	SE0024	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	1.15	0.1 U	0.002	0.5 U	47.4 J
TT6-0100	ECO-M	6/21/2004	SE0025	<i>Carex</i>	<i>bigelowii</i>	Blades	0	1.72	0.1	0.007	0.4 U	53.0 J
TT6-1000	ECO-M	6/21/2004	SE0023	<i>Carex</i>	<i>bigelowii</i>	Blades	0	0.454	0.4	0.002	0.5 U	33.0 J
TT6-2000	ECO-M	6/22/2004	SE0028	<i>Carex</i>	<i>podocarpa</i>	Blades	0	0.134	0.1 U	0.007	0.4 U	71.4 J
TT7-0010	ECO-M	6/22/2004	SE0027	<i>Carex</i>	<i>microchaeta</i>	Blades	0	0.556	0.1 U	0.035	0.5 U	166 J
TT7-1000	ECO-M	6/22/2004	SE0026	<i>Carex</i>	<i>scirpoidea</i>	Blades	0	0.888	0.1 U	0.006	0.5 U	43.4 J
TT7-2000	ECO-M	7/4/2004	SE0061	<i>Carex</i>	<i>microchaeta</i>	Blades	0	1.26	0.2	0.009	0.3 U	49.7
TT7-2000	ECO-M	7/4/2004	SE0062	<i>Carex</i>	<i>scirpoidea</i>	Blades	0	0.669	0.1 U	0.007	0.4 U	65.2

**Table G-17. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Organ	Field Replicate	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
TT8-0010	ECO-R	6/19/2004	SE0017	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.816	0.3	0.007	0.4 <i>U</i>	51.0
TT8-0100	ECO-R	6/19/2004	SE0015-D	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	1	0.939	0.2 <i>U</i>	0.002 <i>U</i>	0.5 <i>U</i>	37.1
TT8-0100	ECO-R	6/19/2004	SE0015-D	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	2	0.595	0.2 <i>U</i>	0.003 <i>U</i>	0.4 <i>U</i>	34.3
TT8-1000	ECO-R	6/19/2004	SE0014	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.44	0.2 <i>U</i>	0.01	0.4 <i>U</i>	48.4

**Note:**

- ECO-M - stations outside the mine's solid waste permit boundary and north of Anxiety Ridge Creek
- ECO-P - stations in port ambient air boundary or +/- 2 km from the DMTS road in the vicinity of the port
- ECO-R - stations +/- 2 km from the DMTS road corridor, and between the port and mine assessment units
- U* - undetected; value reported is the full detection limit
- J* - estimated value

**Table G-18. Analytical results for PHASE2RA sedge and grass (reference)**

Survey Station	Date	Sample ID	Genus	Species	Organ	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume)					
							(% wet)	Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)
CL-REF-1	7/2/2004	SE0057	<i>Eriophorum</i>	<i>angustifolium</i>	Whole Plant	0	26.7	8.0	0.049 U	0.05 U	16.4	0.034
CL-REF-1	7/2/2004	SE0058	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	30.9	13.2	0.039 U	0.05 U	18.7	0.072
CL-REF-1	7/2/2004	SE0059	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	34.7	12.0	0.128 U	0.05 U	28.1	0.104
CL-REF-2	7/3/2004	SE0060	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	25.2	23.5	0.05 U	0.2	32.4	0.197
CL-REF3b	7/4/2004	SE0063	<i>Eriophorum</i>	<i>angustifolium</i>	Whole Plant	0	18.3	5.8	0.021 U	0.06	26.9	0.031
CL-REF3b	7/4/2004	TH0002	<i>Deschampsia</i>	<i>beringensis</i>	Whole Plant	0	29.7	34.8	0.041 U	0.07	35.5	0.046
ST-REF-3	6/26/2004	SE0043	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	20.1	261	0.09 U	2.93	50.6	0.18
ST-REF-3	6/26/2004	SE0044	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	21.5	5.6	0.11 U	0.26	30.2	0.04
ST-REF-5	6/24/2004	SE0035	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	21.4	290	0.12 U	0.32	73.3	0.132
ST-REF-5	6/24/2004	SE0036	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	25.8	5.4	0.08 U	0.09	46.9	0.071
ST-REF-6	6/24/2004	SE0039	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	20.4	396	0.1 U	1.08	64.0	0.057
TP-REF-2	6/24/2004	SE0037	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	21.2	48.2	0.06 U	0.5	60.8	0.026
TP-REF-2	6/24/2004	SE0038	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	27.2	5.0 U	0.06 U	0.18	42.3	0.119
TP-REF-3	6/23/2004	SE0029	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	21.3	1,300	0.19 U	1.96	74.9	0.081
TP-REF-3	6/23/2004	SE0030	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	16.3	11.1	0.14 U	0.07	51.2	0.199
TP-REF-5	6/24/2004	SE0033	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	19.2	714	0.15 U	9.36	117	0.179
TS-REF-5	6/23/2004	SE0031	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	37.4	8.3	0.04 U	0.05 U	34.7	0.071
TS-REF-5	7/1/2004	SE0056	<i>Carex</i>	<i>bigelowii</i>	Blades	0	38.7	8.2	0.073 U	0.05 U	25.6	0.035
TS-REF-7	6/24/2004	SE0032	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	29.3	6.8	0.03 U	0.05 U	28.3	0.032
TS-REF11	6/25/2004	SE0041	<i>Carex</i>	<i>bigelowii</i>	Blades	0	35.3	6.8	0.04 U	0.05	16.7	0.025

Table G-18. (cont.)

Survey Station	Date	Sample ID	Genus	Species	Organ	Field Replicate	Chromium (mg/kg dry)	Cobalt (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)
CL-REF-1	7/2/2004	SE0057	<i>Eriophorum</i>	<i>angustifolium</i>	Whole Plant	0	0.3	0.1	0.82	0.052	0.104	0.1 U
CL-REF-1	7/2/2004	SE0058	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.4	0.31	0.69	0.055	0.072	0.1 U
CL-REF-1	7/2/2004	SE0059	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.6	0.16	2.27	0.046	0.086	0.1 U
CL-REF-2	7/3/2004	SE0060	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.4	0.44	3.28	0.029	0.45	0.2
CL-REF3b	7/4/2004	SE0063	<i>Eriophorum</i>	<i>angustifolium</i>	Whole Plant	0	0.5 J	0.06	0.45	0.04	0.362	0.1
CL-REF3b	7/4/2004	TH0002	<i>Deschampsia</i>	<i>beringensis</i>	Whole Plant	0	0.3 J	1.38	0.62	0.054	0.238	0.1 U
ST-REF-3	6/26/2004	SE0043	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	3.7 J	2.17	1.28	0.032	0.231	0.5
ST-REF-3	6/26/2004	SE0044	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.5 UJ	0.71	0.17	0.039	0.3	0.2
ST-REF-5	6/24/2004	SE0035	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	2.6	1.13	0.47	0.034	0.378	0.1 U
ST-REF-5	6/24/2004	SE0036	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.3 U	0.42	0.21	0.031	0.506	0.1 U
ST-REF-6	6/24/2004	SE0039	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	4.1	1.62	0.74	0.025	0.147	0.2
TP-REF-2	6/24/2004	SE0037	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	1.5	1.63	0.4	0.041	0.211	0.1 U
TP-REF-2	6/24/2004	SE0038	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.4 U	1.34	0.5	0.03	1.08	0.3 U
TP-REF-3	6/23/2004	SE0029	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	55.0	1.72	2.3	0.03	0.9	0.1
TP-REF-3	6/23/2004	SE0030	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.4	0.25	0.37	0.033	0.829	0.1 U
TP-REF-5	6/24/2004	SE0033	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	6.2	4.56	1.1	0.033	0.38	0.2
TS-REF-5	6/23/2004	SE0031	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.3 U	0.04	0.52	0.023	0.422	0.1 U
TS-REF-5	7/1/2004	SE0056	<i>Carex</i>	<i>bigelowii</i>	Blades	0	0.6	0.05	0.46	0.04	0.549	0.1 U
TS-REF-7	6/24/2004	SE0032	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.7 U	0.06	0.28	0.029	0.651	0.1 U
TS-REF11	6/25/2004	SE0041	<i>Carex</i>	<i>bigelowii</i>	Blades	0	0.5 UJ	0.08	0.39	0.036	0.236	0.3

**Table G-18. (cont.)**

Survey Station	Date	Sample ID	Genus	Species	Organ	Field Replicate	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
CL-REF-1	7/2/2004	SE0057	<i>Eriophorum</i>	<i>angustifolium</i>	Whole Plant	0	0.004	0.3 U	35.2
CL-REF-1	7/2/2004	SE0058	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.002 U	0.3 U	35.6
CL-REF-1	7/2/2004	SE0059	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.002 U	0.3 U	55.2
CL-REF-2	7/3/2004	SE0060	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.007	0.3 U	49.3
CL-REF3b	7/4/2004	SE0063	<i>Eriophorum</i>	<i>angustifolium</i>	Whole Plant	0	0.002 U	0.3 U	51.3
CL-REF3b	7/4/2004	TH0002	<i>Deschampsia</i>	<i>beringensis</i>	Whole Plant	0	0.004	0.3 U	30.8
ST-REF-3	6/26/2004	SE0043	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.023	1.3 U	47.7 J
ST-REF-3	6/26/2004	SE0044	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.002	0.6 U	40.3 J
ST-REF-5	6/24/2004	SE0035	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.05	1.3 U	29.6
ST-REF-5	6/24/2004	SE0036	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.003	0.5 U	31.7
ST-REF-6	6/24/2004	SE0039	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.009	1.7 U	30
TP-REF-2	6/24/2004	SE0037	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.01	0.6 U	25.4
TP-REF-2	6/24/2004	SE0038	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.022	0.5 U	28.3
TP-REF-3	6/23/2004	SE0029	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.13	7.6	36.6
TP-REF-3	6/23/2004	SE0030	<i>Carex</i>	<i>aquatilis</i>	Seeds	0	0.004	0.4 U	30
TP-REF-5	6/24/2004	SE0033	<i>Carex</i>	<i>aquatilis</i>	Whole Plant	0	0.049	3.9	32.0
TS-REF-5	6/23/2004	SE0031	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.004	0.5 U	35.9
TS-REF-5	7/1/2004	SE0056	<i>Carex</i>	<i>bigelowii</i>	Blades	0	0.002 U	0.3 U	30.6
TS-REF-7	6/24/2004	SE0032	<i>Eriophorum</i>	<i>vaginatum</i>	Blades	0	0.002 U	0.5 U	37.9
TS-REF11	6/25/2004	SE0041	<i>Carex</i>	<i>bigelowii</i>	Blades	0	0.002 U	0.5 U	25.6 J

**Note:** U - undetected; value reported is the full detection limit  
 J - estimated value

**Table G-19. Analytical results for PHASE2RA lichen (site)**

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume)						
							Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	
TT2-0010	ECO-P	6/21/2004	LI0018	<i>Peltigera</i>	sp.	0	34.9	2,200 J	1.3 J	1.86	850	4.6	12.7
TT2-0100	ECO-P	6/16/2004	LI0008	<i>Peltigera</i>	sp.	0	49.2	579	0.56	0.81	309	1.78	2.0
TT2-1000	ECO-P	6/16/2004	LI0007	<i>Peltigera</i>	sp.	0	42.0	166	0.25	0.29	38.5	0.573	0.9 U
TT3-0010	ECO-R	6/18/2004	LI0010	<i>Peltigera</i>	sp.	0	36.1	773	1.29	1.47	815	2.37	2.8
TT3-0100	ECO-R	6/20/2004	LI0037	<i>Peltigera</i>	sp.	0	31.1	424	0.46	0.42	406	1.11	1.1 UJ
TT3-1000	ECO-R	6/20/2004	LI0016	<i>Cladina</i>	sp.	0	57.6	162 J	0.23 J	0.28	81.2	0.534	1.0 U
TT3-1000	ECO-R	6/20/2004	LI0017	<i>Peltigera</i>	sp.	0	24.5	159 J	0.25 J	0.36	113	0.531	0.7 U
TT5-0010	ECO-P	7/1/2004	LI0038	<i>Peltigera</i>	sp.	0	35.8	967	1.18	1.34	460	4.43	3.8 J
TT5-0100	ECO-P	6/15/2004	LI0006	<i>Peltigera</i>	sp.	0	33.0	566	2.48	1.1	350	4.0	2.1
TT5-1000	ECO-P	6/13/2004	LI0002	<i>Peltigera</i>	sp.	0	33.8	354	0.61	0.68	94.6 J	2.99	1.2 U
TT5-2000	ECO-P	6/15/2004	LI0019	<i>Cladina</i>	sp.	0	66.7	190 J	0.3 J	0.3	31.0	1.51	0.8 U
TT6-0010	ECO-M	6/25/2004	LI0034-D	<i>Peltigera</i>	sp.	1	30.3	2,560	0.9	1.95	2,660	2.64	12.7 J
TT6-0010	ECO-M	6/25/2004	LI0036	<i>Cladina</i>	sp.	0	28.8	2,780	0.77	1.75	2,460	2.68	17.8 J
TT6-0100	ECO-M	6/21/2004	LI0022	<i>Cladina</i>	sp.	0	47.8	1,040 J	1.02	1.62	2,210 J	3.41	2.4 J
TT6-0100	ECO-M	6/21/2004	LI0023	<i>Peltigera</i>	sp.	0	24.5	1,190 J	1.06	1.16	1,460 J	3.7	3.8 J
TT6-1000	ECO-M	6/21/2004	LI0020	<i>Peltigera</i>	sp.	0	23.9	147 J	0.86	1.04	402 J	2.75	0.7 UJ
TT6-1000	ECO-M	6/21/2004	LI0021	<i>Cladina</i>	sp.	0	41.8	164 J	1.06	1.17	564 J	4.15	0.9 UJ
TT6-2000	ECO-M	6/22/2004	LI0026	<i>Peltigera</i>	sp.	0	25.5	159 J	0.7	0.74	169 J	1.82	1.0 UJ
TT6-2000	ECO-M	6/22/2004	LI0027	<i>Cladina</i>	sp.	0	37.6	125 J	0.52	0.45	218 J	1.3	0.8 UJ
TT7-0010	ECO-M	6/22/2004	LI0025	<i>Cladina</i>	sp.	0	44.8	469 J	10.1	6.89	2,240 J	19.1	3.0 J
TT7-1000	ECO-M	6/22/2004	LI0024	<i>Cladina</i>	sp.	0	33.0	494 J	3.8	2.6	900 J	9.06	1.8 J
TT7-2000	ECO-M	7/4/2004	LI0039	<i>Cladina</i>	sp.	0	89.8	559	3.68	3.07	1,110	9.96	1.9
TT8-0010	ECO-R	6/19/2004	LI0015	<i>Peltigera</i>	sp.	0	44.5	2,430 J	0.99 J	1.74	1,480	3.68	16.9
TT8-0100	ECO-R	6/19/2004	LI0014	<i>Peltigera</i>	sp.	0	28.8	1,530	0.69	1.1	611	2.14	6.2
TT8-1000	ECO-R	6/19/2004	LI0011	<i>Cladina</i>	sp.	0	21.4	170	0.21	0.21	61.5	0.453	0.4 U
TT8-1000	ECO-R	6/19/2004	LI0012-D	<i>Peltigera</i>	sp.	1	17.6	290	0.32	3.59	93.9	0.478	1.4 U
TT8-1000	ECO-R	6/19/2004	LI0012-D	<i>Peltigera</i>	sp.	2	18.1	349	0.47	0.34	150	0.676	1.7



**Table G-19. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Field Replicate	Cobalt (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
TT2-0010	ECO-P	6/21/2004	LI0018	<i>Peltigera</i>	sp.	0	2.47	170	0.14	0.423	0.5	0.11	5.9 J	780
TT2-0100	ECO-P	6/16/2004	LI0008	<i>Peltigera</i>	sp.	0	0.844	57.1	0.08	0.25	0.2	0.03	1.3	292
TT2-1000	ECO-P	6/16/2004	LI0007	<i>Peltigera</i>	sp.	0	0.249	18.6	0.07	0.244	0.2 U	0.012	0.4 U	137
TT3-0010	ECO-R	6/18/2004	LI0010	<i>Peltigera</i>	sp.	0	1.76	72.1	0.08	0.821	0.4 U	0.071	3.6	209
TT3-0100	ECO-R	6/20/2004	LI0037	<i>Peltigera</i>	sp.	0	0.93	34.3	0.064	0.584	0.1	0.058	2.7 U	119 J
TT3-1000	ECO-R	6/20/2004	LI0016	<i>Cladina</i>	sp.	0	0.206	13.0	0.04	0.097	0.2 U	0.021	0.5	81.9
TT3-1000	ECO-R	6/20/2004	LI0017	<i>Peltigera</i>	sp.	0	0.271	17.4	0.05	0.54	0.2 U	0.032	0.6 J	94.4
TT5-0010	ECO-P	7/1/2004	LI0038	<i>Peltigera</i>	sp.	0	1.28	161	0.143	0.356	0.3	0.072	2.8	594
TT5-0100	ECO-P	6/15/2004	LI0006	<i>Peltigera</i>	sp.	0	0.94	179	0.09	0.304	0.4	0.044	1.4	572
TT5-1000	ECO-P	6/13/2004	LI0002	<i>Peltigera</i>	sp.	0	0.585	99.0	0.12	0.583	0.3	0.048	0.8	531
TT5-2000	ECO-P	6/15/2004	LI0019	<i>Cladina</i>	sp.	0	0.268	52.6	0.05	0.075	0.2	0.024	0.5 U	278
TT6-0010	ECO-M	6/25/2004	LI0034-D	<i>Peltigera</i>	sp.	1	2.39	98.3	0.100	0.547	0.4	0.172	7.4	357 J
TT6-0010	ECO-M	6/25/2004	LI0034-D	<i>Peltigera</i>	sp.	2	2.73	96.1	0.107	0.468	0.2	0.15	8.6	345 J
TT6-0010	ECO-M	6/25/2004	LI0036	<i>Cladina</i>	sp.	0	2.16	123	0.109	0.443	0.3	0.243	9.0	317 J
TT6-0100	ECO-M	6/21/2004	LI0022	<i>Cladina</i>	sp.	0	1.2	178	0.129	0.418	0.3	0.212	3.0 U	420 J
TT6-0100	ECO-M	6/21/2004	LI0023	<i>Peltigera</i>	sp.	0	0.96	108	0.087	0.36	0.3	0.161	3.5	392 J
TT6-1000	ECO-M	6/21/2004	LI0020	<i>Peltigera</i>	sp.	0	0.31	99.5	0.084	0.305	0.2	0.107	0.9 U	335 J
TT6-1000	ECO-M	6/21/2004	LI0021	<i>Cladina</i>	sp.	0	0.34	131	0.111	0.236	0.2	0.157	0.8 U	386 J
TT6-2000	ECO-M	6/22/2004	LI0026	<i>Peltigera</i>	sp.	0	0.31	76.5	0.075	0.323	0.3	0.079	0.8 U	163 J
TT6-2000	ECO-M	6/22/2004	LI0027	<i>Cladina</i>	sp.	0	0.16	46.1	0.072	0.101	0.2	0.064	0.8 U	141 J
TT7-0010	ECO-M	6/22/2004	LI0025	<i>Cladina</i>	sp.	0	1.37	1,530	0.711	1.78	1.0	1.49	4.2	2,740 J
TT7-1000	ECO-M	6/22/2004	LI0024	<i>Cladina</i>	sp.	0	0.58	594	0.254	1.15	0.6	0.698	2.6 U	996 J
TT7-2000	ECO-M	7/4/2004	LI0039	<i>Cladina</i>	sp.	0	0.87	492	0.297	1.67	0.7	0.599	2.8	1,260
TT8-0010	ECO-R	6/19/2004	LI0015	<i>Peltigera</i>	sp.	0	3.68	140	0.12	0.626	0.5	0.108	9.8	627
TT8-0100	ECO-R	6/19/2004	LI0014	<i>Peltigera</i>	sp.	0	2.1	111	0.09	0.463	0.4	0.072	5.9	397
TT8-1000	ECO-R	6/19/2004	LI0011	<i>Cladina</i>	sp.	0	0.226	13.8	0.03	0.101	0.2 U	0.018	0.6	70
TT8-1000	ECO-R	6/19/2004	LI0012-D	<i>Peltigera</i>	sp.	1	5.16	21.1	0.09	0.511	0.5	0.175	1.1	114
TT8-1000	ECO-R	6/19/2004	LI0012-D	<i>Peltigera</i>	sp.	2	0.465	28.6	0.15	0.941	0.2 U	0.033	1.4	184

**Note:** All results for whole plant.

- ECO-M - stations outside the mine's solid waste permit boundary and north of Anxiety Ridge Creek
- ECO-P - stations in port ambient air boundary or ± 2 km from the DMTS road in the vicinity of the port
- ECO-R - stations ± 2 km from the DMTS road corridor, and between the port and mine assessment units
- J - estimated value
- U - undetected; value reported is the full detection limit

**Table G-20. Analytical results for PHASE2RA lichen (reference)**

Survey Station	Date	Sample ID	Genus	Species	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume)							
						(% wet)	Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Cobalt (mg/kg dry)
TS-REF-5	6/23/2004	LI0028	<i>Cladina</i>	sp.	0	37.4	130	0.13 U	0.18	31.4	0.231	0.3 U	0.14
TS-REF-5	6/23/2004	LI0029	<i>Peltigera</i>	sp.	0	24.4	88.3	0.1 U	0.15	40.6	0.194	0.3 U	0.1
TS-REF-7	6/24/2004	LI0030	<i>Cladina</i>	sp.	0	41.2	46.8	0.07 U	0.07	27.2	0.112	0.3 U	0.29
TS-REF-7	6/24/2004	LI0031	<i>Peltigera</i>	sp.	0	18.7	51.9	0.06 U	0.12	29.3	0.127	0.4 U	0.17
TS-REF11	6/25/2004	LI0032	<i>Cladina</i>	sp.	0	27.2	47.9	0.08 U	0.05	14.2	0.09	0.4 UJ	0.07
TS-REF11	6/25/2004	LI0033	<i>Peltigera</i>	sp.	0	23.5	33.0	0.07 U	0.09	15.6	0.098	0.4 UJ	0.08

**Table G-20. (cont.)**

Survey Station	Date	Sample ID	Genus	Species	Field Replicate	Lead (mg/kg dry)	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
TS-REF-5	6/23/2004	LI0028	<i>Cladina</i>	sp.	0	7.27	0.035	0.096	0.1 U	0.016	0.5 U	45.2
TS-REF-5	6/23/2004	LI0029	<i>Peltigera</i>	sp.	0	6.14	0.054	0.229	0.2	0.017	0.7 U	48.5
TS-REF-7	6/24/2004	LI0030	<i>Cladina</i>	sp.	0	2.69	0.033	0.097	0.1 U	0.006	0.5 U	26.9
TS-REF-7	6/24/2004	LI0031	<i>Peltigera</i>	sp.	0	3.03	0.084	0.902	0.2	0.008	0.5 U	39.2
TS-REF11	6/25/2004	LI0032	<i>Cladina</i>	sp.	0	1.96	0.027	0.018 U	0.1 U	0.018	0.5 U	19.4 J
TS-REF11	6/25/2004	LI0033	<i>Peltigera</i>	sp.	0	1.58	0.054	0.019 U	0.1	0.007	0.5 U	29.7 J

**Note:** All results for whole plant.

- J - estimated value
- U - undetected; value reported is the full detection limit

**Table G-21. Analytical results for PHASE2RA birch (site)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Total Solids	Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Cobalt (mg/kg dry)
					(dry wt. as % of wet wt. or volume) (% wet)							
TT3-0100	ECO-R	6/20/2004	BR0004	0	40.8	28.4 <i>J</i>	0.05 <i>UJ</i>	0.07 <i>U</i>	123	0.136	0.3 <i>U</i>	0.306
TT3-1000	ECO-R	6/20/2004	BR0003	0	42.6	6.6 <i>J</i>	0.03 <i>UJ</i>	0.07 <i>U</i>	77.9	0.155	0.3 <i>U</i>	0.313
TT5-1000	ECO-P	6/13/2004	BR0001	0	33.4	8.4	0.12	0.07 <i>U</i>	42.3 <i>J</i>	0.728	0.8 <i>U</i>	0.437
TT5-2000	ECO-P	6/15/2004	BR0002	0	35.2	5.7	0.06 <i>U</i>	0.07 <i>U</i>	28.0	0.323	0.4 <i>U</i>	0.76

**Table G-21. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Field Replicate	Lead (mg/kg dry)	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
TT3-0100	ECO-R	6/20/2004	BR0004	0	1.91	0.03	0.369	0.2 U	0.003 U	0.4 U	138
TT3-1000	ECO-R	6/20/2004	BR0003	0	0.58	0.04	0.08	0.2 U	0.002 U	0.5 U	275
TT5-1000	ECO-P	6/13/2004	BR0001	0	3.77	0.04	0.084	0.2 U	0.002 U	0.5 U	284
TT5-2000	ECO-P	6/15/2004	BR0002	0	0.42	0.03	0.222	0.2 U	0.002 U	0.4 U	225

**Note:** All results for *Betula nana* leaves.

- ECO-P - stations in port ambient air boundary or ± 2 km from the DMTS road in the vicinity of the port
- ECO-R - stations ± 2 km from the DMTS road corridor, and between the port and mine assessment units
- J - estimated value
- U - undetected; value reported is the full detection limit

**Table G-22. Analytical results for PHASE2RA birch (reference)**

Survey Station	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume) (% wet)	Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Cobalt (mg/kg dry)	Lead (mg/kg dry)
TS-REF-7	6/24/2004	BR0005	0	36.2	5.0 <i>U</i>	0.04 <i>U</i>	0.05 <i>U</i>	69.9	0.16	0.8 <i>U</i>	0.54	0.13
TS-REF11	6/25/2004	BR0006	0	38.0	5.0 <i>U</i>	0.03 <i>U</i>	0.05 <i>U</i>	74.4	0.108	0.8 <i>UU</i>	0.1	0.08

**Table G-22. (cont.)**

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Survey Station	Date	Sample ID	Field Replicate	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
TS-REF-7	6/24/2004	BR0005	0	0.047	0.15	0.1 U	0.003	0.4 U	107
TS-REF11	6/25/2004	BR0006	0	0.049	0.009 U	0.1 U	0.002 U	0.5 U	145 J

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**Note:** All results for *Betula nana* leaves.

J - estimated value

U - undetected; value reported is the full detection limit

**Table G-23. Analytical results for PHASE2RA willow (site)**

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Field Replicate	Total Solids	Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)
							(dry wt. as % of wet wt. or volume) (% wet)					
AC-R	ECO-R	6/23/2004	WI0018	<i>Salix</i>	<i>planifolia</i>	0	33.6	156	0.14 U	0.21	81.0	1.99
ARC-R	ECO-R	7/1/2004	WI0028	<i>Salix</i>	<i>planifolia</i>	0	36.9	142	0.155 U	0.24	308	3.9
OR-R	ECO-R	7/1/2004	WI0026-D	<i>Salix</i>	<i>planifolia</i>	1	37.0	96.9	0.123 U	0.2	50.6	0.478
OR-R	ECO-R	7/1/2004	WI0026-D	<i>Salix</i>	<i>planifolia</i>	2	37.0	172	0.157 U	0.24	79.8	0.577
TT2-0010	ECO-P	6/17/2004	WI0006	<i>Salix</i>	<i>planifolia</i>	0	35.0	93.6	0.15	0.13	77.2	16.5
TT2-0100	ECO-P	6/16/2004	WI0005	<i>Salix</i>	<i>planifolia</i>	0	36.8	10.8	0.14	0.07 U	14.1	1.72
TT2-1000	ECO-P	6/16/2004	WI0004	<i>Salix</i>	<i>planifolia</i>	0	34.1	7.5	0.06 U	0.07 U	9.1 J	0.26
TT3-0010	ECO-R	6/18/2004	WI0007	<i>Salix</i>	<i>planifolia</i>	0	35.7	154	0.18	0.19	154	4.43
TT3-0100	ECO-R	6/20/2004	WI0011	<i>Salix</i>	<i>fuscescens</i>	0	38.3	9.1 J	0.04 UJ	0.07 U	54.4	4.71
TT5-0010	ECO-P	6/12/2004	WI0001	<i>Salix</i>	<i>planifolia</i>	0	32.1	66.7	0.17	0.1	57.5 J	10.3
TT5-0100	ECO-P	6/15/2004	WI0003	<i>Salix</i>	<i>planifolia</i>	0	33.7	43.0	0.08 U	0.07 U	35.3	2.14
TT5-1000	ECO-P	6/13/2004	WI0002	<i>Salix</i>	<i>planifolia</i>	0	35.0	11.3	0.07 U	0.07 U	17.1 J	0.817
TT6-0010	ECO-M	6/25/2004	WI0024	<i>Salix</i>	<i>planifolia</i>	0	39.6	21.9	0.11 U	0.05 U	40.2	2.69
TT6-0100	ECO-M	6/21/2004	WI0013-D	<i>Salix</i>	<i>planifolia</i>	1	37.4	11.9 J	0.08 U	0.05 U	34.4 J	1.94
TT6-0100	ECO-M	6/21/2004	WI0013-D	<i>Salix</i>	<i>planifolia</i>	2	36.8	9.7 J	0.06 U	0.05 U	27.9 J	1.62
TT6-1000	ECO-M	6/21/2004	WI0012	<i>Salix</i>	<i>planifolia</i>	0	32.2	6.5 J	0.06 U	0.05 U	14.8 J	4.65
TT6-2000	ECO-M	6/22/2004	WI0017	<i>Salix</i>	<i>planifolia</i>	0	30.5	10.5 J	0.17 U	0.05 U	40.9 J	1.91
TT7-0010	ECO-M	6/22/2004	WI0016	<i>Salix</i>	<i>planifolia</i>	0	37.6	41.5 J	0.22 U	0.05 U	144 J	2.66
TT7-1000	ECO-M	6/22/2004	WI0015	<i>Salix</i>	<i>reticulata</i>	0	25.0	5.0 UJ	0.05 U	0.05 U	17.1 J	4.88
TT7-2000	ECO-M	7/4/2004	WI0029	<i>Salix</i>	<i>reticulata</i>	0	31.3	6.5	0.051 U	0.05 U	54.0	4.48
TT7-2000	ECO-M	7/4/2004	WI0030	<i>Salix</i>	<i>planifolia</i>	0	35.7	5.5	0.02 U	0.05 U	15.5	3.68
TT8-0010	ECO-R	6/19/2004	WI0010	<i>Salix</i>	<i>planifolia</i>	0	37.5	108	0.12	0.11	57.2	6.73
TT8-0100	ECO-R	6/19/2004	WI0009	<i>Salix</i>	<i>planifolia</i>	0	36.1	20.4	0.1 U	0.07 U	54.6	1.77
TT8-1000	ECO-R	6/19/2004	WI0008	<i>Salix</i>	<i>planifolia</i>	0	30.6	18.0	0.51	0.07 U	39.2	0.714



Table G-23. (cont.)

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Field Replicate	Chromium (mg/kg dry)	Cobalt (mg/kg dry)	Lead (mg/kg dry)	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Thallium (mg/kg dry)
AC-R	ECO-R	6/23/2004	WI0018	Salix	planifolia	0	0.8	0.65	10.9	0.051	0.21	0.2	0.015
ARC-R	ECO-R	7/1/2004	WI0028	Salix	planifolia	0	1.8	1.04	11.8	0.05	0.411	0.3	0.022
OR-R	ECO-R	7/1/2004	WI0026-D	Salix	planifolia	1	0.7	1.4	3.88	0.054	0.347	0.2	0.004
OR-R	ECO-R	7/1/2004	WI0026-D	Salix	planifolia	2	1.2	1.28	5.85	0.046	0.38	0.1	0.008
TT2-0010	ECO-P	6/17/2004	WI0006	Salix	planifolia	0	0.3 U	0.456	5.76	0.05	0.174	0.2	0.013
TT2-0100	ECO-P	6/16/2004	WI0005	Salix	planifolia	0	0.3 U	0.738	0.89	0.04	0.149	0.2 U	0.003 U
TT2-1000	ECO-P	6/16/2004	WI0004	Salix	planifolia	0	0.3 U	0.41	0.35	0.04	0.078	0.2 U	0.003
TT3-0010	ECO-R	6/18/2004	WI0007	Salix	planifolia	0	1.1 U	0.426	7.74	0.06	0.342	0.2 U	0.025
TT3-0100	ECO-R	6/20/2004	WI0011	Salix	fuscescens	0	0.4 U	3.11	0.48	0.03	0.48	0.2 U	0.002 U
TT5-0010	ECO-P	6/12/2004	WI0001	Salix	planifolia	0	0.3 U	0.604	6.64	0.05	0.122	0.2 U	0.006
TT5-0100	ECO-P	6/15/2004	WI0003	Salix	planifolia	0	0.7 U	0.965	4.85	0.04	0.075	0.2 U	0.005
TT5-1000	ECO-P	6/13/2004	WI0002	Salix	planifolia	0	0.4 U	2.91	1.07	0.03	0.062	0.2 U	0.002 U
TT6-0010	ECO-M	6/25/2004	WI0024	Salix	planifolia	0	0.5 UJ	1.17	1.12	0.057	0.16	0.1 U	0.004
TT6-0100	ECO-M	6/21/2004	WI0013-D	Salix	planifolia	1	0.3 UJ	0.23	1.17	0.054	0.306	0.1 U	0.005
TT6-0100	ECO-M	6/21/2004	WI0013-D	Salix	planifolia	2	0.3 UJ	0.21	0.97	0.039	0.325	0.1 U	0.004
TT6-1000	ECO-M	6/21/2004	WI0012	Salix	planifolia	0	0.4 UJ	0.2	0.41	0.047	0.373	0.1 U	0.003
TT6-2000	ECO-M	6/22/2004	WI0017	Salix	planifolia	0	0.4 UJ	0.76	0.37	0.047	0.19	0.1 U	0.002 U
TT7-0010	ECO-M	6/22/2004	WI0016	Salix	planifolia	0	0.4 UJ	1.86	6.89	0.048	0.089	0.1 U	0.006
TT7-1000	ECO-M	6/22/2004	WI0015	Salix	reticulata	0	0.3 UJ	0.13	0.52	0.034	0.883	0.1 U	0.011
TT7-2000	ECO-M	7/4/2004	WI0029	Salix	reticulata	0	0.4	0.25	1.4	0.042	0.284	0.1 U	0.007
TT7-2000	ECO-M	7/4/2004	WI0030	Salix	planifolia	0	0.4	0.22	1.09	0.056	0.992	0.1 U	0.004
TT8-0010	ECO-R	6/19/2004	WI0010	Salix	planifolia	0	0.9 U	1.6	2.91	0.05	0.312	0.2	0.007
TT8-0100	ECO-R	6/19/2004	WI0009	Salix	planifolia	0	0.3 U	3.23	0.79	0.04	0.316	0.2 U	0.002 U
TT8-1000	ECO-R	6/19/2004	WI0008	Salix	planifolia	0	0.6 U	4.96	1.47	0.04	0.207	0.2 U	0.002 U

**Table G-23. (cont.)**

Survey Station	Assessment Unit	Date	Sample ID	Genus	Species	Field Replicate	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
AC-R	ECO-R	6/23/2004	WI0018	<i>Salix</i>	<i>planifolia</i>	0	1.1 U	185
ARC-R	ECO-R	7/1/2004	WI0028	<i>Salix</i>	<i>planifolia</i>	0	0.7	198
OR-R	ECO-R	7/1/2004	WI0026-D	<i>Salix</i>	<i>planifolia</i>	1	0.3 U	56.3
OR-R	ECO-R	7/1/2004	WI0026-D	<i>Salix</i>	<i>planifolia</i>	2	0.5	67.0
TT2-0010	ECO-P	6/17/2004	WI0006	<i>Salix</i>	<i>planifolia</i>	0	0.4 U	548
TT2-0100	ECO-P	6/16/2004	WI0005	<i>Salix</i>	<i>planifolia</i>	0	0.4 U	234
TT2-1000	ECO-P	6/16/2004	WI0004	<i>Salix</i>	<i>planifolia</i>	0	0.5 U	244
TT3-0010	ECO-R	6/18/2004	WI0007	<i>Salix</i>	<i>planifolia</i>	0	0.4 U	345
TT3-0100	ECO-R	6/20/2004	WI0011	<i>Salix</i>	<i>fuscescens</i>	0	0.6 U	246
TT5-0010	ECO-P	6/12/2004	WI0001	<i>Salix</i>	<i>planifolia</i>	0	0.4 U	592
TT5-0100	ECO-P	6/15/2004	WI0003	<i>Salix</i>	<i>planifolia</i>	0	0.4 U	267
TT5-1000	ECO-P	6/13/2004	WI0002	<i>Salix</i>	<i>planifolia</i>	0	0.5 U	163
TT6-0010	ECO-M	6/25/2004	WI0024	<i>Salix</i>	<i>planifolia</i>	0	0.5 U	127 J
TT6-0100	ECO-M	6/21/2004	WI0013-D	<i>Salix</i>	<i>planifolia</i>	1	0.5 U	239 J
TT6-0100	ECO-M	6/21/2004	WI0013-D	<i>Salix</i>	<i>planifolia</i>	2	0.4 U	207 J
TT6-1000	ECO-M	6/21/2004	WI0012	<i>Salix</i>	<i>planifolia</i>	0	0.5 U	79.8 J
TT6-2000	ECO-M	6/22/2004	WI0017	<i>Salix</i>	<i>planifolia</i>	0	0.4 U	103 J
TT7-0010	ECO-M	6/22/2004	WI0016	<i>Salix</i>	<i>planifolia</i>	0	0.4 U	145 J
TT7-1000	ECO-M	6/22/2004	WI0015	<i>Salix</i>	<i>reticulata</i>	0	0.4 U	227 J
TT7-2000	ECO-M	7/4/2004	WI0029	<i>Salix</i>	<i>reticulata</i>	0	0.3 U	330
TT7-2000	ECO-M	7/4/2004	WI0030	<i>Salix</i>	<i>planifolia</i>	0	0.3 U	225
TT8-0010	ECO-R	6/19/2004	WI0010	<i>Salix</i>	<i>planifolia</i>	0	0.5	239
TT8-0100	ECO-R	6/19/2004	WI0009	<i>Salix</i>	<i>planifolia</i>	0	0.4 U	143
TT8-1000	ECO-R	6/19/2004	WI0008	<i>Salix</i>	<i>planifolia</i>	0	0.5 U	126

**Note:** All results for leaves.

- ECO-M - stations outside the mine's solid waste permit boundary and north of Anxiety Ridge Creek
- ECO-P - stations in port ambient air boundary or  $\pm$  2 km from the DMTS road in the vicinity of the port
- ECO-R - stations  $\pm$  2 km from the DMTS road corridor, and between the port and mine stassessment units
- J - estimated value
- U - undetected; value reported is the full detection limit

**Table G-24. Analytical results for PHASE2RA willow (reference)**

Survey Station	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume)								
				(% wet)	Aluminum (mg/kg dry)	Antimony (mg/kg dry)	Arsenic (mg/kg dry)	Barium (mg/kg dry)	Cadmium (mg/kg dry)	Chromium (mg/kg dry)	Cobalt (mg/kg dry)	Lead (mg/kg dry)
ST-REF-3	6/26/2004	WI0025	0	35.9	11.0	0.07 U	0.05	26.4	0.356	0.4 UJ	2.40	0.14
ST-REF-5	6/24/2004	WI0021	0	33.3	15.5	0.07 U	0.05 U	57.2	0.401	0.6 U	2.43	0.62
ST-REF-6	6/24/2004	WI0022	0	36.9	5.0 U	0.07 U	0.05 U	24.1	0.558	0.4 UJ	2.06	0.09
TS-REF-5	6/23/2004	WI0019	0	39.2	14.8	0.06 U	0.05 U	76.1	0.673	0.3 U	8.03	0.4
TS-REF-7	6/24/2004	WI0020	0	37.2	9.0	0.05 U	0.05 U	26.7	0.389	0.5 U	2.47	0.11
TS-REF11	6/25/2004	WI0023	0	37.1	22.6	0.07 U	0.05 U	51.1	0.376	0.8 UJ	0.84	0.77

**Table G-24. (cont.)**

Survey Station	Date	Sample ID	Field Replicate	Mercury (mg/kg dry)	Molybdenum (mg/kg dry)	Selenium (mg/kg dry)	Thallium (mg/kg dry)	Vanadium (mg/kg dry)	Zinc (mg/kg dry)
ST-REF-3	6/26/2004	WI0025	0	0.068	0.112	0.2	0.003	0.4 U	97.6 J
ST-REF-5	6/24/2004	WI0021	0	0.037	0.435	0.1 U	0.003	0.5 U	79.2
ST-REF-6	6/24/2004	WI0022	0	0.065	0.09	0.1 U	0.002	0.4 U	92.2
TS-REF-5	6/23/2004	WI0019	0	0.044	0.166	0.1	0.002 U	0.5 U	78.8
TS-REF-7	6/24/2004	WI0020	0	0.042	0.312	0.1 U	0.002 U	0.4 U	62.1
TS-REF11	6/25/2004	WI0023	0	0.055	0.025 U	0.1 U	0.003	0.5 U	47.2 J

**Note:** All results for *Salix planifolia* leaves.

J - estimated value

U - undetected; value reported is the full detection limit

**Table G-25. Analytical results for salmonberry**

Survey	Survey Station	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume) (% wet)	Antimony (mg/kg wet)	Barium (mg/kg wet)	Cadmium (mg/kg wet)	Lead (mg/kg wet)	Thallium (mg/kg wet)	Zinc (mg/kg wet)
<b>2001 salmonberry results used in human health risk assessment (onsite)</b>											
ADEC01	01	08/20/01	OIDMTO01SY	0	13.0			0.013	0.015		2.6
ADEC01	02	08/20/01	OIDMTO02SY	0	13.0			0.018	0.029		3.4
ADEC01	03	08/20/01	OIDMTO03SY	0	13.3			0.014	0.035		2.7
ADEC01	04	08/20/01	OIDMTO04SY	0	13.8			0.018	0.022		2.8
ADEC01	05	08/20/01	OIDMTO05SY	0	13.2			0.020	0.030		3.1
ADEC01	06	08/20/01	OIDMTO06SY	0	11.9			0.024	0.040		3.1
ADEC01	07	08/21/01	OIDMTO07SY	0	12.9			0.025	0.037		3.1
ADEC01	08	08/21/01	OIDMTO08SY	0	12.9			0.031	0.026		3.8
ADEC01	09	08/21/01	OIDMTO09SY	0	13.7			0.023	0.015		3.1
ADEC01	10	08/21/01	OIDMTO10SY	0	12.7			0.022	0.020		2.9
ADEC01	43	09/07/01	01DMT043SY	0	14.2			0.058	0.20		4.5
ADEC01	44	09/07/01	01DMT044SY	0	14.2			0.056	0.17		4.5
ADEC01	45	09/07/01	01DMT045SY	0	14.7			0.081	0.24		4.6
ADEC01	46	09/07/01	01DMT046SY	1	15.9			0.060	0.31		4.8
ADEC01	47	09/07/01	01DMT046SY	2	15.9			0.067	0.34		5.3
FUGDST01	HR01-01B	08/26/01	HR-01-01-B	0	13.1			0.21	1.8		9.2
FUGDST01	HR01-02B	08/21/01	HR-01-02-B	0	12.0			0.042	0.13		3.0
FUGDST01	HR04-01A	08/20/01	HR-04-01-B	0	11.5			0.048	0.48		4.3
FUGDST01	HR04-02B	08/21/01	HR-04-02-B	0	11.8			0.0069	0.055		1.9
FUGDST01	PO-03B	08/23/01	PO-03-B	0	16.4			0.068	0.093		3.6
FUGDST01	PO-17B	08/23/01	PO-17-B	0	12.4			0.045	0.085		2.2
FUGDST01	PO-18B	08/24/01	PO-18-B	0	14.5			0.033	0.12		3.7
<b>2004 salmonberry results used in human health risk assessment (onsite)</b>											
PHASE2RA	A-1B	7/31/2004	SB-023	0	18.7	0.00094 U	0.050	0.043	0.0082	0.00037 U	7.5
PHASE2RA	A-2B	7/31/2004	SB-025	0	16.9	0.00085 U	0.048	0.039	0.0093	0.00034 U	5.6
PHASE2RA	A-3B	7/31/2004	SB-027	0	17.1	0.00086 U	0.050	0.034	0.0041	0.00034 U	5.9
PHASE2RA	A-4B	7/31/2004	SB-029	0	16.3	0.00082 U	0.022	0.024	0.0034	0.00033 U	5.6
PHASE2RA	A-5B	7/31/2004	SB-031	0	14.8	0.00074 U	0.066	0.025	0.0084	0.00030 U	4.9
PHASE2RA	A-6B	7/30/2004	SB-033	0	15.2	0.00076 U	0.078	0.021	0.0011 U	0.00030 U	5.7
<b>2004 salmonberry results not used in human health risk assessment (offsite)</b>											
PHASE2RA	A-1B	7/31/2004	SB-024W	0	17.3	0.00087 U	0.065	0.039	0.010	0.00035 U	7.0
PHASE2RA	A-2B	7/31/2004	SB-026W	0	16.8	0.00084 U	0.044	0.037	0.0091	0.00034 U	6.0
PHASE2RA	A-3B	7/31/2004	SB-028W	0	16.1	0.00081 U	0.085	0.029	0.0072	0.00032 U	5.8
PHASE2RA	A-4B	7/31/2004	SB-030W	0	16.2	0.00081 U	0.022	0.027	0.0053	0.00032 U	5.6
PHASE2RA	A-5B	7/31/2004	SB-032W	0	15.1	0.00076 U	0.038	0.021	0.0027	0.00030 U	5.2
PHASE2RA	A-6B	7/30/2004	SB-034W	0	16.1	0.00081 U	0.15	0.024	0.0055	0.00032 U	6.2
PHASE2RA	B-1B	7/30/2004	SB-013	0	16.1	0.00081 U	0.27	0.022	0.0011 U	0.00032 U	5.2
PHASE2RA	B-1B	7/30/2004	SB-014W	0	16.2	0.00081 U	0.46	0.028	0.0011 U	0.00032 U	4.1

Table G-25. (cont.)

Survey	Survey Station	Date	Sample ID	Field Replicate	Total Solids	Antimony (mg/kg wet)	Barium (mg/kg wet)	Cadmium (mg/kg wet)	Lead (mg/kg wet)	Thallium (mg/kg wet)	Zinc (mg/kg wet)
					(dry wt. as % of wet wt. or volume) (% wet)						
<b>2004 salmonberry results not used in human health risk assessment (offsite) (cont.)</b>											
PHASE2RA	B-2B	7/31/2004	SB-015	0	18.3	0.00092 U	0.45	0.053	0.0013 U	0.00037 U	5.0
PHASE2RA	B-2B	7/31/2004	SB-016W	0	16.1	0.00081 U	0.55	0.058	0.0013	0.00032 U	3.5
PHASE2RA	B-3B	7/31/2004	SB-017	0	16.1	0.00081 U	0.08	0.027	0.0011 U	0.00032 U	3.4
PHASE2RA	B-3B	7/31/2004	SB-018W	0	17.3	0.00087 U	0.11	0.032	0.0029	0.00035 U	3.4
PHASE2RA	B-4B	7/31/2004	SB-019	0	13.8	0.00069 U	0.23	0.043	0.0010 U	0.00028 U	4.5
PHASE2RA	B-4B	7/31/2004	SB-020W	0	14.4	0.00072 U	0.23	0.038	0.0010 U	0.00029 U	4.6
PHASE2RA	B-5B	7/31/2004	SB-021	0	14.8	0.00074 U	0.25	0.015	0.0013	0.00030 U	3.7
PHASE2RA	B-5B	7/31/2004	SB-022W	0	17.1	0.00086 U	0.14	0.023	0.0012 U	0.00034 U	5.1
PHASE2RA	C-1B	7/30/2004	SB-001	0	14.5	0.00073 U	0.20	0.021	0.0019	0.00029 U	3.6
PHASE2RA	C-1B	7/30/2004	SB-002W	0	15.5	0.00078 U	0.17	0.021	0.0011 U	0.00031 U	4.5
PHASE2RA	C-2B	7/31/2004	SB-003	0	15.3	0.00077 U	0.26	0.021	0.0012	0.00031 U	5.7
PHASE2RA	C-2B	7/31/2004	SB-004W	0	15.6	0.00078 U	0.40	0.033	0.0016	0.00031 U	4.6
PHASE2RA	C-3B	7/31/2004	SB-005	1	15.4	0.00077 U	0.34 J	0.020	0.0011 U	0.00031 U	4.0
PHASE2RA	C-3B	7/31/2004	SB-005	2	17.5	0.00088 U	0.15 J	0.020	0.0012 U	0.00035 U	5.5
PHASE2RA	C-3B	7/31/2004	SB-006W	1	14.8	0.00074 U	0.28	0.024	0.0010 U	0.00030 U	3.6
PHASE2RA	C-3B	7/31/2004	SB-006W	2	15.4	0.00077 U	0.27	0.031	0.0012	0.00031 U	3.9
PHASE2RA	C-4B	7/31/2004	SB-009	0	14.2	0.00071 U	0.23	0.023	0.0013	0.00028 U	3.7
PHASE2RA	C-4B	7/31/2004	SB-010W	0	16.2	0.00081 U	0.28	0.028	0.0011 U	0.00032 U	4.4
PHASE2RA	C-5B	7/31/2004	SB-011	0	16.1	0.00081 U	0.61	0.030	0.0029	0.00032 U	4.5
PHASE2RA	C-5B	7/31/2004	SB-012W	0	16.1	0.00081 U	0.25	0.030	0.0011 U	0.00032 U	7.0

**Notes:** All results for *Rubus chamaemorus* berries.

Only unwashed samples from stations at or near the site were used in the human health risk assessment.

J - estimated value

U - undetected; value reported is the full detection limit

Survey names and citations:

ADEC01 ADEC (2001)

FUGDST01 Exponent (2002a)

PHASE2RA Exponent (2004a) and Appendix E of this document

**Table G-26. Analytical results for sourdock**

Survey	Survey Station	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume) (% wet)	Antimony (mg/kg wet)	Barium (mg/kg wet)	Cadmium (mg/kg wet)	Lead (mg/kg wet)	Thallium (mg/kg wet)	Zinc (mg/kg wet)
<b>2001 sourdock results used in human health risk assessment (onsite)</b>											
ADEC01	12	8/24/2001	01DMT012SK	0	11.4			0.021 <i>B</i>	0.32		5.4
ADEC01	13	8/24/2001	01DMT013SK	0	11.4			0.016 <i>B</i>	0.24		7.4
ADEC01	14	8/24/2001	01DMT014SK	0	10.8			0.0057 <i>B</i>	0.22		3.0
ADEC01	15	8/24/2001	01DMT015SK	0	11.9			0.011 <i>B</i>	0.27		5.8
ADEC01	16	8/24/2001	01DMT016SK	0	12.9			0.0099 <i>B</i>	0.33		6.4
ADEC01	17	8/24/2001	01DMT017SK	0	14.1			0.015 <i>B</i>	0.42		5.9
<b>2004 sourdock results used in human health risk assessment (onsite)</b>											
PHASE2RA	A-1S	7/31/2004	SK-0023	0	12.3	0.0037	3.5	0.0063	0.10	0.00049	3.2
PHASE2RA	A-2S	7/31/2004	SK-0025	0	12.8	0.012	0.76	0.0032	0.12	0.00026 <i>U</i>	4.2
PHASE2RA	A-3S	7/31/2004	SK-0027	0	12.8	0.0064	1.2	0.0046	0.12	0.00026 <i>U</i>	3.6
PHASE2RA	A-4S	7/31/2004	SK-0029	0	12.6	0.0063	1.4	0.013	0.10	0.00025 <i>U</i>	3.4
PHASE2RA	A-5S	7/31/2004	SK-0031	0	12.4	0.012	3.2	0.0068	0.25	0.00025 <i>U</i>	3.1
PHASE2RA	A-6S	7/30/2004	SK-0033	0	10.1	0.010	10.6	0.011	0.047	0.00020	4.0
<b>2004 sourdock results not used in human health risk assessment (offsite)</b>											
PHASE2RA	A-1S	7/31/2004	SK-0024W	0	9.9	0.0079	2.1	0.0037	0.059	0.00069	2.7
PHASE2RA	A-2S	7/31/2004	SK-0026W	0	9.7	0.0058	0.83	0.0021	0.090	0.00019 <i>U</i>	2.6
PHASE2RA	A-3S	7/31/2004	SK-0028W	0	9.7	0.0049	1.5	0.0028	0.065	0.00019 <i>U</i>	2.6
PHASE2RA	A-4S	7/31/2004	SK-0030W	0	10.0	0.013	1.0	0.0087	0.062	0.00050	3.4
PHASE2RA	A-5S	7/31/2004	SK-0032W	0	9.2	0.0083	1.2	0.0044	0.16	0.00028	3.9
PHASE2RA	A-6S	7/30/2004	SK-0034W	0	7.8	0.0047	9.4	0.0087	0.021	0.00086	3.4
PHASE2RA	B-1S	7/30/2004	SK-0011	0	6.2	0.014 <i>J</i>	4.8	0.0037	0.019	0.00012 <i>U</i>	1.6
PHASE2RA	B-1S	7/30/2004	SK-0012W	0	7.1	0.0050 <i>J</i>	7.3	0.0036	0.059	0.00021	2.1
PHASE2RA	B-2S	7/31/2004	SK-0013	1	8.6	0.0069 <i>J</i>	13.8	0.0023	0.039	0.00017 <i>U</i>	6.9
PHASE2RA	B-2S	7/31/2004	SK-0013	2	9.8	0.045 <i>J</i>	11.5	0.0052	0.026	0.00039	6.6
PHASE2RA	B-2S	7/31/2004	SK-0014W	1	7.2	0.0079 <i>J</i>	9.0	0.0017	0.024	0.00036	2.8
PHASE2RA	B-2S	7/31/2004	SK-0014W	2	6.3	0.0082 <i>J</i>	16.6	0.0045	0.023	0.00038	2.7
PHASE2RA	B-3S	7/31/2004	SK-0017	0	11.5	0.026 <i>J</i>	17.0	0.0021	0.040	0.00023 <i>U</i>	3.7
PHASE2RA	B-3S	7/31/2004	SK-0018W	0	7.7	0.028 <i>J</i>	10.6	0.0025	0.029	0.00023	2.7
PHASE2RA	B-4S	7/31/2004	SK-0019	0	9.2	0.022 <i>J</i>	15.2	0.0027	0.024	0.00018 <i>U</i>	6.8
PHASE2RA	B-4S	7/31/2004	SK-0020W	0	8.5	0.021 <i>J</i>	10.4	0.0023	0.048	0.00017 <i>U</i>	5.0
PHASE2RA	B-5S	7/31/2004	SK-0021	0	11.3	0.0068	15.9	0.0045	0.021	0.00068	2.2
PHASE2RA	B-5S	7/31/2004	SK-0022W	0	8.6	0.0026	13.0	0.0034	0.045	0.00043	2.4
PHASE2RA	C-1S	7/30/2004	SK-0001	0	10.1	0.039 <i>J</i>	6.6	0.0046	0.047	0.00020 <i>U</i>	2.3
PHASE2RA	C-1S	7/30/2004	SK-0002W	0	8.8	0.027 <i>J</i>	4.5	0.0069	0.23	0.00035	2.4
PHASE2RA	C-2S	7/30/2004	SK-0003	0	7.1	0.023 <i>J</i>	16.8	0.0084	0.021	0.00014 <i>U</i>	2.6
PHASE2RA	C-2S	7/30/2004	SK-0004W	0	10.2	0.035 <i>J</i>	10.2	0.0035	0.067	0.00020 <i>U</i>	3.1
PHASE2RA	C-3S	7/31/2004	SK-0005	0	13.2	0.033 <i>J</i>	4.9	0.0050	0.038	0.00026 <i>U</i>	2.6
PHASE2RA	C-3S	7/31/2004	SK-0006W	0	11.9	0.031 <i>J</i>	4.1	0.0058	0.057	0.00024 <i>U</i>	2.7

**Table G-26. (cont.)**

Survey	Survey Station	Date	Sample ID	Field Replicate	Total Solids (dry wt. as % of wet wt. or volume) (% wet)	Antimony (mg/kg wet)	Barium (mg/kg wet)	Cadmium (mg/kg wet)	Lead (mg/kg wet)	Thallium (mg/kg wet)	Zinc (mg/kg wet)
<b>2004 sourdock results not used in human health risk assessment (offsite) (cont.)</b>											
PHASE2RA	C-4S	7/31/2004	SK-0007	0	10.6	0.032 <i>J</i>	9.2	0.010	0.015	0.00021 <i>U</i>	3.9
PHASE2RA	C-4S	7/31/2004	SK-0008W	0	9.2	0.029 <i>J</i>	4.8	0.0066	0.11	0.00018 <i>U</i>	2.4
PHASE2RA	C-5S	7/31/2004	SK-0009	0	13.2	0.038 <i>J</i>	36.3	0.0051	0.034	0.00026 <i>U</i>	3.7
PHASE2RA	C-5S	7/31/2004	SK-0010W	0	9.9	0.023 <i>J</i>	5.1	0.0015	0.029	0.00020 <i>U</i>	2.0

**Notes:** All results for *Rumex crispus* leaves.  
Only unwashed samples from stations at or near the site were used in the human health risk assessment.

*J* - estimated value

*U* - undetected; value reported is the full detection limit

Survey names and citations:

ADEC01 ADEC (2001)

PHASE2RA Exponent (2004a) and Appendix E of this document



**Table G-27. Analytical results for PHASE2RA ptarmigan tissue (site)**

Survey Station	Date	Sample ID	Organ	Field Replicate	Total Solids	Antimony (mg/kg wet)	Barium (mg/kg wet)	Cadmium (mg/kg wet)	Lead (mg/kg wet)	Thallium (mg/kg wet)	Zinc (mg/kg wet)
					(dry wt. as % of wet wt. or volume) (% wet)						
PT1	6/1/2004	PT-0001	Breast muscle	0	28.3	0.0020 <i>U</i>	0.040 <i>J</i>	0.28	0.020	0.00057 <i>U</i>	9.4
PT1	6/1/2004	PT-0001	Kidney	0	24.7	0.0012 <i>U</i>	0.85 <i>J</i>	55.3	1.0	0.00049	50.1
PT1	6/1/2004	PT-0001	Liver	0	30.1	0.0015 <i>U</i>	0.21 <i>J</i>	22.5	0.33	0.00060	44.2
PT2	6/1/2004	PT-0002	Breast muscle	0	27.7	0.0014 <i>U</i>	0.20 <i>J</i>	0.16	0.028	0.00055 <i>U</i>	8.0
PT2	6/1/2004	PT-0002	Kidney	0	24.7	0.0012 <i>U</i>	0.73 <i>J</i>	52.6	1.8	0.00049 <i>U</i>	41.0
PT2	6/1/2004	PT-0002	Liver	0	28.8	0.0014 <i>U</i>	0.12 <i>J</i>	7.8	0.33	0.00058 <i>U</i>	64.8
PT3	6/3/2004	PT-0003	Breast muscle	0	28.4	0.0014 <i>U</i>	0.09 <i>J</i>	0.37	0.011	0.00057 <i>U</i>	10.2
PT3	6/3/2004	PT-0003	Kidney	0	24.1	0.0012 <i>U</i>	0.43 <i>J</i>	84.4	0.50	0.00048 <i>U</i>	57.8
PT3	6/3/2004	PT-0003	Liver	0	27.9	0.0014 <i>U</i>	0.38 <i>J</i>	10.1	0.11	0.00056 <i>U</i>	28.2
PT4	6/4/2004	PT-0004	Breast muscle	0	28.6	0.0014 <i>U</i>	0.14 <i>J</i>	0.48	0.020	0.00057 <i>U</i>	9.3
PT4	6/4/2004	PT-0004	Kidney	0	24.3	0.0012 <i>U</i>	0.38 <i>J</i>	108	0.44	0.00049 <i>U</i>	56.4
PT4	6/4/2004	PT-0004	Liver	0	29.2	0.0015 <i>U</i>	0.53 <i>J</i>	13.4	0.16	0.00058 <i>U</i>	35.9
PT7	7/2/2004	PT-0007	Breast muscle	0	26.2	0.0013 <i>U</i>	0.48 <i>J</i>	0.25	0.045	0.00052 <i>U</i>	6.3
PT7	7/2/2004	PT-0007	Kidney	0	26.1	0.0013 <i>U</i>	3.8	104 <i>J</i>	2.7	0.0037	67.1
PT7	7/2/2004	PT-0007	Liver	0	26.0	0.0013 <i>U</i>	0.24 <i>J</i>	22.3	0.97	0.00052 <i>U</i>	35.9

**Note:** All results for *Lagopus lagopus*.

*J* - estimated value

*U* - undetected; value reported is the full detection limit

**Table G-28. Analytical results for PHASE2RA ptarmigan tissue (reference)**

Survey Station	Date	Sample ID	Organ	Field Replicate	Total Solids		Antimony (mg/kg wet)	Barium (mg/kg wet)	Cadmium (mg/kg wet)	Lead (mg/kg wet)	Thallium (mg/kg wet)	Zinc (mg/kg wet)
					(dry wt. as % of wet wt. or volume)	(% wet)						
PT5-REF	6/4/2004	PT-0005	Breast muscle	0	29.2	0.0018 U	0.12 J	0.19	0.018	0.00058 U	8.0	
PT5-REF	6/4/2004	PT-0005	Kidney	0	24.4	0.0012 U	0.85 J	59.5	0.44	0.00049 U	43.4	
PT5-REF	6/4/2004	PT-0005	Liver	0	28.4	0.0014 U	0.32 J	8.2	0.065	0.00057 U	38.9	
PT6-REF	6/5/2004	PT-0006	Breast muscle	0	28.7	0.0014 U	0.057 J	0.17	0.0029	0.00057 U	8.5	
PT6-REF	6/5/2004	PT-0006	Kidney	0	25.3	0.0013 U	0.24 J	83.2	0.33	0.00051 U	63.8	
PT6-REF	6/5/2004	PT-0006	Liver	0	29.9	0.0015 U	0.19 J	9.7	0.099	0.00060 U	35.3	
PT8-REF	7/29/2004	PT-0008	Breast muscle	0	27.5	0.0017	0.039	0.11 J	0.014	0.00055 U	8.6	
PT8-REF	7/29/2004	PT-0008	Kidney	0	24.9	0.0012 U	0.26	11.9 J	0.17	0.0025	28.6	
PT8-REF	7/29/2004	PT-0008	Liver	0	25.8	0.0013 U	0.085	3.0 J	0.10	0.0010	26.6	

**Note:** All results for *Lagopus lagopus*.

J - estimated value

U - undetected; value reported is the full detection limit

**Table G-29. Analytical results for caribou tissue**

Survey	Survey Station	Survey Date	Tissue Type	Sample ID	Field Replicate	Subsample	Total Solids (dry wt. as % of wet wt. or volume) (% wet)	Arsenic <sup>a</sup> (mg/kg wet)	Cadmium (mg/kg wet)	Lead (mg/kg wet)	Zinc (mg/kg wet)
CARIBO02	02-01	04/15/02	Kidney	02-01-Kidney	0	0	29.4	0.08 U	1.29	0.366	12.4
CARIBO02	02-02	04/15/02	Kidney	02-02-Kidney	0	0	33.4	0.1 U	4.48	1.16	23.4
CARIBO02	02-03	04/15/02	Kidney	02-03-Kidney	0	0	25.0	0.08	9.87	5.82	27.9
CARIBO02	02-04	04/15/02	Kidney	02-04-Kidney	0	0	33.5	0.1 U	4.28	0.807	19.7
CARIBO02	02-05	04/15/02	Kidney	02-05-Kidney	0	0	29.8	0.09 U	1.62	0.347	18.5
CARIBO02	02-06	04/15/02	Kidney	02-06-Kidney	0	0	30.5	0.1	6.17	0.714	25.1
CARIBO02	02-07	04/15/02	Kidney	02-07-Kidney	0	0	22.7	0.07 U	6.59	2.55	16.5
CARIBO02	02-08	04/15/02	Kidney	02-08-Kidney	0	0	26.3	0.08 U	1.61	1.22	9.99
CARIBO02	02-09	04/15/02	Kidney	02-09-Kidney	0	0	26.2	0.08 U	5.64	3.34	20.7
CARIBO02	02-10	04/15/02	Kidney	02-10-Kidney	0	0	20.5	0.06 U	1.99	4.02	15.3
CARIBO02	02-11	08/05/02	Kidney	02-11-Kidney	0	0	35.5	0.5 U	8.54	1.29	53.8
CARIBO02	02-01	04/15/02	Liver	02-01-Liver	0	0	24.9	0.07 U	0.36	0.766	20.3
CARIBO02	02-02	04/15/02	Liver	02-02-Liver	0	0	28.5	0.09 U	0.77	1.61	26.7
CARIBO02	02-03	04/15/02	Liver	02-03-Liver	0	0	34.8	0.1 U	1.96	3.41	44.6
CARIBO02	02-04	04/15/02	Liver	02-04-Liver	0	0	26.8	0.08 U	0.58	1.39	25.4
CARIBO02	02-05	04/15/02	Liver	02-05-Liver	0	0	22.6	0.07 U	0.68	0.715	22.2
CARIBO02	02-06	04/15/02	Liver	02-06-Liver	0	0	47.5	0.14 U	2.49	1.66	43.9
CARIBO02	02-07	04/15/02	Liver	02-07-Liver	0	0	30.7	0.09 U	2.36	5.59	34.2
CARIBO02	02-08	04/15/02	Liver	02-08-Liver	0	0	36.2	0.11 U	1.24	3.9	30.1
CARIBO02	02-09	04/15/02	Liver	02-09-Liver	0	0	27.7	0.08 U	1.05	4.83	26.3
CARIBO02	02-10	04/15/02	Liver	02-10-Liver	0	0	24.6	0.07 U	0.78	3.14	36.8
CARIBO02	02-11	08/05/02	Liver	02-11-Liver	0	0	30.2	0.5 U	3.32	1.15	120
CARIBO02	02-01	04/15/02	Muscle	02-01-Tissue	0	0	30.2	0.09 U	0.01 U	0.02	32.9
CARIBO02	02-02	04/15/02	Muscle	02-02-Tissue	0	0	29.6	0.09 U	0.01 U	0.023	25
CARIBO02	02-03	04/15/02	Muscle	02-03-Tissue	0	0	33.9	0.1 U	0.04	0.097	25
CARIBO02	02-04	04/15/02	Muscle	02-04-Tissue	0	0	27.3	0.08 U	0.05	0.065	20.6
CARIBO02	02-05	04/15/02	Muscle	02-05-Tissue	0	0	27.5	0.08 U	0.03	0.05	22.3
CARIBO02	02-06	04/15/02	Muscle	02-06-Tissue	0	0	29.4	0.08 U	0.03	0.037	27.9
CARIBO02	02-07	04/15/02	Muscle	02-07-Tissue	0	0	29.2	0.09 U	0.08	0.067	20.1
CARIBO02	02-08	04/15/02	Muscle	02-08-Tissue	0	0	30.3	0.09 U	0.08	0.209	22.3
CARIBO02	02-09	04/15/02	Muscle	02-09-Tissue	0	0	30.7	0.09 U	0.05	0.261	27.9
CARIBO02	02-10	04/15/02	Muscle	02-10-Tissue	0	0	34.8	0.11 U	0.05	0.207	27
CARIBO02	02-11	8/5/2002	Muscle	02-11-Muscle	0	0	27.0	0.5 U	0.05 U	0.16	69

**Notes:** U - undetected; value reported is the full detection limit

<sup>a</sup> Arsenic data were not used in the human health risk assessment. Arsenic was not a CoPC.

Survey names and citations: CARIBO02 Exponent (2002e), included in Appendix H

**Table G-30. Lead results for Wulik River fish tissue**

Survey	Survey Station	Date	Sample ID	Field Replicate	Subsample	Total Solids (dry wt. as % of wet wt. or volume) (% dry)	Lead (mg/kg wet wt)
WULRFISH	WR	10/05/91	100591WUDVA1	0	0	27.7	0.008
WULRFISH	WR	10/05/91	100591WUDVA2	0	0	26.9	0.008
WULRFISH	WR	10/05/91	100591WUDVA3	0	0	27.4	0.011
WULRFISH	WR	10/05/91	100591WUDVA4	0	0	30.4	0.012
WULRFISH	WR	10/05/91	100591WUDVA5	0	0	27.5	0.008
WULRFISH	WR	10/05/91	100591WUDVA6	0	0	29.1	0.015
WULRFISH	WR	04/29/92	042992WUDVA1	0	0	24.7	0.012 U
WULRFISH	WR	04/29/92	042992WUDVA2	0	0	24.4	0.005
WULRFISH	WR	04/29/92	042992WUDVA3	0	0	25.9	0.005 U
WULRFISH	WR	04/29/92	042992WUDVA4	0	0	23.6	0.007
WULRFISH	WR	04/29/92	042992WUDVA5	0	0	20.5	0.004 U
WULRFISH	WR	04/29/92	042992WUDVA6	0	0	22.6	0.005
WULRFISH	WR	04/29/92	042992WUDVA7	0	0	21.8	0.004 U
WULRFISH	WR	04/29/92	042992WUDVA8	0	0	22.8	0.005
WULRFISH	WR	09/30/92	093092WUDVA1	0	0	23.5	0.005 U
WULRFISH	WR	09/30/92	093092WUDVA2	0	0	31.7	0.006 U
WULRFISH	WR	09/30/92	093092WUDVA3	0	0	34.4	0.007 U
WULRFISH	WR	09/30/92	093092WUDVA4	0	0	26.2	0.008
WULRFISH	WR	09/30/92	093092WUDVA5	0	0	30.7	0.006 U
WULRFISH	WR	09/30/92	093092WUDVA6	0	0	35.5	0.060
WULRFISH	WR	04/21/93	042193WUDVA1	0	0	25.4	0.005
WULRFISH	WR	04/21/93	042193WUDVA2	0	0	27.4	0.008
WULRFISH	WR	04/21/93	042193WUDVA3	0	0	27.4	0.005
WULRFISH	WR	04/21/93	042193WUDVA4	0	0	26.5	0.005
WULRFISH	WR	04/21/93	042193WUDVA5	0	0	24.8	0.005
WULRFISH	WR	04/21/93	042193WUDVA6	0	0	25.8	0.018
WULRFISH	WR	10/20/93	102093WUDVA1	0	0	36.7	0.081
WULRFISH	WR	10/20/93	102093WUDVA2	0	0	29.6	0.003 U
WULRFISH	WR	10/20/93	102093WUDVA3	0	0	31.1	0.003 U
WULRFISH	WR	10/20/93	102093WUDVA4	0	0	31.3	0.003 U
WULRFISH	WR	10/20/93	102093WUDVA5	0	0	31.4	0.003 U
WULRFISH	WR	10/20/93	102093WUDVA6	0	0	33.1	0.003 U
WULRFISH	WR	04/07/94	040794WUDVA1	0	0	23.0	0.005 U
WULRFISH	WR	04/07/94	040794WUDVA2	0	0	25.8	0.005
WULRFISH	WR	04/07/94	040794WUDVA3	0	0	24.3	0.007

**Table G-30. (cont.)**

Survey	Survey Station	Date	Sample ID	Field Replicate	Subsample	Total Solids (dry wt. as % of wet wt. or volume) (% dry)	Lead (mg/kg wet wt)
WULRFISH	WR	04/07/94	040794WUDVA4	0	0	22.8	0.005 U
WULRFISH	WR	04/07/94	040794WUDVA5	0	0	24.3	0.005
WULRFISH	WR	04/07/94	040794WUDVA6	0	0	28.0	0.006
WULRFISH	WR	09/23/94	092394WUDVA1	0	0	29.1	0.012
WULRFISH	WR	09/23/94	092394WUDVA2	0	0	31.3	0.006 U
WULRFISH	WR	09/23/94	092394WUDVA3	0	0	30.5	0.006 U
WULRFISH	WR	09/23/94	092394WUDVA4	0	0	31.0	0.006 U
WULRFISH	WR	09/23/94	092394WUDVA5	0	0	30.0	0.006 U
WULRFISH	WR	09/23/94	092394WUDVA6	0	0	27.6	0.006 U
WULRFISH	WR	06/14/95	061495WUDVA1	0	0	25.2	0.008
WULRFISH	WR	06/14/95	061495WUDVA2	0	0	25.2	0.005 U
WULRFISH	WR	06/14/95	061495WUDVA3	0	0	25.2	0.005 U
WULRFISH	WR	06/14/95	061495WUDVA4	0	0	24.5	0.005 U
WULRFISH	WR	06/14/95	061495WUDVA5	0	0	25.2	0.005 U
WULRFISH	WR	06/14/95	061495WUDVA6	0	0	27.7	0.006 U
WULRFISH	WR	09/09/95	090995WUDVA1	0	0	8.60	0.048
WULRFISH	WR	09/09/95	090995WUDVA2	0	0	10.8	0.045
WULRFISH	WR	09/09/95	090995WUDVA3	0	0	12.3	0.022
WULRFISH	WR	09/09/95	090995WUDVA4	0	0	11.4	0.018
WULRFISH	WR	09/09/95	090995WUDVA5	0	0	12.5	0.024
WULRFISH	WR	09/09/95	090995WUDVA6	0	0	15.8	0.009
WULRFISH	WR	06/16/96	061996WUDVA1	0	0	24.0	0.014
WULRFISH	WR	06/16/96	061996WUDVA2	0	0	25.2	0.008
WULRFISH	WR	06/16/96	061996WUDVA3	0	0	27.6	0.008
WULRFISH	WR	06/16/96	061996WUDVA4	0	0	26.2	0.005 U
WULRFISH	WR	06/16/96	061996WUDVA5	0	0	27.4	0.005
WULRFISH	WR	09/19/96	91996WUDVA1	0	0	26.0	0.018
WULRFISH	WR	09/19/96	91996WUDVA2	0	0	30.0	0.006 U
WULRFISH	WR	09/19/96	91996WUDVA3	0	0	31.7	0.006 U
WULRFISH	WR	09/19/96	91996WUDVA4	0	0	32.1	0.006 U
WULRFISH	WR	09/19/96	91996WUDVA5	1	0	41.6	0.008 U
WULRFISH	WR	09/19/96	91996WUDVA5	2	0	32.6	0.007 U
WULRFISH	WR	09/19/96	91996WUDVA6	0	0	21.3	0.006
WULRFISH	WR	05/22/97	052297WUDVA1	0	0	27.5	0.022
WULRFISH	WR	05/22/97	052297WUDVA2	0	0	28.6	0.006

**Table G-30. (cont.)**

Survey	Survey Station	Date	Sample ID	Field Replicate	Subsample	Total Solids (dry wt. as % of wet wt. or volume) (% dry)	Lead (mg/kg wet wt)
WULRFISH	WR	05/22/97	052297WUDVA3	0	0	25.1	0.010
WULRFISH	WR	05/22/97	052297WUDVA4	0	0	27.4	0.011
WULRFISH	WR	05/22/97	052297WUDVA5	0	0	28.1	0.006 U
WULRFISH	WR	05/22/97	052297WUDVA6	0	0	24.8	0.005 U
WULRFISH	WR	09/27/97	092797WUDVA1	0	0	34.2	0.010
WULRFISH	WR	09/27/97	092797WUDVA2	0	0	25.4	0.038
WULRFISH	WR	09/27/97	092797WUDVA3	0	0	26.8	0.011
WULRFISH	WR	09/27/97	092797WUDVA4	0	0	26.2	0.005 U
WULRFISH	WR	09/27/97	092797WUDVA5	0	0	30.6	0.006
WULRFISH	WR	09/27/97	092797WUDVA6	1	0	36.0	0.007 U
WULRFISH	WR	09/27/97	092797WUDVA6	2	0	28.7	0.006 U
WULRFISH	WR	06/01/98	060198WUDVA1	0	0	27.3	0.005 U
WULRFISH	WR	06/01/98	060198WUDVA2	1	0	31.9	0.006 U
WULRFISH	WR	06/01/98	060198WUDVA2	2	0	29.8	0.006 U
WULRFISH	WR	06/01/98	060198WUDVA3	0	0	30.4	0.006 U
WULRFISH	WR	06/01/98	060198WUDVA4	0	0	28.6	0.006 U
WULRFISH	WR	06/01/98	060198WUDVA5	0	0	28.0	0.006 U
WULRFISH	WR	06/01/98	060198WUDVA6	0	0	28.4	0.006 U
WULRFISH	WR	10/06/98	100698WUDVA1	0	0	33.0	0.007 U
WULRFISH	WR	10/06/98	100698WUDVA2	0	0	41.2	0.008 U
WULRFISH	WR	10/06/98	100698WUDVA3	1	0	41.9	0.008 U
WULRFISH	WR	10/06/98	100698WUDVA3	2	0	42.8	0.009 U
WULRFISH	WR	10/06/98	100698WUDVA4	0	0	39.0	0.008 U
WULRFISH	WR	10/06/98	100698WUDVA5	0	0	34.8	0.007 U
WULRFISH	WR	10/06/98	100698WUDVA6	0	0	30.9	0.006 U
WULRFISH	WR	05/15/99	051599WUDVA1	0	0	35.3	0.071
WULRFISH	WR	05/15/99	051599WUDVA2	0	0	21.9	0.044
WULRFISH	WR	05/15/99	051599WUDVA3	0	0	23.4	0.009
WULRFISH	WR	05/15/99	051599WUDVA4	0	0	30.3	0.082
WULRFISH	WR	05/15/99	051599WUDVA5	0	0	32.7	0.010
WULRFISH	WR	05/15/99	051599WUDVA6	1	0	27.3	0.027
WULRFISH	WR	05/15/99	051599WUDVA6	2	0	30.0	0.015
WULRFISH	WR	09/08/99	090899WUDVA1	0	0	26.0	0.005 U
WULRFISH	WR	09/08/99	090899WUDVA2	0	0	19.1	0.004 U
WULRFISH	WR	09/08/99	090899WUDVA3	0	0	33.7	0.010

**Table G-30. (cont.)**

Survey	Survey Station	Date	Sample ID	Field Replicate	Subsample	Total Solids (dry wt. as % of wet wt. or volume) (% dry)	Lead (mg/kg wet wt)
WULRFISH	WR	09/08/99	090899WUDVA4	0	0	31.0	0.006 U
WULRFISH	WR	09/08/99	090899WUDVA5	0	0	31.0	0.006 U
WULRFISH	WR	09/08/99	090899WUDVA6	0	0	30.6	0.006 U
WULRFISH	WR	06/08/00	060800WUDVA1	0	0	31.1	0.016
WULRFISH	WR	06/08/00	060800WUDVA2	0	0	34.5	0.017
WULRFISH	WR	06/08/00	060800WUDVA3	0	0	28.7	0.032
WULRFISH	WR	06/08/00	060800WUDVA4	0	0	28.5	0.031
WULRFISH	WR	06/08/00	060800WUDVA5	1	0	25.0	0.008
WULRFISH	WR	06/08/00	060800WUDVA5	2	0	25.0	0.005 U
WULRFISH	WR	06/08/00	060800WUDVA6	0	0	29.8	0.009
WULRFISH	WR	10/20/00	102000WUDVA1	0	0	27.0	0.008 U
WULRFISH	WR	10/20/00	102000WUDVA2	0	0	27.5	0.008 U
WULRFISH	WR	10/20/00	102000WUDVA3	0	0	27.5	0.008 U
WULRFISH	WR	10/20/00	102000WUDVA4	1	0	28.3	0.008 U
WULRFISH	WR	10/20/00	102000WUDVA4	2	0	29.7	0.006 U
WULRFISH	WR	10/20/00	102000WUDVA5	0	0	30.3	0.009 U
WULRFISH	WR	10/20/00	102000WUDVA6	0	0	27.7	0.008 U
WULRFISH	WR	06/16/01	061601WUDVA1	0	0	25.0	0.035
WULRFISH	WR	06/16/01	061601WUDVA2	1	0	26.5	0.037
WULRFISH	WR	06/16/01	061601WUDVA2	2	0	28.5	0.009
WULRFISH	WR	06/16/01	061601WUDVA4	0	0	22.7	0.007
WULRFISH	WR	06/16/01	061601WUDVA5	0	0	31.8	0.006 U
WULRFISH	WR	06/16/01	061601WUDVA6	0	0	26.1	0.005 U
WULRFISH	WR	06/16/01	061601WUDVA7	0	0	24.5	0.005 U
WULRFISH	WR	08/28/01	082801WUDVA1	0	0	29.0	0.023
WULRFISH	WR	08/28/01	082801WUDVA2	0	0	26.8	0.005 U
WULRFISH	WR	08/28/01	082801WUDVA3	0	0	29.3	0.006
WULRFISH	WR	08/28/01	082801WUDVA4	0	0	28.8	0.006 U
WULRFISH	WR	08/28/01	082801WUDVA5	0	0	28.6	0.011
WULRFISH	WR	08/28/01	082801WUDVA6	1	0	29.1	0.006 U
WULRFISH	WR	08/28/01	082801WUDVA6	2	0	32.5	0.029
WULRFISH	WR	05/30/02	050302WUDVA1	0	0	28.2	0.006 U
WULRFISH	WR	05/30/02	050302WUDVA2	0	0	26.5	0.005 U
WULRFISH	WR	05/30/02	050302WUDVA3	0	0	29.6	0.006 U
WULRFISH	WR	05/30/02	050302WUDVA4	0	0	33.1	0.007 U

**Table G-30. (cont.)**

Survey	Survey Station	Date	Sample ID	Field Replicate	Subsample	Total Solids (dry wt. as % of wet wt. or volume) (% dry)	Lead (mg/kg wet wt)
WULRFISH	WR	05/30/02	050302WUDVA5	1	0	28.8	0.006 <i>U</i>
WULRFISH	WR	05/30/02	050302WUDVA5	2	0	27.4	0.005 <i>U</i>
WULRFISH	WR	05/30/02	050302WUDVA6	0	0	22.6	0.005 <i>U</i>
WULRFISH	WR	10/03/02	100302WUDVA1	0	0	29.3	0.006 <i>U</i>
WULRFISH	WR	10/03/02	100302WUDVA2	1	0	31.3	0.006 <i>U</i>
WULRFISH	WR	10/03/02	100302WUDVA2	2	0	31.4	0.006 <i>U</i>
WULRFISH	WR	10/03/02	100302WUDVA3	0	0	29.3	0.006 <i>U</i>
WULRFISH	WR	10/03/02	100302WUDVA4	0	0	27.5	0.006 <i>U</i>
WULRFISH	WR	10/03/02	100302WUDVA5	0	0	29.4	0.006 <i>U</i>
WULRFISH	WR	10/03/02	100302WUDVA6	0	0	21.6	0.004 <i>U</i>
WULRFISH	WR	06/06/03	060603WUDVA1	0	0	24.6	0.005 <i>U</i>
WULRFISH	WR	06/06/03	060603WUDVA2	0	0	25.8	0.005 <i>U</i>
WULRFISH	WR	06/06/03	060603WUDVA3	0	0	25.4	0.091
WULRFISH	WR	06/06/03	060603WUDVA4	0	0	24.7	0.005 <i>U</i>
WULRFISH	WR	06/06/03	060603WUDVA5	1	0	30.6	0.006 <i>U</i>
WULRFISH	WR	06/06/03	060603WUDVA5	2	0	31.1	0.006 <i>U</i>
WULRFISH	WR	06/06/03	060603WUDVA6	0	0	21.5	0.019
WULRFISH	WR	09/30/03	093003WUDVA1	0	0	26.4	0.005 <i>U</i>
WULRFISH	WR	09/30/03	093003WUDVA2	0	0	28.2	0.054
WULRFISH	WR	09/30/03	093003WUDVA3	0	0	30.3	0.006 <i>U</i>
WULRFISH	WR	09/30/03	093003WUDVA4	1	0	31.3	0.006 <i>U</i>
WULRFISH	WR	09/30/03	093003WUDVA4	2	0	30.5	0.006 <i>U</i>
WULRFISH	WR	09/30/03	093003WUDVA5	0	0	28.6	0.006 <i>U</i>
WULRFISH	WR	09/30/03	093003WUDVA6	0	0	29.1	0.006 <i>U</i>

**Note:** *U* - undetected; value reported is the full detection limit

Survey names and citations: WULRFISH Ott (2004)



**Table G-31. Summary of water quality parameters for surface waters**

Station	Date	Time	Dissolved Oxygen (mg/L)	Temperature (°C)	pH	Conductivity ( $\mu$ S/cm)	Salinity (ppt)
<b>Site Stream Surface Water</b>							
AC	06/27/04	15:10	9.21	11.4	7.6	122.9	0.1
ARC	06/27/04	11:55	10.06	8.5	7.0	--	--
OR	06/27/04	13:50	10.22	10.5	7.4	99.2	0.1
<b>Reference Stream Surface Water</b>							
ST-REF-3	07/01/04	13:09	5.22	15.4	8.1	158.2	0.1
ST-REF-5	07/01/04	14:30	2.19	17.0	7.6	38.3	0.0
ST-REF-6	07/01/04	16:08	4.08	14.5	7.2	60.6	0.0
<b>Site Tundra Pond Surface Water</b>							
TP1_100m	06/17/04	12:15	--	9.1		--	--
TP1_100m	07/01/04	14:20	2.51	23.53	7.13	715	--
TP1_1000m	06/17/04	10:45	--	11.5		--	--
TP1_1000m	07/01/04	13:25	3.36	23.25	6.2	42	--
TP3	07/01/04	--	3.03	21.55	6.38	329	--
TP4	06/17/04	17:03	--	11.2		--	--
TP4	07/01/04	18:16	2.96	21.93	6.8	119	--
<b>Reference Tundra Pond Surface Water</b>							
TP-REF-2	07/01/04	12:40	5.44	19.5	7.9	111.6	0.1
TP-REF-3	07/01/04	11:50	5.4	22.1	7.7	23.4	0.0
TP-REF-5	07/01/04	12:45	3.5	14.5	7.2	63.2	0.0
<b>Site Lagoon Surface Water</b>							
PLNL	06/29/04	10:30	3.88	17.9	7.2	2,724	1.7
NLK	06/30/04	16:09	8.19	23.6	8.5	958	0.5
NLF	07/02/04	14:35	4.07	20.9	8.6	866	0.5
<b>Reference Lagoon Surface Water</b>							
CL-REF-1	07/03/04	12:05	2.81	18.4	8.5	210.3	0.0
CL-REF-2	07/04/04	12:00	8.45	15.7	8.0	357.8	0.2
CL-REF-3	07/04/04	15:31	8.56	15.5	8.3	361.5	0.2

**Table G-32. Summary of abundances of stream macroinvertebrates (per m<sup>3</sup>) in drift samples from ARC-R**

Phylum	Class	Order	Family	Genus	ARC-R					ARC-R Total
					ST0001A	ST0001B	ST0001C	ST0001D	ST0001E	
Platyhelminthes	Turbellaria									
Nematoda	Nematoda									
Annelida	Oligochaeta									
Arthropoda	Arachnida	Acarina			0.13	0.098	0.053		0.052	0.33
	Crustacea	Ostracoda								
	Insecta	Coleoptera (Beetles)	Dytiscidae	<i>Agabinus</i>						
				<i>Dytiscus</i>		0.0035				
				<i>Hydaticus</i>						
				<i>Oreodytes</i>						
			Hydrophilidae						0.0027	0.0027
				<i>Ametor</i>						
				<i>Hydrophilus</i>						
		Collembola (Springtails)	Sminthuridae				0.0041			0.004
				<i>Sminthuris</i>					0.0044	
			Isotomidae		0.016	0.0070				0.023
			Onychiuridae		0.0071	0.0035	0.0041			0.015
			Poduridae							
	Diptera (True flies)		Chironomidae		1.3	0.74	0.71	0.41	0.63	3.8
			Culicidae		0.029				0.0055	0.034
			Dolichopodidae							
			Ephydriidae	<i>Scatella</i>						
			Empididae							
				<i>Chelifera</i>		0.0035				0.0035
				<i>Oreogeton</i>	0.064	0.0070				0.071
			Dixidae	<i>Dixella</i>						
			Simuliidae	<i>Simulium</i>	0.35	0.25	0.20	0.076	0.17	1.0
			Tipulidae			0.0035				0.0035
				<i>Dicranota</i>	0.0071					0.0071
				<i>Tipula</i>		0.0035				0.0035
	Ephemeroptera (Mayflies)		Ameletidae	<i>Ameletus</i>						
			Baetidae		<i>Baetis</i>	0.18	0.14	0.13	0.062	0.24

**Table G-32. (cont.)**

Phylum	Class	Order	Family	Genus	ARC-R					ARC-R Total
					ST0001A	ST0001B	ST0001C	ST0001D	ST0001E	
			Heptageniidae	<i>Cinygmula</i>	0.43	0.42	0.37	0.20	0.11	1.5
				<i>Epeorus</i>						
		Plecoptera (Stoneflies)	Capniidae	<i>Capnia</i>	0.85	0.69	0.54	0.32	0.16	2.6
			Chloroperlidae			0.0035				0.0035
				<i>Neaviperla</i>					0.0027	0.0027
				<i>Utaperla</i>						
			Nemouridae		0.0054			0.018		0.023
				<i>Nemoura</i>	0.0071	0.028	0.028	0.018	0.0055	0.087
				<i>Zapada</i>						
		Trichoptera (Caddis flies)	Brachycentridae							
				<i>Amiocentris</i>						
				<i>Brachycentrus</i>						
			Limnephilidae							
				<i>Grensia</i>			0.0041	0.0044		0.0085
				<i>Hydatophylax</i>		0.014	0.0041	0.0044		0.023
<b>Grand Total</b>					<b>3.3</b>	<b>2.4</b>	<b>2.0</b>	<b>1.1</b>	<b>1.4</b>	<b>10</b>

**Table G-33. Summary of abundances of stream macroinvertebrates (per m<sup>3</sup>) in drift samples from OR-R**

Phylum	Class	Order	Family	Genus	OR-R					OR-R Total
					ST0006A	ST0006B	ST0006C	ST0006D	ST0006E	
Platyhelminthes	Turbellaria									
Nematoda	Nematoda							0.0028		0.0028
Annelida	Oligochaeta				0.034	0.017	0.0033			0.054
Arthropoda	Arachnida	Acarina			0.22	0.034	0.22	0.11	0.081	0.66
	Crustacea	Ostracoda				0.011			0.0084	0.020
	Insecta	Coleoptera (Beetles)	Dytiscidae	<i>Agabinus</i>						
				<i>Dytiscus</i>			0.0066		0.0056	0.012
				<i>Hydaticus</i>						
				<i>Oreodytes</i>	0.0057	0.0056			0.0056	0.017
			Hydrophilidae	<i>Ametor</i>						
				<i>Hydrophilus</i>						
		Collembola (Springtails)	Sminthuridae	<i>Sminthuris</i>						
			Isotomidae		0.0057		0.0033			0.0090
			Onychiuridae							
			Poduridae		0.0057	0.0056	0.010	0.0046	0.017	0.043
		Diptera (True flies)	Chironomidae		2.0	1.5	1.8	0.82	0.94	7.1
			Culicidae		0.0057		0.0066			0.012
			Dolico podidae							
			Ephyridae	<i>Scatella</i>				0.0046		0.0046
			Empididae	<i>Chelifera</i>	0.0057	0.0056	0.0033		0.0028	0.017
				<i>Oreogeton</i>						
			Dixidae	<i>Dixella</i>						
			Simuliidae	<i>Simulium</i>	0.81	0.42	0.22	0.14	0.11	1.7
			Tipulidae	<i>Dicranota</i>						
				<i>Tipula</i>	0.0057					0.0057
		Ephemeroptera (Mayflies)	Ameletidae	<i>Ameletus</i>						
			Baetidae	<i>Baetis</i>	0.43	0.23	0.15	0.091	0.067	0.965

**Table G-33. (cont.)**

Phylum	Class	Order	Family	Genus	OR-R					OR-R Total
					ST0006A	ST0006B	ST0006C	ST0006D	ST0006E	
			Heptageniidae	<i>Cinygmula</i>						
				<i>Epeorus</i>						
		Plecoptera (Stoneflies)	Capniidae	<i>Capnia</i>	0.11	0.040	0.046	0.014	0.020	0.23
			Chloroperlidae			0.034				0.034
				<i>Neaviperla</i>		0.034	0.0033	0.023	0.011	0.071
				<i>Utaperla</i>						
			Nemouridae		0.017		0.0066			0.024
				<i>Nemoura</i>					0.0028	0.0028
				<i>Zapada</i>						
		Trichoptera (Caddis flies)	Brachycentridae				0.003		0.0056	0.0089
				<i>Amiocentris</i>						
				<i>Brachycentrus</i>		0.006				0.0056
			Limnephilidae							
				<i>Grensia</i>						
				<i>Hydatophylax</i>	0.13	0.034	0.129	0.037	0.045	0.37
<b>Grand Total</b>					<b>3.8</b>	<b>2.4</b>	<b>2.6</b>	<b>1.2</b>	<b>1.3</b>	<b>11</b>

**Table G-34. Summary of abundances of stream macroinvertebrates (per m<sup>3</sup>) in drift samples from AC-R**

Phylum	Class	Order	Family	Genus	AC-R					AC-R Total
					ST0002A	ST0002B	ST0002C	ST0002D	ST0002E	
Platyhelminthes	Turbellaria						0.0017			0.0017
Nematoda	Nematoda						0.0017			0.0017
Annelida	Oligochaeta				0.045	0.015	0.016	0.004		0.081
Arthropoda	Arachnida	Acarina			0.060	0.018	0.031	0.040	0.035	0.18
	Crustacea	Ostracoda								
	Insecta	Coleoptera (Beetles)	Dytiscidae				0.00083			0.00083
				<i>Agabinus</i>	0.015				0.012	0.027
				<i>Dytiscus</i>						
				<i>Hydaticus</i>						
				<i>Oreodytes</i>						
			Hydrophilidae							
				<i>Ametor</i>	0.015				0.0078	0.023
				<i>Hydrophilus</i>						
		Collembola (Springtails)	Sminthuridae			0.0030	0.00083			0.0039
				<i>Sminthuris</i>						
			Isotomidae							
			Onychiuridae		0.030					0.030
			Poduridae			0.0091	0.00083			0.010
		Diptera (True flies)	Chironomidae		1.4	0.67	0.26	0.50	0.79	3.6
			Culicidae							
			Dolichopodidae		0.015		0.0033			0.018
			Ephydriidae	<i>Scatella</i>				0.0045		0.0045
			Empididae					0.0045		0.0045
				<i>Chelifera</i>						
				<i>Oreogeton</i>						
			Dixidae	<i>Dixella</i>						
			Simuliidae	<i>Simulium</i>	0.57	0.18	0.14	0.24		1.1
			Tipulidae							
				<i>Dicranota</i>						
				<i>Tipula</i>		0.0091	0.0067	0.0089		0.025
		Ephemeroptera (Mayflies)	Ameletidae	<i>Ameletus</i>						
			Baetidae							
				<i>Baetis</i>	6.9	2.8	1.7	2.9	2.2	16.5

**Table G-34. (cont.)**

Phylum	Class	Order	Family	Genus	AC-R					AC-R
					ST0002A	ST0002B	ST0002C	ST0002D	ST0002E	Total
			Heptageniidae	<i>Cinygmula</i>	0.090	0.061	0.047	0.085	0.043	0.33
				<i>Epeorus</i>						
		Plecoptera (Stoneflies)	Capniidae	<i>Capnia</i>	2.1	1.0	0.37	0.90	0.86	5.3
			Chloroperlidae	<i>Neaviperla</i>						
				<i>Utaperla</i>						
			Nemouridae		0.060				0.012	0.072
				<i>Nemoura</i>		0.038	0.015	0.045	0.0078	0.11
				<i>Zapada</i>		0.035	0.015			0.050
		Trichoptera (Caddis flies)	Brachycentridae	<i>Amiocentris</i>			0.0025			0.0025
				<i>Brachycentrus</i>					0.0039	0.0039
			Limnephilidae						0.0039	0.0039
				<i>Grensia</i>			0.00083			0.0008
				<i>Hydatophylax</i>						
<b>Grand Total</b>					<b>11</b>	<b>4.8</b>	<b>2.6</b>	<b>4.8</b>	<b>4.0</b>	<b>28</b>

**Table G-35. Summary of abundances of stream macroinvertebrates (per m<sup>3</sup>) in drift samples from ST-REF-3**

Phylum	Class	Order	Family	Genus	ST-REF-3					ST-REF-3
					ST0003A	ST0003B	ST0003C	ST0003D	ST0003E	Total
Platyhelminthes	Turbellaria							0.0027		0.0027
Nematoda	Nematoda									
Annelida	Oligochaeta									
Arthropoda	Arachnida	Acarina			0.015	0.025	0.022	0.029	0.025	0.12
	Crustacea	Ostracoda								
	Insecta	Coleoptera (Beetles)	Dytiscidae	<i>Agabinus</i> <i>Dytiscus</i> <i>Hydaticus</i> <i>Oreodytes</i>						
			Hydrophilidae		0.0039					0.0039
		Collembola (Springtails)	Sminthuridae	<i>Sminthuris</i>		0.0061			0.0021	0.0082
			Isotomidae			0.0061	0.030	0.0027	0.0021	0.041
			Onychiuridae		0.0039		0.0074	0.0027		0.014
			Poduridae				0.0074		0.0042	0.012
		Diptera (True flies)	Chironomidae		0.17	0.33	0.39	0.12	0.099	1.1
			Culicidae				0.0074		0.0021	0.010
			Dolichopodidae		0.0039	0.0061				0.010
			Ephydriidae	<i>Scatella</i>						
			Empididae	<i>Chelifera</i> <i>Oreogeton</i>						
			Dixidae	<i>Dixella</i>						
			Simuliidae	<i>Simulium</i>	0.17	0.18	0.16	0.088	0.040	0.63
			Tipulidae				0.0074			0.0074
				<i>Dicranota</i> <i>Tipula</i>				0.0053	0.0021	0.0074
		Ephemeroptera (Mayflies)	Ameletidae	<i>Ameletus</i>	0.0039					0.0039
			Baetidae	<i>Baetis</i>	0.67	0.94	0.82	0.40	0.46	3.3



**Table G-35. (cont.)**

Phylum	Class	Order	Family	Genus	ST-REF-3					ST-REF-3
					ST0003A	ST0003B	ST0003C	ST0003D	ST0003E	Total
			Heptageniidae	<i>Cinygmula</i>	0.085	0.17	0.18	0.077	0.11	0.62
				<i>Epeorus</i>				0.0053		0.0053
		Plecoptera (Stoneflies)	Capniidae	<i>Capnia</i>	0.077	0.055	0.12	0.037	0.042	0.33
			Chloroperlidae						0.015	0.015
				<i>Neaviperla</i>		0.067	0.022		0.025	0.11
				<i>Utaperla</i>						
			Nemouridae				0.022			0.022
				<i>Nemoura</i>	0.019	0.0061	0.015	0.0053	0.0063	0.052
				<i>Zapada</i>					0.0021	0.0021
		Trichoptera (Caddis flies)	Brachycentridae				0.0074			0.0074
				<i>Amiocentris</i>						
				<i>Brachycentrus</i>	0.0039					0.0039
			Limnephilidae							
				<i>Grensia</i>		0.012	0.0074			0.020
				<i>Hydatophylax</i>	0.023	0.037	0.037	0.027	0.036	0.16
<b>Grand Total</b>					<b>1.3</b>	<b>1.8</b>	<b>1.9</b>	<b>0.80</b>	<b>0.87</b>	<b>6.6</b>

**Table G-36. Summary of abundances of stream macroinvertebrates (per m<sup>3</sup>) in drift samples from ST-REF-5**

Phylum	Class	Order	Family	Genus	ST-REF-5					ST-REF-5			
					ST0004A	ST0004B	ST0004C	ST0004D	ST0004E	Total			
Platyhelminthes	Turbellaria												
Nematoda	Nematoda								0.0014		0.0014		
Annelida	Oligochaeta				0.0038	0.0043			0.0043		0.012		
Arthropoda	Arachnida	Acarina											
		Crustacea	Ostracoda										
	Insecta (Beetles)	Coleoptera	Dytiscidae		<i>Agabinus</i>								
					<i>Dytiscus</i>								
					<i>Hydaticus</i>								
					<i>Oreodytes</i>								
				Hydrophilidae		<i>Ametor</i>							
						<i>Hydrophilus</i>							
			Collembola (Springtails)	Sminthuridae		<i>Sminthuris</i>							
				Isotomidae									
				Onychiuridae									
				Poduridae									
			Diptera (True flies)	Chironomidae			0.038	0.019	0.018	0.060	0.013		0.15
		Culicidae						0.0017		0.0029		0.0045	
		Dolichopodidae							0.0017			0.0017	
		Ephydriidae			<i>Scatella</i>								
		Empididae		<i>Chelifera</i>									
				<i>Oreogeton</i>									
		Dixidae		<i>Dixella</i>	0.0038						0.0038		
		Simuliidae		<i>Simulium</i>									
		Tipulidae		<i>Dicranota</i>									
				<i>Tipula</i>									
	Ephemeroptera (Mayflies)	Ameletidae		<i>Ameletus</i>									
Baetidae			<i>Baetis</i>					0.0014		0.0014			

**Table G-36. (cont.)**

Phylum	Class	Order	Family	Genus	ST-REF-5					ST-REF-5
					ST0004A	ST0004B	ST0004C	ST0004D	ST0004E	Total
			Heptageniidae	<i>Cinygmula</i>						
				<i>Epeorus</i>						
		Plecoptera (Stoneflies)	Capniidae	<i>Capnia</i>						
			Chloroperlidae	<i>Neaviperla</i>			0.0022			0.0022
				<i>Utaperla</i>						
			Nemouridae	<i>Nemoura</i>						
				<i>Zapada</i>						
		Trichoptera (Caddis flies)	Brachycentridae	<i>Amiocentris</i>						
				<i>Brachycentrus</i>						
			Limnephilidae	<i>Grensia</i>						
				<i>Hydatophylax</i>						
<b>Grand Total</b>					<b>0.045</b>	<b>0.026</b>	<b>0.022</b>	<b>0.060</b>	<b>0.023</b>	<b>0.18</b>

**Table G-37. Summary of abundances of stream macroinvertebrates (per m<sup>3</sup>) in drift samples from ST-REF-6**

Phylum	Class	Order	Family	Genus	ST-REF-6					ST-REF-6
					ST0005A	ST0005B	ST0005C	ST0005D	ST0005E	Total
Platyhelminthes	Turbellaria									
Nematoda	Nematoda									
Annelida	Oligochaeta				0.047	0.077		0.0069		0.13
Arthropoda	Arachnida	Acarina			0.094	0.047	0.064	0.051	0.082	0.34
	Crustacea	Ostracoda								
	Insecta	Coleoptera (Beetles)	Dytiscidae	<i>Agabinus</i> <i>Dytiscus</i> <i>Hydaticus</i> <i>Oreodytes</i>			0.0042			0.0042
			Hydrophilidae	<i>Ametor</i> <i>Hydrophilus</i>					0.0037	0.0037
		Collembola (Springtails)	Sminthuridae	<i>Sminthuris</i>			0.0042	0.0034	0.0075	0.015
			Isotomidae		0.14		0.0085	0.024	0.015	0.19
			Onychiuridae					0.0069		0.0069
			Poduridae		0.023	0.0043	0.0042	0.010	0.0037	0.046
		Diptera (True flies)	Chironomidae		5.1	0.91	1.5	4.6	2.7	15
			Culicidae				0.017		0.0037	0.021
			Dolichopodidae						0.0037	0.0037
			Ephydriidae	<i>Scatella</i>						
			Empididae	<i>Chelifera</i> <i>Oreogeton</i>	0.012			0.0069		0.019
			Dixidae	<i>Dixella</i>						
			Simuliidae	<i>Simulium</i>	0.32	0.75	0.37	0.19	0.082	1.7
			Tipulidae		0.012					0.012
				<i>Dicranota</i> <i>Tipula</i>			0.0042	0.0034		0.0077
						0.0043	0.013	0.0034		0.020
		Ephemeroptera (Mayflies)	Ameletidae	<i>Ameletus</i>					0.0037	0.0037
			Baetidae						0.0075	0.0075
				<i>Baetis</i>	0.94	1.5	0.68	0.39	0.22	3.7

**Table G-37. (cont.)**

Phylum	Class	Order	Family	Genus	ST-REF-6					ST-REF-6
					ST0005A	ST0005B	ST0005C	ST0005D	ST0005E	Total
			Heptageniidae	<i>Cinygmula</i>	0.19	0.29	0.081	0.082	0.052	0.69
				<i>Epeorus</i>		0.081	0.0085		0.0037	0.093
		Plecoptera (Stoneflies)	Capniidae	<i>Capnia</i>	0.070	0.094	0.038	0.058	0.052	0.31
			Chloroperlidae			0.11				0.11
				<i>Neaviperla</i>	0.035		0.030	0.0034	0.019	0.087
				<i>Utaperla</i>		0.0043				0.004
			Nemouridae							
				<i>Nemoura</i>			0.0042		0.0037	0.0080
				<i>Zapada</i>	0.023	0.030	0.008	0.0069	0.011	0.080
		Trichoptera (Caddis flies)	Brachycentridae							
				<i>Amiocentris</i>					0.0075	0.0075
				<i>Brachycentrus</i>		0.0043				0.0043
			Limnephilidae							
				<i>Grensia</i>		0.0085	0.0085	0.0034		0.020
				<i>Hydatophylax</i>	0.21	0.21	0.34	0.42	0.56	1.8
<b>Grand Total</b>					<b>7.2</b>	<b>4.1</b>	<b>3.2</b>	<b>5.9</b>	<b>3.8</b>	<b>24</b>

**Table G-38. Laboratory data for amphipod (*Hyalella azteca*) sediment toxicity test conducted for Phase II of the DMTS fugitive dust risk assessment**

Station	Sample Number	Sampling Date	Replicate	Number Initiated	Number of Survivors	Survival (percent)	Mean Survival (percent)	Total Biomass	Growth <sup>a</sup>	Mean Growth	Standard Deviation
--	Lab control	--	1	10	7	70		0.83	0.08		
--	Lab control	--	2	10	9	90		1.00	0.10		
--	Lab control	--	3	10	8	80		0.96	0.10		
--	Lab control	--	4	10	8	80		0.80	0.08		
--	Lab control	--	5	10	10	100		1.12	0.11		
--	Lab control	--	6	10	10	100		1.23	0.12		
--	Lab control	--	7	10	10	100		1.11	0.11		
--	Lab control	--	8	10	10	100	<b>90.0</b>	1.23	0.12	<b>0.10</b>	<b>0.01</b>
PLNL	SD0001	06/28/04	1	10	9	90		2.23	0.22		
PLNL	SD0001	06/28/04	2	10	10	100		2.71	0.27		
PLNL	SD0001	06/28/04	3	10	10	100		2.66	0.27		
PLNL	SD0001	06/28/04	4	10	10	100		2.45	0.25		
PLNL	SD0001	06/28/04	5	10	10	100		2.92	0.29		
PLNL	SD0001	06/28/04	6	10	10	100		2.40	0.24		
PLNL	SD0001	06/28/04	7	10	10	100		2.82	0.28		
PLNL	SD0001	06/28/04	8	10	10	100	<b>98.8</b>	3.06	0.31	<b>0.27</b>	<b>0.03</b>
NLK	SD0002	06/30/04	1	10	10	100		2.66	0.27		
NLK	SD0002	06/30/04	2	10	10	100		2.74	0.27		
NLK	SD0002	06/30/04	3	10	10	100		3.10	0.31		
NLK	SD0002	06/30/04	4	10	9	90		2.25	0.23		
NLK	SD0002	06/30/04	5	10	10	100		3.16	0.32		
NLK	SD0002	06/30/04	6	10	10	100		3.10	0.31		
NLK	SD0002	06/30/04	7	10	10	100		2.62	0.26		
NLK	SD0002	06/30/04	8	10	10	100	<b>98.8</b>	2.82	0.28	<b>0.28</b>	<b>0.03</b>
NLF	SD0003	07/02/04	1	10	7	70		0.98	0.10		
NLF	SD0003	07/02/04	2	10	10	100		2.50	0.25		
NLF	SD0003	07/02/04	3	10	10	100		2.26	0.23		
NLF	SD0003	07/02/04	4	10	9	90		2.34	0.23		
NLF	SD0003	07/02/04	5	10	10	100		2.71	0.27		
NLF	SD0003	07/02/04	6	10	10	100		2.31	0.23		
NLF	SD0003	07/02/04	7	10	7	70		1.15	0.12		
NLF	SD0003	07/02/04	8	10	10	100	<b>91.3</b>	2.50	0.25	<b>0.21</b>	<b>0.07</b>

**Table G-38. (cont.)**

Station	Sample Number	Sampling Date	Replicate	Number Initiated	Number of Survivors	Survival (percent)	Mean		Mean Growth	Standard Deviation
							Survival (percent)	Total Biomass		
CL-REF-1	SD0004	07/02/04	1	10	10	100		2.88	0.29	
CL-REF-1	SD0004	07/02/04	2	10	10	100		2.83	0.28	
CL-REF-1	SD0004	07/02/04	3	10	10	100		2.98	0.30	
CL-REF-1	SD0004	07/02/04	4	10	9	90		2.50	0.25	
CL-REF-1	SD0004	07/02/04	5	10	9	90		2.78	0.28	
CL-REF-1	SD0004	07/02/04	6	10	10	100		2.36	0.24	
CL-REF-1	SD0004	07/02/04	7	10	10	100		2.77	0.28	
CL-REF-1	SD0004	07/02/04	8	10	10	100	<b>97.5</b>	2.83	0.28	<b>0.27</b> <b>0.02</b>
CL-REF-2	SD0005	07/03/04	1	10	10	100		2.04	0.20	
CL-REF-2	SD0005	07/03/04	2	10	10	100		2.23	0.22	
CL-REF-2	SD0005	07/03/04	3	10	9	90		1.45	0.15	
CL-REF-2	SD0005	07/03/04	4	10	10	100		1.98	0.20	
CL-REF-2	SD0005	07/03/04	5	10	10	100		1.66	0.17	
CL-REF-2	SD0005	07/03/04	6	10	10	100		1.60	0.16	
CL-REF-2	SD0005	07/03/04	7	10	10	100		2.16	0.22	
CL-REF-2	SD0005	07/03/04	8	10	10	100	<b>98.8</b>	1.73	0.17	<b>0.19</b> <b>0.03</b>
CL-REF-3	SD0007	07/04/04	1	10	8	80		1.31	0.13	
CL-REF-3	SD0007	07/04/04	2	10	9	90		1.76	0.18	
CL-REF-3	SD0007	07/04/04	3	10	9	90		1.85	0.19	
CL-REF-3	SD0007	07/04/04	4	10	10	100		2.35	0.24	
CL-REF-3	SD0007	07/04/04	5	10	10	100		1.97	0.20	
CL-REF-3	SD0007	07/04/04	6	10	10	100		1.88	0.19	
CL-REF-3	SD0007	07/04/04	7	10	10	100		1.93	0.19	
CL-REF-3	SD0007	07/04/04	8	10	10	100	<b>95.0</b>	2.29	0.23	<b>0.19</b> <b>0.03</b>

<sup>a</sup> Growth calculated as total biomass divided by number initiated.