

## **Appendix I Data Availability Tables for Analytes not Carried Forward**

**Table I-1. Groundwater Analytes not Carried Forward**

Analyte	Alluvium	Clinker	Colluvium	Interburden	McKay Coal	Rosebud Coal	Rosebud Overburden	Shallow	Spoils	SubMcKay	SubMcKay Deep	Total
1-methylnaphthalene	2	0	0	0	0	0	0	0	0	0	0	2
2-butanone	3	0	0	0	0	0	0	0	0	0	0	3
2-methylnaphthalene	2	0	0	0	0	0	0	0	0	0	0	2
Acenaphthene	2	0	0	0	0	0	0	0	0	0	0	2
Acenaphthylene	2	0	0	0	0	0	0	0	0	0	0	2
Acidity	1	0	0	0	0	0	0	0	0	1	0	2
Acidity,	659	0	0	298	430	300	159	0	143	222	0	2211
Alkalinity	18	0	0	0	0	0	0	0	0	11	0	29
Alkalinity,	960	4	0	444	875	632	332	0	561	343	0	4151
Ammonium	0	0	0	0	1	0	0	0	0	0	0	1
Anthracene	2	0	0	0	0	0	0	0	0	0	0	2
Bacteria,	67	0	0	0	0	0	0	0	0	0	0	67
Benzene	6	0	0	0	4	0	0	0	0	0	0	10
Benzo	10	0	0	0	0	0	0	0	0	0	0	10
Bicarbonate	5114	638	54	594	3094	1131	945	44	1479	6817	84	19994
C11-c22	2	0	0	0	0	0	0	0	0	0	0	2
C19-c36	2	0	0	0	0	0	0	0	0	0	0	2
C5-c8	3	0	0	0	2	0	0	0	0	0	0	5
C9-c10	3	0	0	0	2	0	0	0	0	0	0	5
C9-c12	3	0	0	0	2	0	0	0	0	0	0	5
C9-c18	2	0	0	0	0	0	0	0	0	0	0	2
Carbonate	4740	601	54	568	2809	885	764	45	1372	6163	79	18080
Cerium	7	0	0	0	6	5	0	0	12	1	0	31
Cesium	7	0	0	0	6	5	0	0	12	1	0	31
Chromium	6	0	0	0	0	0	0	0	0	0	0	6
Chrysene	2	0	0	0	0	0	0	0	0	0	0	2
Conductivity	1361	4	0	658	1053	758	444	0	462	474	0	5214
Cyanide	3	0	0	0	0	0	0	0	0	0	0	3
Dibenz	2	0	0	0	0	0	0	0	0	0	0	2
Ethylbenzene	6	0	0	0	3	0	0	0	0	0	0	9
Ethylene	3	0	0	0	0	0	0	0	0	0	0	3
Extractable	0	0	0	0	1	0	0	0	0	0	0	1
Fluoranthene	2	0	0	0	0	0	0	0	0	0	0	2
Fluorene	2	0	0	0	0	0	0	0	0	0	0	2
Gallium	7	0	0	0	6	5	0	0	12	1	0	31
Hardness	87	0	0	0	160	80	5	0	290	27	0	649
Hardness	890	4	0	440	738	567	323	0	301	317	0	3580

Table I-1 continued

Analyte	Alluvium	Clinker	Colluvium	Interburden	McKay Coal	Rosebud Coal	Rosebud Overburden	Shallow	Spoils	SubMcKay	SubMcKay Deep	Total
Hexachlorobenzene	3	0	0	0	0	0	0	0	0	0	0	3
Hydrazine	3	0	0	0	0	0	0	0	0	0	0	3
Hydrogen	4	0	1	1	7	1	1	0	2	2	0	19
Hydroxide	152	0	0	53	93	55	33	0	56	113	0	555
Indeno	2	0	0	0	0	0	0	0	0	0	0	2
Iodide	0	0	0	0	0	0	1	0	0	7	0	8
Lanthanum	7	0	0	0	6	5	0	0	12	1	0	31
M-p	6	0	0	0	1	0	0	0	0	0	0	7
Methyl	3	0	0	0	4	0	0	0	0	0	0	7
Naphthalene	5	0	0	0	3	0	0	0	0	0	0	8
Neodymium	7	0	0	0	6	5	0	0	12	1	0	31
Niobium	7	0	0	0	6	5	0	0	12	1	0	31
Nitrite + Nitrate	4	0	0	0	6	5	0	0	12	1	0	28
O-xylene	6	0	0	0	1	0	0	0	0	0	0	7
Oil	5	0	0	0	0	1	0	0	0	1	0	7
Oxygen	3	0	1	1	7	1	1	0	2	3	0	19
Palladium	7	0	0	0	6	5	0	0	12	1	0	31
Ph	1683	4	0	479	816	611	356	0	341	729	0	5019
Phenanthrene	2	0	0	0	0	0	0	0	0	0	0	2
Phosphorus	118	0	0	91	199	187	132	0	89	64	0	880
Praseodymium	7	0	0	0	6	5	0	0	12	1	0	31
Purgeable	1	0	0	0	1	0	0	0	0	0	0	2
Pyrene	2	0	0	0	0	0	0	0	0	0	0	2
Rubidium	7	0	0	0	6	5	0	0	12	1	0	31
Salinity	2	0	0	0	1	0	0	0	0	2	0	5
Sar	86	0	0	0	160	80	5	0	290	26	0	647
Settleable	0	0	0	0	0	1	0	0	0	0	0	1
Sigma	7	0	0	0	2	0	0	0	0	0	0	9
Silicon	3	3	0	0	0	0	0	0	0	0	0	6
Sodium	1525	31	5	501	1485	766	533	0	540	1661	27	7074
Sulfate	7	0	1	1	0	1	1	0	1	0	0	12
Sum	106	0	0	60	132	70	48	0	86	115	0	617
Thorium	7	0	0	0	6	5	0	0	12	1	0	31
Toluene	6	0	0	0	3	0	0	0	0	0	0	9
Tot	5	0	0	0	8	0	0	0	0	0	0	13
Total	8892	767	69	910	4874	1919	1485	100	2294	9976	129	31415
Tungsten	7	0	0	0	6	5	0	0	12	1	0	31

**Table I-1 continued**

Analyte	Alluvium	Clinker	Colluvium	Interburden	McKay Coal	Rosebud Coal	Rosebud Overburden	Shallow	Spoils	SubMcKay	SubMcKay Deep	Total
Turbidity	48	3	0	10	48	6	15	0	7	75	2	214
Uranium	10	0	0	0	9	6	0	0	16	2	0	43
Water	1472	85	10	63	779	223	153	39	648	1468	23	4963

**Table I-2. Surface Water Analytes not Carried Forward**

Analyte	AR-12	SW-55	SW-60	SW-75	Total
Acidity	0	11	13	13	24
Alkalinity	0	16	14	17	30
Bicarbonate	6	16	14	17	36
Carbonate	6	11	14	5	31
Chromium	1	0	0	0	1
Conductivity	0	57	14	22	71
Flow	3	0	0	0	3
Hardness,	0	16	14	18	30
Hydrogen	1	0	0	0	1
Hydroxide	0	10	0	5	10
Nitrogen,	2	0	0	0	2
Nutrient-nitrogen	0	8	0	3	8
Oil	2	14	13	4	29
Oxidation	1	0	0	0	1
Oxygen	5	0	0	0	5
Ph	0	57	14	23	71
Phosphorus	0	8	0	3	8
Settleable	0	6	1	12	7
Sodium	0	15	14	18	29
Sum	0	18	2	6	20
Total	19	40	42	42	101
Turbidity	0	12	13	14	25
Water	6	40	0	5	46