

TABLE 1B
Screening of Inorganic Chemicals in RZ-C Using LBCLs and LSSLs

Parameter of Interest	Chemical Name	Depth Interval	Count	Detection Count	Detection Frequency	Maximum Detection (mg/kg)	Count of Site-wide Detections Above RBGC in Groundwater ⁵	LBCL (DAF 1) ³ (mg/kg)	Detections > LBCL ⁶ (DAF 1)	LBCL (DAF 20) ³ (mg/kg)	Detections > LBCL ⁶ (DAF 20)	LSSL ⁴ (mg/kg)	Total Detections > LSSL ⁶
Metals	Arsenic	0 - 2 ft	95	95	100%	476	96	1.0E+00	95	2.0E+01	9	4.6E+01	6
	Arsenic	2 - 10 ft	98	98	100%	7		1.0E+00	97	2.0E+01	0	4.6E+01	0
	Barium	0 - 10 ft	193	193	100%	6760	0	8.2E+01	192	1.6E+03	5	2.4E+04	0
	Barium	10 ft - UMCf	143	143	100%	468		8.2E+01	123	1.6E+03	0	2.4E+04	0
	Boron	0 - 10 ft	193	78	40%	1510	18	2.3E+01	24	4.7E+02	6	4.0E+03	0
	Chromium (total)	0 - 2 ft	95	95	100%	2140	48	2.0E+00	95	4.0E+01	9	3.8E+03	0
	Chromium (VI)	0 - 10 ft	195	47	24%	85	46	2.0E+00	18	4.0E+01	3	6.4E+02	0
	Chromium (VI)	10 ft - UMCf	143	35	24%	106		2.0E+00	12	4.0E+01	2	6.4E+02	0
	Cobalt	0 - 10 ft	193	193	100%	784	6	4.9E-01	193	9.9E+00	20	8.6E+01	2
	Cobalt	10 ft - UMCf	143	143	100%	284		4.9E-01	143	9.9E+00	10	8.6E+01	2
	Lead	0 - 10 ft	193	193	100%	825	2	1.4E+01	45	2.7E+02	6	3.2E+03	0
	Magnesium	0 - 2 ft	95	94	99%	240000	49	9.7E+02	94	1.9E+04	15	6.0E+04	6
	Manganese	0 - 10 ft	193	193	100%	61400	18	3.3E+01	193	6.7E+02	44	2.4E+03	23
	Manganese	10 ft - UMCf	143	143	100%	9760		3.3E+01	143	6.7E+02	18	2.4E+03	7
	Molybdenum	0 - 2 ft	95	91	96%	82	2	3.6E+00	8	7.3E+01	1	1.7E+03	0
	Silver	0 - 10 ft	193	52	27%	9.6	0	1.6E+00	3	3.1E+01	0	NC	0
	Thallium	0 - 10 ft	193	186	96%	62	0	4.0E-01	25	8.0E+00	3	6.4E+01	0
	Thallium	10 ft - UMCf	143	137	96%	2		4.0E-01	9	8.0E+00	0	6.4E+01	0
	Tungsten	0 - 10 ft	193	179	93%	158	2	4.1E+01	5	8.2E+02	0	NC	0
Perchlorate	Perchlorate	0 - 10 ft	193	176	91%	5300	84	3.6E-03	176	7.2E-02	174	4.2E-02	176
	Perchlorate	10 ft - UMCf	143	130	91%	3010		3.6E-03	130	7.2E-02	127	4.2E-02	130

Notes:

1 - Shading indicates that the chemical is screened out from further evaluation.

2 - Metals shown for only the depth intervals which exceed background based on the comparison with the RZ-A dataset (see Attachment 2 Table 2B) and exceed the LBCL for DAF=1.

3 - The generic LBCL is used for chemicals without an established LBCL. Where applicable, the adjusted LBCL is used based on the NDEP approved hierarchy for RBGCs (See Attachment 3 Table 2A).

4 - LSSLs are calculated for chemicals with at least one detection greater than the LBCL (DAF=20) in any remediation zone. They are based on an infiltration=0.14 ft/y and an foc=0.001.

5 - Groundwater exceedances are based on the highest result from each well sampled during Phase B investigations.

6 - Soil statistics use Phase A and Phase B investigation data. Normal environmental samples and field duplicates are treated as independent samples.

Abbreviations:

DAF = Dilution attenuation factor (NDEP, 2009)

LBCL = Leaching-based, basic comparison level (NDEP, 2009)

LSSL = Leaching-based, site-specific level (NDEP, 2009)

NC = LSSL not calculated.

RBGC = Risk-based groundwater concentration

mg/kg = milligrams per kilogram