

TABLE 3
Area II Soil Data Results Summary - Metals and Radionuclides

Parameter of Interest	Chemical	Result Unit	Total Count	Detect Count	Detect Frequency	Min. Detect ^a	Max. Detect ^a	Location of Max. Detect	Min. Non-Detect Limit	Max. Non-Detect Limit	NDEP 2009 Worker BCL ^a	Basis	Count of Detects > NDEP Worker BCL	Count of Non-Detect > NDEP Worker BCL	LBCL (DAF = 1) ^a	Count of Detects > LBCL (1)	LBCL (DAF = 20) ^a	Count of Detects > LBCL (20)	Statistical Evaluation: Shallow Soils Above Bkgd? ^b	Statistical Evaluation: Middle Soils Above Bkgd? ^b	Statistical Evaluation: Deep Soils Above Bkgd? ^b
Metals	Aluminum	mg/kg	351	351	100%	2470	23400	SA187-39B	--	--	100000	max	0	0	75	351	1500	351	No ^p	No ^p	Yes
	Antimony	mg/kg	351	132	38%	0.083	20.6	SA188-05B	0.0523	0.8	454	N	0	0	0.3	89	6	5	Yes	Yes	Yes
	Arsenic	mg/kg	351	351	100%	0.57	476	SA102-05B	--	--	1.77	C	341	0	10	111	20	39	PASA	Yes	Yes
	Barium	mg/kg	351	351	100%	25.2	2420	SA51-05B	--	--	100000	max	0	0	82	311	1640	2	No ^p	No ^p	No ^p
	Beryllium	mg/kg	351	351	100%	0.073	1.73	SA51-05B	--	--	2040	C	0	0	3	0	60	0	No ^p	No ^p	No ^p
	Boron	mg/kg	351	328	93%	2.8	1510	SA62-05B	0.3	2.1	100000	max	0	0	23.4	61	467	5	Yes	Yes	Yes
	Cadmium	mg/kg	351	300	85%	0.039	4.47	SA128-05B	0.005	0.05	553	N	0	0	0.4	45	8	0	PASA	Yes	Yes
	Chromium (Total)	mg/kg	351	351	100%	1.31	2140	SA106-05B	--	--	409	C	4	0	2	350	40	31	Yes	Yes	Yes
	Chromium (VI)	mg/kg	351	126	36%	0.11	106	SA106-12B	0.1	0.3	409	C	0	0	2	56	40	5	PASA	PASA	PASA
	Cobalt	mg/kg	351	351	100%	2.1	62.5	SA131-05B	--	--	331	C	0	0	33	3	660	0	No ^p	No ^p	No ^p
	Copper	mg/kg	351	351	100%	5.8	446	SA128-05B	--	--	42200	N	0	0	35.2	18	704	0	Yes	No ^p	Yes ¹
	Iron	mg/kg	351	351	100%	4870	22100	SA63-05B	--	--	100000	max	0	0	7.56	351	151	351	Yes	No ^p	No
	Lead	mg/kg	351	351	100%	2.4	2210	SA128-05B	--	--	800	--	2	0	--	0	--	0	Yes	No ^p	No ^p
	Magnesium	mg/kg	351	351	100%	4590	180000	SA106-05B	--	--	100000	max	2	0	--	0	--	0	Yes	Yes	Yes
	Manganese	mg/kg	351	351	100%	80	59100	SA188-05B	--	--	13700	N	2	0	3.26	351	65.2	351	Yes	No ^p	No
	Mercury	mg/kg	351	304	87%	0.001	34.2	SA165-05B	0.001	0.0067	182	N	0	0	0.104	8	2.09	1	Yes ¹	No ^p	No
	Molybdenum	mg/kg	351	349	99%	0.08	22.8	SA51-05B	0.05	0.08	5680	N	0	0	3.64	5	72.7	0	Yes	No ^p	Yes
	Nickel	mg/kg	351	351	100%	5.99	84.8	SA129-05B	--	--	20100	N	0	0	7	345	140	0	No ^p	No ^p	No
	Platinum	mg/kg	351	309	88%	0.002	0.93	SA129-05B	0.001	0.037	--	--	0	0	--	0	--	0	PASA	PASA	PASA
	Potassium	mg/kg	351	351	100%	840	9190	SA32-37B	--	--	--	--	0	0	--	0	--	0	Yes	Yes	No ^p
	Selenium	mg/kg	351	49	14%	0.7	4.6	SA129-29B	0.1079	1.1	5680	N	0	0	0.3	49	6	0	PASA	PASA	PASA
	Silver	mg/kg	351	65	19%	0.068	3	SA129-05B	0.02	0.3	5680	N	0	0	2	2	40	0	PASA	PASA	PASA
	Sodium	mg/kg	351	351	100%	210	32200	SA106-05B	--	--	--	--	0	0	--	0	--	0	Yes	Yes	Yes
	Strontium	mg/kg	351	351	100%	46.1	5670	SA50-36B	--	--	100000	max	0	0	--	0	--	0	No ^p	Yes	No ^p
	Thallium	mg/kg	351	327	93%	0.016	4.08	SA51-05B	0.001	0.0699	79.5	N	0	0	0.4	20	8	0	No ^p	PASA	PASA
	Tin	mg/kg	351	351	100%	0.27	19.4	SA128-05B	--	--	100000	max	0	0	--	0	--	0	Yes	Yes	Yes
	Titanium	mg/kg	351	351	100%	207	1400	SA131-05B	--	--	100000	max	0	0	150000	0	3000000	0	Yes	No ^p	Yes
Tungsten	mg/kg	351	340	97%	0.033	43.7	SA51-05B	0.002	0.09	8520	N	0	0	41.2	1	823	0	PASA	No ^p	PASA	
Uranium	mg/kg	351	351	100%	0.19	16.5	SA50-36B	--	--	3390	N	0	0	13.5	1	270	0	Yes	Yes	Yes	
Vanadium	mg/kg	351	351	100%	13.7	147	SA51-05B	--	--	5680	N	0	0	300	0	6000	0	Yes	No ^p	Yes	
Zinc	mg/kg	351	346	99%	12.2	350	SA51-05B	0.2	0.52	100000	max	0	0	620	0	12400	0	No ^p	No ^p	No ^p	
Radionuclides	Radium-226	pCi/g	351	347	99%	0.283	6.56	SA50-36B	0.0402	0.276	0.023	C	347	4	0.016	347	0.32	346	No ^p	PASA	Yes
	Radium-228	pCi/g	351	339	97%	0.413	4.8	SA167-05B	0.129	0.667	0.041	C	339	12	0.016	339	0.32	339	No ^p	No ^p	No
	Thorium-228	pCi/g	339	339	100%	0.426	3.12	SA172-05B	--	--	0.025	C	339	0	0.0023	339	0.045	339	No ^p	No ^p	No ^p
	Thorium-230	pCi/g	339	339	100%	0.586	8.38	RSAM7-28B	--	--	8.3	C	1	0	0.00084	339	0.017	339	No ^p	Yes	Yes
	Thorium-232	pCi/g	339	339	100%	0.208	2.41	SA65-20B	--	--	7.4	C	0	0	0.0029	339	0.058	339	No ^p	No ^p	No ^p
	Uranium-234	pCi/g	339	339	100%	0.266	9.21	RSAM7-28B	--	--	11	C	0	0	--	--	--	--	No ^p	Yes	Yes
	Uranium-235	pCi/g	339	258	76%	0.0135	0.44	RSAM7-28B	0.00515	0.537	0.35	C	1	3	--	--	--	--	No ^p	Yes	Yes
Uranium-238	pCi/g	339	321	95%	0.254	7.59	RSAM7-28B	0.00562	2.64	1.4	C	139	16	--	--	--	--	No ^p	Yes	Yes	

a - From User's Guide and Background Technical Document for Nevada Division of Environmental Protection (NDEP) Basic Comparison Levels (BCLs) for Human Health for the BMI Complex and Common Areas, Revision 4, November 2009. Values for the worker are the lower of the indoor and outdoor worker soil BCLs.

b - Based on results of statistical comparison tests performed between shallow alluvium, deep alluvium and Muddy Creek background and site datasets as follows: Shallow Quaternary Alluvium (i.e., 0-10 feet bgs) compared with the 2005 BRC/TIMET Shallow Background Data Set, using only the samples derived from the McCullough Range. Middle Quaternary Alluvium (i.e., 10-20 feet bgs) compared to the deeper alluvium data from the 2007 BRC/TIMET Deep Background data set, using only samples derived from the McCullough Range. Deep soil (i.e., > 20 feet bgs) compared with Upper Muddy Creek samples from the 2007 BRC/TIMET Deep Background data set.

C = Cancer

N = Noncancer

sat = soil saturation

max = risk-based value is greater than 100,000 mg/kg

No^p = Gilbert's Toolbox results imply Site data lower than Background data, additional analysis of Detection Limits is pending

PASA = Pending additional statistical analysis due to low frequency of detection in either site or background data sets or conflicting Gilbert toolbox results (Ra-226)

Yes¹ = failed Gilbert's Toolbox in only 1 out of 4 tests