

Table 7-1. Raccoon Blood Data Summary: 2010
Tennessee Valley Authority Kingston, Tennessee

Constituent	Units	Reference			Impacted		
		Number of Detects / Number of Samples	Range	Mean Concentration [a]	Number of Detects / Number of Samples	Range	Mean Concentration [a]
Inorganics							
Aluminum	mg/kg ww	0 - 5	3.7 - 4.1	3.94	1 - 10	3.5 - 4.1	3.72
Antimony	mg/kg ww	0 - 5	0.013 - 0.015	0.014	0 - 10	0.013 - 0.015	0.0133
Arsenic	mg/kg ww	0 - 5	0.026 - 0.029	0.0276	0 - 10	0.025 - 0.029	0.026
Barium	mg/kg ww	1 - 5	0.044 - 0.057	0.048	1 - 10	0.04 - 0.078	0.0453
Beryllium	mg/kg ww	0 - 5	0.027 - 0.03	0.0288	0 - 10	0.026 - 0.03	0.0271
Boron	mg/kg ww	0 - 5	0.38 - 0.42	0.404	0 - 10	0.36 - 0.42	0.382
Cadmium	mg/kg ww	0 - 5	0.007 - 0.0078	0.00748	0 - 10	0.0067 - 0.0078	0.00702
Chromium	mg/kg ww	0 - 5	0.12 - 0.13	0.126	0 - 10	0.11 - 0.13	0.117
Cobalt	mg/kg ww	1 - 5	0.014 - 0.016	0.0144	0 - 10	0.012 - 0.014	0.0128
Copper	mg/kg ww	5 - 5	1.2 - 1.8	1.4	10 - 10	1.2 - 1.7	1.47
Lead	mg/kg ww	3 - 5	0.026 - 0.037	0.031	2 - 10	0.024 - 0.074	0.0334
Manganese	mg/kg ww	0 - 5	0.16 - 0.17	0.168	0 - 10	0.15 - 0.17	0.157
Mercury	mg/kg ww	1 - 5	0.011 - 0.019	0.013	2 - 10	0.01 - 0.032	0.0139
Molybdenum	mg/kg ww	3 - 5	0.034 - 0.087	0.062	6 - 10	0.054 - 0.12	0.072
Nickel	mg/kg ww	0 - 5	0.09 - 0.1	0.096	0 - 10	0.085 - 0.1	0.0898
Selenium	mg/kg ww	5 - 5	0.36 - 0.53	0.434	10 - 10	0.37 - 0.62	0.459
Silver	mg/kg ww	0 - 5	0.0027 - 0.0029	0.00284	0 - 10	0.0025 - 0.003	0.00267
Strontium	mg/kg ww	0 - 5	0.041 - 0.045	0.0434	3 - 10	0.039 - 0.048	0.0412
Thallium	mg/kg ww	0 - 5	0.013 - 0.014	0.0136	0 - 10	0.012 - 0.014	0.0127
Vanadium	mg/kg ww	0 - 5	0.042 - 0.047	0.0448	0 - 10	0.04 - 0.047	0.0421
Zinc	mg/kg ww	5 - 5	4.6 - 8.2	6.08	10 - 10	3.4 - 13	6.53
Inorganic-cations/anions							
Calcium	mg/kg ww	5 - 5	55.4 - 85.1	69.24	10 - 10	56.4 - 69.4	62.35
Iron	mg/kg ww	5 - 5	304 - 481	397	10 - 10	324 - 563	394.8
Magnesium	mg/kg ww	2 - 5	44.8 - 60.4	49.8	5 - 10	42.2 - 52.7	46.25
Potassium	mg/kg ww	3 - 5	683 - 1090	784.2	6 - 10	636 - 801	703.6
Sodium	mg/kg ww	5 - 5	2880 - 3980	3274	10 - 10	2740 - 3440	3029

Note: 2010 Reference location includes samples collected from Hugo Property and Knox County, Tennessee.

[a] Mean concentration calculated using full reporting limits for non-detect values.

- = Not detected/ not analyzed/ not applicable.

mg/kg ww = Milligram per kilogram wet weight.

Table 7-2. Raccoon Skeletal Muscle Data Summary: 2010

Tennessee Valley Authority Kingston, Tennessee

Constituent	Units	Reference			Impacted		
		Number of Detects / Number of Samples	Range	Mean Concentration [a]	Number of Detects / Number of Samples	Range	Mean Concentration [a]
Inorganics							
Aluminum	mg/kg ww	0 - 5	3.6 - 4	3.76	1 - 10	3.5 - 5.5	4.05
Antimony	mg/kg ww	0 - 5	0.013 - 0.014	0.0134	1 - 10	0.013 - 0.31	0.0438
Arsenic	mg/kg ww	0 - 5	0.025 - 0.028	0.0266	3 - 10	0.025 - 0.07	0.036
Barium	mg/kg ww	3 - 5	0.041 - 0.13	0.0648	3 - 10	0.043 - 0.064	0.0488
Beryllium	mg/kg ww	0 - 5	0.027 - 0.03	0.028	0 - 10	0.026 - 0.031	0.0286
Boron	mg/kg ww	0 - 5	0.37 - 0.41	0.39	0 - 10	0.37 - 0.43	0.402
Cadmium	mg/kg ww	0 - 5	0.0069 - 0.023	0.0103	1 - 10	0.0071 - 0.17	0.0237
Chromium	mg/kg ww	0 - 5	0.11 - 0.13	0.12	1 - 10	0.11 - 0.93	0.204
Cobalt	mg/kg ww	0 - 5	0.013 - 0.014	0.0134	1 - 10	0.013 - 0.063	0.0188
Copper	mg/kg ww	5 - 5	1.4 - 1.8	1.66	10 - 10	1.3 - 16.7	3.27
Lead	mg/kg ww	0 - 5	0.025 - 0.028	0.0262	1 - 10	0.026 - 3.2	0.345
Manganese	mg/kg ww	4 - 5	0.16 - 0.21	0.186	8 - 10	0.17 - 2.7	0.473
Mercury	mg/kg ww	3 - 5	0.014 - 0.12	0.0466	10 - 10	0.012 - 0.39	0.0941
Molybdenum	mg/kg ww	3 - 5	0.034 - 0.067	0.0476	6 - 10	0.034 - 0.81	0.123
Nickel	mg/kg ww	0 - 5	0.088 - 0.098	0.0922	0 - 10	0.086 - 0.1	0.094
Selenium	mg/kg ww	5 - 5	0.22 - 0.35	0.286	10 - 10	0.31 - 1.3	0.492
Silver	mg/kg ww	0 - 5	0.0026 - 0.0029	0.00272	1 - 10	0.0027 - 0.014	0.00394
Strontium	mg/kg ww	0 - 5	0.04 - 0.044	0.0416	1 - 10	0.041 - 0.053	0.0442
Thallium	mg/kg ww	0 - 5	0.012 - 0.014	0.0132	0 - 10	0.012 - 0.014	0.0133
Vanadium	mg/kg ww	0 - 5	0.041 - 0.046	0.0432	2 - 10	0.042 - 0.36	0.0968
Zinc	mg/kg ww	5 - 5	53.3 - 67.3	60.96	10 - 10	39.5 - 73.3	57.76
			0 - 0			0 - 0	
Inorganic-cations/anions							
Calcium	mg/kg ww	3 - 5	43.4 - 55.6	48.74	5 - 10	45.1 - 85.9	54.22
Iron	mg/kg ww	5 - 5	18.6 - 32.4	27.76	10 - 10	27.1 - 733	108.94
Magnesium	mg/kg ww	5 - 5	256 - 301	270.4	10 - 10	188 - 292	265.1
Potassium	mg/kg ww	5 - 5	3740 - 4470	4048	10 - 10	2320 - 4160	3728
Sodium	mg/kg ww	5 - 5	490 - 657	601	10 - 10	446 - 1790	736.3

Note: 2010 Reference location includes samples collected from Hugo Property and Knox County, Tennessee.

[a] Mean concentration calculated using full reporting limits for non-detect values.

– = Not detected/ not analyzed/ not applicable.

mg/kg ww = Milligram per kilogram wet weight.

Table 7-3. Raccoon Kidney Data Summary: 2010
Tennessee Valley Authority Kingston, Tennessee

Constituent	Units	Reference			Impacted		
		Number of Detects / Number of Samples	Range	Mean Concentration [a]	Number of Detects / Number of Samples	Range	Mean Concentration [a]
Inorganics							
Aluminum	mg/kg ww	0 - 5	3.6 - 4.1	3.78	0 - 10	3.6 - 4.1	3.91
Antimony	mg/kg ww	0 - 5	0.013 - 0.015	0.0136	1 - 10	0.013 - 0.016	0.0145
Arsenic	mg/kg ww	3 - 5	0.026 - 0.065	0.0376	3 - 10	0.025 - 0.037	0.029
Barium	mg/kg ww	5 - 5	0.067 - 0.3	0.1576	10 - 10	0.052 - 0.12	0.0806
Beryllium	mg/kg ww	0 - 5	0.027 - 0.03	0.028	0 - 10	0.027 - 0.03	0.0289
Boron	mg/kg ww	0 - 5	0.37 - 0.42	0.392	0 - 10	0.37 - 0.43	0.405
Cadmium	mg/kg ww	5 - 5	0.93 - 10.1	3.102	10 - 10	0.63 - 2.7	1.251
Chromium	mg/kg ww	0 - 5	0.11 - 0.13	0.12	0 - 10	0.11 - 0.13	0.123
Cobalt	mg/kg ww	5 - 5	0.036 - 0.11	0.0734	10 - 10	0.025 - 0.065	0.0424
Copper	mg/kg ww	5 - 5	3.5 - 8.7	5.6	10 - 10	3.3 - 5.3	4.42
Lead	mg/kg ww	5 - 5	0.041 - 0.21	0.1268	10 - 10	0.043 - 1.3	0.271
Manganese	mg/kg ww	5 - 5	1.2 - 1.5	1.3	10 - 10	0.92 - 1.5	1.21
Mercury	mg/kg ww	5 - 5	0.064 - 0.4	0.1734	10 - 10	0.057 - 0.79	0.19
Molybdenum	mg/kg ww	5 - 5	0.28 - 0.68	0.444	10 - 10	0.29 - 0.54	0.42
Nickel	mg/kg ww	0 - 5	0.088 - 0.1	0.0926	0 - 10	0.088 - 0.1	0.095
Selenium	mg/kg ww	5 - 5	1.5 - 2	1.84	10 - 10	1.3 - 2.3	1.94
Silver	mg/kg ww	0 - 5	0.0026 - 0.003	0.00274	0 - 10	0.0026 - 0.0047	0.003
Strontium	mg/kg ww	3 - 5	0.04 - 0.088	0.0534	7 - 10	0.044 - 0.065	0.049
Thallium	mg/kg ww	0 - 5	0.012 - 0.014	0.0132	0 - 10	0.012 - 0.014	0.0135
Vanadium	mg/kg ww	1 - 5	0.042 - 0.061	0.0474	2 - 10	0.043 - 0.14	0.0606
Zinc	mg/kg ww	5 - 5	17.8 - 25.7	21.74	10 - 10	17.4 - 31	21.28
			0 - 0			0 - 0	
Inorganic-cations/anions							
Calcium	mg/kg ww	5 - 5	75.3 - 162	96.42	10 - 10	69.7 - 90.4	79.41
Iron	mg/kg ww	5 - 5	49.9 - 231	109.84	10 - 10	63 - 204	105.98
Magnesium	mg/kg ww	5 - 5	146 - 170	155.6	10 - 10	133 - 166	149.2
Potassium	mg/kg ww	5 - 5	1730 - 2160	1896	10 - 10	1520 - 2020	1793
Sodium	mg/kg ww	5 - 5	2090 - 2300	2214	10 - 10	1900 - 2470	2124

Note: 2010 Reference location includes samples collected from Hugo Property and Knox County, Tennessee.

[a] Mean concentration calculated using full reporting limits for non-detect values.

- = Not detected/ not analyzed/ not applicable.

mg/kg ww = Milligram per kilogram wet weight.

Table 7-4. Raccoon Liver Dataset: 2010
Tennessee Valley Authority Kingston, Tennessee

Constituent	Units	Reference			Impacted		
		Number of Detects / Number of Samples	Range Min	Mean Concentration [a]	Number of Detects / Number of Samples	Range Min	Mean Concentration [a]
Inorganics							
Aluminum	mg/kg ww	0 - 5	3.6 - 4.1	3.92	0 - 10	3.5 - 4.1	3.81
Antimony	mg/kg ww	1 - 5	0.013 - 0.015	0.0144	1 - 10	0.013 - 0.015	0.0138
Arsenic	mg/kg ww	3 - 5	0.028 - 0.039	0.0316	3 - 10	0.025 - 0.046	0.0317
Barium	mg/kg ww	2 - 5	0.041 - 0.062	0.0498	4 - 10	0.04 - 0.055	0.0464
Beryllium	mg/kg ww	0 - 5	0.027 - 0.03	0.029	0 - 10	0.026 - 0.03	0.028
Boron	mg/kg ww	0 - 5	0.37 - 0.42	0.406	0 - 10	0.36 - 0.42	0.392
Cadmium	mg/kg ww	5 - 5	0.21 - 1.1	0.454	9 - 10	0.007 - 0.48	0.247
Chromium	mg/kg ww	0 - 5	0.11 - 0.13	0.122	0 - 10	0.11 - 0.13	0.121
Cobalt	mg/kg ww	5 - 5	0.068 - 0.12	0.086	9 - 10	0.013 - 0.15	0.0726
Copper	mg/kg ww	5 - 5	5.1 - 32.9	16.56	10 - 10	1.5 - 23.7	11.12
Lead	mg/kg ww	5 - 5	0.066 - 0.41	0.196	9 - 10	0.025 - 0.84	0.255
Manganese	mg/kg ww	5 - 5	2.8 - 3.4	3.06	10 - 10	0.21 - 3.6	2.191
Mercury	mg/kg ww	4 - 5	0.053 - 1.6	0.443	9 - 10	0.04 - 3.1	0.571
Molybdenum	mg/kg ww	5 - 5	0.5 - 1.6	1.12	10 - 10	0.053 - 1.2	0.811
Nickel	mg/kg ww	0 - 5	0.088 - 0.1	0.096	1 - 10	0.086 - 0.23	0.106
Selenium	mg/kg ww	5 - 5	0.79 - 1.6	1.026	10 - 10	0.48 - 2.3	1.15
Silver	mg/kg ww	3 - 5	0.0028 - 0.055	0.023	3 - 10	0.0026 - 0.02	0.00658
Strontium	mg/kg ww	0 - 5	0.04 - 0.045	0.043	2 - 10	0.039 - 0.056	0.0435
Thallium	mg/kg ww	0 - 5	0.012 - 0.014	0.0136	0 - 10	0.012 - 0.014	0.0131
Vanadium	mg/kg ww	2 - 5	0.045 - 0.13	0.0664	8 - 10	0.042 - 0.42	0.225
Zinc	mg/kg ww	5 - 5	29.7 - 51.9	43.9	10 - 10	26.7 - 64.5	45.28
			0 - 0			0 - 0	
Inorganic-cations/anions							
Calcium	mg/kg ww	4 - 5	49.1 - 69.1	61.38	10 - 10	59.7 - 98.3	74.57
Iron	mg/kg ww	5 - 5	312 - 555	435.8	10 - 10	29.7 - 815	445.0
Magnesium	mg/kg ww	5 - 5	179 - 190	184.4	10 - 10	161 - 269	186.6
Potassium	mg/kg ww	5 - 5	2150 - 2990	2426	10 - 10	1610 - 3840	2235
Sodium	mg/kg ww	5 - 5	1020 - 1660	1458	10 - 10	694 - 1770	1535

Note: 2010 Reference location includes samples collected from Hugo Property and Knox County, Tennessee.

[a] Mean concentration calculated using full reporting limits for non-detect values.

- = Not detected/ not analyzed/ not applicable.

mg/kg ww = Milligram per kilogram wet weight.

Table 7-5. Raccoon Gonad Data Summary: 2010
Tennessee Valley Authority Kingston, Tennessee

Constituent	Units	Reference				Impacted			
		Number of Detects / Number of Samples		Range	Mean Concentration [a]	Number of Detects / Number of Samples		Range	Mean Concentration [a]
Inorganics									
Aluminum	mg/kg ww	0 - 3	3.7 - 4	3.87		1 - 8	3.5 - 12.7	4.88	
Antimony	mg/kg ww	0 - 3	0.014 - 0.014	0.014		0 - 8	0.013 - 0.016	0.0143	
Arsenic	mg/kg ww	0 - 3	0.026 - 0.028	0.027		0 - 8	0.025 - 0.029	0.0268	
Barium	mg/kg ww	3 - 3	0.047 - 0.083	0.0633		6 - 8	0.043 - 0.11	0.057	
Beryllium	mg/kg ww	0 - 3	0.028 - 0.029	0.0287		0 - 8	0.026 - 0.03	0.0279	
Boron	mg/kg ww	0 - 3	0.39 - 0.41	0.4		0 - 8	0.36 - 0.42	0.391	
Cadmium	mg/kg ww	1 - 3	0.0071 - 0.012	0.0089		4 - 8	0.0067 - 0.01	0.00795	
Chromium	mg/kg ww	0 - 3	0.12 - 0.13	0.123		1 - 8	0.11 - 0.18	0.129	
Cobalt	mg/kg ww	0 - 3	0.013 - 0.014	0.0137		0 - 8	0.012 - 0.014	0.013	
Copper	mg/kg ww	3 - 3	1 - 1.2	1.1		8 - 8	0.9 - 1.4	1.15	
Lead	mg/kg ww	0 - 3	0.026 - 0.028	0.027		0 - 8	0.024 - 0.028	0.0263	
Manganese	mg/kg ww	3 - 3	0.28 - 0.38	0.347		8 - 8	0.25 - 0.51	0.365	
Mercury	mg/kg ww	0 - 3	0.011 - 0.014	0.012		6 - 8	0.01 - 0.045	0.0198	
Molybdenum	mg/kg ww	2 - 3	0.071 - 0.24	0.167		5 - 8	0.1 - 0.16	0.121	
Nickel	mg/kg ww	0 - 3	0.091 - 0.097	0.0943		0 - 8	0.086 - 0.1	0.0924	
Selenium	mg/kg ww	3 - 3	0.37 - 0.7	0.52		8 - 8	0.38 - 0.73	0.513	
Silver	mg/kg ww	0 - 3	0.0027 - 0.0029	0.0028		0 - 8	0.0025 - 0.003	0.0027	
Strontium	mg/kg ww	2 - 3	0.041 - 0.045	0.0433		4 - 8	0.039 - 0.063	0.047	
Thallium	mg/kg ww	0 - 3	0.013 - 0.014	0.013		0 - 8	0.012 - 0.014	0.013	
Vanadium	mg/kg ww	0 - 3	0.043 - 0.046	0.045		0 - 8	0.04 - 0.064	0.046	
Zinc	mg/kg ww	3 - 3	12.7 - 17.3	15.57		8 - 8	12.4 - 21.4	16.01	
Inorganic-cations/anions									
Calcium	mg/kg ww	3 - 3	60.4 - 78.3	68.57		8 - 8	61.1 - 79	69.04	
Iron	mg/kg ww	3 - 3	17.1 - 35.8	24.23		8 - 8	21.3 - 65.4	39.86	
Magnesium	mg/kg ww	3 - 3	122 - 150	137		8 - 8	99.1 - 169	128.51	
Potassium	mg/kg ww	3 - 3	2290 - 3150	2820		8 - 8	2160 - 3140	2628	
Sodium	mg/kg ww	3 - 3	1290 - 1620	1443		8 - 8	1260 - 1640	1409	

Note: 2010 Reference location includes samples collected from Hugo Property and Knox County, Tennessee.

[a] Mean concentration calculated using full reporting limits for non-detect values.

- = Not detected/ not analyzed/ not applicable.

mg/kg ww = Milligram per kilogram wet weight.

Table 7-6. Raccoon Hair Data Summary: 2010
Tennessee Valley Authority Kingston, Tennessee

Constituent	Units	Reference			Impacted		
		Number of Detects / Number of Samples	Range	Mean Concentration [a]	Number of Detects / Number of Samples	Range	Mean Concentration [a]
Inorganics							
Aluminum	mg/kg ww	5 - 5	11.9 - 77.5	38.94	10 - 10	17.4 - 474	126.5
Antimony	mg/kg ww	3 - 5	0.013 - 0.031	0.0192	8 - 10	0.015 - 0.092	0.0301
Arsenic	mg/kg ww	5 - 5	0.036 - 0.21	0.119	10 - 10	0.2 - 0.83	0.483
Barium	mg/kg ww	5 - 5	1.4 - 11.6	3.96	10 - 10	0.9 - 4.5	2.2
Beryllium	mg/kg ww	0 - 5	0.027 - 0.03	0.0288	0 - 10	0.026 - 0.031	0.0286
Boron	mg/kg ww	5 - 5	1 - 3	1.7	10 - 10	0.62 - 2	1.241
Cadmium	mg/kg ww	4 - 5	0.007 - 0.058	0.0273	6 - 10	0.0074 - 0.46	0.0578
Chromium	mg/kg ww	5 - 5	0.12 - 0.42	0.248	8 - 10	0.16 - 0.73	0.371
Cobalt	mg/kg ww	5 - 5	0.031 - 0.35	0.135	10 - 10	0.033 - 0.62	0.15
Copper	mg/kg ww	5 - 5	20.9 - 29.6	23.7	10 - 10	11.3 - 26.2	19.99
Lead	mg/kg ww	5 - 5	0.1 - 0.86	0.34	10 - 10	0.15 - 6.7	1.18
Manganese	mg/kg ww	5 - 5	5.5 - 42.8	15.9	10 - 10	3.2 - 71.7	19.39
Mercury	mg/kg ww	4 - 5	0.068 - 1.9	0.698	10 - 10	0.13 - 4.8	0.927
Molybdenum	mg/kg ww	3 - 5	0.032 - 0.11	0.055	6 - 10	0.044 - 0.19	0.0927
Nickel	mg/kg ww	5 - 5	0.099 - 0.55	0.202	10 - 10	0.096 - 0.66	0.267
Selenium	mg/kg ww	5 - 5	2.2 - 3.7	2.9	10 - 10	2.7 - 8	4.67
Silver	mg/kg ww	3 - 5	0.0028 - 0.012	0.00552	3 - 10	0.0025 - 0.0091	0.00376
Strontium	mg/kg ww	5 - 5	0.73 - 2.1	1.12	10 - 10	0.57 - 2.1	1.1
Thallium	mg/kg ww	0 - 5	0.013 - 0.014	0.0138	0 - 10	0.012 - 0.046	0.0178
Vanadium	mg/kg ww	3 - 5	0.042 - 0.24	0.12	8 - 10	0.11 - 0.93	0.278
Zinc	mg/kg ww	5 - 5	216 - 234 0 - 0	225.6	10 - 10	194 - 288 0 - 0	232.8
Inorganic-cations/anions							
Calcium	mg/kg ww	5 - 5	493 - 1150	764	10 - 10	537 - 1040	682.9
Iron	mg/kg ww	5 - 5	16.6 - 126	53.06	10 - 10	30.7 - 630	198.17
Magnesium	mg/kg ww	5 - 5	99.5 - 213	144.3	10 - 10	92.5 - 171	125.04
Potassium	mg/kg ww	0 - 5	664 - 734	708.4	0 - 10	642 - 724	686.7
Sodium	mg/kg ww	5 - 5	155 - 235	187.6	10 - 10	51.2 - 281	138.21

Note: 2010 Reference location includes samples collected from Hugo Property and Knox County, Tennessee.

[a] Mean concentration calculated using full reporting limits for non-detect values.

- = Not detected/ not analyzed/ not applicable.

mg/kg ww = Milligram per kilogram wet weight.

Table 7-7. Raccoon Brain Dataset: 2010
Tennessee Valley Authority Kingston, Tennessee

Constituent	Units	Reference				Impacted			
		Number of Detects / Number of Samples		Range	Mean Concentration [a]	Number of Detects / Number of Samples		Range	Mean Concentration [a]
Inorganics									
Aluminum	mg/kg ww	0 - 5	3.6 - 4.1	3.84		0 - 10	3.9 - 4.2	4.06	
Antimony	mg/kg ww	0 - 5	0.013 - 0.015	0.0138		0 - 10	0.014 - 0.015	0.0147	
Arsenic	mg/kg ww	0 - 5	0.025 - 0.029	0.027		0 - 10	0.026 - 0.029	0.0283	
Barium	mg/kg ww	2 - 5	0.041 - 0.052	0.046		3 - 10	0.045 - 0.31	0.0841	
Beryllium	mg/kg ww	0 - 5	0.026 - 0.031	0.0282		0 - 10	0.029 - 0.031	0.03	
Boron	mg/kg ww	0 - 5	0.37 - 0.43	0.398		0 - 10	0.41 - 0.43	0.422	
Cadmium	mg/kg ww	1 - 5	0.0068 - 0.028	0.01396		4 - 10	0.0075 - 0.026	0.0129	
Chromium	mg/kg ww	1 - 5	0.11 - 0.17	0.13		2 - 10	0.12 - 0.17	0.137	
Cobalt	mg/kg ww	5 - 5	0.013 - 0.023	0.0198		8 - 10	0.014 - 0.022	0.0168	
Copper	mg/kg ww	5 - 5	2.5 - 4.8	3.9		10 - 10	3.2 - 4.8	3.99	
Lead	mg/kg ww	0 - 5	0.025 - 0.029	0.027		2 - 10	0.027 - 0.17	0.0429	
Manganese	mg/kg ww	5 - 5	0.34 - 0.42	0.368		10 - 10	0.33 - 0.41	0.37	
Mercury	mg/kg ww	2 - 5	0.011 - 0.056	0.0222		7 - 10	0.011 - 0.1	0.0254	
Molybdenum	mg/kg ww	1 - 5	0.031 - 0.062	0.0394		4 - 10	0.036 - 0.061	0.0461	
Nickel	mg/kg ww	0 - 5	0.087 - 0.1	0.0934		2 - 10	0.096 - 0.25	0.1151	
Selenium	mg/kg ww	5 - 5	0.22 - 0.33	0.266		10 - 10	0.22 - 0.37	0.304	
Silver	mg/kg ww	3 - 5	0.0027 - 0.009	0.00514		3 - 10	0.0029 - 0.0086	0.00511	
Strontium	mg/kg ww	1 - 5	0.039 - 0.071	0.0476		4 - 10	0.043 - 0.07	0.0485	
Thallium	mg/kg ww	0 - 5	0.012 - 0.014	0.0132		0 - 10	0.014 - 0.014	0.014	
Vanadium	mg/kg ww	0 - 5	0.041 - 0.047	0.0438		0 - 10	0.045 - 0.047	0.0463	
Zinc	mg/kg ww	5 - 5	14.2 - 16.1	15.02		10 - 10	12.9 - 18.7	16.02	
			0 - 0				0 - 0		
Inorganic-cations/anions									
Calcium	mg/kg ww	5 - 5	53.5 - 72	59.96		10 - 10	55.1 - 103	64.74	
Iron	mg/kg ww	5 - 5	13.5 - 19.6	17.26		10 - 10	15.7 - 22	18.08	
Magnesium	mg/kg ww	5 - 5	152 - 169	160.2		10 - 10	154 - 162	157.5	
Potassium	mg/kg ww	5 - 5	3560 - 4150	3846		10 - 10	3510 - 3960	3678	
Sodium	mg/kg ww	5 - 5	1240 - 1410	1354		10 - 10	1250 - 1390	1306	

Note: 2010 Reference location includes samples collected from Hugo Property and Knox County, Tennessee.

[a] Mean concentration calculated using full reporting limits for non-detect values.

- = Not detected/ not analyzed/ not applicable.

mg/kg ww = Milligram per kilogram wet weight.