

**Minerals Scheme**

**Cattle Feed**

**Test Material Code # 201953**

**# Labs Reporting: 29**

**# Analytes Reported 16**

**Issue Date : 10/31/2019**

**Analyte Proficiency Testing Report**

Method Group	Analyte Group (Units)	Lab Code	Lab Data		Method Values				AAFCO PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Horwitz SD	R-bar	# Tests			
015	Aluminum (mg / kg (ppm))	0278	21.87	0.3500	1,292	70.31	72.98	15	-18.06	015.43	0
015	Aluminum (mg / kg (ppm))	0186	1,123	27.00	1,292	70.31	72.98	15	-2.41	015.52	0
015	Aluminum (mg / kg (ppm))	0918	1,174	20.15	1,292	70.31	72.98	15	-1.68	015.53	0
015	Aluminum (mg / kg (ppm))	2207	1,223	16.00	1,292	70.31	72.98	15	-0.98	015.42	0
015	Aluminum (mg / kg (ppm))	0098	1,234	70.00	1,292	70.31	72.98	15	-0.82	015.43	0
015	Aluminum (mg / kg (ppm))	0047	1,266	18.30	1,292	70.31	72.98	15	-0.37	015.52	0
015	Aluminum (mg / kg (ppm))	0160	1,275	90.00	1,292	70.31	72.98	15	-0.24	015.99	0
015	Aluminum (mg / kg (ppm))	0407	1,276	136.2	1,292	70.31	72.98	15	-0.23	015.41	0
015	Aluminum (mg / kg (ppm))	0227	1,293	135.0	1,292	70.31	72.98	15	0.01	015.41	0
015	Aluminum (mg / kg (ppm))	2260	1,319	79.00	1,292	70.31	72.98	15	0.38	015.33	0
015	Aluminum (mg / kg (ppm))	0042	1,378	87.00	1,292	70.31	72.98	15	1.22	015.42	0
015	Aluminum (mg / kg (ppm))	0870	1,387	181.0	1,292	70.31	72.98	15	1.35	015.43	0
015	Aluminum (mg / kg (ppm))	0553	1,415	50.00	1,292	70.31	72.98	15	1.75	015.53	0
015	Aluminum (mg / kg (ppm))	2033	1,434	184.7	1,292	70.31	72.98	15	2.02	015.43	0
015	Aluminum (mg / kg (ppm))	0510	1,510	0.0000	1,292	70.31	72.98	15	3.10	015.43	0
017	Boron (mg / kg (ppm))	0870	106.5	13.00	133.7	10.23	5.700	11	-2.65	017.43	0
017	Boron (mg / kg (ppm))	2260	113.4	10.40	133.7	10.23	5.700	11	-1.98	017.99	0
017	Boron (mg / kg (ppm))	0553	116.5	3.000	133.7	10.23	5.700	11	-1.68	017.53	0
017	Boron (mg / kg (ppm))	0047	131.8	1.000	133.7	10.23	5.700	11	-0.18	017.52	0
017	Boron (mg / kg (ppm))	0407	137.3	7.210	133.7	10.23	5.700	11	0.36	017.41	0
017	Boron (mg / kg (ppm))	0918	138.0	0.5900	133.7	10.23	5.700	11	0.42	017.43	0
017	Boron (mg / kg (ppm))	0098	138.5	0.4000	133.7	10.23	5.700	11	0.47	017.43	0
017	Boron (mg / kg (ppm))	0160	138.5	3.000	133.7	10.23	5.700	11	0.47	017.99	0
017	Boron (mg / kg (ppm))	2207	145.5	5.000	133.7	10.23	5.700	11	1.16	017.42	0
017	Boron (mg / kg (ppm))	2033	146.2	14.10	133.7	10.23	5.700	11	1.22	017.43	0
017	Boron (mg / kg (ppm))	0510	156.5	5.000	133.7	10.23	5.700	11	2.23	017.43	0
021	Cobalt (mg / kg (ppm))	0407	19.38	0.8147	22.74	2.273	1.061	18	-1.48	021.41	0
021	Cobalt (mg / kg (ppm))	0043	19.94	1.370	22.74	2.273	1.061	18	-1.23	021.43	0
021	Cobalt (mg / kg (ppm))	2207	20.60	1.800	22.74	2.273	1.061	18	-0.94	021.52	0
021	Cobalt (mg / kg (ppm))	0042	21.20	0.6000	22.74	2.273	1.061	18	-0.68	021.42	0
021	Cobalt (mg / kg (ppm))	0047	21.45	0.0500	22.74	2.273	1.061	18	-0.57	021.52	0
021	Cobalt (mg / kg (ppm))	0186	21.50	1.000	22.74	2.273	1.061	18	-0.54	021.42	0
021	Cobalt (mg / kg (ppm))	0186	21.50	1.000	22.74	2.273	1.061	18	-0.54	021.52	0

Method Group	Analyte Group (Units)	Lab Code	Lab Data		Method Values				AAFCO PT	Your	Flag
			Value	Range	Rob Mean	Horwitz SD	R-bar	# Tests	Z Score	Method	
021	Cobalt (mg / kg (ppm))	0278	22.31	0.1600	22.74	2.273	1.061	18	-0.19	021.43	0
021	Cobalt (mg / kg (ppm))	2260	23.00	0.4000	22.74	2.273	1.061	18	0.12	021.33	0
021	Cobalt (mg / kg (ppm))	2113	23.00	2.000	22.74	2.273	1.061	18	0.12	021.52	0
021	Cobalt (mg / kg (ppm))	0033	23.40	1.400	22.74	2.273	1.061	18	0.29	021.53	0
021	Cobalt (mg / kg (ppm))	2033	23.45	3.490	22.74	2.273	1.061	18	0.31	021.43	0
021	Cobalt (mg / kg (ppm))	0098	23.65	1.930	22.74	2.273	1.061	18	0.40	021.43	0
021	Cobalt (mg / kg (ppm))	0918	24.15	0.4804	22.74	2.273	1.061	18	0.62	021.53	0
021	Cobalt (mg / kg (ppm))	0227	24.50	1.000	22.74	2.273	1.061	18	0.78	021.31	0
021	Cobalt (mg / kg (ppm))	2141	24.81	0.4500	22.74	2.273	1.061	18	0.91	021.43	0
021	Cobalt (mg / kg (ppm))	0510	25.34	0.4600	22.74	2.273	1.061	18	1.15	021.43	0
021	Cobalt (mg / kg (ppm))	0553	27.55	0.7000	22.74	2.273	1.061	18	2.12	021.53	0
022	Copper (mg / kg (ppm))	2097	80.10	0.8200	842.3	48.89	32.00	27	-15.59	022.31	0
022	Copper (mg / kg (ppm))	0047	584.1	31.00	842.3	48.89	32.00	27	-5.28	022.52	0
022	Copper (mg / kg (ppm))	2144	698.5	17.00	842.3	48.89	32.00	27	-2.94	022.35	0
022	Copper (mg / kg (ppm))	0407	755.4	5.121	842.3	48.89	32.00	27	-1.78	022.41	0
022	Copper (mg / kg (ppm))	0186	768.5	41.00	842.3	48.89	32.00	27	-1.51	022.52	0
022	Copper (mg / kg (ppm))	0026	770.3	8.145	842.3	48.89	32.00	27	-1.47	022.42	0
022	Copper (mg / kg (ppm))	0227	775.0	10.00	842.3	48.89	32.00	27	-1.38	022.41	0
022	Copper (mg / kg (ppm))	0553	794.0	72.00	842.3	48.89	32.00	27	-0.99	022.53	0
022	Copper (mg / kg (ppm))	0043	795.8	6.300	842.3	48.89	32.00	27	-0.95	022.43	0
022	Copper (mg / kg (ppm))	0202	805.8	11.53	842.3	48.89	32.00	27	-0.75	022.43	0
022	Copper (mg / kg (ppm))	0529	808.4	15.90	842.3	48.89	32.00	27	-0.69	022.31	0
022	Copper (mg / kg (ppm))	0511	815.5	17.00	842.3	48.89	32.00	27	-0.55	022.41	0
022	Copper (mg / kg (ppm))	0870	838.0	130.0	842.3	48.89	32.00	27	-0.09	022.43	0
022	Copper (mg / kg (ppm))	2260	839.9	68.90	842.3	48.89	32.00	27	-0.05	022.33	0
022	Copper (mg / kg (ppm))	0918	844.1	9.660	842.3	48.89	32.00	27	0.04	022.43	0
022	Copper (mg / kg (ppm))	0186	850.5	43.00	842.3	48.89	32.00	27	0.17	022.42	0
022	Copper (mg / kg (ppm))	0160	864.5	37.00	842.3	48.89	32.00	27	0.45	022.99	0
022	Copper (mg / kg (ppm))	0098	899.9	12.00	842.3	48.89	32.00	27	1.18	022.53	0
022	Copper (mg / kg (ppm))	0510	901.5	5.000	842.3	48.89	32.00	27	1.21	022.43	0
022	Copper (mg / kg (ppm))	0017	904.7	35.67	842.3	48.89	32.00	27	1.28	022.43	0
022	Copper (mg / kg (ppm))	0278	905.6	24.80	842.3	48.89	32.00	27	1.29	022.42	0
022	Copper (mg / kg (ppm))	2207	916.0	10.00	842.3	48.89	32.00	27	1.51	022.42	0
022	Copper (mg / kg (ppm))	0042	922.0	36.00	842.3	48.89	32.00	27	1.63	022.42	0
022	Copper (mg / kg (ppm))	2113	950.0	60.00	842.3	48.89	32.00	27	2.20	022.52	0
022	Copper (mg / kg (ppm))	2114	961.1	11.15	842.3	48.89	32.00	27	2.43	022.99	0
022	Copper (mg / kg (ppm))	2033	969.4	142.9	842.3	48.89	32.00	27	2.60	022.43	0
022	Copper (mg / kg (ppm))	2141	1,032	1.998	842.3	48.89	32.00	27	3.88	022.43	0
023	Fluorine (mg / kg (ppm))	2260	19.81	5.590				3		023.99	0
023	Fluorine (mg / kg (ppm))	2033	61.95	13.30				3		023.01	0
023	Fluorine (mg / kg (ppm))	0227	94.00	6.000				3		023.01	0
024	Iodine (mg / kg (ppm))	2260	3.685	1.250				3		024.03	0

Method Group	Analyte Group (Units)	Lab Code	Lab Data		Method Values				AAFCO PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Horwitz SD	R-bar	# Tests			
024	Iodine (mg / kg (ppm))	2033	28.50	1.000				3		024.53	0
024	Iodine (mg / kg (ppm))	0186	42.50	3.000				3		024.52	0
034	Selenium (mg / kg (ppm))	2260	6.255	1.270	13.14	1.427	0.6240	15	-4.83	034.33	0
034	Selenium (mg / kg (ppm))	0186	11.00	0.0000	13.14	1.427	0.6240	15	-1.50	034.42	0
034	Selenium (mg / kg (ppm))	0407	11.18	0.2500	13.14	1.427	0.6240	15	-1.38	034.41	0
034	Selenium (mg / kg (ppm))	2207	12.40	1.400	13.14	1.427	0.6240	15	-0.52	034.52	0
034	Selenium (mg / kg (ppm))	0870	12.50	1.000	13.14	1.427	0.6240	15	-0.45	034.43	0
034	Selenium (mg / kg (ppm))	2141	12.87	0.3234	13.14	1.427	0.6240	15	-0.20	034.43	0
034	Selenium (mg / kg (ppm))	0186	12.90	0.8000	13.14	1.427	0.6240	15	-0.17	034.52	0
034	Selenium (mg / kg (ppm))	0033	13.20	0.4000	13.14	1.427	0.6240	15	0.04	034.53	0
034	Selenium (mg / kg (ppm))	2033	13.72	0.2900	13.14	1.427	0.6240	15	0.40	034.53	0
034	Selenium (mg / kg (ppm))	0160	13.75	1.700	13.14	1.427	0.6240	15	0.42	034.99	0
034	Selenium (mg / kg (ppm))	0227	13.95	0.3000	13.14	1.427	0.6240	15	0.56	034.04	0
034	Selenium (mg / kg (ppm))	0553	14.30	0.6000	13.14	1.427	0.6240	15	0.81	034.53	0
034	Selenium (mg / kg (ppm))	0918	14.44	0.0368	13.14	1.427	0.6240	15	0.91	034.53	0
034	Selenium (mg / kg (ppm))	0098	14.78	0.5200	13.14	1.427	0.6240	15	1.15	034.53	0
034	Selenium (mg / kg (ppm))	0047	15.44	0.4700	13.14	1.427	0.6240	15	1.61	034.52	0
036	Sulfur (%)	2141	0.7416	0.0061	0.8208	0.0338	0.0227	16	-2.34	036.43	0
036	Sulfur (%)	0186	0.7505	0.0230	0.8208	0.0338	0.0227	16	-2.08	036.52	0
036	Sulfur (%)	2033	0.7650	0.0500	0.8208	0.0338	0.0227	16	-1.65	036.43	0
036	Sulfur (%)	0202	0.7955	0.0010	0.8208	0.0338	0.0227	16	-0.75	036.43	0
036	Sulfur (%)	0160	0.8135	0.0390	0.8208	0.0338	0.0227	16	-0.22	036.99	0
036	Sulfur (%)	0278	0.8150	0.0100	0.8208	0.0338	0.0227	16	-0.17	036.42	0
036	Sulfur (%)	0227	0.8250	0.0300	0.8208	0.0338	0.0227	16	0.12	036.42	0
036	Sulfur (%)	0042	0.8285	0.0350	0.8208	0.0338	0.0227	16	0.23	036.42	0
036	Sulfur (%)	0553	0.8295	0.0350	0.8208	0.0338	0.0227	16	0.26	036.53	0
036	Sulfur (%)	2207	0.8300	0.0000	0.8208	0.0338	0.0227	16	0.27	036.42	0
036	Sulfur (%)	0186	0.8345	0.0270	0.8208	0.0338	0.0227	16	0.40	036.42	0
036	Sulfur (%)	0870	0.8394	0.0187	0.8208	0.0338	0.0227	16	0.55	036.42	0
036	Sulfur (%)	0918	0.8480	0.0060	0.8208	0.0338	0.0227	16	0.80	036.43	0
036	Sulfur (%)	0407	0.8492	0.0052	0.8208	0.0338	0.0227	16	0.84	036.43	0
036	Sulfur (%)	0098	0.8555	0.0570	0.8208	0.0338	0.0227	16	1.03	036.43	0
036	Sulfur (%)	0510	0.9400	0.0200	0.8208	0.0338	0.0227	16	3.52	036.43	0
038	Molybdenum (mg / kg (ppm))	2207	3.050	0.1000	3.944	0.5132	0.3017	17	-1.74	038.52	0
038	Molybdenum (mg / kg (ppm))	0278	3.325	0.2100	3.944	0.5132	0.3017	17	-1.21	038.42	0
038	Molybdenum (mg / kg (ppm))	0407	3.505	0.0039	3.944	0.5132	0.3017	17	-0.86	038.41	0
038	Molybdenum (mg / kg (ppm))	0510	3.650	0.1000	3.944	0.5132	0.3017	17	-0.57	038.43	0
038	Molybdenum (mg / kg (ppm))	0047	3.770	1.020	3.944	0.5132	0.3017	17	-0.34	038.52	0
038	Molybdenum (mg / kg (ppm))	0186	3.785	0.2700	3.944	0.5132	0.3017	17	-0.31	038.52	0
038	Molybdenum (mg / kg (ppm))	0918	3.807	0.0293	3.944	0.5132	0.3017	17	-0.27	038.53	0
038	Molybdenum (mg / kg (ppm))	0042	3.835	0.2900	3.944	0.5132	0.3017	17	-0.21	038.42	0
038	Molybdenum (mg / kg (ppm))	0160	3.850	0.1000	3.944	0.5132	0.3017	17	-0.18	038.99	0

Method Group	Analyte Group (Units)	Lab Code	Lab Data		Method Values				AAFCO PT	Your	Flag
			Value	Range	Rob Mean	Horwitz SD	R-bar	# Tests	Z Score	Method	
038	Molybdenum (mg / kg (ppm))	2113	3.900	0.2000	3.944	0.5132	0.3017	17	-0.09	038.52	0
038	Molybdenum (mg / kg (ppm))	0098	4.094	0.3030	3.944	0.5132	0.3017	17	0.29	038.53	0
038	Molybdenum (mg / kg (ppm))	2033	4.105	0.6700	3.944	0.5132	0.3017	17	0.31	038.43	0
038	Molybdenum (mg / kg (ppm))	0553	4.215	0.0100	3.944	0.5132	0.3017	17	0.53	038.53	0
038	Molybdenum (mg / kg (ppm))	0033	4.320	0.0600	3.944	0.5132	0.3017	17	0.73	038.53	0
038	Molybdenum (mg / kg (ppm))	0227	4.370	0.4400	3.944	0.5132	0.3017	17	0.83	038.53	0
038	Molybdenum (mg / kg (ppm))	2141	4.681	0.4533	3.944	0.5132	0.3017	17	1.44	038.43	0
038	Molybdenum (mg / kg (ppm))	2260	6.815	0.8700	3.944	0.5132	0.3017	17	5.59	038.33	0
041	Vanadium (mg / kg (ppm))	2207	5.300	0.0000	6.704	0.8054	0.3445	8	-1.74	041.52	0
041	Vanadium (mg / kg (ppm))	0047	5.525	0.2500	6.704	0.8054	0.3445	8	-1.46	041.52	0
041	Vanadium (mg / kg (ppm))	0160	6.300	0.8000	6.704	0.8054	0.3445	8	-0.50	041.99	0
041	Vanadium (mg / kg (ppm))	0098	6.487	0.0060	6.704	0.8054	0.3445	8	-0.27	041.43	0
041	Vanadium (mg / kg (ppm))	2033	6.855	0.8900	6.704	0.8054	0.3445	8	0.19	041.43	0
041	Vanadium (mg / kg (ppm))	0553	7.335	0.0700	6.704	0.8054	0.3445	8	0.78	041.53	0
041	Vanadium (mg / kg (ppm))	0278	7.360	0.0200	6.704	0.8054	0.3445	8	0.81	041.43	0
041	Vanadium (mg / kg (ppm))	2260	11.04	0.7200	6.704	0.8054	0.3445	8	5.38	041.33	0
516	Arsenic, Total (mg / kg (ppm))	0425	2.495	0.0300	10.51	1.180	0.6460	21	-6.79	516.34	0
516	Arsenic, Total (mg / kg (ppm))	0043	7.073	0.9420	10.51	1.180	0.6460	21	-2.91	516.43	0
516	Arsenic, Total (mg / kg (ppm))	0186	8.500	1.000	10.51	1.180	0.6460	21	-1.70	516.42	0
516	Arsenic, Total (mg / kg (ppm))	2260	8.775	0.7700	10.51	1.180	0.6460	21	-1.47	516.00	0
516	Arsenic, Total (mg / kg (ppm))	0047	9.295	0.3700	10.51	1.180	0.6460	21	-1.03	516.52	0
516	Arsenic, Total (mg / kg (ppm))	2207	9.650	0.3000	10.51	1.180	0.6460	21	-0.73	516.52	0
516	Arsenic, Total (mg / kg (ppm))	0186	9.915	0.2900	10.51	1.180	0.6460	21	-0.50	516.52	0
516	Arsenic, Total (mg / kg (ppm))	0918	10.22	0.1142	10.51	1.180	0.6460	21	-0.24	516.53	0
516	Arsenic, Total (mg / kg (ppm))	2146	10.24	1.280	10.51	1.180	0.6460	21	-0.23	516.34	0
516	Arsenic, Total (mg / kg (ppm))	0407	10.34	0.4180	10.51	1.180	0.6460	21	-0.14	516.43	0
516	Arsenic, Total (mg / kg (ppm))	2114	10.41	0.1300	10.51	1.180	0.6460	21	-0.09	516.53	0
516	Arsenic, Total (mg / kg (ppm))	0160	10.50	1.000	10.51	1.180	0.6460	21	-0.01	516.99	0
516	Arsenic, Total (mg / kg (ppm))	2146	11.12	0.9800	10.51	1.180	0.6460	21	0.52	516.52	0
516	Arsenic, Total (mg / kg (ppm))	0033	11.30	1.200	10.51	1.180	0.6460	21	0.67	516.53	0
516	Arsenic, Total (mg / kg (ppm))	0227	11.30	1.400	10.51	1.180	0.6460	21	0.67	516.53	0
516	Arsenic, Total (mg / kg (ppm))	0553	11.40	0.4000	10.51	1.180	0.6460	21	0.75	516.53	0
516	Arsenic, Total (mg / kg (ppm))	0098	11.69	0.3600	10.51	1.180	0.6460	21	1.00	516.53	0
516	Arsenic, Total (mg / kg (ppm))	2033	11.91	0.4100	10.51	1.180	0.6460	21	1.18	516.53	0
516	Arsenic, Total (mg / kg (ppm))	2141	12.10	0.5723	10.51	1.180	0.6460	21	1.35	516.43	0
516	Arsenic, Total (mg / kg (ppm))	2113	14.00	0.0000	10.51	1.180	0.6460	21	2.96	516.52	0
516	Arsenic, Total (mg / kg (ppm))	0042	14.70	1.600	10.51	1.180	0.6460	21	3.55	516.42	0
518	Cadmium (mg / kg (ppm))	0043	2.360	0.0450	3.255	0.4360	0.1611	19	-2.05	518.43	0
518	Cadmium (mg / kg (ppm))	0407	2.702	0.2355	3.255	0.4360	0.1611	19	-1.27	518.41	0
518	Cadmium (mg / kg (ppm))	2207	2.850	0.1000	3.255	0.4360	0.1611	19	-0.93	518.52	0
518	Cadmium (mg / kg (ppm))	0042	2.995	0.0300	3.255	0.4360	0.1611	19	-0.60	518.42	0
518	Cadmium (mg / kg (ppm))	0160	3.050	0.1000	3.255	0.4360	0.1611	19	-0.47	518.99	0

Method Group	Analyte Group (Units)	Lab Code	Lab Data		Method Values				AAFCO PT	Your	Flag
			Value	Range	Rob Mean	Horwitz SD	R-bar	# Tests	Z Score	Method	
518	Cadmium (mg / kg (ppm))	0186	3.080	0.0200	3.255	0.4360	0.1611	19	-0.40	518.52	0
518	Cadmium (mg / kg (ppm))	0047	3.145	0.4500	3.255	0.4360	0.1611	19	-0.25	518.52	0
518	Cadmium (mg / kg (ppm))	2141	3.170	0.1422	3.255	0.4360	0.1611	19	-0.19	518.43	0
518	Cadmium (mg / kg (ppm))	0098	3.265	0.0100	3.255	0.4360	0.1611	19	0.02	518.53	0
518	Cadmium (mg / kg (ppm))	0918	3.275	0.0188	3.255	0.4360	0.1611	19	0.05	518.53	0
518	Cadmium (mg / kg (ppm))	2114	3.341	0.0300	3.255	0.4360	0.1611	19	0.20	518.99	0
518	Cadmium (mg / kg (ppm))	0227	3.350	0.3800	3.255	0.4360	0.1611	19	0.22	518.53	0
518	Cadmium (mg / kg (ppm))	2033	3.435	0.1300	3.255	0.4360	0.1611	19	0.41	518.53	0
518	Cadmium (mg / kg (ppm))	0033	3.450	0.2600	3.255	0.4360	0.1611	19	0.45	518.53	0
518	Cadmium (mg / kg (ppm))	2146	3.480	0.1000	3.255	0.4360	0.1611	19	0.52	518.52	0
518	Cadmium (mg / kg (ppm))	0553	3.485	0.1100	3.255	0.4360	0.1611	19	0.53	518.53	0
518	Cadmium (mg / kg (ppm))	2146	3.590	0.0600	3.255	0.4360	0.1611	19	0.77	518.34	0
518	Cadmium (mg / kg (ppm))	2113	3.600	0.6000	3.255	0.4360	0.1611	19	0.79	518.52	0
518	Cadmium (mg / kg (ppm))	2260	4.120	0.2400	3.255	0.4360	0.1611	19	1.98	518.33	0
518	Cadmium (mg / kg (ppm))	0278	12.60	0.7400	3.255	0.4360	0.1611	19	21.44	518.43	2
520	Chromium (mg / kg (ppm))	0407	167.1	0.3821	231.1	16.29	8.892	17	-3.92	520.41	0
520	Chromium (mg / kg (ppm))	2260	171.6	3.600	231.1	16.29	8.892	17	-3.65	520.33	0
520	Chromium (mg / kg (ppm))	0918	181.2	2.376	231.1	16.29	8.892	17	-3.06	520.53	0
520	Chromium (mg / kg (ppm))	0042	208.0	8.000	231.1	16.29	8.892	17	-1.42	520.42	0
520	Chromium (mg / kg (ppm))	2207	224.0	14.00	231.1	16.29	8.892	17	-0.43	520.52	0
520	Chromium (mg / kg (ppm))	0160	229.0	4.000	231.1	16.29	8.892	17	-0.13	520.99	0
520	Chromium (mg / kg (ppm))	0047	235.1	13.80	231.1	16.29	8.892	17	0.25	520.52	0
520	Chromium (mg / kg (ppm))	0227	235.5	9.000	231.1	16.29	8.892	17	0.27	520.31	0
520	Chromium (mg / kg (ppm))	0033	236.0	12.00	231.1	16.29	8.892	17	0.30	520.53	0
520	Chromium (mg / kg (ppm))	2141	236.7	5.333	231.1	16.29	8.892	17	0.34	520.43	0
520	Chromium (mg / kg (ppm))	0278	237.6	0.2200	231.1	16.29	8.892	17	0.40	520.43	0
520	Chromium (mg / kg (ppm))	0186	241.0	4.000	231.1	16.29	8.892	17	0.61	520.52	0
520	Chromium (mg / kg (ppm))	2113	245.0	10.00	231.1	16.29	8.892	17	0.85	520.52	0
520	Chromium (mg / kg (ppm))	2033	245.7	25.00	231.1	16.29	8.892	17	0.90	520.43	0
520	Chromium (mg / kg (ppm))	0098	250.0	10.00	231.1	16.29	8.892	17	1.16	520.43	0
520	Chromium (mg / kg (ppm))	0510	263.0	1.460	231.1	16.29	8.892	17	1.96	520.43	0
520	Chromium (mg / kg (ppm))	0553	310.0	28.00	231.1	16.29	8.892	17	4.84	520.53	0
526	Lead (mg / kg (ppm))	0278	8.690	0.3400	26.23	2.566	1.569	22	-6.84	526.43	0
526	Lead (mg / kg (ppm))	0407	20.65	0.3052	26.23	2.566	1.569	22	-2.17	526.41	0
526	Lead (mg / kg (ppm))	0047	22.23	2.200	26.23	2.566	1.569	22	-1.56	526.52	0
526	Lead (mg / kg (ppm))	0186	24.00	2.000	26.23	2.566	1.569	22	-0.87	526.42	0
526	Lead (mg / kg (ppm))	2033	24.47	0.9800	26.23	2.566	1.569	22	-0.69	526.53	0
526	Lead (mg / kg (ppm))	2260	24.56	2.690	26.23	2.566	1.569	22	-0.65	526.33	0
526	Lead (mg / kg (ppm))	2146	25.20	3.070	26.23	2.566	1.569	22	-0.40	526.52	0
526	Lead (mg / kg (ppm))	0043	25.66	0.7070	26.23	2.566	1.569	22	-0.22	526.43	0
526	Lead (mg / kg (ppm))	0186	25.95	2.500	26.23	2.566	1.569	22	-0.11	526.52	0
526	Lead (mg / kg (ppm))	2146	26.48	0.7900	26.23	2.566	1.569	22	0.09	526.34	0

Method Group	Analyte Group (Units)	Lab Code	Lab Data		Method Values				AAFCO PT	Your	Flag
			Value	Range	Rob Mean	Horwitz SD	R-bar	# Tests	Z Score	Method	
526	Lead (mg / kg (ppm))	0160	26.60	3.200	26.23	2.566	1.569	22	0.14	526.99	0
526	Lead (mg / kg (ppm))	0098	26.65	1.100	26.23	2.566	1.569	22	0.16	526.53	0
526	Lead (mg / kg (ppm))	0918	26.81	0.9272	26.23	2.566	1.569	22	0.23	526.53	0
526	Lead (mg / kg (ppm))	2114	27.13	0.3670	26.23	2.566	1.569	22	0.35	526.99	0
526	Lead (mg / kg (ppm))	0227	27.30	2.000	26.23	2.566	1.569	22	0.42	526.53	0
526	Lead (mg / kg (ppm))	2207	27.35	2.100	26.23	2.566	1.569	22	0.44	526.52	0
526	Lead (mg / kg (ppm))	0033	27.35	0.1000	26.23	2.566	1.569	22	0.44	526.53	0
526	Lead (mg / kg (ppm))	0042	27.80	2.000	26.23	2.566	1.569	22	0.61	526.42	0
526	Lead (mg / kg (ppm))	2113	28.00	0.0000	26.23	2.566	1.569	22	0.69	526.52	0
526	Lead (mg / kg (ppm))	0425	28.06	2.600	26.23	2.566	1.569	22	0.71	526.34	0
526	Lead (mg / kg (ppm))	2141	29.85	2.444	26.23	2.566	1.569	22	1.41	526.43	0
526	Lead (mg / kg (ppm))	0553	30.35	2.100	26.23	2.566	1.569	22	1.60	526.53	0
529	Mercury (µg / kg (ppb))	0047	0.2300	0.0600	46.23	10.17	4.224	9	-4.52	529.99	0
529	Mercury (µg / kg (ppb))	0160	10.30	0.4000	46.23	10.17	4.224	9	-3.53	529.99	0
529	Mercury (µg / kg (ppb))	0227	49.50	3.000	46.23	10.17	4.224	9	0.32	529.99	0
529	Mercury (µg / kg (ppb))	0553	49.65	9.100	46.23	10.17	4.224	9	0.34	529.99	0
529	Mercury (µg / kg (ppb))	0186	50.35	4.900	46.23	10.17	4.224	9	0.41	529.99	0
529	Mercury (µg / kg (ppb))	2033	53.59	2.560	46.23	10.17	4.224	9	0.72	529.99	0
529	Mercury (µg / kg (ppb))	2207	57.50	5.000	46.23	10.17	4.224	9	1.11	529.99	0
529	Mercury (µg / kg (ppb))	0918	59.50	3.000	46.23	10.17	4.224	9	1.30	529.99	0
529	Mercury (µg / kg (ppb))	0098	79.00	10.00	46.23	10.17	4.224	9	3.22	529.99	0
529	Mercury (µg / kg (ppb))	0425	< 0.025		46.23	10.17	4.224	9		529.00	5
529	Mercury (µg / kg (ppb))	0043	< 1.9		46.23	10.17	4.224	9		529.99	5
529	Mercury (µg / kg (ppb))	2260	< 50		46.23	10.17	4.224	9		529.00	5
539	Nickel (mg / kg (ppm))	0047	2.635	0.6300	7.717	0.9077	0.5466	14	-5.60	539.52	0
539	Nickel (mg / kg (ppm))	2207	5.300	0.4000	7.717	0.9077	0.5466	14	-2.66	539.52	0
539	Nickel (mg / kg (ppm))	0918	5.707	0.9625	7.717	0.9077	0.5466	14	-2.21	539.53	0
539	Nickel (mg / kg (ppm))	2113	6.000	0.6000	7.717	0.9077	0.5466	14	-1.89	539.52	0
539	Nickel (mg / kg (ppm))	2141	6.536	0.0811	7.717	0.9077	0.5466	14	-1.30	539.43	0
539	Nickel (mg / kg (ppm))	0042	7.850	0.8600	7.717	0.9077	0.5466	14	0.15	539.42	0
539	Nickel (mg / kg (ppm))	2260	7.990	0.8000	7.717	0.9077	0.5466	14	0.30	539.33	0
539	Nickel (mg / kg (ppm))	0278	8.280	0.1600	7.717	0.9077	0.5466	14	0.62	539.43	0
539	Nickel (mg / kg (ppm))	0186	8.475	0.1500	7.717	0.9077	0.5466	14	0.83	539.52	0
539	Nickel (mg / kg (ppm))	0407	8.519	0.5692	7.717	0.9077	0.5466	14	0.88	539.41	0
539	Nickel (mg / kg (ppm))	0098	9.375	1.010	7.717	0.9077	0.5466	14	1.83	539.53	0
539	Nickel (mg / kg (ppm))	2033	9.545	1.270	7.717	0.9077	0.5466	14	2.01	539.43	0
539	Nickel (mg / kg (ppm))	0553	9.740	0.1600	7.717	0.9077	0.5466	14	2.23	539.53	0
539	Nickel (mg / kg (ppm))	0186	10.00	0.0000	7.717	0.9077	0.5466	14	2.51	539.42	0
539	Nickel (mg / kg (ppm))	0160	10.65	5.100	7.717	0.9077	0.5466	14	3.23	539.99	1

Notes: Interpreting Z Scores: Red indicates a normally distributed Z value >3 or <-3 (requires action), Orange = Z between 2 and 3 or -2 and -3 (warning) and Green = Z < 2 and >-2 (OK at 95%). Flags indicate data usage: 0 = Used, 1 = Rejected for duplicates too far apart, 2 = Rejected as outlier, 5 = A reporting limit and 4 = zeros submitted as values. Robust statistics not used if < 6 labs reporting, in the case of 4 or 5 labs reporting Means and SD's may be reported based on Raw Data with obvious blunders

Method Group	Analyte Group (Units)	Lab Code	Lab Data		Method Values				AAFCO PT Z Score	Your Method	Flag
			Value	Range	Rob Mean	Horwitz SD	R-bar	# Tests			

removed (Mandel h and k exclusions apply; Grey). Flag 3 indicates not used in statistics.