



AAFCO
Proficiency Testing Program



Minerals Scheme

Beef Mineral

Test Material Code # 202152

Labs Reporting: 33

Analytes Reported 17

Issue Date : 07/31/2021

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 (ppm)	0047	663.3	26.12	1,361	73.51	47.57	17	-9.50	015.52	0
015	Aluminum (ppm)	0511	1,036	94.84	1,361	73.51	47.57	17	-4.43	015.43	0
015	Aluminum (ppm)	0407	1,205	3.746	1,361	73.51	47.57	17	-2.13	015.41	0
015	Aluminum (ppm)	0407	1,247	38.06	1,361	73.51	47.57	17	-1.56	015.53	0
015	Aluminum (ppm)	0227	1,265	90.00	1,361	73.51	47.57	17	-1.31	015.41	0
015	Aluminum (ppm)	0510	1,280	0.0000	1,361	73.51	47.57	17	-1.11	015.43	0
015	Aluminum (ppm)	2033	1,344	11.00	1,361	73.51	47.57	17	-0.24	015.43	0
015	Aluminum (ppm)	2207	1,364	119.0	1,361	73.51	47.57	17	0.03	015.42	0
015	Aluminum (ppm)	0208	1,365	50.00	1,361	73.51	47.57	17	0.05	015.41	0
015	Aluminum (ppm)	0870	1,367	65.00	1,361	73.51	47.57	17	0.07	015.43	0
015	Aluminum (ppm)	0186	1,400	72.00	1,361	73.51	47.57	17	0.53	015.52	0
015	Aluminum (ppm)	0042	1,440	80.00	1,361	73.51	47.57	17	1.07	015.42	0
015	Aluminum (ppm)	0918	1,456	41.45	1,361	73.51	47.57	17	1.29	015.53	0
015	Aluminum (ppm)	0964	1,477	75.00	1,361	73.51	47.57	17	1.57	015.43	0
015	Aluminum (ppm)	0553	1,510	20.00	1,361	73.51	47.57	17	2.02	015.53	0
015	Aluminum (ppm)	0278	1,591	21.48	1,361	73.51	47.57	17	3.12	015.43	0
015	Aluminum (ppm)	2292	2,011	1.000	1,361	73.51	47.57	17	8.83	015.99	0
015	Aluminum (ppm)	2302	2,229	640.0	1,361	73.51	47.57	17	11.80	015.99	1
017	Boron (ppm)	0553	35.55	3.300	78.31	6.498	2.163	10	-6.58	017.53	0
017	Boron (ppm)	0047	52.56	0.5600	78.31	6.498	2.163	10	-3.96	017.52	0
017	Boron (ppm)	0870	64.41	1.760	78.31	6.498	2.163	10	-2.14	017.43	0
017	Boron (ppm)	0407	69.06	1.781	78.31	6.498	2.163	10	-1.42	017.41	0
017	Boron (ppm)	2033	82.30	2.000	78.31	6.498	2.163	10	0.61	017.43	0
017	Boron (ppm)	0098	87.04	0.4400	78.31	6.498	2.163	10	1.34	017.43	0
017	Boron (ppm)	0918	90.35	6.380	78.31	6.498	2.163	10	1.85	017.43	0
017	Boron (ppm)	2207	94.50	1.000	78.31	6.498	2.163	10	2.49	017.42	0
017	Boron (ppm)	0407	97.36	2.410	78.31	6.498	2.163	10	2.93	017.53	0
017	Boron (ppm)	0510	100.0	2.000	78.31	6.498	2.163	10	3.34	017.43	0
021	Cobalt (ppm)	2302	10.83	0.1300	31.18	2.972	0.9076	22	-6.85	021.99	0
021	Cobalt (ppm)	0047	16.75	0.3700	31.18	2.972	0.9076	22	-4.86	021.52	0
021	Cobalt (ppm)	0407	23.64	0.3531	31.18	2.972	0.9076	22	-2.54	021.41	0
021	Cobalt (ppm)	0511	24.65	0.1600	31.18	2.972	0.9076	22	-2.20	021.43	0
021	Cobalt (ppm)	2141	26.64	1.740	31.18	2.972	0.9076	22	-1.53	021.43	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			
021	Cobalt (ppm)	2146	28.38	2.900	31.18	2.972	0.9076	22	-0.94	021.52	0
021	Cobalt (ppm)	0870	29.33	0.0731	31.18	2.972	0.9076	22	-0.62	021.43	0
021	Cobalt (ppm)	0278	29.99	0.0000	31.18	2.972	0.9076	22	-0.40	021.43	0
021	Cobalt (ppm)	0964	30.20	0.8000	31.18	2.972	0.9076	22	-0.33	021.43	0
021	Cobalt (ppm)	0042	31.20	2.800	31.18	2.972	0.9076	22	0.01	021.42	0
021	Cobalt (ppm)	0227	31.50	1.000	31.18	2.972	0.9076	22	0.11	021.31	0
021	Cobalt (ppm)	0033	31.65	0.5000	31.18	2.972	0.9076	22	0.16	021.53	0
021	Cobalt (ppm)	0510	32.65	0.3700	31.18	2.972	0.9076	22	0.49	021.43	0
021	Cobalt (ppm)	0186	33.30	0.2000	31.18	2.972	0.9076	22	0.71	021.52	0
021	Cobalt (ppm)	2113	33.50	1.000	31.18	2.972	0.9076	22	0.78	021.52	0
021	Cobalt (ppm)	0918	33.71	0.2810	31.18	2.972	0.9076	22	0.85	021.53	0
021	Cobalt (ppm)	2207	33.85	1.500	31.18	2.972	0.9076	22	0.90	021.52	0
021	Cobalt (ppm)	0910	34.58	1.560	31.18	2.972	0.9076	22	1.15	021.52	0
021	Cobalt (ppm)	2033	35.32	1.750	31.18	2.972	0.9076	22	1.39	021.43	0
021	Cobalt (ppm)	0553	37.60	0.6000	31.18	2.972	0.9076	22	2.16	021.53	0
021	Cobalt (ppm)	0407	38.91	0.0897	31.18	2.972	0.9076	22	2.60	021.53	0
021	Cobalt (ppm)	0098	68.77	1.790	31.18	2.972	0.9076	22	12.65	021.53	0
021	Cobalt (ppm)	0208	30.30	6.000	31.18	2.972	0.9076	22	-0.29	021.31	1
022	Copper (ppm)	0047	709.4	50.89	1,552	82.18	50.16	27	-10.26	022.52	0
022	Copper (ppm)	0553	1,065	90.00	1,552	82.18	50.16	27	-5.93	022.53	0
022	Copper (ppm)	0918	1,381	140.8	1,552	82.18	50.16	27	-2.08	022.43	0
022	Copper (ppm)	0964	1,390	48.50	1,552	82.18	50.16	27	-1.97	022.43	0
022	Copper (ppm)	0407	1,411	30.68	1,552	82.18	50.16	27	-1.72	022.41	0
022	Copper (ppm)	0511	1,453	91.65	1,552	82.18	50.16	27	-1.21	022.43	0
022	Copper (ppm)	0202	1,464	13.00	1,552	82.18	50.16	27	-1.08	022.43	0
022	Copper (ppm)	2141	1,487	67.00	1,552	82.18	50.16	27	-0.80	022.43	0
022	Copper (ppm)	0278	1,511	28.50	1,552	82.18	50.16	27	-0.50	022.42	0
022	Copper (ppm)	0033	1,525	10.00	1,552	82.18	50.16	27	-0.33	022.53	0
022	Copper (ppm)	0870	1,532	66.00	1,552	82.18	50.16	27	-0.25	022.43	0
022	Copper (ppm)	2207	1,546	18.00	1,552	82.18	50.16	27	-0.08	022.42	0
022	Copper (ppm)	2113	1,550	100.0	1,552	82.18	50.16	27	-0.03	022.52	0
022	Copper (ppm)	0510	1,582	4.000	1,552	82.18	50.16	27	0.36	022.43	0
022	Copper (ppm)	0186	1,587	100.0	1,552	82.18	50.16	27	0.42	022.52	0
022	Copper (ppm)	2292	1,598	1.000	1,552	82.18	50.16	27	0.55	022.99	0
022	Copper (ppm)	0529	1,599	3.500	1,552	82.18	50.16	27	0.57	022.31	0
022	Copper (ppm)	0208	1,602	43.00	1,552	82.18	50.16	27	0.60	022.41	0
022	Copper (ppm)	0010	1,627	73.00	1,552	82.18	50.16	27	0.90	022.33	0
022	Copper (ppm)	0407	1,627	25.14	1,552	82.18	50.16	27	0.91	022.53	0
022	Copper (ppm)	0208	1,630	40.00	1,552	82.18	50.16	27	0.95	022.31	0
022	Copper (ppm)	0227	1,655	30.00	1,552	82.18	50.16	27	1.25	022.41	0
022	Copper (ppm)	2033	1,660	16.50	1,552	82.18	50.16	27	1.31	022.43	0
022	Copper (ppm)	0098	1,665	6.000	1,552	82.18	50.16	27	1.37	022.53	0

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022	Copper (ppm)	2114	1,670	28.82	1,552	82.18	50.16	27	1.43	022.99	0
022	Copper (ppm)	0017	1,683	42.30	1,552	82.18	50.16	27	1.59	022.43	0
022	Copper (ppm)	0910	1,738	186.0	1,552	82.18	50.16	27	2.26	022.41	0
022	Copper (ppm)	2302	2,428	376.0	1,552	82.18	50.16	27	10.66	022.99	1
023	Fluorine (ppm)	0227	104.5	11.00	254.9	17.71	4.425	4		023.01	0
023	Fluorine (ppm)	2033	127.0	6.000	254.9	17.71	4.425	4		023.01	0
023	Fluorine (ppm)	0910	363.1	0.0000	254.9	17.71	4.425	4		023.99	0
023	Fluorine (ppm)	2146	425.1	0.7000	254.9	17.71	4.425	4		023.01	0
024	Iodine (ppm)	0208	185.0	0.0000				2		024.99	0
024	Iodine (ppm)	0910	195.9	9.940				2		024.52	0
034	Selenium, Total (Se) (ppm)	0047	8.800	0.7000	22.48	2.251	0.8428	22	-6.08	034.52	0
034	Selenium, Total (Se) (ppm)	0723	16.00	1.000	22.48	2.251	0.8428	22	-2.88	034.43	0
034	Selenium, Total (Se) (ppm)	0511	19.14	0.0400	22.48	2.251	0.8428	22	-1.49	034.43	0
034	Selenium, Total (Se) (ppm)	2141	19.26	1.810	22.48	2.251	0.8428	22	-1.43	034.43	0
034	Selenium, Total (Se) (ppm)	0910	19.48	0.4500	22.48	2.251	0.8428	22	-1.34	034.52	0
034	Selenium, Total (Se) (ppm)	0186	19.95	0.1000	22.48	2.251	0.8428	22	-1.13	034.52	0
034	Selenium, Total (Se) (ppm)	2114	20.08	0.1084	22.48	2.251	0.8428	22	-1.07	034.43	0
034	Selenium, Total (Se) (ppm)	2146	20.92	1.120	22.48	2.251	0.8428	22	-0.69	034.52	0
034	Selenium, Total (Se) (ppm)	0033	21.60	0.4000	22.48	2.251	0.8428	22	-0.39	034.53	0
034	Selenium, Total (Se) (ppm)	0964	22.20	0.2000	22.48	2.251	0.8428	22	-0.13	034.43	0
034	Selenium, Total (Se) (ppm)	0098	22.31	0.4100	22.48	2.251	0.8428	22	-0.08	034.53	0
034	Selenium, Total (Se) (ppm)	0227	22.35	1.300	22.48	2.251	0.8428	22	-0.06	034.04	0
034	Selenium, Total (Se) (ppm)	0208	23.05	0.1000	22.48	2.251	0.8428	22	0.25	034.52	0
034	Selenium, Total (Se) (ppm)	0870	23.10	1.410	22.48	2.251	0.8428	22	0.27	034.43	0
034	Selenium, Total (Se) (ppm)	0553	23.15	0.9000	22.48	2.251	0.8428	22	0.30	034.53	0
034	Selenium, Total (Se) (ppm)	0278	24.07	1.260	22.48	2.251	0.8428	22	0.70	034.53	0
034	Selenium, Total (Se) (ppm)	2207	24.10	0.6000	22.48	2.251	0.8428	22	0.72	034.52	0
034	Selenium, Total (Se) (ppm)	0042	25.30	0.0000	22.48	2.251	0.8428	22	1.25	034.42	0
034	Selenium, Total (Se) (ppm)	0010	27.10	3.200	22.48	2.251	0.8428	22	2.05	034.53	0
034	Selenium, Total (Se) (ppm)	0918	27.82	1.085	22.48	2.251	0.8428	22	2.37	034.53	0
034	Selenium, Total (Se) (ppm)	0407	27.96	0.1475	22.48	2.251	0.8428	22	2.43	034.53	0
034	Selenium, Total (Se) (ppm)	2033	29.14	2.200	22.48	2.251	0.8428	22	2.96	034.53	0
034	Selenium, Total (Se) (ppm)	2302	0.1750	0.3500	22.48	2.251	0.8428	22		034.99	4
036	Sulfur (%)	0910	0.8023	0.0100	0.9698	0.0390	0.0234	16	-4.30	036.42	0
036	Sulfur (%)	0553	0.8500	0.0180	0.9698	0.0390	0.0234	16	-3.07	036.53	0
036	Sulfur (%)	0870	0.9037	0.0134	0.9698	0.0390	0.0234	16	-1.70	036.42	0
036	Sulfur (%)	0202	0.9190	0.0320	0.9698	0.0390	0.0234	16	-1.30	036.43	0
036	Sulfur (%)	0964	0.9208	0.0552	0.9698	0.0390	0.0234	16	-1.26	036.43	0
036	Sulfur (%)	2141	0.9301	0.0315	0.9698	0.0390	0.0234	16	-1.02	036.43	0
036	Sulfur (%)	2292	0.9585	0.0110	0.9698	0.0390	0.0234	16	-0.29	036.99	0
036	Sulfur (%)	0278	0.9600	0.0000	0.9698	0.0390	0.0234	16	-0.25	036.42	0
036	Sulfur (%)	0186	0.9720	0.0440	0.9698	0.0390	0.0234	16	0.06	036.52	0

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036	Sulfur (%)	2033	0.9750	0.0100	0.9698	0.0390	0.0234	16	0.13	036.43	0
036	Sulfur (%)	0098	1.010	0.0200	0.9698	0.0390	0.0234	16	1.03	036.43	0
036	Sulfur (%)	2207	1.030	0.0600	0.9698	0.0390	0.0234	16	1.55	036.42	0
036	Sulfur (%)	0010	1.035	0.0100	0.9698	0.0390	0.0234	16	1.67	036.43	0
036	Sulfur (%)	0918	1.043	0.0300	0.9698	0.0390	0.0234	16	1.88	036.43	0
036	Sulfur (%)	0227	1.070	0.0200	0.9698	0.0390	0.0234	16	2.57	036.42	0
036	Sulfur (%)	0510	1.145	0.0100	0.9698	0.0390	0.0234	16	4.50	036.43	0
036	Sulfur (%)	0407	1.001	0.1947	0.9698	0.0390	0.0234	16	0.79	036.42	1
038	Molybdenum (ppm)	0047	7.430	0.5800	11.21	1.247	0.5740	22	-3.04	038.52	0
038	Molybdenum (ppm)	0407	8.177	0.0243	11.21	1.247	0.5740	22	-2.44	038.41	0
038	Molybdenum (ppm)	0511	8.265	0.0900	11.21	1.247	0.5740	22	-2.37	038.43	0
038	Molybdenum (ppm)	0870	8.597	0.5868	11.21	1.247	0.5740	22	-2.10	038.43	0
038	Molybdenum (ppm)	0510	9.450	0.5000	11.21	1.247	0.5740	22	-1.42	038.43	0
038	Molybdenum (ppm)	0964	10.25	0.6875	11.21	1.247	0.5740	22	-0.77	038.43	0
038	Molybdenum (ppm)	0910	10.51	0.9300	11.21	1.247	0.5740	22	-0.57	038.52	0
038	Molybdenum (ppm)	2141	10.92	0.6400	11.21	1.247	0.5740	22	-0.24	038.43	0
038	Molybdenum (ppm)	0278	11.08	1.020	11.21	1.247	0.5740	22	-0.11	038.42	0
038	Molybdenum (ppm)	0042	11.30	1.600	11.21	1.247	0.5740	22	0.07	038.42	0
038	Molybdenum (ppm)	0227	11.30	0.6000	11.21	1.247	0.5740	22	0.07	038.53	0
038	Molybdenum (ppm)	2113	11.50	1.000	11.21	1.247	0.5740	22	0.23	038.52	0
038	Molybdenum (ppm)	0033	11.50	0.6000	11.21	1.247	0.5740	22	0.23	038.53	0
038	Molybdenum (ppm)	2207	11.85	0.5000	11.21	1.247	0.5740	22	0.51	038.52	0
038	Molybdenum (ppm)	0918	11.92	0.1928	11.21	1.247	0.5740	22	0.56	038.53	0
038	Molybdenum (ppm)	0553	11.95	0.1000	11.21	1.247	0.5740	22	0.59	038.53	0
038	Molybdenum (ppm)	0186	12.00	0.2000	11.21	1.247	0.5740	22	0.63	038.52	0
038	Molybdenum (ppm)	0010	12.80	0.2000	11.21	1.247	0.5740	22	1.27	038.53	0
038	Molybdenum (ppm)	2033	12.91	0.7500	11.21	1.247	0.5740	22	1.36	038.43	0
038	Molybdenum (ppm)	0208	13.85	1.500	11.21	1.247	0.5740	22	2.11	038.41	0
038	Molybdenum (ppm)	0407	14.18	0.2071	11.21	1.247	0.5740	22	2.37	038.53	0
038	Molybdenum (ppm)	0098	24.18	0.1200	11.21	1.247	0.5740	22	10.40	038.53	0
041	Vanadium (ppm)	0047	14.18	0.0600	21.73	2.187	0.8123	10	-3.45	041.52	0
041	Vanadium (ppm)	0098	18.58	0.2000	21.73	2.187	0.8123	10	-1.44	041.53	0
041	Vanadium (ppm)	0870	19.07	0.9090	21.73	2.187	0.8123	10	-1.21	041.43	0
041	Vanadium (ppm)	0208	21.90	2.800	21.73	2.187	0.8123	10	0.08	041.41	0
041	Vanadium (ppm)	2207	22.30	1.200	21.73	2.187	0.8123	10	0.26	041.52	0
041	Vanadium (ppm)	0278	22.40	0.0700	21.73	2.187	0.8123	10	0.31	041.43	0
041	Vanadium (ppm)	2033	22.70	0.2800	21.73	2.187	0.8123	10	0.45	041.43	0
041	Vanadium (ppm)	0407	23.16	0.3635	21.73	2.187	0.8123	10	0.66	041.53	0
041	Vanadium (ppm)	0553	23.70	0.4000	21.73	2.187	0.8123	10	0.90	041.53	0
041	Vanadium (ppm)	0511	63.47	1.840	21.73	2.187	0.8123	10	19.09	041.43	0
516	Arsenic, Total (As) (ppm)	0047	2.480	0.1400	5.407	0.6709	0.2884	22	-4.36	516.52	0
516	Arsenic, Total (As) (ppm)	0511	2.995	0.5500	5.407	0.6709	0.2884	22	-3.59	516.43	0

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516	Arsenic, Total (As) (ppm)	0723	3.145	0.4100	5.407	0.6709	0.2884	22	-3.37	516.43	0
516	Arsenic, Total (As) (ppm)	2146	4.195	0.0900	5.407	0.6709	0.2884	22	-1.81	516.34	0
516	Arsenic, Total (As) (ppm)	2146	4.710	0.0600	5.407	0.6709	0.2884	22	-1.04	516.52	0
516	Arsenic, Total (As) (ppm)	0186	4.745	0.1300	5.407	0.6709	0.2884	22	-0.99	516.52	0
516	Arsenic, Total (As) (ppm)	0033	5.000	0.1400	5.407	0.6709	0.2884	22	-0.61	516.53	0
516	Arsenic, Total (As) (ppm)	0553	5.190	0.1000	5.407	0.6709	0.2884	22	-0.32	516.53	0
516	Arsenic, Total (As) (ppm)	0227	5.250	0.2200	5.407	0.6709	0.2884	22	-0.23	516.53	0
516	Arsenic, Total (As) (ppm)	0043	5.292	0.0000	5.407	0.6709	0.2884	22	-0.17	516.53	0
516	Arsenic, Total (As) (ppm)	2207	5.450	0.1000	5.407	0.6709	0.2884	22	0.06	516.52	0
516	Arsenic, Total (As) (ppm)	0208	5.650	0.1600	5.407	0.6709	0.2884	22	0.36	516.52	0
516	Arsenic, Total (As) (ppm)	0910	5.660	0.2800	5.407	0.6709	0.2884	22	0.38	516.52	0
516	Arsenic, Total (As) (ppm)	0098	5.724	0.6000	5.407	0.6709	0.2884	22	0.47	516.53	0
516	Arsenic, Total (As) (ppm)	0010	6.000	0.8000	5.407	0.6709	0.2884	22	0.88	516.53	0
516	Arsenic, Total (As) (ppm)	2114	6.026	0.0120	5.407	0.6709	0.2884	22	0.92	516.43	0
516	Arsenic, Total (As) (ppm)	2113	6.050	0.5000	5.407	0.6709	0.2884	22	0.96	516.52	0
516	Arsenic, Total (As) (ppm)	2033	6.195	0.3300	5.407	0.6709	0.2884	22	1.18	516.53	0
516	Arsenic, Total (As) (ppm)	0918	6.417	0.3293	5.407	0.6709	0.2884	22	1.51	516.53	0
516	Arsenic, Total (As) (ppm)	2141	6.430	1.200	5.407	0.6709	0.2884	22	1.53	516.43	0
516	Arsenic, Total (As) (ppm)	0407	6.619	0.1243	5.407	0.6709	0.2884	22	1.81	516.53	0
516	Arsenic, Total (As) (ppm)	0870	6.661	0.0690	5.407	0.6709	0.2884	22	1.87	516.43	0
516	Arsenic, Total (As) (ppm)	0964	8.535	1.490	5.407	0.6709	0.2884	22	4.66	516.43	1
516	Arsenic, Total (As) (ppm)	2302	0.0050	0.0100	5.407	0.6709	0.2884	22		516.99	4
516	Arsenic, Total (As) (ppm)	0425	< 0.5		5.407	0.6709	0.2884	22		516.34	5
516	Arsenic, Total (As) (ppm)	2144	< 0.67		5.407	0.6709	0.2884	22		516.99	5
518	Cadmium (ppm)	0723	1.245	0.2700	1.941	0.2810	0.1034	22	-2.48	518.43	0
518	Cadmium (ppm)	0047	1.305	0.0100	1.941	0.2810	0.1034	22	-2.26	518.52	0
518	Cadmium (ppm)	0407	1.326	0.0100	1.941	0.2810	0.1034	22	-2.19	518.41	0
518	Cadmium (ppm)	2146	1.665	0.0100	1.941	0.2810	0.1034	22	-0.98	518.52	0
518	Cadmium (ppm)	2113	1.750	0.1000	1.941	0.2810	0.1034	22	-0.68	518.52	0
518	Cadmium (ppm)	0918	1.799	0.0082	1.941	0.2810	0.1034	22	-0.51	518.53	0
518	Cadmium (ppm)	0910	1.865	0.5300	1.941	0.2810	0.1034	22	-0.27	518.52	0
518	Cadmium (ppm)	0964	1.890	0.0600	1.941	0.2810	0.1034	22	-0.18	518.43	0
518	Cadmium (ppm)	0208	1.895	0.1300	1.941	0.2810	0.1034	22	-0.16	518.52	0
518	Cadmium (ppm)	0186	1.925	0.0700	1.941	0.2810	0.1034	22	-0.06	518.52	0
518	Cadmium (ppm)	0227	1.965	0.0900	1.941	0.2810	0.1034	22	0.09	518.53	0
518	Cadmium (ppm)	2033	1.975	0.0300	1.941	0.2810	0.1034	22	0.12	518.53	0
518	Cadmium (ppm)	0278	1.980	0.0400	1.941	0.2810	0.1034	22	0.14	518.43	0
518	Cadmium (ppm)	0870	2.051	0.0848	1.941	0.2810	0.1034	22	0.39	518.43	0
518	Cadmium (ppm)	0043	2.055	0.0000	1.941	0.2810	0.1034	22	0.40	518.53	0
518	Cadmium (ppm)	2114	2.090	0.0134	1.941	0.2810	0.1034	22	0.53	518.99	0
518	Cadmium (ppm)	0010	2.100	0.2000	1.941	0.2810	0.1034	22	0.57	518.53	0
518	Cadmium (ppm)	0033	2.145	0.3500	1.941	0.2810	0.1034	22	0.73	518.53	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			
518	Cadmium (ppm)	0098	2.150	0.0800	1.941	0.2810	0.1034	22	0.74	518.53	0
518	Cadmium (ppm)	2207	2.150	0.1000	1.941	0.2810	0.1034	22	0.74	518.52	0
518	Cadmium (ppm)	0553	2.210	0.0400	1.941	0.2810	0.1034	22	0.96	518.53	0
518	Cadmium (ppm)	0407	2.285	0.0487	1.941	0.2810	0.1034	22	1.23	518.53	0
518	Cadmium (ppm)	0425	17.15	7.170	1.941	0.2810	0.1034	22	54.11	518.34	2
518	Cadmium (ppm)	2302	0.0050	0.0100	1.941	0.2810	0.1034	22		518.99	4
518	Cadmium (ppm)	2144	< 0.013		1.941	0.2810	0.1034	22		518.31	5
518	Cadmium (ppm)	2141	< 5		1.941	0.2810	0.1034	22		518.43	5
520	Chromium, Total (Cr) (ppm)	0047	44.12	0.5800	73.68	6.171	3.390	23	-4.79	520.52	0
520	Chromium, Total (Cr) (ppm)	0407	53.23	1.994	73.68	6.171	3.390	23	-3.31	520.41	0
520	Chromium, Total (Cr) (ppm)	0511	60.90	0.1800	73.68	6.171	3.390	23	-2.07	520.43	0
520	Chromium, Total (Cr) (ppm)	2141	65.49	1.640	73.68	6.171	3.390	23	-1.33	520.43	0
520	Chromium, Total (Cr) (ppm)	0870	66.29	0.2377	73.68	6.171	3.390	23	-1.20	520.43	0
520	Chromium, Total (Cr) (ppm)	0723	67.12	2.160	73.68	6.171	3.390	23	-1.06	520.43	0
520	Chromium, Total (Cr) (ppm)	2146	68.70	4.850	73.68	6.171	3.390	23	-0.81	520.52	0
520	Chromium, Total (Cr) (ppm)	0407	71.19	3.029	73.68	6.171	3.390	23	-0.40	520.53	0
520	Chromium, Total (Cr) (ppm)	0964	72.89	1.117	73.68	6.171	3.390	23	-0.13	520.43	0
520	Chromium, Total (Cr) (ppm)	0033	73.65	4.700	73.68	6.171	3.390	23	-0.01	520.53	0
520	Chromium, Total (Cr) (ppm)	2207	74.50	5.000	73.68	6.171	3.390	23	0.13	520.52	0
520	Chromium, Total (Cr) (ppm)	0208	74.90	11.80	73.68	6.171	3.390	23	0.20	520.41	0
520	Chromium, Total (Cr) (ppm)	0278	75.15	1.100	73.68	6.171	3.390	23	0.24	520.43	0
520	Chromium, Total (Cr) (ppm)	0918	76.21	2.364	73.68	6.171	3.390	23	0.41	520.53	0
520	Chromium, Total (Cr) (ppm)	0042	76.50	11.00	73.68	6.171	3.390	23	0.46	520.42	0
520	Chromium, Total (Cr) (ppm)	2033	77.00	0.4000	73.68	6.171	3.390	23	0.54	520.43	0
520	Chromium, Total (Cr) (ppm)	0010	78.20	6.000	73.68	6.171	3.390	23	0.73	520.53	0
520	Chromium, Total (Cr) (ppm)	0910	78.53	5.640	73.68	6.171	3.390	23	0.79	520.52	0
520	Chromium, Total (Cr) (ppm)	0227	79.50	3.400	73.68	6.171	3.390	23	0.94	520.31	0
520	Chromium, Total (Cr) (ppm)	0510	81.41	2.050	73.68	6.171	3.390	23	1.25	520.43	0
520	Chromium, Total (Cr) (ppm)	0553	82.60	4.200	73.68	6.171	3.390	23	1.45	520.53	0
520	Chromium, Total (Cr) (ppm)	0186	85.65	2.100	73.68	6.171	3.390	23	1.94	520.52	0
520	Chromium, Total (Cr) (ppm)	0098	93.33	2.430	73.68	6.171	3.390	23	3.18	520.53	0
520	Chromium, Total (Cr) (ppm)	2113	76.50	25.00	73.68	6.171	3.390	23	0.46	520.52	1
520	Chromium, Total (Cr) (ppm)	2302	0.0050	0.0100	73.68	6.171	3.390	23		520.99	4
526	Lead (ppm)	0511	57.61	1.140	84.95	6.964	3.804	26	-3.93	526.43	0
526	Lead (ppm)	0723	74.20	2.000	84.95	6.964	3.804	26	-1.54	526.43	0
526	Lead (ppm)	0870	75.13	1.042	84.95	6.964	3.804	26	-1.41	526.43	0
526	Lead (ppm)	0098	75.20	0.2000	84.95	6.964	3.804	26	-1.40	526.53	0
526	Lead (ppm)	0407	75.50	3.356	84.95	6.964	3.804	26	-1.36	526.41	0
526	Lead (ppm)	0964	75.55	1.700	84.95	6.964	3.804	26	-1.35	526.43	0
526	Lead (ppm)	0047	76.53	4.320	84.95	6.964	3.804	26	-1.21	526.52	0
526	Lead (ppm)	2113	78.00	2.000	84.95	6.964	3.804	26	-1.00	526.52	0
526	Lead (ppm)	0010	78.30	6.000	84.95	6.964	3.804	26	-0.96	526.53	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			
526	Lead (ppm)	2114	81.36	0.0429	84.95	6.964	3.804	26	-0.52	526.99	0
526	Lead (ppm)	0227	81.45	5.100	84.95	6.964	3.804	26	-0.50	526.53	0
526	Lead (ppm)	2207	84.95	4.900	84.95	6.964	3.804	26	0.00	526.52	0
526	Lead (ppm)	0042	87.60	12.00	84.95	6.964	3.804	26	0.38	526.42	0
526	Lead (ppm)	0043	87.81	0.0000	84.95	6.964	3.804	26	0.41	526.53	0
526	Lead (ppm)	0033	88.95	4.500	84.95	6.964	3.804	26	0.57	526.53	0
526	Lead (ppm)	0910	90.55	0.1200	84.95	6.964	3.804	26	0.80	526.52	0
526	Lead (ppm)	0186	90.55	1.300	84.95	6.964	3.804	26	0.80	526.52	0
526	Lead (ppm)	0918	90.85	0.7029	84.95	6.964	3.804	26	0.85	526.53	0
526	Lead (ppm)	0208	90.90	5.600	84.95	6.964	3.804	26	0.85	526.52	0
526	Lead (ppm)	2146	91.30	11.64	84.95	6.964	3.804	26	0.91	526.52	0
526	Lead (ppm)	0553	91.35	1.500	84.95	6.964	3.804	26	0.92	526.53	0
526	Lead (ppm)	0425	92.40	6.600	84.95	6.964	3.804	26	1.07	526.34	0
526	Lead (ppm)	0278	92.61	4.130	84.95	6.964	3.804	26	1.10	526.43	0
526	Lead (ppm)	2033	92.85	2.780	84.95	6.964	3.804	26	1.13	526.53	0
526	Lead (ppm)	2141	95.96	9.600	84.95	6.964	3.804	26	1.58	526.43	0
526	Lead (ppm)	0407	97.33	6.618	84.95	6.964	3.804	26	1.78	526.53	0
526	Lead (ppm)	2302	0.0050	0.0100	84.95	6.964	3.804	26		526.99	4
526	Lead (ppm)	2144	< 0.33		84.95	6.964	3.804	26		526.31	5
529	Mercury (ppb)	0910	0.0600	0.0200	89.95	19.79	3.856	14	-4.54	529.99	0
529	Mercury (ppb)	0186	0.0865	0.0030	89.95	19.79	3.856	14	-4.54	529.99	0
529	Mercury (ppb)	0021	78.00	0.0000	89.95	19.79	3.856	14	-0.60	529.99	0
529	Mercury (ppb)	0033	79.30	1.600	89.95	19.79	3.856	14	-0.54	529.99	0
529	Mercury (ppb)	2207	85.50	1.000	89.95	19.79	3.856	14	-0.22	529.99	0
529	Mercury (ppb)	0227	88.20	3.600	89.95	19.79	3.856	14	-0.09	529.99	0
529	Mercury (ppb)	0425	90.00	4.000	89.95	19.79	3.856	14	0.00	529.00	0
529	Mercury (ppb)	0553	91.90	9.000	89.95	19.79	3.856	14	0.10	529.99	0
529	Mercury (ppb)	0042	93.60	0.8000	89.95	19.79	3.856	14	0.18	529.00	0
529	Mercury (ppb)	2033	96.50	3.000	89.95	19.79	3.856	14	0.33	529.99	0
529	Mercury (ppb)	0407	99.29	8.965	89.95	19.79	3.856	14	0.47	529.99	0
529	Mercury (ppb)	0010	104.0	8.000	89.95	19.79	3.856	14	0.71	529.99	0
529	Mercury (ppb)	0098	109.0	14.00	89.95	19.79	3.856	14	0.96	529.99	0
529	Mercury (ppb)	0043	114.8	0.0000	89.95	19.79	3.856	14	1.25	529.99	0
529	Mercury (ppb)	2302	0.0050	0.0100	89.95	19.79	3.856	14		529.99	4
539	Nickel (ppm)	0047	34.88	2.340	71.97	6.049	2.853	20	-6.13	539.52	0
539	Nickel (ppm)	2292	35.50	1.000	71.97	6.049	2.853	20	-6.03	539.99	0
539	Nickel (ppm)	0407	48.99	0.2567	71.97	6.049	2.853	20	-3.80	539.41	0
539	Nickel (ppm)	0511	54.34	0.4500	71.97	6.049	2.853	20	-2.91	539.43	0
539	Nickel (ppm)	0870	62.83	0.3891	71.97	6.049	2.853	20	-1.51	539.43	0
539	Nickel (ppm)	0964	69.25	2.300	71.97	6.049	2.853	20	-0.45	539.43	0
539	Nickel (ppm)	0208	70.70	2.600	71.97	6.049	2.853	20	-0.21	539.41	0
539	Nickel (ppm)	0042	71.00	3.200	71.97	6.049	2.853	20	-0.16	539.42	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			
539	Nickel (ppm)	0278	73.72	2.680	71.97	6.049	2.853	20	0.29	539.43	0
539	Nickel (ppm)	0098	75.40	1.800	71.97	6.049	2.853	20	0.57	539.53	0
539	Nickel (ppm)	0010	76.00	4.000	71.97	6.049	2.853	20	0.67	539.53	0
539	Nickel (ppm)	2033	76.13	3.900	71.97	6.049	2.853	20	0.69	539.43	0
539	Nickel (ppm)	0910	76.27	4.920	71.97	6.049	2.853	20	0.71	539.52	0
539	Nickel (ppm)	2113	77.50	3.000	71.97	6.049	2.853	20	0.92	539.52	0
539	Nickel (ppm)	2207	78.20	1.600	71.97	6.049	2.853	20	1.03	539.52	0
539	Nickel (ppm)	0186	79.15	0.1000	71.97	6.049	2.853	20	1.19	539.52	0
539	Nickel (ppm)	0918	80.93	4.030	71.97	6.049	2.853	20	1.48	539.53	0
539	Nickel (ppm)	0553	84.40	7.000	71.97	6.049	2.853	20	2.06	539.53	0
539	Nickel (ppm)	0407	85.84	1.866	71.97	6.049	2.853	20	2.29	539.53	0
539	Nickel (ppm)	2141	90.09	9.630	71.97	6.049	2.853	20	3.00	539.43	0
542	Arsenic, Inorganic (iAs) (ppm)	2146	2.050	0.0400				1		542.99	0

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