



AAFCO
Association of American Feed Control Officials



**Minerals Scheme
Hog Finisher**

**# Labs Reporting: 28
Analytes Reported 16
Issue Date : 04/30/2024**

Test Material Code # 202451

Analyte Proficiency Testing Report

Method Group	Analyte Group (Units)	Lab Code	Lab Data		Robust* Analyte Values				AAFCO PT Z Score	Your Method	Flag
			Value	Range	Rob. Mean	Horwitz SD	Rob. R-bar	# Tests			
015	Aluminum (ppm)	2292	259.5	1.000	342.7	22.77	5.045	16	-3.65	015.99	0
015	Aluminum (ppm)	0047	267.6	0.5200	342.7	22.77	5.045	16	-3.30	015.52	0
015	Aluminum (ppm)	0870	300.5	4.068	342.7	22.77	5.045	16	-1.85	015.43	0
015	Aluminum (ppm)	0160	303.0	6.000	342.7	22.77	5.045	16	-1.74	015.42	0
015	Aluminum (ppm)	0186	327.0	4.160	342.7	22.77	5.045	16	-0.69	015.52	0
015	Aluminum (ppm)	0510	333.5	5.000	342.7	22.77	5.045	16	-0.40	015.43	0
015	Aluminum (ppm)	0511	335.0	16.00	342.7	22.77	5.045	16	-0.34	015.43	0
015	Aluminum (ppm)	0407	342.7	0.4790	342.7	22.77	5.045	16	0.00	015.53	0
015	Aluminum (ppm)	0407	345.8	1.728	342.7	22.77	5.045	16	0.13	015.41	0
015	Aluminum (ppm)	0227	353.5	3.000	342.7	22.77	5.045	16	0.47	015.43	0
015	Aluminum (ppm)	0148	356.3	0.1300	342.7	22.77	5.045	16	0.60	015.43	0
015	Aluminum (ppm)	0278	375.7	3.940	342.7	22.77	5.045	16	1.45	015.43	0
015	Aluminum (ppm)	0098	379.5	19.00	342.7	22.77	5.045	16	1.62	015.43	0
015	Aluminum (ppm)	0629	385.0	2.000	342.7	22.77	5.045	16	1.86	015.43	0
015	Aluminum (ppm)	0964	386.0	10.00	342.7	22.77	5.045	16	1.90	015.43	0
015	Aluminum (ppm)	0042	420.0	18.00	342.7	22.77	5.045	16	3.39	015.42	0
017	Boron (ppm)	0870	33.94	1.584	50.71	4.492	1.672	9	-3.73	017.43	0
017	Boron (ppm)	0047	36.03	2.330	50.71	4.492	1.672	9	-3.27	017.52	0
017	Boron (ppm)	0160	50.05	0.7000	50.71	4.492	1.672	9	-0.15	017.42	0
017	Boron (ppm)	0629	51.90	2.000	50.71	4.492	1.672	9	0.27	017.43	0
017	Boron (ppm)	0510	52.50	1.000	50.71	4.492	1.672	9	0.40	017.43	0
017	Boron (ppm)	0407	52.57	0.9967	50.71	4.492	1.672	9	0.42	017.41	0
017	Boron (ppm)	0407	54.56	0.5510	50.71	4.492	1.672	9	0.86	017.53	0
017	Boron (ppm)	0098	56.41	2.610	50.71	4.492	1.672	9	1.27	017.43	0
017	Boron (ppm)	0042	70.20	4.000	50.71	4.492	1.672	9	4.34	017.42	0
021	Cobalt (ppm)	2113	2.900	0.2000	3.960	0.5150	0.1430	23	-2.06	021.52	0
021	Cobalt (ppm)	2433	2.962	0.0550	3.960	0.5150	0.1430	23	-1.94	021.42	0
021	Cobalt (ppm)	0160	3.100	0.2000	3.960	0.5150	0.1430	23	-1.67	021.42	0
021	Cobalt (ppm)	0563	3.161	0.0259	3.960	0.5150	0.1430	23	-1.55	021.31	0
021	Cobalt (ppm)	2404	3.300	0.2000	3.960	0.5150	0.1430	23	-1.28	021.43	0
021	Cobalt (ppm)	2404	3.555	0.0700	3.960	0.5150	0.1430	23	-0.79	021.53	0
021	Cobalt (ppm)	0042	3.585	0.2300	3.960	0.5150	0.1430	23	-0.73	021.42	0
021	Cobalt (ppm)	0186	3.620	0.3000	3.960	0.5150	0.1430	23	-0.66	021.52	0

Method Group	Analyte Group (Units)	Lab Code	Lab Data		Robust* Analyte Values				AAFCO PT	Your	Flag
			Value	Range	Rob. Mean	Horwitz SD	Rob. R-bar	# Tests	Z Score	Method	
021	Cobalt (ppm)	0047	3.725	0.0700	3.960	0.5150	0.1430	23	-0.46	021.52	0
021	Cobalt (ppm)	0629	3.845	0.0700	3.960	0.5150	0.1430	23	-0.22	021.43	0
021	Cobalt (ppm)	0511	4.000	0.0000	3.960	0.5150	0.1430	23	0.08	021.43	0
021	Cobalt (ppm)	0098	4.027	0.0370	3.960	0.5150	0.1430	23	0.13	021.53	0
021	Cobalt (ppm)	0964	4.105	0.2300	3.960	0.5150	0.1430	23	0.28	021.43	0
021	Cobalt (ppm)	0510	4.165	0.0700	3.960	0.5150	0.1430	23	0.40	021.43	0
021	Cobalt (ppm)	0227	4.200	0.2000	3.960	0.5150	0.1430	23	0.47	021.43	0
021	Cobalt (ppm)	0033	4.395	0.0900	3.960	0.5150	0.1430	23	0.84	021.53	0
021	Cobalt (ppm)	0407	4.407	0.2056	3.960	0.5150	0.1430	23	0.87	021.53	0
021	Cobalt (ppm)	0407	4.424	0.1402	3.960	0.5150	0.1430	23	0.90	021.41	0
021	Cobalt (ppm)	0278	4.500	0.1000	3.960	0.5150	0.1430	23	1.05	021.43	0
021	Cobalt (ppm)	0043	4.587	0.1610	3.960	0.5150	0.1430	23	1.22	021.53	0
021	Cobalt (ppm)	0572	4.660	0.2200	3.960	0.5150	0.1430	23	1.36	021.53	0
021	Cobalt (ppm)	0870	4.846	0.2658	3.960	0.5150	0.1430	23	1.72	021.43	0
021	Cobalt (ppm)	0148	5.310	0.0200	3.960	0.5150	0.1430	23	2.62	021.43	0
022	Copper (ppm)	2292	124.0	2.000	191.8	13.91	5.026	26	-4.88	022.99	0
022	Copper (ppm)	0047	150.7	1.560	191.8	13.91	5.026	26	-2.96	022.52	0
022	Copper (ppm)	0148	169.5	1.857	191.8	13.91	5.026	26	-1.60	022.43	0
022	Copper (ppm)	0511	183.5	7.000	191.8	13.91	5.026	26	-0.60	022.43	0
022	Copper (ppm)	0033	184.5	3.000	191.8	13.91	5.026	26	-0.53	022.53	0
022	Copper (ppm)	2113	185.0	10.00	191.8	13.91	5.026	26	-0.49	022.52	0
022	Copper (ppm)	0870	185.0	0.6176	191.8	13.91	5.026	26	-0.49	022.43	0
022	Copper (ppm)	0227	186.5	1.000	191.8	13.91	5.026	26	-0.38	022.43	0
022	Copper (ppm)	0563	187.1	1.615	191.8	13.91	5.026	26	-0.34	022.31	0
022	Copper (ppm)	0529	189.3	2.900	191.8	13.91	5.026	26	-0.19	022.31	0
022	Copper (ppm)	0186	189.5	3.000	191.8	13.91	5.026	26	-0.17	022.52	0
022	Copper (ppm)	0098	192.9	10.10	191.8	13.91	5.026	26	0.07	022.53	0
022	Copper (ppm)	0042	193.5	5.000	191.8	13.91	5.026	26	0.12	022.42	0
022	Copper (ppm)	0017	194.5	18.44	191.8	13.91	5.026	26	0.19	022.43	0
022	Copper (ppm)	0407	194.7	1.419	191.8	13.91	5.026	26	0.20	022.53	0
022	Copper (ppm)	0278	195.0	20.00	191.8	13.91	5.026	26	0.23	022.42	0
022	Copper (ppm)	0010	195.1	3.100	191.8	13.91	5.026	26	0.23	022.43	0
022	Copper (ppm)	2404	195.4	4.000	191.8	13.91	5.026	26	0.26	022.53	0
022	Copper (ppm)	2433	196.1	0.3254	191.8	13.91	5.026	26	0.31	022.42	0
022	Copper (ppm)	2404	196.7	6.950	191.8	13.91	5.026	26	0.35	022.43	0
022	Copper (ppm)	0629	198.0	2.000	191.8	13.91	5.026	26	0.44	022.43	0
022	Copper (ppm)	0407	198.5	7.109	191.8	13.91	5.026	26	0.48	022.41	0
022	Copper (ppm)	0510	200.0	6.000	191.8	13.91	5.026	26	0.59	022.43	0
022	Copper (ppm)	0572	200.5	15.00	191.8	13.91	5.026	26	0.62	022.53	0
022	Copper (ppm)	0043	206.0	8.209	191.8	13.91	5.026	26	1.02	022.53	0
022	Copper (ppm)	0964	211.0	8.000	191.8	13.91	5.026	26	1.38	022.43	0
023	Fluorine (ppm)	0227	86.00	0.0000				2		023.01	0

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023	Fluorine (ppm)	2485	135.6	4.630				2		023.99	0
024	Iodine (ppm)	0186	95.50	11.00				1		024.52	0
034	Selenium, Total (Se) (ppm)	0629	2.035	0.1500	2.907	0.3960	0.1805	18	-2.20	034.43	0
034	Selenium, Total (Se) (ppm)	0047	2.235	0.0300	2.907	0.3960	0.1805	18	-1.70	034.52	0
034	Selenium, Total (Se) (ppm)	0870	2.517	0.1228	2.907	0.3960	0.1805	18	-0.99	034.43	0
034	Selenium, Total (Se) (ppm)	2404	2.550	0.1200	2.907	0.3960	0.1805	18	-0.90	034.43	0
034	Selenium, Total (Se) (ppm)	0148	2.655	0.3100	2.907	0.3960	0.1805	18	-0.64	034.42	0
034	Selenium, Total (Se) (ppm)	2404	2.798	0.1180	2.907	0.3960	0.1805	18	-0.28	034.53	0
034	Selenium, Total (Se) (ppm)	0572	2.830	0.3000	2.907	0.3960	0.1805	18	-0.19	034.53	0
034	Selenium, Total (Se) (ppm)	0033	2.850	0.0000	2.907	0.3960	0.1805	18	-0.14	034.53	0
034	Selenium, Total (Se) (ppm)	0227	2.875	0.4300	2.907	0.3960	0.1805	18	-0.08	034.53	0
034	Selenium, Total (Se) (ppm)	0278	2.890	0.1000	2.907	0.3960	0.1805	18	-0.04	034.53	0
034	Selenium, Total (Se) (ppm)	0723	2.920	0.0950	2.907	0.3960	0.1805	18	0.03	034.43	0
034	Selenium, Total (Se) (ppm)	0407	3.044	0.2093	2.907	0.3960	0.1805	18	0.35	034.53	0
034	Selenium, Total (Se) (ppm)	0098	3.154	0.1350	2.907	0.3960	0.1805	18	0.62	034.53	0
034	Selenium, Total (Se) (ppm)	0563	3.169	0.0595	2.907	0.3960	0.1805	18	0.66	034.04	0
034	Selenium, Total (Se) (ppm)	2433	3.183	0.2030	2.907	0.3960	0.1805	18	0.70	034.42	0
034	Selenium, Total (Se) (ppm)	0964	3.265	0.6700	2.907	0.3960	0.1805	18	0.90	034.43	0
034	Selenium, Total (Se) (ppm)	0186	3.570	0.1638	2.907	0.3960	0.1805	18	1.67	034.52	0
034	Selenium, Total (Se) (ppm)	0010	3.945	0.2500	2.907	0.3960	0.1805	18	2.62	034.53	0
034	Selenium, Total (Se) (ppm)	0511	2.500	1.000	2.907	0.3960	0.1805	18	-1.03	034.43	1
034	Selenium, Total (Se) (ppm)	0160	< 10		2.907	0.3960	0.1805	18		034.42	5
034	Selenium, Total (Se) (ppm)	0042	< 12		2.907	0.3960	0.1805	18		034.42	5
036	Sulfur (%)	0407	0.3305	0.0052	0.3807	0.0176	0.0094	11	-2.85	036.42	0
036	Sulfur (%)	2292	0.3550	0.0100	0.3807	0.0176	0.0094	11	-1.46	036.99	0
036	Sulfur (%)	0629	0.3700	0.0000	0.3807	0.0176	0.0094	11	-0.61	036.43	0
036	Sulfur (%)	0227	0.3700	0.0000	0.3807	0.0176	0.0094	11	-0.61	036.53	0
036	Sulfur (%)	0964	0.3730	0.0060	0.3807	0.0176	0.0094	11	-0.44	036.43	0
036	Sulfur (%)	0870	0.3822	0.0219	0.3807	0.0176	0.0094	11	0.08	036.42	0
036	Sulfur (%)	0042	0.3870	0.0020	0.3807	0.0176	0.0094	11	0.36	036.42	0
036	Sulfur (%)	0186	0.3879	0.0024	0.3807	0.0176	0.0094	11	0.41	036.52	0
036	Sulfur (%)	0510	0.4000	0.0000	0.3807	0.0176	0.0094	11	1.09	036.43	0
036	Sulfur (%)	0098	0.4015	0.0030	0.3807	0.0176	0.0094	11	1.18	036.43	0
036	Sulfur (%)	0278	0.4250	0.0300	0.3807	0.0176	0.0094	11	2.51	036.42	0
038	Molybdenum (ppm)	0870	35.23	0.9193	54.52	4.778	1.540	19	-4.04	038.43	0
038	Molybdenum (ppm)	0407	50.43	0.2727	54.52	4.778	1.540	19	-0.86	038.41	0
038	Molybdenum (ppm)	0629	50.80	2.400	54.52	4.778	1.540	19	-0.78	038.43	0
038	Molybdenum (ppm)	0563	50.94	2.650	54.52	4.778	1.540	19	-0.75	038.34	0
038	Molybdenum (ppm)	0160	52.05	0.1000	54.52	4.778	1.540	19	-0.52	038.42	0
038	Molybdenum (ppm)	0510	52.35	0.7000	54.52	4.778	1.540	19	-0.45	038.43	0
038	Molybdenum (ppm)	0278	52.79	6.110	54.52	4.778	1.540	19	-0.36	038.42	0
038	Molybdenum (ppm)	0227	52.85	2.300	54.52	4.778	1.540	19	-0.35	038.53	0

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038	Molybdenum (ppm)	0098	53.10	2.050	54.52	4.778	1.540	19	-0.30	038.53	0
038	Molybdenum (ppm)	0047	53.65	5.060	54.52	4.778	1.540	19	-0.18	038.52	0
038	Molybdenum (ppm)	0407	54.19	0.6269	54.52	4.778	1.540	19	-0.07	038.53	0
038	Molybdenum (ppm)	0511	55.50	1.000	54.52	4.778	1.540	19	0.20	038.43	0
038	Molybdenum (ppm)	0033	55.80	1.400	54.52	4.778	1.540	19	0.27	038.53	0
038	Molybdenum (ppm)	0010	56.55	0.7000	54.52	4.778	1.540	19	0.42	038.53	0
038	Molybdenum (ppm)	0042	57.45	0.7000	54.52	4.778	1.540	19	0.61	038.42	0
038	Molybdenum (ppm)	0186	58.50	1.000	54.52	4.778	1.540	19	0.83	038.52	0
038	Molybdenum (ppm)	0148	59.76	2.275	54.52	4.778	1.540	19	1.10	038.43	0
038	Molybdenum (ppm)	0964	60.20	2.200	54.52	4.778	1.540	19	1.19	038.43	0
038	Molybdenum (ppm)	0572	60.80	1.600	54.52	4.778	1.540	19	1.31	038.53	0
038	Molybdenum (ppm)	2113	54.50	13.00	54.52	4.778	1.540	19	0.00	038.52	1
041	Vanadium (ppm)	0629	2.075	0.1300	2.638	0.3646	0.1303	7	-1.54	041.43	0
041	Vanadium (ppm)	0098	2.397	0.1320	2.638	0.3646	0.1303	7	-0.66	041.53	0
041	Vanadium (ppm)	0407	2.471	0.1843	2.638	0.3646	0.1303	7	-0.46	041.53	0
041	Vanadium (ppm)	0160	2.600	0.0000	2.638	0.3646	0.1303	7	-0.10	041.42	0
041	Vanadium (ppm)	0870	2.775	0.0054	2.638	0.3646	0.1303	7	0.38	041.43	0
041	Vanadium (ppm)	0047	2.995	0.1100	2.638	0.3646	0.1303	7	0.98	041.52	0
041	Vanadium (ppm)	0563	3.150	0.2200	2.638	0.3646	0.1303	7	1.41	041.34	0
041	Vanadium (ppm)	0511	16.50	1.000	2.638	0.3646	0.1303	7	38.02	041.43	1
516	Arsenic, Total (As) (ppm)	0629	3.390	0.0000	4.184	0.5396	0.1670	20	-1.47	516.43	0
516	Arsenic, Total (As) (ppm)	0511	3.500	1.000	4.184	0.5396	0.1670	20	-1.27	516.43	0
516	Arsenic, Total (As) (ppm)	2404	3.595	0.0900	4.184	0.5396	0.1670	20	-1.09	516.43	0
516	Arsenic, Total (As) (ppm)	0043	3.710	0.0648	4.184	0.5396	0.1670	20	-0.88	516.53	0
516	Arsenic, Total (As) (ppm)	0563	3.907	0.0605	4.184	0.5396	0.1670	20	-0.51	516.00	0
516	Arsenic, Total (As) (ppm)	0723	3.991	0.1640	4.184	0.5396	0.1670	20	-0.36	516.43	0
516	Arsenic, Total (As) (ppm)	0227	4.000	0.4200	4.184	0.5396	0.1670	20	-0.34	516.53	0
516	Arsenic, Total (As) (ppm)	2292	4.000	0.0000	4.184	0.5396	0.1670	20	-0.34	516.99	0
516	Arsenic, Total (As) (ppm)	0278	4.030	0.0400	4.184	0.5396	0.1670	20	-0.29	516.53	0
516	Arsenic, Total (As) (ppm)	0407	4.162	0.1512	4.184	0.5396	0.1670	20	-0.04	516.53	0
516	Arsenic, Total (As) (ppm)	0033	4.205	0.0100	4.184	0.5396	0.1670	20	0.04	516.53	0
516	Arsenic, Total (As) (ppm)	0186	4.230	0.0800	4.184	0.5396	0.1670	20	0.09	516.52	0
516	Arsenic, Total (As) (ppm)	0010	4.250	0.3000	4.184	0.5396	0.1670	20	0.12	516.53	0
516	Arsenic, Total (As) (ppm)	2485	4.390	0.1000	4.184	0.5396	0.1670	20	0.38	516.53	0
516	Arsenic, Total (As) (ppm)	0098	4.422	0.0680	4.184	0.5396	0.1670	20	0.44	516.53	0
516	Arsenic, Total (As) (ppm)	0870	4.604	0.2496	4.184	0.5396	0.1670	20	0.78	516.43	0
516	Arsenic, Total (As) (ppm)	0047	4.625	0.0100	4.184	0.5396	0.1670	20	0.82	516.52	0
516	Arsenic, Total (As) (ppm)	0572	4.750	0.2400	4.184	0.5396	0.1670	20	1.05	516.53	0
516	Arsenic, Total (As) (ppm)	0964	5.075	0.9900	4.184	0.5396	0.1670	20	1.65	516.43	0
516	Arsenic, Total (As) (ppm)	2113	5.500	0.2000	4.184	0.5396	0.1670	20	2.44	516.52	0
516	Arsenic, Total (As) (ppm)	0148	3,592	312.6	4.184	0.5396	0.1670	20	>100	516.43	2
516	Arsenic, Total (As) (ppm)	0042	< 6		4.184	0.5396	0.1670	20		516.42	5

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516	Arsenic, Total (As) (ppm)	0160	< 10		4.184	0.5396	0.1670	20		516.42	5
518	Cadmium (ppm)	2325	0.1050	0.0100	0.9319	0.1507	0.0273	24	-5.49	518.41	0
518	Cadmium (ppm)	0160	0.7000	0.0000	0.9319	0.1507	0.0273	24	-1.54	518.42	0
518	Cadmium (ppm)	0407	0.7436	0.0080	0.9319	0.1507	0.0273	24	-1.25	518.41	0
518	Cadmium (ppm)	2404	0.7650	0.0100	0.9319	0.1507	0.0273	24	-1.11	518.43	0
518	Cadmium (ppm)	0629	0.7950	0.0500	0.9319	0.1507	0.0273	24	-0.91	518.43	0
518	Cadmium (ppm)	0964	0.8700	0.0340	0.9319	0.1507	0.0273	24	-0.41	518.43	0
518	Cadmium (ppm)	0043	0.8902	0.0057	0.9319	0.1507	0.0273	24	-0.28	518.53	0
518	Cadmium (ppm)	0407	0.9039	0.0454	0.9319	0.1507	0.0273	24	-0.19	518.53	0
518	Cadmium (ppm)	0148	0.9110	0.0240	0.9319	0.1507	0.0273	24	-0.14	518.43	0
518	Cadmium (ppm)	0563	0.9362	0.0247	0.9319	0.1507	0.0273	24	0.03	518.31	0
518	Cadmium (ppm)	2433	0.9460	0.0060	0.9319	0.1507	0.0273	24	0.09	518.42	0
518	Cadmium (ppm)	0186	0.9488	0.0069	0.9319	0.1507	0.0273	24	0.11	518.52	0
518	Cadmium (ppm)	0010	0.9500	0.1000	0.9319	0.1507	0.0273	24	0.12	518.53	0
518	Cadmium (ppm)	0042	0.9550	0.0100	0.9319	0.1507	0.0273	24	0.15	518.42	0
518	Cadmium (ppm)	0278	0.9550	0.0300	0.9319	0.1507	0.0273	24	0.15	518.43	0
518	Cadmium (ppm)	0227	0.9575	0.0350	0.9319	0.1507	0.0273	24	0.17	518.53	0
518	Cadmium (ppm)	0033	0.9750	0.0300	0.9319	0.1507	0.0273	24	0.29	518.53	0
518	Cadmium (ppm)	0511	1.000	0.0000	0.9319	0.1507	0.0273	24	0.45	518.43	0
518	Cadmium (ppm)	0723	1.008	0.0100	0.9319	0.1507	0.0273	24	0.51	518.43	0
518	Cadmium (ppm)	0870	1.038	0.0425	0.9319	0.1507	0.0273	24	0.71	518.43	0
518	Cadmium (ppm)	0098	1.040	0.0000	0.9319	0.1507	0.0273	24	0.72	518.53	0
518	Cadmium (ppm)	2113	1.050	0.1000	0.9319	0.1507	0.0273	24	0.78	518.52	0
518	Cadmium (ppm)	0572	1.155	0.0100	0.9319	0.1507	0.0273	24	1.48	518.53	0
518	Cadmium (ppm)	0047	1.350	0.0600	0.9319	0.1507	0.0273	24	2.77	518.52	0
518	Cadmium (ppm)	2485	0.9750	0.1500	0.9319	0.1507	0.0273	24	0.29	518.53	1
520	Chromium, Total (Cr) (ppm)	0047	42.90	0.6200	50.21	4.455	1.043	22	-1.64	520.52	0
520	Chromium, Total (Cr) (ppm)	0870	43.41	2.201	50.21	4.455	1.043	22	-1.53	520.43	0
520	Chromium, Total (Cr) (ppm)	0563	43.83	1.192	50.21	4.455	1.043	22	-1.43	520.31	0
520	Chromium, Total (Cr) (ppm)	2292	45.50	1.000	50.21	4.455	1.043	22	-1.06	520.99	0
520	Chromium, Total (Cr) (ppm)	0407	46.10	1.111	50.21	4.455	1.043	22	-0.92	520.41	0
520	Chromium, Total (Cr) (ppm)	2404	46.90	0.8000	50.21	4.455	1.043	22	-0.74	520.43	0
520	Chromium, Total (Cr) (ppm)	0160	47.65	0.5000	50.21	4.455	1.043	22	-0.57	520.42	0
520	Chromium, Total (Cr) (ppm)	0227	48.70	0.8000	50.21	4.455	1.043	22	-0.34	520.53	0
520	Chromium, Total (Cr) (ppm)	0511	49.50	1.000	50.21	4.455	1.043	22	-0.16	520.43	0
520	Chromium, Total (Cr) (ppm)	0510	49.69	0.5300	50.21	4.455	1.043	22	-0.12	520.43	0
520	Chromium, Total (Cr) (ppm)	0098	51.05	2.500	50.21	4.455	1.043	22	0.19	520.53	0
520	Chromium, Total (Cr) (ppm)	0407	51.52	1.852	50.21	4.455	1.043	22	0.29	520.53	0
520	Chromium, Total (Cr) (ppm)	0629	51.90	2.400	50.21	4.455	1.043	22	0.38	520.43	0
520	Chromium, Total (Cr) (ppm)	0042	52.00	1.000	50.21	4.455	1.043	22	0.40	520.42	0
520	Chromium, Total (Cr) (ppm)	0723	52.35	0.2900	50.21	4.455	1.043	22	0.48	520.43	0
520	Chromium, Total (Cr) (ppm)	2404	52.38	1.303	50.21	4.455	1.043	22	0.49	520.53	0

Method Group	Analyte Group (Units)	Lab Code	Lab Data		Robust* Analyte Values				AAFCO PT	Your	Flag
			Value	Range	Rob. Mean	Horwitz SD	Rob. R-bar	# Tests	Z Score	Method	
520	Chromium, Total (Cr) (ppm)	0033	52.65	0.9000	50.21	4.455	1.043	22	0.55	520.53	0
520	Chromium, Total (Cr) (ppm)	0278	54.23	0.9900	50.21	4.455	1.043	22	0.90	520.43	0
520	Chromium, Total (Cr) (ppm)	0010	54.35	1.700	50.21	4.455	1.043	22	0.93	520.53	0
520	Chromium, Total (Cr) (ppm)	0186	54.87	0.7900	50.21	4.455	1.043	22	1.05	520.52	0
520	Chromium, Total (Cr) (ppm)	0964	55.60	0.4000	50.21	4.455	1.043	22	1.21	520.43	0
520	Chromium, Total (Cr) (ppm)	0148	58.34	0.2160	50.21	4.455	1.043	22	1.83	520.43	0
520	Chromium, Total (Cr) (ppm)	2113	51.00	8.000	50.21	4.455	1.043	22	0.18	520.52	1
526	Lead (ppm)	2325	0.3250	0.0100	94.24	7.606	1.449	25	-12.35	526.43	0
526	Lead (ppm)	2404	77.58	0.3800	94.24	7.606	1.449	25	-2.19	526.43	0
526	Lead (ppm)	0010	80.90	0.4000	94.24	7.606	1.449	25	-1.75	526.53	0
526	Lead (ppm)	0723	84.00	0.2580	94.24	7.606	1.449	25	-1.35	526.43	0
526	Lead (ppm)	0511	84.50	3.000	94.24	7.606	1.449	25	-1.28	526.43	0
526	Lead (ppm)	0160	87.05	1.300	94.24	7.606	1.449	25	-0.94	526.42	0
526	Lead (ppm)	0407	87.33	1.563	94.24	7.606	1.449	25	-0.91	526.41	0
526	Lead (ppm)	0629	89.70	1.000	94.24	7.606	1.449	25	-0.60	526.43	0
526	Lead (ppm)	0278	90.70	1.210	94.24	7.606	1.449	25	-0.47	526.43	0
526	Lead (ppm)	2113	91.50	5.000	94.24	7.606	1.449	25	-0.36	526.52	0
526	Lead (ppm)	0043	92.73	2.553	94.24	7.606	1.449	25	-0.20	526.53	0
526	Lead (ppm)	0033	94.05	0.9000	94.24	7.606	1.449	25	-0.02	526.53	0
526	Lead (ppm)	0407	94.84	0.6386	94.24	7.606	1.449	25	0.08	526.53	0
526	Lead (ppm)	2433	95.37	0.2060	94.24	7.606	1.449	25	0.15	526.42	0
526	Lead (ppm)	0964	97.55	1.300	94.24	7.606	1.449	25	0.44	526.43	0
526	Lead (ppm)	0186	98.49	0.1600	94.24	7.606	1.449	25	0.56	526.52	0
526	Lead (ppm)	0572	98.55	2.900	94.24	7.606	1.449	25	0.57	526.53	0
526	Lead (ppm)	0148	98.98	0.0300	94.24	7.606	1.449	25	0.62	526.43	0
526	Lead (ppm)	0098	99.50	3.000	94.24	7.606	1.449	25	0.69	526.53	0
526	Lead (ppm)	2485	101.9	7.220	94.24	7.606	1.449	25	1.01	526.53	0
526	Lead (ppm)	0042	102.0	0.0000	94.24	7.606	1.449	25	1.02	526.42	0
526	Lead (ppm)	0870	105.3	1.105	94.24	7.606	1.449	25	1.45	526.43	0
526	Lead (ppm)	0563	106.2	0.2865	94.24	7.606	1.449	25	1.57	526.31	0
526	Lead (ppm)	0047	106.9	3.480	94.24	7.606	1.449	25	1.66	526.52	0
526	Lead (ppm)	2292	154.0	2.000	94.24	7.606	1.449	25	7.86	526.99	0
526	Lead (ppm)	0227	94.15	9.500	94.24	7.606	1.449	25	-0.01	526.53	1
529	Mercury (ppb)	2485	0.2450	0.0100	172.4	35.93	7.274	12	-4.79	529.99	0
529	Mercury (ppb)	0160	121.5	1.000	172.4	35.93	7.274	12	-1.42	529.00	0
529	Mercury (ppb)	0629	135.0	10.00	172.4	35.93	7.274	12	-1.04	529.99	0
529	Mercury (ppb)	0407	155.9	4.785	172.4	35.93	7.274	12	-0.46	529.99	0
529	Mercury (ppb)	0186	172.8	1.400	172.4	35.93	7.274	12	0.01	529.99	0
529	Mercury (ppb)	0043	176.7	4.260	172.4	35.93	7.274	12	0.12	529.99	0
529	Mercury (ppb)	0227	184.0	2.000	172.4	35.93	7.274	12	0.32	529.99	0
529	Mercury (ppb)	0010	187.5	13.00	172.4	35.93	7.274	12	0.42	529.99	0
529	Mercury (ppb)	0563	196.0	24.90	172.4	35.93	7.274	12	0.66	529.99	0

Method Group	Analyte Group (Units)	Lab Code	Lab Data		Robust* Analyte Values				AAFCO PT	Your	Flag
			Value	Range	Rob. Mean	Horwitz SD	Rob. R-bar	# Tests	Z Score	Method	
529	Mercury (ppb)	0033	196.0	0.0000	172.4	35.93	7.274	12	0.66	529.99	0
529	Mercury (ppb)	0098	213.5	17.00	172.4	35.93	7.274	12	1.14	529.99	0
529	Mercury (ppb)	2404	215.1	0.0000	172.4	35.93	7.274	12	1.19	529.99	0
539	Nickel (ppm)	0047	4.335	0.0500	51.92	4.584	1.361	17	-10.38	539.52	0
539	Nickel (ppm)	2292	35.00	0.0000	51.92	4.584	1.361	17	-3.69	539.99	0
539	Nickel (ppm)	0870	43.47	2.401	51.92	4.584	1.361	17	-1.84	539.43	0
539	Nickel (ppm)	0407	47.01	1.142	51.92	4.584	1.361	17	-1.07	539.41	0
539	Nickel (ppm)	0511	49.50	5.000	51.92	4.584	1.361	17	-0.53	539.43	0
539	Nickel (ppm)	0160	50.00	0.8000	51.92	4.584	1.361	17	-0.42	539.42	0
539	Nickel (ppm)	0629	52.65	0.1000	51.92	4.584	1.361	17	0.16	539.43	0
539	Nickel (ppm)	2433	52.76	0.0600	51.92	4.584	1.361	17	0.18	539.42	0
539	Nickel (ppm)	0278	54.22	0.5500	51.92	4.584	1.361	17	0.50	539.43	0
539	Nickel (ppm)	0098	54.30	2.600	51.92	4.584	1.361	17	0.52	539.53	0
539	Nickel (ppm)	0186	54.47	0.4500	51.92	4.584	1.361	17	0.55	539.52	0
539	Nickel (ppm)	0964	54.60	2.600	51.92	4.584	1.361	17	0.58	539.43	0
539	Nickel (ppm)	2113	55.00	0.0000	51.92	4.584	1.361	17	0.67	539.52	0
539	Nickel (ppm)	0042	55.30	0.8000	51.92	4.584	1.361	17	0.74	539.42	0
539	Nickel (ppm)	0407	55.75	1.639	51.92	4.584	1.361	17	0.83	539.53	0
539	Nickel (ppm)	0010	56.50	3.000	51.92	4.584	1.361	17	1.00	539.53	0
539	Nickel (ppm)	0148	60.51	0.9312	51.92	4.584	1.361	17	1.87	539.43	0

Note 1: Interpreting Z Scores: Red indicates a normally distributed Z value >3 or <-3 (requires action), Orange = Z between 2 and 3 or between -2 and -3 (warning) and Green = Z <= 2 and >= -2 (OK at 95%). Horwitz SD's assigned based on Rob Mean only.

Note 2: Data Not Used Flags: 1=Rejected for duplicates too far apart, 2=Rejected as extreme outlier, 5=Reporting limit (<), 4=Zeros submitted as values and 3=Statistical problem. Flag 0 indicates data used in calculations.

Note 3: *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). A zero range is not included in robust R-bar calculation.