



AAFCO
Association of American Feed Control Officials



**Minerals Scheme
Cattle Mineral**

**# Labs Reporting: 31
Analytes Reported 15
Issue Date : 07/31/2025**

Test Material Code # 202552

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)	0510	141.0	8.000	1,049	58.90	17.79	15	-15.41	015.43	0
015	Aluminum (ppm)	0870	785.8	45.73	1,049	58.90	17.79	15	-4.46	015.43	0
015	Aluminum (ppm)	0278	808.0	11.30	1,049	58.90	17.79	15	-4.09	015.43	0
015	Aluminum (ppm)	0047	880.3	0.6600	1,049	58.90	17.79	15	-2.86	015.52	0
015	Aluminum (ppm)	0407	889.0	7.382	1,049	58.90	17.79	15	-2.71	015.41	0
015	Aluminum (ppm)	0186	895.5	1.000	1,049	58.90	17.79	15	-2.60	015.52	0
015	Aluminum (ppm)	0407	960.2	17.56	1,049	58.90	17.79	15	-1.50	015.43	0
015	Aluminum (ppm)	0511	992.5	11.00	1,049	58.90	17.79	15	-0.96	015.43	0
015	Aluminum (ppm)	0407	1,149	43.81	1,049	58.90	17.79	15	1.70	015.53	0
015	Aluminum (ppm)	0629	1,170	0.0000	1,049	58.90	17.79	15	2.06	015.43	0
015	Aluminum (ppm)	0042	1,193	33.00	1,049	58.90	17.79	15	2.44	015.42	0
015	Aluminum (ppm)	0553	1,275	30.00	1,049	58.90	17.79	15	3.84	015.53	0
015	Aluminum (ppm)	0098	1,315	2.000	1,049	58.90	17.79	15	4.52	015.43	0
015	Aluminum (ppm)	0964	1,322	27.00	1,049	58.90	17.79	15	4.63	015.43	0
015	Aluminum (ppm)	0148	2,121	13.98	1,049	58.90	17.79	15	18.21	015.43	0
017	Boron (ppm)	0553	26.15	1.500	47.82	4.274	2.442	9	-5.07	017.53	0
017	Boron (ppm)	0047	32.83	0.6300	47.82	4.274	2.442	9	-3.51	017.52	0
017	Boron (ppm)	0870	37.51	1.480	47.82	4.274	2.442	9	-2.41	017.43	0
017	Boron (ppm)	0629	51.80	0.0000	47.82	4.274	2.442	9	0.93	017.43	0
017	Boron (ppm)	0407	52.85	3.814	47.82	4.274	2.442	9	1.18	017.41	0
017	Boron (ppm)	0510	54.00	0.0000	47.82	4.274	2.442	9	1.45	017.43	0
017	Boron (ppm)	0407	55.22	3.425	47.82	4.274	2.442	9	1.73	017.43	0
017	Boron (ppm)	0098	58.07	3.380	47.82	4.274	2.442	9	2.40	017.43	0
017	Boron (ppm)	0407	60.68	2.865	47.82	4.274	2.442	9	3.01	017.53	0
021	Cobalt (ppm)	0047	85.24	2.340	136.6	10.42	4.146	24	-4.93	021.52	0
021	Cobalt (ppm)	2433	87.75	10.51	136.6	10.42	4.146	24	-4.69	021.42	0
021	Cobalt (ppm)	0042	96.85	1.100	136.6	10.42	4.146	24	-3.81	021.42	0
021	Cobalt (ppm)	0278	102.6	5.530	136.6	10.42	4.146	24	-3.26	021.43	0
021	Cobalt (ppm)	2113	110.0	0.0000	136.6	10.42	4.146	24	-2.55	021.52	0
021	Cobalt (ppm)	2404	112.4	1.650	136.6	10.42	4.146	24	-2.32	021.43	0
021	Cobalt (ppm)	0354	112.7	4.660	136.6	10.42	4.146	24	-2.30	021.43	0
021	Cobalt (ppm)	0870	115.7	5.935	136.6	10.42	4.146	24	-2.00	021.43	0
021	Cobalt (ppm)	0407	118.8	3.048	136.6	10.42	4.146	24	-1.70	021.43	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)	0511	127.5	3.000	136.6	10.42	4.146	24	-0.87	021.43	0
021	Cobalt (ppm)	0504	130.5	11.00	136.6	10.42	4.146	24	-0.58	021.53	0
021	Cobalt (ppm)	2141	130.8	0.6634	136.6	10.42	4.146	24	-0.56	021.43	0
021	Cobalt (ppm)	0186	132.5	1.000	136.6	10.42	4.146	24	-0.39	021.52	0
021	Cobalt (ppm)	0407	134.3	3.295	136.6	10.42	4.146	24	-0.22	021.41	0
021	Cobalt (ppm)	0510	141.5	0.3500	136.6	10.42	4.146	24	0.47	021.43	0
021	Cobalt (ppm)	0629	144.5	1.000	136.6	10.42	4.146	24	0.76	021.43	0
021	Cobalt (ppm)	0407	153.3	11.45	136.6	10.42	4.146	24	1.61	021.53	0
021	Cobalt (ppm)	0964	166.5	5.000	136.6	10.42	4.146	24	2.87	021.43	0
021	Cobalt (ppm)	0033	172.5	3.000	136.6	10.42	4.146	24	3.44	021.53	0
021	Cobalt (ppm)	0098	174.7	1.100	136.6	10.42	4.146	24	3.65	021.53	0
021	Cobalt (ppm)	0021	175.0	10.00	136.6	10.42	4.146	24	3.68	021.53	0
021	Cobalt (ppm)	2404	179.9	0.8600	136.6	10.42	4.146	24	4.15	021.53	0
021	Cobalt (ppm)	0553	182.5	3.000	136.6	10.42	4.146	24	4.40	021.53	0
021	Cobalt (ppm)	0148	193.2	9.050	136.6	10.42	4.146	24	5.43	021.43	0
022	Copper (ppm)	0870	861.9	2.338	1,347	72.84	20.36	26	-6.66	022.43	0
022	Copper (ppm)	0047	1,101	4.800	1,347	72.84	20.36	26	-3.38	022.52	0
022	Copper (ppm)	0511	1,202	17.00	1,347	72.84	20.36	26	-1.99	022.43	0
022	Copper (ppm)	0278	1,256	20.30	1,347	72.84	20.36	26	-1.25	022.42	0
022	Copper (ppm)	0186	1,267	38.00	1,347	72.84	20.36	26	-1.10	022.52	0
022	Copper (ppm)	0407	1,267	42.29	1,347	72.84	20.36	26	-1.09	022.43	0
022	Copper (ppm)	0510	1,299	2.000	1,347	72.84	20.36	26	-0.66	022.43	0
022	Copper (ppm)	0629	1,300	0.0000	1,347	72.84	20.36	26	-0.64	022.43	0
022	Copper (ppm)	0407	1,311	30.04	1,347	72.84	20.36	26	-0.49	022.41	0
022	Copper (ppm)	0553	1,325	10.00	1,347	72.84	20.36	26	-0.30	022.53	0
022	Copper (ppm)	2404	1,328	9.080	1,347	72.84	20.36	26	-0.25	022.43	0
022	Copper (ppm)	0504	1,355	16.00	1,347	72.84	20.36	26	0.11	022.42	0
022	Copper (ppm)	0964	1,362	25.00	1,347	72.84	20.36	26	0.20	022.43	0
022	Copper (ppm)	0148	1,375	104.3	1,347	72.84	20.36	26	0.38	022.43	0
022	Copper (ppm)	0017	1,378	2.452	1,347	72.84	20.36	26	0.43	022.43	0
022	Copper (ppm)	0208	1,382	24.00	1,347	72.84	20.36	26	0.48	022.41	0
022	Copper (ppm)	0010	1,389	9.600	1,347	72.84	20.36	26	0.58	022.43	0
022	Copper (ppm)	0033	1,395	10.00	1,347	72.84	20.36	26	0.66	022.43	0
022	Copper (ppm)	0504	1,395	130.0	1,347	72.84	20.36	26	0.66	022.53	0
022	Copper (ppm)	2113	1,400	0.0000	1,347	72.84	20.36	26	0.73	022.52	0
022	Copper (ppm)	0021	1,400	0.0000	1,347	72.84	20.36	26	0.73	022.53	0
022	Copper (ppm)	0098	1,403	1.000	1,347	72.84	20.36	26	0.77	022.53	0
022	Copper (ppm)	2404	1,408	35.23	1,347	72.84	20.36	26	0.84	022.53	0
022	Copper (ppm)	0407	1,435	37.69	1,347	72.84	20.36	26	1.21	022.53	0
022	Copper (ppm)	0563	1,443	27.00	1,347	72.84	20.36	26	1.31	022.31	0
022	Copper (ppm)	2141	1,460	12.89	1,347	72.84	20.36	26	1.55	022.43	0
022	Copper (ppm)	0009	1,411	179.8	1,347	72.84	20.36	26	0.87	022.52	1

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024	Iodine (ppm)	0186	106.0	2.000				2		024.52	0
024	Iodine (ppm)	0208	135.5	11.00				2		024.99	0
034	Selenium, Total (Se) (ppm)	0629	11.05	0.1000	17.17	1.790	0.5876	22	-3.42	034.43	0
034	Selenium, Total (Se) (ppm)	2404	11.93	0.5900	17.17	1.790	0.5876	22	-2.93	034.43	0
034	Selenium, Total (Se) (ppm)	2445	12.05	0.5750	17.17	1.790	0.5876	22	-2.86	034.43	0
034	Selenium, Total (Se) (ppm)	0870	12.26	0.4266	17.17	1.790	0.5876	22	-2.74	034.43	0
034	Selenium, Total (Se) (ppm)	0047	14.00	0.8800	17.17	1.790	0.5876	22	-1.77	034.52	0
034	Selenium, Total (Se) (ppm)	2433	14.82	0.3440	17.17	1.790	0.5876	22	-1.31	034.42	0
034	Selenium, Total (Se) (ppm)	0504	15.20	1.200	17.17	1.790	0.5876	22	-1.10	034.53	0
034	Selenium, Total (Se) (ppm)	0208	15.75	0.5000	17.17	1.790	0.5876	22	-0.79	034.52	0
034	Selenium, Total (Se) (ppm)	0186	16.40	0.2000	17.17	1.790	0.5876	22	-0.43	034.52	0
034	Selenium, Total (Se) (ppm)	0148	16.82	0.3000	17.17	1.790	0.5876	22	-0.19	034.42	0
034	Selenium, Total (Se) (ppm)	0511	17.00	0.0000	17.17	1.790	0.5876	22	-0.09	034.43	0
034	Selenium, Total (Se) (ppm)	2404	17.67	0.0870	17.17	1.790	0.5876	22	0.28	034.53	0
034	Selenium, Total (Se) (ppm)	0553	18.05	0.7000	17.17	1.790	0.5876	22	0.49	034.53	0
034	Selenium, Total (Se) (ppm)	0964	18.35	1.100	17.17	1.790	0.5876	22	0.66	034.53	0
034	Selenium, Total (Se) (ppm)	0033	18.45	0.5000	17.17	1.790	0.5876	22	0.72	034.53	0
034	Selenium, Total (Se) (ppm)	0278	19.12	0.5800	17.17	1.790	0.5876	22	1.09	034.53	0
034	Selenium, Total (Se) (ppm)	0098	20.16	0.1300	17.17	1.790	0.5876	22	1.67	034.53	0
034	Selenium, Total (Se) (ppm)	0021	20.50	1.000	17.17	1.790	0.5876	22	1.86	034.53	0
034	Selenium, Total (Se) (ppm)	0407	21.25	0.9823	17.17	1.790	0.5876	22	2.28	034.53	0
034	Selenium, Total (Se) (ppm)	0009	21.33	0.8100	17.17	1.790	0.5876	22	2.32	034.53	0
034	Selenium, Total (Se) (ppm)	0563	22.23	0.1134	17.17	1.790	0.5876	22	2.83	034.04	0
034	Selenium, Total (Se) (ppm)	0010	25.09	1.720	17.17	1.790	0.5876	22	4.43	034.53	0
034	Selenium, Total (Se) (ppm)	2141	21.21	3.767	17.17	1.790	0.5876	22	2.26	034.43	1
036	Sulfur (%)	0504	0.4845	0.0230	0.6583	0.0280	0.0167	13	-6.20	036.53	0
036	Sulfur (%)	0407	0.5875	0.0006	0.6583	0.0280	0.0167	13	-2.52	036.42	0
036	Sulfur (%)	0629	0.6010	0.0000	0.6583	0.0280	0.0167	13	-2.04	036.43	0
036	Sulfur (%)	0553	0.6214	0.0092	0.6583	0.0280	0.0167	13	-1.32	036.53	0
036	Sulfur (%)	0407	0.6282	0.0017	0.6583	0.0280	0.0167	13	-1.07	036.43	0
036	Sulfur (%)	0870	0.6496	0.0166	0.6583	0.0280	0.0167	13	-0.31	036.42	0
036	Sulfur (%)	0186	0.6525	0.0210	0.6583	0.0280	0.0167	13	-0.21	036.52	0
036	Sulfur (%)	0043	0.6807	0.0043	0.6583	0.0280	0.0167	13	0.80	036.53	0
036	Sulfur (%)	0510	0.6900	0.0000	0.6583	0.0280	0.0167	13	1.13	036.43	0
036	Sulfur (%)	2141	0.6905	0.0401	0.6583	0.0280	0.0167	13	1.15	036.43	0
036	Sulfur (%)	0964	0.6938	0.0421	0.6583	0.0280	0.0167	13	1.27	036.43	0
036	Sulfur (%)	0098	0.7460	0.0080	0.6583	0.0280	0.0167	13	3.13	036.43	0
036	Sulfur (%)	0278	0.7700	0.0000	0.6583	0.0280	0.0167	13	3.98	036.42	0
038	Molybdenum (ppm)	0870	18.05	0.3897	62.99	5.401	1.484	21	-8.32	038.43	0
038	Molybdenum (ppm)	0511	53.50	1.000	62.99	5.401	1.484	21	-1.76	038.43	0
038	Molybdenum (ppm)	0407	54.14	1.417	62.99	5.401	1.484	21	-1.64	038.43	0
038	Molybdenum (ppm)	0407	55.74	3.151	62.99	5.401	1.484	21	-1.34	038.41	0

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038	Molybdenum (ppm)	0504	57.05	1.100	62.99	5.401	1.484	21	-1.10	038.53	0
038	Molybdenum (ppm)	0629	59.35	0.1000	62.99	5.401	1.484	21	-0.67	038.43	0
038	Molybdenum (ppm)	0278	59.83	2.100	62.99	5.401	1.484	21	-0.58	038.42	0
038	Molybdenum (ppm)	0047	59.98	0.6100	62.99	5.401	1.484	21	-0.56	038.52	0
038	Molybdenum (ppm)	0563	61.31	1.643	62.99	5.401	1.484	21	-0.31	038.34	0
038	Molybdenum (ppm)	0510	61.60	0.0000	62.99	5.401	1.484	21	-0.26	038.43	0
038	Molybdenum (ppm)	2141	64.24	0.4034	62.99	5.401	1.484	21	0.23	038.43	0
038	Molybdenum (ppm)	0964	64.70	2.600	62.99	5.401	1.484	21	0.32	038.43	0
038	Molybdenum (ppm)	0098	64.94	3.180	62.99	5.401	1.484	21	0.36	038.53	0
038	Molybdenum (ppm)	0010	65.85	1.100	62.99	5.401	1.484	21	0.53	038.53	0
038	Molybdenum (ppm)	0042	66.35	2.900	62.99	5.401	1.484	21	0.62	038.42	0
038	Molybdenum (ppm)	0186	66.50	0.4000	62.99	5.401	1.484	21	0.65	038.52	0
038	Molybdenum (ppm)	0553	66.55	2.100	62.99	5.401	1.484	21	0.66	038.53	0
038	Molybdenum (ppm)	0407	67.96	4.171	62.99	5.401	1.484	21	0.92	038.53	0
038	Molybdenum (ppm)	0033	73.15	1.100	62.99	5.401	1.484	21	1.88	038.53	0
038	Molybdenum (ppm)	0021	75.50	1.000	62.99	5.401	1.484	21	2.32	038.53	0
038	Molybdenum (ppm)	0148	77.05	0.0600	62.99	5.401	1.484	21	2.60	038.43	0
038	Molybdenum (ppm)	2113	73.50	7.000	62.99	5.401	1.484	21	1.95	038.52	1
041	Vanadium (ppm)	0870	2.122	0.0874	7.740	0.9099	0.2390	9	-6.17	041.43	0
041	Vanadium (ppm)	0047	7.085	0.3700	7.740	0.9099	0.2390	9	-0.72	041.52	0
041	Vanadium (ppm)	0098	7.604	0.3260	7.740	0.9099	0.2390	9	-0.15	041.53	0
041	Vanadium (ppm)	0563	7.735	0.2549	7.740	0.9099	0.2390	9	-0.01	041.34	0
041	Vanadium (ppm)	0278	7.810	0.2710	7.740	0.9099	0.2390	9	0.08	041.43	0
041	Vanadium (ppm)	0407	7.850	0.4329	7.740	0.9099	0.2390	9	0.12	041.53	0
041	Vanadium (ppm)	0629	7.975	0.1300	7.740	0.9099	0.2390	9	0.26	041.43	0
041	Vanadium (ppm)	0553	8.120	0.0400	7.740	0.9099	0.2390	9	0.42	041.53	0
041	Vanadium (ppm)	0021	11.00	0.0000	7.740	0.9099	0.2390	9	3.58	041.53	0
041	Vanadium (ppm)	0511	246.5	7.000	7.740	0.9099	0.2390	9	>100	041.43	2
516	Arsenic, Total (As) (ppm)	2445	2.022	0.1690	4.110	0.5315	0.1889	23	-3.93	516.43	0
516	Arsenic, Total (As) (ppm)	0015	2.877	0.2240	4.110	0.5315	0.1889	23	-2.32	516.53	0
516	Arsenic, Total (As) (ppm)	0629	2.890	0.0400	4.110	0.5315	0.1889	23	-2.30	516.43	0
516	Arsenic, Total (As) (ppm)	0870	3.116	0.1780	4.110	0.5315	0.1889	23	-1.87	516.43	0
516	Arsenic, Total (As) (ppm)	2404	3.185	0.2100	4.110	0.5315	0.1889	23	-1.74	516.43	0
516	Arsenic, Total (As) (ppm)	0208	3.700	0.5000	4.110	0.5315	0.1889	23	-0.77	516.52	0
516	Arsenic, Total (As) (ppm)	0148	3.884	0.0110	4.110	0.5315	0.1889	23	-0.43	516.43	0
516	Arsenic, Total (As) (ppm)	0186	3.920	0.0000	4.110	0.5315	0.1889	23	-0.36	516.52	0
516	Arsenic, Total (As) (ppm)	0504	4.040	0.4600	4.110	0.5315	0.1889	23	-0.13	516.53	0
516	Arsenic, Total (As) (ppm)	0043	4.079	0.0340	4.110	0.5315	0.1889	23	-0.06	516.53	0
516	Arsenic, Total (As) (ppm)	0563	4.185	0.2030	4.110	0.5315	0.1889	23	0.14	516.00	0
516	Arsenic, Total (As) (ppm)	2404	4.240	0.0710	4.110	0.5315	0.1889	23	0.24	516.53	0
516	Arsenic, Total (As) (ppm)	0047	4.275	0.1500	4.110	0.5315	0.1889	23	0.31	516.52	0
516	Arsenic, Total (As) (ppm)	0278	4.412	0.1410	4.110	0.5315	0.1889	23	0.57	516.53	0

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516	Arsenic, Total (As) (ppm)	0033	4.455	0.0100	4.110	0.5315	0.1889	23	0.65	516.53	0
516	Arsenic, Total (As) (ppm)	0964	4.495	0.4900	4.110	0.5315	0.1889	23	0.72	516.43	0
516	Arsenic, Total (As) (ppm)	0407	4.547	0.0370	4.110	0.5315	0.1889	23	0.82	516.53	0
516	Arsenic, Total (As) (ppm)	0098	4.628	0.0600	4.110	0.5315	0.1889	23	0.97	516.53	0
516	Arsenic, Total (As) (ppm)	0553	4.675	0.0100	4.110	0.5315	0.1889	23	1.06	516.53	0
516	Arsenic, Total (As) (ppm)	0010	4.755	0.2700	4.110	0.5315	0.1889	23	1.21	516.53	0
516	Arsenic, Total (As) (ppm)	2113	4.800	0.8000	4.110	0.5315	0.1889	23	1.30	516.52	0
516	Arsenic, Total (As) (ppm)	0021	5.100	0.4000	4.110	0.5315	0.1889	23	1.86	516.53	0
516	Arsenic, Total (As) (ppm)	2141	5.440	0.0600	4.110	0.5315	0.1889	23	2.50	516.43	0
518	Cadmium (ppm)	0656	0.3897	0.0000	1.290	0.1986	0.0419	26	-4.53	518.34	0
518	Cadmium (ppm)	2404	0.7700	0.0000	1.290	0.1986	0.0419	26	-2.62	518.43	0
518	Cadmium (ppm)	0354	1.050	0.3000	1.290	0.1986	0.0419	26	-1.21	518.43	0
518	Cadmium (ppm)	0407	1.078	0.0316	1.290	0.1986	0.0419	26	-1.07	518.41	0
518	Cadmium (ppm)	0407	1.091	0.0201	1.290	0.1986	0.0419	26	-1.00	518.43	0
518	Cadmium (ppm)	2433	1.130	0.0260	1.290	0.1986	0.0419	26	-0.81	518.42	0
518	Cadmium (ppm)	0629	1.135	0.0300	1.290	0.1986	0.0419	26	-0.78	518.43	0
518	Cadmium (ppm)	0186	1.185	0.0100	1.290	0.1986	0.0419	26	-0.53	518.52	0
518	Cadmium (ppm)	0563	1.257	0.0390	1.290	0.1986	0.0419	26	-0.17	518.34	0
518	Cadmium (ppm)	0015	1.278	0.0420	1.290	0.1986	0.0419	26	-0.06	518.53	0
518	Cadmium (ppm)	0208	1.290	0.0200	1.290	0.1986	0.0419	26	0.00	518.52	0
518	Cadmium (ppm)	0010	1.290	0.0000	1.290	0.1986	0.0419	26	0.00	518.53	0
518	Cadmium (ppm)	0504	1.290	0.0800	1.290	0.1986	0.0419	26	0.00	518.53	0
518	Cadmium (ppm)	0278	1.294	0.1470	1.290	0.1986	0.0419	26	0.02	518.43	0
518	Cadmium (ppm)	0043	1.320	0.0300	1.290	0.1986	0.0419	26	0.15	518.53	0
518	Cadmium (ppm)	2404	1.338	0.0060	1.290	0.1986	0.0419	26	0.24	518.53	0
518	Cadmium (ppm)	0033	1.345	0.0500	1.290	0.1986	0.0419	26	0.28	518.53	0
518	Cadmium (ppm)	0021	1.350	0.1000	1.290	0.1986	0.0419	26	0.30	518.53	0
518	Cadmium (ppm)	0407	1.395	0.0497	1.290	0.1986	0.0419	26	0.53	518.53	0
518	Cadmium (ppm)	2113	1.400	0.0000	1.290	0.1986	0.0419	26	0.55	518.52	0
518	Cadmium (ppm)	0098	1.430	0.0200	1.290	0.1986	0.0419	26	0.71	518.53	0
518	Cadmium (ppm)	0553	1.430	0.0200	1.290	0.1986	0.0419	26	0.71	518.53	0
518	Cadmium (ppm)	0870	1.462	0.0288	1.290	0.1986	0.0419	26	0.87	518.43	0
518	Cadmium (ppm)	0047	1.540	0.0200	1.290	0.1986	0.0419	26	1.26	518.52	0
518	Cadmium (ppm)	0148	1.660	0.0000	1.290	0.1986	0.0419	26	1.86	518.43	0
518	Cadmium (ppm)	2445	3.111	0.0860	1.290	0.1986	0.0419	26	9.17	518.43	0
518	Cadmium (ppm)	0964	1.535	0.4700	1.290	0.1986	0.0419	26	1.23	518.43	1
518	Cadmium (ppm)	2141	< 5		1.290	0.1986	0.0419	26		518.43	5
520	Chromium, Total (Cr) (ppm)	0042	119.5	5.000	250.0	17.42	9.639	26	-7.49	520.42	0
520	Chromium, Total (Cr) (ppm)	0047	130.0	5.670	250.0	17.42	9.639	26	-6.89	520.52	0
520	Chromium, Total (Cr) (ppm)	2445	175.6	0.0880	250.0	17.42	9.639	26	-4.27	520.43	0
520	Chromium, Total (Cr) (ppm)	0870	175.7	4.617	250.0	17.42	9.639	26	-4.26	520.43	0
520	Chromium, Total (Cr) (ppm)	0354	209.2	1.910	250.0	17.42	9.639	26	-2.34	520.43	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)	2404	209.5	1.850	250.0	17.42	9.639	26	-2.32	520.43	0
520	Chromium, Total (Cr) (ppm)	0407	211.4	9.971	250.0	17.42	9.639	26	-2.22	520.41	0
520	Chromium, Total (Cr) (ppm)	2141	212.5	20.57	250.0	17.42	9.639	26	-2.15	520.43	0
520	Chromium, Total (Cr) (ppm)	0407	224.6	38.94	250.0	17.42	9.639	26	-1.46	520.43	0
520	Chromium, Total (Cr) (ppm)	0407	231.5	26.94	250.0	17.42	9.639	26	-1.06	520.53	0
520	Chromium, Total (Cr) (ppm)	0511	234.0	6.000	250.0	17.42	9.639	26	-0.92	520.43	0
520	Chromium, Total (Cr) (ppm)	0278	253.2	1.400	250.0	17.42	9.639	26	0.18	520.43	0
520	Chromium, Total (Cr) (ppm)	0629	256.0	0.0000	250.0	17.42	9.639	26	0.35	520.43	0
520	Chromium, Total (Cr) (ppm)	0510	259.1	0.6900	250.0	17.42	9.639	26	0.52	520.43	0
520	Chromium, Total (Cr) (ppm)	0504	265.0	42.00	250.0	17.42	9.639	26	0.86	520.53	0
520	Chromium, Total (Cr) (ppm)	0186	265.8	1.800	250.0	17.42	9.639	26	0.91	520.52	0
520	Chromium, Total (Cr) (ppm)	2113	280.0	40.00	250.0	17.42	9.639	26	1.72	520.52	0
520	Chromium, Total (Cr) (ppm)	0015	284.0	13.02	250.0	17.42	9.639	26	1.95	520.53	0
520	Chromium, Total (Cr) (ppm)	0553	285.0	4.000	250.0	17.42	9.639	26	2.01	520.53	0
520	Chromium, Total (Cr) (ppm)	0964	288.5	7.000	250.0	17.42	9.639	26	2.21	520.43	0
520	Chromium, Total (Cr) (ppm)	0098	290.0	4.000	250.0	17.42	9.639	26	2.30	520.53	0
520	Chromium, Total (Cr) (ppm)	2404	296.0	2.770	250.0	17.42	9.639	26	2.64	520.53	0
520	Chromium, Total (Cr) (ppm)	0010	297.6	19.10	250.0	17.42	9.639	26	2.73	520.53	0
520	Chromium, Total (Cr) (ppm)	0033	298.0	10.00	250.0	17.42	9.639	26	2.76	520.53	0
520	Chromium, Total (Cr) (ppm)	0021	330.0	20.00	250.0	17.42	9.639	26	4.59	520.53	0
520	Chromium, Total (Cr) (ppm)	0148	342.8	1.799	250.0	17.42	9.639	26	5.33	520.43	0
526	Lead (ppm)	2404	13.99	0.1600	22.09	2.218	0.6756	28	-3.65	526.43	0
526	Lead (ppm)	0354	14.54	0.4000	22.09	2.218	0.6756	28	-3.41	526.43	0
526	Lead (ppm)	2445	15.26	0.3240	22.09	2.218	0.6756	28	-3.08	526.43	0
526	Lead (ppm)	0511	17.00	0.0000	22.09	2.218	0.6756	28	-2.30	526.43	0
526	Lead (ppm)	0015	18.40	1.247	22.09	2.218	0.6756	28	-1.66	526.53	0
526	Lead (ppm)	0407	18.73	0.6241	22.09	2.218	0.6756	28	-1.52	526.43	0
526	Lead (ppm)	0407	18.87	0.9183	22.09	2.218	0.6756	28	-1.45	526.41	0
526	Lead (ppm)	0629	19.50	0.2000	22.09	2.218	0.6756	28	-1.17	526.43	0
526	Lead (ppm)	0148	19.63	0.2020	22.09	2.218	0.6756	28	-1.11	526.43	0
526	Lead (ppm)	0021	20.00	0.0000	22.09	2.218	0.6756	28	-0.94	526.53	0
526	Lead (ppm)	2404	21.25	0.1250	22.09	2.218	0.6756	28	-0.38	526.53	0
526	Lead (ppm)	2433	21.59	0.8680	22.09	2.218	0.6756	28	-0.23	526.42	0
526	Lead (ppm)	2113	22.00	0.0000	22.09	2.218	0.6756	28	-0.04	526.52	0
526	Lead (ppm)	0186	22.05	0.3000	22.09	2.218	0.6756	28	-0.02	526.52	0
526	Lead (ppm)	0098	22.80	1.200	22.09	2.218	0.6756	28	0.32	526.53	0
526	Lead (ppm)	0964	23.80	1.200	22.09	2.218	0.6756	28	0.77	526.43	0
526	Lead (ppm)	0010	24.00	2.000	22.09	2.218	0.6756	28	0.86	526.53	0
526	Lead (ppm)	0563	24.15	0.5010	22.09	2.218	0.6756	28	0.93	526.31	0
526	Lead (ppm)	0043	24.41	0.3280	22.09	2.218	0.6756	28	1.04	526.53	0
526	Lead (ppm)	0870	24.58	0.2922	22.09	2.218	0.6756	28	1.12	526.43	0
526	Lead (ppm)	0278	24.68	0.1600	22.09	2.218	0.6756	28	1.17	526.43	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	
526	Lead (ppm)	0033	25.05	0.7000	22.09	2.218	0.6756	28	1.33	526.53	0
526	Lead (ppm)	0047	25.10	0.9300	22.09	2.218	0.6756	28	1.35	526.52	0
526	Lead (ppm)	2141	25.72	0.8400	22.09	2.218	0.6756	28	1.63	526.43	0
526	Lead (ppm)	0553	26.05	0.9000	22.09	2.218	0.6756	28	1.78	526.53	0
526	Lead (ppm)	0208	26.40	1.400	22.09	2.218	0.6756	28	1.94	526.52	0
526	Lead (ppm)	0407	26.59	0.3476	22.09	2.218	0.6756	28	2.02	526.53	0
526	Lead (ppm)	0042	28.75	1.300	22.09	2.218	0.6756	28	3.00	526.42	0
529	Mercury (ppb)	0015	0.0925	0.0010	184.8	38.12	10.92	16	-4.85	529.99	0
529	Mercury (ppb)	0186	0.1745	0.0030	184.8	38.12	10.92	16	-4.84	529.99	0
529	Mercury (ppb)	0563	142.0	24.00	184.8	38.12	10.92	16	-1.12	529.99	0
529	Mercury (ppb)	0148	154.9	1.940	184.8	38.12	10.92	16	-0.79	529.99	0
529	Mercury (ppb)	0407	166.1	6.449	184.8	38.12	10.92	16	-0.49	529.99	0
529	Mercury (ppb)	0629	170.0	20.00	184.8	38.12	10.92	16	-0.39	529.99	0
529	Mercury (ppb)	0033	183.0	4.000	184.8	38.12	10.92	16	-0.05	529.99	0
529	Mercury (ppb)	0043	188.1	12.29	184.8	38.12	10.92	16	0.09	529.99	0
529	Mercury (ppb)	0021	195.0	10.00	184.8	38.12	10.92	16	0.27	529.99	0
529	Mercury (ppb)	2445	200.1	10.15	184.8	38.12	10.92	16	0.40	529.99	0
529	Mercury (ppb)	0860	200.7	0.0000	184.8	38.12	10.92	16	0.42	529.00	0
529	Mercury (ppb)	0208	201.5	29.00	184.8	38.12	10.92	16	0.44	529.99	0
529	Mercury (ppb)	0042	209.0	2.000	184.8	38.12	10.92	16	0.63	529.00	0
529	Mercury (ppb)	0553	209.0	14.00	184.8	38.12	10.92	16	0.63	529.99	0
529	Mercury (ppb)	0098	250.0	4.000	184.8	38.12	10.92	16	1.71	529.99	0
529	Mercury (ppb)	0010	373.0	40.00	184.8	38.12	10.92	16	4.94	529.99	0
529	Mercury (ppb)	0656	< 1.0967		184.8	38.12	10.92	16		529.99	5
539	Nickel (ppm)	0042	68.15	0.5000	119.7	9.319	4.245	19	-5.53	539.42	0
539	Nickel (ppm)	0047	75.45	4.280	119.7	9.319	4.245	19	-4.75	539.52	0
539	Nickel (ppm)	0870	82.33	1.495	119.7	9.319	4.245	19	-4.01	539.43	0
539	Nickel (ppm)	0407	89.65	0.5309	119.7	9.319	4.245	19	-3.22	539.43	0
539	Nickel (ppm)	0511	105.5	1.000	119.7	9.319	4.245	19	-1.52	539.43	0
539	Nickel (ppm)	0407	107.1	3.319	119.7	9.319	4.245	19	-1.35	539.41	0
539	Nickel (ppm)	0407	116.9	14.63	119.7	9.319	4.245	19	-0.30	539.53	0
539	Nickel (ppm)	0629	119.0	0.0000	119.7	9.319	4.245	19	-0.07	539.43	0
539	Nickel (ppm)	0098	119.5	1.000	119.7	9.319	4.245	19	-0.02	539.53	0
539	Nickel (ppm)	2433	120.2	4.708	119.7	9.319	4.245	19	0.05	539.42	0
539	Nickel (ppm)	2141	122.6	18.27	119.7	9.319	4.245	19	0.32	539.43	0
539	Nickel (ppm)	0010	130.5	1.000	119.7	9.319	4.245	19	1.16	539.53	0
539	Nickel (ppm)	0278	135.4	9.500	119.7	9.319	4.245	19	1.68	539.43	0
539	Nickel (ppm)	0964	135.5	5.000	119.7	9.319	4.245	19	1.70	539.43	0
539	Nickel (ppm)	2113	140.0	0.0000	119.7	9.319	4.245	19	2.18	539.52	0
539	Nickel (ppm)	0186	140.7	1.100	119.7	9.319	4.245	19	2.25	539.52	0
539	Nickel (ppm)	0553	144.5	5.000	119.7	9.319	4.245	19	2.66	539.53	0
539	Nickel (ppm)	0148	152.3	2.522	119.7	9.319	4.245	19	3.50	539.43	0

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			
539	Nickel (ppm)	0021	155.0	10.00	119.7	9.319	4.245	19	3.79	539.53	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.