AAFCO Proficiency Testing Program

ANAB ACCREDITED ISO/IEC 17043 PROFICIENCY TESTING PROVIDER

AAFCO PTP Minerals Scheme

Minerals Scheme

Wheat Bran

Test Material Code # 202054

Analyte Proficiency Testing Report

 # Labs Reporting: 32

 # Analytes Reported 16

Issue Date : 01/31/2021

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)	0510	37.00	0.0000	59.73	5.163	2.684	20	-4.40	015.43	0
015	Aluminum (ppm)	2260	49.15	12.90	59.73	5.163	2.684	20	-2.05	015.33	0
015	Aluminum (ppm)	2292	52.50	1.000	59.73	5.163	2.684	20	-1.40	015.99	0
015	Aluminum (ppm)	0870	52.57	3.497	59.73	5.163	2.684	20	-1.39	015.43	0
015	Aluminum (ppm)	0629	53.75	1.100	59.73	5.163	2.684	20	-1.16	015.43	0
015	Aluminum (ppm)	2207	54.00	2.000	59.73	5.163	2.684	20	-1.11	015.52	0
015	Aluminum (ppm)	0047	54.36	2.660	59.73	5.163	2.684	20	-1.04	015.52	0
015	Aluminum (ppm)	0098	59.14	1.350	59.73	5.163	2.684	20	-0.12	015.43	0
015	Aluminum (ppm)	0208	59.60	0.0000	59.73	5.163	2.684	20	-0.03	015.41	0
015	Aluminum (ppm)	0407	61.05	5.674	59.73	5.163	2.684	20	0.25	015.53	0
015	Aluminum (ppm)	0186	61.40	2.600	59.73	5.163	2.684	20	0.32	015.52	0
015	Aluminum (ppm)	0407	61.51	4.187	59.73	5.163	2.684	20	0.34	015.41	0
015	Aluminum (ppm)	0021	63.50	1.000	59.73	5.163	2.684	20	0.73	015.43	0
015	Aluminum (ppm)	0015	63.69	1.392	59.73	5.163	2.684	20	0.77	015.53	0
015	Aluminum (ppm)	0553	64.70	1.600	59.73	5.163	2.684	20	0.96	015.53	0
015	Aluminum (ppm)	0918	64.82	1.141	59.73	5.163	2.684	20	0.98	015.53	0
015	Aluminum (ppm)	2299	65.00	6.000	59.73	5.163	2.684	20	1.02	015.43	0
015	Aluminum (ppm)	0964	66.43	4.450	59.73	5.163	2.684	20	1.30	015.43	0
015	Aluminum (ppm)	0278	68.01	0.1300	59.73	5.163	2.684	20	1.60	015.43	0
015	Aluminum (ppm)	0227	75.50	1.000	59.73	5.163	2.684	20	3.05	015.41	0
015	Aluminum (ppm)	0042	88.80	34.40	59.73	5.163	2.684	20	5.63	015.42	1
017	Boron (ppm)	2260	25.90	1.400	134.5	10.29	5.179	13	-10.55	017.99	0
017	Boron (ppm)	0047	120.9	0.8300	134.5	10.29	5.179	13	-1.32	017.52	0
017	Boron (ppm)	0098	123.9	3.700	134.5	10.29	5.179	13	-1.03	017.43	0
017	Boron (ppm)	0510	129.5	3.000	134.5	10.29	5.179	13	-0.49	017.43	0
017	Boron (ppm)	0407	132.6	9.355	134.5	10.29	5.179	13	-0.19	017.41	0
017	Boron (ppm)	0918	132.6	4.580	134.5	10.29	5.179	13	-0.18	017.43	0
017	Boron (ppm)	0407	133.5	14.57	134.5	10.29	5.179	13	-0.10	017.53	0
017	Boron (ppm)	2207	138.0	2.000	134.5	10.29	5.179	13	0.34	017.52	0
017	Boron (ppm)	0021	140.0	0.0000	134.5	10.29	5.179	13	0.53	017.43	0
017	Boron (ppm)	2299	142.5	1.000	134.5	10.29	5.179	13	0.78	017.43	0
017	Boron (ppm)	0629	143.0	6.000	134.5	10.29	5.179	13	0.83	017.43	0
017	Boron (ppm)	0870	143.0	7.886	134.5	10.29	5.179	13	0.83	017.43	0

Test Material Code # 202054 | **Analyte Proficiency Testing Report** | **Issue Date : 01/31/2021**

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			
017	Boron (ppm)	0553	152.5	13.00	134.5	10.29	5.179	13	1.75	017.53	0
021	Cobalt (ppm)	0510	0.1800	0.0000	0.2975	0.0571	0.0125	14	-2.06	021.43	0
021	Cobalt (ppm)	0629	0.2300	0.0200	0.2975	0.0571	0.0125	14	-1.18	021.43	0
021	Cobalt (ppm)	2113	0.2600	0.0400	0.2975	0.0571	0.0125	14	-0.66	021.52	0
021	Cobalt (ppm)	0033	0.2800	0.0120	0.2975	0.0571	0.0125	14	-0.31	021.53	0
021	Cobalt (ppm)	0098	0.2800	0.0020	0.2975	0.0571	0.0125	14	-0.31	021.53	0
021	Cobalt (ppm)	0407	0.2925	0.0090	0.2975	0.0571	0.0125	14	-0.09	021.53	0
021	Cobalt (ppm)	0278	0.3000	0.0200	0.2975	0.0571	0.0125	14	0.04	021.43	0
021	Cobalt (ppm)	2207	0.3000	0.0000	0.2975	0.0571	0.0125	14	0.04	021.52	0
021	Cobalt (ppm)	0021	0.3050	0.0100	0.2975	0.0571	0.0125	14	0.13	021.53	0
021	Cobalt (ppm)	0553	0.3095	0.0070	0.2975	0.0571	0.0125	14	0.21	021.53	0
021	Cobalt (ppm)	0015	0.3115	0.0010	0.2975	0.0571	0.0125	14	0.24	021.53	0
021	Cobalt (ppm)	0870	0.3308	0.0081	0.2975	0.0571	0.0125	14	0.58	021.43	0
021	Cobalt (ppm)	0918	0.3879	0.0152	0.2975	0.0571	0.0125	14	1.58	021.53	0
021	Cobalt (ppm)	0407	0.5599	0.0308	0.2975	0.0571	0.0125	14	4.59	021.41	0
021	Cobalt (ppm)	2260	0.3855	0.0630	0.2975	0.0571	0.0125	14	1.54	021.33	1
021	Cobalt (ppm)	0964	< 0.41		0.2975	0.0571	0.0125	14		021.43	5
021	Cobalt (ppm)	0186	< 0.5		0.2975	0.0571	0.0125	14		021.52	5
021	Cobalt (ppm)	2299	< 0.6		0.2975	0.0571	0.0125	14		021.43	5
021	Cobalt (ppm)	0227	< 0.75		0.2975	0.0571	0.0125	14		021.31	5
021	Cobalt (ppm)	2141	< 1		0.2975	0.0571	0.0125	14		021.43	5
021	Cobalt (ppm)	0021	< 2		0.2975	0.0571	0.0125	14		021.43	5
022	Copper (ppm)	0918	128.6	2.610	142.6	10.81	3.119	32	-1.30	022.43	0
022	Copper (ppm)	0047	129.4	0.3700	142.6	10.81	3.119	32	-1.22	022.52	0
022	Copper (ppm)	0033	130.5	5.000	142.6	10.81	3.119	32	-1.12	022.53	0
022	Copper (ppm)	0278	134.6	10.10	142.6	10.81	3.119	32	-0.74	022.42	0
022	Copper (ppm)	0098	135.4	4.000	142.6	10.81	3.119	32	-0.66	022.53	0
022	Copper (ppm)	0202	135.8	5.600	142.6	10.81	3.119	32	-0.63	022.43	0
022	Copper (ppm)	0563	136.5	0.2634	142.6	10.81	3.119	32	-0.57	022.31	0
022	Copper (ppm)	0553	136.5	1.000	142.6	10.81	3.119	32	-0.56	022.53	0
022	Copper (ppm)	0407	137.5	17.54	142.6	10.81	3.119	32	-0.47	022.53	0
022	Copper (ppm)	0407	137.6	1.502	142.6	10.81	3.119	32	-0.46	022.41	0
022	Copper (ppm)	2141	138.2	1.000	142.6	10.81	3.119	32	-0.41	022.43	0
022	Copper (ppm)	0510	139.5	1.000	142.6	10.81	3.119	32	-0.28	022.43	0
022	Copper (ppm)	0021	140.0	0.0000	142.6	10.81	3.119	32	-0.24	022.43	0
022	Copper (ppm)	0629	140.0	6.000	142.6	10.81	3.119	32	-0.24	022.43	0
022	Copper (ppm)	0186	140.5	3.000	142.6	10.81	3.119	32	-0.19	022.52	0
022	Copper (ppm)	0870	141.3	2.868	142.6	10.81	3.119	32	-0.11	022.43	0
022	Copper (ppm)	0208	141.5	1.200	142.6	10.81	3.119	32	-0.10	022.41	0
022	Copper (ppm)	0010	144.5	1.000	142.6	10.81	3.119	32	0.18	022.33	0
022	Copper (ppm)	0208	145.0	6.000	142.6	10.81	3.119	32	0.22	022.31	0
022	Copper (ppm)	2299	145.0	4.000	142.6	10.81	3.119	32	0.22	022.43	0

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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			
022	Copper (ppm)	0021	145.0	10.00	142.6	10.81	3.119	32	0.22	022.53	0
022	Copper (ppm)	0017	145.0	6.763	142.6	10.81	3.119	32	0.22	022.43	0
022	Copper (ppm)	0227	146.0	0.0000	142.6	10.81	3.119	32	0.32	022.41	0
022	Copper (ppm)	0964	146.2	2.333	142.6	10.81	3.119	32	0.33	022.43	0
022	Copper (ppm)	0529	146.3	0.5000	142.6	10.81	3.119	32	0.34	022.31	0
022	Copper (ppm)	2113	150.0	0.0000	142.6	10.81	3.119	32	0.69	022.52	0
022	Copper (ppm)	2292	151.5	1.000	142.6	10.81	3.119	32	0.83	022.99	0
022	Copper (ppm)	2114	152.5	0.6900	142.6	10.81	3.119	32	0.92	022.41	0
022	Copper (ppm)	2207	154.8	2.400	142.6	10.81	3.119	32	1.13	022.52	0
022	Copper (ppm)	0042	155.0	0.0000	142.6	10.81	3.119	32	1.15	022.42	0
022	Copper (ppm)	0186	155.5	1.000	142.6	10.81	3.119	32	1.20	022.42	0
022	Copper (ppm)	0015	158.0	1.084	142.6	10.81	3.119	32	1.43	022.53	0
022	Copper (ppm)	2260	138.6	18.50	142.6	10.81	3.119	32	-0.37	022.34	1
023	Fluorine (ppm)	2299	3.700	0.2000				1		023.99	0
023	Fluorine (ppm)	2260	< 2					1		023.99	5
023	Fluorine (ppm)	0227	< 15					1		023.01	5
023	Fluorine (ppm)	2144	< 160					1		023.01	5
024	Iodine (ppm)	2260	15.60	0.4000				2		024.03	0
024	Iodine (ppm)	2299	2,005	50.00				2		024.99	0
024	Iodine (ppm)	0186	< 5					2		024.52	5
034	Selenium (ppm)	2114	0.1699	0.0017	2.620	0.3625	0.0554	19	-6.76	034.41	0
034	Selenium (ppm)	0227	1.770	0.0000	2.620	0.3625	0.0554	19	-2.34	034.04	0
034	Selenium (ppm)	0407	2.150	0.1000	2.620	0.3625	0.0554	19	-1.30	034.41	0
034	Selenium (ppm)	0021	2.300	0.0000	2.620	0.3625	0.0554	19	-0.88	034.53	0
034	Selenium (ppm)	0278	2.361	0.1230	2.620	0.3625	0.0554	19	-0.72	034.53	0
034	Selenium (ppm)	0033	2.455	0.0700	2.620	0.3625	0.0554	19	-0.45	034.53	0
034	Selenium (ppm)	0553	2.460	0.0200	2.620	0.3625	0.0554	19	-0.44	034.53	0
034	Selenium (ppm)	0098	2.467	0.0450	2.620	0.3625	0.0554	19	-0.42	034.53	0
034	Selenium (ppm)	0015	2.585	0.0700	2.620	0.3625	0.0554	19	-0.10	034.53	0
034	Selenium (ppm)	0186	2.622	0.0330	2.620	0.3625	0.0554	19	0.00	034.52	0
034	Selenium (ppm)	2207	2.650	0.1000	2.620	0.3625	0.0554	19	0.08	034.52	0
034	Selenium (ppm)	0870	2.779	0.1275	2.620	0.3625	0.0554	19	0.44	034.43	0
034	Selenium (ppm)	0918	2.784	0.0783	2.620	0.3625	0.0554	19	0.45	034.53	0
034	Selenium (ppm)	0964	2.870	0.0600	2.620	0.3625	0.0554	19	0.69	034.43	0
034	Selenium (ppm)	0047	2.895	0.0100	2.620	0.3625	0.0554	19	0.76	034.52	0
034	Selenium (ppm)	0010	2.900	0.0000	2.620	0.3625	0.0554	19	0.77	034.53	0
034	Selenium (ppm)	0208	3.020	0.0800	2.620	0.3625	0.0554	19	1.10	034.52	0
034	Selenium (ppm)	2299	3.300	0.0000	2.620	0.3625	0.0554	19	1.88	034.43	0
034	Selenium (ppm)	0407	3.429	0.1342	2.620	0.3625	0.0554	19	2.23	034.53	0
034	Selenium (ppm)	0563	3.200	0.3143	2.620	0.3625	0.0554	19	1.60	034.04	1
034	Selenium (ppm)	2141	< 5		2.620	0.3625	0.0554	19		034.43	5
034	Selenium (ppm)	0021	< 22		2.620	0.3625	0.0554	19		034.43	5

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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			
036	Sulfur (%)	2141	0.1954	0.0129	0.2451	0.0121	0.0068	21	-4.11	036.43	0
036	Sulfur (%)	0186	0.2298	0.0044	0.2451	0.0121	0.0068	21	-1.26	036.52	0
036	Sulfur (%)	0227	0.2300	0.0200	0.2451	0.0121	0.0068	21	-1.25	036.42	0
036	Sulfur (%)	0870	0.2302	0.0144	0.2451	0.0121	0.0068	21	-1.23	036.42	0
036	Sulfur (%)	0278	0.2350	0.0100	0.2451	0.0121	0.0068	21	-0.84	036.42	0
036	Sulfur (%)	0918	0.2355	0.0010	0.2451	0.0121	0.0068	21	-0.79	036.43	0
036	Sulfur (%)	0964	0.2360	0.0120	0.2451	0.0121	0.0068	21	-0.75	036.43	0
036	Sulfur (%)	2299	0.2400	0.0000	0.2451	0.0121	0.0068	21	-0.42	036.43	0
036	Sulfur (%)	0042	0.2420	0.0180	0.2451	0.0121	0.0068	21	-0.26	036.42	0
036	Sulfur (%)	0098	0.2445	0.0070	0.2451	0.0121	0.0068	21	-0.05	036.43	0
036	Sulfur (%)	0407	0.2472	0.0039	0.2451	0.0121	0.0068	21	0.17	036.42	0
036	Sulfur (%)	2207	0.2500	0.0000	0.2451	0.0121	0.0068	21	0.40	036.42	0
036	Sulfur (%)	0010	0.2500	0.0000	0.2451	0.0121	0.0068	21	0.40	036.43	0
036	Sulfur (%)	0510	0.2500	0.0000	0.2451	0.0121	0.0068	21	0.40	036.43	0
036	Sulfur (%)	0015	0.2500	0.0000	0.2451	0.0121	0.0068	21	0.40	036.53	0
036	Sulfur (%)	0553	0.2545	0.0110	0.2451	0.0121	0.0068	21	0.77	036.53	0
036	Sulfur (%)	0021	0.2550	0.0100	0.2451	0.0121	0.0068	21	0.82	036.43	0
036	Sulfur (%)	0629	0.2550	0.0100	0.2451	0.0121	0.0068	21	0.82	036.43	0
036	Sulfur (%)	0186	0.2591	0.0063	0.2451	0.0121	0.0068	21	1.15	036.42	0
036	Sulfur (%)	2292	0.2635	0.0010	0.2451	0.0121	0.0068	21	1.52	036.99	0
036	Sulfur (%)	0202	0.2765	0.0010	0.2451	0.0121	0.0068	21	2.59	036.43	0
036	Sulfur (%)	2260	0.0255	0.0012	0.2451	0.0121	0.0068	21	-18.13	036.02	2
038	Molybdenum (ppm)	0563	99.91	13.43	139.7	10.62	4.887	22	-3.74	038.34	0
038	Molybdenum (ppm)	0098	127.3	1.800	139.7	10.62	4.887	22	-1.16	038.53	0
038	Molybdenum (ppm)	0964	129.1	0.2500	139.7	10.62	4.887	22	-0.99	038.43	0
038	Molybdenum (ppm)	0227	132.5	1.000	139.7	10.62	4.887	22	-0.67	038.53	0
038	Molybdenum (ppm)	0629	135.5	1.000	139.7	10.62	4.887	22	-0.39	038.43	0
038	Molybdenum (ppm)	0033	135.5	15.00	139.7	10.62	4.887	22	-0.39	038.53	0
038	Molybdenum (ppm)	0010	136.5	8.400	139.7	10.62	4.887	22	-0.30	038.53	0
038	Molybdenum (ppm)	0278	136.9	1.610	139.7	10.62	4.887	22	-0.26	038.42	0
038	Molybdenum (ppm)	0186	137.0	8.000	139.7	10.62	4.887	22	-0.25	038.52	0
038	Molybdenum (ppm)	0870	137.5	5.709	139.7	10.62	4.887	22	-0.20	038.43	0
038	Molybdenum (ppm)	0015	139.5	0.3630	139.7	10.62	4.887	22	-0.02	038.53	0
038	Molybdenum (ppm)	0021	140.0	0.0000	139.7	10.62	4.887	22	0.03	038.43	0
038	Molybdenum (ppm)	0510	140.2	4.900	139.7	10.62	4.887	22	0.05	038.43	0
038	Molybdenum (ppm)	2141	140.5	8.330	139.7	10.62	4.887	22	0.08	038.43	0
038	Molybdenum (ppm)	0208	142.5	1.000	139.7	10.62	4.887	22	0.27	038.41	0
038	Molybdenum (ppm)	0407	143.8	3.102	139.7	10.62	4.887	22	0.39	038.53	0
038	Molybdenum (ppm)	2113	145.0	10.00	139.7	10.62	4.887	22	0.50	038.52	0
038	Molybdenum (ppm)	0553	145.5	5.000	139.7	10.62	4.887	22	0.55	038.53	0
038	Molybdenum (ppm)	2299	146.0	8.000	139.7	10.62	4.887	22	0.60	038.43	0
038	Molybdenum (ppm)	0407	150.4	2.126	139.7	10.62	4.887	22	1.01	038.41	0

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			Value	Range	Rob Mean	Horwitz SD	R-bar	# Tests			
038	Molybdenum (ppm)	2207	180.7	5.400	139.7	10.62	4.887	22	3.86	038.52	0
038	Molybdenum (ppm)	0918	182.9	3.105	139.7	10.62	4.887	22	4.07	038.53	0
038	Molybdenum (ppm)	0042	136.5	31.00	139.7	10.62	4.887	22	-0.30	038.42	1
041	Vanadium (ppm)	0047	0.3000	0.0400	0.3788	0.0701	0.0251	9	-1.12	041.52	0
041	Vanadium (ppm)	0015	0.3230	0.0320	0.3788	0.0701	0.0251	9	-0.80	041.53	0
041	Vanadium (ppm)	0553	0.3240	0.0060	0.3788	0.0701	0.0251	9	-0.78	041.53	0
041	Vanadium (ppm)	0098	0.3345	0.0010	0.3788	0.0701	0.0251	9	-0.63	041.53	0
041	Vanadium (ppm)	0278	0.3450	0.0100	0.3788	0.0701	0.0251	9	-0.48	041.43	0
041	Vanadium (ppm)	0021	0.3750	0.0300	0.3788	0.0701	0.0251	9	-0.05	041.53	0
041	Vanadium (ppm)	0407	0.3974	0.0067	0.3788	0.0701	0.0251	9	0.26	041.53	0
041	Vanadium (ppm)	2207	0.5000	0.0000	0.3788	0.0701	0.0251	9	1.73	041.52	0
041	Vanadium (ppm)	2299	1.950	0.1000	0.3788	0.0701	0.0251	9	22.41	041.43	0
041	Vanadium (ppm)	2260	1.495	0.2900	0.3788	0.0701	0.0251	9	15.92	041.33	1
041	Vanadium (ppm)	0021	< 2		0.3788	0.0701	0.0251	9		041.43	5
516	Arsenic, Total (ppm)	0563	13.43	0.4175	26.87	2.619	1.833	28	-5.13	516.00	0
516	Arsenic, Total (ppm)	0015	23.48	1.527	26.87	2.619	1.833	28	-1.29	516.53	0
516	Arsenic, Total (ppm)	2260	24.02	4.200	26.87	2.619	1.833	28	-1.09	516.00	0
516	Arsenic, Total (ppm)	0407	24.64	1.514	26.87	2.619	1.833	28	-0.85	516.43	0
516	Arsenic, Total (ppm)	0870	24.80	0.7770	26.87	2.619	1.833	28	-0.79	516.43	0
516	Arsenic, Total (ppm)	0033	25.05	1.900	26.87	2.619	1.833	28	-0.70	516.53	0
516	Arsenic, Total (ppm)	0186	25.17	1.420	26.87	2.619	1.833	28	-0.65	516.52	0
516	Arsenic, Total (ppm)	0098	25.47	1.280	26.87	2.619	1.833	28	-0.54	516.53	0
516	Arsenic, Total (ppm)	2285	25.55	5.300	26.87	2.619	1.833	28	-0.50	516.42	0
516	Arsenic, Total (ppm)	2141	25.86	0.5000	26.87	2.619	1.833	28	-0.39	516.43	0
516	Arsenic, Total (ppm)	0042	26.30	1.200	26.87	2.619	1.833	28	-0.22	516.42	0
516	Arsenic, Total (ppm)	0021	26.50	1.000	26.87	2.619	1.833	28	-0.14	516.43	0
516	Arsenic, Total (ppm)	0021	26.50	1.000	26.87	2.619	1.833	28	-0.14	516.53	0
516	Arsenic, Total (ppm)	0010	26.80	0.8000	26.87	2.619	1.833	28	-0.03	516.53	0
516	Arsenic, Total (ppm)	0964	26.95	3.300	26.87	2.619	1.833	28	0.03	516.43	0
516	Arsenic, Total (ppm)	0553	27.05	1.900	26.87	2.619	1.833	28	0.07	516.53	0
516	Arsenic, Total (ppm)	2114	27.23	0.3640	26.87	2.619	1.833	28	0.14	516.43	0
516	Arsenic, Total (ppm)	0918	27.33	0.1528	26.87	2.619	1.833	28	0.17	516.53	0
516	Arsenic, Total (ppm)	0208	27.70	1.800	26.87	2.619	1.833	28	0.32	516.52	0
516	Arsenic, Total (ppm)	0047	27.90	0.2800	26.87	2.619	1.833	28	0.39	516.52	0
516	Arsenic, Total (ppm)	2207	27.95	0.9000	26.87	2.619	1.833	28	0.41	516.52	0
516	Arsenic, Total (ppm)	0227	27.95	1.500	26.87	2.619	1.833	28	0.41	516.53	0
516	Arsenic, Total (ppm)	0629	28.70	2.000	26.87	2.619	1.833	28	0.70	516.43	0
516	Arsenic, Total (ppm)	0407	28.77	1.728	26.87	2.619	1.833	28	0.73	516.53	0
516	Arsenic, Total (ppm)	2113	30.50	3.000	26.87	2.619	1.833	28	1.39	516.52	0
516	Arsenic, Total (ppm)	2299	31.00	4.000	26.87	2.619	1.833	28	1.58	516.43	0
516	Arsenic, Total (ppm)	2146	31.62	2.110	26.87	2.619	1.833	28	1.81	516.52	0
516	Arsenic, Total (ppm)	2146	34.92	5.450	26.87	2.619	1.833	28	3.07	516.34	0

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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)	0563	0.1855	0.0053	0.4487	0.0810	0.0233	23	-3.25	518.31	0
518	Cadmium (ppm)	0047	0.2400	0.0000	0.4487	0.0810	0.0233	23	-2.58	518.52	0
518	Cadmium (ppm)	2114	0.2620	0.0155	0.4487	0.0810	0.0233	23	-2.31	518.99	0
518	Cadmium (ppm)	0629	0.3750	0.0300	0.4487	0.0810	0.0233	23	-0.91	518.43	0
518	Cadmium (ppm)	2260	0.3980	0.1220	0.4487	0.0810	0.0233	23	-0.63	518.33	0
518	Cadmium (ppm)	2285	0.4085	0.1210	0.4487	0.0810	0.0233	23	-0.50	518.42	0
518	Cadmium (ppm)	0407	0.4160	0.0363	0.4487	0.0810	0.0233	23	-0.40	518.41	0
518	Cadmium (ppm)	2299	0.4250	0.0100	0.4487	0.0810	0.0233	23	-0.29	518.43	0
518	Cadmium (ppm)	0407	0.4295	0.0050	0.4487	0.0810	0.0233	23	-0.24	518.53	0
518	Cadmium (ppm)	0015	0.4400	0.0080	0.4487	0.0810	0.0233	23	-0.11	518.53	0
518	Cadmium (ppm)	0021	0.4450	0.0500	0.4487	0.0810	0.0233	23	-0.05	518.53	0
518	Cadmium (ppm)	0033	0.4465	0.0410	0.4487	0.0810	0.0233	23	-0.03	518.53	0
518	Cadmium (ppm)	0186	0.4570	0.0020	0.4487	0.0810	0.0233	23	0.10	518.52	0
518	Cadmium (ppm)	2207	0.4600	0.0000	0.4487	0.0810	0.0233	23	0.14	518.52	0
518	Cadmium (ppm)	0208	0.4750	0.0200	0.4487	0.0810	0.0233	23	0.32	518.52	0
518	Cadmium (ppm)	0227	0.4755	0.0030	0.4487	0.0810	0.0233	23	0.33	518.53	0
518	Cadmium (ppm)	0278	0.4800	0.0000	0.4487	0.0810	0.0233	23	0.39	518.43	0
518	Cadmium (ppm)	0098	0.4980	0.0200	0.4487	0.0810	0.0233	23	0.61	518.53	0
518	Cadmium (ppm)	0010	0.5000	0.0000	0.4487	0.0810	0.0233	23	0.63	518.53	0
518	Cadmium (ppm)	2113	0.5200	0.0000	0.4487	0.0810	0.0233	23	0.88	518.52	0
518	Cadmium (ppm)	0553	0.5400	0.0220	0.4487	0.0810	0.0233	23	1.13	518.53	0
518	Cadmium (ppm)	0918	0.7617	0.0107	0.4487	0.0810	0.0233	23	3.86	518.53	0
518	Cadmium (ppm)	0870	0.9409	0.0138	0.4487	0.0810	0.0233	23	6.08	518.43	0
518	Cadmium (ppm)	0042	0.7830	0.2240	0.4487	0.0810	0.0233	23	4.13	518.42	1
518	Cadmium (ppm)	0964	< 0.54		0.4487	0.0810	0.0233	23		518.43	5
518	Cadmium (ppm)	2141	< 1		0.4487	0.0810	0.0233	23		518.43	5
518	Cadmium (ppm)	0021	< 2		0.4487	0.0810	0.0233	23		518.43	5
520	Chromium (ppm)	0098	205.5	3.000	221.7	15.73	8.501	26	-1.03	520.53	0
520	Chromium (ppm)	2141	206.3	4.000	221.7	15.73	8.501	26	-0.97	520.43	0
520	Chromium (ppm)	0033	206.5	17.00	221.7	15.73	8.501	26	-0.96	520.53	0
520	Chromium (ppm)	0407	207.5	14.86	221.7	15.73	8.501	26	-0.90	520.41	0
520	Chromium (ppm)	0510	209.3	1.070	221.7	15.73	8.501	26	-0.79	520.43	0
520	Chromium (ppm)	0047	211.9	1.540	221.7	15.73	8.501	26	-0.62	520.52	0
520	Chromium (ppm)	0563	213.9	10.01	221.7	15.73	8.501	26	-0.50	520.31	0
520	Chromium (ppm)	0227	214.5	3.000	221.7	15.73	8.501	26	-0.46	520.31	0
520	Chromium (ppm)	0186	214.5	4.600	221.7	15.73	8.501	26	-0.46	520.52	0
520	Chromium (ppm)	0042	216.0	18.00	221.7	15.73	8.501	26	-0.36	520.42	0
520	Chromium (ppm)	0407	218.6	8.077	221.7	15.73	8.501	26	-0.19	520.53	0
520	Chromium (ppm)	2207	219.0	6.000	221.7	15.73	8.501	26	-0.17	520.52	0
520	Chromium (ppm)	0964	219.2	15.00	221.7	15.73	8.501	26	-0.16	520.43	0
520	Chromium (ppm)	0278	219.5	11.38	221.7	15.73	8.501	26	-0.14	520.43	0
520	Chromium (ppm)	0208	223.0	0.0000	221.7	15.73	8.501	26	0.09	520.41	0

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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			
520	Chromium (ppm)	0629	224.5	5.000	221.7	15.73	8.501	26	0.18	520.43	0
520	Chromium (ppm)	0870	226.7	8.625	221.7	15.73	8.501	26	0.32	520.43	0
520	Chromium (ppm)	2299	228.5	3.000	221.7	15.73	8.501	26	0.43	520.43	0
520	Chromium (ppm)	0021	230.0	0.0000	221.7	15.73	8.501	26	0.53	520.43	0
520	Chromium (ppm)	0010	231.8	17.30	221.7	15.73	8.501	26	0.64	520.53	0
520	Chromium (ppm)	0015	233.4	2.875	221.7	15.73	8.501	26	0.75	520.53	0
520	Chromium (ppm)	0553	234.0	8.000	221.7	15.73	8.501	26	0.78	520.53	0
520	Chromium (ppm)	2260	234.1	22.30	221.7	15.73	8.501	26	0.79	520.33	0
520	Chromium (ppm)	2113	235.0	10.00	221.7	15.73	8.501	26	0.85	520.52	0
520	Chromium (ppm)	0021	240.0	20.00	221.7	15.73	8.501	26	1.17	520.53	0
520	Chromium (ppm)	0918	266.9	6.380	221.7	15.73	8.501	26	2.88	520.53	0
526	Lead (ppm)	2260	2.500	0.0800	4.696	0.5952	0.2373	27	-3.69	526.33	0
526	Lead (ppm)	2114	3.182	0.0875	4.696	0.5952	0.2373	27	-2.54	526.99	0
526	Lead (ppm)	2146	3.720	0.2800	4.696	0.5952	0.2373	27	-1.64	526.34	0
526	Lead (ppm)	0870	3.819	0.2447	4.696	0.5952	0.2373	27	-1.47	526.43	0
526	Lead (ppm)	2146	4.320	0.2600	4.696	0.5952	0.2373	27	-0.63	526.52	0
526	Lead (ppm)	2285	4.400	1.160	4.696	0.5952	0.2373	27	-0.50	526.42	0
526	Lead (ppm)	2113	4.400	0.0000	4.696	0.5952	0.2373	27	-0.50	526.52	0
526	Lead (ppm)	0021	4.450	0.1000	4.696	0.5952	0.2373	27	-0.41	526.53	0
526	Lead (ppm)	0098	4.500	0.0000	4.696	0.5952	0.2373	27	-0.33	526.53	0
526	Lead (ppm)	2141	4.511	0.1100	4.696	0.5952	0.2373	27	-0.31	526.43	0
526	Lead (ppm)	0227	4.520	0.0600	4.696	0.5952	0.2373	27	-0.30	526.53	0
526	Lead (ppm)	0407	4.528	0.4905	4.696	0.5952	0.2373	27	-0.28	526.41	0
526	Lead (ppm)	0186	4.710	0.1740	4.696	0.5952	0.2373	27	0.02	526.52	0
526	Lead (ppm)	0033	4.770	0.3800	4.696	0.5952	0.2373	27	0.12	526.53	0
526	Lead (ppm)	0407	4.802	0.2830	4.696	0.5952	0.2373	27	0.18	526.53	0
526	Lead (ppm)	0015	4.823	0.1230	4.696	0.5952	0.2373	27	0.21	526.53	0
526	Lead (ppm)	0010	4.850	0.1000	4.696	0.5952	0.2373	27	0.26	526.53	0
526	Lead (ppm)	0278	4.865	0.0700	4.696	0.5952	0.2373	27	0.28	526.43	0
526	Lead (ppm)	0208	4.885	0.0100	4.696	0.5952	0.2373	27	0.32	526.52	0
526	Lead (ppm)	0964	4.915	0.8100	4.696	0.5952	0.2373	27	0.37	526.43	0
526	Lead (ppm)	2207	4.950	0.1000	4.696	0.5952	0.2373	27	0.43	526.52	0
526	Lead (ppm)	0553	5.105	0.1500	4.696	0.5952	0.2373	27	0.69	526.53	0
526	Lead (ppm)	0629	5.325	0.2500	4.696	0.5952	0.2373	27	1.06	526.43	0
526	Lead (ppm)	0918	5.362	0.0593	4.696	0.5952	0.2373	27	1.12	526.53	0
526	Lead (ppm)	0047	5.400	0.0800	4.696	0.5952	0.2373	27	1.18	526.52	0
526	Lead (ppm)	2299	5.450	0.3000	4.696	0.5952	0.2373	27	1.27	526.43	0
526	Lead (ppm)	0563	7.433	0.6438	4.696	0.5952	0.2373	27	4.60	526.31	0
526	Lead (ppm)	0042	5.480	1.840	4.696	0.5952	0.2373	27	1.32	526.42	1
526	Lead (ppm)	0021	< 6		4.696	0.5952	0.2373	27		526.43	5
529	Mercury (ppb)	0186	0.0368	0.0009	46.52	10.23	3.680	15	-4.54	529.99	0
529	Mercury (ppb)	2207	0.1000	0.0000	46.52	10.23	3.680	15	-4.54	529.99	0

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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			
529	Mercury (ppb)	0047	1.405	0.0300	46.52	10.23	3.680	15	-4.41	529.99	0
529	Mercury (ppb)	2285	34.50	12.00	46.52	10.23	3.680	15	-1.17	529.00	0
529	Mercury (ppb)	0407	46.83	3.129	46.52	10.23	3.680	15	0.03	529.99	0
529	Mercury (ppb)	0021	47.00	0.0000	46.52	10.23	3.680	15	0.05	529.99	0
529	Mercury (ppb)	0553	53.80	6.200	46.52	10.23	3.680	15	0.71	529.99	0
529	Mercury (ppb)	2114	54.13	0.5400	46.52	10.23	3.680	15	0.74	529.99	0
529	Mercury (ppb)	0227	54.15	0.7000	46.52	10.23	3.680	15	0.75	529.99	0
529	Mercury (ppb)	0208	55.80	1.200	46.52	10.23	3.680	15	0.91	529.99	0
529	Mercury (ppb)	0010	56.50	17.00	46.52	10.23	3.680	15	0.98	529.99	0
529	Mercury (ppb)	0098	57.50	3.000	46.52	10.23	3.680	15	1.07	529.99	0
529	Mercury (ppb)	0042	59.50	9.000	46.52	10.23	3.680	15	1.27	529.99	0
529	Mercury (ppb)	0918	61.00	2.000	46.52	10.23	3.680	15	1.42	529.99	0
529	Mercury (ppb)	2260	312.1	0.4000	46.52	10.23	3.680	15	25.95	529.00	0
529	Mercury (ppb)	2299	465.0	50.00	46.52	10.23	3.680	15	40.89	529.99	1
539	Nickel (ppm)	0047	233.8	0.4900	257.6	17.87	8.199	22	-1.34	539.52	0
539	Nickel (ppm)	0098	241.0	8.000	257.6	17.87	8.199	22	-0.93	539.53	0
539	Nickel (ppm)	0964	241.5	1.000	257.6	17.87	8.199	22	-0.90	539.43	0
539	Nickel (ppm)	0186	246.1	8.300	257.6	17.87	8.199	22	-0.65	539.52	0
539	Nickel (ppm)	2260	246.8	24.90	257.6	17.87	8.199	22	-0.61	539.33	0
539	Nickel (ppm)	0629	247.0	6.000	257.6	17.87	8.199	22	-0.60	539.43	0
539	Nickel (ppm)	0870	249.4	6.826	257.6	17.87	8.199	22	-0.46	539.43	0
539	Nickel (ppm)	0407	250.4	31.96	257.6	17.87	8.199	22	-0.41	539.53	0
539	Nickel (ppm)	2292	252.0	4.000	257.6	17.87	8.199	22	-0.32	539.99	0
539	Nickel (ppm)	2207	254.5	2.200	257.6	17.87	8.199	22	-0.18	539.52	0
539	Nickel (ppm)	0021	255.0	10.00	257.6	17.87	8.199	22	-0.15	539.43	0
539	Nickel (ppm)	0278	257.1	6.000	257.6	17.87	8.199	22	-0.03	539.43	0
539	Nickel (ppm)	2299	257.5	5.000	257.6	17.87	8.199	22	-0.01	539.43	0
539	Nickel (ppm)	0208	259.0	2.000	257.6	17.87	8.199	22	0.08	539.41	0
539	Nickel (ppm)	0021	260.0	0.0000	257.6	17.87	8.199	22	0.13	539.53	0
539	Nickel (ppm)	0010	263.0	6.000	257.6	17.87	8.199	22	0.30	539.53	0
539	Nickel (ppm)	0553	270.5	11.00	257.6	17.87	8.199	22	0.72	539.53	0
539	Nickel (ppm)	0407	270.6	2.855	257.6	17.87	8.199	22	0.72	539.41	0
539	Nickel (ppm)	2113	275.0	10.00	257.6	17.87	8.199	22	0.97	539.52	0
539	Nickel (ppm)	2141	276.7	19.33	257.6	17.87	8.199	22	1.06	539.43	0
539	Nickel (ppm)	0015	283.9	5.208	257.6	17.87	8.199	22	1.47	539.53	0
539	Nickel (ppm)	0918	285.6	9.310	257.6	17.87	8.199	22	1.57	539.53	0
539	Nickel (ppm)	0042	247.0	42.00	257.6	17.87	8.199	22	-0.60	539.42	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 removed (Mandel h and k exclusions apply; Grey). Flag 3 indicates not used in statistics.