AAFCO
Association of American Feed Control Officials

ANAB ACCREDITED ISO/IEC 17043 PROFICIENCY TESTING PROVIDER

Minerals Scheme

Beef Feed, Medicated

Test Material Code # 202353

Analyte Proficiency Testing Report

 # Labs Reporting: 30

 # Analytes Reported 16

Issue Date : 10/31/2023

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	55.50	1.000	146.0	11.03	5.442	15	-8.20	015.43	0
015	Aluminum (ppm)	0186	119.8	0.9400	146.0	11.03	5.442	15	-2.37	015.52	0
015	Aluminum (ppm)	0511	137.0	6.000	146.0	11.03	5.442	15	-0.81	015.43	0
015	Aluminum (ppm)	0407	137.3	18.10	146.0	11.03	5.442	15	-0.79	015.53	0
015	Aluminum (ppm)	0870	137.7	0.7992	146.0	11.03	5.442	15	-0.75	015.43	0
015	Aluminum (ppm)	0407	140.1	3.414	146.0	11.03	5.442	15	-0.53	015.41	0
015	Aluminum (ppm)	0227	140.5	9.000	146.0	11.03	5.442	15	-0.50	015.43	0
015	Aluminum (ppm)	0042	142.0	2.000	146.0	11.03	5.442	15	-0.36	015.42	0
015	Aluminum (ppm)	0876	146.8	10.70	146.0	11.03	5.442	15	0.07	015.43	0
015	Aluminum (ppm)	0629	149.0	4.000	146.0	11.03	5.442	15	0.27	015.43	0
015	Aluminum (ppm)	0553	151.0	8.000	146.0	11.03	5.442	15	0.46	015.53	0
015	Aluminum (ppm)	0278	164.6	2.550	146.0	11.03	5.442	15	1.69	015.43	0
015	Aluminum (ppm)	0148	164.9	13.87	146.0	11.03	5.442	15	1.72	015.43	0
015	Aluminum (ppm)	0098	167.0	1.900	146.0	11.03	5.442	15	1.90	015.43	0
015	Aluminum (ppm)	0964	174.0	6.000	146.0	11.03	5.442	15	2.54	015.43	0
017	Boron (ppm)	0870	15.91	1.053	19.14	1.963	0.7130	9	-1.65	017.43	0
017	Boron (ppm)	0047	16.17	0.0100	19.14	1.963	0.7130	9	-1.51	017.52	0
017	Boron (ppm)	0629	17.45	0.1000	19.14	1.963	0.7130	9	-0.86	017.43	0
017	Boron (ppm)	0510	19.00	0.0000	19.14	1.963	0.7130	9	-0.07	017.43	0
017	Boron (ppm)	0407	19.94	1.691	19.14	1.963	0.7130	9	0.41	017.53	0
017	Boron (ppm)	0407	20.04	0.3268	19.14	1.963	0.7130	9	0.46	017.41	0
017	Boron (ppm)	0098	20.49	0.3100	19.14	1.963	0.7130	9	0.69	017.43	0
017	Boron (ppm)	0553	21.55	1.500	19.14	1.963	0.7130	9	1.23	017.53	0
017	Boron (ppm)	0876	21.70	0.0000	19.14	1.963	0.7130	9	1.31	017.53	0
021	Cobalt (ppm)	0407	22.15	0.4990	25.02	2.465	0.5491	19	-1.16	021.41	0
021	Cobalt (ppm)	2433	22.43	0.1910	25.02	2.465	0.5491	19	-1.05	021.42	0
021	Cobalt (ppm)	0227	22.50	1.000	25.02	2.465	0.5491	19	-1.02	021.43	0
021	Cobalt (ppm)	2141	23.75	0.5290	25.02	2.465	0.5491	19	-0.52	021.43	0
021	Cobalt (ppm)	2404	23.78	0.6800	25.02	2.465	0.5491	19	-0.50	021.53	0
021	Cobalt (ppm)	0511	24.00	0.0000	25.02	2.465	0.5491	19	-0.41	021.43	0
021	Cobalt (ppm)	0047	24.03	0.6800	25.02	2.465	0.5491	19	-0.40	021.52	0
021	Cobalt (ppm)	0042	24.35	0.5000	25.02	2.465	0.5491	19	-0.27	021.42	0
021	Cobalt (ppm)	0629	24.60	0.6000	25.02	2.465	0.5491	19	-0.17	021.43	0

Test Material Code # 202353	Analyte Proficiency Testing Report								Issue Date : 10/31/2023		
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			
021	Cobalt (ppm)	0186	24.81	0.2000	25.02	2.465	0.5491	19	-0.08	021.52	0
021	Cobalt (ppm)	0553	25.25	0.1000	25.02	2.465	0.5491	19	0.09	021.53	0
021	Cobalt (ppm)	2113	26.00	2.000	25.02	2.465	0.5491	19	0.40	021.52	0
021	Cobalt (ppm)	0278	26.14	1.430	25.02	2.465	0.5491	19	0.45	021.43	0
021	Cobalt (ppm)	0510	26.22	0.2000	25.02	2.465	0.5491	19	0.49	021.43	0
021	Cobalt (ppm)	0098	26.29	0.3300	25.02	2.465	0.5491	19	0.51	021.53	0
021	Cobalt (ppm)	0964	26.35	0.9000	25.02	2.465	0.5491	19	0.54	021.43	0
021	Cobalt (ppm)	0148	26.73	0.4416	25.02	2.465	0.5491	19	0.69	021.43	0
021	Cobalt (ppm)	0572	28.15	0.3000	25.02	2.465	0.5491	19	1.27	021.53	0
021	Cobalt (ppm)	0870	30.61	0.5861	25.02	2.465	0.5491	19	2.27	021.43	0
021	Cobalt (ppm)	0407	26.47	3.043	25.02	2.465	0.5491	19	0.59	021.53	1
022	Copper (ppm)	0407	45.88	0.4625	50.27	4.460	1.488	25	-0.99	022.41	0
022	Copper (ppm)	0186	46.47	0.6300	50.27	4.460	1.488	25	-0.85	022.52	0
022	Copper (ppm)	0629	46.50	0.0000	50.27	4.460	1.488	25	-0.85	022.43	0
022	Copper (ppm)	0047	46.85	0.1200	50.27	4.460	1.488	25	-0.77	022.52	0
022	Copper (ppm)	0511	47.00	0.0000	50.27	4.460	1.488	25	-0.73	022.43	0
022	Copper (ppm)	2404	47.20	1.220	50.27	4.460	1.488	25	-0.69	022.43	0
022	Copper (ppm)	0227	47.50	3.000	50.27	4.460	1.488	25	-0.62	022.43	0
022	Copper (ppm)	0407	47.63	4.000	50.27	4.460	1.488	25	-0.59	022.53	0
022	Copper (ppm)	0553	47.80	0.6000	50.27	4.460	1.488	25	-0.55	022.53	0
022	Copper (ppm)	0510	49.00	2.000	50.27	4.460	1.488	25	-0.29	022.43	0
022	Copper (ppm)	0098	49.32	0.8300	50.27	4.460	1.488	25	-0.21	022.53	0
022	Copper (ppm)	0876	49.65	1.700	50.27	4.460	1.488	25	-0.14	022.43	0
022	Copper (ppm)	0010	50.40	0.4000	50.27	4.460	1.488	25	0.03	022.43	0
022	Copper (ppm)	2113	51.00	0.0000	50.27	4.460	1.488	25	0.16	022.52	0
022	Copper (ppm)	2404	51.04	0.8530	50.27	4.460	1.488	25	0.17	022.53	0
022	Copper (ppm)	0148	51.28	3.325	50.27	4.460	1.488	25	0.23	022.43	0
022	Copper (ppm)	0006	51.48	1.499	50.27	4.460	1.488	25	0.27	022.53	0
022	Copper (ppm)	0572	51.55	2.100	50.27	4.460	1.488	25	0.29	022.53	0
022	Copper (ppm)	0042	52.90	3.000	50.27	4.460	1.488	25	0.59	022.42	0
022	Copper (ppm)	2141	53.21	1.423	50.27	4.460	1.488	25	0.66	022.43	0
022	Copper (ppm)	2433	53.76	1.189	50.27	4.460	1.488	25	0.78	022.42	0
022	Copper (ppm)	0529	54.10	0.4000	50.27	4.460	1.488	25	0.86	022.31	0
022	Copper (ppm)	0870	54.70	3.145	50.27	4.460	1.488	25	0.99	022.43	0
022	Copper (ppm)	0278	55.20	0.6000	50.27	4.460	1.488	25	1.10	022.42	0
022	Copper (ppm)	0964	55.50	1.000	50.27	4.460	1.488	25	1.17	022.43	0
022	Copper (ppm)	0026	32.78	11.69	50.27	4.460	1.488	25	-3.92	022.42	1
023	Fluorine (ppm)	0227	140.0	0.0000				1		023.01	0
024	Iodine (ppm)	0186	4.911	0.1660				2		024.52	0
024	Iodine (ppm)	2325	11.77	0.4300				2		024.99	0
034	Selenium, Total (Se) (ppm)	0047	1.716	0.1330	2.369	0.3328	0.1196	16	-1.96	034.52	0
034	Selenium, Total (Se) (ppm)	0629	1.860	0.0000	2.369	0.3328	0.1196	16	-1.53	034.43	0

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034	Selenium, Total (Se) (ppm)	2404	2.020	0.0400	2.369	0.3328	0.1196	16	-1.05	034.43	0
034	Selenium, Total (Se) (ppm)	0572	2.105	0.0900	2.369	0.3328	0.1196	16	-0.79	034.53	0
034	Selenium, Total (Se) (ppm)	0553	2.135	0.1500	2.369	0.3328	0.1196	16	-0.70	034.53	0
034	Selenium, Total (Se) (ppm)	0148	2.280	0.1800	2.369	0.3328	0.1196	16	-0.27	034.42	0
034	Selenium, Total (Se) (ppm)	0870	2.330	0.0255	2.369	0.3328	0.1196	16	-0.12	034.43	0
034	Selenium, Total (Se) (ppm)	0098	2.363	0.0980	2.369	0.3328	0.1196	16	-0.02	034.53	0
034	Selenium, Total (Se) (ppm)	2404	2.395	0.0800	2.369	0.3328	0.1196	16	0.08	034.53	0
034	Selenium, Total (Se) (ppm)	0227	2.435	0.2100	2.369	0.3328	0.1196	16	0.20	034.53	0
034	Selenium, Total (Se) (ppm)	0186	2.498	0.0210	2.369	0.3328	0.1196	16	0.39	034.52	0
034	Selenium, Total (Se) (ppm)	0511	2.500	1.000	2.369	0.3328	0.1196	16	0.39	034.43	0
034	Selenium, Total (Se) (ppm)	0278	2.530	0.0200	2.369	0.3328	0.1196	16	0.48	034.53	0
034	Selenium, Total (Se) (ppm)	0964	2.765	0.1700	2.369	0.3328	0.1196	16	1.19	034.43	0
034	Selenium, Total (Se) (ppm)	0407	3.495	0.3380	2.369	0.3328	0.1196	16	3.38	034.53	0
034	Selenium, Total (Se) (ppm)	0723	3.605	0.0520	2.369	0.3328	0.1196	16	3.71	034.43	0
034	Selenium, Total (Se) (ppm)	0010	2.850	1.100	2.369	0.3328	0.1196	16	1.45	034.53	1
034	Selenium, Total (Se) (ppm)	2141	< 5		2.369	0.3328	0.1196	16		034.43	5
034	Selenium, Total (Se) (ppm)	0042	< 12		2.369	0.3328	0.1196	16		034.42	5
036	Sulfur (%)	2141	0.4042	0.0024	0.4512	0.0203	0.0171	13	-2.31	036.43	0
036	Sulfur (%)	0186	0.4074	0.0113	0.4512	0.0203	0.0171	13	-2.15	036.52	0
036	Sulfur (%)	0407	0.4247	0.0016	0.4512	0.0203	0.0171	13	-1.30	036.42	0
036	Sulfur (%)	0227	0.4250	0.0300	0.4512	0.0203	0.0171	13	-1.29	036.53	0
036	Sulfur (%)	0553	0.4430	0.0420	0.4512	0.0203	0.0171	13	-0.40	036.53	0
036	Sulfur (%)	0042	0.4465	0.0110	0.4512	0.0203	0.0171	13	-0.23	036.42	0
036	Sulfur (%)	0876	0.4500	0.0000	0.4512	0.0203	0.0171	13	-0.06	036.43	0
036	Sulfur (%)	0510	0.4550	0.0100	0.4512	0.0203	0.0171	13	0.19	036.43	0
036	Sulfur (%)	0629	0.4550	0.0100	0.4512	0.0203	0.0171	13	0.19	036.43	0
036	Sulfur (%)	0870	0.4749	0.0067	0.4512	0.0203	0.0171	13	1.16	036.42	0
036	Sulfur (%)	0098	0.4750	0.0120	0.4512	0.0203	0.0171	13	1.17	036.43	0
036	Sulfur (%)	0964	0.4997	0.0393	0.4512	0.0203	0.0171	13	2.38	036.43	0
036	Sulfur (%)	0278	0.5350	0.0300	0.4512	0.0203	0.0171	13	4.12	036.42	0
038	Molybdenum (ppm)	0510	1.750	0.3000	2.285	0.3228	0.1276	18	-1.66	038.43	0
038	Molybdenum (ppm)	0511	2.000	0.0000	2.285	0.3228	0.1276	18	-0.88	038.43	0
038	Molybdenum (ppm)	0407	2.146	0.0394	2.285	0.3228	0.1276	18	-0.43	038.41	0
038	Molybdenum (ppm)	0047	2.155	0.0100	2.285	0.3228	0.1276	18	-0.40	038.52	0
038	Molybdenum (ppm)	0407	2.177	0.2081	2.285	0.3228	0.1276	18	-0.34	038.53	0
038	Molybdenum (ppm)	0553	2.215	0.1300	2.285	0.3228	0.1276	18	-0.22	038.53	0
038	Molybdenum (ppm)	0186	2.223	0.0310	2.285	0.3228	0.1276	18	-0.20	038.52	0
038	Molybdenum (ppm)	0870	2.229	0.0095	2.285	0.3228	0.1276	18	-0.17	038.43	0
038	Molybdenum (ppm)	2113	2.250	0.1000	2.285	0.3228	0.1276	18	-0.11	038.52	0
038	Molybdenum (ppm)	0572	2.325	0.2500	2.285	0.3228	0.1276	18	0.12	038.53	0
038	Molybdenum (ppm)	0098	2.343	0.0810	2.285	0.3228	0.1276	18	0.18	038.53	0
038	Molybdenum (ppm)	0006	2.356	0.0830	2.285	0.3228	0.1276	18	0.22	038.53	0

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038	Molybdenum (ppm)	0629	2.370	0.0000	2.285	0.3228	0.1276	18	0.26	038.43	0
038	Molybdenum (ppm)	0010	2.400	0.0000	2.285	0.3228	0.1276	18	0.35	038.53	0
038	Molybdenum (ppm)	0227	2.415	0.0500	2.285	0.3228	0.1276	18	0.40	038.53	0
038	Molybdenum (ppm)	0148	2.430	0.1800	2.285	0.3228	0.1276	18	0.45	038.43	0
038	Molybdenum (ppm)	0964	2.495	0.1500	2.285	0.3228	0.1276	18	0.65	038.43	0
038	Molybdenum (ppm)	0042	3.115	0.4300	2.285	0.3228	0.1276	18	2.57	038.42	0
038	Molybdenum (ppm)	0278	1.150	1.820	2.285	0.3228	0.1276	18	-3.52	038.42	1
038	Molybdenum (ppm)	2141	< 5		2.285	0.3228	0.1276	18		038.43	5
041	Vanadium (ppm)	0407	39.13	3.326	41.16	3.763	1.558	7	-0.54	041.53	0
041	Vanadium (ppm)	0629	39.90	0.6000	41.16	3.763	1.558	7	-0.33	041.43	0
041	Vanadium (ppm)	0553	40.30	0.4000	41.16	3.763	1.558	7	-0.23	041.53	0
041	Vanadium (ppm)	0511	41.00	0.0000	41.16	3.763	1.558	7	-0.04	041.43	0
041	Vanadium (ppm)	0098	41.44	1.740	41.16	3.763	1.558	7	0.08	041.53	0
041	Vanadium (ppm)	0278	42.42	0.5700	41.16	3.763	1.558	7	0.33	041.43	0
041	Vanadium (ppm)	0870	47.60	2.713	41.16	3.763	1.558	7	1.71	041.43	0
516	Arsenic, Total (As) (ppm)	0148	16.45	0.3790	28.84	2.782	0.9431	21	-4.45	516.43	0
516	Arsenic, Total (As) (ppm)	2248	20.84	3.080	28.84	2.782	0.9431	21	-2.88	516.00	0
516	Arsenic, Total (As) (ppm)	0629	24.85	0.1000	28.84	2.782	0.9431	21	-1.43	516.43	0
516	Arsenic, Total (As) (ppm)	2404	26.08	1.480	28.84	2.782	0.9431	21	-0.99	516.43	0
516	Arsenic, Total (As) (ppm)	0553	26.90	0.6000	28.84	2.782	0.9431	21	-0.70	516.53	0
516	Arsenic, Total (As) (ppm)	0186	27.76	0.2000	28.84	2.782	0.9431	21	-0.39	516.52	0
516	Arsenic, Total (As) (ppm)	0511	28.00	0.0000	28.84	2.782	0.9431	21	-0.30	516.43	0
516	Arsenic, Total (As) (ppm)	0006	28.12	1.087	28.84	2.782	0.9431	21	-0.26	516.53	0
516	Arsenic, Total (As) (ppm)	0227	28.75	0.1000	28.84	2.782	0.9431	21	-0.03	516.53	0
516	Arsenic, Total (As) (ppm)	0098	28.78	0.3800	28.84	2.782	0.9431	21	-0.02	516.53	0
516	Arsenic, Total (As) (ppm)	0043	29.14	1.101	28.84	2.782	0.9431	21	0.11	516.53	0
516	Arsenic, Total (As) (ppm)	0278	29.45	0.7600	28.84	2.782	0.9431	21	0.22	516.53	0
516	Arsenic, Total (As) (ppm)	0870	29.73	1.417	28.84	2.782	0.9431	21	0.32	516.43	0
516	Arsenic, Total (As) (ppm)	0964	29.85	1.500	28.84	2.782	0.9431	21	0.36	516.43	0
516	Arsenic, Total (As) (ppm)	2141	30.37	1.471	28.84	2.782	0.9431	21	0.55	516.43	0
516	Arsenic, Total (As) (ppm)	0723	30.61	1.041	28.84	2.782	0.9431	21	0.64	516.43	0
516	Arsenic, Total (As) (ppm)	0042	30.70	2.400	28.84	2.782	0.9431	21	0.67	516.42	0
516	Arsenic, Total (As) (ppm)	0572	30.70	1.000	28.84	2.782	0.9431	21	0.67	516.53	0
516	Arsenic, Total (As) (ppm)	2113	31.50	1.000	28.84	2.782	0.9431	21	0.96	516.52	0
516	Arsenic, Total (As) (ppm)	0010	31.50	1.000	28.84	2.782	0.9431	21	0.96	516.53	0
516	Arsenic, Total (As) (ppm)	0407	35.22	0.4474	28.84	2.782	0.9431	21	2.29	516.53	0
518	Cadmium (ppm)	2325	0.1000	0.0000	2.771	0.3802	0.1188	22	-7.02	518.31	0
518	Cadmium (ppm)	2404	2.175	0.0700	2.771	0.3802	0.1188	22	-1.57	518.43	0
518	Cadmium (ppm)	0407	2.343	0.0226	2.771	0.3802	0.1188	22	-1.13	518.41	0
518	Cadmium (ppm)	0723	2.418	0.1070	2.771	0.3802	0.1188	22	-0.93	518.43	0
518	Cadmium (ppm)	0629	2.580	0.0400	2.771	0.3802	0.1188	22	-0.50	518.43	0
518	Cadmium (ppm)	2433	2.600	0.0510	2.771	0.3802	0.1188	22	-0.45	518.42	0

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			Value	Range	Rob. Mean	Horwitz SD	Rob. R-bar	# Tests			
518	Cadmium (ppm)	0870	2.678	0.0996	2.771	0.3802	0.1188	22	-0.24	518.43	0
518	Cadmium (ppm)	0043	2.716	0.2480	2.771	0.3802	0.1188	22	-0.14	518.53	0
518	Cadmium (ppm)	0186	2.747	0.0680	2.771	0.3802	0.1188	22	-0.06	518.52	0
518	Cadmium (ppm)	0553	2.790	0.1000	2.771	0.3802	0.1188	22	0.05	518.53	0
518	Cadmium (ppm)	0964	2.800	0.2600	2.771	0.3802	0.1188	22	0.08	518.43	0
518	Cadmium (ppm)	0407	2.807	0.1168	2.771	0.3802	0.1188	22	0.09	518.53	0
518	Cadmium (ppm)	0278	2.855	0.0500	2.771	0.3802	0.1188	22	0.22	518.43	0
518	Cadmium (ppm)	0227	2.865	0.3300	2.771	0.3802	0.1188	22	0.25	518.53	0
518	Cadmium (ppm)	2248	2.890	0.1400	2.771	0.3802	0.1188	22	0.31	518.34	0
518	Cadmium (ppm)	0006	2.905	0.2740	2.771	0.3802	0.1188	22	0.35	518.53	0
518	Cadmium (ppm)	0148	2.920	0.1000	2.771	0.3802	0.1188	22	0.39	518.43	0
518	Cadmium (ppm)	0010	2.950	0.1000	2.771	0.3802	0.1188	22	0.47	518.53	0
518	Cadmium (ppm)	2113	3.050	0.1000	2.771	0.3802	0.1188	22	0.73	518.52	0
518	Cadmium (ppm)	0042	3.060	0.1200	2.771	0.3802	0.1188	22	0.76	518.42	0
518	Cadmium (ppm)	0098	3.080	0.1800	2.771	0.3802	0.1188	22	0.81	518.53	0
518	Cadmium (ppm)	0572	3.395	0.1100	2.771	0.3802	0.1188	22	1.64	518.53	0
518	Cadmium (ppm)	0511	2.500	1.000	2.771	0.3802	0.1188	22	-0.71	518.43	1
518	Cadmium (ppm)	2141	< 5		2.771	0.3802	0.1188	22		518.43	5
520	Chromium, Total (Cr) (ppm)	0407	6.474	0.7796	8.425	0.9779	0.1667	21	-1.99	520.41	0
520	Chromium, Total (Cr) (ppm)	0047	6.729	0.0200	8.425	0.9779	0.1667	21	-1.73	520.52	0
520	Chromium, Total (Cr) (ppm)	2113	7.250	0.3000	8.425	0.9779	0.1667	21	-1.20	520.52	0
520	Chromium, Total (Cr) (ppm)	0553	7.615	0.5500	8.425	0.9779	0.1667	21	-0.83	520.53	0
520	Chromium, Total (Cr) (ppm)	2404	7.805	0.1100	8.425	0.9779	0.1667	21	-0.63	520.43	0
520	Chromium, Total (Cr) (ppm)	0042	7.840	0.3200	8.425	0.9779	0.1667	21	-0.60	520.42	0
520	Chromium, Total (Cr) (ppm)	0511	8.000	0.0000	8.425	0.9779	0.1667	21	-0.43	520.43	0
520	Chromium, Total (Cr) (ppm)	0186	8.154	0.0660	8.425	0.9779	0.1667	21	-0.28	520.52	0
520	Chromium, Total (Cr) (ppm)	0629	8.305	0.0900	8.425	0.9779	0.1667	21	-0.12	520.43	0
520	Chromium, Total (Cr) (ppm)	0098	8.310	0.0800	8.425	0.9779	0.1667	21	-0.12	520.53	0
520	Chromium, Total (Cr) (ppm)	0723	8.387	0.1860	8.425	0.9779	0.1667	21	-0.04	520.43	0
520	Chromium, Total (Cr) (ppm)	2404	8.507	0.2220	8.425	0.9779	0.1667	21	0.08	520.53	0
520	Chromium, Total (Cr) (ppm)	2141	8.547	0.2320	8.425	0.9779	0.1667	21	0.13	520.43	0
520	Chromium, Total (Cr) (ppm)	0510	8.675	0.1900	8.425	0.9779	0.1667	21	0.26	520.43	0
520	Chromium, Total (Cr) (ppm)	0860	8.970	0.0000	8.425	0.9779	0.1667	21	0.56	520.43	0
520	Chromium, Total (Cr) (ppm)	0227	9.165	0.0700	8.425	0.9779	0.1667	21	0.76	520.53	0
520	Chromium, Total (Cr) (ppm)	0148	9.210	0.0600	8.425	0.9779	0.1667	21	0.80	520.43	0
520	Chromium, Total (Cr) (ppm)	0407	9.253	0.1228	8.425	0.9779	0.1667	21	0.85	520.53	0
520	Chromium, Total (Cr) (ppm)	0964	9.500	0.1800	8.425	0.9779	0.1667	21	1.10	520.43	0
520	Chromium, Total (Cr) (ppm)	0278	9.555	0.0900	8.425	0.9779	0.1667	21	1.16	520.43	0
520	Chromium, Total (Cr) (ppm)	0870	9.867	0.1488	8.425	0.9779	0.1667	21	1.47	520.43	0
520	Chromium, Total (Cr) (ppm)	0010	8.550	1.300	8.425	0.9779	0.1667	21	0.13	520.53	1
526	Lead (ppm)	2325	0.0850	0.0100	2.335	0.3288	0.1112	20	-6.84	526.32	0
526	Lead (ppm)	2404	1.860	0.1000	2.335	0.3288	0.1112	20	-1.45	526.43	0

Test Material Code # 202353	Analyte Proficiency Testing Report								Issue Date : 10/31/2023		
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			
526	Lead (ppm)	0407	1.956	0.0440	2.335	0.3288	0.1112	20	-1.15	526.41	0
526	Lead (ppm)	0723	2.008	0.1060	2.335	0.3288	0.1112	20	-0.99	526.43	0
526	Lead (ppm)	0629	2.130	0.0800	2.335	0.3288	0.1112	20	-0.62	526.43	0
526	Lead (ppm)	2433	2.215	0.0240	2.335	0.3288	0.1112	20	-0.37	526.42	0
526	Lead (ppm)	0553	2.280	0.0200	2.335	0.3288	0.1112	20	-0.17	526.53	0
526	Lead (ppm)	2113	2.300	0.2000	2.335	0.3288	0.1112	20	-0.11	526.52	0
526	Lead (ppm)	0186	2.318	0.0190	2.335	0.3288	0.1112	20	-0.05	526.52	0
526	Lead (ppm)	0043	2.326	0.0630	2.335	0.3288	0.1112	20	-0.03	526.53	0
526	Lead (ppm)	0227	2.370	0.0600	2.335	0.3288	0.1112	20	0.11	526.53	0
526	Lead (ppm)	0407	2.409	0.1996	2.335	0.3288	0.1112	20	0.22	526.53	0
526	Lead (ppm)	0964	2.420	0.2200	2.335	0.3288	0.1112	20	0.26	526.43	0
526	Lead (ppm)	0006	2.451	0.1810	2.335	0.3288	0.1112	20	0.35	526.53	0
526	Lead (ppm)	0098	2.475	0.0300	2.335	0.3288	0.1112	20	0.43	526.53	0
526	Lead (ppm)	0010	2.500	0.2000	2.335	0.3288	0.1112	20	0.50	526.53	0
526	Lead (ppm)	0278	2.590	0.2400	2.335	0.3288	0.1112	20	0.78	526.43	0
526	Lead (ppm)	2248	2.615	0.0500	2.335	0.3288	0.1112	20	0.85	526.34	0
526	Lead (ppm)	0870	3.327	0.1234	2.335	0.3288	0.1112	20	3.02	526.43	0
526	Lead (ppm)	0572	3.710	0.3000	2.335	0.3288	0.1112	20	4.18	526.53	0
526	Lead (ppm)	0511	2.500	1.000	2.335	0.3288	0.1112	20	0.50	526.43	1
526	Lead (ppm)	0148	< 0.71		2.335	0.3288	0.1112	20		526.43	5
526	Lead (ppm)	0042	< 4.99		2.335	0.3288	0.1112	20		526.42	5
526	Lead (ppm)	2141	< 5		2.335	0.3288	0.1112	20		526.43	5
529	Mercury (ppb)	0629	1.375	0.0100	1,192	185.7	60.67	11	-6.41	529.99	0
529	Mercury (ppb)	2404	1.679	0.0000	1,192	185.7	60.67	11	-6.41	529.99	0
529	Mercury (ppb)	0098	1.705	0.0100	1,192	185.7	60.67	11	-6.41	529.99	0
529	Mercury (ppb)	0186	1,443	82.80	1,192	185.7	60.67	11	1.35	529.99	0
529	Mercury (ppb)	0043	1,585	47.06	1,192	185.7	60.67	11	2.11	529.99	0
529	Mercury (ppb)	0553	1,610	80.00	1,192	185.7	60.67	11	2.25	529.99	0
529	Mercury (ppb)	0006	1,635	47.00	1,192	185.7	60.67	11	2.38	529.99	0
529	Mercury (ppb)	0407	1,643	73.11	1,192	185.7	60.67	11	2.43	529.99	0
529	Mercury (ppb)	0227	1,670	80.00	1,192	185.7	60.67	11	2.57	529.99	0
529	Mercury (ppb)	0010	1,709	70.00	1,192	185.7	60.67	11	2.78	529.99	0
529	Mercury (ppb)	0208	1,815	230.0	1,192	185.7	60.67	11	3.35	529.99	0
539	Nickel (ppm)	0047	1.294	0.0100	2.292	0.3236	0.1345	16	-3.08	539.52	0
539	Nickel (ppm)	0629	1.895	0.0500	2.292	0.3236	0.1345	16	-1.23	539.43	0
539	Nickel (ppm)	0511	2.000	0.0000	2.292	0.3236	0.1345	16	-0.90	539.43	0
539	Nickel (ppm)	2113	2.050	0.1000	2.292	0.3236	0.1345	16	-0.75	539.52	0
539	Nickel (ppm)	0407	2.125	0.0654	2.292	0.3236	0.1345	16	-0.52	539.41	0
539	Nickel (ppm)	0553	2.145	0.4100	2.292	0.3236	0.1345	16	-0.45	539.53	0
539	Nickel (ppm)	2433	2.167	0.0370	2.292	0.3236	0.1345	16	-0.39	539.42	0
539	Nickel (ppm)	0042	2.275	0.5300	2.292	0.3236	0.1345	16	-0.05	539.42	0
539	Nickel (ppm)	0098	2.390	0.2000	2.292	0.3236	0.1345	16	0.30	539.53	0

Test Material Code # 202353

Analyte Proficiency Testing Report

Issue Date : 10/31/2023

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)	0148	2.420	0.0200	2.292	0.3236	0.1345	16	**0.40**	539.43	0
539	Nickel (ppm)	0010	2.455	0.2100	2.292	0.3236	0.1345	16	**0.50**	539.53	0
539	Nickel (ppm)	0006	2.461	0.0160	2.292	0.3236	0.1345	16	**0.52**	539.53	0
539	Nickel (ppm)	0278	2.555	0.1100	2.292	0.3236	0.1345	16	**0.81**	539.43	0
539	Nickel (ppm)	0186	2.564	0.1160	2.292	0.3236	0.1345	16	**0.84**	539.52	0
539	Nickel (ppm)	0870	2.587	0.0095	2.292	0.3236	0.1345	16	**0.91**	539.43	0
539	Nickel (ppm)	0964	2.810	0.3600	2.292	0.3236	0.1345	16	**1.60**	539.43	0
539	Nickel (ppm)	0407	2.660	1.055	2.292	0.3236	0.1345	16	**1.14**	539.53	1
539	Nickel (ppm)	2141	< 5		2.292	0.3236	0.1345	16		539.43	5

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.