



Minerals Scheme

Test Material Code # 201953

Report Card for Lab Code 0186

Issue Date : 10/31/2019

Cattle Feed

Proficiency Testing For 20 Analytes

Method Group	Analyte Group (Units)	Lab 0186 Data		Method Values				AAFCO PT	Lab 0186	Flag
		Value	range	Rob Mean	Horwitz SD	R-bar	# Labs	Z Score	Method	
015	Aluminum (mg / kg (ppm))	1,123	27.00	1,292	70.31	72.98	15	-2.41	015.52	0
021	Cobalt (mg / kg (ppm))	21.50	1.000	22.74	2.273	1.061	18	-0.54	021.42	0
021	Cobalt (mg / kg (ppm))	21.50	1.000	22.74	2.273	1.061	18	-0.54	021.52	0
022	Copper (mg / kg (ppm))	768.5	41.00	842.3	48.89	32.00	27	-1.51	022.52	0
022	Copper (mg / kg (ppm))	850.5	43.00	842.3	48.89	32.00	27	0.17	022.42	0
024	Iodine (mg / kg (ppm))	42.50	3.000				3		024.52	0
034	Selenium (mg / kg (ppm))	11.00	0.0000	13.14	1.427	0.6240	15	-1.50	034.42	0
034	Selenium (mg / kg (ppm))	12.90	0.8000	13.14	1.427	0.6240	15	-0.17	034.52	0
036	Sulfur (%)	0.7505	0.0230	0.8208	0.0338	0.0227	16	-2.08	036.52	0
036	Sulfur (%)	0.8345	0.0270	0.8208	0.0338	0.0227	16	0.40	036.42	0
038	Molybdenum (mg / kg (ppm))	3.785	0.2700	3.944	0.5132	0.3017	17	-0.31	038.52	0
516	Arsenic, Total (mg / kg (ppm))	8.500	1.000	10.51	1.180	0.6460	21	-1.70	516.42	0
516	Arsenic, Total (mg / kg (ppm))	9.915	0.2900	10.51	1.180	0.6460	21	-0.50	516.52	0
518	Cadmium (mg / kg (ppm))	3.080	0.0200	3.255	0.4360	0.1611	19	-0.40	518.52	0
520	Chromium (mg / kg (ppm))	241.0	4.000	231.1	16.29	8.892	17	0.61	520.52	0
526	Lead (mg / kg (ppm))	24.00	2.000	26.23	2.566	1.569	22	-0.87	526.42	0
526	Lead (mg / kg (ppm))	25.95	2.500	26.23	2.566	1.569	22	-0.11	526.52	0
529	Mercury (µg / kg (ppb))	50.35	4.900	46.23	10.17	4.224	9	0.41	529.99	0
539	Nickel (mg / kg (ppm))	8.475	0.1500	7.717	0.9077	0.5466	14	0.83	539.52	0
539	Nickel (mg / kg (ppm))	10.00	0.0000	7.717	0.9077	0.5466	14	2.51	539.42	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 extreme 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.