



AAFCO
Association of American Feed Control Officials



Animal Feed Scheme
Cattle Mineral
Test Material Code # 202293

Analyte Summary Report

Labs Reporting: 152
Analytes Reported: 80
Issue Date : 04/30/2022

Analyte Group Code	Analyte and Method	Total # Tests Submitted	# Tests in Robust Calcs	Raw Mean	Raw SD	Assigned Value Robust Mean	AAFCO #fp Robust SD	Uncertainty (U) Robust	% RSD - Robust	Average Range (R-bar)	Thompson Horwitz %RSD
000	Urea (%)	1	1	0.1000							
001	Loss on Drying (%)	55	54	2.331	0.3693	2.342	0.2396	0.0408	10.23%	0.0976	3.52%
002	Protein, Crude (%)	55	52	2.391	0.3824	2.432	0.1936	0.0336	7.96%	0.1221	3.50%
003	Fat, Crude (%)	38	37	1.300	0.6682	1.199	0.2443	0.0502	20.37%	0.1390	3.89%
004	Fiber, Crude (%)	25	24	5.547	3.582	4.712	1.173	0.2994	24.90%	0.3191	3.17%
005	Ash (%)	108	106	72.08	4.139	72.68	1.210	0.1469	1.66%	0.3957	1.17%
006	Total Sugars (%)	2	2	5.040	0.0141						
008	Fiber, Acid Detergent (%)	12	12	5.682	1.455	5.494	1.225	0.4420	22.30%	0.3045	3.10%
009	Fiber, Neutral Detergent (%)	12	12	13.83	6.081	12.96	4.899	1.768	37.79%	0.3471	2.72%
010	Moisture (%)	19	18	2.588	1.005	2.394	0.3306	0.0974	13.81%	0.1008	3.51%
011	Loss on Drying, HT (%)	50	49	3.518	0.5572	3.602	0.3222	0.0575	8.95%	0.0862	3.30%
012	Starch (%)	14	12	0.8960	0.4024	0.8514	0.3521	0.1271	41.36%	0.0807	4.10%
013	Fat, Acid Pretreat (%)	17	17	2.771	1.427	2.618	1.259	0.3817	48.09%	0.2551	3.46%
015	Aluminum (ppm)	19	19	1,038	343.3	983.6	192.3	55.15	19.55%	49.63	5.67%
017	Boron (ppm)	18	17	14.72	7.417	13.80	6.051	1.835	43.84%	1.031	10.78%
019	Calcium (%)	115	114	12.37	0.8849	12.37	0.7206	0.0844	5.83%	0.2789	2.74%
021	Cobalt (ppm)	27	26	54.71	15.59	54.77	13.61	3.336	24.84%	2.489	8.76%
022	Copper (ppm)	98	96	1,271	140.8	1,268	109.4	13.96	8.63%	38.70	5.46%
024	Iodine (ppm)	2	2	44.96	15.80						
025	Iron (ppm)	76	75	6,747	1,190	6,928	616.9	89.04	8.90%	180.4	4.23%
027	Magnesium (%)	95	94	10.92	1.572	11.10	0.8133	0.1049	7.32%	0.3707	2.78%
028	Manganese (ppm)	80	79	1,908	243.3	1,926	192.3	27.04	9.99%	64.77	5.13%
031	Phosphorus (%)	107	104	2.722	0.2394	2.729	0.1837	0.0225	6.73%	0.0740	3.44%
032	Potassium (%)	66	64	0.7421	0.1278	0.7245	0.0864	0.0135	11.92%	0.0275	4.20%
033	Salt as chloride (%)	53	51	16.97	2.481	17.23	0.9121	0.1597	5.30%	0.3450	2.41%
034	Selenium, Total (Se) (ppm)	38	36	20.16	6.707	20.63	4.409	0.9185	21.37%	0.8043	10.14%
035	Sodium (%)	79	77	6.318	1.061	6.467	0.4198	0.0598	6.49%	0.1390	3.02%
036	Sulfur (%)	46	45	0.5692	0.1019	0.5597	0.0706	0.0132	12.61%	0.0246	4.36%
037	Zinc (ppm)	100	99	2,430	321.7	2,427	225.4	28.32	9.29%	69.02	4.95%

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038	Molybdenum (ppm)	23	21	8.239	1.682	8.282	1.780	0.4855	21.49%	0.4845	11.64%
040	Barium (ppm)	3	3	20.24	2.197	20.24	2.197	1.268	10.85%	1.160	10.17%
041	Vanadium (ppm)	1	1	14.22							
042	Chloride (%)	6	6	10.37	0.3760	10.39	0.3269	0.1668	3.15%	0.2663	2.81%
095	Methoprene (ppm)	2	2	21.88	8.317						
101	Choline Chloride (ppm)	1	1	131.5							
102	Niacin (ppm)	1	1	6.910							
103	Pantothenic Acid (ppm)	1	1	4.230							
105	Thiamine (ppm)	1	1	0.1775							
106	Vitamin A (KU / kg)	22	22	212.1	39.17	211.7	43.73	11.65	20.65%	15.04	
107	Vitamin B12 (ppb)	1		4.400							
108	Vitamin D3 (KU / kg)	8	8	19.22	4.109	18.80	3.635	1.606	19.33%	4.511	
109	Vitamin E (IU / kg)	17	17	311.0	220.1	268.5	70.94	21.51	26.42%	17.61	
111	Vitamin C, Phosphorylated (ppm)	1		4.400							
112	Pyridoxine (µg / g)	1	1	0.6600							
113	Folic Acid (ppm)	1	1	0.1490							
114	Biotin (ppm)	1	1	0.2215							
120	Alanine (%)	6	6	0.0912	0.0068	0.0912	0.0077	0.0039	8.43%	0.0035	5.73%
121	Arginine (%)	6	5	0.0766	0.0085	0.0766	0.0085	0.0047	11.08%	0.0006	5.89%
122	Aspartic (%)	6	6	0.2526	0.0283	0.2526	0.0320	0.0163	12.68%	0.0076	4.92%
124	Cysteine/Cystine (%)	6	4	0.0254	0.0072	0.0254	0.0072	0.0045	28.23%	0.0010	6.95%
125	Glutamic (%)	6	6	0.2526	0.0131	0.2525	0.0146	0.0075	5.79%	0.0119	4.92%
126	Glycine (%)	6	6	0.1250	0.0079	0.1263	0.0055	0.0028	4.39%	0.0014	5.46%
127	Histidine (%)	6	5	0.0316	0.0128	0.0316	0.0128	0.0072	40.68%	0.0008	6.73%
128	Isoleucine (%)	6	6	0.0678	0.0039	0.0678	0.0045	0.0023	6.57%	0.0021	6.00%
129	Leucine (%)	6	6	0.1047	0.0080	0.1044	0.0084	0.0043	8.06%	0.0051	5.62%
130	L-Lysine (%)	6	6	0.0800	0.0075	0.0800	0.0085	0.0043	10.64%	0.0018	5.85%
131	Methionine (%)	6	4	0.0144	0.0046	0.0144	0.0046	0.0029	31.85%	0.0012	7.58%
132	Phenylalanine (%)	6	6	0.0638	0.0145	0.0638	0.0164	0.0084	25.76%	0.0032	6.05%
133	Proline (%)	6	5	0.0851	0.0111	0.0851	0.0111	0.0062	13.09%	0.0016	5.80%
134	Serine (%)	6	6	0.0873	0.0110	0.0873	0.0124	0.0063	14.25%	0.0053	5.77%
135	Threonine (%)	6	6	0.0612	0.0074	0.0612	0.0084	0.0043	13.72%	0.0016	6.09%
136	Tryptophan (%)	5	3	0.0202	0.0033	0.0202	0.0033	0.0019	16.11%	0.0003	7.20%
137	Tyrosine (%)	6	6	0.0713	0.0118	0.0713	0.0134	0.0068	18.82%	0.0052	5.95%
138	Valine (%)	6	6	0.0890	0.0124	0.0890	0.0140	0.0072	15.76%	0.0029	5.76%
139	Taurine (%)	2		0.0100							
160	Fructose (%)	2	1	0.5600							
161	Galactose (%)	1		0.0000							
162	Glucose (%)	2	1	0.1300							
163	Lactose (%)	2		0.0000							

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164	Maltose (%)	2		0.0000							
165	Sucrose (%)	2	2	3.223	0.6965						
166	Raffinose (%)	2		0.0000							
167	Stachyose (%)	2	1	0.0700							
400	Water Activity (Units)	8	8	0.3734	0.0452	0.3662	0.0327	0.0145	8.94%	0.0046	
516	Arsenic, Total (As) (ppm)	8	8	5.464	10.31	1.984	0.7521	0.3324	37.91%	0.0978	14.43%
518	Cadmium (ppm)	14	12	0.6837	0.0950	0.6803	0.0979	0.0353	14.40%	0.0476	16.95%
520	Chromium, Total (Cr) (ppm)	17	17	76.24	25.28	78.60	21.09	6.393	26.83%	4.375	8.29%
526	Lead (ppm)	13	12	2.026	3.157	1.165	0.2072	0.0748	17.78%	0.0597	15.63%
529	Mercury (ppb)	5	3	27.45	38.31	27.45	38.31	22.12	139.57%	5.847	22.00%
539	Nickel (ppm)	11	10	34.22	7.301	34.22	8.279	3.273	24.20%	1.368	9.40%

Notes: Robust statistics not used if < 6 labs reporting. In this case Means and SD's may be reported based on Raw Data with obvious blunders removed. Robust Assigned Values indicated in bold font.