



AAFCO
Association of American Feed Control Officials



Animal Feed Scheme
Cottonseed Meal
Test Material Code # 202328

Analyte Summary Report

Labs Reporting: 166
Analytes Reported: 118
Issue Date : 09/30/2023

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 (Rob R-bar)	Thompson Horwitz %RSD
000	Urea (%)	1	1	0.2000							
001	Loss on Drying (%)	78	76	8.683	0.6889	8.764	0.4392	0.0630	5.01%	0.1019	2.89%
002	Protein, Crude (%)	163	162	40.72	1.129	40.78	0.7188	0.0706	1.76%	0.4128	1.57%
003	Fat, Crude (%)	142	140	3.403	0.4349	3.406	0.3826	0.0404	11.23%	0.1183	3.33%
004	Fiber, Crude (%)	109	106	12.38	1.494	12.28	1.209	0.1468	9.84%	0.3287	2.74%
005	Ash (%)	134	131	7.911	0.2727	7.894	0.1435	0.0157	1.82%	0.0644	2.93%
006	Total Sugars (%)	9	9	4.888	1.857	5.084	1.216	0.5065	23.91%	0.2786	3.13%
008	Fiber, Acid Detergent (%)	62	60	18.08	1.767	18.03	1.695	0.2736	9.40%	0.4507	2.36%
009	Fiber, Neutral Detergent (%)	58	57	26.43	3.574	26.04	3.000	0.4968	11.52%	0.6799	1.96%
010	Moisture (%)	18	18	8.615	0.9265	8.754	0.6853	0.2019	7.83%	0.1219	2.89%
011	Loss on Drying, HT (%)	70	68	9.615	0.6399	9.705	0.4183	0.0634	4.31%	0.1238	2.84%
012	Starch (%)	32	31	1.733	1.987	1.413	1.215	0.2727	85.94%	0.1532	3.80%
013	Fat, Pretreat (%)	46	44	4.565	0.8621	4.585	0.9179	0.1730	20.02%	0.1807	3.18%
015	Aluminum (ppm)	16	14	393.9	136.3	397.0	127.5	42.58	32.10%	9.680	6.50%
017	Boron (ppm)	17	16	19.12	6.216	17.77	1.730	0.5405	9.73%	0.7500	10.37%
019	Calcium (%)	129	128	0.2614	0.0450	0.2564	0.0283	0.0031	11.05%	0.0116	4.91%
021	Cobalt (ppm)	29	27	7.094	2.809	7.423	2.310	0.5558	31.12%	0.3103	11.83%
022	Copper (ppm)	90	88	11.69	1.367	11.59	1.291	0.1720	11.14%	0.6885	11.06%
024	Iodine (ppm)	1	1	0.2135							
025	Iron (ppm)	87	85	351.1	78.39	359.6	66.31	8.991	18.44%	13.48	6.60%
027	Magnesium (%)	92	90	0.6219	0.0381	0.6233	0.0329	0.0043	5.28%	0.0153	4.29%
028	Manganese (ppm)	91	88	39.25	4.236	39.58	2.836	0.3779	7.17%	1.344	9.20%
030	Nitrate (%)	1	1	0.0024							
031	Phosphorus (%)	130	127	1.157	0.1160	1.163	0.0600	0.0067	5.15%	0.0307	3.91%
032	Potassium (%)	97	94	1.632	0.1661	1.645	0.0854	0.0110	5.19%	0.0356	3.71%
033	Salt as chloride (%)	35	33	0.1387	0.0914	0.1251	0.0544	0.0118	43.47%	0.0138	5.47%
034	Selenium, Total (Se) (ppm)	23	18	0.3217	0.4123	0.2080	0.1009	0.0297	48.53%	0.0167	20.26%
035	Sodium (%)	89	88	0.2730	0.4888	0.2226	0.0134	0.0018	6.01%	0.0093	5.01%
036	Sulfur (%)	54	52	0.4365	0.0263	0.4374	0.0276	0.0048	6.31%	0.0143	4.53%

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037	Zinc (ppm)	96	94	74.50	7.807	74.15	6.234	0.8038	8.41%	2.851	8.37%
038	Molybdenum (ppm)	22	19	0.9664	0.3358	0.9687	0.3760	0.1078	38.81%	0.0930	16.07%
040	Barium (ppm)	1	1	4.498							
041	Vanadium (ppm)	1	1	1.231							
042	Chloride (%)	6	4	0.0788	0.0193	0.0788	0.0193	0.0130	24.49%		5.86%
101	Choline Chloride (ppm)	1	1	2,485							
102	Niacin (ppm)	1	1	30.65							
103	Pantothenic Acid (ppm)	1	1	5.230							
104	Riboflavin (ppm)	1	1	1.720							
105	Thiamine (ppm)	1	1	3.375							
106	Vitamin A (KU / kg)	12	2	19.41	25.73	19.41	25.73	22.74	132.53%	2.621	
107	Vitamin B12 (ppb)	1		4.400							
108	Vitamin D3 (KU / kg)	3	1								
109	Vitamin E (IU / kg)	12	9	16.90	4.687	15.98	2.753	1.147	17.22%	1.234	
111	Vitamin C, Phosphorylated (ppm)	2		1.000							
112	Pyridoxine (µg / g)	1	1	1.365							
113	Folic Acid (ppm)	1	1	1.965							
114	Biotin (ppm)	2	2	0.3175	0.1619						
115	Non Protein N (NPN) (%)	1	1	0.7313							
120	Alanine (%)	25	25	1.571	0.1383	1.571	0.0595	0.0149	3.79%	0.0276	3.74%
121	Arginine (%)	25	25	4.250	0.2567	4.266	0.1412	0.0353	3.31%	0.0871	3.22%
122	Aspartic (%)	25	24	3.588	0.3048	3.632	0.1296	0.0331	3.57%	0.0621	3.29%
124	Cysteine/Cystine (%)	25	25	0.5984	0.0676	0.5905	0.0347	0.0087	5.87%	0.0183	4.33%
125	Glutamic (%)	25	24	7.792	0.5041	7.850	0.3610	0.0921	4.60%	0.1437	2.93%
126	Glycine (%)	25	25	1.689	0.1808	1.666	0.0568	0.0142	3.41%	0.0329	3.70%
127	Histidine (%)	25	24	1.066	0.0974	1.082	0.0623	0.0159	5.76%	0.0217	3.95%
128	Isoleucine (%)	25	25	1.262	0.1174	1.254	0.0800	0.0200	6.38%	0.0292	3.87%
129	Leucine (%)	25	25	2.303	0.1384	2.318	0.0818	0.0205	3.53%	0.0380	3.52%
130	L-Lysine (%)	26	25	1.649	0.1296	1.651	0.1198	0.0300	7.26%	0.0296	3.71%
131	Methionine (%)	26	26	0.5870	0.0678	0.5972	0.0413	0.0101	6.91%	0.0194	4.32%
132	Phenylalanine (%)	25	25	2.106	0.1551	2.134	0.0825	0.0206	3.86%	0.0524	3.57%
133	Proline (%)	24	23	1.479	0.1556	1.497	0.1068	0.0278	7.14%	0.0292	3.76%
134	Serine (%)	25	24	1.697	0.1664	1.725	0.0901	0.0230	5.22%	0.0304	3.68%
135	Threonine (%)	26	26	1.293	0.1234	1.304	0.0597	0.0146	4.58%	0.0260	3.84%
136	Tryptophan (%)	18	18	0.5017	0.0631	0.5079	0.0551	0.0162	10.85%	0.0085	4.43%
137	Tyrosine (%)	20	20	1.073	0.1362	1.079	0.1278	0.0357	11.85%	0.0271	3.95%
138	Valine (%)	25	25	1.728	0.1110	1.734	0.0915	0.0229	5.27%	0.0310	3.68%
139	Taurine (%)	6	3	0.1080	0.0716	0.1080	0.0716	0.0517	66.28%	0.0160	5.59%
160	Fructose (%)	3	3	0.3600	0.4158	0.3600	0.4158	0.2401	115.50%		4.66%
161	Galactose (%)	1		0.0000							

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162	Glucose (%)	3									
163	Lactose (%)	3									
164	Maltose (%)	3	1								
165	Sucrose (%)	3	3	1.328	0.2053	1.328	0.2053	0.1185	15.45%	0.0433	3.83%
166	Raffinose (%)	2	2	4.138	0.2298						
167	Stachyose (%)	2	2	0.7750	0.0141						
351	Chlortetracycline (ppm)	1		1.000							
354	Decoquinatate (ppm)	1		0.3000							
365	Monensin (ppm)	1		0.1000							
367	Nicarbazin (ppm)	1		0.1000							
388	Tylosin (ppm)	1		0.6000							
392	Fenbendazole (ppm)	1		1.000							
400	Water Activity (Units)	12	11	0.5536	0.0111	0.5541	0.0113	0.0043	2.04%	0.0030	
516	Arsenic, Total (As) (ppm)	8	4	0.0580	0.0138	0.0580	0.0138	0.0086	23.82%	0.0105	22.00%
518	Cadmium (ppm)	11	10	0.0571	0.0143	0.0541	0.0075	0.0030	13.85%	0.0045	22.00%
520	Chromium, Total (Cr) (ppm)	15	14	9.363	4.494	9.394	5.029	1.680	53.53%	0.8098	11.42%
526	Lead (ppm)	10	8	0.1902	0.0771	0.1888	0.0845	0.0373	44.73%	0.0228	20.56%
529	Mercury (ppb)	5	2	9.863	0.4761	9.863	0.4761	0.3366	4.83%	0.2955	22.00%
539	Nickel (ppm)	9	9	9.172	14.23	4.908	2.115	0.8812	43.09%	0.9051	12.59%
702	Butyric Acid (4:0) (%)	1		0.0200							
704	Caproic Acid (6:0) (%)	1		0.0200							
706	Caprylic acid (8:0) (%) (w/w)	1		0.0200							
708	Capric acid (10:0) (%) (w/w)	1		0.0200							
710	Lauric Acid (12:0) (%) (w/w)	3									
714	Myristic Acid (14:0) (%) (w/w)	2	2	0.0316	0.0042						
716	Palmitic Acid (16:0) (%) (w/w)	2	2	1.093	0.0155						
718	Palmitoleic Acid (9c-16:1) (%) (w/w)	3	3	0.0230	0.0009	0.0230	0.0009	0.0005	3.87%	0.0008	7.06%
720	Margaric acid (17:0) (%) (w/w)	1		0.0200							
722	Stearic Acid (18:0) (%) (w/w)	2	2	0.1323	0.0025						
724	Oleic Acid (9c-18:1) (%) (w/w)	2	2	0.7151	0.0142						
726	Linoleic Acid (9c,12c-18:2) (%) (w/w)	3	3	2.220	0.0952	2.220	0.0952	0.0550	4.29%	0.0624	3.55%
728	alpha-Linolenic Acid (9c,12c,15c-18:3) (%) (w/w)	3	3	0.0199	0.0008	0.0199	0.0008	0.0005	4.06%		7.21%
730	Arachidic Acid (20:0) (%) (w/w)	2	1	0.0164							
732	Gondoic Acid (11c-20:1) (%) (w/w)	2		0.0050							
736	Arachidonic Acid (5c,8c,11c,14c-20:4) (%) (w/w)	2		0.0000							
740	Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:5) (%) (w/w)	3									
742	Behenic Acid (22:0) (%) (w/w)	2	1	0.0141							
744	Erucic Acid (13c-22:1) (%) (w/w)	2		0.0050							
746	Docosapentaenoic Acid n-3 DPA (7c,10c,13c,16c,19c-22:5) (%) (w/w)	3									
748	Lignoceric Acid (24:0) (%) (w/w)	2	1	0.0105							

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750	Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c-22:6) (%)	3									
752	Nervonic Acid (24:1) isomers (% (w/w))	2	1	0.0365							
754	Total n-3 Polyunsaturated (Omega-3) Fatty Acids (% (w/w))	2	2	0.0210	0.0014						
756	Total n-6 Polyunsaturated (Omega-6) Fatty Acids (% (w/w))	2	2	2.212	0.1315						
758	Total Saturated Fatty Acids (% (w/w))	1	1	1.329							
764	Total cis Monounsaturated Fatty Acids (% (w/w))	1	1	0.8180							
768	Total cis Polyunsaturated Fatty Acids (% (w/w))	1	1	2.161							
770	Total Fat (equivalent to NLEA) (% (w/w))	1	1	4.526							
772	Total Fatty Acids (% (w/w))	2	2	4.329	0.0034						

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.