



**AAFCO**  
Association of American Feed Control Officials



**Animal Feed Scheme**  
**Dry Dog Feed**  
**Test Material Code # 202326**

**Analyte Summary Report**

**# Labs Reporting: 205**  
**# Analytes Reported: 116**  
**Issue Date : 07/31/2023**

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	0.1000							
001	Loss on Drying (%)	108	106	7.321	0.4171	7.360	0.3061	0.0372	4.16%	0.0840	2.96%
002	Protein, Crude (%)	211	207	24.69	0.3562	24.70	0.2752	0.0239	1.11%	0.1585	2.01%
003	Fat, Crude (%)	128	125	11.29	0.8303	11.25	0.4046	0.0452	3.60%	0.1657	2.78%
004	Fiber, Crude (%)	115	114	4.007	0.6801	3.962	0.5273	0.0617	13.31%	0.1909	3.25%
005	Ash (%)	175	171	7.339	0.2706	7.359	0.0938	0.0090	1.27%	0.0570	2.96%
006	Total Sugars (%)	3	3	0.9267	0.6739	0.9267	0.6739	0.3891	72.72%	0.2700	4.05%
008	Fiber, Acid Detergent (%)	62	61	6.981	1.526	6.921	1.437	0.2300	20.76%	0.2622	2.99%
009	Fiber, Neutral Detergent (%)	57	56	12.44	2.604	12.21	2.145	0.3583	17.57%	0.4395	2.74%
010	Moisture (%)	20	20	7.556	0.4328	7.551	0.4280	0.1196	5.67%	0.1124	2.95%
011	Loss on Drying, HT (%)	78	76	7.962	0.4161	7.982	0.3652	0.0524	4.58%	0.1131	2.93%
012	Starch (%)	39	37	33.70	6.602	35.18	1.503	0.3088	4.27%	0.4056	1.69%
013	Fat, Pretreat (%)	100	96	13.48	1.059	13.52	0.6227	0.0794	4.61%	0.2389	2.70%
014	Fiber, Total Dietary (%)	1	1	10.70							
015	Aluminum (ppm)	14	13	97.37	26.83	96.74	24.26	8.410	25.07%	2.840	8.04%
017	Boron (ppm)	17	16	3.893	1.052	3.801	0.9044	0.2826	23.80%	0.2028	13.08%
019	Calcium (%)	156	152	1.505	0.1529	1.509	0.0711	0.0072	4.71%	0.0335	3.76%
021	Cobalt (ppm)	24	23	1.745	0.5229	1.793	0.4849	0.1264	27.04%	0.0896	14.65%
022	Copper (ppm)	104	101	14.71	2.846	14.75	1.917	0.2384	12.99%	0.5161	10.67%
024	Iodine (ppm)	1	1	3.803							
025	Iron (ppm)	84	82	342.7	50.51	349.1	32.00	4.417	9.17%	9.328	6.63%
027	Magnesium (%)	118	114	0.1354	0.0346	0.1331	0.0083	0.0010	6.24%	0.0052	5.42%
028	Manganese (ppm)	112	108	49.24	5.299	49.73	3.535	0.4252	7.11%	1.086	8.89%
030	Nitrate (%)	1	1	0.0057							
031	Phosphorus (%)	153	149	0.9846	0.0740	0.9808	0.0495	0.0051	5.05%	0.0226	4.01%
032	Potassium (%)	121	118	0.7647	0.0821	0.7568	0.0424	0.0049	5.61%	0.0179	4.17%
033	Salt as chloride (%)	61	60	0.9102	0.1491	0.9327	0.0711	0.0115	7.62%	0.0267	4.04%
034	Selenium, Total (Se) (ppm)	23	21	0.7968	0.2588	0.7527	0.1727	0.0471	22.94%	0.0434	16.70%
035	Sodium (%)	117	116	0.2602	0.2110	0.2385	0.0136	0.0016	5.71%	0.0091	4.96%

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036	Sulfur (%)	49	<b>46</b>	0.3192	0.0382	<b>0.3155</b>	0.0227	0.0042	7.20%	0.0131	4.76%
037	Zinc (ppm)	107	<b>104</b>	189.0	20.95	<b>188.8</b>	19.45	2.384	10.30%	4.229	7.27%
038	Molybdenum (ppm)	19	<b>17</b>	0.7400	0.1275	<b>0.7333</b>	0.1298	0.0393	17.70%	0.0485	16.76%
040	Barium (ppm)	1	1	18.06							
041	Vanadium (ppm)	1	1	0.3229							
042	Chloride (%)	12	<b>11</b>	0.6859	0.2421	<b>0.6295</b>	0.1006	0.0379	15.98%	0.0170	4.29%
101	Choline Chloride (ppm)	1	1	5,900							
102	Niacin (ppm)	3	3	45.33	33.93	45.33	33.93	19.59	74.84%	1.667	9.01%
103	Pantothenic Acid (ppm)	2	2	34.65	10.18						
104	Riboflavin (ppm)	4	3	4.112	1.279	4.112	1.279	0.7384	31.11%	0.0633	12.93%
105	Thiamine (ppm)	3	3	11.44	4.275	11.44	4.275	2.468	37.37%	0.6833	11.09%
106	Vitamin A (KU / kg)	12	<b>11</b>	5.411	1.328	<b>5.334</b>	1.323	0.4986	24.80%	0.5165	
107	Vitamin B12 (ppb)	2	2	83.83	70.96						
108	Vitamin D3 (KU / kg)	7	<b>7</b>	0.9959	0.8420	<b>0.8024</b>	0.4388	0.2073	54.69%	0.2793	
109	Vitamin E (IU / kg)	13	<b>12</b>	296.4	93.93	<b>294.5</b>	102.2	36.87	34.70%	21.46	
111	Vitamin C, Phosphorylated (ppm)	1		4.400							
112	Pyridoxine (µg / g)	3	3	3.356	1.403	3.356	1.403	0.8098	41.80%	0.0650	13.33%
113	Folic Acid (ppm)	3	3	0.9478	0.2269	0.9478	0.2269	0.1310	23.94%	0.0657	16.13%
114	Biotin (ppm)	2	2	0.2378	0.0110						
115	Non Protein N (NPN) (%)	2	2	0.3530	0.3436						
120	Alanine (%)	31	<b>31</b>	1.694	0.1010	<b>1.698</b>	0.0777	0.0174	4.58%	0.0331	3.69%
121	Arginine (%)	31	<b>31</b>	1.511	0.1018	<b>1.517</b>	0.0909	0.0204	6.00%	0.0290	3.76%
122	Aspartic (%)	31	<b>30</b>	1.974	0.1546	<b>1.980</b>	0.0916	0.0209	4.62%	0.0306	3.61%
124	Cysteine/Cystine (%)	32	<b>32</b>	0.3398	0.1010	<b>0.3214</b>	0.0370	0.0082	11.52%	0.0140	4.74%
125	Glutamic (%)	31	<b>30</b>	3.300	0.2214	<b>3.300</b>	0.1616	0.0369	4.90%	0.0353	3.34%
126	Glycine (%)	31	<b>30</b>	1.693	0.2529	<b>1.736</b>	0.0878	0.0200	5.06%	0.0252	3.68%
127	Histidine (%)	31	<b>31</b>	0.6745	0.0574	<b>0.6764</b>	0.0455	0.0102	6.73%	0.0168	4.24%
128	Isoleucine (%)	31	<b>30</b>	0.8387	0.0630	<b>0.8396</b>	0.0624	0.0142	7.44%	0.0155	4.11%
129	Leucine (%)	31	<b>30</b>	2.042	0.0921	<b>2.045</b>	0.0928	0.0212	4.54%	0.0285	3.59%
130	L-Lysine (%)	35	<b>34</b>	1.297	0.1102	<b>1.306</b>	0.0978	0.0210	7.49%	0.0217	3.84%
131	Methionine (%)	32	<b>31</b>	0.4391	0.0435	<b>0.4366</b>	0.0340	0.0076	7.80%	0.0122	4.53%
132	Phenylalanine (%)	31	<b>30</b>	1.103	0.0595	<b>1.108</b>	0.0462	0.0105	4.17%	0.0157	3.94%
133	Proline (%)	30	<b>29</b>	1.488	0.1427	<b>1.483</b>	0.1136	0.0264	7.66%	0.0319	3.77%
134	Serine (%)	31	<b>31</b>	1.109	0.0813	<b>1.111</b>	0.0811	0.0182	7.30%	0.0199	3.94%
135	Threonine (%)	32	<b>32</b>	0.9508	0.0524	<b>0.9512</b>	0.0433	0.0096	4.55%	0.0151	4.03%
136	Tryptophan (%)	23	<b>22</b>	0.2799	0.1015	<b>0.2683</b>	0.0618	0.0165	23.03%	0.0061	4.88%
137	Tyrosine (%)	27	<b>27</b>	0.6820	0.0990	<b>0.6819</b>	0.1123	0.0270	16.46%	0.0187	4.24%
138	Valine (%)	31	<b>31</b>	1.203	0.0843	<b>1.209</b>	0.0788	0.0177	6.52%	0.0246	3.89%
139	Taurine (%)	8	<b>8</b>	0.1424	0.0891	<b>0.1257</b>	0.0474	0.0209	37.69%	0.0078	5.46%
160	Fructose (%)	1		0.0000							

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161	Galactose (%)	1		0.0000							
162	Glucose (%)	1		0.0000							
163	Lactose (%)	1		0.0000							
164	Maltose (%)	1		0.0000							
165	Sucrose (%)	1	1	2.420							
166	Raffinose (%)	1	1	1.960							
167	Stachyose (%)	1	1	0.8450							
400	Water Activity (Units)	10	10	0.5139	0.0464	0.5246	0.0182	0.0072	3.47%	0.0046	
516	Arsenic, Total (As) (ppm)	7	4	0.1104	0.0259	0.1104	0.0259	0.0162	23.44%	0.0056	22.00%
518	Cadmium (ppm)	10	4	0.0375	0.0032	0.0375	0.0032	0.0020	8.44%	0.0019	22.00%
520	Chromium, Total (Cr) (ppm)	11	11	2.881	0.6686	2.952	0.5755	0.2169	19.50%	0.1221	13.59%
526	Lead (ppm)	10	8	0.2125	0.1782	0.1586	0.0397	0.0175	25.01%	0.0233	21.11%
529	Mercury (ppb)	3	1								
539	Nickel (ppm)	8	7	1.985	0.2348	1.985	0.2662	0.1258	13.41%	0.0942	14.43%
702	Butyric Acid (4:0) (%)	2	2	0.0178	0.0237						
704	Caproic Acid (6:0) (%)	2	2	0.0048	0.0018						
706	Caprylic acid (8:0) (% (w/w))	3	1								
708	Capric acid (10:0) (% (w/w))	3	2	0.0055	0.0014	0.0055	0.0014	0.0010	25.64%	0.0010	8.75%
710	Lauric Acid (12:0) (% (w/w))	5	4	0.0084	0.0017	0.0084	0.0017	0.0009	20.57%	0.0008	8.21%
714	Myristic Acid (14:0) (% (w/w))	4	3	0.1117	0.0078	0.1117	0.0078	0.0045	7.00%	0.0025	5.56%
716	Palmitic Acid (16:0) (% (w/w))	4	3	2.893	0.3171	2.893	0.3171	0.1830	10.96%	0.0294	3.41%
718	Palmitoleic Acid (9c-16:1) (% (w/w))	5	4	0.5613	0.0491	0.5613	0.0491	0.0245	8.74%	0.0225	4.36%
720	Margaric acid (17:0) (% (w/w))	1	1	0.0470							
722	Stearic Acid (18:0) (% (w/w))	4	3	1.096	0.0955	1.096	0.0955	0.0552	8.72%	0.0135	3.95%
724	Oleic Acid (9c-18:1) (% (w/w))	4	2	4.128	0.1752	4.128	0.1752	0.1239	4.24%	0.0280	3.23%
726	Linoleic Acid (9c,12c-18:2) (% (w/w))	7	7	4.773	6.380	2.447	0.3388	0.1601	13.85%	0.0543	3.50%
728	alpha-Linolenic Acid (9c,12c,15c-18:3) (% (w/w))	5	4	0.1186	0.0118	0.1186	0.0118	0.0059	9.92%	0.0029	5.51%
730	Arachidic Acid (20:0) (% (w/w))	4	3	0.0252	0.0038	0.0252	0.0038	0.0022	14.87%	0.0020	6.96%
732	Gondoic Acid (11c-20:1) (% (w/w))	3	3	0.0392	0.0054	0.0392	0.0054	0.0031	13.79%	0.0029	6.51%
736	Arachidonic Acid (5c,8c,11c,14c-20:4) (% (w/w))	3	3	0.0488	0.0084	0.0488	0.0084	0.0049	17.26%	0.0065	6.30%
738	Mead Acid (11c,14c,17c-20:3) (% (w/w))	1		0.0000							
740	Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:5) (% (w/w))	5	2	0.0395	0.0502	0.0395	0.0502	0.0355	127.09%		6.50%
742	Behenic Acid (22:0) (% (w/w))	3	3	0.0527	0.0670	0.0527	0.0670	0.0387	127.24%	0.0070	6.23%
744	Erucic Acid (13c-22:1) (% (w/w))	4	1								
746	Docosapentaenoic Acid n-3 DPA (7c,10c,13c,16c,19c-22:5) (% (w/w))	5	3	0.0075	0.0009	0.0075	0.0009	0.0005	11.30%	0.0007	8.35%
748	Lignoceric Acid (24:0) (% (w/w))	3	3	0.0618	0.0764	0.0618	0.0764	0.0441	123.70%	0.0205	6.08%
750	Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c-22:6) (% (w/w))	5	1								
752	Nervonic Acid (24:1) isomers (% (w/w))	3	2	0.0078	0.0010	0.0078	0.0010	0.0007	12.13%	0.0007	8.30%
754	Total n-3 Polyunsaturated (Omega-3) Fatty Acids (% (w/w))	7	7	0.1274	0.0206	0.1274	0.0234	0.0110	18.34%	0.0073	5.45%
756	Total n-6 Polyunsaturated (Omega-6) Fatty Acids (% (w/w))	7	7	2.424	0.1867	2.424	0.2118	0.1000	8.74%	0.0466	3.50%

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758	Total Saturated Fatty Acids (% (w/w))	2	2	18.61	20.83						
762	Total Monounsaturated Fatty Acids (% (w/w))	1	1	40.40							
764	Total cis Monounsaturated Fatty Acids (% (w/w))	1	1	4.903							
766	Total Polyunsaturated Fatty Acids (% (w/w))	1	1	21.11							
768	Total cis Polyunsaturated Fatty Acids (% (w/w))	1	1	2.563							
770	Total Fat (equivalent to NLEA) (% (w/w))	1	1	12.03							
772	Total Fatty Acids (% (w/w))	2	2	11.42	0.1111						

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.