



**AAFCO**  
Proficiency Testing Program



**Animal Feed Scheme**  
**Dry Dog Food**  
**Test Material Code # 201923**

**Analyte Summary Report**

**# Labs Reporting: 217**  
**# Analytes Reported: 103**  
**Issue Date : 04/30/2019**

Analyte Group Code	Analyte and Method	Total # Tests Submitted	# Tests in Robust Calcs	Raw Mean	Raw SD	Assigned Value Robust Mean	AAFCO PT ffp - Robust sd	Uncertainty (U) - Robust	% RSD - Robust	Average Range (R-bar)	Horwitz %RSD
000	Urea (%)	2	2	0.0600	0.0566						
001	Loss on Drying (%)	90	88	7.319	0.3486	7.319	0.2325	0.0310	3.18%	0.1003	2.96%
002	Protein, Crude (%)	221	217	24.38	0.4748	24.39	0.3022	0.0256	1.24%	0.1467	2.02%
003	Fat, Crude (%)	132	130	6.111	0.9286	5.874	0.2447	0.0268	4.17%	0.1256	3.06%
004	Fiber, Crude (%)	134	132	3.586	0.6926	3.511	0.4446	0.0484	12.66%	0.1575	3.31%
005	Ash (%)	162	159	7.659	0.3282	7.655	0.1835	0.0182	2.40%	0.0703	2.94%
006	Total Sugars (%)	4	3	2.798	0.8315	2.798	0.8315	0.4800	29.71%	0.0033	3.43%
008	Fiber, Acid Detergent (%)	63	62	5.672	1.039	5.605	1.004	0.1594	17.91%	0.2284	3.09%
009	Fiber, Neutral Detergent (%)	62	60	17.54	1.938	17.45	1.957	0.3158	11.21%	0.3950	2.39%
010	Moisture (%)	24	22	7.548	0.7439	7.468	0.4730	0.1261	6.33%	0.1095	2.96%
011	Loss on Drying (%)	77	76	7.829	0.2668	7.834	0.2573	0.0369	3.28%	0.0927	2.93%
012	Starch (%)	42	40	32.49	1.977	32.70	1.131	0.2236	3.46%	0.3744	1.75%
013	Fat, Acid Pretreat (%)	86	84	9.021	0.7285	9.045	0.6459	0.0881	7.14%	0.1763	2.87%
015	Aluminum (mg / kg (ppm))	13	13	61.94	13.23	62.42	11.18	3.875	17.91%	2.036	8.59%
017	Boron (mg / kg (ppm))	17	16	5.661	0.8559	5.563	0.7111	0.2222	12.78%	0.2343	12.36%
019	Calcium (%)	162	158	1.666	0.1239	1.677	0.0852	0.0085	5.08%	0.0343	3.70%
021	Cobalt (mg / kg (ppm))	14	11	0.8995	0.4090	0.8995	0.4638	0.1748	51.55%	0.1094	16.25%
022	Copper (mg / kg (ppm))	99	95	16.20	3.107	16.18	1.719	0.2204	10.62%	0.7171	10.52%
025	Iron (mg / kg (ppm))	95	94	288.1	60.38	297.9	27.91	3.599	9.37%	11.05	6.79%
027	Magnesium (%)	115	114	0.2085	0.0278	0.2112	0.0124	0.0015	5.89%	0.0065	5.05%
028	Manganese (mg / kg (ppm))	100	98	55.27	7.033	55.91	4.152	0.5242	7.43%	1.278	8.73%
031	Phosphorus (%)	151	148	1.078	0.0654	1.082	0.0468	0.0048	4.32%	0.0211	3.95%
032	Potassium (%)	113	112	0.8154	0.0632	0.8188	0.0496	0.0059	6.06%	0.0187	4.12%
033	Salt as chloride (%)	61	60	0.7735	0.0919	0.7753	0.0771	0.0124	9.95%	0.0214	4.16%
034	Selenium (mg / kg (ppm))	24	23	0.6057	0.3893	0.4861	0.1268	0.0331	26.09%	0.0311	17.83%
035	Sodium (%)	119	117	0.3446	0.0275	0.3445	0.0186	0.0021	5.40%	0.0081	4.70%
036	Sulfur (%)	41	40	0.2515	0.0183	0.2502	0.0171	0.0034	6.85%	0.0078	4.93%
037	Zinc (mg / kg (ppm))	108	105	168.0	30.15	170.2	12.81	1.562	7.52%	4.435	7.38%
038	Molybdenum (mg / kg (ppm))	19	18	1.991	0.3514	1.982	0.3137	0.0924	15.83%	0.1896	14.43%
040	Barium (mg / kg (ppm))	3	3	8.730	0.4290	8.730	0.4290	0.2477	4.91%	0.0942	11.55%

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042	Chloride (%)	2	2	0.4785	0.0021						
101	Choline Chloride (mg / kg (ppm))	3	3	2,010	691.8	2,010	691.8	399.4	34.42%	69.67	5.09%
102	Niacin (mg / kg (ppm))	5	5	42.70	26.16	42.70	26.16	11.70	61.26%	1.604	9.09%
103	Pantothenic Acid (mg / kg (ppm))	5	4	16.73	1.179	16.73	1.179	0.5893	7.04%	0.6775	10.47%
104	Riboflavin (mg / kg (ppm))	6	6	5.973	2.720	5.973	3.084	1.574	51.64%	0.5267	12.22%
105	Thiamine (mg / kg (ppm))	6	6	7.000	1.995	6.995	2.252	1.149	32.19%	0.2133	11.94%
106	Vitamin A (KU / kg)	21	19	16.27	39.53	7.245	1.868	0.5357	25.78%	0.6131	
107	Vitamin B12 (µg / kg (ppb))	2	2	49.45	31.18						
108	Vitamin D3 (KU / kg)	9	7	1.262	0.9200	1.096	0.6169	0.2915	56.30%	0.1420	
109	Vitamin E (IU / kg)	17	16	47.33	11.40	49.68	6.566	2.052	13.22%	2.517	
112	Pyridoxine (µg / g)	5	4	3.171	2.047	3.171	2.047	1.024	64.56%	0.0775	
113	Folic Acid (mg / kg (ppm))	3	3	0.7057	0.3397	0.7057	0.3397	0.1961	48.14%	0.0493	16.86%
114	Biotin (mg / kg (ppm))	2	2	0.2893	0.0484						
118	Peroxide value (meq/kg)	1	1	9.660							
120	Alanine (%)	38	37	1.489	0.0723	1.490	0.0617	0.0127	4.14%	0.0201	3.77%
121	Arginine (%)	35	34	1.465	0.1327	1.489	0.0585	0.0125	3.93%	0.0297	3.77%
122	Aspartic (%)	37	36	1.930	0.1087	1.932	0.0955	0.0199	4.94%	0.0307	3.62%
124	Cysteine/Cystine (%)	35	34	0.3028	0.0539	0.3062	0.0310	0.0066	10.12%	0.0099	4.78%
125	Glutamic (%)	37	37	3.727	0.2380	3.716	0.1909	0.0392	5.14%	0.0683	3.28%
126	Glycine (%)	37	35	1.792	0.0932	1.796	0.0708	0.0150	3.94%	0.0299	3.66%
127	Histidine (%)	38	37	0.5785	0.0613	0.5780	0.0455	0.0093	7.87%	0.0099	4.34%
128	Isoleucine (%)	38	38	0.8384	0.0585	0.8428	0.0558	0.0113	6.62%	0.0203	4.10%
129	Leucine (%)	38	36	1.813	0.0639	1.816	0.0538	0.0112	2.96%	0.0245	3.66%
130	L-Lysine (%)	40	39	1.191	0.0883	1.194	0.0895	0.0179	7.50%	0.0231	3.89%
131	Methionine (%)	38	37	0.3920	0.0371	0.3892	0.0287	0.0059	7.38%	0.0080	4.61%
132	Phenylalanine (%)	38	37	0.9930	0.0560	0.9967	0.0538	0.0110	5.39%	0.0143	4.00%
133	Proline (%)	36	35	1.603	0.1344	1.587	0.0905	0.0191	5.70%	0.0357	3.73%
134	Serine (%)	36	35	1.010	0.0696	1.006	0.0579	0.0122	5.76%	0.0179	4.00%
135	Threonine (%)	38	37	0.8379	0.0567	0.8471	0.0334	0.0069	3.94%	0.0165	4.10%
136	Tryptophan (%)	23	22	0.2691	0.0756	0.2562	0.0221	0.0059	8.64%	0.0079	4.91%
137	Tyrosine (%)	30	29	0.6810	0.1082	0.6792	0.1187	0.0275	17.48%	0.0188	4.24%
138	Valine (%)	38	38	1.076	0.0880	1.083	0.0831	0.0168	7.67%	0.0260	3.95%
139	Taurine (%)	8	7	0.0741	0.0705	0.0621	0.0493	0.0233	79.37%	0.0010	6.08%
160	Fructose (%)	2	2	0.1338	0.0866						
162	Glucose (%)	2	1	0.0630							
163	Lactose (%)	2		0.0000							
164	Maltose (%)	1		0.1500							
165	Sucrose (%)	2	2	1.720	0.0141						
166	Raffinose (%)	2	2	0.4398	0.0004						
167	Stachyose (%)	2	2	0.5680	0.1032						

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400	Water Activity (Units)	10	10	0.4279	0.0583	0.4146	0.0255	0.0101	6.14%	0.0025	
412	Starch, Dietary (%)	1	1	31.17							
516	Arsenic, Total (mg / kg (ppm))	8	6	0.0726	0.0348	0.0680	0.0283	0.0144	41.58%	0.0043	22.00%
518	Cadmium (mg / kg (ppm))	11	8	0.0635	0.0073	0.0640	0.0073	0.0032	11.34%	0.0041	22.00%
520	Chromium (mg / kg (ppm))	9	9	1.964	0.7424	1.964	0.8419	0.3508	42.86%	0.2448	14.45%
526	Lead (mg / kg (ppm))	11	10	1.361	0.1787	1.357	0.1935	0.0765	14.26%	0.0862	15.28%
529	Mercury (µg / kg (ppb))	1	1	5.980							
539	Nickel (mg / kg (ppm))	4	4	2.000	0.2209	2.000	0.2209	0.1105	11.05%	0.0863	14.41%
710	Lauric Acid (12:0) (% (w/w))	4	2	0.0055	0.0000	0.0055	0.0000	0.0000	0.73%	0.0007	
714	Myristic Acid (14:0) (% (w/w))	4	3	0.0697	0.0131	0.0697	0.0131	0.0075	18.74%	0.0042	
716	Palmitic Acid (16:0) (% (w/w))	4	3	1.613	0.2364	1.613	0.2364	0.1365	14.66%	0.0475	
718	Palmitoleic Acid (9c-16:1) (% (w/w))	5	4	0.2538	0.0307	0.2538	0.0307	0.0154	12.11%	0.0047	
722	Stearic Acid (18:0) (% (w/w))	4	3	0.5448	0.0839	0.5448	0.0839	0.0484	15.40%	0.0166	
724	Oleic Acid (9c-18:1) (% (w/w))	4	3	2.399	0.2496	2.399	0.2496	0.1441	10.40%	0.0502	
726	Linoleic Acid (9c,12c-18:2) (% (w/w))	5	4	2.201	0.3009	2.201	0.3009	0.1505	13.67%	0.0491	
728	alpha-Linolenic Acid (9c,12c,15c-18:3) (% (w/w))	5	4	0.1256	0.0210	0.1256	0.0210	0.0105	16.74%	0.0041	
730	Arachidic Acid (20:0) (% (w/w))	3	2	0.1104	0.1338	0.1104	0.1338	0.0946	121.18%	0.0053	
732	Gondoic Acid (11c-20:1) (% (w/w))	3	3	0.2036	0.2957	0.2036	0.2957	0.1707	145.19%	0.0036	
736	Arachidonic Acid (5c,8c,11c,14c-20:4) (% (w/w))	2	2	0.1528	0.1588						
740	Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:5) (% (w/w))	4	3	0.0080	0.0017	0.0080	0.0017	0.0010	21.63%	0.0009	
742	Behenic Acid (22:0) (% (w/w))	3	2	0.0564	0.0687	0.0564	0.0687	0.0486	121.86%	0.0052	
744	Erucic Acid (13c-22:1) (% (w/w))	1		0.0000							
746	Docosapentaenoic Acid n-3 DPA (7c,10c,13c,16c,19c-22:5) (%)	2	2	0.0053	0.0010						
748	Lignoceric Acid (24:0) (% (w/w))	2	2	0.0546	0.0642						
750	Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c-22:6) (%)	3	2	0.0063	0.0010	0.0063	0.0010	0.0007	15.01%	0.0001	
752	Nervonic Acid (24:1) isomers (% (w/w))	1	1	0.0030							
754	Total n-3 Polyunsaturated (Omega-3) Fatty Acids (% (w/w))	3	3	0.1450	0.0250	0.1450	0.0250	0.0144	17.24%	0.0033	
756	Total n-6 Polyunsaturated (Omega-6) Fatty Acids (% (w/w))	3	3	2.237	0.3735	2.237	0.3735	0.2156	16.70%	0.0533	
758	Total Saturated Fatty Acids (% (w/w))	2	2	15.95	19.04						
762	Total Monounsaturated Fatty Acids (% (w/w))	2	2	20.72	25.10						
766	Total Polyunsaturated Fatty Acids (% (w/w))	2	2	16.15	19.47						
770	Total Fat (equivalent to NLEA) (% (w/w))	1	1	8.300							
772	Total Fatty Acids (% (w/w))	3	3	7.395	1.010	7.395	1.010	0.5828	13.65%	0.2031	

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.