



**AAFCO**  
Proficiency Testing Program



**Pet Food Ingredient Scheme**  
**Dried Whole Egg Pasteurized**  
**Test Material Code # 201944**

**Method Summary Report**  
(Precision Report Follows)

**# Labs Reporting: 53**  
**# Methods Reported: 272**  
**Issue Date : 12/31/2019**

Method Code	Analyte and Method	Total # Labs Submitting	# Labs in Robust Calcs	Raw Mean	Raw SD	Assigned Value Robust Mean	AAFCO ffp Robust SD	Uncertainty (U) Robust	% RSD - Robust	Average Range (R-bar)	Howitz %RSD
001.00	Loss on Drying, Vac 95°C 5 hr (%)	4	3	4.678	0.0378	4.678	0.0378	0.0218	0.81%	0.0130	3.17%
001.03	Loss on Drying, Low temp. methods (%)	2	2	4.710	0.3960						
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	11	11	4.645	0.3071	4.645	0.3483	0.1313	7.50%	0.0801	3.17%
001.99	Loss on Drying, Miscellaneous (%)	8	7	4.511	0.3033	4.511	0.3439	0.1625	7.62%	0.0629	3.19%
002.00	Protein, Crude, Crude (%)	1	1	49.44							
002.01	Protein, Crude, Auto Kjell-Foss (%)	5	5	50.14	0.4488	50.14	0.4488	0.2007	0.90%	0.1884	1.41%
002.04	Protein, Crude, Copper Catalyst (%)	2	2	50.91	0.0354						
002.05	Protein, Crude, Copper, Boric Acid (%)	2	2	49.96	1.153						
002.06	Protein, Crude, Combustion Nitrogen Analyzer (%)	40	38	50.82	0.5241	50.78	0.4065	0.0824	0.80%	0.1309	1.40%
002.08	Protein, Crude, Cu/Ti (%)	2	2	50.63	0.1167						
003.00	Fat, Crude, Diethyl Ether Ext., Direct (%)	2	2	29.18	2.818						
003.01	Fat, Crude, Diethyl Ether Ext (13th ed.), Indirect (%)	1	1	30.84							
003.09	Fat, Crude, Randall, Diethyl Ether Ext (%)	3	3	31.52	0.1601	31.52	0.1601	0.0925	0.51%	0.1841	1.78%
003.10	Fat, Crude, Randall, Pet Ether (%)	10	10	30.40	1.992	30.83	0.9894	0.3911	3.21%	0.5942	1.80%
003.12	Fat, Crude, Hexane Ext (%)	1	1	32.12							
003.13	Fat, Crude, Randall, Hexane Ext. (%)	2	2	31.59	0.7569						
003.14	Fat, Crude, Ankom (%)	10	9	31.56	3.015	31.56	3.419	1.424	10.83%	0.4159	1.78%
003.99	Fat, Crude, Miscellaneous (%)	2	2	35.73	0.4596						
004.00	Fiber, Crude, Asbestos Free (%)	3	2	0.1950	0.1909	0.1950	0.1909			0.1100	5.12%
004.07	Fiber, Crude, ANKOM (%)	6	3	0.3079	0.2626	0.3079	0.2626	0.1895	85.29%	0.0723	4.78%
005.00	Ash, 2h @ 600°C (%)	33	32	5.601	0.1366	5.610	0.0854	0.0189	1.52%	0.0677	3.09%
005.05	Ash, 3h @ 550°C (%)	5	3	5.648	0.0126	5.648	0.0126	0.0073	0.22%	0.0100	3.08%
005.99	Ash, Miscellaneous (%)	4	4	5.566	0.1058	5.566	0.1058	0.0529	1.90%	0.0543	3.09%
006.00	Total Sugars, As sucrose (%)	1	1	0.4808							
008.08	Fiber, Acid Detergent, Filter Bag - ANKOM (%)	3	3	1.562	1.671	1.562	1.671	0.9650	106.98%	0.0596	3.74%
009.09	Fiber, Neutral Detergent, Filter Bag - ANKOM (%)	2	2	0.6987	0.0524						
010.03	Moisture, Karl-Fischer (%)	1	1	4.185							
010.99	Moisture, Miscellaneous (%)	3	3	5.222	0.1052	5.222	0.1052	0.0607	2.01%	0.0300	3.12%
011.01	Loss on Drying, 135°C 2hr (%)	18	17	5.077	0.2230	5.077	0.2529	0.0767	4.98%	0.0761	3.13%
011.02	Loss on Drying, 130°C for 2 hours (%)	3	3	4.612	0.4335	4.612	0.4335	0.3065	9.40%	0.4300	3.18%

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012.00	Starch, Polarimetric (Ewers) (%)	1		1.000							
012.01	Starch, Enzymatic-Colorimetric Method (Megazyme) (%)	1		0.2000							
012.03	Starch, Enzymatic-Colorimetric Method, Miscellaneous (%)	1	1	0.4219							
012.04	Starch, Enzymatic-Enzyme Membrane Technology (YSI) (%)	1	1	0.6500							
013.00	Fat, Acid Pretreat, Acid hydrolysis (%)	8	8	35.28	1.404	35.28	1.592	0.7036	4.51%	0.9352	1.68%
013.02	Fat, Acid Pretreat, Mojonier, Bak Ext (%)	11	11	35.37	2.676	35.75	1.968	0.7416	5.50%	1.680	1.67%
013.10	Fat, Acid Pretreat, Soxtec-Acid Hydrolysis (%)	3	3	32.13	0.7355	32.13	0.7355	0.4246	2.29%	0.6233	1.76%
013.13	Fat, Acid Pretreat, Ankom- Acid Hydrolysis (%)	4	4	33.74	0.8120	33.74	0.8120	0.4060	2.41%	0.9816	1.72%
015.41	Aluminum, ICP, Dry ash (mg / kg (ppm))	3	3	202.3	77.63	202.3	77.63	44.82	38.37%	6.626	7.19%
015.43	Aluminum, ICP, Microwave (mg / kg (ppm))	1	1	554.0							
015.53	Aluminum, ICP-MS, Microwave (mg / kg (ppm))	1	1	577.0							
017.41	Boron, ICP, Dry ash (mg / kg (ppm))	1	1	1.361							
017.53	Boron, ICP-MS, Microwave (mg / kg (ppm))	1	1	5.625							
019.00	Calcium, Ox-Mn04 Vol. (%)	1	1	0.8300							
019.31	Calcium, AAS, Dry ash (%)	2	2	0.8461	0.0339						
019.41	Calcium, ICP, Dry ash (%)	7	7	0.7821	0.0288	0.7764	0.0178	0.0084	2.29%	0.0288	4.16%
019.42	Calcium, ICP, Open vessel (%)	4	4	0.7398	0.0909	0.7398	0.0909	0.0455	12.29%	0.0402	4.19%
019.43	Calcium, ICP, Microwave (%)	9	9	0.7454	0.1318	0.7784	0.0505	0.0211	6.49%	0.0118	4.15%
019.44	Calcium, ICP, Dry ash (%)	4	4	0.7286	0.0401	0.7286	0.0401	0.0200	5.50%	0.0438	4.19%
019.52	Calcium, ICP-MS, Open vessel (%)	1	1	0.7850							
019.53	Calcium, ICP-MS, Microwave (%)	2	2	0.7664	0.0002						
019.99	Calcium, Miscellaneous (%)	3	3	0.8407	0.1380	0.8407	0.1380	0.0797	16.42%	0.0180	4.11%
021.31	Cobalt, AAS, Dry ash (mg / kg (ppm))	1		0.7500							
021.41	Cobalt, ICP, Dry ash (mg / kg (ppm))	2	2	0.1089	0.1115						
021.53	Cobalt, ICP-MS, Microwave (mg / kg (ppm))	1	1	0.0169							
022.31	Copper, AAS, Dry ash (mg / kg (ppm))	1	1	6.475							
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	7	7	5.370	1.457	5.233	1.322	0.6247	25.26%	1.054	12.47%
022.42	Copper, ICP, Open vessel (mg / kg (ppm))	4	3	4.602	1.219	4.602	1.219	0.7037	26.48%	0.4127	12.71%
022.43	Copper, ICP, Microwave (mg / kg (ppm))	8	8	4.468	0.5340	4.444	0.5509	0.2435	12.39%	0.2141	12.78%
022.44	Copper, ICP, Dry ash (mg / kg (ppm))	1	1	4.050							
022.52	Copper, ICP-MS, Open vessel (mg / kg (ppm))	1	1	5.485							
022.53	Copper, ICP-MS, Microwave (mg / kg (ppm))	3	3	4.597	0.4625	4.597	0.4625	0.2670	10.06%	0.3000	12.72%
022.99	Copper, Miscellaneous (mg / kg (ppm))	2	2	3.605	0.1485						
024.53	Iodine, ICP-MS, Microwave (mg / kg (ppm))	1	1	3.300							
025.31	Iron, AAS, Dry ash (mg / kg (ppm))	2	2	79.09	15.36						
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	8	8	78.68	11.32	77.27	9.303	4.111	12.04%	4.919	8.32%
025.42	Iron, ICP, Open vessel (mg / kg (ppm))	4	4	82.65	14.61	82.65	14.61	7.304	17.67%	7.161	8.23%
025.43	Iron, ICP, Microwave (mg / kg (ppm))	9	9	97.26	37.78	85.73	5.391	2.246	6.29%	3.143	8.19%
025.52	Iron, ICP-MS, Open vessel (mg / kg (ppm))	1	1	86.50							
025.53	Iron, ICP-MS, Microwave (mg / kg (ppm))	2	2	80.06	3.458						

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025.99	Iron, Miscellaneous (mg / kg (ppm))	2	2	82.53	12.69						
027.31	Magnesium, AAS, Dry ash (%)	2	2	0.0680	0.0050						
027.41	Magnesium, ICP, Dry ash (%)	7	7	0.0657	0.0014	0.0657	0.0015	0.0007	2.34%	0.0044	6.02%
027.42	Magnesium, ICP, Open vessel (%)	4	4	0.0673	0.0065	0.0673	0.0065	0.0033	9.68%	0.0030	6.00%
027.43	Magnesium, ICP, Microwave (%)	9	9	0.0658	0.0122	0.0694	0.0023	0.0010	3.36%	0.0005	5.98%
027.44	Magnesium, ICP, Dry ash (%)	5	4	0.0659	0.0018	0.0659	0.0018	0.0009	2.76%	0.0020	6.02%
027.52	Magnesium, ICP-MS, Open vessel (%)	1	1	0.0900							
027.53	Magnesium, ICP-MS, Microwave (%)	2	2	0.0641	0.0014						
027.99	Magnesium, Miscellaneous (%)	2	2	0.0700	0.0000						
028.31	Manganese, AAS, Dry ash (mg / kg (ppm))	1	1	1.945							
028.41	Manganese, ICP, Dry ash (mg / kg (ppm))	7	6	1.829	0.2023	1.829	0.2294	0.1170	12.54%	0.0435	14.61%
028.42	Manganese, ICP, Open vessel (mg / kg (ppm))	2	1	1.305							
028.43	Manganese, ICP, Microwave (mg / kg (ppm))	8	7	2.048	1.081	1.786	0.5204	0.2459	29.14%	0.0749	14.66%
028.44	Manganese, ICP, Dry ash (mg / kg (ppm))	1	1	1.350							
028.52	Manganese, ICP-MS, Open vessel (mg / kg (ppm))	1	1	1.625							
028.53	Manganese, ICP-MS, Microwave (mg / kg (ppm))	1	1	1.395							
028.99	Manganese, Miscellaneous (mg / kg (ppm))	2	2	1.548	0.0672						
031.01	Phosphorus, Photometric (%)	5	5	0.6913	0.0475	0.6913	0.0475	0.0212	6.87%	0.0406	4.23%
031.03	Phosphorus, Autoanalyzer (%)	1	1	0.7370							
031.41	Phosphorus, ICP, Dry ash (%)	6	5	0.7184	0.0245	0.7184	0.0245	0.0137	3.41%	0.0020	4.20%
031.42	Phosphorus, ICP, Open vessel (%)	4	3	0.7195	0.0043	0.7195	0.0043	0.0025	0.60%	0.0207	4.20%
031.43	Phosphorus, ICP, Microwave (%)	9	9	0.7146	0.1304	0.7460	0.0444	0.0185	5.95%	0.0133	4.18%
031.44	Phosphorus, ICP, Dry ash (%)	3	3	0.7155	0.0345	0.7155	0.0345	0.0199	4.83%	0.0097	4.21%
031.53	Phosphorus, ICP-MS, Microwave (%)	2	2	0.7390	0.0325						
031.99	Phosphorus, Miscellaneous (%)	3	3	0.6863	0.0187	0.6863	0.0187	0.0108	2.73%	0.0167	4.23%
032.31	Potassium, AAS, Dry ash (%)	1	1	0.4450							
032.41	Potassium, ICP, Dry ash (%)	7	7	0.5075	0.0457	0.5022	0.0389	0.0184	7.74%	0.0173	4.44%
032.42	Potassium, ICP, Open vessel (%)	4	4	0.5221	0.0218	0.5221	0.0218	0.0109	4.17%	0.0201	4.41%
032.43	Potassium, ICP, Microwave (%)	9	9	0.5264	0.0841	0.5476	0.0309	0.0129	5.64%	0.0070	4.38%
032.44	Potassium, ICP, Dry ash (%)	5	5	0.4832	0.0299	0.4832	0.0299	0.0134	6.19%	0.0120	4.46%
032.53	Potassium, ICP-MS, Microwave (%)	3	3	0.5272	0.0067	0.5272	0.0067	0.0039	1.27%	0.0188	4.40%
032.99	Potassium, Miscellaneous (%)	3	3	0.4955	0.0488	0.4955	0.0488	0.0282	9.84%	0.0110	4.45%
033.00	Salt as chloride, Sol Cl (%)	1	1	1.130							
033.01	Salt as chloride, Poten Cl (%)	7	7	1.132	0.1608	1.168	0.0871	0.0412	7.46%	0.0157	3.91%
033.99	Salt, Miscellaneous (%)	1	1	1.585							
034.04	Selenium, AA, Hydride (mg / kg (ppm))	1	1	1.250							
034.41	Selenium, ICP, Dry ash (mg / kg (ppm))	1	1	1.300							
034.43	Selenium, ICP, Microwave (mg / kg (ppm))	3	2	1.559	0.6870	1.559	0.6870			0.0215	14.96%
034.52	Selenium, ICP-MS, Open vessel (mg / kg (ppm))	2	2	1.800	0.2828						
034.53	Selenium, ICP-MS, Microwave (mg / kg (ppm))	5	5	1.871	0.5526	1.871	0.5526	0.2471	29.53%	0.0380	14.56%

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035.31	Sodium, AAS, Dry ash (%)	1	1	0.6200							
035.41	Sodium, ICP, Dry ash (%)	10	10	0.5972	0.0357	0.5961	0.0312	0.0123	5.24%	0.0226	4.32%
035.42	Sodium, ICP, Open vessel (%)	3	3	0.6089	0.0202	0.6089	0.0202	0.0116	3.31%	0.0260	4.31%
035.43	Sodium, ICP, Microwave (%)	8	8	0.5831	0.1074	0.6131	0.0337	0.0149	5.50%	0.0088	4.31%
035.53	Sodium, ICP-MS, Microwave (%)	2	2	0.6171	0.0091						
035.99	Sodium, Miscellaneous (%)	1	1	0.5900							
036.42	Sulfur, ICP, Open vessel (%)	4	4	0.7932	0.1070	0.7932	0.1070	0.0535	13.49%	0.0293	4.14%
036.43	Sulfur, ICP, Microwave (%)	5	4	0.7194	0.2212	0.7194	0.2212	0.1106	30.75%	0.0076	4.20%
036.53	Sulfur, ICP-MS, Microwave (%)	2	2	0.4173	0.5659						
036.99	Sulfur, Miscellaneous (%)	1	1	0.7100							
037.31	Zinc, AAS, Dry ash (mg / kg (ppm))	2	2	54.01	10.25						
037.41	Zinc, ICP, Dry ash (mg / kg (ppm))	7	7	46.31	2.340	46.31	2.653	1.254	5.73%	2.810	8.98%
037.42	Zinc, ICP, Open vessel (mg / kg (ppm))	4	4	46.82	4.904	46.82	4.904	2.452	10.47%	3.565	8.97%
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	10	10	50.22	1.905	50.33	1.909	0.7546	3.79%	0.9946	8.87%
037.44	Zinc, ICP, Dry ash (mg / kg (ppm))	1	1	44.00							
037.52	Zinc, ICP-MS, Open vessel (mg / kg (ppm))	1	1	51.91							
037.53	Zinc, ICP-MS, Microwave (mg / kg (ppm))	2	2	56.82	4.695						
037.99	Zinc, Miscellaneous (mg / kg (ppm))	2	2	41.35	5.445						
038.41	Molybdenum, ICP, Dry ash (mg / kg (ppm))	2	2	0.1501	0.0355						
038.43	Molybdenum, ICP, Microwave (mg / kg (ppm))	1	1	0.5000							
038.53	Molybdenum, ICP-MS, Microwave (mg / kg (ppm))	3	3	0.2092	0.0213	0.2092	0.0213	0.0123	10.16%	0.0017	20.24%
040.53	Barium, ICP-MS, Microwave (mg / kg (ppm))	1	1	2.460							
041.53	Vanadium, ICP-MS, Microwave (mg / kg (ppm))	1	1	0.3915							
042.00	Chloride, Titrimetric (%)	1	1	0.7925							
101.02	Choline Chloride, LC (mg / kg (ppm))	1	1	11,350							
102.01	Niacin, Microbiological (mg / kg (ppm))	1	1	8.325							
103.01	Pantothenic Acid, Microbiological (mg / kg (ppm))	1	1	51.90							
104.00	Riboflavin, Fluorometric (mg / kg (ppm))	1	1	14.85							
105.01	Thiamine, Fluorometer (mg / kg (ppm))	1	1	1.840							
106.00	Vitamin A, Color (KU / kg)	1	1	1.810							
106.02	Vitamin A, LC (KU / kg)	4	3	1.732	0.3509	1.732	0.3509	0.2026	20.27%	0.0300	
107.00	Vitamin B12, Microbiological (µg / kg (ppb))	1	1	72.90							
108.02	Vitamin D3, LC (KU / kg)	2	1	8.425							
108.99	Vitamin D3, Miscellaneous (KU / kg)	3	1								
109.02	Vitamin E, LC (IU / kg)	3	3	221.2	289.1	221.2	289.1	204.4	130.69%	10.38	
109.99	Vitamin E, Miscellaneous (IU / kg)	2	1	40.25							
112.01	Pyridoxine, LC (µg / g)	1	1	3.470							
113.01	Folic Acid, Micro (mg / kg (ppm))	1	1	1.135							
114.01	Biotin, Microbiological (mg / kg (ppm))	1	1	1.115							
120.00	Alanine, Post-col Ninhydrin Der (%)	6	6	2.993	0.0716	2.993	0.0812	0.0415	2.71%	0.0641	3.39%

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120.02	Alanine, Post-col OPA Der (%)	1	1	3.310							
120.05	Alanine, Pre-col AQC Der (%)	2	2	2.773	0.1591						
120.99	Alanine, Miscellaneous (%)	1	1	2.985							
121.00	Arginine, Post-col Ninhydrin Der (%)	6	6	3.233	0.0902	3.233	0.1023	0.0522	3.17%	0.0421	3.35%
121.02	Arginine, Post-col OPA Der (%)	1	1	3.580							
121.05	Arginine, Pre-col AQC Der (%)	2	2	2.940	0.0141						
121.99	Arginine, Miscellaneous (%)	1	1	3.025							
122.00	Aspartic, Post-col Ninhydrin Der (%)	6	6	5.097	0.1932	5.097	0.2191	0.1118	4.30%	0.0825	3.13%
122.02	Aspartic, Post-col OPA Der (%)	1	1	6.055							
122.05	Aspartic, Pre-col AQC Der (%)	2	2	4.658	0.4490						
122.99	Aspartic, Miscellaneous (%)	1	1	5.030							
124.00	Cysteine/Cystine, PAO Post-col Ninhydry (%)	6	6	1.278	0.0947	1.278	0.1074	0.0548	8.40%	0.0463	3.85%
124.02	Cysteine/Cystine, PAO Post-col OPA Der (%)	1	1	1.430							
124.05	Cysteine/Cystine, PAO Pre-col AQC Der (%)	2	2	1.410	0.3465						
124.99	Cysteine/Cystine, Miscellaneous (%)	1	1	1.365							
125.00	Glutamic, Post-col Ninhydrin Der (%)	6	6	6.454	0.4816	6.454	0.5462	0.2787	8.46%	0.2049	3.02%
125.02	Glutamic, Post-col OPA Der (%)	1	1	7.855							
125.05	Glutamic, Pre-col AQC Der (%)	2	2	5.808	0.3217						
125.99	Glutamic, Miscellaneous (%)	1	1	6.340							
126.00	Glycine, Post-col Ninhydrin Der (%)	6	6	1.793	0.0458	1.793	0.0519	0.0265	2.90%	0.0490	3.66%
126.05	Glycine, Pre-col AQC Der (%)	2	2	1.718	0.0672						
126.99	Glycine, Miscellaneous (%)	1	1	1.705							
127.00	Histidine, Post-col Ninhydrin Der (%)	6	6	1.288	0.1448	1.288	0.1642	0.0838	12.75%	0.0368	3.85%
127.02	Histidine, Post-col OPA Der (%)	1	1	1.340							
127.05	Histidine, Pre-col AQC Der (%)	2	2	1.093	0.0530						
127.99	Histidine, Miscellaneous (%)	1	1	1.190							
128.00	Isoleucine, Post-col Ninhydrin Der (%)	6	6	2.724	0.0975	2.734	0.0873	0.0445	3.19%	0.0739	3.44%
128.02	Isoleucine, Post-col OPA Der (%)	1	1	2.935							
128.05	Isoleucine, Pre-col AQC Der (%)	2	2	2.403	0.2864						
128.99	Isoleucine, Miscellaneous (%)	1	1	2.680							
129.00	Leucine, Post-col Ninhydrin Der (%)	6	6	4.339	0.1095	4.339	0.1241	0.0634	2.86%	0.0689	3.21%
129.02	Leucine, Post-col OPA Der (%)	1	1	5.015							
129.05	Leucine, Pre-col AQC Der (%)	2	2	4.020	0.3111						
129.99	Leucine, Miscellaneous (%)	1	1	4.200							
130.00	L-Lysine, Post-col Ninhydrin Der (%)	6	6	3.865	0.0614	3.865	0.0696	0.0355	1.80%	0.1137	3.26%
130.02	L-Lysine, Post-col OPA Der (%)	1	1	4.305							
130.05	L-Lysine, Pre-col AQC Der (%)	2	2	3.350	0.3182						
130.99	L-Lysine, Miscellaneous (%)	1	1	3.595							
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	6	6	1.718	0.0903	1.718	0.1024	0.0523	5.96%	0.1044	3.69%
131.02	Methionine, PAO Post-col OPA Der (%)	1	1	1.910							

Method Code	Analyte and Method	Total # Labs Submitting	# Labs in Robust Calcs	Raw Mean	Raw SD	Assigned Value Robust Mean	AAFCO ffp Robust SD	Uncertainty (U) - Robust	% RSD - Robust	Average Range (R-bar)	Horwitz %RSD
131.05	Methionine, PAO Pre-col AQC Der (%)	2	2	1.953	0.1591						
131.99	Methionine, Miscellaneous (%)	1	1	1.510							
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	6	6	2.788	0.0815	2.778	0.0678	0.0346	2.44%	0.0491	3.43%
132.02	Phenylalanine, Post-col OPA Der (%)	1	1	3.130							
132.05	Phenylalanine, Pre-col AQC Der (%)	2	2	2.640	0.0212						
132.99	Phenylalanine, Miscellaneous (%)	1	1	2.655							
133.00	Proline, Post-col Ninhydrin Der (%)	6	6	1.794	0.1366	1.795	0.1527	0.0779	8.51%	0.0594	3.66%
133.05	Proline, Pre-col AQC Der (%)	2	2	1.768	0.1096						
133.99	Proline, Miscellaneous (%)	2	2	2.160	0.5869						
134.00	Serine, Post-col Ninhydrin Der (%)	6	6	3.687	0.2774	3.687	0.3145	0.1605	8.53%	0.1260	3.29%
134.02	Serine, Post-col OPA Der (%)	1	1	4.290							
134.05	Serine, Pre-col AQC Der (%)	2	2	3.490	0.0707						
134.99	Serine, Miscellaneous (%)	1	1	3.420							
135.00	Threonine, Post-col Ninhydrin Der (%)	6	6	2.397	0.0960	2.407	0.0842	0.0430	3.50%	0.0475	3.50%
135.02	Threonine, Post-col OPA Der (%)	1	1	2.810							
135.05	Threonine, Pre-col AQC Der (%)	2	2	2.330	0.2404						
135.99	Threonine, Miscellaneous (%)	1	1	1.950							
136.00	Tryptophan, Alka-Hydrol Post-col Ninhyd (%)	2	2	0.7705	0.0205						
136.01	Tryptophan, Alka-Hydrol Rev Phase LC UV (%)	1	1	0.7915							
136.02	Tryptophan, Alka-Hydrol Post-col OPA De (%)	1	1	0.6100							
136.05	Tryptophan, Pre-col AQC Der (%)	1	1	0.6000							
136.99	Tryptophan, Miscellaneous (%)	2	2	0.7625	0.0601						
137.00	Tyrosine, Post-col Ninhydrin Der (%)	5	5	2.097	0.1262	2.097	0.1262	0.0564	6.02%	0.0426	3.58%
137.02	Tyrosine, Post-col OPA Der (%)	1	1	2.345							
137.05	Tyrosine, Pre-col AQC Der (%)	2	2	1.993	0.0248						
137.99	Tyrosine, Miscellaneous (%)	1	1	1.990							
138.00	Valine, Post-col Ninhydrin Der (%)	6	6	3.261	0.2484	3.261	0.2817	0.1438	8.64%	0.0743	3.35%
138.02	Valine, Post-col OPA Der (%)	1	1	3.405							
138.05	Valine, Pre-col AQC Der (%)	2	2	3.025	0.4738						
138.99	Valine, Miscellaneous (%)	1	1	3.280							
139.00	Taurine, Post-col Ninhydrin Der (%)	3	3	0.0702	0.0503	0.0702	0.0503	0.0290	71.61%	0.0230	5.97%
160.99	Fructose, Miscellaneous (%)	1		0.1500							
162.99	Glucose, Miscellaneous (%)	1		0.1500							
163.99	Lactose, Miscellaneous (%)	1		0.1500							
164.99	Maltose, Miscellaneous (%)	1		0.1500							
165.99	Sucrose, Miscellaneous (%)	1		0.1500							
400.01	Water Activity, Aqualab chilled mirror (Units)	1	1	0.3842							
400.99	Water Activity, Miscellaneous (Units)	1	1	0.3640							
516.00	Arsenic, Total, AA, Hydride (mg / kg (ppm))	1	1	0.0155							
516.43	Arsenic, Total, ICP, Microwave (mg / kg (ppm))	2	1	0.7015							

Method Code	Analyte and Method	Total # Labs Submitting	# Labs in Robust Calcs	Raw Mean	Raw SD	Assigned Value Robust Mean	AAFCO ffp Robust SD	Uncertainty (U) - Robust	% RSD - Robust	Average Range (R-bar)	Horwitz %RSD
516.53	Arsenic, Total, ICP-MS, Microwave (mg / kg (ppm))	2	2	0.0203	0.0060						
518.41	Cadmium, ICP, Dry ash (mg / kg (ppm))	2	1	0.0052							
518.43	Cadmium, ICP, Microwave (mg / kg (ppm))	1		0.1600							
518.53	Cadmium, ICP-MS, Microwave (mg / kg (ppm))	1		0.0100							
520.41	Chromium, ICP, Dry ash (mg / kg (ppm))	2	1	0.5980							
520.43	Chromium, ICP, Microwave (mg / kg (ppm))	1	1	0.6400							
520.53	Chromium, ICP-MS, Microwave (mg / kg (ppm))	3	3	0.6135	0.1374	0.6135	0.1374	0.0793	22.40%	0.0223	17.22%
526.41	Lead, ICP, Dry ash (mg / kg (ppm))	2	1	0.0229							
526.53	Lead, ICP-MS, Microwave (mg / kg (ppm))	2	2	0.1058	0.0032						
539.41	Nickel, ICP, Dry ash (mg / kg (ppm))	2	1	0.1380							
539.53	Nickel, ICP-MS, Microwave (mg / kg (ppm))	2	2	0.1950	0.0566						
702.00	Butyric Acid (4:0), Miscellaneous GC (%)	1		0.1000							
704.00	Caproic Acid (6:0), Miscellaneous GC (%)	1		0.1000							
706.99	Caprylic acid (8:0), Miscellaneous (%) (w/w)	1		0.1000							
708.99	Capric acid (10:0), Miscellaneous (%) (w/w)	1		0.1000							
710.99	Lauric Acid (12:0), Miscellaneous (%) (w/w)	4	1								
714.99	Myristic Acid (14:0), Miscellaneous (%) (w/w)	5	4	0.1825	0.1245	0.1825	0.1245			0.0000	
716.99	Palmitic Acid (16:0), Miscellaneous (%) (w/w)	5	4	9.161	0.6033	9.161	0.6033	0.3483	6.58%	0.2975	
718.99	Palmitoleic Acid (9c-16:1), Miscellaneous (%) (w/w)	6	6	1.306	0.9382	0.9424	0.0642	0.0328	6.81%	0.0268	
720.99	Margaric acid (17:0), Miscellaneous (%) (w/w)	2	1	0.0350							
722.99	Stearic Acid (18:0), Miscellaneous (%) (w/w)	4	3	3.343	0.0306	3.343	0.0306	0.0176	0.91%	0.1333	
724.99	Oleic Acid (9c-18:1), Miscellaneous (%) (w/w)	5	3	12.91	0.9356	12.91	0.9356	0.5402	7.25%	0.1500	
726.99	Linoleic Acid (9c,12c-18:2), Miscellaneous (%) (w/w)	6	6	7.460	4.524	5.862	0.8079	0.4123	13.78%	0.1707	
728.99	alpha-Linolenic Acid (9c,12c,15c-18:3), Miscellaneous (%) (w/w)	6	4	0.1025	0.0260	0.1025	0.0260	0.0162	25.35%	0.0060	
730.99	Arachidic Acid (20:0), Miscellaneous (%) (w/w)	2	1	0.0100							
732.99	Gondoic Acid (11c-20:1), Miscellaneous (%) (w/w)	2	1	0.0450							
736.99	Arachidonic Acid (5c,8c,11c,14c-20:4), Miscellaneous (%) (w/w)	3	3	0.5828	0.1895	0.5828	0.1895	0.1094	32.52%	0.0357	
738.99	Mead Acid (11c,14c,17c-20:3), Miscellaneous (%) (w/w)	1	1	0.0300							
740.99	Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:5), Miscellaneous (%) (w/w)	2		0.0000							
742.99	Behenic Acid (22:0), Miscellaneous (%) (w/w)	2	1	0.0300							
744.99	Erucic Acid (13c-22:1), Miscellaneous (%) (w/w)	1	1	0.0300							
746.99	Docosapentaenoic Acid n-3 DPA (7c,10c,13c,16c,19c-22:5), Miscellaneous (%) (w/w)	3	2	0.0263	0.0053	0.0263	0.0053			0.0005	
748.99	Lignoceric Acid (24:0), Miscellaneous (%) (w/w)	1		0.1000							
750.99	Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c-22:6), Miscellaneous (%) (w/w)	5	4	0.1523	0.0456	0.1523	0.0456	0.0228	29.93%	0.0060	
752.99	Nervonic Acid (24:1) isomers, Miscellaneous (%) (w/w)	2	1	0.0250							
754.99	Total n-3 Polyunsaturated (Omega-3) Fatty Acids, Miscellaneous (%) (w/w)	6	5	0.3980	0.2869	0.3980	0.2869	0.1604	72.10%	0.0280	
756.99	Total n-6 Polyunsaturated (Omega-6) Fatty Acids, Miscellaneous (%) (w/w)	6	6	8.522	5.453	6.744	1.434	0.7317	21.26%	0.2032	
758.99	Total Saturated Fatty Acids, Miscellaneous (%) (w/w)	4	3	12.31	1.153	12.31	1.153	0.8152	9.36%	0.5533	
762.99	Total Monounsaturated Fatty Acids, Miscellaneous (%) (w/w)	3	3	23.26	16.20	23.26	16.20	9.355	69.66%	0.5600	
764.99	Total cis Monounsaturated Fatty Acids, Miscellaneous (%) (w/w)	1	1	15.00							

**Test Material Code # 201944****(Precision Report Follows)****Issue Date : 12/31/2019**

Method Code	Analyte and Method	Total # Labs Submitting	# Labs in Robust Calcs	Raw Mean	Raw SD	Assigned Value Robust Mean	AAFCO ffp Robust SD	Uncertainty (U) - Robust	% RSD - Robust	Average Range (R-bar)	Horwitz %RSD
766.99	Total Polyunsaturated Fatty Acids, Miscellaneous (% (w/w))	4	3	6.418	0.8211	6.418	0.8211	0.4741	12.79%	0.2967	
772.99	Total Fatty Acids, Miscellaneous (% (w/w))	1	1	34.57							

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.





**Pet Food Ingredient Scheme**  
**Dried Whole Egg Pasteurized**  
**Test Material Code # 201944**

**Method Precision Report**

**# Methods Reported: 15**  
**# Labs Reporting: 53**  
**Issue Date : 12/31/2019**

Method Code	Analyte and Method	Total # Labs Submitting	# Labs used in Precision Calcs	Precision Mean	Precision SD	Between Labs sL	Within Labs sr	Reproducibility sR	Between Labs %RSD	Within Labs %rdsd	Reproducibility %RSD	sR/sr
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	11	10	4.645	0.3071	0.3215	0.0534	0.3259	6.92%	1.15%	7.02%	6.103
002.06	Protein, Crude, Combustion Nitrogen Analyzer (%)	40	36	50.82	0.5241	0.4135	0.1127	0.4286	0.81%	0.22%	0.84%	3.802
003.10	Fat, Crude, Randall, Pet Ether (%)	10	9	30.40	1.992	0.6451	0.5182	0.8275	2.08%	1.67%	2.67%	1.597
003.14	Fat, Crude, Ankom (%)	10	9	31.56	3.015	3.003	0.3770	3.026	9.52%	1.19%	9.59%	8.028
005.00	Ash, 2h @ 600°C (%)	33	29	5.601	0.1366	0.0850	0.0586	0.1032	1.51%	1.04%	1.83%	1.760
011.01	Loss on Drying, 135°C 2hr (%)	18	16	5.077	0.2230	0.2200	0.0506	0.2257	4.34%	1.00%	4.46%	4.466
013.00	Fat, Acid Pretreat, Acid hydrolysis (%)	8	8	35.28	1.404	1.254	0.8926	1.539	3.55%	2.53%	4.36%	1.724
013.02	Fat, Acid Pretreat, Mojonnier, Bak Ext (%)	11	10	35.37	2.676	1.196	1.303	1.769	3.32%	3.62%	4.91%	1.358
019.43	Calcium, ICP, Microwave (%)	9	8	0.7454	0.1318	0.0357	0.0116	0.0376	4.54%	1.48%	4.77%	3.228
022.43	Copper, ICP, Microwave (mg / kg (ppm))	8	8	4.468	0.5340	0.5114	0.2172	0.5556	11.45%	4.86%	12.44%	2.558
025.43	Iron, ICP, Microwave (mg / kg (ppm))	9	8	97.26	37.78	3.581	2.237	4.222	4.23%	2.64%	4.98%	1.888
031.43	Phosphorus, ICP, Microwave (%)	9	8	0.7146	0.1304	0.0360	0.0132	0.0384	4.76%	1.75%	5.07%	2.901
032.43	Potassium, ICP, Microwave (%)	9	8	0.5264	0.0841	0.0224	0.0054	0.0231	4.05%	0.98%	4.17%	4.257
035.41	Sodium, ICP, Dry ash (%)	10	10	0.5972	0.0357	0.0330	0.0192	0.0381	5.52%	3.21%	6.39%	1.992
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	10	9	50.22	1.905	1.962	0.6432	2.064	3.91%	1.28%	4.11%	3.209

Notes: Precision Calculations provided for methods with 8 or more labs used in calculations.