



AAFCO
Proficiency Testing Program



Pet Food Scheme
Meat and Bone Meal

Method Summary Report
(Precision Report Follows)

Methods Reported: 263
Labs Reporting: 53
Issue Date : 10/31/2017

Test Material Code # 201743

Method Code	Analyte and Method	Total # Labs Submitting	# Labs in Robust Calcs	Raw Mean	Raw SD	Assigned Value - Robust Mean	AAFCO PT fp - Robust sd	Uncertainty (U) Robust	% RSD - Robust	Average Range (R-bar)	Horwitz %RSD
001.00	Loss on Drying, Vac 95°C 5 hr (%)	5	4	5.2479	0.65693	5.2479	0.65693	0.32847	12.52%	0.05075	3.12%
001.03	Loss on Drying, Low temp. methods (%)	1	1	5.1900							
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	8	8	5.1754	0.32391	5.1411	0.28279	0.12498	5.50%	0.10079	3.13%
001.08	Loss on Drying, 102°C 16 hr, in meat (%)	1	1	5.1800							
001.99	Loss on Drying, Miscellaneous (%)	3	3	4.8633	0.41956	4.8633	0.41956	0.29667	8.63%	0.10000	3.15%
002.01	Protein, Auto Kjel-Foss (%)	3	3	50.301	0.68793	50.301	0.68793	0.39718	1.37%	0.28767	1.41%
002.02	Protein, Semiauto Autoanalyzer (%)	1	1	50.070							
002.04	Protein, Copper Catalyst (%)	2	2	50.693	0.18738						
002.05	Protein, Copper, Boric Acid (%)	4	3	50.640	0.25239	50.640	0.25239	0.14572	0.50%	0.05333	1.41%
002.06	Protein, Combustion Nitrogen Analyzer (%)	43	42	50.869	0.74093	50.842	0.69062	0.13321	1.36%	0.60230	1.40%
002.08	Protein, Cu/Ti (%)	1	1	50.535							
002.11	Protein, NIR (%)	1	1	50.660							
002.99	Protein, Miscellaneous (%)	1	1	52.400							
003.00	Fat, Eth Ext., Direct (%)	3	3	9.2353	0.31857	9.2353	0.31857	0.18393	3.45%	0.15450	2.86%
003.01	Fat, Ind Eth Ext (13th ed.), Indirect (%)	2	2	9.5825	0.63993						
003.06	Fat, Pet Ether (%)	2	2	9.2525	0.20860						
003.09	Fat, Soxtec, Eth Ext (%)	2	2	9.3438	0.01591						
003.10	Fat, Soxtec, Pet Ether (%)	9	9	9.4256	0.31827	9.4165	0.20069	0.08362	2.13%	0.12776	2.85%
003.11	Fat, NIR (%)	1	1	8.8600							
003.12	Fat, Hexane Ext (%)	1	1	9.2050							
003.13	Fat, Soxtec, Hexane Ext. (%)	1	1	9.2450							
003.14	Fat, Ankom (%)	7	7	9.2953	0.38034	9.3071	0.40403	0.19089	4.34%	0.19220	2.86%
003.99	Fat, Miscellaneous (%)	4	4	9.3988	1.7824	9.3988	1.7824	0.89120	18.96%	0.07750	2.85%
004.00	Fiber, Crude, Asbestos Free (%)	10	10	1.7332	0.59265	1.6253	0.30360	0.12001	18.68%	0.15726	3.72%
004.03	Fiber, Fritted Glass (%)	2	2	1.6625	0.13081						
004.06	Fiber, Fibertec (%)	3	3	1.6316	0.24567	1.6316	0.24567	0.14184	15.06%	0.17997	3.72%
004.07	Fiber, ANKOM (%)	14	14	2.5318	1.2476	2.3076	0.76792	0.25654	33.28%	0.23081	3.53%
005.00	Ash, 2h @ 600°C (%)	29	28	32.327	0.36793	32.324	0.41175	0.09727	1.27%	0.33843	1.76%
005.05	Ash, 3h @ 550°C (%)	6	5	32.605	0.29701	32.605	0.29701	0.16603	0.91%	0.09800	1.75%
005.11	Ash, NIR (%)	1	1	29.060							

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005.99	Ash, Miscellaneous (%)	7	7	32.689	0.45463	32.689	0.51555	0.24357	1.58%	0.48300	1.75%
006.99	Total sugars, Miscellaneous (%)	2		0.00000							
008.02	Fiber, Acid Detergent (%)	3	3	3.7493	1.2030	3.7493	1.2030	0.69455	32.09%	0.09253	3.28%
008.08	Fiber, Acid Detergent, ANKOM (%)	5	5	4.5767	1.5061	4.5767	1.5061	0.67355	32.91%	0.13164	3.18%
009.04	Fiber, Neutral Det-No ENZ Pretreat (%)	1	1	34.400							
009.07	Fiber, Neutral Det-ENZ Pretreat (%)	1	1	30.569							
009.09	Fiber, Neutral Detergent, ANKOM (%)	5	5	34.053	6.7294	34.053	6.7294	3.0095	19.76%	0.97040	1.71%
010.03	Moisture, Karl-Fischer (%)	1	1	6.3550							
010.11	Moisture, NIR (%)	1	1	5.6200							
010.99	Moisture, Miscellaneous (%)	7	7	5.2145	0.70128	5.1436	0.62309	0.29438	12.11%	0.08626	3.13%
011.01	Loss on Drying, 135°C 2hr (%)	22	22	5.7375	0.29788	5.7566	0.27868	0.07427	4.84%	0.17091	3.07%
011.02	Loss on Drying, 130°C for 2 hours (%)	3	3	6.1083	0.23143	6.1083	0.23143	0.13362	3.79%	0.06333	3.05%
011.03	Loss on drying, 130°C, 1 hour, Flour (%)	1	1	5.8200							
011.99	Loss on Drying, High Temp. Methods Miscellaneo	1	1	5.7000							
012.01	Starch, Megazyme (%)	3	3	0.45585	0.03448	0.45585	0.03448	0.01991	7.56%	0.05077	4.50%
012.04	Starch, YSI Analyzer (%)	1	1	0.70000							
013.00	Fat, Acid hydrolysis (%)	10	10	10.316	0.39437	10.273	0.29602	0.11701	2.88%	0.38400	2.82%
013.02	Fat, Mojonnier, Bak Ext (%)	14	14	10.499	0.35832	10.544	0.21399	0.07149	2.03%	0.18681	2.81%
013.10	Fat, Soxtec-Acid Hydrolysis (%)	4	4	9.8613	0.32048	9.8613	0.32048	0.16024	3.25%	0.22250	2.83%
013.13	Fat, Ankom- Acid Hydrolysis (%)	3	3	9.6493	1.7341	9.6493	1.7341	1.0012	17.97%	0.61960	2.84%
015.43	Aluminum, ICP, Microwave (mg / kg (ppm))	1	1	74.500							
017.43	Boron, ICP, Microwave (mg / kg (ppm))	1	1	1.0000							
019.00	Calcium, Ox-Mn04 Vol. (%)	1	1	12.166							
019.31	Calcium, AAS, Dry ash (%)	3	3	12.533	1.0645	12.533	1.0645	0.61459	8.49%	0.58000	2.73%
019.41	Calcium, ICP, Dry ash (%)	8	8	11.857	0.48669	11.857	0.55049	0.24329	4.64%	0.47410	2.76%
019.42	Calcium, ICP, Open vessel (%)	2	2	11.920	1.5981						
019.43	Calcium, ICP, Microwave (%)	10	10	11.298	0.71190	11.371	0.51645	0.20414	4.54%	0.37491	2.77%
019.44	Calcium, ICP, Dry ash (%)	5	5	11.063	1.0300	11.063	1.0300	0.46063	9.31%	0.19120	2.79%
019.52	Calcium, ICP-MS, Open vessel (%)	1	1	12.665							
019.53	Calcium, ICP-MS, Microwave (%)	1	1	12.556							
019.99	Calcium, Miscellaneous (%)	2	2	11.180	0.20506						
021.31	Cobalt, AAS, Dry ash (mg / kg (ppm))	1	1	1.6500							
021.43	Cobalt, ICP, Microwave (mg / kg (ppm))	2	2	0.23378	0.00880						
022.31	Copper, AAS, Dry ash (mg / kg (ppm))	1	1	13.720							
022.32	Copper, AAS, Open vessel (mg / kg (ppm))	1	1	10.200							
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	8	8	9.5491	2.0065	9.5491	2.2754	1.0056	23.83%	0.67941	11.39%
022.42	Copper, ICP, Open vessel (mg / kg (ppm))	2	2	12.985	6.6677						
022.43	Copper, ICP, Microwave (mg / kg (ppm))	8	7	9.1189	1.5933	9.2223	1.5625	0.73823	16.94%	0.23326	11.45%

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022.44	Copper, ICP, Dry ash (mg / kg (ppm))	3	3	10.200	0.81462	10.200	0.81462	0.47032	7.99%	0.28533	11.28%
022.53	Copper, ICP-MS, Microwave (mg / kg (ppm))	2	2	8.9450	0.00707						
022.99	Copper, Miscellaneous (mg / kg (ppm))	1	1	9.5000							
024.99	Iodine, Miscellaneous (mg / kg (ppm))	1	1	1.6900							
025.31	Iron, AAS, Dry ash (mg / kg (ppm))	1	1	186.40							
025.32	Iron, AAS, Open vessel (mg / kg (ppm))	1	1	209.35							
025.33	Iron, AAS, Microwave (mg / kg (ppm))	1	1	185.95							
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	11	11	184.75	18.835	183.63	18.698	7.0471	10.18%	20.401	7.30%
025.42	Iron, ICP, Open vessel (mg / kg (ppm))	2	2	217.53	21.178						
025.43	Iron, ICP, Microwave (mg / kg (ppm))	9	8	174.40	31.692	176.63	30.631	13.537	17.34%	6.2805	7.34%
025.53	Iron, ICP-MS, Microwave (mg / kg (ppm))	1	1	180.40							
025.99	Iron, Miscellaneous (mg / kg (ppm))	1	1	189.00							
027.31	Magnesium, AAS, Dry ash (%)	2	2	0.26150	0.03748						
027.41	Magnesium, ICP, Dry ash (%)	8	8	0.23402	0.01673	0.23402	0.01897	0.00838	8.11%	0.01296	4.98%
027.42	Magnesium, ICP, Open vessel (%)	2	2	0.23308	0.01616						
027.43	Magnesium, ICP, Microwave (%)	9	9	0.22931	0.02234	0.22958	0.02472	0.01030	10.77%	0.00414	4.99%
027.44	Magnesium, ICP, Dry ash (%)	5	3	0.22567	0.01909	0.22567	0.01909	0.01102	8.46%	0.00600	5.00%
027.53	Magnesium, ICP-MS, Microwave (%)	1	1	0.25075							
027.99	Magnesium, Miscellaneous (%)	1	1	0.23000							
028.31	Manganese, AAS, Dry ash (mg / kg (ppm))	1	1	19.185							
028.32	Manganese, AAS, Open vessel (mg / kg (ppm))	1	1	17.475							
028.33	Manganese, AAS, Microwave (mg / kg (ppm))	1	1	14.540							
028.41	Manganese, ICP, Dry ash (mg / kg (ppm))	8	7	14.391	1.3227	14.443	1.3792	0.65159	9.55%	0.94360	10.70%
028.42	Manganese, ICP, Open vessel (mg / kg (ppm))	2	2	15.183	4.1260						
028.43	Manganese, ICP, Microwave (mg / kg (ppm))	8	7	15.833	2.3185	15.439	0.99162	0.46850	6.42%	2.0113	10.60%
028.44	Manganese, ICP, Dry ash (mg / kg (ppm))	4	4	13.960	1.2819	13.960	1.2819	0.64095	9.18%	0.43700	10.76%
028.53	Manganese, ICP-MS, Microwave (mg / kg (ppm))	2	2	15.408	1.0501						
028.99	Manganese, Miscellaneous (mg / kg (ppm))	1	1	15.500							
031.01	Phosphorus, Photometric (%)	6	6	5.6242	0.14108	5.6242	0.15998	0.08164	2.84%	0.14470	3.08%
031.03	Phosphorus, Autoanalyzer (%)	2	2	5.6113	0.00884						
031.41	Phosphorus, ICP, Dry ash (%)	7	6	5.4117	0.77073	5.5193	0.60929	0.31093	11.04%	0.09698	3.09%
031.42	Phosphorus, ICP, Open vessel (%)	3	3	5.4865	0.30541	5.4865	0.30541	0.17633	5.57%	0.48233	3.10%
031.43	Phosphorus, ICP, Microwave (%)	9	9	5.4965	0.40804	5.5248	0.33064	0.13777	5.98%	0.16673	3.09%
031.44	Phosphorus, ICP, Dry ash (%)	5	4	5.1851	0.45598	5.1851	0.45598	0.22799	8.79%	0.19325	3.12%
031.53	Phosphorus, ICP-MS, Microwave (%)	1	1	5.3000							
031.99	Phosphorus, Miscellaneous (%)	2	2	5.4650	0.09899						
032.02	Potassium, Flame Emission (%)	1	1	0.27000							
032.31	Potassium, AAS, Dry ash (%)	2	2	0.29125	0.01945						

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032.41	Potassium, ICP, Dry ash (%)	8	8	0.29528	0.01776	0.29737	0.01267	0.00560	4.26%	0.01624	4.80%
032.42	Potassium, ICP, Open vessel (%)	3	3	0.31842	0.05736	0.31842	0.05736	0.04056	18.01%	0.06903	4.75%
032.43	Potassium, ICP, Microwave (%)	10	10	0.30473	0.02406	0.30436	0.02648	0.01047	8.70%	0.01753	4.78%
032.44	Potassium, ICP, Dry ash (%)	5	4	0.30600	0.03533	0.30600	0.03533	0.01767	11.55%	0.00350	4.78%
032.53	Potassium, ICP-MS, Microwave (%)	1	1	0.27140							
032.99	Potassium, Miscellaneous (%)	1	1	0.26500							
033.00	Salt as chloride, Sol Cl (%)	2	2	0.36815	0.06597						
033.01	Salt as chloride, Poten Cl (%)	6	6	0.42063	0.02636	0.42063	0.02989	0.01525	7.11%	0.01975	4.56%
034.04	Selenium, AA, Hydride (mg / kg (ppm))	2	2	0.47000	0.03536						
034.43	Selenium, ICP, Microwave (mg / kg (ppm))	2	2	0.46543	0.18325						
034.53	Selenium, ICP-MS, Microwave (mg / kg (ppm))	1	1	0.55000							
034.99	Selenium, Miscellaneous (mg / kg (ppm))	1	1	0.52000							
035.05	Sodium, Flame Emission (%)	1	1	0.53500							
035.31	Sodium, AAS, Dry ash (%)	2	2	0.52000	0.05303						
035.41	Sodium, ICP, Dry ash (%)	11	11	0.51050	0.06836	0.52290	0.04095	0.01543	7.83%	0.01425	4.41%
035.42	Sodium, ICP, Open vessel (%)	3	3	0.54327	0.05218	0.54327	0.05218	0.03013	9.60%	0.01647	4.38%
035.43	Sodium, ICP, Microwave (%)	10	10	0.54482	0.07370	0.52913	0.03495	0.01381	6.60%	0.01361	4.40%
035.53	Sodium, ICP-MS, Microwave (%)	1	1	0.51875							
035.99	Sodium, Miscellaneous (%)	1	1	0.50000							
036.42	Sulfur, ICP, Open vessel (%)	3	3	0.35710	0.01643	0.35710	0.01643	0.00949	4.60%	0.01127	4.67%
036.43	Sulfur, ICP, Microwave (%)	6	6	0.43638	0.09674	0.43151	0.09815	0.05009	22.75%	0.02913	4.54%
036.99	Sulfur, Miscellaneous (%)	1	1	0.50500							
037.31	Zinc, AAS, Dry ash (mg / kg (ppm))	1	1	83.840							
037.32	Zinc, AAS, Open vessel (mg / kg (ppm))	1	1	94.505							
037.33	Zinc, AAS, Microwave (mg / kg (ppm))	1	1	85.935							
037.41	Zinc, ICP, Dry ash (mg / kg (ppm))	8	8	97.959	16.943	97.959	19.213	8.4911	19.61%	8.5311	8.02%
037.42	Zinc, ICP, Open vessel (mg / kg (ppm))	2	2	478.59	587.49						
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	9	9	91.431	4.2113	91.431	4.7756	1.9898	5.22%	3.2559	8.11%
037.44	Zinc, ICP, Dry ash (mg / kg (ppm))	3	3	89.360	12.998	89.360	12.998	7.5044	14.55%	1.8387	8.14%
037.53	Zinc, ICP-MS, Microwave (mg / kg (ppm))	1	1	84.150							
037.99	Zinc, Miscellaneous (mg / kg (ppm))	1	1	95.500							
038.43	Molybdenum, ICP, Microwave (mg / kg (ppm))	2	2	0.16575	0.02227						
038.53	Molybdenum, ICP-MS, Microwave (mg / kg (ppm))	1	1	0.23500							
042.99	Chloride, Miscellaneous (%)	1	1	0.26400							
101.01	Choline Chloride, Chem (mg / kg (ppm))	1	1	202.00							
104.03	Riboflavin, LC (mg / kg (ppm))	1	1	4.3500							
105.00	Thiamine, LC (mg / kg (ppm))	1	1	0.35000							
106.02	Vitamin A, LC (KU / kg)	2		0.00000							

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108.99	Vitamin D3, Miscellaneous (KU / kg)	2		0.00000							
109.02	Vitamin E, LC (IU/kg)	1		0.00000							
120.00	Alanine, Post-col Ninhydrin Der (%)	4	4	4.0602	0.20870	4.0602	0.20870	0.10435	5.14%	0.06935	3.24%
120.05	Alanine, Pre-col AQC Der (%)	1	1	3.4850							
120.99	Alanine, Miscellaneous (%)	1	1	3.8230							
121.00	Arginine, Post-col Ninhydrin Der (%)	4	4	3.7734	0.18804	3.7734	0.18804	0.09402	4.98%	0.03030	3.28%
121.02	Arginine, Post-col OPA Der (%)	1	1	3.5700							
121.05	Arginine, Pre-col AQC Der (%)	1	1	3.5350							
121.99	Arginine, Miscellaneous (%)	1	1	3.4115							
122.00	Aspartic, Post-col Ninhydrin Der (%)	4	4	3.6431	0.14453	3.6431	0.14453	0.07227	3.97%	0.05178	3.29%
122.02	Aspartic, Post-col OPA Der (%)	1	1	3.5200							
122.05	Aspartic, Pre-col AQC Der (%)	1	1	3.2650							
122.99	Aspartic, Miscellaneous (%)	1	1	3.3525							
124.00	Cysteine/Cystine, PAO Post-col Ninhydry (%)	4	4	0.40900	0.04848	0.40900	0.04848	0.02424	11.85%	0.00805	4.58%
124.02	Cysteine/Cystine, PAO Post-col OPA Der (%)	1	1	0.41500							
124.05	Cysteine/Cystine, PAO Pre-col AQC Der (%)	1	1	0.40500							
124.99	Cysteine/Cystine, Miscellaneous (%)	1	1	0.31500							
125.00	Glutamic, Post-col Ninhydrin Der (%)	4	4	5.6935	0.44928	5.6935	0.44928	0.22464	7.89%	0.07870	3.08%
125.02	Glutamic, Post-col OPA Der (%)	1	1	6.0250							
125.05	Glutamic, Pre-col AQC Der (%)	1	1	5.5600							
125.99	Glutamic, Miscellaneous (%)	1	1	6.2345							
126.00	Glycine, Post-col Ninhydrin Der (%)	4	4	7.9606	0.29175	7.9606	0.29175	0.14588	3.66%	0.11850	2.93%
126.02	Glycine, Post-col OPA Der (%)	1	1	7.9600							
126.05	Glycine, Pre-col AQC Der (%)	1	1	7.0200							
126.99	Glycine, Miscellaneous (%)	1	1	7.5975							
127.00	Histidine, Post-col Ninhydrin Der (%)	4	4	0.83023	0.10341	0.83023	0.10341	0.05171	12.46%	0.01490	4.11%
127.02	Histidine, Post-col OPA Der (%)	1	1	0.86000							
127.05	Histidine, Pre-col AQC Der (%)	1	1	0.68000							
127.99	Histidine, Miscellaneous (%)	1	1	0.78350							
128.00	Isoleucine, Post-col Ninhydrin Der (%)	4	4	1.2960	0.17375	1.2960	0.17375	0.08688	13.41%	0.03303	3.85%
128.02	Isoleucine, Post-col OPA Der (%)	1	1	1.1850							
128.05	Isoleucine, Pre-col AQC Der (%)	1	1	1.1450							
128.99	Isoleucine, Miscellaneous (%)	1	1	1.2675							
129.00	Leucine, Post-col Ninhydrin Der (%)	4	4	2.7872	0.16994	2.7872	0.16994	0.08497	6.10%	0.06895	3.43%
129.02	Leucine, Post-col OPA Der (%)	1	1	2.6950							
129.05	Leucine, Pre-col AQC Der (%)	1	1	2.5300							
129.99	Leucine, Miscellaneous (%)	1	1	2.6675							
130.00	L-Lysine, Post-col Ninhydrin Der (%)	4	4	2.4934	0.14348	2.4934	0.14348	0.07174	5.75%	0.03768	3.49%

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130.02	L-Lysine, Post-col OPA Der (%)	1	1	2.1850							
130.05	L-Lysine, Pre-col AQC Der (%)	1	1	2.3050							
130.99	L-Lysine, Miscellaneous (%)	1	1	2.3305							
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	4	4	0.68320	0.03062	0.68320	0.03062	0.01531	4.48%	0.01935	4.24%
131.02	Methionine, PAO Post-col OPA Der (%)	1	1	0.66500							
131.05	Methionine, PAO Pre-col AQC Der (%)	1	1	0.77000							
131.99	Methionine, Miscellaneous (%)	1	1	0.60050							
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	4	4	1.5998	0.11160	1.5998	0.11160	0.05580	6.98%	0.02768	3.73%
132.02	Phenylalanine, Post-col OPA Der (%)	1	1	1.5550							
132.05	Phenylalanine, Pre-col AQC Der (%)	1	1	1.4350							
132.99	Phenylalanine, Miscellaneous (%)	1	1	1.7800							
133.00	Proline, Post-col Ninhydrin Der (%)	4	4	4.7315	0.13930	4.7315	0.13930	0.06965	2.94%	0.16650	3.17%
133.05	Proline, Pre-col AQC Der (%)	1	1	4.3650							
133.99	Proline, Miscellaneous (%)	2	2	4.8480	0.03960						
134.00	Serine, Post-col Ninhydrin Der (%)	4	4	1.9681	0.09299	1.9681	0.09299	0.04650	4.72%	0.06268	3.61%
134.02	Serine, Post-col OPA Der (%)	1	1	1.8950							
134.05	Serine, Pre-col AQC Der (%)	1	1	1.9200							
134.99	Serine, Miscellaneous (%)	1	1	1.8300							
135.00	Threonine, Post-col Ninhydrin Der (%)	4	4	1.5500	0.05578	1.5500	0.05578	0.02789	3.60%	0.04368	3.74%
135.02	Threonine, Post-col OPA Der (%)	1	1	1.4800							
135.05	Threonine, Pre-col AQC Der (%)	2	2	1.5045	0.05586						
135.99	Threonine, Miscellaneous (%)	1	1	1.4295							
136.00	Tryptophan, Alka-Hydrol Post-col Ninhyd (%)	3	3	0.22572	0.08314	0.22572	0.08314	0.05879	36.83%	0.00743	5.00%
136.03	Tryptophan, Alka-Hydrol + IS RP LC FI (%)	1	1	0.26560							
136.99	Tryptophan, Miscellaneous (%)	2	2	0.30025	0.04844						
137.00	Tyrosine, Post-col Ninhydrin Der (%)	4	4	1.0387	0.15316	1.0387	0.15316	0.07658	14.75%	0.05440	3.98%
137.02	Tyrosine, Post-col OPA Der (%)	1	1	0.95000							
137.05	Tyrosine, Pre-col AQC Der (%)	1	1	1.1050							
137.99	Tyrosine, Miscellaneous (%)	1	1	0.86600							
138.00	Valine, Post-col Ninhydrin Der (%)	4	4	1.9303	0.22909	1.9303	0.22909	0.11455	11.87%	0.06500	3.62%
138.02	Valine, Post-col OPA Der (%)	1	1	1.6300							
138.05	Valine, Pre-col AQC Der (%)	1	1	1.8200							
138.99	Valine, Miscellaneous (%)	1	1	1.9615							
139.00	Taurine, Post-col Ninhydrin Der (%)	4	3	0.04537	0.00803	0.04537	0.00803	0.00568	17.70%	0.00033	6.37%
139.05	Taurine, Pre-col AQC Der (%)	1	1	0.03000							
139.99	Taurine, Miscellaneous (%)	1	1	0.17500							
160.99	Fructose, Miscellaneous (%)	2		0.00000							
161.99	Galactose, Miscellaneous (%)	1		0.00000							

Method Code	Analyte and Method	Total # Labs Submitting	# Labs 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
162.99	Glucose, Miscellaneous (%)	2		0.00000							
163.99	Lactose, Miscellaneous (%)	2		0.00000							
164.99	Maltose, Miscellaneous (%)	2		0.00000							
165.99	Sucrose, Miscellaneous (%)	2		0.00000							
400.01	Water activity, Aqualab chilled mirror (Units)	3	3	0.37770	0.02841	0.37770	0.02841	0.01640	7.52%	0.00593	
400.99	Water activity, Miscellaneous (Units)	1	1	0.35500							
516.00	Arsenic, total, AA, Hydride (mg / kg (ppm))	1	1	0.05400							
516.43	Arsenic, total, ICP, Microwave (mg / kg (ppm))	1		0.00000							
516.53	Arsenic, total, ICP-MS, Microwave (mg / kg (ppm))	1	1	0.06100							
518.43	Cadmium, ICP, Microwave (mg / kg (ppm))	1		0.00000							
520.43	Chromium, ICP, Microwave (mg / kg (ppm))	1	1	1.0550							
520.53	Chromium, ICP-MS, Microwave (mg / kg (ppm))	1	1	0.67000							
526.53	Lead, ICP-MS, Microwave (mg / kg (ppm))	1	1	0.22700							
539.53	Nickel, ICP-MS, Microwave (mg / kg (ppm))	1	1	1.6150							
710.02	Lauric Acid (12:0), Direct Methylation by Acid-Alka	1	1	0.01000							
710.99	Lauric Acid (12:0), Miscellaneous (% (w/w))	1	1	0.01000							
714.02	Myristic Acid (14:0), Direct Methylation by Acid-Al	1	1	0.28500							
714.99	Myristic Acid (14:0), Miscellaneous (% (w/w))	1	1	0.35000							
716.02	Palmitic Acid (16:0), Direct Methylation by Acid-All	1	1	2.2550							
716.99	Palmitic Acid (16:0), Miscellaneous (% (w/w))	1	1	2.7850							
718.99	Palmitoleic Acid (9c-16:1), Miscellaneous (% (w/v	1	1	0.31000							
722.99	Stearic Acid (18:0), Miscellaneous (% (w/w))	1	1	1.8900							
724.02	Oleic Acid (9c-18:1), Direct Methylation by Acid-Al	1	1	3.1900							
724.99	Oleic Acid (9c-18:1), Miscellaneous (% (w/w))	1	1	4.1700							
726.02	Linoleic Acid (9c,12c-18:2), Direct Methylation by ,	1	1	0.33500							
726.99	Linoleic Acid (9c,12c-18:2), Miscellaneous (% (w/	1	1	0.36500							
728.02	alpha-Linolenic Acid (9c,12c,15c-18:3), Direct Met	1	1	0.02000							
728.99	alpha-Linolenic Acid (9c,12c,15c-18:3), Miscellane	1	1	0.03000							
732.02	Gondoic Acid (11c-20:1), Direct Methylation by Ac	1	1	0.02000							
736.02	Arachidonic Acid (5c,8c,11c,14c-20:4), Direct Metl	1	1	0.06000							
740.02	Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-2l	1	1	0.06000							
740.99	Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-2l	1		0.00000							
742.02	Behenic Acid (22:0), Direct Methylation by Acid-Al	1	1	0.01000							
748.02	Lignoceric Acid (24:0), Direct Methylation by Acid-	1	1	0.01000							
750.99	Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,1	1		0.00000							
754.02	Total n-3 Polyunsaturated (Omega-3) Fatty Acids,	1	1	0.04000							
754.99	Total n-3 Polyunsaturated (Omega-3) Fatty Acids,	1	1	0.12000							
756.02	Total n-6 Polyunsaturated (Omega-6) Fatty Acids,	1	1	0.44000							

Test Material Code # 201743

Issue Date : 10/31/2017

Method Code	Analyte and Method	Total # Labs Submitting	# Labs 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
756.99	Total n-6 Polyunsaturated (Omega-6) Fatty Acids,	1	1	0.40500							
758.02	Total Saturated Fatty Acids, Direct Methylation by	1	1	4.3050							
766.02	Total Polyunsaturated Fatty Acids, Direct Methylat	1	1	0.52000							
772.02	Total Fatty Acids, Direct Methylation by Acid-Alkal	1	1	9.3550							
772.99	Total Fatty Acids, Miscellaneous (% (w/w))	1	1	10.065							

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 Scheme
Meat and Bone Meal
Test Material Code # 201743

Method Precision Report

Methods Reported: 19
Labs Reporting: 53
Issue Date : 10/31/2017

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 %rsd	Reproducibility %RSD	sR/sr
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	8	8	5.1754	0.32391	0.31697	0.09426	0.33069	6.12%	1.821%	6.39%	3.5083
002.06	Protein, Combustion Nitrogen Analyzer (%)	43	40	50.869	0.74093	0.53597	0.54854	0.76692	1.05%	1.079%	1.51%	1.3981
003.10	Fat, Soxtec, Pet Ether (%)	9	9	9.4256	0.31827	0.30905	0.10755	0.32723	3.28%	1.141%	3.47%	3.0426
004.00	Fiber, Crude, Asbestos Free (%)	10	9	1.7332	0.59265	0.24066	0.11902	0.26848	15.41%	7.620%	17.19%	2.2559
004.07	Fiber, ANKOM (%)	14	13	2.5318	1.2476	0.67108	0.18522	0.69617	29.85%	8.238%	30.96%	3.7586
005.00	Ash, 2h @ 600°C (%)	29	27	32.327	0.36793	0.31406	0.28269	0.42255	0.97%	0.875%	1.31%	1.4948
011.01	Loss on Drying, 135°C 2hr (%)	22	20	5.7375	0.29788	0.23028	0.14697	0.27318	3.99%	2.549%	4.74%	1.8588
013.00	Fat, Acid hydrolysis (%)	10	9	10.316	0.39437	0.11963	0.29857	0.32164	1.17%	2.923%	3.15%	1.0773
013.02	Fat, Mojonnier, Bak Ext (%)	14	13	10.499	0.35832	0.16136	0.15748	0.22547	1.53%	1.488%	2.13%	1.4317
019.43	Calcium, ICP, Microwave (%)	10	9	11.298	0.71190	0.39081	0.28296	0.48249	3.40%	2.464%	4.20%	1.7052
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	8	8	9.5491	2.0065	1.9541	0.64429	2.0576	20.46%	6.747%	21.55%	3.1936
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	11	10	184.75	18.835	15.771	14.476	21.407	8.62%	7.914%	11.70%	1.4788
025.43	Iron, ICP, Microwave (mg / kg (ppm))	9	8	174.40	31.692	31.418	5.8745	31.963	18.02%	3.368%	18.33%	5.4410
027.43	Magnesium, ICP, Microwave (%)	9	8	0.22931	0.02234	0.02339	0.00320	0.02360	10.26%	1.402%	10.35%	7.3837
031.43	Phosphorus, ICP, Microwave (%)	9	9	5.4965	0.40804	0.39440	0.14796	0.42124	7.18%	2.692%	7.66%	2.8469
032.43	Potassium, ICP, Microwave (%)	10	10	0.30473	0.02406	0.02112	0.01631	0.02668	6.93%	5.351%	8.76%	1.6362
035.41	Sodium, ICP, Dry ash (%)	11	10	0.51050	0.06836	0.03040	0.01123	0.03241	5.75%	2.124%	6.13%	2.8852
035.43	Sodium, ICP, Microwave (%)	10	9	0.54482	0.07370	0.02602	0.01027	0.02797	4.98%	1.963%	5.35%	2.7250
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	9	9	91.431	4.2113	3.5973	3.0966	4.7465	3.93%	3.387%	5.19%	1.5328

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