



**AAFCO**  
Proficiency Testing Program



**Pet Food Scheme**

**Oat Flour**

**Test Material Code # 201644**

**Method Summary Report**

(Precision Report Follows)

**# Methods Reported: 254**

**# Labs Reporting: 55**

**Issue Date : 01/31/2017**

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
001.00	Loss on Drying, Vac 95°C 5 hr (%)	4	4	9.2481	0.14877	9.2481	0.14877	0.07439	1.61%	0.19825	2.86%
001.03	Loss on Drying, Low temp. methods (%)	2	2	9.6914	0.06880						
001.05	Loss on Drying, LECO (%)	1	1	9.1200							
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	9	8	9.4638	0.14566	9.4629	0.16311	0.07209	1.72%	0.04866	2.85%
001.99	Loss on Drying, Miscellaneous (%)	1	1	9.5500							
002.01	Protein, Auto Kjel-Foss (%)	2	2	12.830	0.24749						
002.04	Protein, Copper Catalyst (%)	2	2	12.868	0.16617						
002.05	Protein, Copper, Boric Acid (%)	4	4	13.092	0.25111	13.092	0.25111	0.14498	1.92%	0.27010	2.72%
002.06	Protein, Combustion Nitrogen Analyzer (%)	39	37	12.925	0.44097	12.985	0.31560	0.06485	2.43%	0.15965	2.72%
002.08	Protein, Cu/Ti (%)	1	1	12.810							
002.10	Protein, Block dig/distillation (%)	1	1	12.730							
002.99	Protein, Miscellaneous (%)	4	4	12.940	0.24235	12.940	0.24235	0.12118	1.87%	0.17000	2.72%
003.00	Fat, Eth Ext., Direct (%)	6	6	5.8024	0.48319	5.7757	0.48455	0.24727	8.39%	0.07203	3.07%
003.06	Fat, Pet Ether (%)	3	3	5.3967	0.63721	5.3967	0.63721	0.36789	11.81%	0.15333	3.10%
003.09	Fat, Soxtec, Eth Ext (%)	5	5	5.6410	0.19795	5.6410	0.19795	0.08853	3.51%	0.13772	3.08%
003.10	Fat, Soxtec, Pet Ether (%)	4	4	5.6905	0.50106	5.6905	0.50106	0.28929	8.81%	0.27840	3.08%
003.12	Fat, Hexane Ext (%)	1	1	5.6200							
003.13	Fat, Soxtec, Hexane Ext. (%)	2	2	5.9600	0.56569						
003.14	Fat, Ankom (%)	6	6	5.4784	0.41413	5.5216	0.36492	0.18622	6.61%	0.26222	3.09%
003.99	Fat, Miscellaneous (%)	4	4	5.1838	2.7146	5.1838	2.7146	1.3573	52.37%	0.17750	3.12%
004.00	Fiber, Crude, Asbestos Free (%)	10	9	1.1877	0.32716	1.2228	0.28321	0.11800	23.16%	0.05284	3.88%
004.03	Fiber, Fritted Glass (%)	2	2	1.2800	0.09899						
004.06	Fiber, Fibertec (%)	5	5	1.4429	0.15100	1.4429	0.15100	0.06753	10.47%	0.14926	3.78%
004.07	Fiber, ANKOM (%)	14	13	1.4057	0.41810	1.3711	0.38592	0.13380	28.15%	0.11413	3.81%
005.00	Ash, 2h @ 600°C (%)	31	30	1.8671	0.31984	1.8152	0.08608	0.01964	4.74%	0.06710	3.66%
005.02	Ash, LECO (%)	1	1	1.8300							
005.05	Ash, 3h @ 550°C (%)	6	6	1.7609	0.16517	1.7609	0.18730	0.09558	10.64%	0.06338	3.67%
005.99	Ash, Miscellaneous (%)	7	7	1.8386	0.04981	1.8386	0.05648	0.02669	3.07%	0.03714	3.65%
006.01	Total sugars, Mod. Fehling Soln (%)	1	1	1.2600							
006.99	Total sugars, Miscellaneous (%)	3	3	1.2117	0.20654	1.2117	0.20654	0.14605	17.05%	0.00333	3.89%

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008.02	Fiber, Acid Detergent (%)	3	3	1.4753	0.15906	1.4753	0.15906	0.09183	10.78%	0.10693	3.77%
008.08	Fiber, Acid Detergent, ANKOM (%)	9	9	2.1531	0.55675	2.1531	0.63135	0.26306	29.32%	0.32177	3.56%
008.99	Fiber, Acid Detergent Miscellaneous (%)	2	2	1.6600	0.01414						
009.07	Fiber, Neutral Det-ENZ Pretreat (%)	2	2	11.220	1.1029						
009.09	Fiber, Neutral Detergent, ANKOM (%)	7	7	9.4304	6.0289	7.5569	1.5215	0.71884	20.13%	0.27560	2.95%
009.99	Fiber, Neutral Det Miscellaneous (%)	1	1	7.4550							
010.03	Moisture, Karl-Fischer (%)	1	1	9.6650							
010.99	Moisture, Miscellaneous (%)	7	7	9.2179	0.55557	9.2494	0.55613	0.26275	6.01%	0.07471	2.86%
011.01	Loss on Drying, 135°C 2hr (%)	24	23	9.6520	0.31801	9.6838	0.26875	0.07005	2.78%	0.16822	2.84%
011.02	Loss on Drying, 130°C for 2 hours (%)	2	2	9.9900	0.15556						
011.03	Loss on drying, 130°C, 1 hour, Flour (%)	1	1	9.7150							
012.00	Starch, Polarimetric (Ewers) (%)	1	1	61.300							
012.01	Starch, Megazyme (%)	4	4	58.345	6.0646	58.345	6.0646	3.0323	10.39%	1.0456	1.31%
012.02	Starch, Colorimetric (GOP) (%)	1	1	64.750							
012.03	Starch, Enzymatic (%)	2	2	55.220	0.18385						
012.04	Starch, YSI Analyzer (%)	2	2	59.525	0.03536						
013.00	Fat, Acid hydrolysis (%)	9	9	6.5336	0.40029	6.5336	0.45393	0.18914	6.95%	0.22526	3.02%
013.02	Fat, Mojonier, Bak Ext (%)	13	13	6.6676	0.48277	6.6840	0.50964	0.17668	7.62%	0.18856	3.01%
013.13	Fat, Ankom- Acid Hydrolysis (%)	1	1	6.2100							
014.99	Fiber, total dietary TDF, Miscellaneous (%)	2	2	9.3350	0.33234						
015.41	Aluminum, ICP, Dry ash (mg / kg (ppm))	1	1	8.4000							
015.43	Aluminum, ICP, Microwave (mg / kg (ppm))	1	1	1.9000							
019.00	Calcium, Ox-Mn04 Vol. (%)	1	1	0.06000							
019.31	Calcium, AAS, Dry ash (%)	3	3	0.05347	0.00581	0.05347	0.00581	0.00335	10.87%	0.00227	6.22%
019.32	Calcium, AAS, Open vessel (%)	1	1	0.05350							
019.33	Calcium, AAS, Microwave (%)	1	1	0.04150							
019.41	Calcium, ICP, Dry ash (%)	10	9	0.05407	0.00283	0.05382	0.00259	0.00108	4.81%	0.00152	6.21%
019.42	Calcium, ICP, Open vessel (%)	5	5	0.05493	0.01099	0.05493	0.01099	0.00491	20.01%	0.00486	6.19%
019.43	Calcium, ICP, Microwave (%)	10	9	0.05235	0.00398	0.05184	0.00319	0.00133	6.16%	0.00117	6.24%
019.44	Calcium, ICP, Dry ash (%)	5	5	102.65	229.39	102.65	229.39	114.70	223.47%	1.2007	0.99%
019.52	Calcium, ICP-MS, Open vessel (%)	1	1	0.05000							
019.53	Calcium, ICP-MS, Microwave (%)	1	1	0.05750							
019.99	Calcium, Miscellaneous (%)	1	1	0.05000							
021.41	Cobalt, ICP, Dry ash (mg / kg (ppm))	1	1	0.00200							
022.32	Copper, AAS, Open vessel (mg / kg (ppm))	1	1	3.7525							
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	10	10	3.5013	1.0498	3.3594	0.81400	0.32176	24.23%	0.23378	13.33%
022.42	Copper, ICP, Open vessel (mg / kg (ppm))	3	3	3.6737	0.52179	3.6737	0.52179	0.30126	14.20%	0.21467	13.15%
022.43	Copper, ICP, Microwave (mg / kg (ppm))	7	7	2.9844	0.91811	2.9674	1.0023	0.47353	33.78%	0.19090	13.58%

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022.44	Copper, ICP, Dry ash (mg / kg (ppm))	4	4	3.4538	0.39561	3.4538	0.39561	0.19781	11.45%	0.06750	13.27%
022.52	Copper, ICP-MS, Open vessel (mg / kg (ppm))	1	1	3.0650							
022.53	Copper, ICP-MS, Microwave (mg / kg (ppm))	3	3	3.1850	0.25870	3.1850	0.25870	0.14936	8.12%	0.23000	13.44%
024.99	Iodine, Miscellaneous (mg / kg (ppm))	3									
025.32	Iron, AAS, Open vessel (mg / kg (ppm))	1	1	32.740							
025.33	Iron, AAS, Microwave (mg / kg (ppm))	1	1	39.000							
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	14	13	37.687	7.1798	36.036	2.2571	0.78252	6.26%	1.8055	9.33%
025.42	Iron, ICP, Open vessel (mg / kg (ppm))	2	2	37.763	5.4836						
025.43	Iron, ICP, Microwave (mg / kg (ppm))	11	11	37.348	7.3071	36.311	5.4553	2.0560	15.02%	3.0071	9.32%
025.52	Iron, ICP-MS, Open vessel (mg / kg (ppm))	1	1	35.000							
025.53	Iron, ICP-MS, Microwave (mg / kg (ppm))	1	1	36.450							
027.31	Magnesium, AAS, Dry ash (%)	3	3	0.12990	0.00915	0.12990	0.00915	0.00528	7.04%	0.00387	5.44%
027.32	Magnesium, AAS, Open vessel (%)	1	1	0.13750							
027.33	Magnesium, AAS, Microwave (%)	2	2	0.13150	0.00495						
027.41	Magnesium, ICP, Dry ash (%)	10	10	0.13582	0.00395	0.13534	0.00322	0.00127	2.38%	0.00568	5.40%
027.42	Magnesium, ICP, Open vessel (%)	4	4	0.23368	0.20423	0.23368	0.20423	0.11791	87.40%	0.21910	4.98%
027.43	Magnesium, ICP, Microwave (%)	9	9	0.13554	0.00853	0.13554	0.00967	0.00403	7.14%	0.00663	5.40%
027.44	Magnesium, ICP, Dry ash (%)	5	5	0.13885	0.00718	0.13885	0.00718	0.00321	5.17%	0.00202	5.38%
027.52	Magnesium, ICP-MS, Open vessel (%)	1	1	0.12000							
027.53	Magnesium, ICP-MS, Microwave (%)	1	1	0.15500							
028.31	Manganese, AAS, Dry ash (mg / kg (ppm))	1	1	37.170							
028.32	Manganese, AAS, Open vessel (mg / kg (ppm))	1	1	35.320							
028.33	Manganese, AAS, Microwave (mg / kg (ppm))	1	1	40.190							
028.41	Manganese, ICP, Dry ash (mg / kg (ppm))	10	10	36.736	1.8624	36.627	1.8549	0.73320	5.06%	0.96159	9.30%
028.42	Manganese, ICP, Open vessel (mg / kg (ppm))	4	4	215.65	358.81	215.65	358.81	207.16	166.39%	8.7550	7.13%
028.43	Manganese, ICP, Microwave (mg / kg (ppm))	9	9	37.753	2.6058	37.753	2.9550	1.2313	7.83%	1.6140	9.26%
028.44	Manganese, ICP, Dry ash (mg / kg (ppm))	5	5	36.948	0.80688	36.948	0.80688	0.40344	2.18%	1.3346	9.29%
028.52	Manganese, ICP-MS, Open vessel (mg / kg (ppm))	1	1	34.850							
028.53	Manganese, ICP-MS, Microwave (mg / kg (ppm))	2	2	36.675	2.2274						
028.99	Manganese, Miscellaneous (mg / kg (ppm))	1	1	32.500							
031.01	Phosphorus, Photometric (%)	6	6	0.42154	0.02112	0.42195	0.02300	0.01174	5.45%	0.00888	4.55%
031.03	Phosphorus, Autoanalyzer (%)	3	3	0.40583	0.02323	0.40583	0.02323	0.01341	5.72%	0.01300	4.58%
031.41	Phosphorus, ICP, Dry ash (%)	9	9	0.41897	0.01463	0.41739	0.01264	0.00527	3.03%	0.00702	4.56%
031.42	Phosphorus, ICP, Open vessel (%)	6	6	0.39672	0.04112	0.39672	0.04662	0.02379	11.75%	0.01127	4.60%
031.43	Phosphorus, ICP, Microwave (%)	9	9	0.42721	0.02606	0.42832	0.02015	0.00839	4.70%	0.01788	4.54%
031.44	Phosphorus, ICP, Dry ash (%)	5	5	0.39753	0.01139	0.39753	0.01139	0.00509	2.87%	0.00334	4.60%
031.53	Phosphorus, ICP-MS, Microwave (%)	2	2	0.40925	0.00601						
032.02	Potassium, Flame Emission (%)	1	1	0.37000							

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032.31	Potassium, AAS, Dry ash (%)	2	2	0.42950	0.07495						
032.41	Potassium, ICP, Dry ash (%)	10	10	0.39230	0.03159	0.39337	0.02224	0.00879	5.65%	0.01250	4.60%
032.42	Potassium, ICP, Open vessel (%)	5	5	0.35639	0.04939	0.35639	0.04939	0.02209	13.86%	0.01630	4.67%
032.43	Potassium, ICP, Microwave (%)	10	10	0.40224	0.02163	0.40322	0.02226	0.00880	5.52%	0.01260	4.59%
032.44	Potassium, ICP, Dry ash (%)	5	5	0.36533	0.03517	0.36533	0.03517	0.01759	9.63%	0.00682	4.65%
032.53	Potassium, ICP-MS, Microwave (%)	1	1	0.39950							
032.99	Potassium, Miscellaneous (%)	2	2	0.37975	0.00742						
033.00	Salt as chloride, Sol Cl (%)	2	2	0.05050	0.02192						
033.01	Salt as chloride, Poten Cl (%)	5	5	0.09360	0.01809	0.09360	0.01809	0.00905	19.33%	0.00200	5.71%
033.99	Salt, Miscellaneous (%)	2	2	0.06550	0.02758						
034.04	Selenium, AA, Hydride (mg / kg (ppm))	2	2	0.19750	0.05303						
034.43	Selenium, ICP, Microwave (mg / kg (ppm))	2	2	0.43775	0.17847						
034.53	Selenium, ICP-MS, Microwave (mg / kg (ppm))	2	2	0.19750	0.00354						
034.99	Selenium, Miscellaneous (mg / kg (ppm))	2	2	0.15975	0.01379						
035.05	Sodium, Flame Emission (%)	1	1	0.00250							
035.31	Sodium, AAS, Dry ash (%)	1	1	0.00260							
035.41	Sodium, ICP, Dry ash (%)	13	10	0.00936	0.01319	0.00512	0.00511	0.00202	99.89%	0.00092	8.85%
035.42	Sodium, ICP, Open vessel (%)	4	3	0.00992	0.00563	0.00992	0.00563	0.00398	56.75%	0.00310	8.01%
035.43	Sodium, ICP, Microwave (%)	5	5	0.00428	0.00599	0.00428	0.00599	0.00300	139.95%	0.00208	9.09%
036.04	Sulfur, LECO (%)	1	1	0.20000							
036.42	Sulfur, ICP, Open vessel (%)	6	6	0.17800	0.00979	0.17777	0.01057	0.00539	5.94%	0.00603	5.19%
036.43	Sulfur, ICP, Microwave (%)	6	5	0.19414	0.01150	0.19250	0.01258	0.00703	6.54%	0.00152	5.13%
037.31	Zinc, AAS, Dry ash (mg / kg (ppm))	1	1	21.175							
037.32	Zinc, AAS, Open vessel (mg / kg (ppm))	1	1	22.215							
037.41	Zinc, ICP, Dry ash (mg / kg (ppm))	10	9	31.251	13.582	28.220	6.6181	2.7576	23.45%	1.2799	9.68%
037.42	Zinc, ICP, Open vessel (mg / kg (ppm))	4	4	151.60	254.63	151.60	254.63	147.01	167.96%	69.378	7.51%
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	11	11	25.609	2.6742	25.276	2.2545	0.84971	8.92%	1.4705	9.84%
037.44	Zinc, ICP, Dry ash (mg / kg (ppm))	4	4	24.473	1.0179	24.473	1.0179	0.50895	4.16%	0.69015	9.89%
037.52	Zinc, ICP-MS, Open vessel (mg / kg (ppm))	1	1	20.150							
037.53	Zinc, ICP-MS, Microwave (mg / kg (ppm))	1	1	25.800							
037.99	Zinc, Miscellaneous (mg / kg (ppm))	1	1	31.000							
038.41	Molybdenum, ICP, Dry ash (mg / kg (ppm))	1	1	0.55000							
038.43	Molybdenum, ICP, Microwave (mg / kg (ppm))	1	1	0.60000							
038.52	Molybdenum, ICP-MS, Open vessel (mg / kg (ppm))	1	1	0.54500							
038.53	Molybdenum, ICP-MS, Microwave (mg / kg (ppm))	4	4	0.63950	0.02959	0.63950	0.02959	0.01708	4.63%	0.01750	17.11%
042.00	Chloride, Titrimetric (%)	2	2	0.05475	0.00672						
042.99	Chloride, Miscellaneous (%)	2	2	0.04100	0.01556						
101.00	Choline Chloride, Microbiological (mg / kg (ppm))	1	1	1,890.0							

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101.01	Choline Chloride, Chem (mg / kg (ppm))	2	2	1,094.5	226.98						
102.01	Niacin, Microbiological (mg / kg (ppm))	3	3	11.250	0.84113	11.250	0.84113	0.48563	7.48%	1.0333	11.11%
103.01	Pantothenic Acid, Microbiological (mg / kg (ppm))	1	1	3.2900							
103.02	Pantothenic Acid, LC (mg / kg (ppm))	2	2	4.1000	0.63640						
104.00	Riboflavin, Fluorometric (mg / kg (ppm))	1	1	1.2050							
104.02	Riboflavin, Microbiological, Turbidity (mg / kg (ppm))	2	2	2.4400	0.62225						
104.03	Riboflavin, LC (mg / kg (ppm))	1	1	1.2000							
105.00	Thiamine, LC (mg / kg (ppm))	1	1	5.7500							
105.01	Thiamine, Fluorometer (mg / kg (ppm))	1	1	5.6600							
105.99	Thiamine, Miscellaneous (mg / kg (ppm))	2	2	4.1750	0.03536						
106.02	Vitamin A, LC (KU / kg)	3									
107.00	Vitamin B12, Microbiological (µg / kg (ppb))	2		0.00000							
108.01	Vitamin D3, LC, AOAC (KU / kg)	1		0.00000							
108.99	Vitamin D3, Miscellaneous (KU / kg)	3									
109.02	Vitamin E, LC (IU/kg)	4	4	6.6438	3.5740	6.6438	3.5740	1.7870	53.79%	0.88750	
112.00	Pyridoxine, Vitamin B6 (µg / g)	2	2	1.0750	0.10607						
112.01	Pyridoxine, LC (µg / g)	1	1	1.9450							
113.01	Folic Acid, Micro (mg / kg (ppm))	3	3	81.223	140.10	81.223	140.10	99.066	172.49%	3.3420	8.25%
114.01	Biotin, Microbiological (mg / kg (ppm))	2	2	0.25500	0.01414						
120.00	Alanine, Post-col Ninhydrin Der (%)	5	5	0.61163	0.02515	0.61163	0.02515	0.01125	4.11%	0.00698	4.31%
120.01	Alanine, Pre-col OPA Der (%)	3	3	0.56350	0.04064	0.56350	0.04064	0.02346	7.21%	0.00300	4.36%
120.02	Alanine, Post-col OPA Der (%)	1	1	0.56500							
121.00	Arginine, Post-col Ninhydrin Der (%)	5	5	0.84318	0.03893	0.84318	0.03893	0.01947	4.62%	0.03820	4.10%
121.01	Arginine, Pre-col OPA Der (%)	3	3	0.91967	0.00611	0.91967	0.00611	0.00353	0.66%	0.00600	4.05%
121.02	Arginine, Post-col OPA Der (%)	1	1	0.88000							
121.99	Arginine, Miscellaneous (%)	1	1	0.99400							
122.00	Aspartic, Post-col Ninhydrin Der (%)	5	5	1.0375	0.02201	1.0375	0.02201	0.00984	2.12%	0.01302	3.98%
122.01	Aspartic, Pre-col OPA Der (%)	3	3	1.0183	0.00764	1.0183	0.00764	0.00540	0.75%	0.00333	3.99%
122.02	Aspartic, Post-col OPA Der (%)	1	1	0.93000							
124.00	Cysteine/Cystine, PAO Post-col Ninhydrin Der (%)	5	5	0.41055	0.01704	0.41055	0.01704	0.00852	4.15%	0.00330	4.57%
124.01	Cysteine/Cystine, PAO Pre-col OPA Der (%)	3	3	0.39367	0.04196	0.39367	0.04196	0.02967	10.66%	0.01133	4.60%
124.02	Cysteine/Cystine, PAO Post-col OPA Der (%)	1	1	0.44500							
125.00	Glutamic, Post-col Ninhydrin Der (%)	5	5	2.6348	0.01394	2.6348	0.01394	0.00623	0.53%	0.02404	3.46%
125.01	Glutamic, Pre-col OPA Der (%)	3	3	2.5867	0.03014	2.5867	0.03014	0.01740	1.17%	0.01333	3.47%
125.02	Glutamic, Post-col OPA Der (%)	1	1	2.3850							
126.00	Glycine, Post-col Ninhydrin Der (%)	5	5	0.64588	0.02624	0.64588	0.02624	0.01312	4.06%	0.01496	4.27%
126.01	Glycine, Pre-col OPA Der (%)	3	3	0.61583	0.04054	0.61583	0.04054	0.02341	6.58%	0.00167	4.30%
126.02	Glycine, Post-col OPA Der (%)	1	1	0.62500							

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
127.00	Histidine, Post-col Ninhydrin Der (%)	5	5	0.29353	0.02175	0.29353	0.02175	0.01088	7.41%	0.01926	4.81%
127.01	Histidine, Pre-col OPA Der (%)	3	3	0.27767	0.01320	0.27767	0.01320	0.00762	4.75%	0.00467	4.85%
127.02	Histidine, Post-col OPA Der (%)	1	1	0.54500							
127.99	Histidine, Miscellaneous (%)	1	1	0.32350							
128.00	Isoleucine, Post-col Ninhydrin Der (%)	5	5	0.46886	0.03632	0.46886	0.03632	0.01624	7.75%	0.01684	4.48%
128.01	Isoleucine, Pre-col OPA Der (%)	3	3	0.48183	0.02461	0.48183	0.02461	0.01421	5.11%	0.01167	4.46%
128.02	Isoleucine, Post-col OPA Der (%)	1	1	0.46000							
128.99	Isoleucine, Miscellaneous (%)	1	1	0.52450							
129.00	Leucine, Post-col Ninhydrin Der (%)	5	5	0.92567	0.03213	0.92567	0.03213	0.01437	3.47%	0.01294	4.05%
129.01	Leucine, Pre-col OPA Der (%)	3	3	0.92417	0.02602	0.92417	0.02602	0.01502	2.82%	0.00500	4.05%
129.02	Leucine, Post-col OPA Der (%)	1	1	0.89500							
129.99	Leucine, Miscellaneous (%)	1	1	0.96250							
130.00	L-Lysine, Post-col Ninhydrin Der (%)	5	5	0.55236	0.05397	0.55236	0.05397	0.02414	9.77%	0.01312	4.37%
130.01	L-Lysine, Pre-col OPA Der (%)	3	3	0.45500	0.06245	0.45500	0.06245	0.03606	13.73%	0.00800	4.50%
130.02	L-Lysine, Post-col OPA Der (%)	1	1	0.63500							
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	5	5	0.22181	0.00800	0.22181	0.00800	0.00358	3.61%	0.00482	5.02%
131.01	Methionine, PAO Pre-col OPA Der (%)	3	3	0.22200	0.02800	0.22200	0.02800	0.01980	12.61%	0.00067	5.02%
131.02	Methionine, PAO Post-col OPA Der (%)	1	1	0.21500							
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	5	5	0.66101	0.05053	0.66101	0.05053	0.02260	7.64%	0.00438	4.26%
132.01	Phenylalanine, Pre-col OPA Der (%)	3	3	0.64650	0.01826	0.64650	0.01826	0.01054	2.82%	0.00633	4.27%
132.02	Phenylalanine, Post-col OPA Der (%)	1	1	0.61500							
132.99	Phenylalanine, Miscellaneous (%)	1	1	0.65400							
133.00	Proline, Post-col Ninhydrin Der (%)	5	5	0.67977	0.02694	0.67977	0.02694	0.01205	3.96%	0.01786	4.24%
133.04	Proline, Pre-col FMOC Der (%)	1	1	0.67950							
133.99	Proline, Miscellaneous (%)	3	3	0.70617	0.07737	0.70617	0.07737	0.04467	10.96%	0.01433	4.21%
134.00	Serine, Post-col Ninhydrin Der (%)	5	5	0.63210	0.03689	0.63210	0.03689	0.01650	5.84%	0.01288	4.29%
134.01	Serine, Pre-col OPA Der (%)	3	3	0.59817	0.03610	0.59817	0.03610	0.02084	6.04%	0.01167	4.32%
134.02	Serine, Post-col OPA Der (%)	1	1	0.56500							
135.00	Threonine, Post-col Ninhydrin Der (%)	5	5	0.43474	0.00577	0.43474	0.00577	0.00258	1.33%	0.00452	4.53%
135.01	Threonine, Pre-col OPA Der (%)	3	3	0.42283	0.03252	0.42283	0.03252	0.01878	7.69%	0.00767	4.55%
135.02	Threonine, Post-col OPA Der (%)	1	1	0.38500							
135.99	Threonine, Miscellaneous (%)	1	1	0.45200							
136.00	Tryptophan, Alka-Hydrol Post-col Ninhyd (%)	2	2	0.18308	0.03101						
136.02	Tryptophan, Alka-Hydrol Post-col OPA De (%)	1	1	0.16500							
136.99	Tryptophan, Miscellaneous (%)	4	4	0.17938	0.01643	0.17938	0.01643	0.00822	9.16%	0.00375	5.18%
137.00	Tyrosine, Post-col Ninhydrin Der (%)	5	5	0.37025	0.08819	0.37025	0.08819	0.04410	23.82%	0.01346	4.64%
137.01	Tyrosine, Pre-col OPA Der (%)	3	3	0.53167	0.00878	0.53167	0.00878	0.00507	1.65%	0.00200	4.40%
137.02	Tyrosine, Post-col OPA Der (%)	1	1	0.38000							

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
138.00	Valine, Post-col Ninhydrin Der (%)	5	5	0.53548	0.27738	0.53548	0.27738	0.13869	51.80%	0.01396	4.39%
138.01	Valine, Pre-col OPA Der (%)	2	2	0.68025	0.04207						
138.02	Valine, Post-col OPA Der (%)	1	1	0.58500							
139.00	Taurine, Post-col Ninhydrin Der (%)	3	2	0.10875	0.12551	0.10875	0.12551			0.00150	5.59%
139.01	Taurine, Pre-col OPA Der (%)	1	1	0.01115							
160.99	Fructose, Miscellaneous (%)	2	1	0.02050							
161.99	Galactose, Miscellaneous (%)	2		0.00000							
162.99	Glucose, Miscellaneous (%)	2	1	0.01475							
163.99	Lactose, Miscellaneous (%)	2		0.00000							
164.99	Maltose, Miscellaneous (%)	2		0.00000							
165.99	Sucrose, Miscellaneous (%)	5	5	1.0640	0.05237	1.0640	0.05237	0.02342	4.92%	0.02800	3.96%
400.01	Water activity, Aqualab chilled mirror (Units)	1	1	0.44665							
400.99	Water activity, Miscellaneous (Units)	1	1	0.46000							
516.00	Arsenic, total, AA, Hydride (mg / kg (ppm))	1	1	0.00400							
516.43	Arsenic, total, ICP, Microwave (mg / kg (ppm))	1		0.00000							
518.41	Cadmium, ICP, Dry ash (mg / kg (ppm))	1	1	0.01000							
518.43	Cadmium, ICP, Microwave (mg / kg (ppm))	1	1	0.04705							
520.41	Chromium, ICP, Dry ash (mg / kg (ppm))	1	1	0.12500							
520.53	Chromium, ICP-MS, Microwave (mg / kg (ppm))	1	1	0.01500							
526.41	Lead, ICP, Dry ash (mg / kg (ppm))	1		0.00500							
539.41	Nickel, ICP, Dry ash (mg / kg (ppm))	1	1	1.3000							
539.53	Nickel, ICP-MS, Microwave (mg / kg (ppm))	1	1	1.5700							
710.99	Lauric Acid (12:0), Miscellaneous (% (w/w))	1		0.00000							
714.99	Myristic Acid (14:0), Miscellaneous (% (w/w))	1	1	0.01255							
716.99	Palmitic Acid (16:0), Miscellaneous (% (w/w))	1	1	0.90950							
718.99	Palmitoleic Acid (9c-16:1), Miscellaneous (% (w/w))	1	1	0.01100							
722.99	Stearic Acid (18:0), Miscellaneous (% (w/w))	1	1	0.07010							
724.99	Oleic Acid (9c-18:1), Miscellaneous (% (w/w))	1	1	1.7890							
726.99	Linoleic Acid (9c,12c-18:2), Miscellaneous (% (w/w))	1	1	2.4075							
728.99	alpha-Linolenic Acid (9c,12c,15c-18:3), Miscellaneous (% (w/w))	1	1	0.07605							
740.99	Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:5), Miscellaneous (% (w/w))	1		0.00000							
750.99	Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c-22:6), Miscellaneous (% (w/w))	1		0.00000							
754.99	Total n-3 Polyunsaturated (Omega-3) Fatty Acids, % (w/w)	4									
756.99	Total n-6 Polyunsaturated (Omega-6) Fatty Acids, % (w/w)	4	4	2.7131	0.54347	2.7131	0.54347	0.27174	20.03%	0.04225	

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.

**Test Material Code # 201644**

**Issue Date : 01/31/2017**

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
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**AAFCO**  
Proficiency Testing Program



**Pet Food Scheme**  
**Oat Flour**  
**Test Material Code # 201644**

**Method Precision Report**

**# Methods Reported: 24**  
**# Labs Reporting: 55**  
**Issue Date : 01/31/2017**

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 (%)	9	8	9.4638	0.14566	0.14253	0.04244	0.14872	1.51%	0.448%	1.57%	3.5042
002.06	Protein, Combustion Nitrogen Analyzer (%)	39	35	12.925	0.44097	0.34495	0.12155	0.36574	2.66%	0.938%	2.82%	3.0090
004.00	Fiber, Crude, Asbestos Free (%)	10	8	1.1877	0.32716	0.20314	0.04497	0.20806	15.92%	3.524%	16.31%	4.6270
004.07	Fiber, ANKOM (%)	14	12	1.4057	0.41810	0.29776	0.09676	0.31309	22.51%	7.314%	23.67%	3.2358
005.00	Ash, 2h @ 600°C (%)	31	28	1.8671	0.31984	0.12906	0.05097	0.13876	7.09%	2.800%	7.62%	2.7222
008.08	Fiber, Acid Detergent, ANKOM (%)	9	8	2.1531	0.55675	0.52003	0.24247	0.57378	25.00%	11.655%	27.58%	2.3664
011.01	Loss on Drying, 135°C 2hr (%)	24	22	9.6520	0.31801	0.21027	0.14995	0.25826	2.17%	1.546%	2.66%	1.7223
013.00	Fat, Acid hydrolysis (%)	9	9	6.5336	0.40029	0.37627	0.19314	0.42295	5.76%	2.956%	6.47%	2.1898
013.02	Fat, Mojonnier, Bak Ext (%)	13	13	6.6676	0.48277	0.46887	0.16265	0.49629	7.03%	2.439%	7.44%	3.0512
019.41	Calcium, ICP, Dry ash (%)	10	8	0.05407	0.00283	0.00289	0.00097	0.00305	5.37%	1.807%	5.66%	3.1353
019.43	Calcium, ICP, Microwave (%)	10	8	0.05235	0.00398	0.00229	0.00054	0.00235	4.46%	1.058%	4.59%	4.3356
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	10	9	3.5013	1.0498	0.58639	0.23979	0.63352	18.19%	7.438%	19.65%	2.6420
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	14	11	37.687	7.1798	1.3431	1.1310	1.7559	3.79%	3.189%	4.95%	1.5525
025.43	Iron, ICP, Microwave (mg / kg (ppm))	11	9	37.348	7.3071	3.5586	1.0845	3.7202	9.79%	2.982%	10.23%	3.4303
027.41	Magnesium, ICP, Dry ash (%)	10	9	0.13582	0.00395		0.00504			3.740%		
027.43	Magnesium, ICP, Microwave (%)	9	9	0.13554	0.00853	0.00697	0.00696	0.00985	5.14%	5.138%	7.27%	1.4143
028.41	Manganese, ICP, Dry ash (mg / kg (ppm))	10	9	36.736	1.8624	1.8820	0.63160	1.9851	5.11%	1.714%	5.39%	3.1430
028.43	Manganese, ICP, Microwave (mg / kg (ppm))	9	9	37.753	2.6058	2.3750	1.5164	2.8178	6.29%	4.017%	7.46%	1.8582
031.41	Phosphorus, ICP, Dry ash (%)	9	8	0.41897	0.01463	0.00768	0.00710	0.01046	1.85%	1.711%	2.52%	1.4735
031.43	Phosphorus, ICP, Microwave (%)	9	9	0.42721	0.02606	0.02306	0.01715	0.02874	5.40%	4.015%	6.73%	1.6755
032.41	Potassium, ICP, Dry ash (%)	10	10	0.39230	0.03159	0.03047	0.01178	0.03267	7.77%	3.003%	8.33%	2.7727
032.43	Potassium, ICP, Microwave (%)	10	9	0.40224	0.02163	0.01833	0.00911	0.02047	4.60%	2.287%	5.14%	2.2458
035.41	Sodium, ICP, Dry ash (%)	13	10	0.00936	0.01319	0.01317	0.00096	0.01321	140.75%	10.248%	141.12%	13.772
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	11	11	25.609	2.6742	2.4687	1.4539	2.8650	9.64%	5.677%	11.19%	1.9705

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