

Animal Feed Scheme
Poultry Feed
Test Material Code # 201824

Method Summary Report
(Precision Report Follows)

Methods Reported: 418
Labs Reporting: 203
Issue Date : 05/31/2018

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
000.02	Urea, As protein, Colorimetric (%)	1	1	0.55000							
001.00	Loss on Drying, Vac 95°C 5 hr (%)	6	5	9.3442	0.57256	9.3442	0.57256	0.06314	6.13%	0.02372	2.86%
001.02	Loss on Drying, Vac on sand (%)	1	1	9.1250							
001.03	Loss on Drying, Low temp. methods (%)	7	7	9.4007	0.26085	9.4007	0.29581	0.13976	3.15%	0.01263	2.85%
001.05	Loss on Drying, LECO (%)	2	2	9.1225	0.61872						
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	44	42	9.3793	0.30877	9.4080	0.26250	0.05063	2.79%	0.08726	2.85%
001.99	Loss on Drying, Miscellaneous (%)	25	25	9.1420	0.89462	9.2775	0.63229	0.15807	6.82%	0.13470	2.86%
002.00	Protein, Crude, Crude (%)	1	1	18.220							
002.01	Protein, Crude, Auto Kjel-Foss (%)	19	19	18.394	0.30403	18.369	0.25852	0.07414	1.41%	0.08397	2.33%
002.02	Protein, Crude, Semiauto Autoanalyzer (%)	4	4	18.034	0.43171	18.034	0.43171	0.26982	2.39%	0.15930	2.35%
002.03	Protein, Crude, Hach Method (%)	2	2	16.803	2.1047						
002.04	Protein, Crude, Copper Catalyst (%)	4	4	18.036	0.23994	18.036	0.23994	0.14996	1.33%	0.12750	2.35%
002.05	Protein, Crude, Copper, Boric Acid (%)	36	35	18.301	0.28981	18.300	0.23260	0.04914	1.27%	0.06523	2.34%
002.06	Protein, Crude, Combustion Nitrogen Analyzer (%)	126	122	18.439	0.23855	18.440	0.22001	0.02490	1.19%	0.14217	2.33%
002.08	Protein, Crude, Cu/Ti (%)	2	2	18.415	0.20481						
002.10	Protein, Crude, Block dig/distillation (%)	1	1	17.990							
002.11	Protein, Crude, NIR (%)	9	9	20.366	1.5631	20.366	1.7725	0.73856	8.70%	0.19756	2.22%
003.00	Fat, Crude, Diethyl Ether Ext., Direct (%)	14	14	2.6689	1.3544	2.4000	0.22248	0.07433	9.27%	0.13482	3.51%
003.01	Fat, Crude, Diethyl Ether Ext (13th ed.), Indirect (%)	1	1	2.9900							
003.06	Fat, Crude, Pet Ether (%)	19	19	2.4416	0.21330	2.4402	0.21993	0.06307	9.01%	0.08190	3.50%
003.09	Fat, Crude, Randall, Diethyl Ether Ext (%)	20	20	2.4714	0.30516	2.4368	0.21048	0.05883	8.64%	0.06235	3.50%
003.10	Fat, Crude, Randall, Pet Ether (%)	32	31	2.3231	0.23583	2.3153	0.17527	0.03935	7.57%	0.06096	3.52%
003.11	Fat, Crude, NIR (%)	8	7	1.7859	0.78932	1.7859	0.89508	0.42289	50.12%	0.04543	3.67%
003.12	Fat, Crude, Hexane Ext (%)	5	5	2.3426	0.35889	2.3426	0.35889	0.20063	15.32%	0.11758	3.52%
003.13	Fat, Crude, Randall, Hexane Ext. (%)	7	7	2.3364	0.11575	2.3252	0.10399	0.04913	4.47%	0.05286	3.52%
003.14	Fat, Crude, Ankom (%)	46	46	2.3608	0.29768	2.3539	0.23707	0.04369	10.07%	0.12653	3.52%
003.99	Fat, Crude, Miscellaneous (%)	5	4	2.8250	1.3028	2.8250	1.3028	0.81425	46.12%	0.10000	3.42%
004.00	Fiber, Crude, Asbestos Free (%)	18	18	2.9801	0.14545	2.9712	0.13859	0.04083	4.66%	0.13752	3.40%
004.03	Fiber, Crude, Fritted Glass (%)	7	7	2.9649	0.59288	3.0248	0.52687	0.24892	17.42%	0.20000	3.39%
004.06	Fiber, Crude, Fibertec (%)	29	28	3.0016	0.23884	3.0038	0.20542	0.04853	6.84%	0.11671	3.39%
004.07	Fiber, Crude, ANKOM (%)	65	64	2.8395	0.69749	2.7581	0.36811	0.05752	13.35%	0.16420	3.43%
004.11	Fiber, Crude, NIR (%)	7	7	5.2730	1.9713	5.0140	1.5929	0.75255	31.77%	0.10247	3.14%

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004.99	Fiber, Crude, Miscellaneous (%)	8	8	2.5963	0.28937	2.5975	0.24487	0.10822	9.43%	0.10250	3.46%
005.00	Ash, 2h @ 600°C (%)	96	94	6.4464	0.17577	6.4464	0.17259	0.02225	2.68%	0.07662	3.02%
005.02	Ash, LECO (%)	1	1	6.7750							
005.03	Ash, Microwave furnace (%)	1	1	6.1000							
005.05	Ash, 3h @ 550°C (%)	39	38	6.6105	0.13224	6.6170	0.13547	0.02747	2.05%	0.05797	3.01%
005.11	Ash, NIR (%)	8	8	8.3040	3.5892	8.3040	4.0701	1.7988	49.01%	0.25571	2.91%
005.99	Ash, Miscellaneous (%)	11	11	6.5314	0.25446	6.5402	0.26841	0.10116	4.10%	0.04302	3.01%
006.00	Total Sugars, As sucrose (%)	2	2	8.4300	1.4849						
006.99	Total Sugars, Miscellaneous (%)	4	4	12.351	1.4252	12.351	1.4252	0.89075	11.54%	0.24725	2.74%
008.02	Fiber, Acid Detergent, Crucible (%)	15	14	4.3318	0.57438	4.3145	0.61228	0.20455	14.19%	0.17069	3.21%
008.05	Fiber, Acid Detergent, Acid Detergent-Hach (%)	1	1	5.6950							
008.08	Fiber, Acid Detergent, Filter Bag - ANKOM (%)	42	41	4.1817	0.51230	4.1983	0.54126	0.10566	12.89%	0.19389	3.22%
008.99	Fiber, Acid Detergent, Miscellaneous (%)	5	4	4.5189	0.18067	4.5189	0.18067	0.11292	4.00%	0.13923	3.19%
009.04	Fiber, Neutral Detergent, Neutral Det-No ENZ Pretreat (%)	1	1	9.1400							
009.07	Fiber, Neutral Detergent, AOAC -ENZ Pretreat (%)	14	14	10.651	1.3375	10.654	1.5112	0.50485	14.18%	0.31374	2.80%
009.09	Fiber, Neutral Detergent, Filter Bag - ANKOM (%)	43	41	10.222	1.0554	10.095	0.66896	0.13059	6.63%	0.19910	2.82%
009.99	Fiber, Neutral Detergent, Miscellaneous (%)	4	4	10.883	2.2059	10.883	2.2059	1.3787	20.27%	0.20725	2.79%
010.03	Moisture, Karl-Fischer (%)	2	2	9.1600	0.85560						
010.11	Moisture, NIR (%)	8	8	9.7438	1.0806	9.7936	1.1101	0.49059	11.33%	0.07200	2.84%
010.99	Moisture, Miscellaneous (%)	17	16	9.6215	0.41768	9.5946	0.32635	0.10198	3.40%	0.09006	2.85%
011.01	Loss on Drying, 135°C 2hr (%)	72	71	10.198	0.43820	10.258	0.29986	0.04448	2.92%	0.11289	2.82%
011.02	Loss on Drying, 130°C for 2 hours (%)	3	3	10.467	0.30925	10.467	0.30925	0.22318	2.95%	0.14667	2.81%
011.99	Loss on Drying, High Temp. Methods Miscellaneous (%)	2	2	10.345	0.34648						
012.00	Starch, Polarimetric (Ewers) (%)	18	18	35.616	1.1322	35.668	1.1596	0.34164	3.25%	0.18443	1.67%
012.01	Starch, Enzymatic-Colorimetric Method (Megazyme) (%)	10	10	32.968	4.0619	33.401	2.4117	0.95331	7.22%	0.92630	1.73%
012.03	Starch, Enzymatic-Colorimetric Method, Miscellaneous (%)	6	6	37.602	6.3871	36.825	5.3452	2.7277	14.52%	0.90333	1.65%
012.04	Starch, Enzymatic-Enzyme Membrane Technology (YSI) (%)	5	5	34.416	2.2017	34.416	2.2017	1.2308	6.40%	0.30800	1.70%
012.11	Starch, NIR (%)	5	5	32.209	4.4187	32.209	4.4187	2.4701	13.72%	0.37220	1.76%
012.99	Starch, Miscellaneous (%)	1	1	36.470							
013.00	Fat, Acid Pretreat, Acid hydrolysis (%)	20	19	3.2543	0.55427	3.2238	0.55198	0.15829	17.12%	0.12634	3.35%
013.02	Fat, Acid Pretreat, Mojonier, Bak Ext (%)	17	17	3.9008	0.47998	3.8515	0.36632	0.11106	9.51%	0.10807	3.27%
013.10	Fat, Acid Pretreat, Soxtec-Acid Hydrolysis (%)	5	4	2.9928	0.12309	2.9928	0.12309	0.07693	4.11%	0.13188	3.39%
013.12	Fat, Acid Pretreat, NIR- Acid Hydrolysis (%)	1	1	0.27925							
013.13	Fat, Acid Pretreat, Ankom- Acid Hydrolysis (%)	6	5	3.1830	0.37637	3.1830	0.37637	0.21040	11.82%	0.24200	3.36%
013.99	Fat, Acid Pretreat, Pretreatment, Misc (%)	1	1	6.1500							
015.41	Aluminum, ICP, Dry ash (mg / kg (ppm))	4	3	72.932	16.330	72.932	16.330	11.785	22.39%	1.2367	8.39%
015.42	Aluminum, ICP, Open vessel (mg / kg (ppm))	1	1	76.350							
015.43	Aluminum, ICP, Microwave (mg / kg (ppm))	6	6	73.385	14.234	74.389	13.744	7.0135	18.48%	2.6342	8.36%
015.52	Aluminum, ICP-MS, Open vessel (mg / kg (ppm))	1	1	78.550							
015.53	Aluminum, ICP-MS, Microwave (mg / kg (ppm))	1	1	86.250							

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017.41	Boron, ICP, Dry ash (mg / kg (ppm))	4	3	10.917	0.32420	10.917	0.32420	0.23397	2.97%	0.14000	11.16%
017.42	Boron, ICP, Open vessel (mg / kg (ppm))	6	6	10.869	1.5150	10.869	1.7180	0.87673	15.81%	0.18850	11.17%
017.43	Boron, ICP, Microwave (mg / kg (ppm))	5	3	9.9833	0.49021	9.9833	0.49021	0.35378	4.91%	0.11333	11.31%
019.00	Calcium, Ox-Mn04 Vol. (%)	12	12	1.1278	0.07526	1.1265	0.08244	0.02975	7.32%	0.01818	3.93%
019.02	Calcium, Hach Method (%)	1	1	1.5235							
019.03	Calcium, Semiauto (Autoanalyzer) (%)	1	1	1.1783							
019.08	Calcium, EDTA (%)	14	13	1.0929	0.10740	1.1070	0.08393	0.02910	7.58%	0.01328	3.94%
019.09	Calcium, Ion-selective electrode (%)	1	1	1.4825							
019.31	Calcium, AAS, Dry ash (%)	26	25	1.1307	0.06511	1.1297	0.04695	0.01174	4.16%	0.02844	3.93%
019.32	Calcium, AAS, Open vessel (%)	1	1	1.1400							
019.33	Calcium, AAS, Microwave (%)	2	2	1.2225	0.05303						
019.41	Calcium, ICP, Dry ash (%)	32	31	1.1249	0.06856	1.1202	0.06208	0.01394	5.54%	0.02231	3.93%
019.42	Calcium, ICP, Open vessel (%)	21	21	1.1269	0.08358	1.1269	0.09478	0.02585	8.41%	0.02963	3.93%
019.43	Calcium, ICP, Microwave (%)	29	29	1.1219	0.05564	1.1242	0.04403	0.01022	3.92%	0.02699	3.93%
019.44	Calcium, ICP, Dry ash (%)	1	1	1.0850							
019.52	Calcium, ICP-MS, Open vessel (%)	3	3	1.1491	0.03017	1.1491	0.03017	0.02177	2.63%	0.05427	3.92%
019.53	Calcium, ICP-MS, Microwave (%)	2	2	1.1500	0.00000						
019.99	Calcium, Miscellaneous (%)	6	6	1.0888	0.09421	1.0926	0.09787	0.04994	8.96%	0.00877	3.95%
021.31	Cobalt, AAS, Dry ash (mg / kg (ppm))	2	2	0.46750	0.44901						
021.41	Cobalt, ICP, Dry ash (mg / kg (ppm))	3	3	0.53483	0.18432	0.53483	0.18432	0.13302	34.46%	0.02167	17.58%
021.42	Cobalt, ICP, Open vessel (mg / kg (ppm))	2	2	0.43950	0.02192						
021.43	Cobalt, ICP, Microwave (mg / kg (ppm))	5	5	0.52583	0.12238	0.52583	0.12238	0.06841	23.27%	0.04014	17.62%
021.52	Cobalt, ICP-MS, Open vessel (mg / kg (ppm))	2	2	0.51728	0.17292						
021.53	Cobalt, ICP-MS, Microwave (mg / kg (ppm))	3	3	0.55832	0.12962	0.55832	0.12962	0.09355	23.22%	0.02817	17.46%
022.31	Copper, AAS, Dry ash (mg / kg (ppm))	14	13	17.260	2.5661	17.275	2.5517	0.88465	14.77%	1.5192	10.42%
022.32	Copper, AAS, Open vessel (mg / kg (ppm))	2	2	15.754	4.5771						
022.33	Copper, AAS, Microwave (mg / kg (ppm))	1	1	15.271							
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	22	21	15.968	2.6321	15.856	1.8148	0.49503	11.45%	0.75088	10.55%
022.42	Copper, ICP, Open vessel (mg / kg (ppm))	22	20	18.525	3.2234	18.072	1.7051	0.47659	9.44%	1.1001	10.35%
022.43	Copper, ICP, Microwave (mg / kg (ppm))	21	21	17.375	4.0515	17.090	2.0036	0.54653	11.72%	0.68251	10.44%
022.52	Copper, ICP-MS, Open vessel (mg / kg (ppm))	1	1	25.500							
022.53	Copper, ICP-MS, Microwave (mg / kg (ppm))	3	3	16.300	1.8187	16.300	1.8187			0.40000	10.51%
022.99	Copper, Miscellaneous (mg / kg (ppm))	5	5	15.759	0.72980	15.759	0.72980	0.40797	4.63%	0.31000	10.56%
023.01	Fluorine, Ion Sel Elect (mg / kg (ppm))	1	1	21.750							
025.31	Iron, AAS, Dry ash (mg / kg (ppm))	17	16	360.09	59.111	350.26	18.091	5.6534	5.16%	7.6025	6.62%
025.32	Iron, AAS, Open vessel (mg / kg (ppm))	1	1	248.98							
025.33	Iron, AAS, Microwave (mg / kg (ppm))	1	1	419.50							
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	26	25	329.97	40.271	334.63	34.015	8.5037	10.16%	11.474	6.67%
025.42	Iron, ICP, Open vessel (mg / kg (ppm))	16	15	328.96	53.172	339.42	34.162	11.026	10.06%	8.4361	6.66%
025.43	Iron, ICP, Microwave (mg / kg (ppm))	21	20	343.46	38.676	346.33	32.895	9.1946	9.50%	6.2312	6.63%

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025.52	Iron, ICP-MS, Open vessel (mg / kg (ppm))	2	2	333.02	44.505						
025.53	Iron, ICP-MS, Microwave (mg / kg (ppm))	2	2	344.15	8.6974						
025.99	Iron, Miscellaneous (mg / kg (ppm))	4	3	362.05	6.1610	362.05	6.1610	4.4463	1.70%	15.367	6.59%
027.31	Magnesium, AAS, Dry ash (%)	17	16	0.19981	0.00996	0.19891	0.00892	0.00279	4.48%	0.00393	5.10%
027.32	Magnesium, AAS, Open vessel (%)	1	1	0.16000							
027.33	Magnesium, AAS, Microwave (%)	3	3	720.82	1,248.1	720.82	1,248.1	1,103.2	173.15%	11.341	0.37%
027.41	Magnesium, ICP, Dry ash (%)	27	26	0.19923	0.00863	0.19861	0.00814	0.00200	4.10%	0.00462	5.10%
027.42	Magnesium, ICP, Open vessel (%)	21	20	0.20257	0.01430	0.20257	0.01622	0.00453	8.01%	0.00507	5.09%
027.43	Magnesium, ICP, Microwave (%)	26	26	0.20120	0.01058	0.20101	0.01075	0.00264	5.35%	0.00530	5.09%
027.44	Magnesium, ICP, Dry ash (%)	1	1	0.19400							
027.52	Magnesium, ICP-MS, Open vessel (%)	3	3	0.20757	0.02711	0.20757	0.02711	0.01956	13.06%	0.00467	5.07%
027.53	Magnesium, ICP-MS, Microwave (%)	2	2	0.19900	0.00566						
027.99	Magnesium, Miscellaneous (%)	5	5	0.19485	0.01143	0.19485	0.01143	0.00639	5.87%	0.00558	5.12%
028.31	Manganese, AAS, Dry ash (mg / kg (ppm))	17	17	85.583	7.8719	86.376	6.7600	2.0494	7.83%	2.1535	8.18%
028.32	Manganese, AAS, Open vessel (mg / kg (ppm))	2	2	83.492	15.957						
028.33	Manganese, AAS, Microwave (mg / kg (ppm))	1	1	81.723							
028.41	Manganese, ICP, Dry ash (mg / kg (ppm))	23	22	82.373	9.1792	83.397	6.3099	1.6816	7.57%	3.0828	8.22%
028.42	Manganese, ICP, Open vessel (mg / kg (ppm))	21	21	89.722	7.8658	90.211	7.6388	2.0837	8.47%	3.5241	8.12%
028.43	Manganese, ICP, Microwave (mg / kg (ppm))	19	18	83.447	21.780	88.154	7.3756	2.1731	8.37%	4.4400	8.15%
028.44	Manganese, ICP, Dry ash (mg / kg (ppm))	1	1	80.233							
028.52	Manganese, ICP-MS, Open vessel (mg / kg (ppm))	1	1	102.50							
028.53	Manganese, ICP-MS, Microwave (mg / kg (ppm))	4	4	84.800	4.6338	84.800	4.6338	2.8961	5.46%	2.2000	8.20%
028.99	Manganese, Miscellaneous (mg / kg (ppm))	5	5	87.190	6.5227	87.190	6.5227	3.6463	7.48%	4.1600	8.17%
031.00	Phosphorus, Vol (%)	1	1	0.70500							
031.01	Phosphorus, Photometric (%)	53	52	0.68575	0.03660	0.68652	0.02549	0.00442	3.71%	0.01169	4.23%
031.02	Phosphorus, GQMP (AOAC 935.13-Extraction) (%)	2	2	0.69500	0.00707						
031.03	Phosphorus, Autoanalyzer (%)	3	3	0.68888	0.00788	0.68888	0.00788	0.00569	1.14%	0.00590	4.23%
031.06	Phosphorus, Hach Method (%)	1	1	1.0050							
031.41	Phosphorus, ICP, Dry ash (%)	29	29	0.68673	0.03585	0.68663	0.03859	0.00896	5.62%	0.01655	4.23%
031.42	Phosphorus, ICP, Open vessel (%)	21	20	0.67926	0.03954	0.68115	0.04013	0.01122	5.89%	0.01516	4.24%
031.43	Phosphorus, ICP, Microwave (%)	27	26	0.69486	0.03713	0.69195	0.02776	0.00680	4.01%	0.00781	4.23%
031.44	Phosphorus, ICP, Dry ash (%)	1	1	0.66250							
031.52	Phosphorus, ICP-MS, Open vessel (%)	2	2	0.70585	0.01322						
031.53	Phosphorus, ICP-MS, Microwave (%)	2	2	0.70500	0.00212						
031.99	Phosphorus, Miscellaneous (%)	6	6	0.65754	0.06164	0.65754	0.06990	0.03567	10.63%	0.02515	4.26%
032.02	Potassium, Flame Emission (%)	2	2	1.0073	0.01096						
032.31	Potassium, AAS, Dry ash (%)	17	17	0.96657	0.04595	0.96974	0.04386	0.01330	4.52%	0.01549	4.02%
032.32	Potassium, AAS, Open vessel (%)	1	1	0.79500							
032.33	Potassium, AAS, Microwave (%)	1	1	1.2250							
032.41	Potassium, ICP, Dry ash (%)	27	26	0.96341	0.07134	0.96990	0.05538	0.01358	5.71%	0.01850	4.02%

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032.42	Potassium, ICP, Open vessel (%)	20	19	0.98796	0.05269	0.98512	0.04310	0.01236	4.37%	0.02129	4.01%
032.43	Potassium, ICP, Microwave (%)	25	25	0.96066	0.05926	0.96006	0.06319	0.01580	6.58%	0.02414	4.02%
032.44	Potassium, ICP, Dry ash (%)	1	1	0.94200							
032.52	Potassium, ICP-MS, Open vessel (%)	2	2	1.0539	0.06131						
032.53	Potassium, ICP-MS, Microwave (%)	2	2	1.0055	0.06293						
032.99	Potassium, Miscellaneous (%)	6	6	0.99258	0.18214	0.98021	0.17702	0.09034	18.06%	0.01467	4.01%
033.00	Salt as chloride, Sol Cl (%)	25	25	0.75686	0.06057	0.75235	0.05362	0.01340	7.13%	0.01894	4.17%
033.01	Salt as chloride, Poten Cl (%)	33	32	0.78636	0.14591	0.79103	0.02406	0.00532	3.04%	0.00873	4.14%
033.03	Salt as chloride, Quantab (%)	6	5	0.65000	0.03808	0.65000	0.03808	0.02129		0.00000	4.27%
033.05	Salt as chloride, Ion Sel Electrode (%)	4	3	0.76500	0.02179	0.76500	0.02179	0.01926	2.85%	0.00333	4.16%
033.99	Salt, Miscellaneous (%)	8	8	0.76488	0.07316	0.77089	0.06852	0.03028	8.89%	0.02200	4.16%
034.01	Selenium, Fluor (mg / kg (ppm))	2	2	3.2068	0.47058						
034.04	Selenium, AA, Hydride (mg / kg (ppm))	7	7	3.5636	0.37924	3.5650	0.42700	0.20174	11.98%	0.20757	13.21%
034.41	Selenium, ICP, Dry ash (mg / kg (ppm))	2	2	4.1400	0.63640						
034.42	Selenium, ICP, Open vessel (mg / kg (ppm))	2	2	4.2975	0.07425						
034.43	Selenium, ICP, Microwave (mg / kg (ppm))	3	3	4.5774	0.88143	4.5774	0.88143	0.63612	19.26%	0.20810	12.72%
034.52	Selenium, ICP-MS, Open vessel (mg / kg (ppm))	4	4	3.7738	0.70270	3.7738	0.70270	0.43919	18.62%	0.24750	13.10%
034.53	Selenium, ICP-MS, Microwave (mg / kg (ppm))	4	3	4.1893	0.64211	4.1893	0.64211	0.46340	15.33%	0.13253	12.89%
035.01	Sodium, Ion-selective electrode (%)	2	2	0.30500	0.02970						
035.02	Sodium, Em Spect (%)	1	1	0.26000							
035.05	Sodium, Flame Emission (%)	4	4	0.33875	0.05935	0.33875	0.05935	0.03709	17.52%	0.01250	4.71%
035.31	Sodium, AAS, Dry ash (%)	20	20	0.28899	0.03000	0.28852	0.02681	0.00749	9.29%	0.00731	4.82%
035.33	Sodium, AAS, Microwave (%)	1	1	0.25600							
035.41	Sodium, ICP, Dry ash (%)	26	25	0.28741	0.02606	0.28652	0.02006	0.00501	7.00%	0.00813	4.83%
035.42	Sodium, ICP, Open vessel (%)	15	14	0.27789	0.01701	0.27709	0.01323	0.00442	4.77%	0.01021	4.85%
035.43	Sodium, ICP, Microwave (%)	24	22	0.28297	0.02488	0.28238	0.02517	0.00671	8.91%	0.00643	4.84%
035.52	Sodium, ICP-MS, Open vessel (%)	2	2	0.31010	0.00933						
035.53	Sodium, ICP-MS, Microwave (%)	2	2	0.28800	0.00000						
035.99	Sodium, Miscellaneous (%)	5	4	0.28250	0.03014	0.28250	0.03014	0.01884	10.67%	0.01000	4.84%
036.04	Sulfur, LECO (%)	2	2	0.34000	0.02828						
036.42	Sulfur, ICP, Open vessel (%)	17	17	0.31277	0.03076	0.30766	0.02012	0.00610	6.54%	0.00579	4.78%
036.43	Sulfur, ICP, Microwave (%)	11	11	0.31079	0.02382	0.31083	0.02693	0.01015	8.66%	0.01169	4.77%
036.52	Sulfur, ICP-MS, Open vessel (%)	2	2	1,453.4	2,055.0						
036.53	Sulfur, ICP-MS, Microwave (%)	1	1	0.31600							
036.99	Sulfur, Miscellaneous (%)	2	2	0.30258	0.00364						
037.31	Zinc, AAS, Dry ash (mg / kg (ppm))	18	17	179.72	13.382	180.48	12.450	3.7745	6.90%	3.2849	7.32%
037.32	Zinc, AAS, Open vessel (mg / kg (ppm))	2	2	166.33	6.2628						
037.33	Zinc, AAS, Microwave (mg / kg (ppm))	3	3	210.16	65.494	210.16	65.494	47.266	31.16%	5.2680	7.15%
037.41	Zinc, ICP, Dry ash (mg / kg (ppm))	25	24	179.91	13.695	179.29	12.109	3.0897	6.75%	7.9312	7.33%
037.42	Zinc, ICP, Open vessel (mg / kg (ppm))	20	20	188.72	22.597	189.00	17.709	4.9498	9.37%	6.9502	7.27%

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037.43	Zinc, ICP, Microwave (mg / kg (ppm))	26	26	185.00	15.089	185.25	12.656	3.1025	6.83%	6.2529	7.29%
037.44	Zinc, ICP, Dry ash (mg / kg (ppm))	1	1	172.50							
037.52	Zinc, ICP-MS, Open vessel (mg / kg (ppm))	2	2	167.08	33.128						
037.53	Zinc, ICP-MS, Microwave (mg / kg (ppm))	2	2	198.50	0.70711						
037.99	Zinc, Miscellaneous (mg / kg (ppm))	6	6	179.69	16.986	179.69	19.263	9.8299	10.72%	3.6955	7.32%
038.41	Molybdenum, ICP, Dry ash (mg / kg (ppm))	3	3	1.4087	0.08712	1.4087	0.08712	0.06287	6.18%	0.12133	15.19%
038.42	Molybdenum, ICP, Open vessel (mg / kg (ppm))	4	4	1.4138	0.20774	1.4138	0.20774	0.12984	14.69%	0.21200	15.18%
038.43	Molybdenum, ICP, Microwave (mg / kg (ppm))	5	5	1.4102	0.61065	1.4102	0.61065	0.34136	43.30%	0.14216	15.19%
038.52	Molybdenum, ICP-MS, Open vessel (mg / kg (ppm))	2	2	1.2700	0.14142						
038.53	Molybdenum, ICP-MS, Microwave (mg / kg (ppm))	3	3	1.2743	0.31808	1.2743	0.31808	0.22955	24.96%	0.06983	15.42%
040.42	Barium, ICP, Open vessel (mg / kg (ppm))	1	1	5.4600							
040.53	Barium, ICP-MS, Microwave (mg / kg (ppm))	1	1	5.4105							
041.53	Vanadium, ICP-MS, Microwave (mg / kg (ppm))	1	1	1.1300							
042.00	Chloride, Titrimetric (%)	3	3	0.49667	0.05107	0.49667	0.05107	0.03686	10.28%	0.01667	4.44%
042.01	Chloride, Ion-selective electrode (%)	1	1	0.46000							
101.00	Choline Chloride, Microbiological (mg / kg (ppm))	1	1	1,770.0							
102.01	Niacin, Microbiological (mg / kg (ppm))	1	1	71.200							
102.99	Niacin, Miscellaneous (mg / kg (ppm))	1	1	65.750							
103.01	Pantothenic Acid, Microbiological (mg / kg (ppm))	1	1	14.750							
103.02	Pantothenic Acid, LC (mg / kg (ppm))	1	1	12.450							
104.00	Riboflavin, Fluorometric (mg / kg (ppm))	2	2	8.8850	1.1102						
104.03	Riboflavin, LC (mg / kg (ppm))	2	2	7.2725	2.2239						
104.99	Riboflavin, Miscellaneous (mg / kg (ppm))	1	1	24.265							
105.00	Thiamine, LC (mg / kg (ppm))	3	3	2.3083	0.53114	2.3083	0.53114	0.38332	23.01%	0.24333	14.10%
105.01	Thiamine, Fluorometer (mg / kg (ppm))	1	1	4.0200							
106.00	Vitamin A, Color (KU / kg)	1	1	31.721							
106.01	Vitamin A, UV (KU / kg)	2	2	8,118.5	11,436						
106.02	Vitamin A, LC (KU / kg)	20	19	33.015	5.2570	32.444	4.4690	1.2816	13.77%	1.7427	
106.99	Vitamin A, Miscellaneous (KU / kg)	1	1	13.800							
107.00	Vitamin B12, Microbiological (µg / kg (ppb))	1	1	18.800							
108.01	Vitamin D3, LC, AOAC (KU / kg)	1	1	4.9000							
108.02	Vitamin D3, LC (KU / kg)	7	7	4.6721	1.0072	4.6721	1.1422	0.53965	24.45%	0.34143	
109.02	Vitamin E, LC (IU / kg)	18	17	79.753	72.818	61.852	14.959	4.5352	24.19%	2.7024	
109.99	Vitamin E, Miscellaneous (IU / kg)	1	1	23.950							
111.01	Vitamin C, Ascorbic Acid, LC (mkg/kg (ppm))	4	4	193.26	130.17	193.26	130.17	81.356	67.35%	8.0175	7.24%
111.98	Vitamin C, Ascorbic Acid, Miscellaneous (mkg/kg (ppm))	2	2	297.69	57.003						
112.01	Pyridoxine, LC (µg / g)	1	1	5.7700							
113.01	Folic Acid, Micro (mg / kg (ppm))	1	1	1.7550							
113.99	Folic acid, Miscellaneous (mg / kg (ppm))	1	1	0.63500							
114.01	Biotin, Microbiological (mg / kg (ppm))	1	1	0.24450							

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115.00	Non Protein N (NPN), Urea + Am, Urease method (%)	1	1	0.77500							
120.00	Alanine, Post-col Ninhydrin Der (%)	23	23	0.95966	0.10242	0.93590	0.03924	0.01023	4.19%	0.01648	4.04%
120.01	Alanine, Pre-col OPA Der (%)	1	1	0.96000							
120.02	Alanine, Post-col OPA Der (%)	1	1	0.95450							
120.05	Alanine, Pre-col AQC Der (%)	6	6	0.91700	0.03045	0.91700	0.03453	0.01762	3.77%	0.01333	4.05%
120.99	Alanine, Miscellaneous (%)	2	2	0.87750	0.05303						
121.00	Arginine, Post-col Ninhydrin Der (%)	23	22	1.1108	0.06243	1.1187	0.03817	0.01017	3.41%	0.02247	3.93%
121.01	Arginine, Pre-col OPA Der (%)	1	1	1.2050							
121.02	Arginine, Post-col OPA Der (%)	1	1	1.1400							
121.05	Arginine, Pre-col AQC Der (%)	6	6	1.1308	0.04228	1.1308	0.04794	0.02447	4.24%	0.03683	3.93%
121.99	Arginine, Miscellaneous (%)	1	1	1.3450							
122.00	Aspartic, Post-col Ninhydrin Der (%)	23	22	1.6691	0.14995	1.6991	0.07440	0.01983	4.38%	0.02544	3.69%
122.01	Aspartic, Pre-col OPA Der (%)	1	1	1.9200							
122.02	Aspartic, Post-col OPA Der (%)	1	1	1.8055							
122.05	Aspartic, Pre-col AQC Der (%)	6	6	1.7164	0.07044	1.7164	0.07988	0.04076	4.65%	0.03683	3.69%
122.99	Aspartic, Miscellaneous (%)	2	2	1.4450	0.12728						
124.00	Cysteine/Cystine, PAO Post-col Ninhydrin (%)	23	23	0.30756	0.04301	0.30589	0.03631	0.00946	11.87%	0.00777	4.78%
124.01	Cysteine/Cystine, PAO Pre-col OPA Der (%)	1	1	0.27500							
124.02	Cysteine/Cystine, PAO Post-col OPA Der (%)	1	1	0.31850							
124.05	Cysteine/Cystine, PAO Pre-col AQC Der (%)	6	5	0.31074	0.01948	0.31074	0.01948	0.00902	6.27%	0.00200	4.77%
124.99	Cysteine/Cystine, Miscellaneous (%)	2	2	1.5025	1.6935						
125.00	Glutamic, Post-col Ninhydrin Der (%)	23	22	3.2245	0.16505	3.2243	0.12731	0.03393	3.95%	0.03996	3.35%
125.01	Glutamic, Pre-col OPA Der (%)	1	1	3.3000							
125.02	Glutamic, Post-col OPA Der (%)	1	1	3.2650							
125.05	Glutamic, Pre-col AQC Der (%)	6	6	3.2083	0.16172	3.1788	0.10931	0.05578	3.44%	0.02333	3.36%
125.99	Glutamic, Miscellaneous (%)	2	2	2.8925	0.25102						
126.00	Glycine, Post-col Ninhydrin Der (%)	23	22	0.77070	0.03144	0.76931	0.02545	0.00678	3.31%	0.00788	4.16%
126.01	Glycine, Pre-col OPA Der (%)	1	1	0.78500							
126.02	Glycine, Post-col OPA Der (%)	1	1	0.79100							
126.05	Glycine, Pre-col AQC Der (%)	6	6	0.77017	0.02037	0.77017	0.02310	0.01179	3.00%	0.01800	4.16%
126.99	Glycine, Miscellaneous (%)	2	2	0.71500	0.00707						
127.00	Histidine, Post-col Ninhydrin Der (%)	23	22	0.47848	0.05479	0.46827	0.02614	0.00697	5.58%	0.00975	4.48%
127.01	Histidine, Pre-col OPA Der (%)	1	1	0.51000							
127.02	Histidine, Post-col OPA Der (%)	1	1	0.47100							
127.05	Histidine, Pre-col AQC Der (%)	6	6	0.46308	0.02061	0.46308	0.02337	0.01193	5.05%	0.00950	4.49%
127.99	Histidine, Miscellaneous (%)	2	2	0.50750	0.08839						
128.00	Isoleucine, Post-col Ninhydrin Der (%)	23	22	0.70373	0.05885	0.71557	0.03465	0.00923	4.84%	0.01346	4.21%
128.01	Isoleucine, Pre-col OPA Der (%)	1	1	0.75500							
128.02	Isoleucine, Post-col OPA Der (%)	1	1	0.74400							
128.05	Isoleucine, Pre-col AQC Der (%)	6	6	0.73967	0.05437	0.74046	0.05982	0.03052	8.08%	0.01733	4.18%

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128.99	Isoleucine, Miscellaneous (%)	2	2	0.78250	0.15910						
129.00	Leucine, Post-col Ninhydrin Der (%)	23	22	1.5018	0.12053	1.5163	0.05416	0.01443	3.57%	0.01998	3.76%
129.01	Leucine, Pre-col OPA Der (%)	1	1	1.6500							
129.02	Leucine, Post-col OPA Der (%)	1	1	1.5700							
129.05	Leucine, Pre-col AQC Der (%)	6	5	1.5435	0.07798	1.5435	0.07798	0.04359	5.05%	0.00820	3.75%
129.99	Leucine, Miscellaneous (%)	2	2	1.4675	0.02475						
130.00	L-Lysine, Post-col Ninhydrin Der (%)	24	24	0.86542	0.06437	0.87108	0.05933	0.01514	6.81%	0.02051	4.08%
130.01	L-Lysine, Pre-col OPA Der (%)	1	1	0.99000							
130.02	L-Lysine, Post-col OPA Der (%)	1	1	0.92950							
130.05	L-Lysine, Pre-col AQC Der (%)	8	7	0.90636	0.04872	0.90636	0.05524	0.02610	6.10%	0.01729	4.06%
130.99	L-Lysine, Miscellaneous (%)	5	5	1.0061	0.14251	1.0061	0.14251	0.07967	14.16%	0.03502	4.00%
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	24	24	0.29654	0.02827	0.29363	0.02370	0.00605	8.07%	0.00665	4.81%
131.01	Methionine, PAO Pre-col OPA Der (%)	1	1	0.29500							
131.02	Methionine, PAO Post-col OPA Der (%)	1	1	0.27800							
131.05	Methionine, PAO Pre-col AQC Der (%)	7	7	0.29594	0.03767	0.29594	0.04272	0.02018	14.43%	0.00700	4.80%
131.99	Methionine, Miscellaneous (%)	5	4	0.24375	0.05072	0.24375	0.05072	0.03170	20.81%	0.02750	4.95%
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	23	22	0.86555	0.06544	0.86980	0.03289	0.00876	3.78%	0.01421	4.08%
132.01	Phenylalanine, Pre-col OPA Der (%)	1	1	0.84500							
132.02	Phenylalanine, Post-col OPA Der (%)	1	1	0.87250							
132.05	Phenylalanine, Pre-col AQC Der (%)	6	6	0.87033	0.04967	0.86666	0.04754	0.02426	5.49%	0.02967	4.09%
132.99	Phenylalanine, Miscellaneous (%)	2	2	0.90500	0.00707						
133.00	Proline, Post-col Ninhydrin Der (%)	23	23	1.1332	0.18528	1.0944	0.06301	0.01642	5.76%	0.02564	3.95%
133.05	Proline, Pre-col AQC Der (%)	7	7	1.1096	0.06119	1.1110	0.01254	0.00593	1.13%	0.02157	3.94%
133.99	Proline, Miscellaneous (%)	2	2	1.2225	0.32173						
134.00	Serine, Post-col Ninhydrin Der (%)	23	22	0.86790	0.04870	0.86777	0.03320	0.00885	3.83%	0.01541	4.09%
134.01	Serine, Pre-col OPA Der (%)	1	1	0.97000							
134.02	Serine, Post-col OPA Der (%)	1	1	0.76100							
134.05	Serine, Pre-col AQC Der (%)	6	6	0.86283	0.03850	0.86283	0.04366	0.02228	5.06%	0.01100	4.09%
134.99	Serine, Miscellaneous (%)	2	2	0.84000	0.03536						
135.00	Threonine, Post-col Ninhydrin Der (%)	23	23	0.67742	0.02808	0.67712	0.02466	0.00643	3.64%	0.01366	4.24%
135.01	Threonine, Pre-col OPA Der (%)	1	1	0.78000							
135.02	Threonine, Post-col OPA Der (%)	1	1	0.68450							
135.05	Threonine, Pre-col AQC Der (%)	6	6	0.64608	0.04393	0.65573	0.02524	0.01288	3.85%	0.01017	4.26%
135.99	Threonine, Miscellaneous (%)	1	1	0.58000							
136.00	Tryptophan, Alka-Hydrol Post-col Ninhyd (%)	7	7	0.20394	0.02189	0.20394	0.02482	0.01173	12.17%	0.01139	5.08%
136.01	Tryptophan, Alka-Hydrol Rev Phase LC UV (%)	4	4	0.20975	0.01250	0.20975	0.01250	0.00781	5.96%	0.00350	5.06%
136.02	Tryptophan, Alka-Hydrol Post-col OPA De (%)	1	1	0.20200							
136.03	Tryptophan, Alka-Hydrol + IS RP LC FI (%)	5	5	0.21700	0.02540	0.21700	0.02540	0.01420	11.71%	0.00160	5.03%
136.99	Tryptophan, Miscellaneous (%)	3	3	0.18333	0.04856	0.18333	0.04856	0.03505	26.49%	0.01333	5.16%
137.00	Tyrosine, Post-col Ninhydrin Der (%)	15	15	0.56793	0.04655	0.57178	0.04268	0.01377	7.46%	0.01940	4.35%

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137.01	Tyrosine, Pre-col OPA Der (%)	1	1	0.63000							
137.02	Tyrosine, Post-col OPA Der (%)	2	2	0.60205	0.00912						
137.05	Tyrosine, Pre-col AQC Der (%)	6	6	0.60833	0.06506	0.61633	0.05424	0.02768	8.80%	0.01400	4.30%
137.99	Tyrosine, Miscellaneous (%)	3	3	0.60000	0.15548	0.60000	0.15548	0.11221	25.91%	0.02000	4.32%
138.00	Valine, Post-col Ninhydrin Der (%)	23	23	0.82939	0.06246	0.83637	0.04977	0.01297	5.95%	0.01970	4.11%
138.01	Valine, Pre-col OPA Der (%)	1	1	0.81500							
138.02	Valine, Post-col OPA Der (%)	1	1	0.88400							
138.05	Valine, Pre-col AQC Der (%)	6	6	0.86383	0.03662	0.86383	0.04153	0.02119	4.81%	0.01333	4.09%
138.99	Valine, Miscellaneous (%)	2	2	0.72750	0.06718						
139.00	Taurine, Post-col Ninhydrin Der (%)	1	1	0.18500							
139.02	Taurine, Post-col OPA Der (%)	1	1	0.01000							
139.99	Taurine, Miscellaneous (%)	1	1	0.08000							
142.00	Threonine Free, LC-PCD (%)	1	1	0.80500							
160.99	Fructose, Miscellaneous (%)	6	5	0.30080	0.13231	0.30080	0.13231	0.07397	43.99%	0.04600	4.79%
161.99	Galactose, Miscellaneous (%)	1	1	0.02700							
162.99	Glucose, Miscellaneous (%)	7	6	0.67917	0.35662	0.56560	0.10198	0.05204	18.03%	0.05467	4.36%
163.99	Lactose, Miscellaneous (%)	6	6	2.9148	0.26705	2.9148	0.30284	0.15454	10.39%	0.11767	3.40%
164.99	Maltose, Miscellaneous (%)	5	2	0.12500	0.03536	0.12500	0.03536			0.00000	5.47%
165.99	Sucrose, Miscellaneous (%)	6	6	5.5538	0.44394	5.5538	0.50343	0.25691	9.06%	0.11683	3.09%
166.99	Raffinose, Miscellaneous (%)	3	3	0.44483	0.03017	0.44483	0.03017	0.02667	6.78%	0.00433	4.52%
167.99	Stachyose, Miscellaneous (%)	3	3	1.2300	0.09734	1.2300	0.09734	0.07025	7.91%	0.02533	3.88%
345.00	Amprolium, Colorimetric (mg/kg (ppm))	1	1	8.4500							
345.02	Amprolium, LC (UV or FL) (mg/kg (ppm))	2	1	3.6325							
345.03	Amprolium, LC-MS (mg/kg (ppm))	1	1	3.0000							
348.06	Bacitracin, LC-MS/MS (mg/kg (ppm))	1	1	0.30000							
351.00	Chlortetracycline, Plate (mg/kg (ppm))	1	1	2.5499							
351.03	Chlortetracycline, LC (UV or FL) (mg/kg (ppm))	1	1	3.6300							
354.01	Decoquinat, LC (UV or FL) (mg/kg (ppm))	2	2	2.1575	0.39244						
354.02	Decoquinat, LC (mg/kg (ppm))	2	2	2.0750	0.03536						
354.04	Decoquinat, LC-MS/MS (mg/kg (ppm))	1	1	1.7050							
354.99	Decoquinat, Miscellaneous (mg/kg (ppm))	1	1	2.2250							
361.02	Lasalocid Sodium, LC (mg/kg (ppm))	2	2	1.8750	0.10607						
361.03	Lasalocid Sodium, LC (UV or FL) (mg/kg (ppm))	1	1	1.4650							
361.04	Lasalocid Sodium, LC-MS (mg/kg (ppm))	2	2	1.8125	1.1490						
361.05	Lasalocid Sodium, LC-MS/MS (mg/kg (ppm))	5	5	1.8910	0.16184	1.8910	0.16184	0.09047	8.56%	0.13400	14.53%
365.02	Monensin, LC (mg/kg (ppm))	1	1	3.8000							
365.03	Monensin, LC-PCD (mg/kg (ppm))	3	3	4.7400	0.88051	4.7400	0.88051	0.63545	18.58%	0.22000	12.66%
365.04	Monensin, LC-MS (mg/kg (ppm))	2	2	4.4200	0.36770						
365.05	Monensin, LC-MS/MS (mg/kg (ppm))	7	7	5.2571	1.9337	4.9256	1.3457	0.63579	27.32%	0.56286	12.58%
365.99	Monensin, Miscellaneous (mg/kg (ppm))	1	1	4.0700							

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
400.01	Water Activity, Aqualab chilled mirror (Units)	7	7	0.56572	0.02540	0.56550	0.02831	0.01337	5.01%	0.00504	
400.99	Water Activity, Miscellaneous (Units)	2	2	0.59450	0.09263						
412.01	Starch, Dietary, Enzymatic-Colorimetric (%)	1	1	33.275							
516.00	Arsenic, Total, AA, Hydride (mg / kg (ppm))	2	2	0.11725	0.02157						
516.52	Arsenic, Total, ICP-MS, Open vessel (mg / kg (ppm))	2	2	0.12850	0.00495						
516.53	Arsenic, Total, ICP-MS, Microwave (mg / kg (ppm))	4	4	0.17626	0.06252	0.17626	0.06252	0.03908	35.47%	0.00753	20.77%
518.41	Cadmium, ICP, Dry ash (mg / kg (ppm))	2	2	0.15125	0.12905						
518.52	Cadmium, ICP-MS, Open vessel (mg / kg (ppm))	2	2	0.07950	0.00636						
518.53	Cadmium, ICP-MS, Microwave (mg / kg (ppm))	4	4	0.08370	0.00384	0.08370	0.00384	0.00240	4.59%	0.00775	22.00%
520.41	Chromium, ICP, Dry ash (mg / kg (ppm))	1	1	2.3740							
520.42	Chromium, ICP, Open vessel (mg / kg (ppm))	2	2	2.2720	0.03253						
520.43	Chromium, ICP, Microwave (mg / kg (ppm))	1	1	2.9000							
520.52	Chromium, ICP-MS, Open vessel (mg / kg (ppm))	1	1	1.7350							
520.53	Chromium, ICP-MS, Microwave (mg / kg (ppm))	2	2	2.2164	0.12219						
526.41	Lead, ICP, Dry ash (mg / kg (ppm))	1	1	0.05000							
526.52	Lead, ICP-MS, Open vessel (mg / kg (ppm))	1	1	0.11350							
526.53	Lead, ICP-MS, Microwave (mg / kg (ppm))	4	4	0.09305	0.01000	0.09305	0.01000	0.00625	10.75%	0.00865	22.00%
539.52	Nickel, ICP-MS, Open vessel (mg / kg (ppm))	1	1	1.9250							
539.53	Nickel, ICP-MS, Microwave (mg / kg (ppm))	1	1	2.0933							
702.00	Butyric Acid (4:0), Miscellaneous GC (%)	2	1	0.01000							
703.00	Valeric Acid (5:0), Miscellaneous GC (%)	1	1	0.01000							
704.00	Caproic Acid (6:0), Miscellaneous GC (%)	2	1	0.01000							
706.01	Caprylic acid (8:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1		0.00000							
706.99	Caprylic acid (8:0), Miscellaneous (% (w/w))	1	1	0.00045							
708.01	Capric acid (10:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1		0.00000							
708.99	Capric acid (10:0), Miscellaneous (% (w/w))	1	1	0.00040							
710.01	Lauric Acid (12:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1		0.00000							
710.99	Lauric Acid (12:0), Miscellaneous (% (w/w))	2	2	0.00293	0.00202						
714.01	Myristic Acid (14:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.04450							
714.99	Myristic Acid (14:0), Miscellaneous (% (w/w))	2	2	0.00723	0.00541						
716.01	Palmitic Acid (16:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.47300							
716.99	Palmitic Acid (16:0), Miscellaneous (% (w/w))	2	2	0.74970	0.40503						
718.01	Palmitoleic Acid (9c-16:1), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1		0.00000							
718.99	Palmitoleic Acid (9c-16:1), Miscellaneous (% (w/w))	3	3	0.00672	0.00283	0.00672	0.00283	0.00204	42.11%	0.00010	
720.99	Margaric acid (17:0), Miscellaneous (% (w/w))	1	1	0.00675							
722.01	Stearic Acid (18:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.07050							
722.99	Stearic Acid (18:0), Miscellaneous (% (w/w))	2	2	0.20583	0.19555						
724.01	Oleic Acid (9c-18:1), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.67250							
724.99	Oleic Acid (9c-18:1), Miscellaneous (% (w/w))	2	2	1.0128	0.55469						
726.01	Linoleic Acid (9c,12c-18:2), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	2.0100							

Test Material Code # 201824

Issue Date : 05/31/2018

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
726.99	Linoleic Acid (9c,12c-18:2), Miscellaneous (% (w/w))	3	3	2.0021	0.73687	2.0021	0.73687	0.65131	36.80%	0.01463	
728.01	alpha-Linolenic Acid (9c,12c,15c-18:3), Direct Methylation by Alkali Hydrolysis	1	1	0.08200							
728.99	alpha-Linolenic Acid (9c,12c,15c-18:3), Miscellaneous (% (w/w))	3	3	0.09310	0.02179	0.09310	0.02179	0.01573	23.40%	0.00133	
730.01	Arachidic Acid (20:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.04350							
730.99	Arachidic Acid (20:0), Miscellaneous (% (w/w))	2	2	0.01938	0.01234						
732.01	Gondoic Acid (11c-20:1), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.00000							
732.99	Gondoic Acid (11c-20:1), Miscellaneous (% (w/w))	2	2	0.01448	0.00923						
736.01	Arachidonic Acid (5c,8c,11c,14c-20:4), Direct Methylation by Alkali Hydrolysis	1	1	0.00000							
736.99	Arachidonic Acid (5c,8c,11c,14c-20:4), Miscellaneous (% (w/w))	1	1	0.00010							
738.01	Mead Acid (11c,14c,17c-20:3), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.00000							
738.99	Mead Acid (11c,14c,17c-20:3), Miscellaneous (% (w/w))	1	1	0.00010							
740.01	Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:5), Direct Methylation by Alkali Hydrolysis	1	1	0.00000							
740.99	Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:5), Miscellaneous (% (w/w))	2	1	0.00010							
742.99	Behenic Acid (22:0), Miscellaneous (% (w/w))	2	2	0.00995	0.00410						
744.01	Erucic Acid (13c-22:1), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.00000							
744.99	Erucic Acid (13c-22:1), Miscellaneous (% (w/w))	2	1	0.00010							
746.01	Docosapentaenoic Acid n-3 DPA (7c,10c,13c,16c,19c-22:5), Direct Methylation by Alkali Hydrolysis	1	1	0.00000							
746.99	Docosapentaenoic Acid n-3 DPA (7c,10c,13c,16c,19c-22:5), Miscellaneous (% (w/w))	2	1	0.00010							
748.99	Lignoceric Acid (24:0), Miscellaneous (% (w/w))	2	2	0.01188	0.00428						
750.01	Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c-22:6), Direct Methylation by Alkali Hydrolysis	1	1	0.00000							
750.99	Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c-22:6), Miscellaneous (% (w/w))	2	1	0.00010							
752.01	Nervonic Acid (24:1) isomers, Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.00000							
752.99	Nervonic Acid (24:1) isomers, Miscellaneous (% (w/w))	2	1	0.00010							
754.99	Total n-3 Polyunsaturated (Omega-3) Fatty Acids, Miscellaneous (% (w/w))	1	1	0.09000							
756.99	Total n-6 Polyunsaturated (Omega-6) Fatty Acids, Miscellaneous (% (w/w))	1	1	1.7100							
772.99	Total Fatty Acids, Miscellaneous (% (w/w))	1	1	2.7583							

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.

Animal Feed Scheme

Method Precision Report

Methods Reported: 92

Poultry Feed

Labs Reporting: 203

Test Material Code # 201824

Issue Date : 05/31/2018

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 (%)	44	41	9.3793	0.30877	0.25767	0.08568	0.27154	2.74%	0.911%	2.89%	3.1693
001.99	Loss on Drying, Miscellaneous (%)	25	23	9.1420	0.89462	0.71415	0.11731	0.72372	7.72%	1.269%	7.83%	6.1695
002.01	Protein, Crude, Auto Kjel-Foss (%)	19	17	18.394	0.30403	0.22006	0.06220	0.22868	1.20%	0.339%	1.25%	3.6764
002.05	Protein, Crude, Copper, Boric Acid (%)	36	33	18.301	0.28981	0.20728	0.06131	0.21616	1.13%	0.335%	1.18%	3.5258
002.06	Protein, Crude, Combustion Nitrogen Analyzer (%)	126	114	18.439	0.23855	0.19332	0.12301	0.22914	1.05%	0.667%	1.24%	1.8628
002.11	Protein, Crude, NIR (%)	9	9	20.366	1.5631	1.5554	0.21872	1.5707	7.64%	1.074%	7.71%	7.1813
003.00	Fat, Crude, Diethyl Ether Ext., Direct (%)	14	13	2.6689	1.3544	0.32457	0.11574	0.34459	14.01%	4.994%	14.87%	2.9773
003.06	Fat, Crude, Pet Ether (%)	19	18	2.4416	0.21330	0.21114	0.07170	0.22298	8.67%	2.945%	9.16%	3.1099
003.09	Fat, Crude, Randall, Diethyl Ether Ext (%)	20	18	2.4714	0.30516	0.17051	0.05783	0.18005	7.12%	2.416%	7.52%	3.1137
003.10	Fat, Crude, Randall, Pet Ether (%)	32	29	2.3231	0.23583	0.17117	0.04724	0.17757	7.48%	2.065%	7.76%	3.7589
003.14	Fat, Crude, Ankom (%)	46	42	2.3608	0.29768	0.24591	0.10096	0.26583	10.25%	4.207%	11.08%	2.6330
004.00	Fiber, Crude, Asbestos Free (%)	18	17	2.9801	0.14545	0.08978	0.10973	0.14178	3.03%	3.708%	4.79%	1.2921
004.06	Fiber, Crude, Fibertec (%)	29	27	3.0016	0.23884	0.23077	0.10581	0.25387	7.70%	3.529%	8.47%	2.3993
004.07	Fiber, Crude, ANKOM (%)	65	62	2.8395	0.69749	0.34168	0.13118	0.36600	12.42%	4.769%	13.30%	2.7900
004.99	Fiber, Crude, Miscellaneous (%)	8	8	2.5963	0.28937	0.28114	0.09689	0.29737	10.83%	3.732%	11.45%	3.0692
005.00	Ash, 2h @ 600°C (%)	96	89	6.4464	0.17577	0.16219	0.06676	0.17539	2.51%	1.034%	2.72%	2.6272
005.05	Ash, 3h @ 550°C (%)	39	37	6.6105	0.13224	0.12750	0.05180	0.13762	1.93%	0.784%	2.08%	2.6566
005.11	Ash, NIR (%)	8	8	8.3040	3.5892	3.5862	0.20786	3.5922	43.19%	2.503%	43.26%	17.282
005.99	Ash, Miscellaneous (%)	11	11	6.5314	0.25446	0.25304	0.03797	0.25587	3.87%	0.581%	3.92%	6.7396
008.02	Fiber, Acid Detergent, Crucible (%)	15	14	4.3318	0.57438	0.56343	0.15779	0.58511	13.01%	3.643%	13.51%	3.7081
008.08	Fiber, Acid Detergent, Filter Bag - ANKOM (%)	42	39	4.1817	0.51230	0.45079	0.16950	0.48161	10.65%	4.006%	11.38%	2.8413
009.07	Fiber, Neutral Detergent, AOC -ENZ Pretreat (%)	14	13	10.651	1.3375	1.3257	0.27123	1.3532	12.56%	2.570%	12.82%	4.9891
009.09	Fiber, Neutral Detergent, Filter Bag - ANKOM (%)	43	39	10.222	1.0554	0.65445	0.16263	0.67436	6.48%	1.610%	6.68%	4.1467
010.11	Moisture, NIR (%)	8	8	9.7438	1.0806	1.0795	0.06796	1.0817	11.08%	0.697%	11.10%	15.916
010.99	Moisture, Miscellaneous (%)	17	16	9.6215	0.41768	0.41376	0.08074	0.42157	4.30%	0.839%	4.38%	5.2211
011.01	Loss on Drying, 135°C 2hr (%)	72	67	10.198	0.43820	0.34252	0.10414	0.35800	3.34%	1.016%	3.49%	3.4378
012.00	Starch, Polarimetric (Ewers) (%)	18	18	35.616	1.1322	1.1239	0.19399	1.1405	3.16%	0.545%	3.20%	5.8793
012.01	Starch, Enzymatic-Colorimetric Method (Megazyme) (%)	10	9	32.968	4.0619	2.3166	0.59126	2.3908	6.80%	1.737%	7.02%	4.0436
013.00	Fat, Acid Pretreat, Acid hydrolysis (%)	20	18	3.2543	0.55427	0.45684	0.09104	0.46582	14.37%	2.863%	14.65%	5.1168
013.02	Fat, Acid Pretreat, Mojonier, Bak Ext (%)	17	16	3.9008	0.47998	0.30697	0.08675	0.31899	8.06%	2.277%	8.37%	3.6770
019.00	Calcium, Ox-Mn04 Vol. (%)	12	12	1.1278	0.07526	0.07439	0.01609	0.07611	6.60%	1.427%	6.75%	4.7309
019.08	Calcium, EDTA (%)	14	11	1.0929	0.10740	0.07159	0.00927	0.07218	6.41%	0.830%	6.47%	7.7881
019.31	Calcium, AAS, Dry ash (%)	26	22	1.1307	0.06511	0.03660	0.02339	0.04344	3.24%	2.073%	3.85%	1.8574
019.41	Calcium, ICP, Dry ash (%)	32	30	1.1249	0.06856	0.05812	0.01986	0.06142	5.20%	1.776%	5.49%	3.0921
019.42	Calcium, ICP, Open vessel (%)	21	21	1.1269	0.08358	0.08083	0.03004	0.08623	7.17%	2.665%	7.65%	2.8709

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
019.43	Calcium, ICP, Microwave (%)	29	27	1.1219	0.05564	0.04161	0.02238	0.04724	3.70%	1.991%	4.20%	2.1113
022.31	Copper, AAS, Dry ash (mg / kg (ppm))	14	13	17.260	2.5661	2.2465	1.7539	2.8501	13.02%	10.162%	16.51%	1.6250
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	22	19	15.968	2.6321	1.9934	0.57518	2.0747	12.85%	3.709%	13.38%	3.6071
022.42	Copper, ICP, Open vessel (mg / kg (ppm))	22	18	18.525	3.2234	1.6283	0.64144	1.7501	9.24%	3.641%	9.93%	2.7284
022.43	Copper, ICP, Microwave (mg / kg (ppm))	21	20	17.375	4.0515	2.3933	0.62420	2.4733	14.37%	3.747%	14.85%	3.9624
025.31	Iron, AAS, Dry ash (mg / kg (ppm))	17	14	360.09	59.111	20.685	5.5665	21.421	5.97%	1.607%	6.19%	3.8482
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	26	23	329.97	40.271	33.355	8.9739	34.541	9.92%	2.668%	10.27%	3.8491
025.42	Iron, ICP, Open vessel (mg / kg (ppm))	16	14	328.96	53.172	41.001	8.1311	41.799	12.13%	2.405%	12.37%	5.1406
025.43	Iron, ICP, Microwave (mg / kg (ppm))	21	18	343.46	38.676	28.801	4.3892	29.133	8.21%	1.252%	8.31%	6.6375
027.31	Magnesium, AAS, Dry ash (%)	17	15	0.19981	0.00996	0.00831	0.00351	0.00902	4.19%	1.768%	4.55%	2.5715
027.41	Magnesium, ICP, Dry ash (%)	27	24	0.19923	0.00863	0.00805	0.00363	0.00883	4.04%	1.824%	4.43%	2.4301
027.42	Magnesium, ICP, Open vessel (%)	21	20	0.20257	0.01430	0.01391	0.00473	0.01469	6.86%	2.334%	7.25%	3.1068
027.43	Magnesium, ICP, Microwave (%)	26	26	0.20120	0.01058	0.00977	0.00576	0.01134	4.86%	2.861%	5.64%	1.9699
028.31	Manganese, AAS, Dry ash (mg / kg (ppm))	17	16	85.583	7.8719	5.4635	2.0080	5.8208	6.28%	2.309%	6.69%	2.8988
028.41	Manganese, ICP, Dry ash (mg / kg (ppm))	23	21	82.373	9.1792	5.1300	2.7994	5.8441	6.11%	3.334%	6.96%	2.0877
028.42	Manganese, ICP, Open vessel (mg / kg (ppm))	21	19	89.722	7.8658	5.6049	3.1476	6.4282	6.21%	3.489%	7.13%	2.0423
028.43	Manganese, ICP, Microwave (mg / kg (ppm))	19	17	83.447	21.780	6.6387	4.4033	7.9662	7.52%	4.987%	9.02%	1.8091
031.01	Phosphorus, Photometric (%)	53	49	0.68575	0.03660	0.02461	0.00993	0.02654	3.60%	1.451%	3.88%	2.6729
031.41	Phosphorus, ICP, Dry ash (%)	29	28	0.68673	0.03585	0.03479	0.01267	0.03702	5.07%	1.849%	5.40%	2.9215
031.42	Phosphorus, ICP, Open vessel (%)	21	18	0.67926	0.03954	0.03150	0.01101	0.03337	4.59%	1.603%	4.86%	3.0311
031.43	Phosphorus, ICP, Microwave (%)	27	24	0.69486	0.03713	0.02552	0.00645	0.02632	3.70%	0.935%	3.82%	4.0832
032.31	Potassium, AAS, Dry ash (%)	17	15	0.96657	0.04595	0.03627	0.01143	0.03803	3.72%	1.174%	3.90%	3.3263
032.41	Potassium, ICP, Dry ash (%)	27	25	0.96341	0.07134	0.04984	0.01690	0.05263	5.12%	1.737%	5.41%	3.1135
032.42	Potassium, ICP, Open vessel (%)	20	19	0.98796	0.05269	0.05067	0.02043	0.05463	5.13%	2.068%	5.53%	2.6744
032.43	Potassium, ICP, Microwave (%)	25	23	0.96066	0.05926	0.05699	0.01831	0.05986	5.96%	1.916%	6.26%	3.2691
033.00	Salt as chloride, Sol Cl (%)	25	24	0.75686	0.06057	0.04832	0.01649	0.05105	6.45%	2.200%	6.81%	3.0953
033.01	Salt as chloride, Poten Cl (%)	33	29	0.78636	0.14591	0.03300	0.00731	0.03380	4.19%	0.928%	4.29%	4.6251
033.99	Salt, Miscellaneous (%)	8	8	0.76488	0.07316	0.07155	0.02159	0.07474	9.35%	2.822%	9.77%	3.4622
035.31	Sodium, AAS, Dry ash (%)	20	20	0.28899	0.03000	0.02932	0.00895	0.03066	10.15%	3.098%	10.61%	3.4242
035.41	Sodium, ICP, Dry ash (%)	26	24	0.28741	0.02606	0.01968	0.00690	0.02085	6.93%	2.430%	7.34%	3.0209
035.42	Sodium, ICP, Open vessel (%)	15	13	0.27789	0.01701	0.01217	0.00698	0.01403	4.43%	2.540%	5.10%	2.0101
035.43	Sodium, ICP, Microwave (%)	24	22	0.28297	0.02488	0.02447	0.00629	0.02527	8.65%	2.223%	8.93%	4.0177
036.42	Sulfur, ICP, Open vessel (%)	17	16	0.31277	0.03076	0.01972	0.00597	0.02061	6.42%	1.946%	6.71%	3.4498
036.43	Sulfur, ICP, Microwave (%)	11	11	0.31079	0.02382	0.02220	0.01223	0.02534	7.14%	3.936%	8.15%	2.0718
037.31	Zinc, AAS, Dry ash (mg / kg (ppm))	18	16	179.72	13.382	10.270	3.2843	10.782	5.65%	1.806%	5.93%	3.2830
037.41	Zinc, ICP, Dry ash (mg / kg (ppm))	25	23	179.91	13.695	10.716	6.2445	12.403	6.01%	3.501%	6.95%	1.9862
037.42	Zinc, ICP, Open vessel (mg / kg (ppm))	20	18	188.72	22.597	13.020	6.3287	14.476	6.89%	3.348%	7.66%	2.2874
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	26	24	185.00	15.089	9.4205	5.5600	10.939	5.09%	3.001%	5.90%	1.9674
106.02	Vitamin A, LC (KU / kg)	20	18	33.015	5.2570	3.8298	1.5527	4.1326	11.89%	4.822%	12.83%	2.6616
109.02	Vitamin E, LC (IU / kg)	18	16	79.753	72.818	18.243	2.6457	18.434	29.13%	4.225%	29.44%	6.9675
120.00	Alanine, Post-col Ninhydrin Der (%)	23	21	0.95966	0.10242	0.03627	0.01170	0.03811	3.89%	1.256%	4.09%	3.2577
121.00	Arginine, Post-col Ninhydrin Der (%)	23	21	1.1108	0.06243	0.03990	0.01854	0.04400	3.56%	1.654%	3.93%	2.3733
122.00	Aspartic, Post-col Ninhydrin Der (%)	23	21	1.6691	0.14995	0.09531	0.02218	0.09786	5.63%	1.310%	5.78%	4.4113

Test Material Code # 201824

Issue Date : 05/31/2018

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
124.00	Cysteine/Cystine, PAO Post-col Ninhydrin (%)	23	21	0.30756	0.04301	0.03651	0.00575	0.03696	12.10%	1.907%	12.25%	6.4242
125.00	Glutamic, Post-col Ninhydrin Der (%)	23	21	3.2245	0.16505	0.13236	0.03432	0.13673	4.13%	1.071%	4.27%	3.9843
126.00	Glycine, Post-col Ninhydrin Der (%)	23	21	0.77070	0.03144	0.02655	0.00747	0.02758	3.46%	0.974%	3.60%	3.6919
127.00	Histidine, Post-col Ninhydrin Der (%)	23	20	0.47848	0.05479	0.02821	0.00690	0.02904	6.08%	1.488%	6.26%	4.2071
128.00	Isoleucine, Post-col Ninhydrin Der (%)	23	19	0.70373	0.05885	0.02978	0.00836	0.03093	4.14%	1.162%	4.30%	3.6994
129.00	Leucine, Post-col Ninhydrin Der (%)	23	20	1.5018	0.12053	0.04301	0.01371	0.04514	2.84%	0.905%	2.98%	3.2914
130.00	L-Lysine, Post-col Ninhydrin Der (%)	24	22	0.86542	0.06437	0.05425	0.01669	0.05676	6.22%	1.913%	6.51%	3.4014
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	24	23	0.29654	0.02827	0.02316	0.00604	0.02393	7.90%	2.061%	8.16%	3.9612
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	23	19	0.86555	0.06544	0.02971	0.01124	0.03176	3.42%	1.295%	3.66%	2.8254
133.00	Proline, Post-col Ninhydrin Der (%)	23	22	1.1332	0.18528	0.11052	0.02158	0.11261	10.03%	1.958%	10.22%	5.2186
134.00	Serine, Post-col Ninhydrin Der (%)	23	19	0.86790	0.04870	0.02818	0.01079	0.03018	3.25%	1.244%	3.48%	2.7959
135.00	Threonine, Post-col Ninhydrin Der (%)	23	21	0.67742	0.02808	0.02170	0.00982	0.02381	3.23%	1.460%	3.54%	2.4254
137.00	Tyrosine, Post-col Ninhydrin Der (%)	15	13	0.56793	0.04655	0.03375	0.01303	0.03618	5.84%	2.253%	6.26%	2.7768
138.00	Valine, Post-col Ninhydrin Der (%)	23	21	0.82939	0.06246	0.04278	0.01718	0.04610	5.11%	2.050%	5.50%	2.6839

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