AAFCO Proficiency Testing Program

AAFCO PTP Animal Feed Scheme

Animal Feed Scheme
Lamb Feed, Medicated
Test Material Code # 201632

Method Summary Report

(Precision Report Follows)

 # Methods Reported: 328
 # Labs Reporting: 197
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
000.02	Urea, As protein, Colorimetric (%)	1	1	0.90000							
001.00	Loss on Drying, Vac 95°C 5 hr (%)	9	9	8.1091	0.77445	8.1865	0.68645	0.28602	8.39%	0.18491	2.91%
001.03	Loss on Drying, Low temp. methods (%)	5	5	8.5570	0.26133	8.5570	0.26133	0.11687	3.05%	0.04168	2.90%
001.05	Loss on Drying, LECO (%)	1	1	8.4050							
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	40	39	8.4513	0.34952	8.4339	0.29944	0.05994	3.55%	0.09375	2.90%
001.08	Loss on Drying, 102°C 16 hr, in meat (%)	2	2	8.7000	0.07071						
001.99	Loss on Drying, Miscellaneous (%)	18	17	8.2787	0.63162	8.3470	0.55622	0.16863	6.66%	0.06927	2.91%
002.00	Protein, Crude (%)	3	3	18.978	0.30791	18.978	0.30791	0.21773	1.62%	0.09000	2.30%
002.01	Protein, Auto Kjel-Foss (%)	11	11	19.215	0.18967	19.205	0.19251	0.07256	1.00%	0.10964	2.28%
002.02	Protein, Semiauto Autoanalyzer (%)	2	2	19.391	0.04080						
002.04	Protein, Copper Catalyst (%)	6	6	20.300	2.3320	19.444	0.31252	0.15948	1.61%	0.20333	2.27%
002.05	Protein, Copper, Boric Acid (%)	29	28	19.230	0.23455	19.231	0.20884	0.04933	1.09%	0.09778	2.28%
002.06	Protein, Combustion Nitrogen Analyzer (%)	132	129	19.526	0.28558	19.541	0.23508	0.02587	1.20%	0.14731	2.26%
002.08	Protein, Cu/Ti (%)	3	3	19.183	0.31720	19.183	0.31720	0.18314	1.65%	0.15650	2.28%
002.10	Protein, Block dig/distillation (%)	1	1	19.530							
002.11	Protein, NIR (%)	7	7	20.119	1.1892	20.119	1.3485	0.63711	6.70%	0.12857	2.23%
002.99	Protein, Miscellaneous (%)	4	4	19.668	0.73879	19.668	0.73879	0.36940	3.76%	0.12425	2.25%
003.00	Fat, Eth Ext., Direct (%)	14	14	4.3000	0.22767	4.3000	0.25817	0.08625	6.00%	0.11758	3.21%
003.06	Fat, Pet Ether (%)	19	19	4.1443	0.19178	4.1442	0.14036	0.04025	3.39%	0.11173	3.23%
003.09	Fat, Soxtec, Eth Ext (%)	21	21	4.2944	0.25870	4.2899	0.21340	0.05821	4.97%	0.10962	3.21%
003.10	Fat, Soxtec, Pet Ether (%)	25	25	3.9755	0.16308	3.9733	0.15340	0.03835	3.86%	0.09154	3.25%
003.11	Fat, NIR (%)	8	8	4.1919	0.63732	4.1542	0.62741	0.27728	15.10%	0.05625	3.23%
003.12	Fat, Hexane Ext (%)	4	4	4.0451	0.18851	4.0451	0.18851	0.09426	4.66%	0.10598	3.24%
003.13	Fat, Soxtec, Hexane Ext. (%)	9	8	4.1047	0.17603	4.1061	0.19643	0.08681	4.78%	0.07516	3.23%
003.14	Fat, Ankom (%)	40	40	4.0395	0.25185	4.0348	0.25878	0.05115	6.41%	0.10761	3.24%
003.99	Fat, Miscellaneous (%)	4	4	3.6588	1.4340	3.6588	1.4340	0.71700	39.19%	0.11250	3.29%
004.00	Fiber, Crude, Asbestos Free (%)	17	16	5.7636	0.48299	5.7180	0.43462	0.13582	7.60%	0.12292	3.08%
004.01	Fiber, Sing Filt (%)	1	1	6.1000							
004.03	Fiber, Fritted Glass (%)	6	6	5.7367	1.1256	5.7367	1.2764	0.65137	22.25%	0.29333	3.08%
004.06	Fiber, Fibertec (%)	20	20	5.9849	0.47334	5.9106	0.31602	0.08833	5.35%	0.16576	3.06%

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004.07	Fiber, ANKOM (%)	58	57	5.7116	0.60982	5.6537	0.43616	0.07221	7.71%	0.17609	3.08%
004.11	Fiber, NIR (%)	7	7	5.4893	0.65993	5.4893	0.74836	0.35357	13.63%	0.10143	3.10%
004.99	Fiber, Miscellaneous (%)	6	6	5.4384	0.51239	5.3955	0.47784	0.24385	8.86%	0.36483	3.10%
005.00	Ash, 2h @ 600°C (%)	95	92	7.7700	0.36159	7.7954	0.28756	0.03748	3.69%	0.07973	2.94%
005.02	Ash, LECO (%)	2	2	8.0975	0.20153						
005.05	Ash, 3h @ 550°C (%)	29	28	8.0154	0.25530	8.0243	0.27066	0.06394	3.37%	0.06607	2.92%
005.11	Ash, NIR (%)	6	6	8.2817	2.8452	8.2817	3.2265	1.6465	38.96%	0.06667	2.91%
005.99	Ash, Miscellaneous (%)	12	11	8.2909	0.41449	8.2711	0.36403	0.13720	4.40%	0.08909	2.91%
006.00	Total sugars, As sucrose (%)	1	1	4.9650							
006.01	Total sugars, Mod. Fehling Soln (%)	2	2	5.5875	1.4672						
006.99	Total sugars, Miscellaneous (%)	1	1	6.1500							
008.02	Fiber, Acid Detergent (%)	15	15	7.8048	1.3980	7.7419	0.44582	0.14389	5.76%	0.19855	2.94%
008.05	Fiber, Acid Detergent-Hach (%)	1	1	7.7000							
008.08	Fiber, Acid Detergent, ANKOM (%)	42	42	7.4806	0.64593	7.5250	0.57449	0.11081	7.63%	0.22667	2.95%
008.99	Fiber, Acid Detergent Miscellaneous (%)	3	3	7.7933	0.68331	7.7933	0.68331	0.39451	8.77%	0.12667	2.94%
009.04	Fiber, Neutral Det-No ENZ Pretreat (%)	1	1	18.125							
009.07	Fiber, Neutral Det-ENZ Pretreat (%)	10	9	17.978	1.0438	17.922	1.0528	0.43866	5.87%	0.18643	2.36%
009.09	Fiber, Neutral Detergent, ANKOM (%)	36	34	17.309	0.91814	17.300	0.95577	0.20489	5.52%	0.36041	2.40%
009.99	Fiber, Neutral Det Miscellaneous (%)	3	3	18.698	3.5699	18.698	3.5699	2.0611	19.09%	0.56333	2.31%
010.03	Moisture, Karl-Fischer (%)	3	3	8.1650	0.43356	8.1650	0.43356	0.25032	5.31%	0.15667	2.92%
010.11	Moisture, NIR (%)	4	4	8.6925	0.52220	8.6925	0.52220	0.30149	6.01%	0.05500	2.89%
010.99	Moisture, Miscellaneous (%)	17	17	8.7990	0.75133	8.6858	0.50945	0.15445	5.87%	0.13347	2.89%
011.01	Loss on Drying, 135°C 2hr (%)	72	69	9.3438	0.42896	9.3736	0.36555	0.05501	3.90%	0.11171	2.86%
011.02	Loss on Drying, 130°C for 2 hours (%)	2	2	9.4525	0.08839						
011.99	Loss on Drying, High Temp. Methods Miscellaneo	4	4	8.9063	0.25643	8.9063	0.25643	0.12822	2.88%	0.22250	2.88%
012.00	Starch, Polarimetric (Ewers) (%)	9	9	31.012	0.57792	31.012	0.65537	0.27307	2.11%	0.33609	1.80%
012.01	Starch, Megazyme (%)	9	9	28.183	3.8524	28.496	2.4124	1.0052	8.47%	0.68474	1.87%
012.02	Starch, Colorimetric (GOP) (%)	2	2	32.600	2.4749						
012.03	Starch, Enzymatic (%)	5	5	28.828	1.5396	28.828	1.5396	0.68853	5.34%	0.68922	1.86%
012.04	Starch, YSI Analyzer (%)	4	4	28.615	1.7862	28.615	1.7862	0.89310	6.24%	0.26000	1.87%
012.11	Starch, NIR (%)	4	4	32.184	1.4738	32.184	1.4738	0.73690	4.58%	0.18250	1.76%
012.99	Starch, Miscellaneous (%)	1	1	46.730							
013.00	Fat, Acid hydrolysis (%)	22	21	4.9701	0.61044	4.9794	0.67281	0.18352	13.51%	0.14073	3.14%
013.02	Fat, Mojonnier, Bak Ext (%)	21	20	5.5351	0.78185	5.6176	0.46045	0.12870	8.20%	0.11856	3.08%
013.08	Fat, Roese-Gottlieb Modified (%)	1	1	4.9150							
013.10	Fat, Soxtec-Acid Hydrolysis (%)	6	6	4.8606	0.81216	4.8606	0.92099	0.46999	18.95%	0.17587	3.15%
013.13	Fat, Ankom- Acid Hydrolysis (%)	7	6	5.0832	1.1583	5.0832	1.3135	0.67029	25.84%	0.13100	3.13%
015.41	Aluminum, ICP, Dry ash (mg / kg (ppm))	3	3	78.983	14.705	78.983	14.705	8.4899	18.62%	7.6667	8.29%

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015.42	Aluminum, ICP, Open vessel (mg / kg (ppm))	1	1	86.350							
015.43	Aluminum, ICP, Microwave (mg / kg (ppm))	7	7	107.86	99.271	77.351	26.256	12.405	33.94%	2.9596	8.31%
017.41	Boron, ICP, Dry ash (mg / kg (ppm))	4	4	10.941	0.85419	10.941	0.85419	0.42710	7.81%	0.35250	11.16%
017.42	Boron, ICP, Open vessel (mg / kg (ppm))	4	4	10.374	0.68999	10.374	0.68999	0.34500	6.65%	0.20250	11.25%
017.43	Boron, ICP, Microwave (mg / kg (ppm))	6	5	10.975	0.62300	10.844	0.63455	0.35473	5.85%	0.33000	11.17%
019.00	Calcium, Ox-Mn04 Vol. (%)	12	12	1.4566	0.06761	1.4673	0.04537	0.01637	3.09%	0.01367	3.78%
019.03	Calcium, Semiauto (Autoanalyzer) (%)	1	1	1.5611							
019.08	Calcium, EDTA (%)	9	9	1.6408	0.42051	1.5192	0.09099	0.03791	5.99%	0.02660	3.76%
019.09	Calcium, Ion-selective electrode (%)	1	1	1.4325							
019.31	Calcium, AAS, Dry ash (%)	24	22	1.4849	0.10143	1.4792	0.08551	0.02279	5.78%	0.03661	3.77%
019.32	Calcium, AAS, Open vessel (%)	4	4	1.4682	0.06494	1.4682	0.06494	0.03247	4.42%	0.08505	3.78%
019.33	Calcium, AAS, Microwave (%)	2	2	1.5515	0.07566						
019.41	Calcium, ICP, Dry ash (%)	27	26	1.4992	0.06692	1.4978	0.05354	0.01312	3.57%	0.02933	3.76%
019.42	Calcium, ICP, Open vessel (%)	25	25	1.4990	0.14269	1.5150	0.11125	0.02781	7.34%	0.04744	3.76%
019.43	Calcium, ICP, Microwave (%)	25	24	1.5004	0.09540	1.4957	0.09360	0.02388	6.26%	0.02355	3.76%
019.44	Calcium, ICP, Dry ash (%)	1	1	1.4300							
019.51	Calcium, ICP-MS, Dry ash (%)	1	1	1.5900							
019.52	Calcium, ICP-MS, Open vessel (%)	2	2	1.2895	0.06290						
019.53	Calcium, ICP-MS, Microwave (%)	1	1	1.5150							
019.99	Calcium, Miscellaneous (%)	5	5	2.1979	1.5404	2.1979	1.5404	0.77020	70.09%	0.76260	3.55%
021.31	Cobalt, AAS, Dry ash (mg / kg (ppm))	4	4	4.8141	0.97589	4.8141	0.97589	0.48795	20.27%	0.29375	12.63%
021.34	Cobalt, AAS, Graphite furnace (mg / kg (ppm))	1	1	4.4200							
021.41	Cobalt, ICP, Dry ash (mg / kg (ppm))	3	3	2.8967	0.03512	2.8967	0.03512	0.02028	1.21%	0.12000	13.63%
021.42	Cobalt, ICP, Open vessel (mg / kg (ppm))	5	5	4.0626	0.24805	4.0626	0.24805	0.11093	6.11%	0.29056	12.95%
021.43	Cobalt, ICP, Microwave (mg / kg (ppm))	8	8	4.3752	0.45040	4.3532	0.45966	0.20314	10.56%	0.15744	12.82%
021.52	Cobalt, ICP-MS, Open vessel (mg / kg (ppm))	2	2	3.7100	0.49497						
021.53	Cobalt, ICP-MS, Microwave (mg / kg (ppm))	2	2	3.9230	0.34924						
022.31	Copper, AAS, Dry ash (mg / kg (ppm))	12	12	27.644	2.8030	27.620	3.1268	1.1283	11.32%	1.9921	9.71%
022.32	Copper, AAS, Open vessel (mg / kg (ppm))	2	2	33.358	1.2127						
022.33	Copper, AAS, Microwave (mg / kg (ppm))	2	2	24.683	1.6723						
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	20	19	26.784	1.6911	26.690	1.6779	0.48116	6.29%	1.1658	9.76%
022.42	Copper, ICP, Open vessel (mg / kg (ppm))	25	24	27.345	5.1096	27.511	2.8541	0.72824	10.37%	1.5789	9.71%
022.43	Copper, ICP, Microwave (mg / kg (ppm))	22	21	26.615	1.7525	26.424	1.3746	0.37496	5.20%	0.89252	9.77%
022.44	Copper, ICP, Dry ash (mg / kg (ppm))	1	1	27.750							
022.51	Copper, ICP-MS, Dry ash (mg / kg (ppm))	1	1	28.481							
022.52	Copper, ICP-MS, Open vessel (mg / kg (ppm))	2	2	24.575	1.0960						
022.53	Copper, ICP-MS, Microwave (mg / kg (ppm))	2	2	27.725	0.38891						
022.99	Copper, Miscellaneous (mg / kg (ppm))	4	4	26.734	1.1500	26.734	1.1500	0.57500	4.30%	1.2875	9.76%

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024.99	Iodine, Miscellaneous (mg / kg (ppm))	1	1	5.7500							
025.31	Iron, AAS, Dry ash (mg / kg (ppm))	14	14	225.03	26.401	222.19	23.152	7.7345	10.42%	6.5950	7.09%
025.32	Iron, AAS, Open vessel (mg / kg (ppm))	1	1	211.80							
025.33	Iron, AAS, Microwave (mg / kg (ppm))	1	1	214.00							
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	20	19	213.13	15.856	213.72	9.8574	2.8268	4.61%	6.4271	7.13%
025.42	Iron, ICP, Open vessel (mg / kg (ppm))	20	20	189.95	40.123	195.32	32.239	9.0111	16.51%	7.7986	7.23%
025.43	Iron, ICP, Microwave (mg / kg (ppm))	21	21	205.69	15.261	205.86	16.668	4.5465	8.10%	6.8682	7.18%
025.51	Iron, ICP-MS, Dry ash (mg / kg (ppm))	1	1	237.89							
025.52	Iron, ICP-MS, Open vessel (mg / kg (ppm))	1	1	183.30							
025.99	Iron, Miscellaneous (mg / kg (ppm))	2	2	200.50	4.9497						
027.31	Magnesium, AAS, Dry ash (%)	15	14	0.27863	0.01591	0.27840	0.01627	0.00544	5.84%	0.00707	4.85%
027.32	Magnesium, AAS, Open vessel (%)	3	3	0.26602	0.02652	0.26602	0.02652	0.01531	9.97%	0.00457	4.88%
027.33	Magnesium, AAS, Microwave (%)	3	3	0.27617	0.01020	0.27617	0.01020	0.00589	3.69%	0.00900	4.85%
027.41	Magnesium, ICP, Dry ash (%)	21	20	0.28571	0.00889	0.28670	0.00667	0.00187	2.33%	0.00551	4.83%
027.42	Magnesium, ICP, Open vessel (%)	22	21	0.28686	0.02010	0.28737	0.02166	0.00591	7.54%	0.00800	4.83%
027.43	Magnesium, ICP, Microwave (%)	21	20	0.28632	0.02135	0.28515	0.01850	0.00517	6.49%	0.00786	4.83%
027.44	Magnesium, ICP, Dry ash (%)	1	1	0.28300							
027.52	Magnesium, ICP-MS, Open vessel (%)	1	1	0.26500							
027.53	Magnesium, ICP-MS, Microwave (%)	1	1	0.29050							
027.99	Magnesium, Miscellaneous (%)	4	4	0.27875	0.03425	0.27875	0.03425	0.01977	12.29%	0.00750	4.85%
028.31	Manganese, AAS, Dry ash (mg / kg (ppm))	14	14	142.42	8.3276	142.55	9.1636	3.0613	6.43%	4.9243	7.58%
028.32	Manganese, AAS, Open vessel (mg / kg (ppm))	3	3	145.65	6.6796	145.65	6.6796	3.8565	4.59%	8.7000	7.56%
028.33	Manganese, AAS, Microwave (mg / kg (ppm))	2	2	137.15	16.827						
028.41	Manganese, ICP, Dry ash (mg / kg (ppm))	20	19	139.23	10.233	139.93	9.2672	2.6576	6.62%	3.6516	7.60%
028.42	Manganese, ICP, Open vessel (mg / kg (ppm))	24	24	140.25	28.920	143.54	13.475	3.4382	9.39%	5.1453	7.58%
028.43	Manganese, ICP, Microwave (mg / kg (ppm))	23	23	141.13	7.1026	141.66	4.4053	1.1482	3.11%	3.7024	7.59%
028.44	Manganese, ICP, Dry ash (mg / kg (ppm))	1	1	140.21							
028.51	Manganese, ICP-MS, Dry ash (mg / kg (ppm))	1	1	159.30							
028.52	Manganese, ICP-MS, Open vessel (mg / kg (ppm)	1	1	120.60							
028.53	Manganese, ICP-MS, Microwave (mg / kg (ppm))	1	1	143.00							
028.99	Manganese, Miscellaneous (mg / kg (ppm))	4	4	144.65	7.5248	144.65	7.5248	3.7624	5.20%	5.8000	7.57%
031.01	Phosphorus, Photometric (%)	44	43	0.61640	0.03202	0.61931	0.02552	0.00487	4.12%	0.01163	4.30%
031.02	Phosphorus, GQMP (AOAC 935.13-Extraction) (%	3	3	0.64167	0.01258	0.64167	0.01258	0.00890	1.96%	0.01000	4.28%
031.03	Phosphorus, Autoanalyzer (%)	5	5	0.61541	0.02617	0.61541	0.02617	0.01170	4.25%	0.00958	4.30%
031.06	Phosphorus, Hach Method (%)	1	1	0.64050							
031.41	Phosphorus, ICP, Dry ash (%)	26	24	0.61717	0.04983	0.62537	0.02327	0.00594	3.72%	0.00885	4.29%
031.42	Phosphorus, ICP, Open vessel (%)	24	23	0.63025	0.03546	0.63199	0.03606	0.00940	5.71%	0.01659	4.29%
031.43	Phosphorus, ICP, Microwave (%)	25	24	0.62992	0.04144	0.63147	0.04152	0.01059	6.57%	0.00999	4.29%

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031.44	Phosphorus, ICP, Dry ash (%)	1	1	0.60800							
031.51	Phosphorus, ICP-MS, Dry ash (%)	1	1	0.64285							
031.52	Phosphorus, ICP-MS, Open vessel (%)	1	1	0.57315							
031.53	Phosphorus, ICP-MS, Microwave (%)	1	1	0.68100							
031.99	Phosphorus, Miscellaneous (%)	4	4	0.61750	0.03428	0.61750	0.03428	0.01714	5.55%	0.02500	4.30%
032.02	Potassium, Flame Emission (%)	3	3	1.2355	0.05682	1.2355	0.05682	0.03281	4.60%	0.01767	3.87%
032.31	Potassium, AAS, Dry ash (%)	18	18	1.2308	0.07895	1.2284	0.06633	0.01954	5.40%	0.04223	3.88%
032.32	Potassium, AAS, Open vessel (%)	3	3	1.1457	0.11568	1.1457	0.11568	0.06679	10.10%	0.01653	3.92%
032.41	Potassium, ICP, Dry ash (%)	22	21	1.2324	0.05505	1.2281	0.05082	0.01386	4.14%	0.02041	3.88%
032.42	Potassium, ICP, Open vessel (%)	24	23	1.2815	0.06461	1.2776	0.05660	0.01475	4.43%	0.02704	3.85%
032.43	Potassium, ICP, Microwave (%)	23	22	1.2595	0.07084	1.2609	0.07255	0.01934	5.75%	0.03076	3.86%
032.44	Potassium, ICP, Dry ash (%)	1	1	1.2300							
032.52	Potassium, ICP-MS, Open vessel (%)	1	1	1.1773							
032.53	Potassium, ICP-MS, Microwave (%)	1	1	1.3450							
032.99	Potassium, Miscellaneous (%)	6	6	1.2102	0.08223	1.2102	0.09325	0.04759	7.71%	0.04567	3.89%
033.00	Salt as chloride, Sol Cl (%)	22	22	1.6922	0.13460	1.7139	0.06384	0.01701	3.73%	0.02670	3.69%
033.01	Salt as chloride, Poten Cl (%)	29	28	1.7755	0.07661	1.7895	0.03687	0.00871	2.06%	0.01805	3.66%
033.03	Salt as chloride, Quantab (%)	6	6	1.8458	0.41596	1.8458	0.47170	0.24071	25.55%	0.04167	3.65%
033.05	Salt as chloride, Ion Sel Electrode (%)	3	3	1.8483	0.17265	1.8483	0.17265	0.12208	9.34%	0.21000	3.65%
033.99	Salt, Miscellaneous (%)	8	7	1.6424	0.33423	1.6995	0.23313	0.11014	13.72%	0.02506	3.69%
034.01	Selenium, Fluor (mg / kg (ppm))	2	2	1.7350	0.06364						
034.04	Selenium, AA, Hydride (mg / kg (ppm))	7	7	1.3714	0.38826	1.4250	0.30679	0.14495	21.53%	0.05143	15.17%
034.41	Selenium, ICP, Dry ash (mg / kg (ppm))	2	2	1.4460	0.05091						
034.42	Selenium, ICP, Open vessel (mg / kg (ppm))	1	1	1.7500							
034.43	Selenium, ICP, Microwave (mg / kg (ppm))	2	2	1.3924	0.41352						
034.52	Selenium, ICP-MS, Open vessel (mg / kg (ppm))	5	5	1.7550	0.30021	1.7550	0.30021	0.13426	17.11%	0.05400	14.70%
034.53	Selenium, ICP-MS, Microwave (mg / kg (ppm))	3	3	2.0036	0.80888	2.0036	0.80888	0.46701	40.37%	0.22823	14.41%
034.99	Selenium, Miscellaneous (mg / kg (ppm))	2	2	2.6425	1.4955						
035.01	Sodium, Ion-selective electrode (%)	4	4	0.41163	0.04535	0.41163	0.04535	0.02268	11.02%	0.00575	4.57%
035.02	Sodium, Em Spect (%)	1	1	0.37000							
035.05	Sodium, Flame Emission (%)	3	3	0.39500	0.01000	0.39500	0.01000	0.00577	2.53%	0.01000	4.60%
035.31	Sodium, AAS, Dry ash (%)	17	17	0.36996	0.02216	0.36812	0.01616	0.00490	4.39%	0.01235	4.65%
035.32	Sodium, AAS, Open vessel (%)	2	2	0.34105	0.04533						
035.41	Sodium, ICP, Dry ash (%)	23	22	0.36963	0.02238	0.36676	0.01794	0.00478	4.89%	0.00816	4.65%
035.42	Sodium, ICP, Open vessel (%)	20	19	0.37672	0.02256	0.37692	0.02319	0.00665	6.15%	0.01141	4.63%
035.43	Sodium, ICP, Microwave (%)	21	20	0.36514	0.02511	0.36331	0.02414	0.00675	6.65%	0.01300	4.66%
035.52	Sodium, ICP-MS, Open vessel (%)	1	1	0.34930							
035.53	Sodium, ICP-MS, Microwave (%)	1	1	0.38000							

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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
035.99	Sodium, Miscellaneous (%)	6	5	0.34500	0.05863	0.34500	0.05863	0.03278	16.99%	0.00600	4.69%
036.00	Sulfur, Gravimetric (%)	1	1	0.28250							
036.04	Sulfur, LECO (%)	4	4	0.27625	0.00479	0.27625	0.00479	0.00240	1.73%	0.00750	4.85%
036.42	Sulfur, ICP, Open vessel (%)	22	22	0.28419	0.02553	0.28523	0.02181	0.00581	7.65%	0.01112	4.83%
036.43	Sulfur, ICP, Microwave (%)	15	15	0.28637	0.02262	0.28720	0.02270	0.00733	7.90%	0.00548	4.83%
036.52	Sulfur, ICP-MS, Open vessel (%)	1	1	0.26380							
036.99	Sulfur, Miscellaneous (%)	2	2	0.30000	0.01414						
037.31	Zinc, AAS, Dry ash (mg / kg (ppm))	15	15	250.72	18.533	250.72	21.016	6.7829	8.38%	8.0149	6.97%
037.32	Zinc, AAS, Open vessel (mg / kg (ppm))	3	3	258.13	12.239	258.13	12.239	7.0662	4.74%	9.4667	6.94%
037.33	Zinc, AAS, Microwave (mg / kg (ppm))	2	2	260.98	5.6922						
037.41	Zinc, ICP, Dry ash (mg / kg (ppm))	20	19	242.24	54.563	253.77	12.413	3.5598	4.89%	5.0157	6.95%
037.42	Zinc, ICP, Open vessel (mg / kg (ppm))	23	22	246.44	27.813	249.14	24.257	6.4645	9.74%	8.2993	6.97%
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	23	22	256.95	17.893	257.61	15.775	4.2040	6.12%	7.2041	6.94%
037.44	Zinc, ICP, Dry ash (mg / kg (ppm))	1	1	255.82							
037.51	Zinc, ICP-MS, Dry ash (mg / kg (ppm))	1	1	253.18							
037.52	Zinc, ICP-MS, Open vessel (mg / kg (ppm))	1	1	222.30							
037.53	Zinc, ICP-MS, Microwave (mg / kg (ppm))	1	1	272.50							
037.99	Zinc, Miscellaneous (mg / kg (ppm))	5	5	255.37	22.158	255.37	22.158	9.9094	8.68%	7.8200	6.95%
038.41	Molybdenum, ICP, Dry ash (mg / kg (ppm))	2	2	3.2275	0.46315						
038.42	Molybdenum, ICP, Open vessel (mg / kg (ppm))	4	4	3.7950	0.47288	3.7950	0.47288	0.23644	12.46%	0.17500	13.09%
038.43	Molybdenum, ICP, Microwave (mg / kg (ppm))	8	8	3.7098	0.33182	3.6721	0.17676	0.07812	4.81%	0.14688	13.15%
038.52	Molybdenum, ICP-MS, Open vessel (mg / kg (ppm	1	1	3.3200							
038.53	Molybdenum, ICP-MS, Microwave (mg / kg (ppm))	2	2	3.5231	0.46255						
040.42	Barium, ICP, Open vessel (mg / kg (ppm))	1	1	10.450							
040.43	Barium, ICP, Microwave (mg / kg (ppm))	1	1	9.2000							
040.53	Barium, ICP-MS, Microwave (mg / kg (ppm))	1	1	9.9556							
042.00	Chloride, Titrimetric (%)	2	2	1.0875	0.01061						
042.02	Chloride, Ion Chromatography (%)	1	1	1.6600							
042.99	Chloride, Miscellaneous (%)	1	1	0.98500							
051.00	Chlortetracycline, Plate (mg / kg (ppm))	6	6	50.002	6.3649	50.002	7.2178	3.6833	14.43%	1.3700	8.88%
051.03	Chlortetracycline, LC (mg / kg (ppm))	15	15	47.155	14.843	44.156	8.8007	2.8404	19.93%	3.7653	9.05%
054.01	Decoquinate, LC (mg / kg (ppm))	8	8	28.877	7.9896	26.386	0.46508	0.20554	1.76%	0.88125	9.77%
054.02	Decoquinate, LC (mg / kg (ppm))	8	8	25.830	1.5454	25.830	1.7525	0.77450	6.78%	1.0544	9.81%
054.99	Decoquinate, Miscellaneous (mg / kg (ppm))	1	1	19.600							
061.00	Lasalocid Sodium, Microbiological (mg / kg (ppm))	1	1	19.500							
061.02	Lasalocid Sodium, LC (mg / kg (ppm))	9	9	23.307	4.7484	22.179	2.0545	0.85603	9.26%	0.97333	10.03%
061.03	Lasalocid Sodium, LC, AOAC (mg / kg (ppm))	10	9	24.327	1.8455	24.346	2.0517	0.85486	8.43%	1.2886	9.89%
061.99	Lasalocid Sodium, Miscellaneous (mg / kg (ppm))	4	4	26.978	2.7772	26.978	2.7772	1.6034	10.29%	3.4500	9.74%

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101.00	Choline Chloride, Microbiological (mg / kg (ppm))	1	1	1,575.0							
101.01	Choline Chloride, Chem (mg / kg (ppm))	1	1	1,110.0							
101.99	Choline Chloride, Miscellaneous (mg / kg (ppm))	1	1	1,014.3							
102.01	Niacin, Microbiological (mg / kg (ppm))	1	1	913.50							
102.02	Niacin, LC (mg / kg (ppm))	2	2	734.90	154.88						
103.01	Pantothenic Acid, Microbiological (mg / kg (ppm))	1	1	11.425							
104.00	Riboflavin, Fluorometric (mg / kg (ppm))	1	1	3.7050							
104.03	Riboflavin, LC (mg / kg (ppm))	2	2	2.2600	0.21213						
105.00	Thiamine, LC (mg / kg (ppm))	3	3	4.3065	0.33283	4.3065	0.33283	0.23535	7.73%	0.14033	12.84%
105.01	Thiamine, Fluorometer (mg / kg (ppm))	1	1	6.6550							
106.00	Vitamin A, Color (KU / kg)	2	2	28.363	5.7093						
106.01	Vitamin A, UV (KU / kg)	1	1	25.950							
106.02	Vitamin A, LC (KU / kg)	25	25	25.081	5.5961	24.972	5.2094	1.3024	20.86%	3.9253	
107.00	Vitamin B12, Microbiological (µg / kg (ppb))	1	1	8.5700							
108.01	Vitamin D3, LC, AOAC (KU / kg)	1	1	2.5000							
108.02	Vitamin D3, LC (KU / kg)	5	5	4.4280	1.2412	4.4280	1.2412	0.55508	28.03%	0.46400	
108.99	Vitamin D3, Miscellaneous (KU / kg)	1	1	5.4050							
109.02	Vitamin E, LC (IU/kg)	15	15	209.31	49.753	210.81	38.112	12.301	18.08%	6.3118	
109.99	Vitamin E, Miscellaneous (IU/kg)	1	1	203.00							
112.01	Pyridoxine, LC (µg / g)	1	1	5.2050							
113.01	Folic Acid, Micro (mg / kg (ppm))	1	1	0.46750							
114.01	Biotin, Microbiological (mg / kg (ppm))	1	1	0.47350							
120.00	Alanine, Post-col Ninhydrin Der (%)	16	16	0.89493	0.01635	0.89601	0.01579	0.00493	1.76%	0.00844	4.07%
120.02	Alanine, Post-col OPA Der (%)	1	1	0.92050							
120.05	Alanine, Pre-col AQC Der (%)	2	2	0.84275	0.00813						
121.00	Arginine, Post-col Ninhydrin Der (%)	16	16	1.2302	0.06743	1.2239	0.04252	0.01329	3.47%	0.01454	3.88%
121.02	Arginine, Post-col OPA Der (%)	1	1	1.2240							
121.05	Arginine, Pre-col AQC Der (%)	2	2	1.1920	0.01556						
122.00	Aspartic, Post-col Ninhydrin Der (%)	16	16	1.7336	0.05227	1.7277	0.03391	0.01060	1.96%	0.01789	3.68%
122.02	Aspartic, Post-col OPA Der (%)	1	1	1.7250							
122.05	Aspartic, Pre-col AQC Der (%)	2	2	1.6170	0.00212						
124.00	Cysteine/Cystine, PAO Post-col Ninhydri (%)	16	16	0.31823	0.02818	0.31498	0.02060	0.00644	6.54%	0.00707	4.76%
124.02	Cysteine/Cystine, PAO Post-col OPA Der (%)	1	1	0.32650							
124.05	Cysteine/Cystine, PAO Pre-col AQC Der (%)	1	1	0.34500							
125.00	Glutamic, Post-col Ninhydrin Der (%)	16	16	3.3901	0.14649	3.3576	0.05648	0.01765	1.68%	0.03672	3.33%
125.02	Glutamic, Post-col OPA Der (%)	1	1	3.3365							
125.05	Glutamic, Pre-col AQC Der (%)	2	2	3.1855	0.06576						
126.00	Glycine, Post-col Ninhydrin Der (%)	16	16	0.85118	0.03064	0.84526	0.01229	0.00384	1.45%	0.01008	4.10%

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126.02	Glycine, Post-col OPA Der (%)	1	1	0.83200							
126.05	Glycine, Pre-col AQC Der (%)	2	2	0.80150	0.06718						
127.00	Histidine, Post-col Ninhydrin Der (%)	16	16	0.48715	0.04058	0.48032	0.02137	0.00668	4.45%	0.00761	4.47%
127.02	Histidine, Post-col OPA Der (%)	1	1	0.47550							
127.05	Histidine, Pre-col AQC Der (%)	2	2	0.44950	0.00990						
128.00	Isoleucine, Post-col Ninhydrin Der (%)	16	16	0.70978	0.04522	0.71415	0.04031	0.01260	5.64%	0.01279	4.21%
128.02	Isoleucine, Post-col OPA Der (%)	1	1	0.74350							
128.05	Isoleucine, Pre-col AQC Der (%)	2	2	0.71025	0.03217						
129.00	Leucine, Post-col Ninhydrin Der (%)	16	16	1.4068	0.05006	1.4065	0.02887	0.00902	2.05%	0.01732	3.80%
129.02	Leucine, Post-col OPA Der (%)	1	1	1.4265							
129.05	Leucine, Pre-col AQC Der (%)	2	2	1.3600	0.05162						
130.00	L-Lysine, Post-col Ninhydrin Der (%)	16	16	0.93170	0.03740	0.92494	0.02233	0.00698	2.41%	0.01351	4.05%
130.02	L-Lysine, Post-col OPA Der (%)	1	1	0.94650							
130.05	L-Lysine, Pre-col AQC Der (%)	2	2	0.90300	0.01980						
130.99	L-Lysine, Miscellaneous (%)	1	1	0.83150							
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	16	16	0.27495	0.02026	0.27242	0.01353	0.00423	4.97%	0.00499	4.86%
131.02	Methionine, PAO Post-col OPA Der (%)	1	1	0.25350							
131.05	Methionine, PAO Pre-col AQC Der (%)	1	1	0.24450							
131.99	Methionine, Miscellaneous (%)	1	1	0.31550							
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	16	16	0.85877	0.03780	0.85318	0.02493	0.00779	2.92%	0.01806	4.10%
132.02	Phenylalanine, Post-col OPA Der (%)	1	1	0.85600							
132.05	Phenylalanine, Pre-col AQC Der (%)	2	2	0.83050	0.02121						
133.00	Proline, Post-col Ninhydrin Der (%)	16	14	1.0805	0.02205	1.0805	0.02500	0.00835	2.31%	0.01260	3.95%
133.05	Proline, Pre-col AQC Der (%)	2	2	1.0355	0.06718						
134.00	Serine, Post-col Ninhydrin Der (%)	16	16	0.87720	0.03985	0.87588	0.02277	0.00711	2.60%	0.01752	4.08%
134.02	Serine, Post-col OPA Der (%)	1	1	0.77650							
134.05	Serine, Pre-col AQC Der (%)	2	2	0.79725	0.01732						
135.00	Threonine, Post-col Ninhydrin Der (%)	16	16	0.67788	0.02360	0.67612	0.02219	0.00693	3.28%	0.00717	4.24%
135.02	Threonine, Post-col OPA Der (%)	1	1	0.65200							
135.05	Threonine, Pre-col AQC Der (%)	2	2	0.67075	0.04278						
136.00	Tryptophan, Alka-Hydrol Post-col Ninhyd (%)	4	4	0.23243	0.03240	0.23243	0.03240	0.01871	13.94%	0.01840	4.98%
136.01	Tryptophan, Alka-Hydrol Rev Phase LC UV (%)	2	2	0.24475	0.01025						
136.02	Tryptophan, Alka-Hydrol Post-col OPA De (%)	1	1	0.24000							
136.03	Tryptophan, Alka-Hydrol + IS RP LC Fl (%)	3	3	0.23700	0.00557	0.23700	0.00557	0.00322	2.35%	0.00533	4.97%
136.99	Tryptophan, Miscellaneous (%)	1	1	0.22500							
137.00	Tyrosine, Post-col Ninhydrin Der (%)	12	12	0.52891	0.10061	0.55013	0.05845	0.02109	10.63%	0.02304	4.38%
137.02	Tyrosine, Post-col OPA Der (%)	1	1	0.60400							
137.05	Tyrosine, Pre-col AQC Der (%)	2	2	0.54300	0.10394						

Test Material Code # 201632 **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
138.00	Valine, Post-col Ninhydrin Der (%)	16	15	0.85357	0.04291	0.85666	0.04127	0.01332	4.82%	0.01311	4.09%
138.02	Valine, Post-col OPA Der (%)	1	1	0.87550							
138.05	Valine, Pre-col AQC Der (%)	2	2	0.84625	0.03642						
139.00	Taurine, Post-col Ninhydrin Der (%)	2	2	0.10000	0.08485						
139.02	Taurine, Post-col OPA Der (%)	1		0.00000							
160.99	Fructose, Miscellaneous (%)	4	4	0.30588	0.07977	0.30588	0.07977	0.04606	26.08%	0.02975	4.78%
162.99	Glucose, Miscellaneous (%)	4	3	0.32483	0.14785	0.32483	0.14785	0.08536	45.52%	0.08700	4.74%
163.99	Lactose, Miscellaneous (%)	2		0.00000							
164.99	Maltose, Miscellaneous (%)	2	2	0.30225	0.07389						
165.99	Sucrose, Miscellaneous (%)	5	5	2.9372	0.32635	2.9372	0.32635	0.14595	11.11%	0.04920	3.40%
166.99	Raffinose, Miscellaneous (%)	3	3	0.78433	0.13183	0.78433	0.13183	0.07611	16.81%	0.00867	4.15%
167.99	Stachyose, Miscellaneous (%)	3	3	1.0900	0.14309	1.0900	0.14309	0.08261	13.13%	0.02533	3.95%
351.05	Chlortetracycline, residual, LC-MS/MS (µg / kg (pp	1	1	34.615							
361.04	Lasalocid sodium, residual, LC-MS/MS (µg / kg (p	1	1	11.193							
400.01	Water activity, Aqualab chilled mirror (Units)	6	6	0.44885	0.04369	0.44885	0.04954	0.02528	11.04%	0.00667	
400.99	Water activity, Miscellaneous (Units)	2	2	0.43050	0.00778						
516.00	Arsenic, total, AA, Hydride (mg / kg (ppm))	2	2	0.09275	0.00318						
516.52	Arsenic, total, ICP-MS, Open vessel (mg / kg (ppn	2	2	0.09885	0.00163						
516.53	Arsenic, total, ICP-MS, Microwave (mg / kg (ppm)	3	3	0.16170	0.08061	0.16170	0.08061	0.04654	49.85%	0.01860	21.04%
518.34	Cadmium, AAS, Graphite furnace (mg / kg (ppm))	1	1	0.07500							
518.41	Cadmium, ICP, Dry ash (mg / kg (ppm))	2	2	0.05975	0.03571						
518.52	Cadmium, ICP-MS, Open vessel (mg / kg (ppm))	2	2	0.06893	0.02273						
518.53	Cadmium, ICP-MS, Microwave (mg / kg (ppm))	3	3	0.08663	0.00625	0.08663	0.00625	0.00361	7.21%	0.00607	22.00%
520.41	Chromium, ICP, Dry ash (mg / kg (ppm))	2	2	2.1600	0.22627						
520.42	Chromium, ICP, Open vessel (mg / kg (ppm))	1	1	3.8900							
520.43	Chromium, ICP, Microwave (mg / kg (ppm))	1	1	3.5000							
520.53	Chromium, ICP-MS, Microwave (mg / kg (ppm))	1	1	2.5955							
526.41	Lead, ICP, Dry ash (mg / kg (ppm))	2	1	0.18500							
526.52	Lead, ICP-MS, Open vessel (mg / kg (ppm))	2	2	0.17170	0.04483						
526.53	Lead, ICP-MS, Microwave (mg / kg (ppm))	3	3	0.15173	0.00435	0.15173	0.00435	0.00251	2.87%	0.02293	21.25%
539.41	Nickel, ICP, Dry ash (mg / kg (ppm))	1	1	2.4000							
539.53	Nickel, ICP-MS, Microwave (mg / kg (ppm))	1	1	2.3667							

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.

AAFCO Proficiency Testing Program

AAFCO PTP Animal Feed Scheme

Animal Feed Scheme
Lamb Feed, Medicated
Test Material Code # 201632

Method Precision Report

 # Methods Reported: 92
 # Labs Reporting: 197
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
001.00	Loss on Drying, Vac 95°C 5 hr (%)	9	8	8.1091	0.77445	0.48250	0.17653	0.51377	5.80%	2.123%	6.18%	2.9105
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	40	38	8.4513	0.34952	0.31223	0.07759	0.32173	3.71%	0.921%	3.82%	4.1466
001.99	Loss on Drying, Miscellaneous (%)	18	16	8.2787	0.63162	0.63737	0.05778	0.63999	7.67%	0.695%	7.70%	11.077
002.01	Protein, Auto Kjel-Foss (%)	11	11	19.215	0.18967	0.17429	0.10581	0.20390	0.91%	0.551%	1.06%	1.9270
002.05	Protein, Copper, Boric Acid (%)	29	26	19.230	0.23455	0.19208	0.08539	0.21021	1.00%	0.443%	1.09%	2.4618
002.06	Protein, Combustion Nitrogen Analyzer (%)	132	120	19.526	0.28558	0.20421	0.13076	0.24248	1.04%	0.669%	1.24%	1.8545
003.00	Fat, Eth Ext., Direct (%)	14	13	4.3000	0.22767	0.21435	0.10033	0.23667	5.01%	2.343%	5.53%	2.3588
003.06	Fat, Pet Ether (%)	19	17	4.1443	0.19178	0.09921	0.07355	0.12350	2.39%	1.774%	2.98%	1.6791
003.09	Fat, Soxtec, Eth Ext (%)	21	19	4.2944	0.25870	0.21198	0.09273	0.23137	4.97%	2.173%	5.42%	2.4951
003.10	Fat, Soxtec, Pet Ether (%)	25	25	3.9755	0.16308	0.15040	0.08919	0.17485	3.78%	2.244%	4.40%	1.9604
003.11	Fat, NIR (%)	8	8	4.1919	0.63732	0.63630	0.05081	0.63833	15.18%	1.212%	15.23%	12.564
003.14	Fat, Ankom (%)	40	38	4.0395	0.25185	0.23497	0.08563	0.25009	5.80%	2.113%	6.17%	2.9205
004.00	Fiber, Crude, Asbestos Free (%)	17	15	5.7636	0.48299	0.36750	0.08948	0.37823	6.47%	1.574%	6.66%	4.2272
004.06	Fiber, Fibertec (%)	20	19	5.9849	0.47334	0.27780	0.13854	0.31042	4.71%	2.348%	5.26%	2.2407
004.07	Fiber, ANKOM (%)	58	54	5.7116	0.60982	0.47823	0.14371	0.49936	8.48%	2.549%	8.86%	3.4746
005.00	Ash, 2h @ 600°C (%)	95	88	7.7700	0.36159	0.26568	0.06707	0.27401	3.41%	0.860%	3.51%	4.0857
005.05	Ash, 3h @ 550°C (%)	29	28	8.0154	0.25530	0.25152	0.06189	0.25902	3.14%	0.772%	3.23%	4.1854
005.99	Ash, Miscellaneous (%)	12	10	8.2909	0.41449	0.39653	0.05191	0.39992	4.81%	0.630%	4.85%	7.7035
008.02	Fiber, Acid Detergent (%)	15	14	7.8048	1.3980	0.82537	0.18673	0.84623	10.99%	2.487%	11.27%	4.5318
008.08	Fiber, Acid Detergent, ANKOM (%)	42	39	7.4806	0.64593	0.50795	0.18161	0.53944	6.78%	2.424%	7.20%	2.9703
009.07	Fiber, Neutral Det-ENZ Pretreat (%)	10	8	17.978	1.0438	1.0181	0.09249	1.0223	5.62%	0.510%	5.64%	11.053
009.09	Fiber, Neutral Detergent, ANKOM (%)	36	33	17.309	0.91814	0.90324	0.29058	0.94883	5.22%	1.681%	5.49%	3.2653
010.99	Moisture, Miscellaneous (%)	17	16	8.7990	0.75133	0.52676	0.14478	0.54629	6.08%	1.670%	6.30%	3.7732
011.01	Loss on Drying, 135°C 2hr (%)	72	65	9.3438	0.42896	0.35613	0.10254	0.37060	3.80%	1.094%	3.95%	3.6143
012.00	Starch, Polarimetric (Ewers) (%)	9	9	31.012	0.57792	0.54386	0.27644	0.61009	1.75%	0.891%	1.97%	2.2070
012.01	Starch, Megazyme (%)	9	8	28.183	3.8524	2.3710	0.48205	2.4195	8.11%	1.649%	8.28%	5.0191
013.00	Fat, Acid hydrolysis (%)	22	20	4.9701	0.61044	0.61744	0.10524	0.62634	12.38%	2.111%	12.56%	5.9518
013.02	Fat, Mojonnier, Bak Ext (%)	21	19	5.5351	0.78185	0.49601	0.10382	0.50676	8.75%	1.831%	8.93%	4.8810
019.00	Calcium, Ox-Mn04 Vol. (%)	12	10	1.4566	0.06761	0.03581	0.01013	0.03721	2.43%	0.687%	2.52%	3.6731
019.08	Calcium, EDTA (%)	9	8	1.6408	0.42051	0.06490	0.01742	0.06720	4.32%	1.159%	4.47%	3.8582
019.31	Calcium, AAS, Dry ash (%)	24	21	1.4849	0.10143	0.07445	0.02771	0.07943	5.06%	1.884%	5.40%	2.8670
019.41	Calcium, ICP, Dry ash (%)	27	24	1.4992	0.06692	0.04331	0.02554	0.05028	2.89%	1.704%	3.35%	1.9689

Test Material Code # 201632 **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
019.42	Calcium, ICP, Open vessel (%)	25	22	1.4990	0.14269	0.08697	0.03227	0.09277	5.69%	2.111%	6.07%	2.8751
019.43	Calcium, ICP, Microwave (%)	25	23	1.5004	0.09540	0.07774	0.02350	0.08121	5.22%	1.578%	5.45%	3.4557
022.31	Copper, AAS, Dry ash (mg / kg (ppm))	12	12	27.644	2.8030	2.4507	1.9239	3.1157	8.87%	6.960%	11.27%	1.6195
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	20	17	26.784	1.6911	1.2743	0.87957	1.5484	4.81%	3.318%	5.84%	1.7604
022.42	Copper, ICP, Open vessel (mg / kg (ppm))	25	22	27.345	5.1096	2.8529	1.4104	3.1825	10.43%	5.158%	11.64%	2.2564
022.43	Copper, ICP, Microwave (mg / kg (ppm))	22	20	26.615	1.7525	1.1050	0.90466	1.4281	4.19%	3.434%	5.42%	1.5786
025.31	Iron, AAS, Dry ash (mg / kg (ppm))	14	13	225.03	26.401	19.781	6.1908	20.728	8.98%	2.811%	9.41%	3.3481
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	20	17	213.13	15.856	10.940	5.4396	12.218	5.08%	2.525%	5.67%	2.2461
025.42	Iron, ICP, Open vessel (mg / kg (ppm))	20	18	189.95	40.123	32.025	6.5934	32.696	16.59%	3.416%	16.94%	4.9590
025.43	Iron, ICP, Microwave (mg / kg (ppm))	21	19	205.69	15.261	13.362	4.4014	14.069	6.48%	2.136%	6.83%	3.1964
027.31	Magnesium, AAS, Dry ash (%)	15	14	0.27863	0.01591	0.01521	0.00658	0.01658	5.46%	2.362%	5.95%	2.5190
027.41	Magnesium, ICP, Dry ash (%)	21	19	0.28571	0.00889	0.00505	0.00620	0.00799	1.76%	2.160%	2.78%	1.2892
027.42	Magnesium, ICP, Open vessel (%)	22	20	0.28686	0.02010	0.01850	0.00736	0.01991	6.41%	2.553%	6.90%	2.7039
027.43	Magnesium, ICP, Microwave (%)	21	20	0.28632	0.02135	0.02076	0.00702	0.02191	7.25%	2.451%	7.65%	3.1233
028.31	Manganese, AAS, Dry ash (mg / kg (ppm))	14	14	142.42	8.3276	7.7323	4.3726	8.8830	5.43%	3.070%	6.24%	2.0315
028.41	Manganese, ICP, Dry ash (mg / kg (ppm))	20	17	139.23	10.233	7.7457	2.9609	8.2924	5.54%	2.117%	5.93%	2.8006
028.42	Manganese, ICP, Open vessel (mg / kg (ppm))	24	22	140.25	28.920	15.883	4.6320	16.545	10.80%	3.149%	11.25%	3.5718
028.43	Manganese, ICP, Microwave (mg / kg (ppm))	23	21	141.13	7.1026	5.9825	2.9513	6.6709	4.22%	2.080%	4.70%	2.2603
031.01	Phosphorus, Photometric (%)	44	39	0.61640	0.03202	0.02623	0.00948	0.02789	4.22%	1.527%	4.49%	2.9416
031.41	Phosphorus, ICP, Dry ash (%)	26	23	0.61717	0.04983	0.02077	0.00771	0.02215	3.32%	1.231%	3.54%	2.8738
031.42	Phosphorus, ICP, Open vessel (%)	24	22	0.63025	0.03546	0.02913	0.01422	0.03242	4.59%	2.242%	5.11%	2.2799
031.43	Phosphorus, ICP, Microwave (%)	25	24	0.62992	0.04144	0.04100	0.00855	0.04188	6.51%	1.357%	6.65%	4.8981
032.31	Potassium, AAS, Dry ash (%)	18	17	1.2308	0.07895	0.05751	0.03412	0.06687	4.72%	2.800%	5.49%	1.9597
032.41	Potassium, ICP, Dry ash (%)	22	20	1.2324	0.05505	0.04170	0.01810	0.04546	3.40%	1.478%	3.71%	2.5113
032.42	Potassium, ICP, Open vessel (%)	24	21	1.2815	0.06461	0.05378	0.02011	0.05742	4.22%	1.579%	4.51%	2.8556
032.43	Potassium, ICP, Microwave (%)	23	21	1.2595	0.07084	0.06875	0.02521	0.07323	5.47%	2.007%	5.83%	2.9046
033.00	Salt as chloride, Sol Cl (%)	22	19	1.6922	0.13460	0.07257	0.01885	0.07498	4.24%	1.100%	4.38%	3.9777
033.01	Salt as chloride, Poten Cl (%)	29	25	1.7755	0.07661	0.03491	0.01337	0.03738	1.94%	0.744%	2.08%	2.7964
035.31	Sodium, AAS, Dry ash (%)	17	16	0.36996	0.02216	0.01223	0.01185	0.01703	3.34%	3.240%	4.65%	1.4367
035.41	Sodium, ICP, Dry ash (%)	23	20	0.36963	0.02238	0.01803	0.00642	0.01914	4.92%	1.753%	5.23%	2.9810
035.42	Sodium, ICP, Open vessel (%)	20	19	0.37672	0.02256	0.02146	0.00985	0.02361	5.70%	2.614%	6.27%	2.3978
035.43	Sodium, ICP, Microwave (%)	21	19	0.36514	0.02511	0.01913	0.01311	0.02319	5.29%	3.621%	6.41%	1.7692
036.42	Sulfur, ICP, Open vessel (%)	22	22	0.28419	0.02553	0.02455	0.00990	0.02647	8.64%	3.484%	9.31%	2.6734
036.43	Sulfur, ICP, Microwave (%)	15	15	0.28637	0.02262	0.02223	0.00587	0.02300	7.76%	2.051%	8.03%	3.9150
037.31	Zinc, AAS, Dry ash (mg / kg (ppm))	15	14	250.72	18.533	17.630	5.7517	18.544	6.99%	2.279%	7.35%	3.2241
037.41	Zinc, ICP, Dry ash (mg / kg (ppm))	20	18	242.24	54.563	10.891	4.9675	11.971	4.28%	1.952%	4.70%	2.4098
037.42	Zinc, ICP, Open vessel (mg / kg (ppm))	23	20	246.44	27.813	21.367	7.0166	22.489	8.53%	2.801%	8.98%	3.2052
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	23	20	256.95	17.893	14.061	6.0979	15.327	5.42%	2.351%	5.91%	2.5134
051.03	Chlortetracycline, LC (mg / kg (ppm))	15	14	47.155	14.843	9.3334	2.8710	9.7650	21.14%	6.503%	22.12%	3.4013
061.02	Lasalocid Sodium, LC (mg / kg (ppm))	9	8	23.307	4.7484	1.4120	0.68006	1.5672	6.48%	3.120%	7.19%	2.3045

Test Material Code # 201632 **Issue Date : 01/31/2017**

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061.03	Lasalocid Sodium, LC, AOAC (mg / kg (ppm))	10	9	24.327	1.8455	1.6077	1.2815	2.0560	6.61%	5.268%	8.45%	1.6043
106.02	Vitamin A, LC (KU / kg)	25	24	25.081	5.5961	3.8698	3.9248	5.5118	15.82%	16.045%	22.53%	1.4043
109.02	Vitamin E, LC (IU/kg)	15	14	209.31	49.753	39.043	5.8142	39.473	17.94%	2.671%	18.14%	6.7891
120.00	Alanine, Post-col Ninhydrin Der (%)	16	15	0.89493	0.01635	0.01165	0.00762	0.01393	1.30%	0.849%	1.55%	1.8268
121.00	Arginine, Post-col Ninhydrin Der (%)	16	15	1.2302	0.06743	0.03994	0.01257	0.04188	3.28%	1.034%	3.44%	3.3303
122.00	Aspartic, Post-col Ninhydrin Der (%)	16	15	1.7336	0.05227	0.02818	0.01726	0.03305	1.64%	1.002%	1.92%	1.9146
124.00	Cysteine/Cystine, PAO Post-col Ninhydri (%)	16	14	0.31823	0.02818	0.01754	0.00604	0.01855	5.62%	1.933%	5.94%	3.0723
125.00	Glutamic, Post-col Ninhydrin Der (%)	16	14	3.3901	0.14649	0.05523	0.02729	0.06160	1.65%	0.813%	1.84%	2.2573
126.00	Glycine, Post-col Ninhydrin Der (%)	16	15	0.85118	0.03064	0.00735	0.00997	0.01239	0.87%	1.181%	1.47%	1.2429
127.00	Histidine, Post-col Ninhydrin Der (%)	16	14	0.48715	0.04058	0.01791	0.00560	0.01876	3.74%	1.171%	3.92%	3.3491
128.00	Isoleucine, Post-col Ninhydrin Der (%)	16	15	0.70978	0.04522	0.03363	0.01053	0.03524	4.69%	1.468%	4.91%	3.3469
129.00	Leucine, Post-col Ninhydrin Der (%)	16	15	1.4068	0.05006	0.03503	0.01451	0.03792	2.51%	1.038%	2.71%	2.6139
130.00	L-Lysine, Post-col Ninhydrin Der (%)	16	14	0.93170	0.03740	0.02019	0.00857	0.02194	2.19%	0.928%	2.38%	2.5605
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	16	13	0.27495	0.02026	0.01407	0.00312	0.01442	5.19%	1.150%	5.32%	4.6229
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	16	15	0.85877	0.03780	0.01675	0.01616	0.02328	1.97%	1.900%	2.74%	1.4402
133.00	Proline, Post-col Ninhydrin Der (%)	16	14	1.0805	0.02205	0.02054	0.01135	0.02346	1.90%	1.050%	2.17%	2.0672
134.00	Serine, Post-col Ninhydrin Der (%)	16	14	0.87720	0.03985	0.03111	0.01216	0.03340	3.52%	1.375%	3.78%	2.7465
135.00	Threonine, Post-col Ninhydrin Der (%)	16	15	0.67788	0.02360	0.01732	0.00718	0.01875	2.57%	1.066%	2.78%	2.6105
137.00	Tyrosine, Post-col Ninhydrin Der (%)	12	11	0.52891	0.10061	0.07266	0.01667	0.07455	13.22%	3.032%	13.56%	4.4729
138.00	Valine, Post-col Ninhydrin Der (%)	16	15	0.85357	0.04291	0.04193	0.01289	0.04387	4.91%	1.510%	5.14%	3.4037

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