

Animal Feed Scheme
Dairy Beef Feed
Test Material Code # 201629
Method Summary Report

(Precision Report Follows)

Methods Reported: 370
Labs Reporting: 204
Issue Date : 10/31/2016

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	9.3000							
001.00	Loss on Drying, Vac 95°C 5 hr (%)	9	9	6.9881	0.62201	6.9881	0.70536	0.29390	10.09%	0.13659	2.99%
001.03	Loss on Drying, Low temp. methods (%)	4	4	7.1575	0.03304	7.1517	0.03786	0.02186	0.53%	0.05000	2.97%
001.05	Loss on Drying, LECO (%)	1	1	6.9450							
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	36	35	7.1744	0.52858	7.1779	0.29071	0.06142	4.05%	0.09081	2.97%
001.08	Loss on Drying, 102°C 16 hr, in meat (%)	2	2	7.3500	0.00000						
001.99	Loss on Drying, Miscellaneous (%)	19	19	7.0911	0.45281	7.1309	0.39528	0.11336	5.54%	0.09989	2.98%
002.00	Protein, Crude (%)	4	4	32.171	3.5083	30.423	0.38283	0.22103	1.26%	0.05500	1.81%
002.01	Protein, Auto Kjel-Foss (%)	12	11	30.160	0.34200	30.159	0.38538	0.14525	1.28%	0.12800	1.82%
002.02	Protein, Semiauto Autoanalyzer (%)	3	3	30.248	0.19808	30.248	0.19808	0.11436	0.65%	0.10950	1.82%
002.04	Protein, Copper Catalyst (%)	4	4	32.056	3.8846	30.120	0.37493	0.21647	1.24%	0.17250	1.82%
002.05	Protein, Copper, Boric Acid (%)	28	28	30.176	0.37483	30.181	0.26949	0.06366	0.89%	0.14635	1.82%
002.06	Protein, Combustion Nitrogen Analyzer (%)	132	130	30.581	0.53448	30.607	0.29409	0.03224	0.96%	0.19555	1.81%
002.08	Protein, Cu/Ti (%)	3	3	29.994	0.12817	29.921	0.02970	0.02100	0.10%	0.18733	1.83%
002.10	Protein, Block dig/distillation (%)	1	1	30.275							
002.11	Protein, NIR (%)	7	7	36.268	3.5103	36.268	3.9806	1.8807	10.98%	0.21000	1.66%
002.99	Protein, Miscellaneous (%)	5	5	31.684	2.7421	30.305	0.46992	0.27131	1.55%	0.20400	1.82%
003.00	Fat, Eth Ext., Direct (%)	15	15	1.9748	0.26372	1.9801	0.28751	0.09279	14.52%	0.10707	3.61%
003.06	Fat, Pet Ether (%)	18	18	2.0606	0.35352	2.0254	0.29330	0.08641	14.48%	0.07321	3.60%
003.09	Fat, Soxtec, Eth Ext (%)	18	17	2.1892	0.39174	2.1910	0.44053	0.13355	20.11%	0.07435	3.55%
003.10	Fat, Soxtec, Pet Ether (%)	25	24	1.7579	0.29720	1.7451	0.30546	0.07794	17.50%	0.09262	3.68%
003.11	Fat, NIR (%)	6	6	2.9563	0.72596	2.9563	0.82324	0.42011	27.85%	0.07333	3.40%
003.12	Fat, Hexane Ext (%)	3	3	1.6433	0.11836	1.5750	0.00000	0.00000	0.00%	0.09333	3.74%
003.13	Fat, Soxtec, Hexane Ext. (%)	11	10	1.9835	0.41659	1.9352	0.34814	0.13762	17.99%	0.05870	3.62%
003.14	Fat, Ankom (%)	42	41	1.8695	0.28484	1.8441	0.25424	0.04963	13.79%	0.12623	3.65%
003.99	Fat, Miscellaneous (%)	3	3	2.6800	1.3875	2.6800	1.3875	0.80108	51.77%	0.03333	3.45%
004.00	Fiber, Crude, Asbestos Free (%)	17	16	8.0592	0.41044	8.0378	0.41334	0.12917	5.14%	0.15383	2.92%
004.01	Fiber, Sing Filt (%)	2	2	8.4950	0.43134						
004.03	Fiber, Fritted Glass (%)	5	5	7.4026	1.6988	7.4026	1.6988	0.75973	22.95%	0.29972	2.96%
004.06	Fiber, Fibertec (%)	23	23	7.8220	0.42852	7.7811	0.37383	0.09744	4.80%	0.11743	2.94%

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
004.07	Fiber, ANKOM (%)	59	58	9.6094	2.3018	9.6277	2.1367	0.35070	22.19%	0.35911	2.84%
004.11	Fiber, NIR (%)	8	8	9.9491	2.0364	10.226	1.6063	0.70988	15.71%	0.08000	2.82%
004.99	Fiber, Miscellaneous (%)	3	3	7.0600	0.44643	7.0600	0.44643	0.25775	6.32%	0.21333	2.98%
005.00	Ash, 2h @ 600°C (%)	96	94	30.423	1.4468	30.786	0.65545	0.08451	2.13%	0.15908	1.80%
005.05	Ash, 3h @ 550°C (%)	22	22	30.916	0.69725	30.995	0.54104	0.14419	1.75%	0.12480	1.80%
005.11	Ash, NIR (%)	7	7	22.084	15.136	22.084	17.164	8.1093	77.72%	0.44571	2.13%
005.99	Ash, Miscellaneous (%)	12	11	31.241	0.28664	31.282	0.23424	0.08828	0.75%	0.07727	1.79%
006.00	Total sugars, As sucrose (%)	2	2	3.2650	1.0677						
006.01	Total sugars, Mod. Fehling Soln (%)	2	2	3.7700	0.31113						
006.05	Total sugars, TSI, Lane-Eunon (12th) (%)	1	1	5.6700							
006.99	Total sugars, Miscellaneous (%)	3	3	5.9783	3.0913	5.9783	3.0913	1.7848	51.71%	0.32333	3.06%
008.02	Fiber, Acid Detergent (%)	19	19	10.656	1.2575	10.822	0.93331	0.26765	8.62%	0.25402	2.79%
008.05	Fiber, Acid Detergent-Hach (%)	1	1	12.050							
008.08	Fiber, Acid Detergent, ANKOM (%)	44	43	10.689	1.4614	10.598	1.1409	0.21749	10.77%	0.47124	2.80%
008.99	Fiber, Acid Detergent Miscellaneous (%)	4	4	12.456	4.0478	12.456	4.0478	2.0239	32.50%	0.10750	2.74%
009.07	Fiber, Neutral Det-ENZ Pretreat (%)	13	13	20.809	2.3783	20.427	1.7118	0.59346	8.38%	0.30478	2.21%
009.09	Fiber, Neutral Detergent, ANKOM (%)	45	45	19.645	2.1378	19.420	1.6800	0.31305	8.65%	0.56639	2.27%
009.99	Fiber, Neutral Det Miscellaneous (%)	4	4	19.271	2.4206	19.271	2.4206	1.2103	12.56%	0.05750	2.28%
010.03	Moisture, Karl-Fischer (%)	3	3	6.9833	0.18058	6.9833	0.18058	0.10426	2.59%	0.14000	2.99%
010.11	Moisture, NIR (%)	6	6	7.6094	1.2593	7.6094	1.4280	0.72872	18.77%	0.13500	2.95%
010.99	Moisture, Miscellaneous (%)	17	17	7.5687	1.0000	7.4457	0.63749	0.19327	8.56%	0.15119	2.96%
011.01	Loss on Drying, 135°C 2hr (%)	74	73	8.4000	0.52744	8.4162	0.49102	0.07184	5.83%	0.14121	2.90%
011.02	Loss on Drying, 130°C for 2 hours (%)	2	2	8.1575	0.55508						
011.03	Loss on drying, 130°C, 1 hour, Flour (%)	1	1	6.8050							
011.99	Loss on Drying, High Temp. Methods Miscellaneous	3	3	8.1333	0.38679	8.1333	0.38679	0.22331	4.76%	0.24000	2.92%
012.00	Starch, Polarimetric (Ewers) (%)	7	7	3.9887	0.53324	4.0260	0.50052	0.23647	12.43%	0.16857	3.24%
012.01	Starch, Megazyme (%)	8	8	5.2484	0.58360	5.3698	0.33067	0.14614	6.16%	0.17810	3.11%
012.02	Starch, Colorimetric (GOP) (%)	1	1	6.8400							
012.03	Starch, Enzymatic (%)	5	5	5.3795	0.76015	5.6569	0.50739	0.25370	8.97%	0.07878	3.08%
012.04	Starch, YSI Analyzer (%)	4	4	5.1775	0.56541	5.1775	0.56541	0.28271	10.92%	0.15000	3.12%
012.11	Starch, NIR (%)	4	4	8.2688	2.6192	7.5184	2.6290	1.5179	34.97%	0.25000	2.95%
013.00	Fat, Acid hydrolysis (%)	17	17	2.7547	0.56426	2.7492	0.62818	0.19045	22.85%	0.08173	3.44%
013.02	Fat, Mojonier, Bak Ext (%)	19	18	3.1666	0.49490	3.1163	0.38752	0.11417	12.44%	0.13006	3.37%
013.08	Fat, Roese-Gottlieb Modified (%)	1	1	2.7550							
013.10	Fat, Soxtec-Acid Hydrolysis (%)	5	5	2.2250	0.49412	2.2250	0.49412	0.22098	22.21%	0.23400	3.55%
013.13	Fat, Ankom- Acid Hydrolysis (%)	5	5	2.2141	0.89105	2.2141	0.89105	0.39849	40.24%	0.18100	3.55%
015.41	Aluminum, ICP, Dry ash (mg / kg (ppm))	4	4	503.54	36.028	503.54	36.028	18.014	7.15%	10.293	6.27%
015.42	Aluminum, ICP, Open vessel (mg / kg (ppm))	1	1	449.45							

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
015.43	Aluminum, ICP, Microwave (mg / kg (ppm))	7	7	346.28	106.48	346.28	120.75	57.047	34.87%	18.629	6.64%
015.53	Aluminum, ICP-MS, Microwave (mg / kg (ppm))	1	1	317.00							
017.41	Boron, ICP, Dry ash (mg / kg (ppm))	4	4	12.621	1.8337	12.621	1.8337	0.91684	14.53%	0.82750	10.92%
017.42	Boron, ICP, Open vessel (mg / kg (ppm))	4	4	12.549	1.6132	12.549	1.6132	0.80660	12.85%	0.19280	10.93%
017.43	Boron, ICP, Microwave (mg / kg (ppm))	6	5	11.668	1.2916	11.668	1.2916	0.72200	11.07%	0.49600	11.05%
019.00	Calcium, Ox-Mn04 Vol. (%)	11	11	8.7000	0.91667	8.9320	0.25780	0.09716	2.89%	0.07723	2.88%
019.02	Calcium, Hach Method (%)	1	1	5.0210							
019.03	Calcium, Semiauto (Autoanalyzer) (%)	1	1	8.9790							
019.08	Calcium, EDTA (%)	8	8	8.8138	0.34226	8.8138	0.38813	0.17153	4.40%	0.11520	2.88%
019.09	Calcium, Ion-selective electrode (%)	1	1	8.5505							
019.31	Calcium, AAS, Dry ash (%)	24	23	8.9781	0.63920	8.9322	0.44168	0.11512	4.94%	0.15601	2.88%
019.32	Calcium, AAS, Open vessel (%)	3	3	10.088	2.1351	10.088	2.1351	1.2327	21.16%	0.17000	2.82%
019.33	Calcium, AAS, Microwave (%)	1	1	9.2200							
019.41	Calcium, ICP, Dry ash (%)	30	28	8.8205	0.54776	8.8179	0.42007	0.09923	4.76%	0.16914	2.88%
019.42	Calcium, ICP, Open vessel (%)	24	23	8.8508	1.1390	8.8719	0.66168	0.17246	7.46%	0.28910	2.88%
019.43	Calcium, ICP, Microwave (%)	23	22	8.8873	0.58950	8.9061	0.62602	0.16684	7.03%	0.12206	2.88%
019.44	Calcium, ICP, Dry ash (%)	1	1	8.0900							
019.52	Calcium, ICP-MS, Open vessel (%)	2	2	8.1772	0.17282						
019.53	Calcium, ICP-MS, Microwave (%)	2	2	8.6175	0.25809						
019.99	Calcium, Miscellaneous (%)	6	6	8.1109	1.7896	8.5553	0.88274	0.45047	10.32%	0.31817	2.90%
021.31	Cobalt, AAS, Dry ash (mg / kg (ppm))	2	2	11.650	0.49497						
021.41	Cobalt, ICP, Dry ash (mg / kg (ppm))	2	2	8.8360	6.3088						
021.42	Cobalt, ICP, Open vessel (mg / kg (ppm))	5	5	8.7280	0.96706	8.7280	0.96706	0.43248	11.08%	0.62090	11.55%
021.43	Cobalt, ICP, Microwave (mg / kg (ppm))	9	9	10.554	2.3478	10.554	2.6624	1.1093	25.23%	0.16847	11.22%
021.52	Cobalt, ICP-MS, Open vessel (mg / kg (ppm))	3	3	9.0367	0.12907	9.0367	0.12907	0.07452	1.43%	0.83333	11.49%
021.53	Cobalt, ICP-MS, Microwave (mg / kg (ppm))	4	4	10.197	2.4252	10.197	2.4252	1.2126	23.78%	1.3903	11.28%
021.99	Cobalt, Miscellaneous (mg / kg (ppm))	1	1	13.050							
022.31	Copper, AAS, Dry ash (mg / kg (ppm))	13	13	268.77	11.615	268.90	12.886	4.4674	4.79%	7.0243	6.89%
022.32	Copper, AAS, Open vessel (mg / kg (ppm))	3	3	273.57	8.9167	273.57	8.9167	5.1481	3.26%	11.896	6.87%
022.33	Copper, AAS, Microwave (mg / kg (ppm))	4	4	280.70	6.0058	280.70	6.0058	3.0029	2.14%	4.2725	6.85%
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	23	23	267.61	23.421	267.54	12.548	3.2705	4.69%	10.070	6.90%
022.42	Copper, ICP, Open vessel (mg / kg (ppm))	23	22	268.14	29.050	269.81	25.714	6.8528	9.53%	7.9730	6.89%
022.43	Copper, ICP, Microwave (mg / kg (ppm))	20	19	266.27	30.084	269.26	26.544	7.6121	9.86%	3.3897	6.89%
022.44	Copper, ICP, Dry ash (mg / kg (ppm))	1	1	266.17							
022.52	Copper, ICP-MS, Open vessel (mg / kg (ppm))	2	2	254.63	0.24749						
022.53	Copper, ICP-MS, Microwave (mg / kg (ppm))	3	3	270.33	29.429	270.33	29.429	16.991	10.89%	11.333	6.89%
022.99	Copper, Miscellaneous (mg / kg (ppm))	5	5	250.70	59.996	277.25	9.9457	4.9728	3.59%	6.7980	6.86%
023.01	Fluorine, Ion Sel Elect (mg / kg (ppm))	1	1	16.650							

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
024.03	Iodine, Ion-selective electrode (mg / kg (ppm))	1	1	10.000							
024.52	Iodine, ICP-MS, Open vessel (mg / kg (ppm))	1	1	16.705							
025.31	Iron, AAS, Dry ash (mg / kg (ppm))	12	12	802.63	121.60	827.90	78.545	28.342	9.49%	18.960	5.82%
025.32	Iron, AAS, Open vessel (mg / kg (ppm))	3	3	630.81	310.69	630.81	310.69	179.38	49.25%	36.009	6.06%
025.33	Iron, AAS, Microwave (mg / kg (ppm))	2	2	838.49	6.2070						
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	25	24	805.64	68.409	811.36	57.447	14.658	7.08%	24.266	5.84%
025.42	Iron, ICP, Open vessel (mg / kg (ppm))	18	17	645.20	205.07	689.37	115.08	34.890	16.69%	32.703	5.98%
025.43	Iron, ICP, Microwave (mg / kg (ppm))	17	17	699.92	163.79	723.11	129.08	39.133	17.85%	29.471	5.94%
025.52	Iron, ICP-MS, Open vessel (mg / kg (ppm))	1	1	698.70							
025.53	Iron, ICP-MS, Microwave (mg / kg (ppm))	1	1	665.50							
025.99	Iron, Miscellaneous (mg / kg (ppm))	3	3	743.33	91.943	690.25	0.35355	0.25000	0.05%	24.000	5.98%
027.31	Magnesium, AAS, Dry ash (%)	15	15	0.67505	0.04572	0.67670	0.04804	0.01551	7.10%	0.01319	4.24%
027.32	Magnesium, AAS, Open vessel (%)	4	4	0.68963	0.02071	0.68963	0.02071	0.01035	3.00%	0.00775	4.23%
027.33	Magnesium, AAS, Microwave (%)	3	3	0.67167	0.04805	0.69750	0.02475	0.01750	3.55%	0.00733	4.22%
027.41	Magnesium, ICP, Dry ash (%)	27	26	0.67918	0.09442	0.67708	0.03550	0.00870	5.24%	0.01158	4.24%
027.42	Magnesium, ICP, Open vessel (%)	23	22	0.68604	0.05736	0.68211	0.04465	0.01190	6.55%	0.01600	4.24%
027.43	Magnesium, ICP, Microwave (%)	21	20	0.65884	0.04498	0.66065	0.04450	0.01244	6.74%	0.00734	4.26%
027.44	Magnesium, ICP, Dry ash (%)	1	1	0.63150							
027.52	Magnesium, ICP-MS, Open vessel (%)	2	2	0.63565	0.06456						
027.53	Magnesium, ICP-MS, Microwave (%)	2	2	0.67375	0.03359						
027.99	Magnesium, Miscellaneous (%)	4	4	0.70875	0.05170	0.70875	0.05170	0.02585	7.29%	0.02250	4.21%
028.31	Manganese, AAS, Dry ash (mg / kg (ppm))	13	13	409.21	27.354	410.74	27.345	9.4802	6.66%	8.3599	6.47%
028.32	Manganese, AAS, Open vessel (mg / kg (ppm))	3	3	352.34	96.266	352.34	96.266	55.579	27.32%	4.6487	6.62%
028.33	Manganese, AAS, Microwave (mg / kg (ppm))	2	2	357.28	110.12						
028.41	Manganese, ICP, Dry ash (mg / kg (ppm))	24	23	410.33	25.495	408.69	24.515	6.3896	6.00%	10.007	6.47%
028.42	Manganese, ICP, Open vessel (mg / kg (ppm))	23	22	402.28	34.692	402.11	31.619	8.4266	7.86%	11.568	6.49%
028.43	Manganese, ICP, Microwave (mg / kg (ppm))	19	18	401.97	36.161	402.08	40.790	12.018	10.14%	6.0346	6.49%
028.44	Manganese, ICP, Dry ash (mg / kg (ppm))	1	1	386.57							
028.52	Manganese, ICP-MS, Open vessel (mg / kg (ppm))	2	2	402.30	22.769						
028.53	Manganese, ICP-MS, Microwave (mg / kg (ppm))	2	2	402.50	26.870						
028.99	Manganese, Miscellaneous (mg / kg (ppm))	4	4	426.63	14.186	426.63	14.186	7.0928	3.33%	11.250	6.43%
031.01	Phosphorus, Photometric (%)	43	42	0.61390	0.04726	0.61886	0.02990	0.00577	4.83%	0.01473	4.30%
031.02	Phosphorus, GQMP (AOAC 935.13-Extraction) (%)	4	4	8.7963	16.336	0.62500	0.00707	0.00500	1.13%	0.00250	4.29%
031.03	Phosphorus, Autoanalyzer (%)	5	5	0.60761	0.02839	0.60761	0.02839	0.01270	4.67%	0.00514	4.31%
031.06	Phosphorus, Hach Method (%)	1	1	0.67450							
031.41	Phosphorus, ICP, Dry ash (%)	32	31	0.62286	0.08682	0.60917	0.04083	0.00917	6.70%	0.01923	4.31%
031.42	Phosphorus, ICP, Open vessel (%)	24	23	0.59279	0.05872	0.60080	0.04694	0.01224	7.81%	0.02936	4.32%
031.43	Phosphorus, ICP, Microwave (%)	23	22	0.58815	0.04476	0.58746	0.04822	0.01285	8.21%	0.01103	4.33%

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
031.44	Phosphorus, ICP, Dry ash (%)	1	1	0.59250							
031.52	Phosphorus, ICP-MS, Open vessel (%)	1	1	0.57840							
031.53	Phosphorus, ICP-MS, Microwave (%)	2	2	0.58435	0.06032						
031.99	Phosphorus, Miscellaneous (%)	5	5	0.60070	0.01971	0.60070	0.01971	0.00881	3.28%	0.01300	4.32%
032.02	Potassium, Flame Emission (%)	2	2	2.1200	0.03536						
032.31	Potassium, AAS, Dry ash (%)	16	15	2.1175	0.26280	2.1523	0.13607	0.04392	6.32%	0.02944	3.56%
032.32	Potassium, AAS, Open vessel (%)	2	2	2.0925	0.01768						
032.41	Potassium, ICP, Dry ash (%)	27	26	2.1719	0.28245	2.1082	0.08790	0.02155	4.17%	0.05330	3.58%
032.42	Potassium, ICP, Open vessel (%)	23	21	2.1642	0.12228	2.1600	0.10731	0.02927	4.97%	0.04873	3.56%
032.43	Potassium, ICP, Microwave (%)	22	22	2.1039	0.11566	2.0891	0.07918	0.02110	3.79%	0.04493	3.58%
032.44	Potassium, ICP, Dry ash (%)	1	1	2.1300							
032.52	Potassium, ICP-MS, Open vessel (%)	1	1	2.0746							
032.53	Potassium, ICP-MS, Microwave (%)	2	2	2.0725	0.08132						
032.99	Potassium, Miscellaneous (%)	6	5	2.1185	0.07180	2.1185	0.07180	0.04014	3.39%	0.03100	3.57%
033.00	Salt as chloride, Sol Cl (%)	20	18	3.7141	0.12582	3.7080	0.12250	0.03609	3.30%	0.03413	3.28%
033.01	Salt as chloride, Poten Cl (%)	30	29	3.7990	0.08900	3.8014	0.08328	0.01933	2.19%	0.02910	3.27%
033.03	Salt as chloride, Quantab (%)	5	5	4.2660	0.93080	4.2660	0.93080	0.41626	21.82%	0.24800	3.22%
033.05	Salt as chloride, Ion Sel Electrode (%)	3	3	3.4900	0.19925	3.4900	0.19925	0.11504	5.71%	0.04667	3.31%
033.99	Salt, Miscellaneous (%)	7	6	3.3375	0.74733	3.3375	0.84748	0.43248	25.39%	0.09500	3.34%
034.01	Selenium, Fluor (mg / kg (ppm))	2	2	4.0550	0.14142						
034.04	Selenium, AA, Hydride (mg / kg (ppm))	5	5	3.8780	0.24201	3.9667	0.08021	0.04631	2.02%	0.23600	13.00%
034.41	Selenium, ICP, Dry ash (mg / kg (ppm))	1	1	4.6300							
034.42	Selenium, ICP, Open vessel (mg / kg (ppm))	2	2	3.5250	0.03536						
034.43	Selenium, ICP, Microwave (mg / kg (ppm))	5	4	4.2459	0.57017	4.5295	0.07054	0.04073	1.56%	0.37750	12.74%
034.52	Selenium, ICP-MS, Open vessel (mg / kg (ppm))	4	4	3.8600	0.30197	3.8600	0.30197	0.15098	7.82%	0.20000	13.05%
034.53	Selenium, ICP-MS, Microwave (mg / kg (ppm))	4	4	4.0240	0.13673	4.0240	0.13673	0.06836	3.40%	0.47873	12.97%
034.99	Selenium, Miscellaneous (mg / kg (ppm))	3	3	3.1883	1.0488	3.1883	1.0488	0.60553	32.90%	0.11667	13.44%
035.01	Sodium, Ion-selective electrode (%)	3	3	0.84383	0.06936	0.84383	0.06936	0.04005	8.22%	0.01433	4.10%
035.05	Sodium, Flame Emission (%)	4	4	0.93700	0.10584	0.93700	0.10584	0.05292	11.30%	0.04650	4.04%
035.31	Sodium, AAS, Dry ash (%)	16	16	0.87495	0.08399	0.87637	0.08963	0.02801	10.23%	0.02198	4.08%
035.32	Sodium, AAS, Open vessel (%)	2	2	0.79250	0.15203						
035.41	Sodium, ICP, Dry ash (%)	30	29	0.84019	0.13568	0.84049	0.05718	0.01327	6.80%	0.02363	4.11%
035.42	Sodium, ICP, Open vessel (%)	19	19	0.87254	0.04803	0.87249	0.05436	0.01559	6.23%	0.02845	4.08%
035.43	Sodium, ICP, Microwave (%)	17	17	0.84186	0.06648	0.83817	0.06634	0.02011	7.91%	0.02582	4.11%
035.51	Sodium, ICP-MS, Dry ash (%)	1	1	0.81000							
035.52	Sodium, ICP-MS, Open vessel (%)	1	1	0.91760							
035.53	Sodium, ICP-MS, Microwave (%)	2	2	0.84150	0.03748						
035.99	Sodium, Miscellaneous (%)	6	6	0.92583	0.29219	0.86000	0.08351	0.04261	9.71%	0.02167	4.09%

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
036.04	Sulfur, LECO (%)	4	4	0.57000	0.06416	0.57000	0.06416	0.03208	11.26%	0.03000	4.35%
036.42	Sulfur, ICP, Open vessel (%)	22	21	0.71334	0.07792	0.71068	0.07464	0.02036	10.50%	0.01541	4.21%
036.43	Sulfur, ICP, Microwave (%)	12	11	0.70783	0.05618	0.70375	0.05379	0.02027	7.64%	0.01378	4.22%
036.52	Sulfur, ICP-MS, Open vessel (%)	1	1	0.64050							
036.99	Sulfur, Miscellaneous (%)	2	2	0.68450	0.09970						
037.31	Zinc, AAS, Dry ash (mg / kg (ppm))	13	12	923.81	43.942	922.08	45.862	16.549	4.97%	10.852	5.73%
037.32	Zinc, AAS, Open vessel (mg / kg (ppm))	4	4	970.46	193.62	970.46	193.62	96.810	19.95%	12.904	5.68%
037.33	Zinc, AAS, Microwave (mg / kg (ppm))	3	3	950.85	32.962	950.85	32.962	19.031	3.47%	12.721	5.70%
037.41	Zinc, ICP, Dry ash (mg / kg (ppm))	23	23	881.24	82.023	886.53	79.872	20.818	9.01%	26.175	5.76%
037.42	Zinc, ICP, Open vessel (mg / kg (ppm))	22	21	880.97	76.423	882.58	78.496	21.412	8.89%	34.933	5.76%
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	22	21	887.65	104.40	897.53	91.382	24.926	10.18%	9.6421	5.75%
037.44	Zinc, ICP, Dry ash (mg / kg (ppm))	1	1	854.47							
037.52	Zinc, ICP-MS, Open vessel (mg / kg (ppm))	2	2	882.83	40.553						
037.53	Zinc, ICP-MS, Microwave (mg / kg (ppm))	3	3	856.50	117.88	856.50	117.88	68.056	13.76%	45.667	5.79%
037.99	Zinc, Miscellaneous (mg / kg (ppm))	6	6	900.58	63.183	900.58	71.650	36.564	7.96%	35.833	5.75%
038.41	Molybdenum, ICP, Dry ash (mg / kg (ppm))	3	3	75.260	125.80	75.260	125.80	72.633	167.16%	0.52467	8.35%
038.42	Molybdenum, ICP, Open vessel (mg / kg (ppm))	3	3	4.8813	0.47475	4.8813	0.47475	0.27410	9.73%	0.28490	12.60%
038.43	Molybdenum, ICP, Microwave (mg / kg (ppm))	8	8	4.4309	0.85192	4.4309	0.96608	0.42695	21.80%	0.15913	12.79%
038.52	Molybdenum, ICP-MS, Open vessel (mg / kg (ppm))	2	2	4.8900	0.29698						
038.53	Molybdenum, ICP-MS, Microwave (mg / kg (ppm))	3	3	5.1555	0.99693	5.1555	0.99693	0.57558	19.34%	0.27577	12.50%
040.42	Barium, ICP, Open vessel (mg / kg (ppm))	1	1	12.900							
040.43	Barium, ICP, Microwave (mg / kg (ppm))	1	1	17.800							
040.52	Barium, ICP-MS, Open vessel (mg / kg (ppm))	1	1	12.000							
040.53	Barium, ICP-MS, Microwave (mg / kg (ppm))	1	1	10.827							
041.43	Vanadium, ICP, Microwave (mg / kg (ppm))	1	1	1.9000							
041.52	Vanadium, ICP-MS, Open vessel (mg / kg (ppm))	1	1	1.3500							
041.53	Vanadium, ICP-MS, Microwave (mg / kg (ppm))	1	1	2.6000							
042.00	Chloride, Titrimetric (%)	2	2	2.3725	0.01061						
042.02	Chloride, Ion Chromatography (%)	1	1	2.1700							
042.99	Chloride, Miscellaneous (%)	1	1	2.1750							
051.00	Chlortetracycline, Plate (mg / kg (ppm))	1	1	8.1672							
051.03	Chlortetracycline, LC (mg / kg (ppm))	2	2	7.4400	0.65054						
051.99	Chlortetracycline, Miscellaneous (mg / kg (ppm))	1	1	3.4850							
061.02	Lasalocid Sodium, LC (mg / kg (ppm))	1	1	0.77500							
061.03	Lasalocid Sodium, LC, AOAC (mg / kg (ppm))	2	2	1.3143	0.18279						
061.99	Lasalocid Sodium, Miscellaneous (mg / kg (ppm))	2	1	1.2650							
065.00	Monensin, Plate (mg / kg (ppm))	4	4	318.60	29.569	318.60	29.569	14.784	9.28%	20.228	6.72%
065.03	Monensin, LC (mg / kg (ppm))	10	10	295.31	49.439	305.50	33.131	13.096	10.84%	17.995	6.76%

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
065.04	Monensin, LC-PCD (mg / kg (ppm))	4	4	322.16	3.5529	322.16	3.5529	1.7764	1.10%	4.0070	6.71%
065.99	Monensin, Miscellaneous (mg / kg (ppm))	7	7	309.85	54.697	320.44	34.498	16.299	10.77%	4.9586	6.71%
067.99	Nicarbazin, Miscellaneous (mg / kg (ppm))	1		0.00000							
079.99	Salinomycin, Miscellaneous (mg / kg (ppm))	1		0.00000							
088.00	Tylosin, Plate (mg / kg (ppm))	2	2	46.675	1.5203						
088.02	Tylosin, Plate w Hyd (mg / kg (ppm))	1	1	45.670							
088.03	Tylosin, LC (mg / kg (ppm))	5	5	36.994	20.178	36.994	20.178	9.0240	54.54%	2.4760	9.29%
091.99	Narasin, Miscellaneous (mg / kg (ppm))	1		0.00000							
101.01	Choline Chloride, Chem (mg / kg (ppm))	1	1	744.00							
101.02	Choline Chloride, LC (mg / kg (ppm))	2	2	1,752.5	350.02						
102.01	Niacin, Microbiological (mg / kg (ppm))	1	1	1,085.0							
103.01	Pantothenic Acid, Microbiological (mg / kg (ppm))	1	1	9.3050							
104.03	Riboflavin, LC (mg / kg (ppm))	2	2	1.3375	0.01768						
105.00	Thiamine, LC (mg / kg (ppm))	4	4	20.044	2.1292	20.044	2.1292	1.0646	10.62%	0.72500	10.19%
105.01	Thiamine, Fluorometer (mg / kg (ppm))	1	1	23.250							
106.00	Vitamin A, Color (KU / kg)	3	3	41.867	12.808	41.867	12.808	7.3945	30.59%	1.6336	
106.01	Vitamin A, UV (KU / kg)	1	1	46.100							
106.02	Vitamin A, LC (KU / kg)	21	20	1,097.3	4,782.3	27.330	6.2402	1.7442	22.83%	26.080	
107.00	Vitamin B12, Microbiological (µg / kg (ppb))	1	1	13.000							
108.01	Vitamin D3, LC, AOAC (KU / kg)	1	1	2,430.0							
108.02	Vitamin D3, LC (KU / kg)	6	5	8.6570	4.4087	8.6570	4.4087	2.4645	50.93%	0.41000	
108.99	Vitamin D3, Miscellaneous (KU / kg)	1	1	7.9850							
109.02	Vitamin E, LC (IU/kg)	18	17	73.261	23.224	77.502	15.305	4.6400	19.75%	4.9605	
109.99	Vitamin E, Miscellaneous (IU/kg)	1	1	78.000							
112.01	Pyridoxine, LC (µg / g)	1	1	4.9950							
113.01	Folic Acid, Micro (mg / kg (ppm))	1	1	0.84600							
114.01	Biotin, Microbiological (mg / kg (ppm))	1	1	0.33600							
115.00	Non Protein N (NPN), Urea + Am, Urease method	6	5	7.9860	5.2520	6.7825	5.2079	2.9113	76.78%	0.18400	3.00%
115.99	Non Protein N (NPN), Miscellaneous (%)	2	2	6.6575	5.9786						
120.00	Alanine, Post-col Ninhydrin Der (%)	20	20	0.93154	0.26743	0.84608	0.03063	0.00856	3.62%	0.01449	4.10%
120.02	Alanine, Post-col OPA Der (%)	1	1	0.85250							
120.05	Alanine, Pre-col AQC Der (%)	3	3	0.82117	0.05098	0.82117	0.05098	0.02943	6.21%	0.01167	4.12%
120.99	Alanine, Miscellaneous (%)	1	1	0.86500							
121.00	Arginine, Post-col Ninhydrin Der (%)	20	19	1.2558	0.29710	1.1897	0.03085	0.00885	2.59%	0.01294	3.90%
121.02	Arginine, Post-col OPA Der (%)	1	1	1.1795							
121.05	Arginine, Pre-col AQC Der (%)	3	3	1.2422	0.01941	1.2422	0.01941	0.01120	1.56%	0.05100	3.87%
121.99	Arginine, Miscellaneous (%)	1	1	1.2100							
122.00	Aspartic, Post-col Ninhydrin Der (%)	20	20	1.6635	0.45507	1.5195	0.02893	0.00809	1.90%	0.02711	3.76%

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
122.02	Aspartic, Post-col OPA Der (%)	1	1	1.5295							
122.05	Aspartic, Pre-col AQC Der (%)	3	3	1.4537	0.13677	1.4537	0.13677	0.07896	9.41%	0.07467	3.78%
122.99	Aspartic, Miscellaneous (%)	1	1	0.43500							
124.00	Cysteine/Cystine, PAO Post-col Ninhydi (%)	20	19	0.31475	0.02461	0.31672	0.02325	0.00667	7.34%	0.00761	4.76%
124.02	Cysteine/Cystine, PAO Post-col OPA Der (%)	1	1	0.31050							
124.05	Cysteine/Cystine, PAO Pre-col AQC Der (%)	3	3	0.30053	0.03082	0.30053	0.03082	0.01779	10.25%	0.01000	4.79%
124.99	Cysteine/Cystine, Miscellaneous (%)	1	1	0.15500							
125.00	Glutamic, Post-col Ninhydrin Der (%)	20	20	3.5072	0.96794	3.1768	0.10741	0.03002	3.38%	0.04637	3.36%
125.02	Glutamic, Post-col OPA Der (%)	1	1	3.1220							
125.05	Glutamic, Pre-col AQC Der (%)	3	3	3.0570	0.24476	3.0570	0.24476	0.14131	8.01%	0.08333	3.38%
125.99	Glutamic, Miscellaneous (%)	1	1	1.7350							
126.00	Glycine, Post-col Ninhydrin Der (%)	19	19	0.90842	0.27072	0.82560	0.02050	0.00588	2.48%	0.01575	4.12%
126.02	Glycine, Post-col OPA Der (%)	1	1	0.83250							
126.05	Glycine, Pre-col AQC Der (%)	3	3	0.84600	0.02651	0.84600	0.02651	0.01531	3.13%	0.02867	4.10%
126.99	Glycine, Miscellaneous (%)	1	1	0.84500							
127.00	Histidine, Post-col Ninhydrin Der (%)	19	18	0.44148	0.02315	0.44238	0.02411	0.00710	5.45%	0.00657	4.52%
127.02	Histidine, Post-col OPA Der (%)	1	1	0.43450							
127.05	Histidine, Pre-col AQC Der (%)	3	3	0.49817	0.04495	0.49817	0.04495	0.02595	9.02%	0.02233	4.44%
127.99	Histidine, Miscellaneous (%)	1	1	0.46500							
128.00	Isoleucine, Post-col Ninhydrin Der (%)	20	20	0.70295	0.18802	0.65329	0.05154	0.01441	7.89%	0.01513	4.26%
128.02	Isoleucine, Post-col OPA Der (%)	1	1	0.65850							
128.05	Isoleucine, Pre-col AQC Der (%)	3	3	0.68333	0.02843	0.68750	0.03889	0.02750	5.66%	0.01800	4.23%
128.99	Isoleucine, Miscellaneous (%)	1	1	0.66500							
129.00	Leucine, Post-col Ninhydrin Der (%)	20	19	1.3031	0.30633	1.2394	0.05091	0.01460	4.11%	0.01399	3.87%
129.02	Leucine, Post-col OPA Der (%)	1	1	1.2635							
129.05	Leucine, Pre-col AQC Der (%)	3	3	1.2877	0.03250	1.2877	0.03250	0.01876	2.52%	0.01933	3.85%
129.99	Leucine, Miscellaneous (%)	1	1	1.2500							
130.00	L-Lysine, Post-col Ninhydrin Der (%)	20	19	0.90398	0.28801	0.81866	0.06696	0.01920	8.18%	0.01247	4.12%
130.02	L-Lysine, Post-col OPA Der (%)	1	1	0.82250							
130.05	L-Lysine, Pre-col AQC Der (%)	4	4	0.80663	0.05236	0.80663	0.05236	0.02618	6.49%	0.02075	4.13%
130.99	L-Lysine, Miscellaneous (%)	1	1	0.85500							
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	20	19	0.23701	0.01355	0.23701	0.01536	0.00441	6.48%	0.00647	4.97%
131.02	Methionine, PAO Post-col OPA Der (%)	1	1	0.22650							
131.05	Methionine, PAO Pre-col AQC Der (%)	4	4	0.25310	0.00674	0.25310	0.00674	0.00337	2.66%	0.00950	4.92%
131.99	Methionine, Miscellaneous (%)	1	1	0.27500							
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	20	19	0.86612	0.26438	0.78572	0.03652	0.01047	4.65%	0.01354	4.15%
132.02	Phenylalanine, Post-col OPA Der (%)	1	1	0.78450							
132.05	Phenylalanine, Pre-col AQC Der (%)	3	3	0.82467	0.02739	0.82467	0.02739	0.01581	3.32%	0.03133	4.12%

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
132.99	Phenylalanine, Miscellaneous (%)	1	1	0.82500							
133.00	Proline, Post-col Ninhydrin Der (%)	19	18	1.0547	0.27644	0.99643	0.06980	0.02056	7.00%	0.01565	4.00%
133.05	Proline, Pre-col AQC Der (%)	3	3	1.0310	0.03568	1.0310	0.03568	0.02060	3.46%	0.01267	3.98%
133.99	Proline, Miscellaneous (%)	1	1	1.0400							
134.00	Serine, Post-col Ninhydrin Der (%)	20	20	0.88249	0.26476	0.80528	0.04676	0.01307	5.81%	0.01336	4.13%
134.02	Serine, Post-col OPA Der (%)	1	1	0.77750							
134.05	Serine, Pre-col AQC Der (%)	3	3	0.82383	0.04233	0.82383	0.04233	0.02444	5.14%	0.02300	4.12%
134.99	Serine, Miscellaneous (%)	1	1	0.81000							
135.00	Threonine, Post-col Ninhydrin Der (%)	20	19	0.69018	0.16291	0.65603	0.03202	0.00918	4.88%	0.00808	4.26%
135.02	Threonine, Post-col OPA Der (%)	1	1	0.64800							
135.05	Threonine, Pre-col AQC Der (%)	3	3	0.67150	0.03300	0.67150	0.03300	0.01905	4.91%	0.01700	4.25%
135.99	Threonine, Miscellaneous (%)	1	1	0.61500							
136.00	Tryptophan, Alka-Hydrol Post-col Ninhyd (%)	5	5	0.20964	0.02901	0.20964	0.02901	0.01298	13.84%	0.01544	5.06%
136.01	Tryptophan, Alka-Hydrol Rev Phase LC UV (%)	2	2	0.22300	0.01414						
136.02	Tryptophan, Alka-Hydrol Post-col OPA De (%)	1	1	0.22950							
136.03	Tryptophan, Alka-Hydrol + IS RP LC FI (%)	4	4	0.22725	0.00674	0.22725	0.00674	0.00337	2.97%	0.00600	5.00%
136.99	Tryptophan, Miscellaneous (%)	2	2	0.22750	0.00354						
137.00	Tyrosine, Post-col Ninhydrin Der (%)	14	14	0.53136	0.10511	0.53386	0.05986	0.02000	11.21%	0.01324	4.40%
137.02	Tyrosine, Post-col OPA Der (%)	1	1	0.53100							
137.05	Tyrosine, Pre-col AQC Der (%)	3	3	0.58967	0.01550	0.58967	0.01550	0.00895	2.63%	0.01267	4.33%
137.99	Tyrosine, Miscellaneous (%)	1	1	0.59000							
138.00	Valine, Post-col Ninhydrin Der (%)	20	20	0.88924	0.23730	0.82308	0.05142	0.01437	6.25%	0.01748	4.12%
138.02	Valine, Post-col OPA Der (%)	1	1	0.84450							
138.05	Valine, Pre-col AQC Der (%)	3	3	0.84350	0.04155	0.82025	0.01450	0.01025	1.77%	0.01433	4.12%
138.99	Valine, Miscellaneous (%)	1	1	0.85500							
139.02	Taurine, Post-col OPA Der (%)	1		0.00000							
160.99	Fructose, Miscellaneous (%)	3	3	0.25250	0.09627	0.25250	0.09627	0.05558	38.13%	0.05433	4.92%
162.99	Glucose, Miscellaneous (%)	2	1	0.08600							
163.99	Lactose, Miscellaneous (%)	2	1	0.15000							
164.99	Maltose, Miscellaneous (%)	1		0.00000							
165.99	Sucrose, Miscellaneous (%)	5	5	2.1638	0.13095	2.1638	0.13095	0.05856	6.05%	0.06800	3.56%
166.99	Raffinose, Miscellaneous (%)	2	2	0.70100	0.11455						
167.99	Stachyose, Miscellaneous (%)	2	2	0.89925	0.14743						
351.04	Chlortetracycline, residual, LC-MS (µg / kg (ppb))	1	1	9,220.0							
361.02	Lasalocid sodium, residual, LC (µg / kg (ppb))	1	1	0.64420							
361.03	Lasalocid sodium, residual, LC-MS (µg / kg (ppb))	2	2	293.00	407.29						
361.04	Lasalocid sodium, residual, LC-MS/MS (µg / kg (p	2	2	1,070.0	113.14						
365.05	Monensin, residual, LC-MS/MS (µg / kg (ppb))	1	1	377.50							

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
392.01	Fenbendazole, residual, LC-MS (µg / kg (ppb))	1	1	5,190.0							
400.01	Water activity, Aqualab chilled mirror (Units)	6	5	0.51722	0.00909	0.51722	0.00909	0.00508	1.76%	0.00136	
400.99	Water activity, Miscellaneous (Units)	3	3	0.51733	0.01397	0.51733	0.01397	0.00806	2.70%	0.00333	
516.00	Arsenic, total, AA, Hydride (mg / kg (ppm))	1	1	1.3400							
516.43	Arsenic, total, ICP, Microwave (mg / kg (ppm))	2	1	1.8983							
516.52	Arsenic, total, ICP-MS, Open vessel (mg / kg (ppm))	3	3	1.4817	0.06171	1.4817	0.06171	0.03563	4.17%	0.12333	15.08%
516.53	Arsenic, total, ICP-MS, Microwave (mg / kg (ppm))	5	5	1.4277	0.14302	1.4277	0.14302	0.06396	10.02%	0.15174	15.16%
518.41	Cadmium, ICP, Dry ash (mg / kg (ppm))	2	2	0.34150	0.40517						
518.43	Cadmium, ICP, Microwave (mg / kg (ppm))	2	2	0.31820	0.02574						
518.52	Cadmium, ICP-MS, Open vessel (mg / kg (ppm))	2	2	0.32150	0.01202						
518.53	Cadmium, ICP-MS, Microwave (mg / kg (ppm))	5	5	0.32988	0.06052	0.32988	0.06052	0.02707	18.35%	0.03928	18.90%
520.31	Chromium, AAS, Dry ash (mg / kg (ppm))	2	2	8.9450	1.3506						
520.41	Chromium, ICP, Dry ash (mg / kg (ppm))	3	3	6.6437	5.4767	6.6437	5.4767	3.1620	82.44%	0.31867	12.03%
520.43	Chromium, ICP, Microwave (mg / kg (ppm))	3	3	17.811	2.2721	16.725	1.8031	1.2750	10.78%	1.6465	10.47%
520.52	Chromium, ICP-MS, Open vessel (mg / kg (ppm))	1	1	8.8000							
520.53	Chromium, ICP-MS, Microwave (mg / kg (ppm))	2	2	17.042	8.4256						
526.31	Lead, AAS, Dry ash (mg / kg (ppm))	1	1	4.4000							
526.41	Lead, ICP, Dry ash (mg / kg (ppm))	1	1	0.00000							
526.43	Lead, ICP, Microwave (mg / kg (ppm))	3	2	2.8695	2.8829					1.0118	
526.52	Lead, ICP-MS, Open vessel (mg / kg (ppm))	3	3	0.74933	0.05260	0.74933	0.05260	0.03037	7.02%	0.10200	16.71%
526.53	Lead, ICP-MS, Microwave (mg / kg (ppm))	5	5	0.75437	0.02771	0.75437	0.02771	0.01239	3.67%	0.10478	16.69%
529.99	Mercury, Miscellaneous (µg / kg (ppb))	1	1	475.00							
539.41	Nickel, ICP, Dry ash (mg / kg (ppm))	1	1	10.060							
539.43	Nickel, ICP, Microwave (mg / kg (ppm))	3	3	10.654	1.2145	10.654	1.2145	0.70121	11.40%	0.35133	11.20%
539.52	Nickel, ICP-MS, Open vessel (mg / kg (ppm))	1	1	6.9950							
539.53	Nickel, ICP-MS, Microwave (mg / kg (ppm))	2	2	9.1217	2.6564						
710.99	Lauric Acid (12:0), Miscellaneous (% (w/w))	1	1	0.00200							
718.99	Palmitoleic Acid (9c-16:1), Miscellaneous (% (w/w))	1	1	0.01000							
726.99	Linoleic Acid (9c,12c-18:2), Miscellaneous (% (w/w))	1	1	0.99900							
728.99	alpha-Linolenic Acid (9c,12c,15c-18:3), Miscellaneous (% (w/w))	1	1	0.08950							
736.99	Arachidonic Acid (5c,8c,11c,14c-20:4), Miscellaneous (% (w/w))	1	1	0.00000							
740.99	Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:5), Miscellaneous (% (w/w))	1	1	0.00000							
746.99	Docosapentaenoic Acid n-3 DPA (DHA) (7c,10c,13c,16c,19c-22:5), Miscellaneous (% (w/w))	1	1	0.00100							
750.99	Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c,22:6), Miscellaneous (% (w/w))	1	1	0.00000							
754.99	Total n-3 Polyunsaturated (Omega-3) Fatty Acids, % (w/w)	1	1	0.09000							
756.99	Total n-6 Polyunsaturated (Omega-6) Fatty Acids, % (w/w)	1	1	1.0050							

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 # 201629

Issue Date : 10/31/2016

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
-------------	--------------------	-------------------------	------------------------	----------	--------	------------------------------	--------------------------	--------------------------	----------------	-----------------------	--------------

Animal Feed Scheme
Dairy Beef Feed
Test Material Code # 201629

Method Precision Report

Methods Reported: 90
Labs Reporting: 204
Issue Date : 10/31/2016

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	6.8741	0.55546	0.55134	0.09549	0.55954	8.02%	1.389%	8.14%	5.8600
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	36	32	7.2518	0.37643	0.37297	0.07202	0.37986	5.14%	0.993%	5.24%	5.2746
001.99	Loss on Drying, Miscellaneous (%)	19	18	7.1648	0.32849	0.32317	0.08330	0.33373	4.51%	1.163%	4.66%	4.0062
002.01	Protein, Auto Kjel-Foss (%)	12	10	30.217	0.30261	0.29686	0.08303	0.30825	0.98%	0.275%	1.02%	3.7127
002.05	Protein, Copper, Boric Acid (%)	28	26	30.197	0.25619	0.24153	0.12080	0.27005	0.80%	0.400%	0.89%	2.2356
002.06	Protein, Combustion Nitrogen Analyzer (%)	132	122	30.623	0.32855	0.30945	0.15610	0.34660	1.01%	0.510%	1.13%	2.2203
003.00	Fat, Eth Ext., Direct (%)	15	14	2.0023	0.25039	0.24366	0.08154	0.25694	12.17%	4.073%	12.83%	3.1509
003.06	Fat, Pet Ether (%)	18	16	1.9692	0.21877	0.21435	0.06189	0.22310	10.89%	3.143%	11.33%	3.6051
003.09	Fat, Soxtec, Eth Ext (%)	18	17	2.1892	0.39174	0.38854	0.07070	0.39492	17.75%	3.229%	18.04%	5.5861
003.10	Fat, Soxtec, Pet Ether (%)	25	23	1.7259	0.25815	0.24920	0.09530	0.26679	14.44%	5.522%	15.46%	2.7996
003.13	Fat, Soxtec, Hexane Ext. (%)	11	8	1.8556	0.27036	0.26882	0.04077	0.27189	14.49%	2.197%	14.65%	6.6696
003.14	Fat, Ankom (%)	42	39	1.8291	0.22562	0.20965	0.11789	0.24052	11.46%	6.445%	13.15%	2.0402
004.00	Fiber, Crude, Asbestos Free (%)	17	16	8.0592	0.41044	0.39701	0.14728	0.42345	4.93%	1.827%	5.25%	2.8751
004.06	Fiber, Fibertec (%)	23	21	7.7705	0.33444	0.32850	0.08880	0.34029	4.23%	1.143%	4.38%	3.8321
004.07	Fiber, ANKOM (%)	59	53	9.5411	1.8491	1.8397	0.26252	1.8584	19.28%	2.751%	19.48%	7.0790
005.00	Ash, 2h @ 600°C (%)	96	88	30.627	1.0246	1.0206	0.12768	1.0286	3.33%	0.417%	3.36%	8.0562
005.05	Ash, 3h @ 550°C (%)	22	20	31.039	0.49924	0.49207	0.11929	0.50632	1.59%	0.384%	1.63%	4.2446
005.99	Ash, Miscellaneous (%)	12	10	31.211	0.28222	0.27945	0.05572	0.28496	0.90%	0.179%	0.91%	5.1138
008.02	Fiber, Acid Detergent (%)	19	18	10.880	0.81731	0.79738	0.25368	0.83677	7.33%	2.332%	7.69%	3.2985
008.08	Fiber, Acid Detergent, ANKOM (%)	44	41	10.582	0.99354	0.94708	0.42466	1.0379	8.95%	4.013%	9.81%	2.4442
009.07	Fiber, Neutral Det-ENZ Pretreat (%)	13	12	20.293	1.5478	1.5349	0.28191	1.5606	7.56%	1.389%	7.69%	5.5357
009.09	Fiber, Neutral Detergent, ANKOM (%)	45	44	19.439	1.6492	1.6055	0.53334	1.6917	8.26%	2.744%	8.70%	3.1720
010.99	Moisture, Miscellaneous (%)	17	16	7.3917	0.70630	0.69864	0.14668	0.71388	9.45%	1.984%	9.66%	4.8668
011.01	Loss on Drying, 135°C 2hr (%)	74	67	8.4142	0.44264	0.43603	0.10777	0.44915	5.18%	1.281%	5.34%	4.1679
013.00	Fat, Acid hydrolysis (%)	17	17	2.7547	0.56426	0.56151	0.07863	0.56699	20.38%	2.854%	20.58%	7.2112
013.02	Fat, Mojonier, Bak Ext (%)	19	16	3.0593	0.35389	0.34799	0.09103	0.35969	11.37%	2.975%	11.76%	3.9514
019.00	Calcium, Ox-Mn04 Vol. (%)	11	9	8.9506	0.19942	0.19726	0.04139	0.20156	2.20%	0.462%	2.25%	4.8693
019.08	Calcium, EDTA (%)	8	8	8.8138	0.34226	0.33468	0.10134	0.34969	3.80%	1.150%	3.97%	3.4505
019.31	Calcium, AAS, Dry ash (%)	24	21	8.8667	0.43581	0.42716	0.12220	0.44429	4.82%	1.378%	5.01%	3.6359
019.41	Calcium, ICP, Dry ash (%)	30	24	8.7687	0.33916	0.32797	0.12215	0.34998	3.74%	1.393%	3.99%	2.8652
019.42	Calcium, ICP, Open vessel (%)	24	20	8.9231	0.57242	0.55941	0.17160	0.58514	6.27%	1.923%	6.56%	3.4100
019.43	Calcium, ICP, Microwave (%)	23	21	8.8516	0.57927	0.57441	0.10589	0.58409	6.49%	1.196%	6.60%	5.5162

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
021.43	Cobalt, ICP, Microwave (mg / kg (ppm))	9	9	10.554	2.3478	2.3454	0.15009	2.3502	22.22%	1.422%	22.27%	15.658
022.31	Copper, AAS, Dry ash (mg / kg (ppm))	13	12	268.37	12.040	11.454	5.2466	12.598	4.27%	1.955%	4.69%	2.4012
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	23	20	266.95	12.073	10.412	8.6438	13.532	3.90%	3.238%	5.07%	1.5655
022.42	Copper, ICP, Open vessel (mg / kg (ppm))	23	20	269.30	21.413	21.075	5.3632	21.747	7.83%	1.992%	8.08%	4.0548
022.43	Copper, ICP, Microwave (mg / kg (ppm))	20	18	270.73	23.627	23.547	2.7492	23.707	8.70%	1.015%	8.76%	8.6234
025.31	Iron, AAS, Dry ash (mg / kg (ppm))	12	11	795.09	124.56	124.23	12.827	124.89	15.62%	1.613%	15.71%	9.7369
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	25	23	814.24	55.133	52.598	23.370	57.556	6.46%	2.870%	7.07%	2.4629
025.42	Iron, ICP, Open vessel (mg / kg (ppm))	18	14	705.63	82.112	79.620	28.392	84.531	11.28%	4.024%	11.98%	2.9773
025.43	Iron, ICP, Microwave (mg / kg (ppm))	17	16	723.99	134.54	133.44	24.270	135.63	18.43%	3.352%	18.73%	5.5885
027.31	Magnesium, AAS, Dry ash (%)	15	15	0.67505	0.04572	0.04503	0.01117	0.04640	6.67%	1.654%	6.87%	4.1542
027.41	Magnesium, ICP, Dry ash (%)	27	24	0.67950	0.03977	0.03906	0.01056	0.04046	5.75%	1.553%	5.96%	3.8336
027.42	Magnesium, ICP, Open vessel (%)	23	20	0.67415	0.04324	0.04224	0.01308	0.04422	6.27%	1.940%	6.56%	3.3806
027.43	Magnesium, ICP, Microwave (%)	21	20	0.65884	0.04498	0.04471	0.00705	0.04526	6.79%	1.071%	6.87%	6.4153
028.31	Manganese, AAS, Dry ash (mg / kg (ppm))	13	13	409.21	27.354	26.757	8.0356	27.937	6.54%	1.964%	6.83%	3.4767
028.41	Manganese, ICP, Dry ash (mg / kg (ppm))	24	21	406.73	21.128	20.287	8.3455	21.937	4.99%	2.052%	5.39%	2.6286
028.42	Manganese, ICP, Open vessel (mg / kg (ppm))	23	20	398.99	30.334	29.484	10.084	31.161	7.39%	2.527%	7.81%	3.0900
028.43	Manganese, ICP, Microwave (mg / kg (ppm))	19	18	401.97	36.161	35.946	5.5731	36.375	8.94%	1.386%	9.05%	6.5270
031.01	Phosphorus, Photometric (%)	43	39	0.61905	0.03514	0.03430	0.01080	0.03596	5.54%	1.745%	5.81%	3.3282
031.41	Phosphorus, ICP, Dry ash (%)	32	28	0.60215	0.04221	0.04078	0.01539	0.04359	6.77%	2.555%	7.24%	2.8328
031.42	Phosphorus, ICP, Open vessel (%)	24	22	0.59973	0.04949	0.04489	0.02949	0.05371	7.48%	4.917%	8.96%	1.8212
031.43	Phosphorus, ICP, Microwave (%)	23	21	0.58806	0.04587	0.04541	0.00912	0.04632	7.72%	1.551%	7.88%	5.0790
032.31	Potassium, AAS, Dry ash (%)	16	14	2.1730	0.15671	0.15567	0.02549	0.15774	7.16%	1.173%	7.26%	6.1888
032.41	Potassium, ICP, Dry ash (%)	27	24	2.1023	0.14086	0.13731	0.04447	0.14433	6.53%	2.115%	6.87%	3.2458
032.42	Potassium, ICP, Open vessel (%)	23	19	2.1433	0.10304	0.09946	0.03809	0.10650	4.64%	1.777%	4.97%	2.7959
032.43	Potassium, ICP, Microwave (%)	22	20	2.0856	0.06713	0.06179	0.03711	0.07208	2.96%	1.779%	3.46%	1.9422
033.00	Salt as chloride, Sol Cl (%)	20	17	3.6961	0.10298	0.10093	0.02895	0.10500	2.73%	0.783%	2.84%	3.6265
033.01	Salt as chloride, Poten Cl (%)	30	26	3.8028	0.07748	0.07604	0.02098	0.07889	2.00%	0.552%	2.07%	3.7596
035.31	Sodium, AAS, Dry ash (%)	16	15	0.87514	0.08694	0.08610	0.01702	0.08776	9.84%	1.945%	10.03%	5.1571
035.41	Sodium, ICP, Dry ash (%)	30	26	0.84402	0.06052	0.05919	0.01783	0.06182	7.01%	2.112%	7.32%	3.4676
035.42	Sodium, ICP, Open vessel (%)	19	19	0.87254	0.04803	0.04237	0.03200	0.05309	4.86%	3.668%	6.08%	1.6591
035.43	Sodium, ICP, Microwave (%)	17	17	0.84186	0.06648	0.06321	0.02914	0.06960	7.51%	3.461%	8.27%	2.3884
036.42	Sulfur, ICP, Open vessel (%)	22	19	0.69791	0.06266	0.06211	0.01172	0.06321	8.90%	1.679%	9.06%	5.3927
036.43	Sulfur, ICP, Microwave (%)	12	11	0.70783	0.05618	0.05559	0.01145	0.05676	7.85%	1.618%	8.02%	4.9551
037.31	Zinc, AAS, Dry ash (mg / kg (ppm))	13	11	919.56	43.430	43.072	7.8732	43.785	4.68%	0.856%	4.76%	5.5613
037.41	Zinc, ICP, Dry ash (mg / kg (ppm))	23	22	891.02	68.861	66.956	22.747	70.715	7.51%	2.553%	7.94%	3.1088
037.42	Zinc, ICP, Open vessel (mg / kg (ppm))	22	19	887.27	70.055	67.270	27.654	72.732	7.58%	3.117%	8.20%	2.6301
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	22	19	897.83	77.562	77.372	7.6694	77.751	8.62%	0.854%	8.66%	10.138
038.43	Molybdenum, ICP, Microwave (mg / kg (ppm))	8	8	4.4309	0.85192	0.84619	0.13949	0.85761	19.10%	3.148%	19.36%	6.1481
065.03	Monensin, LC (mg / kg (ppm))	10	10	295.31	49.439	48.094	16.199	50.748	16.29%	5.485%	17.18%	3.1328
106.02	Vitamin A, LC (KU / kg)	21	19	27.946	10.134	9.8434	3.4099	10.417	35.22%	12.202%	37.28%	3.0551

Test Material Code # 201629

Issue Date : 10/31/2016

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
109.02	Vitamin E, LC (IU/kg)	18	16	77.152	17.341	16.972	5.0374	17.703	22.00%	6.529%	22.95%	3.5144
120.00	Alanine, Post-col Ninhydrin Der (%)	20	18	0.84613	0.04393	0.04299	0.01281	0.04486	5.08%	1.514%	5.30%	3.5023
121.00	Arginine, Post-col Ninhydrin Der (%)	20	18	1.1884	0.04471	0.04420	0.00952	0.04521	3.72%	0.801%	3.80%	4.7491
122.00	Aspartic, Post-col Ninhydrin Der (%)	20	18	1.5180	0.07063	0.06940	0.01851	0.07183	4.57%	1.219%	4.73%	3.8804
124.00	Cysteine/Cystine, PAO Post-col Ninhydri (%)	20	19	0.31475	0.02461	0.02408	0.00714	0.02512	7.65%	2.270%	7.98%	3.5162
125.00	Glutamic, Post-col Ninhydrin Der (%)	20	18	3.2013	0.23441	0.23347	0.02955	0.23534	7.29%	0.923%	7.35%	7.9635
126.00	Glycine, Post-col Ninhydrin Der (%)	19	17	0.81868	0.02275	0.02085	0.01287	0.02450	2.55%	1.572%	2.99%	1.9038
127.00	Histidine, Post-col Ninhydrin Der (%)	19	18	0.44148	0.02315	0.02268	0.00657	0.02361	5.14%	1.487%	5.35%	3.5951
128.00	Isoleucine, Post-col Ninhydrin Der (%)	20	18	0.64325	0.04213	0.04121	0.01238	0.04303	6.41%	1.925%	6.69%	3.4750
129.00	Leucine, Post-col Ninhydrin Der (%)	20	18	1.2336	0.04532	0.04442	0.01268	0.04620	3.60%	1.028%	3.74%	3.6420
130.00	L-Lysine, Post-col Ninhydrin Der (%)	20	17	0.81312	0.06649	0.06606	0.01069	0.06692	8.12%	1.314%	8.23%	6.2622
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	20	19	0.23701	0.01355	0.01272	0.00659	0.01433	5.37%	2.780%	6.04%	2.1740
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	20	17	0.81846	0.16717	0.16704	0.00937	0.16730	20.41%	1.145%	20.44%	17.858
133.00	Proline, Post-col Ninhydrin Der (%)	19	17	0.99203	0.07765	0.07701	0.01404	0.07828	7.76%	1.416%	7.89%	5.5743
134.00	Serine, Post-col Ninhydrin Der (%)	20	18	0.79721	0.03601	0.03528	0.01021	0.03672	4.42%	1.281%	4.61%	3.5956
135.00	Threonine, Post-col Ninhydrin Der (%)	20	18	0.65341	0.03007	0.02956	0.00784	0.03058	4.52%	1.199%	4.68%	3.9017
137.00	Tyrosine, Post-col Ninhydrin Der (%)	14	13	0.51415	0.08649	0.08625	0.00910	0.08673	16.78%	1.771%	16.87%	9.5266
138.00	Valine, Post-col Ninhydrin Der (%)	20	18	0.81390	0.04019	0.03819	0.01771	0.04210	4.69%	2.176%	5.17%	2.3766

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