



AAFCO
Proficiency Testing Program



Animal Feed Scheme
Dairy Feed, Medicated
Test Material Code # 201930

Method Summary Report
(Precision Report Follows)

Labs Reporting: 196
Methods Reported: 415
Issue Date : 11/30/2019

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	0.8500							
001.00	Loss on Drying, Vac 95°C 5 hr (%)	5	4	8.628	0.4060	8.628	0.4060	0.2030	4.71%	0.0413	2.89%
001.03	Loss on Drying, Low temp. methods (%)	5	5	8.689	0.2349	8.689	0.2349	0.1051	2.70%	0.0460	2.89%
001.05	Loss on Drying, LECO (%)	2	2	8.440	0.0354						
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	51	50	8.490	0.4327	8.514	0.3271	0.0578	3.84%	0.1358	2.90%
001.99	Loss on Drying, Miscellaneous (%)	27	26	8.358	0.6073	8.373	0.4838	0.1186	5.78%	0.0951	2.90%
002.00	Protein, Crude, Crude (%)	1	1	18.55							
002.01	Protein, Crude, Auto Kjell-Foss (%)	15	14	18.69	0.5487	18.78	0.3525	0.1178	1.88%	0.0789	2.31%
002.02	Protein, Crude, Semiauto Autoanalyzer (%)	2	2	19.01	0.0196						
002.03	Protein, Crude, Hach Method (%)	1	1	18.68							
002.04	Protein, Crude, Copper Catalyst (%)	3	3	19.03	0.0611	19.03	0.0611	0.0353	0.32%	0.1100	2.29%
002.05	Protein, Crude, Copper, Boric Acid (%)	32	31	18.78	0.3262	18.79	0.2804	0.0630	1.49%	0.1019	2.31%
002.06	Protein, Crude, Combustion Nitrogen Analyzer (%)	127	125	19.13	0.5175	19.15	0.3191	0.0357	1.67%	0.2068	2.29%
002.08	Protein, Crude, Cu/Ti (%)	1	1	18.76							
002.10	Protein, Crude, Block dig/distillation (%)	2	2	18.97	0.0000						
002.11	Protein, Crude, NIR (%)	9	9	20.50	1.836	20.36	1.755	0.7314	8.62%	0.1427	2.22%
002.99	Protein, Crude, Miscellaneous (%)	1	1	19.88							
003.00	Fat, Crude, Diethyl Ether Ext., Direct (%)	14	14	4.272	0.5917	4.292	0.5612	0.1875	13.08%	0.1227	3.21%
003.01	Fat, Crude, Diethyl Ether Ext (13th ed.), Indirect (%)	2	2	2.825	1.704						
003.06	Fat, Crude, Pet Ether (%)	16	15	4.241	0.2253	4.241	0.2555	0.0825	6.03%	0.0963	3.22%
003.09	Fat, Crude, Randall, Diethyl Ether Ext (%)	13	13	4.160	0.2148	4.166	0.2295	0.0796	5.51%	0.1053	3.23%
003.10	Fat, Crude, Randall, Pet Ether (%)	31	30	3.824	0.2803	3.822	0.2080	0.0475	5.44%	0.0815	3.27%
003.11	Fat, Crude, NIR (%)	8	8	4.467	0.7396	4.457	0.7086	0.3131	15.90%	0.0453	3.19%
003.12	Fat, Crude, Hexane Ext (%)	2	2	4.145	0.1556						
003.13	Fat, Crude, Randall, Hexane Ext. (%)	9	8	3.982	0.1713	3.992	0.1707	0.0754	4.28%	0.0696	3.25%
003.14	Fat, Crude, Ankom (%)	56	55	4.007	0.6656	4.063	0.3676	0.0620	9.05%	0.1965	3.24%
003.99	Fat, Crude, Miscellaneous (%)	5	4	4.281	0.2834	4.281	0.2834	0.1417	6.62%	0.0375	3.21%
004.00	Fiber, Crude, Asbestos Free (%)	14	14	13.97	0.6459	13.95	0.6982	0.2332	5.00%	0.2212	2.68%
004.01	Fiber, Crude, Sing Filt (%)	2	2	11.74	0.3430						
004.03	Fiber, Crude, Fritted Glass (%)	5	4	13.86	0.6193	13.86	0.6193	0.3097	4.47%	0.0450	2.69%

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004.06	Fiber, Crude, Fibertec (%)	19	19	13.84	1.006	13.69	0.6085	0.1745	4.44%	0.1629	2.70%
004.07	Fiber, Crude, ANKOM (%)	73	71	13.54	1.101	13.48	0.9211	0.1366	6.83%	0.2553	2.70%
004.11	Fiber, Crude, NIR (%)	7	7	12.58	0.7620	12.58	0.8641	0.4082	6.87%	0.0613	2.73%
004.99	Fiber, Crude, Miscellaneous (%)	3	3	12.70	1.076	12.70	1.076	0.7606	8.47%	0.4033	2.73%
005.00	Ash, 2h @ 600°C (%)	98	97	7.641	0.2464	7.663	0.1989	0.0252	2.60%	0.0823	2.94%
005.02	Ash, LECO (%)	1	1	8.065							
005.03	Ash, Microwave furnace (%)	1	1	7.500							
005.05	Ash, 3h @ 550°C (%)	38	37	7.865	0.2360	7.875	0.2211	0.0454	2.81%	0.0559	2.93%
005.11	Ash, NIR (%)	5	4	6.953	0.3680	6.953	0.3680	0.1840	5.29%	0.1439	2.99%
005.99	Ash, Miscellaneous (%)	10	10	7.768	0.3388	7.837	0.1686	0.0666	2.15%	0.0984	2.93%
006.00	Total Sugars, As sucrose (%)	2	2	3.891	1.585						
006.99	Total Sugars, Miscellaneous (%)	3	3	4.190	0.3368	4.190	0.3368	0.1944	8.04%	0.0600	3.22%
008.02	Fiber, Acid Detergent, Crucible (%)	14	14	18.46	0.7727	18.51	0.7606	0.2541	4.11%	0.4243	2.32%
008.05	Fiber, Acid Detergent, Acid Detergent-Hach (%)	1	1	20.05							
008.08	Fiber, Acid Detergent, Filter Bag - ANKOM (%)	48	47	18.30	1.543	18.26	1.372	0.2501	7.51%	0.3583	2.34%
008.99	Fiber, Acid Detergent, Miscellaneous (%)	2	2	17.54	1.566						
009.04	Fiber, Neutral Detergent, Neutral Det-No ENZ Pretreat (%)	2	2	35.00	2.602						
009.07	Fiber, Neutral Detergent, AOAC -ENZ Pretreat (%)	15	15	34.10	5.813	35.10	2.063	0.6658	5.88%	0.5883	1.69%
009.09	Fiber, Neutral Detergent, Filter Bag - ANKOM (%)	44	43	34.16	2.054	33.94	1.620	0.3089	4.77%	0.3541	1.72%
009.99	Fiber, Neutral Detergent, Miscellaneous (%)	2	2	30.83	2.977						
010.03	Moisture, Karl-Fischer (%)	2	2	8.440	0.5162						
010.11	Moisture, NIR (%)	5	4	8.807	0.6624	8.807	0.6624	0.3312	7.52%	0.0254	2.88%
010.99	Moisture, Miscellaneous (%)	15	14	8.803	0.6161	8.738	0.5339	0.1784	6.11%	0.1279	2.89%
011.01	Loss on Drying, 135°C 2hr (%)	66	64	9.486	0.4664	9.467	0.4235	0.0662	4.47%	0.1143	2.85%
011.02	Loss on Drying, 130°C for 2 hours (%)	2	2	8.805	0.0354						
011.99	Loss on Drying, High Temp. Methods Miscellaneous (%)	2	2	9.645	0.9122						
012.00	Starch, Polarimetric (Ewers) (%)	16	16	14.61	0.4799	14.57	0.4572	0.1429	3.14%	0.1473	2.62%
012.01	Starch, Enzymatic-Colorimetric Method (Megazyme) (%)	12	12	13.31	1.924	13.25	1.971	0.7113	14.88%	0.6183	2.71%
012.03	Starch, Enzymatic-Colorimetric Method, Miscellaneous (%)	6	6	13.72	0.7257	13.72	0.8230	0.4200	6.00%	0.4064	2.70%
012.04	Starch, Enzymatic-Enzyme Membrane Technology (YSI) (%)	3	3	12.61	1.271	12.61	1.271	0.7336	10.08%	0.2833	2.73%
012.11	Starch, NIR (%)	6	6	15.45	2.421	15.45	2.746	1.401	17.77%	0.2817	2.54%
012.99	Starch, Miscellaneous (%)	2	2	15.08	0.1556						
013.00	Fat, Acid Pretreat, Acid hydrolysis (%)	17	17	5.028	0.7822	5.066	0.7095	0.2151	14.01%	0.1581	3.13%
013.02	Fat, Acid Pretreat, Mojonier, Bak Ext (%)	15	15	5.410	0.5279	5.399	0.5744	0.1854	10.64%	0.1461	3.10%
013.10	Fat, Acid Pretreat, Soxtec-Acid Hydrolysis (%)	5	4	4.599	0.4842	4.599	0.4842	0.2421	10.53%	0.0233	3.18%
013.12	Fat, Acid Pretreat, NIR- Acid Hydrolysis (%)	1	1	4.696							
013.13	Fat, Acid Pretreat, Ankom- Acid Hydrolysis (%)	8	8	5.393	0.5222	5.393	0.5922	0.2617	10.98%	0.1929	3.10%
015.41	Aluminum, ICP, Dry ash (mg / kg (ppm))	5	5	126.0	18.23	126.0	18.23	8.152	14.46%	5.528	7.73%
015.42	Aluminum, ICP, Open vessel (mg / kg (ppm))	2	2	136.5	8.167						
015.43	Aluminum, ICP, Microwave (mg / kg (ppm))	8	8	143.6	19.74	143.6	22.39	9.895	15.59%	7.522	7.57%

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015.52	Aluminum, ICP-MS, Open vessel (mg / kg (ppm))	1	1	81.45							
015.53	Aluminum, ICP-MS, Microwave (mg / kg (ppm))	1	1	176.5							
017.41	Boron, ICP, Dry ash (mg / kg (ppm))	5	5	7.546	2.999	7.546	2.999	1.341	39.75%	0.7959	11.80%
017.42	Boron, ICP, Open vessel (mg / kg (ppm))	6	6	8.289	0.5409	8.155	0.2683	0.1369	3.29%	0.6213	11.66%
017.43	Boron, ICP, Microwave (mg / kg (ppm))	7	5	8.562	0.4126	8.562	0.4126	0.2654	4.82%	0.3160	11.58%
017.44	Boron, ICP, Dry ash (mg / kg (ppm))	1	1	7.957							
017.52	Boron, ICP-MS, Open vessel (mg / kg (ppm))	1	1	7.989							
019.00	Calcium, Ox-Mn04 Vol. (%)	12	11	1.239	0.1325	1.220	0.1027	0.0387	8.42%	0.0254	3.88%
019.02	Calcium, Hach Method (%)	1	1	1.215							
019.03	Calcium, Semiauto (Autoanalyzer) (%)	1	1	1.280							
019.08	Calcium, EDTA (%)	11	10	1.240	0.0552	1.233	0.0440	0.0174	3.57%	0.0127	3.88%
019.31	Calcium, AAS, Dry ash (%)	20	19	1.206	0.0713	1.204	0.0757	0.0217	6.29%	0.0233	3.89%
019.32	Calcium, AAS, Open vessel (%)	1	1	1.210							
019.41	Calcium, ICP, Dry ash (%)	31	31	1.184	0.0775	1.185	0.0812	0.0182	6.85%	0.0457	3.90%
019.42	Calcium, ICP, Open vessel (%)	22	21	1.271	0.1039	1.271	0.0790	0.0216	6.22%	0.0279	3.86%
019.43	Calcium, ICP, Microwave (%)	31	29	1.199	0.0822	1.205	0.0777	0.0180	6.45%	0.0367	3.89%
019.44	Calcium, ICP, Dry ash (%)	1	1	1.110							
019.51	Calcium, ICP-MS, Dry ash (%)	1	1	1.300							
019.52	Calcium, ICP-MS, Open vessel (%)	5	5	1.171	0.0531	1.171	0.0531	0.0238	4.54%	0.0238	3.91%
019.53	Calcium, ICP-MS, Microwave (%)	4	3	1.142	0.0379	1.142	0.0379	0.0219	3.32%	0.0100	3.92%
019.99	Calcium, Miscellaneous (%)	4	4	1.223	0.0494	1.223	0.0494	0.0247	4.04%	0.0350	3.88%
021.31	Cobalt, AAS, Dry ash (mg / kg (ppm))	3	3	3.533	0.6658	3.533	0.6658	0.3844	18.84%	0.1800	13.23%
021.41	Cobalt, ICP, Dry ash (mg / kg (ppm))	5	5	2.541	0.8708	2.541	0.8708	0.3895	34.27%	0.2214	13.90%
021.42	Cobalt, ICP, Open vessel (mg / kg (ppm))	4	3	2.627	0.5349	2.627	0.5349	0.3088	20.37%	0.2450	13.83%
021.43	Cobalt, ICP, Microwave (mg / kg (ppm))	11	10	2.969	0.7222	3.079	0.5202	0.2056	16.89%	0.1461	13.51%
021.52	Cobalt, ICP-MS, Open vessel (mg / kg (ppm))	5	5	2.050	0.1798	2.050	0.1798	0.0804	8.77%	0.0876	14.36%
021.53	Cobalt, ICP-MS, Microwave (mg / kg (ppm))	3	3	2.941	0.4246	2.941	0.4246	0.2451	14.44%	0.3437	13.60%
022.31	Copper, AAS, Dry ash (mg / kg (ppm))	12	12	60.29	3.821	60.50	3.221	1.162	5.32%	2.287	8.63%
022.32	Copper, AAS, Open vessel (mg / kg (ppm))	2	2	58.29	4.969						
022.33	Copper, AAS, Microwave (mg / kg (ppm))	2	2	58.99	4.121						
022.34	Copper, AAS, Graphite furnace (mg / kg (ppm))	1	1	56.21							
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	24	24	55.96	6.041	55.63	5.055	1.290	9.09%	2.570	8.74%
022.42	Copper, ICP, Open vessel (mg / kg (ppm))	21	20	61.72	6.575	62.38	5.769	1.612	9.25%	1.650	8.59%
022.43	Copper, ICP, Microwave (mg / kg (ppm))	24	24	60.48	4.284	60.39	4.114	1.050	6.81%	2.561	8.63%
022.44	Copper, ICP, Dry ash (mg / kg (ppm))	2	2	56.48	10.65						
022.51	Copper, ICP-MS, Dry ash (mg / kg (ppm))	1	1	59.71							
022.52	Copper, ICP-MS, Open vessel (mg / kg (ppm))	4	4	59.00	2.082	59.00	2.082	1.041	3.53%	4.030	8.66%
022.53	Copper, ICP-MS, Microwave (mg / kg (ppm))	3	3	59.25	1.937	59.25	1.937	1.118	3.27%	4.940	8.65%
022.99	Copper, Miscellaneous (mg / kg (ppm))	4	3	57.47	1.343	57.47	1.343	0.7753	2.34%	1.067	8.69%
024.03	Iodine, Ion-selective electrode (mg / kg (ppm))	1	1	4.500							

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024.53	Iodine, ICP-MS, Microwave (mg / kg (ppm))	1	1	5.000							
024.99	Iodine, Miscellaneous (mg / kg (ppm))	1	1	4.620							
025.31	Iron, AAS, Dry ash (mg / kg (ppm))	14	14	322.3	45.30	322.1	50.66	16.92	15.73%	8.828	6.71%
025.32	Iron, AAS, Open vessel (mg / kg (ppm))	1	1	420.2							
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	26	26	317.8	35.65	318.7	36.10	8.850	11.33%	12.80	6.72%
025.42	Iron, ICP, Open vessel (mg / kg (ppm))	16	16	320.5	54.36	325.9	43.46	13.58	13.33%	13.64	6.70%
025.43	Iron, ICP, Microwave (mg / kg (ppm))	26	26	340.2	34.36	341.8	33.39	8.186	9.77%	16.11	6.65%
025.52	Iron, ICP-MS, Open vessel (mg / kg (ppm))	4	4	289.4	44.77	289.4	44.77	22.38	15.47%	6.153	6.82%
025.53	Iron, ICP-MS, Microwave (mg / kg (ppm))	1	1	172.7							
025.99	Iron, Miscellaneous (mg / kg (ppm))	3	3	333.3	11.58	333.3	11.58	6.685	3.47%	22.67	6.67%
027.31	Magnesium, AAS, Dry ash (%)	15	15	0.3723	0.0107	0.3736	0.0092	0.0030	2.45%	0.0084	4.64%
027.32	Magnesium, AAS, Open vessel (%)	1	1	0.3950							
027.33	Magnesium, AAS, Microwave (%)	3	3	0.3871	0.0212	0.3871	0.0212	0.0123	5.49%	0.0151	4.61%
027.41	Magnesium, ICP, Dry ash (%)	25	25	0.3752	0.0248	0.3738	0.0247	0.0062	6.61%	0.0107	4.64%
027.42	Magnesium, ICP, Open vessel (%)	22	22	0.3947	0.0264	0.3932	0.0243	0.0065	6.19%	0.0108	4.60%
027.43	Magnesium, ICP, Microwave (%)	29	28	0.3794	0.0204	0.3776	0.0172	0.0041	4.57%	0.0092	4.63%
027.44	Magnesium, ICP, Dry ash (%)	1	1	0.3535							
027.51	Magnesium, ICP-MS, Dry ash (%)	1	1	0.4100							
027.52	Magnesium, ICP-MS, Open vessel (%)	5	5	0.3962	0.0501	0.3962	0.0501	0.0224	12.64%	0.0218	4.60%
027.53	Magnesium, ICP-MS, Microwave (%)	3	3	0.3917	0.0218	0.3917	0.0218	0.0126	5.57%	0.0080	4.61%
027.99	Magnesium, Miscellaneous (%)	3	3	0.3825	0.0198	0.3825	0.0198	0.0115	5.19%	0.0083	4.62%
028.31	Manganese, AAS, Dry ash (mg / kg (ppm))	11	10	189.0	10.28	190.3	7.970	3.150	4.19%	4.120	7.26%
028.32	Manganese, AAS, Open vessel (mg / kg (ppm))	2	2	202.3	16.54						
028.33	Manganese, AAS, Microwave (mg / kg (ppm))	1	1	154.0							
028.34	Manganese, AAS, Dry ash (mg / kg (ppm))	1	1	27.68							
028.41	Manganese, ICP, Dry ash (mg / kg (ppm))	23	23	184.2	37.78	179.9	24.48	6.381	13.61%	6.884	7.32%
028.42	Manganese, ICP, Open vessel (mg / kg (ppm))	20	20	200.2	16.07	200.2	18.22	5.094	9.10%	9.145	7.21%
028.43	Manganese, ICP, Microwave (mg / kg (ppm))	27	26	196.6	12.71	195.6	12.14	2.977	6.21%	6.651	7.23%
028.44	Manganese, ICP, Dry ash (mg / kg (ppm))	1	1	182.6							
028.51	Manganese, ICP-MS, Dry ash (mg / kg (ppm))	1	1	213.8							
028.52	Manganese, ICP-MS, Open vessel (mg / kg (ppm))	4	4	186.6	11.15	186.6	11.15	5.573	5.97%	13.17	7.28%
028.53	Manganese, ICP-MS, Microwave (mg / kg (ppm))	3	3	189.1	3.505	189.1	3.505	2.024	1.85%	10.66	7.27%
028.99	Manganese, Miscellaneous (mg / kg (ppm))	4	3	198.8	16.31	198.8	16.31	9.418	8.20%	1.000	7.21%
031.00	Phosphorus, Vol (%)	1	1	0.7700							
031.01	Phosphorus, Photometric (%)	43	41	0.8064	0.0417	0.8083	0.0222	0.0043	2.75%	0.0116	4.13%
031.02	Phosphorus, GQMP (AOAC 935.13-Extraction) (%)	1	1	0.7800							
031.03	Phosphorus, Autoanalyzer (%)	3	3	0.8143	0.0124	0.8143	0.0124	0.0071	1.52%	0.0109	4.13%
031.06	Phosphorus, Hach Method (%)	1	1	0.8000							
031.41	Phosphorus, ICP, Dry ash (%)	28	28	0.8006	0.0536	0.7980	0.0526	0.0124	6.59%	0.0233	4.14%
031.42	Phosphorus, ICP, Open vessel (%)	21	20	0.8255	0.0607	0.8181	0.0504	0.0141	6.16%	0.0172	4.12%

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031.43	Phosphorus, ICP, Microwave (%)	28	28	0.8289	0.0500	0.8276	0.0380	0.0090	4.59%	0.0176	4.12%
031.44	Phosphorus, ICP, Dry ash (%)	2	2	0.7883	0.0117						
031.51	Phosphorus, ICP-MS, Dry ash (%)	1	1	0.8200							
031.52	Phosphorus, ICP-MS, Open vessel (%)	2	2	0.7240	0.0658						
031.53	Phosphorus, ICP-MS, Microwave (%)	3	3	0.8388	0.0736	0.8388	0.0736	0.0425	8.78%	0.0470	4.11%
031.99	Phosphorus, Miscellaneous (%)	5	5	0.8082	0.0621	0.8082	0.0621	0.0278	7.68%	0.0288	4.13%
032.02	Potassium, Flame Emission (%)	2	2	1.113	0.0672						
032.31	Potassium, AAS, Dry ash (%)	12	12	1.074	0.1039	1.057	0.0271	0.0098	2.57%	0.0330	3.97%
032.32	Potassium, AAS, Open vessel (%)	2	2	1.035	0.2263						
032.41	Potassium, ICP, Dry ash (%)	29	29	1.039	0.0891	1.043	0.0897	0.0208	8.59%	0.0433	3.97%
032.42	Potassium, ICP, Open vessel (%)	20	20	1.114	0.0716	1.116	0.0729	0.0204	6.53%	0.0342	3.93%
032.43	Potassium, ICP, Microwave (%)	29	28	1.072	0.0504	1.071	0.0512	0.0121	4.78%	0.0276	3.96%
032.51	Potassium, ICP-MS, Dry ash (%)	1	1	1.180							
032.52	Potassium, ICP-MS, Open vessel (%)	3	3	0.9909	0.0937	0.9909	0.0937	0.0663	9.46%	0.0311	4.01%
032.53	Potassium, ICP-MS, Microwave (%)	3	3	1.083	0.0404	1.083	0.0404	0.0286	3.73%	0.0467	3.95%
032.99	Potassium, Miscellaneous (%)	4	4	1.076	0.0303	1.076	0.0303	0.0152	2.82%	0.0273	3.96%
033.00	Salt as chloride, Sol Cl (%)	24	23	1.015	0.1294	1.036	0.0712	0.0186	6.88%	0.0258	3.98%
033.01	Salt as chloride, Poten Cl (%)	31	31	1.104	0.0302	1.104	0.0249	0.0056	2.25%	0.0134	3.94%
033.03	Salt as chloride, Quantab (%)	5	5	0.9760	0.1390	0.9760	0.1390	0.0622	14.24%	0.0520	4.01%
033.05	Salt as chloride, Ion Sel Electrode (%)	3	3	1.800	1.221	1.800	1.221	0.8634	67.84%	0.0267	3.66%
033.99	Salt, Miscellaneous (%)	9	9	1.043	0.2586	1.065	0.2384	0.0993	22.38%	0.0261	3.96%
034.01	Selenium, Fluor (mg / kg (ppm))	1	1	1.438							
034.04	Selenium, AA, Hydride (mg / kg (ppm))	3	3	1.312	0.0722	1.312	0.0722	0.0417	5.50%	0.0900	15.36%
034.41	Selenium, ICP, Dry ash (mg / kg (ppm))	3	3	1.493	0.3938	1.493	0.3938	0.2274	26.37%	0.1533	15.06%
034.42	Selenium, ICP, Open vessel (mg / kg (ppm))	1	1	2.250							
034.43	Selenium, ICP, Microwave (mg / kg (ppm))	4	4	1.606	0.1528	1.606	0.1528	0.0764	9.52%	0.0630	14.90%
034.52	Selenium, ICP-MS, Open vessel (mg / kg (ppm))	5	4	1.342	0.1709	1.342	0.1709	0.0855	12.74%	0.0258	15.30%
034.53	Selenium, ICP-MS, Microwave (mg / kg (ppm))	7	7	1.510	0.1625	1.513	0.1769	0.0836	11.69%	0.1679	15.03%
034.99	Selenium, Miscellaneous (mg / kg (ppm))	1	1	2.325							
035.01	Sodium, Ion-selective electrode (%)	2	2	0.4765	0.0375						
035.02	Sodium, Em Spect (%)	1	1	0.4550							
035.05	Sodium, Flame Emission (%)	2	2	0.4350	0.0495						
035.31	Sodium, AAS, Dry ash (%)	15	15	0.4477	0.0405	0.4437	0.0320	0.0103	7.22%	0.0075	4.52%
035.32	Sodium, AAS, Open vessel (%)	1	1	0.4800							
035.41	Sodium, ICP, Dry ash (%)	28	27	0.4347	0.0445	0.4378	0.0294	0.0071	6.71%	0.0127	4.53%
035.42	Sodium, ICP, Open vessel (%)	17	16	0.4662	0.0296	0.4660	0.0272	0.0085	5.83%	0.0139	4.49%
035.43	Sodium, ICP, Microwave (%)	28	27	0.4482	0.0286	0.4508	0.0256	0.0062	5.67%	0.0180	4.51%
035.51	Sodium, ICP-MS, Dry ash (%)	1	1	0.4900							
035.52	Sodium, ICP-MS, Open vessel (%)	3	3	0.4495	0.0189	0.4495	0.0189	0.0109	4.21%	0.0143	4.51%
035.53	Sodium, ICP-MS, Microwave (%)	4	4	0.4465	0.0305	0.4465	0.0305	0.0152	6.83%	0.0250	4.52%

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035.99	Sodium, Miscellaneous (%)	4	4	0.4428	0.0105	0.4428	0.0105	0.0053	2.37%	0.0135	4.52%
036.04	Sulfur, LECO (%)	5	5	0.4873	0.0441	0.4873	0.0441	0.0197	9.05%	0.0206	4.46%
036.42	Sulfur, ICP, Open vessel (%)	21	20	0.4508	0.0545	0.4590	0.0319	0.0089	6.94%	0.0120	4.50%
036.43	Sulfur, ICP, Microwave (%)	20	19	0.4820	0.0444	0.4787	0.0426	0.0122	8.90%	0.0154	4.47%
036.52	Sulfur, ICP-MS, Open vessel (%)	2	2	0.4650	0.0459						
036.53	Sulfur, ICP-MS, Microwave (%)	1	1	0.4940							
036.99	Sulfur, Miscellaneous (%)	1	1	0.4100							
037.31	Zinc, AAS, Dry ash (mg / kg (ppm))	12	12	254.7	50.17	241.1	20.12	7.261	8.35%	6.265	7.01%
037.32	Zinc, AAS, Open vessel (mg / kg (ppm))	2	2	243.1	5.461						
037.33	Zinc, AAS, Microwave (mg / kg (ppm))	3	3	159.5	101.7	159.5	101.7	58.72	63.76%	0.1183	7.46%
037.41	Zinc, ICP, Dry ash (mg / kg (ppm))	24	24	225.6	39.95	224.9	27.62	7.048	12.29%	6.600	7.08%
037.42	Zinc, ICP, Open vessel (mg / kg (ppm))	20	20	243.5	19.52	243.5	22.06	6.166	9.06%	13.37	7.00%
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	27	26	241.2	14.02	241.1	15.52	3.804	6.44%	7.542	7.01%
037.44	Zinc, ICP, Dry ash (mg / kg (ppm))	1	1	266.8							
037.51	Zinc, ICP-MS, Dry ash (mg / kg (ppm))	1	1	254.5							
037.52	Zinc, ICP-MS, Open vessel (mg / kg (ppm))	4	4	245.1	15.10	245.1	15.10	7.549	6.16%	5.618	6.99%
037.53	Zinc, ICP-MS, Microwave (mg / kg (ppm))	3	3	256.3	26.26	256.3	26.26	15.16	10.24%	30.00	6.94%
037.99	Zinc, Miscellaneous (mg / kg (ppm))	4	4	244.8	12.29	244.8	12.29	6.143	5.02%	8.500	6.99%
038.41	Molybdenum, ICP, Dry ash (mg / kg (ppm))	3	3	1.174	0.0612	1.174	0.0612	0.0353	5.21%	0.0337	15.61%
038.42	Molybdenum, ICP, Open vessel (mg / kg (ppm))	4	4	1.557	0.2879	1.557	0.2879	0.1440	18.49%	0.3765	14.97%
038.43	Molybdenum, ICP, Microwave (mg / kg (ppm))	8	8	1.498	0.4412	1.434	0.3375	0.1491	23.53%	0.1980	15.15%
038.52	Molybdenum, ICP-MS, Open vessel (mg / kg (ppm))	3	3	1.203	0.1125	1.203	0.1125	0.0649	9.35%	0.0827	15.56%
038.53	Molybdenum, ICP-MS, Microwave (mg / kg (ppm))	3	3	1.301	0.1401	1.301	0.1401	0.0809	10.77%	0.0353	15.38%
040.42	Barium, ICP, Open vessel (mg / kg (ppm))	1	1	17.07							
040.52	Barium, ICP-MS, Open vessel (mg / kg (ppm))	1	1	14.26							
040.53	Barium, ICP-MS, Microwave (mg / kg (ppm))	1	1	14.75							
041.53	Vanadium, ICP-MS, Microwave (mg / kg (ppm))	1	1	1.205							
042.00	Chloride, Titrimetric (%)	1	1	0.6590							
042.99	Chloride, Miscellaneous (%)	4	4	0.6805	0.0306	0.6805	0.0306	0.0153	4.50%	0.0460	4.24%
101.02	Choline Chloride, LC (mg / kg (ppm))	1	1	1,400							
102.01	Niacin, Microbiological (mg / kg (ppm))	1	1	70.90							
103.01	Pantothenic Acid, Microbiological (mg / kg (ppm))	1	1	7.980							
104.00	Riboflavin, Fluorometric (mg / kg (ppm))	2	2	3.723	0.6611						
104.03	Riboflavin, LC (mg / kg (ppm))	1	1	0.7750							
105.00	Thiamine, LC (mg / kg (ppm))	1	1	2.165							
105.01	Thiamine, Fluorometer (mg / kg (ppm))	1	1	3.955							
106.00	Vitamin A, Color (KU / kg)	1	1	19.37							
106.01	Vitamin A, UV (KU / kg)	1	1	18.35							
106.02	Vitamin A, LC (KU / kg)	19	19	16.30	9.632	14.95	4.610	1.322	30.84%	2.482	
107.00	Vitamin B12, Microbiological (µg / kg (ppb))	1	1	8.445							

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108.01	Vitamin D3, LC, AOAC (KU / kg)	1	1	3.000							
108.02	Vitamin D3, LC (KU / kg)	6	6	9.338	5.368	7.943	2.469	1.260	31.08%	0.3917	
108.99	Vitamin D3, Miscellaneous (KU / kg)	1	1	7.410							
109.02	Vitamin E, LC (IU / kg)	13	12	93.35	32.07	97.45	25.87	9.334	26.54%	2.457	
109.99	Vitamin E, Miscellaneous (IU / kg)	1	1	89.50							
112.01	Pyridoxine, LC (µg / g)	1	1	2.425							
113.01	Folic Acid, Micro (mg / kg (ppm))	1	1	0.8300							
114.01	Biotin, Microbiological (mg / kg (ppm))	1	1	0.2315							
115.00	Non Protein N (NPN), Urea + Am, Urease method (%)	1	1	0.8100							
118.99	Peroxide value, Miscellaneous (meq/kg)	1	1	5.140							
120.00	Alanine, Post-col Ninhydrin Der (%)	23	22	0.9041	0.0482	0.9050	0.0354	0.0094	3.92%	0.0152	4.06%
120.02	Alanine, Post-col OPA Der (%)	1	1	0.9490							
120.05	Alanine, Pre-col AQC Der (%)	9	9	0.9058	0.0755	0.8944	0.0557	0.0232	6.22%	0.0124	4.07%
120.99	Alanine, Miscellaneous (%)	2	2	0.8225	0.2510						
121.00	Arginine, Post-col Ninhydrin Der (%)	23	22	1.234	0.0973	1.243	0.0857	0.0228	6.90%	0.0235	3.87%
121.02	Arginine, Post-col OPA Der (%)	1	1	1.263							
121.05	Arginine, Pre-col AQC Der (%)	8	8	1.250	0.0761	1.250	0.0859	0.0380	6.88%	0.0306	3.87%
121.99	Arginine, Miscellaneous (%)	1	1	0.8450							
122.00	Aspartic, Post-col Ninhydrin Der (%)	23	22	1.403	0.0610	1.405	0.0582	0.0155	4.14%	0.0282	3.80%
122.02	Aspartic, Post-col OPA Der (%)	1	1	1.458							
122.05	Aspartic, Pre-col AQC Der (%)	9	9	1.436	0.1841	1.418	0.1191	0.0496	8.39%	0.0453	3.79%
122.99	Aspartic, Miscellaneous (%)	2	2	1.460	0.1273						
124.00	Cysteine/Cystine, PAO Post-col Ninhytri (%)	23	22	0.3196	0.0328	0.3194	0.0319	0.0085	9.99%	0.0099	4.75%
124.02	Cysteine/Cystine, PAO Post-col OPA Der (%)	1	1	0.3360							
124.05	Cysteine/Cystine, PAO Pre-col AQC Der (%)	8	8	0.2791	0.1050	0.2807	0.1156	0.0511	41.19%	0.0155	4.84%
124.99	Cysteine/Cystine, Miscellaneous (%)	2	2	0.3975	0.0177						
125.00	Glutamic, Post-col Ninhydrin Der (%)	23	22	3.232	0.1538	3.209	0.1086	0.0290	3.39%	0.0727	3.36%
125.02	Glutamic, Post-col OPA Der (%)	1	1	3.216							
125.05	Glutamic, Pre-col AQC Der (%)	9	9	3.256	0.1823	3.252	0.1977	0.0824	6.08%	0.0262	3.35%
125.99	Glutamic, Miscellaneous (%)	2	2	3.075	0.5233						
126.00	Glycine, Post-col Ninhydrin Der (%)	23	21	0.8494	0.0327	0.8466	0.0249	0.0068	2.94%	0.0140	4.10%
126.02	Glycine, Post-col OPA Der (%)	1	1	0.8580							
126.05	Glycine, Pre-col AQC Der (%)	9	8	0.8689	0.0396	0.8689	0.0449	0.0199	5.17%	0.0250	4.09%
126.99	Glycine, Miscellaneous (%)	2	2	0.6075	0.4207						
127.00	Histidine, Post-col Ninhydrin Der (%)	23	22	0.4802	0.0537	0.4720	0.0231	0.0062	4.89%	0.0097	4.48%
127.02	Histidine, Post-col OPA Der (%)	1	1	0.4710							
127.05	Histidine, Pre-col AQC Der (%)	9	9	0.4593	0.0339	0.4562	0.0310	0.0129	6.79%	0.0088	4.50%
127.99	Histidine, Miscellaneous (%)	2	2	0.8350	0.7425						
128.00	Isoleucine, Post-col Ninhydrin Der (%)	23	23	0.5969	0.0528	0.6001	0.0424	0.0110	7.06%	0.0143	4.32%
128.02	Isoleucine, Post-col OPA Der (%)	1	1	0.6150							

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128.05	Isoleucine, Pre-col AQC Der (%)	9	9	0.6174	0.0497	0.6174	0.0564	0.0235	9.13%	0.0109	4.30%
128.99	Isoleucine, Miscellaneous (%)	2	2	0.6150	0.0354						
129.00	Leucine, Post-col Ninhydrin Der (%)	23	22	1.354	0.0599	1.349	0.0397	0.0106	2.95%	0.0182	3.82%
129.02	Leucine, Post-col OPA Der (%)	1	1	1.364							
129.05	Leucine, Pre-col AQC Der (%)	9	8	1.353	0.0493	1.353	0.0559	0.0247	4.13%	0.0230	3.82%
129.99	Leucine, Miscellaneous (%)	2	2	1.178	0.4207						
130.00	L-Lysine, Post-col Ninhydrin Der (%)	24	23	0.7067	0.0388	0.7088	0.0366	0.0095	5.17%	0.0137	4.21%
130.02	L-Lysine, Post-col OPA Der (%)	1	1	0.7245							
130.05	L-Lysine, Pre-col AQC Der (%)	9	8	0.7289	0.1071	0.7045	0.0535	0.0237	7.60%	0.0058	4.22%
130.99	L-Lysine, Miscellaneous (%)	3	3	0.9900	0.3339	0.9900	0.3339	0.1928	33.73%	0.0600	4.01%
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	23	22	0.2847	0.0287	0.2899	0.0119	0.0032	4.11%	0.0078	4.82%
131.02	Methionine, PAO Post-col OPA Der (%)	1	1	0.2820							
131.05	Methionine, PAO Pre-col AQC Der (%)	9	8	0.2624	0.0536	0.2624	0.0608	0.0269	23.17%	0.0076	4.89%
131.99	Methionine, Miscellaneous (%)	2	2	0.3100	0.0071						
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	23	23	0.8339	0.0407	0.8376	0.0320	0.0083	3.82%	0.0222	4.11%
132.02	Phenylalanine, Post-col OPA Der (%)	1	1	0.8415							
132.05	Phenylalanine, Pre-col AQC Der (%)	9	8	0.8266	0.0314	0.8266	0.0357	0.0158	4.31%	0.0139	4.12%
132.99	Phenylalanine, Miscellaneous (%)	2	2	0.7325	0.0530						
133.00	Proline, Post-col Ninhydrin Der (%)	23	23	1.077	0.1336	1.069	0.0868	0.0226	8.12%	0.0268	3.96%
133.05	Proline, Pre-col AQC Der (%)	9	9	1.114	0.0830	1.114	0.0941	0.0392	8.44%	0.0234	3.94%
133.99	Proline, Miscellaneous (%)	2	2	1.063	0.0884						
134.00	Serine, Post-col Ninhydrin Der (%)	23	22	0.8142	0.0541	0.8133	0.0415	0.0110	5.10%	0.0200	4.13%
134.02	Serine, Post-col OPA Der (%)	1	1	0.7530							
134.05	Serine, Pre-col AQC Der (%)	9	8	0.8311	0.0705	0.8311	0.0800	0.0353	9.62%	0.0184	4.11%
134.99	Serine, Miscellaneous (%)	2	2	0.8800	0.0566						
135.00	Threonine, Post-col Ninhydrin Der (%)	23	22	0.6143	0.0156	0.6145	0.0172	0.0046	2.79%	0.0112	4.30%
135.02	Threonine, Post-col OPA Der (%)	1	1	0.6215							
135.05	Threonine, Pre-col AQC Der (%)	9	8	0.6073	0.0312	0.6073	0.0354	0.0156	5.83%	0.0158	4.31%
135.99	Threonine, Miscellaneous (%)	2	2	0.6500	0.0424						
136.00	Tryptophan, Alka-Hydrol Post-col Ninhyd (%)	9	9	0.2246	0.0505	0.2246	0.0572	0.0239	25.49%	0.0089	5.01%
136.01	Tryptophan, Alka-Hydrol Rev Phase LC UV (%)	3	3	0.2238	0.0147	0.2238	0.0147	0.0085	6.56%	0.0023	5.01%
136.02	Tryptophan, Alka-Hydrol Post-col OPA De (%)	1	1	0.2220							
136.03	Tryptophan, Alka-Hydrol + IS RP LC FI (%)	6	6	0.2355	0.0224	0.2297	0.0103	0.0053	4.48%	0.0015	4.99%
136.05	Tryptophan, Pre-col AQC Der (%)	3	3	0.1433	0.0575	0.1433	0.0575	0.0332	40.13%	0.0100	5.36%
136.99	Tryptophan, Miscellaneous (%)	2	2	0.3125	0.1945						
137.00	Tyrosine, Post-col Ninhydrin Der (%)	17	17	0.5450	0.0528	0.5429	0.0554	0.0168	10.20%	0.0160	4.38%
137.02	Tyrosine, Post-col OPA Der (%)	1	1	0.5390							
137.05	Tyrosine, Pre-col AQC Der (%)	9	8	0.5566	0.0804	0.5562	0.0901	0.0398	16.20%	0.0118	4.37%
137.99	Tyrosine, Miscellaneous (%)	2	2	0.4925	0.0601						
138.00	Valine, Post-col Ninhydrin Der (%)	23	23	0.8096	0.0604	0.8142	0.0584	0.0152	7.17%	0.0254	4.13%

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138.02	Valine, Post-col OPA Der (%)	1	1	0.8730							
138.05	Valine, Pre-col AQC Der (%)	9	9	0.8498	0.0403	0.8498	0.0457	0.0190	5.37%	0.0152	4.10%
138.99	Valine, Miscellaneous (%)	2	2	0.7725	0.1450						
139.00	Taurine, Post-col Ninhydrin Der (%)	3	3	0.1127	0.0484	0.1127	0.0484	0.0280	42.98%	0.0060	5.56%
139.02	Taurine, Post-col OPA Der (%)	1		0.0100							
139.05	Taurine, Pre-col AQC Der (%)	1	1	0.0025							
139.99	Taurine, Miscellaneous (%)	1	1	0.0090							
160.10	Fructose, HPAEC PAD (%)	1	1	0.2025							
160.99	Fructose, Miscellaneous (%)	2	2	0.2288	0.0937						
162.10	Glucose, HPAEC PAD (%)	1	1	0.2445							
162.99	Glucose, Miscellaneous (%)	2	2	0.2275	0.0035						
163.99	Lactose, Miscellaneous (%)	2		0.0000							
164.10	Maltose, HPAEC PAD (%)	1	1	0.2125							
164.99	Maltose, Miscellaneous (%)	1		0.1500							
165.10	Sucrose, HPAEC PAD (%)	1	1	1.195							
165.99	Sucrose, Miscellaneous (%)	2	2	1.513	0.3995						
166.10	Raffinose, HPAEC PAD (%)	1	1	0.6325							
166.99	Raffinose, Miscellaneous (%)	2	2	0.7890	0.2319						
167.10	Stachyose, HPAEC PAD (%)	1	1	0.1395							
167.99	Stachyose, Miscellaneous (%)	2	2	0.3038	0.1397						
323.99	Diflubenzuron, Miscellaneous (mg/kg (ppm))	1	1	0.6250							
351.00	Chlortetracycline, Plate (mg/kg (ppm))	1	1	187.2							
351.03	Chlortetracycline, LC (UV or FL) (mg/kg (ppm))	9	9	188.1	28.32	184.6	23.09	9.620	12.51%	13.29	7.29%
351.05	Chlortetracycline, LC-MS/MS (mg/kg (ppm))	3	3	198.3	58.05	198.3	58.05	33.52	29.28%	13.86	7.22%
351.99	Chlortetracycline, Miscellaneous (mg/kg (ppm))	1	1	85.66							
365.02	Monensin, LC (mg/kg (ppm))	3	3	25.80	2.275	25.80	2.275	1.314	8.82%	1.133	9.81%
365.03	Monensin, LC-PCD (mg/kg (ppm))	9	9	28.96	2.940	29.39	2.168	0.9033	7.38%	1.723	9.62%
365.04	Monensin, LC-MS (mg/kg (ppm))	4	4	27.79	4.902	27.79	4.902	2.451	17.64%	3.076	9.70%
365.05	Monensin, LC-MS/MS (mg/kg (ppm))	8	8	29.54	5.216	29.53	5.915	2.614	20.03%	3.914	9.61%
365.99	Monensin, Miscellaneous (mg/kg (ppm))	3	3	30.59	7.387	30.59	7.387	4.265	24.15%	1.483	9.56%
400.01	Water Activity, Aqualab chilled mirror (Units)	10	10	0.4996	0.0296	0.4988	0.0233	0.0092	4.67%	0.0076	
400.99	Water Activity, Miscellaneous (Units)	2	2	0.5060	0.0156						
412.01	Starch, Dietary, Enzymatic-Colorimetric (%)	1	1	13.39							
516.00	Arsenic, Total, AA, Hydride (mg / kg (ppm))	2	2	0.1328	0.0018						
516.43	Arsenic, Total, ICP, Microwave (mg / kg (ppm))	1	1	1.024							
516.52	Arsenic, Total, ICP-MS, Open vessel (mg / kg (ppm))	4	4	0.1412	0.0102	0.1412	0.0102	0.0051	7.25%	0.0153	21.48%
516.53	Arsenic, Total, ICP-MS, Microwave (mg / kg (ppm))	4	4	0.1630	0.0248	0.1630	0.0248	0.0124	15.23%	0.0150	21.02%
518.31	Cadmium, AAS, Dry ash (mg / kg (ppm))	1		0.2000							
518.41	Cadmium, ICP, Dry ash (mg / kg (ppm))	2	2	0.1127	0.0103						
518.43	Cadmium, ICP, Microwave (mg / kg (ppm))	2	2	0.1157	0.0074						

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
518.52	Cadmium, ICP-MS, Open vessel (mg / kg (ppm))	4	4	0.1193	0.0067	0.1193	0.0067	0.0033	5.59%	0.0099	22.00%
518.53	Cadmium, ICP-MS, Microwave (mg / kg (ppm))	4	4	0.1208	0.0090	0.1208	0.0090	0.0045	7.45%	0.0070	21.99%
520.41	Chromium, ICP, Dry ash (mg / kg (ppm))	2	2	1.812	1.256						
520.42	Chromium, ICP, Open vessel (mg / kg (ppm))	2	2	4.181	0.3741						
520.43	Chromium, ICP, Microwave (mg / kg (ppm))	3	3	2.484	2.369	2.484	2.369	1.675	95.36%	0.2328	13.95%
520.52	Chromium, ICP-MS, Open vessel (mg / kg (ppm))	2	2	2.184	0.9172						
520.53	Chromium, ICP-MS, Microwave (mg / kg (ppm))	3	3	3.725	1.507	3.725	1.507	1.066	40.46%	0.1900	13.12%
526.31	Lead, AAS, Dry ash (mg / kg (ppm))	1		0.2000							
526.41	Lead, ICP, Dry ash (mg / kg (ppm))	2	2	0.1356	0.0432						
526.43	Lead, ICP, Microwave (mg / kg (ppm))	1	1	0.2698							
526.52	Lead, ICP-MS, Open vessel (mg / kg (ppm))	4	4	0.1640	0.0152	0.1640	0.0152	0.0076	9.30%	0.0269	21.00%
526.53	Lead, ICP-MS, Microwave (mg / kg (ppm))	4	4	0.1538	0.0081	0.1538	0.0081	0.0040	5.24%	0.0035	21.20%
529.99	Mercury, Miscellaneous (µg / kg (ppb))	1	1	0.0030							
539.41	Nickel, ICP, Dry ash (mg / kg (ppm))	2	2	1.695	0.1273						
539.43	Nickel, ICP, Microwave (mg / kg (ppm))	1	1	2.038							
539.52	Nickel, ICP-MS, Open vessel (mg / kg (ppm))	2	2	1.781	0.4756						
539.53	Nickel, ICP-MS, Microwave (mg / kg (ppm))	2	2	2.313	0.4844						
702.00	Butyric Acid (4:0), Miscellaneous GC (%)	1		0.0000							
704.00	Caproic Acid (6:0), Miscellaneous GC (%)	1	1	0.0015							
706.01	Caprylic acid (8:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1		0.0000							
708.01	Capric acid (10:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1		0.0000							
710.01	Lauric Acid (12:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1		0.0000							
710.99	Lauric Acid (12:0), Miscellaneous (% (w/w))	3	1								
714.01	Myristic Acid (14:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.0350							
714.99	Myristic Acid (14:0), Miscellaneous (% (w/w))	2	2	0.2330	0.3140						
716.01	Palmitic Acid (16:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.8210							
716.99	Palmitic Acid (16:0), Miscellaneous (% (w/w))	2	2	9.795	12.74						
718.01	Palmitoleic Acid (9c-16:1), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1		0.0000							
718.99	Palmitoleic Acid (9c-16:1), Miscellaneous (% (w/w))	3	3	0.1775	0.2836	0.1775	0.2836	0.2006	159.79%	0.0303	
722.01	Stearic Acid (18:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.0845							
722.99	Stearic Acid (18:0), Miscellaneous (% (w/w))	2	2	1.417	1.857						
724.01	Oleic Acid (9c-18:1), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.9045							
724.99	Oleic Acid (9c-18:1), Miscellaneous (% (w/w))	2	2	11.32	14.77						
726.01	Linoleic Acid (9c,12c-18:2), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	2.650							
726.02	Linoleic Acid (9c,12c-18:2), Direct Methylation by Acid-Alkali Hydrolysis & GC (% (w/w))	1	1	2.060							
726.99	Linoleic Acid (9c,12c-18:2), Miscellaneous (% (w/w))	3	3	18.26	27.60	18.26	27.60	19.51	151.11%	0.3220	
728.01	alpha-Linolenic Acid (9c,12c,15c-18:3), Direct Methylation by Alkali Hydrolysis	1	1	0.1200							
728.99	alpha-Linolenic Acid (9c,12c,15c-18:3), Miscellaneous (% (w/w))	3	3	1.036	1.567	1.036	1.567	1.108	151.34%	0.0110	
730.01	Arachidic Acid (20:0), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.0435							
730.99	Arachidic Acid (20:0), Miscellaneous (% (w/w))	2	2	0.1848	0.2408						

Test Material Code # 201930

(Precision Report Follows)

Issue Date : 11/30/2019

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
732.01	Gondoic Acid (11c-20:1), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1	1	0.0450							
732.99	Gondoic Acid (11c-20:1), Miscellaneous (% (w/w))	2	2	0.1935	0.2496						
736.01	Arachidonic Acid (5c,8c,11c,14c-20:4), Direct Methylation by Alkali Hydrolysis	1		0.0000							
736.99	Arachidonic Acid (5c,8c,11c,14c-20:4), Miscellaneous (% (w/w))	1		0.0000							
738.01	Mead Acid (11c,14c,17c-20:3), Direct Methylation by Alkali Hydrolysis & GC (%)	1		0.0000							
740.01	Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:5), Direct Methylation by Al	1		0.0000							
740.99	Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:5), Miscellaneous (% (w/w))	2		0.0000							
742.99	Behenic Acid (22:0), Miscellaneous (% (w/w))	2	2	0.1780	0.2362						
744.01	Erucic Acid (13c-22:1), Direct Methylation by Alkali Hydrolysis & GC (% (w/w))	1		0.0000							
744.99	Erucic Acid (13c-22:1), Miscellaneous (% (w/w))	1		0.0050							
746.01	Docosapentaenoic Acid n-3 DPA (7c,10c,13c,16c,19c-22:5), Direct Methylation	1		0.0000							
746.99	Docosapentaenoic Acid n-3 DPA (7c,10c,13c,16c,19c-22:5), Miscellaneous (%)	2		0.0000							
748.99	Lignoceric Acid (24:0), Miscellaneous (% (w/w))	1	1	0.0120							
750.01	Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c-22:6), Direct Methylation	1		0.0000							
750.99	Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c-22:6), Miscellaneous (%)	2		0.0000							
752.01	Nervonic Acid (24:1) isomers, Direct Methylation by Alkali Hydrolysis & GC (%)	1		0.0000							
752.99	Nervonic Acid (24:1) isomers, Miscellaneous (% (w/w))	1		0.0050							
754.02	Total n-3 Polyunsaturated (Omega-3) Fatty Acids, Direct Methylation by Acid-f	1	1	0.1200							
754.99	Total n-3 Polyunsaturated (Omega-3) Fatty Acids, Miscellaneous (% (w/w))	2	2	1.530	1.973						
756.01	Total n-6 Polyunsaturated (Omega-6) Fatty Acids, Direct Methylation by Alkali	1	1	2.060							
756.99	Total n-6 Polyunsaturated (Omega-6) Fatty Acids, Miscellaneous (% (w/w))	2	2	26.14	33.60						
758.99	Total Saturated Fatty Acids, Miscellaneous (% (w/w))	1	1	23.62							
762.99	Total Monounsaturated Fatty Acids, Miscellaneous (% (w/w))	1	1	22.68							
766.99	Total Polyunsaturated Fatty Acids, Miscellaneous (% (w/w))	1	1	52.91							
772.99	Total Fatty Acids, Miscellaneous (% (w/w))	1	1	4.255							

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

Methods Reported: 111

Dairy Feed, Medicated

Method Precision Report

Labs Reporting: 196

Test Material Code # 201930

Issue Date : 11/30/2019

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 %rstd	Reproducibility %RSD	sR/sr
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	51	47	8.490	0.4327	0.3585	0.1218	0.3786	4.20%	1.43%	4.44%	3.109
001.99	Loss on Drying, Miscellaneous (%)	27	23	8.358	0.6073	0.4367	0.0778	0.4435	5.23%	0.93%	5.31%	5.704
002.01	Protein, Crude, Auto Kjel-Foss (%)	15	13	18.69	0.5487	0.2766	0.0789	0.2876	1.47%	0.42%	1.53%	3.647
002.05	Protein, Crude, Copper, Boric Acid (%)	32	28	18.78	0.3262	0.2297	0.0878	0.2459	1.22%	0.47%	1.31%	2.801
002.06	Protein, Crude, Combustion Nitrogen Analyzer (%)	127	116	19.13	0.5175	0.2775	0.1682	0.3245	1.45%	0.88%	1.69%	1.929
002.11	Protein, Crude, NIR (%)	9	9	20.50	1.836	1.834	0.1340	1.838	8.95%	0.65%	8.97%	13.72
003.00	Fat, Crude, Diethyl Ether Ext., Direct (%)	14	14	4.272	0.5917	0.5847	0.1287	0.5987	13.69%	3.01%	14.02%	4.652
003.06	Fat, Crude, Pet Ether (%)	16	15	4.241	0.2253	0.2176	0.0826	0.2328	5.13%	1.95%	5.49%	2.818
003.09	Fat, Crude, Randall, Diethyl Ether Ext (%)	13	13	4.160	0.2148	0.2037	0.0964	0.2254	4.90%	2.32%	5.42%	2.337
003.10	Fat, Crude, Randall, Pet Ether (%)	31	28	3.824	0.2803	0.1851	0.0716	0.1985	4.83%	1.87%	5.18%	2.772
003.11	Fat, Crude, NIR (%)	8	8	4.467	0.7396	0.7388	0.0473	0.7403	16.54%	1.06%	16.57%	15.64
003.13	Fat, Crude, Randall, Hexane Ext. (%)	9	8	3.982	0.1713	0.1653	0.0636	0.1771	4.15%	1.60%	4.45%	2.786
003.14	Fat, Crude, Ankom (%)	56	52	4.007	0.6656	0.3990	0.1675	0.4328	9.80%	4.11%	10.63%	2.584
004.00	Fiber, Crude, Asbestos Free (%)	14	13	13.97	0.6459	0.6093	0.1641	0.6310	4.38%	1.18%	4.54%	3.846
004.06	Fiber, Crude, Fibertec (%)	19	17	13.84	1.006	0.4603	0.1260	0.4772	3.36%	0.92%	3.49%	3.786
004.07	Fiber, Crude, ANKOM (%)	73	66	13.54	1.101	0.8301	0.2206	0.8589	6.15%	1.64%	6.37%	3.894
005.00	Ash, 2h @ 600°C (%)	98	90	7.641	0.2464	0.1733	0.0693	0.1866	2.26%	0.90%	2.43%	2.694
005.05	Ash, 3h @ 550°C (%)	38	35	7.865	0.2360	0.1987	0.0510	0.2051	2.53%	0.65%	2.61%	4.021
005.99	Ash, Miscellaneous (%)	10	9	7.768	0.3388	0.1119	0.0968	0.1480	1.42%	1.23%	1.88%	1.529
008.02	Fiber, Acid Detergent, Crucible (%)	14	14	18.46	0.7727	0.7105	0.4294	0.8302	3.85%	2.33%	4.50%	1.933
008.08	Fiber, Acid Detergent, Filter Bag - ANKOM (%)	48	45	18.30	1.543	1.435	0.2899	1.464	7.88%	1.59%	8.04%	5.051
009.07	Fiber, Neutral Detergent, AOAC -ENZ Pretreat (%)	15	14	34.10	5.813	2.063	0.6252	2.156	5.81%	1.76%	6.07%	3.448
009.09	Fiber, Neutral Detergent, Filter Bag - ANKOM (%)	44	40	34.16	2.054	1.543	0.2884	1.570	4.54%	0.85%	4.62%	5.442
010.99	Moisture, Miscellaneous (%)	15	13	8.803	0.6161	0.4350	0.1314	0.4544	5.01%	1.51%	5.23%	3.458
011.01	Loss on Drying, 135°C 2hr (%)	66	61	9.486	0.4664	0.4029	0.1010	0.4154	4.26%	1.07%	4.39%	4.111
012.00	Starch, Polarimetric (Ewers) (%)	16	14	14.61	0.4799	0.4829	0.0792	0.4893	3.29%	0.54%	3.34%	6.180
012.01	Starch, Enzymatic-Colorimetric Method (Megazyme) (%)	12	12	13.31	1.924	1.882	0.5636	1.965	14.14%	4.23%	14.76%	3.486
013.00	Fat, Acid Pretreat, Acid hydrolysis (%)	17	17	5.028	0.7822	0.7760	0.1387	0.7883	15.43%	2.76%	15.68%	5.684
013.02	Fat, Acid Pretreat, Mojonier, Bak Ext (%)	15	14	5.410	0.5279	0.4574	0.1089	0.4702	8.57%	2.04%	8.81%	4.316
013.13	Fat, Acid Pretreat, Ankom- Acid Hydrolysis (%)	8	8	5.393	0.5222	0.5090	0.1649	0.5351	9.44%	3.06%	9.92%	3.244
019.00	Calcium, Ox-Mn04 Vol. (%)	12	10	1.239	0.1325	0.0837	0.0228	0.0868	6.94%	1.89%	7.19%	3.808
019.08	Calcium, EDTA (%)	11	8	1.240	0.0552	0.0196	0.0092	0.0216	1.61%	0.76%	1.78%	2.355
019.31	Calcium, AAS, Dry ash (%)	20	19	1.206	0.0713	0.0692	0.0243	0.0734	5.74%	2.01%	6.08%	3.019

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
019.41	Calcium, ICP, Dry ash (%)	31	30	1.184	0.0775	0.0737	0.0395	0.0836	6.22%	3.34%	7.06%	2.117
019.42	Calcium, ICP, Open vessel (%)	22	19	1.271	0.1039	0.0600	0.0213	0.0637	4.73%	1.68%	5.02%	2.987
019.43	Calcium, ICP, Microwave (%)	31	27	1.199	0.0822	0.0656	0.0322	0.0731	5.42%	2.66%	6.04%	2.268
021.43	Cobalt, ICP, Microwave (mg / kg (ppm))	11	9	2.969	0.7222	0.3819	0.1120	0.3980	12.07%	3.54%	12.57%	3.554
022.31	Copper, AAS, Dry ash (mg / kg (ppm))	12	11	60.29	3.821	2.362	2.141	3.188	3.87%	3.51%	5.22%	1.489
022.41	Copper, ICP, Dry ash (mg / kg (ppm))	24	23	55.96	6.041	4.963	2.417	5.520	8.97%	4.37%	9.98%	2.284
022.42	Copper, ICP, Open vessel (mg / kg (ppm))	21	19	61.72	6.575	5.075	1.503	5.293	8.10%	2.40%	8.45%	3.521
022.43	Copper, ICP, Microwave (mg / kg (ppm))	24	23	60.48	4.284	3.344	2.370	4.098	5.57%	3.95%	6.83%	1.729
025.31	Iron, AAS, Dry ash (mg / kg (ppm))	14	14	322.3	45.30	44.88	8.702	45.71	13.93%	2.70%	14.19%	5.253
025.41	Iron, ICP, Dry ash (mg / kg (ppm))	26	24	317.8	35.65	30.27	10.04	31.89	9.38%	3.11%	9.88%	3.178
025.42	Iron, ICP, Open vessel (mg / kg (ppm))	16	14	320.5	54.36	37.46	9.647	38.68	11.26%	2.90%	11.62%	4.010
025.43	Iron, ICP, Microwave (mg / kg (ppm))	26	25	340.2	34.36	33.67	13.64	36.32	9.91%	4.01%	10.69%	2.664
027.31	Magnesium, AAS, Dry ash (%)	15	15	0.3723	0.0107	0.0090	0.0081	0.0121	2.42%	2.18%	3.25%	1.493
027.41	Magnesium, ICP, Dry ash (%)	25	25	0.3752	0.0248	0.0237	0.0100	0.0257	6.32%	2.66%	6.86%	2.578
027.42	Magnesium, ICP, Open vessel (%)	22	21	0.3947	0.0264	0.0198	0.0093	0.0219	5.07%	2.39%	5.61%	2.350
027.43	Magnesium, ICP, Microwave (%)	29	26	0.3794	0.0204	0.0171	0.0069	0.0185	4.54%	1.84%	4.90%	2.659
028.31	Manganese, AAS, Dry ash (mg / kg (ppm))	11	9	189.0	10.28	5.423	3.554	6.483	2.83%	1.85%	3.38%	1.824
028.41	Manganese, ICP, Dry ash (mg / kg (ppm))	23	22	184.2	37.78	21.74	7.051	22.86	12.23%	3.97%	12.86%	3.241
028.42	Manganese, ICP, Open vessel (mg / kg (ppm))	20	19	200.2	16.07	14.11	8.300	16.37	7.10%	4.17%	8.23%	1.972
028.43	Manganese, ICP, Microwave (mg / kg (ppm))	27	26	196.6	12.71	11.91	6.286	13.47	6.06%	3.20%	6.85%	2.142
031.01	Phosphorus, Photometric (%)	43	39	0.8064	0.0417	0.0214	0.0097	0.0235	2.65%	1.20%	2.91%	2.419
031.41	Phosphorus, ICP, Dry ash (%)	28	26	0.8006	0.0536	0.0415	0.0200	0.0461	5.24%	2.52%	5.82%	2.306
031.42	Phosphorus, ICP, Open vessel (%)	21	18	0.8255	0.0607	0.0474	0.0136	0.0494	5.78%	1.66%	6.01%	3.617
031.43	Phosphorus, ICP, Microwave (%)	28	24	0.8289	0.0500	0.0324	0.0113	0.0343	3.92%	1.37%	4.15%	3.025
032.31	Potassium, AAS, Dry ash (%)	12	10	1.074	0.1039	0.0399	0.0187	0.0441	3.83%	1.79%	4.23%	2.356
032.41	Potassium, ICP, Dry ash (%)	29	29	1.039	0.0891	0.0843	0.0409	0.0937	8.11%	3.94%	9.01%	2.288
032.42	Potassium, ICP, Open vessel (%)	20	19	1.114	0.0716	0.0638	0.0289	0.0700	5.76%	2.61%	6.32%	2.421
032.43	Potassium, ICP, Microwave (%)	29	27	1.072	0.0504	0.0491	0.0209	0.0534	4.58%	1.95%	4.98%	2.556
033.00	Salt as chloride, Sol Cl (%)	24	21	1.015	0.1294	0.0952	0.0228	0.0979	9.23%	2.21%	9.49%	4.296
033.01	Salt as chloride, Poten Cl (%)	31	30	1.104	0.0302	0.0247	0.0130	0.0279	2.23%	1.17%	2.52%	2.151
033.99	Salt, Miscellaneous (%)	9	9	1.043	0.2586	0.2580	0.0245	0.2592	24.74%	2.35%	24.86%	10.57
035.31	Sodium, AAS, Dry ash (%)	15	14	0.4477	0.0405	0.0281	0.0077	0.0292	6.39%	1.76%	6.63%	3.773
035.41	Sodium, ICP, Dry ash (%)	28	26	0.4347	0.0445	0.0320	0.0110	0.0339	7.27%	2.51%	7.69%	3.067
035.42	Sodium, ICP, Open vessel (%)	17	16	0.4662	0.0296	0.0282	0.0127	0.0309	6.04%	2.73%	6.63%	2.431
035.43	Sodium, ICP, Microwave (%)	28	26	0.4482	0.0286	0.0218	0.0150	0.0264	4.82%	3.32%	5.86%	1.762
036.42	Sulfur, ICP, Open vessel (%)	21	19	0.4508	0.0545	0.0251	0.0124	0.0280	5.44%	2.68%	6.06%	2.265
036.43	Sulfur, ICP, Microwave (%)	20	19	0.4820	0.0444	0.0431	0.0146	0.0455	8.95%	3.02%	9.45%	3.124
037.31	Zinc, AAS, Dry ash (mg / kg (ppm))	12	10	254.7	50.17	27.08	4.875	27.52	11.23%	2.02%	11.41%	5.645
037.41	Zinc, ICP, Dry ash (mg / kg (ppm))	24	23	225.6	39.95	30.04	6.231	30.68	13.64%	2.83%	13.94%	4.923
037.42	Zinc, ICP, Open vessel (mg / kg (ppm))	20	19	243.5	19.52	17.32	12.65	21.45	7.14%	5.22%	8.85%	1.695
037.43	Zinc, ICP, Microwave (mg / kg (ppm))	27	25	241.2	14.02	13.54	6.544	15.04	5.61%	2.71%	6.24%	2.298
106.02	Vitamin A, LC (KU / kg)	19	17	16.30	9.632	4.022	1.927	4.460	29.24%	14.01%	32.42%	2.315
109.02	Vitamin E, LC (IU / kg)	13	10	93.35	32.07	15.25	1.996	15.38	14.49%	1.90%	14.62%	7.705

Test Material Code # 201930

Issue Date : 11/30/2019

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 %rstd	Reproducibility %RSD	sR/sr
120.00	Alanine, Post-col Ninhydrin Der (%)	23	20	0.9041	0.0482	0.0337	0.0124	0.0359	3.73%	1.37%	3.97%	2.902
120.05	Alanine, Pre-col AQC Der (%)	9	8	0.9058	0.0755	0.0395	0.0122	0.0413	4.47%	1.38%	4.67%	3.385
121.00	Arginine, Post-col Ninhydrin Der (%)	23	20	1.234	0.0973	0.0704	0.0182	0.0727	5.66%	1.46%	5.84%	4.002
121.05	Arginine, Pre-col AQC Der (%)	8	8	1.250	0.0761	0.0720	0.0349	0.0800	5.76%	2.80%	6.40%	2.289
122.00	Aspartic, Post-col Ninhydrin Der (%)	23	20	1.403	0.0610	0.0534	0.0157	0.0556	3.79%	1.12%	3.95%	3.536
124.00	Cysteine/Cystine, PAO Post-col Ninhydrin (%)	23	22	0.3196	0.0328	0.0321	0.0092	0.0334	10.06%	2.87%	10.46%	3.647
124.05	Cysteine/Cystine, PAO Pre-col AQC Der (%)	8	8	0.2791	0.1050	0.1044	0.0149	0.1055	37.42%	5.33%	37.79%	7.096
125.00	Glutamic, Post-col Ninhydrin Der (%)	23	20	3.232	0.1538	0.0991	0.0597	0.1157	3.08%	1.86%	3.60%	1.937
125.05	Glutamic, Pre-col AQC Der (%)	9	8	3.256	0.1823	0.1942	0.0188	0.1952	5.96%	0.58%	5.99%	10.36
126.00	Glycine, Post-col Ninhydrin Der (%)	23	19	0.8494	0.0327	0.0235	0.0097	0.0254	2.78%	1.15%	3.01%	2.627
127.00	Histidine, Post-col Ninhydrin Der (%)	23	20	0.4802	0.0537	0.0365	0.0076	0.0372	7.75%	1.63%	7.92%	4.872
127.05	Histidine, Pre-col AQC Der (%)	9	8	0.4593	0.0339	0.0221	0.0072	0.0232	4.90%	1.60%	5.15%	3.215
128.00	Isoleucine, Post-col Ninhydrin Der (%)	23	21	0.5969	0.0528	0.0409	0.0115	0.0425	6.78%	1.90%	7.04%	3.701
128.05	Isoleucine, Pre-col AQC Der (%)	9	8	0.6174	0.0497	0.0507	0.0078	0.0513	8.14%	1.25%	8.24%	6.603
129.00	Leucine, Post-col Ninhydrin Der (%)	23	21	1.354	0.0599	0.0427	0.0185	0.0465	3.17%	1.38%	3.46%	2.509
129.05	Leucine, Pre-col AQC Der (%)	9	8	1.353	0.0493	0.0468	0.0219	0.0517	3.46%	1.62%	3.82%	2.358
130.00	L-Lysine, Post-col Ninhydrin Der (%)	24	21	0.7067	0.0388	0.0295	0.0103	0.0312	4.13%	1.44%	4.38%	3.036
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	23	21	0.2847	0.0287	0.0122	0.0067	0.0140	4.22%	2.32%	4.82%	2.073
131.05	Methionine, PAO Pre-col AQC Der (%)	9	8	0.2624	0.0536	0.0534	0.0072	0.0539	20.34%	2.74%	20.52%	7.500
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	23	21	0.8339	0.0407	0.0241	0.0196	0.0311	2.86%	2.33%	3.68%	1.584
132.05	Phenylalanine, Pre-col AQC Der (%)	9	8	0.8266	0.0314	0.0299	0.0139	0.0329	3.61%	1.68%	3.99%	2.367
133.00	Proline, Post-col Ninhydrin Der (%)	23	22	1.077	0.1336	0.0950	0.0262	0.0986	8.98%	2.48%	9.32%	3.758
133.05	Proline, Pre-col AQC Der (%)	9	9	1.114	0.0830	0.0815	0.0221	0.0844	7.31%	1.98%	7.57%	3.828
134.00	Serine, Post-col Ninhydrin Der (%)	23	19	0.8142	0.0541	0.0294	0.0115	0.0316	3.60%	1.41%	3.87%	2.739
135.00	Threonine, Post-col Ninhydrin Der (%)	23	21	0.6143	0.0156	0.0145	0.0085	0.0168	2.36%	1.39%	2.74%	1.971
135.05	Threonine, Pre-col AQC Der (%)	9	8	0.6073	0.0312	0.0292	0.0155	0.0331	4.81%	2.55%	5.44%	2.135
136.00	Tryptophan, Alka-Hydrol Post-col Ninhydrin (%)	9	9	0.2246	0.0505	0.0500	0.0103	0.0510	22.25%	4.60%	22.72%	4.940
137.00	Tyrosine, Post-col Ninhydrin Der (%)	17	16	0.5450	0.0528	0.0484	0.0144	0.0505	8.97%	2.66%	9.36%	3.519
137.05	Tyrosine, Pre-col AQC Der (%)	9	8	0.5566	0.0804	0.0800	0.0109	0.0807	14.37%	1.97%	14.50%	7.378
138.00	Valine, Post-col Ninhydrin Der (%)	23	22	0.8096	0.0604	0.0588	0.0221	0.0628	7.28%	2.74%	7.78%	2.837
138.05	Valine, Pre-col AQC Der (%)	9	8	0.8498	0.0403	0.0416	0.0111	0.0430	4.88%	1.30%	5.05%	3.889
351.03	Chlortetracycline, LC (UV or FL) (mg/kg (ppm))	9	8	188.1	28.32	14.21	12.58	18.98	7.88%	6.98%	10.53%	1.508
365.03	Monensin, LC-PCD (mg/kg (ppm))	9	8	28.96	2.940	1.243	1.415	1.884	4.17%	4.75%	6.32%	1.331
365.05	Monensin, LC-MS/MS (mg/kg (ppm))	8	8	29.54	5.216	4.654	3.330	5.723	15.76%	11.28%	19.38%	1.718
400.01	Water Activity, Aqualab chilled mirror (Units)	10	9	0.4996	0.0296	0.0311	0.0054	0.0316	6.23%	1.08%	6.33%	5.876

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