

Animal Feed Scheme

Pig Feed, Residue

Test Material Code # 202124

Method Summary Report

(Precision Report Follows)

Labs Reporting: 167

Methods Reported: 390

Issue Date : 05/31/2021

Method Code	Analyte and Method	Total # Labs Submitting	# Labs in Robust Calcs	Raw Mean	Raw SD	Assigned Value Robust Mean	AAFCO #fp Robust SD	Uncertainty (U) Robust	% RSD - Robust	Average Range (R-bar)	Thompson Horwitz %RSD
000.02	Urea, As protein, Colorimetric (%)	1	1	0.5000							
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	46	46	9.886	0.5432	9.961	0.3219	0.0593	3.23%	0.1191	2.83%
001.99	Loss on Drying, Miscellaneous (%)	18	18	9.905	0.7374	9.958	0.4839	0.1426	4.86%	0.1484	2.83%
001.00	Loss on Drying, Vac 95°C 5 hr (%)	5	5	10.21	0.3795	10.21	0.3795	0.1697	3.72%	0.0444	2.82%
001.03	Loss on Drying, Low temp. methods (%)	3	3	10.19	0.3190	10.19	0.3190	0.1842	3.13%	0.0200	2.82%
001.05	Loss on Drying, LECO (%)	1	1	9.947							
002.06	Protein, Crude, Combustion Nitrogen Analyzer (%)	108	108	16.42	0.3176	16.41	0.2561	0.0308	1.56%	0.1854	2.47%
002.05	Protein, Crude, Copper, Boric Acid (%)	24	24	16.25	0.7450	16.19	0.2188	0.0558	1.35%	0.1415	2.49%
002.01	Protein, Crude, Auto Kjeh-Foss (%)	16	15	16.38	0.3548	16.33	0.2831	0.0914	1.73%	0.0637	2.47%
002.11	Protein, Crude, NIR (%)	8	8	17.29	1.465	16.96	0.7504	0.3317	4.43%	0.1200	2.43%
002.04	Protein, Crude, Copper Catalyst (%)	3	3	16.28	0.2201	16.28	0.2201	0.1271	1.35%	0.0267	2.48%
002.00	Protein, Crude, Crude (%)	2	2	16.25	0.2475						
002.02	Protein, Crude, Semiauto Autoanalyzer (%)	2	2	16.30	0.0401						
002.08	Protein, Crude, Cu/Ti (%)	2	2	16.31	0.1535						
002.99	Protein, Crude, Miscellaneous (%)	2	2	16.85	0.4031						
003.14	Fat, Crude, Ankom (%)	55	53	2.140	0.2505	2.160	0.1863	0.0320	8.63%	0.0979	3.56%
003.10	Fat, Crude, Randall, Pet Ether (%)	26	25	2.197	0.1577	2.192	0.1689	0.0422	7.71%	0.0800	3.55%
003.06	Fat, Crude, Pet Ether (%)	16	15	2.347	0.1770	2.347	0.2008	0.0648	8.56%	0.0605	3.52%
003.09	Fat, Crude, Randall, Diethyl Ether Ext (%)	10	10	2.378	0.1729	2.380	0.1554	0.0614	6.53%	0.0780	3.51%
003.00	Fat, Crude, Diethyl Ether Ext., Direct (%)	10	9	2.406	0.3533	2.368	0.3078	0.1283	13.00%	0.0523	3.51%
003.13	Fat, Crude, Randall, Hexane Ext. (%)	9	9	2.287	0.0991	2.294	0.0970	0.0404	4.23%	0.0811	3.53%
003.11	Fat, Crude, NIR (%)	8	8	3.868	3.519	2.812	0.8160	0.3606	29.02%	0.0350	3.42%
003.01	Fat, Crude, Diethyl Ether Ext (13th ed.), Indirect (%)	3	3	2.115	0.4326	2.115	0.4326	0.3059	20.46%	0.1386	3.57%
003.12	Fat, Crude, Hexane Ext (%)	3	3	2.392	0.1455	2.392	0.1455	0.0840	6.08%	0.0900	3.51%
003.99	Fat, Crude, Miscellaneous (%)	1	1	3.625							
004.07	Fiber, Crude, ANKOM (%)	66	65	3.547	0.5139	3.547	0.4460	0.0692	12.57%	0.1442	3.31%
004.00	Fiber, Crude, Asbestos Free (%)	16	16	3.960	0.6450	3.858	0.4243	0.1326	11.00%	0.2969	3.26%
004.06	Fiber, Crude, Fibertec (%)	15	15	3.530	0.2320	3.539	0.2419	0.0781	6.83%	0.1172	3.31%
004.11	Fiber, Crude, NIR (%)	7	7	4.203	0.5842	4.203	0.6625	0.3130	15.76%	0.1971	3.22%

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004.03	Fiber, Crude, Fritted Glass (%)	6	6	3.612	0.3234	3.612	0.3668	0.1872	10.16%	0.3133	3.30%
004.99	Fiber, Crude, Miscellaneous (%)	2	2	4.025	0.0354						
004.01	Fiber, Crude, Sing Filt (%)	1	1	3.510							
005.00	Ash, 2h @ 600°C (%)	85	83	9.394	0.4693	9.430	0.4495	0.0617	4.77%	0.1293	2.85%
005.05	Ash, 3h @ 550°C (%)	28	27	9.846	0.3763	9.862	0.2869	0.0690	2.91%	0.1012	2.83%
005.99	Ash, Miscellaneous (%)	8	8	9.750	0.6892	9.966	0.1199	0.0530	1.20%	0.1850	2.83%
005.11	Ash, NIR (%)	5	4	8.066	1.923	8.066	1.923	0.9613	23.83%	0.0325	2.92%
005.02	Ash, LECO (%)	1	1	9.510							
005.03	Ash, Microwave furnace (%)	1	1	9.050							
006.00	Total Sugars, As sucrose (%)	4	4	4.046	0.3508	4.046	0.3508	0.1754	8.67%	0.2475	3.24%
006.99	Total Sugars, Miscellaneous (%)	4	3	4.367	1.332	4.367	1.332			0.0000	3.20%
008.08	Fiber, Acid Detergent, Filter Bag - ANKOM (%)	46	45	4.883	0.3937	4.884	0.3978	0.0741	8.15%	0.1900	3.15%
008.02	Fiber, Acid Detergent, Crucible (%)	11	11	4.784	0.3409	4.840	0.2534	0.0955	5.24%	0.1441	3.15%
008.99	Fiber, Acid Detergent, Miscellaneous (%)	4	3	6.737	0.0769	6.737	0.0769	0.0444	1.14%	0.1000	3.00%
008.05	Fiber, Acid Detergent, Acid Detergent-Hach (%)	1	1	4.140							
009.09	Fiber, Neutral Detergent, Filter Bag - ANKOM (%)	44	42	13.08	0.6240	13.04	0.5694	0.1098	4.37%	0.2967	2.72%
009.07	Fiber, Neutral Detergent, AOAC -ENZ Pretreat (%)	11	11	13.99	1.329	13.99	1.507	0.5679	10.77%	0.4366	2.67%
009.99	Fiber, Neutral Detergent, Miscellaneous (%)	4	4	15.38	1.588	15.38	1.588	0.7942	10.33%	0.4075	2.55%
009.04	Fiber, Neutral Detergent, Neutral Det-No ENZ Pretreat (%)	2	2	12.45	0.2263						
010.99	Moisture, Miscellaneous (%)	11	10	10.10	0.2766	10.11	0.2958	0.1169	2.93%	0.0700	2.82%
010.11	Moisture, NIR (%)	6	5	10.81	0.9676	10.81	0.9676	0.5409	8.95%	0.0260	2.80%
010.03	Moisture, Karl-Fischer (%)	2	2	9.758	0.5480						
011.01	Loss on Drying, HT, 135°C 2hr (%)	63	61	10.68	0.3884	10.71	0.3415	0.0547	3.19%	0.0875	2.80%
011.99	Loss on Drying, HT, High Temp. Methods Miscellaneous (%)	6	6	10.11	0.5222	10.11	0.5922	0.3022	5.86%	0.5040	2.82%
011.02	Loss on Drying, HT, 130°C for 2 hours (%)	1	1	10.57							
012.00	Starch, Polarimetric (Ewers) (%)	14	14	39.51	0.7616	39.53	0.8140	0.2719	2.06%	0.2531	1.59%
012.01	Starch, Enzymatic-Colorimetric Method (Megazyme) (%)	12	12	37.99	2.843	37.48	1.868	0.6740	4.98%	1.102	1.63%
012.04	Starch, Enzymatic-Enzyme Membrane Technology (YSI) (%)	5	5	36.98	2.280	36.98	2.280	1.020	6.17%	1.780	1.64%
012.11	Starch, NIR (%)	4	4	40.76	2.953	40.76	2.953	1.477	7.25%	0.2888	1.57%
012.03	Starch, Enzymatic-Colorimetric Method, Miscellaneous (%)	3	3	34.24	2.916	34.24	2.916	1.683	8.52%	0.4650	1.71%
012.20	Starch, Dietary, Enzymatic-Colorimetric (%)	1	1	37.32							
013.00	Fat, Acid Pretreat, Acid hydrolysis (%)	21	20	3.032	0.4815	3.006	0.4797	0.1341	15.96%	0.1032	3.39%
013.02	Fat, Acid Pretreat, Mojonniier, Bak Ext (%)	15	14	3.424	0.4056	3.439	0.4238	0.1416	12.32%	0.1125	3.32%
013.13	Fat, Acid Pretreat, Ankom- Acid Hydrolysis (%)	8	8	3.626	0.5838	3.555	0.4841	0.2139	13.62%	0.3367	3.30%
013.10	Fat, Acid Pretreat, Soxtec-Acid Hydrolysis (%)	6	6	2.902	0.1829	2.902	0.2074	0.1058	7.15%	0.1027	3.41%
013.12	Fat, Acid Pretreat, NIR- Acid Hydrolysis (%)	1	1	2.750							
015.43	Aluminum, ICP, Microwave (ppm)	9	9	105.2	36.44	112.8	19.39	8.080	17.19%	5.158	7.85%
015.41	Aluminum, ICP, Dry ash (ppm)	6	5	97.79	27.48	97.79	27.48	15.36	28.10%	3.583	8.03%
015.42	Aluminum, ICP, Open vessel (ppm)	2	2	86.58	5.480						
015.53	Aluminum, ICP-MS, Microwave (ppm)	2	2	125.2	5.312						

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017.42	Boron, ICP, Open vessel (ppm)	6	6	8.213	0.8440	8.140	0.7817	0.3989	9.60%	0.3595	11.67%
017.41	Boron, ICP, Dry ash (ppm)	5	5	7.922	1.066	7.922	1.066	0.4767	13.45%	0.2871	11.72%
017.43	Boron, ICP, Microwave (ppm)	7	5	8.936	1.245	8.936	1.245	0.6958	13.93%	0.1059	11.50%
017.53	Boron, ICP-MS, Microwave (ppm)	1	1	7.874							
019.43	Calcium, ICP, Microwave (%)	31	30	2.374	0.1932	2.392	0.1554	0.0355	6.49%	0.0721	3.51%
019.41	Calcium, ICP, Dry ash (%)	23	23	2.400	0.0904	2.401	0.1010	0.0263	4.20%	0.0869	3.51%
019.42	Calcium, ICP, Open vessel (%)	17	17	2.394	0.3074	2.425	0.2608	0.0791	10.75%	0.0815	3.50%
019.31	Calcium, AAS, Dry ash (%)	17	16	2.347	0.1061	2.348	0.0889	0.0278	3.79%	0.0447	3.52%
019.08	Calcium, EDTA (%)	8	7	2.390	0.0811	2.381	0.0688	0.0325	2.89%	0.0141	3.51%
019.00	Calcium, Ox-Mn04 Vol. (%)	6	6	2.347	0.0934	2.347	0.1060	0.0541	4.51%	0.0367	3.52%
019.99	Calcium, Miscellaneous (%)	6	6	2.313	0.1564	2.313	0.1773	0.0905	7.67%	0.1183	3.53%
019.53	Calcium, ICP-MS, Microwave (%)	4	4	2.263	0.1364	2.263	0.1364	0.0682	6.03%	0.0744	3.54%
019.52	Calcium, ICP-MS, Open vessel (%)	3	3	2.343	0.1678	2.343	0.1678	0.0969	7.16%	0.0882	3.52%
019.03	Calcium, Semiauto (Autoanalyzer) (%)	1	1	2.548							
019.09	Calcium, Ion-selective electrode (%)	1	1	2.257							
019.32	Calcium, AAS, Open vessel (%)	1	1	2.310							
019.44	Calcium, ICP, Dry ash (%)	1	1	2.400							
021.43	Cobalt, ICP, Microwave (ppm)	12	11	1.137	0.2051	1.137	0.2325	0.0876	20.45%	0.0749	15.69%
021.53	Cobalt, ICP-MS, Microwave (ppm)	5	5	1.200	0.1233	1.200	0.1233	0.0551	10.27%	0.1260	15.56%
021.41	Cobalt, ICP, Dry ash (ppm)	3	3	1.181	0.4514	1.181	0.4514	0.3192	38.23%	0.0527	15.60%
021.52	Cobalt, ICP-MS, Open vessel (ppm)	3	3	1.232	0.4529	1.232	0.4529	0.2615	36.77%	0.1767	15.50%
021.31	Cobalt, AAS, Dry ash (ppm)	2	2	1.683	0.7538						
021.42	Cobalt, ICP, Open vessel (ppm)	2	2	0.8273	0.3857						
021.33	Cobalt, AAS, Microwave (ppm)	1	1	1.761							
022.43	Copper, ICP, Microwave (ppm)	26	26	51.67	3.640	51.84	3.033	0.7435	5.85%	1.621	8.83%
022.41	Copper, ICP, Dry ash (ppm)	18	18	51.12	5.409	50.52	4.315	1.271	8.54%	3.174	8.86%
022.42	Copper, ICP, Open vessel (ppm)	18	16	53.59	3.465	53.73	3.373	1.054	6.28%	2.244	8.78%
022.31	Copper, AAS, Dry ash (ppm)	12	12	52.80	19.93	52.90	6.305	2.275	11.92%	1.937	8.80%
022.53	Copper, ICP-MS, Microwave (ppm)	5	5	50.70	2.877	50.70	2.877	1.287	5.67%	3.069	8.86%
022.99	Copper, Miscellaneous (ppm)	3	3	48.32	1.013	48.32	1.013	0.5847	2.10%	1.833	8.92%
022.33	Copper, AAS, Microwave (ppm)	2	2	51.70	1.124						
022.44	Copper, ICP, Dry ash (ppm)	2	2	55.72	1.726						
022.52	Copper, ICP-MS, Open vessel (ppm)	2	2	51.59	4.826						
022.32	Copper, AAS, Open vessel (ppm)	1	1	47.25							
024.52	Iodine, ICP-MS, Open vessel (ppm)	1	1	2.285							
024.99	Iodine, Miscellaneous (ppm)	1	1	2.890							
025.43	Iron, ICP, Microwave (ppm)	25	25	700.7	69.59	702.5	69.27	17.32	9.86%	17.46	5.97%
025.41	Iron, ICP, Dry ash (ppm)	20	20	688.9	62.90	690.3	58.64	16.39	8.49%	29.43	5.98%
025.42	Iron, ICP, Open vessel (ppm)	14	13	617.4	122.1	627.1	116.7	40.45	18.61%	19.56	6.07%
025.31	Iron, AAS, Dry ash (ppm)	13	12	649.9	209.9	698.2	72.91	26.31	10.44%	7.036	5.97%

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025.53	Iron, ICP-MS, Microwave (ppm)	3	3	636.7	124.0	636.7	124.0	71.61	19.48%	21.42	6.05%
025.99	Iron, Miscellaneous (ppm)	3	3	703.5	28.60	703.5	28.60	16.51	4.07%	12.33	5.96%
025.52	Iron, ICP-MS, Open vessel (ppm)	1	1	456.5							
027.43	Magnesium, ICP, Microwave (%)	28	28	0.2175	0.0196	0.2179	0.0178	0.0042	8.15%	0.0065	5.03%
027.41	Magnesium, ICP, Dry ash (%)	18	18	0.2237	0.0214	0.2221	0.0178	0.0052	8.00%	0.0062	5.02%
027.42	Magnesium, ICP, Open vessel (%)	18	17	0.2198	0.0115	0.2201	0.0089	0.0027	4.02%	0.0048	5.02%
027.31	Magnesium, AAS, Dry ash (%)	12	11	0.2264	0.0095	0.2261	0.0099	0.0037	4.38%	0.0069	5.00%
027.53	Magnesium, ICP-MS, Microwave (%)	4	4	0.2189	0.0089	0.2189	0.0089	0.0044	4.05%	0.0124	5.03%
027.99	Magnesium, Miscellaneous (%)	5	4	0.2188	0.0075	0.2188	0.0075	0.0038	3.43%	0.0075	5.03%
027.52	Magnesium, ICP-MS, Open vessel (%)	3	3	0.2288	0.0194	0.2288	0.0194	0.0112	8.50%	0.0072	4.99%
027.33	Magnesium, AAS, Microwave (%)	2	2	0.2258	0.0081						
027.32	Magnesium, AAS, Open vessel (%)	1	1	0.2100							
027.44	Magnesium, ICP, Dry ash (%)	1	1	0.2180							
028.43	Manganese, ICP, Microwave (ppm)	26	25	142.1	10.47	142.0	8.298	2.075	5.85%	6.988	7.59%
028.42	Manganese, ICP, Open vessel (ppm)	18	18	157.1	42.57	148.1	13.44	3.958	9.07%	3.423	7.54%
028.41	Manganese, ICP, Dry ash (ppm)	17	17	141.6	12.35	141.5	13.51	4.097	9.55%	5.924	7.59%
028.31	Manganese, AAS, Dry ash (ppm)	11	11	141.4	5.012	141.4	5.570	2.099	3.94%	2.968	7.59%
028.53	Manganese, ICP-MS, Microwave (ppm)	5	4	141.6	6.801	141.6	6.801	3.400	4.80%	4.060	7.59%
028.99	Manganese, Miscellaneous (ppm)	3	3	140.3	3.547	140.3	3.547	2.048	2.53%	6.000	7.60%
028.44	Manganese, ICP, Dry ash (ppm)	2	2	138.5	4.909						
028.52	Manganese, ICP-MS, Open vessel (ppm)	2	2	153.6	51.48						
028.32	Manganese, AAS, Open vessel (ppm)	1	1	151.5							
028.33	Manganese, AAS, Microwave (ppm)	1	1	144.0							
028.34	Manganese, AAS, Dry ash (ppm)	1	1	21.00							
031.43	Phosphorus, ICP, Microwave (%)	31	31	0.8404	0.0555	0.8438	0.0538	0.0121	6.38%	0.0262	4.10%
031.01	Phosphorus, Photometric (%)	31	30	0.8300	0.0392	0.8303	0.0284	0.0065	3.42%	0.0115	4.11%
031.41	Phosphorus, ICP, Dry ash (%)	22	21	0.8555	0.0445	0.8563	0.0450	0.0123	5.25%	0.0234	4.09%
031.42	Phosphorus, ICP, Open vessel (%)	19	19	0.8339	0.0725	0.8278	0.0623	0.0179	7.53%	0.0149	4.12%
031.99	Phosphorus, Miscellaneous (%)	5	5	0.7290	0.1058	0.7290	0.1058	0.0473	14.51%	0.0180	4.19%
031.53	Phosphorus, ICP-MS, Microwave (%)	4	4	0.8119	0.0296	0.8119	0.0296	0.0148	3.64%	0.0674	4.13%
031.03	Phosphorus, Autoanalyzer (%)	3	3	0.8606	0.0163	0.8606	0.0163	0.0094	1.89%	0.0119	4.09%
031.44	Phosphorus, ICP, Dry ash (%)	2	2	0.8145	0.0431						
031.52	Phosphorus, ICP-MS, Open vessel (%)	2	2	0.8249	0.0202						
031.02	Phosphorus, GQMP (AOAC 935.13-Extraction) (%)	1	1	0.8400							
031.06	Phosphorus, Hach Method (%)	1	1	0.8150							
032.43	Potassium, ICP, Microwave (%)	28	27	0.8074	0.0599	0.8112	0.0513	0.0123	6.33%	0.0205	4.13%
032.41	Potassium, ICP, Dry ash (%)	20	20	0.8093	0.0502	0.8061	0.0497	0.0139	6.17%	0.0232	4.13%
032.42	Potassium, ICP, Open vessel (%)	17	16	0.8331	0.0920	0.8178	0.0525	0.0164	6.42%	0.0115	4.12%
032.31	Potassium, AAS, Dry ash (%)	8	8	0.7533	0.1608	0.7971	0.0548	0.0242	6.87%	0.0237	4.14%
032.99	Potassium, Miscellaneous (%)	5	5	0.8037	0.0464	0.8037	0.0464	0.0207	5.77%	0.0378	4.13%

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032.53	Potassium, ICP-MS, Microwave (%)	4	4	0.8010	0.0579	0.8010	0.0579	0.0290	7.23%	0.0220	4.14%
032.52	Potassium, ICP-MS, Open vessel (%)	3	3	0.8335	0.0517	0.8335	0.0517	0.0298	6.20%	0.0235	4.11%
032.02	Potassium, Flame Emission (%)	1	1	0.8150							
032.32	Potassium, AAS, Open vessel (%)	1	1	0.7300							
032.44	Potassium, ICP, Dry ash (%)	1	1	0.8015							
033.01	Salt as chloride, Poten Cl (%)	28	27	1.225	0.0366	1.226	0.0276	0.0066	2.25%	0.0150	3.88%
033.00	Salt as chloride, Sol Cl (%)	20	19	1.159	0.0835	1.170	0.0698	0.0200	5.96%	0.0286	3.91%
033.99	Salt, Miscellaneous (%)	9	9	1.137	0.1343	1.166	0.0674	0.0281	5.78%	0.0511	3.91%
033.03	Salt as chloride, Quantab (%)	5	4	1.120	0.0817	1.120	0.0817			0.0000	3.93%
033.05	Salt as chloride, Ion Sel Electrode (%)	1	1	1.210							
034.53	Selenium, ICP-MS, Microwave (ppm)	9	9	1.335	0.1881	1.345	0.1886	0.0786	14.02%	0.1388	15.30%
034.04	Selenium, AA, Hydride (ppm)	4	4	1.220	0.0928	1.220	0.0928	0.0464	7.60%	0.0123	15.52%
034.52	Selenium, ICP-MS, Open vessel (ppm)	4	4	1.268	0.2287	1.268	0.2287	0.1143	18.04%	0.0500	15.44%
034.43	Selenium, ICP, Microwave (ppm)	5	3	1.432	0.3032	1.432	0.3032	0.1751	21.18%	0.0430	15.16%
034.41	Selenium, ICP, Dry ash (ppm)	2	2	1.098	0.1025						
034.01	Selenium, Fluor (ppm)	1	1	1.425							
034.99	Selenium, Miscellaneous (ppm)	1	1	2.585							
035.43	Sodium, ICP, Microwave (%)	24	23	0.4772	0.0369	0.4775	0.0322	0.0084	6.74%	0.0113	4.47%
035.41	Sodium, ICP, Dry ash (%)	21	20	0.4686	0.0326	0.4648	0.0202	0.0056	4.35%	0.0160	4.49%
035.42	Sodium, ICP, Open vessel (%)	16	16	0.4764	0.0309	0.4762	0.0346	0.0108	7.27%	0.0151	4.47%
035.31	Sodium, AAS, Dry ash (%)	10	10	0.4683	0.0264	0.4683	0.0299	0.0118	6.40%	0.0116	4.48%
035.53	Sodium, ICP-MS, Microwave (%)	4	4	0.4539	0.0197	0.4539	0.0197	0.0098	4.34%	0.0244	4.50%
035.99	Sodium, Miscellaneous (%)	4	3	0.4583	0.0306	0.4583	0.0306	0.0176	6.67%	0.0100	4.50%
035.52	Sodium, ICP-MS, Open vessel (%)	2	2	0.5201	0.0143						
035.01	Sodium, Ion-selective electrode (%)	1	1	0.4380							
035.02	Sodium, Em Spect (%)	1	1	0.4400							
035.05	Sodium, Flame Emission (%)	1	1	0.4900							
035.32	Sodium, AAS, Open vessel (%)	1	1	0.3850							
036.43	Sulfur, ICP, Microwave (%)	21	21	0.3536	0.0277	0.3539	0.0269	0.0073	7.60%	0.0106	4.68%
036.42	Sulfur, ICP, Open vessel (%)	20	19	0.3402	0.0247	0.3390	0.0249	0.0071	7.35%	0.0109	4.71%
036.04	Sulfur, LECO (%)	4	3	0.3272	0.0125	0.3272	0.0125	0.0072	3.82%	0.0223	4.73%
036.99	Sulfur, Miscellaneous (%)	2	2	0.3025	0.0035						
036.52	Sulfur, ICP-MS, Open vessel (%)	1	1	0.3600							
037.43	Zinc, ICP, Microwave (ppm)	27	27	410.9	38.06	413.7	31.20	7.507	7.54%	15.56	6.46%
037.41	Zinc, ICP, Dry ash (ppm)	18	18	410.2	37.79	409.7	41.76	12.30	10.19%	12.78	6.47%
037.42	Zinc, ICP, Open vessel (ppm)	17	17	408.2	24.37	408.2	27.60	8.369	6.76%	9.248	6.47%
037.31	Zinc, AAS, Dry ash (ppm)	12	12	421.3	45.55	413.2	27.27	9.842	6.60%	7.023	6.46%
037.99	Zinc, Miscellaneous (ppm)	5	5	379.8	27.95	379.8	27.95	12.50	7.36%	17.10	6.54%
037.33	Zinc, AAS, Microwave (ppm)	4	4	296.8	136.6	296.8	136.6	68.31	46.03%	12.99	6.79%
037.53	Zinc, ICP-MS, Microwave (ppm)	4	4	392.9	13.65	392.9	13.65	6.826	3.47%	11.60	6.51%

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037.44	Zinc, ICP, Dry ash (ppm)	2	2	392.7	20.96						
037.52	Zinc, ICP-MS, Open vessel (ppm)	2	2	437.9	14.96						
037.32	Zinc, AAS, Open vessel (ppm)	1	1	422.5							
038.43	Molybdenum, ICP, Microwave (ppm)	13	12	1.115	0.2177	1.145	0.1622	0.0585	14.16%	0.1612	15.67%
038.41	Molybdenum, ICP, Dry ash (ppm)	4	4	1.212	0.2033	1.212	0.2033	0.1017	16.78%	0.0286	15.54%
038.53	Molybdenum, ICP-MS, Microwave (ppm)	4	4	1.224	0.0481	1.224	0.0481	0.0241	3.93%	0.0601	15.52%
038.42	Molybdenum, ICP, Open vessel (ppm)	4	3	1.260	0.0355	1.260	0.0355	0.0205	2.82%	0.1027	15.45%
038.52	Molybdenum, ICP-MS, Open vessel (ppm)	3	3	1.073	0.0318	1.073	0.0318	0.0225	2.96%	0.0333	15.83%
040.53	Barium, ICP-MS, Microwave (ppm)	2	2	9.311	0.8414						
041.53	Vanadium, ICP-MS, Microwave (ppm)	1	1	1.944							
042.00	Chloride, Titrimetric (%)	3	3	0.7550	0.0087	0.7550	0.0087	0.0061	1.15%	0.0167	4.17%
042.99	Chloride, Miscellaneous (%)	3	3	0.7662	0.1132	0.7662	0.1132	0.0653	14.77%	0.0203	4.16%
101.99	Choline Chloride, Miscellaneous (ppm)	1	1	2,525							
102.02	Niacin, LC (ppm)	2	2	29.63	24.29						
102.01	Niacin, Microbiological (ppm)	1	1	93.25							
102.99	Niacin, Miscellaneous (ppm)	1	1	107.8							
103.01	Pantothenic Acid, Microbiological (ppm)	1	1	33.40							
103.02	Pantothenic Acid, LC (ppm)	1	1	35.40							
103.99	Pantothenic Acid, Miscellaneous (ppm)	1	1	34.10							
104.03	Riboflavin, LC (ppm)	4	4	9.439	1.845	9.439	1.845	0.9226	19.55%	1.013	11.41%
104.00	Riboflavin, Fluorometric (ppm)	2	2	17.55	8.202						
104.99	Riboflavin, Miscellaneous (ppm)	1	1	12.75							
105.00	Thiamine, LC (ppm)	1	1	3.745							
105.01	Thiamine, Fluorometer (ppm)	1	1	3.245							
106.02	Vitamin A, LC (KU / kg)	9	9	3.508	3.410	2.524	0.7468	0.3112	29.59%	0.7223	
106.00	Vitamin A, Color (KU / kg)	1	1	1.265							
106.01	Vitamin A, UV (KU / kg)	1	1	1.630							
107.99	Vitamin B12, Miscellaneous (ppb)	1	1	15.65							
108.02	Vitamin D3, LC (KU / kg)	4	3	0.4452	0.2574	0.4452	0.2574	0.1486	57.82%	0.0377	
108.99	Vitamin D3, Miscellaneous (KU / kg)	2	2	0.3548	0.0781						
109.02	Vitamin E, LC (IU / kg)	13	13	52.18	12.08	50.77	9.801	3.398	19.31%	3.978	
109.99	Vitamin E, Miscellaneous (IU / kg)	1	1	42.50							
111.00	Vitamin C, Phosphorylated, LC (ppm)	1		4.400							
112.01	Pyridoxine, LC (µg / g)	1	1	3.070							
113.99	Folic acid, Miscellaneous (ppm)	1	1	0.6380							
114.01	Biotin, Microbiological (ppm)	1	1	0.1820							
115.00	Non Protein N (NPN), Urea + Am, Urease method (%)	1	1	0.7050							
118.99	Peroxide value, Miscellaneous (meq/kg)	1	1	3.525							
120.00	Alanine, Post-col Ninhydrin Der (%)	20	20	0.7762	0.0382	0.7793	0.0242	0.0068	3.11%	0.0178	4.15%
120.05	Alanine, Pre-col AQC Der (%)	8	7	0.7355	0.0531	0.7355	0.0602	0.0284	8.18%	0.0016	4.19%

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120.99	Alanine, Miscellaneous (%)	3	3	0.8183	0.0858	0.8183	0.0858	0.0607	10.48%	0.0033	4.12%
120.02	Alanine, Post-col OPA Der (%)	1	1	0.7885							
121.00	Arginine, Post-col Ninhydrin Der (%)	20	20	0.9816	0.0416	0.9877	0.0314	0.0088	3.18%	0.0138	4.01%
121.05	Arginine, Pre-col AQC Der (%)	8	8	0.9529	0.0641	0.9529	0.0726	0.0321	7.62%	0.0216	4.03%
121.99	Arginine, Miscellaneous (%)	2	2	0.8325	0.1450						
121.02	Arginine, Post-col OPA Der (%)	1	1	0.9885							
122.00	Aspartic, Post-col Ninhydrin Der (%)	20	19	1.327	0.0700	1.336	0.0588	0.0169	4.41%	0.0176	3.83%
122.05	Aspartic, Pre-col AQC Der (%)	8	8	1.284	0.1189	1.284	0.1349	0.0596	10.50%	0.0215	3.85%
122.99	Aspartic, Miscellaneous (%)	3	3	1.442	0.3562	1.442	0.3562	0.2057	24.71%	0.0167	3.79%
122.02	Aspartic, Post-col OPA Der (%)	1	1	1.370							
124.00	Cysteine/Cystine, PAO Post-col Ninhydrin Der (%)	21	21	0.2744	0.0337	0.2728	0.0259	0.0071	9.49%	0.0099	4.86%
124.05	Cysteine/Cystine, PAO Pre-col AQC Der (%)	8	8	0.2635	0.0977	0.2587	0.0805	0.0356	31.10%	0.0121	4.90%
124.99	Cysteine/Cystine, Miscellaneous (%)	3	3	0.2533	0.0454	0.2533	0.0454	0.0262	17.91%	0.0067	4.92%
124.02	Cysteine/Cystine, PAO Post-col OPA Der (%)	1	1	0.2920							
125.00	Glutamic, Post-col Ninhydrin Der (%)	19	19	2.948	0.1417	2.943	0.1492	0.0428	5.07%	0.0533	3.40%
125.05	Glutamic, Pre-col AQC Der (%)	8	8	2.791	0.2327	2.791	0.2639	0.1166	9.45%	0.0333	3.43%
125.99	Glutamic, Miscellaneous (%)	3	3	2.912	0.4310	2.912	0.4310	0.2488	14.80%	0.0233	3.41%
125.02	Glutamic, Post-col OPA Der (%)	1	1	2.951							
126.00	Glycine, Post-col Ninhydrin Der (%)	20	20	0.7663	0.0306	0.7663	0.0292	0.0082	3.82%	0.0154	4.16%
126.05	Glycine, Pre-col AQC Der (%)	8	8	0.7446	0.0359	0.7446	0.0407	0.0180	5.46%	0.0246	4.18%
126.99	Glycine, Miscellaneous (%)	3	3	0.6567	0.2441	0.6567	0.2441	0.1409	37.16%	0.0133	4.26%
126.02	Glycine, Post-col OPA Der (%)	1	1	0.7800							
127.00	Histidine, Post-col Ninhydrin Der (%)	20	19	0.3888	0.0267	0.3911	0.0243	0.0070	6.20%	0.0053	4.61%
127.05	Histidine, Pre-col AQC Der (%)	8	8	0.4101	0.0609	0.3977	0.0353	0.0156	8.87%	0.0208	4.60%
127.99	Histidine, Miscellaneous (%)	3	3	0.4167	0.0486	0.4167	0.0486	0.0280	11.65%	0.0067	4.56%
127.02	Histidine, Post-col OPA Der (%)	1	1	0.3990							
128.00	Isoleucine, Post-col Ninhydrin Der (%)	20	19	0.5745	0.0399	0.5783	0.0370	0.0106	6.39%	0.0116	4.34%
128.05	Isoleucine, Pre-col AQC Der (%)	8	8	0.5630	0.0693	0.5673	0.0684	0.0302	12.05%	0.0128	4.36%
128.99	Isoleucine, Miscellaneous (%)	3	3	0.6283	0.1077	0.6283	0.1077	0.0622	17.15%	0.0167	4.29%
128.02	Isoleucine, Post-col OPA Der (%)	1	1	0.6090							
129.00	Leucine, Post-col Ninhydrin Der (%)	20	20	1.171	0.0416	1.174	0.0417	0.0116	3.55%	0.0198	3.90%
129.05	Leucine, Pre-col AQC Der (%)	8	8	1.130	0.0675	1.130	0.0765	0.0338	6.77%	0.0124	3.93%
129.99	Leucine, Miscellaneous (%)	3	3	1.293	0.1854	1.293	0.1854	0.1070	14.33%	0.0200	3.85%
129.02	Leucine, Post-col OPA Der (%)	1	1	1.208							
130.00	L-Lysine, Post-col Ninhydrin Der (%)	21	21	0.7273	0.0489	0.7336	0.0318	0.0087	4.33%	0.0121	4.19%
130.05	L-Lysine, Pre-col AQC Der (%)	8	7	0.7142	0.0355	0.7142	0.0402	0.0190	5.63%	0.0227	4.21%
130.99	L-Lysine, Miscellaneous (%)	3	3	0.7750	0.3111	0.7750	0.3111	0.2200	40.14%	0.0033	4.16%
130.02	L-Lysine, Post-col OPA Der (%)	1	1	0.7860							
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	21	21	0.2225	0.0295	0.2264	0.0164	0.0045	7.26%	0.0090	5.00%
131.05	Methionine, PAO Pre-col AQC Der (%)	8	8	0.2287	0.0368	0.2290	0.0411	0.0182	17.97%	0.0103	4.99%

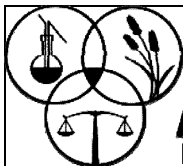
Method Code	Analyte and Method	Total # Labs Submitting	# Labs in Robust Calcs	Raw Mean	Raw SD	Assigned Value Robust Mean	AAFCO ffp Robust SD	Uncertainty (U) Robust	% RSD - Robust	Average Range (R-bar)	Thompson Horwitz % _{RSD}
131.99	Methionine, Miscellaneous (%)	3	3	0.2417	0.0226	0.2417	0.0226	0.0159	9.33%	0.0033	4.95%
131.02	Methionine, PAO Post-col OPA Der (%)	1	1	0.2250							
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	20	20	0.7137	0.0324	0.7129	0.0339	0.0095	4.75%	0.0177	4.21%
132.05	Phenylalanine, Pre-col AQC Der (%)	8	8	0.6855	0.0369	0.6855	0.0418	0.0185	6.10%	0.0193	4.23%
132.99	Phenylalanine, Miscellaneous (%)	3	3	0.7650	0.1069	0.7650	0.1069	0.0756	13.97%	0.0033	4.16%
132.02	Phenylalanine, Post-col OPA Der (%)	1	1	0.7205							
133.00	Proline, Post-col Ninhydrin Der (%)	20	20	1.030	0.0975	1.016	0.0559	0.0156	5.50%	0.0257	3.99%
133.05	Proline, Pre-col AQC Der (%)	8	8	1.006	0.0559	1.007	0.0599	0.0265	5.95%	0.0245	4.00%
133.99	Proline, Miscellaneous (%)	3	3	0.9933	0.0983	0.9933	0.0983	0.0567	9.89%	0.0200	4.00%
134.00	Serine, Post-col Ninhydrin Der (%)	20	20	0.7131	0.0394	0.7141	0.0365	0.0102	5.12%	0.0162	4.21%
134.05	Serine, Pre-col AQC Der (%)	8	8	0.6692	0.0786	0.6799	0.0477	0.0211	7.01%	0.0191	4.24%
134.99	Serine, Miscellaneous (%)	3	3	0.7417	0.1387	0.7417	0.1387	0.0801	18.70%	0.0100	4.18%
134.02	Serine, Post-col OPA Der (%)	1	1	0.6655							
135.00	Threonine, Post-col Ninhydrin Der (%)	20	20	0.5459	0.0336	0.5449	0.0238	0.0066	4.36%	0.0106	4.38%
135.05	Threonine, Pre-col AQC Der (%)	8	8	0.5114	0.0464	0.5220	0.0228	0.0101	4.37%	0.0160	4.41%
135.99	Threonine, Miscellaneous (%)	3	3	0.5767	0.1241	0.5767	0.1241	0.0717	21.53%	0.0067	4.35%
135.02	Threonine, Post-col OPA Der (%)	1	1	0.5505							
136.00	Tryptophan, Alka-Hydrol Post-col Ninhyd (%)	6	6	0.2146	0.0496	0.2110	0.0476	0.0243	22.57%	0.0180	5.06%
136.03	Tryptophan, Alka-Hydrol + IS RP LC FI (%)	5	5	0.1925	0.0153	0.1925	0.0153	0.0068	7.93%	0.0051	5.13%
136.05	Tryptophan, Pre-col AQC Der (%)	3	3	0.2523	0.2418	0.2523	0.2418	0.1396	95.81%	0.0233	4.92%
136.99	Tryptophan, Miscellaneous (%)	4	3	0.1883	0.0058	0.1883	0.0058	0.0041	3.06%	0.0100	5.14%
136.01	Tryptophan, Alka-Hydrol Rev Phase LC UV (%)	2	2	0.1683	0.0265						
136.02	Tryptophan, Alka-Hydrol Post-col OPA De (%)	1	1	0.1875							
137.00	Tyrosine, Post-col Ninhydrin Der (%)	15	15	0.4857	0.0730	0.4823	0.0732	0.0236	15.17%	0.0149	4.46%
137.05	Tyrosine, Pre-col AQC Der (%)	8	7	0.4910	0.0644	0.4910	0.0731	0.0345	14.88%	0.0083	4.45%
137.99	Tyrosine, Miscellaneous (%)	3	3	0.4617	0.0983	0.4617	0.0983	0.0695	21.29%	0.0033	4.49%
137.02	Tyrosine, Post-col OPA Der (%)	1	1	0.4830							
138.00	Valine, Post-col Ninhydrin Der (%)	20	19	0.7043	0.0518	0.7104	0.0394	0.0113	5.55%	0.0162	4.21%
138.05	Valine, Pre-col AQC Der (%)	8	8	0.6859	0.0720	0.6859	0.0816	0.0361	11.90%	0.0180	4.23%
138.99	Valine, Miscellaneous (%)	3	3	0.7783	0.0802	0.7783	0.0802	0.0463	10.31%	0.0167	4.15%
138.02	Valine, Post-col OPA Der (%)	1	1	0.7490							
139.00	Taurine, Post-col Ninhydrin Der (%)	2	2	0.1205	0.0559						
139.05	Taurine, Pre-col AQC Der (%)	1	1	0.0040							
139.02	Taurine, Post-col OPA Der (%)	1		0.0100							
139.99	Taurine, Miscellaneous (%)	1		0.0100							
150.00	Phytase, Colorimetric (Units / kg)	2	2	825.5	239.7						
160.99	Fructose, Miscellaneous (%)	2	2	0.3373	0.0463						
160.10	Fructose, HPAEC PAD (%)	1	1	0.1645							
161.10	Galactose, HPAEC PAD (%)	1		0.0000							
162.99	Glucose, Miscellaneous (%)	2	2	0.3248	0.1481						

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162.10	Glucose, HPAEC PAD (%)	1	1	0.1750							
163.10	Lactose, HPAEC PAD (%)	1		0.0000							
163.99	Lactose, Miscellaneous (%)	2		0.1500							
164.10	Maltose, HPAEC PAD (%)	1	1	0.2825							
164.99	Maltose, Miscellaneous (%)	2	1	0.7265							
165.99	Sucrose, Miscellaneous (%)	2	2	2.085	0.0279						
165.10	Sucrose, HPAEC PAD (%)	1	1	1.804							
166.10	Raffinose, HPAEC PAD (%)	1	1	0.4555							
166.99	Raffinose, Miscellaneous (%)	1	1	0.4450							
167.10	Stachyose, HPAEC PAD (%)	1	1	0.5425							
167.99	Stachyose, Miscellaneous (%)	1	1	0.6600							
351.05	Chlortetracycline, LC-MS/MS (ppm)	3	3	0.7696	0.2763	0.7696	0.2763	0.1595	35.90%	0.0220	16.64%
351.04	Chlortetracycline, LC-MS (ppm)	1	1	0.6580							
354.04	Decoquinatate, LC-MS/MS (ppm)	4	4	0.2861	0.0550	0.2861	0.0550	0.0275	19.22%	0.0268	19.31%
354.01	Decoquinatate, LC (UV or FL) (ppm)	1		0.5000							
361.05	Lasalocid Sodium, LC-MS/MS (ppm)	5	3	0.3040	0.0728	0.3040	0.0728	0.0514	23.93%	0.0100	19.14%
361.03	Lasalocid Sodium, LC (UV or FL) (ppm)	3	1								
365.05	Monensin, LC-MS/MS (ppm)	7	7	1.074	0.2120	1.074	0.2404	0.1136	22.39%	0.0390	15.83%
365.03	Monensin, LC-PCD (ppm)	1	1	1.115							
373.05	Oxytetracycline, LC-MS (ppm)	2	2	0.0554	0.0048						
373.06	Oxytetracycline, LC-MS/MS (ppm)	1	1	0.1455							
373.03	Oxytetracycline, LC (ppm)	1		2.000							
379.05	Salinomycin, LC-MS/MS (ppm)	1		0.2500							
382.04	Sulfamethazine, LC-MS/MS (ppm)	3	3	0.4513	0.0663	0.4513	0.0663	0.0382	14.68%	0.0067	18.03%
382.02	Sulfamethazine, LC-PCD (ppm)	1	1	0.4650							
391.03	Narasin, LC-MS/MS (ppm)	1		0.2500							
400.01	Water Activity, Aqualab chilled mirror (Units)	10	10	0.5571	0.0282	0.5542	0.0226	0.0089	4.08%	0.0057	
400.99	Water Activity, Miscellaneous (Units)	2	2	0.5615	0.0134						
516.53	Arsenic, Total, ICP-MS, Microwave (ppm)	5	5	0.1815	0.0230	0.1815	0.0230	0.0103	12.66%	0.0124	20.68%
516.00	Arsenic, Total, AA, Hydride (ppm)	2	2	0.1620	0.0113						
516.52	Arsenic, Total, ICP-MS, Open vessel (ppm)	2	2	0.1705	0.0134						
516.43	Arsenic, Total, ICP, Microwave (ppm)	2	1	5.645							
518.53	Cadmium, ICP-MS, Microwave (ppm)	6	6	0.1233	0.0028	0.1233	0.0031	0.0016	2.55%	0.0095	21.92%
518.43	Cadmium, ICP, Microwave (ppm)	3	3	1.297	1.964	1.297	1.964	1.389	151.45%	0.8674	15.38%
518.41	Cadmium, ICP, Dry ash (ppm)	2	2	0.1143	0.0103						
518.52	Cadmium, ICP-MS, Open vessel (ppm)	2	2	0.1435	0.0163						
518.33	Cadmium, AAS, Microwave (ppm)	1	1	0.1231							
520.53	Chromium, ICP-MS, Microwave (ppm)	5	5	3.642	0.6464	3.642	0.6464	0.2891	17.75%	0.2725	13.17%
520.43	Chromium, ICP, Microwave (ppm)	5	4	3.771	1.212	3.771	1.212	0.6996	32.13%	0.0702	13.10%
520.41	Chromium, ICP, Dry ash (ppm)	2	2	2.556	0.2594						

Method Code	Analyte and Method	Total # Labs Submitting	# Labs in Robust Calcs	Raw Mean	Raw SD	Assigned Value Robust Mean	AAFCO ffp Robust SD	Uncertainty (U) Robust	% RSD - Robust	Average Range (R-bar)	Thompson Horwitz %RSD
520.42	Chromium, ICP, Open vessel (ppm)	2	2	4.174	0.6099						
520.52	Chromium, ICP-MS, Open vessel (ppm)	1	1	3.350							
526.53	Lead, ICP-MS, Microwave (ppm)	5	4	0.1596	0.0241	0.1596	0.0241	0.0121	15.12%	0.0057	21.08%
526.41	Lead, ICP, Dry ash (ppm)	2	2	0.1250	0.0156						
526.43	Lead, ICP, Microwave (ppm)	3	2	1.379	1.678	1.379	1.678			0.6350	15.24%
526.52	Lead, ICP-MS, Open vessel (ppm)	2	2	0.1963	0.0301						
529.99	Mercury, Miscellaneous (ppb)	5	2	5.582	7.167	5.582	7.167			2.383	22.00%
539.43	Nickel, ICP, Microwave (ppm)	3	3	3.003	1.530	3.003	1.530	1.082	50.95%	1.137	13.56%
539.41	Nickel, ICP, Dry ash (ppm)	2	2	1.554	0.0664						
539.53	Nickel, ICP-MS, Microwave (ppm)	2	2	2.174	0.2373						
539.52	Nickel, ICP-MS, Open vessel (ppm)	1	1	1.995							
702.00	Butyric Acid (4:0), Miscellaneous GC (%)	1		0.0200							
704.00	Caproic Acid (6:0) , Miscellaneous GC (%)	1		0.0200							
706.99	Caprylic acid (8:0), Miscellaneous (%) (w/w)	1		0.0200							
708.99	Capric acid (10:0), Miscellaneous (%) (w/w)	1		0.0200							
710.99	Lauric Acid (12:0), Miscellaneous (%) (w/w)	2		0.0050							
714.99	Myristic Acid (14:0) , Miscellaneous (%) (w/w)	2	1	0.0070							
716.99	Palmitic Acid (16:0), Miscellaneous (%) (w/w)	2	2	0.5033	0.0308						
718.99	Palmitoleic Acid (9c-16:1), Miscellaneous (%) (w/w)	2	1	0.0129							
720.99	Margaric acid (17:0), Miscellaneous (%) (w/w)	1		0.0200							
722.99	Stearic Acid (18:0), Miscellaneous (%) (w/w)	2	2	0.0950	0.0000						
724.99	Oleic Acid (9c-18:1), Miscellaneous (%) (w/w)	2	2	0.5819	0.0168						
726.99	Linoleic Acid (9c,12c-18:2), Miscellaneous (%) (w/w)	2	2	1.478	0.3288						
728.99	alpha-Linolenic Acid (9c,12c,15c-18:3), Miscellaneous (%) (w/w)	2	2	0.2575	0.2511						
730.99	Arachidic Acid (20:0), Miscellaneous (%) (w/w)	2	1	0.0085							
732.99	Gondoic Acid (11c-20:1), Miscellaneous (%) (w/w)	2	1	0.0139							
736.99	Arachidonic Acid (5c,8c,11c,14c-20:4), Miscellaneous (%) (w/w)	1		0.0200							
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	1	0.0070							
744.99	Erucic Acid (13c-22:1), Miscellaneous (%) (w/w)	2		0.0050							
746.99	Docosapentaenoic Acid n-3 DPA (7c,10c,13c,16c,19c-22:5), Miscellaneous (%) (w/w)	2		0.0050							
748.99	Lignoceric Acid (24:0), Miscellaneous (%) (w/w)	2	1	0.0085							
750.99	Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c-22:6), Miscellaneous (%) (w/w)	2		0.0000							
752.99	Nervonic Acid (24:1) isomers, Miscellaneous (%) (w/w)	2		0.0050							
754.99	Total n-3 Polyunsaturated (Omega-3) Fatty Acids, Miscellaneous (%) (w/w)	1	1	0.0800							
756.99	Total n-6 Polyunsaturated (Omega-6) Fatty Acids, Miscellaneous (%) (w/w)	1	1	1.220							
758.99	Total Saturated Fatty Acids, Miscellaneous (%) (w/w)	1	1	0.6750							
764.99	Total cis Monounsaturated Fatty Acids, Miscellaneous (%) (w/w)	1	1	0.6400							
768.99	Total cis Polyunsaturated Fatty Acids, Miscellaneous (%) (w/w)	1	1	1.310							
770.99	Total Fat (equivalent to NLEA), Miscellaneous (%) (w/w)	1	1	2.760							

Method Code	Analyte and Method	Total # Labs Submitting	# Labs in Robust Calcs	Raw Mean	Raw SD	Assigned Value Robust Mean	AAFCO ffp Robust SD	Uncertainty (U) Robust	% RSD - Robust	Average Range (R-bar)	Thompson Horwitz %RSD
772.99	Total Fatty Acids, Miscellaneous (% (w/w))	2	2	2.598	0.0601						

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. Robust Assigned Values indicated in bold font.



Animal Feed Scheme

Methods Reported: 137

Pig Feed, Residue

Method Precision Report

Labs Reporting: 167

Test Material Code # 202124

Issue Date : 05/31/2021

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 (%)	5	5	10.21	0.3795	0.3787	0.0348	0.3803	3.71%	0.34%	3.73%	10.92
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	46	44	9.886	0.5432	0.2762	0.1149	0.2992	2.77%	1.15%	3.00%	2.605
001.99	Loss on Drying, Miscellaneous (%)	18	16	9.905	0.7374	0.4792	0.1244	0.4950	4.79%	1.24%	4.95%	3.981
002.01	Protein, Crude, Auto Kjel-Foss (%)	16	14	16.38	0.3548	0.2702	0.0674	0.2785	1.66%	0.41%	1.71%	4.129
002.05	Protein, Crude, Copper, Boric Acid (%)	24	23	16.25	0.7450	0.3560	0.1332	0.3801	2.21%	0.83%	2.36%	2.853
002.06	Protein, Crude, Combustion Nitrogen Analyzer (%)	108	101	16.42	0.3176	0.2236	0.1602	0.2750	1.36%	0.98%	1.68%	1.717
002.11	Protein, Crude, NIR (%)	8	7	17.29	1.465	0.5162	0.0785	0.5222	3.07%	0.47%	3.11%	6.654
003.00	Fat, Crude, Diethyl Ether Ext., Direct (%)	10	8	2.406	0.3533	0.2204	0.0521	0.2265	9.54%	2.25%	9.80%	4.350
003.06	Fat, Crude, Pet Ether (%)	16	15	2.347	0.1770	0.1711	0.0641	0.1827	7.29%	2.73%	7.79%	2.852
003.09	Fat, Crude, Randall, Diethyl Ether Ext (%)	10	10	2.378	0.1729	0.1657	0.0696	0.1798	6.97%	2.93%	7.56%	2.581
003.10	Fat, Crude, Randall, Pet Ether (%)	26	23	2.197	0.1577	0.1592	0.0466	0.1658	7.23%	2.12%	7.53%	3.562
003.11	Fat, Crude, NIR (%)	8	7	3.868	3.519	0.5643	0.0259	0.5648	21.40%	0.98%	21.42%	21.80
003.13	Fat, Crude, Randall, Hexane Ext. (%)	9	8	2.287	0.0991	0.1003	0.0430	0.1091	4.39%	1.88%	4.78%	2.537
003.14	Fat, Crude, Ankom (%)	55	49	2.140	0.2505	0.1710	0.0867	0.1918	7.92%	4.02%	8.88%	2.211
004.00	Fiber, Crude, Asbestos Free (%)	16	15	3.960	0.6450	0.3144	0.2630	0.4099	8.22%	6.88%	10.72%	1.558
004.03	Fiber, Crude, Fritted Glass (%)	6	6	3.612	0.3234	0.2641	0.2641	0.3735	7.31%	7.31%	10.34%	1.414
004.06	Fiber, Crude, Fibertec (%)	15	15	3.530	0.2320	0.2188	0.1089	0.2444	6.20%	3.09%	6.92%	2.244
004.07	Fiber, Crude, ANKOM (%)	66	65	3.547	0.5139	0.5038	0.1434	0.5238	14.20%	4.04%	14.77%	3.653
004.11	Fiber, Crude, NIR (%)	7	6	4.203	0.5842	0.6123	0.1205	0.6240	14.37%	2.83%	14.65%	5.179
005.00	Ash, 2h @ 600°C (%)	85	78	9.394	0.4693	0.4466	0.0969	0.4570	4.74%	1.03%	4.85%	4.716
005.05	Ash, 3h @ 550°C (%)	28	26	9.846	0.3763	0.3197	0.0796	0.3294	3.26%	0.81%	3.36%	4.138
005.99	Ash, Miscellaneous (%)	8	6	9.750	0.6892	0.0349	0.1108	0.1162	0.35%	1.11%	1.16%	1.049
008.02	Fiber, Acid Detergent, Crucible (%)	11	10	4.784	0.3409	0.2124	0.1466	0.2581	4.37%	3.01%	5.31%	1.761
008.08	Fiber, Acid Detergent, Filter Bag - ANKOM (%)	46	44	4.883	0.3937	0.3549	0.1721	0.3944	7.30%	3.54%	8.11%	2.291
009.07	Fiber, Neutral Detergent, AOAC -ENZ Pretreat (%)	11	11	13.99	1.329	1.302	0.3763	1.355	9.31%	2.69%	9.69%	3.601
009.09	Fiber, Neutral Detergent, Filter Bag - ANKOM (%)	44	40	13.08	0.6240	0.5024	0.2443	0.5586	3.86%	1.88%	4.29%	2.287
010.11	Moisture, NIR (%)	6	5	10.81	0.9676	0.9675	0.0247	0.9678	8.95%	0.23%	8.96%	39.18
010.99	Moisture, Miscellaneous (%)	11	10	10.10	0.2766	0.2721	0.0701	0.2810	2.69%	0.69%	2.78%	4.006
011.01	Loss on Drying, HT, 135°C 2hr (%)	63	57	10.68	0.3884	0.3355	0.0763	0.3440	3.13%	0.71%	3.21%	4.507
011.99	Loss on Drying, HT, High Temp. Methods Miscellaneous (%)	6	6	10.11	0.5222	0.3997	0.4752	0.6210	3.95%	4.70%	6.14%	1.307
012.00	Starch, Polarimetric (Ewers) (%)	14	13	39.51	0.7616	0.7216	0.1817	0.7441	1.82%	0.46%	1.88%	4.096
012.01	Starch, Enzymatic-Colorimetric Method (Megazyme) (%)	12	10	37.99	2.843	1.606	0.7745	1.783	4.29%	2.07%	4.76%	2.302
012.04	Starch, Enzymatic-Enzyme Membrane Technology (YSI) (%)	5	5	36.98	2.280	1.946	1.681	2.572	5.26%	4.55%	6.95%	1.529
013.00	Fat, Acid Pretreat, Acid hydrolysis (%)	21	18	3.032	0.4815	0.3651	0.0852	0.3749	12.47%	2.91%	12.80%	4.399
013.02	Fat, Acid Pretreat, Mojonnier, Bak Ext (%)	15	14	3.424	0.4056	0.4004	0.0916	0.4107	11.69%	2.68%	12.00%	4.483
013.10	Fat, Acid Pretreat, Soxtec-Acid Hydrolysis (%)	6	6	2.902	0.1829	0.1681	0.1018	0.1965	5.79%	3.51%	6.77%	1.931

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
013.13	Fat, Acid Pretreat, Ankom- Acid Hydrolysis (%)	8	7	3.626	0.5838	0.2446	0.3236	0.4056	7.09%	9.38%	11.75%	1.254
015.41	Aluminum, ICP, Dry ash (ppm)	6	5	97.79	27.48	27.40	2.951	27.56	28.02%	3.02%	28.18%	9.340
015.43	Aluminum, ICP, Microwave (ppm)	9	7	105.2	36.44	13.12	3.456	13.57	11.04%	2.91%	11.42%	3.926
017.41	Boron, ICP, Dry ash (ppm)	5	5	7.922	1.066	1.048	0.2787	1.084	13.22%	3.52%	13.68%	3.889
017.42	Boron, ICP, Open vessel (ppm)	6	6	8.213	0.8440	0.8133	0.3192	0.8737	9.90%	3.89%	10.64%	2.737
017.43	Boron, ICP, Microwave (ppm)	7	5	8.936	1.245	1.243	0.0961	1.246	13.91%	1.08%	13.95%	12.97
019.00	Calcium, Ox-Mn04 Vol. (%)	6	6	2.347	0.0934	0.0900	0.0352	0.0967	3.84%	1.50%	4.12%	2.744
019.08	Calcium, EDTA (%)	8	6	2.390	0.0811	0.0878	0.0076	0.0882	3.68%	0.32%	3.69%	11.62
019.31	Calcium, AAS, Dry ash (%)	17	15	2.347	0.1061	0.1063	0.0332	0.1114	4.53%	1.42%	4.75%	3.356
019.41	Calcium, ICP, Dry ash (%)	23	22	2.400	0.0904	0.0689	0.0741	0.1012	2.88%	3.10%	4.23%	1.365
019.42	Calcium, ICP, Open vessel (%)	17	15	2.394	0.3074	0.2268	0.0595	0.2345	9.33%	2.45%	9.65%	3.940
019.43	Calcium, ICP, Microwave (%)	31	29	2.374	0.1932	0.1583	0.0784	0.1766	6.62%	3.28%	7.38%	2.252
019.99	Calcium, Miscellaneous (%)	6	6	2.313	0.1564	0.1418	0.0933	0.1697	6.13%	4.03%	7.34%	1.819
021.43	Cobalt, ICP, Microwave (ppm)	12	11	1.137	0.2051	0.1968	0.0817	0.2130	17.30%	7.18%	18.73%	2.608
021.53	Cobalt, ICP-MS, Microwave (ppm)	5	5	1.200	0.1233	0.1018	0.0984	0.1415	8.48%	8.20%	11.80%	1.439
022.31	Copper, AAS, Dry ash (ppm)	12	9	52.80	19.93	3.746	1.380	3.992	7.17%	2.64%	7.65%	2.893
022.41	Copper, ICP, Dry ash (ppm)	18	17	51.12	5.409	3.712	2.304	4.369	7.39%	4.59%	8.70%	1.896
022.42	Copper, ICP, Open vessel (ppm)	18	15	53.59	3.465	3.351	1.404	3.633	6.28%	2.63%	6.81%	2.589
022.43	Copper, ICP, Microwave (ppm)	26	24	51.67	3.640	3.049	1.398	3.354	5.87%	2.69%	6.45%	2.400
022.53	Copper, ICP-MS, Microwave (ppm)	5	5	50.70	2.877	2.270	2.500	3.377	4.48%	4.93%	6.66%	1.351
025.31	Iron, AAS, Dry ash (ppm)	13	11	649.9	209.9	57.22	6.915	57.64	8.08%	0.98%	8.14%	8.335
025.41	Iron, ICP, Dry ash (ppm)	20	20	688.9	62.90	59.82	27.50	65.84	8.68%	3.99%	9.56%	2.394
025.42	Iron, ICP, Open vessel (ppm)	14	12	617.4	122.1	126.4	12.91	127.1	20.60%	2.10%	20.71%	9.842
025.43	Iron, ICP, Microwave (ppm)	25	24	700.7	69.59	70.08	15.13	71.69	10.02%	2.16%	10.25%	4.738
027.31	Magnesium, AAS, Dry ash (%)	12	11	0.2264	0.0095	0.0087	0.0053	0.0102	3.84%	2.36%	4.51%	1.908
027.41	Magnesium, ICP, Dry ash (%)	18	17	0.2237	0.0214	0.0149	0.0059	0.0160	6.76%	2.67%	7.27%	2.723
027.42	Magnesium, ICP, Open vessel (%)	18	17	0.2198	0.0115	0.0110	0.0045	0.0119	5.02%	2.04%	5.42%	2.659
027.43	Magnesium, ICP, Microwave (%)	28	27	0.2175	0.0196	0.0164	0.0065	0.0176	7.48%	2.95%	8.04%	2.726
028.31	Manganese, AAS, Dry ash (ppm)	11	11	141.4	5.012	4.663	2.596	5.337	3.30%	1.84%	3.78%	2.056
028.41	Manganese, ICP, Dry ash (ppm)	17	17	141.6	12.35	11.60	6.018	13.06	8.19%	4.25%	9.22%	2.171
028.42	Manganese, ICP, Open vessel (ppm)	18	16	157.1	42.57	13.62	2.924	13.93	9.22%	1.98%	9.43%	4.766
028.43	Manganese, ICP, Microwave (ppm)	26	25	142.1	10.47	9.306	6.781	11.51	6.55%	4.77%	8.10%	1.698
031.01	Phosphorus, Photometric (%)	31	27	0.8300	0.0392	0.0233	0.0106	0.0255	2.81%	1.28%	3.09%	2.419
031.41	Phosphorus, ICP, Dry ash (%)	22	20	0.8555	0.0445	0.0431	0.0190	0.0471	5.03%	2.22%	5.50%	2.478
031.42	Phosphorus, ICP, Open vessel (%)	19	18	0.8339	0.0725	0.0518	0.0126	0.0533	6.30%	1.53%	6.48%	4.231
031.43	Phosphorus, ICP, Microwave (%)	31	28	0.8404	0.0555	0.0449	0.0201	0.0492	5.29%	2.36%	5.79%	2.450
031.99	Phosphorus, Miscellaneous (%)	5	5	0.7290	0.1058	0.1052	0.0152	0.1063	14.44%	2.08%	14.59%	7.012
032.31	Potassium, AAS, Dry ash (%)	8	7	0.7533	0.1608	0.0359	0.0173	0.0398	4.43%	2.14%	4.92%	2.303
032.41	Potassium, ICP, Dry ash (%)	20	20	0.8093	0.0502	0.0479	0.0214	0.0524	5.92%	2.65%	6.48%	2.449
032.42	Potassium, ICP, Open vessel (%)	17	15	0.8331	0.0920	0.0418	0.0123	0.0436	5.14%	1.52%	5.36%	3.534
032.43	Potassium, ICP, Microwave (%)	28	25	0.8074	0.0599	0.0486	0.0158	0.0511	6.00%	1.95%	6.31%	3.234
032.99	Potassium, Miscellaneous (%)	5	5	0.8037	0.0464	0.0391	0.0353	0.0527	4.87%	4.39%	6.55%	1.492
033.00	Salt as chloride, Sol Cl (%)	20	18	1.159	0.0835	0.0709	0.0223	0.0743	6.06%	1.91%	6.35%	3.326
033.01	Salt as chloride, Poten Cl (%)	28	26	1.225	0.0366	0.0282	0.0142	0.0316	2.29%	1.16%	2.57%	2.217
033.99	Salt, Miscellaneous (%)	9	8	1.137	0.1343	0.0314	0.0530	0.0616	2.66%	4.50%	5.23%	1.162
034.53	Selenium, ICP-MS, Microwave (ppm)	9	9	1.335	0.1881	0.1686	0.1181	0.2058	12.63%	8.85%	15.42%	1.743

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035.31	Sodium, AAS, Dry ash (%)	10	9	0.4683	0.0264	0.0243	0.0074	0.0254	5.23%	1.59%	5.47%	3.446
035.41	Sodium, ICP, Dry ash (%)	21	18	0.4686	0.0326	0.0168	0.0131	0.0213	3.63%	2.84%	4.61%	1.622
035.42	Sodium, ICP, Open vessel (%)	16	16	0.4764	0.0309	0.0291	0.0147	0.0326	6.10%	3.08%	6.83%	2.222
035.43	Sodium, ICP, Microwave (%)	24	22	0.4772	0.0369	0.0301	0.0103	0.0318	6.24%	2.13%	6.60%	3.092
036.42	Sulfur, ICP, Open vessel (%)	20	19	0.3402	0.0247	0.0236	0.0101	0.0257	6.94%	2.97%	7.55%	2.541
036.43	Sulfur, ICP, Microwave (%)	21	21	0.3536	0.0277	0.0267	0.0099	0.0285	7.56%	2.81%	8.07%	2.868
037.31	Zinc, AAS, Dry ash (ppm)	12	10	421.3	45.55	19.59	6.581	20.67	4.75%	1.60%	5.01%	3.140
037.41	Zinc, ICP, Dry ash (ppm)	18	18	410.2	37.79	36.47	13.99	39.07	8.89%	3.41%	9.52%	2.792
037.42	Zinc, ICP, Open vessel (ppm)	17	16	408.2	24.37	24.12	7.162	25.16	5.89%	1.75%	6.15%	3.513
037.43	Zinc, ICP, Microwave (ppm)	27	26	410.9	38.06	31.07	14.64	34.35	7.49%	3.53%	8.28%	2.346
037.99	Zinc, Miscellaneous (ppm)	5	5	379.8	27.95	25.93	14.75	29.83	6.83%	3.88%	7.85%	2.023
038.43	Molybdenum, ICP, Microwave (ppm)	13	11	1.115	0.2177	0.0911	0.1253	0.1550	7.81%	10.74%	13.27%	1.236
106.02	Vitamin A, LC (KU / kg)	9	8	3.508	3.410	0.1819	0.7223	0.7449	7.63%	30.30%	31.25%	1.031
109.02	Vitamin E, LC (IU / kg)	13	11	52.18	12.08	7.574	3.057	8.168	15.12%	6.10%	16.30%	2.672
120.00	Alanine, Post-col Ninhydrin Der (%)	20	18	0.7762	0.0382	0.0181	0.0146	0.0233	2.33%	1.87%	2.99%	1.595
120.05	Alanine, Pre-col AQC Der (%)	8	6	0.7355	0.0531	0.0471	0.0003	0.0471	6.31%	0.04%	6.31%	163.2
121.00	Arginine, Post-col Ninhydrin Der (%)	20	19	0.9816	0.0416	0.0320	0.0122	0.0343	3.24%	1.24%	3.47%	2.806
121.05	Arginine, Pre-col AQC Der (%)	8	8	0.9529	0.0641	0.0623	0.0211	0.0658	6.54%	2.21%	6.90%	3.120
122.00	Aspartic, Post-col Ninhydrin Der (%)	20	18	1.327	0.0700	0.0576	0.0163	0.0599	4.31%	1.22%	4.48%	3.666
122.05	Aspartic, Pre-col AQC Der (%)	8	8	1.284	0.1189	0.1181	0.0195	0.1197	9.20%	1.52%	9.32%	6.129
124.00	Cysteine/Cystine, PAO Post-col Ninhydrin Der (%)	21	20	0.2744	0.0337	0.0274	0.0092	0.0289	10.13%	3.42%	10.70%	3.124
124.05	Cysteine/Cystine, PAO Pre-col AQC Der (%)	8	7	0.2635	0.0977	0.0669	0.0080	0.0674	28.26%	3.39%	28.46%	8.399
125.00	Glutamic, Post-col Ninhydrin Der (%)	19	19	2.948	0.1417	0.1362	0.0549	0.1469	4.62%	1.86%	4.98%	2.676
125.05	Glutamic, Pre-col AQC Der (%)	8	7	2.791	0.2327	0.1848	0.0205	0.1859	6.75%	0.75%	6.80%	9.074
126.00	Glycine, Post-col Ninhydrin Der (%)	20	20	0.7663	0.0306	0.0291	0.0136	0.0321	3.79%	1.77%	4.19%	2.365
126.05	Glycine, Pre-col AQC Der (%)	8	8	0.7446	0.0359	0.0318	0.0234	0.0395	4.27%	3.14%	5.30%	1.689
127.00	Histidine, Post-col Ninhydrin Der (%)	20	17	0.3888	0.0267	0.0218	0.0041	0.0222	5.57%	1.05%	5.66%	5.412
127.05	Histidine, Pre-col AQC Der (%)	8	7	0.4101	0.0609	0.0226	0.0129	0.0261	5.80%	3.30%	6.68%	2.021
128.00	Isoleucine, Post-col Ninhydrin Der (%)	20	18	0.5745	0.0399	0.0381	0.0093	0.0392	6.66%	1.62%	6.86%	4.231
128.05	Isoleucine, Pre-col AQC Der (%)	8	8	0.5630	0.0693	0.0687	0.0128	0.0699	12.21%	2.27%	12.42%	5.480
129.00	Leucine, Post-col Ninhydrin Der (%)	20	18	1.171	0.0416	0.0341	0.0135	0.0367	2.89%	1.15%	3.11%	2.714
129.05	Leucine, Pre-col AQC Der (%)	8	8	1.130	0.0675	0.0668	0.0132	0.0681	5.92%	1.17%	6.03%	5.167
130.00	L-Lysine, Post-col Ninhydrin Der (%)	21	20	0.7273	0.0489	0.0266	0.0121	0.0292	3.61%	1.64%	3.97%	2.416
130.05	L-Lysine, Pre-col AQC Der (%)	8	6	0.7142	0.0355	0.0344	0.0120	0.0364	4.85%	1.69%	5.13%	3.042
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	21	20	0.2225	0.0295	0.0171	0.0099	0.0198	7.52%	4.34%	8.69%	2.001
131.05	Methionine, PAO Pre-col AQC Der (%)	8	7	0.2287	0.0368	0.0281	0.0061	0.0288	11.83%	2.58%	12.11%	4.702
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	20	20	0.7137	0.0324	0.0303	0.0165	0.0345	4.24%	2.31%	4.83%	2.090
132.05	Phenylalanine, Pre-col AQC Der (%)	8	7	0.6855	0.0369	0.0387	0.0129	0.0408	5.65%	1.88%	5.96%	3.162
133.00	Proline, Post-col Ninhydrin Der (%)	20	18	1.030	0.0975	0.0611	0.0227	0.0652	6.04%	2.25%	6.45%	2.867
133.05	Proline, Pre-col AQC Der (%)	8	8	1.006	0.0559	0.0536	0.0224	0.0581	5.33%	2.23%	5.78%	2.596
134.00	Serine, Post-col Ninhydrin Der (%)	20	20	0.7131	0.0394	0.0378	0.0157	0.0409	5.30%	2.20%	5.74%	2.610
134.05	Serine, Pre-col AQC Der (%)	8	6	0.6692	0.0786	0.0413	0.0065	0.0418	5.90%	0.92%	5.97%	6.474
135.00	Threonine, Post-col Ninhydrin Der (%)	20	19	0.5459	0.0336	0.0240	0.0089	0.0256	4.44%	1.65%	4.74%	2.879
135.05	Threonine, Pre-col AQC Der (%)	8	7	0.5114	0.0464	0.0120	0.0145	0.0188	2.28%	2.74%	3.57%	1.301
136.00	Tryptophan, Alka-Hydrol Post-col Ninhydrin Der (%)	6	6	0.2146	0.0496	0.0478	0.0188	0.0514	22.27%	8.77%	23.94%	2.729
136.03	Tryptophan, Alka-Hydrol + IS RP LC FI (%)	5	5	0.1925	0.0153	0.0149	0.0047	0.0156	7.74%	2.43%	8.12%	3.344

Test Material Code # 202124

Issue Date : 05/31/2021

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
137.00	Tyrosine, Post-col Ninhydrin Der (%)	15	14	0.4857	0.0730	0.0752	0.0113	0.0761	15.46%	2.32%	15.63%	6.748
137.05	Tyrosine, Pre-col AQC Der (%)	8	7	0.4910	0.0644	0.0640	0.0110	0.0649	13.03%	2.23%	13.22%	5.917
138.00	Valine, Post-col Ninhydrin Der (%)	20	18	0.7043	0.0518	0.0309	0.0146	0.0342	4.33%	2.04%	4.79%	2.346
138.05	Valine, Pre-col AQC Der (%)	8	7	0.6859	0.0720	0.0585	0.0113	0.0595	8.32%	1.60%	8.48%	5.287
365.05	Monensin, LC-MS/MS (ppm)	7	7	1.074	0.2120	0.2104	0.0373	0.2137	19.59%	3.47%	19.90%	5.729
400.01	Water Activity, Aqualab chilled mirror (Units)	10	9	0.5571	0.0282	0.0175	0.0048	0.0182	3.19%	0.87%	3.31%	3.812
516.53	Arsenic, Total, ICP-MS, Microwave (ppm)	5	5	0.1815	0.0230	0.0214	0.0119	0.0245	11.78%	6.55%	13.48%	2.059
518.53	Cadmium, ICP-MS, Microwave (ppm)	6	6	0.1233	0.0028		0.0077			6.23%		
520.53	Chromium, ICP-MS, Microwave (ppm)	5	5	3.642	0.6464	0.6228	0.2452	0.6693	17.10%	6.73%	18.37%	2.730

Notes: Precision Calculations provided for methods with 5 or more labs contributing to calculations.