AAFCO
Association of American Feed Control Officials

Pet Food Ingredient Scheme

 # Labs Reporting: 98

Rice Hulls

Method Summary Report

 # Methods Reported: 191

Test Material Code # 202543

(Precision Report Follows)

Issue Date : 09/30/2025

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 (Rob R-bar)	Thompson Horwitz %RSD
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	56	**55**	6.966	0.2917	**7.014**	0.1735	0.0292	2.47%	0.0849	2.98%
001.99	Loss on Drying, Miscellaneous (%)	6	**6**	5.998	0.9872	**5.998**	1.120	0.5713	18.66%	0.4200	3.05%
001.00	Loss on Drying, Vac 95°C 5 hr (%)	2	2	6.665	0.0141						
001.03	Loss on Drying, Low temp. methods (%)	1	1	6.605							
002.06	Protein, Crude, Combustion Nitrogen Analyzer (%)	85	**85**	2.353	0.2432	**2.330**	0.1794	0.0243	7.70%	0.0964	3.52%
002.01	Protein, Crude, Auto Kjel-Foss (%)	5	5	2.459	0.1760	2.459	0.1760	0.0787	7.15%	0.0748	3.49%
002.04	Protein, Crude, Copper Catalyst (%)	3	3	2.307	0.1091	2.307	0.1091	0.0772	4.73%	0.1300	3.53%
002.05	Protein, Crude, Copper, Boric Acid (%)	2	2	2.248	0.1082						
002.08	Protein, Crude, Cu/Ti (%)	1	1	2.395							
002.11	Protein, Crude, NIR (%)	1	1	10.90							
003.00	Fat, Crude, Diethyl Ether Ext., Direct (%)	13	**13**	0.4704	0.0917	**0.4738**	0.0961	0.0333	20.28%	0.0467	4.48%
003.10	Fat, Crude, Randall, Pet Ether (%)	14	**13**	0.4886	0.0906	**0.4817**	0.0855	0.0297	17.76%	0.0440	4.46%
003.09	Fat, Crude, Randall, Diethyl Ether Ext (%)	8	**8**	0.4863	0.1171	**0.4863**	0.1328	0.0587	27.31%	0.0200	4.46%
003.14	Fat, Crude, Ankom (%)	4	4	0.5319	0.1973	0.5319	0.1973	0.0986	37.09%	0.0285	4.40%
003.01	Fat, Crude, Diethyl Ether Ext (13th ed.), Indirect (%)	2	2	0.5400	0.0424						
003.13	Fat, Crude, Randall, Hexane Ext. (%)	2	2	0.6200	0.0424						
003.06	Fat, Crude, Pet Ether (%)	2	1	0.4400							
003.99	Fat, Crude, Miscellaneous (%)	1	1	0.4250							
004.07	Fiber, Crude, ANKOM (%)	26	**26**	47.39	1.663	**47.22**	1.422	0.3486	3.01%	0.8982	1.46%
004.00	Fiber, Crude, Asbestos Free (%)	5	5	47.90	2.336	47.90	2.336	1.045	4.88%	1.058	1.44%
004.06	Fiber, Crude, Fibertec (%)	2	2	49.39	1.223						
004.11	Fiber, Crude, NIR (%)	1	1	21.60							
005.00	Ash, 2h @ 600°C (%)	58	**57**	15.02	0.2040	**15.03**	0.1685	0.0279	1.12%	0.0935	2.58%
005.05	Ash, 3h @ 550°C (%)	13	**13**	15.01	0.2482	**15.03**	0.2453	0.0850	1.63%	0.0882	2.58%
005.03	Ash, Microwave furnace (%)	9	**9**	15.14	0.2177	**15.18**	0.1221	0.0509	0.80%	0.2145	2.57%
005.99	Ash, Miscellaneous (%)	4	3	14.98	0.0513	14.98	0.0513	0.0296	0.34%	0.0233	2.58%
005.11	Ash, NIR (%)	1	1	9.640							
006.00	Total Sugars, As sucrose (%)	2	1	1.192							
008.08	Fiber, Acid Detergent, Filter Bag - ANKOM (%)	13	**13**	64.63	4.887	**65.67**	2.898	1.005	4.41%	0.9007	1.23%

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008.02	Fiber, Acid Detergent, Crucible (%)	2	2	67.94	0.0615						
008.99	Fiber, Acid Detergent, Miscellaneous (%)	1	1	53.33							
009.09	Fiber, Neutral Detergent, Filter Bag - ANKOM (%)	10	**10**	70.93	2.468	**70.83**	2.566	1.014	3.62%	1.023	1.19%
009.07	Fiber, Neutral Detergent, AOAC -ENZ Pretreat (%)	1	1	80.98							
009.99	Fiber, Neutral Detergent, Miscellaneous (%)	1	1	70.30							
010.99	Moisture, Miscellaneous (%)	5	5	6.933	0.5627	6.933	0.5627	0.2516	8.12%	0.1066	2.99%
011.01	Loss on Drying, HT, 135°C 2hr (%)	19	**18**	7.047	0.6349	**7.139**	0.4208	0.1240	5.89%	0.1232	2.98%
011.02	Loss on Drying, HT, 130°C for 2 hours (%)	1	1	7.415							
012.01	Starch, Enzymatic-Colorimetric Method (Megazyme) (%)	4	4	4.068	0.6596	4.068	0.6596	0.3298	16.21%	0.3088	3.24%
012.03	Starch, Enzymatic-Colorimetric Method, Miscellaneous (%)	2	2	4.455	0.4312						
012.04	Starch, Enzymatic-Enzyme Membrane Technology (YSI) (%)	2	2	3.400	0.0000						
012.00	Starch, Polarimetric (Ewers) (%)	1	1	3.750							
013.02	Fat, Pretreat, Mojonnier, Bak Ext, Acid hydrolysis (%)	11	**11**	0.7919	0.3277	**0.7869**	0.3606	0.1359	45.83%	0.1193	4.15%
013.00	Fat, Pretreat, Acid hydrolysis (%)	3	3	0.5348	0.1469	0.5348	0.1469	0.1039	27.47%	0.1423	4.39%
013.13	Fat, Pretreat, Ankom- Acid Hydrolysis (%)	3	2	0.9771	0.8231	0.9771	0.8231			0.0378	4.01%
013.10	Fat, Pretreat, Soxtec-Acid Hydrolysis (%)	1	1	0.8000							
013.99	Fat, Pretreat, Miscellaneous (%)	1	1	0.3600							
014.02	Fiber, Total Dietary, ANKOM Enz-Grav (%)	2	2	68.35	1.983						
014.01	Fiber, Total Dietary, Enz-Grav (%)	1	1	73.45							
014.99	Fiber, Total Dietary, Miscellaneous (%)	1	1	71.20							
015.43	Aluminum, ICP, Microwave (ppm)	3	3	365.3	619.8	365.3	619.8	438.3	169.67%	1.129	6.58%
015.41	Aluminum, ICP, Dry ash (ppm)	1	1	7.964							
015.53	Aluminum, ICP-MS, Microwave (ppm)	1	1	8.385							
017.43	Boron, ICP, Microwave (ppm)	2	2	2.847	0.2169						
017.41	Boron, ICP, Dry ash (ppm)	1	1	1.665							
017.53	Boron, ICP-MS, Microwave (ppm)	1	1	2.030							
019.44	Calcium, ICP, Dry ash (%)	31	**27**	0.0624	0.0043	**0.0600**	0.0000	0.0000	0.00%	0.0010	6.11%
019.43	Calcium, ICP, Microwave (%)	19	**18**	0.0688	0.0034	**0.0690**	0.0030	0.0009	4.37%	0.0026	5.98%
019.53	Calcium, ICP-MS, Microwave (%)	9	**8**	0.0673	0.0032	**0.0673**	0.0036	0.0016	5.38%	0.0016	6.00%
019.42	Calcium, ICP, Open vessel (%)	5	5	0.0623	0.0022	0.0623	0.0022	0.0010	3.60%	0.0013	6.07%
019.41	Calcium, ICP, Dry ash (%)	5	4	0.0619	0.0056	0.0619	0.0056	0.0028	8.99%	0.0052	6.08%
019.00	Calcium, Ox-Mn04 Vol. (%)	1	1	0.0300							
019.31	Calcium, AAS, Dry ash (%)	1	1	0.0850							
021.43	Cobalt, ICP, Microwave (ppm)	3	3	2.562	1.597	2.562	1.597	0.9223	62.36%	0.1053	13.89%
021.41	Cobalt, ICP, Dry ash (ppm)	2	2	1.627	0.2500						
021.53	Cobalt, ICP-MS, Microwave (ppm)	1	1	2.025							
022.44	Copper, ICP, Dry ash (ppm)	31	**31**	2.476	0.2331	**2.456**	0.1666	0.0374	6.78%	0.1990	13.97%
022.43	Copper, ICP, Microwave (ppm)	24	**22**	3.163	0.5517	**3.192**	0.3305	0.0881	10.35%	0.1036	13.43%
022.41	Copper, ICP, Dry ash (ppm)	4	4	4.620	2.742	4.620	2.742	1.371	59.35%	0.2061	12.71%
022.53	Copper, ICP-MS, Microwave (ppm)	4	4	2.571	0.4732	2.571	0.4732	0.2366	18.41%	0.1057	13.88%

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022.42	Copper, ICP, Open vessel (ppm)	4	3	2.906	0.9099	2.906	0.9099	0.5253	31.31%	0.1291	13.62%
022.31	Copper, AAS, Dry ash (ppm)	2	1	14.45							
022.52	Copper, ICP-MS, Open vessel (ppm)	1	1	2.425							
024.52	Iodine, ICP-MS, Open vessel (ppm)	1	1	0.1045							
025.43	Iron, ICP, Microwave (ppm)	14	**14**	551.0	323.5	**437.8**	53.16	17.76	12.14%	28.16	6.41%
025.41	Iron, ICP, Dry ash (ppm)	7	**7**	404.8	94.89	**399.8**	96.00	45.36	24.01%	13.26	6.49%
025.53	Iron, ICP-MS, Microwave (ppm)	4	4	344.5	39.32	344.5	39.32	19.66	11.42%	30.15	6.64%
025.31	Iron, AAS, Dry ash (ppm)	3	3	349.9	135.4	349.9	135.4	78.18	38.70%	4.650	6.62%
025.42	Iron, ICP, Open vessel (ppm)	4	3	383.0	24.19	383.0	24.19	13.97	6.32%	12.73	6.54%
025.52	Iron, ICP-MS, Open vessel (ppm)	1	1	71.51							
027.44	Magnesium, ICP, Dry ash (%)	29	**29**	0.0326	0.0015	**0.0327**	0.0015	0.0004	4.66%	0.0010	6.69%
027.43	Magnesium, ICP, Microwave (%)	25	**24**	0.0380	0.0026	**0.0381**	0.0027	0.0007	7.12%	0.0018	6.54%
027.41	Magnesium, ICP, Dry ash (%)	5	5	0.0324	0.0029	0.0324	0.0029	0.0013	8.86%	0.0014	6.70%
027.42	Magnesium, ICP, Open vessel (%)	5	5	0.0324	0.0025	0.0324	0.0025	0.0011	7.60%	0.0011	6.70%
027.53	Magnesium, ICP-MS, Microwave (%)	3	3	0.0382	0.0027	0.0382	0.0027	0.0016	7.09%	0.0014	6.54%
027.31	Magnesium, AAS, Dry ash (%)	1	1	0.0295							
028.44	Manganese, ICP, Dry ash (ppm)	28	**28**	110.8	6.679	**110.3**	5.992	1.415	5.43%	3.015	7.88%
028.43	Manganese, ICP, Microwave (ppm)	25	**25**	133.8	7.568	**132.9**	5.670	1.418	4.27%	4.433	7.66%
028.41	Manganese, ICP, Dry ash (ppm)	7	**7**	108.6	11.53	**109.6**	10.71	5.060	9.77%	4.696	7.89%
028.42	Manganese, ICP, Open vessel (ppm)	4	4	119.1	5.651	119.1	5.651	2.825	4.75%	4.239	7.79%
028.53	Manganese, ICP-MS, Microwave (ppm)	5	4	128.8	2.015	128.8	2.015	1.008	1.56%	4.829	7.70%
028.31	Manganese, AAS, Dry ash (ppm)	3	3	113.1	19.55	113.1	19.55	11.29	17.30%	6.000	7.85%
028.52	Manganese, ICP-MS, Open vessel (ppm)	2	2	126.6	3.334						
031.44	Phosphorus, ICP, Dry ash (%)	30	**29**	0.0524	0.0047	**0.0500**	0.0000	0.0000	0.00%	0.0100	6.28%
031.43	Phosphorus, ICP, Microwave (%)	24	**23**	0.0587	0.0052	**0.0589**	0.0046	0.0012	7.86%	0.0036	6.13%
031.41	Phosphorus, ICP, Dry ash (%)	5	5	0.0510	0.0019	0.0510	0.0019	0.0009	3.81%	0.0028	6.26%
031.42	Phosphorus, ICP, Open vessel (%)	5	5	0.0504	0.0024	0.0504	0.0024	0.0011	4.66%	0.0018	6.27%
031.53	Phosphorus, ICP-MS, Microwave (%)	4	3	0.0511	0.0009	0.0511	0.0009	0.0007	1.82%		6.26%
031.01	Phosphorus, Photometric (%)	2	1	0.0600							
032.44	Potassium, ICP, Dry ash (%)	29	**29**	0.1337	0.0098	**0.1326**	0.0066	0.0015	4.99%	0.0100	5.42%
032.43	Potassium, ICP, Microwave (%)	24	**23**	0.1857	0.0162	**0.1847**	0.0161	0.0042	8.72%	0.0117	5.16%
032.41	Potassium, ICP, Dry ash (%)	6	**6**	0.1399	0.0107	**0.1399**	0.0121	0.0062	8.68%	0.0110	5.38%
032.42	Potassium, ICP, Open vessel (%)	5	5	0.1787	0.0062	0.1787	0.0062	0.0028	3.48%	0.0054	5.18%
032.53	Potassium, ICP-MS, Microwave (%)	4	4	0.1822	0.0220	0.1822	0.0220	0.0110	12.06%	0.0068	5.17%
032.31	Potassium, AAS, Dry ash (%)	1	1	0.1400							
033.01	Salt as chloride, Poten Cl (%)	4	4	0.0478	0.0224	0.0478	0.0224	0.0112	46.91%	0.0053	6.32%
033.99	Salt, Miscellaneous (%)	2	2	0.0230	0.0099						
034.53	Selenium, Total (Se), ICP-MS, Microwave (ppm)	1	1	0.0495							
035.43	Sodium, ICP, Microwave (%)	15	**14**	0.0063	0.0030	**0.0063**	0.0034	0.0011	53.27%	0.0005	8.57%
035.41	Sodium, ICP, Dry ash (%)	33	**12**	0.0112	0.0070	**0.0100**	0.0000	0.0000	0.00%	0.0017	8.00%

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035.53	Sodium, ICP-MS, Microwave (%)	3	3	0.0032	0.0009	0.0032	0.0009	0.0005	28.79%	0.0002	9.48%
035.42	Sodium, ICP, Open vessel (%)	5	2	0.0139	0.0148	0.0139	0.0148				7.61%
035.31	Sodium, AAS, Dry ash (%)	1	1	0.0080							
036.43	Sulfur, ICP, Microwave (%)	7	**7**	0.0391	0.0026	**0.0391**	0.0029	0.0014	7.52%	0.0023	6.52%
036.42	Sulfur, ICP, Open vessel (%)	3	3	0.0379	0.0090	0.0379	0.0090	0.0052	23.80%	0.0019	6.55%
036.04	Sulfur, LECO (%)	1	1	0.0224							
037.44	Zinc, ICP, Dry ash (ppm)	27	**27**	8.283	1.183	**8.219**	0.6275	0.1510	7.64%	0.4093	11.65%
037.43	Zinc, ICP, Microwave (ppm)	17	**15**	11.40	2.350	**11.22**	1.721	0.5556	15.35%	0.6596	11.12%
037.41	Zinc, ICP, Dry ash (ppm)	8	**8**	9.232	3.233	**8.708**	1.742	0.7699	20.01%	0.8847	11.55%
037.53	Zinc, ICP-MS, Microwave (ppm)	5	5	10.04	0.7010	10.04	0.7010	0.3135	6.98%	0.3339	11.31%
037.42	Zinc, ICP, Open vessel (ppm)	4	3	9.415	1.662	9.415	1.662	1.175	17.65%		11.41%
037.31	Zinc, AAS, Dry ash (ppm)	2	2	10.91	1.916						
037.52	Zinc, ICP-MS, Open vessel (ppm)	1	1	28.21							
038.43	Molybdenum, ICP, Microwave (ppm)	3	3	10.35	2.442	10.35	2.442	1.410	23.60%	0.4627	11.25%
038.53	Molybdenum, ICP-MS, Microwave (ppm)	2	2	6.475	2.086						
038.41	Molybdenum, ICP, Dry ash (ppm)	1	1	7.433							
040.53	Barium, ICP-MS, Microwave (ppm)	1	1	10.00							
041.53	Vanadium, ICP-MS, Microwave (ppm)	1	1	0.4562							
105.00	Thiamine, LC (ppm)	1	1	1.400							
108.99	Vitamin D3, Miscellaneous (KU / kg)	1	1	0.0680							
109.02	Vitamin E, LC (IU / kg)	1	1	36.21							
120.00	Alanine, Post-col Ninhydrin Der (%)	2	2	0.1425	0.0035						
120.05	Alanine, Pre-col AQC Der (%)	1	1	0.1385							
120.99	Alanine, Miscellaneous (%)	1	1	0.0550							
121.00	Arginine, Post-col Ninhydrin Der (%)	2	2	0.1175	0.0318						
121.99	Arginine, Miscellaneous (%)	1	1	0.0335							
122.00	Aspartic, Post-col Ninhydrin Der (%)	2	2	0.2050	0.0071						
122.05	Aspartic, Pre-col AQC Der (%)	1	1	0.2090							
122.99	Aspartic, Miscellaneous (%)	1	1	0.0635							
124.00	Cysteine/Cystine, PAO Post-col Ninhydri (%)	2	1	0.0300							
124.99	Cysteine/Cystine, Miscellaneous (%)	1	1	0.0300							
125.00	Glutamic, Post-col Ninhydrin Der (%)	2	2	0.2850	0.0354						
125.05	Glutamic, Pre-col AQC Der (%)	1	1	0.2950							
125.99	Glutamic, Miscellaneous (%)	1	1	0.0895							
126.00	Glycine, Post-col Ninhydrin Der (%)	2	2	0.1175	0.0035						
126.05	Glycine, Pre-col AQC Der (%)	1	1	0.0910							
126.99	Glycine, Miscellaneous (%)	1	1	0.0440							
127.00	Histidine, Post-col Ninhydrin Der (%)	2	1	0.0400							
128.00	Isoleucine, Post-col Ninhydrin Der (%)	2	1	0.0700							
128.99	Isoleucine, Miscellaneous (%)	1	1	0.0285							

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129.00	Leucine, Post-col Ninhydrin Der (%)	2	2	0.1575	0.0177						
129.05	Leucine, Pre-col AQC Der (%)	1	1	0.1665							
129.99	Leucine, Miscellaneous (%)	1	1	0.0535							
130.99	L-Lysine, Miscellaneous (%)	1	1	0.0280							
130.00	L-Lysine, Post-col Ninhydrin Der (%)	1		0.1000							
131.05	Methionine, PAO Pre-col AQC Der (%)	1	1	0.0390							
131.99	Methionine, Miscellaneous (%)	1	1	0.0200							
131.00	Methionine, PAO Post-col Ninhydrin Der (%)	1		0.1000							
132.00	Phenylalanine, Post-col Ninhydrin Der (%)	1	1	0.1050							
132.99	Phenylalanine, Miscellaneous (%)	1	1	0.0330							
133.00	Proline, Post-col Ninhydrin Der (%)	1	1	0.2250							
133.05	Proline, Pre-col AQC Der (%)	1	1	0.1660							
133.99	Proline, Miscellaneous (%)	1	1	0.0415							
134.05	Serine, Pre-col AQC Der (%)	1	1	0.0935							
134.99	Serine, Miscellaneous (%)	1	1	0.0300							
134.00	Serine, Post-col Ninhydrin Der (%)	1		0.1000							
135.05	Threonine, Pre-col AQC Der (%)	1	1	0.0865							
135.99	Threonine, Miscellaneous (%)	1	1	0.0350							
135.00	Threonine, Post-col Ninhydrin Der (%)	1		0.1000							
136.99	Tryptophan, Miscellaneous (%)	1	1	0.0135							
137.05	Tyrosine, Pre-col AQC Der (%)	1	1	0.0410							
137.00	Tyrosine, Post-col Ninhydrin Der (%)	1		0.1000							
138.00	Valine, Post-col Ninhydrin Der (%)	1	1	0.1500							
138.05	Valine, Pre-col AQC Der (%)	1	1	0.1280							
138.99	Valine, Miscellaneous (%)	1	1	0.0340							
400.99	Water Activity, Miscellaneous (Units)	2	2	0.4130	0.0113						
400.01	Water Activity, Aqualab chilled mirror (Units)	1	1	0.4160							
516.53	Arsenic, Total (As), ICP-MS, Microwave (ppm)	2	2	0.1807	0.0054						
516.43	Arsenic, Total (As), ICP, Microwave (ppm)	1		0.8900							
518.53	Cadmium, ICP-MS, Microwave (ppm)	2	2	0.0123	0.0017						
518.41	Cadmium, ICP, Dry ash (ppm)	1	1	0.0242							
518.43	Cadmium, ICP, Microwave (ppm)	2	1	0.0344							
520.43	Chromium, Total (Cr), ICP, Microwave (ppm)	3	3	149.9	111.6	149.9	111.6	64.43	74.47%	5.529	7.53%
520.41	Chromium, Total (Cr), ICP, Dry ash (ppm)	1	1	55.86							
520.53	Chromium, Total (Cr), ICP-MS, Microwave (ppm)	1	1	79.50							
526.53	Lead, ICP-MS, Microwave (ppm)	2	2	0.0125	0.0021						
526.41	Lead, ICP, Dry ash (ppm)	1	1	0.1853							
526.43	Lead, ICP, Microwave (ppm)	1	1	0.5317							
529.99	Mercury, Miscellaneous (ppb)	2	1	1.053							
539.43	Nickel, ICP, Microwave (ppm)	3	3	44.18	9.324	44.18	9.324	5.383	21.10%	4.982	9.05%

Test Material Code # 202543 **(Precision Report Follows)** **Issue Date : 09/30/2025**

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 (Rob R-bar)	Thompson Horwitz %RSD
539.41	Nickel, ICP, Dry ash (ppm)	1	1	46.16							
539.53	Nickel, ICP-MS, Microwave (ppm)	1	1	48.32							

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.

Association of American Feed Control Officials

ANAB ACCREDITED ISO/IEC 17043 PROFICIENCY TESTING PROVIDER

AAFCO PTP Pet Food Ingredient Scheme

Pet Food Ingredient Scheme
Rice Hulls
Test Material Code # 202543

Method Precision Report

 # Methods Reported: 47
 # Labs Reporting: 98
Issue Date : 09/30/2025

Method Code	Analyte and Method	Total # Labs Submitting	# Labs used in Precision Calcs	Precision Mean	Precision SD	Between Labs sL	Within Labs sr	Reproducibility sR	Between Labs %RSD	Within Labs %rsd	Reproducibility %RSD	sR/sr
001.07	Loss on Drying, 104°C 3 hr, in malt (%)	56	52	6.966	0.2917	0.1945	0.0822	0.2112	2.78%	1.17%	3.02%	2.567
001.99	Loss on Drying, Miscellaneous (%)	6	5	5.998	0.9872	0.9668	0.1475	0.9780	15.62%	2.38%	15.80%	6.629
002.01	Protein, Crude, Auto Kjel-Foss (%)	5	5	2.459	0.1760	0.1688	0.0703	0.1828	6.86%	2.86%	7.43%	2.603
002.06	Protein, Crude, Combustion Nitrogen Analyzer (%)	85	80	2.353	0.2432	0.1595	0.0872	0.1818	6.86%	3.75%	7.82%	2.084
003.00	Fat, Crude, Diethyl Ether Ext., Direct (%)	13	12	0.4704	0.0917	0.0817	0.0438	0.0927	17.77%	9.52%	20.16%	2.118
003.09	Fat, Crude, Randall, Diethyl Ether Ext (%)	8	8	0.4863	0.1171	0.1168	0.0122	0.1174	24.02%	2.52%	24.15%	9.587
003.10	Fat, Crude, Randall, Pet Ether (%)	14	12	0.4886	0.0906	0.0601	0.0442	0.0746	12.76%	9.38%	15.83%	1.689
004.00	Fiber, Crude, Asbestos Free (%)	5	5	47.90	2.336	2.235	0.9625	2.433	4.67%	2.01%	5.08%	2.528
004.07	Fiber, Crude, ANKOM (%)	26	23	47.39	1.663	1.347	0.7110	1.523	2.85%	1.51%	3.23%	2.142
005.00	Ash, 2h @ 600°C (%)	58	54	15.02	0.2040	0.1852	0.0874	0.2048	1.23%	0.58%	1.36%	2.344
005.03	Ash, Microwave furnace (%)	9	8	15.14	0.2177		0.1511			0.99%		
005.05	Ash, 3h @ 550°C (%)	13	13	15.01	0.2482	0.2429	0.0716	0.2533	1.62%	0.48%	1.69%	3.536
008.08	Fiber, Acid Detergent, Filter Bag - ANKOM (%)	13	11	64.63	4.887	3.156	0.6464	3.222	4.83%	0.99%	4.93%	4.984
009.09	Fiber, Neutral Detergent, Filter Bag - ANKOM (%)	10	10	70.93	2.468	2.403	0.7948	2.531	3.39%	1.12%	3.57%	3.184
010.99	Moisture, Miscellaneous (%)	5	5	6.933	0.5627	0.5590	0.0904	0.5663	8.06%	1.30%	8.17%	6.267
011.01	Loss on Drying, HT, 135°C 2hr (%)	19	17	7.047	0.6349	0.3419	0.1114	0.3596	4.77%	1.55%	5.01%	3.229
013.02	Fat, Pretreat, Mojonnier, Bak Ext, Acid hydrolysis (%)	11	11	0.7919	0.3277	0.3184	0.1098	0.3368	40.20%	13.87%	42.53%	3.067
019.42	Calcium, ICP, Open vessel (%)	5	5	0.0623	0.0022	0.0022	0.0008	0.0023	3.47%	1.34%	3.72%	2.774
019.43	Calcium, ICP, Microwave (%)	19	18	0.0688	0.0034	0.0032	0.0018	0.0037	4.63%	2.63%	5.32%	2.023
019.44	Calcium, ICP, Dry ash (%)	31	25	0.0624	0.0043	0.0041	0.0000	0.0041	6.58%	0.00%	6.58%	
019.53	Calcium, ICP-MS, Microwave (%)	9	7	0.0673	0.0032	0.0034	0.0004	0.0035	5.10%	0.60%	5.14%	8.626
022.43	Copper, ICP, Microwave (ppm)	24	19	3.163	0.5517	0.3269	0.0738	0.3351	10.38%	2.34%	10.64%	4.541
022.44	Copper, ICP, Dry ash (ppm)	31	29	2.476	0.2331	0.1223	0.1828	0.2200	5.00%	7.48%	9.00%	1.203
025.41	Iron, ICP, Dry ash (ppm)	7	7	404.8	94.89	94.46	12.83	95.32	23.34%	3.17%	23.55%	7.430
025.43	Iron, ICP, Microwave (ppm)	14	13	551.0	323.5	238.4	25.35	239.7	48.64%	5.17%	48.91%	9.459
027.41	Magnesium, ICP, Dry ash (%)	5	5	0.0324	0.0029	0.0028	0.0009	0.0029	8.62%	2.86%	9.08%	3.169
027.42	Magnesium, ICP, Open vessel (%)	5	5	0.0324	0.0025	0.0024	0.0005	0.0025	7.53%	1.47%	7.67%	5.229
027.43	Magnesium, ICP, Microwave (%)	25	24	0.0380	0.0026	0.0024	0.0013	0.0027	6.35%	3.30%	7.15%	2.168

Test Material Code # 202543 **Issue Date : 09/30/2025**

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
027.44	Magnesium, ICP, Dry ash (%)	29	27	0.0326	0.0015	0.0013	0.0008	0.0015	3.93%	2.52%	4.67%	1.851
028.41	Manganese, ICP, Dry ash (ppm)	7	7	108.6	11.53	11.21	3.852	11.85	10.32%	3.55%	10.91%	3.076
028.43	Manganese, ICP, Microwave (ppm)	25	24	133.8	7.568	5.240	4.247	6.745	3.94%	3.20%	5.08%	1.588
028.44	Manganese, ICP, Dry ash (ppm)	28	27	110.8	6.679	4.585	3.207	5.595	4.17%	2.92%	5.09%	1.745
031.41	Phosphorus, ICP, Dry ash (%)	5	5	0.0510	0.0019	0.0013	0.0021	0.0024	2.50%	4.07%	4.78%	1.173
031.42	Phosphorus, ICP, Open vessel (%)	5	5	0.0504	0.0024	0.0021	0.0014	0.0025	4.26%	2.69%	5.04%	1.870
031.43	Phosphorus, ICP, Microwave (%)	24	22	0.0587	0.0052	0.0037	0.0034	0.0050	6.19%	5.70%	8.41%	1.476
031.44	Phosphorus, ICP, Dry ash (%)	30	28	0.0524	0.0047	0.0033	0.0035	0.0049	6.40%	6.80%	9.34%	1.372
032.41	Potassium, ICP, Dry ash (%)	6	6	0.1399	0.0107	0.0086	0.0090	0.0124	6.16%	6.41%	8.89%	1.388
032.42	Potassium, ICP, Open vessel (%)	5	5	0.1787	0.0062	0.0055	0.0040	0.0068	3.10%	2.23%	3.82%	1.710
032.43	Potassium, ICP, Microwave (%)	24	23	0.1857	0.0162	0.0152	0.0079	0.0172	8.21%	4.25%	9.25%	2.175
032.44	Potassium, ICP, Dry ash (%)	29	28	0.1337	0.0098	0.0053	0.0044	0.0069	4.01%	3.35%	5.22%	1.559
035.41	Sodium, ICP, Dry ash (%)	33	11	0.0112	0.0070	0.0026	0.0002	0.0026	27.89%	1.79%	27.95%	15.59
035.43	Sodium, ICP, Microwave (%)	15	13	0.0063	0.0030	0.0031	0.0002	0.0031	48.94%	2.94%	49.02%	16.68
036.43	Sulfur, ICP, Microwave (%)	7	7	0.0391	0.0026	0.0023	0.0016	0.0028	5.93%	4.20%	7.27%	1.732
037.41	Zinc, ICP, Dry ash (ppm)	8	7	9.232	3.233	1.450	0.6308	1.581	17.68%	7.69%	19.28%	2.507
037.43	Zinc, ICP, Microwave (ppm)	17	14	11.40	2.350	1.558	0.4836	1.632	14.25%	4.42%	14.92%	3.374
037.44	Zinc, ICP, Dry ash (ppm)	27	25	8.283	1.183	0.4090	0.4395	0.6004	4.97%	5.35%	7.30%	1.366
037.53	Zinc, ICP-MS, Microwave (ppm)	5	5	10.04	0.7010	0.6740	0.2725	0.7269	6.71%	2.71%	7.24%	2.668

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