



AAFCO
Proficiency Testing Program



Animal Feed Scheme

Equine Feed

Test Material Code # 201727

Method Summary Report

(Precision Report Follows)

Methods Reported: 429

Labs Reporting: 199

Issue Date : 08/31/2017

| Method Code | Analyte and Method | Total # Labs Submitting | # Labs in Robust Calcs | Raw Mean | Raw SD | Assigned Value - Robust Mean | AAFCO PT fp - Robust sd | Uncertainty (U) Robust | % RSD - Robust | Average Range (R-bar) | Horwitz %RSD |
|-------------|---|-------------------------|------------------------|----------|---------|------------------------------|-------------------------|------------------------|----------------|-----------------------|--------------|
| 000.02 | Urea, As protein, Colorimetric (%) | 1 | 1 | 0.60000 | | | | | | | |
| 001.00 | Loss on Drying, Vac 95°C 5 hr (%) | 6 | 6 | 9.2034 | 0.52258 | 9.2034 | 0.59261 | 0.30241 | 6.44% | 0.16717 | 2.86% |
| 001.03 | Loss on Drying, Low temp. methods (%) | 7 | 7 | 9.2529 | 0.06933 | 9.2529 | 0.07862 | 0.03715 | 0.85% | 0.05143 | 2.86% |
| 001.05 | Loss on Drying, LECO (%) | 2 | 2 | 9.3725 | 0.17324 | | | | | | |
| 001.07 | Loss on Drying, 104°C 3 hr, in malt (%) | 40 | 39 | 9.3040 | 0.45104 | 9.2769 | 0.26295 | 0.05263 | 2.83% | 0.16467 | 2.86% |
| 001.08 | Loss on Drying, 102°C 16 hr, in meat (%) | 2 | 2 | 9.1700 | 0.11314 | | | | | | |
| 001.99 | Loss on Drying, Miscellaneous (%) | 22 | 22 | 9.1226 | 0.50660 | 9.1586 | 0.48190 | 0.12843 | 5.26% | 0.11821 | 2.87% |
| 002.00 | Protein, Crude (%) | 2 | 2 | 17.213 | 0.33588 | | | | | | |
| 002.01 | Protein, Auto Kjel-Foss (%) | 13 | 13 | 17.155 | 0.15381 | 17.155 | 0.17405 | 0.06034 | 1.01% | 0.05215 | 2.41% |
| 002.02 | Protein, Semiauto Autoanalyzer (%) | 3 | 3 | 17.254 | 0.16535 | 17.254 | 0.16535 | 0.09546 | 0.96% | 0.07287 | 2.41% |
| 002.03 | Protein, Hach Method (%) | 1 | 1 | 18.860 | | | | | | | |
| 002.04 | Protein, Copper Catalyst (%) | 4 | 4 | 17.228 | 0.15058 | 17.228 | 0.15058 | 0.07529 | 0.87% | 0.19500 | 2.41% |
| 002.05 | Protein, Copper, Boric Acid (%) | 34 | 34 | 17.288 | 0.19285 | 17.293 | 0.18461 | 0.03958 | 1.07% | 0.09852 | 2.40% |
| 002.06 | Protein, Combustion Nitrogen Analyzer (%) | 125 | 122 | 17.589 | 0.32580 | 17.596 | 0.27960 | 0.03164 | 1.59% | 0.16690 | 2.38% |
| 002.08 | Protein, Cu/Ti (%) | 2 | 2 | 16.780 | 0.31753 | | | | | | |
| 002.10 | Protein, Block dig/distillation (%) | 1 | 1 | 17.565 | | | | | | | |
| 002.11 | Protein, NIR (%) | 5 | 5 | 17.292 | 1.8082 | 17.292 | 1.8082 | 0.80865 | 10.46% | 0.04400 | 2.40% |
| 002.99 | Protein, Miscellaneous (%) | 2 | 2 | 17.445 | 0.28991 | | | | | | |
| 003.00 | Fat, Eth Ext., Direct (%) | 11 | 11 | 8.1138 | 0.85454 | 8.3229 | 0.30849 | 0.11627 | 3.71% | 0.10150 | 2.91% |
| 003.01 | Fat, Ind Eth Ext (13th ed.), Indirect (%) | 1 | 1 | 2.9150 | | | | | | | |
| 003.06 | Fat, Pet Ether (%) | 20 | 20 | 8.3597 | 0.16972 | 8.3649 | 0.17496 | 0.04890 | 2.09% | 0.10320 | 2.91% |
| 003.09 | Fat, Soxtec, Eth Ext (%) | 20 | 20 | 8.3183 | 0.30534 | 8.3526 | 0.24223 | 0.06771 | 2.90% | 0.09608 | 2.91% |
| 003.10 | Fat, Soxtec, Pet Ether (%) | 29 | 29 | 8.0694 | 0.24824 | 8.0852 | 0.24421 | 0.05669 | 3.02% | 0.10688 | 2.92% |
| 003.11 | Fat, NIR (%) | 4 | 4 | 7.1300 | 1.7664 | 7.1300 | 1.7664 | 0.88320 | 24.77% | 0.05500 | 2.98% |
| 003.12 | Fat, Hexane Ext (%) | 5 | 5 | 8.1730 | 0.31290 | 8.1730 | 0.31290 | 0.13993 | 3.83% | 0.09400 | 2.92% |
| 003.13 | Fat, Soxtec, Hexane Ext. (%) | 7 | 6 | 8.2691 | 0.09118 | 8.2685 | 0.10215 | 0.05213 | 1.24% | 0.03850 | 2.91% |
| 003.14 | Fat, Ankom (%) | 44 | 42 | 8.2337 | 0.42594 | 8.2573 | 0.31910 | 0.06155 | 3.86% | 0.13345 | 2.91% |
| 003.99 | Fat, Miscellaneous (%) | 6 | 6 | 6.9883 | 1.5416 | 6.9883 | 1.7482 | 0.89214 | 25.02% | 0.13333 | 2.99% |
| 004.00 | Fiber, Crude, Asbestos Free (%) | 16 | 16 | 14.586 | 0.43543 | 14.569 | 0.33658 | 0.10518 | 2.31% | 0.35797 | 2.62% |
| 004.01 | Fiber, Sing Filt (%) | 1 | 1 | 14.750 | | | | | | | |

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|-------------|--|-------------------------|------------------------|----------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------------|--------------|
| 004.03 | Fiber, Fritted Glass (%) | 5 | 5 | 14.500 | 1.7575 | 14.500 | 1.7575 | 0.78598 | 12.12% | 0.71566 | 2.63% |
| 004.06 | Fiber, Fibertec (%) | 26 | 25 | 14.724 | 0.85665 | 14.615 | 0.61353 | 0.15338 | 4.20% | 0.14388 | 2.62% |
| 004.07 | Fiber, ANKOM (%) | 64 | 64 | 14.569 | 1.3066 | 14.626 | 0.83529 | 0.13051 | 5.71% | 0.26115 | 2.61% |
| 004.11 | Fiber, NIR (%) | 4 | 4 | 10.381 | 0.81141 | 10.381 | 0.81141 | 0.40571 | 7.82% | 0.17250 | 2.81% |
| 004.99 | Fiber, Miscellaneous (%) | 3 | 3 | 13.565 | 0.40271 | 13.565 | 0.40271 | 0.28476 | 2.97% | 0.39667 | 2.70% |
| 005.00 | Ash, 2h @ 600°C (%) | 89 | 86 | 7.7874 | 0.21082 | 7.7749 | 0.19449 | 0.02622 | 2.50% | 0.08266 | 2.94% |
| 005.02 | Ash, LECO (%) | 2 | 2 | 7.9975 | 0.22981 | | | | | | |
| 005.04 | Ash, Acid insoluble (%) | 1 | 1 | 0.82000 | | | | | | | |
| 005.05 | Ash, 3h @ 550°C (%) | 34 | 33 | 7.9889 | 0.16453 | 7.9951 | 0.17188 | 0.03740 | 2.15% | 0.03148 | 2.93% |
| 005.11 | Ash, NIR (%) | 5 | 5 | 11.754 | 2.3544 | 11.754 | 2.3544 | 1.1772 | 20.03% | 0.26000 | 2.76% |
| 005.99 | Ash, Miscellaneous (%) | 11 | 11 | 7.9964 | 0.33410 | 8.0483 | 0.24686 | 0.09304 | 3.07% | 0.06000 | 2.92% |
| 006.00 | Total sugars, As sucrose (%) | 1 | 1 | 3.9000 | | | | | | | |
| 006.01 | Total sugars, Mod. Fehling Soln (%) | 1 | 1 | 4.4285 | | | | | | | |
| 006.99 | Total sugars, Miscellaneous (%) | 1 | 1 | 4.2000 | | | | | | | |
| 008.02 | Fiber, Acid Detergent (%) | 15 | 15 | 18.340 | 1.7660 | 18.480 | 1.1187 | 0.36106 | 6.05% | 0.26819 | 2.33% |
| 008.05 | Fiber, Acid Detergent-Hach (%) | 1 | 1 | 19.550 | | | | | | | |
| 008.08 | Fiber, Acid Detergent, ANKOM (%) | 43 | 41 | 18.855 | 1.2778 | 18.771 | 1.1084 | 0.21637 | 5.90% | 0.31436 | 2.31% |
| 008.99 | Fiber, Acid Detergent Miscellaneous (%) | 6 | 5 | 17.842 | 2.6847 | 18.998 | 0.84123 | 0.47026 | 4.43% | 0.14000 | 2.29% |
| 009.04 | Fiber, Neutral Det-No ENZ Pretreat (%) | 1 | 1 | 32.775 | | | | | | | |
| 009.07 | Fiber, Neutral Det-ENZ Pretreat (%) | 12 | 12 | 35.601 | 2.0925 | 35.653 | 2.2592 | 0.81523 | 6.34% | 0.61793 | 1.67% |
| 009.09 | Fiber, Neutral Detergent, ANKOM (%) | 44 | 43 | 33.847 | 1.5869 | 33.658 | 1.2523 | 0.23872 | 3.72% | 0.38170 | 1.72% |
| 009.99 | Fiber, Neutral Det Miscellaneous (%) | 2 | 2 | 35.043 | 0.51202 | | | | | | |
| 010.03 | Moisture, Karl-Fischer (%) | 3 | 3 | 9.4350 | 0.34044 | 9.4350 | 0.34044 | 0.19655 | 3.61% | 0.37667 | 2.85% |
| 010.11 | Moisture, NIR (%) | 3 | 3 | 9.9700 | 1.2435 | 9.9700 | 1.2435 | 0.71794 | 12.47% | 0.08667 | 2.83% |
| 010.99 | Moisture, Miscellaneous (%) | 22 | 21 | 9.5031 | 0.47748 | 9.5016 | 0.53837 | 0.14685 | 5.67% | 0.08129 | 2.85% |
| 011.01 | Loss on Drying, 135°C 2hr (%) | 68 | 67 | 10.042 | 0.60729 | 10.102 | 0.45295 | 0.06917 | 4.48% | 0.12980 | 2.82% |
| 011.02 | Loss on Drying, 130°C for 2 hours (%) | 3 | 3 | 10.107 | 0.22418 | 10.107 | 0.22418 | 0.12943 | 2.22% | 0.14667 | 2.82% |
| 011.99 | Loss on Drying, High Temp. Methods Miscellaneous | 3 | 3 | 10.280 | 0.54651 | 10.280 | 0.54651 | 0.31553 | 5.32% | 0.23333 | 2.82% |
| 012.00 | Starch, Polarimetric (Ewers) (%) | 10 | 10 | 12.350 | 0.61551 | 12.350 | 0.69798 | 0.27590 | 5.65% | 0.36471 | 2.74% |
| 012.01 | Starch, Megazyme (%) | 9 | 9 | 9.3860 | 1.5808 | 9.5349 | 0.69623 | 0.29010 | 7.30% | 0.60876 | 2.85% |
| 012.03 | Starch, Enzymatic (%) | 5 | 5 | 9.6800 | 0.91647 | 9.6800 | 0.91647 | 0.40986 | 9.47% | 0.25200 | 2.84% |
| 012.04 | Starch, YSI Analyzer (%) | 6 | 6 | 9.9500 | 1.0641 | 9.9599 | 1.1837 | 0.60404 | 11.88% | 0.33000 | 2.83% |
| 012.11 | Starch, NIR (%) | 2 | 2 | 15.448 | 5.4624 | | | | | | |
| 012.99 | Starch, Miscellaneous (%) | 1 | 1 | 29.370 | | | | | | | |
| 013.00 | Fat, Acid hydrolysis (%) | 21 | 21 | 8.9823 | 0.90114 | 9.1137 | 0.56809 | 0.15496 | 6.23% | 0.14580 | 2.87% |
| 013.02 | Fat, Mojonier, Bak Ext (%) | 17 | 16 | 9.7093 | 0.82060 | 9.7524 | 0.82551 | 0.25797 | 8.46% | 0.18661 | 2.84% |
| 013.10 | Fat, Soxtec-Acid Hydrolysis (%) | 6 | 6 | 9.0880 | 0.70710 | 8.9597 | 0.48016 | 0.24503 | 5.36% | 0.10865 | 2.88% |
| 013.13 | Fat, Ankom- Acid Hydrolysis (%) | 8 | 8 | 10.001 | 0.90877 | 10.010 | 1.0108 | 0.44674 | 10.10% | 0.26326 | 2.83% |

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|-------------|---|-------------------------|------------------------|----------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------------|--------------|
| 015.41 | Aluminum, ICP, Dry ash (mg / kg (ppm)) | 4 | 4 | 146.17 | 19.954 | 146.17 | 19.954 | 9.9770 | 13.65% | 14.048 | 7.55% |
| 015.42 | Aluminum, ICP, Open vessel (mg / kg (ppm)) | 1 | 1 | 124.80 | | | | | | | |
| 015.43 | Aluminum, ICP, Microwave (mg / kg (ppm)) | 5 | 5 | 119.18 | 15.271 | 119.18 | 15.271 | 6.8294 | 12.81% | 11.892 | 7.79% |
| 015.52 | Aluminum, ICP-MS, Open vessel (mg / kg (ppm)) | 1 | 1 | 58.500 | | | | | | | |
| 015.53 | Aluminum, ICP-MS, Microwave (mg / kg (ppm)) | 1 | 1 | 169.50 | | | | | | | |
| 017.41 | Boron, ICP, Dry ash (mg / kg (ppm)) | 4 | 4 | 16.209 | 1.6428 | 16.209 | 1.6428 | 0.82140 | 10.14% | 1.1625 | 10.52% |
| 017.42 | Boron, ICP, Open vessel (mg / kg (ppm)) | 4 | 4 | 14.809 | 2.3361 | 14.809 | 2.3361 | 1.1681 | 15.77% | 0.41170 | 10.66% |
| 017.43 | Boron, ICP, Microwave (mg / kg (ppm)) | 4 | 4 | 13.490 | 3.7158 | 13.490 | 3.7158 | 1.8579 | 27.54% | 0.34000 | 10.81% |
| 019.00 | Calcium, Ox-Mn04 Vol. (%) | 14 | 14 | 1.1428 | 0.05737 | 1.1455 | 0.05877 | 0.01963 | 5.13% | 0.01401 | 3.92% |
| 019.02 | Calcium, Hach Method (%) | 1 | 1 | 1.6400 | | | | | | | |
| 019.03 | Calcium, Semiauto (Autoanalyzer) (%) | 1 | 1 | 1.1780 | | | | | | | |
| 019.08 | Calcium, EDTA (%) | 7 | 7 | 1.2069 | 0.15355 | 1.1610 | 0.04499 | 0.02126 | 3.88% | 0.04869 | 3.91% |
| 019.09 | Calcium, Ion-selective electrode (%) | 1 | 1 | 1.2790 | | | | | | | |
| 019.31 | Calcium, AAS, Dry ash (%) | 24 | 23 | 1.1536 | 0.05201 | 1.1522 | 0.05205 | 0.01357 | 4.52% | 0.02630 | 3.92% |
| 019.32 | Calcium, AAS, Open vessel (%) | 4 | 4 | 1.1700 | 0.03342 | 1.1700 | 0.03342 | 0.01930 | 2.86% | 0.04300 | 3.91% |
| 019.33 | Calcium, AAS, Microwave (%) | 3 | 3 | 1.1765 | 0.06068 | 1.1765 | 0.06068 | 0.03503 | 5.16% | 0.05567 | 3.90% |
| 019.41 | Calcium, ICP, Dry ash (%) | 26 | 25 | 1.1476 | 0.05355 | 1.1444 | 0.05385 | 0.01346 | 4.71% | 0.01946 | 3.92% |
| 019.42 | Calcium, ICP, Open vessel (%) | 20 | 20 | 1.1826 | 0.07714 | 1.1805 | 0.07470 | 0.02088 | 6.33% | 0.02381 | 3.90% |
| 019.43 | Calcium, ICP, Microwave (%) | 26 | 25 | 1.1627 | 0.04784 | 1.1590 | 0.04441 | 0.01110 | 3.83% | 0.02515 | 3.91% |
| 019.44 | Calcium, ICP, Dry ash (%) | 1 | 1 | 1.1250 | | | | | | | |
| 019.51 | Calcium, ICP-MS, Dry ash (%) | 1 | 1 | 1.0985 | | | | | | | |
| 019.52 | Calcium, ICP-MS, Open vessel (%) | 3 | 3 | 1.1445 | 0.05492 | 1.1445 | 0.05492 | 0.03171 | 4.80% | 0.05167 | 3.92% |
| 019.53 | Calcium, ICP-MS, Microwave (%) | 4 | 4 | 1.2106 | 0.03453 | 1.2106 | 0.03453 | 0.01727 | 2.85% | 0.03325 | 3.89% |
| 019.99 | Calcium, Miscellaneous (%) | 6 | 6 | 1.1692 | 0.08206 | 1.1692 | 0.09306 | 0.04749 | 7.96% | 0.02167 | 3.91% |
| 021.31 | Cobalt, AAS, Dry ash (mg / kg (ppm)) | 3 | 3 | 12.973 | 1.1833 | 12.973 | 1.1833 | 0.68318 | 9.12% | 0.56667 | 10.88% |
| 021.34 | Cobalt, AAS, Graphite furnace (mg / kg (ppm)) | 1 | 1 | 15.645 | | | | | | | |
| 021.41 | Cobalt, ICP, Dry ash (mg / kg (ppm)) | 2 | 2 | 11.618 | 3.1431 | | | | | | |
| 021.42 | Cobalt, ICP, Open vessel (mg / kg (ppm)) | 4 | 4 | 9.2477 | 1.2200 | 9.2477 | 1.2200 | 0.61000 | 13.19% | 0.68480 | 11.45% |
| 021.43 | Cobalt, ICP, Microwave (mg / kg (ppm)) | 5 | 5 | 10.816 | 2.7412 | 10.816 | 2.7412 | 1.3706 | 25.34% | 0.79326 | 11.18% |
| 021.52 | Cobalt, ICP-MS, Open vessel (mg / kg (ppm)) | 2 | 2 | 6.9025 | 0.39244 | | | | | | |
| 021.53 | Cobalt, ICP-MS, Microwave (mg / kg (ppm)) | 2 | 2 | 5.9934 | 0.30243 | | | | | | |
| 022.31 | Copper, AAS, Dry ash (mg / kg (ppm)) | 18 | 18 | 86.221 | 8.2685 | 86.565 | 8.5548 | 2.5205 | 9.88% | 2.3536 | 8.17% |
| 022.32 | Copper, AAS, Open vessel (mg / kg (ppm)) | 3 | 3 | 93.928 | 7.2566 | 93.928 | 7.2566 | 4.1896 | 7.73% | 5.4567 | 8.07% |
| 022.33 | Copper, AAS, Microwave (mg / kg (ppm)) | 3 | 3 | 93.094 | 8.1573 | 93.094 | 8.1573 | 5.7681 | 8.76% | 3.0387 | 8.09% |
| 022.41 | Copper, ICP, Dry ash (mg / kg (ppm)) | 21 | 21 | 80.821 | 11.780 | 81.825 | 11.098 | 3.0273 | 13.56% | 4.2954 | 8.24% |
| 022.42 | Copper, ICP, Open vessel (mg / kg (ppm)) | 20 | 20 | 95.392 | 10.105 | 96.198 | 6.1445 | 1.7174 | 6.39% | 3.7510 | 8.05% |
| 022.43 | Copper, ICP, Microwave (mg / kg (ppm)) | 23 | 23 | 93.338 | 6.1741 | 93.066 | 5.5351 | 1.4427 | 5.95% | 2.7956 | 8.09% |
| 022.44 | Copper, ICP, Dry ash (mg / kg (ppm)) | 1 | 1 | 91.400 | | | | | | | |

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|-------------|---|-------------------------|------------------------|----------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------------|--------------|
| 022.51 | Copper, ICP-MS, Dry ash (mg / kg (ppm)) | 1 | 1 | 85.250 | | | | | | | |
| 022.52 | Copper, ICP-MS, Open vessel (mg / kg (ppm)) | 2 | 2 | 95.820 | 2.7860 | | | | | | |
| 022.53 | Copper, ICP-MS, Microwave (mg / kg (ppm)) | 2 | 2 | 93.425 | 5.9043 | | | | | | |
| 022.99 | Copper, Miscellaneous (mg / kg (ppm)) | 5 | 5 | 92.490 | 9.8769 | 92.490 | 9.8769 | 4.4171 | 10.68% | 1.7840 | 8.09% |
| 023.01 | Fluorine, Ion Sel Elect (mg / kg (ppm)) | 1 | 1 | 9.2000 | | | | | | | |
| 024.01 | Iodine, Elm-Cald (mg / kg (ppm)) | 1 | 1 | 4.0000 | | | | | | | |
| 024.03 | Iodine, Ion-selective electrode (mg / kg (ppm)) | 1 | 1 | 4.7850 | | | | | | | |
| 025.31 | Iron, AAS, Dry ash (mg / kg (ppm)) | 18 | 18 | 633.42 | 61.403 | 632.10 | 66.707 | 19.654 | 10.55% | 23.615 | 6.06% |
| 025.32 | Iron, AAS, Open vessel (mg / kg (ppm)) | 2 | 2 | 638.28 | 49.886 | | | | | | |
| 025.33 | Iron, AAS, Microwave (mg / kg (ppm)) | 2 | 2 | 723.25 | 93.344 | | | | | | |
| 025.41 | Iron, ICP, Dry ash (mg / kg (ppm)) | 22 | 21 | 600.49 | 68.429 | 611.50 | 41.713 | 11.378 | 6.82% | 9.0720 | 6.09% |
| 025.42 | Iron, ICP, Open vessel (mg / kg (ppm)) | 17 | 17 | 519.94 | 160.64 | 535.11 | 147.94 | 44.849 | 27.65% | 27.492 | 6.21% |
| 025.43 | Iron, ICP, Microwave (mg / kg (ppm)) | 21 | 20 | 594.14 | 90.784 | 608.03 | 58.955 | 16.479 | 9.70% | 18.195 | 6.10% |
| 025.51 | Iron, ICP-MS, Dry ash (mg / kg (ppm)) | 1 | 1 | 608.00 | | | | | | | |
| 025.52 | Iron, ICP-MS, Open vessel (mg / kg (ppm)) | 3 | 3 | 444.86 | 147.73 | 444.86 | 147.73 | 85.292 | 33.21% | 23.177 | 6.39% |
| 025.53 | Iron, ICP-MS, Microwave (mg / kg (ppm)) | 2 | 2 | 636.58 | 8.5913 | | | | | | |
| 025.99 | Iron, Miscellaneous (mg / kg (ppm)) | 4 | 4 | 641.49 | 34.170 | 641.49 | 34.170 | 17.085 | 5.33% | 3.8750 | 6.05% |
| 027.31 | Magnesium, AAS, Dry ash (%) | 18 | 17 | 0.31219 | 0.01786 | 0.31174 | 0.01570 | 0.00476 | 5.04% | 0.00803 | 4.77% |
| 027.32 | Magnesium, AAS, Open vessel (%) | 3 | 3 | 0.33392 | 0.00657 | 0.33392 | 0.00657 | 0.00465 | 1.97% | 0.00297 | 4.72% |
| 027.33 | Magnesium, AAS, Microwave (%) | 2 | 2 | 0.31790 | 0.04398 | | | | | | |
| 027.35 | Magnesium, AAS, Open vessel (%) | 1 | 1 | 0.36500 | | | | | | | |
| 027.41 | Magnesium, ICP, Dry ash (%) | 23 | 23 | 0.32913 | 0.01521 | 0.32770 | 0.01255 | 0.00327 | 3.83% | 0.00848 | 4.73% |
| 027.42 | Magnesium, ICP, Open vessel (%) | 19 | 18 | 0.33344 | 0.01471 | 0.33430 | 0.01449 | 0.00427 | 4.33% | 0.00978 | 4.72% |
| 027.43 | Magnesium, ICP, Microwave (%) | 24 | 24 | 0.32985 | 0.02157 | 0.32729 | 0.01377 | 0.00351 | 4.21% | 0.00826 | 4.73% |
| 027.44 | Magnesium, ICP, Dry ash (%) | 1 | 1 | 0.31550 | | | | | | | |
| 027.52 | Magnesium, ICP-MS, Open vessel (%) | 3 | 3 | 0.31498 | 0.00446 | 0.31498 | 0.00446 | 0.00257 | 1.42% | 0.02097 | 4.76% |
| 027.53 | Magnesium, ICP-MS, Microwave (%) | 3 | 3 | 0.34965 | 0.00728 | 0.34965 | 0.00728 | 0.00420 | 2.08% | 0.00603 | 4.69% |
| 027.99 | Magnesium, Miscellaneous (%) | 4 | 4 | 0.34750 | 0.02021 | 0.34750 | 0.02021 | 0.01011 | 5.82% | 0.00500 | 4.69% |
| 028.31 | Manganese, AAS, Dry ash (mg / kg (ppm)) | 16 | 15 | 183.24 | 8.5058 | 183.05 | 8.8233 | 2.8477 | 4.82% | 5.4241 | 7.30% |
| 028.32 | Manganese, AAS, Open vessel (mg / kg (ppm)) | 3 | 3 | 192.47 | 14.950 | 192.47 | 14.950 | 8.6314 | 7.77% | 0.93333 | 7.25% |
| 028.33 | Manganese, AAS, Microwave (mg / kg (ppm)) | 2 | 2 | 183.14 | 7.2963 | | | | | | |
| 028.41 | Manganese, ICP, Dry ash (mg / kg (ppm)) | 21 | 21 | 178.36 | 16.296 | 181.09 | 11.288 | 3.0792 | 6.23% | 2.3842 | 7.32% |
| 028.42 | Manganese, ICP, Open vessel (mg / kg (ppm)) | 18 | 18 | 187.47 | 13.685 | 187.25 | 14.961 | 4.4078 | 7.99% | 6.0483 | 7.28% |
| 028.43 | Manganese, ICP, Microwave (mg / kg (ppm)) | 23 | 23 | 185.97 | 9.3884 | 185.47 | 8.4777 | 2.2097 | 4.57% | 3.5594 | 7.29% |
| 028.44 | Manganese, ICP, Dry ash (mg / kg (ppm)) | 2 | 2 | 177.47 | 1.4566 | | | | | | |
| 028.51 | Manganese, ICP-MS, Dry ash (mg / kg (ppm)) | 1 | 1 | 192.90 | | | | | | | |
| 028.52 | Manganese, ICP-MS, Open vessel (mg / kg (ppm)) | 2 | 2 | 195.35 | 4.0305 | | | | | | |
| 028.53 | Manganese, ICP-MS, Microwave (mg / kg (ppm)) | 3 | 3 | 186.93 | 4.9003 | 186.93 | 4.9003 | 3.4650 | 2.62% | 2.7333 | 7.28% |

| 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 |
|-------------|---|-------------------------|------------------------|----------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------------|--------------|
| 028.99 | Manganese, Miscellaneous (mg / kg (ppm)) | 4 | 4 | 193.38 | 14.952 | 193.38 | 14.952 | 8.6325 | 7.73% | 3.5500 | 7.24% |
| 031.00 | Phosphorus, Vol (%) | 1 | 1 | 0.78500 | | | | | | | |
| 031.01 | Phosphorus, Photometric (%) | 41 | 40 | 0.75516 | 0.02818 | 0.75708 | 0.02035 | 0.00402 | 2.69% | 0.01078 | 4.17% |
| 031.02 | Phosphorus, GQMP (AOAC 935.13-Extraction) (%) | 2 | 2 | 0.76425 | 0.00106 | | | | | | |
| 031.03 | Phosphorus, Autoanalyzer (%) | 2 | 2 | 0.73013 | 0.04260 | | | | | | |
| 031.06 | Phosphorus, Hach Method (%) | 1 | 1 | 0.81500 | | | | | | | |
| 031.41 | Phosphorus, ICP, Dry ash (%) | 25 | 25 | 0.75166 | 0.03251 | 0.75090 | 0.03126 | 0.00782 | 4.16% | 0.01728 | 4.18% |
| 031.42 | Phosphorus, ICP, Open vessel (%) | 21 | 20 | 0.73971 | 0.03379 | 0.74054 | 0.03176 | 0.00888 | 4.29% | 0.01424 | 4.18% |
| 031.43 | Phosphorus, ICP, Microwave (%) | 26 | 26 | 0.75278 | 0.03033 | 0.75457 | 0.02943 | 0.00721 | 3.90% | 0.01539 | 4.17% |
| 031.44 | Phosphorus, ICP, Dry ash (%) | 1 | 1 | 0.75500 | | | | | | | |
| 031.51 | Phosphorus, ICP-MS, Dry ash (%) | 1 | 1 | 0.66000 | | | | | | | |
| 031.52 | Phosphorus, ICP-MS, Open vessel (%) | 2 | 2 | 0.69993 | 0.02252 | | | | | | |
| 031.53 | Phosphorus, ICP-MS, Microwave (%) | 4 | 4 | 0.80064 | 0.03978 | 0.80064 | 0.03978 | 0.01989 | 4.97% | 0.01978 | 4.14% |
| 031.99 | Phosphorus, Miscellaneous (%) | 6 | 6 | 0.76167 | 0.04309 | 0.76164 | 0.04880 | 0.02490 | 6.41% | 0.00667 | 4.17% |
| 032.02 | Potassium, Flame Emission (%) | 1 | 1 | 1.1400 | | | | | | | |
| 032.31 | Potassium, AAS, Dry ash (%) | 16 | 16 | 1.1789 | 0.06962 | 1.1789 | 0.06700 | 0.02094 | 5.68% | 0.02896 | 3.90% |
| 032.32 | Potassium, AAS, Open vessel (%) | 3 | 3 | 1.2367 | 0.05204 | 1.2367 | 0.05204 | 0.03005 | 4.21% | 0.02667 | 3.87% |
| 032.41 | Potassium, ICP, Dry ash (%) | 23 | 22 | 1.1586 | 0.05293 | 1.1623 | 0.04942 | 0.01317 | 4.25% | 0.02325 | 3.91% |
| 032.42 | Potassium, ICP, Open vessel (%) | 20 | 20 | 1.2338 | 0.06879 | 1.2314 | 0.06068 | 0.01696 | 4.93% | 0.02878 | 3.88% |
| 032.43 | Potassium, ICP, Microwave (%) | 28 | 28 | 1.1871 | 0.04497 | 1.1868 | 0.04617 | 0.01091 | 3.89% | 0.02753 | 3.90% |
| 032.44 | Potassium, ICP, Dry ash (%) | 1 | 1 | 1.1050 | | | | | | | |
| 032.51 | Potassium, ICP-MS, Dry ash (%) | 1 | 1 | 1.0640 | | | | | | | |
| 032.52 | Potassium, ICP-MS, Open vessel (%) | 2 | 2 | 1.1870 | 0.00993 | | | | | | |
| 032.53 | Potassium, ICP-MS, Microwave (%) | 3 | 3 | 1.2680 | 0.05828 | 1.2680 | 0.05828 | 0.03365 | 4.60% | 0.01067 | 3.86% |
| 032.99 | Potassium, Miscellaneous (%) | 2 | 2 | 1.2250 | 0.00000 | | | | | | |
| 033.00 | Salt as chloride, Sol Cl (%) | 25 | 25 | 0.81751 | 0.06918 | 0.81167 | 0.05931 | 0.01483 | 7.31% | 0.01514 | 4.13% |
| 033.01 | Salt as chloride, Poten Cl (%) | 31 | 30 | 0.84091 | 0.07691 | 0.83806 | 0.02893 | 0.00660 | 3.45% | 0.00815 | 4.11% |
| 033.03 | Salt as chloride, Quantab (%) | 5 | 5 | 0.73300 | 0.06611 | 0.73300 | 0.06611 | 0.03306 | 9.02% | 0.03000 | 4.19% |
| 033.05 | Salt as chloride, Ion Sel Electrode (%) | 2 | 2 | 0.97000 | 0.21213 | | | | | | |
| 033.99 | Salt, Miscellaneous (%) | 8 | 8 | 0.80825 | 0.14174 | 0.82965 | 0.10563 | 0.04668 | 12.73% | 0.03700 | 4.11% |
| 034.01 | Selenium, Fluor (mg / kg (ppm)) | 1 | 1 | 0.63600 | | | | | | | |
| 034.04 | Selenium, AA, Hydride (mg / kg (ppm)) | 6 | 6 | 0.59708 | 0.14688 | 0.59708 | 0.16656 | 0.08500 | 27.90% | 0.10117 | 17.29% |
| 034.41 | Selenium, ICP, Dry ash (mg / kg (ppm)) | 1 | 1 | 2.5200 | | | | | | | |
| 034.42 | Selenium, ICP, Open vessel (mg / kg (ppm)) | 1 | 1 | 0.95000 | | | | | | | |
| 034.43 | Selenium, ICP, Microwave (mg / kg (ppm)) | 1 | 1 | 0.51730 | | | | | | | |
| 034.52 | Selenium, ICP-MS, Open vessel (mg / kg (ppm)) | 4 | 4 | 0.94238 | 0.36398 | 0.94238 | 0.36398 | 0.21014 | 38.62% | 0.25575 | 16.14% |
| 034.53 | Selenium, ICP-MS, Microwave (mg / kg (ppm)) | 4 | 4 | 0.68320 | 0.04508 | 0.68320 | 0.04508 | 0.02254 | 6.60% | 0.01465 | 16.94% |
| 034.99 | Selenium, Miscellaneous (mg / kg (ppm)) | 1 | 1 | 1.2050 | | | | | | | |

| Method Code | Analyte and Method | Total # Labs Submitting | # Labs in Robust Calcs | Raw Mean | Raw SD | Assigned Value - Robust Mean | AAFCO PT ffp - Robust sd | Uncertainty (U) - Robust | % RSD - Robust | Average Range (R-bar) | Horwitz %RSD |
|-------------|---|-------------------------|------------------------|----------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------------|--------------|
| 035.01 | Sodium, Ion-selective electrode (%) | 2 | 2 | 0.37900 | 0.01980 | | | | | | |
| 035.02 | Sodium, Em Spect (%) | 1 | 1 | 0.34000 | | | | | | | |
| 035.05 | Sodium, Flame Emission (%) | 2 | 2 | 0.36750 | 0.01061 | | | | | | |
| 035.31 | Sodium, AAS, Dry ash (%) | 17 | 16 | 0.37500 | 0.03631 | 0.37500 | 0.04118 | 0.01287 | 10.98% | 0.01311 | 4.64% |
| 035.32 | Sodium, AAS, Open vessel (%) | 2 | 2 | 0.39500 | 0.01414 | | | | | | |
| 035.33 | Sodium, AAS, Microwave (%) | 1 | 1 | 0.36500 | | | | | | | |
| 035.41 | Sodium, ICP, Dry ash (%) | 24 | 24 | 0.36196 | 0.02667 | 0.36052 | 0.01507 | 0.00385 | 4.18% | 0.00744 | 4.66% |
| 035.42 | Sodium, ICP, Open vessel (%) | 17 | 16 | 0.36828 | 0.02022 | 0.36828 | 0.01921 | 0.00600 | 5.22% | 0.00533 | 4.65% |
| 035.43 | Sodium, ICP, Microwave (%) | 24 | 23 | 0.36499 | 0.01714 | 0.36566 | 0.01676 | 0.00437 | 4.58% | 0.00757 | 4.65% |
| 035.51 | Sodium, ICP-MS, Dry ash (%) | 1 | 1 | 0.37650 | | | | | | | |
| 035.52 | Sodium, ICP-MS, Open vessel (%) | 2 | 2 | 0.35850 | 0.00354 | | | | | | |
| 035.53 | Sodium, ICP-MS, Microwave (%) | 4 | 4 | 0.39874 | 0.03010 | 0.39874 | 0.03010 | 0.01505 | 7.55% | 0.00728 | 4.59% |
| 035.99 | Sodium, Miscellaneous (%) | 3 | 3 | 0.37500 | 0.02500 | 0.37500 | 0.02500 | 0.01768 | 6.67% | 0.00333 | 4.64% |
| 036.04 | Sulfur, LECO (%) | 1 | 1 | 0.37000 | | | | | | | |
| 036.42 | Sulfur, ICP, Open vessel (%) | 20 | 19 | 0.32573 | 0.03004 | 0.32332 | 0.02719 | 0.00780 | 8.41% | 0.00819 | 4.74% |
| 036.43 | Sulfur, ICP, Microwave (%) | 13 | 12 | 0.31538 | 0.01641 | 0.31716 | 0.01393 | 0.00503 | 4.39% | 0.01073 | 4.75% |
| 036.52 | Sulfur, ICP-MS, Open vessel (%) | 2 | 2 | 0.31018 | 0.00329 | | | | | | |
| 036.53 | Sulfur, ICP-MS, Microwave (%) | 1 | 1 | 0.33490 | | | | | | | |
| 036.99 | Sulfur, Miscellaneous (%) | 1 | 1 | 0.32000 | | | | | | | |
| 037.31 | Zinc, AAS, Dry ash (mg / kg (ppm)) | 17 | 17 | 258.68 | 27.309 | 256.90 | 17.228 | 5.2231 | 6.71% | 10.170 | 6.94% |
| 037.32 | Zinc, AAS, Open vessel (mg / kg (ppm)) | 3 | 3 | 271.78 | 22.695 | 271.78 | 22.695 | 13.103 | 8.35% | 9.2333 | 6.88% |
| 037.33 | Zinc, AAS, Microwave (mg / kg (ppm)) | 3 | 3 | 252.63 | 7.0288 | 252.63 | 7.0288 | 4.0581 | 2.78% | 7.5713 | 6.96% |
| 037.41 | Zinc, ICP, Dry ash (mg / kg (ppm)) | 20 | 20 | 244.70 | 21.292 | 248.43 | 15.273 | 4.2690 | 6.15% | 6.0555 | 6.98% |
| 037.42 | Zinc, ICP, Open vessel (mg / kg (ppm)) | 18 | 17 | 252.36 | 24.275 | 253.65 | 21.262 | 6.4460 | 8.38% | 5.1854 | 6.95% |
| 037.43 | Zinc, ICP, Microwave (mg / kg (ppm)) | 23 | 23 | 255.62 | 17.103 | 255.78 | 17.300 | 4.5092 | 6.76% | 6.2633 | 6.94% |
| 037.44 | Zinc, ICP, Dry ash (mg / kg (ppm)) | 2 | 2 | 255.46 | 14.938 | | | | | | |
| 037.51 | Zinc, ICP-MS, Dry ash (mg / kg (ppm)) | 1 | 1 | 246.55 | | | | | | | |
| 037.52 | Zinc, ICP-MS, Open vessel (mg / kg (ppm)) | 2 | 2 | 226.58 | 19.693 | | | | | | |
| 037.53 | Zinc, ICP-MS, Microwave (mg / kg (ppm)) | 2 | 2 | 258.50 | 16.971 | | | | | | |
| 037.99 | Zinc, Miscellaneous (mg / kg (ppm)) | 5 | 5 | 259.58 | 16.171 | 259.58 | 16.171 | 7.2319 | 6.23% | 4.4400 | 6.93% |
| 038.41 | Molybdenum, ICP, Dry ash (mg / kg (ppm)) | 2 | 2 | 4.0025 | 0.78135 | | | | | | |
| 038.42 | Molybdenum, ICP, Open vessel (mg / kg (ppm)) | 3 | 3 | 5.0159 | 0.91615 | 5.0159 | 0.91615 | 0.52894 | 18.26% | 0.14093 | 12.55% |
| 038.43 | Molybdenum, ICP, Microwave (mg / kg (ppm)) | 7 | 7 | 4.8232 | 0.62655 | 4.8607 | 0.62233 | 0.29402 | 12.80% | 0.26816 | 12.61% |
| 038.52 | Molybdenum, ICP-MS, Open vessel (mg / kg (ppm)) | 2 | 2 | 3.5850 | 0.09899 | | | | | | |
| 038.53 | Molybdenum, ICP-MS, Microwave (mg / kg (ppm)) | 3 | 3 | 3.9894 | 0.97239 | 3.9894 | 0.97239 | 0.56141 | 24.37% | 0.22287 | 12.99% |
| 040.42 | Barium, ICP, Open vessel (mg / kg (ppm)) | 1 | 1 | 11.980 | | | | | | | |
| 040.53 | Barium, ICP-MS, Microwave (mg / kg (ppm)) | 1 | 1 | 11.261 | | | | | | | |
| 041.53 | Vanadium, ICP-MS, Microwave (mg / kg (ppm)) | 1 | 1 | 0.66350 | | | | | | | |

| 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 |
|-------------|---|-------------------------|------------------------|----------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------------|--------------|
| 042.00 | Chloride, Titrimetric (%) | 2 | 2 | 0.54500 | 0.04243 | | | | | | |
| 042.02 | Chloride, Ion Chromatography (%) | 1 | 1 | 0.65000 | | | | | | | |
| 101.00 | Choline Chloride, Microbiological (mg / kg (ppm)) | 1 | 1 | 1,380.0 | | | | | | | |
| 101.01 | Choline Chloride, Chem (mg / kg (ppm)) | 1 | 1 | 1,339.0 | | | | | | | |
| 101.02 | Choline Chloride, LC (mg / kg (ppm)) | 1 | 1 | 793.50 | | | | | | | |
| 102.01 | Niacin, Microbiological (mg / kg (ppm)) | 1 | 1 | 238.50 | | | | | | | |
| 103.01 | Pantothenic Acid, Microbiological (mg / kg (ppm)) | 1 | 1 | 24.600 | | | | | | | |
| 103.02 | Pantothenic Acid, LC (mg / kg (ppm)) | 1 | 1 | 423.50 | | | | | | | |
| 104.00 | Riboflavin, Fluorometric (mg / kg (ppm)) | 1 | 1 | 16.750 | | | | | | | |
| 104.03 | Riboflavin, LC (mg / kg (ppm)) | 3 | 3 | 13.235 | 3.2644 | 13.235 | 3.2644 | 1.8847 | 24.66% | 1.8167 | 10.84% |
| 105.00 | Thiamine, LC (mg / kg (ppm)) | 3 | 3 | 17.567 | 5.5082 | 17.567 | 5.5082 | 3.1802 | 31.36% | 1.6103 | 10.39% |
| 105.01 | Thiamine, Fluorometer (mg / kg (ppm)) | 1 | 1 | 23.100 | | | | | | | |
| 106.00 | Vitamin A, Color (KU / kg) | 2 | 2 | 40.488 | 2.3511 | | | | | | |
| 106.01 | Vitamin A, UV (KU / kg) | 1 | 1 | 40.800 | | | | | | | |
| 106.02 | Vitamin A, LC (KU / kg) | 17 | 16 | 37.145 | 10.616 | 38.292 | 8.6574 | 2.7054 | 22.61% | 3.0368 | |
| 107.00 | Vitamin B12, Microbiological (µg / kg (ppb)) | 1 | 1 | 266.50 | | | | | | | |
| 108.01 | Vitamin D3, LC, AOAC (KU / kg) | 1 | | 0.00000 | | | | | | | |
| 108.02 | Vitamin D3, LC (KU / kg) | 4 | 4 | 46.820 | 88.788 | 46.820 | 88.788 | 51.262 | 189.64% | 2.0550 | |
| 108.99 | Vitamin D3, Miscellaneous (KU / kg) | 1 | 1 | 2.1900 | | | | | | | |
| 109.02 | Vitamin E, LC (IU/kg) | 16 | 15 | 689.20 | 118.45 | 694.42 | 91.716 | 29.601 | 13.21% | 18.022 | |
| 109.99 | Vitamin E, Miscellaneous (IU/kg) | 3 | 3 | 792.13 | 136.81 | 792.13 | 136.81 | 78.987 | 17.27% | 11.530 | |
| 111.00 | Vitamin C, phosphorylated, LC (mg / kg (ppm)) | 2 | 2 | 105.10 | 33.510 | | | | | | |
| 111.01 | Vitamin C, Ascorbic Acid, LC (mkg/kg (ppm)) | 1 | 1 | 116.00 | | | | | | | |
| 112.01 | Pyridoxine, LC (µg / g) | 1 | 1 | 21.300 | | | | | | | |
| 113.01 | Folic Acid, Micro (mg / kg (ppm)) | 1 | 1 | 3.4700 | | | | | | | |
| 114.01 | Biotin, Microbiological (mg / kg (ppm)) | 2 | 2 | 3.0925 | 0.47730 | | | | | | |
| 120.00 | Alanine, Post-col Ninhydrin Der (%) | 19 | 19 | 0.77518 | 0.02966 | 0.77086 | 0.01694 | 0.00486 | 2.20% | 0.00742 | 4.16% |
| 120.01 | Alanine, Pre-col OPA Der (%) | 1 | 1 | 0.60200 | | | | | | | |
| 120.02 | Alanine, Post-col OPA Der (%) | 1 | 1 | 0.76200 | | | | | | | |
| 120.05 | Alanine, Pre-col AQC Der (%) | 3 | 3 | 0.73033 | 0.02617 | 0.73033 | 0.02617 | 0.01511 | 3.58% | 0.02133 | 4.19% |
| 120.99 | Alanine, Miscellaneous (%) | 2 | 2 | 0.78000 | 0.02121 | | | | | | |
| 121.00 | Arginine, Post-col Ninhydrin Der (%) | 19 | 19 | 1.0341 | 0.03612 | 1.0320 | 0.02999 | 0.00860 | 2.91% | 0.01721 | 3.98% |
| 121.01 | Arginine, Pre-col OPA Der (%) | 1 | 1 | 1.0095 | | | | | | | |
| 121.02 | Arginine, Post-col OPA Der (%) | 1 | 1 | 1.0000 | | | | | | | |
| 121.05 | Arginine, Pre-col AQC Der (%) | 3 | 3 | 0.95233 | 0.05292 | 0.95233 | 0.05292 | 0.03055 | 5.56% | 0.03133 | 4.03% |
| 122.00 | Aspartic, Post-col Ninhydrin Der (%) | 19 | 18 | 1.4827 | 0.05843 | 1.4720 | 0.03184 | 0.00938 | 2.16% | 0.01180 | 3.77% |
| 122.01 | Aspartic, Pre-col OPA Der (%) | 1 | 1 | 1.2435 | | | | | | | |
| 122.02 | Aspartic, Post-col OPA Der (%) | 1 | 1 | 1.4820 | | | | | | | |

| Method Code | Analyte and Method | Total # Labs Submitting | # Labs in Robust Calcs | Raw Mean | Raw SD | Assigned Value - Robust Mean | AAFCO PT ffp - Robust sd | Uncertainty (U) - Robust | % RSD - Robust | Average Range (R-bar) | Horwitz %RSD |
|-------------|---|-------------------------|------------------------|----------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------------|--------------|
| 122.05 | Aspartic, Pre-col AQC Der (%) | 3 | 3 | 1.4515 | 0.04403 | 1.4515 | 0.04403 | 0.02542 | 3.03% | 0.08500 | 3.78% |
| 122.99 | Aspartic, Miscellaneous (%) | 2 | 2 | 1.2250 | 0.33941 | | | | | | |
| 124.00 | Cysteine/Cystine, PAO Post-col Ninhydry (%) | 19 | 19 | 0.28383 | 0.01970 | 0.28333 | 0.01789 | 0.00513 | 6.31% | 0.00687 | 4.84% |
| 124.01 | Cysteine/Cystine, PAO Pre-col OPA Der (%) | 1 | 1 | 0.26100 | | | | | | | |
| 124.02 | Cysteine/Cystine, PAO Post-col OPA Der (%) | 1 | 1 | 0.30050 | | | | | | | |
| 124.05 | Cysteine/Cystine, PAO Pre-col AQC Der (%) | 3 | 3 | 0.29270 | 0.00485 | 0.29270 | 0.00485 | 0.00280 | 1.66% | 0.00533 | 4.81% |
| 124.99 | Cysteine/Cystine, Miscellaneous (%) | 1 | 1 | 0.31000 | | | | | | | |
| 125.00 | Glutamic, Post-col Ninhydrin Der (%) | 19 | 18 | 2.5973 | 0.07467 | 2.6089 | 0.05083 | 0.01498 | 1.95% | 0.02868 | 3.46% |
| 125.01 | Glutamic, Pre-col OPA Der (%) | 1 | 1 | 2.5695 | | | | | | | |
| 125.02 | Glutamic, Post-col OPA Der (%) | 1 | 1 | 2.5820 | | | | | | | |
| 125.05 | Glutamic, Pre-col AQC Der (%) | 3 | 3 | 2.6315 | 0.03846 | 2.6315 | 0.03846 | 0.02220 | 1.46% | 0.12033 | 3.46% |
| 125.99 | Glutamic, Miscellaneous (%) | 2 | 2 | 2.2100 | 0.80610 | | | | | | |
| 126.00 | Glycine, Post-col Ninhydrin Der (%) | 19 | 19 | 0.88093 | 0.02616 | 0.87783 | 0.01355 | 0.00389 | 1.54% | 0.01108 | 4.08% |
| 126.01 | Glycine, Pre-col OPA Der (%) | 1 | 1 | 0.65850 | | | | | | | |
| 126.02 | Glycine, Post-col OPA Der (%) | 1 | 1 | 0.88200 | | | | | | | |
| 126.05 | Glycine, Pre-col AQC Der (%) | 3 | 3 | 0.85150 | 0.04213 | 0.85150 | 0.04213 | 0.02432 | 4.95% | 0.03633 | 4.10% |
| 126.99 | Glycine, Miscellaneous (%) | 2 | 2 | 0.84500 | 0.07778 | | | | | | |
| 127.00 | Histidine, Post-col Ninhydrin Der (%) | 19 | 19 | 0.41936 | 0.02920 | 0.41413 | 0.02037 | 0.00584 | 4.92% | 0.00746 | 4.57% |
| 127.01 | Histidine, Pre-col OPA Der (%) | 1 | 1 | 0.41800 | | | | | | | |
| 127.02 | Histidine, Post-col OPA Der (%) | 1 | 1 | 0.40100 | | | | | | | |
| 127.05 | Histidine, Pre-col AQC Der (%) | 3 | 3 | 0.37917 | 0.02496 | 0.37917 | 0.02496 | 0.01441 | 6.58% | 0.02100 | 4.63% |
| 127.99 | Histidine, Miscellaneous (%) | 1 | 1 | 0.43500 | | | | | | | |
| 128.00 | Isoleucine, Post-col Ninhydrin Der (%) | 19 | 19 | 0.60478 | 0.03886 | 0.60611 | 0.03099 | 0.00889 | 5.11% | 0.01104 | 4.31% |
| 128.01 | Isoleucine, Pre-col OPA Der (%) | 1 | 1 | 0.58100 | | | | | | | |
| 128.02 | Isoleucine, Post-col OPA Der (%) | 1 | 1 | 0.61250 | | | | | | | |
| 128.05 | Isoleucine, Pre-col AQC Der (%) | 3 | 3 | 0.55767 | 0.03947 | 0.55767 | 0.03947 | 0.02279 | 7.08% | 0.01600 | 4.37% |
| 128.99 | Isoleucine, Miscellaneous (%) | 2 | 2 | 0.60750 | 0.03182 | | | | | | |
| 129.00 | Leucine, Post-col Ninhydrin Der (%) | 19 | 18 | 1.1091 | 0.04110 | 1.1072 | 0.02035 | 0.00600 | 1.84% | 0.01084 | 3.94% |
| 129.01 | Leucine, Pre-col OPA Der (%) | 1 | 1 | 1.0455 | | | | | | | |
| 129.02 | Leucine, Post-col OPA Der (%) | 1 | 1 | 1.1080 | | | | | | | |
| 129.05 | Leucine, Pre-col AQC Der (%) | 3 | 3 | 1.0838 | 0.02010 | 1.0838 | 0.02010 | 0.01160 | 1.85% | 0.02967 | 3.95% |
| 129.99 | Leucine, Miscellaneous (%) | 2 | 2 | 1.1575 | 0.00354 | | | | | | |
| 130.00 | L-Lysine, Post-col Ninhydrin Der (%) | 20 | 19 | 1.1243 | 0.05590 | 1.1198 | 0.04653 | 0.01334 | 4.15% | 0.01121 | 3.93% |
| 130.01 | L-Lysine, Pre-col OPA Der (%) | 1 | 1 | 1.0725 | | | | | | | |
| 130.02 | L-Lysine, Post-col OPA Der (%) | 1 | 1 | 1.1365 | | | | | | | |
| 130.05 | L-Lysine, Pre-col AQC Der (%) | 5 | 5 | 1.1145 | 0.03035 | 1.1145 | 0.03035 | 0.01357 | 2.72% | 0.05220 | 3.93% |
| 130.99 | L-Lysine, Miscellaneous (%) | 3 | 3 | 1.1617 | 0.11536 | 1.1617 | 0.11536 | 0.06660 | 9.93% | 0.02333 | 3.91% |
| 131.00 | Methionine, PAO Post-col Ninhydrin Der (%) | 19 | 19 | 0.38638 | 0.01388 | 0.38661 | 0.01526 | 0.00438 | 3.95% | 0.00695 | 4.61% |

| 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 |
|-------------|---|-------------------------|------------------------|----------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------------|--------------|
| 131.01 | Methionine, PAO Pre-col OPA Der (%) | 1 | 1 | 0.37100 | | | | | | | |
| 131.02 | Methionine, PAO Post-col OPA Der (%) | 1 | 1 | 0.38250 | | | | | | | |
| 131.05 | Methionine, PAO Pre-col AQC Der (%) | 4 | 4 | 0.33960 | 0.08444 | 0.33960 | 0.08444 | 0.04222 | 24.86% | 0.00725 | 4.71% |
| 131.99 | Methionine, Miscellaneous (%) | 3 | 3 | 0.42000 | 0.06538 | 0.42000 | 0.06538 | 0.03775 | 15.57% | 0.00667 | 4.56% |
| 132.00 | Phenylalanine, Post-col Ninhydrin Der (%) | 19 | 18 | 0.70267 | 0.02796 | 0.70209 | 0.02240 | 0.00660 | 3.19% | 0.01183 | 4.22% |
| 132.01 | Phenylalanine, Pre-col OPA Der (%) | 1 | 1 | 0.65800 | | | | | | | |
| 132.02 | Phenylalanine, Post-col OPA Der (%) | 1 | 1 | 0.67850 | | | | | | | |
| 132.05 | Phenylalanine, Pre-col AQC Der (%) | 3 | 3 | 0.66867 | 0.04819 | 0.66867 | 0.04819 | 0.02782 | 7.21% | 0.01867 | 4.25% |
| 132.99 | Phenylalanine, Miscellaneous (%) | 1 | 1 | 0.75000 | | | | | | | |
| 133.00 | Proline, Post-col Ninhydrin Der (%) | 19 | 19 | 0.90589 | 0.04766 | 0.90107 | 0.03821 | 0.01096 | 4.24% | 0.01518 | 4.06% |
| 133.05 | Proline, Pre-col AQC Der (%) | 3 | 3 | 0.97650 | 0.12238 | 0.97650 | 0.12238 | 0.08654 | 12.53% | 0.02833 | 4.01% |
| 133.99 | Proline, Miscellaneous (%) | 2 | 2 | 0.89500 | 0.03536 | | | | | | |
| 134.00 | Serine, Post-col Ninhydrin Der (%) | 19 | 18 | 0.77529 | 0.04934 | 0.77883 | 0.02991 | 0.00881 | 3.84% | 0.01023 | 4.15% |
| 134.01 | Serine, Pre-col OPA Der (%) | 1 | 1 | 0.51400 | | | | | | | |
| 134.02 | Serine, Post-col OPA Der (%) | 1 | 1 | 0.68750 | | | | | | | |
| 134.05 | Serine, Pre-col AQC Der (%) | 3 | 3 | 0.79283 | 0.04648 | 0.79283 | 0.04648 | 0.02684 | 5.86% | 0.01567 | 4.14% |
| 134.99 | Serine, Miscellaneous (%) | 2 | 2 | 0.68250 | 0.04596 | | | | | | |
| 135.00 | Threonine, Post-col Ninhydrin Der (%) | 19 | 19 | 0.79592 | 0.04004 | 0.78703 | 0.01798 | 0.00516 | 2.28% | 0.00851 | 4.15% |
| 135.01 | Threonine, Pre-col OPA Der (%) | 1 | 1 | 0.71100 | | | | | | | |
| 135.02 | Threonine, Post-col OPA Der (%) | 1 | 1 | 0.79800 | | | | | | | |
| 135.05 | Threonine, Pre-col AQC Der (%) | 4 | 4 | 0.81513 | 0.09731 | 0.81513 | 0.09731 | 0.04866 | 11.94% | 0.05475 | 4.12% |
| 135.99 | Threonine, Miscellaneous (%) | 3 | 3 | 0.79833 | 0.04311 | 0.79833 | 0.04311 | 0.02489 | 5.40% | 0.03000 | 4.14% |
| 136.00 | Tryptophan, Alka-Hydrol Post-col Ninhyd (%) | 6 | 6 | 0.24857 | 0.06584 | 0.24247 | 0.05996 | 0.03060 | 24.73% | 0.02203 | 4.95% |
| 136.01 | Tryptophan, Alka-Hydrol Rev Phase LC UV (%) | 3 | 3 | 0.23800 | 0.01522 | 0.23800 | 0.01522 | 0.00879 | 6.39% | 0.00200 | 4.96% |
| 136.02 | Tryptophan, Alka-Hydrol Post-col OPA De (%) | 1 | 1 | 0.22300 | | | | | | | |
| 136.03 | Tryptophan, Alka-Hydrol + IS RP LC FI (%) | 5 | 5 | 0.23870 | 0.01059 | 0.23870 | 0.01059 | 0.00474 | 4.44% | 0.00620 | 4.96% |
| 136.99 | Tryptophan, Miscellaneous (%) | 1 | 1 | 0.18000 | | | | | | | |
| 137.00 | Tyrosine, Post-col Ninhydrin Der (%) | 14 | 13 | 0.49574 | 0.04670 | 0.49655 | 0.04390 | 0.01522 | 8.84% | 0.00877 | 4.44% |
| 137.01 | Tyrosine, Pre-col OPA Der (%) | 1 | 1 | 0.48600 | | | | | | | |
| 137.02 | Tyrosine, Post-col OPA Der (%) | 1 | 1 | 0.51850 | | | | | | | |
| 137.05 | Tyrosine, Pre-col AQC Der (%) | 3 | 3 | 0.49017 | 0.05649 | 0.49017 | 0.05649 | 0.03261 | 11.52% | 0.00633 | 4.45% |
| 137.99 | Tyrosine, Miscellaneous (%) | 1 | 1 | 0.84000 | | | | | | | |
| 138.00 | Valine, Post-col Ninhydrin Der (%) | 19 | 19 | 0.76015 | 0.04053 | 0.76113 | 0.03846 | 0.01103 | 5.05% | 0.01793 | 4.17% |
| 138.01 | Valine, Pre-col OPA Der (%) | 1 | 1 | 0.73100 | | | | | | | |
| 138.02 | Valine, Post-col OPA Der (%) | 1 | 1 | 0.78150 | | | | | | | |
| 138.05 | Valine, Pre-col AQC Der (%) | 3 | 3 | 0.71083 | 0.05282 | 0.71083 | 0.05282 | 0.03050 | 7.43% | 0.01967 | 4.21% |
| 138.99 | Valine, Miscellaneous (%) | 2 | 2 | 0.75250 | 0.02475 | | | | | | |
| 139.00 | Taurine, Post-col Ninhydrin Der (%) | 1 | 1 | 0.03000 | | | | | | | |

| 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 |
|-------------|---|-------------------------|------------------------|----------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------------|--------------|
| 139.02 | Taurine, Post-col OPA Der (%) | 1 | | 0.00000 | | | | | | | |
| 139.05 | Taurine, Pre-col AQC Der (%) | 1 | | 0.00000 | | | | | | | |
| 150.00 | Phytase, Colorimetric (Units / kg) | 2 | 2 | 539.00 | 37.477 | | | | | | |
| 160.99 | Fructose, Miscellaneous (%) | 6 | 5 | 0.52418 | 0.20942 | 0.52418 | 0.20942 | 0.11707 | 39.95% | 0.04920 | 4.41% |
| 161.99 | Galactose, Miscellaneous (%) | 1 | | 0.00000 | | | | | | | |
| 162.99 | Glucose, Miscellaneous (%) | 6 | 3 | 0.20283 | 0.05081 | 0.20283 | 0.05081 | 0.03667 | 25.05% | 0.00567 | 5.09% |
| 163.99 | Lactose, Miscellaneous (%) | 5 | | | | | | | | | |
| 164.99 | Maltose, Miscellaneous (%) | 6 | 2 | 0.81250 | 0.47730 | 0.81250 | 0.47730 | 0.42188 | | 0.07500 | 4.13% |
| 165.99 | Sucrose, Miscellaneous (%) | 8 | 8 | 1.8701 | 0.19057 | 1.8655 | 0.20560 | 0.09086 | 11.02% | 0.07350 | 3.64% |
| 166.99 | Raffinose, Miscellaneous (%) | 3 | 3 | 0.92150 | 0.49087 | 0.92150 | 0.49087 | 0.28340 | 53.27% | 0.01100 | 4.05% |
| 167.99 | Stachyose, Miscellaneous (%) | 3 | 3 | 0.87167 | 0.23740 | 0.87167 | 0.23740 | 0.13706 | 27.24% | 0.02667 | 4.08% |
| 315.03 | Diclazuril, LC-MS/MS (mg/kg (ppm)) | 2 | 2 | 0.01158 | 0.00011 | | | | | | |
| 351.00 | Chlortetracycline, Plate (mg/kg (ppm)) | 1 | 1 | 1.6872 | | | | | | | |
| 351.03 | Chlortetracycline, LC (UV or FL) (mg/kg (ppm)) | 1 | 1 | 7.5150 | | | | | | | |
| 351.05 | Chlortetracycline, LC-MS/MS (mg/kg (ppm)) | 1 | 1 | 1.6805 | | | | | | | |
| 357.01 | Ethoxyquin, LC (mg/kg (ppm)) | 1 | 1 | 14.000 | | | | | | | |
| 357.99 | Ethoxyquin, Miscellaneous (mg/kg (ppm)) | 1 | 1 | 15.000 | | | | | | | |
| 361.02 | Lasalocid sodium, LC (mg/kg (ppm)) | 3 | 2 | 1.3139 | 0.11155 | 1.3139 | 0.11155 | | | 0.08885 | 15.35% |
| 361.03 | Lasalocid sodium, LC (UV or FL) (mg/kg (ppm)) | 3 | 3 | 1.8476 | 0.76658 | 1.8476 | 0.76658 | 0.44259 | 41.49% | 0.11810 | 14.58% |
| 361.05 | Lasalocid sodium, LC-MS/MS (mg/kg (ppm)) | 4 | 4 | 1.4480 | 0.44949 | 1.4480 | 0.44949 | 0.25951 | 31.04% | 0.17883 | 15.13% |
| 361.99 | Lasalocid sodium, Miscellaneous (mg/kg (ppm)) | 1 | 1 | 945.50 | | | | | | | |
| 365.02 | Monensin, LC (mg/kg (ppm)) | 4 | 4 | 3.1575 | 0.22998 | 3.1575 | 0.22998 | 0.13278 | 7.28% | 0.29000 | 13.45% |
| 365.03 | Monensin, LC-PCD (mg/kg (ppm)) | 4 | 4 | 3.2812 | 0.67353 | 3.2812 | 0.67353 | 0.33677 | 20.53% | 0.33593 | 13.38% |
| 365.05 | Monensin, LC-MS/MS (mg/kg (ppm)) | 5 | 5 | 3.0695 | 0.41587 | 3.0695 | 0.41587 | 0.18598 | 13.55% | 0.25978 | 13.51% |
| 365.99 | Monensin, Miscellaneous (mg/kg (ppm)) | 3 | 3 | 1.9917 | 0.82907 | 1.9917 | 0.82907 | 0.47866 | 41.63% | 0.04333 | 14.42% |
| 388.99 | Tylosin, Miscellaneous (mg/kg (ppm)) | 1 | 1 | 0.60500 | | | | | | | |
| 400.01 | Water activity, Aqualab chilled mirror (Units) | 6 | 6 | 0.58910 | 0.01319 | 0.58910 | 0.01496 | 0.00763 | 2.54% | 0.00470 | |
| 400.99 | Water activity, Miscellaneous (Units) | 2 | 2 | 0.56650 | 0.01626 | | | | | | |
| 412.01 | Dietary Starch, Enzymatic-Colorimetric (%) | 1 | 1 | 9.4150 | | | | | | | |
| 516.00 | Arsenic, total, AA, Hydride (mg / kg (ppm)) | 2 | 2 | 0.07783 | 0.00400 | | | | | | |
| 516.52 | Arsenic, total, ICP-MS, Open vessel (mg / kg (ppm)) | 2 | 2 | 0.12425 | 0.00813 | | | | | | |
| 516.53 | Arsenic, total, ICP-MS, Microwave (mg / kg (ppm)) | 4 | 4 | 0.14020 | 0.05175 | 0.14020 | 0.05175 | 0.02588 | 36.91% | 0.01015 | 21.50% |
| 518.34 | Cadmium, AAS, Graphite furnace (mg / kg (ppm)) | 1 | 1 | 0.10000 | | | | | | | |
| 518.41 | Cadmium, ICP, Dry ash (mg / kg (ppm)) | 1 | 1 | 0.09500 | | | | | | | |
| 518.43 | Cadmium, ICP, Microwave (mg / kg (ppm)) | 1 | 1 | 0.15000 | | | | | | | |
| 518.52 | Cadmium, ICP-MS, Open vessel (mg / kg (ppm)) | 2 | 2 | 0.13750 | 0.01768 | | | | | | |
| 518.53 | Cadmium, ICP-MS, Microwave (mg / kg (ppm)) | 4 | 4 | 0.15604 | 0.01594 | 0.15604 | 0.01594 | 0.00797 | 10.22% | 0.00458 | 21.16% |
| 520.41 | Chromium, ICP, Dry ash (mg / kg (ppm)) | 1 | 1 | 9.8300 | | | | | | | |

| 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 |
|-------------|---|-------------------------|------------------------|----------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------------|--------------|
| 520.42 | Chromium, ICP, Open vessel (mg / kg (ppm)) | 2 | 2 | 20.781 | 3.3509 | | | | | | |
| 520.43 | Chromium, ICP, Microwave (mg / kg (ppm)) | 3 | 3 | 19.545 | 5.7657 | 19.545 | 5.7657 | 3.3288 | 29.50% | 1.0300 | 10.23% |
| 520.52 | Chromium, ICP-MS, Open vessel (mg / kg (ppm)) | 1 | 1 | 4.7450 | | | | | | | |
| 520.53 | Chromium, ICP-MS, Microwave (mg / kg (ppm)) | 2 | 2 | 12.582 | 9.7125 | | | | | | |
| 526.34 | Lead, AAS, Graphite furnace (mg / kg (ppm)) | 1 | 1 | 0.20000 | | | | | | | |
| 526.41 | Lead, ICP, Dry ash (mg / kg (ppm)) | 1 | 1 | 0.05500 | | | | | | | |
| 526.52 | Lead, ICP-MS, Open vessel (mg / kg (ppm)) | 2 | 2 | 0.19275 | 0.01803 | | | | | | |
| 526.53 | Lead, ICP-MS, Microwave (mg / kg (ppm)) | 4 | 4 | 0.17018 | 0.01036 | 0.17018 | 0.01036 | 0.00518 | 6.09% | 0.02035 | 20.88% |
| 539.41 | Nickel, ICP, Dry ash (mg / kg (ppm)) | 1 | 1 | 8.9000 | | | | | | | |
| 539.43 | Nickel, ICP, Microwave (mg / kg (ppm)) | 1 | 1 | 13.480 | | | | | | | |
| 539.52 | Nickel, ICP-MS, Open vessel (mg / kg (ppm)) | 1 | 1 | 3.4800 | | | | | | | |
| 539.53 | Nickel, ICP-MS, Microwave (mg / kg (ppm)) | 2 | 2 | 7.0867 | 4.8201 | | | | | | |
| 702.00 | Butyric Acid (4:0), Miscellaneous GC (%) | 1 | 1 | 0.01200 | | | | | | | |
| 704.00 | Caproic Acid (6:0) , Miscellaneous GC (%) | 1 | 1 | 0.00800 | | | | | | | |
| 706.01 | Caprylic acid (8:0), Direct Methylation by Alkali Hy | 1 | | 0.00000 | | | | | | | |
| 708.01 | Capric acid (10:0), Direct Methylation by Alkali Hy | 1 | | 0.00000 | | | | | | | |
| 710.01 | Lauric Acid (12:0), Direct Methylation by Alkali Hyc | 1 | | 0.00000 | | | | | | | |
| 710.99 | Lauric Acid (12:0), Miscellaneous (% (w/w)) | 2 | 1 | 0.00300 | | | | | | | |
| 714.01 | Myristic Acid (14:0) , Direct Methylation by Alkali F | 1 | 1 | 0.02450 | | | | | | | |
| 714.99 | Myristic Acid (14:0) , Miscellaneous (% (w/w)) | 1 | 1 | 0.00850 | | | | | | | |
| 716.01 | Palmitic Acid (16:0), Direct Methylation by Alkali H | 1 | 1 | 0.61200 | | | | | | | |
| 716.99 | Palmitic Acid (16:0), Miscellaneous (% (w/w)) | 1 | 1 | 0.93250 | | | | | | | |
| 718.01 | Palmitoleic Acid (9c-16:1), Direct Methylation by A | 1 | | 0.00000 | | | | | | | |
| 718.99 | Palmitoleic Acid (9c-16:1), Miscellaneous (% (w/w) | 2 | 2 | 0.01150 | 0.00141 | | | | | | |
| 722.01 | Stearic Acid (18:0), Direct Methylation by Alkali Hy | 1 | 1 | 0.13250 | | | | | | | |
| 722.99 | Stearic Acid (18:0), Miscellaneous (% (w/w)) | 1 | 1 | 0.25450 | | | | | | | |
| 724.01 | Oleic Acid (9c-18:1), Direct Methylation by Alkali F | 1 | 1 | 1.4750 | | | | | | | |
| 724.99 | Oleic Acid (9c-18:1), Miscellaneous (% (w/w)) | 1 | 1 | 1.6660 | | | | | | | |
| 726.01 | Linoleic Acid (9c,12c-18:2), Direct Methylation by , | 1 | 1 | 4.4400 | | | | | | | |
| 726.99 | Linoleic Acid (9c,12c-18:2), Miscellaneous (% (w/ | 2 | 2 | 3.9868 | 0.46846 | | | | | | |
| 728.01 | alpha-Linolenic Acid (9c,12c,15c-18:3), Direct Met | 1 | 1 | 0.98500 | | | | | | | |
| 728.99 | alpha-Linolenic Acid (9c,12c,15c-18:3), Miscellane | 2 | 2 | 1.2190 | 0.26022 | | | | | | |
| 730.01 | Arachidic Acid (20:0), Direct Methylation by Alkali | 1 | 1 | 0.03800 | | | | | | | |
| 730.99 | Arachidic Acid (20:0), Miscellaneous (% (w/w)) | 1 | 1 | 0.02850 | | | | | | | |
| 732.01 | Gondoic Acid (11c-20:1), Direct Methylation by All | 1 | 1 | 0.04000 | | | | | | | |
| 732.99 | Gondoic Acid (11c-20:1), Miscellaneous (% (w/w) | 1 | 1 | 0.02200 | | | | | | | |
| 736.01 | Arachidonic Acid (5c,8c,11c,14c-20:4), Direct Metl | 1 | | 0.00000 | | | | | | | |
| 736.99 | Arachidonic Acid (5c,8c,11c,14c-20:4), Miscellane | 1 | | 0.00000 | | | | | | | |

Test Material Code # 201727

Issue Date : 08/31/2017

| Method Code | Analyte and Method | Total # Labs Submitting | # Labs in Robust Calcs | Raw Mean | Raw SD | Assigned Value - Robust Mean | AAFCO PT ffp - Robust sd | Uncertainty (U) - Robust | % RSD - Robust | Average Range (R-bar) | Horwitz %RSD |
|-------------|---|-------------------------|------------------------|----------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------------|--------------|
| 738.01 | Mead Acid (11c,14c,17c-20:3), Direct Methylation | 1 | | 0.00000 | | | | | | | |
| 740.01 | Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:3), Direct Methylation | 1 | | 0.00000 | | | | | | | |
| 740.99 | Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:3), Direct Methylation | 2 | 1 | 0.04650 | | | | | | | |
| 742.99 | Behenic Acid (22:0), Miscellaneous (% (w/w)) | 1 | 1 | 0.02400 | | | | | | | |
| 744.01 | Erucic Acid (13c-22:1), Direct Methylation by Alkaline Hydrolysis | 1 | | 0.00000 | | | | | | | |
| 744.99 | Erucic Acid (13c-22:1), Miscellaneous (% (w/w)) | 1 | | 0.00050 | | | | | | | |
| 746.01 | Docosapentaenoic Acid n-3 DPA (DHA)7c,10c,13c,16c,19c,22:1n-3, Direct Methylation | 1 | | 0.00000 | | | | | | | |
| 746.99 | Docosapentaenoic Acid n-3 DPA (DHA)7c,10c,13c,16c,19c,22:1n-3, Direct Methylation | 2 | | 0.00000 | | | | | | | |
| 748.99 | Lignoceric Acid (24:0), Miscellaneous (% (w/w)) | 1 | 1 | 0.01750 | | | | | | | |
| 750.01 | Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c,22:6n-3), Direct Methylation | 1 | | 0.00000 | | | | | | | |
| 750.99 | Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c,22:6n-3), Direct Methylation | 2 | | 0.00000 | | | | | | | |
| 752.01 | Nervonic Acid (24:1) isomers, Direct Methylation by Alkaline Hydrolysis | 1 | | 0.00000 | | | | | | | |
| 752.99 | Nervonic Acid (24:1) isomers, Miscellaneous (% (w/w)) | 1 | | 0.02900 | | | | | | | |
| 754.02 | Total n-3 Polyunsaturated (Omega-3) Fatty Acids, Direct Methylation | 2 | 2 | 1.0575 | 0.08132 | | | | | | |
| 754.99 | Total n-3 Polyunsaturated (Omega-3) Fatty Acids, Direct Methylation | 3 | 3 | 1.2463 | 0.21052 | 1.2463 | 0.21052 | 0.12154 | 16.89% | 0.04667 | |
| 756.01 | Total n-6 Polyunsaturated (Omega-6) Fatty Acids, Direct Methylation | 1 | 1 | 3.7150 | | | | | | | |
| 756.02 | Total n-6 Polyunsaturated (Omega-6) Fatty Acids, Direct Methylation | 1 | 1 | 4.3950 | | | | | | | |
| 756.99 | Total n-6 Polyunsaturated (Omega-6) Fatty Acids, Direct Methylation | 3 | 3 | 4.2772 | 0.25020 | 4.2772 | 0.25020 | 0.14445 | 5.85% | 0.09367 | |
| 772.99 | Total Fatty Acids, Miscellaneous (% (w/w)) | 1 | 1 | 7.7905 | | | | | | | |

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

Equine Feed

Test Material Code # 201727

Method Precision Report

Methods Reported: 87

Labs Reporting: 199

Issue Date : 08/31/2017

| Method Code | Analyte and Method | Total # Labs Submitting | # Labs used in Precision Calcs | Precision Mean | Precision SD | Between Labs sL | Within Labs sr | Reproducibility sR | Between Labs %RSD | Within Labs %rsd | Reproducibility %RSD | sR/sr |
|-------------|---|-------------------------|--------------------------------|----------------|--------------|-----------------|----------------|--------------------|-------------------|------------------|----------------------|--------|
| 001.07 | Loss on Drying, 104°C 3 hr, in malt (%) | 40 | 36 | 9.3040 | 0.45104 | 0.33910 | 0.15425 | 0.37253 | 3.67% | 1.668% | 4.03% | 2.4151 |
| 001.99 | Loss on Drying, Miscellaneous (%) | 22 | 21 | 9.1226 | 0.50660 | 0.40563 | 0.11182 | 0.42076 | 4.41% | 1.217% | 4.58% | 3.7627 |
| 002.01 | Protein, Auto Kjel-Foss (%) | 13 | 12 | 17.155 | 0.15381 | 0.15822 | 0.03909 | 0.16298 | 0.92% | 0.228% | 0.95% | 4.1690 |
| 002.05 | Protein, Copper, Boric Acid (%) | 34 | 33 | 17.288 | 0.19285 | 0.16209 | 0.09053 | 0.18566 | 0.94% | 0.523% | 1.07% | 2.0507 |
| 002.06 | Protein, Combustion Nitrogen Analyzer (%) | 125 | 116 | 17.589 | 0.32580 | 0.24464 | 0.14041 | 0.28208 | 1.39% | 0.798% | 1.60% | 2.0089 |
| 003.00 | Fat, Eth Ext., Direct (%) | 11 | 10 | 8.1138 | 0.85454 | 0.25256 | 0.07275 | 0.26283 | 3.02% | 0.870% | 3.14% | 3.6127 |
| 003.06 | Fat, Pet Ether (%) | 20 | 18 | 8.3597 | 0.16972 | 0.17166 | 0.07088 | 0.18572 | 2.05% | 0.848% | 2.22% | 2.6203 |
| 003.09 | Fat, Soxtec, Eth Ext (%) | 20 | 19 | 8.3183 | 0.30534 | 0.24321 | 0.09733 | 0.26196 | 2.91% | 1.164% | 3.13% | 2.6916 |
| 003.10 | Fat, Soxtec, Pet Ether (%) | 29 | 27 | 8.0694 | 0.24824 | 0.21520 | 0.08159 | 0.23015 | 2.66% | 1.008% | 2.84% | 2.8208 |
| 003.14 | Fat, Ankom (%) | 44 | 38 | 8.2337 | 0.42594 | 0.30937 | 0.10593 | 0.32700 | 3.75% | 1.284% | 3.96% | 3.0870 |
| 004.00 | Fiber, Crude, Asbestos Free (%) | 16 | 15 | 14.586 | 0.43543 | 0.26083 | 0.32999 | 0.42062 | 1.80% | 2.273% | 2.90% | 1.2747 |
| 004.06 | Fiber, Fibertec (%) | 26 | 24 | 14.724 | 0.85665 | 0.53984 | 0.13237 | 0.55583 | 3.70% | 0.907% | 3.81% | 4.1991 |
| 004.07 | Fiber, ANKOM (%) | 64 | 62 | 14.569 | 1.3066 | 0.86170 | 0.23695 | 0.89368 | 5.85% | 1.608% | 6.07% | 3.7716 |
| 005.00 | Ash, 2h @ 600°C (%) | 89 | 83 | 7.7874 | 0.21082 | 0.17838 | 0.07567 | 0.19377 | 2.29% | 0.972% | 2.49% | 2.5607 |
| 005.05 | Ash, 3h @ 550°C (%) | 34 | 33 | 7.9889 | 0.16453 | 0.16299 | 0.03177 | 0.16606 | 2.04% | 0.398% | 2.08% | 5.2264 |
| 005.99 | Ash, Miscellaneous (%) | 11 | 10 | 7.9964 | 0.33410 | 0.20601 | 0.04738 | 0.21139 | 2.55% | 0.587% | 2.62% | 4.4614 |
| 008.02 | Fiber, Acid Detergent (%) | 15 | 14 | 18.340 | 1.7660 | 1.1178 | 0.25335 | 1.1462 | 5.98% | 1.355% | 6.13% | 4.5242 |
| 008.08 | Fiber, Acid Detergent, ANKOM (%) | 43 | 37 | 18.855 | 1.2778 | 0.93454 | 0.24021 | 0.96491 | 5.03% | 1.292% | 5.19% | 4.0170 |
| 009.07 | Fiber, Neutral Det-ENZ Pretreat (%) | 12 | 12 | 35.601 | 2.0925 | 2.0607 | 0.51419 | 2.1239 | 5.79% | 1.444% | 5.97% | 4.1305 |
| 009.09 | Fiber, Neutral Detergent, ANKOM (%) | 44 | 41 | 33.847 | 1.5869 | 1.3277 | 0.30784 | 1.3629 | 3.94% | 0.913% | 4.04% | 4.4272 |
| 010.99 | Moisture, Miscellaneous (%) | 22 | 20 | 9.5031 | 0.47748 | 0.46089 | 0.05980 | 0.46475 | 4.83% | 0.627% | 4.87% | 7.7721 |
| 011.01 | Loss on Drying, 135°C 2hr (%) | 68 | 62 | 10.042 | 0.60729 | 0.46308 | 0.11487 | 0.47711 | 4.58% | 1.136% | 4.72% | 4.1536 |
| 012.00 | Starch, Polarimetric (Ewers) (%) | 10 | 10 | 12.350 | 0.61551 | 0.55760 | 0.36860 | 0.66842 | 4.51% | 2.985% | 5.41% | 1.8134 |
| 013.00 | Fat, Acid hydrolysis (%) | 21 | 19 | 8.9823 | 0.90114 | 0.64878 | 0.12156 | 0.66007 | 7.12% | 1.335% | 7.25% | 5.4299 |
| 013.02 | Fat, Mojonier, Bak Ext (%) | 17 | 16 | 9.7093 | 0.82060 | 0.81139 | 0.17339 | 0.82971 | 8.36% | 1.786% | 8.55% | 4.7851 |
| 013.13 | Fat, Ankom- Acid Hydrolysis (%) | 8 | 8 | 10.001 | 0.90877 | 0.89447 | 0.22708 | 0.92285 | 8.94% | 2.271% | 9.23% | 4.0640 |
| 019.00 | Calcium, Ox-Mn04 Vol. (%) | 14 | 14 | 1.1428 | 0.05737 | 0.05655 | 0.01368 | 0.05818 | 4.95% | 1.197% | 5.09% | 4.2547 |
| 019.31 | Calcium, AAS, Dry ash (%) | 24 | 22 | 1.1536 | 0.05201 | 0.04189 | 0.02380 | 0.04818 | 3.65% | 2.073% | 4.20% | 2.0247 |
| 019.41 | Calcium, ICP, Dry ash (%) | 26 | 24 | 1.1476 | 0.05355 | 0.05345 | 0.01647 | 0.05593 | 4.66% | 1.435% | 4.87% | 3.3959 |
| 019.42 | Calcium, ICP, Open vessel (%) | 20 | 20 | 1.1826 | 0.07714 | 0.07576 | 0.02052 | 0.07849 | 6.41% | 1.735% | 6.64% | 3.8252 |
| 019.43 | Calcium, ICP, Microwave (%) | 26 | 24 | 1.1627 | 0.04784 | 0.03870 | 0.02287 | 0.04496 | 3.34% | 1.976% | 3.88% | 1.9655 |
| 022.31 | Copper, AAS, Dry ash (mg / kg (ppm)) | 18 | 18 | 86.221 | 8.2685 | 8.1038 | 2.3222 | 8.4300 | 9.40% | 2.693% | 9.78% | 3.6302 |

| 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 |
|-------------|---|-------------------------|--------------------------------|----------------|--------------|-----------------|----------------|--------------------|-------------------|------------------|----------------------|--------|
| 022.41 | Copper, ICP, Dry ash (mg / kg (ppm)) | 21 | 20 | 80.821 | 11.780 | 11.480 | 3.6146 | 12.035 | 14.31% | 4.505% | 15.00% | 3.3296 |
| 022.42 | Copper, ICP, Open vessel (mg / kg (ppm)) | 20 | 19 | 95.392 | 10.105 | 5.7872 | 3.6134 | 6.8226 | 5.95% | 3.718% | 7.02% | 1.8881 |
| 022.43 | Copper, ICP, Microwave (mg / kg (ppm)) | 23 | 22 | 93.338 | 6.1741 | 4.6234 | 2.4611 | 5.2376 | 5.00% | 2.660% | 5.66% | 2.1282 |
| 025.31 | Iron, AAS, Dry ash (mg / kg (ppm)) | 18 | 17 | 633.42 | 61.403 | 57.157 | 20.573 | 60.747 | 9.10% | 3.275% | 9.67% | 2.9528 |
| 025.41 | Iron, ICP, Dry ash (mg / kg (ppm)) | 22 | 20 | 600.49 | 68.429 | 37.976 | 6.6966 | 38.562 | 6.20% | 1.092% | 6.29% | 5.7584 |
| 025.42 | Iron, ICP, Open vessel (mg / kg (ppm)) | 17 | 17 | 519.94 | 160.64 | 159.70 | 24.550 | 161.57 | 30.71% | 4.722% | 31.08% | 6.5813 |
| 025.43 | Iron, ICP, Microwave (mg / kg (ppm)) | 21 | 19 | 594.14 | 90.784 | 62.898 | 13.295 | 64.288 | 10.33% | 2.183% | 10.56% | 4.8357 |
| 027.31 | Magnesium, AAS, Dry ash (%) | 18 | 16 | 0.31219 | 0.01786 | 0.01379 | 0.00633 | 0.01518 | 4.46% | 2.045% | 4.90% | 2.3974 |
| 027.41 | Magnesium, ICP, Dry ash (%) | 23 | 22 | 0.32913 | 0.01521 | 0.01064 | 0.00700 | 0.01274 | 3.25% | 2.142% | 3.89% | 1.8183 |
| 027.42 | Magnesium, ICP, Open vessel (%) | 19 | 17 | 0.33344 | 0.01471 | 0.00992 | 0.00937 | 0.01364 | 2.95% | 2.791% | 4.06% | 1.4562 |
| 027.43 | Magnesium, ICP, Microwave (%) | 24 | 22 | 0.32985 | 0.02157 | 0.01279 | 0.00731 | 0.01472 | 3.92% | 2.238% | 4.51% | 2.0157 |
| 028.31 | Manganese, AAS, Dry ash (mg / kg (ppm)) | 16 | 15 | 183.24 | 8.5058 | 7.6597 | 5.2301 | 9.2750 | 4.18% | 2.854% | 5.06% | 1.7734 |
| 028.41 | Manganese, ICP, Dry ash (mg / kg (ppm)) | 21 | 20 | 178.36 | 16.296 | 13.443 | 2.1520 | 13.614 | 7.45% | 1.193% | 7.54% | 6.3263 |
| 028.42 | Manganese, ICP, Open vessel (mg / kg (ppm)) | 18 | 18 | 187.47 | 13.685 | 13.190 | 5.1615 | 14.164 | 7.04% | 2.753% | 7.55% | 2.7441 |
| 028.43 | Manganese, ICP, Microwave (mg / kg (ppm)) | 23 | 23 | 185.97 | 9.3884 | 9.0469 | 3.5482 | 9.7179 | 4.86% | 1.908% | 5.23% | 2.7388 |
| 031.01 | Phosphorus, Photometric (%) | 41 | 38 | 0.75516 | 0.02818 | 0.02200 | 0.00876 | 0.02368 | 2.90% | 1.157% | 3.13% | 2.7030 |
| 031.41 | Phosphorus, ICP, Dry ash (%) | 25 | 23 | 0.75166 | 0.03251 | 0.02500 | 0.01487 | 0.02909 | 3.35% | 1.992% | 3.90% | 1.9562 |
| 031.42 | Phosphorus, ICP, Open vessel (%) | 21 | 20 | 0.73971 | 0.03379 | 0.03252 | 0.01297 | 0.03501 | 4.40% | 1.753% | 4.73% | 2.6997 |
| 031.43 | Phosphorus, ICP, Microwave (%) | 26 | 25 | 0.75278 | 0.03033 | 0.02927 | 0.01379 | 0.03235 | 3.89% | 1.833% | 4.30% | 2.3464 |
| 032.31 | Potassium, AAS, Dry ash (%) | 16 | 15 | 1.1789 | 0.06962 | 0.06119 | 0.02389 | 0.06569 | 5.23% | 2.041% | 5.61% | 2.7495 |
| 032.41 | Potassium, ICP, Dry ash (%) | 23 | 21 | 1.1586 | 0.05293 | 0.03900 | 0.01927 | 0.04350 | 3.34% | 1.652% | 3.73% | 2.2578 |
| 032.42 | Potassium, ICP, Open vessel (%) | 20 | 18 | 1.2338 | 0.06879 | 0.05433 | 0.02459 | 0.05963 | 4.44% | 2.008% | 4.87% | 2.4255 |
| 032.43 | Potassium, ICP, Microwave (%) | 28 | 27 | 1.1871 | 0.04497 | 0.04248 | 0.02307 | 0.04834 | 3.58% | 1.945% | 4.08% | 2.0954 |
| 033.00 | Salt as chloride, Sol Cl (%) | 25 | 24 | 0.81751 | 0.06918 | 0.05694 | 0.01217 | 0.05823 | 7.03% | 1.504% | 7.19% | 4.7829 |
| 033.01 | Salt as chloride, Poten Cl (%) | 31 | 28 | 0.84091 | 0.07691 | 0.04496 | 0.00753 | 0.04558 | 5.44% | 0.911% | 5.51% | 6.0549 |
| 035.31 | Sodium, AAS, Dry ash (%) | 17 | 15 | 0.37500 | 0.03631 | 0.03281 | 0.01115 | 0.03465 | 8.84% | 3.005% | 9.34% | 3.1084 |
| 035.41 | Sodium, ICP, Dry ash (%) | 24 | 22 | 0.36196 | 0.02667 | 0.01700 | 0.00672 | 0.01827 | 4.70% | 1.857% | 5.05% | 2.7206 |
| 035.42 | Sodium, ICP, Open vessel (%) | 17 | 14 | 0.36828 | 0.02022 | 0.02155 | 0.00315 | 0.02178 | 5.85% | 0.855% | 5.91% | 6.9076 |
| 035.43 | Sodium, ICP, Microwave (%) | 24 | 21 | 0.36499 | 0.01714 | 0.01393 | 0.00703 | 0.01560 | 3.79% | 1.914% | 4.25% | 2.2200 |
| 036.42 | Sulfur, ICP, Open vessel (%) | 20 | 17 | 0.32573 | 0.03004 | 0.02291 | 0.00646 | 0.02381 | 7.14% | 2.013% | 7.42% | 3.6870 |
| 036.43 | Sulfur, ICP, Microwave (%) | 13 | 11 | 0.31538 | 0.01641 | 0.00846 | 0.00967 | 0.01285 | 2.65% | 3.031% | 4.03% | 1.3287 |
| 037.31 | Zinc, AAS, Dry ash (mg / kg (ppm)) | 17 | 16 | 258.68 | 27.309 | 17.005 | 10.222 | 19.840 | 6.70% | 4.029% | 7.82% | 1.9410 |
| 037.41 | Zinc, ICP, Dry ash (mg / kg (ppm)) | 20 | 18 | 244.70 | 21.292 | 17.616 | 4.7515 | 18.246 | 7.15% | 1.929% | 7.41% | 3.8400 |
| 037.42 | Zinc, ICP, Open vessel (mg / kg (ppm)) | 18 | 15 | 252.36 | 24.275 | 18.914 | 3.7114 | 19.274 | 7.36% | 1.444% | 7.50% | 5.1933 |
| 037.43 | Zinc, ICP, Microwave (mg / kg (ppm)) | 23 | 23 | 255.62 | 17.103 | 16.552 | 6.0887 | 17.637 | 6.48% | 2.382% | 6.90% | 2.8966 |
| 106.02 | Vitamin A, LC (KU / kg) | 17 | 14 | 37.145 | 10.616 | 6.7895 | 2.0998 | 7.1068 | 17.84% | 5.516% | 18.67% | 3.3845 |
| 109.02 | Vitamin E, LC (IU/kg) | 16 | 15 | 689.20 | 118.45 | 117.74 | 18.202 | 119.14 | 17.08% | 2.641% | 17.29% | 6.5455 |
| 120.00 | Alanine, Post-col Ninhydrin Der (%) | 19 | 17 | 0.77518 | 0.02966 | 0.02231 | 0.00562 | 0.02301 | 2.89% | 0.729% | 2.98% | 4.0904 |
| 121.00 | Arginine, Post-col Ninhydrin Der (%) | 19 | 17 | 1.0341 | 0.03612 | 0.02609 | 0.01378 | 0.02950 | 2.54% | 1.340% | 2.87% | 2.1411 |
| 122.00 | Aspartic, Post-col Ninhydrin Der (%) | 19 | 17 | 1.4827 | 0.05843 | 0.03677 | 0.01148 | 0.03852 | 2.50% | 0.780% | 2.62% | 3.3543 |

Test Material Code # 201727

Issue Date : 08/31/2017

| Method Code | Analyte and Method | Total # Labs Submitting | # Labs used in Precision Calcs | Precision Mean | Precision SD | Between Labs sL | Within Labs sr | Reproducibility sR | Between Labs %RSD | Within Labs %rsd | Reproducibility %RSD | sR/sr |
|-------------|---|-------------------------|--------------------------------|----------------|--------------|-----------------|----------------|--------------------|-------------------|------------------|----------------------|--------|
| 124.00 | Cysteine/Cystine, PAO Post-col Ninhydri (%) | 19 | 19 | 0.28383 | 0.01970 | 0.01911 | 0.00673 | 0.02026 | 6.73% | 2.373% | 7.14% | 3.0090 |
| 125.00 | Glutamic, Post-col Ninhydrin Der (%) | 19 | 16 | 2.5973 | 0.07467 | 0.04565 | 0.02108 | 0.05028 | 1.75% | 0.808% | 1.93% | 2.3852 |
| 126.00 | Glycine, Post-col Ninhydrin Der (%) | 19 | 17 | 0.88093 | 0.02616 | 0.01170 | 0.00878 | 0.01463 | 1.33% | 1.002% | 1.67% | 1.6656 |
| 127.00 | Histidine, Post-col Ninhydrin Der (%) | 19 | 18 | 0.41936 | 0.02920 | 0.02404 | 0.00687 | 0.02500 | 5.79% | 1.654% | 6.02% | 3.6388 |
| 128.00 | Isoleucine, Post-col Ninhydrin Der (%) | 19 | 18 | 0.60478 | 0.03886 | 0.02968 | 0.00943 | 0.03114 | 4.86% | 1.545% | 5.10% | 3.3017 |
| 129.00 | Leucine, Post-col Ninhydrin Der (%) | 19 | 16 | 1.1091 | 0.04110 | 0.02716 | 0.00724 | 0.02811 | 2.47% | 0.658% | 2.55% | 3.8817 |
| 130.00 | L-Lysine, Post-col Ninhydrin Der (%) | 20 | 19 | 1.1243 | 0.05590 | 0.05542 | 0.01033 | 0.05637 | 4.93% | 0.919% | 5.01% | 5.4555 |
| 131.00 | Methionine, PAO Post-col Ninhydrin Der (%) | 19 | 18 | 0.38638 | 0.01388 | 0.01310 | 0.00538 | 0.01416 | 3.40% | 1.396% | 3.67% | 2.6324 |
| 132.00 | Phenylalanine, Post-col Ninhydrin Der (%) | 19 | 16 | 0.70267 | 0.02796 | 0.02013 | 0.00766 | 0.02153 | 2.89% | 1.100% | 3.09% | 2.8117 |
| 133.00 | Proline, Post-col Ninhydrin Der (%) | 19 | 17 | 0.90589 | 0.04766 | 0.03582 | 0.01128 | 0.03755 | 3.98% | 1.254% | 4.17% | 3.3287 |
| 134.00 | Serine, Post-col Ninhydrin Der (%) | 19 | 17 | 0.77529 | 0.04934 | 0.03094 | 0.00823 | 0.03201 | 3.94% | 1.049% | 4.08% | 3.8917 |
| 135.00 | Threonine, Post-col Ninhydrin Der (%) | 19 | 17 | 0.79592 | 0.04004 | 0.02591 | 0.00647 | 0.02670 | 3.28% | 0.818% | 3.38% | 4.1303 |
| 137.00 | Tyrosine, Post-col Ninhydrin Der (%) | 14 | 12 | 0.49574 | 0.04670 | 0.04844 | 0.00643 | 0.04887 | 9.75% | 1.295% | 9.84% | 7.5961 |
| 138.00 | Valine, Post-col Ninhydrin Der (%) | 19 | 17 | 0.76015 | 0.04053 | 0.03351 | 0.01451 | 0.03651 | 4.37% | 1.894% | 4.77% | 2.5168 |
| 165.99 | Sucrose, Miscellaneous (%) | 8 | 8 | 1.8701 | 0.19057 | 0.18383 | 0.07100 | 0.19707 | 9.83% | 3.797% | 10.54% | 2.7755 |

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