



AAFCO
Proficiency Testing Program



Animal Feed Scheme

Equine Feed

Test Material Code # 201821

Analyte Summary Report

Analytes Reported: 94

Labs Reporting: 178

Issue Date : 02/28/2018

| Analyte Group Code | Analyte and Method | Total # Tests Submitted | # Tests 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 | Urea (%) | 1 | 1 | 0.10000 | | | | | | | |
| 001 | Loss on Drying (%) | 73 | 71 | 7.2775 | 0.47612 | 7.3017 | 0.27462 | 0.04074 | 3.76% | 0.08407 | 2.97% |
| 002 | Protein (%) | 177 | 173 | 18.603 | 0.64544 | 18.545 | 0.32459 | 0.03085 | 1.75% | 0.14752 | 2.32% |
| 003 | Fat (%) | 135 | 133 | 3.3276 | 0.73276 | 3.2956 | 0.75924 | 0.08229 | 23.04% | 0.15207 | 3.34% |
| 004 | Fiber (%) | 107 | 105 | 11.174 | 0.97666 | 11.147 | 0.86775 | 0.10586 | 7.78% | 0.21605 | 2.78% |
| 005 | Ash (%) | 127 | 125 | 11.943 | 0.40563 | 11.950 | 0.39325 | 0.04397 | 3.29% | 0.10936 | 2.75% |
| 006 | Total sugars (%) | 4 | 4 | 4.6263 | 1.6119 | 4.6263 | 1.6119 | 1.0074 | 34.84% | 0.29250 | 3.18% |
| 008 | Fiber (%) | 53 | 52 | 13.861 | 0.95148 | 13.862 | 0.93436 | 0.16197 | 6.74% | 0.28706 | 2.69% |
| 009 | Fiber (%) | 51 | 49 | 23.734 | 1.7033 | 23.709 | 1.8789 | 0.33552 | 7.93% | 0.42317 | 2.05% |
| 010 | Moisture (%) | 24 | 23 | 7.7117 | 0.49728 | 7.6266 | 0.33194 | 0.08652 | 4.35% | 0.08174 | 2.95% |
| 011 | Loss on Drying (%) | 58 | 56 | 8.1573 | 0.43792 | 8.2114 | 0.29858 | 0.04987 | 3.64% | 0.06575 | 2.91% |
| 012 | Starch (%) | 36 | 36 | 16.983 | 2.4694 | 16.832 | 1.4192 | 0.29567 | 8.43% | 0.29657 | 2.44% |
| 013 | Fat (%) | 45 | 45 | 5.1670 | 1.3402 | 5.2230 | 1.3390 | 0.24950 | 25.64% | 0.23654 | 3.12% |
| 015 | Aluminum (mg / kg (ppm)) | 11 | 11 | 313.78 | 55.352 | 315.69 | 58.426 | 22.020 | 18.51% | 17.052 | 6.73% |
| 017 | Boron (mg / kg (ppm)) | 13 | 12 | 18.891 | 1.7206 | 19.005 | 1.5451 | 0.55756 | 8.13% | 0.59608 | 10.27% |
| 019 | Calcium (%) | 123 | 122 | 2.1833 | 0.16056 | 2.1819 | 0.12488 | 0.01413 | 5.72% | 0.04788 | 3.56% |
| 021 | Cobalt (mg / kg (ppm)) | 21 | 20 | 4.0714 | 0.97195 | 4.0709 | 1.1011 | 0.30777 | 27.05% | 0.21905 | 12.95% |
| 022 | Copper (mg / kg (ppm)) | 88 | 86 | 120.63 | 11.828 | 120.58 | 7.9229 | 1.0679 | 6.57% | 4.0227 | 7.78% |
| 023 | Fluorine (mg / kg (ppm)) | 1 | 1 | 28.900 | | | | | | | |
| 025 | Iron (mg / kg (ppm)) | 75 | 72 | 748.50 | 151.27 | 770.01 | 80.339 | 11.835 | 10.43% | 18.378 | 5.88% |
| 027 | Magnesium (%) | 91 | 90 | 0.92966 | 0.09035 | 0.93399 | 0.05299 | 0.00698 | 5.67% | 0.02442 | 4.04% |
| 028 | Manganese (mg / kg (ppm)) | 85 | 83 | 292.16 | 24.947 | 292.33 | 21.016 | 2.8835 | 7.19% | 7.3359 | 6.81% |
| 031 | Phosphorus (%) | 122 | 120 | 0.86904 | 0.06103 | 0.86688 | 0.04307 | 0.00491 | 4.97% | 0.01935 | 4.09% |
| 032 | Potassium (%) | 90 | 89 | 1.3785 | 1.1324 | 1.2763 | 0.06359 | 0.00843 | 4.98% | 0.03951 | 3.86% |
| 033 | Salt as chloride (%) | 48 | 47 | 1.1588 | 0.25363 | 1.1671 | 0.08694 | 0.01585 | 7.45% | 0.02176 | 3.91% |
| 034 | Selenium (mg / kg (ppm)) | 21 | 21 | 2.0559 | 0.56305 | 2.0809 | 0.56066 | 0.15293 | 26.94% | 0.11236 | 14.33% |
| 035 | Sodium (%) | 87 | 86 | 0.62843 | 0.08971 | 0.61983 | 0.04060 | 0.00547 | 6.55% | 0.01577 | 4.30% |
| 036 | Sulfur (%) | 35 | 34 | 0.31124 | 0.02387 | 0.31122 | 0.02175 | 0.00466 | 6.99% | 0.01107 | 4.77% |
| 037 | Zinc (mg / kg (ppm)) | 85 | 85 | 419.41 | 33.057 | 420.04 | 28.492 | 3.8630 | 6.78% | 10.786 | 6.45% |
| 038 | Molybdenum (mg / kg (ppm)) | 15 | 15 | 2.8016 | 0.25067 | 2.7957 | 0.27134 | 0.08758 | 9.71% | 0.21103 | 13.70% |

| Analyte Group Code | Analyte and Method | Total # Tests Submitted | # Tests 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 |
|--------------------|---|-------------------------|-------------------------|----------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------------|--------------|
| 040 | Barium (mg / kg (ppm)) | 3 | 3 | 23.065 | 1.1018 | 23.065 | 1.1018 | 0.79516 | 4.78% | 0.41580 | 9.97% |
| 041 | Vanadium (mg / kg (ppm)) | 1 | 1 | 2.6696 | | | | | | | |
| 042 | Chloride (%) | 4 | 3 | 0.74317 | 0.01549 | 0.74317 | 0.01549 | 0.01118 | 2.08% | 0.00033 | 4.18% |
| 101 | Choline Chloride (mg / kg (ppm)) | 1 | 1 | 1,429.0 | | | | | | | |
| 103 | Pantothenic Acid (mg / kg (ppm)) | 1 | 1 | 24.450 | | | | | | | |
| 104 | Riboflavin (mg / kg (ppm)) | 3 | 3 | 16.485 | 3.7760 | 16.485 | 3.7760 | 2.7251 | 22.91% | 0.87000 | 10.49% |
| 105 | Thiamine (mg / kg (ppm)) | 2 | 2 | 14.400 | 8.9873 | | | | | | |
| 106 | Vitamin A (KU / kg) | 19 | 18 | 13.254 | 10.602 | 10.809 | 4.5191 | 1.3315 | 41.81% | 0.93644 | |
| 108 | Vitamin D3 (KU / kg) | 5 | 5 | 2.9456 | 2.8998 | 2.9456 | 2.8998 | 1.6210 | 98.45% | 0.26000 | |
| 109 | Vitamin E (IU/kg) | 19 | 19 | 581.20 | 73.099 | 573.43 | 64.176 | 18.404 | 11.19% | 25.278 | |
| 111 | Vitamin C, phosphorylated (mg / kg (ppm)) | 3 | 3 | 128.07 | 74.698 | 128.07 | 74.698 | 53.909 | 58.33% | 28.067 | 7.71% |
| 120 | Alanine (%) | 23 | 22 | 0.85139 | 0.05562 | 0.85019 | 0.02631 | 0.00701 | 3.10% | 0.00695 | 4.10% |
| 121 | Arginine (%) | 23 | 22 | 1.1099 | 0.03864 | 1.1106 | 0.04217 | 0.01124 | 3.80% | 0.01819 | 3.94% |
| 122 | Aspartic (%) | 23 | 23 | 1.7835 | 0.05938 | 1.7878 | 0.05672 | 0.01478 | 3.17% | 0.03209 | 3.66% |
| 124 | Cysteine/Cystine (%) | 24 | 24 | 0.30449 | 0.02771 | 0.30168 | 0.02246 | 0.00573 | 7.44% | 0.00507 | 4.79% |
| 125 | Glutamic (%) | 23 | 23 | 2.9864 | 0.11192 | 2.9907 | 0.08729 | 0.02275 | 2.92% | 0.04523 | 3.39% |
| 126 | Glycine (%) | 23 | 23 | 0.84558 | 0.03799 | 0.84682 | 0.03919 | 0.01022 | 4.63% | 0.01200 | 4.10% |
| 127 | Histidine (%) | 23 | 22 | 0.41904 | 0.02437 | 0.41934 | 0.02108 | 0.00562 | 5.03% | 0.00683 | 4.56% |
| 128 | Isoleucine (%) | 23 | 23 | 0.71718 | 0.03941 | 0.71763 | 0.04034 | 0.01051 | 5.62% | 0.01196 | 4.20% |
| 129 | Leucine (%) | 23 | 22 | 1.2769 | 0.12238 | 1.2605 | 0.04748 | 0.01265 | 3.77% | 0.01806 | 3.86% |
| 130 | L-Lysine (%) | 30 | 29 | 0.97188 | 0.06185 | 0.97656 | 0.05171 | 0.01200 | 5.30% | 0.01674 | 4.01% |
| 131 | Methionine (%) | 27 | 27 | 0.30068 | 0.03067 | 0.30215 | 0.02679 | 0.00645 | 8.87% | 0.00600 | 4.79% |
| 132 | Phenylalanine (%) | 23 | 23 | 0.83981 | 0.04026 | 0.84226 | 0.03410 | 0.00889 | 4.05% | 0.01453 | 4.10% |
| 133 | Proline (%) | 22 | 22 | 1.0489 | 0.09457 | 1.0476 | 0.07699 | 0.02052 | 7.35% | 0.01725 | 3.97% |
| 134 | Serine (%) | 23 | 22 | 0.84545 | 0.04206 | 0.84685 | 0.04119 | 0.01098 | 4.86% | 0.01645 | 4.10% |
| 135 | Threonine (%) | 24 | 23 | 0.69198 | 0.03186 | 0.69177 | 0.03151 | 0.00821 | 4.55% | 0.00580 | 4.23% |
| 136 | Tryptophan (%) | 13 | 13 | 0.24921 | 0.02862 | 0.25171 | 0.02603 | 0.00902 | 10.34% | 0.00493 | 4.92% |
| 137 | Tyrosine (%) | 15 | 15 | 0.54109 | 0.06061 | 0.54279 | 0.06492 | 0.02095 | 11.96% | 0.01271 | 4.38% |
| 138 | Valine (%) | 23 | 23 | 0.88531 | 0.03948 | 0.88720 | 0.03499 | 0.00912 | 3.94% | 0.01507 | 4.07% |
| 139 | Taurine (%) | 2 | 1 | 0.16000 | | | | | | | |
| 351 | Chlortetracycline (mg/kg (ppm)) | 2 | 2 | 5.4876 | 2.9873 | | | | | | |
| 354 | Decoquinatate (mg/kg (ppm)) | 1 | 1 | 0.13000 | | | | | | | |
| 361 | Lasalocid sodium (mg/kg (ppm)) | 6 | 4 | 0.61686 | 0.13919 | 0.61686 | 0.13919 | 0.08699 | 22.56% | 0.01523 | 17.20% |
| 365 | Monensin (mg/kg (ppm)) | 9 | 7 | 0.84180 | 0.53948 | 0.72327 | 0.29802 | 0.14080 | 41.20% | 0.10820 | 16.80% |
| 377 | Pyrantel Tartrate (mg/kg (ppm)) | 1 | 1 | 212.00 | | | | | | | |
| 392 | Fenbendazole (mg/kg (ppm)) | 1 | 1 | 96.850 | | | | | | | |
| 400 | Water activity (Units) | 7 | 7 | 0.39746 | 0.03853 | 0.39746 | 0.04369 | 0.02064 | 10.99% | 0.00320 | |
| 412 | Dietary Starch (%) | 2 | 2 | 15.873 | 0.28638 | | | | | | |

Test Material Code # 201821
Issue Date : 02/28/2018

| Analyte Group Code | Analyte and Method | Total # Tests Submitted | # Tests 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 |
|--------------------|---|-------------------------|-------------------------|----------|---------|------------------------------|--------------------------|------------------------|----------------|-----------------------|--------------|
| 516 | Arsenic, total (mg / kg (ppm)) | 6 | 6 | 0.46511 | 0.06484 | 0.46511 | 0.07353 | 0.03752 | 15.81% | 0.04595 | 17.95% |
| 518 | Cadmium (mg / kg (ppm)) | 6 | 6 | 0.22244 | 0.00840 | 0.22254 | 0.00929 | 0.00474 | 4.17% | 0.03742 | 20.06% |
| 520 | Chromium (mg / kg (ppm)) | 10 | 10 | 9.4947 | 2.7617 | 9.4947 | 3.1318 | 1.2379 | 32.98% | 0.49488 | 11.40% |
| 526 | Lead (mg / kg (ppm)) | 5 | 4 | 0.37329 | 0.03082 | 0.37329 | 0.03082 | 0.01926 | 8.26% | 0.03948 | 18.55% |
| 539 | Nickel (mg / kg (ppm)) | 5 | 5 | 5.5818 | 1.2020 | 5.5818 | 1.2020 | 0.67194 | 21.53% | 0.48220 | 12.35% |
| 710 | Lauric Acid (12:0) (% (w/w)) | 2 | 2 | 0.00418 | 0.00187 | | | | | | |
| 714 | Myristic Acid (14:0) (% (w/w)) | 1 | 1 | 0.00940 | | | | | | | |
| 716 | Palmitic Acid (16:0) (% (w/w)) | 1 | 1 | 0.64735 | | | | | | | |
| 718 | Palmitoleic Acid (9c-16:1) (% (w/w)) | 2 | 2 | 0.03543 | 0.04020 | | | | | | |
| 722 | Stearic Acid (18:0) (% (w/w)) | 1 | 1 | 0.14070 | | | | | | | |
| 724 | Oleic Acid (9c-18:1) (% (w/w)) | 1 | 1 | 0.78495 | | | | | | | |
| 726 | Linoleic Acid (9c,12c-18:2) (% (w/w)) | 3 | 3 | 0.59375 | 0.10370 | 0.59375 | 0.10370 | 0.07484 | 17.47% | 0.05017 | |
| 728 | alpha-Linolenic Acid (9c,12c,15c-18:3) (% (w/w)) | 2 | 2 | 0.22928 | 0.03002 | | | | | | |
| 730 | Arachidic Acid (20:0) (% (w/w)) | 1 | 1 | 0.01335 | | | | | | | |
| 732 | Gondoic Acid (11c-20:1) (% (w/w)) | 1 | 1 | 0.02200 | | | | | | | |
| 736 | Arachidonic Acid (5c,8c,11c,14c-20:4) (% (w/w)) | 1 | 1 | 0.00650 | | | | | | | |
| 740 | Eicosapentaenoic Acid EPA (5c,8c,11c,14c,17c-20:5) (% (w/w)) | 2 | 1 | 0.00200 | | | | | | | |
| 742 | Behenic Acid (22:0) (% (w/w)) | 1 | 1 | 0.01890 | | | | | | | |
| 744 | Erucic Acid (13c-22:1) (% (w/w)) | 1 | 1 | 0.00110 | | | | | | | |
| 746 | Docosapentaenoic Acid n-3 DPA (DHA)7c,10c,13c,16c,19c-22:5) (% (w/w)) | 2 | | 0.00000 | | | | | | | |
| 748 | Lignoceric Acid (24:0) (% (w/w)) | 1 | 1 | 0.01210 | | | | | | | |
| 750 | Docosahexaenoic Acid DHA (4c,7c,10c,13c,16c,19c,22:6) (% (w/w)) | 2 | | 0.00000 | | | | | | | |
| 752 | Nervonic Acid (24:1) isomers (% (w/w)) | 1 | 1 | 0.01885 | | | | | | | |
| 754 | Total n-3 Polyunsaturated (Omega-3) Fatty Acids | 3 | 3 | 0.29750 | 0.04380 | 0.29750 | 0.04380 | 0.03161 | 14.72% | 0.00767 | |
| 756 | Total n-6 Polyunsaturated (Omega-6) Fatty Acids | 3 | 3 | 0.78900 | 0.27262 | 0.78900 | 0.27262 | 0.19675 | 34.55% | 0.05133 | |
| 772 | Total Fatty Acids (% (w/w)) | 1 | 1 | 2.5254 | | | | | | | |

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.