

AAFCO Check Sample Program
Method Performance & Summary Report



AAFCO
Check Sample Program



Sample # 201621
Cattle Feed Supplement
Regular Program

Labs Reporting: 170
Issue Date : 02/29/2016

| Method Code | Total # Labs Submitting | # Labs in Method Precision Calcs | Mean | SD | Assigned Value - Robust Mean | AAFCO CS ffp - Robust sd | Uncertainty (U) - Robust | % RSD - Robust | Between Labs sL | Within Labs sr | Reproducibility SR | Between Labs %RSD | Within Labs %rsd | Reproducibility %RSD | sR/sr | Average Range (R-bar) | Horwitz %RSD |
|-------------|-------------------------|----------------------------------|--------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------|----------------|--------------------|-------------------|------------------|----------------------|--------|-----------------------|--------------|
| 000.02 | 4 | 3 | 18.307 | 10.704 | 18.307 | 10.704 | 6.1800 | 58.47% | 10.704 | 0.04726 | 10.704 | 58.47% | 0.26% | 58.47% | 226.50 | 0.16000 | 2.34% |
| 000.99 | 1 | | 8.7065 | | | | | | | | | | | | | | |
| 001.00 | 8 | 7 | 6.3182 | 0.90425 | 6.5922 | 1.2936 | 0.45736 | 19.62% | 0.90286 | 0.07091 | 0.90564 | 14.29% | 1.12% | 14.33% | 12.772 | 0.11878 | 3.01% |
| 001.03 | 1 | | 6.7300 | | | | | | | | | | | | | | |
| 001.05 | 1 | | 5.9900 | | | | | | | | | | | | | | |
| 001.07 | 38 | 34 | 6.4166 | 0.39504 | 6.4233 | 0.41014 | 0.06743 | 6.39% | 0.38862 | 0.10033 | 0.40136 | 6.06% | 1.56% | 6.26% | 4.0005 | 0.11569 | 3.02% |
| 001.08 | 2 | 0 | | | | | | | | | | | | | | | |
| 001.99 | 17 | 15 | 6.5722 | 0.79168 | 6.6416 | 0.85233 | 0.21308 | 12.83% | 0.79125 | 0.03695 | 0.79211 | 12.04% | 0.56% | 12.05% | 21.436 | 0.06580 | 3.01% |
| 002.00 | 3 | 3 | 39.830 | 0.67050 | 39.830 | 0.67050 | 0.38712 | 1.68% | 0.66635 | 0.10536 | 0.67463 | 1.67% | 0.26% | 1.69% | 6.4033 | 0.12000 | 1.58% |
| 002.01 | 12 | 11 | 39.460 | 0.43638 | 39.422 | 0.41191 | 0.12420 | 1.04% | 0.42291 | 0.15218 | 0.44946 | 1.07% | 0.39% | 1.14% | 2.9534 | 0.17223 | 1.59% |
| 002.02 | 4 | 4 | 39.738 | 0.72035 | 39.738 | 0.72035 | 0.36018 | 1.81% | 0.71759 | 0.08916 | 0.72310 | 1.81% | 0.22% | 1.82% | 8.1101 | 0.11780 | 1.59% |
| 002.04 | 6 | 5 | 39.445 | 0.39125 | 39.230 | 0.71787 | 0.29307 | 1.83% | 0.37125 | 0.17461 | 0.41027 | 0.94% | 0.44% | 1.04% | 2.3496 | 0.20167 | 1.60% |
| 002.05 | 24 | 24 | 39.375 | 0.40029 | 39.386 | 0.37212 | 0.07596 | 0.94% | 0.38178 | 0.17015 | 0.41798 | 0.97% | 0.43% | 1.06% | 2.4565 | 0.17884 | 1.59% |
| 002.06 | 114 | 104 | 39.903 | 0.30832 | 39.891 | 0.30640 | 0.02921 | 0.77% | 0.26843 | 0.21452 | 0.34362 | 0.67% | 0.54% | 0.86% | 1.6018 | 0.24875 | 1.58% |
| 002.08 | 3 | 3 | 39.144 | 0.40287 | 39.144 | 0.40287 | 0.23260 | 1.03% | 0.37619 | 0.20387 | 0.42789 | 0.96% | 0.52% | 1.09% | 2.0988 | 0.24073 | 1.60% |
| 002.09 | 1 | | 39.315 | | | | | | | | | | | | | | |
| 002.10 | 1 | | 39.485 | | | | | | | | | | | | | | |
| 002.11 | 5 | 5 | 41.383 | 5.5181 | 41.383 | 5.5181 | 2.4678 | 13.33% | 5.5168 | 0.16694 | 5.5194 | 13.33% | 0.40% | 13.34% | 33.061 | 0.18200 | 1.55% |
| 002.99 | 1 | | 39.500 | | | | | | | | | | | | | | |
| 003.00 | 12 | 10 | 2.8560 | 0.29247 | 2.8955 | 0.34780 | 0.10040 | 12.01% | 0.28179 | 0.11072 | 0.30277 | 9.87% | 3.88% | 10.60% | 2.7344 | 0.14004 | 3.41% |
| 003.01 | 1 | | 1.6200 | | | | | | | | | | | | | | |
| 003.06 | 16 | 15 | 2.6227 | 0.22696 | 2.6506 | 0.27900 | 0.06975 | 10.53% | 0.21075 | 0.11912 | 0.24209 | 8.04% | 4.54% | 9.23% | 2.0324 | 0.13279 | 3.45% |
| 003.09 | 19 | 18 | 2.9020 | 0.29758 | 2.9028 | 0.33585 | 0.07916 | 11.57% | 0.29067 | 0.09016 | 0.30433 | 10.02% | 3.11% | 10.49% | 3.3755 | 0.10278 | 3.41% |
| 003.10 | 19 | 18 | 2.5453 | 0.21793 | 2.5425 | 0.21861 | 0.05153 | 8.60% | 0.21350 | 0.06179 | 0.22227 | 8.39% | 2.43% | 8.73% | 3.5969 | 0.06219 | 3.48% |
| 003.11 | 4 | 4 | 2.4713 | 1.1959 | 2.4713 | 1.1959 | 0.59795 | 48.39% | 1.1952 | 0.05690 | 1.1966 | 48.36% | 2.30% | 48.42% | 21.030 | 0.06750 | 3.49% |
| 003.12 | 3 | 3 | 2.3683 | 0.30880 | 2.3683 | 0.30880 | 0.17829 | 13.04% | 0.30553 | 0.06338 | 0.31204 | 12.90% | 2.68% | 13.18% | 4.9235 | 0.07667 | 3.51% |
| 003.13 | 6 | 6 | 2.6674 | 0.27249 | 2.7002 | 0.22895 | 0.09347 | 8.48% | 0.26667 | 0.07918 | 0.27818 | 10.00% | 2.97% | 10.43% | 3.5134 | 0.08117 | 3.44% |
| 003.14 | 37 | 32 | 2.7951 | 0.45785 | 2.7720 | 0.35473 | 0.05912 | 12.80% | 0.45047 | 0.11577 | 0.46511 | 16.12% | 4.14% | 16.64% | 4.0176 | 0.14377 | 3.43% |
| 003.99 | 3 | 2 | 2.3300 | 0.74953 | 2.3300 | 0.74953 | 0.53000 | 32.17% | 0.74619 | 0.10000 | 0.75286 | 32.03% | 4.29% | 32.31% | 7.5286 | 0.93333 | 3.52% |
| 004.00 | 15 | 12 | 6.7130 | 0.41357 | 6.8023 | 0.43025 | 0.11499 | 6.33% | 0.40692 | 0.10445 | 0.42011 | 6.06% | 1.56% | 6.26% | 4.0222 | 0.14060 | 3.00% |
| 004.01 | 2 | 0 | | | | | | | | | | | | | | | |
| 004.03 | 4 | 4 | 6.5238 | 1.3234 | 6.5238 | 1.3234 | 0.66168 | 20.29% | 1.3175 | 0.17532 | 1.3292 | 20.20% | 2.69% | 20.37% | 7.5813 | 0.19750 | 3.02% |

| Method Code | Total # Labs Submitting | # Labs in Method Precision Calcs | Mean | SD | Assigned Value - Robust Mean | AAFCCO CS ffp - Robust sd | Uncertainty (U) - Robust | % RSD - Robust | Between Labs sL | Within Labs sr | Reproducibility sR | Between Labs %RSD | Within Labs %rsd | Reproducibility %RSD | sR/sr | Average Range (R-bar) | Horwitz %RSD |
|-------------|-------------------------|----------------------------------|---------|---------|------------------------------|---------------------------|--------------------------|----------------|-----------------|----------------|--------------------|-------------------|------------------|----------------------|--------|-----------------------|--------------|
| 004.06 | 21 | 20 | 6.7720 | 0.52901 | 6.7264 | 0.44548 | 0.09721 | 6.62% | 0.52058 | 0.13307 | 0.53732 | 7.69% | 1.96% | 7.93% | 4.0380 | 0.15152 | 3.00% |
| 004.07 | 49 | 44 | 9.4392 | 1.8523 | 9.4278 | 2.0573 | 0.30009 | 21.82% | 1.8419 | 0.27688 | 1.8626 | 19.51% | 2.93% | 19.73% | 6.7269 | 0.33039 | 2.85% |
| 004.11 | 4 | 4 | 9.9813 | 2.5336 | 9.9813 | 2.5336 | 1.2668 | 25.38% | 2.5215 | 0.34948 | 2.5456 | 25.26% | 3.50% | 25.50% | 7.2840 | 0.43250 | 2.83% |
| 004.99 | 3 | 2 | 6.1000 | 0.42426 | 6.1000 | 0.42426 | 0.30000 | 6.96% | 0.42426 | 0.00000 | 0.42426 | 6.96% | 0.00% | 6.96% | | 0.00667 | 3.05% |
| 005.00 | 78 | 68 | 31.701 | 0.76468 | 31.780 | 0.50704 | 0.05894 | 1.60% | 0.75762 | 0.14659 | 0.77167 | 2.39% | 0.46% | 2.43% | 5.2641 | 0.22317 | 1.77% |
| 005.05 | 18 | 15 | 31.905 | 0.41344 | 31.833 | 0.50054 | 0.12140 | 1.57% | 0.39507 | 0.17233 | 0.43102 | 1.24% | 0.54% | 1.35% | 2.5012 | 0.20412 | 1.77% |
| 005.11 | 5 | 5 | 18.018 | 8.9219 | 18.018 | 8.9219 | 3.9900 | 49.52% | 8.8864 | 1.1245 | 8.9572 | 49.32% | 6.24% | 49.71% | 7.9658 | 1.1440 | 2.36% |
| 005.99 | 8 | 8 | 31.902 | 0.48605 | 31.907 | 0.54107 | 0.19130 | 1.70% | 0.47627 | 0.13714 | 0.49563 | 1.49% | 0.43% | 1.55% | 3.6139 | 0.15240 | 1.77% |
| 006.00 | 2 | 0 | | | | | | | | | | | | | | | |
| 006.01 | 2 | 0 | | | | | | | | | | | | | | | |
| 006.05 | 1 | | 4.4750 | | | | | | | | | | | | | | |
| 006.99 | 1 | | 3.9000 | | | | | | | | | | | | | | |
| 007.00 | 1 | | 0.02500 | | | | | | | | | | | | | | |
| 008.02 | 14 | 13 | 9.0763 | 0.63129 | 9.1000 | 0.66158 | 0.18349 | 7.27% | 0.62415 | 0.13385 | 0.63834 | 6.88% | 1.47% | 7.03% | 4.7690 | 0.12988 | 2.87% |
| 008.05 | 1 | | 9.4500 | | | | | | | | | | | | | | |
| 008.08 | 37 | 33 | 9.1724 | 1.2338 | 9.1580 | 1.0397 | 0.17329 | 11.35% | 1.2274 | 0.17708 | 1.2401 | 13.38% | 1.93% | 13.52% | 7.0030 | 0.22640 | 2.87% |
| 008.99 | 1 | | 9.1750 | | | | | | | | | | | | | | |
| 009.04 | 1 | | 19.485 | | | | | | | | | | | | | | |
| 009.07 | 11 | 9 | 19.449 | 1.3735 | 19.630 | 1.6056 | 0.50775 | 8.18% | 1.3686 | 0.16287 | 1.3783 | 7.04% | 0.84% | 7.09% | 8.4623 | 0.24969 | 2.26% |
| 009.09 | 32 | 31 | 20.064 | 1.2465 | 20.063 | 1.3915 | 0.24993 | 6.94% | 1.2200 | 0.36161 | 1.2725 | 6.08% | 1.80% | 6.34% | 3.5190 | 0.42304 | 2.23% |
| 009.99 | 2 | 0 | | | | | | | | | | | | | | | |
| 010.03 | 3 | 3 | 5.2500 | 0.47760 | 5.2500 | 0.47760 | 0.27574 | 9.10% | 0.44336 | 0.25113 | 0.50954 | 8.44% | 4.78% | 9.71% | 2.0290 | 0.34667 | 3.12% |
| 010.11 | 4 | 4 | 8.3963 | 1.9720 | 8.3963 | 1.9720 | 0.98601 | 23.49% | 1.9700 | 0.12752 | 1.9741 | 23.46% | 1.52% | 23.51% | 15.480 | 0.14250 | 2.90% |
| 010.99 | 12 | 11 | 6.6275 | 0.37870 | 6.5412 | 0.38959 | 0.11247 | 5.96% | 0.36564 | 0.13942 | 0.39132 | 5.52% | 2.10% | 5.90% | 2.8068 | 0.14919 | 3.01% |
| 011.01 | 60 | 58 | 8.7308 | 0.75202 | 8.6929 | 0.74823 | 0.09660 | 8.61% | 0.74770 | 0.11380 | 0.75631 | 8.56% | 1.30% | 8.66% | 6.6458 | 0.12357 | 2.89% |
| 011.02 | 1 | | 7.2850 | | | | | | | | | | | | | | |
| 011.99 | 4 | 4 | 7.2588 | 0.43383 | 7.2588 | 0.43383 | 0.21691 | 5.98% | 0.37743 | 0.30251 | 0.48370 | 5.20% | 4.17% | 6.66% | 1.5989 | 0.40250 | 2.97% |
| 012.00 | 5 | 5 | 7.5170 | 2.3498 | 7.5170 | 2.3498 | 1.0509 | 31.26% | 2.3450 | 0.21183 | 2.3546 | 31.20% | 2.82% | 31.32% | 11.116 | 0.23400 | 2.95% |
| 012.01 | 6 | 6 | 6.9696 | 1.8156 | 7.0974 | 1.7538 | 0.71597 | 24.71% | 1.8105 | 0.19377 | 1.8208 | 25.98% | 2.78% | 26.12% | 9.3966 | 0.21383 | 2.98% |
| 012.02 | 1 | | 9.7900 | | | | | | | | | | | | | | |
| 012.03 | 4 | 4 | 8.6646 | 1.0066 | 8.6646 | 1.0066 | 0.50328 | 11.62% | 1.0058 | 0.05548 | 1.0073 | 11.61% | 0.64% | 11.63% | 18.156 | 0.07125 | 2.89% |
| 012.04 | 4 | 4 | 8.1850 | 1.0381 | 8.1850 | 1.0381 | 0.51904 | 12.68% | 1.0363 | 0.08703 | 1.0399 | 12.66% | 1.06% | 12.71% | 11.948 | 0.11000 | 2.91% |
| 012.11 | 3 | 3 | 18.487 | 3.4229 | 18.487 | 3.4229 | 1.9762 | 18.52% | 3.4194 | 0.21886 | 3.4264 | 18.50% | 1.18% | 18.53% | 15.656 | 0.29333 | 2.33% |
| 013.00 | 14 | 13 | 3.5421 | 0.55907 | 3.5812 | 0.60564 | 0.16187 | 16.91% | 0.55139 | 0.13055 | 0.56664 | 15.57% | 3.69% | 16.00% | 4.3404 | 0.18314 | 3.30% |
| 013.02 | 17 | 17 | 3.5776 | 0.35030 | 3.6002 | 0.34408 | 0.08345 | 9.56% | 0.32964 | 0.16758 | 0.36979 | 9.21% | 4.68% | 10.34% | 2.2067 | 0.18235 | 3.30% |
| 013.08 | 2 | 0 | | | | | | | | | | | | | | | |
| 013.10 | 6 | 6 | 3.3742 | 0.38769 | 3.3742 | 0.43964 | 0.17948 | 13.03% | 0.37186 | 0.15505 | 0.40290 | 11.02% | 4.60% | 11.94% | 2.5984 | 0.17500 | 3.33% |
| 013.13 | 4 | 4 | 4.9806 | 3.3771 | 4.9806 | 3.3771 | 1.6885 | 67.80% | 3.3746 | 0.18427 | 3.3796 | 67.75% | 3.70% | 67.86% | 18.340 | 0.22325 | 3.14% |
| 015.41 | 3 | 3 | 348.08 | 63.667 | 348.08 | 63.667 | 36.758 | 18.29% | 63.554 | 5.3748 | 63.781 | 18.26% | 1.54% | 18.32% | 11.867 | 7.0138 | 6.63% |
| 015.42 | 1 | | 297.05 | | | | | | | | | | | | | | |
| 015.43 | 6 | 6 | 246.36 | 61.232 | 246.36 | 69.437 | 28.348 | 28.19% | 61.067 | 6.3576 | 61.397 | 24.79% | 2.58% | 24.92% | 9.6573 | 7.1920 | 6.98% |
| 015.53 | 1 | | 382.00 | | | | | | | | | | | | | | |
| 017.41 | 1 | | 6.6650 | | | | | | | | | | | | | | |

| Method Code | Total # Labs Submitting | # Labs in Method Precision Calcs | Mean | SD | Assigned Value - Robust Mean | AAFCO CS ffp - Robust sd | Uncertainty (U) - Robust | % RSD - Robust | Between Labs sL | Within Labs sr | Reproducibility sR | Between Labs %RSD | Within Labs %rsd | Reproducibility %RSD | sR/sr | Average Range (R-bar) | Horwitz %RSD |
|-------------|-------------------------|----------------------------------|---------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------|----------------|--------------------|-------------------|------------------|----------------------|--------|-----------------------|--------------|
| 017.42 | 5 | 5 | 8.8430 | 5.2385 | 8.8430 | 5.2385 | 2.3427 | 59.24% | 5.2336 | 0.32083 | 5.2434 | 59.18% | 3.63% | 59.29% | 16.343 | 0.37000 | 11.52% |
| 017.43 | 5 | 4 | 5.5863 | 1.0938 | 5.5863 | 1.0938 | 0.54691 | 19.58% | 0.93961 | 0.79190 | 1.2288 | 16.82% | 14.18% | 22.00% | 1.5517 | 0.78250 | 12.35% |
| 019.00 | 11 | 11 | 9.4039 | 0.35005 | 9.4002 | 0.26031 | 0.07849 | 2.77% | 0.33910 | 0.12288 | 0.36068 | 3.61% | 1.31% | 3.84% | 2.9352 | 0.11474 | 2.85% |
| 019.03 | 1 | | 9.7629 | | | | | | | | | | | | | | |
| 019.08 | 6 | 4 | 9.2950 | 0.28893 | 9.2950 | 0.28893 | 0.12922 | 3.11% | 0.28878 | 0.01323 | 0.28909 | 3.11% | 0.14% | 3.11% | 21.853 | 0.03360 | 2.86% |
| 019.09 | 2 | 0 | | | | | | | | | | | | | | | |
| 019.31 | 23 | 22 | 9.4153 | 0.40635 | 9.3851 | 0.47677 | 0.09941 | 5.08% | 0.39880 | 0.11028 | 0.41376 | 4.24% | 1.17% | 4.39% | 3.7520 | 0.12710 | 2.86% |
| 019.32 | 1 | | 9.1400 | | | | | | | | | | | | | | |
| 019.33 | 1 | | 9.7550 | | | | | | | | | | | | | | |
| 019.41 | 26 | 24 | 9.5368 | 0.45820 | 9.4973 | 0.40008 | 0.08002 | 4.21% | 0.45180 | 0.10792 | 0.46451 | 4.74% | 1.13% | 4.87% | 4.3043 | 0.10998 | 2.85% |
| 019.42 | 20 | 19 | 9.4887 | 0.51753 | 9.5216 | 0.56131 | 0.12551 | 5.90% | 0.48505 | 0.25522 | 0.54810 | 5.11% | 2.69% | 5.78% | 2.1476 | 0.26054 | 2.85% |
| 019.43 | 17 | 14 | 9.2655 | 0.60528 | 9.3300 | 0.59843 | 0.15451 | 6.41% | 0.60347 | 0.06604 | 0.60708 | 6.51% | 0.71% | 6.55% | 9.1921 | 0.08263 | 2.86% |
| 019.44 | 3 | 3 | 9.7008 | 0.76369 | 9.7008 | 0.76369 | 0.44092 | 7.87% | 0.72582 | 0.33591 | 0.79978 | 7.48% | 3.46% | 8.24% | 2.3809 | 0.46500 | 2.84% |
| 019.52 | 1 | | 9.2390 | | | | | | | | | | | | | | |
| 019.53 | 2 | 0 | | | | | | | | | | | | | | | |
| 019.99 | 5 | 4 | 7.2313 | 2.0434 | 7.2313 | 2.0434 | 1.0217 | 28.26% | 2.0432 | 0.04373 | 2.0437 | 28.25% | 0.60% | 28.26% | 46.731 | 0.11000 | 2.97% |
| 021.31 | 5 | 5 | 13.209 | 2.7996 | 13.209 | 2.7996 | 1.2520 | 21.19% | 2.7492 | 0.74732 | 2.8490 | 20.81% | 5.66% | 21.57% | 3.8123 | 0.77400 | 10.85% |
| 021.41 | 3 | 3 | 9.0364 | 1.6765 | 9.0364 | 1.6765 | 0.96792 | 18.55% | 1.6044 | 0.68774 | 1.7456 | 17.75% | 7.61% | 19.32% | 2.5382 | 0.73517 | 11.49% |
| 021.42 | 2 | 0 | | | | | | | | | | | | | | | |
| 021.43 | 7 | 6 | 10.815 | 0.69144 | 10.815 | 0.78409 | 0.32010 | 7.25% | 0.64715 | 0.34431 | 0.73305 | 5.98% | 3.18% | 6.78% | 2.1290 | 0.36523 | 11.18% |
| 021.52 | 1 | | 8.6000 | | | | | | | | | | | | | | |
| 021.53 | 4 | 4 | 9.9517 | 1.6120 | 9.9517 | 1.6120 | 0.80600 | 16.20% | 1.5791 | 0.45806 | 1.6442 | 15.87% | 4.60% | 16.52% | 3.5895 | 0.54865 | 11.32% |
| 022.31 | 16 | 16 | 185.78 | 8.1308 | 185.95 | 8.7832 | 2.1958 | 4.72% | 6.5234 | 6.8636 | 9.4691 | 3.51% | 3.69% | 5.10% | 1.3796 | 7.4491 | 7.29% |
| 022.32 | 3 | 3 | 194.43 | 1.2097 | 194.43 | 1.2097 | 0.69841 | 0.62% | 1.1733 | 0.41633 | 1.2450 | 0.60% | 0.21% | 0.64% | 2.9904 | 0.40000 | 7.24% |
| 022.33 | 2 | 0 | | | | | | | | | | | | | | | |
| 022.41 | 21 | 19 | 179.00 | 10.217 | 179.07 | 11.282 | 2.5228 | 6.30% | 9.7998 | 4.0859 | 10.617 | 5.47% | 2.28% | 5.93% | 2.5985 | 4.8632 | 7.33% |
| 022.42 | 19 | 17 | 181.17 | 12.116 | 181.11 | 13.210 | 3.1137 | 7.29% | 11.929 | 2.9957 | 12.299 | 6.58% | 1.65% | 6.79% | 4.1057 | 4.6444 | 7.31% |
| 022.43 | 17 | 14 | 181.19 | 12.982 | 180.24 | 11.981 | 3.0936 | 6.65% | 12.880 | 2.3071 | 13.085 | 7.11% | 1.27% | 7.22% | 5.6715 | 2.6745 | 7.32% |
| 022.44 | 2 | 0 | | | | | | | | | | | | | | | |
| 022.52 | 2 | 0 | | | | | | | | | | | | | | | |
| 022.53 | 1 | | 204.17 | | | | | | | | | | | | | | |
| 022.99 | 1 | | 185.50 | | | | | | | | | | | | | | |
| 025.31 | 15 | 13 | 698.54 | 58.260 | 686.00 | 57.293 | 15.312 | 8.35% | 57.658 | 11.807 | 58.855 | 8.25% | 1.69% | 8.43% | 4.9848 | 11.995 | 5.99% |
| 025.32 | 1 | | 517.60 | | | | | | | | | | | | | | |
| 025.33 | 2 | 0 | | | | | | | | | | | | | | | |
| 025.41 | 21 | 18 | 637.97 | 71.282 | 644.44 | 69.300 | 15.496 | 10.75% | 69.502 | 22.392 | 73.020 | 10.89% | 3.51% | 11.45% | 3.2610 | 25.067 | 6.04% |
| 025.42 | 16 | 14 | 570.29 | 74.024 | 567.31 | 92.645 | 23.161 | 16.33% | 73.132 | 16.207 | 74.906 | 12.82% | 2.84% | 13.13% | 4.6219 | 19.688 | 6.16% |
| 025.43 | 14 | 13 | 622.39 | 96.287 | 626.58 | 99.449 | 27.582 | 15.87% | 96.031 | 9.9105 | 96.541 | 15.43% | 1.59% | 15.51% | 9.7413 | 10.035 | 6.07% |
| 025.52 | 2 | 0 | | | | | | | | | | | | | | | |
| 025.53 | 2 | 0 | | | | | | | | | | | | | | | |
| 025.99 | 1 | | 551.50 | | | | | | | | | | | | | | |
| 027.31 | 16 | 14 | 0.73946 | 0.03327 | 0.73501 | 0.03948 | 0.00987 | 5.37% | 0.03259 | 0.00945 | 0.03393 | 4.41% | 1.28% | 4.59% | 3.5914 | 0.01153 | 4.19% |
| 027.32 | 2 | 0 | | | | | | | | | | | | | | | |

| Method Code | Total # Labs Submitting | # Labs in Method Precision Calcs | Mean | SD | Assigned Value - Robust Mean | AAFCO CS ffp - Robust sd | Uncertainty (U) - Robust | % RSD - Robust | Between Labs sL | Within Labs sr | Reproducibility sR | Between Labs %RSD | Within Labs %rsd | Reproducibility %RSD | sR/sr | Average Range (R-bar) | Horwitz %RSD |
|-------------|-------------------------|----------------------------------|---------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------|----------------|--------------------|-------------------|------------------|----------------------|--------|-----------------------|--------------|
| 027.33 | 2 | 0 | | | | | | | | | | | | | | | |
| 027.41 | 20 | 19 | 0.73972 | 0.03249 | 0.73663 | 0.03914 | 0.00875 | 5.31% | 0.03072 | 0.01500 | 0.03418 | 4.15% | 2.03% | 4.62% | 2.2794 | 0.01502 | 4.19% |
| 027.42 | 17 | 15 | 0.72442 | 0.02804 | 0.72697 | 0.02821 | 0.00705 | 3.88% | 0.02508 | 0.01771 | 0.03071 | 3.46% | 2.45% | 4.24% | 1.7334 | 0.02361 | 4.20% |
| 027.43 | 13 | 12 | 0.74459 | 0.06496 | 0.74526 | 0.06468 | 0.01867 | 8.68% | 0.06440 | 0.01200 | 0.06551 | 8.65% | 1.61% | 8.80% | 5.4591 | 0.01328 | 4.18% |
| 027.44 | 3 | 3 | 0.78655 | 0.03405 | 0.78655 | 0.03405 | 0.01966 | 4.33% | 0.03053 | 0.02132 | 0.03723 | 3.88% | 2.71% | 4.73% | 1.7465 | 0.02690 | 4.15% |
| 027.52 | 1 | | 0.69760 | | | | | | | | | | | | | | |
| 027.53 | 3 | 2 | 0.78575 | 0.04985 | 0.78575 | 0.04985 | 0.03525 | 6.34% | 0.03528 | 0.04981 | 0.06104 | 4.49% | 6.34% | 7.77% | 1.2254 | 66.609 | 4.15% |
| 027.99 | 2 | 0 | | | | | | | | | | | | | | | |
| 028.31 | 12 | 12 | 462.67 | 28.618 | 461.95 | 30.852 | 8.9063 | 6.68% | 28.113 | 7.5728 | 29.115 | 6.08% | 1.64% | 6.29% | 3.8447 | 9.1826 | 6.35% |
| 028.32 | 2 | 0 | | | | | | | | | | | | | | | |
| 028.33 | 2 | 0 | | | | | | | | | | | | | | | |
| 028.41 | 19 | 18 | 443.48 | 22.882 | 441.27 | 23.825 | 5.4658 | 5.40% | 19.655 | 16.567 | 25.706 | 4.43% | 3.74% | 5.80% | 1.5516 | 15.438 | 6.40% |
| 028.42 | 18 | 16 | 446.83 | 21.436 | 442.17 | 18.721 | 4.4125 | 4.23% | 20.119 | 10.463 | 22.677 | 4.50% | 2.34% | 5.08% | 2.1674 | 13.358 | 6.40% |
| 028.43 | 15 | 12 | 440.28 | 22.245 | 443.20 | 25.158 | 6.7238 | 5.68% | 21.729 | 6.7388 | 22.750 | 4.94% | 1.53% | 5.17% | 3.3759 | 8.5879 | 6.39% |
| 028.44 | 2 | 0 | | | | | | | | | | | | | | | |
| 028.52 | 1 | | 451.50 | | | | | | | | | | | | | | |
| 028.53 | 2 | 0 | | | | | | | | | | | | | | | |
| 028.99 | 1 | | 468.50 | | | | | | | | | | | | | | |
| 031.01 | 36 | 34 | 0.56988 | 0.02284 | 0.57016 | 0.02454 | 0.00409 | 4.30% | 0.02207 | 0.00831 | 0.02358 | 3.87% | 1.46% | 4.14% | 2.8376 | 0.00869 | 4.35% |
| 031.02 | 4 | 4 | 0.57980 | 0.01590 | 0.57980 | 0.01590 | 0.00795 | 2.74% | 0.01566 | 0.00389 | 0.01614 | 2.70% | 0.67% | 2.78% | 4.1465 | 0.00365 | 4.34% |
| 031.03 | 3 | 2 | 0.56525 | 0.00742 | 0.56525 | 0.00742 | 0.00525 | 1.31% | 0.00721 | 0.00250 | 0.00763 | 1.28% | 0.44% | 1.35% | 3.0529 | 0.01567 | 4.36% |
| 031.06 | 1 | | 0.59700 | | | | | | | | | | | | | | |
| 031.41 | 26 | 23 | 0.57827 | 0.02967 | 0.58144 | 0.03478 | 0.00696 | 5.98% | 0.02800 | 0.01386 | 0.03125 | 4.84% | 2.40% | 5.40% | 2.2536 | 0.01622 | 4.34% |
| 031.42 | 21 | 19 | 0.55001 | 0.02220 | 0.55001 | 0.02505 | 0.00547 | 4.56% | 0.01949 | 0.01504 | 0.02461 | 3.54% | 2.73% | 4.48% | 1.6367 | 0.01528 | 4.38% |
| 031.43 | 17 | 13 | 0.54914 | 0.03940 | 0.54346 | 0.04923 | 0.01316 | 9.06% | 0.03899 | 0.00799 | 0.03980 | 7.10% | 1.46% | 7.25% | 4.9797 | 0.00849 | 4.38% |
| 031.44 | 3 | 3 | 0.57880 | 0.07547 | 0.57880 | 0.07547 | 0.04357 | 13.04% | 0.07431 | 0.01862 | 0.07661 | 12.84% | 3.22% | 13.24% | 4.1152 | 0.01840 | 4.34% |
| 031.52 | 1 | | 0.51745 | | | | | | | | | | | | | | |
| 031.53 | 2 | 0 | | | | | | | | | | | | | | | |
| 031.99 | 5 | 5 | 0.53800 | 0.03867 | 0.53800 | 0.03867 | 0.01729 | 7.19% | 0.03814 | 0.00894 | 0.03918 | 7.09% | 1.66% | 7.28% | 4.3804 | 0.01200 | 4.39% |
| 032.02 | 2 | 0 | | | | | | | | | | | | | | | |
| 032.31 | 18 | 17 | 1.0294 | 0.07666 | 1.0365 | 0.06244 | 0.01514 | 6.02% | 0.07564 | 0.01766 | 0.07767 | 7.35% | 1.72% | 7.55% | 4.3978 | 0.02017 | 3.98% |
| 032.32 | 2 | 0 | | | | | | | | | | | | | | | |
| 032.41 | 23 | 20 | 1.0684 | 0.05872 | 1.0687 | 0.06472 | 0.01380 | 6.06% | 0.05676 | 0.02128 | 0.06061 | 5.31% | 1.99% | 5.67% | 2.8489 | 0.02956 | 3.96% |
| 032.42 | 20 | 18 | 1.0444 | 0.07092 | 1.0515 | 0.08575 | 0.01967 | 8.15% | 0.06987 | 0.01714 | 0.07194 | 6.69% | 1.64% | 6.89% | 4.1981 | 0.01857 | 3.97% |
| 032.43 | 18 | 16 | 1.0597 | 0.05420 | 1.0535 | 0.06621 | 0.01606 | 6.28% | 0.05188 | 0.02219 | 0.05642 | 4.90% | 2.09% | 5.32% | 2.5432 | 0.02334 | 3.97% |
| 032.44 | 3 | 2 | 1.1458 | 0.00590 | 1.1458 | 0.00590 | 0.00418 | 0.52% | | 0.01014 | | | 0.88% | | | 0.06110 | 3.92% |
| 032.52 | 1 | | 1.0277 | | | | | | | | | | | | | | |
| 032.53 | 2 | 0 | | | | | | | | | | | | | | | |
| 032.99 | 3 | 0 | | | | | | | | | | | | | | | 0.00650 |
| 033.00 | 11 | 10 | 4.0919 | 0.20611 | 4.1238 | 0.20806 | 0.06273 | 5.05% | 0.20437 | 0.03781 | 0.20784 | 4.99% | 0.92% | 5.08% | 5.4970 | 0.04954 | 3.23% |
| 033.01 | 29 | 26 | 4.1982 | 0.10516 | 4.1986 | 0.10789 | 0.02076 | 2.57% | 0.10395 | 0.02246 | 0.10635 | 2.48% | 0.53% | 2.53% | 4.7353 | 0.02667 | 3.22% |
| 033.03 | 5 | 5 | 4.7060 | 1.4741 | 4.7060 | 1.4741 | 0.65925 | 31.32% | 1.4644 | 0.23850 | 1.4837 | 31.12% | 5.07% | 31.53% | 6.2212 | 0.28000 | 3.17% |
| 033.05 | 2 | 0 | | | | | | | | | | | | | | | |

| Method Code | Total # Labs Submitting | # Labs in Method Precision Calcs | Mean | SD | Assigned Value - Robust Mean | AAFCO CS ffp - Robust sd | Uncertainty (U) - Robust | % RSD - Robust | Between Labs sL | Within Labs sr | Reproducibility sR | Between Labs %RSD | Within Labs %rsd | Reproducibility %RSD | sR/sr | Average Range (R-bar) | Horwitz %RSD |
|-------------|-------------------------|----------------------------------|---------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------|----------------|--------------------|-------------------|------------------|----------------------|---------|-----------------------|--------------|
| 033.99 | 6 | 6 | 4.0795 | 0.32094 | 4.0588 | 0.31455 | 0.12841 | 7.75% | 0.30131 | 0.15628 | 0.33943 | 7.39% | 3.83% | 8.32% | 2.1719 | 0.16367 | 3.24% |
| 034.04 | 5 | 5 | 3.3203 | 0.60228 | 3.3203 | 0.60228 | 0.26935 | 18.14% | 0.59920 | 0.08599 | 0.60534 | 18.05% | 2.59% | 18.23% | 7.0393 | 0.11134 | 13.35% |
| 034.41 | 1 | | 3.5195 | | | | | | | | | | | | | | |
| 034.42 | 1 | | 4.6500 | | | | | | | | | | | | | | |
| 034.43 | 3 | 0 | | | | | | | | | | | | | | 0.04805 | |
| 034.52 | 2 | 0 | | | | | | | | | | | | | | | |
| 034.53 | 6 | 5 | 3.8197 | 0.43586 | 3.8197 | 0.43586 | 0.19492 | 11.41% | 0.43115 | 0.09029 | 0.44051 | 11.29% | 2.36% | 11.53% | 4.8786 | 0.08858 | 13.07% |
| 034.99 | 3 | 3 | 3.9417 | 0.41959 | 3.9417 | 0.41959 | 0.24225 | 10.65% | 0.40474 | 0.15647 | 0.43394 | 10.27% | 3.97% | 11.01% | 2.7733 | 0.15667 | 13.01% |
| 035.01 | 3 | 2 | 1.4380 | 0.00071 | 1.4380 | 0.00071 | 0.00050 | 0.05% | | 0.00354 | | | 0.25% | | 0.01100 | 0.01100 | 3.79% |
| 035.05 | 4 | 4 | 1.5709 | 0.10258 | 1.5709 | 0.10258 | 0.05129 | 6.53% | 0.09210 | 0.06388 | 0.11209 | 5.86% | 4.07% | 7.14% | 1.7546 | 0.06175 | 3.74% |
| 035.31 | 17 | 16 | 1.3557 | 0.13904 | 1.3754 | 0.15737 | 0.03817 | 11.44% | 0.13828 | 0.02053 | 0.13980 | 10.20% | 1.51% | 10.31% | 6.8099 | 0.02116 | 3.81% |
| 035.32 | 2 | 0 | | | | | | | | | | | | | | | |
| 035.33 | 1 | | 1.5000 | | | | | | | | | | | | | | |
| 035.41 | 24 | 21 | 1.4397 | 0.08344 | 1.4397 | 0.10509 | 0.02191 | 7.30% | 0.08214 | 0.02072 | 0.08471 | 5.71% | 1.44% | 5.88% | 4.0888 | 0.02326 | 3.79% |
| 035.42 | 16 | 13 | 1.5346 | 0.13770 | 1.5185 | 0.12906 | 0.03332 | 8.50% | 0.13651 | 0.02557 | 0.13888 | 8.90% | 1.67% | 9.05% | 5.4322 | 0.03150 | 3.76% |
| 035.43 | 12 | 10 | 1.4610 | 0.04854 | 1.4505 | 0.05891 | 0.01776 | 4.06% | 0.04571 | 0.02309 | 0.05122 | 3.13% | 1.58% | 3.51% | 2.2179 | 0.01847 | 3.78% |
| 035.52 | 1 | | 1.5102 | | | | | | | | | | | | | | |
| 035.53 | 2 | 0 | | | | | | | | | | | | | | | |
| 035.99 | 3 | 3 | 1.6300 | 0.12379 | 1.6300 | 0.12379 | 0.07147 | 7.59% | 0.12278 | 0.02236 | 0.12480 | 7.53% | 1.37% | 7.66% | 5.5812 | 0.02667 | 3.72% |
| 036.04 | 3 | 3 | 0.80833 | 0.01258 | 0.80833 | 0.01258 | 0.00726 | 1.56% | | 0.01871 | | | 2.31% | | 0.02333 | 0.02333 | 4.13% |
| 036.42 | 20 | 18 | 0.87181 | 0.06832 | 0.87706 | 0.07910 | 0.01815 | 9.02% | 0.06759 | 0.01414 | 0.06905 | 7.75% | 1.62% | 7.92% | 4.8820 | 0.01472 | 4.08% |
| 036.43 | 8 | 8 | 0.85021 | 0.04565 | 0.84945 | 0.04928 | 0.01742 | 5.80% | 0.04538 | 0.00708 | 0.04593 | 5.34% | 0.83% | 5.40% | 6.4896 | 0.00755 | 4.10% |
| 036.99 | 1 | | 0.72500 | | | | | | | | | | | | | | |
| 037.31 | 17 | 17 | 660.36 | 25.679 | 659.90 | 20.435 | 4.9562 | 3.10% | 23.062 | 15.973 | 28.054 | 3.49% | 2.42% | 4.25% | 1.7563 | 16.055 | 6.02% |
| 037.32 | 3 | 3 | 665.17 | 3.4034 | 665.17 | 3.4034 | 1.9650 | 0.51% | | 7.3797 | | | 1.11% | | 9.1333 | 6.01% | |
| 037.33 | 1 | | 778.50 | | | | | | | | | | | | | | |
| 037.41 | 21 | 20 | 631.62 | 49.260 | 632.06 | 52.422 | 11.722 | 8.29% | 48.248 | 14.046 | 50.251 | 7.64% | 2.22% | 7.96% | 3.5776 | 12.481 | 6.06% |
| 037.42 | 19 | 18 | 623.76 | 31.774 | 620.70 | 37.595 | 8.6249 | 6.06% | 29.400 | 17.043 | 33.983 | 4.71% | 2.73% | 5.45% | 1.9940 | 18.205 | 6.08% |
| 037.43 | 16 | 13 | 639.11 | 26.767 | 636.48 | 27.194 | 7.0215 | 4.27% | 25.546 | 11.304 | 27.935 | 4.00% | 1.77% | 4.37% | 2.4713 | 14.566 | 6.05% |
| 037.44 | 2 | 0 | | | | | | | | | | | | | | | |
| 037.52 | 2 | 0 | | | | | | | | | | | | | | | |
| 037.53 | 2 | 0 | | | | | | | | | | | | | | | |
| 037.99 | 2 | 0 | | | | | | | | | | | | | | | |
| 038.41 | 2 | 0 | | | | | | | | | | | | | | | |
| 038.42 | 3 | 3 | 4.6200 | 0.28200 | 4.6200 | 0.28200 | 0.16281 | 6.10% | 0.19333 | 0.29034 | 0.34882 | 4.18% | 6.28% | 7.55% | 1.2014 | 0.32000 | 12.71% |
| 038.43 | 7 | 6 | 4.7343 | 0.21262 | 4.7343 | 0.24111 | 0.09843 | 5.09% | 0.20701 | 0.06863 | 0.21809 | 4.37% | 1.45% | 4.61% | 3.1778 | 0.06583 | 12.66% |
| 038.52 | 1 | | 4.6000 | | | | | | | | | | | | | | |
| 038.53 | 3 | 2 | 4.7899 | 0.61536 | 4.7899 | 0.61536 | 0.43512 | 12.85% | 0.61440 | 0.04867 | 0.61632 | 12.83% | 1.02% | 12.87% | 12.662 | 0.79103 | 12.64% |
| 040.42 | 1 | | 9.7050 | | | | | | | | | | | | | | |
| 040.52 | 1 | | 9.9000 | | | | | | | | | | | | | | |
| 040.53 | 1 | | 9.1226 | | | | | | | | | | | | | | |
| 041.43 | 1 | | 0.00000 | | | | | | | | | | | | | | |
| 041.52 | 1 | | 0.90000 | | | | | | | | | | | | | | |

| Method Code | Total # Labs Submitting | # Labs in Method Precision Calcs | Mean | SD | Assigned Value - Robust Mean | AAFCO CS ffp - Robust sd | Uncertainty (U) - Robust | % RSD - Robust | Between Labs sL | Within Labs sr | Reproducibility sR | Between Labs %RSD | Within Labs %rsd | Reproducibility %RSD | sR/sr | Average Range (R-bar) | Horwitz %RSD |
|-------------|-------------------------|----------------------------------|---------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------|----------------|--------------------|-------------------|------------------|----------------------|--------|-----------------------|--------------|
| 041.53 | 1 | | 1.5350 | | | | | | | | | | | | | | |
| 042.00 | 1 | | 2.5550 | | | | | | | | | | | | | | |
| 042.99 | 1 | | 2.3400 | | | | | | | | | | | | | | |
| 051.00 | 6 | 6 | 267.59 | 26.865 | 267.59 | 30.464 | 12.437 | 11.38% | 25.363 | 12.525 | 28.287 | 9.48% | 4.68% | 10.57% | 2.2584 | 15.478 | 6.90% |
| 051.03 | 10 | 9 | 261.90 | 23.672 | 260.03 | 22.313 | 7.4376 | 8.58% | 23.165 | 6.8893 | 24.168 | 8.84% | 2.63% | 9.23% | 3.5081 | 7.1322 | 6.93% |
| 061.02 | 8 | 7 | 235.69 | 15.728 | 235.69 | 17.835 | 6.7411 | 7.57% | 15.565 | 3.1914 | 15.889 | 6.60% | 1.35% | 6.74% | 4.9787 | 3.0639 | 7.03% |
| 061.03 | 8 | 6 | 250.50 | 2.7746 | 250.27 | 4.7362 | 1.6745 | 1.89% | | 7.6847 | | | 3.07% | | | 11.122 | 6.97% |
| 061.99 | 3 | 3 | 236.14 | 30.307 | 236.14 | 30.307 | 17.498 | 12.83% | 27.185 | 18.946 | 33.136 | 11.51% | 8.02% | 14.03% | 1.7489 | 22.200 | 7.03% |
| 064.01 | 1 | | 2.2500 | | | | | | | | | | | | | | |
| 065.00 | 3 | 2 | 423.99 | 9.3126 | 423.99 | 9.3126 | 6.5850 | 2.20% | 9.1182 | 2.6769 | 9.5030 | 2.15% | 0.63% | 2.24% | 3.5501 | 15.820 | 6.44% |
| 065.03 | 10 | 9 | 412.45 | 17.067 | 416.24 | 22.759 | 7.1971 | 5.47% | 6.5409 | 22.294 | 23.233 | 1.59% | 5.41% | 5.63% | 1.0422 | 20.215 | 6.45% |
| 065.04 | 4 | 4 | 411.49 | 5.9511 | 411.49 | 5.9511 | 2.9755 | 1.45% | 4.9675 | 4.6346 | 6.7938 | 1.21% | 1.13% | 1.65% | 1.4659 | 5.8283 | 6.47% |
| 065.99 | 5 | 4 | 409.19 | 51.228 | 409.19 | 51.228 | 25.614 | 12.52% | 51.002 | 6.7979 | 51.453 | 12.46% | 1.66% | 12.57% | 7.5690 | 15.406 | 6.47% |
| 073.03 | 1 | | 0.0000 | | | | | | | | | | | | | | |
| 101.01 | 1 | | 1,270.0 | | | | | | | | | | | | | | |
| 101.02 | 1 | | 1,070.0 | | | | | | | | | | | | | | |
| 102.01 | 1 | | 77.100 | | | | | | | | | | | | | | |
| 103.01 | 1 | | 10.650 | | | | | | | | | | | | | | |
| 104.00 | 1 | | 4.5000 | | | | | | | | | | | | | | |
| 105.01 | 1 | | 1.3000 | | | | | | | | | | | | | | |
| 106.00 | 1 | | 41.665 | | | | | | | | | | | | | | |
| 106.01 | 1 | | 36.000 | | | | | | | | | | | | | | |
| 106.02 | 22 | 21 | 43.408 | 15.212 | 42.849 | 13.503 | 2.8789 | 31.51% | 14.813 | 4.8999 | 15.602 | 34.12% | 11.29% | 35.94% | 3.1842 | 5.3265 | |
| 108.01 | 1 | | 21.000 | | | | | | | | | | | | | | |
| 108.02 | 5 | 4 | 2.9958 | 1.4290 | 2.9958 | 1.4290 | 0.71448 | 47.70% | 1.1368 | 1.2243 | 1.6707 | 37.95% | 40.87% | 55.77% | 1.3646 | 1.0833 | |
| 108.99 | 1 | | 3.8450 | | | | | | | | | | | | | | |
| 109.02 | 20 | 17 | 86.392 | 15.908 | 83.531 | 11.391 | 2.6132 | 13.64% | 15.810 | 2.4862 | 16.005 | 18.30% | 2.88% | 18.53% | 6.4374 | 3.3783 | |
| 109.99 | 1 | | 76.000 | | | | | | | | | | | | | | |
| 112.01 | 1 | | 4.9300 | | | | | | | | | | | | | | |
| 113.01 | 1 | | 0.96650 | | | | | | | | | | | | | | |
| 114.01 | 1 | | 0.27550 | | | | | | | | | | | | | | |
| 115.00 | 6 | 4 | 4.1608 | 0.17904 | 4.1608 | 0.17904 | 0.08007 | 4.30% | 0.17874 | 0.01473 | 0.17934 | 4.30% | 0.35% | 4.31% | 12.175 | 0.07120 | 3.23% |
| 115.99 | 3 | 2 | 4.3975 | 0.07425 | 4.3975 | 0.07425 | 0.05250 | 1.69% | 0.05958 | 0.06265 | 0.08646 | 1.35% | 1.42% | 1.97% | 1.3800 | 0.75667 | 3.20% |
| 120.00 | 12 | 11 | 0.64131 | 0.01352 | 0.64394 | 0.01619 | 0.00467 | 2.51% | 0.01040 | 0.01221 | 0.01604 | 1.62% | 1.90% | 2.50% | 1.3136 | 0.01460 | 4.27% |
| 120.01 | 1 | | 0.59200 | | | | | | | | | | | | | | |
| 120.02 | 1 | | 0.66600 | | | | | | | | | | | | | | |
| 120.05 | 1 | | 0.59400 | | | | | | | | | | | | | | |
| 120.99 | 1 | | 0.66000 | | | | | | | | | | | | | | |
| 121.00 | 12 | 12 | 0.74940 | 0.02689 | 0.74940 | 0.03050 | 0.00880 | 4.07% | 0.02587 | 0.01038 | 0.02788 | 3.45% | 1.38% | 3.72% | 2.6864 | 0.01079 | 4.18% |
| 121.01 | 1 | | 0.81750 | | | | | | | | | | | | | | |
| 121.02 | 1 | | 0.76100 | | | | | | | | | | | | | | |
| 121.05 | 1 | | 0.85400 | | | | | | | | | | | | | | |
| 121.99 | 1 | | 0.88000 | | | | | | | | | | | | | | |

| Method Code | Total # Labs Submitting | # Labs in Method Precision Calcs | Mean | SD | Assigned Value - Robust Mean | AAFCO CS ffp - Robust sd | Uncertainty (U) - Robust | % RSD - Robust | Between Labs sL | Within Labs sr | Reproducibility sR | Between Labs %RSD | Within Labs %rsd | Reproducibility %RSD | sR/sr | Average Range (R-bar) | Horwitz %RSD |
|-------------|-------------------------|----------------------------------|---------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------|----------------|--------------------|-------------------|------------------|----------------------|--------|-----------------------|--------------|
| 122.00 | 12 | 12 | 0.92225 | 0.02900 | 0.92145 | 0.02664 | 0.00769 | 2.89% | 0.02703 | 0.01486 | 0.03085 | 2.93% | 1.61% | 3.34% | 2.0758 | 0.01550 | 4.05% |
| 122.01 | 1 | | 0.92850 | | | | | | | | | | | | | | |
| 122.02 | 1 | | 0.94700 | | | | | | | | | | | | | | |
| 122.05 | 1 | | 0.98700 | | | | | | | | | | | | | | |
| 122.99 | 1 | | 0.43500 | | | | | | | | | | | | | | |
| 124.00 | 12 | 11 | 0.24539 | 0.02010 | 0.24557 | 0.02241 | 0.00676 | 9.13% | 0.01939 | 0.00750 | 0.02079 | 7.90% | 3.06% | 8.47% | 2.7724 | 0.00776 | 4.94% |
| 124.01 | 1 | | 0.23150 | | | | | | | | | | | | | | |
| 124.02 | 1 | | 0.22600 | | | | | | | | | | | | | | |
| 124.05 | 1 | | 0.24400 | | | | | | | | | | | | | | |
| 124.99 | 1 | | 0.31500 | | | | | | | | | | | | | | |
| 125.00 | 12 | 11 | 2.2426 | 0.04711 | 2.2426 | 0.04599 | 0.01387 | 2.05% | 0.04286 | 0.02768 | 0.05102 | 1.91% | 1.23% | 2.27% | 1.8432 | 0.02707 | 3.54% |
| 125.01 | 1 | | 2.1645 | | | | | | | | | | | | | | |
| 125.02 | 1 | | 2.1990 | | | | | | | | | | | | | | |
| 125.05 | 1 | | 2.2845 | | | | | | | | | | | | | | |
| 125.99 | 1 | | 1.4250 | | | | | | | | | | | | | | |
| 126.00 | 12 | 12 | 0.60677 | 0.01405 | 0.60598 | 0.01407 | 0.00406 | 2.32% | 0.01197 | 0.01040 | 0.01586 | 1.97% | 1.71% | 2.61% | 1.5254 | 0.01195 | 4.31% |
| 126.01 | 1 | | 0.56450 | | | | | | | | | | | | | | |
| 126.02 | 1 | | 0.61200 | | | | | | | | | | | | | | |
| 126.05 | 1 | | 0.63150 | | | | | | | | | | | | | | |
| 126.99 | 1 | | 0.61000 | | | | | | | | | | | | | | |
| 127.00 | 12 | 11 | 0.31744 | 0.01677 | 0.31728 | 0.01868 | 0.00563 | 5.89% | 0.01565 | 0.00852 | 0.01782 | 4.93% | 2.69% | 5.61% | 2.0906 | 0.00867 | 4.75% |
| 127.01 | 1 | | 0.50650 | | | | | | | | | | | | | | |
| 127.02 | 1 | | 0.31850 | | | | | | | | | | | | | | |
| 127.05 | 1 | | 0.31650 | | | | | | | | | | | | | | |
| 127.99 | 1 | | 0.32500 | | | | | | | | | | | | | | |
| 128.00 | 12 | 11 | 0.41572 | 0.01973 | 0.41079 | 0.01734 | 0.00501 | 4.22% | 0.01854 | 0.00954 | 0.02085 | 4.46% | 2.29% | 5.02% | 2.1862 | 0.01118 | 4.57% |
| 128.01 | 1 | | 0.36100 | | | | | | | | | | | | | | |
| 128.02 | 1 | | 0.42900 | | | | | | | | | | | | | | |
| 128.05 | 1 | | 0.38850 | | | | | | | | | | | | | | |
| 128.99 | 1 | | 0.43500 | | | | | | | | | | | | | | |
| 129.00 | 12 | 11 | 0.87956 | 0.01603 | 0.88252 | 0.01993 | 0.00575 | 2.26% | 0.01218 | 0.01474 | 0.01912 | 1.39% | 1.68% | 2.17% | 1.2975 | 0.01863 | 4.08% |
| 129.01 | 1 | | 0.76900 | | | | | | | | | | | | | | |
| 129.02 | 1 | | 0.91150 | | | | | | | | | | | | | | |
| 129.05 | 1 | | 0.87850 | | | | | | | | | | | | | | |
| 129.99 | 1 | | 0.83500 | | | | | | | | | | | | | | |
| 130.00 | 12 | 11 | 0.50415 | 0.02360 | 0.50460 | 0.02177 | 0.00628 | 4.31% | 0.02198 | 0.01214 | 0.02511 | 4.36% | 2.41% | 4.98% | 2.0678 | 0.01262 | 4.43% |
| 130.01 | 1 | | 0.49800 | | | | | | | | | | | | | | |
| 130.02 | 1 | | 0.52450 | | | | | | | | | | | | | | |
| 130.05 | 1 | | 0.53850 | | | | | | | | | | | | | | |
| 130.99 | 1 | | 0.45500 | | | | | | | | | | | | | | |
| 131.00 | 12 | 12 | 0.18445 | 0.02254 | 0.18526 | 0.02372 | 0.00685 | 12.81% | 0.02210 | 0.00624 | 0.02297 | 11.98% | 3.38% | 12.45% | 3.6803 | 0.00693 | 5.16% |
| 131.01 | 2 | 0 | | | | | | | | | | | | | | | |
| 131.02 | 1 | | 0.17550 | | | | | | | | | | | | | | |

| Method Code | Total # Labs Submitting | # Labs in Method Precision Calcs | Mean | SD | Assigned Value - Robust Mean | AAFCO CS ffp - Robust sd | Uncertainty (U) - Robust | % RSD - Robust | Between Labs sL | Within Labs sr | Reproducibility sR | Between Labs %RSD | Within Labs %rsd | Reproducibility %RSD | sR/sr | Average Range (R-bar) | Horwitz %RSD |
|-------------|-------------------------|----------------------------------|---------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------|----------------|--------------------|-------------------|------------------|----------------------|--------|-----------------------|--------------|
| 131.05 | 1 | | 0.18400 | | | | | | | | | | | | | | |
| 131.99 | 1 | | 0.15000 | | | | | | | | | | | | | | |
| 132.00 | 12 | 12 | 0.51050 | 0.01274 | 0.51054 | 0.01436 | 0.00415 | 2.81% | 0.01069 | 0.00980 | 0.01450 | 2.09% | 1.92% | 2.84% | 1.4805 | 0.01065 | 4.43% |
| 132.01 | 1 | | 0.53950 | | | | | | | | | | | | | | |
| 132.02 | 1 | | 0.51700 | | | | | | | | | | | | | | |
| 132.05 | 1 | | 0.51000 | | | | | | | | | | | | | | |
| 132.99 | 1 | | 0.53000 | | | | | | | | | | | | | | |
| 133.00 | 12 | 12 | 0.80958 | 0.04440 | 0.81287 | 0.04222 | 0.01219 | 5.19% | 0.04198 | 0.02045 | 0.04670 | 5.19% | 2.53% | 5.77% | 2.2834 | 0.02358 | 4.13% |
| 133.05 | 1 | | 0.89400 | | | | | | | | | | | | | | |
| 133.99 | 1 | | 0.79500 | | | | | | | | | | | | | | |
| 134.00 | 12 | 11 | 0.53773 | 0.01132 | 0.53971 | 0.01449 | 0.00418 | 2.69% | 0.00917 | 0.00937 | 0.01312 | 1.71% | 1.74% | 2.44% | 1.3993 | 0.01441 | 4.39% |
| 134.01 | 1 | | 0.61750 | | | | | | | | | | | | | | |
| 134.02 | 1 | | 0.51350 | | | | | | | | | | | | | | |
| 134.05 | 1 | | 0.59950 | | | | | | | | | | | | | | |
| 134.99 | 1 | | 0.57000 | | | | | | | | | | | | | | |
| 135.00 | 12 | 11 | 0.44365 | 0.01334 | 0.44497 | 0.01488 | 0.00429 | 3.34% | 0.01145 | 0.00967 | 0.01499 | 2.58% | 2.18% | 3.38% | 1.5502 | 0.01202 | 4.52% |
| 135.01 | 1 | | 0.60050 | | | | | | | | | | | | | | |
| 135.02 | 1 | | 0.44450 | | | | | | | | | | | | | | |
| 135.05 | 1 | | 0.45650 | | | | | | | | | | | | | | |
| 135.99 | 1 | | 0.51000 | | | | | | | | | | | | | | |
| 136.00 | 4 | 4 | 0.17849 | 0.03101 | 0.17849 | 0.03101 | 0.01551 | 17.38% | 0.03086 | 0.00435 | 0.03117 | 17.29% | 2.44% | 17.46% | 7.1592 | 0.00473 | 5.18% |
| 136.01 | 1 | | 0.14100 | | | | | | | | | | | | | | |
| 136.02 | 1 | | 0.18000 | | | | | | | | | | | | | | |
| 136.03 | 3 | 3 | 0.17767 | 0.01077 | 0.17767 | 0.01077 | 0.00622 | 6.06% | 0.01072 | 0.00153 | 0.01083 | 6.03% | 0.86% | 6.09% | 7.0887 | 0.00200 | 5.19% |
| 136.99 | 2 | 0 | | | | | | | | | | | | | | | |
| 137.00 | 9 | 9 | 0.38043 | 0.02751 | 0.38043 | 0.03120 | 0.01040 | 8.20% | 0.02695 | 0.00783 | 0.02806 | 7.08% | 2.06% | 7.38% | 3.5854 | 0.00959 | 4.63% |
| 137.01 | 1 | | 0.45400 | | | | | | | | | | | | | | |
| 137.02 | 1 | | 0.36500 | | | | | | | | | | | | | | |
| 137.05 | 1 | | 0.35550 | | | | | | | | | | | | | | |
| 137.99 | 1 | | 0.44500 | | | | | | | | | | | | | | |
| 138.00 | 12 | 11 | 0.57105 | 0.01224 | 0.56903 | 0.01543 | 0.00445 | 2.71% | 0.01065 | 0.00851 | 0.01364 | 1.87% | 1.49% | 2.39% | 1.6018 | 0.01023 | 4.35% |
| 138.01 | 1 | | 0.68100 | | | | | | | | | | | | | | |
| 138.02 | 1 | | 0.59800 | | | | | | | | | | | | | | |
| 138.05 | 1 | | 0.58000 | | | | | | | | | | | | | | |
| 138.99 | 1 | | 0.62500 | | | | | | | | | | | | | | |
| 139.00 | 1 | | 0.06500 | | | | | | | | | | | | | | |
| 139.02 | 1 | | 0.00000 | | | | | | | | | | | | | | |
| 160.99 | 3 | 3 | 0.31633 | 0.12166 | 0.31633 | 0.12166 | 0.07024 | 38.46% | 0.12102 | 0.01759 | 0.12229 | 38.26% | 5.56% | 38.66% | 6.9531 | 0.01867 | 4.76% |
| 161.99 | 1 | | 0.00000 | | | | | | | | | | | | | | |
| 162.99 | 3 | 3 | 0.30400 | 0.09382 | 0.30400 | 0.09382 | 0.05417 | 30.86% | 0.09158 | 0.02887 | 0.09602 | 30.12% | 9.50% | 31.59% | 3.3262 | 0.03333 | 4.78% |
| 163.99 | 1 | | 0.00000 | | | | | | | | | | | | | | |
| 164.99 | 1 | | 0.49250 | | | | | | | | | | | | | | |
| 165.99 | 3 | 3 | 1.3735 | 0.26285 | 1.3735 | 0.26285 | 0.15176 | 19.14% | 0.26149 | 0.03777 | 0.26421 | 19.04% | 2.75% | 19.24% | 6.9945 | 0.03967 | 3.81% |

| Method Code | Total # Labs Submitting | # Labs in Method Precision Calcs | Mean | SD | Assigned Value - Robust Mean | AAFCO CS ffp - Robust sd | Uncertainty (U) - Robust | % RSD - Robust | Between Labs sL | Within Labs sr | Reproducibility sR | Between Labs %RSD | Within Labs %rsd | Reproducibility %RSD | sR/sr | Average Range (R-bar) | Horwitz %RSD |
|-------------|-------------------------|----------------------------------|---------|---------|------------------------------|--------------------------|--------------------------|----------------|-----------------|----------------|--------------------|-------------------|------------------|----------------------|--------|-----------------------|--------------|
| 166.99 | 2 | 0 | | | | | | | | | | | | | | | |
| 167.99 | 2 | 0 | | | | | | | | | | | | | | | |
| 361.04 | 1 | | 195.00 | | | | | | | | | | | | | | |
| 365.05 | 1 | | 400.50 | | | | | | | | | | | | | | |
| 400.01 | 3 | 3 | 0.42475 | 0.01202 | 0.42475 | 0.01202 | 0.00694 | 2.83% | 0.01193 | 0.00202 | 0.01210 | 2.81% | 0.47% | 2.85% | 6.0002 | 0.00230 | |
| 400.99 | 1 | | 0.42750 | | | | | | | | | | | | | | |
| 516.00 | 1 | | 1.3150 | | | | | | | | | | | | | | |
| 516.43 | 2 | | | | | | | | | | | | | | | | |
| 516.52 | 2 | 0 | | | | | | | | | | | | | | | |
| 516.53 | 5 | 4 | 1.4198 | 0.14391 | 1.4198 | 0.14391 | 0.07195 | 10.14% | 0.13847 | 0.05541 | 0.14915 | 9.75% | 3.90% | 10.50% | 2.6915 | 0.14196 | 15.17% |
| 518.31 | 1 | | 0.08500 | | | | | | | | | | | | | | |
| 518.41 | 3 | 2 | 0.23488 | 0.04932 | 0.23488 | 0.04932 | 0.03488 | 21.00% | 0.04932 | 0.00025 | 0.04932 | 21.00% | 0.11% | 21.00% | 197.28 | 0.01683 | 19.89% |
| 518.43 | 1 | | 0.00000 | | | | | | | | | | | | | | |
| 518.52 | 2 | 0 | | | | | | | | | | | | | | | |
| 518.53 | 5 | 5 | 0.36808 | 0.02882 | 0.36808 | 0.02882 | 0.01289 | 7.83% | 0.02165 | 0.02691 | 0.03454 | 5.88% | 7.31% | 9.38% | 1.2836 | 0.02892 | 18.59% |
| 520.41 | 2 | 0 | | | | | | | | | | | | | | | |
| 520.43 | 3 | 0 | | | | | | | | | | | | | | 0.67340 | |
| 520.52 | 1 | | 5.7000 | | | | | | | | | | | | | | |
| 520.53 | 2 | 0 | | | | | | | | | | | | | | | |
| 520.99 | 1 | | 8.9630 | | | | | | | | | | | | | | |
| 526.41 | 1 | | 0.54500 | | | | | | | | | | | | | | |
| 526.43 | 1 | | 0.00000 | | | | | | | | | | | | | | |
| 526.52 | 2 | 0 | | | | | | | | | | | | | | | |
| 526.53 | 5 | 5 | 0.72236 | 0.03612 | 0.72236 | 0.03612 | 0.01615 | 5.00% | 0.01577 | 0.04595 | 0.04858 | 2.18% | 6.36% | 6.73% | 1.0573 | 0.04180 | 16.80% |
| 529.99 | 3 | | | | | | | | | | | | | | | | |
| 539.41 | 1 | | 5.7255 | | | | | | | | | | | | | | |
| 539.43 | 2 | 0 | | | | | | | | | | | | | | | |
| 539.52 | 1 | | 3.8500 | | | | | | | | | | | | | | |
| 539.53 | 2 | 0 | | | | | | | | | | | | | | | |
| 710.99 | 1 | | 0.00700 | | | | | | | | | | | | | | |
| 718.99 | 1 | | 0.00700 | | | | | | | | | | | | | | |
| 726.99 | 1 | | 1.3805 | | | | | | | | | | | | | | |
| 728.99 | 1 | | 0.09100 | | | | | | | | | | | | | | |
| 736.99 | 1 | | 0.00000 | | | | | | | | | | | | | | |
| 754.99 | 1 | | 0.09000 | | | | | | | | | | | | | | |
| 756.99 | 1 | | 1.3850 | | | | | | | | | | | | | | |