AAFCO Check Sample 0929
Preconditioning / Receiving chow, Medicated

Administrative

The link to the Collaborative Check Sample Program page on the AAFCO website is provided below.
http://www.aafco.org/NewsandInformation/AAFCOCheckSampleProgram/tabid/74/Default.aspx
Use this link to access all relevant program documents and forms, and also link to the Summary reports page.

2010 Program sign-up

Thanks so much for your positive response to the customized invoices for the 2010 renewal process and to those labs that have already sent in their completed renewal forms. The deadline for renewal is December 31st 2009, and the pricing for 2010 remains the same as in 2009 (US & Canada $255 for 12 months, International $300 for 12 months). When completing your renewal forms, please update the current information as appropriate before you send in your payment. Thanks so much for your continued support of our Program. Watch your email for information concerning launch of the AAFCO data reporting website and revised statistical analysis of the data, which will soon be available.

Sample 2009-29 Medicated Preconditioning / Receiving Chow

Due to the high fiber content of this sample, grinding caused clumping and there was a tendency for the fiber clumps to segregate, particularly during shipment of the sample. This sample is documented as a non-homogeneous sample. This should be taken into consideration when evaluating your performance scores.

Analytical

Analyte	Estimated Analysis	AAFCO Grand Average (Pass 2)*	% of Estimated Analysis
Crude Protein, min	12.00 %	12.8695 %	107.25
Crude Fat[1], min	1.00 %	2.5305 %	253.05
Crude Fiber, max	26.00 %	23.8112 %	91.58
Calcium (Ca), min	0.45 %	0.8149 %	181.09
Phosphorus (P), min	0.40 %	0.4371 %	109.28
Potassium (K), min	1.10 %	1.0510 %	95.55
Salt (from NaCl), min	0.25 %	0.7968 %	318.72
Selenium (Se), min	0.3 PPM	0.4089 PPM	136.30
Vitamin A, min	5.0 KU/LB	5.0472 KU/LB	100.94
Chlortetracycline	70 g/Ton	56.1689 g/Ton	80.24
Sulfamethazine	0.0077%	0.00648 %	84.16

* Method Group results
[1]Method Group 003.XX

Since there was a suspected non-homogeneous distribution to this sample, I have included a comparison of both the crude fiber method group (004.XX) results and the protein by combustion nitrogen analyzer (002.06) results, using the Pass 2 values for grand average, standard deviation and average range of duplicates for some past AAFCO samples. AAFCO sample 0923 is the same commercial product, but a different lot, purchased independently and prepared independently, as AAFCO sample 0929.

Fiber Method group 004.XX

AAFCO Sample #	Grand Average % Crude Fiber	Standard Deviation	Relative Standard Deviation (RSD%)	Average Range of duplicates
0929	23.81	1.36	5.71	0.37
0928	2.88	0.32	11.11	0.094
0927	1.98	0.67	33.84	0.17
0926	3.32	0.39	11.75	0.094
0925	7.58	1.30	17.15	0.15
0924	5.61	0.55	9.80	0.13
0923	24.90	1.49	5.98	0.37
0922	2.13	0.38	17.84	0.095
0921	3.07	0.35	11.40	0.097

Looking at this information on the fiber methods we can conclude that the RSD is lower for sample 0929 and 0923 than the typical AAFCO sample. We can also see that the average range of duplicates is larger for samples 0929 and 0923. We can also say that the group test results are very reproducible between sample 0929 and 0923.
I think it useful also to consider the results of protein by nitrogen combustion analyzer because this test method uses a comparatively small test portion size compared to the fiber methods. If there is influence on the test results due to less homogeneity of the sample matrix, it is likely to have a bigger impact on a test using a smaller test portion.

Protein Method group 002.06

AAFCO Sample #	Grand Average Crude Protein	Standard Deviation	Relative Standard Deviation (RSD%)	Average Range of Duplicates
0929	12.88	0.64	4.97	0.23
0928	21.73	0.33	1.52	0.14
0927	4.01	0.24	5.99	0.10
0926	18.02	0.30	1.67	0.12
0925	40.88	0.31	0.76	0.13
0924	21.42	0.34	1.59	0.14
0923	12.48	0.64	5.13	0.25
0922	24.51	0.38	1.55	0.14
0921	17.65	0.32	1.81	0.11

The information provided here show that for protein measurement, the RSD is larger for samples 0929 & 0923, but this correlates with a lower protein content than is typically found in an AAFCO test sample. The average range of duplicates is a little higher than is seen in the other samples, but this is less striking than evidenced in the fiber results. Please take this information into account when reviewing your performance scores for this test sample.

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