

AOF Test Check Program

2003 / 2004 Annual Summary of Results

Test weight

D – Lab D submitted 4 results in total, starting from round 9. Their testing proved to be very accurate, recording differences of 0.1 and 0.2. Well done.

F – Accurate results were continually submitted all year, with most of the results producing a difference to the mean of just 0.2, the only exception being round 9 where a result of 1.09 difference was submitted. A difference of 0.00% was recorded in round 1. Well done.

G – Throughout the program Lab G produced either the highest or the lowest result out of all the labs each round. However, the differences weren't that extreme to cause great concern. The best round was round 5 where a difference of only -0.17 was achieved. The worst rounds were round 3 (0.96) and 4 (-1.75) where the results had to be omitted from the mean. 4 times the results exceeded ± 1.0 , with the majority of results staying around 0.6, 0.8, and 0.9.

H – Varying results across the year from Lab H. Results for 2 rounds, rounds 4 and 12, had to be omitted (1.75 and -1.39). Round 5 and 9 saw the best results, -0.17 (the same as lab G and L) and -0.19 . With the exception of the 2 excluded results, Lab H compared accurately with all other labs across the year.

I – The first and only Test Weight result submitted was -3.04 in round 5, being the only obscure result for the round and the year, and had to be omitted.

L – 12 results were received; out of which only 1 result had to be omitted from the mean (round 3) but round 4 saw a much-improved result. Rounds 10 and 11 saw the lowest result of all labs being recorded, (-0.91 and -0.95) and round 1 produced the best result of -0.2 , the second best result for that round. 9 rounds resulted in negative difference to the mean, but overall Lab L fared comparatively accurate to all other participating laboratories.

M – Only 3 Test Weight results were missed for the year, with the 9 results that were submitted proving to be very accurate. Lab M was able to achieve a mean difference of -0.04 in round 3 and 0.09 in round 11. The highest result was 0.83 in round 5, and the lowest was -0.31 in round 6. Excellent.

N – Lab N continually submitted consistent results, with 9 of the 12 results being on the negative side of the scale. The best 2 rounds were rounds 11 and 12, achieving -0.01 and -0.13 . Excellent.

O – Only 4 results were received from lab O, the first being submitted in round 8 (0.79). The other 3 results were submitted in rounds 10 (-0.37), 11 (0.09), and 12 (-0.13) and compared accurately to other laboratories. Well done.

Impurities

A – The only odd result received for Impurities was seen in round 4. The low result had to be omitted, but was not the only lab omitted for the round. All results compared well with other labs. Well done.

B – The year didn't start off well with the result for round 1 having to be omitted (-1.24). Varying results were submitted for the rest of the year, for example, 0.87, -0.52 , and -0.04 . However, with the exception to round 1, no results exceeded ± 1.0 and results fared well when comparing to other industry results.

C – The 2 lowest result for the year had a difference to the mean of -0.41 in round 2 and -0.72 in round 6. All other results were closer to the mean. The overall average of the mean difference is 0.04, one of the best averages. Well done.

Impurities Cont...

D – A steady year of results. The difference to the mean was constant throughout, and compared well to other results. Well done.

E – Where other labs recorded at least one or 2 odd results that were dissimilar to other results for that round, 4 were documented for lab E, with round 10's result being eliminated from the mean. Despite this, most of the rounds demonstrated close and accurate results and compared well to the mean and other laboratories.

F – The same level of variation between rounds seen in other laboratories performances were demonstrated during the year of analysis. The result that differed the most from the mean was round 4, but wasn't one of the 3 labs that were omitted from the mean for this round. The overall average of the mean difference for the year is 0.28.

G – All 12 results were submitted, well done, with all results continuing the same variable trend of all participants. An average year of results.

H – Performance for the year was on par with all participants. Accuracy of analysis is good, with the common variability between rounds that is a feature of this test.

I – Lab I demonstrated the same level of fluctuation of results seen between rounds as other participants. Results were more stable from round 7. Well done.

K - The value for round 1 shared equal lowest with lab N, but nothing to extreme. Round 6 also saw a low result, and again the lowest for the round, a difference of – 1.32%

L – Round 4 saw a result that was the highest out of all labs and was excluded from the mean. Consistent accurate results were being submitted for all other rounds, with the majority of results staying under 0.5% difference to the mean.

M – All results but one were lower than the mean. The difference to the mean continually change during the program, but no results greatly questioned the accuracy of the test.

N – The best round – 12, saw a mean difference of 0.01. The result for round 4 had to be omitted –2.33. All results were on the lower side of the scale, but did compare well with other laboratories results.

O – 7 results were received for the Impurity analysis, with one result recording a difference of 1.96 and being excluded from the mean. Other results proved to be consistent and accurate. Well done.

Oil rapid

A – 4 results recorded a mean difference of over +/- 1.0. One result of –2.37 difference had to be omitted from the mean (round 10) All other results were fine.

C – 2 result had to be omitted from the mean, the worst of these results showing a difference of 2.88. With the exception of these 2 outliers, all results stayed under +/- 1% and produced similar results to that of other participants.

D – 3 rounds saw results having to be excluded from the mean, as they were considerably lower. Results started to even out from rounds 5 – 12, with the only slight oddity being recorded in round 11, and omitting this result was unnecessary. Rounds 7 – 12 saw greater accuracy between Oil rapid and Oil Solvent.

E – A poor year of test results for Oil Rapid. 7 / 11 results were too low, with just 2 of these results not being omitted from the mean. The best rounds were 2,3, and 4 where a mean difference of 0.16, -0.4, and 0.29 were recorded. All other results (with the exception to round 1) recorded results that differed greater than -1.5%. The 3 lowest results showed differences to the mean of -2.03, -1.85, and -2.45, rounds 5,6, and 10.

F – A mean difference of 1.06 was recorded for the final round and is the most varying results submitted as rounds 1 – 11 saw very consistent and accurate results. Results compared well to Oil Solvent and Oil SFE. Well done.

Oil rapid Cont...

G – The first result received (round 4) was the result that had the biggest difference to the mean for the year - -1.01 for lab G. Good comparison of results between Oil rapid and Oil solvent, and when comparing to other participants. Well done.

H – A good year of analysis, no outliers recorded with performance rating well against other labs.

I - After a somewhat inconsistent beginning, a sound finish was made to the year. Results from rounds 1 – 6 varied from -0.33 -0.62, with the lowest result recording a difference of -1.29 in round 3. Results for rounds 7 and 8 had to be omitted as a difference of -4.08 and 2.97 were recorded (the lowest results of all labs for the year). Rounds 9 – 12 saw a vast improvement of results i.e. -0.04, -0.4. Hopefully this standard can be continued into the 2004/2005 season.

J – 2 results were submitted for the year with a difference of 0.66 and 0.78 in rounds 7 and 8. They are slightly high when compared to other labs results, but are fine.

L – One result had to be omitted from the mean (round 4). This proved to be a rarity as all other results for the year were accurate. Well done.

M – All results were lower than the mean, but all within an acceptable level, with the exception to one result of -1.64. A good year of results.

N – All results stayed under +/- 1.0% difference. The closest result that came to this difference from the mean was 0.99% in round 11, but all other results were a lot more accurate, with Oil Solvent confirming the accuracy. Excellent.

O – All submitted results accurately reflected the mean. Results compared well with other oil analysis. Well done.

Oil Solvent

A – Results were improving up until round 3, where a difference of 0.03 was recorded. Round 4 saw the difference to the mean plummet to -1.08. Results then began to close the gap between the difference to the mean, and hovered around 0.04, -0.09, -0.11. Results dropped down again in round 10 to a difference of -1.04. Great improvements were seen for rounds 11 and 12. Results for Oil Solvent fared better than results for Oil rapid.

B – The first 8 rounds saw results hovering between -0.24 to -0.56. The lowest result was recorded in round 9 of -1.0, but improvement was seen in rounds 10 and 11, with a mean difference of 0.0 being recorded for round 11. With the exception of round 9, and although there was some variability between rounds, results weren't too extreme.

D – Rounds 1 – 6 produced fairly low results, with rounds 2,3, and 4 having to be omitted. These rounds were also omitted from the mean for Oil Rapid. Round 5 saw an improvement (a difference of -0.31), but then dropped back to -1.65 in round 6. Results submitted for rounds 7 – 12 began to stabilise and better reflected the mean. The only odd result was recorded for round 11 -1.11.

E – The first 5 rounds saw 3 results having to be excluded from the mean as they were too low. Low results were continually being recorded for the duration of the program, with results for oil rapid differing greatly. The overall average of the mean difference for the year is -1.19.

F – Lab F was one of the better performing labs, achieving 0.00% in round 1. Stable results were produced for the entire year, comparing well to other methods of oil analysis. Well done.

Oil Solvent Cont...

G – Rounds 1 – 7 saw a trend of instability being documented. For example, round 1 –1.1, round 2 0.04, round 3 –1.38, round 4 –0.98. The result for round 7 was the lowest for the year for lab G, -2.04 and was omitted from the mean. The variability of results continued from rounds 8 – 12, but the differences between rounds, and the mean, improved. –0.1, -0.53, -1.0, -0.35. Results for Oil solvent and Oil Rapid were similar throughout the year.

H –An excellent year of results. The result that recorded the biggest difference from the mean was from round 10, -0.58. All other results were much closer to the mean. The overall average of the mean difference was –0.06, the best out of all participants. Well done.

J – 2 results submitted for the year, rounds 7 and 8, recording a difference of 0.36 and –0.14. Good.

K – The 2 results submitted had a difference of 0.2 and 0.65. Well done.

M – An inconsistent year of results. The result with the biggest difference was recorded in round 6 of 1.25 and the lowest was 0.06, recorded in round 7. When comparing the Oil Solvent results to Oil Rapid,

N – Up until round 5 results were keeping minimal differences to the mean. Things changed in round 6 when the highest result for the year was recorded, 1.35. For the next few rounds, results were inconsistent and jumping around the place, varying from –0.54 to 1.1 difference. Results began to improve from rounds 10 – 12. Very similar results are being documented between oil rapid and oil solvent.

O – The year saw good results being submitted that reflected the mean well. As mentioned under Oil SFE, there was good comparison between methods.

Oil SFE

F – With the exception of round 1, an excellent year of results, with all 12 results being submitted. When comparing the results for Oil SFE to results for Oil solvent and Oil Rapid, minimal difference is seen between results. Well done. This accuracy is reinforced when comparing the results to the 2 other participating labs. Well done.

L –The result with the biggest difference was seen in round 1, –0.93. The next result wasn't submitted until round 5 and saw a much closer difference to the mean and compared well to the other results. In regards to consistency of results when compared to Oil rapid, with the exception of round 8, all rounds rated well. Good Job.

O – With a variation of 2% across all labs in round 1, Lab O recorded a result that matched the mean for the reference method better than the other 2 labs. This accuracy was carried out for the duration of the program. Well done.

Moisture Oven

A – With the exception of round 3, Lab A produced low and consistent results throughout the year. Round 3 saw the result of –1.68 compared with +/- 0.02 to +/- 0.08, and consequently had to be excluded from the mean. This was the most obscure result recorded and the only time a result had to be omitted. To contrast this, in round 6 a mean difference of 0.00 was achieved. Well done. From rounds 4 – 12 results were kept accurate and stable.

B – An excellent year of results. The highest result documented was 0.09 and the lowest was –0.23 and –0.14. Round 2 showed even greater accuracy with a mean difference of 0.00. Well done.

further investigation. There was minimal contrast between results from other laboratories.

Moisture Oven Cont...

D – Good consistent results received by Lab D during the year. All results were close to the mean. 3 times the results were the highest of all labs, but only had to be omitted from the mean once (round 5). These highs were nothing too extreme to warrant

E – There are no outliers to speak of from rounds 1 – 12. 0.00% was recorded in round 5 with all results staying very close to this figure. The lowest result was -0.28 and the highest 0.07. Good work.

F – All year reliable results were being recorded by lab F. They varied very little from other laboratories results. Excellent.

G – More higher and lower results were recorded by lab G than other labs. For example, -0.39 in round 1, 0.32 in round 4, 0.29 in round 8 and 12, 0.48 in round 10. These results generally aren't high or low, only when they are compared with the standard of results being submitted for Oven Moisture (0.02 / 0.1 etc). All other results for the year fitted the common trend of results.

H – Round 2 recorded a mean difference of 0.00%, and was the only round where the difference wasn't on the negative side of the scale. All results were around -0.08, -0.03, -0.01 etc and made for an excellent year of test results. Well done.

I – 10 / 12 results received, of which 6 results were the lowest of all results for the corresponding round, and 1 result (round 10) recorded the lowest result out of all the labs for the entire year for this test (-1.07). The difference to the mean varied from round to round. Round 3 recorded a difference of 0.02, round 4 a difference of -0.43, round 5 0.04, and round 6 -0.44. The fluctuation of results ceased from round 9 – 12 where similar low results were recorded.

J – 2 results were received for the year. Round 7 saw a result of -0.53 and round 8 a result of -0.41. Both times the results compared much lower to other participants.

K – Only 2 results were received during the program. The first result in round 1 had to be removed from the mean, as it was too low. The second result submitted in round 6 was overall higher than the other labs, but didn't need to be excluded from the mean.

L – Round 1 produced the highest result for the year, 0.31. Rounds 2 – 12 demonstrated accurate and steady results. A mean difference of 0.00% was recorded for round 2, as 4 other labs did for this round. Well done.

M – In every round, Lab M recorded the same results as at least another laboratory. Some of these were - a mean difference of 0.00% in Rounds 2 – the same result as 4 other labs (B, H, L, O), 0.02 in Round 3, the same as 4 other labs (B, I, L, N). 0.16 in round 5 - the same as one other lab (G) 0.06 in round 6 - the same as 2 other labs (F, N). 0.27 round 7 – the same as 2 other labs (N, O). Good, accurate results. Well done.

N and O – As mentioned above, these two labs recorded several same results as other laboratories. Continual accuracy and reliable results were submitted for the entire year. Excellent.

Moisture Rapid

C – The results submitted for Rounds 1 – 4 inclusive were considerable higher than the mean (compared to other lab results and the second half of the year), and saw the result for round 2 being omitted from the average (0.7). Rounds 5 – 12 saw a great improvement and all results were consistently accurate. The highest result for these 8 rounds were 0.2 and the lowest -0.13. Excellent.

0.01% difference. All high results were the highest for the round, but no cause for concern.

Moisture Rapid Cont...

D – Slightly variable results were submitted across the year. The majority of results proved to be accurate, with the exception of 4 results (rounds 5,8,9, and 11). The result for round 5, 0.28 was omitted from the mean as all other industry results were around **F** – 9 / 12 rounds produced negative results, with 6 rounds generating the lowest results of all the laboratories. Slightly inconsistent results were documented, round 4 – 0.22, round 5 0.01, round 6 0.20, round 7 0.03, round 8 –0.23. Similar low results were seen for the duration of the program. Other than the slight inconsistency, results were kept within an acceptable parameter for Moisture Rapid.

G – No results were received for the first 3 rounds. Lab G followed a similar pattern to that of lab F, as in recording a –0.32 difference for one round, and 0.01 for the next. Although there was this variability of differences to the mean throughout the year, also as with lab F, all results were within an acceptable parameter for Moisture Rapid.

H – Excellent results achieved throughout the year. All results were consistent, with no outliers. The highest difference result record was 0.18 and the lowest –0.10. 0.00 was recorded for round 5, well done.

I – Only 2 results were received with a difference to the mean of –0.10 in round 6 and 1.03 in round 7 (omitted)

L – A year of continual stable results with differences not exceeding 0.17 and –0.15. Excellent.

M – As with other analysis, Lab M recorded the same results as other labs several times throughout the program, and was able to record a mean difference of 0.00 in round 2. Laboratories that shared the same results were H, N, F, O, and C. Well done.

N – There were no obscure results recorded, with all results proving to be stable and accurate. Good work.

O – With the exception of 2 results (round 2 and 10) that ended up being abnormal, all results were kept close to the mean. Great.

Oleic

A – The year started off a bit shaky, recording low and inconsistent results for the first 5 rounds. Round 6 saw one of the best results for lab A, a difference of 0.04. Results showed better accuracy and stability from rounds 6 – 12. The overall average of the mean difference for the year is -0.59, an average result.

B – 2 obscure results were recorded for the year. The first was seen in round 4 with a difference of –1.09 (not the lowest for the round), and the second in round 11 –2.10 which had to be omitted. The difference to the mean varied each month, but compared to other participants, the results were relatively stable and accurate. The average of the mean difference for the year for Oleic analysis is –0.09, the best result out of all laboratories.

E – Results tended to be a bit too high for the first 3 rounds, but the only omissions from the mean were in the last 3 rounds as the difference to the mean was too high (rounds 11 and 12) and too low (round 10) compared to other participants. With the exception of one result in round 6, rounds 4, 5, 8, and 9 were the most accurate for the year. Overall, variable results recorded throughout the year.

I – Inconsistent results were submitted for the duration of the year. Round 1 recorded the second highest result for the round – 2.76. The next result submitted was round 3, seeing a difference from the mean of –0.34. Rounds 5 and 6 had to be omitted, as the results were too influential to the mean. Although an improved result was seen in round 8, it too was omitted for being too high. Rounds 9 – 12 saw a slight improvement in results with 3 out of 4 results displaying close accuracy to the mean. The odd result was seen in round 11, a difference of 1.09, but exclusion from the mean wasn't necessary.

Oleic Cont...

K – a result with a difference of just 0.17 was submitted for round 1. This is an excellent result considering the value of the difference of other participants i.e. -3.33, 2.28, 2.76. The only other result received was for round 6 which saw a high value of 1.63 and was the second highest for the round.

M – Lab M had the biggest variation of results seen by any lab, recorded the lowest result of any lab, and had 5 results omitted from the mean. The lowest result was seen in round 3 with a difference of -5.06, and the best was 0.10 in round 11.

O – A similar variability of differences seen in other laboratories was present from round to round, but only one great differing result was submitted in round 5, -1.16. Compared to some results from other participants, this outlier is very minimal and the year generally saw consistent results being submitted.

Linoleic

A – Performance for this analysis was quite good all through the year. The 3 highest results were 0.44, 0.78, and 0.89, but no results had to be omitted. The majority of results came very close to the mean result, with round 8 achieving 0.00%. Well done.

B – An average year of results, with a similar pattern seen by lab M. Results varied from 0.27, 0.34, to 0.04 and 0.16. No outliers were recorded, and all results compared well. Overall, a good year of analysis. Well done.

E – The majority of submissions compared well to results from other participants and the mean, with the exception of 3 rounds. Rounds 1 and 6 saw results over 1% difference (1.07 and 1.59), and round 10 recorded Lab E's highest result of 2.98 difference, and subsequently was omitted from the mean.

G – 3 results were received for the year, rounds 10 – 12 inclusive. These results proved to be accurate, with a mean difference of -0.18, -0.6, - 0.04. Well done. Other laboratories who submitted results for the majority of the year recorded equally as accurate results, but also recorded obscure results along the way. Would similar high / low results have been recorded if more tests were performed?

I – 11 / 12 results were submitted, with 4 results having to be omitted from the mean as the values were too low. The most extreme difference was round 6 where a difference of -10.99 was recorded. All other outliers were around -1.2, -1.5 etc. Two results of -0.8 and -0.9 were documented and compared better to other results. A fluctuating year of test results for Lab I.

K – 2 results were received for the year, -0.14 in round 1 and -0.72 in round 6, which rated well when comparing the results to others of the specified rounds.

M – Rounds 4, 5, and 6 saw the lowest results for the year for lab M, -0.41, -0.43, and -0.51. All other results were good.

O – Consistent results seen all year, with no results having to be omitted. The lowest result was -0.62, with the majority of results recording a difference to the mean of around 0.2 and 0.3. Well done.

Free Fatty Acid

This analysis is one where all participating laboratories performed equally throughout the year. Variation of accuracy differed from round to round, but still compared well to other laboratories results. Each participant recorded a combination of high and low results, and equally recorded closer accuracy to the mean i.e. 0.02, -0.1. The only obscure result received was from lab G for round 6, 1.02. When comparing the mean difference of all received results for 12 rounds, the scale only reaches 0.5 and -0.5. Excellent.