Round 13 Sample Details

BACKGROUND

This report covers Round 13 of the Asbestos in Soils Scheme (AISS). Round 13 was open to laboratories worldwide. Laboratory participation was as follows: 31 UK, 19 EU and 3 RoW.

SAMPLES

Two samples were circulated as follows:

Sample S025 – This sample contained no asbestos in top soil containing cement, plaster, sand and polypropylene fibres.

Sample S026 – This sample contained anthophyllite asbestos (loose fibre) at 0.05% by weight of the dried sample. Each sample was individually made by mixing known weights of asbestos in a pure top soil matrix.

SCREENING & VALIDATOR INFORMATION

Both samples were prepared for circulation following our normal internal screening process of samples with representative sub-samples scanned using stereo-zoom microscopy to assess homogeneity and suitability. Approximately 10% of the total number of samples despatched were validated by 3 independent laboratories.

INFORMATION SUBMITTED BY LABORATORIES

Laboratories used the HSL web-based PT data entry system to submit their results for this round. Results were submitted as asbestos type(s) present and for the Quantitative option, the % asbestos in ACM's, as loose fibres and the total % asbestos.

AISS QUALITATIVE RESULTS

Sample 025

Forty-eight laboratories correctly reported no asbestos.
One laboratory reported anthophyllite.
Four laboratories did not submit a result.

Sample 026

Thirty-eight laboratories correctly reported anthophyllite.
Nine reported tremolite and one reported anthophyllite and tremolite (no error)
One laboratory reported anthophyllite and chrysotile.

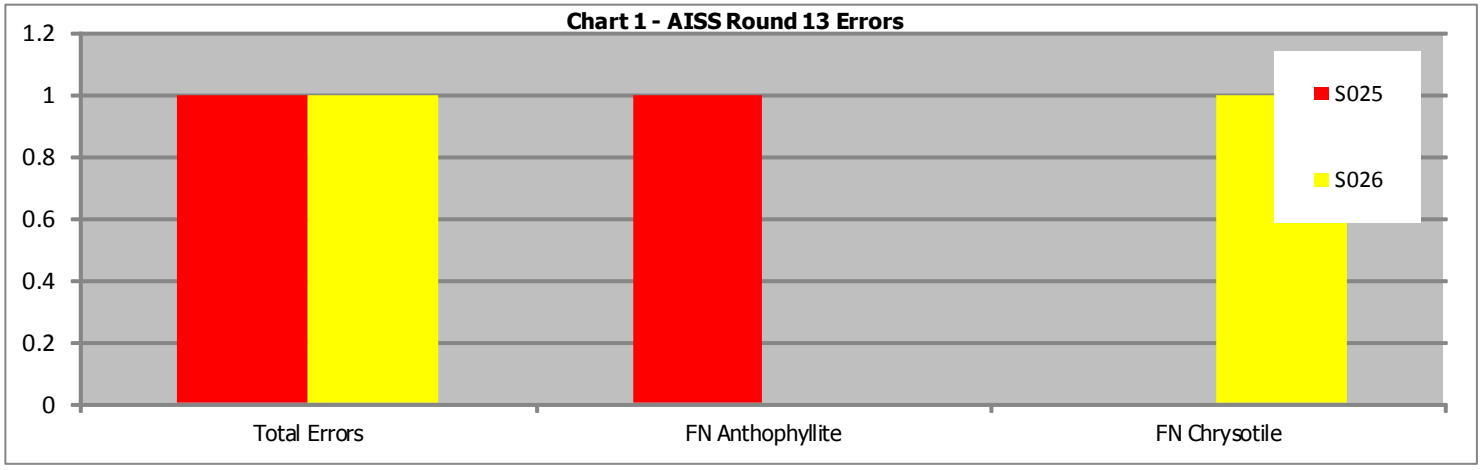
AISS QUANTITATIVE RESULTS

The median of quantitative results submitted was 0.03625. For the purposes of the z score we are using 40% of the median - 0.0145. Forty laboratories submitted quantitative results for S026;

- 23 (57.5%) laboratories achieved a z-score of < ± 2, Satisfactory
- 14 (35%) laboratory achieved a z-score of between ± 2 - ± 3, Questionable
- 3 (7.5%) laboratories achieved a z-score of > ± 3, Unsatisfactory

1. Type Of Errors Obtained

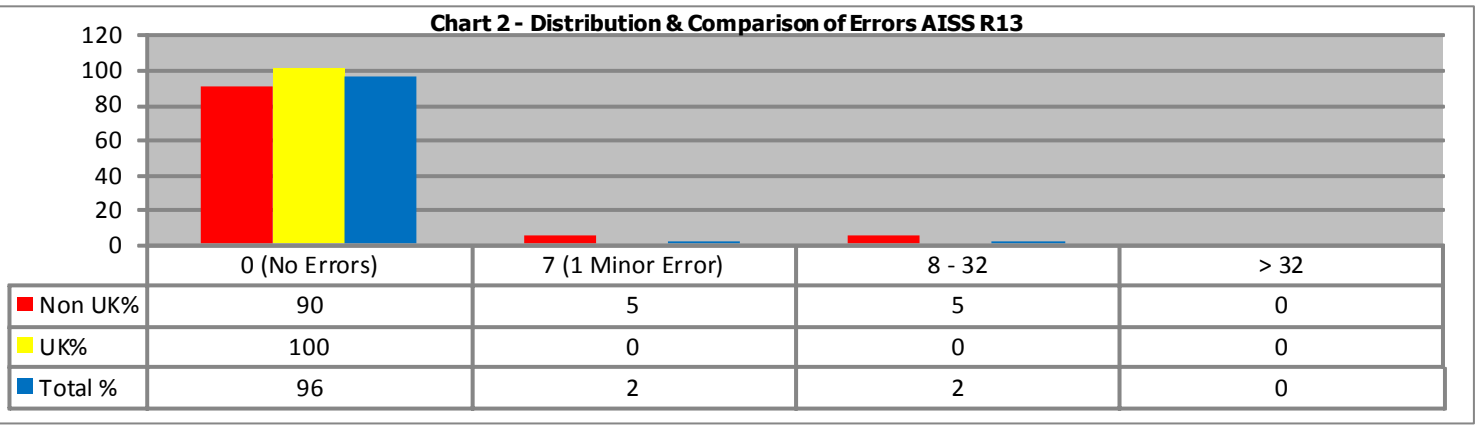
Chart 1 illustrates the errors made by participating laboratories. One error was made on sample S025 where the laboratory reported anthophyllite. Only error was made on sample S026 where a lab falsely identified chrysotile.



False Negative = Component has been missed. False Positive = Component has been incorrectly identified as present.

2. Errors for UK & Non-UK Laboratories

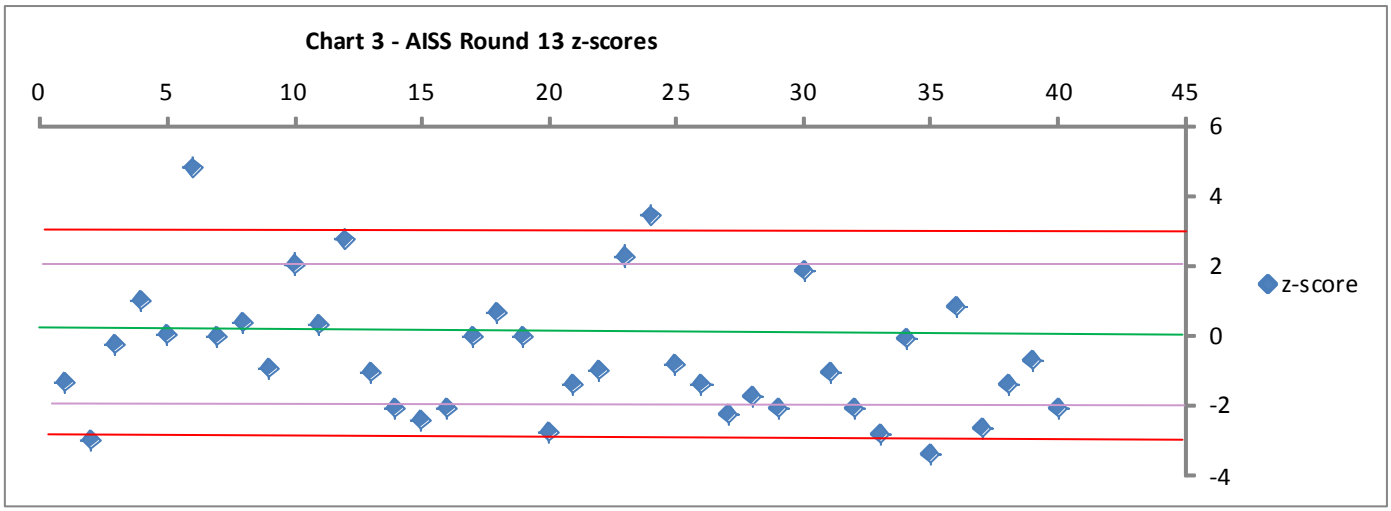
Chart 2 illustrates the distribution of scores for all participating laboratories. 47 (96%) laboratories obtained a score of zero in this round, indicating that these laboratories had not made any errors. The distribution of scores obtained by UK (United Kingdom) and Non-UK laboratories is also compared; 29 (100%) UK laboratories and 18 (90%) Non-UK laboratories obtained a score of zero for the round.



	0 (No Errors)	7 (1 Minor Error)	8 - 32	> 32
Non UK%	90	5	5	0
UK%	100	0	0	0
Total %	96	2	2	0

3. Quantitative Results - z scores

Chart 3 - scatter graph of z scores for the 40 laboratories who submitted a quantification result for sample S026. Results within the two purple lines and around the central green line are close to the assigned % asbestos (satisfactory). Results falling between the purple and red lines (z score ± 2 and ± 3) are questionable and results falling outside of the red lines (z score > ± 3) are unsatisfactory.



4. Quantitative Results

Chart 4 illustrates of the 40 laboratories who submitted a quantification result for sample S026, 23 labs (57.5%) achieved a satisfactory result i.e. a z score of < ± 2. 14 labs (35%) achieved a questionable result with a z score of between ± 2 and ± 3. 3 labs (7.5%) achieved an unsatisfactory result with a z score of > ± 3.