



GROUP REPORT
Round 34



November 2024

ASBESTOS IN SOILS SCHEME

Round 34 Sample Details

BACKGROUND

This report covers Round 34 of the Asbestos in Soils Scheme (AISS). Round 34 was open to laboratories worldwide. Assigned laboratories were as follows: 21 UK & 50 NON UK with 70 laboratories submitting results.

SAMPLES

Two samples were circulated as follows:

Sample S067 – This sample was a non-asbestos matrix containing topsoil, compost, sand and clay with polypropylene fibres.

Sample S068 – This sample contained 0.06% amosite free fibre asbestos in a topsoil, sand, aggregate and wood flour 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 were validated by 3 independent laboratories.

INFORMATION SUBMITTED BY LABORATORIES

Seventy laboratories submitted results for AISS Round 34. Laboratories used the PT online 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 AC-M's, as loose fibres and the total % asbestos.

AISS QUALITATIVE RESULTS

Sample 1 (S067)

Sixty-nine laboratories correctly reported no asbestos

One laboratory reported chrysotile

Sample 2 (S068)

Sixty-nine laboratories correctly reported amosite

One laboratory reported amosite & crocidolite

AISS QUANTITATIVE RESULTS

The median of quantitative results submitted was 0.085. For the purposes of the z score we are using 40% of the median - 0.034.

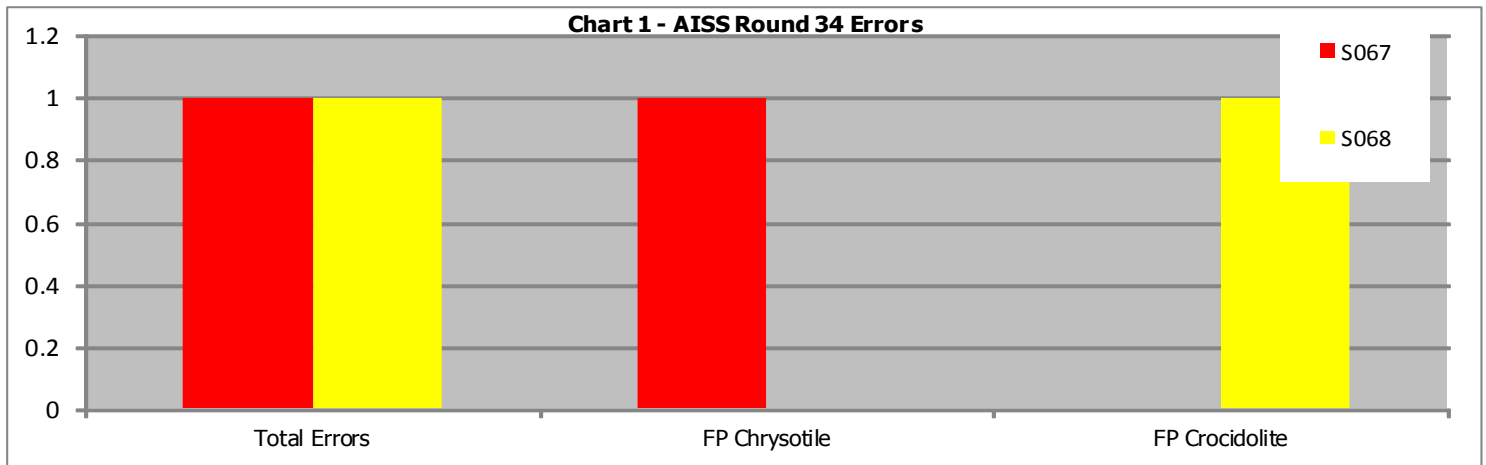
Forty-seven laboratories submitted quantitative results for S068;

- 44 (94%) laboratories achieved a z-score of $< \pm 2$, Satisfactory
- 1 (2%) laboratory achieved a z-score of between $\pm 2 - \pm 3$, Questionable
- 2 (4%) laboratories achieved a z-score of $> \pm 3$, Unsatisfactory

1. Type Of Errors Obtained

Chart 1 illustrates the errors made by participating laboratories. One error was made on sample S067 (non asbestos) with one laboratory falsely reporting chrysotile.

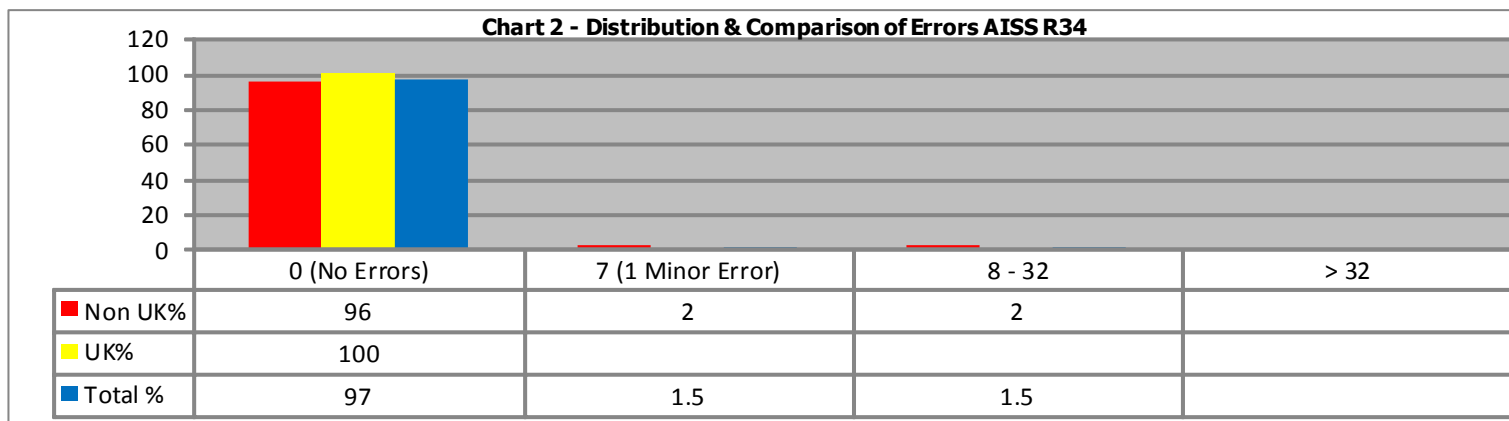
One error was made on sample S068 (amosite) with one laboratory reporting amosite but also falsely reporting crocidolite.



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

2. Errors for UK & Non-UK Laboratories

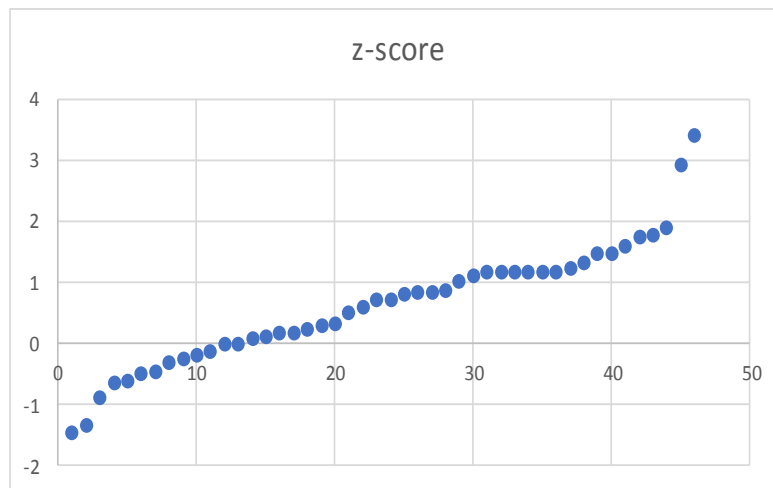
Chart 2 illustrates the distribution of scores for all participating laboratories. 68 (97%) laboratories obtained a score of zero in this round, indicating that these laboratories had not made any errors. The distribution of scores obtained by UK (United Kingdom) and Non-UK laboratories is also compared; 21 (100%) UK laboratories and 47 (96%) Non-UK laboratories obtained a score of zero for the round.





3. Quantitative Results - z scores

Chart 3 - scatter graph of z scores (one z score of 71.76 removed as an outlier) for the 47 labs who submitted a quantification result for sample S068.



4. Quantitative Results

Chart 4 illustrates the results of the 47 laboratories who submitted a quantification result for sample S068. 44 labs (94%) achieved a satisfactory result i.e. a z score of ± 2 . 1 lab (2%) achieved a questionable result with a z score of between ± 2 and ± 3 . 2 labs (4%) achieved an unsatisfactory result with a z score of $> \pm 3$.

