



GROUP REPORT
Round 33



June 2024

ASBESTOS IN SOILS SCHEME

Round 33 Sample Details

BACKGROUND

This report covers Round 33 of the Asbestos in Soils Scheme (AISS). Round 33 was open to laboratories worldwide. Laboratory participation was as follows: 22 UK & 48 NON UK.

SAMPLES

Two samples were circulated as follows:

Sample S065 – This sample contained amosite and crocidolite asbestos in a topsoil, compost, sand and plaster matrix with wood flour, leather and wollastonite fibres.

Sample S066 – This sample contained 0.11% chrysotile free fibre asbestos in a topsoil, sand, aggregate, plaster and paper 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 33. 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 (S065)

Sixty two laboratories correctly reported crocidolite & amosite
Two laboratories reported crocidolite, amosite & chrysotile
One laboratory reported amosite & chrysotile
Five laboratories reported amosite only

Sample 2 (S066)

Sixty eight laboratories correctly reported chrysotile
One laboratory reported chrysotile & crocidolite
One laboratory reported chrysotile & amosite

AISS QUANTITATIVE RESULTS

The median of quantitative results submitted was 0.10. For the purposes of the z score we are using 40% of the median - 0.04.

Forty-eight laboratories submitted quantitative results for S066;

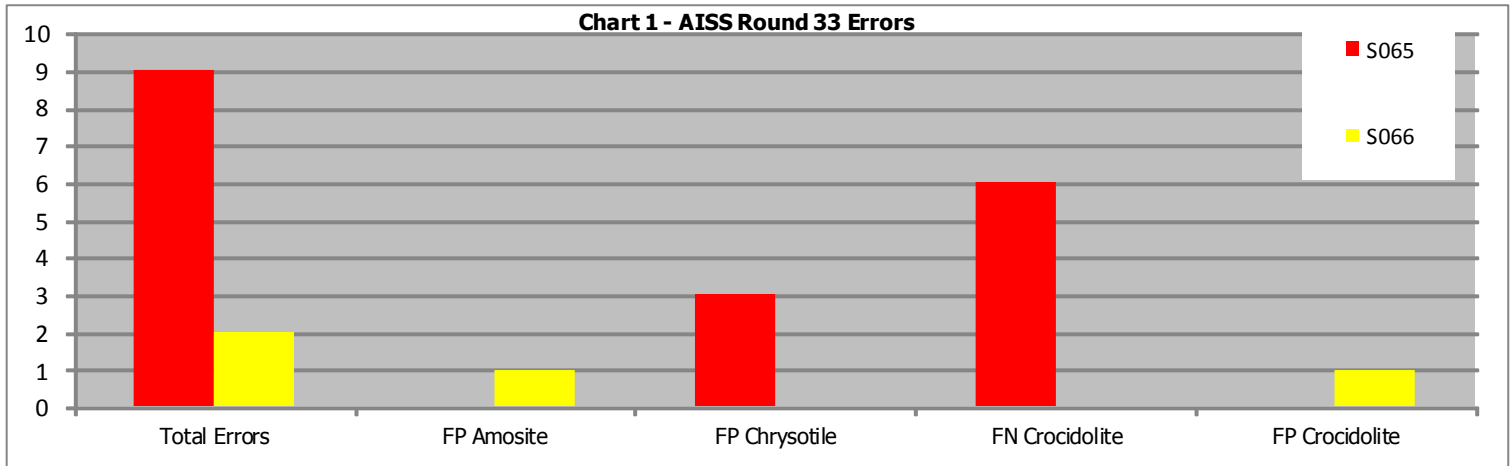
- 45 (94%) laboratories achieved a z-score of $< \pm 2$, Satisfactory
- 1 (2%) laboratory achieved a z-score of between $\pm 2 - \pm 3$, Questionable
- 2 (4%) laboratories achieved a z-score of $> \pm 3$, Unsatisfactory



1. Type Of Errors Obtained

Chart 1 illustrates the errors made by participating laboratories. Nine errors were made on sample S065 (amosite & crocidolite) with six laboratories failing to report crocidolite, three falsely reporting chrysotile.

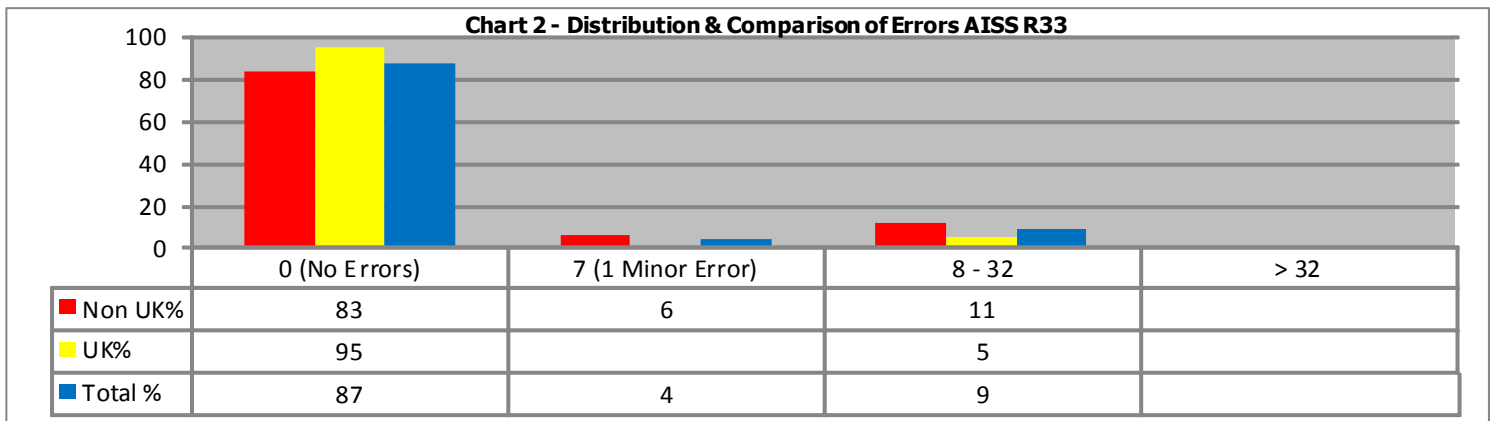
Two errors were made on sample S066 (chrysotile) with one laboratory falsely reporting crocidolite and one falsely reporting amosite.



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

2. Errors for UK & Non-UK Laboratories

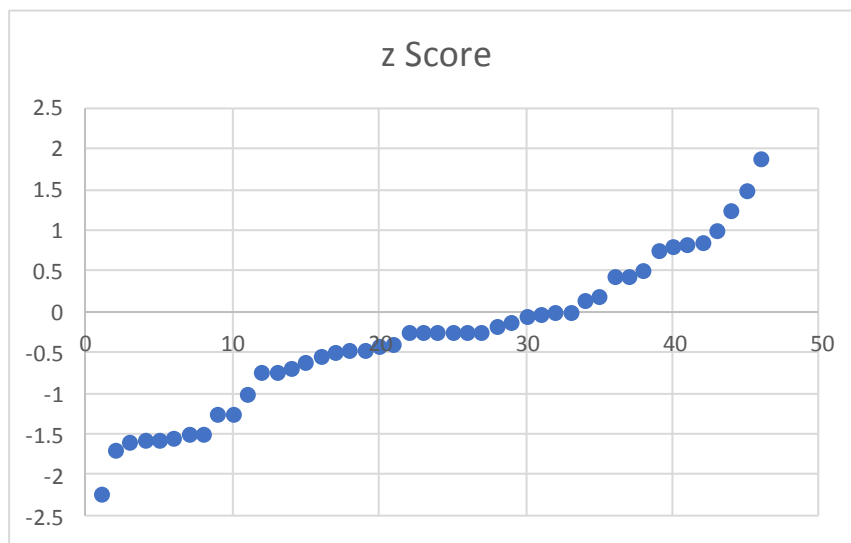
Chart 2 illustrates the distribution of scores for all participating laboratories. 61 (87%) laboratories obtained a score of zero in this round, indicating that these laboratories had not made any errors. The distribution of scores obtained by UK (United Kingdom) and Non-UK laboratories is also compared; 21 (95%) UK laboratories and 40 (83%) Non-UK laboratories obtained a score of zero for the round.





3. Quantitative Results - z scores

Chart 3 - scatter graph of z scores (two z scores of 9.75 & 72.25 removed as outliers) for the 48 labs who submitted a quantification result for sample S066.



4. Quantitative Results

Chart 4 illustrates the results of the 48 labs who submitted a quantification result for sample S066. 45 labs (94%) achieved a satisfactory result i.e. a z score of $< \pm 2$. 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 $> \pm 3$.

