



GROUP REPORT
Round 25



November 2021

ASBESTOS IN SOILS SCHEME

Round 25 Sample Details

BACKGROUND

This report covers Round 25 of the Asbestos in Soils Scheme (AISS). Round 25 was open to laboratories worldwide. Laboratory participation was as follows: 28 UK & 34 NON UK

SAMPLES

Two samples were circulated as follows:

Sample S049 – This sample contained amosite free fibre and organic fibres in a topsoil and mortar matrix.

Sample S050 – This sample contained chrysotile asbestos 0.05% and polypropylene fibres in a topsoil and cement 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 4 independent laboratories.

INFORMATION SUBMITTED BY LABORATORIES

Sixty Two laboratories submitted results for AISS Round 25. 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 (S049)

Fifty-Nine laboratories correctly reported amosite
One laboratory reported amosite and chrysotile
One laboratory reported amosite and actinolite
One laboratory reported no asbestos

Sample 2 (S050)

Fifty-Eight laboratories correctly reported chrysotile
Two laboratories reported crocidolite only
One laboratory reported chrysotile and amosite
One laboratory reported chrysotile and anthophyllite and actinolite

AISS QUANTITATIVE RESULTS

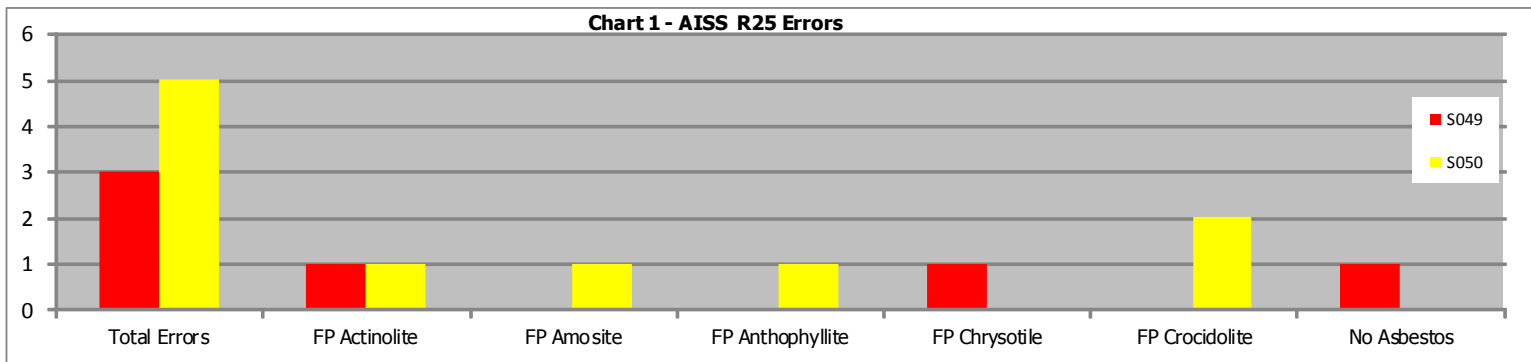
The median of quantitative results submitted was 0.067. For the purposes of the z score we are using 40% of the median - 0.026. Fifty-one (51) laboratories submitted quantitative results for S050;

- 49 (96%) laboratories achieved a z-score of $< \pm 2$, Satisfactory
- 0 (0%) laboratories 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.

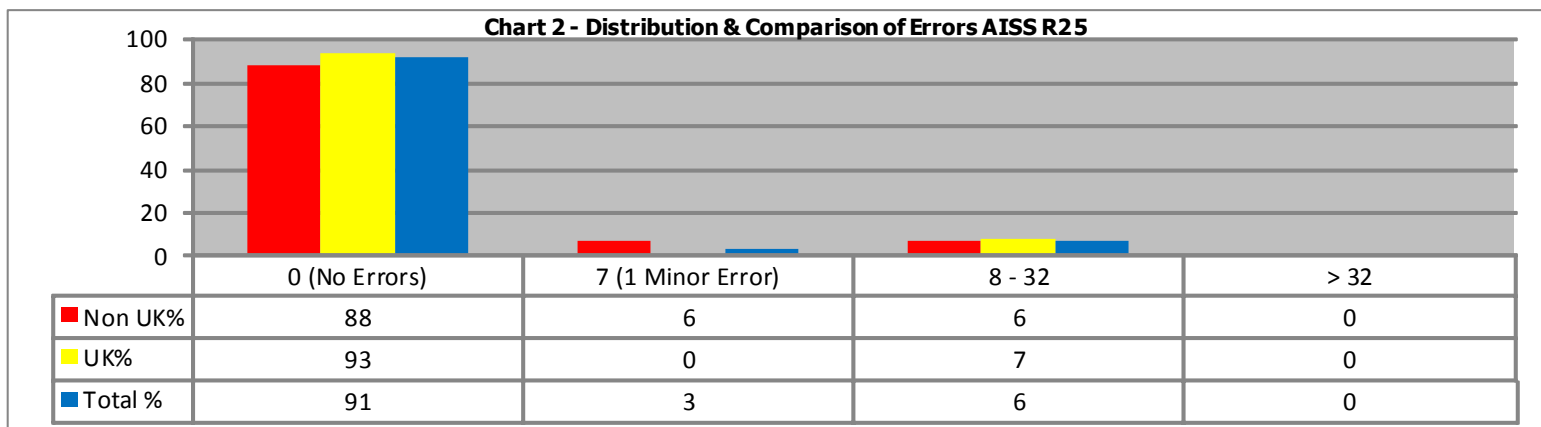
Three errors were made on sample S049 (amosite), with one laboratory reporting amosite and chrysotile, one laboratory reporting amosite and actinolite and one laboratory reporting no asbestos
 Five errors were made on sample S050 (chrysotile), with two laboratories reporting crocidolite, one laboratory reporting chrysotile and amosite and one laboratory reporting chrysotile, anthophyllite and actinolite.



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

2. Errors for UK & Non-UK Laboratories

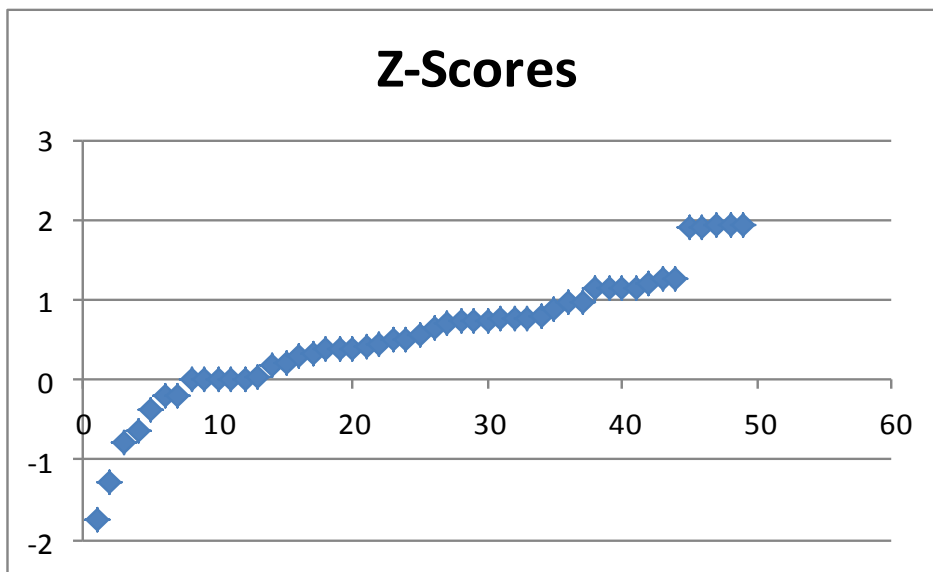
Chart 2 illustrates the distribution of scores for all participating laboratories. (90%) laboratories obtained a score of zero in this round. The distribution of scores obtained by UK (United Kingdom) and Non-UK laboratories is also compared; 26 (93%) UK laboratories and 30 (88%) Non-UK laboratories obtained a score of zero for the round.





3. Quantitative Results - z scores

Chart 3 - scatter graph of Z-scores for the fifty-one (51) labs who submitted a quantification result for sample S050. (two Z-scores of 4.23 and 5.38 removed as outliers)



4. Quantitative Results

Chart 4 illustrates the results of the fifty-one (51) labs who submitted a quantification result for sample S050, 49 labs (96%) achieved a satisfactory result i.e. a z score of $< \pm 2$. No labs (0%) 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 $> \pm 3$.

