



GROUP REPORT
Round 24



July 2021

ASBESTOS IN SOILS SCHEME

Round 24 Sample Details

BACKGROUND

This report covers Round 24 of the Asbestos in Soils Scheme (AISS). Round 24 was open to laboratories worldwide. Laboratory participation was as follows: 29 UK, & 36 NON UK

SAMPLES

Two samples were circulated as follows:

Sample S047 – This sample contained crocidolite asbestos in a matrix of top soil, cement and limestone chippings.

Sample S048 – This sample contained asbestos cement fragments (containing chrysotile asbestos) in a matrix consisting of top soil, cement, sand, grout and limestone chippings.

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

Fifty-seven laboratories submitted results for AISS Round 24. 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 with no asbestos present then only the qualitative score has been calculated.

AISS QUALITATIVE RESULTS

Sample 1 (S047)

Fifty-seven laboratories correctly reported crocidolite

Sample 2 (S048)

Forty-seven laboratories correctly reported chrysotile

One laboratory reported chrysotile and tremolite

Nine laboratories reported no asbestos

AISS QUANTITATIVE RESULTS

Following the withdrawal of the SCA Blue Book the Information Books for Participants and Validators were updated and reissued on 22/2/21 to reflect this including the asbestos percentages for ACMs that were now to be used in the scheme. This was notified to all participants at the time.

The median of quantitative results submitted was 0.12. For the purposes of the z score we are using 40% of the median - 0.048. Forty-four laboratories submitted quantitative results for S048;

- 30 (68%) laboratories achieved a z-score of $< \pm 2$, Satisfactory
- 9 (21%) laboratory achieved a z-score of between $\pm 2 - \pm 3$, Questionable
- 5 (11%) laboratories achieved a z-score of $> \pm 3$, Unsatisfactory

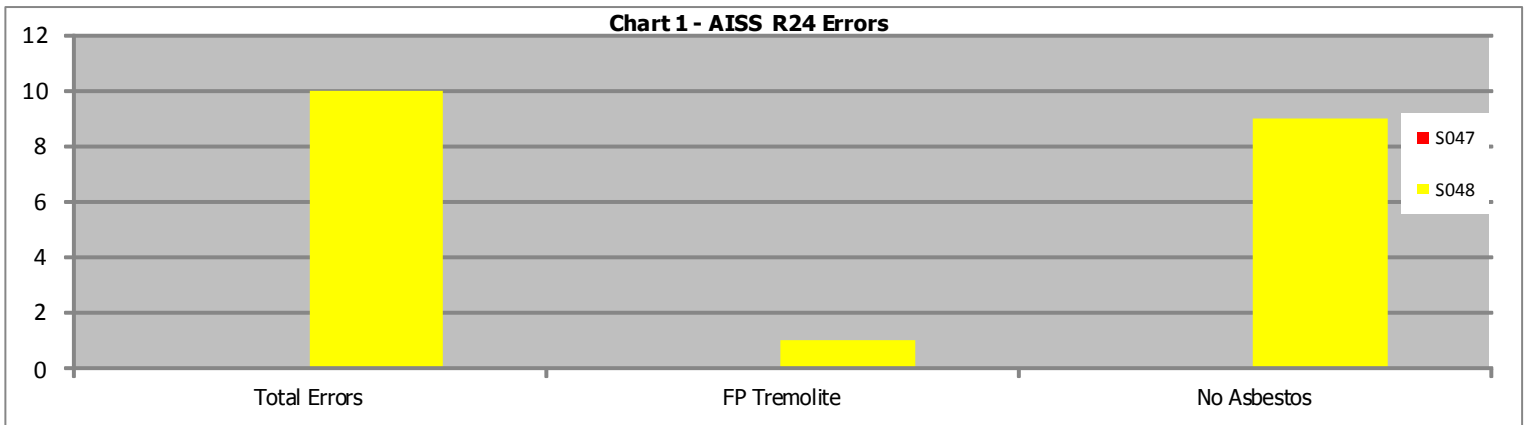


1. Type Of Errors Obtained

Chart 1 illustrates the errors made by participating laboratories.

Zero errors were made on sample S047 (crocidolite).

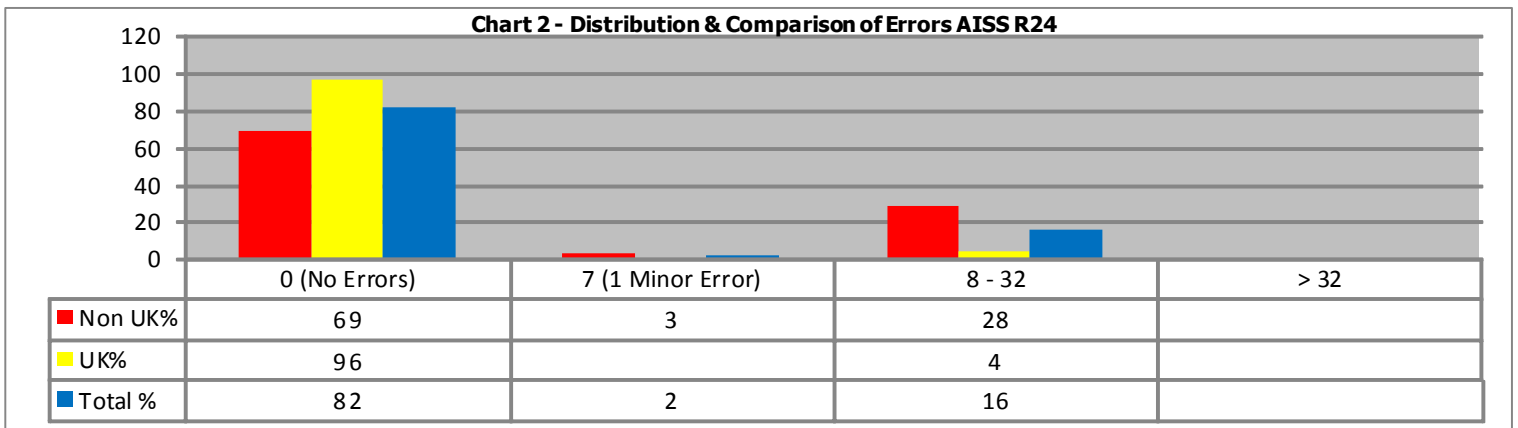
Ten errors were made on sample S048 (chrysotile) with one laboratory identifying chrysotile and tremolite, and nine reporting no asbestos.



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

2. Errors for UK & Non-UK Laboratories

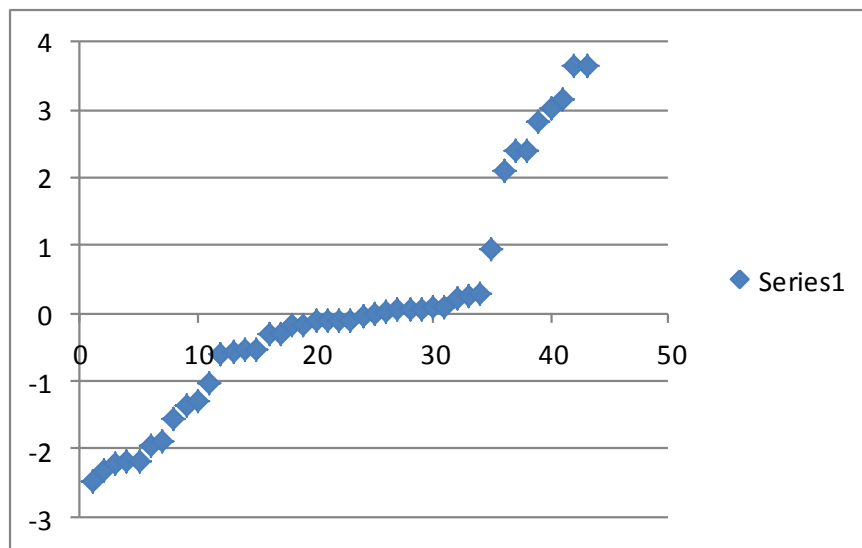
Chart 2 illustrates the distribution of scores for all participating laboratories. 47 (82%) laboratories obtained a score of zero in this round. The distribution of scores obtained by UK (United Kingdom) and Non-UK laboratories is also compared; 27 (96%) UK laboratories and 20 (69%) Non-UK laboratories obtained a score of zero for the round.





3. Quantitative Results - z scores

Chart 3 - scatter graph of z scores (one z score of 8.44 removed as an outlier) for the forty-four labs who submitted a quantification result for sample S048.



4. Quantitative Results

Chart 4 illustrates the results for the forty-four labs who submitted a quantification result for sample S048. 30 labs (68%) achieved a satisfactory result i.e. a z score of $< \pm 2$. 9 labs (21%) achieved a questionable result with a z score of between ± 2 and ± 3 . 5 labs (11%) achieved an unsatisfactory result with a z score of $> \pm 3$.

