



GROUP REPORT
Round 30



July 2023

ASBESTOS IN SOILS SCHEME

Round 30 Sample Details

BACKGROUND

This report covers Round 30 of the Asbestos in Soils Scheme (AISS). Round 30 was open to laboratories worldwide. Laboratory participation was as follows: 24 UK & 52 NON UK

SAMPLES

Two samples were circulated as follows:

Sample S059 – This sample contained no asbestos, in a topsoil, compost, aggregate, sand, cement, sepiolite and flax fibre matrix.

Sample S060 – This sample contained crocidolite asbestos (0.068% loose fibre) in a topsoil, aggregate, sand wollastonite 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-four laboratories submitted results for AISS Round 30. 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 ACM's, as loose fibres and the total % asbestos.

AISS QUALITATIVE RESULTS

Sample 1 (S059)

Seventy-one laboratories correctly reported no asbestos
Two laboratories reported anthophyllite
One laboratory reported amosite & actinolite

Sample 2 (S060)

Seventy-two laboratories correctly reported crocidolite
One laboratory reported crocidolite & chrysotile
One laboratory reported crocidolite & actinolite

AISS QUANTITATIVE RESULTS

The median of quantitative results submitted was 0.08. For the purposes of the z score we are using 40% of the median - 0.032.

Forty-nine laboratories submitted quantitative results for S060;

- 43 (88%) laboratories achieved a z-score of $< \pm 2$, Satisfactory
- 1 (2%) laboratories achieved a z-score of between $\pm 2 - \pm 3$, Questionable
- 5 (10%) laboratories achieved a z-score of $> \pm 3$, Unsatisfactory

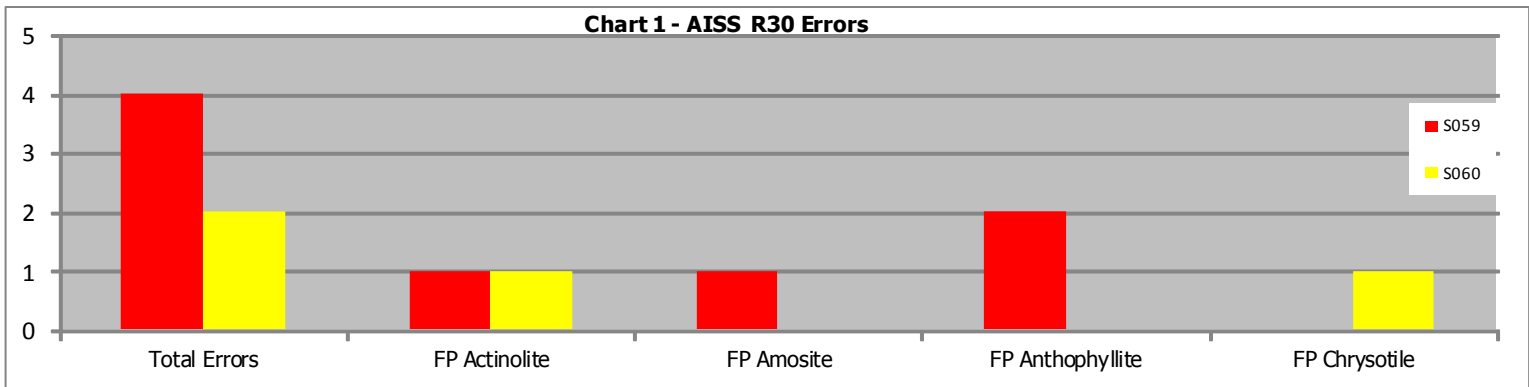


1. Type Of Errors Obtained

Chart 1 illustrates the errors made by participating laboratories.

Four errors were made on sample S059 (no asbestos) with two laboratories falsely reporting anthophyllite and one falsely reporting actinolite & amosite.

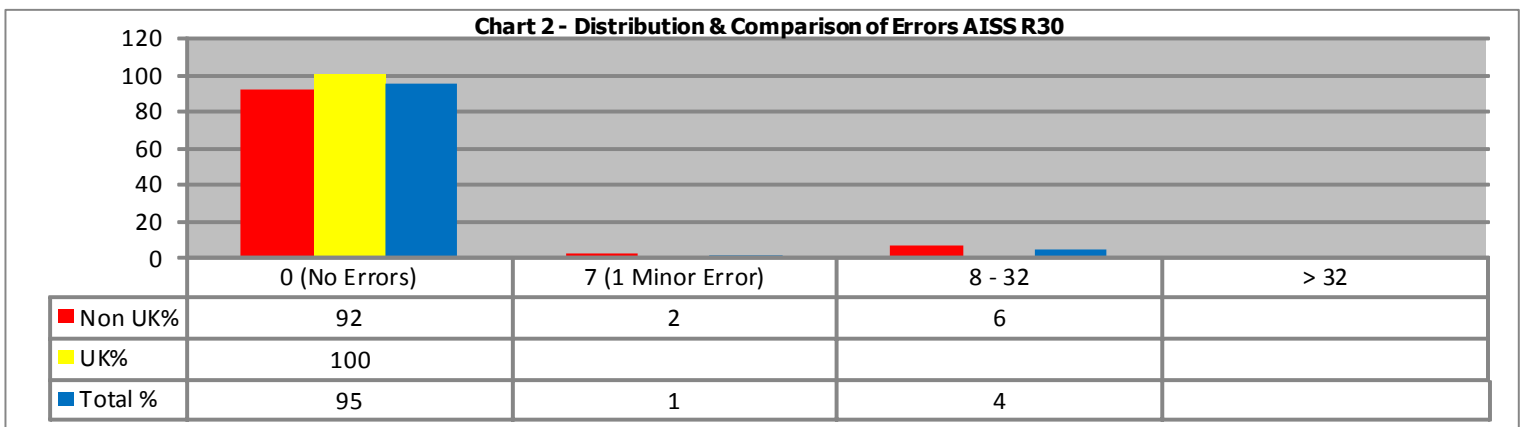
Two errors were made on sample S060 (crocidolite) with one laboratory reporting crocidolite but also falsely identifying chrysotile and one laboratory reporting crocidolite but also falsely identifying actinolite.



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

2. Errors for UK & Non-UK Laboratories

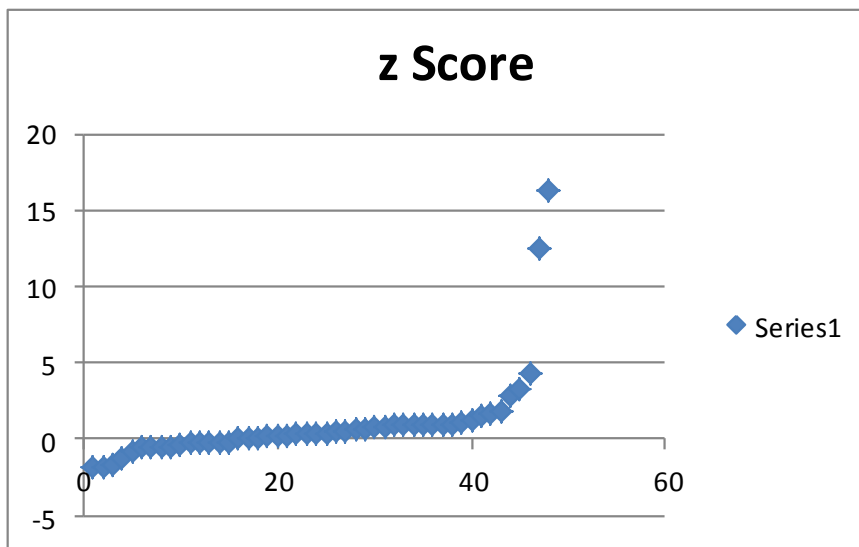
Chart 2 illustrates the distribution of scores for all participating laboratories. 70 (95%) laboratories obtained a score of zero in this round. The distribution of scores obtained by UK (United Kingdom) and Non-UK laboratories is also compared; 22 (100%) UK laboratories and 48 (92%) Non-UK laboratories obtained a score of zero for the round.





3. Quantitative Results - z scores

Chart 3 - scatter graph of z-scores for the forty-nine laboratories who submitted a quantification result for sample S060. (one z-score of 3122.875 was removed as an outlier)



4. Quantitative Results

Chart 4 illustrates the forty nine laboratories who submitted a quantification result for sample S060, 43 labs (88%) 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 . 5 labs (10%) achieved an unsatisfactory result with a z score of $> \pm 3$.

