

GROUP REPORT Round 26



March 2022

ASBESTOS IN SOILS SCHEME

Round 26 Sample Details

BACKGROUND

This report covers Round 26 of the Asbestos in Soils Scheme (AISS). Round 26 was open to laboratories worldwide. Laboratory participation was as follows: 28 UK & 41 NON UK

SAMPLES

Two samples were circulated as follows:

Sample S051 – This sample was a non-asbestos sample made up of a topsoil, sand and plaster matrix. **Sample S052** – This sample contained crocidolite asbestos 0.05% (free fibre) in a topsoil, compost, plaster, sand and limestone chippings matrix.

SCREENING & VALIDATOR INFORMATION

Both samples were prepared for circulation following our normal internal screening process of samples with representative subsamples 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-three laboratories submitted results for AISS Round 26. 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 (S051)

Sixty-one laboratories correctly reported no asbestos One laboratory reported crocidolite One laboratory reported chrysotile

Sample 2 (S052)

Sixty-one laboratories correctly reported crocidolite One laboratory reported crocidolite & chrysotile One laboratory reported chrysotile only

AISS QUANTITATIVE RESULTS

The median of quantitative results submitted was 0.065. For the purposes of the z score we are using 40% of the median - 0.026. Forty-nine (49) laboratories submitted quantitative results for S052;

- 43 (88%) laboratories achieved a z-score of < ± 2, Satisfactory
- 2 (4%) laboratories achieved a z-score of between ± 2 ± 3, Questionable
- 4 (8%) laboratories achieved a z-score of > ± 3, Unsatisfactory

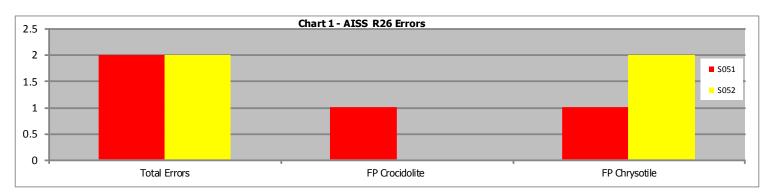


1. Type Of Errors Obtained

Chart 1 illustrates the errors made by participating laboratories.

Two errors were made on sample S051 (non-asbestos), with one laboratory reporting crocidolite and one reporting chrysotile

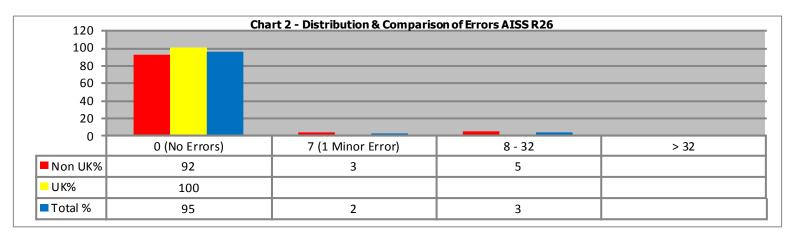
Two errors were made on sample S052 (crocidolite), with one laboratory reporting crocidolite & chrysotile and one laboratory reporting chrysotile only.



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

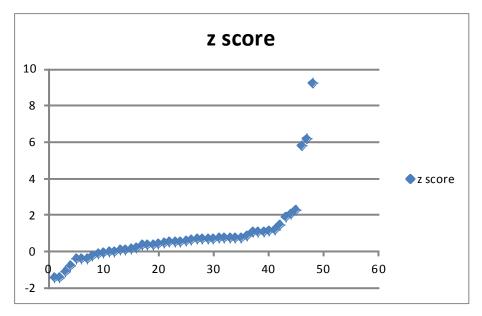
2. Errors for UK & Non-UK Laboratories

Chart 2 illustrates the distribution of scores for all participating laboratories. (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; 25 (100%) UK laboratories and 35 (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 S052. (one z-score of 36.54 removed as an outlier)



4. Quantitative Results

Chart 4 illustrates of the forty-nine laboratories who submitted a quantification result for sample S052, 43 labs (88%) achieved a satisfactory result i.e. a z score of $< \pm 2$. 2 labs (4%) achieved a questionable result with a z score of between ± 2 and ± 3 . 4 labs (8%) achieved an unsatisfactory result with a z score of $> \pm 3$.

