



**GROUP REPORT**  
**Round 28**



**November 2022**

**ASBESTOS IN SOILS SCHEME**

## Round 28 Sample Details

### BACKGROUND

This report covers Round 28 of the Asbestos in Soils Scheme (AISS). Round 28 was open to laboratories worldwide. Laboratory participation was as follows: 26 UK & 45 NON UK

### SAMPLES

Two samples were circulated as follows:

**Sample S055** – This sample was non asbestos, containing leather fibres, mop hair fibre, limestone pieces, sand and topsoil.

**Sample S056** – This sample contained anthophyllite asbestos (0.05% loose fibre) mixed with readybrek, paper, topsoil and aggregate.

### 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

Sixty-nine laboratories submitted results for AISS Round 28. 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 (S055)

Sixty-five laboratories correctly reported no asbestos

One laboratory reported amosite

Three laboratories reported chrysotile

#### Sample 2 (S056)

Fifty-three laboratories correctly reported anthophyllite

Eleven laboratories reported tremolite (no score)

One laboratory reported anthophyllite, amosite and tremolite

One laboratory reported anthophyllite and chrysotile

One laboratory reported tremolite & crocidolite

One laboratory reported chrysotile only

One laboratory reported amosite only

### AISS QUANTITATIVE RESULTS

The median of quantitative results submitted was 0.0452. For the purposes of the z score we are using 40% of the median - 0.01808. Fifty laboratories submitted quantitative results for S056;

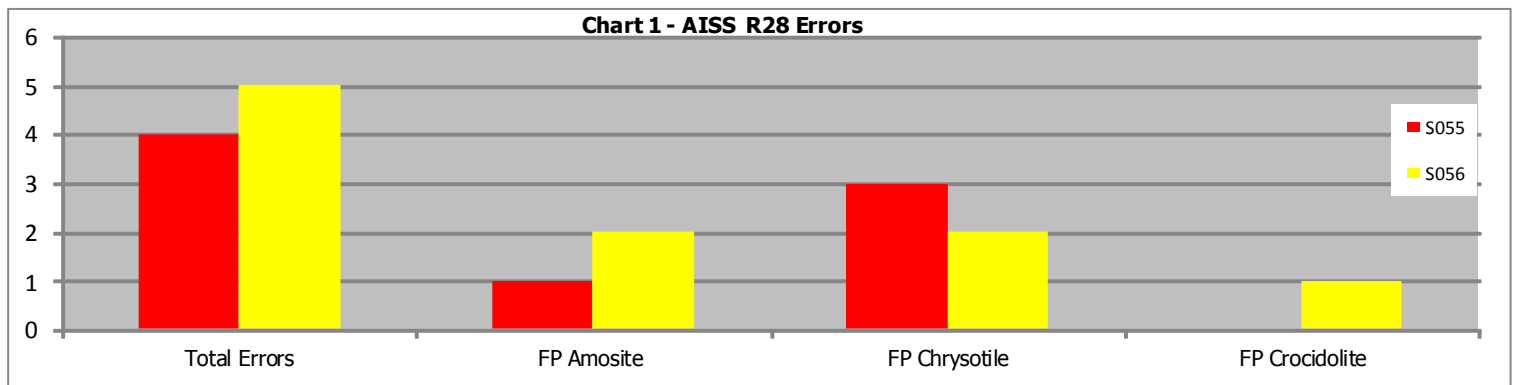
- 40 (80%) laboratories achieved a z-score of  $< \pm 2$ , Satisfactory
- 4 (8%) laboratories achieved a z-score of between  $\pm 2 - \pm 3$ , Questionable
- 6 (12%) laboratories achieved a z-score of  $> \pm 3$ , Unsatisfactory

### 1. Type Of Errors Obtained

Chart 1 illustrates the errors made by participating laboratories.

Four errors were made on sample S055 (no asbestos) with one laboratory falsely reporting amosite and three falsely reporting chrysotile.

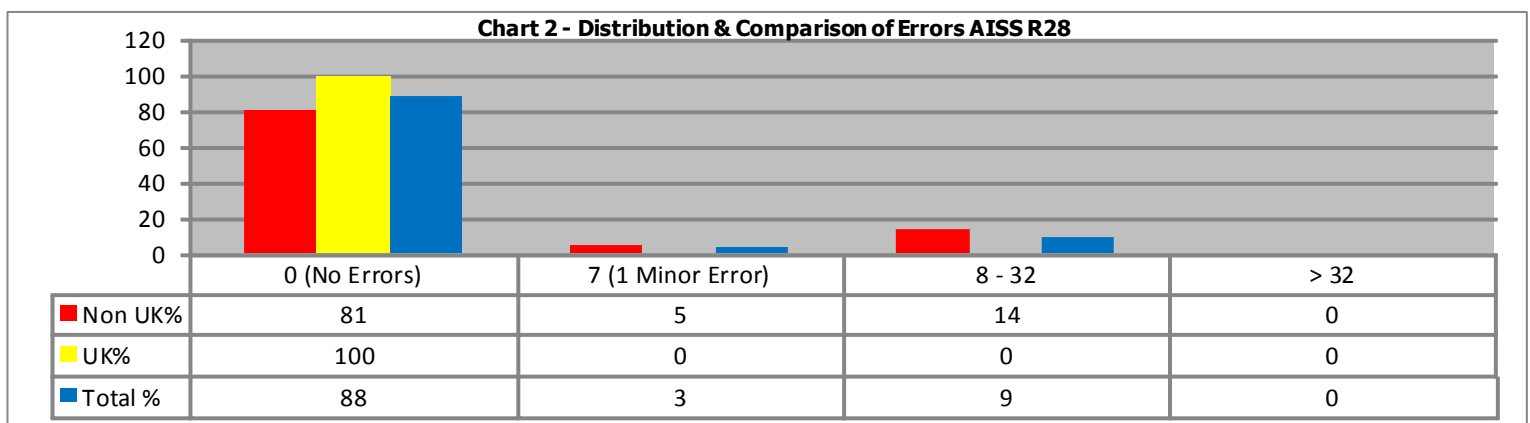
Five errors were made on sample S056 (anthophyllite) with two laboratories falsely identifying amosite, two falsely reporting chrysotile and one falsely reporting crocidolite.



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

### 2. Errors for UK & Non-UK Laboratories

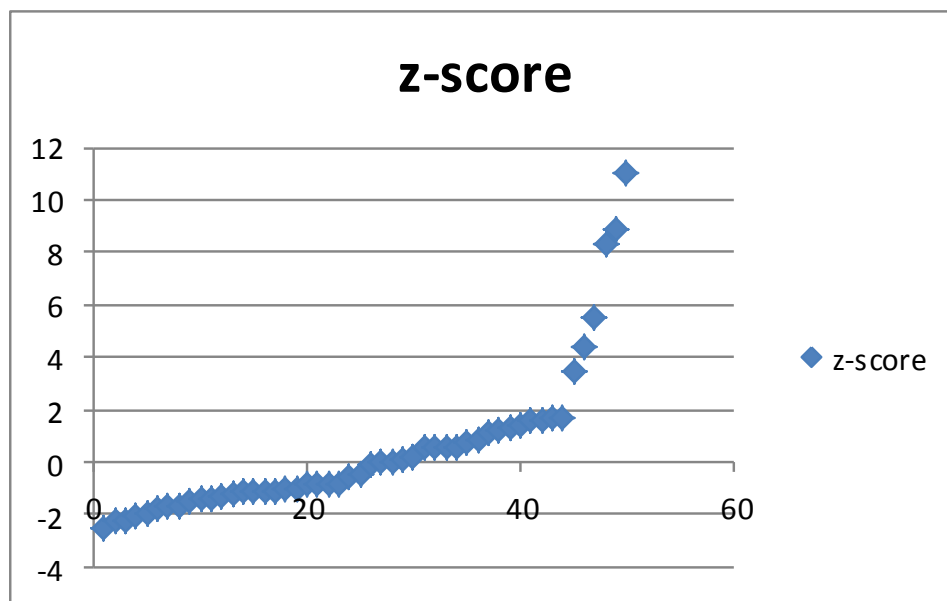
Chart 2 illustrates the distribution of scores for all participating laboratories. 61 (88%) laboratories obtained a score of zero in this round. The distribution of scores obtained by UK (United Kingdom) and Non-UK laboratories is also compared; 26 (100%) UK laboratories and 35 (81%) Non-UK laboratories obtained a score of zero for the round.





### 3. Quantitative Results - z scores

Chart 3 - scatter graph of z-scores for the fifty laboratories who submitted a quantification result for sample S056.



### 4. Quantitative Results

Chart 4 illustrates the results for the fifty laboratories who submitted a quantification result for sample S056. 40 labs (80%) achieved a satisfactory result i.e. a z score of  $\leq \pm 2$ . 4 labs (8%) achieved a questionable result with a z score of between  $\pm 2$  and  $\pm 3$ . 6 labs (12%) achieved an unsatisfactory result with a z score of  $> \pm 3$ .

