



**Group Report**  
**Round 76**  
**June 2022**



Asbestos In Materials Scheme

# Asbestos In Materials (AIMS) Scheme

This report is available to view on our website: <https://www.hsl.gov.uk/proficiency-testing-schemes/group-reports>

## Round 76 Sample Details

361 labs were assigned to Round 76 with 345 laboratories submitting complete results. All samples were prepared for circulation following our normal internal screening process and were scanned using stereozoom microscopy to assess homogeneity and suitability. Approximately 10% of all samples prepared were validated by 17 independent laboratories using either PLM or SEM analytical techniques.

The round consisted of four manufactured samples of materials that may contain asbestos and would typically be submitted for analysis at an asbestos testing laboratory. Sample 1 was a cement sample containing 0.1% crocidolite asbestos; Sample 2 was a painted board sample containing 0.5% each of amosite and chrysotile asbestos within the magnolia paint layer; Sample 3 was a textured coating on wallpaper sample containing 1% chrysotile asbestos within the textured coating layer and Sample 4 was a non-asbestos plaster sample containing plastic and glass fibres.

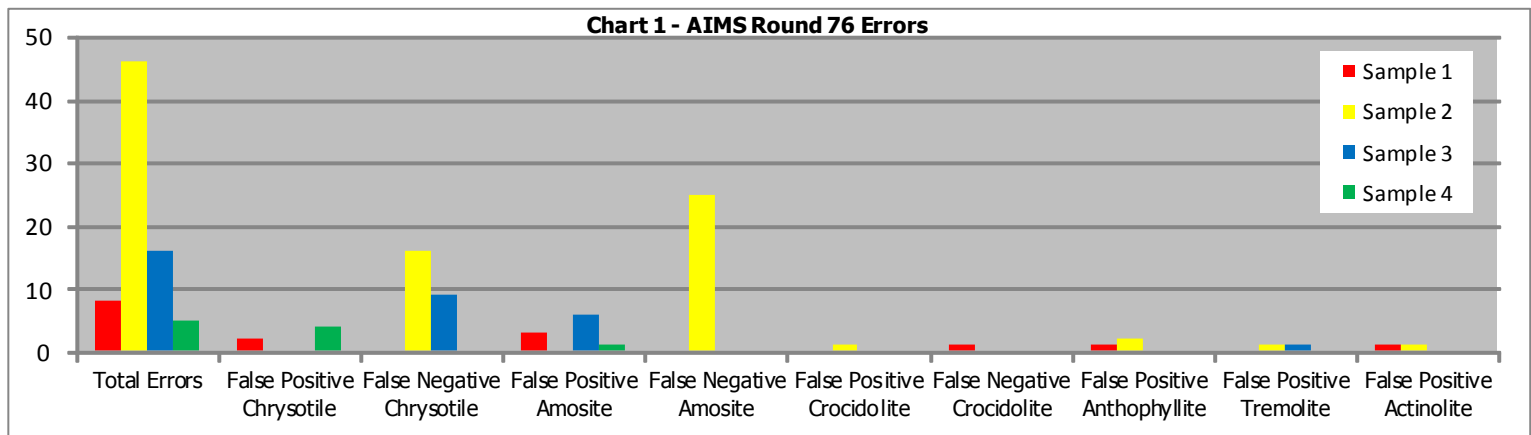
The largest number of errors occurred on Sample 2 with analysts missing one or more of the two asbestos types present. Analysts need to be aware that commercially produced asbestos products could include more than one asbestos type in varying quantities, e.g. AIB was typically made containing amosite asbestos but would often also contain smaller amounts of chrysotile. In sample 2 using the stereozoom microscope the outline of fibres may be seen in the paint layer which could then be carefully scraped to extract the fibres. However a thorough analysis of the whole paint layer would be required to reveal both asbestos types present. Analysts could then make use of sample preparation treatments to ensure the whole sample is assessed and all fibres present are extracted and analysed.

Sample	Validation Number	Product Type	Target Component	Asbestos Present (%)
1	324	Cement	Crocidolite	0.1%
2	328	Painted Eaves Board	Amosite & Chrysotile	0.5% of each asbestos type (in the paint layer)
3	326	Textured Coating	Chrysotile	1% (in the textured coating layer)
4	327	Plaster	No Asbestos	N/A



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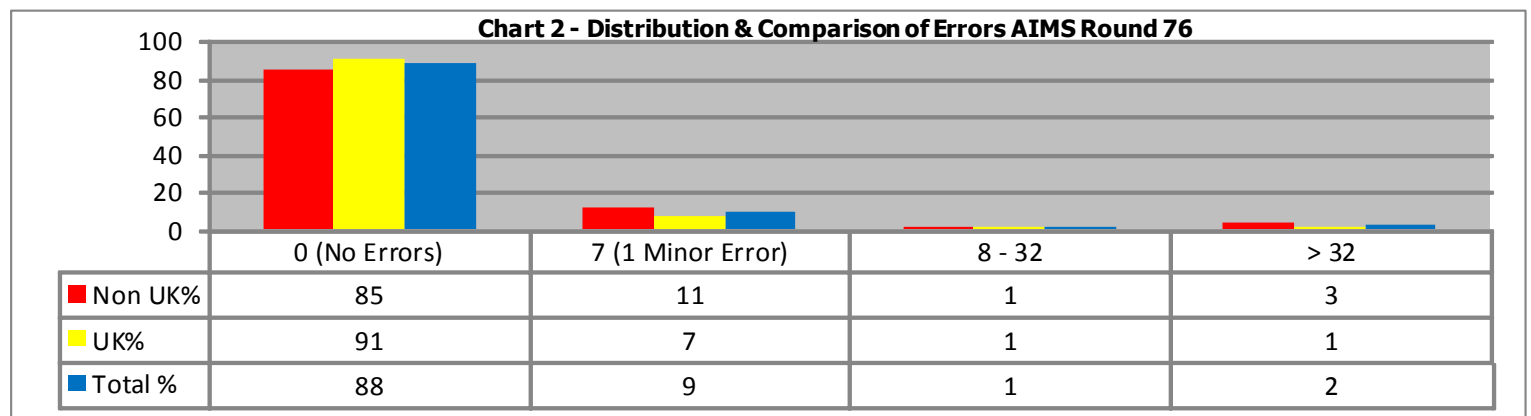
## 1. Type Of Errors Obtained



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

## 2. Round Scores

Chart 2 illustrates the distribution of scores for all participating laboratories. 302 (88%) laboratories obtained a score of zero in this round, indicating that these laboratories had not made any errors. The distribution of scores obtained by UK (United Kingdom) and Non-UK laboratories is also compared; 149 (91%) UK laboratories and 153 (85%) Non-UK laboratories obtained a score of zero for the round.





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Chart 3 shows the percentage distribution of cumulative three round scores for all UK and Non-UK laboratories. 12 laboratories (3%) in total had not yet completed 3 rounds and therefore did not accumulate a score. Following this round, 285 laboratories (80%) obtained a good cumulative score (0 – 7 penalty points cumulatively). 48 laboratories (13%) obtained an acceptable cumulative score (8 – 32 penalty points cumulatively) and 13 laboratories (4%) obtained an unsatisfactory cumulative score (33 or more penalty points cumulatively).

**Chart 3 - Distribution & Comparison of Cumulative Scores Following AIMS Round 76**

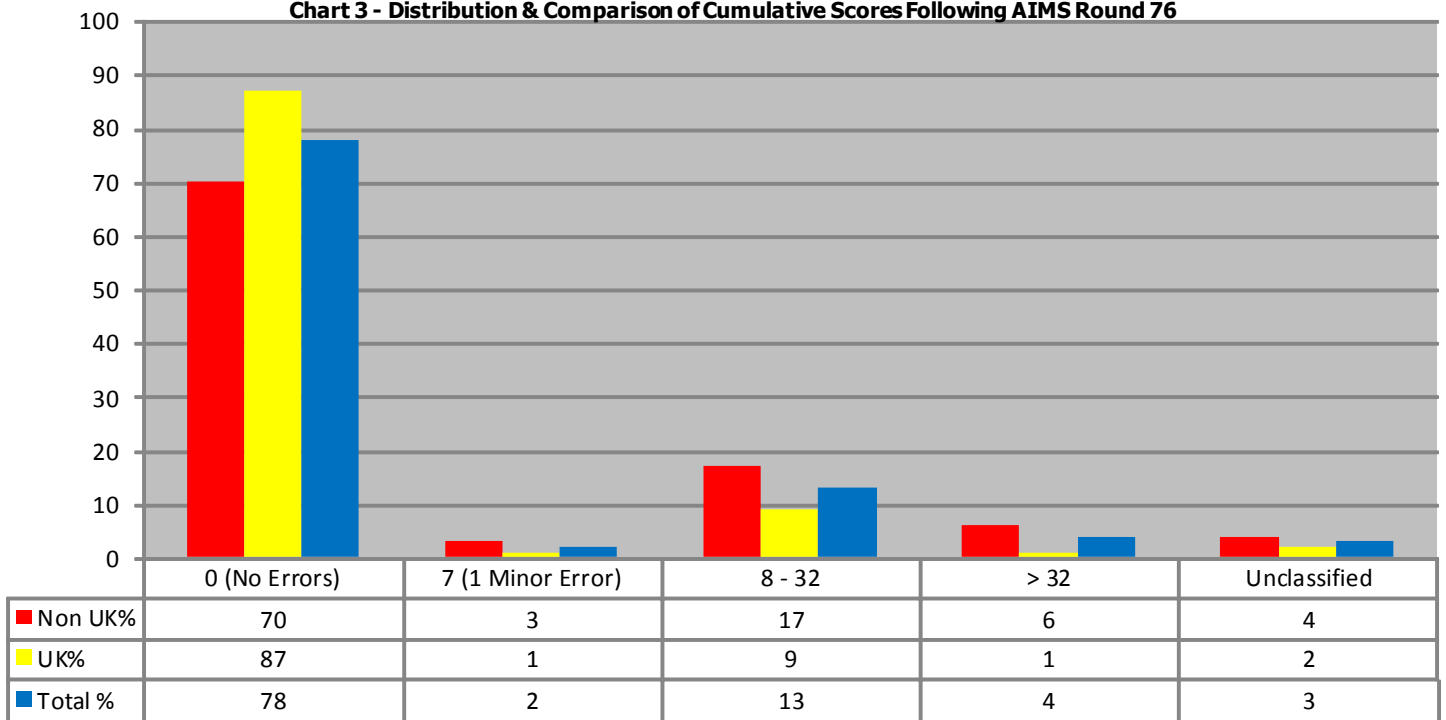
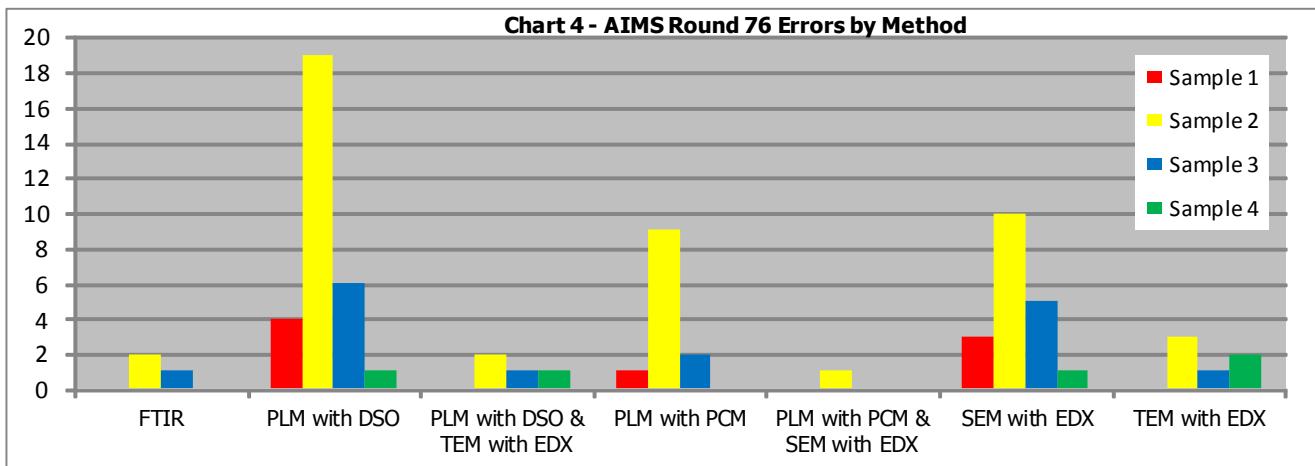


Chart 4 shows the number of errors made on each sample for all UK and Non-UK laboratories.

PLM - polarised light microscopy. DSO - dispersion staining objective. SEM - scanning electron microscopy. EDX - energy dispersive X-ray. TEM - transmission electron microscopy. FTIR - Fourier transform infra-red.

**Chart 4 - AIMS Round 76 Errors by Method**

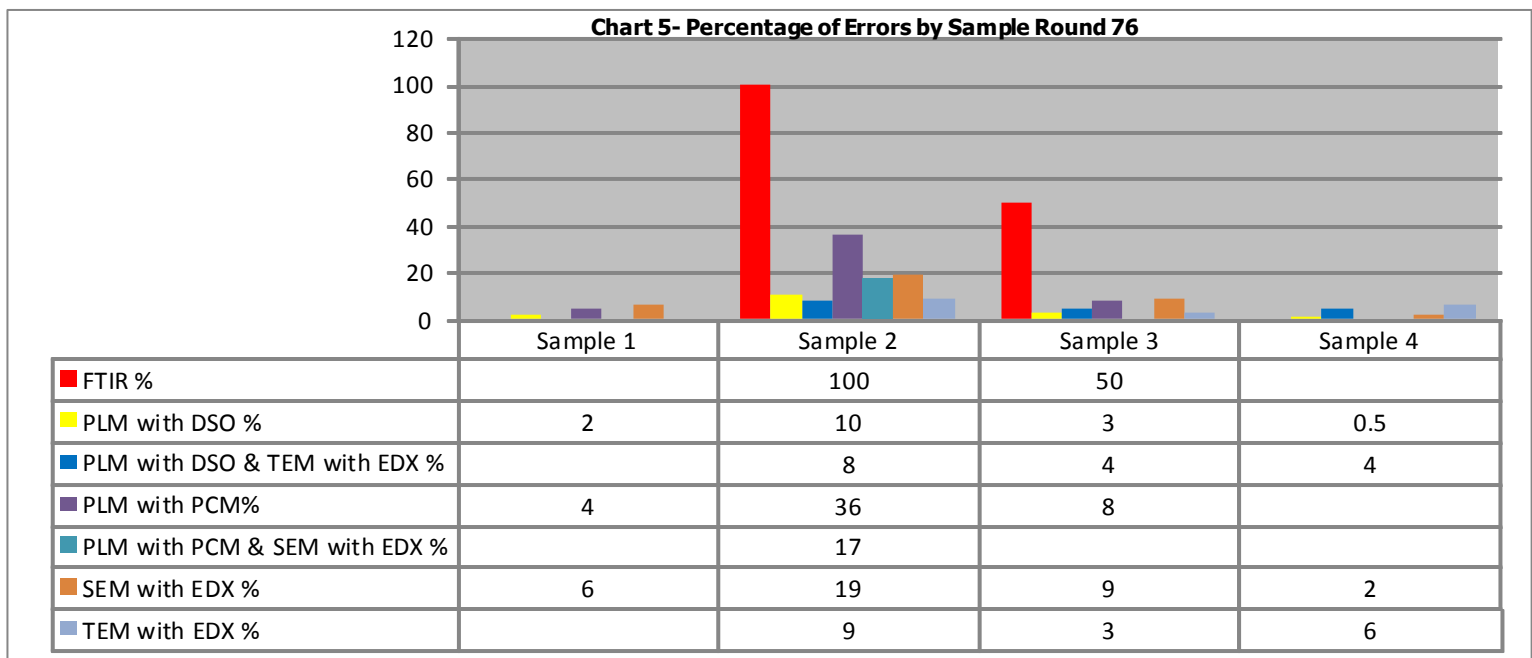




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Chart 5 shows the percentage of sample errors by method.

Of the 345 participating labs in R76 the method used in terms of the number of labs was as follows : FTIR, 2 labs; PLM with DSO, 191 labs; PLM with PCM, 26 labs; SEM with EDX, 52 labs; TEM with EDX, 31 labs; PLM with DSO & TEM with EDX, 26 labs; PLM with PCM & SEM with EDX, 6 labs; PLM with PCM & TEM with EDX, 10 labs; and Other, 1 lab.



### 3. For Your Information - AIMS NEWS !!

The next round of AIMS will be despatched week commencing 5th September 2022. Samples will not be despatched until full payment has been received. Please ensure your contact details are kept up to date and inform us straight away if anything needs amending prior to despatch.

Our courier company has advised that overseas laboratories **must** provide their EORI (Economic Operators Registration & Identification) and VAT number to assist customs processing their packages in a timely manner. If you haven't provided this information to us already, please email the PT Team with the details - including your PT Lab number. It is important for laboratories to inform the PT Team if they are having issues receiving their samples due to customs.

If you require a sample to be investigated by HSE following completion of a round, please remember to advise the PT Team within 10 working days of your report being issued so we can let you know the process for returning it to us. Following R75 there was one sample returned to HSE for investigation. The sample was analysed and all three asbestos types were identified - the participant report was not reissued.

A reminder that we are still mainly working from home, so if you need to contact us please send an email and we will respond as soon as we can.

Melanie Clunas

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