



**Group Report**  
**Round 73**  
**June 2021**



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 73 Sample Details

342 labs were assigned to Round 73 with 330 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 20 independent laboratories using either PLM or SEM analytical techniques.

The round consisted of one commercial sample and three manufactured samples of materials that may contain asbestos and would typically be submitted for analysis at an asbestos testing laboratory. Sample 1 was a commercially produced corrugated asbestos cement sample containing chrysotile asbestos; Sample 2 was a plasterboard sample containing amosite asbestos within the black paint layer; Sample 3 was a non-asbestos paper sample also containing polypropylene fibres and Sample 4 was a plaster sample containing anthophyllite asbestos.

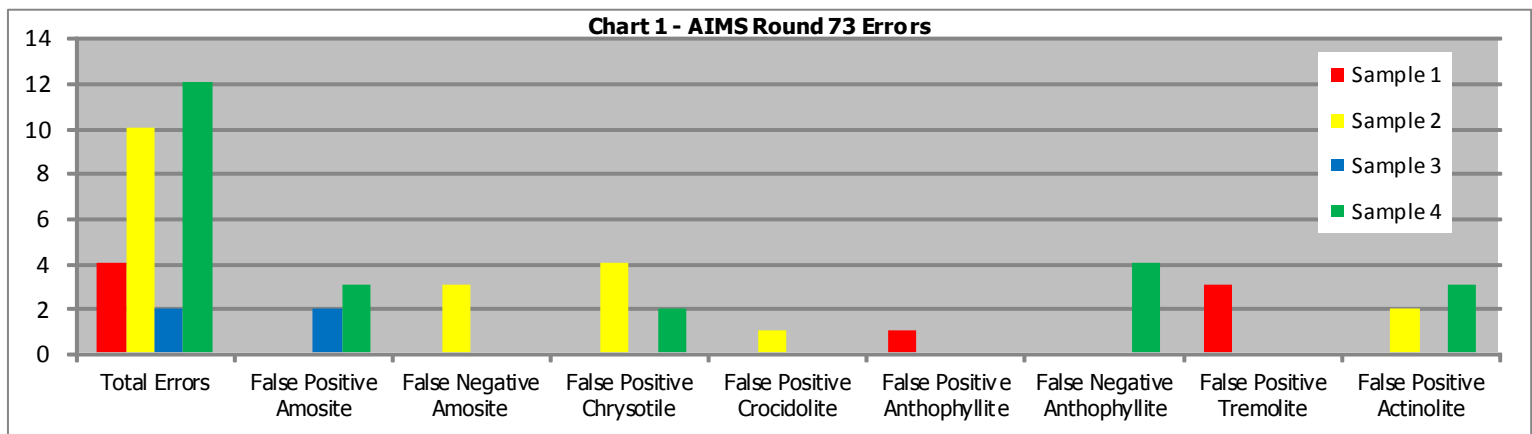
There were few errors on the reported results on all four samples in this round of AIMS. Sample 4 produced the greatest number of errors and is a general reminder to thoroughly analyse the whole sample. Following initial observations using the stereozoom microscope in the case of plaster or cement samples this can involve crushing the sample using a pestle and mortar to expose any asbestos fibre that may be in the sample.

Sample	Validation Number	Product Type	Target Component	Asbestos Present (%)
1	311	Cement (Commercial)	Chrysotile	Unknown
2	312	Board (Manufactured)	Amosite	0.7% (in the paint layer)
3	313	Paper (Manufactured)	No Asbestos	N/A
4	314	Plaster (Manufactured)	Anthophyllite	0.1%



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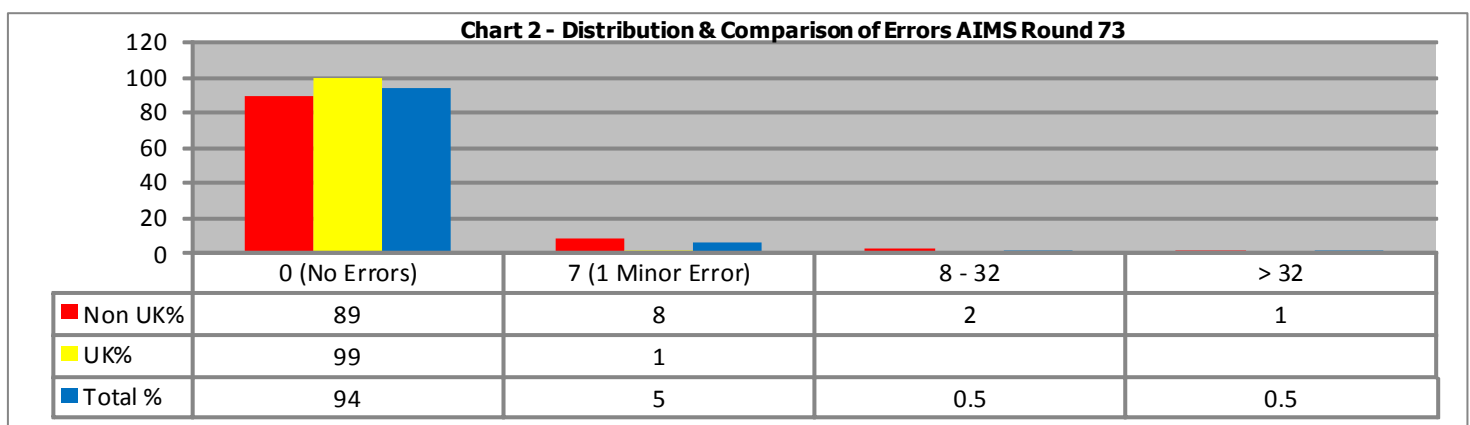
## 1. Type Of Errors Obtained



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. 310 (94%) 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; 157 (99%) UK laboratories and 153 (89%) 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. 9 laboratories (3%) in total had not yet completed 3 rounds and therefore did not accumulate a score. Following this round, 305 laboratories (89%) obtained a good cumulative score (0 – 7 penalty points cumulatively). 23 laboratories (7%) obtained an acceptable cumulative score (8 – 32 penalty points cumulatively) and 5 laboratories (1%) obtained an unsatisfactory cumulative score (33 or more penalty points cumulatively).

**Chart 3 - Distribution & Comparison of Cumulative Scores Following AIMS Round 73**

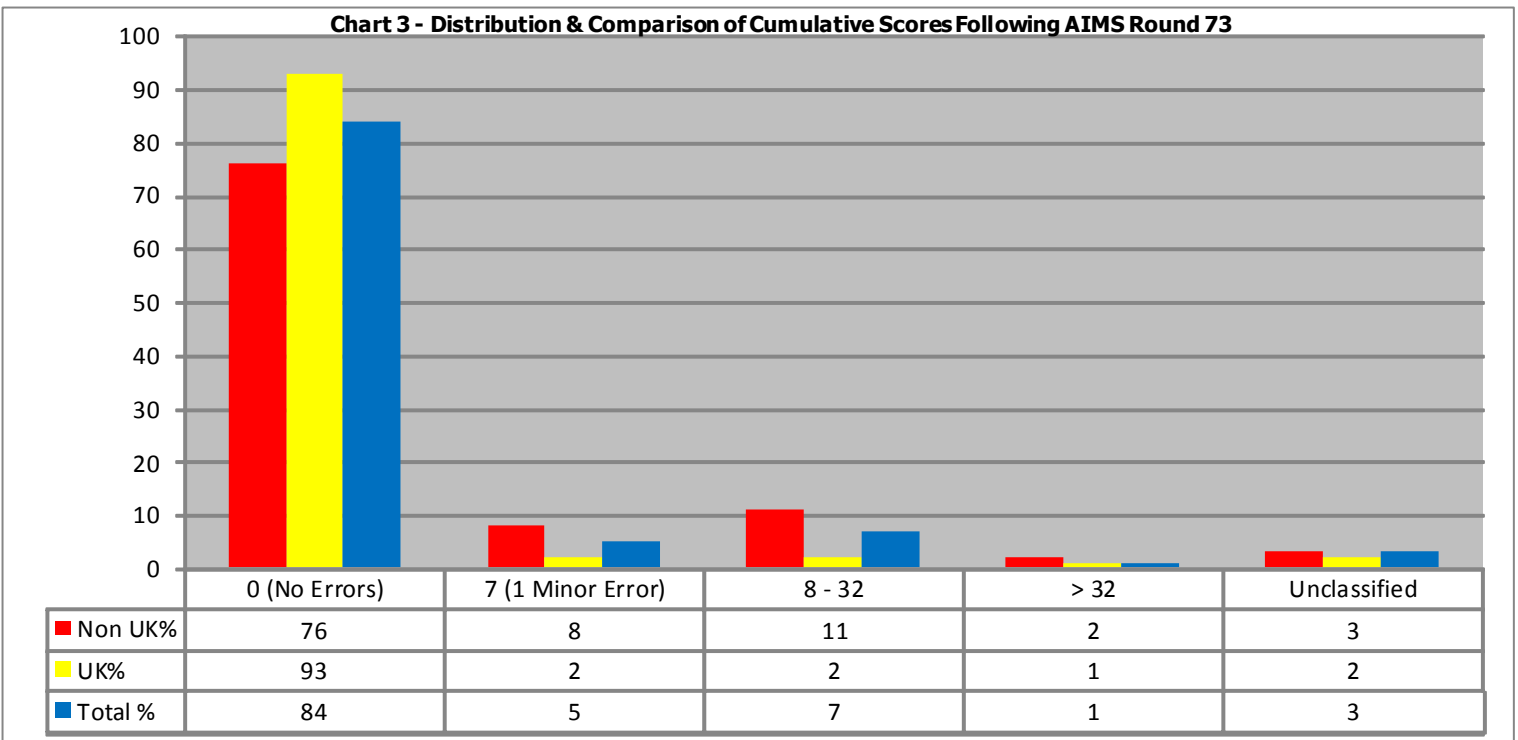
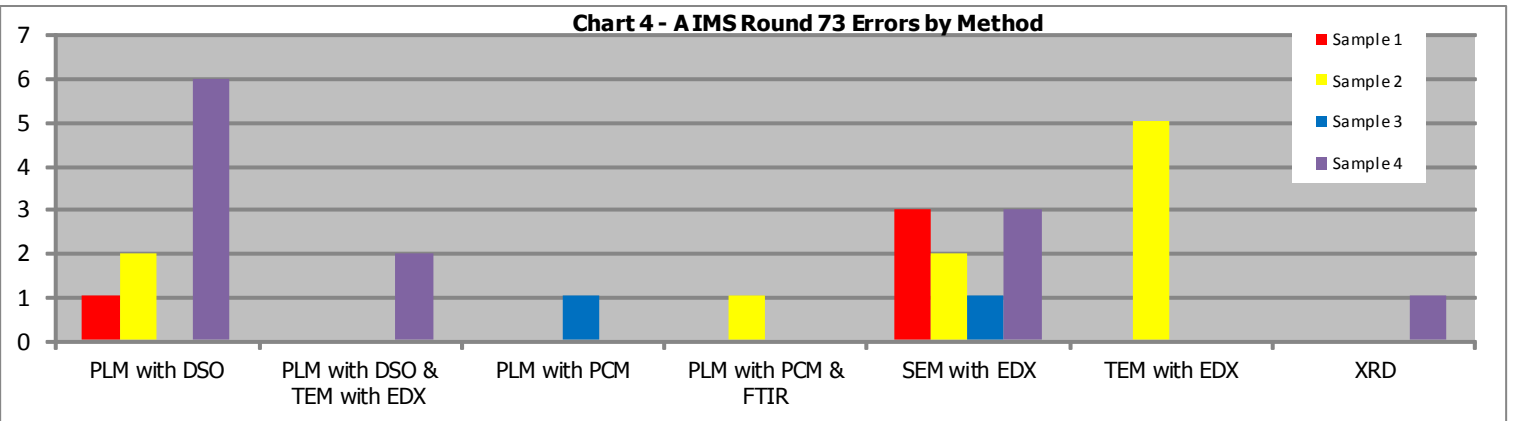


Chart 4 shows the number of errors made on each sample for all UK and Non-UK laboratories.

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

**Chart 4 - AIMS Round 73 Errors by Method**



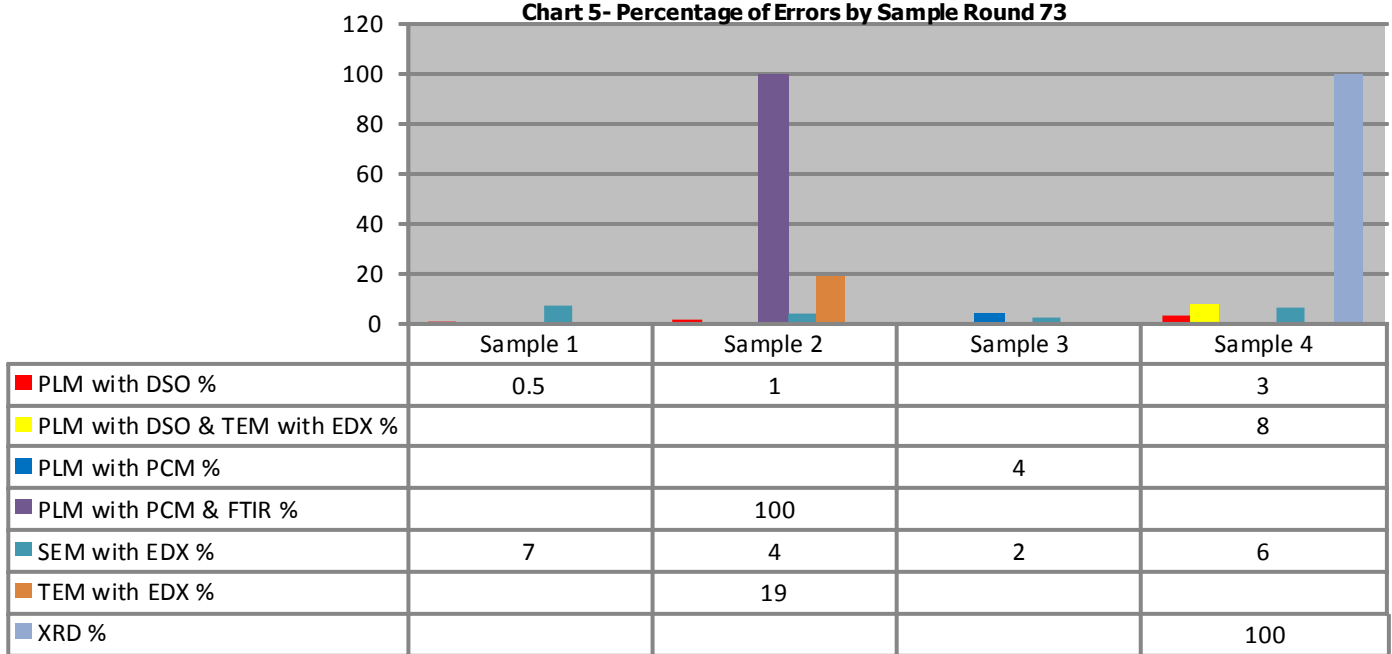


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Chart 5 shows the percentage of sample errors by method.

Of the 330 participating labs in R73 the method used in terms of the number of labs was as follows : FTIR, 1 lab; PLM with DSO, 184 labs; PLM with PCM, 24 labs; SEM with EDX, 48 labs; TEM with EDX, 27 labs; PLM with DSO & TEM with EDX, 27 labs; PLM with PCM & FTIR, 1 lab; PLM with PCM & SEM with EDX, 6 labs; Other, 2 labs and PLM with PCM & TEM with EDX, 9 labs; XRD, 1 lab.

Chart 5- Percentage of Errors by Sample Round 73



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

The next round of AIMS will be despatched week commencing 6<sup>th</sup> September 2021. 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 should 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 on your subscription, please email the PT Team with the details - including your PT Lab number.

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 R72 no samples were returned to HSE for investigation.

All participants have been emailed a link to our Survey Monkey Questionnaire. If you require a reminder of the link, or have problems accessing it - please email the PT Team with our lab number.

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

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