



Group Report
Round 81
February 2024



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 81 Sample Details

389 labs were assigned to Round 81 with 382 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 19 independent laboratories using either PLM or SEM analytical techniques.

The round consisted of two manufactured samples and two commercial samples of materials that may contain asbestos and would typically be submitted for analysis at an asbestos testing laboratory. Sample 1 was a non-asbestos commercial 'Tufnol' board; Sample 2 was a commercial chrysotile asbestos string sample; Sample 3 was a manufactured cement sample containing 0.3% each of crocidolite and amosite asbestos and Sample 4 was a manufactured paper sample containing 1% chrysotile asbestos.

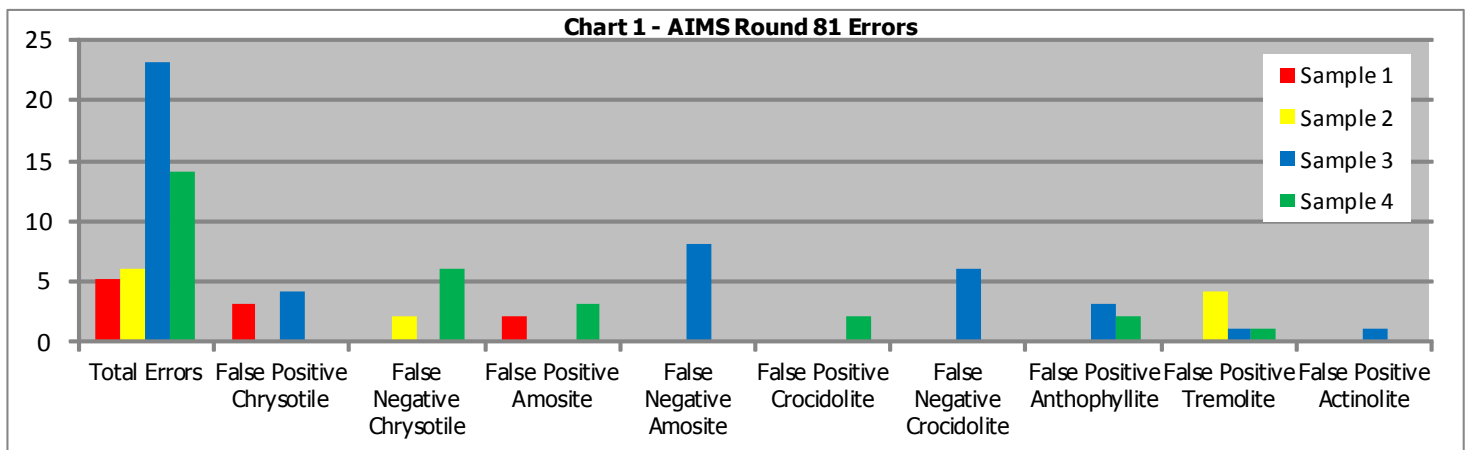
The majority of errors in Round 81 occurred on Sample 3 where a number of labs either missed or misidentified one of the two asbestos types within the sample. Analysts should ensure all samples are checked thoroughly and they should be aware that samples may contain up to three asbestos types. Sample 4 had a few errors with some labs failing to identify the chrysotile asbestos present within the sample or misidentifying it. Care should be taken to correctly identify the asbestos type present and if asbestos wasn't identified initially by the analyst then the sample could have been ashed in the fume cupboard to remove the organic paper fibres thus leaving the chrysotile asbestos.

Sample	Validation Number	Product Type	Target Component	Asbestos Present (%)	Other Added Fibres Present
1	345	Board (Commercial)	No Asbestos	N/A	None
2	346	String (Commercial)	Chrysotile	Unknown	None
3	347	Cement (Manufactured)	Crocidolite & Amosite	0.3% of each asbestos type	None
4	348	Paper (Manufactured)	Chrysotile	1.0%	None



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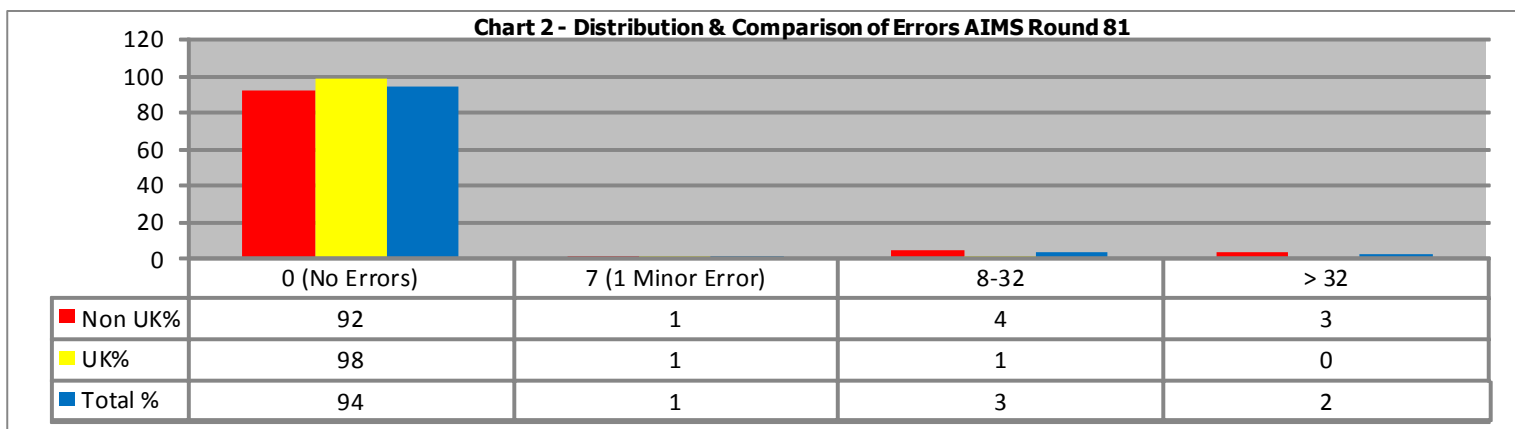
1. Type Of Errors Obtained



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. 360 (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; 154 (98%) UK laboratories and 206 (92%) 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. 19 laboratories (5%) in total had not yet completed 3 rounds and therefore did not accumulate a score. Following this round, 293 laboratories (75%) obtained a good cumulative score (0 – 7 penalty points cumulatively). 58 laboratories (15%) obtained an acceptable cumulative score (8 – 32 penalty points cumulatively) and 19 laboratories (5%) obtained an unsatisfactory cumulative score (33 or more penalty points cumulatively).

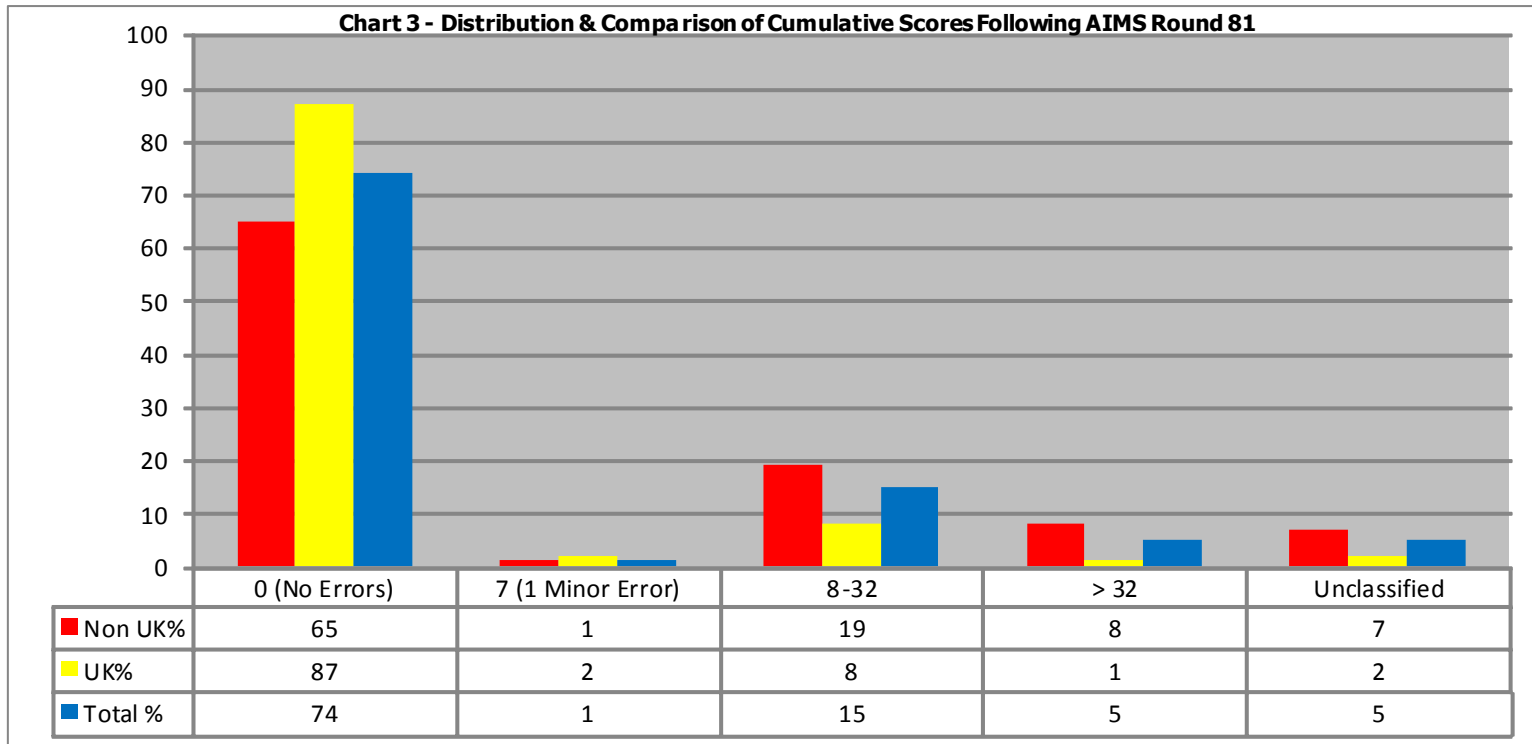
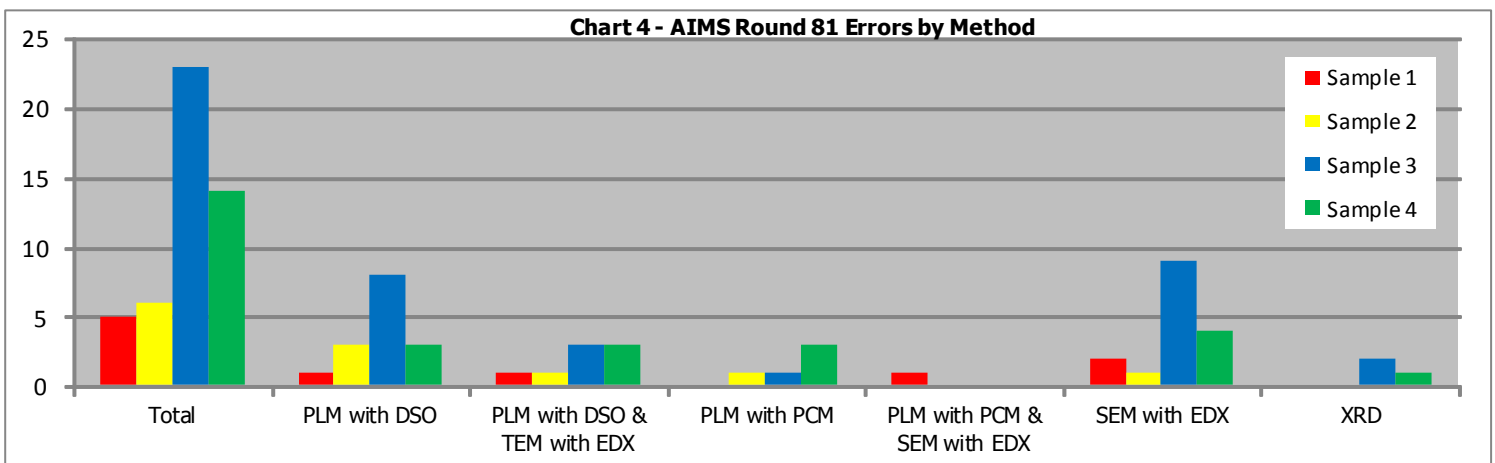


Chart 4 shows the number of errors made on each sample for all UK and Non-UK laboratories.

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. XRD - X-Ray diffraction.

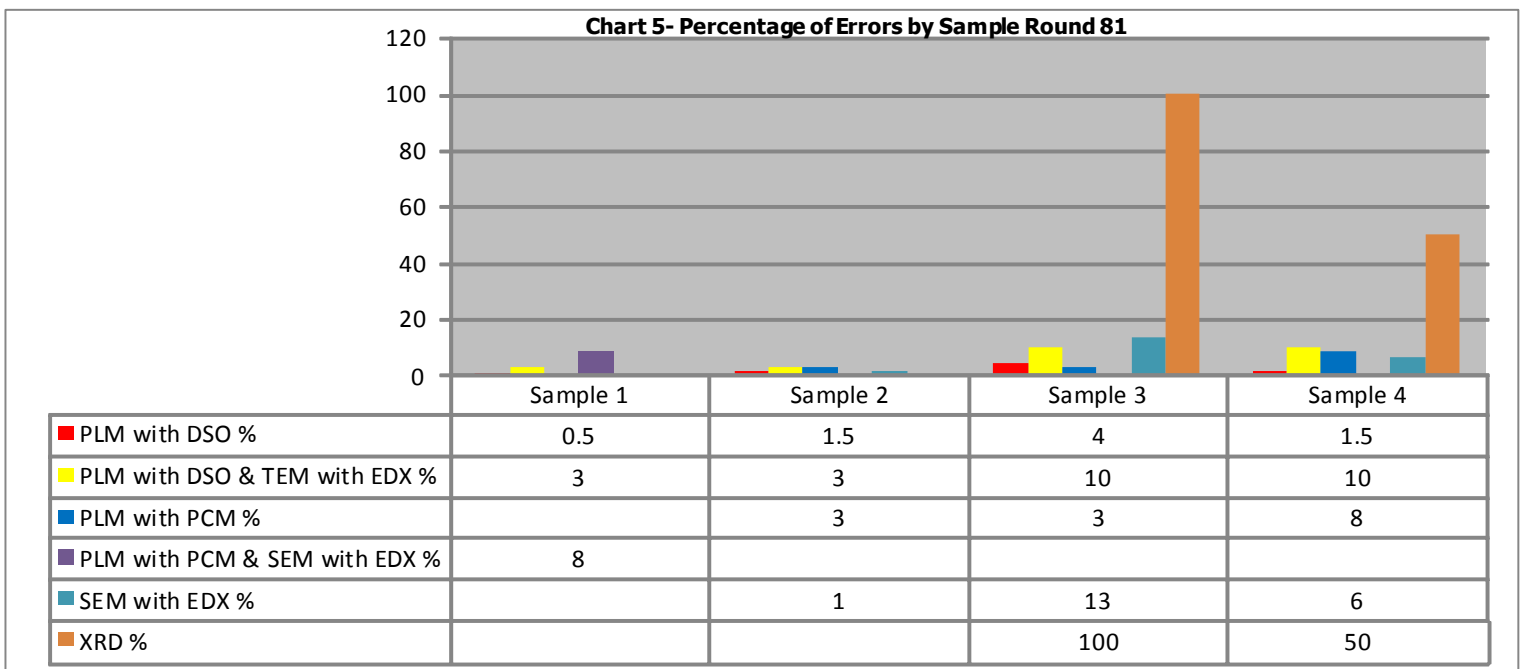




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Chart 5 shows the percentage of sample errors by method.

Of the 382 participating labs in R81 the method used in terms of the number of labs was as follows : FTIR, 2 labs; PLM with DSO, 193 labs; PLM with PCM, 36 labs; PLM with PCM and FTIR, 1 lab; SEM with EDX, 69 labs; TEM with EDX, 26 labs; PLM with DSO & TEM with 29 labs; PLM with PCM & SEM with EDX, 14 labs; PLM with PCM & TEM with EDX, 8 labs, XRD; 2 labs and Other, 2 labs.



3. For Your Information - AIMS NEWS !!

The subscriptions for AIMS 2024/25 are available to purchase on the PT Online System - please ensure your contact details are up to date by logging on and clicking on 'Laboratory Details'. If you need to make any changes, please email the PT Team to request a change of details form. Subscriptions and full payment must be made before the samples can be despatched. Our Scheme Schedule and Information Book for Participants is available in the Useful Links section of the website: <https://www.hsl.gov.uk/proficiency-testing-schemes/aims>

Following R80 there was one sample investigation request. If you require a sample to be investigated by HSE please contact the team within 10 working days of the report being issued. Further details regarding sample investigations can be found in our Information Book for Participants, available in the Useful Links Section of our website page: <https://www.hsl.gov.uk/proficiency-testing-schemes/aims>

We have a wide range of quality control samples available to purchase, including additional rounds (PT038A) to help gain accreditation sooner, replacement rounds (PT038R) to replace the latest round of AIMS and past AIMS samples (PT040) for internal QC/ training: <https://www.hsl.gov.uk/proficiency-testing-schemes/pt-quality-control-samples>



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