



Group Report
Round 71
November 2020



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 71 Sample Details

375 labs were assigned to Round 71 with 367 labs 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 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 amosite along with various non-asbestos fibres; Sample 2 was a painted board sample containing several non-asbestos fibres including polypropylene and sawdust; Sample 3 was a plasterboard sample with a painted black textured coating layer with the textured coating containing crocidolite and Sample 4 was cat litter containing chrysotile asbestos.

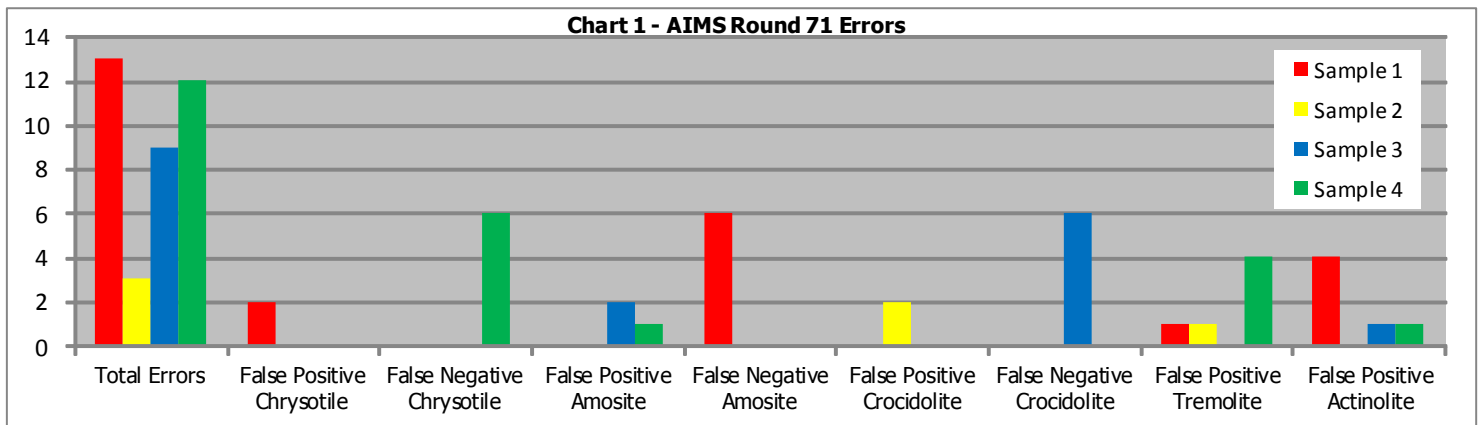
There were very few errors on the four samples contained in this round. Six labs failed to identify amosite on sample 1 and as a general point analysts should continue to remain thorough when analysing samples, analysing the whole sample and to be aware that samples may contain up to three asbestos types. Another important consideration concerns the submission of results and for labs to ensure they have entered and checked their results are correct on the online system before submission.

Sample	Validation Number	Product Type	Target Component	Asbestos Present (%)
1	303	Cement (Manufactured)	Amosite	0.1%
2	304	Board (Manufactured)	No Asbestos	N/A
3	305	Textured Coating (Manufactured)	Crocidolite	1% in textured coating
4	306	Cat Litter (Manufactured)	Chrysotile	0.2%



Asbestos In Materials (AIMS) Scheme

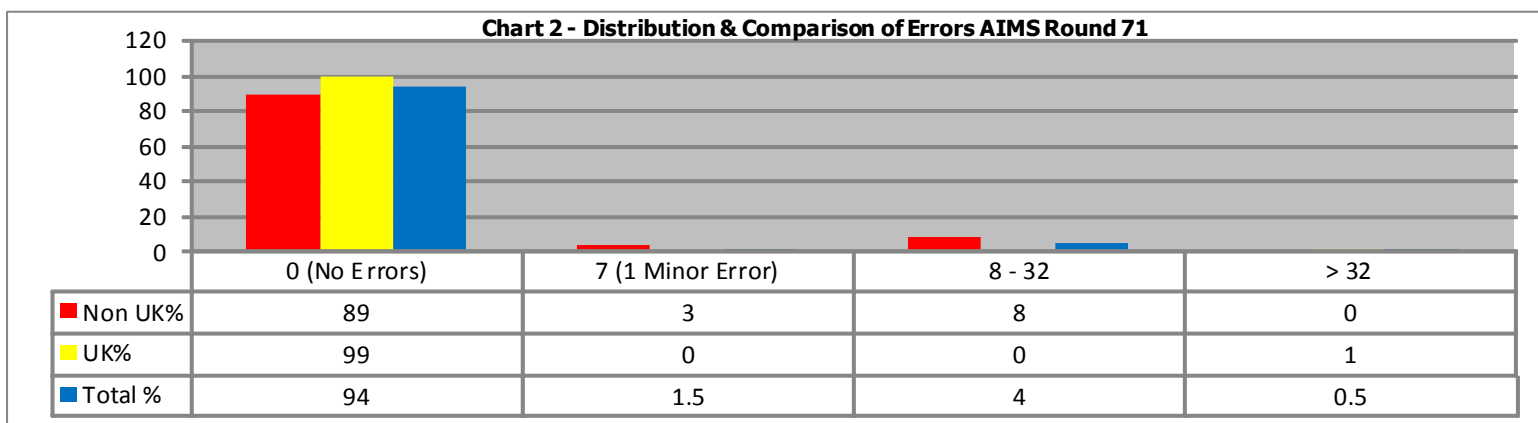
1. Type Of Errors Obtained



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. 344 (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; 166 (99%) UK laboratories and 178 (89%) Non-UK laboratories obtained a score of zero for the round.





Asbestos In Materials (AIMS) Scheme

Chart 3 shows the percentage distribution of cumulative three round scores for all UK and Non-UK laboratories. 18 laboratories (5%) in total had not yet completed 3 rounds and therefore did not accumulate a score. Following this round, 288 laboratories (77%) obtained a good cumulative score (0 – 7 penalty points cumulatively). 58 laboratories (15%) obtained an acceptable cumulative score (8 – 32 penalty points cumulatively) and 11 laboratories (3%) obtained an unsatisfactory cumulative score (33 or more penalty points cumulatively).

Chart 3 - Distribution & Comparison of Cumulative Scores Following AIMS Round 71

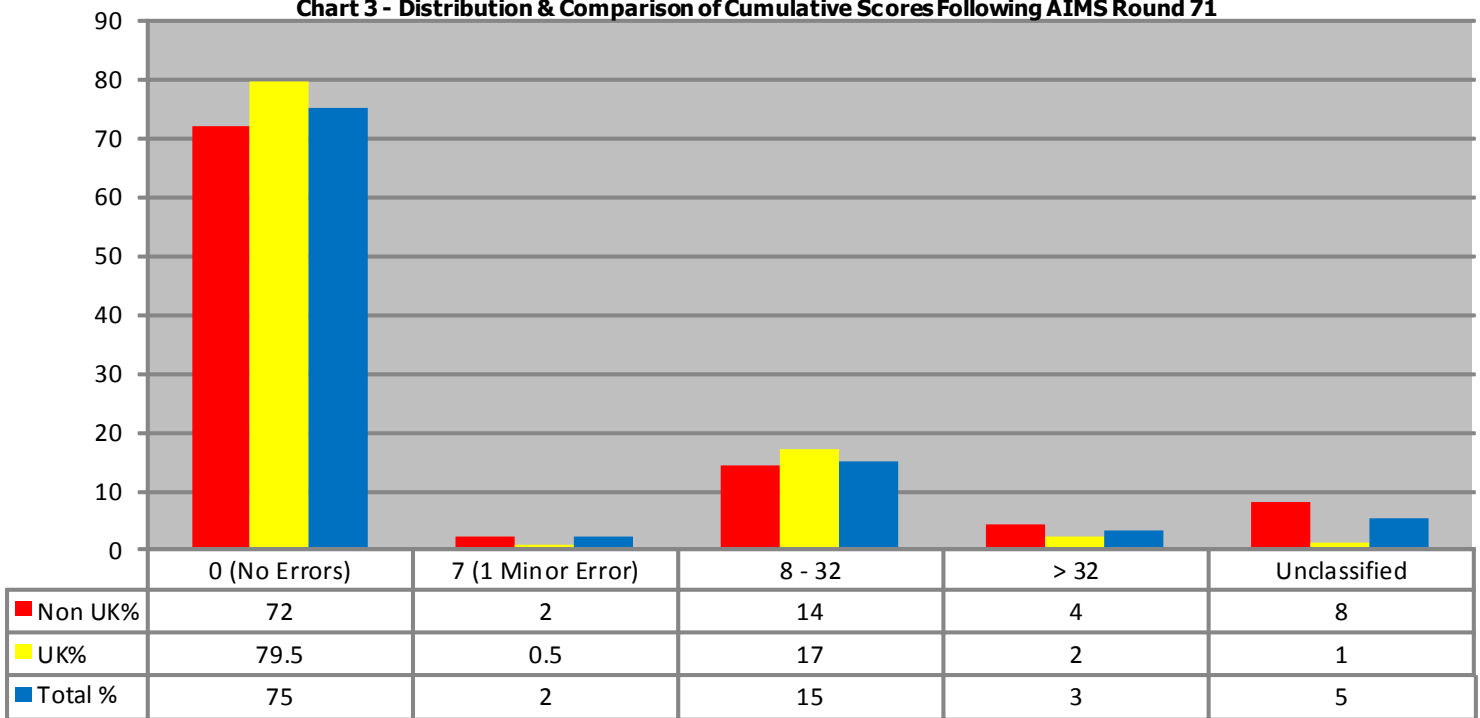
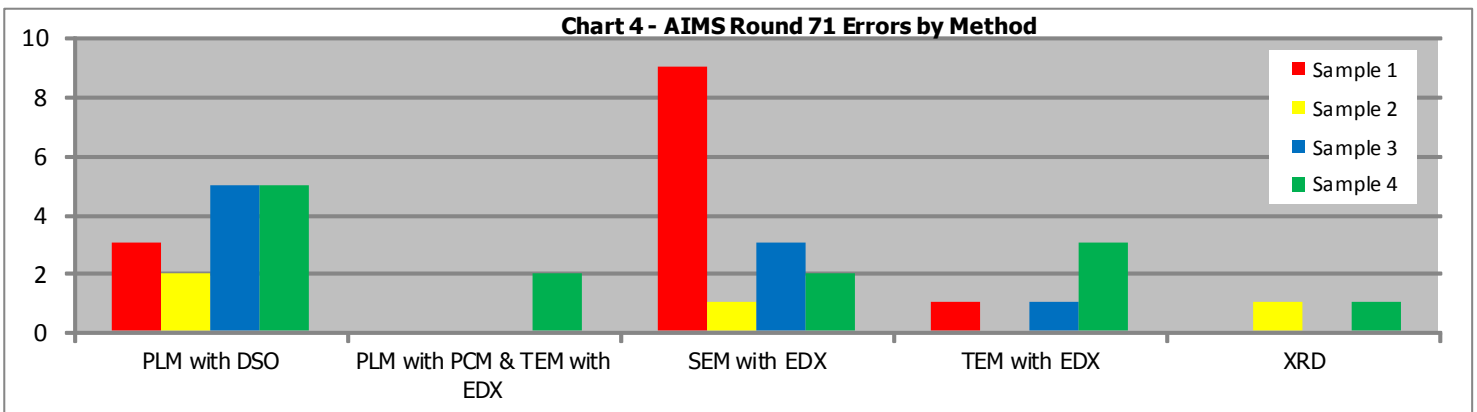


Chart 4 shows the number of errors made on each sample for all UK and Non-UK laboratories.

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 71 Errors by Method



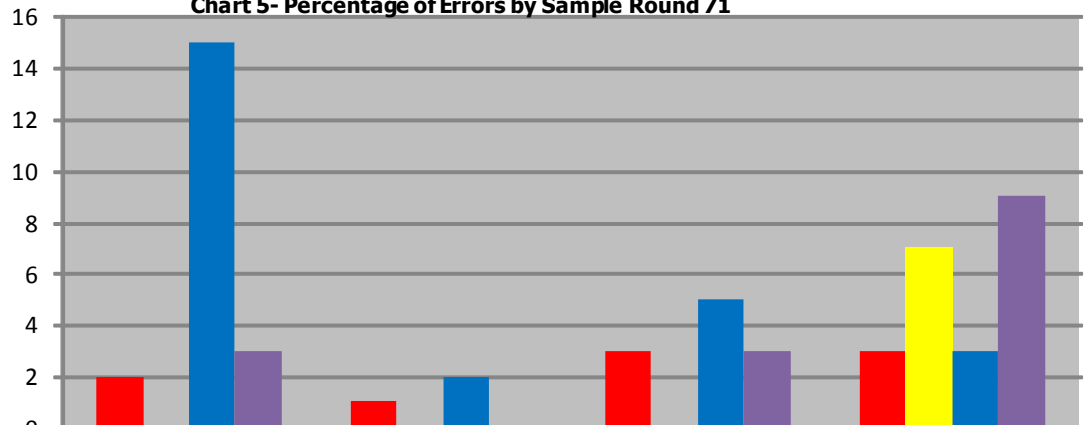


Asbestos In Materials (AIMS) Scheme

Chart 5 shows the percentage of sample errors by method.

Of the 367 participating labs in R71 the method used in terms of the number of labs was as follows : FTIR, 1 lab; PLM with DSO, 195 labs; PLM with PCM, 30 labs; SEM with EDX, 62 labs; TEM with EDX, 35 labs; PLM with DSO & TEM with EDX, 27 labs; PLM with PCM & FTIR, 1 lab; PLM with PCM & SEM with EDX, 14 labs; Other, 1 lab and XRD, 1 lab.

Chart 5- Percentage of Errors by Sample Round 71



	Sample 1	Sample 2	Sample 3	Sample 4
■ PLM with DSO %	2	1	3	3
■ PLM with PCM & TEM with EDX %	0	0	0	7
■ SEM with EDX %	15	2	5	3
■ TEM with EDX %	3	0	3	9

3. For Your Information - AIMS NEWS !!

I hope you are all keeping well during this eventful year. Although we made the decision to cancel the first round of the year, the PT team have kept working throughout the lockdown. Many of us are still working from home though, so if you need to contact us please send an email and we will respond as soon as we can.

Following R70 there were two sample investigations - one laboratory report was amended following the HSE outcome.

Our Quality Control Samples are now available to purchase online. If you wish to purchase any of our AIMS QC samples, please contact the PT Team for further information. For laboratories who wish to replace the last round of AIMS, we have PT038R. Participants are able to replace one in three rounds of AIMS.

The next round of AIMS will be despatched week commencing 4th January 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.

Please note: with immediate effect our email address has changed to proficiency.testing@hse.gov.uk

Melanie Clunas
AIMS Scheme Co-ordinator



Email: proficiency.testing@hse.gov.uk

Telephone: +44 (0)203 028 3382



5254

