



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 70 Sample Details

414 labs were assigned to Round 70 with 409 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 18 independent laboratories using either PLM or SEM analytical techniques.

The round consisted of three manufactured samples and one commercial sample of materials that may contain asbestos and would typically be submitted for analysis at an asbestos testing laboratory. Sample 1 was a powder (chalk) containing various non-asbestos fibres including polyvinyl and cardboard; Sample 2 was a cement sample containing several non- asbestos fibres including cotton and cardboard; Sample 3 was a commercially produced chrysotile string sample and Sample 4 was a grout containing amosite and crocidolite asbestos.

The majority of errors in this round involved sample 4 with some analysts failing to identify one of the two asbestos types present or mis-identifying an asbestos type. Sample 4 was a manufactured grout sample containing amosite and crocidolite asbestos. Analysts should be thorough during analysis of samples, analysing the whole sample and to be aware that samples may contain up to three asbestos types. Some commercial asbestos cement based products were produced containing all three common asbestos types often in varying quantities and analysts need to be aware of this and thoroughly search samples for all asbestos types present.

Sample	Validation Number	Product Type	Target Component	Asbestos Present (%)
1	299	Powder (Manufactured)	No Asbestos	N/A
2	300	Cement (Manufactured)	No Asbestos	N/A
3	301	Textile (Commercial)	Chrysotile	Unknown
4	302	Grout (Manufactured)	Crocidolite & Amosite	0.1% of each asbestos type

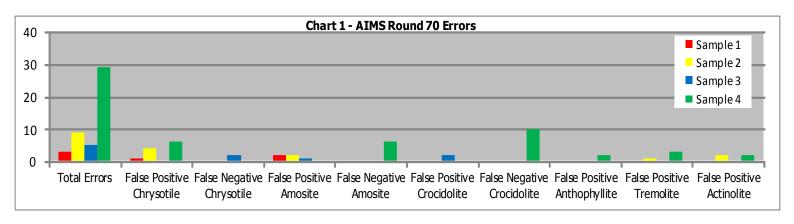




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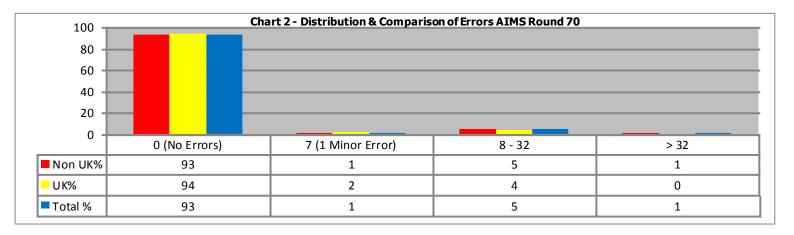
### 1. Type Of Errors Obtained



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. 381 (93%) 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; 169 (94%) UK laboratories and 212 (93%) 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. 30 laboratories (7%) in total had not yet completed 3 rounds and therefore did not accumulate a score. Following this round, 306 laboratories (74%) obtained a good cumulative score (0-7) penalty points cumulatively). 53 laboratories (15%) obtained an acceptable cumulative score (8-32) penalty points cumulatively) and 17 laboratories (4%) obtained an unsatisfactory cumulative score (33 or more penalty points cumulatively).

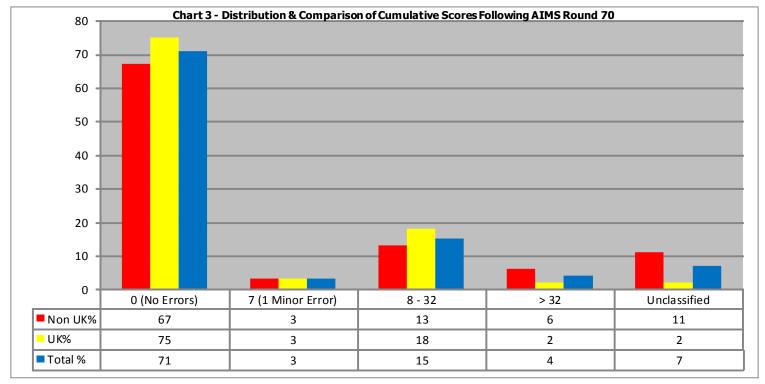
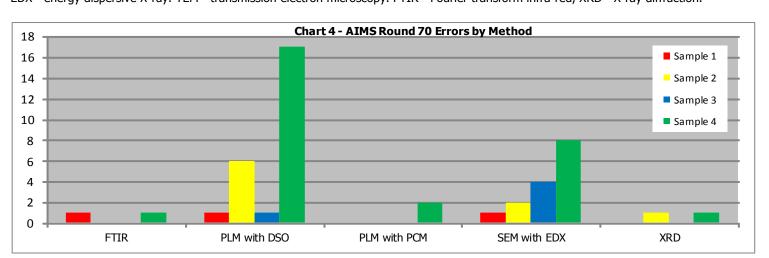


Chart 4 shows the number of errors made on each sample for all UK and Non-UK laboratories.

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. FTIR - Fourier transform infra-red, XRD - X-ray diffraction.





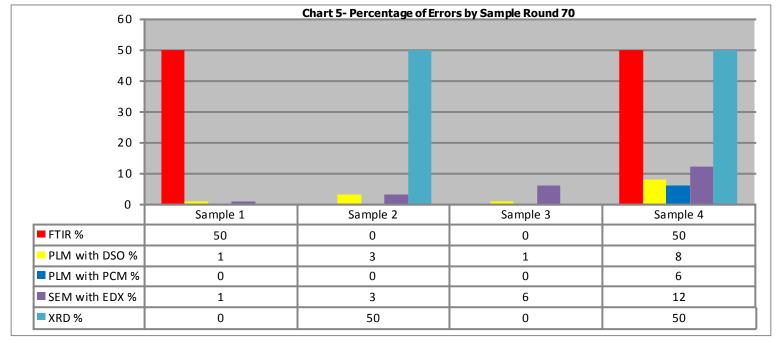


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Chart 5 shows the percentage of sample errors by method.

Of the 409 participating labs in R70 the method used in terms of the number of labs was as follows: FTIR, 2 labs; PLM with DSO, 215 labs; PLM with PCM, 37 labs; SEM with EDX, 68 labs; TEM with EDX, 47 labs; PLM with DSO & TEM with EDX, 24 labs; PLM with PCM & FTIR, 1 lab; PLM with PCM & SEM with EDX, 11 labs; Other, 2 labs and XRD, 2 labs.



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

Following R69 there were two sample investigations - no results were amended following the HSE outcome.

You are now able to subscribe to our schemes for 2020/21. Please log on to the PT Online Data Entry System (<a href="https://xnet.hsl.gov.uk/aims/SR07\_Login.aspx">https://xnet.hsl.gov.uk/aims/SR07\_Login.aspx</a>) and choose 'schemes'. Our new procedure is for laboratories to pay using a credit/ debit card (via Worldpay) - a full receipt, suitable for accounting purposes, is available as soon as payment has been received. Laboratories can request a pro-forma invoice, if required for them to be able to pay by credit/ debit card, please email the PT team with your PT Lab number and the scheme(s) you will be subscribing to.

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. If you wish to purchase any of our AIMS QC samples, please contact the PT Team for further information.

The next round of AIMS will be despatched week commencing 27th April 2020. Samples will not be despatched until full payment has been received.

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

Melanie Clunas AIMS Scheme Co-ordinator



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