



Report
Round 63
October 2017



Asbestos In Material Scheme

Asbestos In Materials (AIMS) Scheme

Round 63 Sample Details

366 labs were assigned to Round 63 with 359 labs submitting results. All samples were prepared for circulation following our normal internal screening process and were scanned using stereo-zoom microscopy to assess homogeneity and suitability. Approximately 10% of all samples prepared were validated by 15 independent laboratories using either PLM or SEM analytical techniques. All validation labs identified all asbestos components present in the samples and no additional asbestos components were identified.

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 grout material containing tremolite asbestos; Sample 2 was a board containing crocidolite asbestos within a black paint layer on the surface; Sample 3 was a non-asbestos cement sample containing polypropylene and wollastonite and Sample 4 was a mixed debris sample containing chrysotile asbestos.

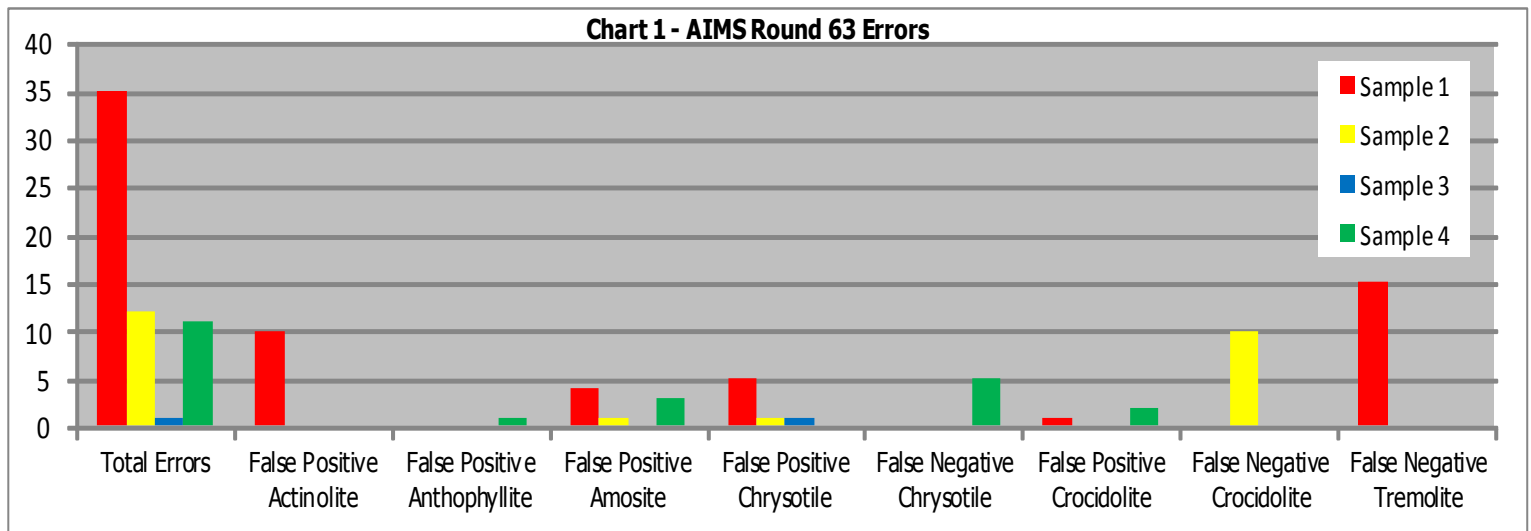
The majority of errors for this round were associated with Sample 1 with labs missing the tremolite asbestos present and/or falsely identifying actinolite asbestos. The grout used in the sample contains iron and this gives a possible explanation why some labs using SEM had errors with the EDX identifying iron (from the grout) leading to a false positive for actinolite asbestos. Ten labs failed to identify the crocidolite asbestos in Sample 2. The 0.5% crocidolite asbestos in this sample was contained within the black paint layer only and not within the board. This emphasises that care needs to be taken when analysing samples with each separate layer of the sample requiring a thorough search and analysis.

Sample	Validation Number	Product Type	Target Component	Asbestos Present (%)
1	271	Grout (Manufactured)	Tremolite	0.1
2	272	Board (Manufactured)	Crocidolite	0.5
3	273	Cement (Manufactured)	No Asbestos	N/A
4	274	Mixed Debris (Manufactured)	Chrysotile	1



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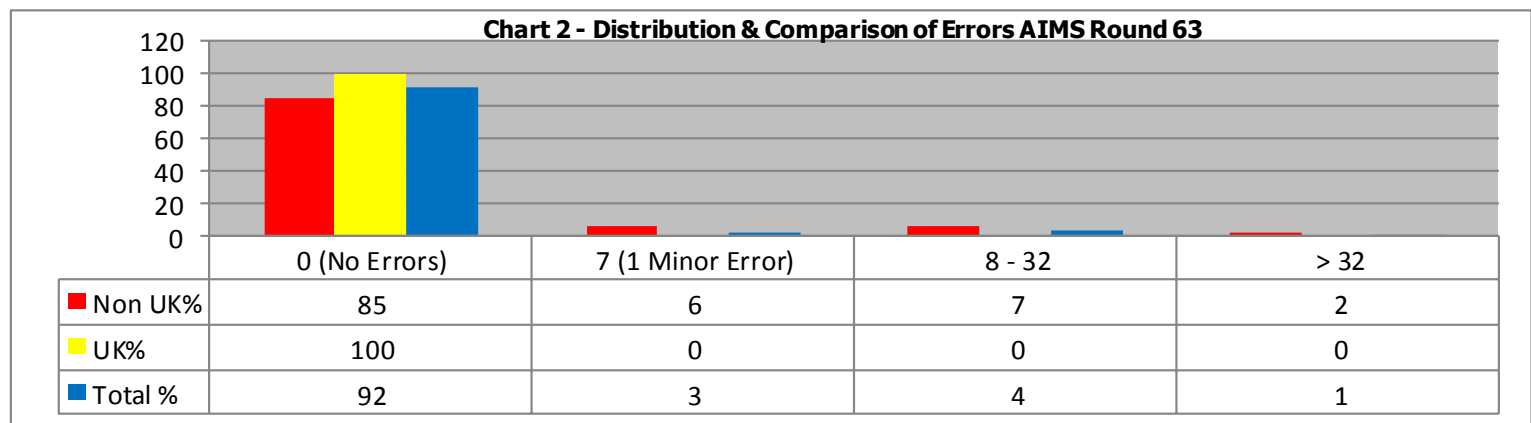
1. Type Of Errors Obtained



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. 332 (92%) 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; 178 (100%) UK laboratories and 154 (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. 29 laboratories (8%) in total had not yet completed 3 rounds and therefore did not accumulate a score. Following this round, 259 laboratories (71%) obtained a good cumulative score (0 – 7 penalty points cumulatively). 62 laboratories (17%) obtained an acceptable cumulative score (8 – 32 penalty points cumulatively) and 16 laboratories (4%) obtained an unsatisfactory cumulative score (33 or more penalty points cumulatively).

Chart 3 - Distribution & Comparison of Cumulative Scores Following AIMS Round 63

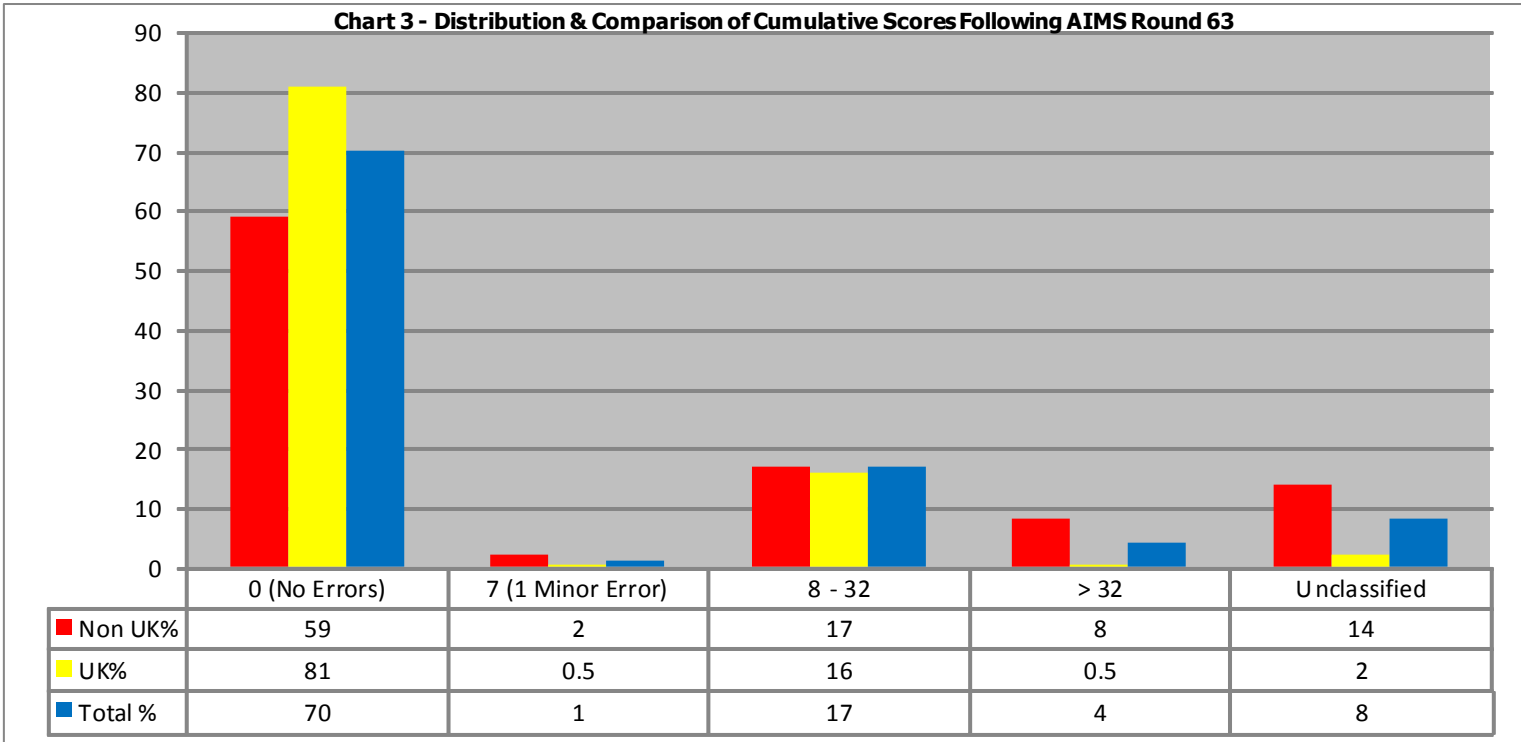
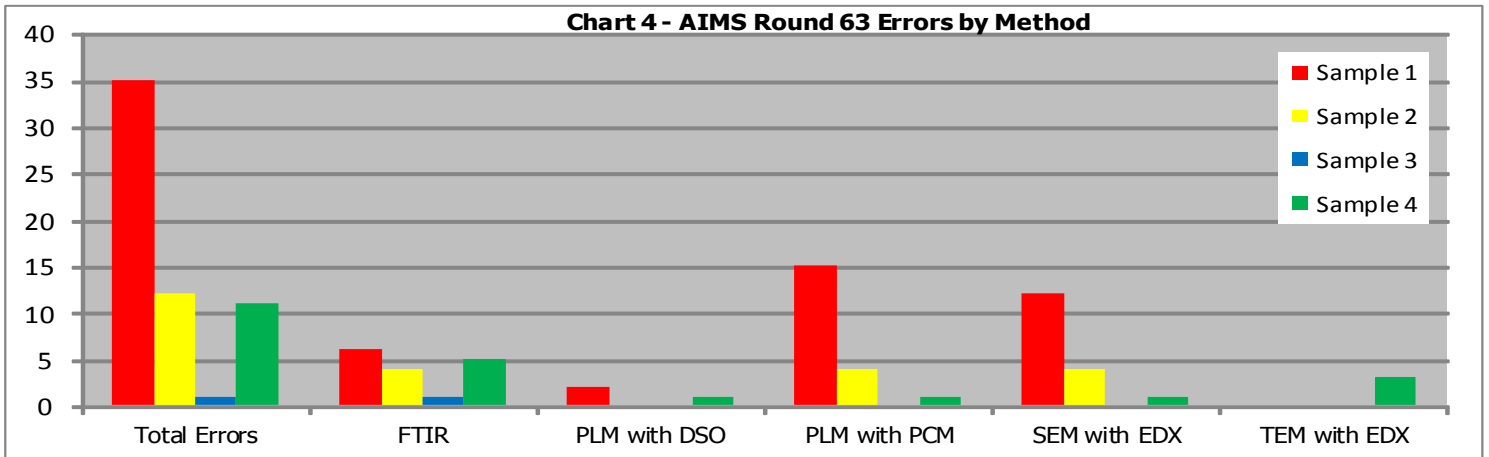


Chart 4 shows the number of errors made on each sample for all UK and Non-UK laboratories.

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.

Chart 4 - AIMS Round 63 Errors by Method





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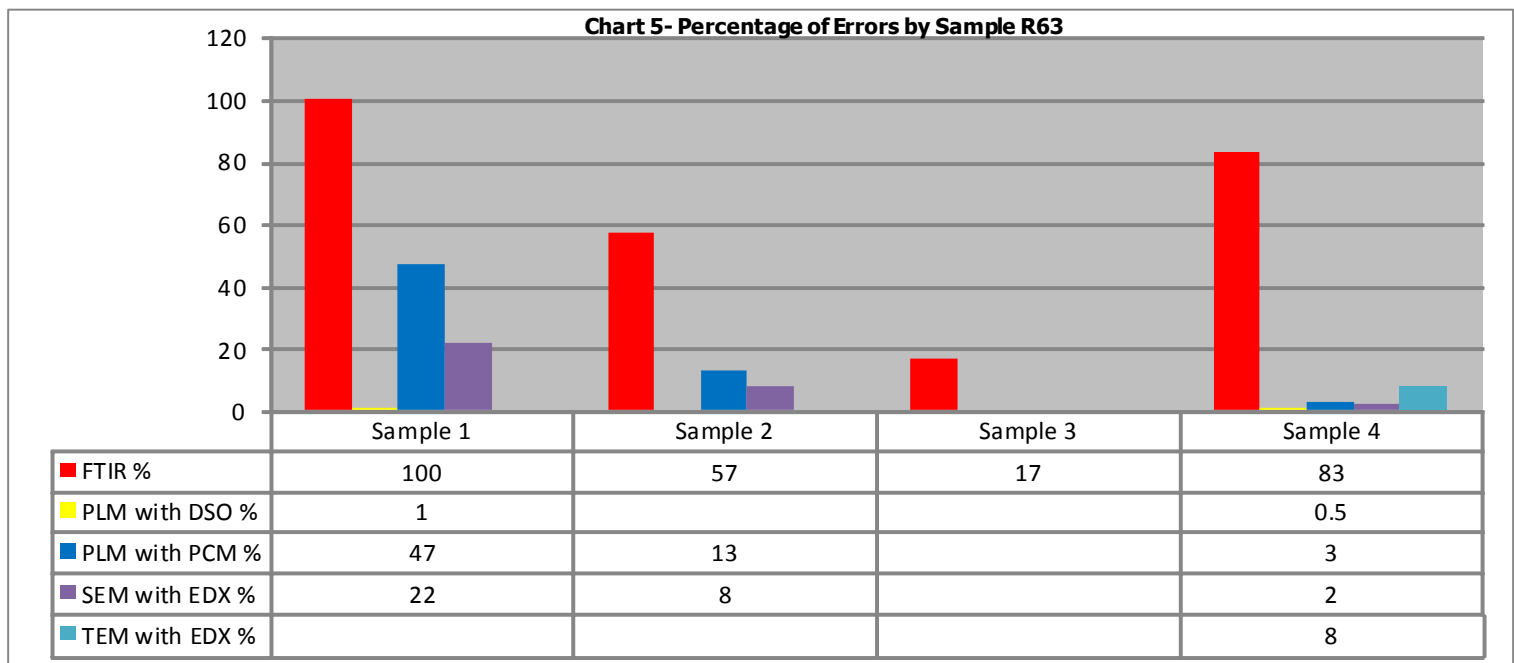


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Chart 5 shows the percentage of sample errors by method.

Of the 359 participating labs in R63 the method used in terms of the number of labs was as follows: FTIR, 7 labs; PLM with DSO, 202 labs; PLM with PCM, 31 labs; SEM with EDX, 51 labs; TEM with EDX, 38 labs; PLM with DSO & TEM with EDX, 19 labs; PLM with PCM & FTIR, 2 labs; PLM with PCM & TEM with EDX, 5 labs; XRD, 1 lab and Other method, 3 labs.



3. For Your Information - AIMS NEWS !!

Following R62 three samples were returned for investigation, where wollastonite had been reported as tremolite. All three sample scores were upheld. Further details on our sample investigation procedure can be found in the Information Book for Participants, available on our website.

Wollastonite is now available to purchase, please email to request an AIMS Quality Control Samples order form.

Over the next few months we will be asking you to participate in our annual survey (via SurveyMonkey) and asking you to subscribe for 2018/19 using our online data entry system. An email will be sent with further details nearer the time.

The next round of AIMS (R64) will be despatched week commencing 8th January 2018.

Please note: we have recently changed our Proficiency Testing enquiries telephone number - please see below for details.

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 AIMS Scheme Co-ordinator



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