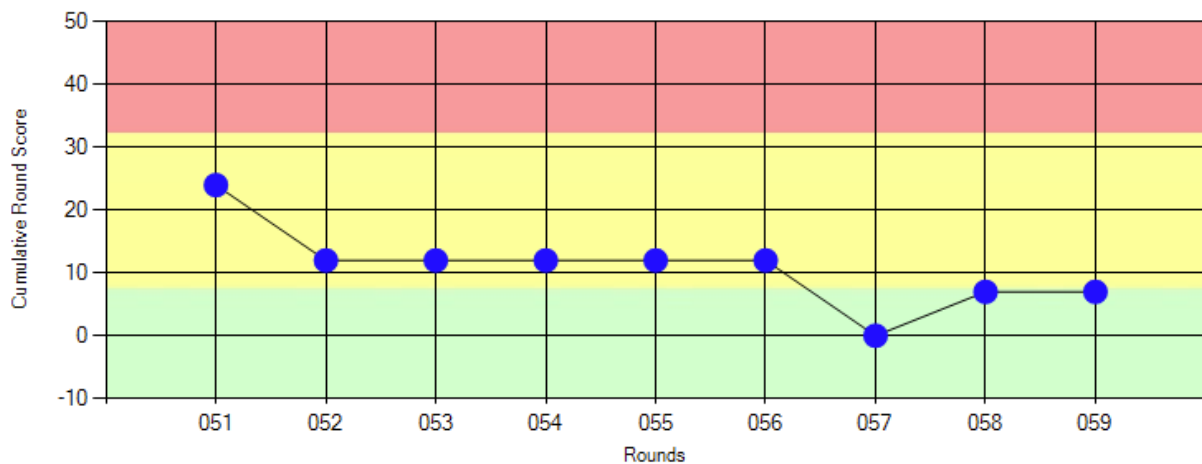Round Results Report

Asbestos in Materials Individual Results : Round 059 : 059 AIMS Round: Main

For Laboratory Number :	1640 CRB Analyse Service GmbH
Report Issued	17/06/2016 10:23:54
Report No.	059/252/7656/ 12569
Your Performance Score	7
Your Performance Classification	Good
Your Score This Round	0

Sample	Your Result	Assigned Result	Sample Score
1	Amosite, Chrysotile,	Amosite, Chrysotile,	0
2	Crocidolite , Chrysotile,	Crocidolite , Chrysotile,	0
3	Tremolite,	Tremolite,	0
4	No Asbestos,	No Asbestos,	0

Health & Safety Laboratory
Melanie Clunas
AIMS Scheme Co-Ordinator
Fibres Team : Chemical & Biological Risks Unit
Final Report

Health & Safety Laboratory
Harpur Hill, Buxton, Derbyshire, SK17 9JN - UK

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Asbestos In Materials (AIMS) Scheme

Round 59 Sample Details

All samples were prepared for circulation following our normal validation process and were scanned using stereo-zoom microscopy to assess homogeneity and suitability. Approximately 10% of all samples prepared were validated by 13 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 majority of errors for this round were associated with samples 1 and 3. In sample 1, the errors mainly concerned failure to identify one or both of the asbestos types present. The sample was a manufactured board material containing amosite and chrysotile asbestos. The board itself was a non-asbestos type with the amosite and chrysotile being contained within the black paint layer on the board surface. With this in mind, analysts should ensure all sample layers are analysed thoroughly and to be aware there may be more than one asbestos type present. Sample 3 also presented some problems with a number of labs failing to identify the tremolite asbestos present. This was a manufactured sample consisting of marble powder with tremolite added. The powder may have caused difficulties when analysing under a stereo-zoom microscope in the fume cupboard due to the air flow causing dispersal. If analysts were unable to observe or extract fibres at this stage then treatment with dilute acid followed by a pinch sample mounted in a RI liquid would have clearly shown the presence of asbestiform fibres under PLM.

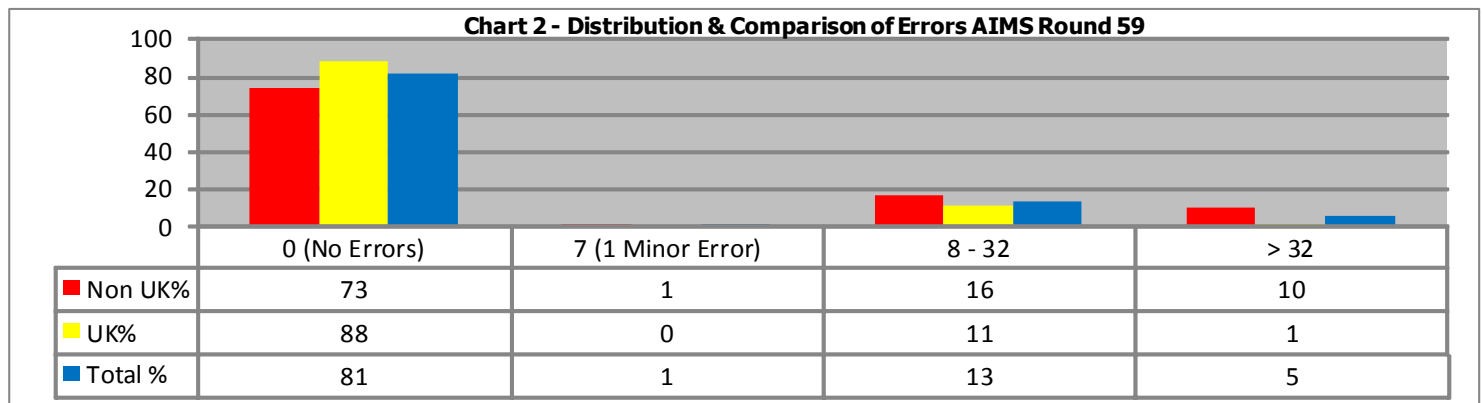| Sample	Validation Number	Product Type	Target Component
1	258	Painted Board (Manufactured)	Amosite & Chrysotile
2	257	Cement (Manufactured)	Chrysotile & Crocidolite
3	256	Powder (Manufactured)	Tremolite
4	255	Rockwool (Commercial)	No Asbestos

1. Type Of Errors Obtained

Chart 1 - AIMS Round 59 Errors
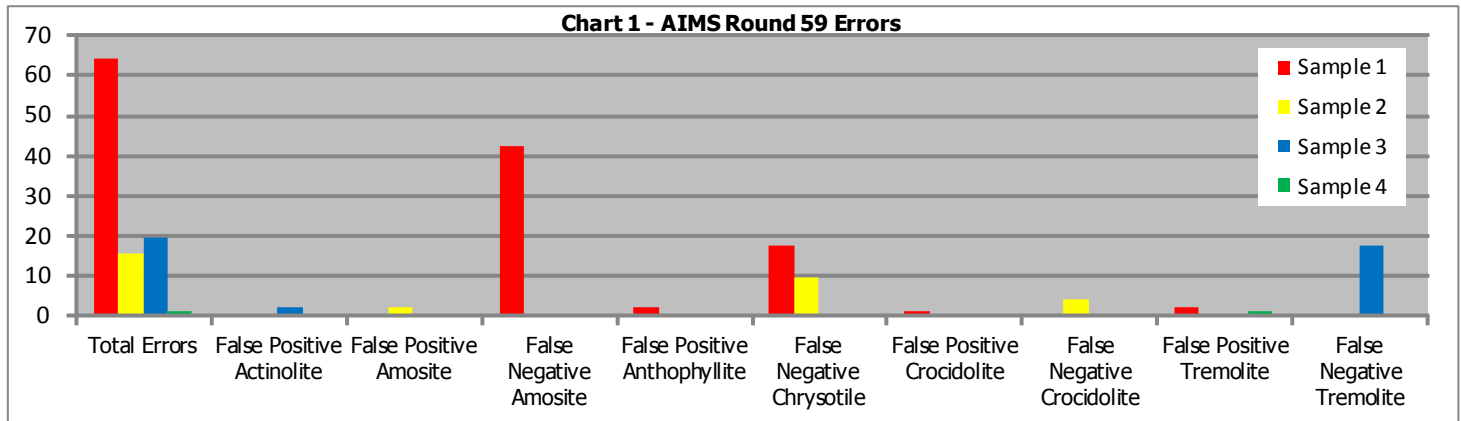
False Negative = Component has been missed. False Positive = Component has been incorrectly identified as present.

2. Round Scores

Chart 2 illustrates the distribution of scores for all participating laboratories. 269 (81%) 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; 156 (88%) UK laboratories and 113 (73%) Non-UK laboratories obtained a score of zero for the round.

Chart 2 - Distribution & Comparison of Errors AIMS Round 59

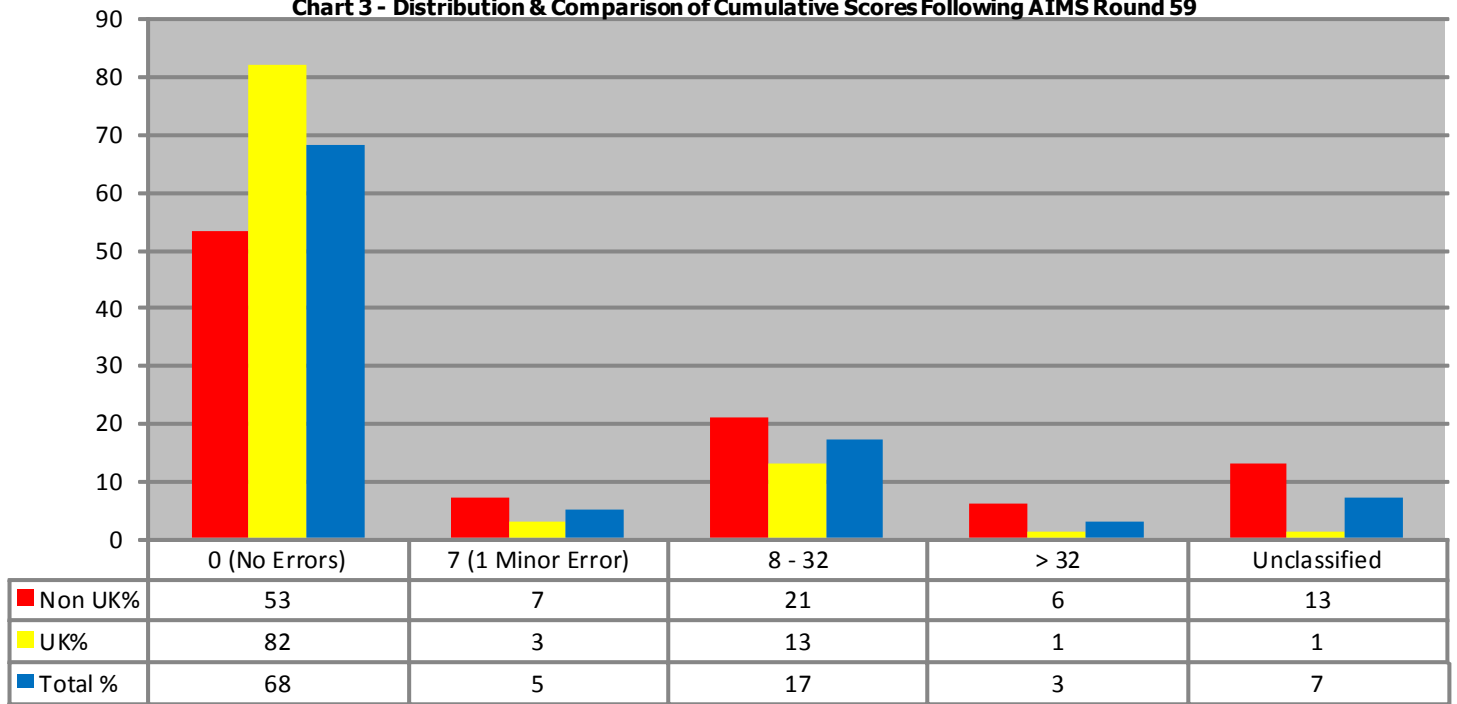|	0 (No Errors)	7 (1 Minor Error)	8 - 32	> 32
Non UK%	73	1	16	10
UK%	88	0	11	1
Total %	81	1	13	5

Asbestos In Materials (AIMS) Scheme

Chart 3 shows the percentage distribution of cumulative three round scores for all UK and Non-UK laboratories.

23 laboratories (7%) in total had not yet completed 3 rounds and therefore did not accumulate a score.

Following this round, 245 laboratories (73%) obtained a good cumulative score (0 – 7 penalty points). 57 laboratories (17%) obtained an acceptable cumulative score (8 – 32 penalty points) and 12 laboratories (3%) obtained an unsatisfactory cumulative score (33 or more penalty points).

Chart 3 - Distribution & Comparison of Cumulative Scores Following AIMS Round 59

	0 (No Errors)	7 (1 Minor Error)	8 - 32	> 32	Unclassified
Non UK%	53	7	21	6	13
UK%	82	3	13	1	1
Total %	68	5	17	3	7

3. For Your Information - AIMS NEWS !!

Thank you to everyone who entered a method for R59 - method choice was meant to be mandatory for this round, unfortunately the software wasn't updated in time. On page 3 you will find Charts 4 & 5 which show the number of errors reported using a particular method and the percentage of errors by method. This data shows FTIR has the highest number of errors from results submitted (e.g. for sample 1, 4 labs used this method and 3 labs made errors).

Any feedback on how data could be fed back within the group report would be gratefully received.

Classification reports are produced and added to our website for UK & Republic of Ireland as this has been a request from the relevant accreditation bodies. A number of participants have requested the same information to be available for their country. This is something that we may look in to for the future.

Anyone wishing to query a sample result should contact the PT administration team within 10 working days of the Individual Reports being issued. Further details can be found in the Information Book for Participants available on our website.

http://www.hsl.gov.uk/proficiency-testing-schemes/aims

The next round (R60) will be despatched week commencing 5th September 2016.

Email: proficiency.testing@hsl.gsi.gov.uk

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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. SEM - scanning electron microscopy. EDX - energy dispersive X-ray. TEM - transmission electron microscopy. FTIR - Fourier transform infra-red.

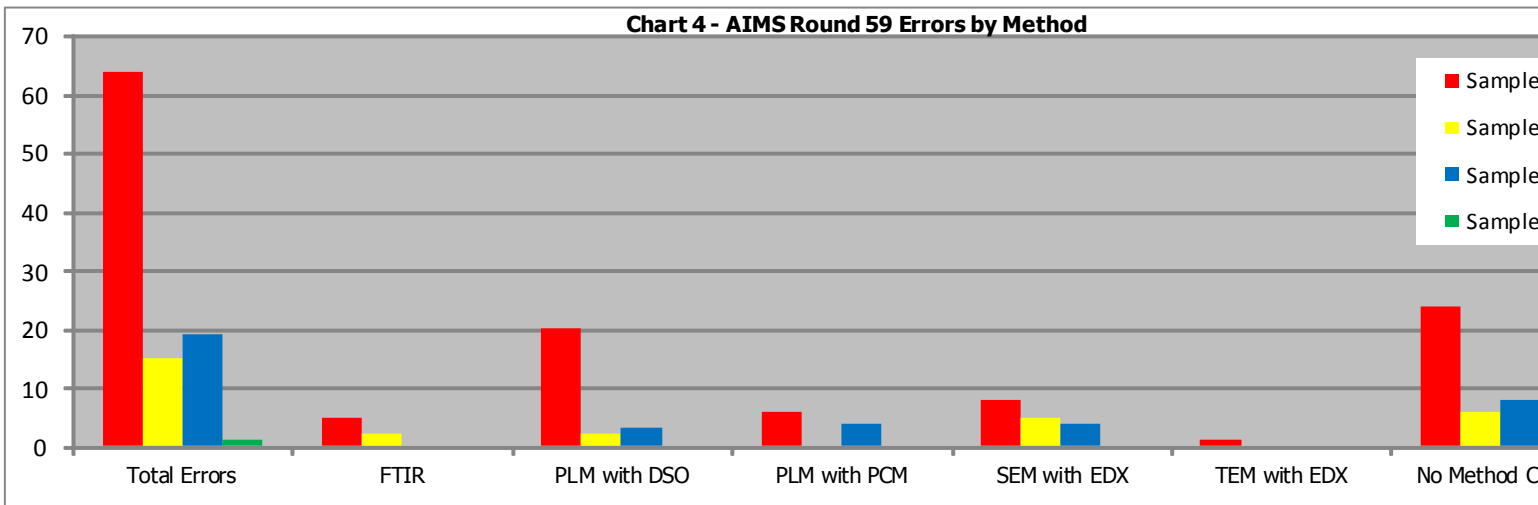Chart 4 - AIMS Round 59 Errors by Method

Chart 5 shows the percentage of sample errors by method. The majority of errors made are by laboratories using the FTIR method.

Chart 5- Percentage of Errors by Sample R59

	Sample 1	Sample 2	Sample 3	Sample 4
FTIR %	75	50	0	0
PLM with DSO %	15	1	3	0
PLM with PCM %	22	0	20	0
SEM with EDX %	17	16	13	0
TEM with EDX %	4	0	0	0
No Method Choice %	17	3	5	0.7