

## Round 39 Report

***This report is a summary of Round 39 of the AFRICA international reference scheme for asbestos fibre counting. Round 39 took place between February and July 2006. Thirty-three laboratories from 18 different countries registered to take part. At the time of writing, 31 sets of results had been submitted, with the other two still expected. Remarkably, all 31 labs have achieved the “good” performance rating 1.***

### **Reference samples**

The AFRICA reference samples comprise a mixture of asbestos fibre types and densities. All samples have been collected as air samples on membrane filters and are



mounted on glass microscope slides. Each reference sample has an assigned value (or *reference count*),

which is the *median of at least 15 previous evaluations* from fibre counting laboratories, and is reported as the number of fibres per square millimetre of filter surface. Reference counts are updated periodically to include the most recent counts from participating laboratories.

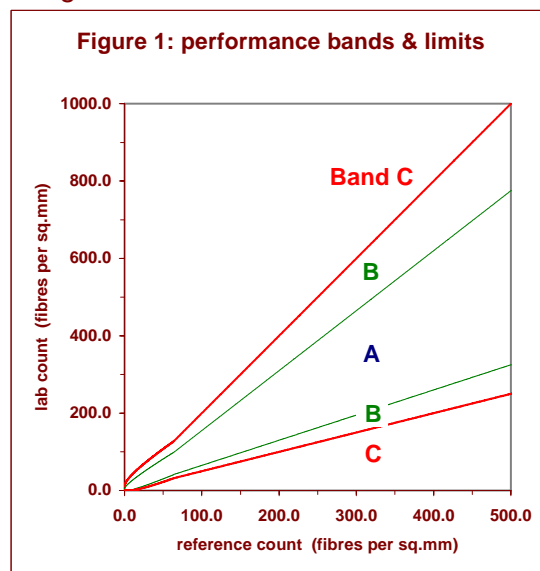
### **Organisation of rounds**

In the scheme, batches of samples are circulated around groups of participating laboratories. Each batch consists of eight reference samples, plus two “candidates” (new samples included to obtain enough counts to calculate a stable reference count). Each laboratory evaluates one batch of samples during the round.

### **Performance criteria**

Individual reports showing results in relation to the reference counts for the eight reference samples have already been sent to each participant. The usual criteria have

been applied to the results: each laboratory has been given a rating of 1 (best), 2 or 3, depending on how well its counts agree with the reference counts (see Figure 1). A rating



of 1 or 2 is normally regarded as satisfactory counting performance, while a rating of 3 should be considered unsatisfactory.

### **Comparison with previous rounds**

Table 1 (overleaf) compares the performance ratings obtained by laboratories in Rounds 38 and 39. The results in Round 38 had initially appeared to be the best of any round in AFRICA, but one late result was a rating 3 and another a rating 2. Now, Round 39 results are the best we have yet seen: all 31 participants who have submitted results by this time have achieved rating 1. It will remain the best round to date regardless of the two sets of results which are still to come.

The overall performance of AFRICA members over 10 years is shown in Figure 2 overleaf, illustrating the exceptional ratings obtained in Round 39.



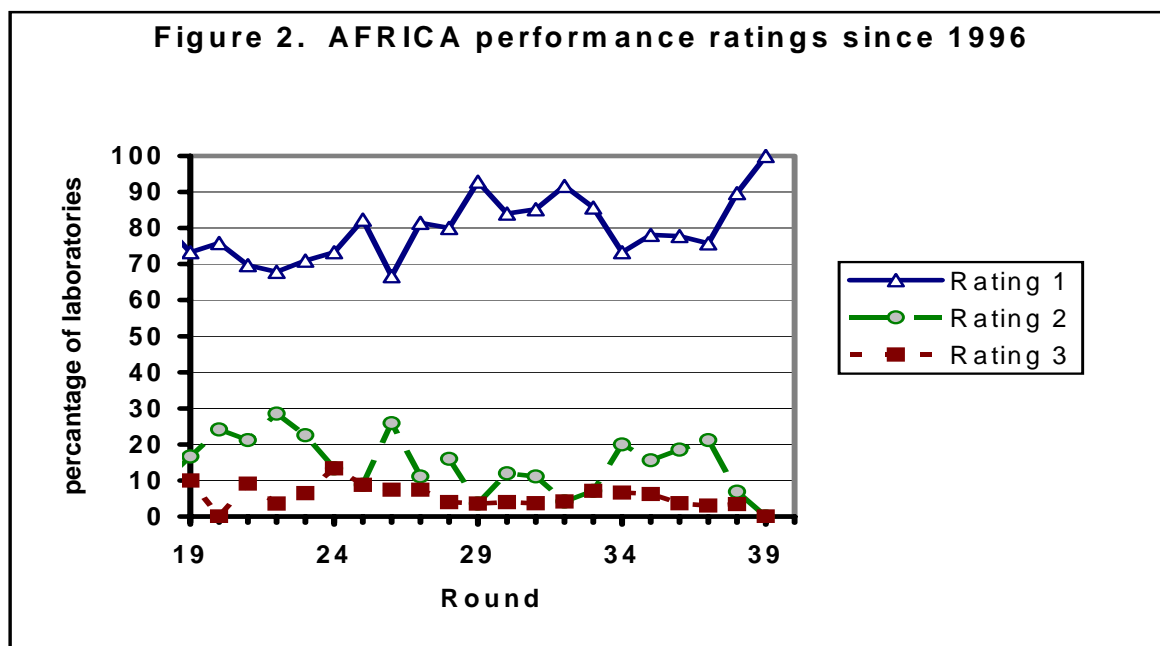
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Table 1. Comparison of AFRICA ratings between Rounds 38 and 39

		Round 39 rating*				TOTAL
		1	2	3	did not participate in Round 39	
Round 38 rating	1	24	0	0	2	26
	2	2	0	0	0	2
	3	0	0	0	1	1
	did not participate in Round 38	5	0	0	0	5
TOTAL		31	0	0	3	34

\* with two more results to come

Figure 2. AFRICA performance ratings since 1996



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