



# Test Monitoring Center

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MEMORANDUM: 03-068

DATE: July 15, 2003

TO: D02.B07 GI (D5133) Mailing List  
D02.B07 GI (D5133) Participants

FROM: Tom Schofield

SUBJECT: Reference Oil Changes for Gelation Index (D5133) Calibration Monitoring

At the June 16, 2003 meeting of the ASTM D02.B0.07 Gelation Index Surveillance Panel, it was agreed to add TMC oil 1009 to the group of GI reference oils, and to drop TMC oils 52 and 53. Effective immediately, the new reference oils, performance targets and acceptance bands are as shown in Table 1, below. Note that the targets and acceptance bands for current GI reference oils 58 and 62 are unchanged. The targets and acceptance bands for oil 1009 were derived from a prior round-robin on that oil. Further refinement of the 1009 targets and bands may be required at the discretion of the panel as we collect additional calibration data.

Table 1  
Revised GI (D5133) TMC Reference Oil Performance Targets and Acceptance Bands  
Effective July 15, 2003

Oil Code	Parameter	n	Mean	s <sub>R</sub>	95% Acceptance Bands*	
					Lower	Upper
58	Gelation Index	17	5.8	0.69	4.4	7.2
62	Gelation Index	35	17.0	3.90	9.4	24.6
1009	Gelation Index	16	7.3	0.68	6.0	8.6

$$*95\% \text{ Bands} = \text{Mean} \pm (1.960 \times s_R)$$

The new overall target precision (s<sub>R</sub>), pooled across all three oils, is 2.86.

Participating labs have been notified about discarding obsolete, unused calibration samples from their inventories, and shipments of reference oil 1009 are under way.

Please direct any inquiries to my attention.

TMS/tms

c: <ftp://ftp.astmtmc.cmu.edu/docs/bench/gi/memos/mem03-068.tms.pdf>  
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