



# Test Monitoring Center

6555 Penn Avenue  
Pittsburgh, PA 15206-4489  
(412) 365-1000

MEMORANDUM: 06-052

DATE: July 18, 2006

TO: D02.B07 TEOST Mailing List

FROM: Tom Schofield

SUBJECT: MTEOS Technical Update:  
Adjusted Reference Oils Targets  
Updated Test Method

At the ASTM D02.B0.07 TEOST Surveillance Panel meeting of June 26, 2006, the panel approved adjusted reference oil performance targets and acceptance bands for all three TMC MTEOS (D7097) reference oils. Table 1 shows the approved MTEOS reference oils, performance targets and acceptance bands to become effective July 31, 2006. All tests with a date completed July 31, 2006, or later will be evaluated using these new performance estimates:

Table 1  
MTEOS (D7097) Reference Oil Performance Targets and Acceptance Bands  
Effective July 31, 2006

Oil ID	n	Target Mean*	Target sR*	Acceptance Bands	
				95% Min*	95% Max*
74	30	12.85	5.59	1.9	23.8
432	30	47.04	4.50	38.2	55.9
434	30	27.37	6.57	14.5	40.2

\*Total Deposits, mg

Pooled Target Total Deposits sR is now 5.62 mg

The previous (or present as of this writing) performance targets and acceptance bands were estimated using initial operationally valid TMC calibration data reported to the TMC through June 8, 2005, using Rod Batch E parts, and it was agreed that those targets and bands would be re-evaluated after additional reference data was collected by the TMC. (You may recall that batch D rods were performing quite imprecisely and therefore the targets and acceptance bands based on tests using Batch D rods were found to be unsuitable.) The updated targets and bands in Table 1 above are calculated using those initial Batch E operationally valid reference tests AND additional operationally valid TMC reference tests for an updated sample size (n) of thirty tests on each oil (using mostly Batch E rods and a few Batch F & G Rods). The new target means change only slightly with somewhat larger standard deviations, resulting in somewhat wider acceptance bands.

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Also, a revised version of the MTEOS test method (Determination of Moderately High Temperature Piston Deposits by Thermo-Oxidation Engine Oil Simulation Test – TEOST MHT) is available from ASTM ([www.astm.org](http://www.astm.org)). Effective immediately, the TMC will begin monitoring ASTM Standard Test Method version **D7097-06** for future MTEOS calibrations. This test method replaces D7097-05 that the TMC has previously been monitoring.

**Please remember to correctly report the new method-version (METHVER) in your data flatfiles to the TMC. The correct field name-variable designation should now be:**

**METHVER D7097-06**

Please contact me if you have any questions.

Tom Schofield  
ASTM Test Monitoring Center  
Carnegie Mellon University  
6555 Penn Avenue  
Pittsburgh, PA 15206-4489  
Voice: 412-365-1011  
Fax: 412-365-1049  
Email: [tms@astmtmc.cmu.edu](mailto:tms@astmtmc.cmu.edu)

TMS/tms

c: <ftp://ftp.astmtmc.cmu.edu/docs/bench/mteos/memos/mem06-052.pdf>  
M. Lane, TMC  
J. Zalar, TMC

Distribution: Email