



## Test Monitoring Center

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MEMORANDUM: 05-075

DATE: October 14, 2005

TO: Mark Sarlo, Chairman, Engine Oil Aeration Test Surveillance Panel

FROM: Jeff Clark

SUBJECT: Engine Oil Aeration Reference Testing for the October 2005 ASTM Report Period

The following is a summary of Engine Oil Aeration reference oil testing completed during the October 2005 ASTM period, which began April 1, 2005 and ended September 30, 2005. It should be noted that for the history of the EOAT, all data has been generated at one laboratory.

The following summarizes the status of the reference oil tests completed this ASTM report period:

Test Description	TMC Validity Code	Number of Tests
Operationally and Statistically Acceptable	AC	1
Failed Acceptance Criteria	OC	0
Operationally Invalid	LC	0
Aborted	XC	0
Total		1

### Severity and Precision:

Figure 1 (attached) shows the current industry severity and precision EWMA control charts and the industry cusum chart for average engine oil aeration (AEOA). AEOA is currently within the industry severity and precision limits.

Since testing frequency is extremely low, an estimate of precision by ASTM period will not be presented.

Reference Oils and Hardware:

The table below shows the current AEOA test targets.

Parameter	Reference Oil	n	Mean (%)	S
AEOA	1004-2	13	9.46	0.25
	1004-3	-	9.46	0.25
	1005	2	7.80	0.25
	1005-1	-	7.80	0.25
	1005-2	-	7.80	0.25
<i>Target Update**</i>	<i>1004-3**</i>	5	9.42	0.27

\*\*To be approved by EOAT Surveillance Panel prior to implementation.

The current test targets for oils 1004-3 and 1005-2 are based on oils 1004-2 and 1005 respectively. These targets are typically updated at five tests. To date, one test has been run on oil 1005-2. Five tests have been run on oil 1004-3 and the mean and standard deviation are shown above for surveillance panel consideration to implement as test targets.

Information Letters:

No information letters were issued during this ASTM period.

Additional Information:

The EOAT database, the industry LTMS plots, industry alarm log, and the EOAT Timeline may all be accessed from the TMC home page at [www.astmtmc.cmu.edu](http://www.astmtmc.cmu.edu).

JAC/jac/mem05-075.jac.doc

## Attachments

c: J.L. Zalar, TMC

F.M. Farber, TMC

Engine Oil Aeration Test Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/diesel/eoat/semiannualreports/eoat-10-2005.pdf>

Distribution: Email

# FIGURE 1 EOAT INDUSTRY OPERATIONALLY VALID DATA

