

MEMORANDUM:	07-062
DATE:	October 16, 2007
TO:	Mack Test Surveillance Panel Two-Cycle Diesel Surveillance Panel Roller Follower Wear Test Surveillance Panel Engine Oil Aeration Test Surveillance Panel
FROM:	Jeff Clark
SUBJECT:	Reference Testing for the October 2007 ASTM Period

This is a summary of several low-activity multi-cylinder diesel reference test areas for the October 2007 ASTM period, which began April 1, 2007 and ended September 30, 2007. The following paragraphs provide a brief summary for each test area and highlight issues of concern, if any. Attachment 1 shows activity levels for each of the four test areas presented in this report. Attachment 2 shows the reference oil supply for each of the references oil used in the tests covered by this report.

#### Mack T-8

There are currently three calibrated stands at three laboratories. Two parameters, Relative Viscosity at 4.8% (50% Loss) and Relative Viscosity at 4.8% (100% Loss), have tripped an industry severity warning in the mild direction. This may be related to the introduction of TMC 1005-2 as the T-8 reference oil. The Mack Test Surveillance Panel is investigating the situation and has shortened current calibration periods in an effort to speed the generation of data.

#### Detroit Diesel 6V92

There are no calibrated stands. Reference oil test targets and candidate adjustment factors were updated effective January 1, 2007.

#### Roller Follower Wear Test

There are currently two calibrated stands at two laboratories.

#### Engine Oil Aeration Test

There is currently one calibrated stand at one laboratory.

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### Additional Information:

The reference test databases, the industry LTMS plots, industry alarm logs, and timelines may all be accessed from the TMC home page at www.astmtmc.cmu.edu.

JAC/jac/mem07-062.jac.doc

Attachment

c: J.L. Zalar, TMC F.M. Farber, TMC ftp://ftp.astmtmc.cmu.edu/docs/diesel/eoat/semiannualreports/eoat-10-2007.pdf ftp://ftp.astmtmc.cmu.edu/docs/diesel/rfwt/semiannualreports/rfwt-10-2007.pdf ftp://ftp.astmtmc.cmu.edu/docs/diesel/6v92/semiannualreports/6v92-10-2007.pdf ftp://ftp.astmtmc.cmu.edu/docs/diesel/mack/semiannualreports/t-8/t8-10-2007.pdf

Distribution: Email

## **Attachment 1 Reference Oil Test Activity of Multi-Cylinder Diesel Tests**

Validity	<b>T-8</b>	6V92	RFWT	EOAT		
AC	4	0	0	1		
OC	$1^{A}$	0	0	0		
LC	<b>1</b> <sup><i>B</i></sup>	0	0	0		
XC	<b>3</b> <sup><i>C</i></sup>	0	0	0		
Total	9	0	0	1		
Calibrated As Of September 30, 2007						
Labs	3	0	2	1		
Stands	3	0	2	1		

<sup>A</sup> Test failed due to mild RV48.
<sup>B</sup> Test invalid due to missing the soot window.
<sup>C</sup> Two tests aborted for missing the soot window, one test aborted due to high oil consumption.

# Attachment 2 **Reference Oil Inventory and Estimated Life**

Oil	Tests	TMC Inventory <sup>A</sup>	Lab Inventory	Estimated Life <sup>B</sup>
862-1	6V92	420	50	5+ years
1004-3	EOAT, RFWT	29	21	3 years
1005-2	T-8, EOAT, RFWT	895	168	5+ years

<sup>A</sup>Inventories are expressed in gallons. <sup>B</sup>Time estimate is based on most recent activity levels.