

Test Monitoring Center

Carnegie Mellon University 6555 Penn Avenue, Pittsburgh, PA 15206, USA http://astmtmc.cmu.edu 412-365-1000

MEMORANDUM: 09-068

DATE: December 3, 2009

TO: Becky Grinfield,

Chairman, Engine Oil Water Tolerance Surveillance Panel

FROM: Michael T. Kasimirsky Milas J. Rasimirsky

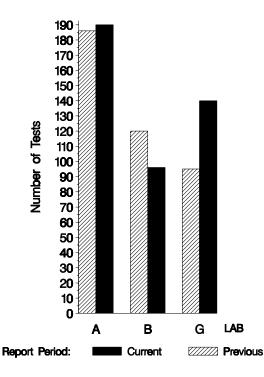
SUBJECT: EOWT Testing from April 1, 2009 through September 30, 2009

A total of 426 EOWT tests were reported to the Test Monitoring Center during the period from April 1, 2009 through September 30, 2009. Following is a summary of testing activity this period.

	Reporting Data
Number of Labs	3

Tests reported this period were distributed as shown below:

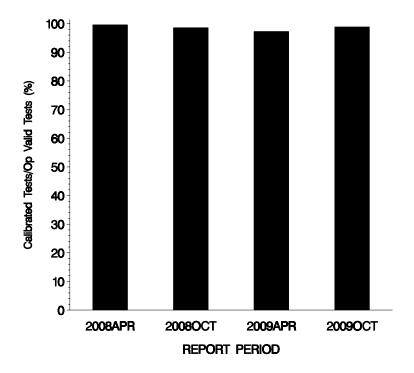
NUMBER OF TESTS REPORTED BY LAB AND REPORT PERIOD



Test Distribution by Oil, Treat Level and Validity

		By Oil			By Treat Level				Totals		
		77	77-1	78	78-1	0.6	1.0	2.0	3.0	Last Period	This Period
Accepted for Calibration	AC	4	201	0	208	104	103	104	102	386	413
Accepted for Target Generation	AG	0	0	0	0	0	0	0	0	0	0
Rejected Tests	OC	0	0	0	5	0	1	2	2	11	5
Operationally Invalid (lab)	LC	0	0	0	4	1	1	1	1	0	4
Operationally Invalid (lab/TMC)	RC	0	0	0	0	0	0	0	0	0	0
Aborted Calibration	XC	0	4	0	0	1	1	1	1	4	4
Total		4	205	0	217	106	106	108	106	401	426

OPERATIONALLY VALID TESTS MEETING ACCEPTANCE CRITERIA



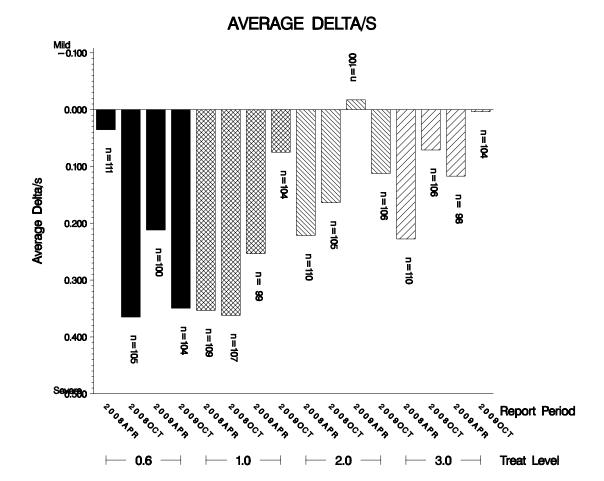
The above chart shows the percentage of accepted operationally valid tests.

Causes for Lost Tests

			Oil			Validity			Loss Rate			
Lab	Cause		77	77-1	78	78-1	LC	RC	XC	Lost	Starts	%
A	Samples Heated Too Long			•		•	•			4	426	1%
G	Mixing Error								•	4	426	1%
			0	4	0	4	4	0	4			
		Starts	4	205	0	217	426	426	426			
		%	0%	2%	0%	2%	1%	0%	1%			

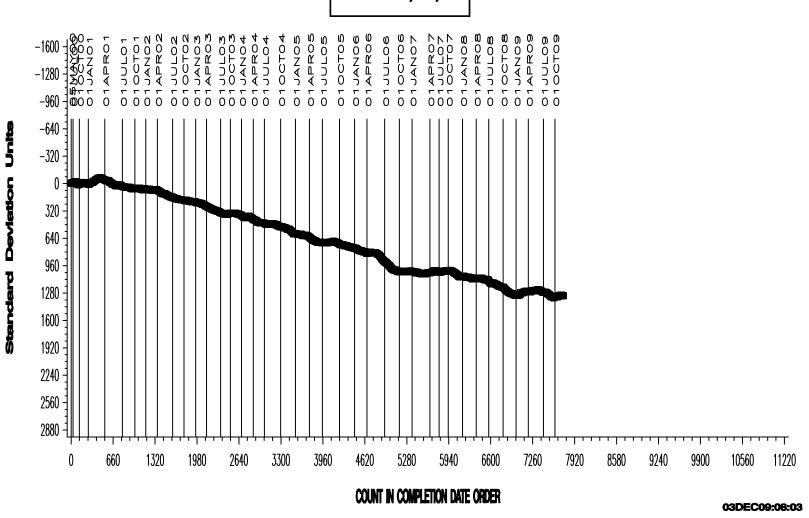
Average $\Delta\!/s$ by Lab and Treat Level

Treat Level	Lab	n	CFAYI
0.6	A	46	-0.051
	В	24	0.742
	G	34	0.615
	Industry	104	0.349
1.0	A	46	0.155
	В	24	-0.074
	G	34	0.071
	Industry	104	0.075
2.0	A	48	0.103
	В	24	-0.445
	G	34	0.519
	Industry	106	0.112
3.0	A	46	-0.050
	В	24	-0.606
	G	34	0.506
	Industry	104	0.004



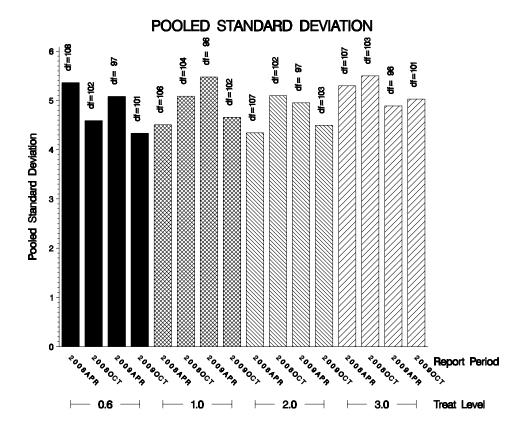
EOWT INDUSTRY OPERATIONALLY VALID DATA TEST RUN 20 - 25 ML CHANGE IN FLOWRATE AVERAGE

CUSUM Severity Analysis



POOLED S:

Shown below are bar charts comparing the pooled s values for the EOWT test parameters over the last four report periods.



STATUS OF REFERENCE OIL SUPPLY:

At the end of this report period, the testing oil supply stood as outlined in the following table:

		@ TMC			
Oil	Cans @ Labs	Cans	Gallons		
77	0	0	0.0		
77-1	48	2881	221.9		
78-1	54	1283	98.8		
Total	102	4164	320.7		

Be aware that this table presumes that all of each of these oils is dedicated to the EOWT test area. This is not the case, as oil 78-1 is also used in the EOFT test.

INFORMATION LETTERS:

No information letters were issued during this report period.

SUMMARY

- Over the course of this report period, CFA severity as measured by cusum plotting remained on target.
- Precision as measured by pooled standard deviation is comparable to previous periods.

MTK/mtk/astm1009.doc/mem09-068.doc.doc

c: F. M. Farber

J. A. Clark

EOWT Surveillance Panel

ftp://ftp.astmtmc.cmu.edu/docs/bench/eowt/semiannualreports/eowt-10-2009.pdf

Distribution: email