

Test Monitoring Center

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MEMORANDUM: 09-030

DATE: May 27, 2009

TO: Becky Grinfield,

Chairman, Engine Oil Water Tolerance Surveillance Panel

FROM: Michael T. Kasimirsky Milal J. Kasimirsky

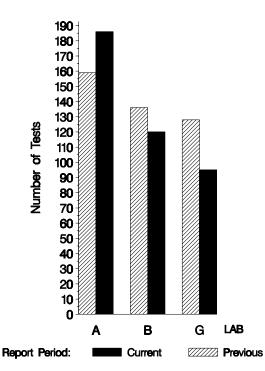
SUBJECT: EOWT Testing from October 1, 2008 through March 31, 2009

A total of 401 EOWT tests were reported to the Test Monitoring Center during the period from October 1, 2008 through March 31, 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:

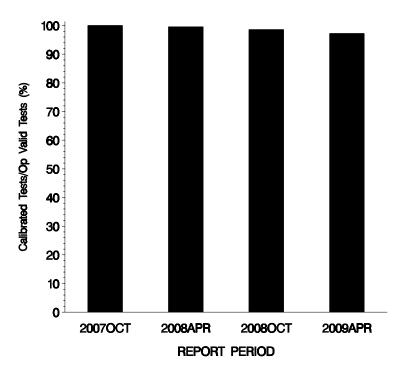
NUMBER OF TESTS REPORTED BY LAB AND REPORT PERIOD



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	3	193	0	190	96	97	97	96	417	386
Accepted for Target Generation	AG	0	0	0	0	0	0	0	0	0	0
Rejected Mild	OC	0	3	0	0	1	0	1	1	4	3
Rejected Severe	OC	0	7	0	1	3	2	2	1	2	8
Operationally Invalid (lab)	LC	0	0	0	0	0	0	0	0	0	0
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	0	4
Total		3	207	0	191	101	100	101	99	423	401

OPERATIONALLY VALID TESTS MEETING ACCEPTANCE CRITERIA



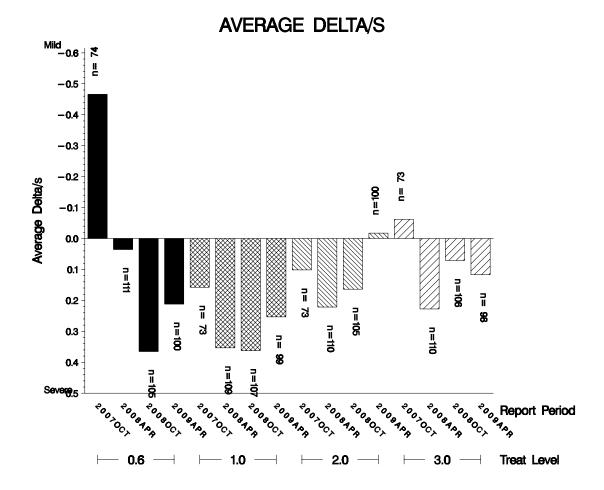
The above chart shows the percentage of accepted operationally valid tests.

Causes for Lost Tests

			Oil			Validity			Loss Rate			
Lab	Cause		77	77-1	78	78-1	LC	RC	XC	Lost	Starts	%
В	Samples blended but not run.		0	4	0	0	0	0	4	4	401	1%
			0	0	0	0	0	0	0			
		Starts	3	207	0	191	401	401	401			
		%	0%	2%	0%	0%	0%	0%	1%			

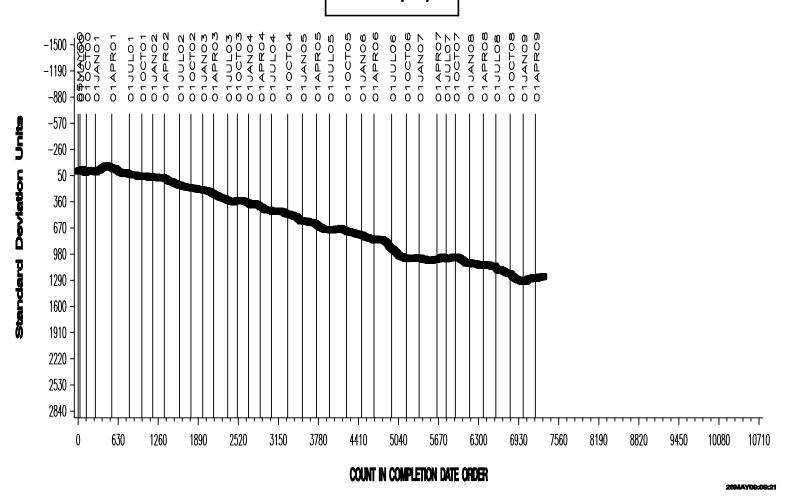
Average $\Delta\!/s$ by Lab and Treat Level

Treat Level	Lab	n	CFAYI
0.6	A	47	0.195
	В	29	-0.638
	G	24	1.271
	Industry	100	0.212
1.0	A	47	0.374
	В	29	-0.624
	G	23	1.113
	Industry	99	0.253
2.0	A	47	0.075
	В	29	-0.820
	G	24	0.772
	Industry	100	-0.017
3.0	A	45	0.279
	В	29	-0.770
	G	24	0.884
	Industry	98	0.117



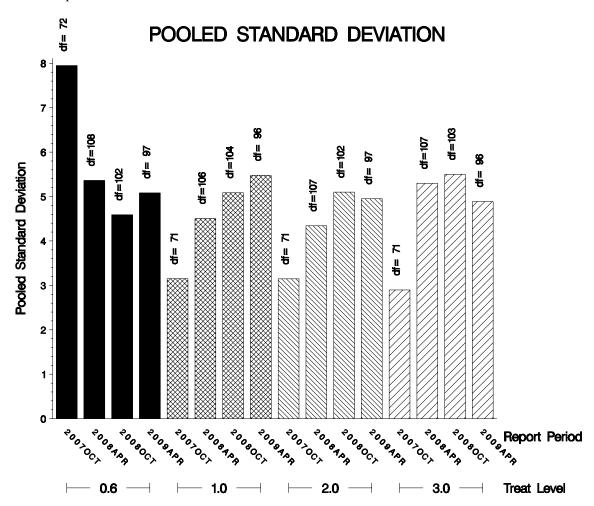
EOWT INDUSTRY OPERATIONALLY VALID DATA TEST RUN 20 - 25 ML CHANGE IN FLOWRATE AVERAGE

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. Where degrees of freedom equal zero, no bars are shown. This will occur where only one test was reported or where multiple tests are reported but all are on different oils. Periods showing no information had no tests reported.



STATUS OF REFERENCE OIL SUPPLY:

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

		@ T	MC
Oil	Samples @ Labs	Samples	Gallons
77	0	38	3.0
77-1	37	3114	239.8
78-1	35	1635	125.9
Total	72	4787	368.7

^{*} Future reblends of oils marked with an asterisk are not obtainable by TMC.

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.

At the December 8, 2008 EOWT Surveillance Panel meeting, the panel approved a motion to update and freeze the test targets for reference oil 77-1, based upon the data presented at that meeting. The new targets, which took effect on December 15, 2008, are shown in the following table:

	Reference Oil 77-1 Test Targets									
WT%	WT% N Mean Std Dev K					Target Range				
0.6	60	-19.70	3.68	1.96	-26.91	-12.49				
1.0	63	-13.46	4.22	1.96	-21.73	-5.20				
2.0	62	-14.67	4.06	1.96	-22.63	-6.72				
3.0	59	-14.74	4.34	1.96	-23.24	-6.24				

Note that the upper and lower limits shown in the "Target Range" block are the official test targets for the EOWT test; the target mean and standard deviation are shown for information purposes only. These new targets were first published in TMC Memo 08-077.

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/astm0409.doc/mem09-030.doc.doc

c: J. L. Zalar

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EOWT Surveillance Panel

ftp://ftp.astmtmc.cmu.edu/docs/bench/eowt/semiannualreports/eowt-04-2009.pdf

Distribution: email