

Test Monitoring Center

@ Carnegie Mellon University 6555 Penn Avenue, Pittsburgh, PA 15206, USA

http://astmtmc.cmu.edu 412-365-1000

MEMORANDUM: 15-044

DATE: November 20, 2015

TO: Yong-Li McFarland,

Chairwoman, Engine Oil Filterability Test Surveillance Panel

FROM: Michael T. Kasimirsky Michael J. Rasimisky

SUBJECT: EOWT Testing from April 1, 2015 through September 30, 2015

A total of 864 EOWT tests were reported to the Test Monitoring Center during the report period from April 1, 2015 through September 30, 2015.

Please find attached a summary of testing activity this period.

MTK/mtk/astm1015.doc/mem15-044.mtk.doc

cc: F. M. Farber J. A. Clark

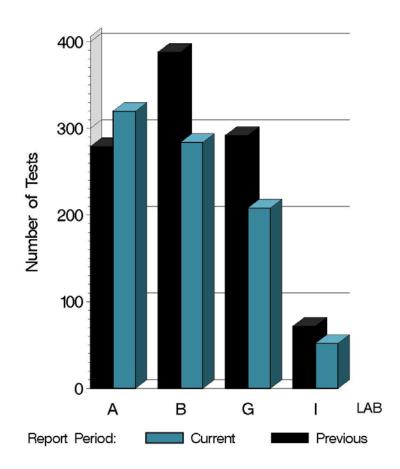
EOWT Surveillance Panel

ftp://ftp.astmtmc.cmu.edu/docs/bench/eowt/semiannualreports/eowt-10-2015.pdf

Distribution: email

	Reporting Data
Number of Labs	4

NUMBER OF TESTS REPORTED BY LAB AND REPORT PERIOD





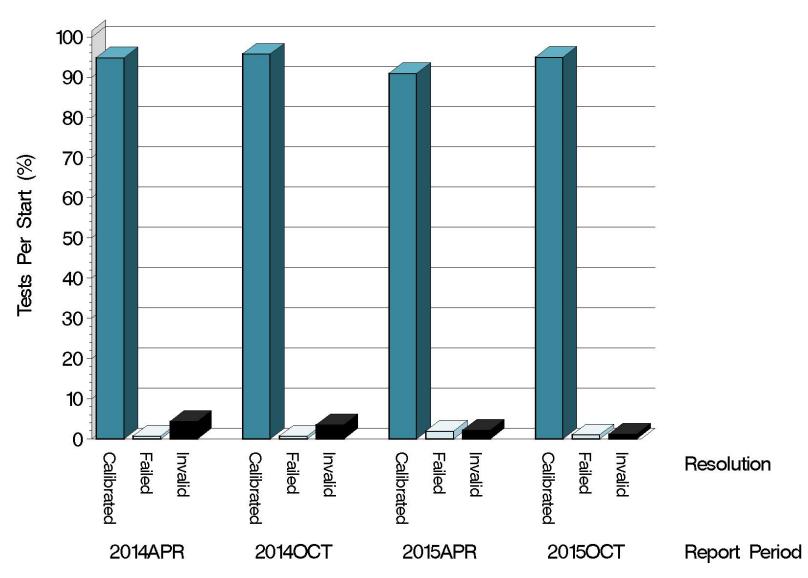


Test Distribution by Oil and Validity

		By Oil			В	y Trea	at Lev	Totals			
		77-2	77-3	78-2	79	0.6	1.0	2.0	3.0	This Period	Last Period
Accepted for Calibration	AC	392	0	34	395	206	206	205	204	821	893
Rejected Tests	OC	9	0	0	0	3	3	2	1	9	20
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	5	0	0	1	1	2	1	2	6	21
Unusable Calibration	МС	0	4	0	0	1	1	1	1	4	0
Acceptable Donated Tests	NI	0	24	0	0	6	6	6	6	24	37
Unacceptable Donated Tests	MI	0	0	0	0	0	0	0	0	0	11
Invalid Donated Tests	LI	0	0	0	0	0	0	0	0	0	4
Aborted Donated Tests	ΧI	0	0	0	0	0	0	0	0	0	0
Total	1	406	28	34	396	217	218	214	215	864	986



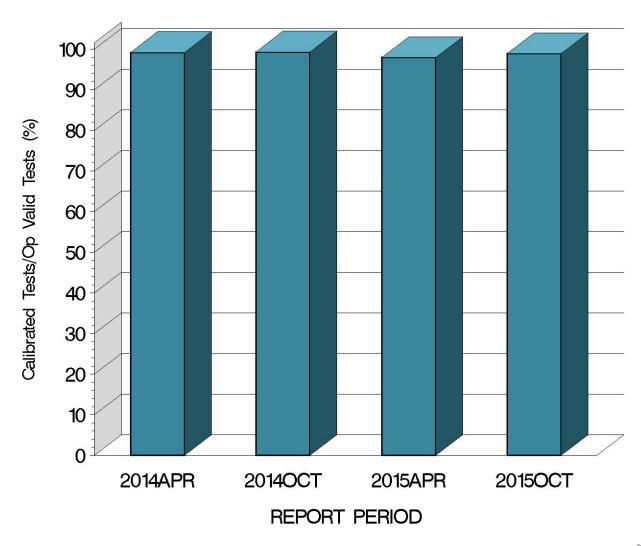
CALIBRATION ATTEMPT SUMMARY







OPERATIONALLY VALID TESTS MEETING ACCEPTANCE CRITERIA







CAUSES FOR LOST TESTS

			Oil			Validity			Loss Rate			
Lab	Cause		77-2	77-3	78-2	79	LC	RC/ MC	XC	Lost	Starts	%
Α	Sample S	pilled	1	0	0	0	0	0	1	1	320	0.3%
В	Sample S	pilled	0	0	0	1	0	0	1	1	284	0.3%
	Unusable	Oil	0	4	0	0	0	4	0	4	200	2%
G	Sample P	rep Error	4	0	0	0	0	0	4	4	208	2%
		Lost	5	4	0	1	0	4	6			
		Starts	406	28	34	396	864	864	864			
		%	1%	0%	0%	0.2%	0%	0.5%	0.7%			

Lost tests are calibration attempts that were either aborted or operationally invalid





Average Δ/s By Laboratory						
Treat Level	Lab	n	CFAYI			
0.6	Α	77	-0.175			
	В	71	0.088			
	G	47	0.810			
		14	1.007			
	Industry	209	0.215			
1.0	Α	77	-0.480			
	В	71	0.271			
	G	47	0.749			
		14	1.086			
	Industry	209	0.157			
2.0	Α	76	-0.274			
	В	71	0.174			
	G	47	0.669			
	I	12	1.140			
	Industry	206	0.178			
3.0	Α	77	-0.281			
	В	70	0.351			
	G	47	0.638			
	I	12	1.400			
	Industry	206	0.241			



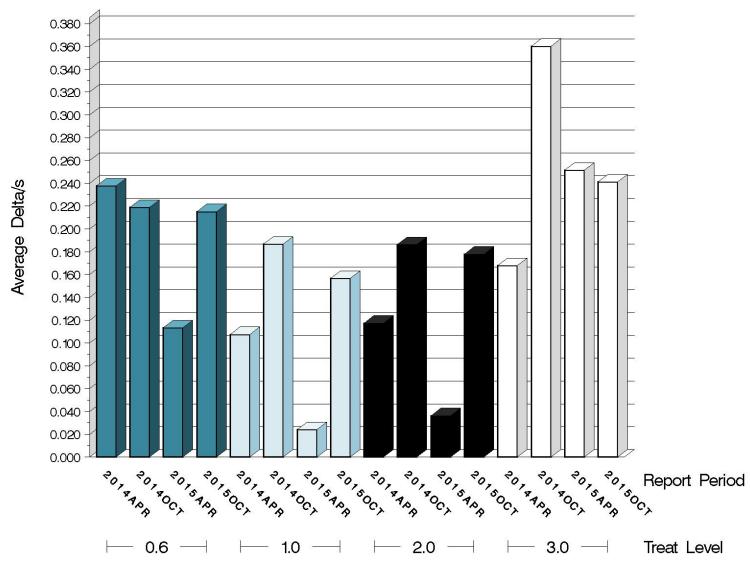
Individual test results can be found on the TMC Web Page at the following link:

ftp://ftp.astmtmc.cmu.edu/refdata/bench/eowt/data/





AVERAGE DELTA/S





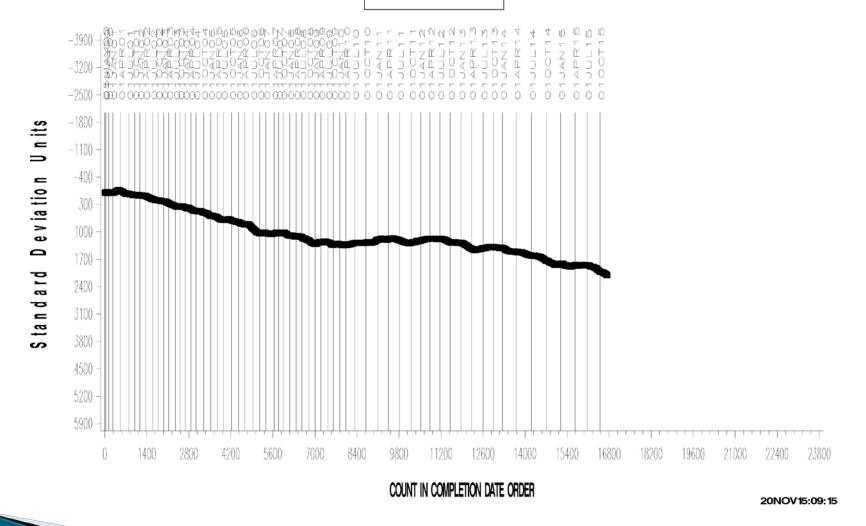


EOWT INDUSTRY OPERATIONALLY VALID DATA



20 - 25 ML CHANGE IN FLOWRATE AVG.

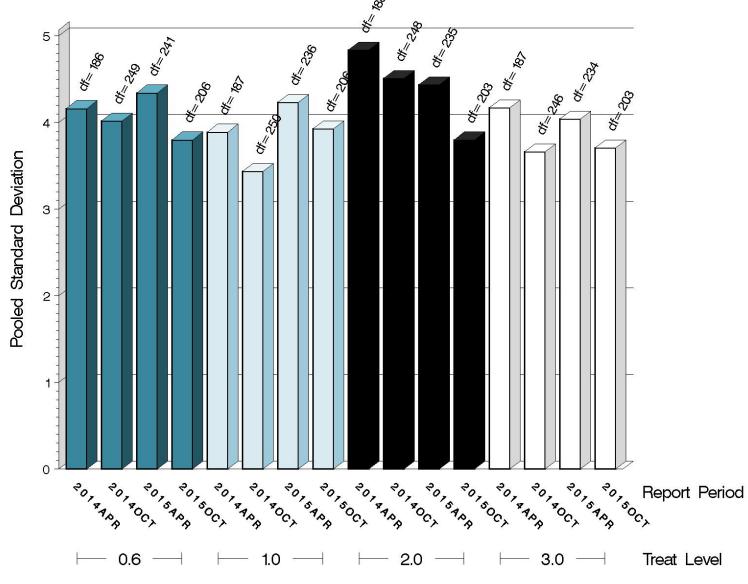
CUSUM Severity Analysis







POOLED STANDARD DEVIATION







EOWT (D 6794) SUMMARY OF SEVERITY & PRECISION

Severity

Over the course of this report period, CIFA severity, as measured by CUSUM plotting, is slightly severe.

Precision

Pooled s values for this period are 3.80 (0.6%), 3.93 (1.0%), 3.80 (2.0%), and 3.71 (3.0%).

Precision, as measured by pooled standard deviation, is better than previous periods, but still comparable to historical performance.





INFORMATION LETTERS

No EOWT Information Letters were issued this period.



STATUS OF REFERENCE OIL SUPPLY

		@ TMC				
Oil	Samples @ Labs	Samples (290 mL)	Gallons			
77-2	115	1,110	85.5			
77-3	48	11,607	893.8			
78-2	14	0	0.0			
79	120	12,290	946.4			
Total	297	25,007	1,925.7			

The TMC inventory of oil 78-2 is depleted.

The TMC has procured a reblend of oil 78-2, called reference oil 79, which has been introduced into EOWT testing.

The TMC has procured a reblend of oil 77-2, reference oil 77-3, which has not yet been introduced into EOWT at this time.



