



# Test Monitoring Center

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

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

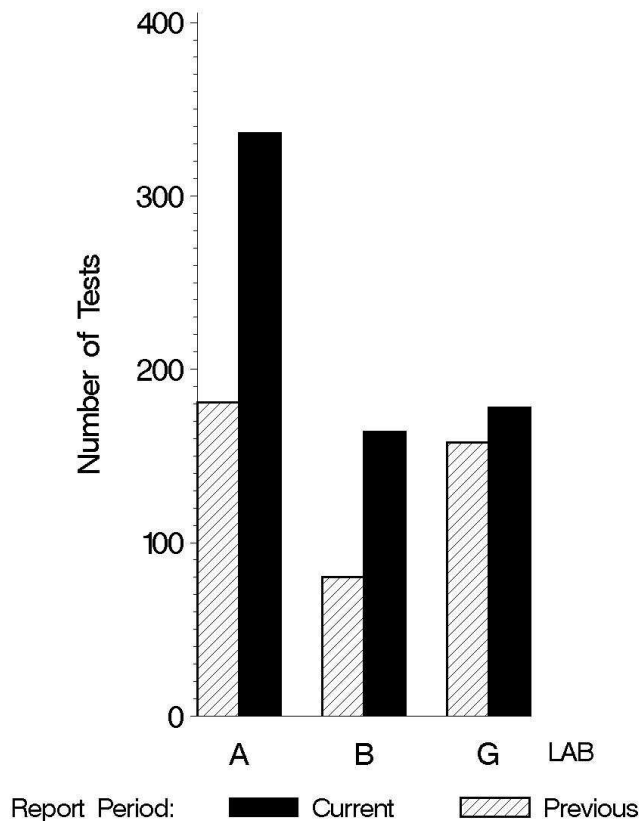
MEMORANDUM: 10-061  
DATE: November 23, 2010  
TO: Becky Grinfield,  
Chairman, Engine Oil Water Tolerance Surveillance Panel  
FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*  
SUBJECT: EOWT Testing from April 1, 2010 through September 30, 2010

A total of 678 EOWT tests were reported to the Test Monitoring Center during the period from April 1, 2010 through September 30, 2010. Following is a summary of testing activity this period.

	Reporting Data
Number of Labs	3

Tests reported this period were distributed as shown below:

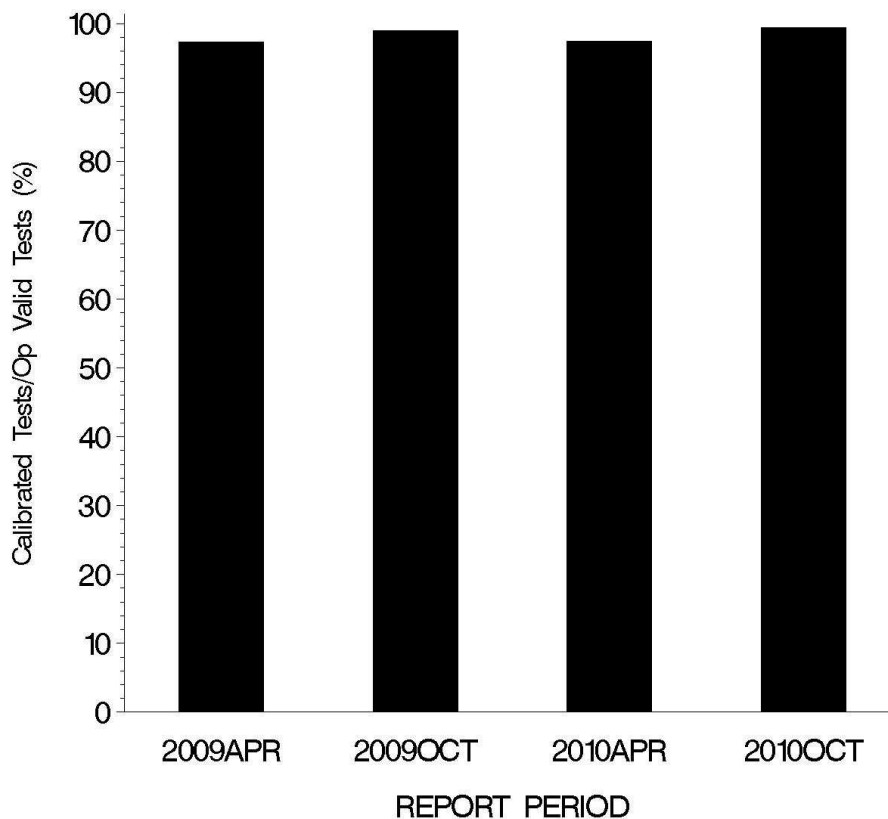
## NUMBER OF TESTS REPORTED BY LAB AND REPORT PERIOD



**Test Distribution by Oil, Treat Level and Validity**

		By Oil		By Treat Level				Totals	
		77-1	78-1	0.6	1.0	2.0	3.0	This Period	Last Period
Accepted for Calibration	AC	334	334	167	166	168	167	668	399
Accepted for Target Generation	AG	0	0	0	0	0	0	0	0
Rejected Tests	OC	3	2	3	0	1	1	5	11
Operationally Invalid (lab)	LC	1	0	1	0	0	0	1	4
Operationally Invalid (lab/TMC)	RC	0	0	0	0	0	0	0	0
Aborted Calibration	XC	4	0	1	1	1	1	4	5
<b>Total</b>		<b>342</b>	<b>336</b>	<b>172</b>	<b>167</b>	<b>170</b>	<b>169</b>	<b>678</b>	<b>419</b>

**OPERATIONALLY VALID TESTS  
MEETING ACCEPTANCE CRITERIA**



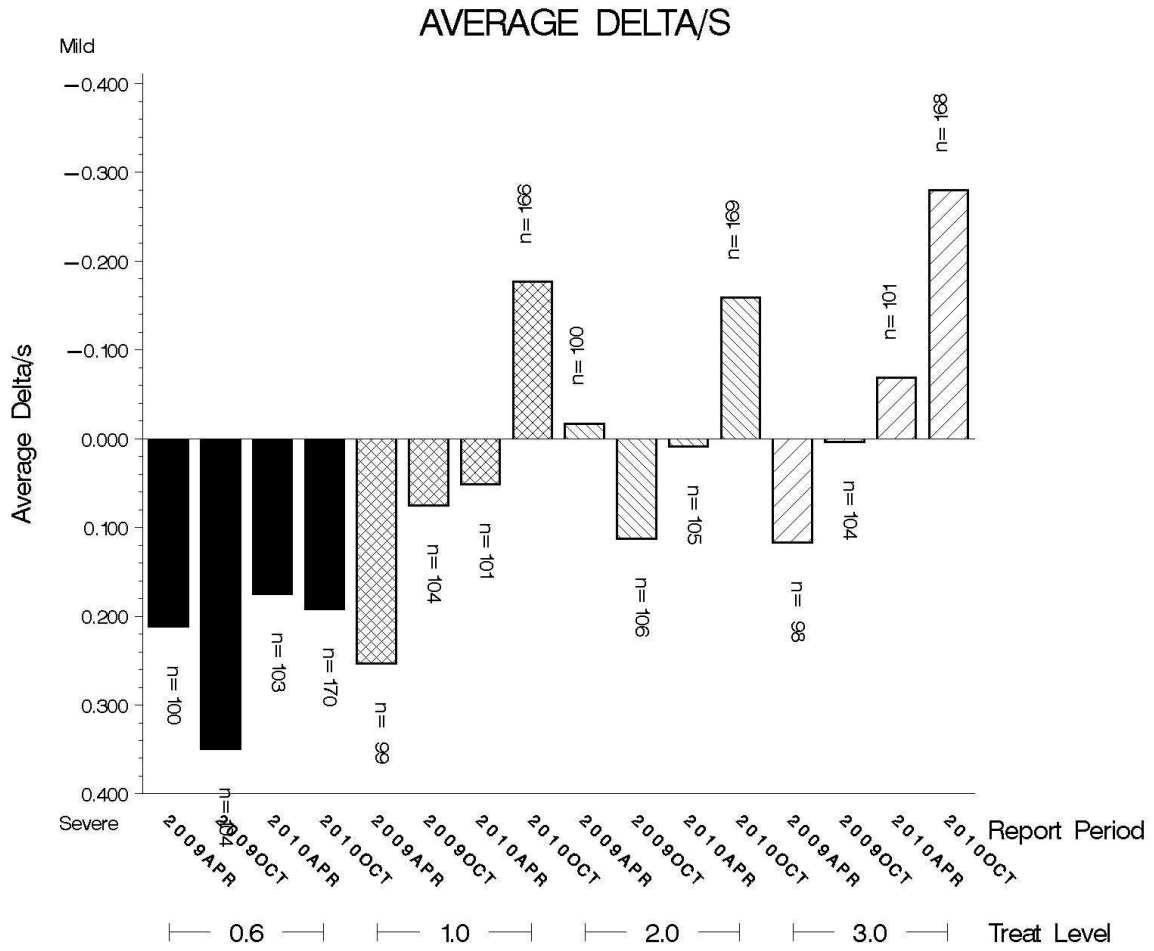
The above chart shows the percentage of accepted operationally valid tests.

Causes for Lost Tests

Lab	Cause	Oil		Validity			Loss Rate		
		77-1	78-1	LC	RC	XC	Lost	Starts	%
A	Sample Preparation Error	●		●			1	678	0.1%
G	Sample Preparation Error	●				●	4	678	0.6%
	Total	5	0	1	0	4			
	Starts	342	336	678	678	678			
	%	1%	0%	0.1%	0%	0.6%			

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

Treat Level	Lab	n	CFAYI
0.6	A	85	-0.191
	B	41	0.341
	G	44	0.791
	Industry	170	0.192
1.0	A	83	-0.249
	B	41	-0.503
	G	42	0.284
	Industry	166	-0.177
2.0	A	84	-0.243
	B	41	-0.584
	G	44	0.398
	Industry	169	-0.159
3.0	A	83	-0.347
	B	41	-0.756
	G	44	0.291
	Industry	168	-0.280

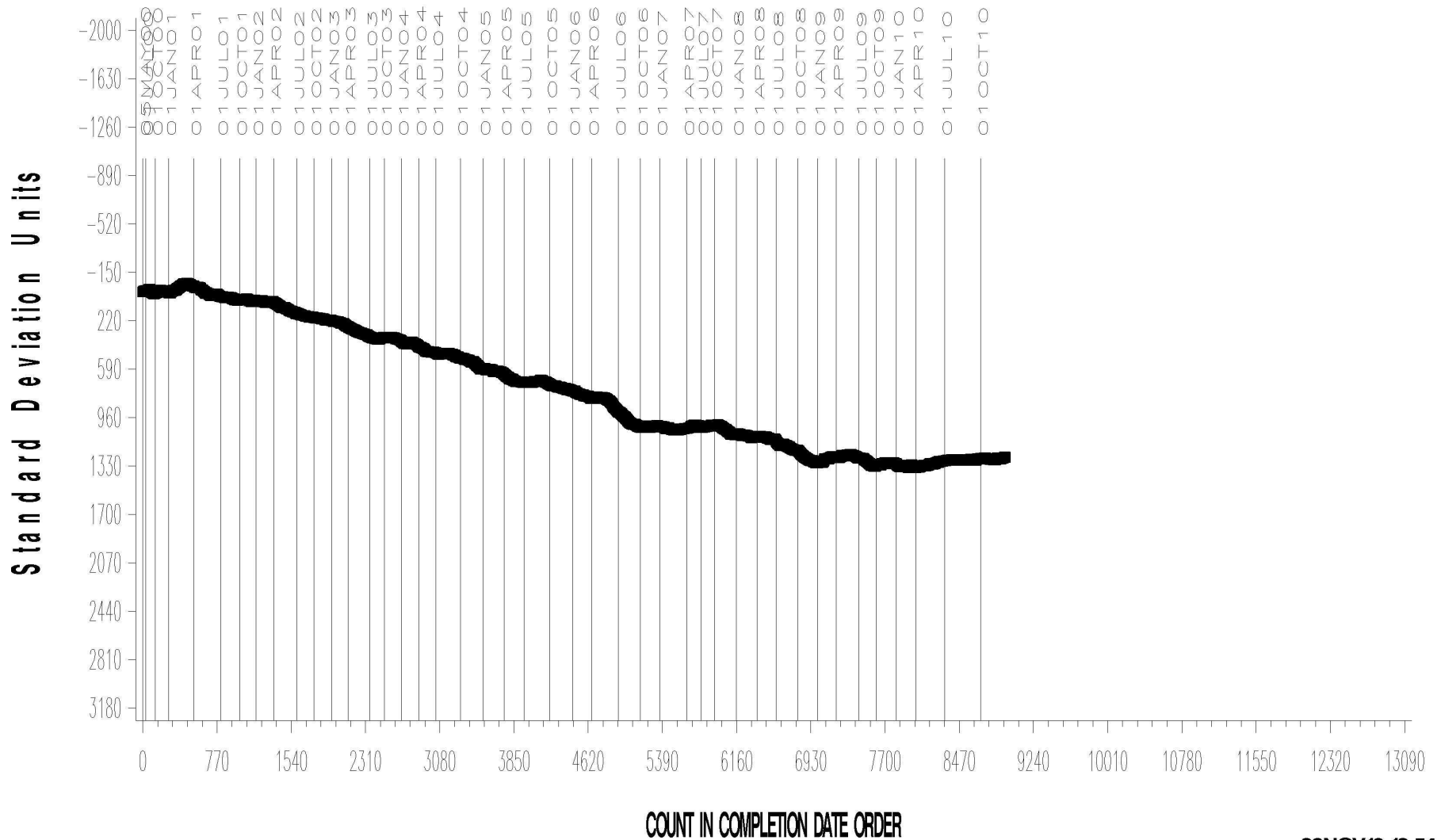


### EOWT INDUSTRY OPERATIONALLY VALID DATA



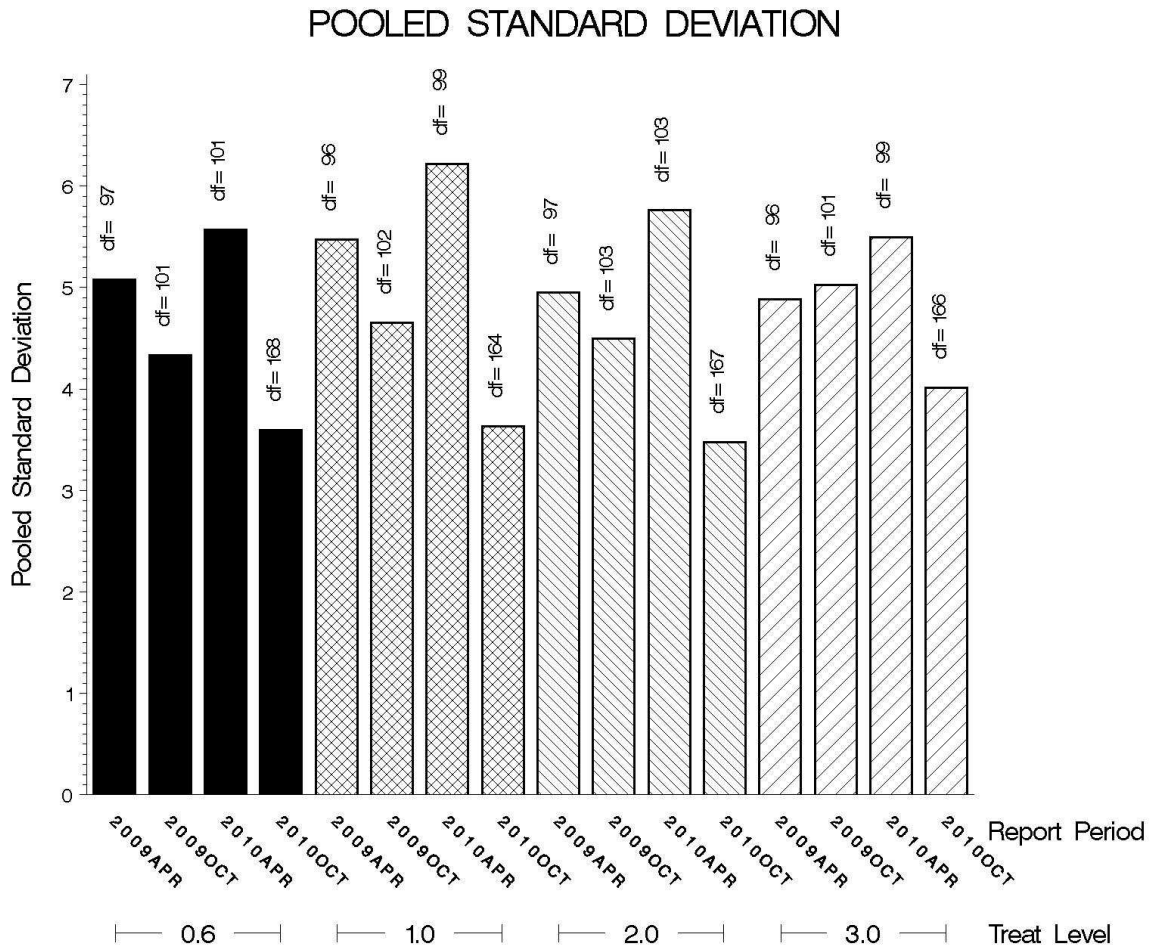
20 — 25 ML CHANGE IN FLOWRATE AVG.

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:

Oil	Cans @ Labs	@ TMC	
		Cans	Gallons
77-1	144	2103	162.0
78-1	156	311	24.0
Total	300	2414	186.0

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, has improved when compared to previous periods.

MTK/mtk/astm1010.doc/mem10-061.doc.doc

c: F. M. Farber

J. A. Clark

EOWT Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/bench/eowt/semiannualreports/eowt-10-2010.pdf>

Distribution: email