



## Test Monitoring Center

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

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

MEMORANDUM: 16-039

DATE: November 7, 2016

TO: Yong-Li McFarland,  
Chairwoman, Engine Oil Filterability Test Surveillance Panel

FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*

SUBJECT: EOFT Testing from April 1, 2016 through September 30, 2016

A total of 137 EOFT tests were reported to the Test Monitoring Center during the report period from April 1, 2016 through September 30, 2016.

Please find attached a summary of testing activity this period.

MTK/mtk/astm1016.doc/mem16-039.mtk.doc

cc: F. M. Farber

J. A. Clark

EOFT Surveillance Panel

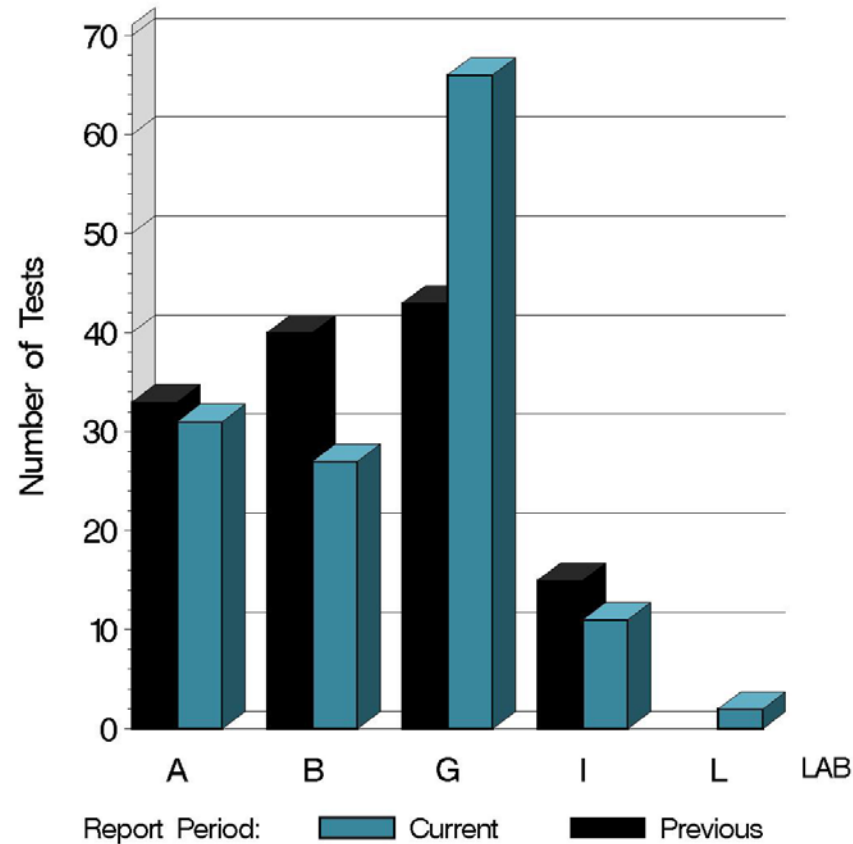
<ftp://ftp.astmtmc.cmu.edu/docs/bench/eoft/semiannualreports/eoft-10-2016.pdf>

Distribution: email

# EOFT (D 6795)

	Reporting Data
Number of Labs	5

NUMBER OF TESTS REPORTED  
BY LAB AND REPORT PERIOD



9:24:59 07NOV2016

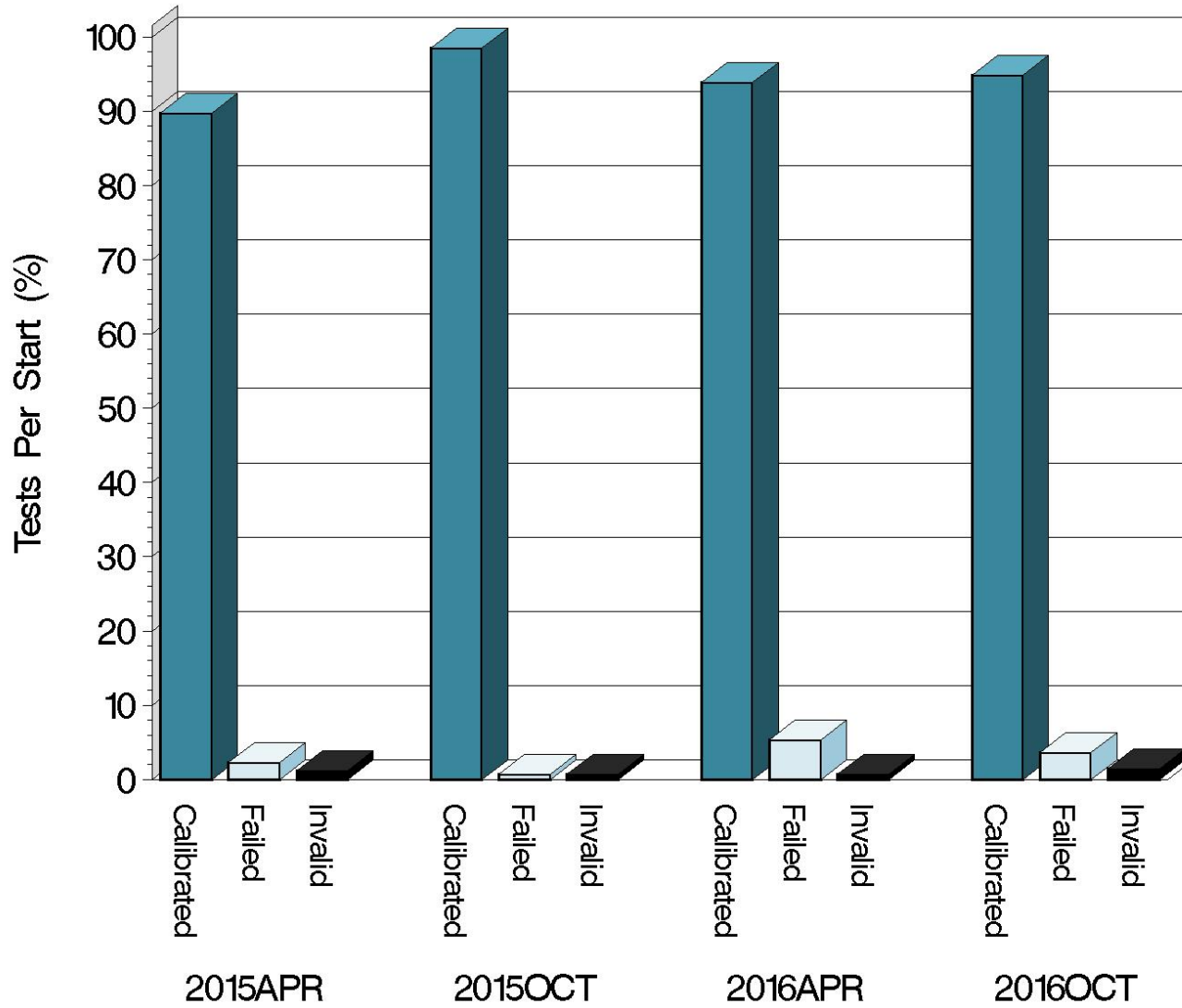
# EOFT (D 6795)

## Test Distribution by Oil and Validity

		Totals			
		78-2	79	This Period	Last Period
Accepted for Calibration	AC	2	128	130	122
Failed Acceptance Criteria	OC	0	5	5	7
Operationally Invalid (lab)	LC	0	0	0	0
Aborted Calibration	XC	0	2	2	1
Accepted for Target Generation	NI	0	0	0	0
Invalid Target Generation	LI	0	0	0	0
<b>Total</b>		<b>2</b>	<b>135</b>	<b>137</b>	<b>130</b>

# EOFT (D 6795)

## CALIBRATION ATTEMPT SUMMARY



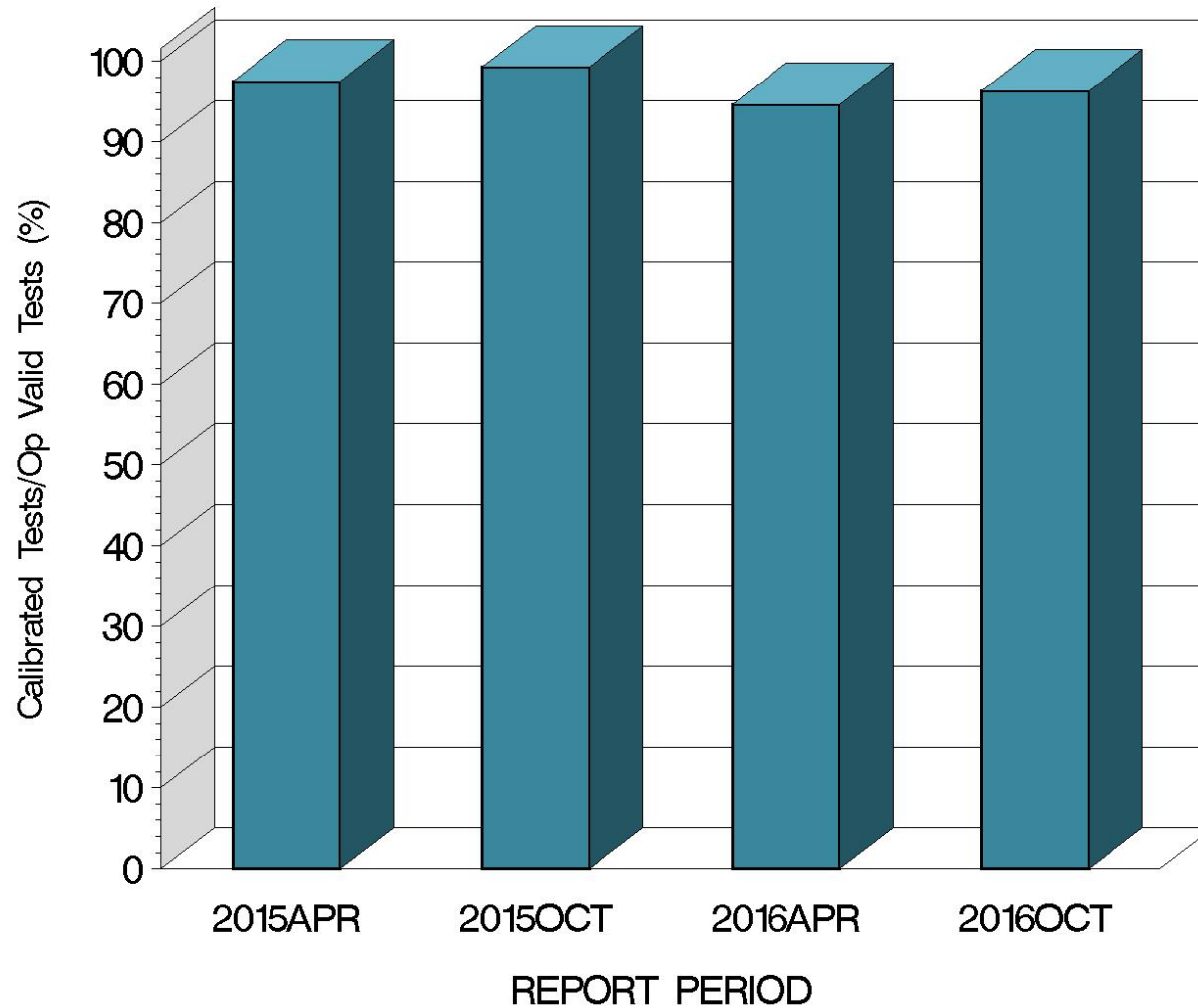
Resolution

Report Period

9:24:59 07NOV2016

# EOFT (D 6795)

OPERATIONALLY VALID TESTS  
MEETING ACCEPTANCE CRITERIA



9:24:59 07NOV2016

# EOFT (D 6795)

## CAUSES FOR LOST TESTS

Lab	Cause	Oil		Validity			Loss Rate		
		78-2	79	LC	RC	XC	Lost	Starts	%
G	Sample Prep Error	0	1	0	0	1	1	66	1.5
I	Sample Prep Error	0	1	0	0	1	1	11	9.1
	Lost	0	2	0	0	2			
	Starts	2	135	137	137	137			
	%	0	1.5	0	0	1.5			

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

# EOFT (D 6795)

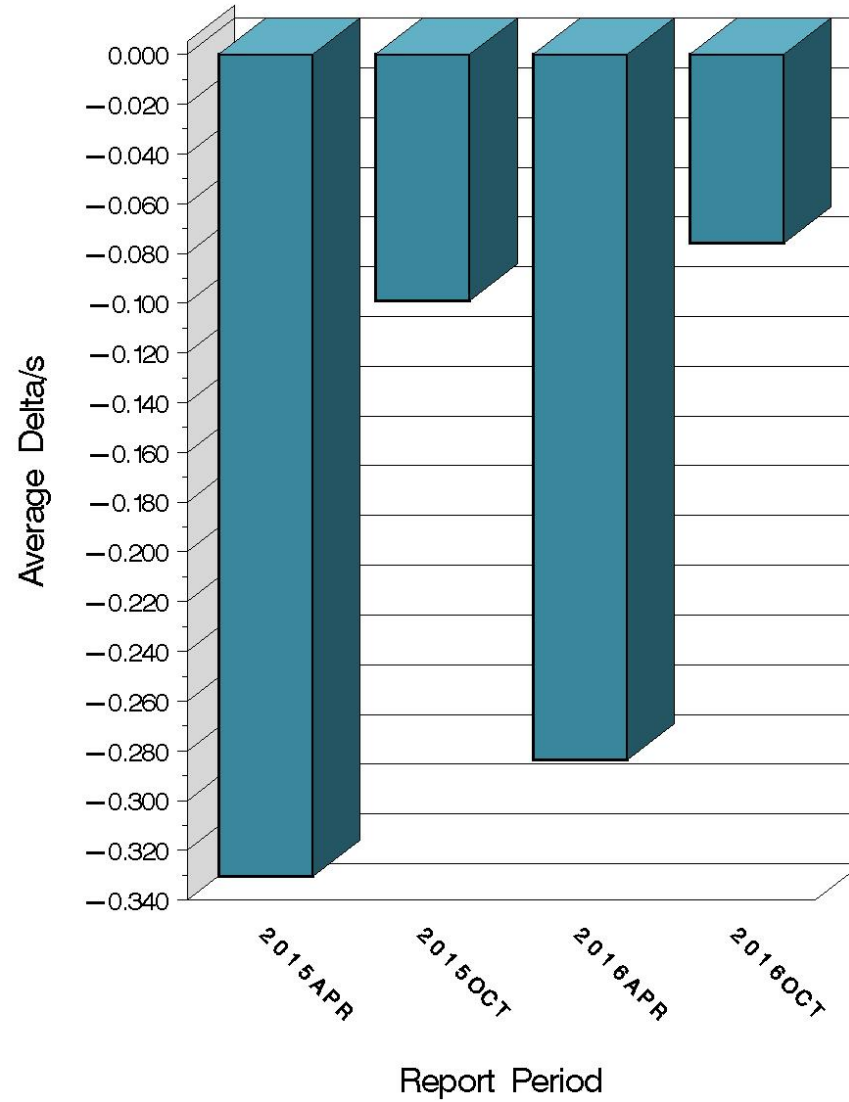
Average $\Delta$ /s By Laboratory		
Lab	n	CIFAYI
A	31	-0.489
B	27	0.757
G	65	-0.170
I	10	-0.147
L	2	-1.487
Industry	135	-0.076

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

<ftp://ftp.astmtmc.cmu.edu/refdata/bench/eoft/data/>

# EOFT (D 6795)

AVERAGE DELTA/S



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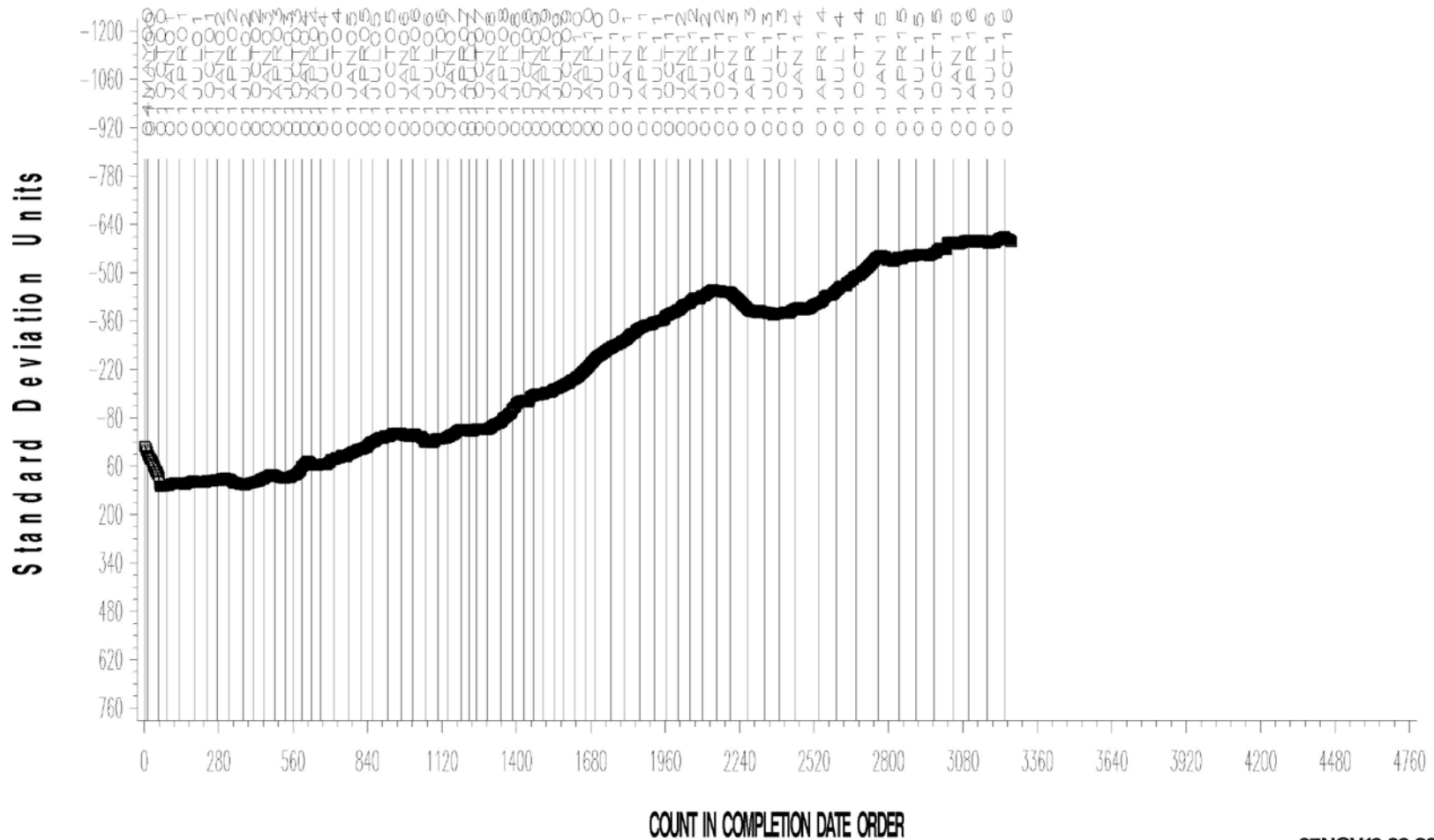
# EOFT (D 6795)

EOFT INDUSTRY OPERATIONALLY VALID DATA



20 – 25 ML CHANGE IN FLOWRATE AVERAGE (%)

CUSUM Severity Analysis

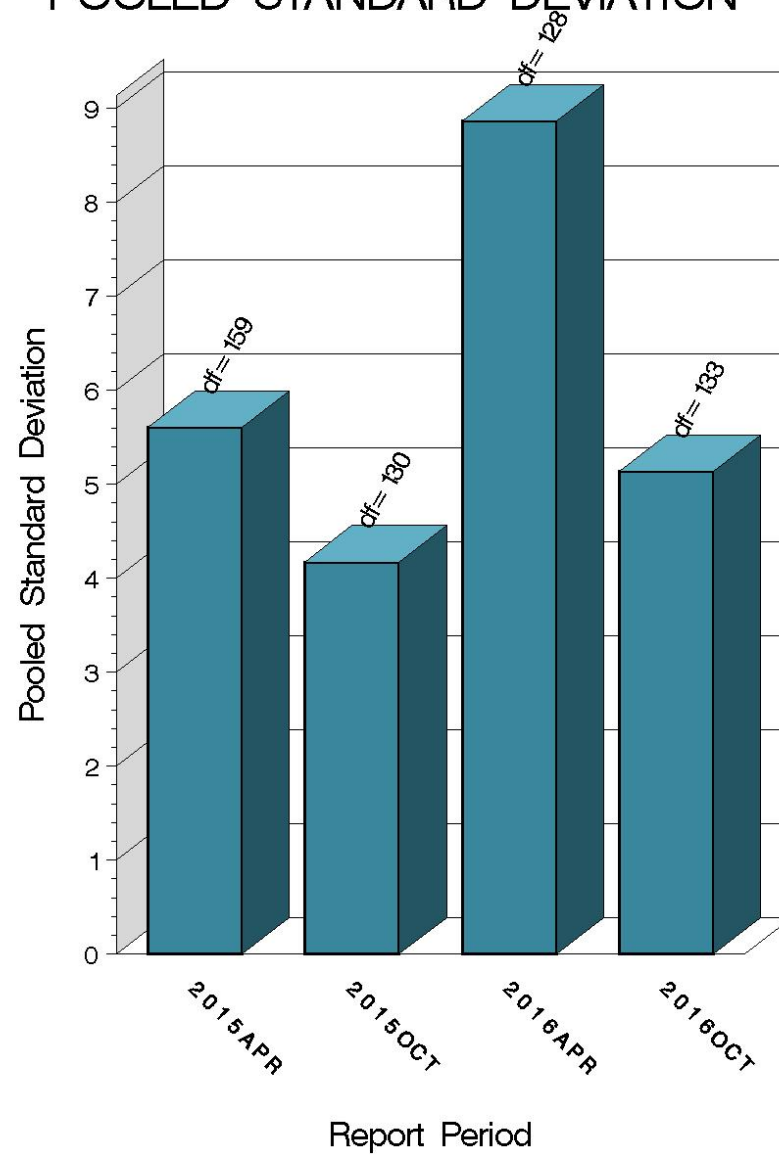


07NOV16:09:20



# EOFT (D 6795)

## POOLED STANDARD DEVIATION



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# EOFT (D 6795)

## SUMMARY OF SEVERITY & PRECISION

### Severity

Over the course of this report period, CIFA severity, as measured by CUSUM plotting, was very slightly mild for the period, and has resumed the mild trend that has existed for several years in the test.

### Precision

Pooled  $s$  for this period is 5.13.

Precision, as measured by pooled standard deviation, has degraded significantly compared to last period, but is still comparable to historical performance.

# EOFT (D 6795)

## INFORMATION LETTERS

No Information Letters were issued this period.

# EOFT (D 6795)

## STATUS OF REFERENCE OIL SUPPLY

Oil	Samples @ Labs	@ TMC	
		Samples (290 mL)	Gallons
78-2	0	0	0.0
79	112	11,063	851.9
Total	112	11,063	851.9

The TMC and laboratory inventory of oil 78-2 have been depleted.

Reference oil 78-2 cannot be re-blended. The TMC has procured a replacement oil, called reference oil 79, which has been introduced into EOFT.