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Test Monitoring Center

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

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

MEMORANDUM: 16-020

DATE: May 31, 2016

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

FROM: Michael T. Kasimirsky

SUBJECT: EOWT Testing from October 1, 2015 through March 31, 2016

A total of 796 EOWT tests were reported to the Test Monitoring Center during the report period from October 1, 2015 through March 31, 2016.

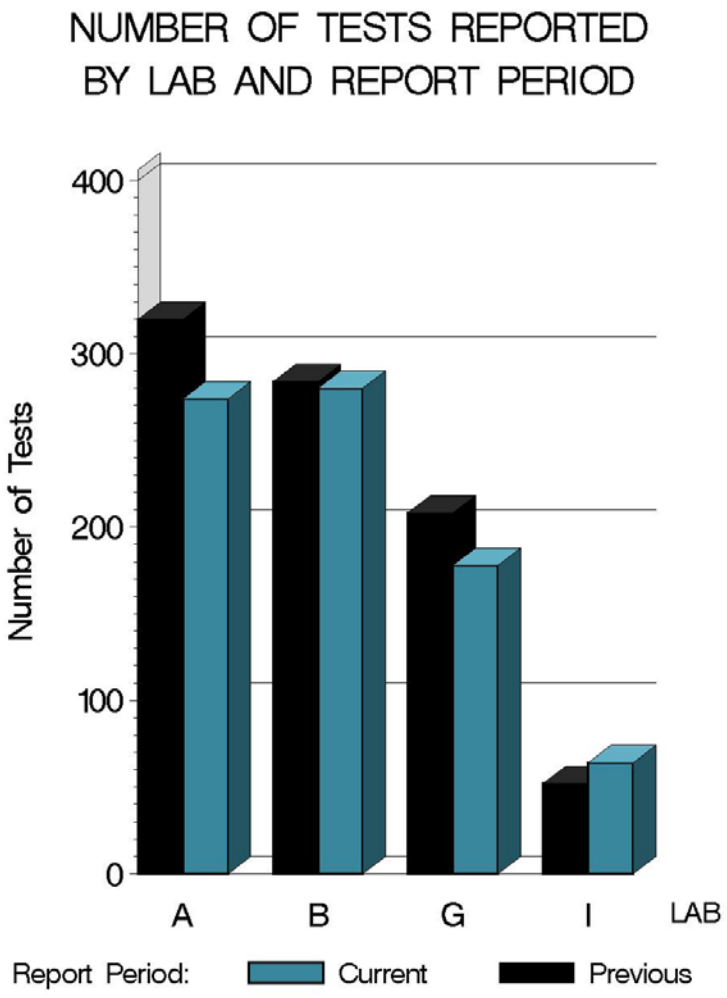
Please find attached a summary of testing activity this period.

MTK/mtk/astm0416.doc/mem16-020.mtk.doc
cc: F. M. Farber
J. A. Clark
EOWT Surveillance Panel
ftp://ftp.astmtmc.cmu.edu/docs/bench/eowt/semiannualreports/eowt-04-2016.pdf

Distribution: email

EOWT (D 6794)

	Reporting Data
Number of Labs	4



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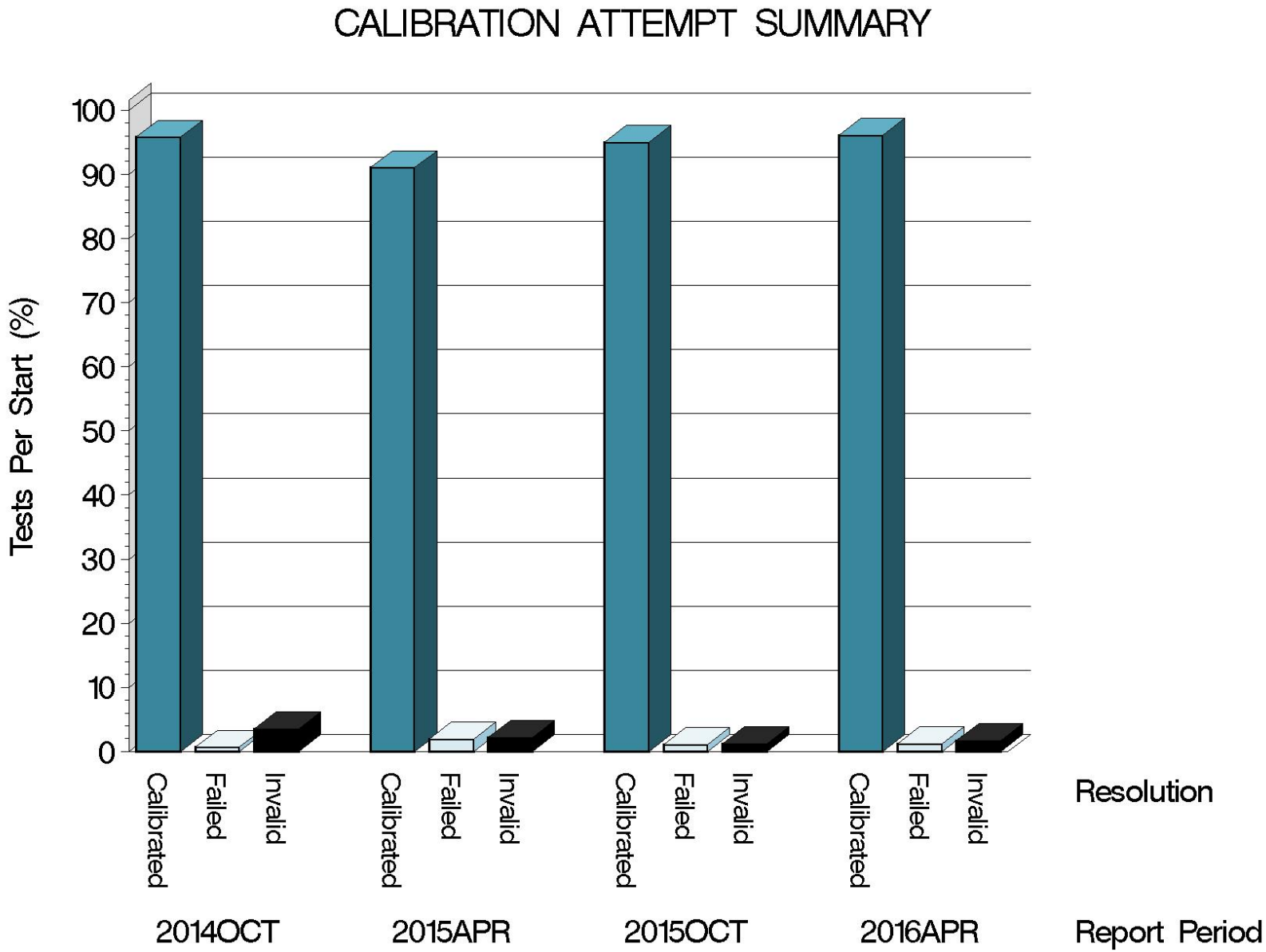
EOWT (D 6794)

Test Distribution by Oil and Validity

		By Oil				By Treat Level				Totals	
		77-2	77-3	78-2	79	0.6	1.0	2.0	3.0	This Period	Last Period
Accepted for Calibration	AC	375	0	22	368	189	191	193	192	765	821
Rejected Tests	OC	3	0	0	7	4	2	2	2	10	9
Operationally Invalid (lab)	LC	1	0	0	0	0	0	1	0	1	0
Operationally Invalid (lab/TMC)	RC	0	0	0	0	0	0	0	0	0	0
Aborted Calibration	XC	2	0	0	10	3	3	3	3	12	6
Unusable Calibration	MC	0	0	0	0	0	0	0	0	0	4
Acceptable Donated Tests	NI	0	8	0	0	2	2	2	2	8	24
Unacceptable Donated Tests	MI	0	0	0	0	0	0	0	0	0	0
Invalid Donated Tests	LI	0	0	0	0	0	0	0	0	0	0
Aborted Donated Tests	XI	0	0	0	0	0	0	0	0	0	0
Total		381	8	22	385	198	198	201	199	796	864

EOWT (D 6794)



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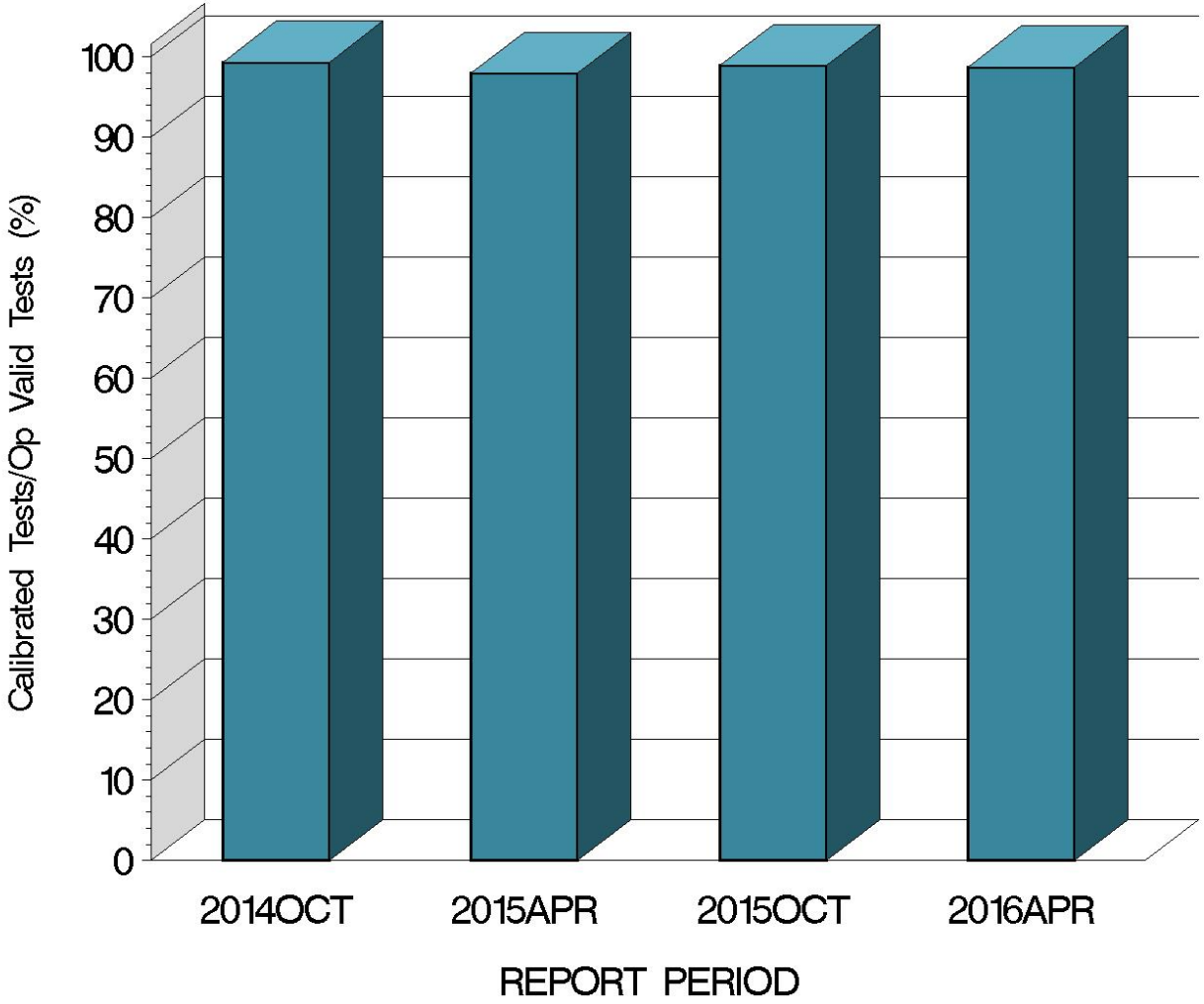
EOWT (D 6794)



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EOWT (D 6794)

CAUSES FOR LOST TESTS

		Oil				Validity			Loss Rate		
Lab	Cause	77-2	77-3	78-2	79	LC	RC/ MC	XC	Lost	Starts	%
A	Sample Prep Error	1	0	0	0	1	0	0	1	274	0.4%
B	Sample Prep Error	2	0	0	10	0	0	12	12	280	4.3%
	Lost	3	0	0	10	1	0	12			
	Starts	381	8	0	385	796	796	796			
	%	0.8%	0%	0%	2.6%	0.1%	0%	1.5%			

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

EOWT (D 6794)

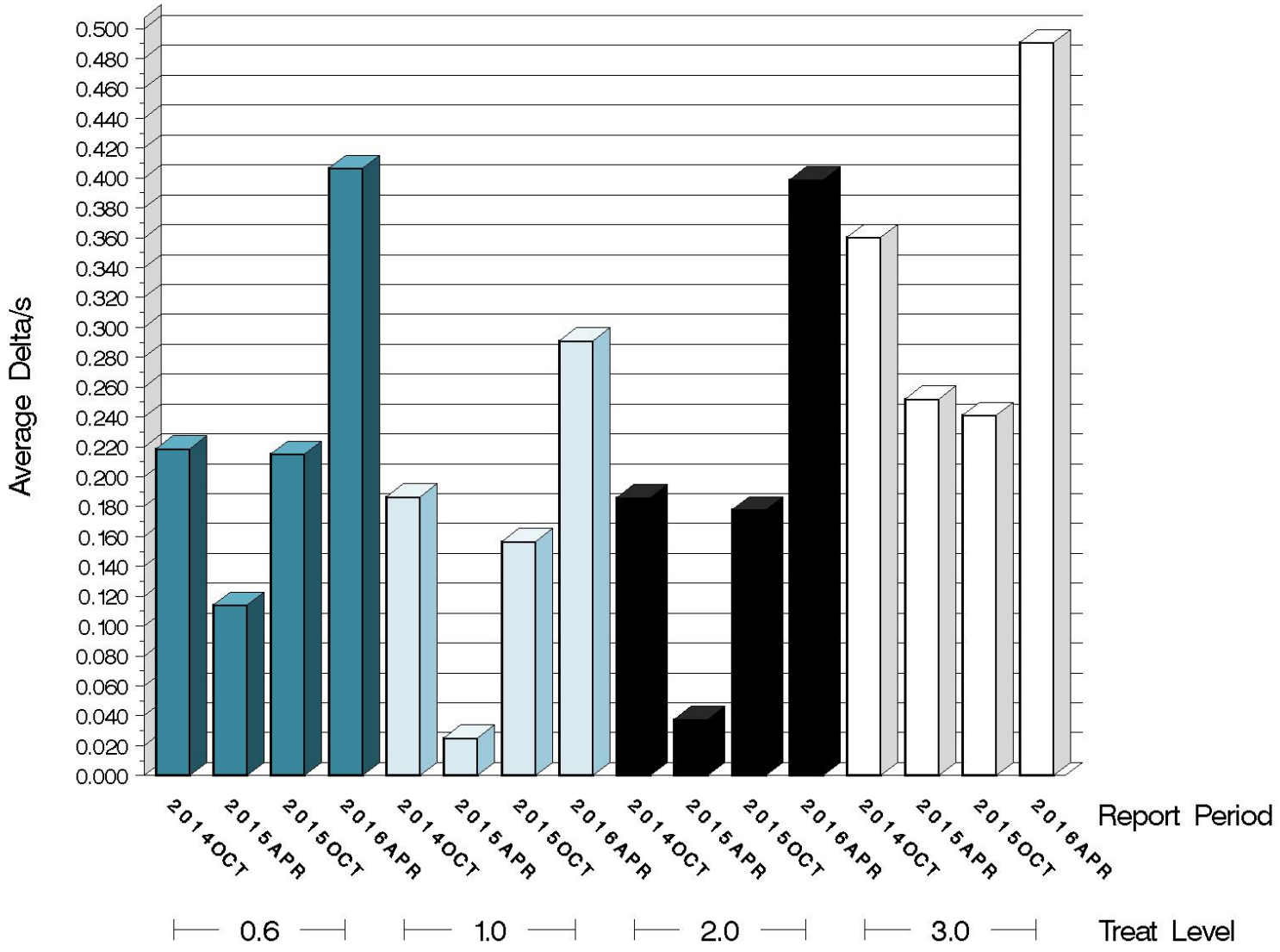
Average Δ/s By Laboratory			
Treat Level	Lab	n	CFAYI
0.6	A	68	-0.234
	B	67	0.653
	G	45	0.930
	I	13	0.671
	Industry	193	0.406
1.0	A	68	-0.282
	B	67	0.441
	G	45	0.830
	I	13	0.645
	Industry	193	0.291
2.0	A	69	0.019
	B	67	0.461
	G	44	0.739
	I	15	0.867
	Industry	195	0.399
3.0	A	68	-0.270
	B	67	0.773
	G	44	1.033
	I	15	1.083
	Industry	194	0.490

EOWT (D 6794)

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

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

EOWT (D 6794)



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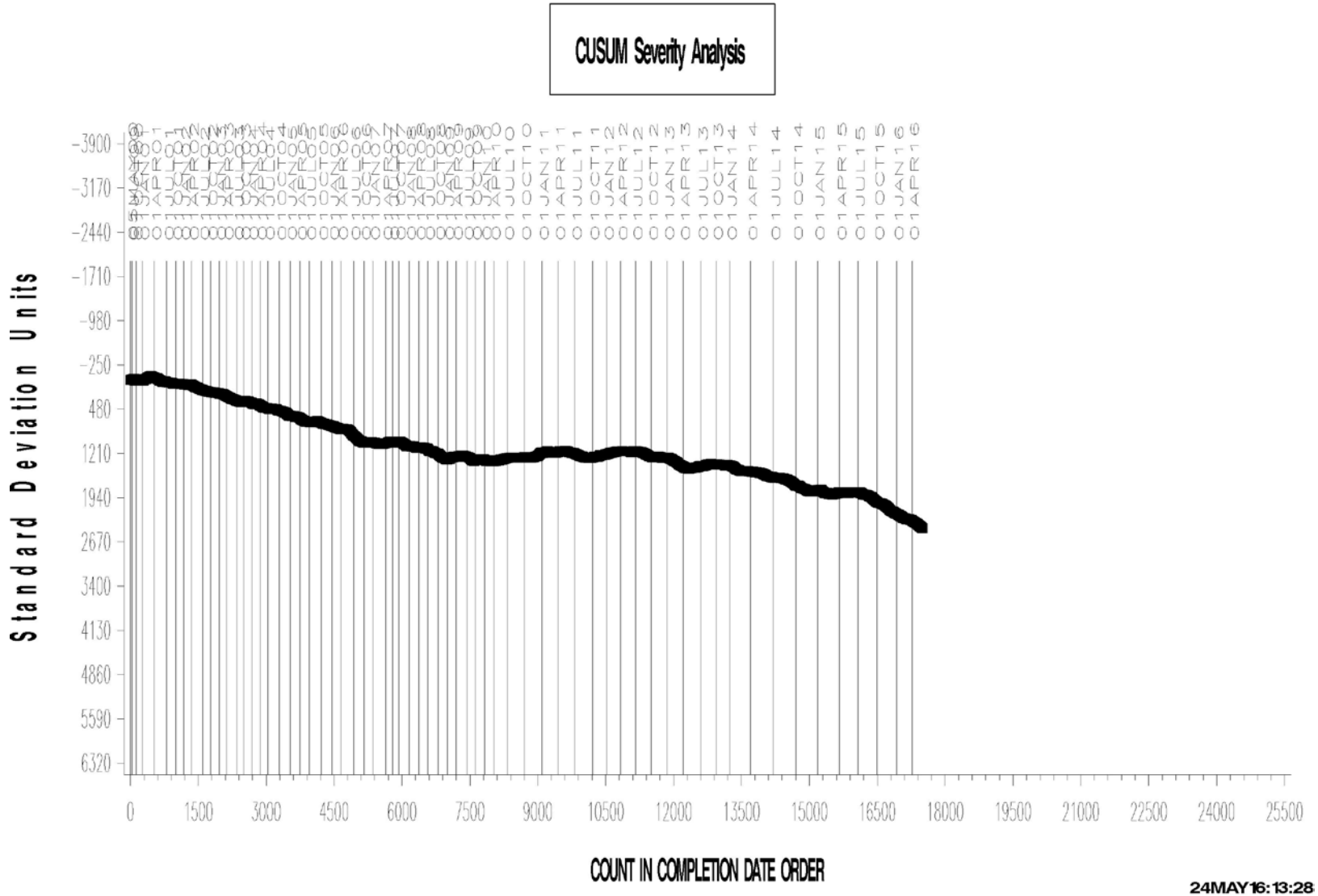
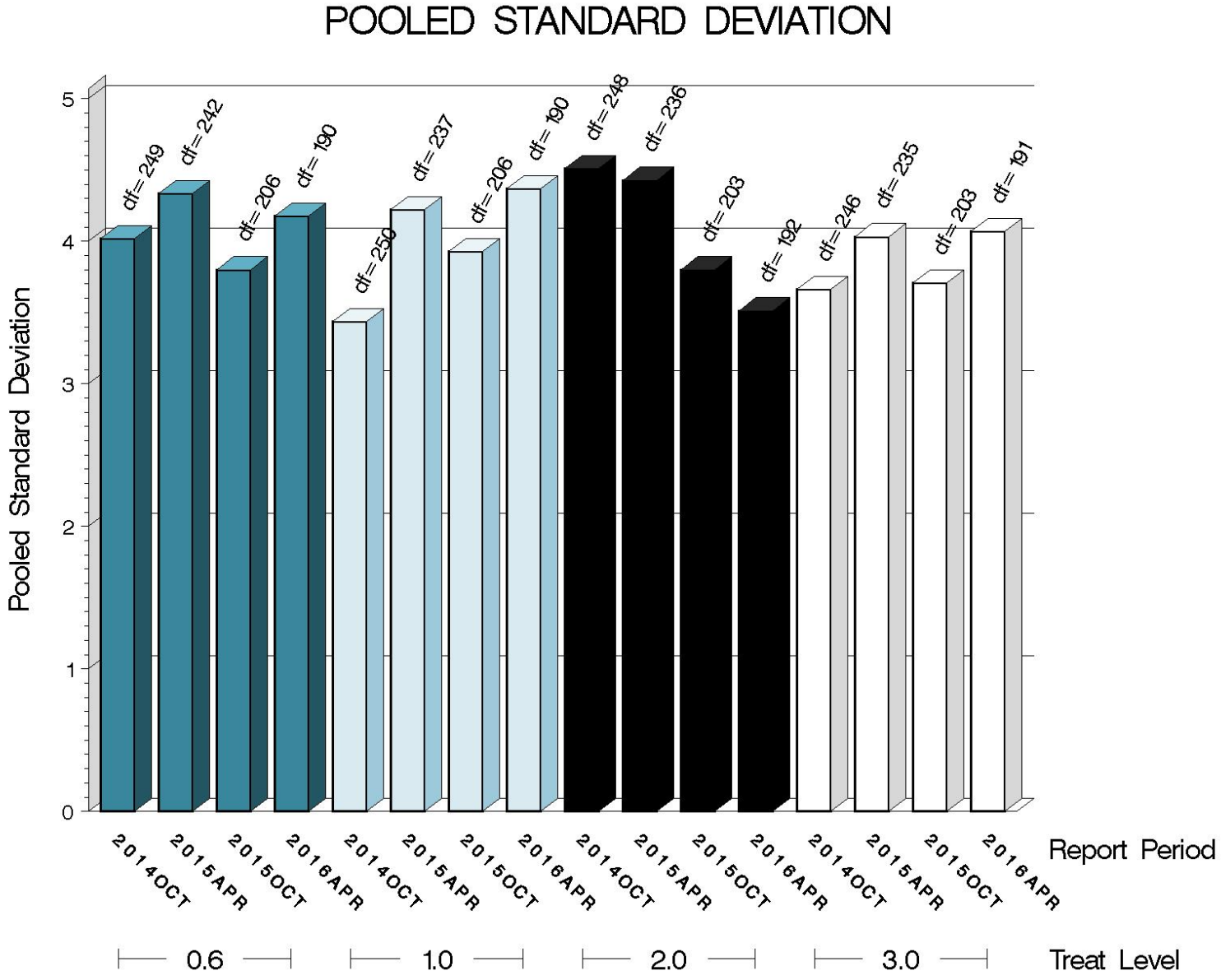
EOWT INDUSTRY OPERATIONALLY VALID DATA

20 — 25 ML CHANGE IN FLOWRATE AVG.



EOWT (D 6794)



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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 4.18 (0.6%), 4.37 (1.0%), 3.52 (2.0%), and 4.07 (3.0%). Precision, as measured by pooled standard deviation, is worse than previous periods, but still comparable to historical performance.

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INFORMATION LETTERS
No EOWT Information Letters were issued this period.

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STATUS OF REFERENCE OIL SUPPLY

		@ TMC	
Oil	Samples @ Labs	Samples (290 mL)	Gallons
77-2	107	794	61.2
77-3	36	11,607	893.8
78-2	6	0	0.0
79	124	11,810	909.4
Total	273	24,211	1,864.4

The TMC inventory of oil 78-2 is 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 EOWT.

The TMC has procured a reblend of oil 77-2, reference oil 77-3, which is being introduced into EOWT at this time.