



Test Monitoring Center

@ Carnegie Mellon University
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<http://astmtmc.cmu.edu>
412-365-1000

MEMORANDUM: 17-044

DATE: November 15, 2017

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

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

SUBJECT: EOWT Testing from April 1, 2017 through September 30, 2017

A total of 977 EOWT tests were reported to the Test Monitoring Center during the report period from April 1, 2017 through September 30, 2017.

Please find attached a summary of testing activity this period.

MTK/mtk/astm1017.doc/mem17-044.mtk.doc

cc: F. M. Farber

J. A. Clark

EOWT Surveillance Panel

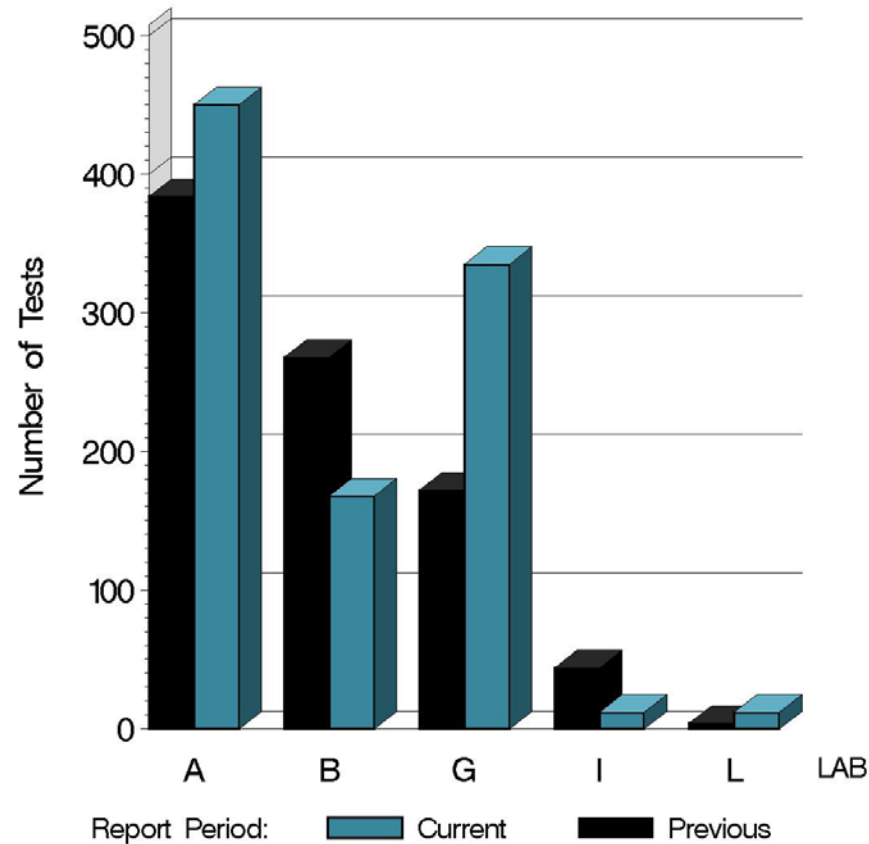
<http://www.astmtmc.cmu.edu/docs/bench/eowt/semiannualreports/eowt-10-2017.pdf>

Distribution: email

EOWT (D 6794)

Reporting Data	
Number of Labs	5

NUMBER OF TESTS REPORTED
BY LAB AND REPORT PERIOD



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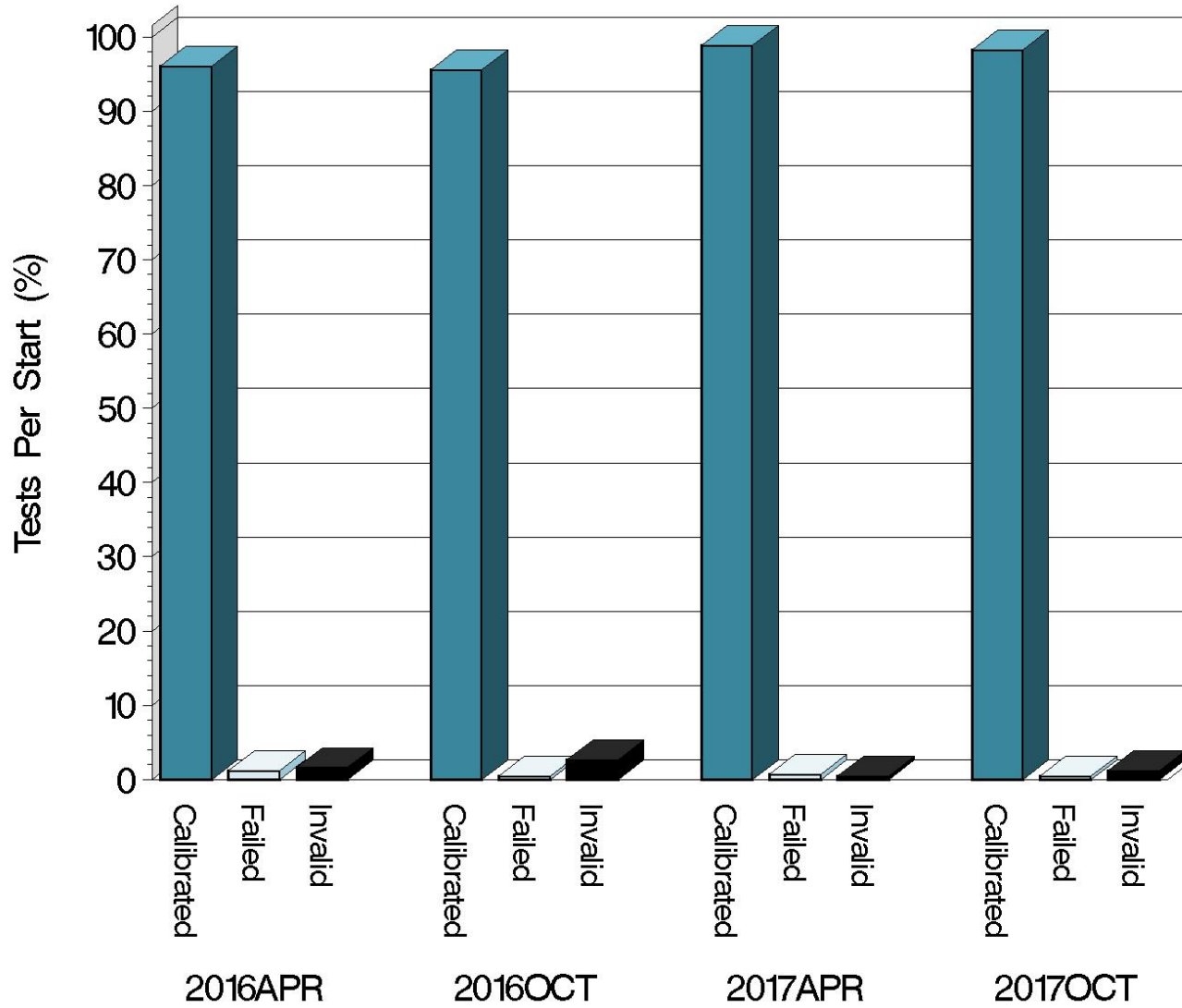
EOWT (D 6794)

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	7	493	0	460	240	241	240	239	960	862
Rejected Tests	OC	1	3	0	1	1	0	3	1	5	6
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	8	0	4	3	3	3	3	12	4
Unusable Calibration	MC	0	0	0	0	0	0	0	0	0	0
Acceptable Donated Tests	NI	0	0	0	0	0	0	0	0	0	0
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		8	504	0	465	244	244	246	243	977	872

EOWT (D 6794)

CALIBRATION ATTEMPT SUMMARY



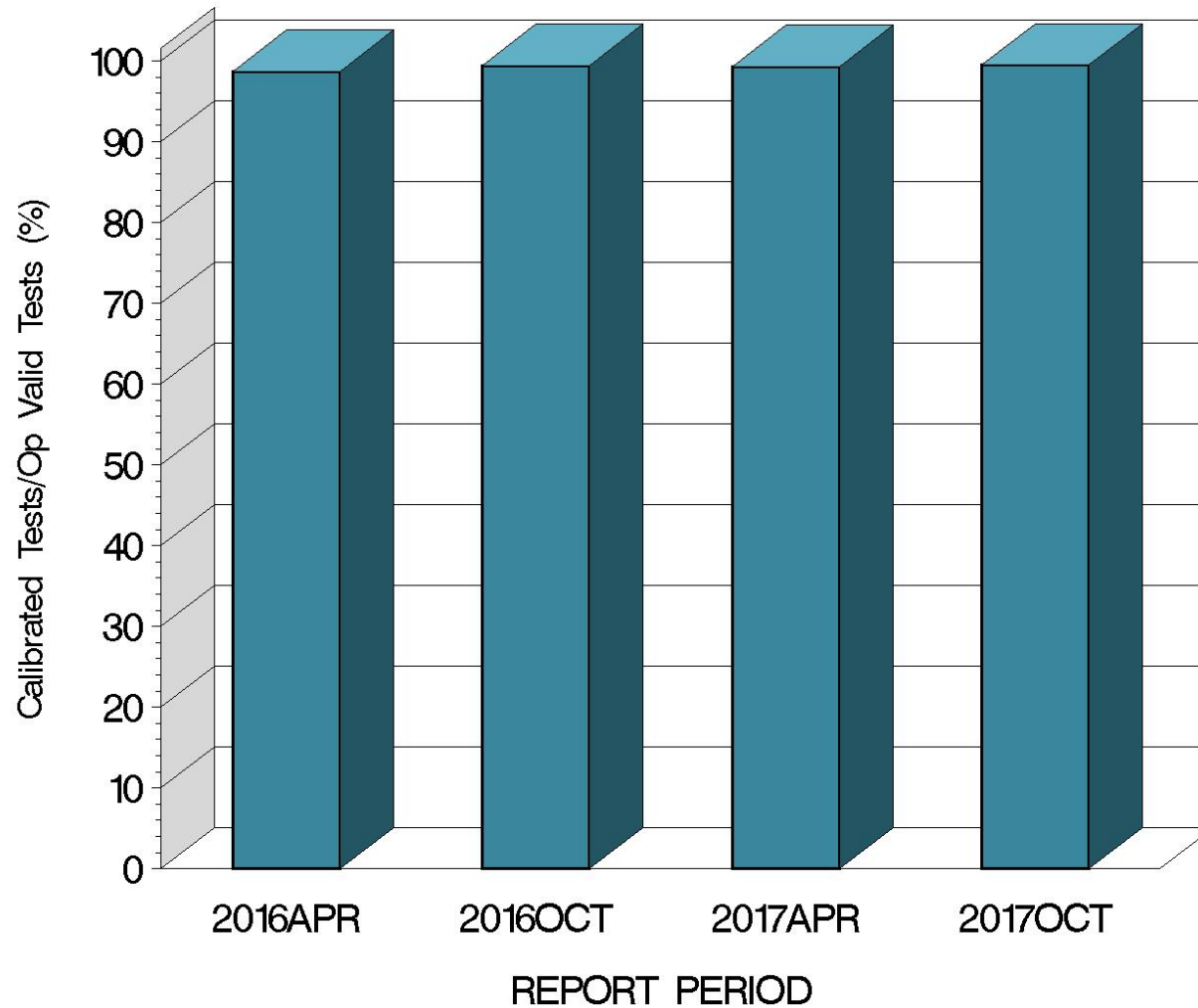
Resolution

Report Period

14:18:17 15NOV2017

EOWT (D 6794)

OPERATIONALLY VALID TESTS
MEETING ACCEPTANCE CRITERIA



14:18:17 15NOV2017

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	%
B	Sample Prep Error	0	4	0	4	0	0	8	8	168	4.8
	Computer Failure	0	4	0	0	0	0	4	4	168	2.4
	Lost	0	8	0	4	0	0	12			
	Starts	8	504	0	465	977	977	977			
	%	0	1.6	0	0.9	0	0	1.2			

1

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	112	-0.629
	B	39	0.384
	G	84	0.662
	I	3	0.165
	L	3	0.507
	Industry	241	0.009
1.0	A	112	-0.297
	B	39	0.647
	G	84	0.940
	I	3	0.507
	L	3	0.696
	Industry	241	0.310
2.0	A	114	-0.248
	B	39	0.717
	G	84	0.793
	I	3	1.265
	L	3	1.733
	Industry	243	0.310
3.0	A	112	-0.031
	B	39	0.748
	G	83	0.680
	I	3	0.539
	L	3	2.505
	Industry	240	0.380

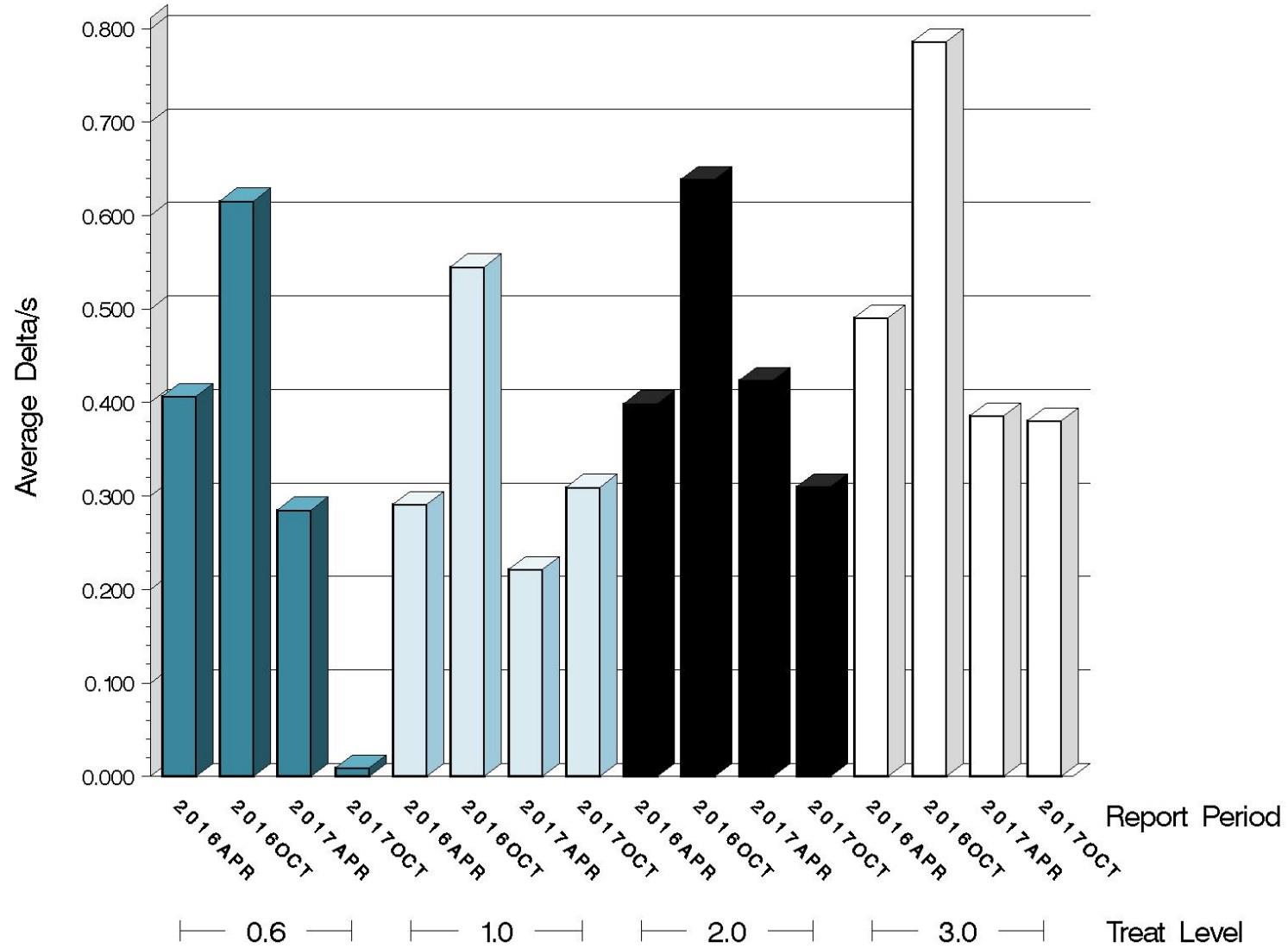
EOWT (D 6794)

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

<http://www.astmtmc.cmu.edu/refdata/bench/eowt/data/>

EOWT (D 6794)

AVERAGE DELTA/S



14:18:17 15NOV2017

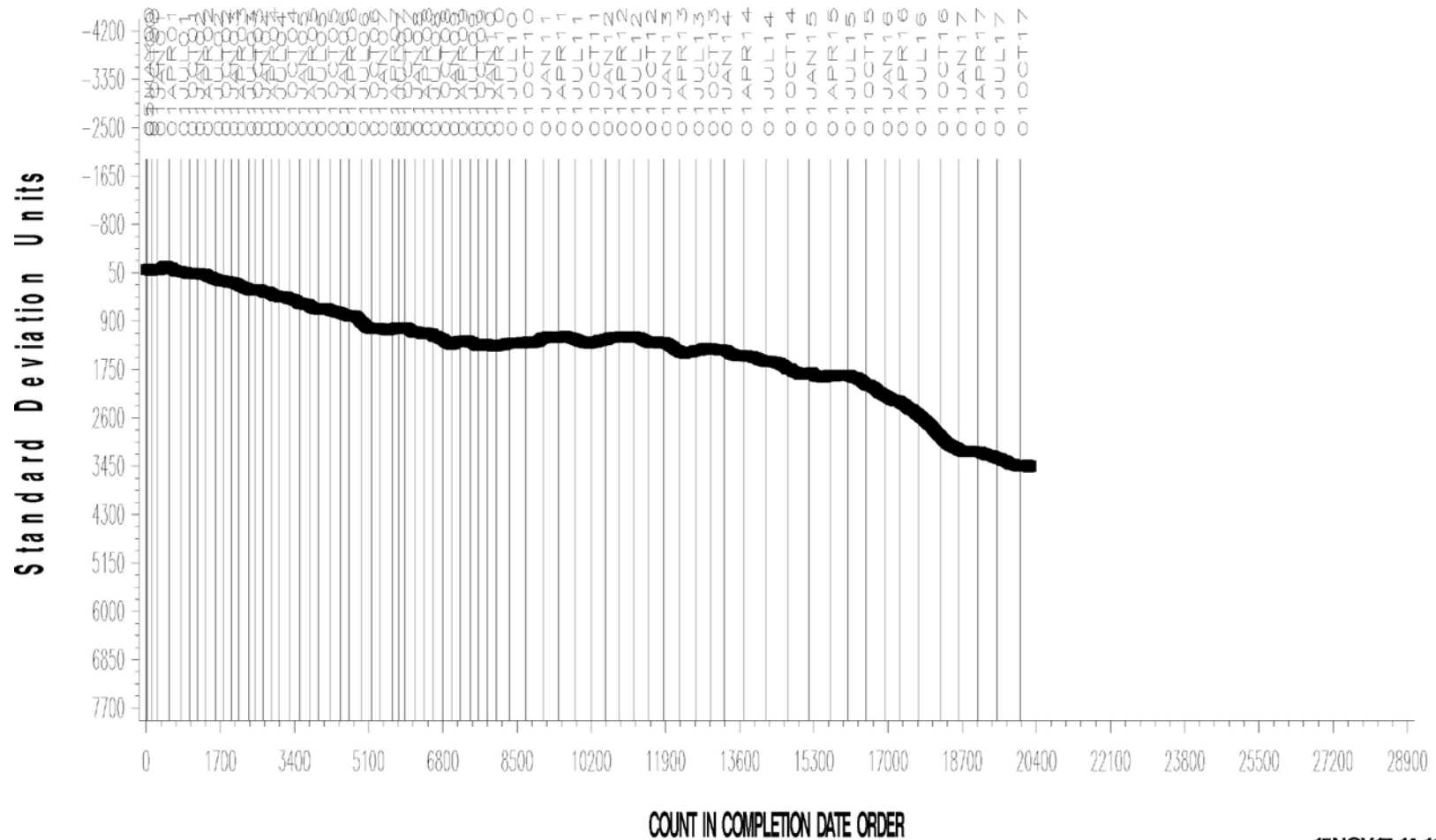
EOWT (D 6794)

EOWT INDUSTRY OPERATIONALLY VALID DATA



20 — 25 ML CHANGE IN FLOWRATE AVG.

CUSUM Severity Analysis

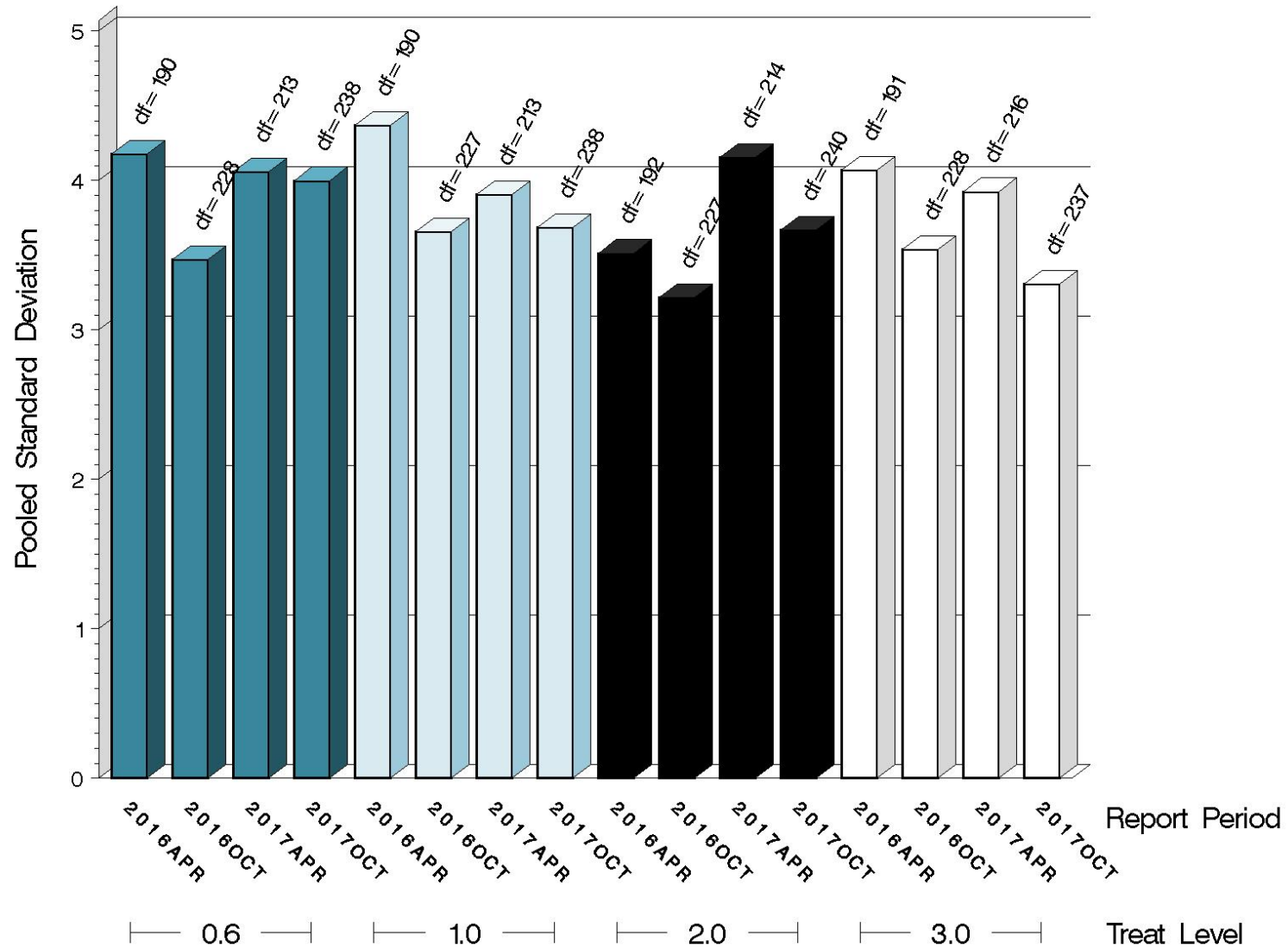


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POOLED STANDARD DEVIATION



14:18:17 15NOV2017

EOWT (D 6794)

SUMMARY OF SEVERITY & PRECISION

Severity

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

Precision

Pooled s values for this period are 4.00 (0.6%), 3.69 (1.0%), 3.67 (2.0%), and 3.31 (3.0%).

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

EOWT (D 6794)

INFORMATION LETTERS

No EOWT Information Letters were issued this period.

EOWT (D 6794)

STATUS OF REFERENCE OIL SUPPLY

Oil	Samples @ Labs	@ TMC	
		Samples (290 mL)	Gallons
77-2	1	0	0.0
77-3	79	10,736	826.7
78-2	0	0	0.0
79	98	9,805	755.0
Total	178	20,541	1,581.7

The TMC inventory of oils 77-2 and 78-2 are depleted. A single sample of reference oil 77-2 remains at one lab.

The TMC has procured a reblend of oil 77-2, reference oil 77-3, which has been introduced into EOWT.

The TMC has procured a replacement for oil 78-2, reference oil 79, which has been introduced into EOWT.