



Test Monitoring Center

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

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

MEMORANDUM: 14-029
DATE: November 11, 2014
TO: Gil Reinhard, Chairman, CBT Surveillance Panel
FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*
SUBJECT: CBT Testing from April 1, 2014 through September 30, 2014

A total of 30 CBT tests were reported to the Test Monitoring Center during the report period from April 1, 2014 through September 30, 2014.

Please find attached a summary of testing activity this period.

MTK/mtk/astm1014.doc/mem14-029.mtk.doc

cc: F. M. Farber

J. A. Clark

CBT Surveillance Panel

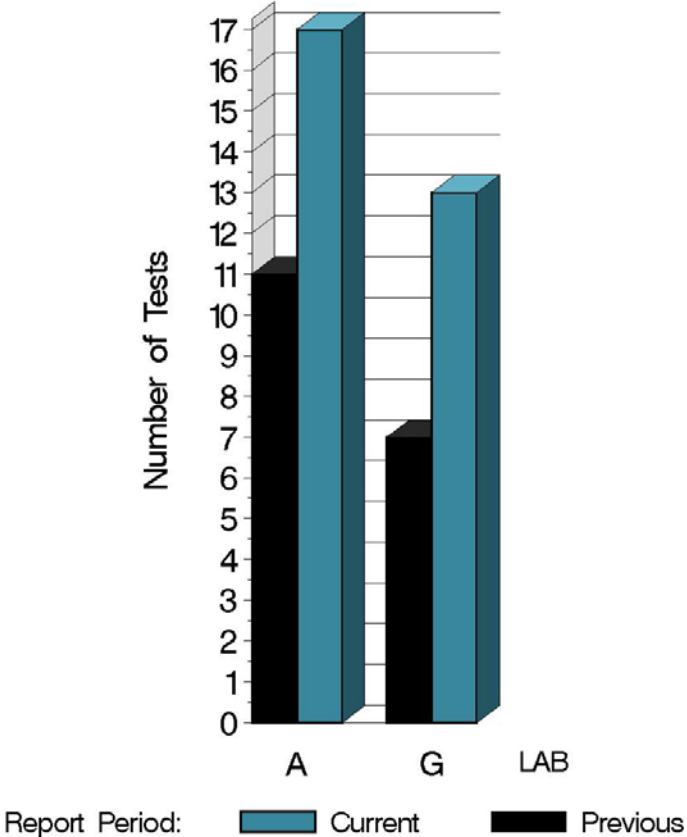
<ftp://ftp.astmtmc.cmu.edu/docs/bench/cbt/semiannualreports/cbt-10-2014.pdf>

Distribution: email

CBT (D 5968)

Reporting Data	
Number of Labs	2

NUMBER OF TESTS REPORTED BY LAB AND REPORT PERIOD



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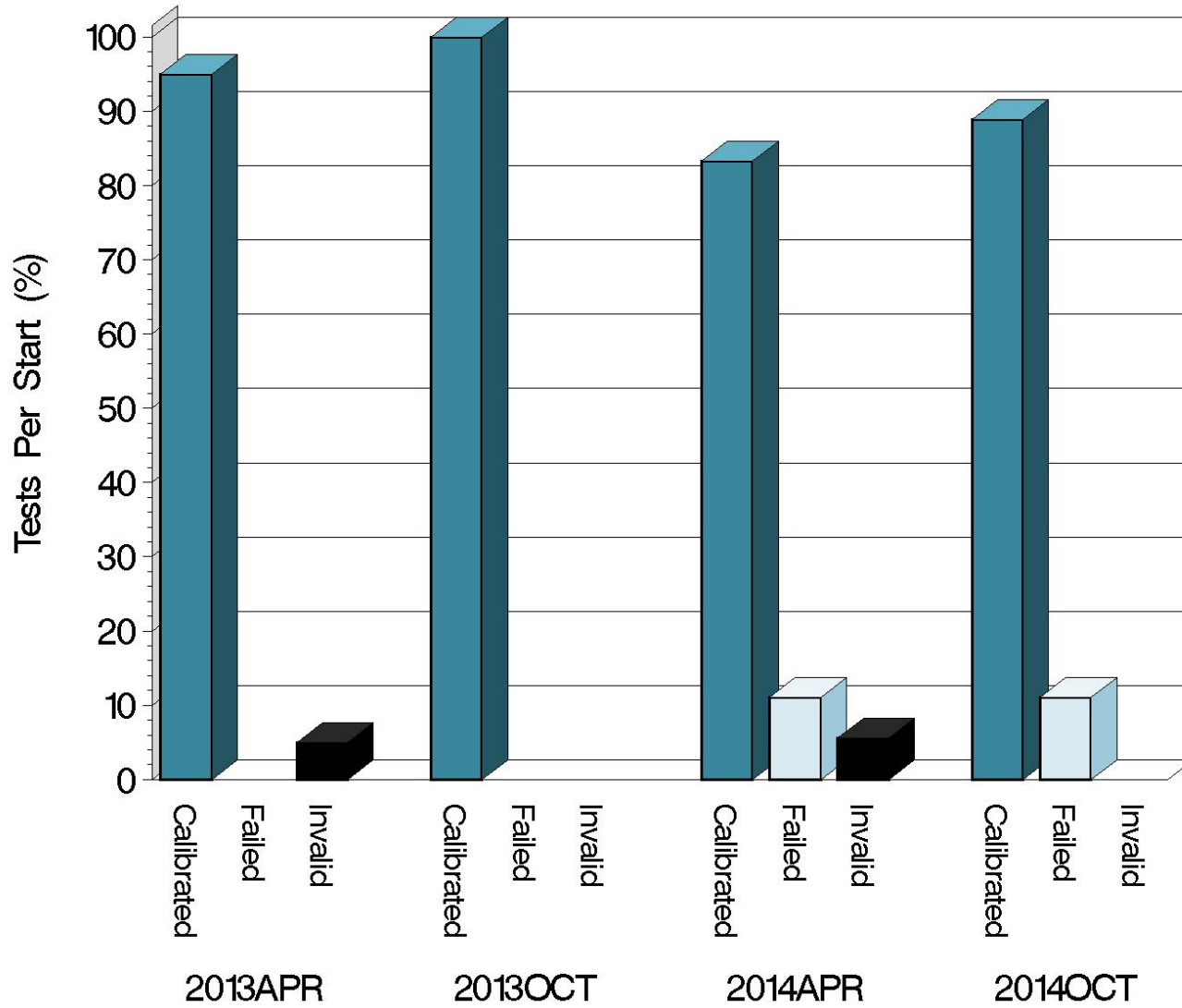
CBT (D 5968)

Test Distribution by Validity

		Number of Tests
Accepted for calibration	AC	16
Rejected	OC	2
Invalidated	LC	0
Aborted	XC	0
Hardware Approval run	NI	7
Unacceptable Approval run	MI	1
Invalid Approval run	LI	4
<hr/>		
Total		30

CBT (D 5968)

CALIBRATION ATTEMPT SUMMARY



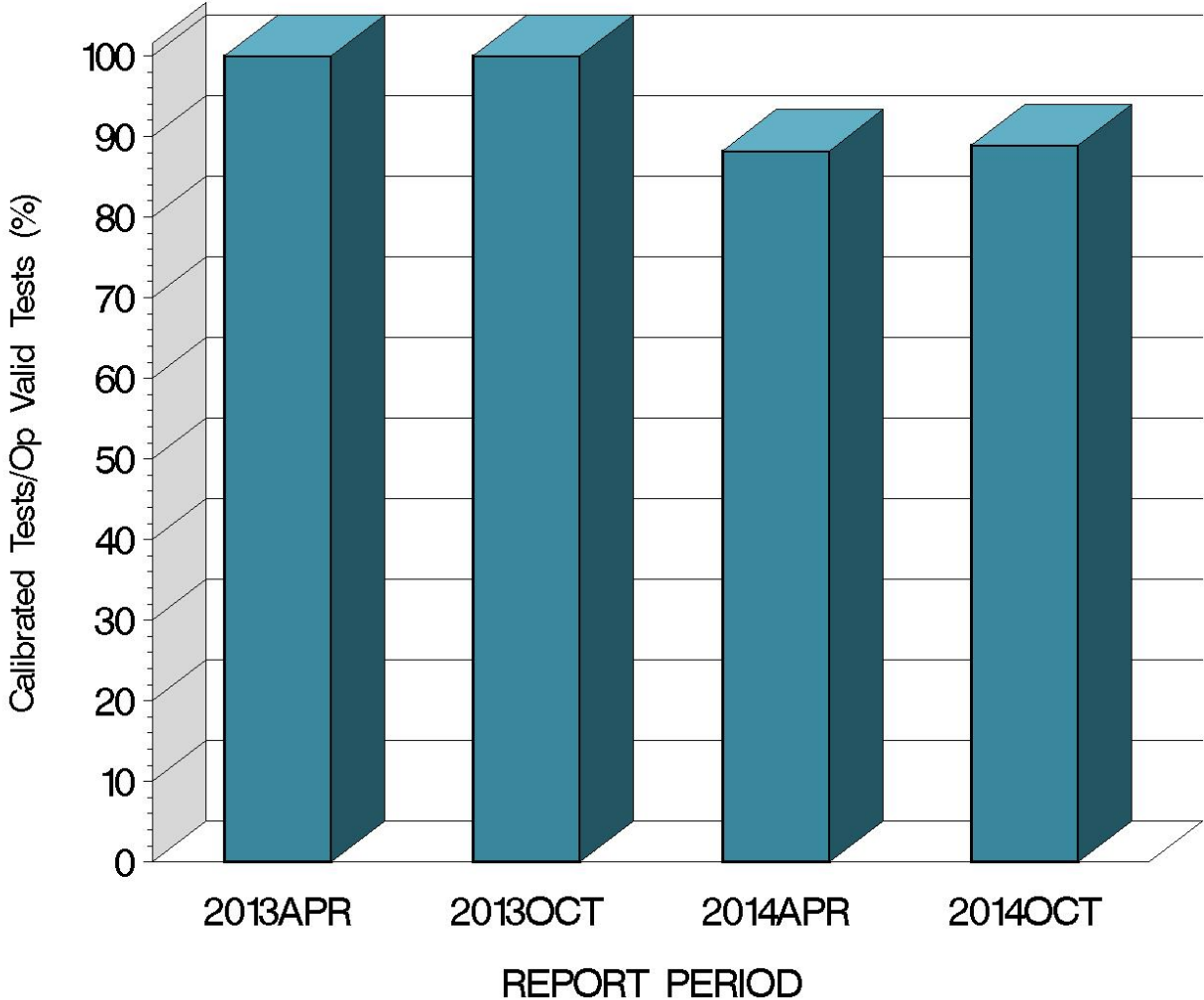
Resolution

Report Period

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OPERATIONALLY VALID TESTS
MEETING ACCEPTANCE CRITERIA



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CAUSES FOR LOST TESTS

Summary of Reasons for Failed Tests	No. of Tests
Mild Lead Concentration	2

Summary of Reasons for Invalid Tests	No. of Tests
Hardware run - Invalid corresponding reference oil test	4

Summary of Reasons for Aborted Tests	No. of Tests
No tests were aborted this period	0

CBT (D 5968)

Average Δ /s By Laboratory			
Lab	n	CUC	PBC
A	9	-1.093	-2.06
G	9	-1.483	-0.61259
Industry	18	-1.288	-1.3363

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

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

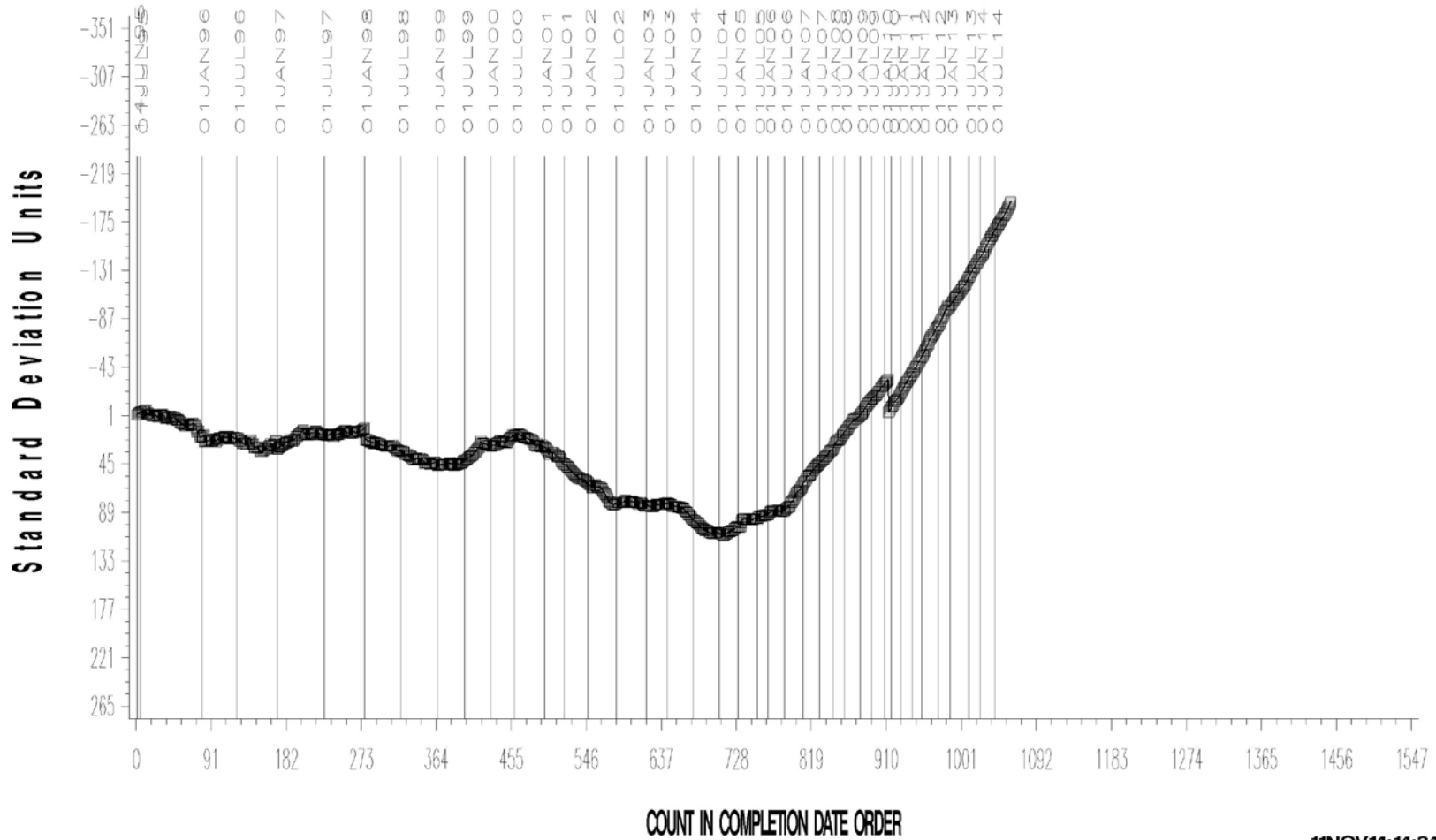
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CBT INDUSTRY OPERATIONALLY VALID DATA



COPPER CHANGE (ppm)

CUSUM Severity Analysis



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Test Monitoring Center
<http://astmtmc.cmu.edu>



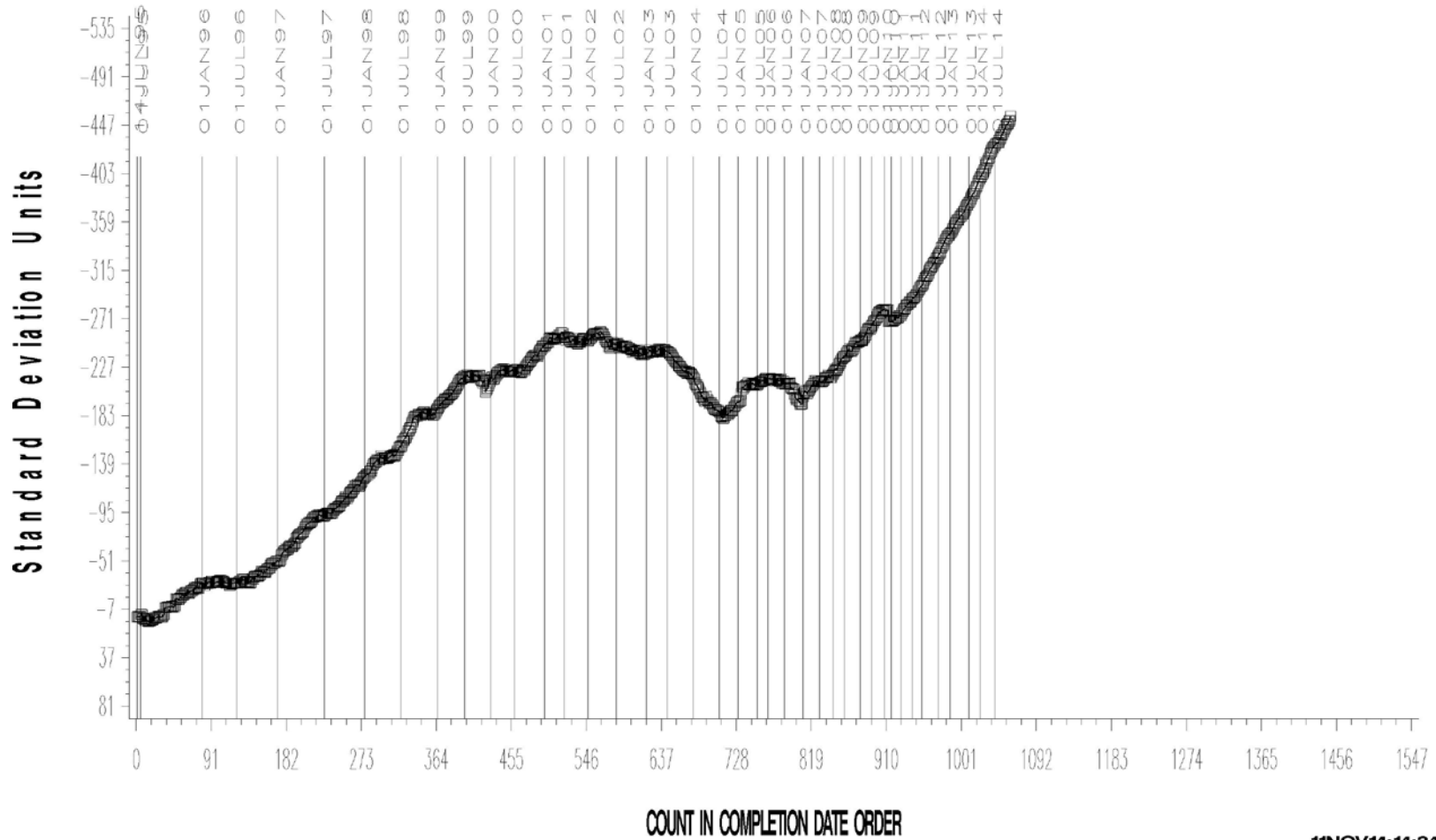
CBT (D 5968)

CBT INDUSTRY OPERATIONALLY VALID DATA



LEAD CHANGE (ppm)

CUSUM Severity Analysis



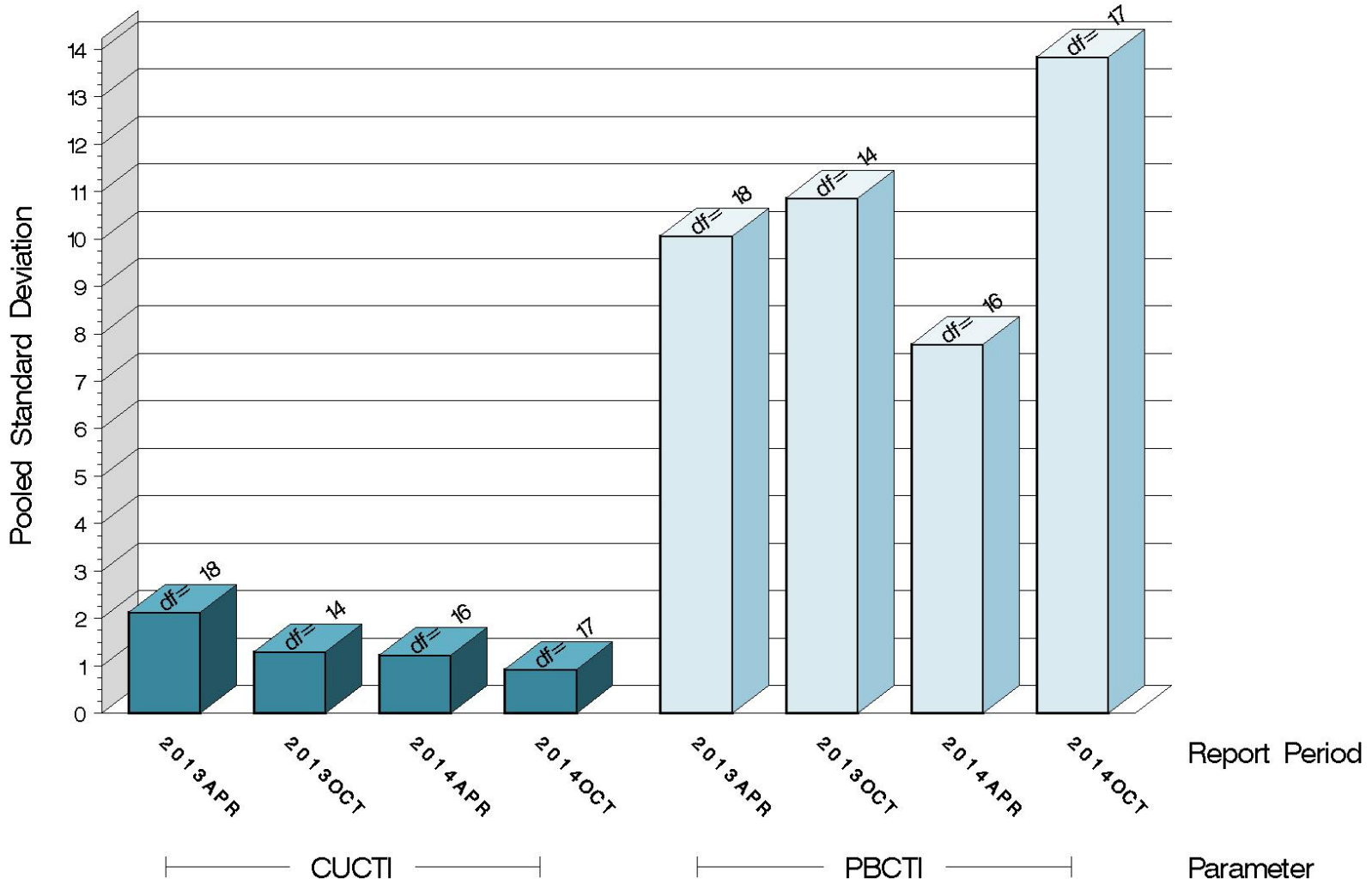
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CBT (D 5968)

TEST PRECISION

POOLED STANDARD DEVIATION
BY SIX-MONTH ASTM REPORT PERIOD



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CBT (D 5968)

SUMMARY OF SEVERITY & PRECISION

Severity

Over the course of this report period, both copper and lead severity, as measured by CUSUM plotting, continued the existing mild trend.

Precision

Pooled s for this period is 0.92 for copper and 13.83 for lead.

Precision, as measured by pooled standard deviation, is slightly better than previous periods for copper and is slightly worse than previous periods for lead, but is still within historical levels.

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INFORMATION LETTERS

No CBT Information Letters were issued this period.

CBT (D 5968)

STATUS OF REFERENCE OIL SUPPLY

Oil	Samples @ Labs	@ TMC	
		Samples (4 oz)	Gallons
43	29	1334	41.7