



Test Monitoring Center

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

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

MEMORANDUM: 19-015
DATE: April 19, 2019
TO: Mike Lopez, Chairman, CBT Surveillance Panel
FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*
SUBJECT: CBT Testing from October 1, 2018 through March 31, 2019

A total of 17 CBT tests were reported to the Test Monitoring Center during the report period from October 1, 2018 through March 31, 2019.

Please find attached a summary of testing activity this period.

MTK/mtk/astm0419.doc/mem19-015.mtk.doc

cc: F. M. Farber

J. A. Clark

CBT Surveillance Panel

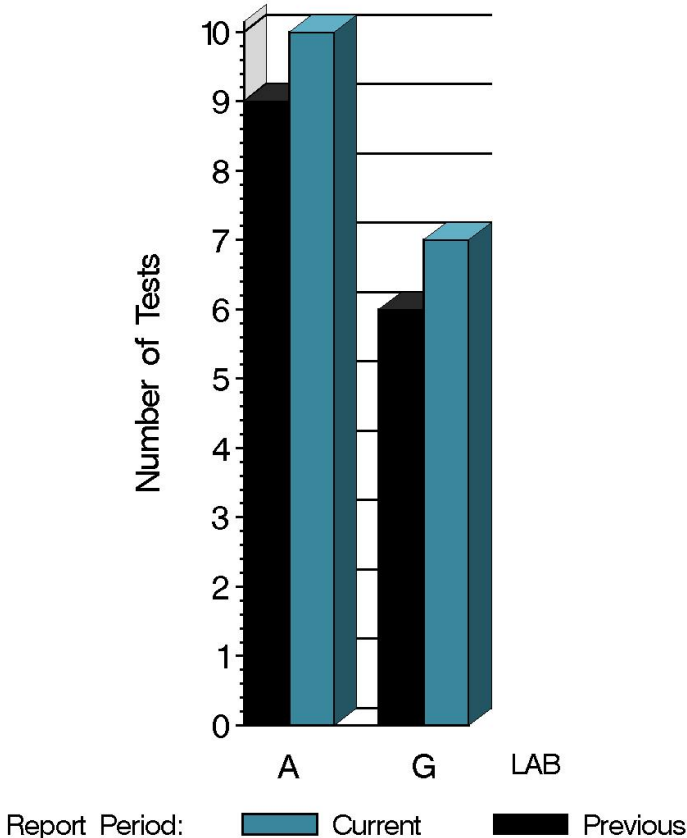
<http://www.astmtmc.cmu.edu/ftp/docs/bench/cbt/semiannualreports/cbt-04-2019.pdf>

Distribution: email

CBT (D 5968)

Reporting Data	
Number of Labs	2

NUMBER OF TESTS REPORTED BY LAB AND REPORT PERIOD



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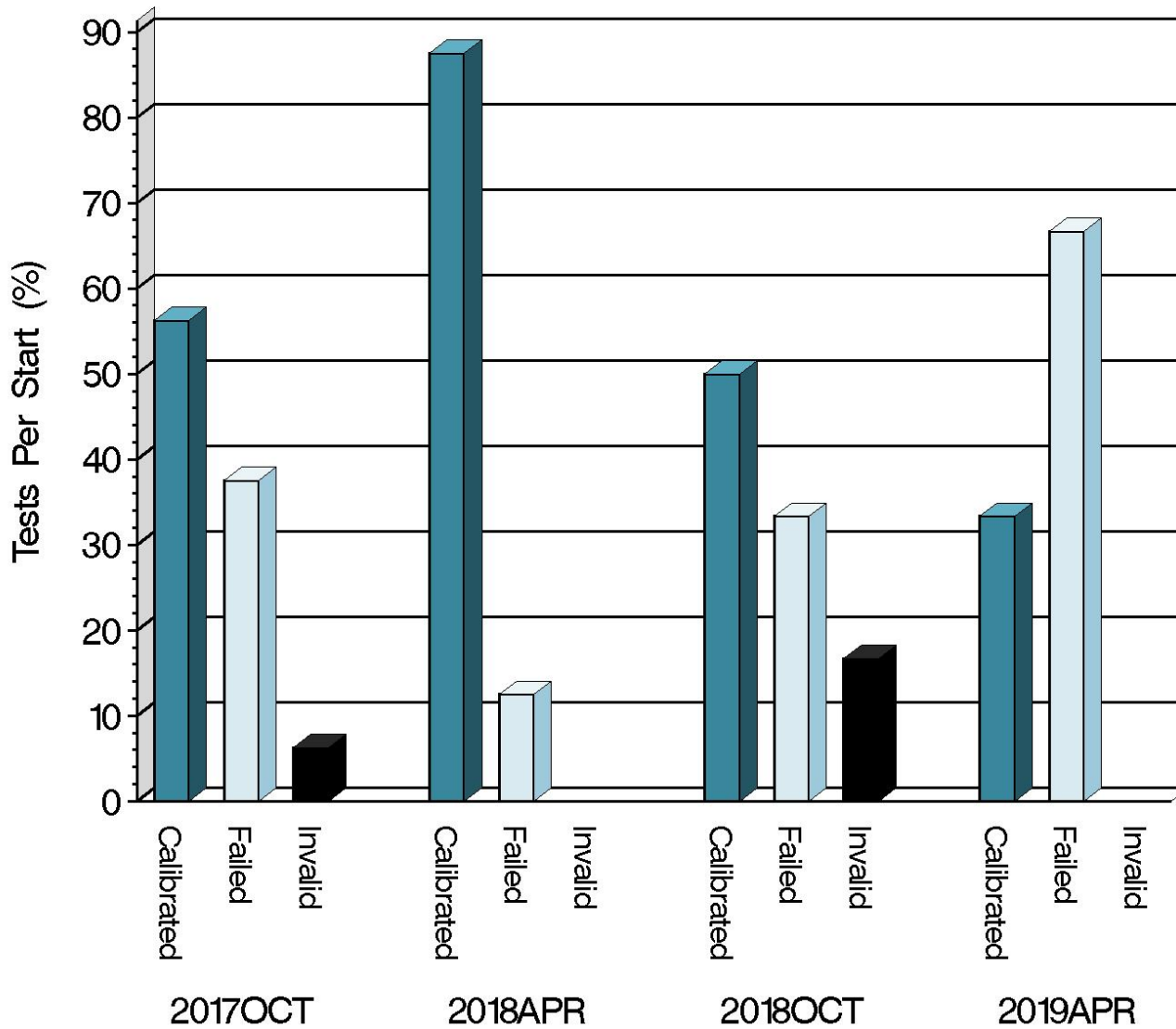
CBT (D 5968)

Test Distribution by Validity

		Number of Tests
Accepted for Calibration	AC	2
Rejected	OC	4
Invalidated by Lab	LC	0
Aborted	XC	0
Acceptable Shakedown	NN	2
Unacceptable Shakedown	MN	1
Invalid Shakedown	RN	1
Hardware Run – N Coupons	NI	3
Invalid Hardware Run – TMC	RI	2
Invalid Hardware Run – Lab	LI	2
Total		17

CBT (D 5968)

CALIBRATION ATTEMPT SUMMARY



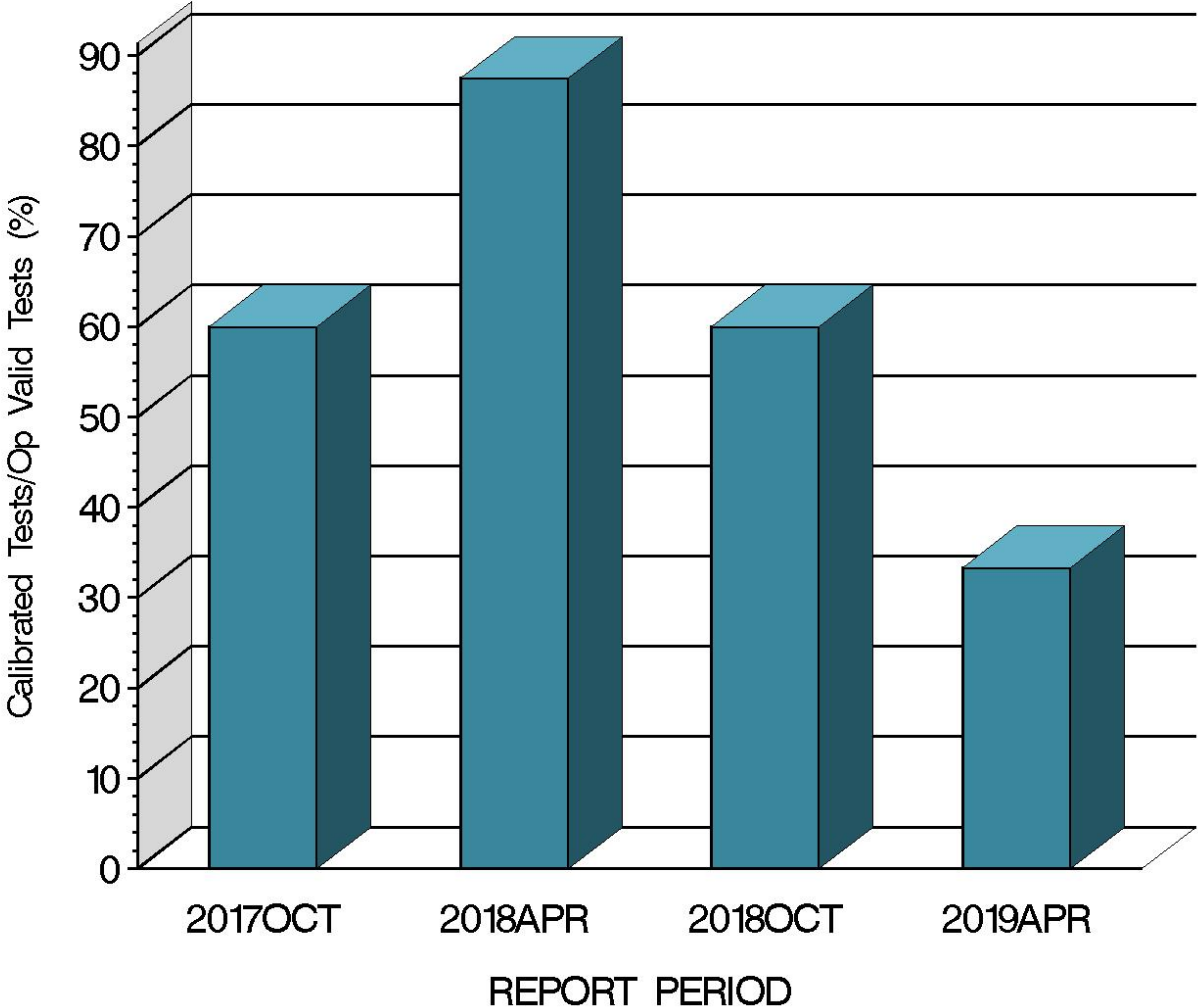
Resolution

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 Copper & Lead Concentration	2
Mild Copper Concentration	2

Summary of Reasons for Invalid Tests	No. of Tests
No tests were invalid this period	0

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

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Average Δ /s By Laboratory			
Lab	n	CUC	PBC
A	3	-1.976	-2.26
G	3	-2.219	-1.28889
Industry	6	-2.097	-1.77444

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

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

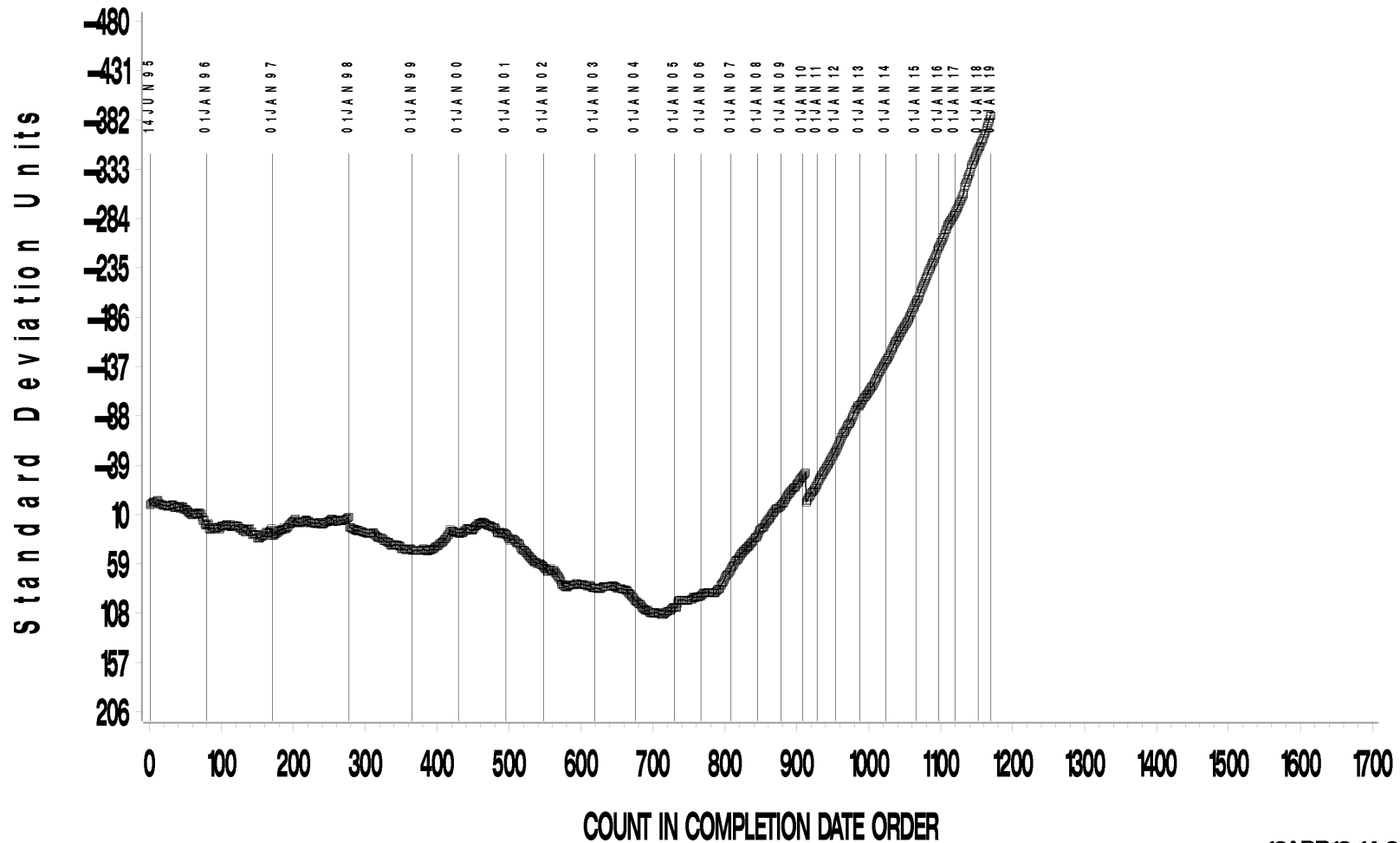
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CBT INDUSTRY OPERATIONALLY VALID DATA



COPPER CHANGE (ppm)

CUSUM Severity Analysis



16APR19: 14:30

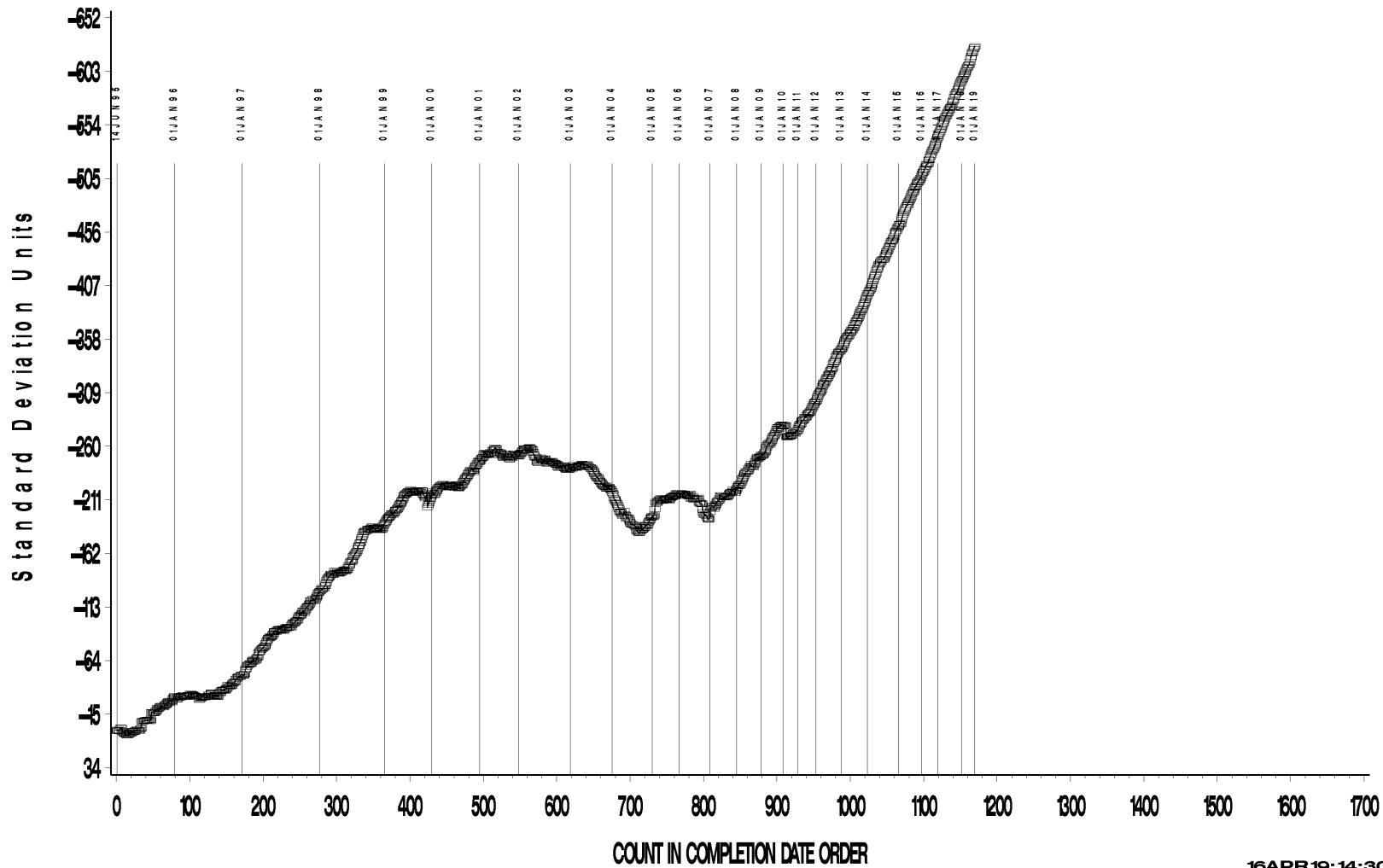
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CBT INDUSTRY OPERATIONALLY VALID DATA



LEAD CHANGE (ppm)

CUSUM Severity Analysis



16APR19: 14:30

Test Monitoring Center

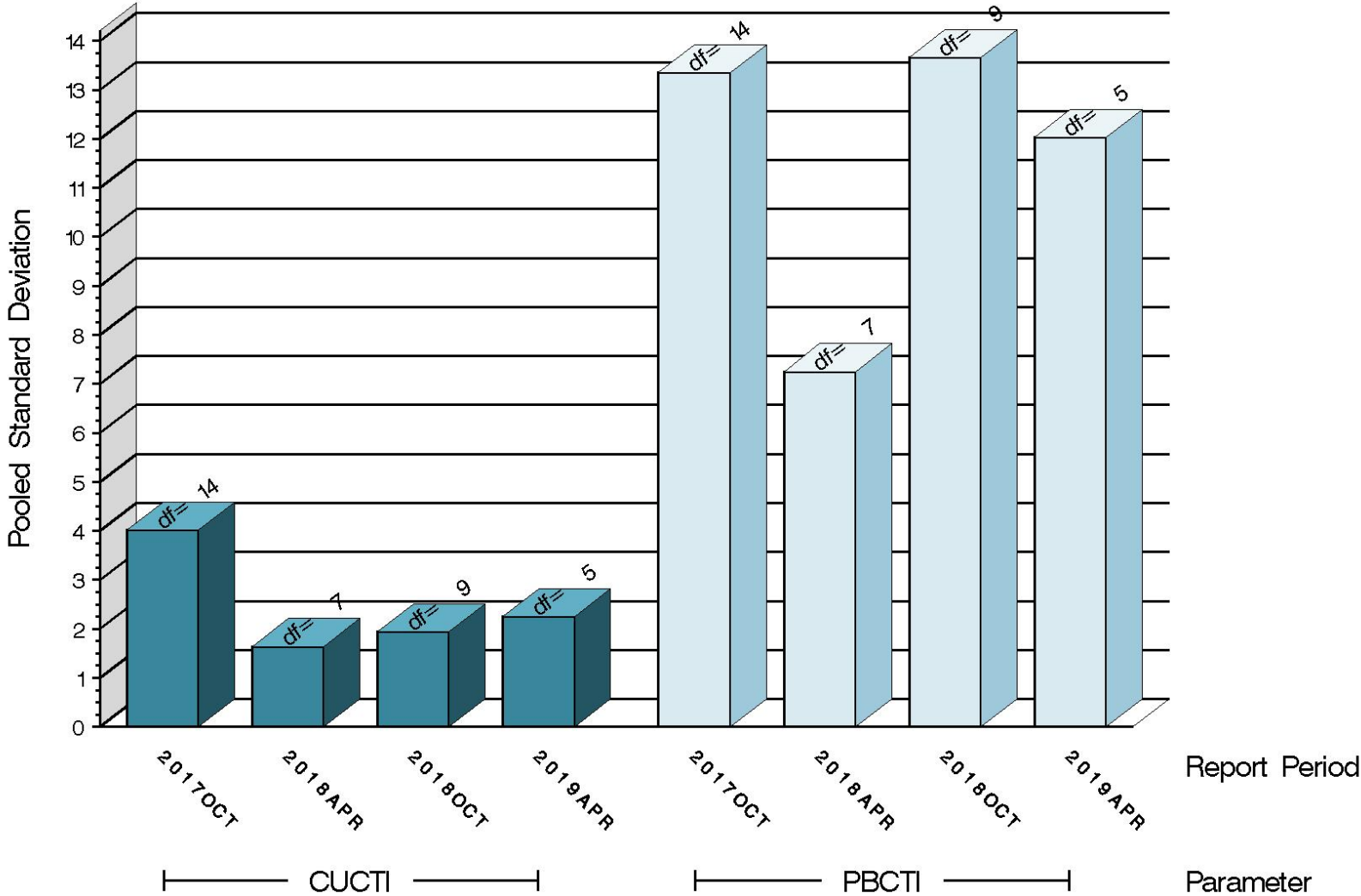
<http://astmtmc.cmu.edu>



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TEST PRECISION
 POOLED STANDARD DEVIATION
 BY SIX-MONTH ASTM REPORT PERIOD



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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 2.25 for copper and 12.03 for lead.

Precision compared to previous periods, as measured by pooled standard deviation, has degraded slightly for copper and improved slightly for lead.

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INFORMATION LETTERS

No information letters were issued this period.

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STATUS OF REFERENCE OIL SUPPLY

		At TMC	
Oil	Samples at Labs	Samples (4 oz)	Gallons
43	38	1055	33.0