



## Test Monitoring Center

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

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

MEMORANDUM: 13-063  
DATE: November 22, 2013  
TO: Gil Reinhard, Chairman, CBT Surveillance Panel  
FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*  
SUBJECT: CBT Testing from April 1, 2013 through September 30, 2013

A total of 29 CBT tests were reported to the Test Monitoring Center during the report period from April 1, 2013 through September 30, 2013.

Please find attached a summary of testing activity this period.

MTK/mtk/astm1013.doc/mem13-063.mtk.doc

cc: F. M. Farber

J. A. Clark

CBT Surveillance Panel

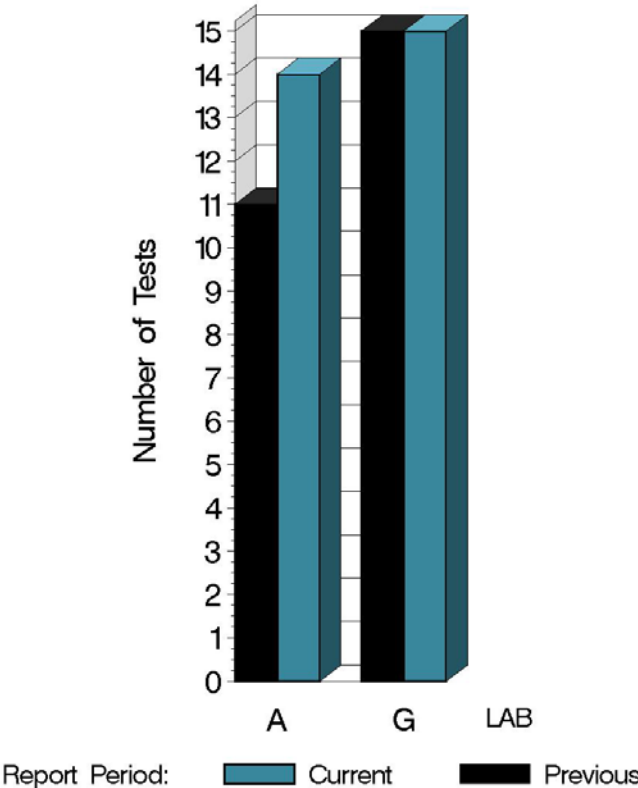
<ftp://ftp.astmtmc.cmu.edu/docs/bench/cbt/semiannualreports/cbt-10-2013.pdf>

Distribution: email

# CBT (D 5968)

Reporting Data	
Number of Labs	2

NUMBER OF TESTS REPORTED BY LAB AND REPORT PERIOD



8/15/2011

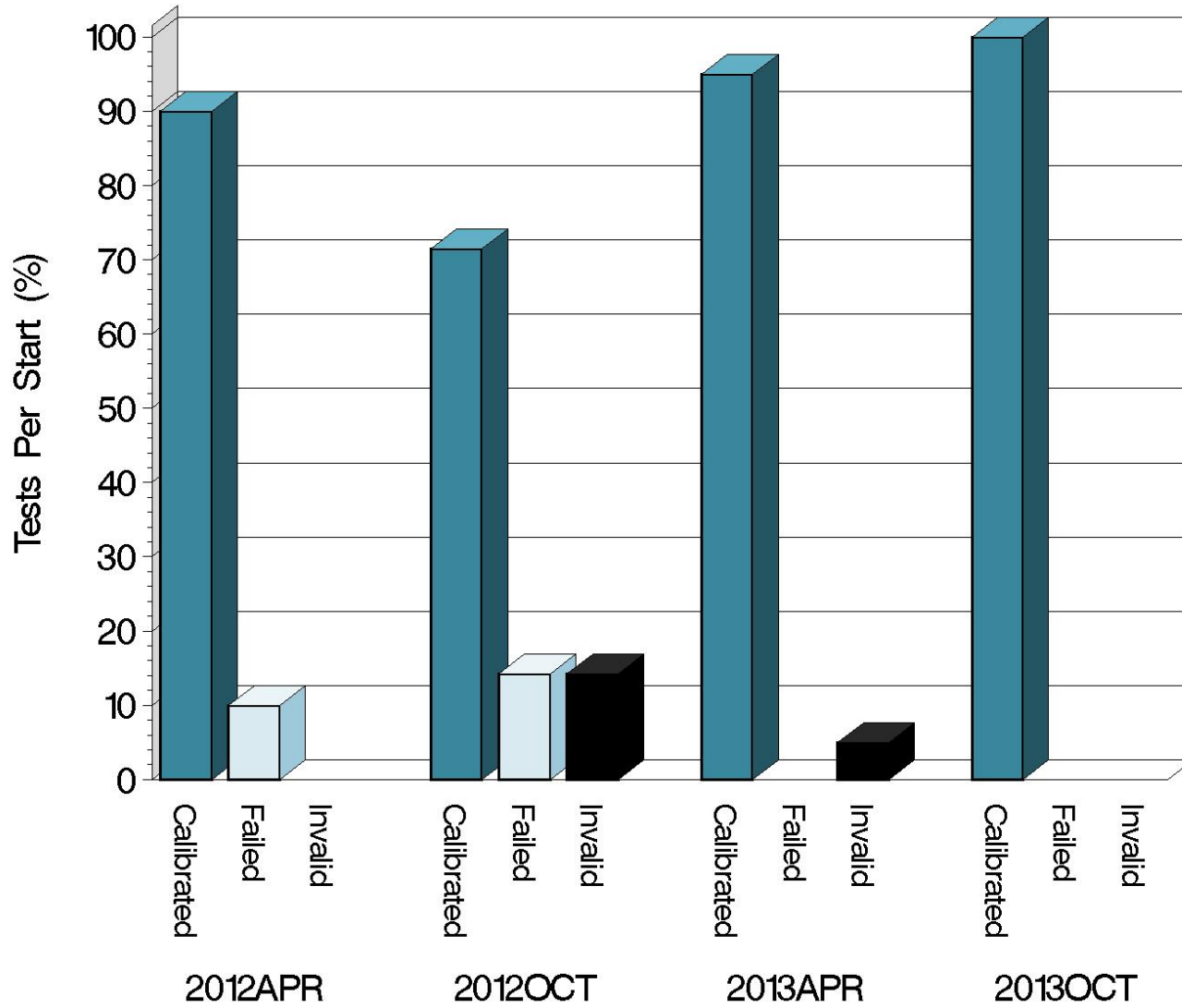
# CBT (D 5968)

## Test Distribution by Validity

		Number of Tests
Accepted for calibration	AC	15
Rejected	OC	0
Invalidated	LC	0
Aborted	XC	0
Hardware Approval run	NI	9
New Solvent run	NI	5
Unacceptable Approval run	MI	0
<hr/>		
Total		29

# CBT (D 5968)

## CALIBRATION ATTEMPT SUMMARY



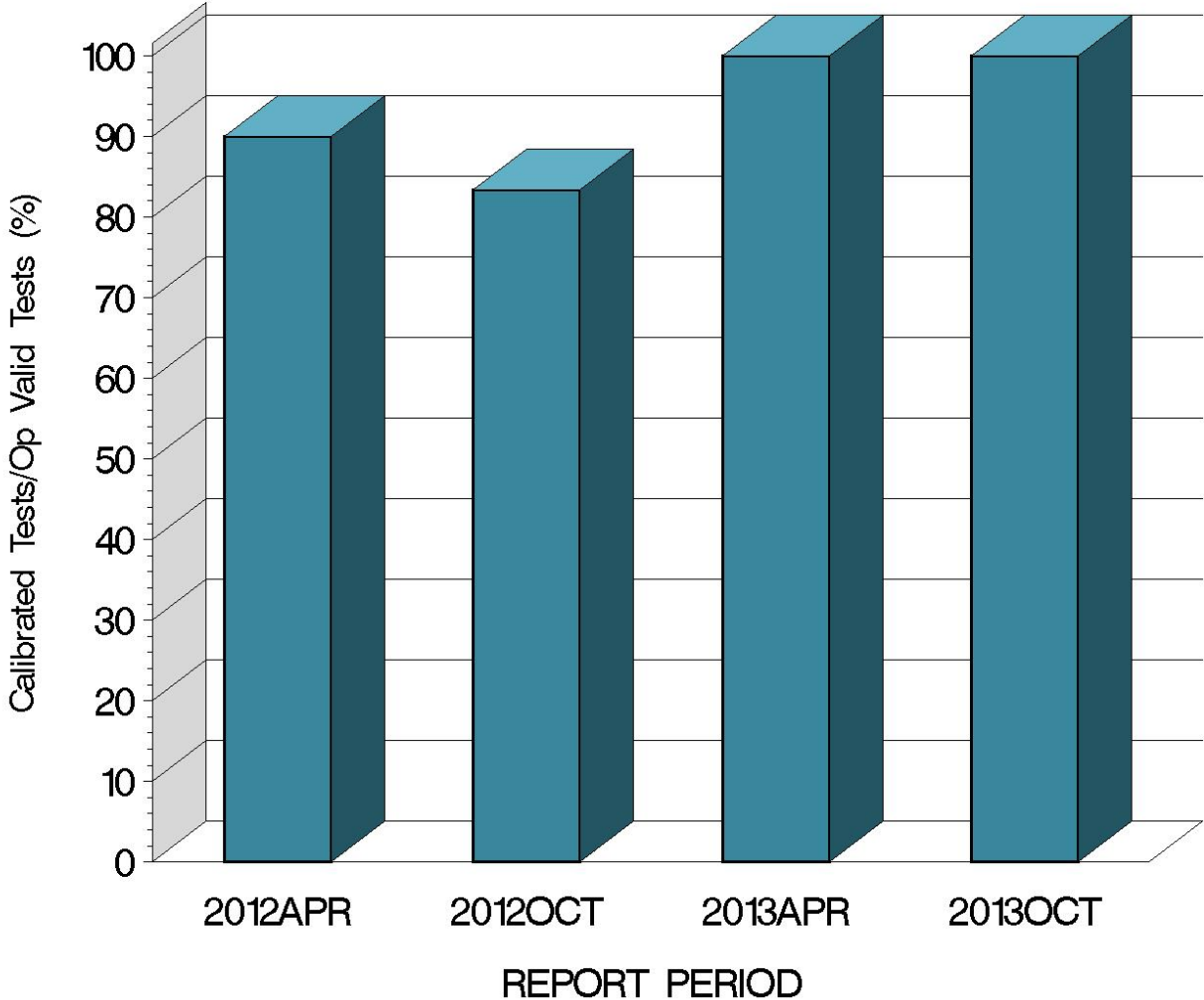
Resolution

Report Period

10:55:31 21NOV2013

# CBT (D 5968)

OPERATIONALLY VALID TESTS  
MEETING ACCEPTANCE CRITERIA



10:55:31 21NOV2013



# CBT (D 5968)

## CAUSES FOR LOST TESTS

Summary of Reasons for Failed Tests	No. of Tests
No failed tests this period	0

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

# CBT (D 5968)

Average $\Delta/s$ By Laboratory			
Lab	n	CUC	PBC
A	8	-1.424	-1.84333
G	7	-1.187	-0.79333
Industry	15	-1.313	-1.35333

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

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

# CBT (D 5968)

CBT INDUSTRY OPERATIONALLY VALID DATA



COPPER CHANGE (ppm)

CUSUM Severity Analysis



12NOV13:14:01





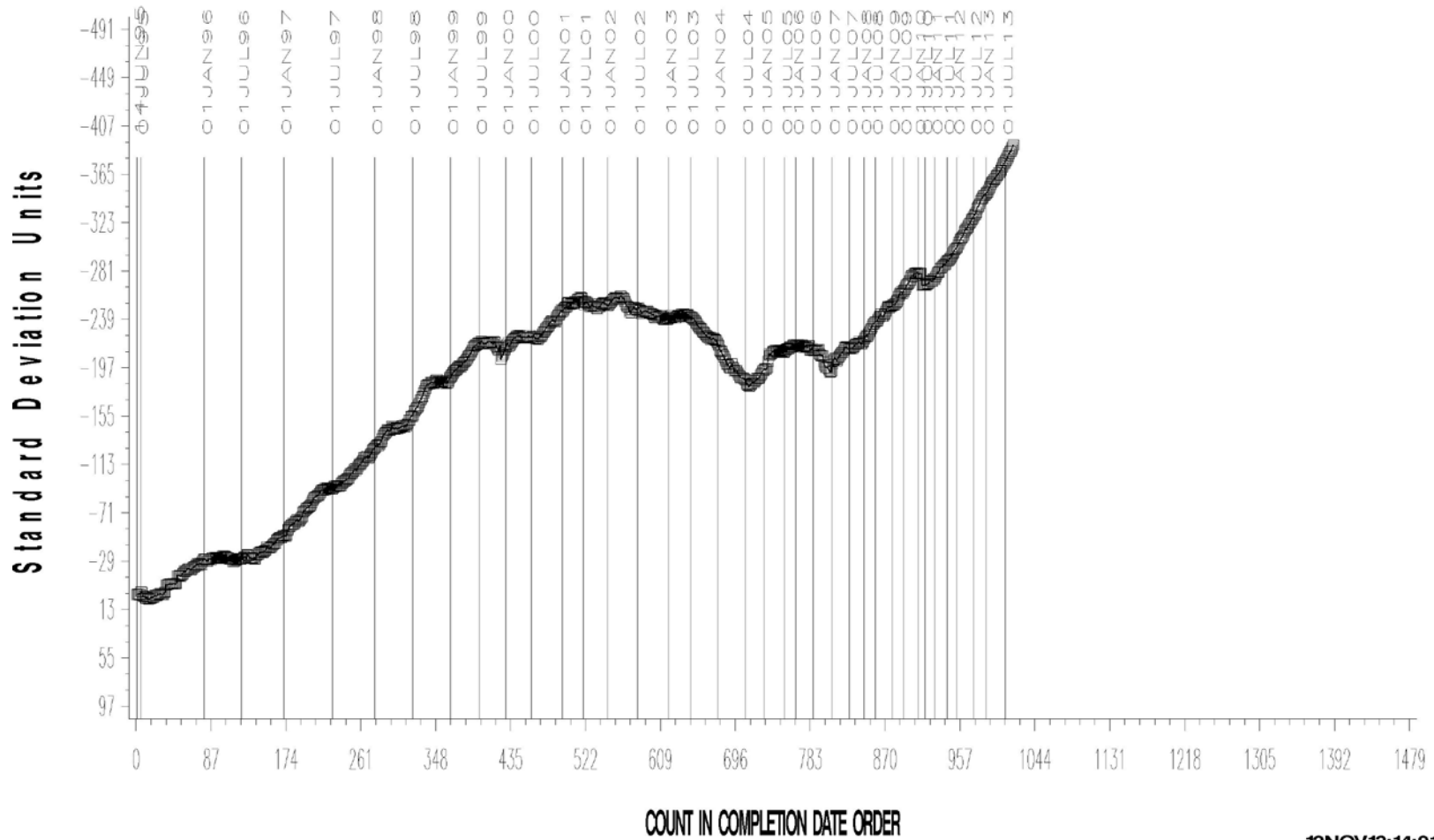
# CBT (D 5968)

CBT INDUSTRY OPERATIONALLY VALID DATA



LEAD CHANGE (ppm)

CUSUM Severity Analysis



12 NOV 13: 14:01

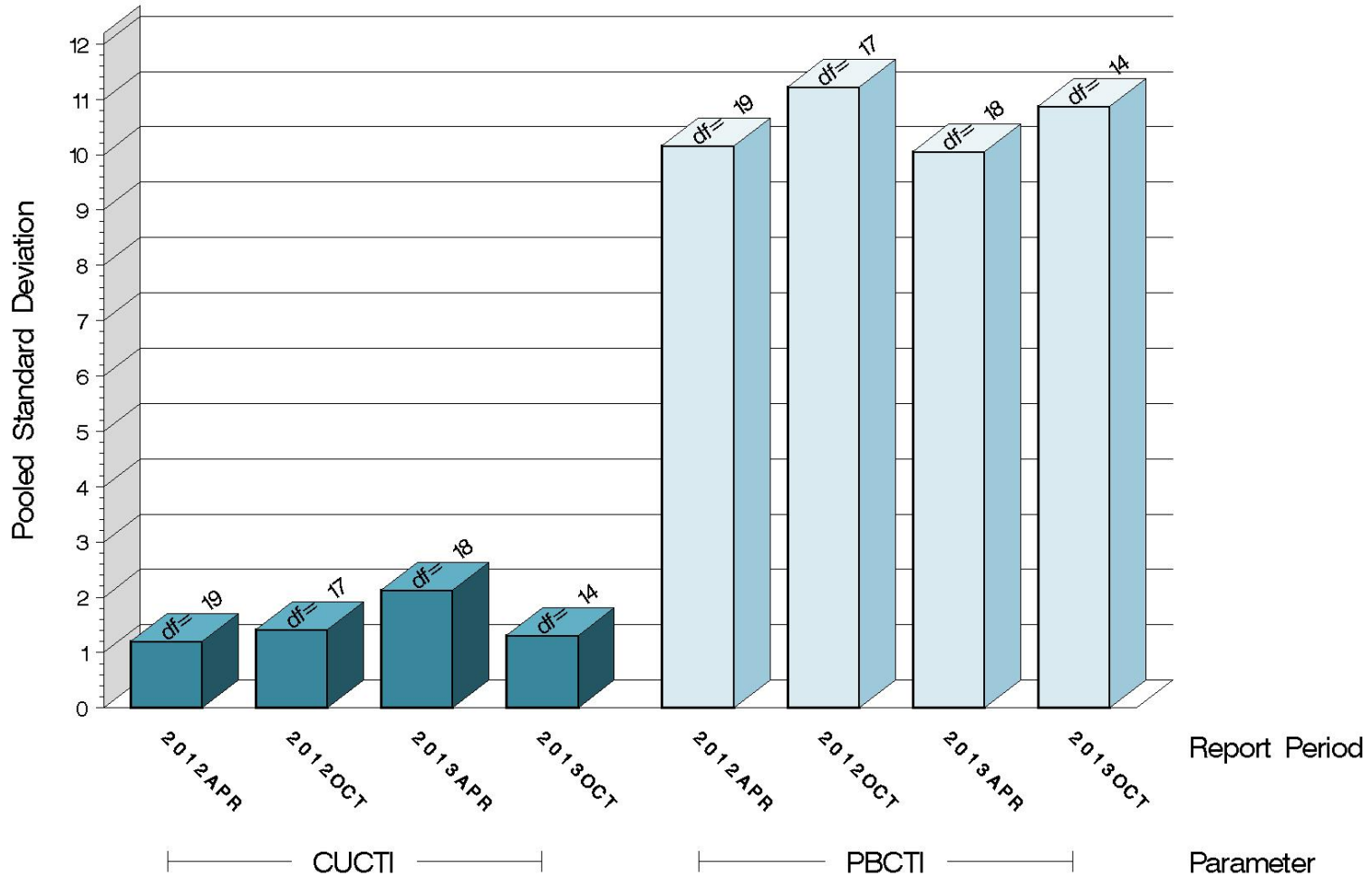
**Test Monitoring Center**  
<http://astmtmc.cmu.edu>



# CBT (D 5968)

## TEST PRECISION

POOLED STANDARD DEVIATION  
BY SIX-MONTH ASTM REPORT PERIOD



10:55:31 21NOV2013

# 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 1.30 for copper and 10.87 for lead.

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

# CBT (D 5968)

## INFORMATION LETTERS

CBT Information Letter 13-1, Sequence No. 10, dated August 9, 2013.

- Removal of Microscope Reference
- New Degreasing Solvent
- New Glassware Cleaning Solution
- Tetrahydrofuran Replacement
- Editorial Revisions

# CBT (D 5968)

## STATUS OF REFERENCE OIL SUPPLY

Oil	Samples @ Labs	@ TMC	
		Samples (4 oz)	Gallons
43	39	1382	43.2