



# Test Monitoring Center

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

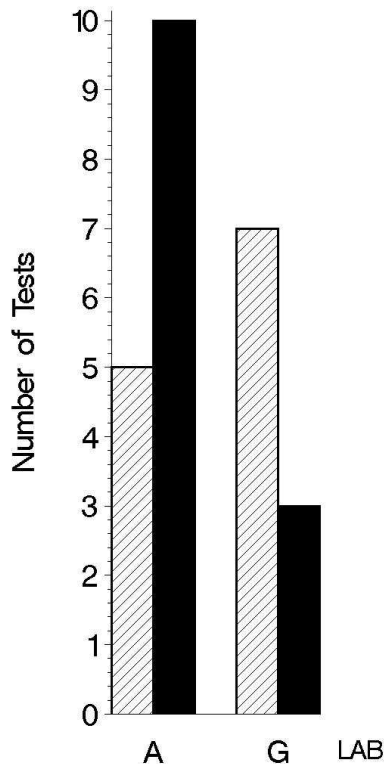
MEMORANDUM: 10-055  
DATE: November 22, 2010  
TO: Gil Reinhard, Chairman, CBT Surveillance Panel  
FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*  
SUBJECT: CBT Testing from April 1, 2010 through September 30, 2010

A total of 13 CBT tests were reported to the Test Monitoring Center during the period from April 1, 2010 through September 30, 2010. Following is a summary of testing activity this period.

	Reporting Data
Number of Labs	2

Tests reported this period were distributed as shown below:

## NUMBER OF TESTS REPORTED BY LAB AND REPORT PERIOD

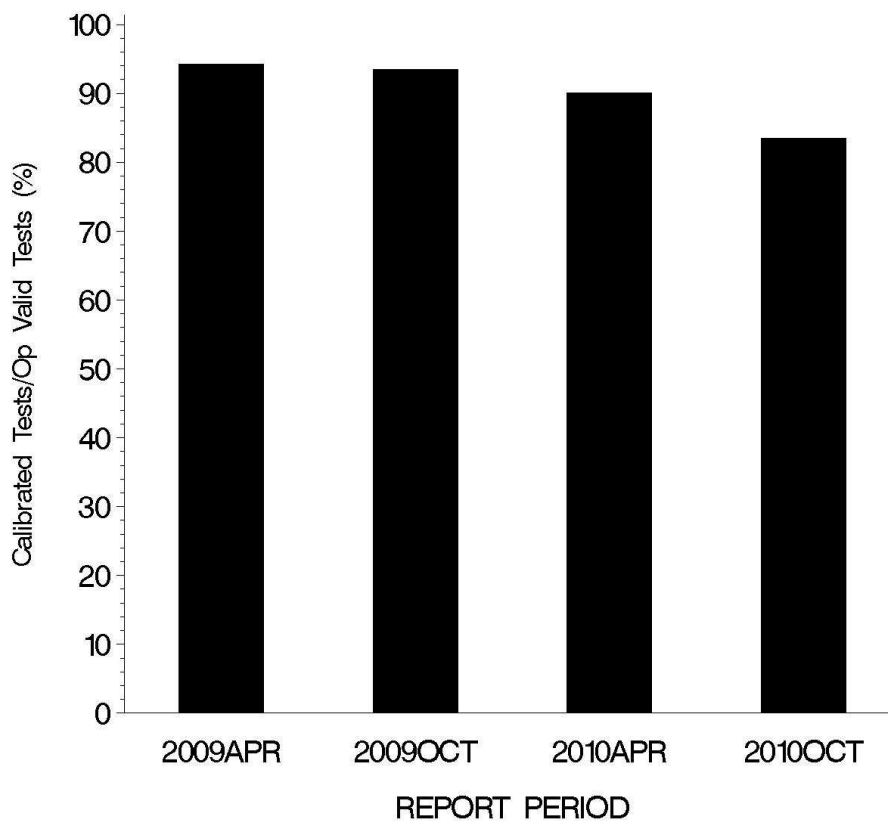


Report Period: Current Previous

**Test Distribution by Validity**

	TMC Validity Codes	No. of Tests
Operationally and Statistically Acceptable	AC	10
Failed Acceptance Criteria	OC	2
Operationally Invalid	LC, RC	1
Aborted	XC	0
Acceptable Donated Tests	NI	0
Unacceptable Donated Tests	MI	0
Total		13

**OPERATIONALLY VALID TESTS  
MEETING ACCEPTANCE CRITERIA**



The above chart shows the percentage of accepted operationally valid tests. Two tests failed to meet the acceptance criteria this period; one was mild on copper and the other was severe on both copper and lead concentration.

The reasons for failed, invalid, or aborted tests are shown in the following tables:

**Summary of Reasons for Failed Tests**

	No. of Tests
Copper, mild	1
Copper & Lead, severe	1

**Summary of Reasons for Invalid Tests**

	No. of Tests
Airflow out of specification	1

**Summary of Reasons for Aborted Tests**

	No. of Tests
No aborted tests	0

**Industry Severity Summary**

The following table shows the average  $\Delta/s$ , by laboratory and for the industry overall, for both copper and lead concentration for this ASTM report period.

Average  $\Delta/s$  by Lab

Lab	n	CUC	PBC
A	9	2.403	1.084
G	3	-1.534	-1.089
Industry	12	1.418	0.541

Note that the results for lab A were significantly biased by a single, severe failing test result and that otherwise the lab's performance was in line with overall industry mild trends.

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

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

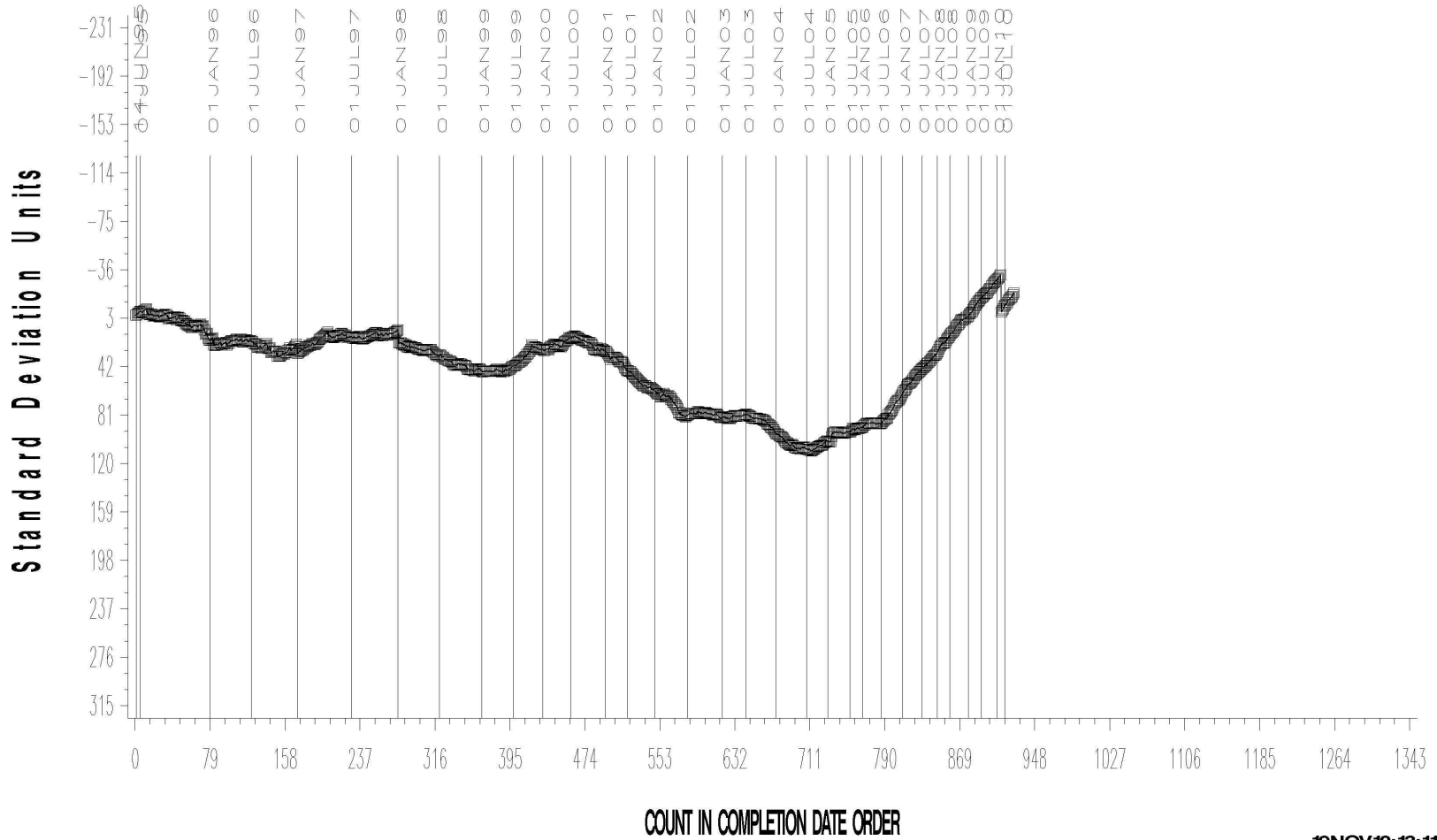
The plots of summation delta/s from target for change in copper and change in lead, respectively, are shown on the following pages. Both copper and lead concentration results are continuing to trend mild.

**CBT INDUSTRY OPERATIONALLY VALID DATA**



**COPPER CHANGE (ppm)**

CUSUM Severity Analysis

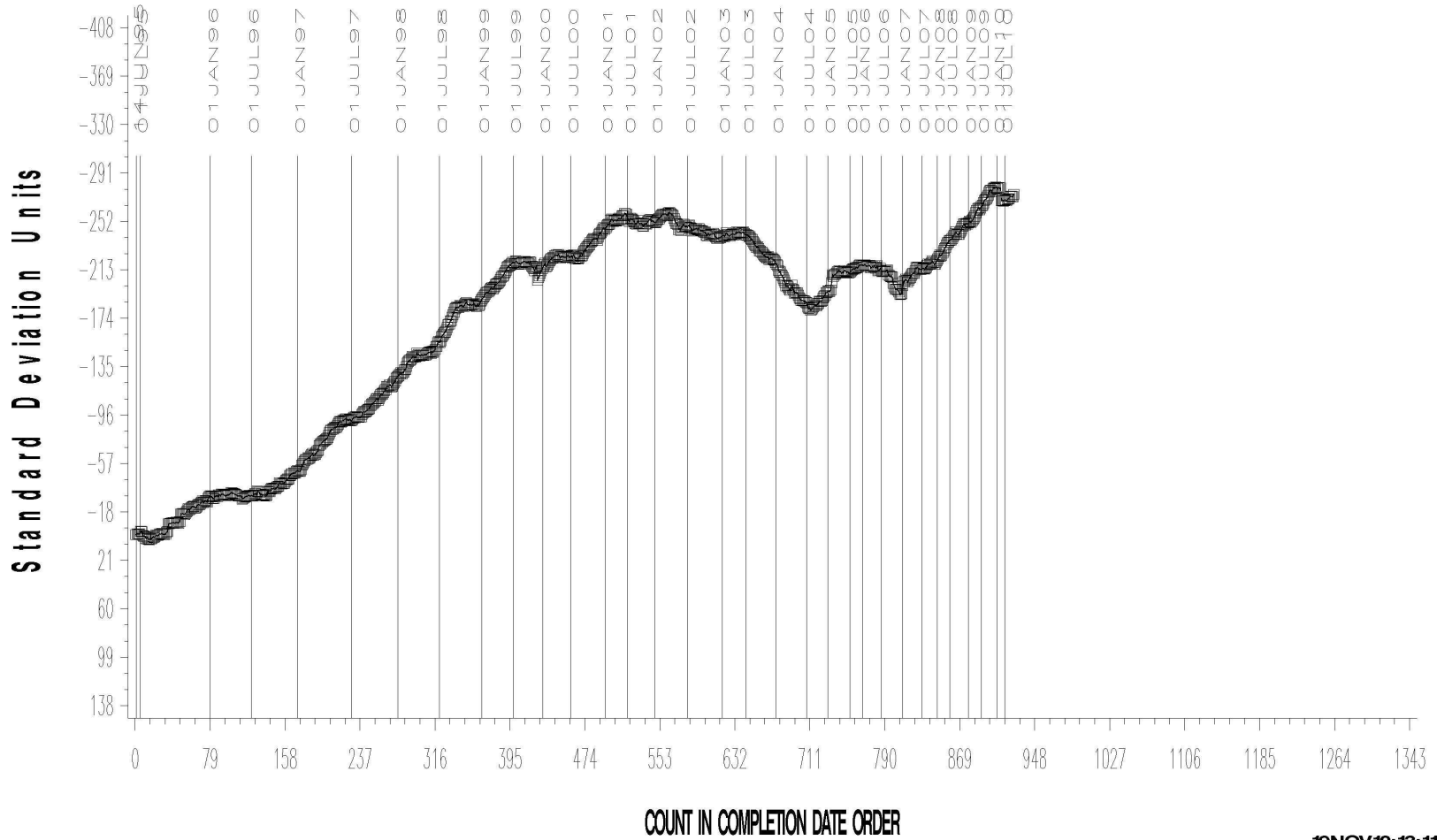


**CBT INDUSTRY OPERATIONALLY VALID DATA**



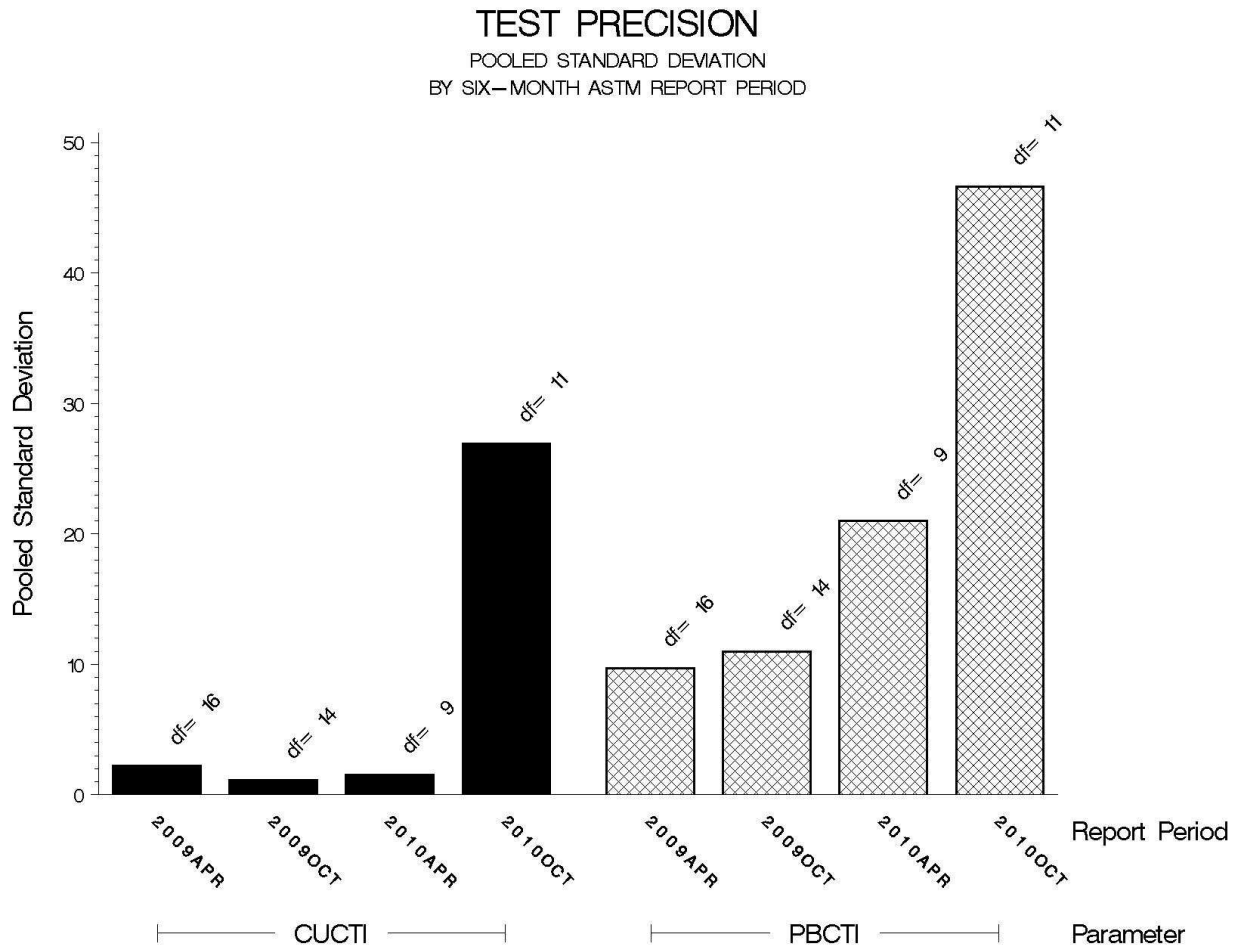
**LEAD CHANGE (ppm)**

CUSUM Severity Analysis



POOLED S:

Precision estimates, by report period are depicted below. Precision estimates for both copper and lead have degraded.



STATUS OF REFERENCE OIL SUPPLY:

At the end of this report period, the testing oil supply stood as outlined in the following table:

		@ TMC	
Oil	Samples @ Labs	Samples	Gallons
43	23	1561	48.8

INFORMATION LETTERS:

No information letters were issued this period.

SUMMARY

- Over the course of this report period, both copper and lead severity as measured by cusum plotting continued the mild trend the existing mild trend.
- Precision as measured by pooled standard deviation is worse than previous periods for both copper and lead concentration.

MTK/mtk/astm1010.doc/mem10-055.mtk.doc

c: F. M. Farber

J. A. Clark

CBT Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/bench/cbt/semiannualreports/cbt-10-2010.pdf>

Distribution: email