A Program of ASTM International

Test Monitoring Center

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

MEMORANDUM: 11-048

DATE: November 8, 2011

TO: Gil Reinhard, Chairman, CBT Surveillance Panel

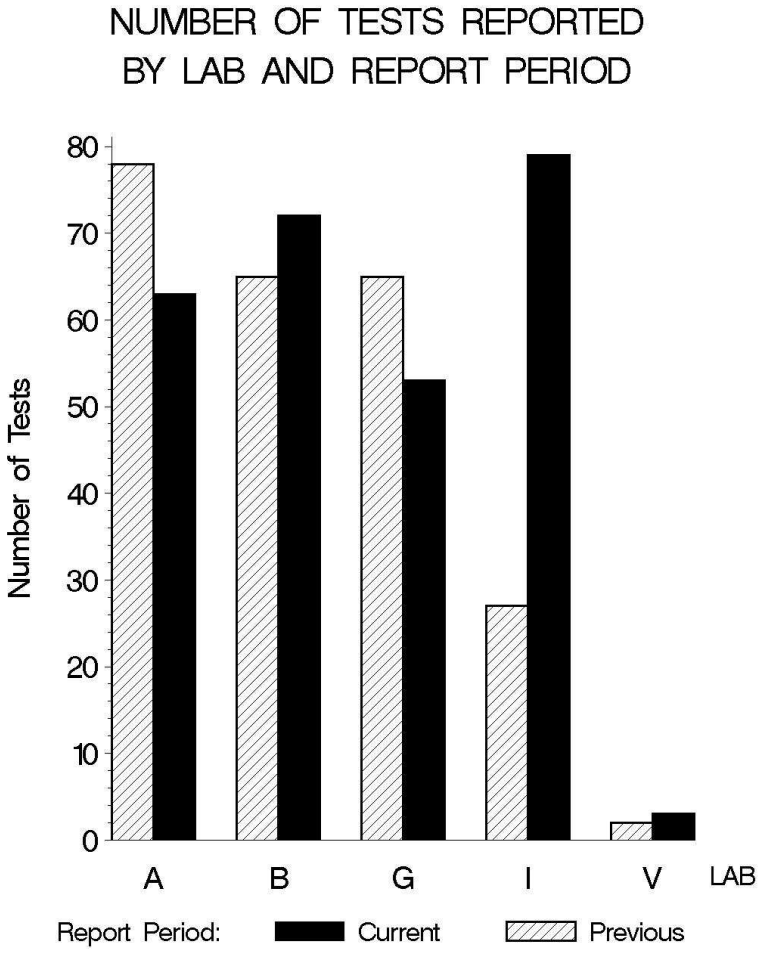
FROM: Michael T. Kasimirsky

SUBJECT: HTCBT Testing from April 1, 2010 through September 30, 2010

A total of 270 HTCBT tests were reported to the Test Monitoring Center during the period from April 1, 2011 through September 30, 2011. Following is a summary of testing activity this period.

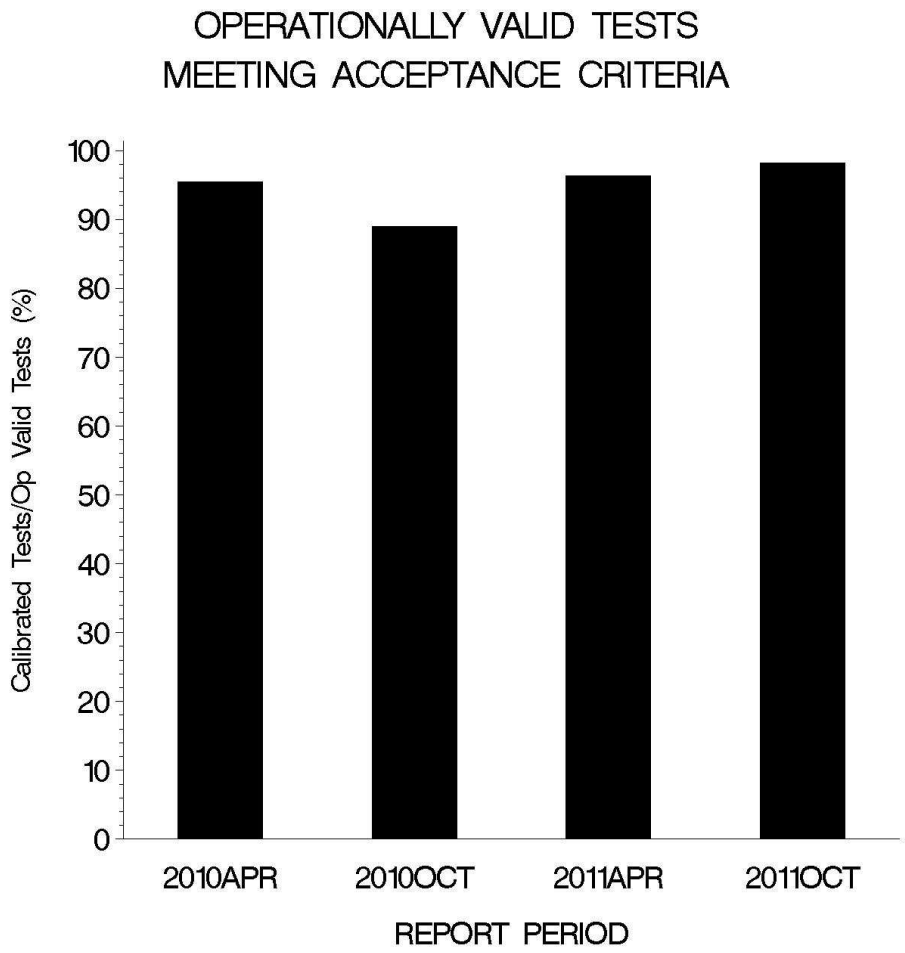
	Reporting Data
Number of Labs	5

Tests reported this period were distributed as shown below:



Test Distribution by Validity

	TMC Validity Codes	No. of Tests
Operationally and Statistically Acceptable	AC	256
Failed Acceptance Criteria	OC	5
Operationally Invalid	LC, RC	4
Aborted	XC	2
Acceptable Donated Tests	AG	0
Unacceptable Donated Tests	OG	3
Total		270



The above chart shows the percentage of accepted operationally valid tests. Five tests failed to meet the acceptance criteria this period.

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	3
Lead, mild	1
Copper & Lead, severe	1

Summary of Reasons for Invalid Tests

	No. of Tests
Cooling Water Problem	3
Airflow & Temperature Control Problems	1

Summary of Reasons for Aborted Tests

	No. of Tests
Sample Spilled	1
Bath Failure	1

Industry Severity Summary

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

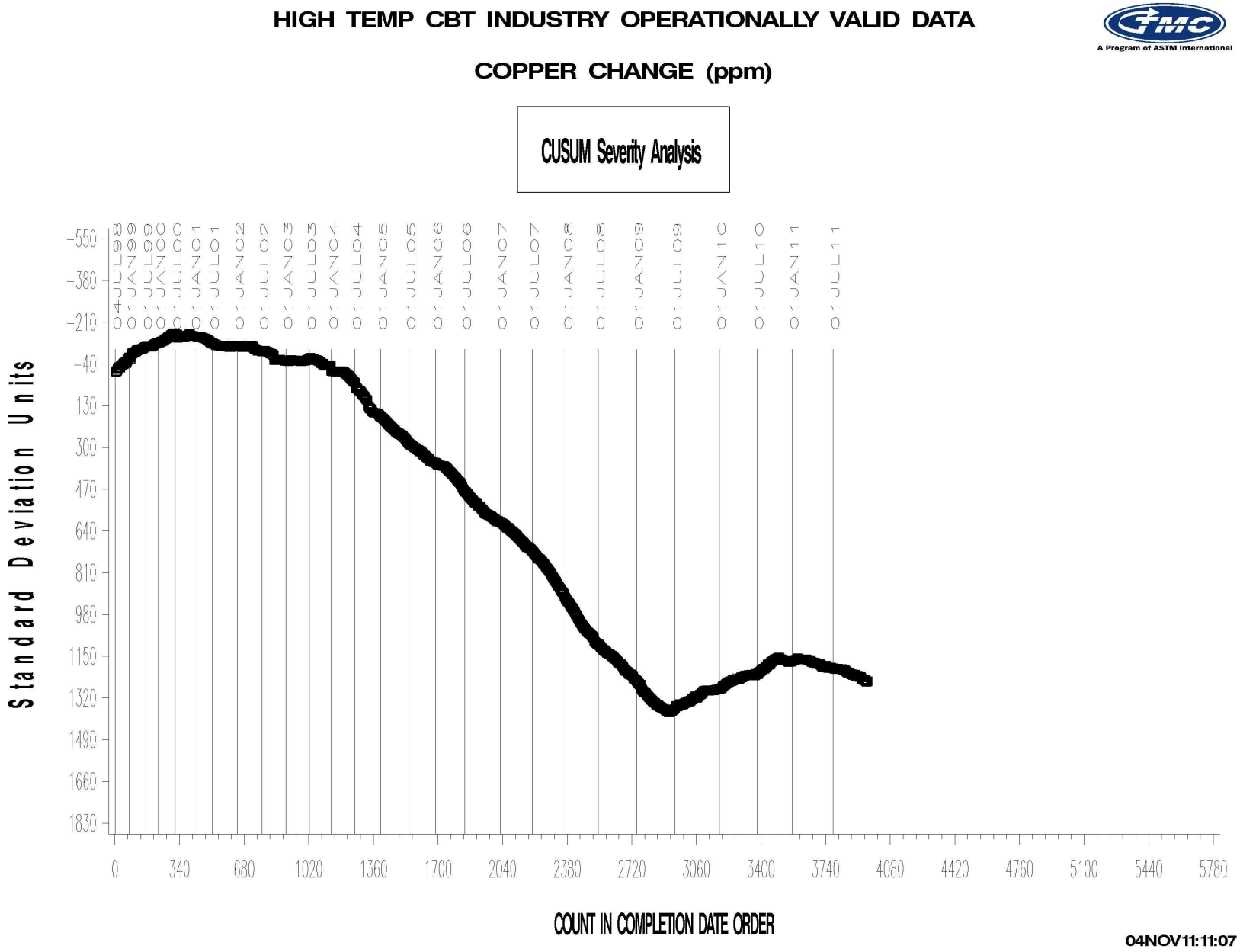
Average Δ/s by Lab

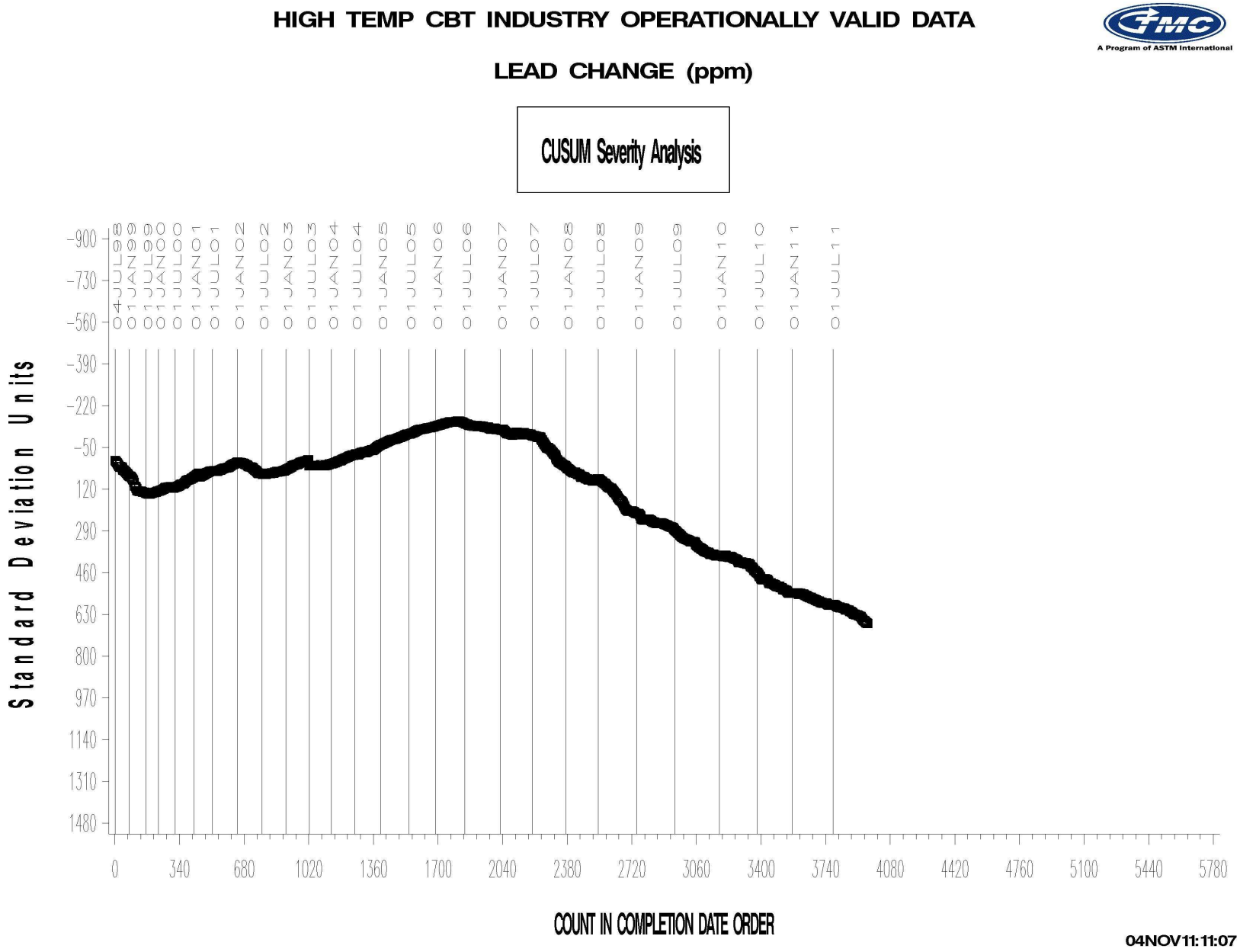
Lab	n	CUC	PBC
A	62	0.586	0.390
B	70	-0.053	-0.495
G	50	0.893	0.714
I	79	-0.141	0.616
V	0	0.000	0.000
Industry	261	0.253	0.283

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

ftp://ftp.astmtmc.cmu.edu/refdata/bench/htcbt/data/

The plots of summation delta/s from target for change in copper and change in lead, respectively, are shown on the following pages. Copper concentration results have returned to the severe trend that has existed for much of the history of the test. Lead concentration results are continuing the severe trend begun in 2007.


HIGH TEMP CBT INDUSTRY OPERATIONALLY VALID DATA
COPPER CHANGE (ppm)
CUSUM Severity Analysis
A Program of ASTM International
Standard Deviation Units
-550
-380
-210
-40
130
300
470
640
810
980
1150
1320
1490
1660
1830
0
340
680
1020
1360
1700
2040
2380
2720
3060
3400
3740
4080
4420
4760
5100
5440
5780
COUNT IN COMPLETION DATE ORDER
04NOV11:11:07


HIGH TEMP CBT INDUSTRY OPERATIONALLY VALID DATA
LEAD CHANGE (ppm)
CUSUM Severity Analysis
A Program of ASTM International
Standard Deviation Units
-900
-730
-560
-390
-220
-50
120
290
460
630
800
970
1140
1310
1480
04JUL98
01JAN99
01JUL99
01JAN00
01JUL00
01JAN01
01JUL01
01JAN02
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4760
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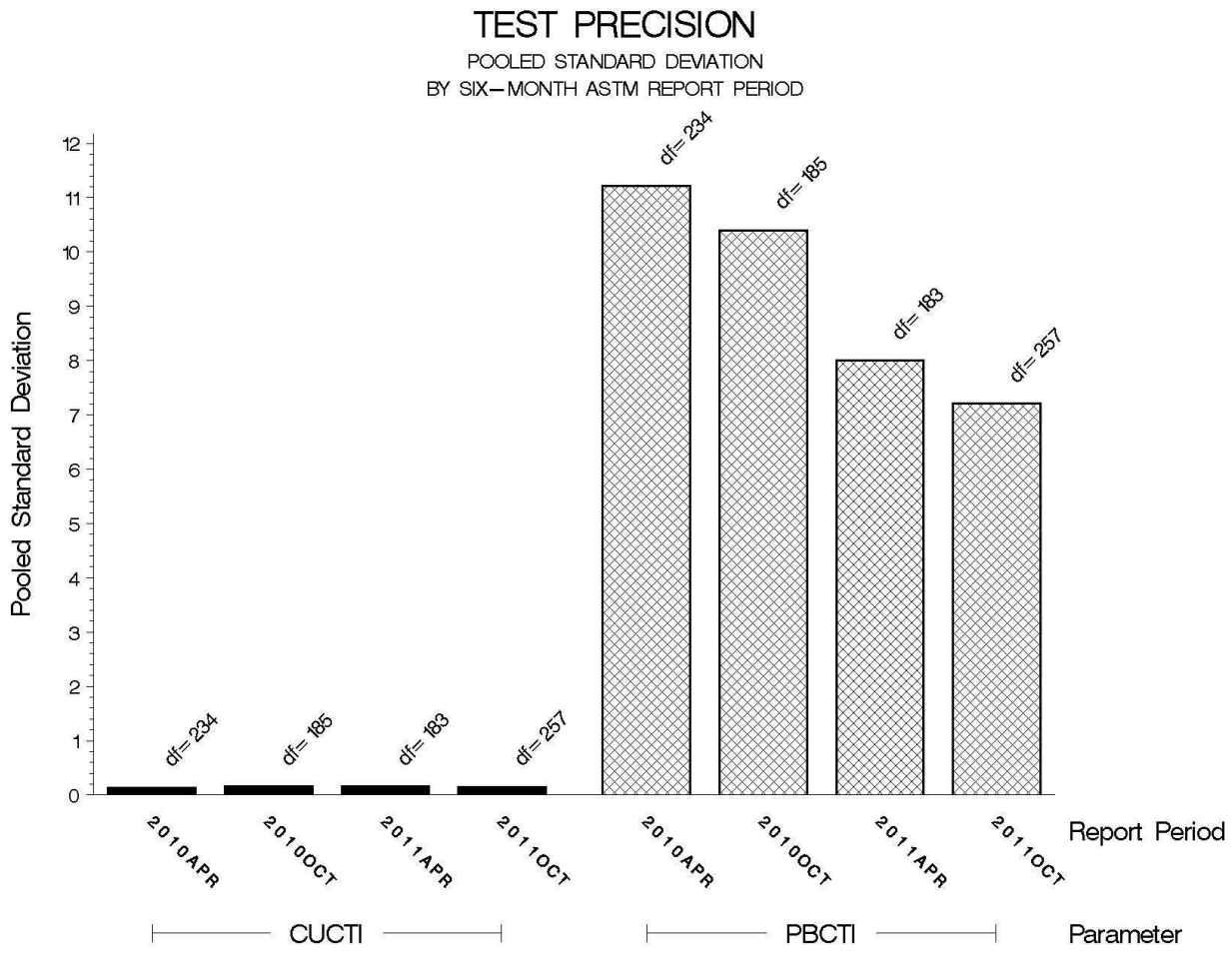
5780
COUNT IN COMPLETION DATE ORDER
04NOV11:11:07

POOLED S:

Precision estimates, by report period are depicted below. Precision estimates for both copper and lead are within historical levels.



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
44-1	0	0	0.0
44-2	38	166	5.2
1005-1	0	0	0.0
1005-3	59	30640	957.5
Total	97	30806	962.7

Reference Oil 1005-3 is used in multiple test areas. The total TMC oil inventory shown, but all isn't available for HTCBT use.

Inventory levels of reference oil 44-2 are getting low. The TMC has begun work on procuring a reblend of this oil, but no delivery date for that oil is available at this time.

INFORMATION LETTERS:
No information letters were issued this period.

SUMMARY

- Over the course of this report period, copper severity, as measured by cusum plotting, continued the existing severe trend.

- Over the course of this report period, lead severity, as measured by cusum plotting, continued the existing severe trend.

  Precision as measured by pooled standard deviation is better than last period for lead concentration, while copper concentration is comparable to previous levels.

MTK/mtk/astm1011.doc/mem11-048.mtk.doc
c: F. M. Farber
J. A. Clark
CBT Surveillance Panel
ftp://ftp.astmtmc.cmu.edu/docs/bench/htcbt/semiannualreports/htcbt-10-2011.pdf

Distribution: email