



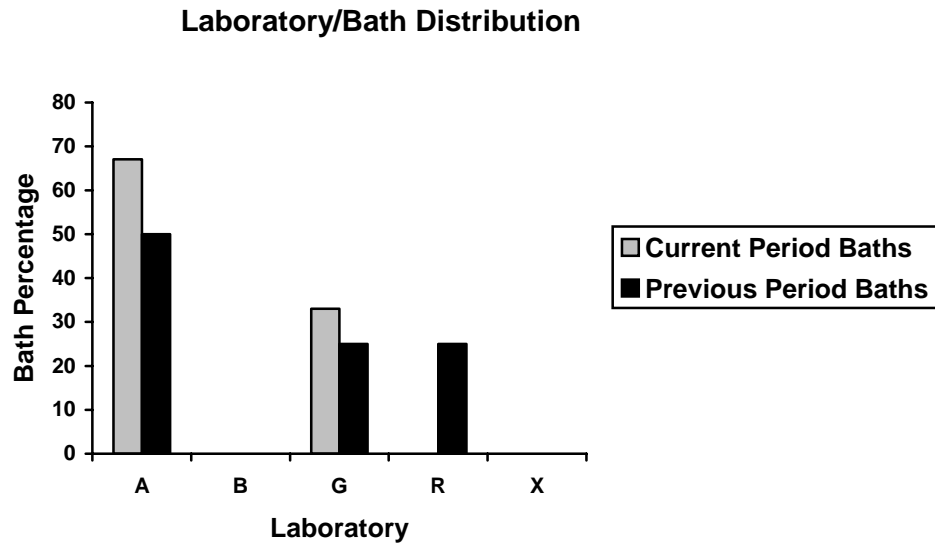
# Test Monitoring Center

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MEMORANDUM: 07-068  
DATE: October 25, 2007  
TO: Gil Reinhard, Chairman, CBT Surveillance Panel  
FROM: Jeff Clark  
SUBJECT: Corrosion Bench Test Status for the October 2007 ASTM Report Period

A total of 17 Corrosion Bench Test results from three baths in two labs were reported to the TMC during the October 2007 ASTM report period, which began on April 1, 2007 and ended on September 30, 2007.

The following chart shows the distribution by laboratory.



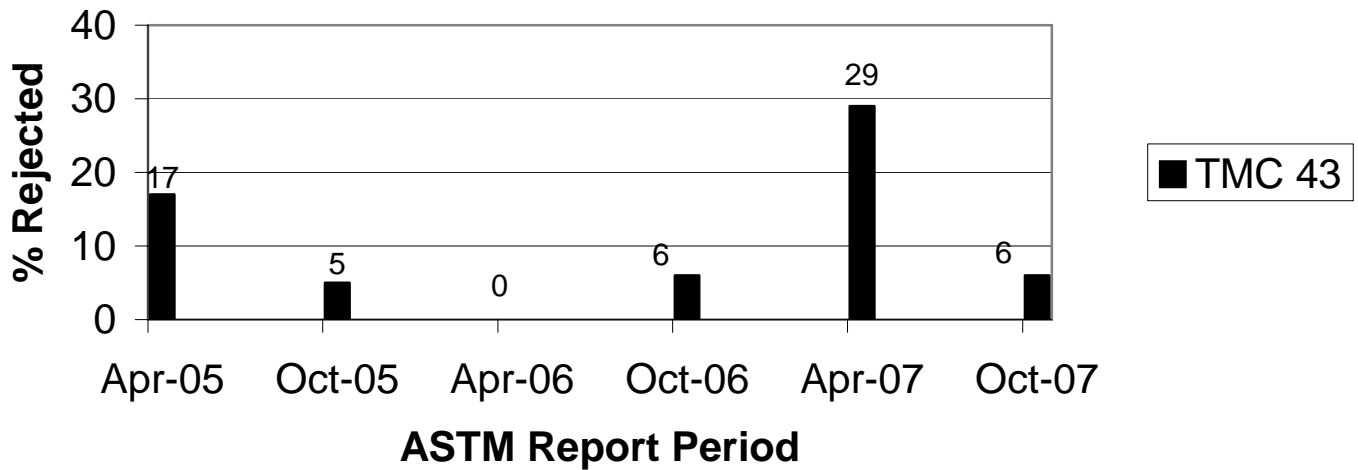
The following summarizes the status of the reference oil tests reported to the TMC:

	TMC Validity Codes	No. of Tests
Operationally and Statistically Acceptable	AC	16
Failed Acceptance Criteria	OC	1
Operationally Invalid	LC	0
Aborted	XC	0
<b>Total</b>		<b>17</b>

Tables 1, 2, and 3 (attached) summarize any failed, invalid and aborted tests.

The following presents the fail rate for this period with the fail rates of previous periods. The increase in rejection rate the previous period was due to a new laboratory that failed five tests.

### Comparison of Rejection Rates for This Period Versus Previous Periods

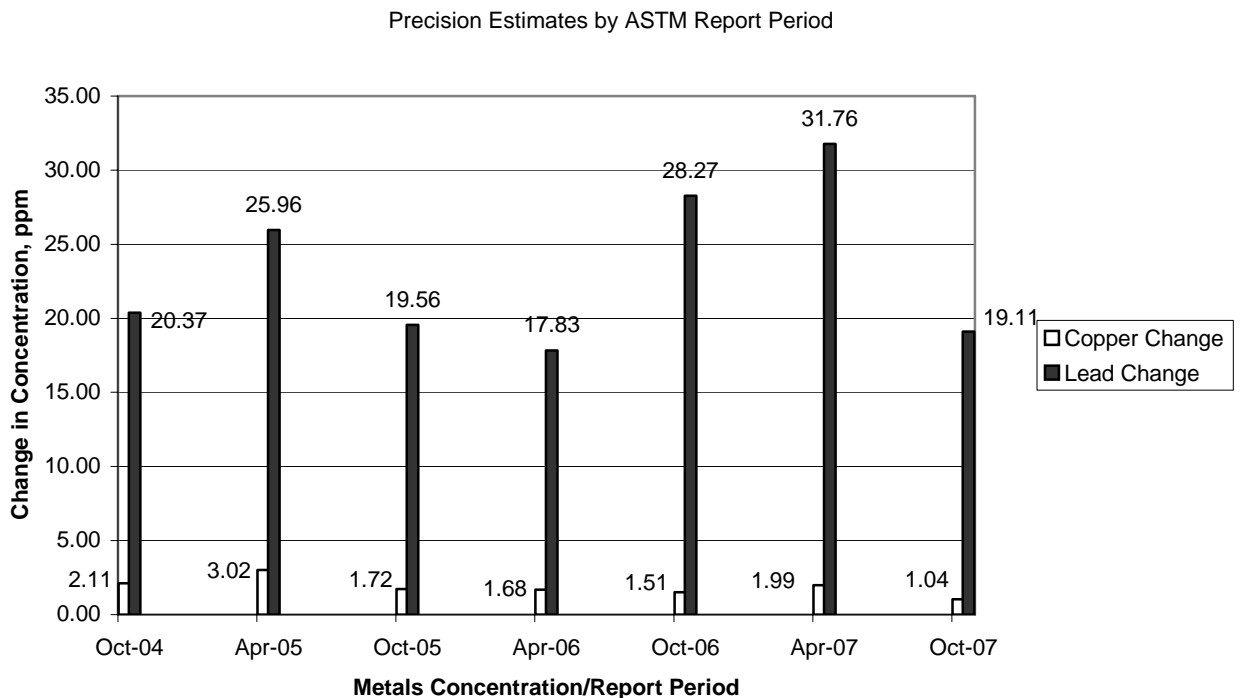


Industry Severity and Precision

The current severity for the change in metals concentration parameters on all operationally valid tests, for the current and previous periods, is tabulated below.

Period	n	$\Delta$ Cu Mean $\Delta/s$	$\Delta$ Pb Mean $\Delta/s$
4/1/07 through 9/30/07	17	-0.79	-0.36
10/1/06 through 3/31/07	29	-1.18	0.02
4/1/06 through 9/30/06	17	-0.22	0.11
10/1/05 through 3/31/06	16	-0.30	0.02
4/1/05 through 9/30/05	21	-0.16	-0.14

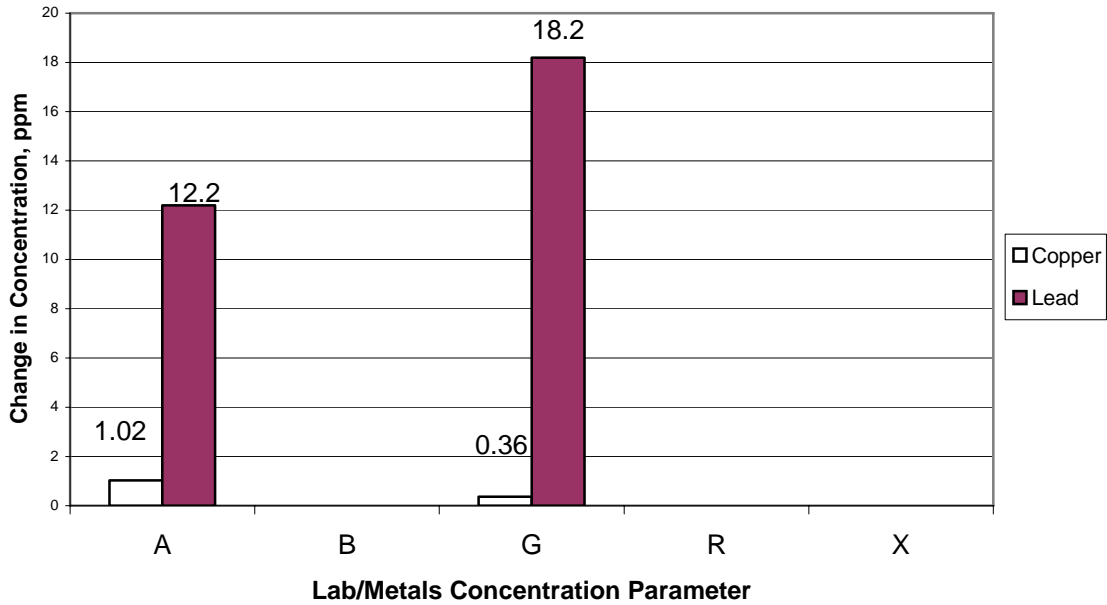
Figures 1 and 2 plot the Summation delta/s from target for change in copper and change in lead, respectively. Both copper and lead change are trending mild for the period. Precision estimates, by report period are depicted below. Precision for Cu change shows improvement compared to historical levels. Precision for Pb change is in line with historical levels.



Laboratory Severity and Precision

The following plot shows the precision for this period, by lab.

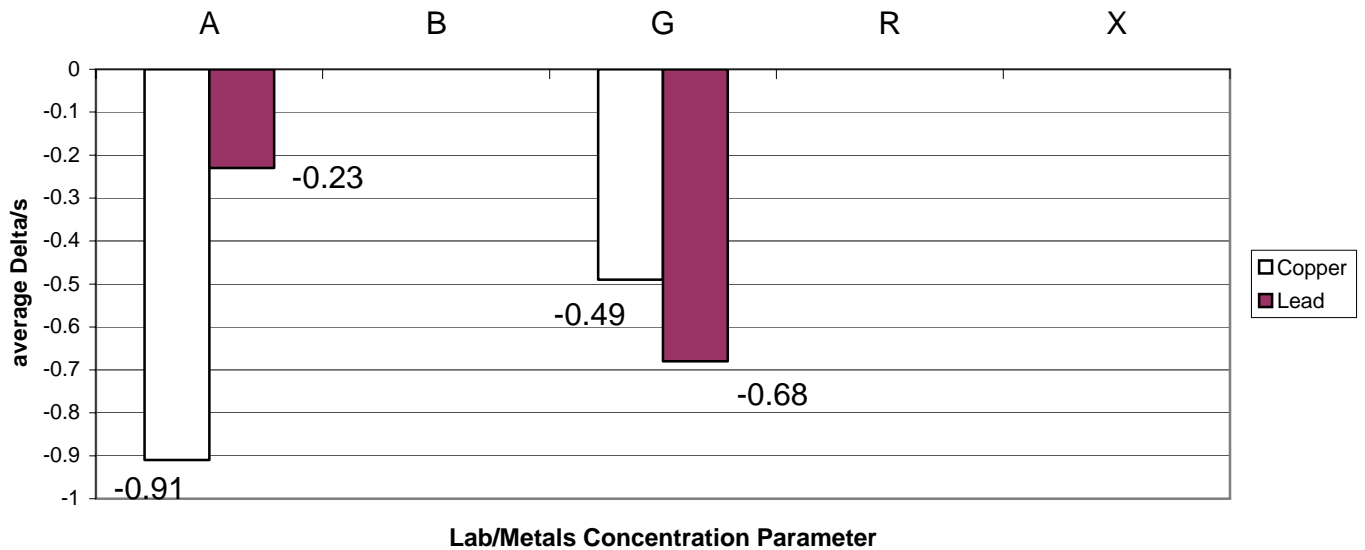
**Precision By Lab, TMC Oil 43**



Precision estimates for Copper show better precision at Lab G and for Lead show better precision at Lab A. Precision estimates are not available for labs B, R, and X (no test activity).

The following plot shows the average  $\Delta$ /s by laboratory and concentration parameter for this ASTM report period.

**Average Delta/s By Lab, TMC Oil 43**



For copper, Lab A was mild compared to Lab G. For lead, Lab G was mild compared to Lab A.

### Reference Oil

Reference oil quantities available at the laboratories and TMC, as well as estimated life of these oils, are tabulated below.

Oil	TMC Inventory, in gallons	TMC Inventory, in tests	Laboratory Inventory, in tests	Estimated life
43	52.9	~1587	21	10+ Years

The current reference oil acceptance bands are shown in the table below.

Oil	Copper Change (ppm)	Lead Change (ppm)
43	12.4 – 24.2	68.5 – 127.3

### Information Letters

No Information Letters were issued this period.

### Additional Information

The CBT database is available on the TMC's website. If you have any questions on how to access this information, contact the TMC.

JAC/jac/mem07-068.jac.doc

c: CBT Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/bench/cbt/semiannualreports/cbt-10-2007.pdf>

J. L. Zalar

F. M. Farber

Distribution: Email

**Table 1**  
**Summary of Reasons for Failed Tests**

	No. of Tests
Lead, mild	1

**Table 2**  
**Summary of Reasons for Invalid Tests**

	No. of Tests
No invalid tests	-

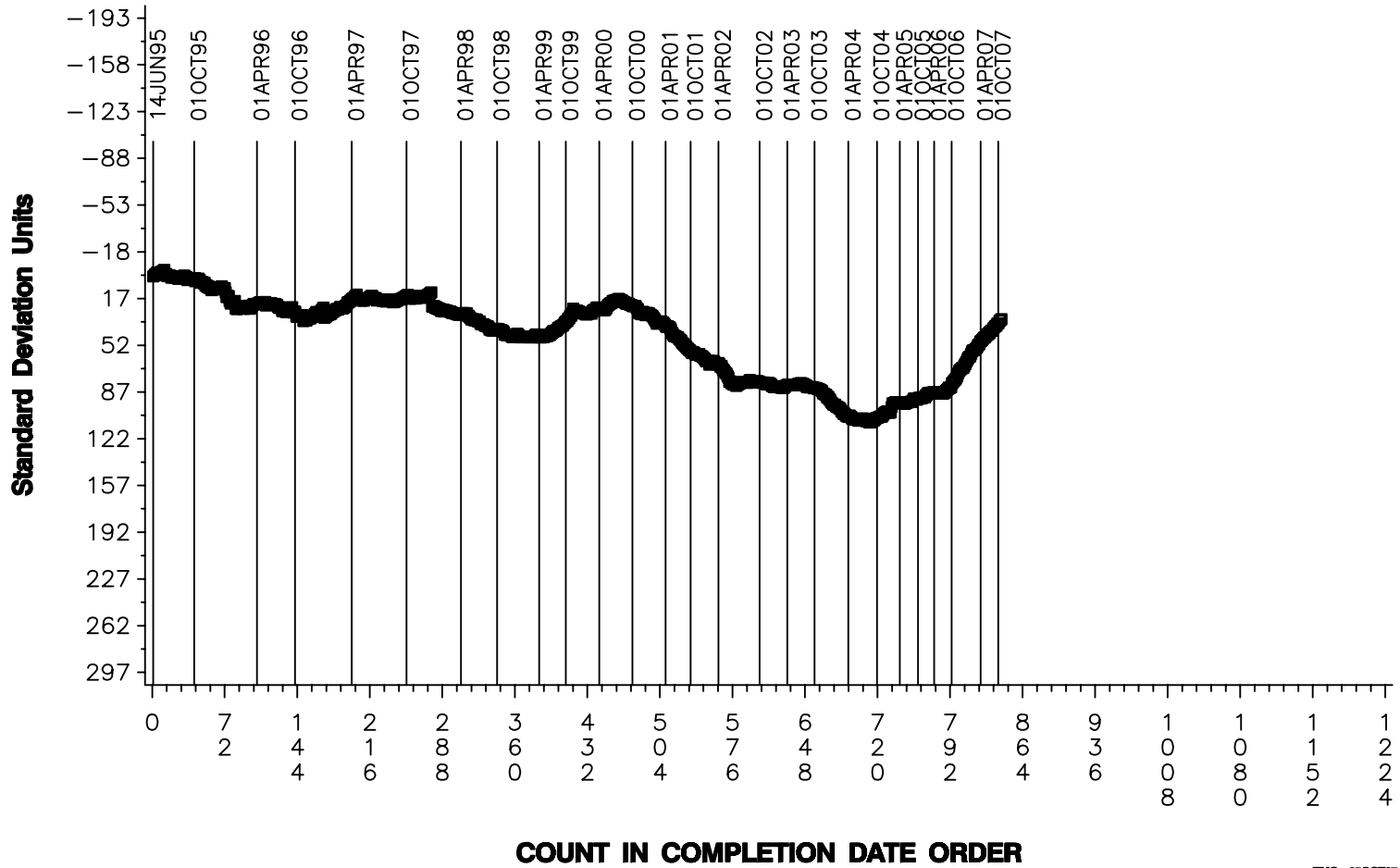
**Table 3**  
**Summary of Reasons for Aborted Tests**

	No. of Tests
No aborted tests	-

**Figure 1**  
**CBT INDUSTRY OPERATIONALLY VALID DATA**

**COPPER CHANGE (ppm)**

**CUSUM Severity Analysis**



**Figure 2**  
**CBT INDUSTRY OPERATIONALLY VALID DATA**

**LEAD CHANGE (ppm)**

**CUSUM Severity Analysis**

