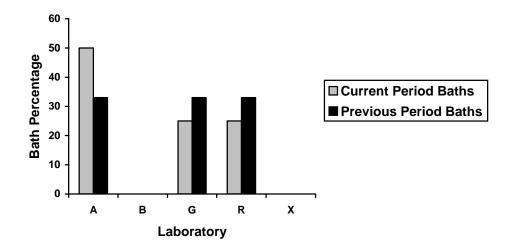


MEMORANDUM:	07-022
DATE:	May 18, 2007
TO:	Gil Reinhard, Chairman, CBT Surveillance Panel
FROM:	Jeff Clark
SUBJECT:	Corrosion Bench Test Status for the April 2007 ASTM Report Period

A total of 43 Corrosion Bench Test results from four baths in three labs were reported to the TMC during the April 2007 ASTM report period, which began on October 1, 2006 and ended on March 31, 2007.

The following chart shows the distribution by laboratory.



# Laboratory/Bath Distribution

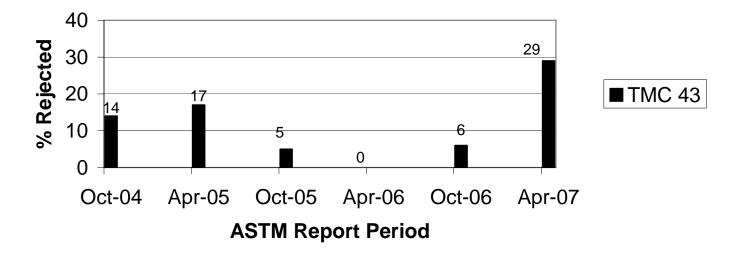
	TMC Validity Codes	No. of Tests
Operationally and Statistically Acceptable	AC	23
Failed Acceptance Criteria	OC	6
Acceptable Donated Test	AG	12
Operationally Invalid	LC	2
Aborted	XC	0
Total		43

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

Tables 1, 2, and 3 (attached) summarize any failed, invalid and aborted tests. All donated tests were run for the batch F coupon approval matrix.

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



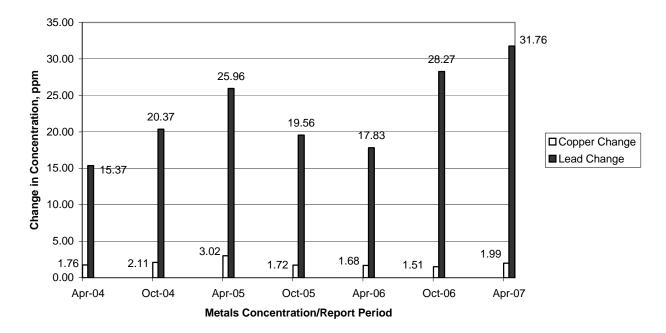


### Industry Severity and Precision

Period	n	Δ Cu	Δ Pb
		Mean $\Delta/s$	Mean $\Delta$ /s
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
10/1/04 through 3/31/05	23	-0.50	-1.17

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

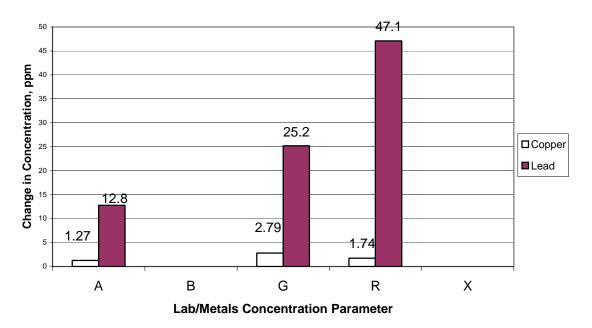
Figures 1 and 2 plot the Summation delta/s from target for change in copper and change in lead, respectively. Copper change is trending mild and lead change is on target for the period. Precision estimates, by report period are depicted below. Precision for Cu change is comparable to historical levels. Precision for Pb change shows degradation compared to recent and historical estimates (see chart below) and is likely influenced by poor precision at lab R (see chart on following page).



#### Precision Estimates by ASTM Report Period

### Laboratory Severity and Precision

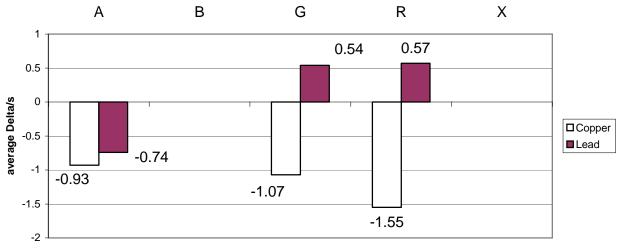
The following plot shows the precision for this period, by lab.



# Precision By Lab, TMC Oil 43

Precision estimates for both Copper and Lead show better precision at lab A. Precision estimates are not available for labs B 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

Lab/Metals Concentration Parameter

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

### Reference Oil Supply

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	54.0	~1728	17	10+ Years

### Test Coupons

Batch F test coupons have been approved for use. To date, 3 tests have been run on oil 43. The TMC will notify the surveillance panel once 30 tests have been completed for the purposes of examining what effects, if any, the coupon batch change has had on test severity.

#### 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/mem07-022.jac.doc

 c: CBT Surveillance Panel ftp://ftp.astmtmc.cmu.edu/docs/bench/cbt/semiannualreports/cbt-04-2007.pdf
 J. L. Zalar
 F. M. Farber

Distribution: Email

<u>Table 1</u>
<b>Summary of Reasons for Failed Tests</b>

	No. of Tests
Lead, severe	2
Lead, mild	2
Copper, mild	1
Copper, mild and Lead, severe	1

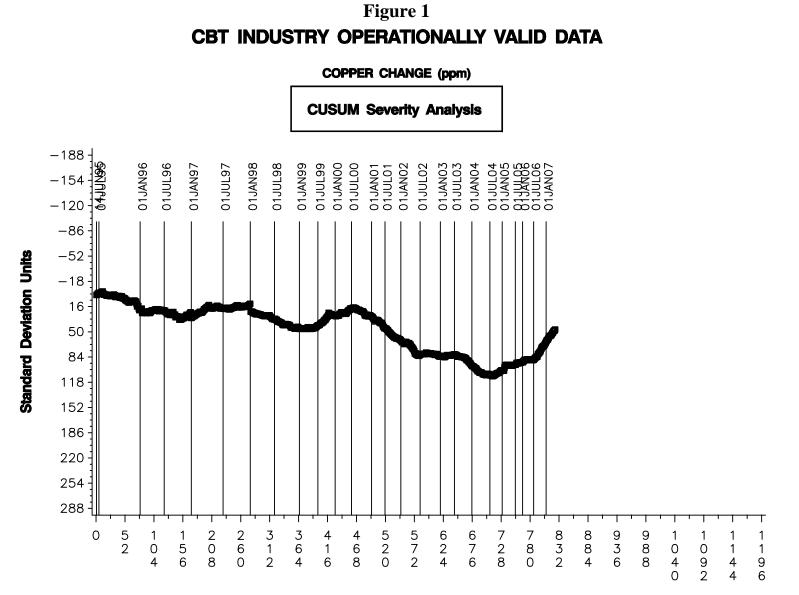
<u>Table 2</u> Summary of Reasons for Invalid Tests

	No. of Tests
Loss of temperature control	1
Bath mechanical failure	1

 Table 3

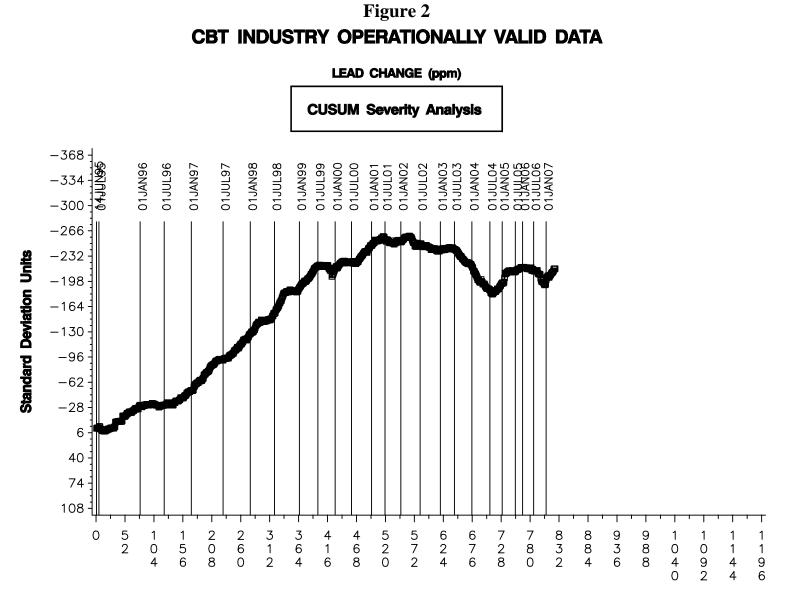
 Summary of Reasons for Aborted Tests

	No. of Tests
No aborted test	-



COUNT IN COMPLETION DATE ORDER

TMC 16MAY07:13:43



COUNT IN COMPLETION DATE ORDER

TMC 16MAY07:13:44