



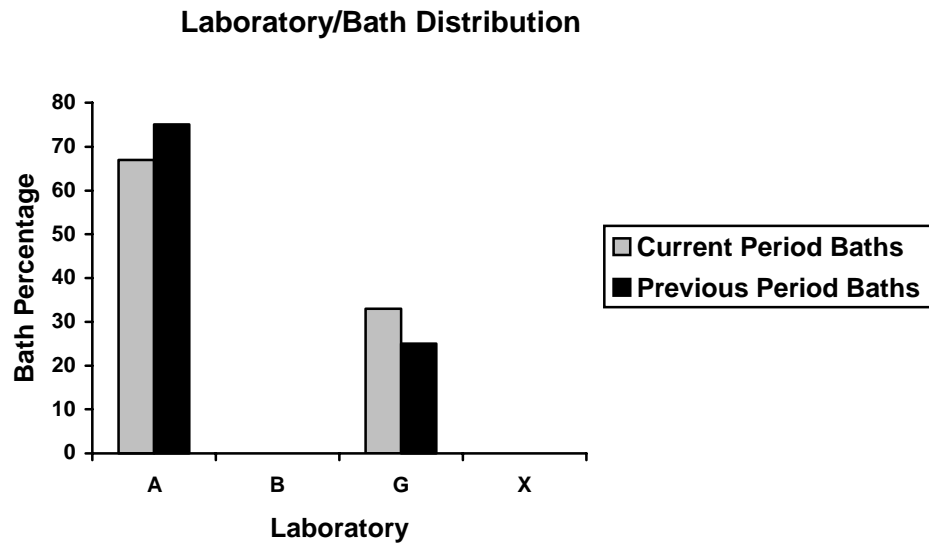
# Test Monitoring Center

6555 Penn Avenue  
Pittsburgh, PA 15206-4489  
(412) 365-1000

MEMORANDUM: 03-031  
DATE: April 9, 2003  
TO: Jerry Wang, Chairman, CBT Surveillance Panel  
FROM: Jeff Clark  
SUBJECT: Corrosion Bench Test Status from October 1, 2002 through March 31, 2003

A total of 29 Corrosion Bench Test results from three baths in two labs were reported to the TMC during the period from October 1, 2002 through March 31, 2003.

The following chart shows the distribution by laboratory.



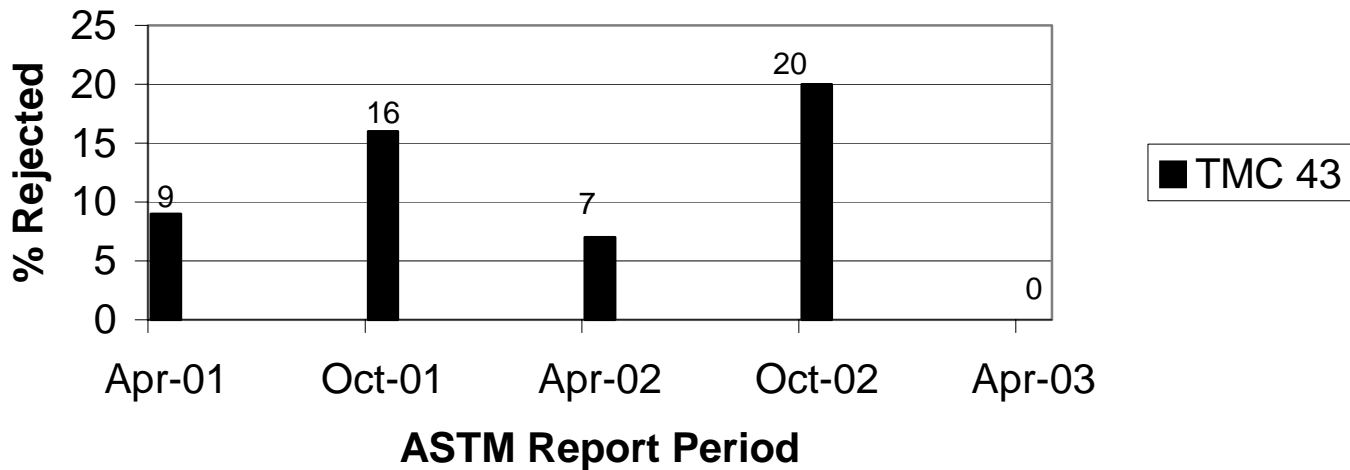
The following summarizes the status of the reference oil tests reported to the TMC:

	TMC Validity Codes	No. of Tests
Operationally and Statistically Acceptable	AC	28
Failed Acceptance Criteria	OC	0
Declared Invalid by Laboratory	LC	1
Aborted	XC	0
Total		29

There was one operationally invalid test reported. The test was invalid due to a bath malfunction. There were no statistically unacceptable tests this period.

The following presents the fail rate for this period with the fail rates of previous periods.

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



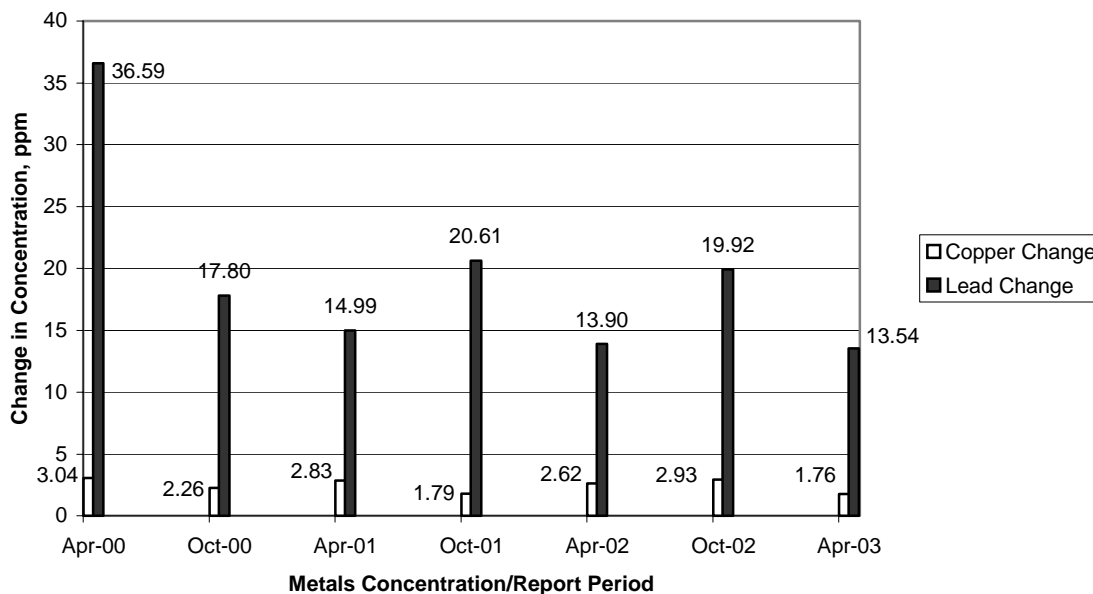
Industry Severity and Precision

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	$\Delta$ Pb
		Mean $\Delta/s$	Mean $\Delta/s$
10/1/02 through 3/31/03	29	0.11	-0.04
4/1/02 through 9/30/02	41	0.32	0.38
10/1/01 through 3/31/02	27	0.37	-0.23
4/1/01 through 9/30/01	25	0.78	0.13
10/1/00 through 3/31/01	33	0.44	-0.68

Figures 1 and 2 plot the Summation delta/s from target for both change in copper and change in lead, respectively. Figure 1 shows copper change trending slightly severe for the period. Figure 2 shows lead change to be on target for the period. Precision estimates, by report period are depicted below. Precision for both Cu and Pb change show improvement compared to both the previous period and historical levels (see chart below).

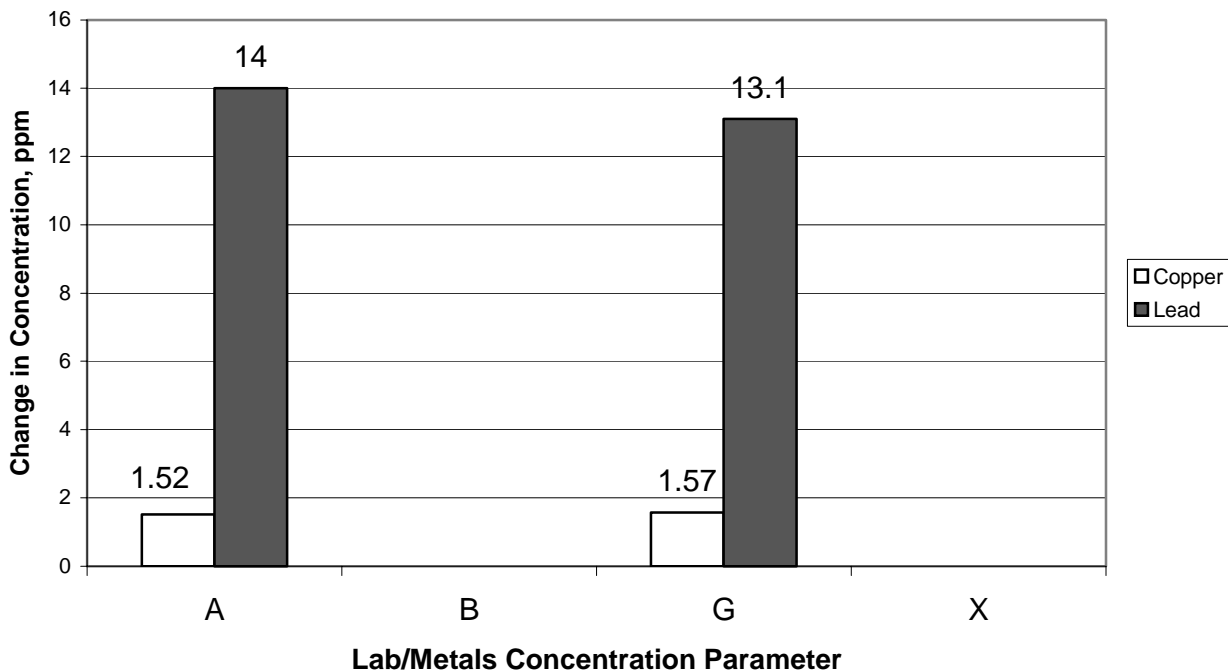
Precision Estimates by ASTM Report Period



Laboratory Severity and Precision

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

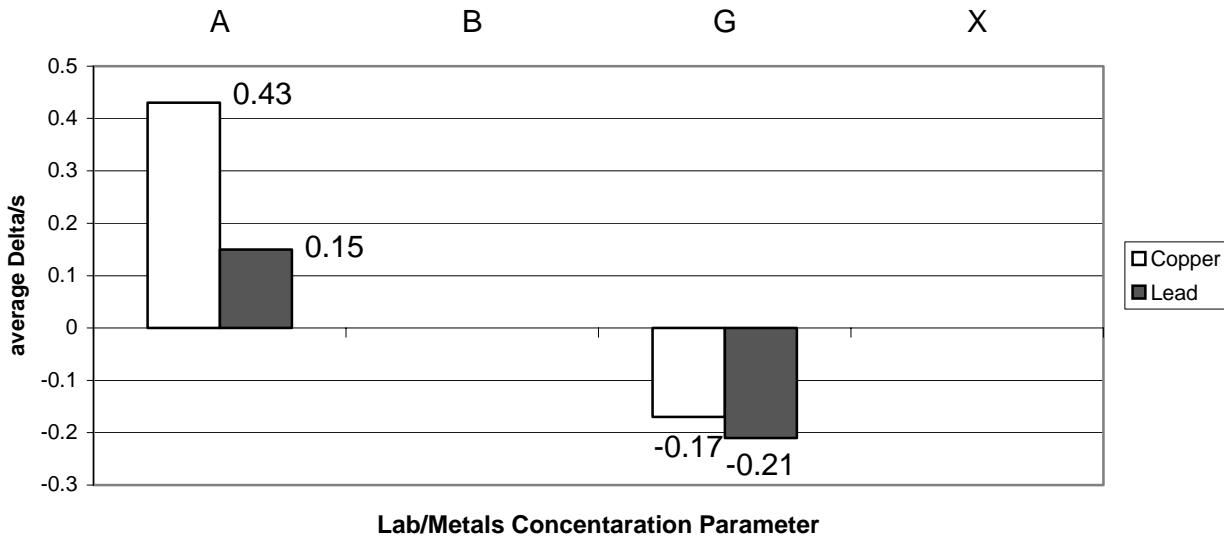
**Precision By Lab, TMC Oil 43**



Precision estimates for both Lead and Copper illustrate good agreement between labs A and B. 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**



For both copper and lead, Lab A was severe and Lab G was mild.

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	62.3	~2000	53	10+ Years

Information Letters and Memoranda

There were no information letters or TMC Memoranda pertaining to the Corrosion Bench Test area 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/mem03-031.jac.doc

c: CBT Surveillance Panel

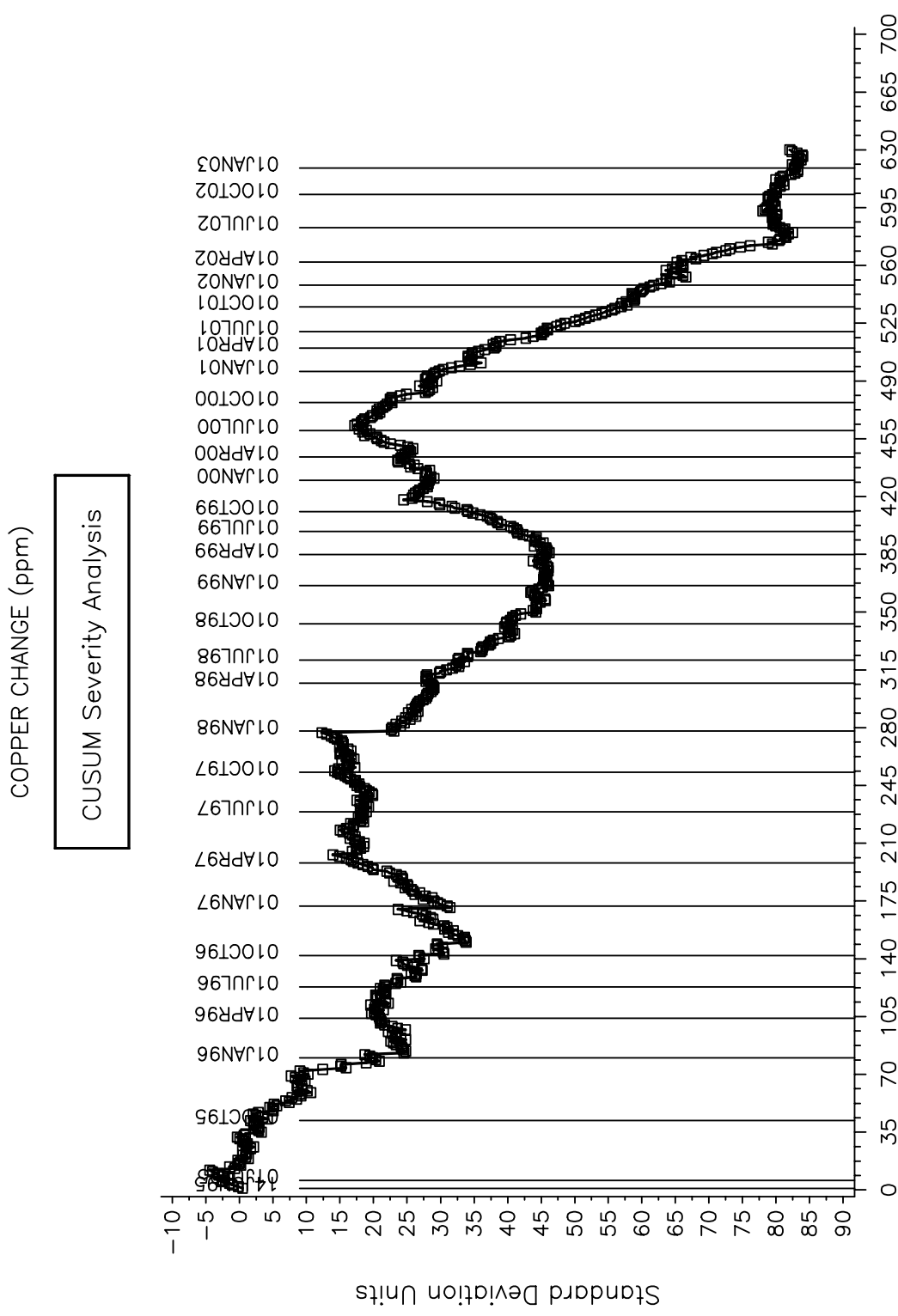
J. L. Zalar

F. M. Farber

<ftp://ftp.astmtmc.cmu.edu/docs/bench/cbt/semiannualreports/cbt-04-2003.pdf>

Distribution: Email

**Figure 1**  
CBT INDUSTRY OPERATIONALLY VALID DATA



**Figure 2**  
 CBT INDUSTRY OPERATIONALLY VALID DATA

LEAD CHANGE (ppm)

CUSUM Severity Analysis

