



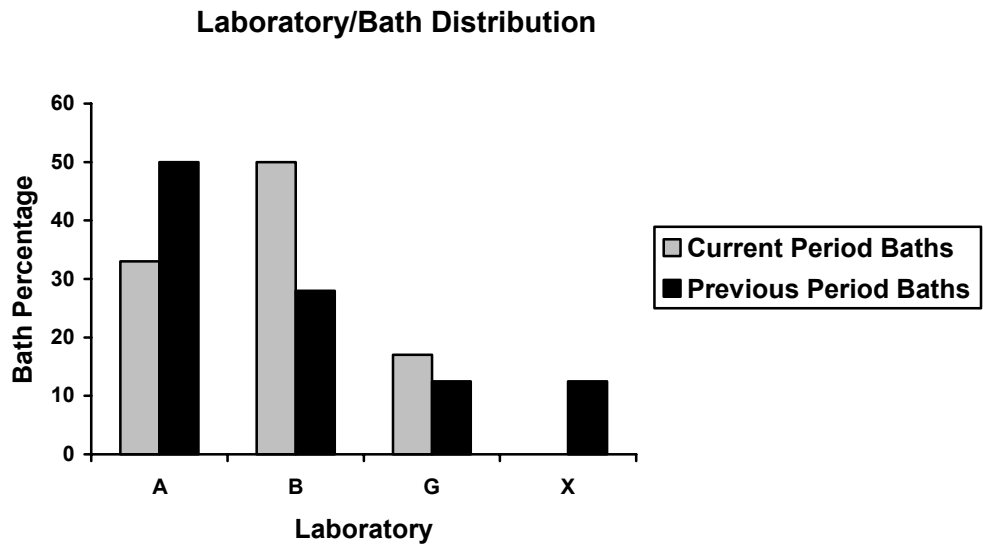
Test Monitoring Center

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(412) 365-1000

MEMORANDUM: 01-146
DATE: November 2, 2001
TO: Jerry Wang, Chairman, CBT Surveillance Panel
FROM: Jeff Clark
SUBJECT: Corrosion Bench Test Status from April 1, 2001 through September 30, 2001

A total of 27 Corrosion Bench Test results from six baths in three labs were reported to the TMC during the period from April 1, 2001 through September 30, 2001.

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	21
Failed Acceptance Criteria	OC	4
Declared Invalid by Laboratory	LC	1
Aborted	XC	1
Total		27

One test was declared invalid due to a temperature control problem. No reason was given for the aborted test.

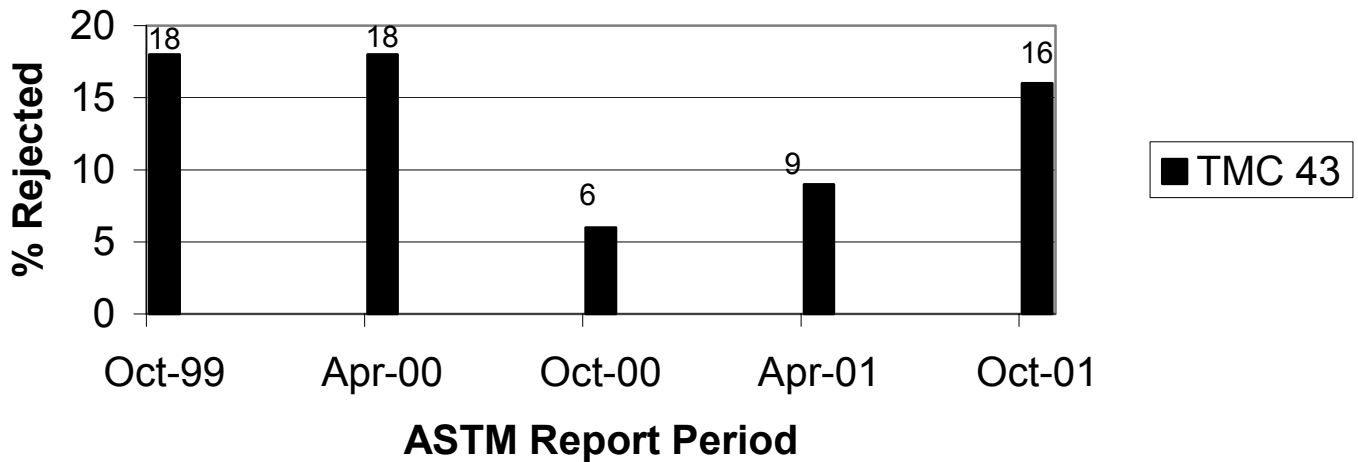
The following tabulates the statistically unacceptable tests:

Reason	Number of Tests
Mild Pb	1
Severe Pb	2
Severe Cu	1

A total of 25 operationally valid results were run on reference oil 43, of which 4 failed (16% fail rate).

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



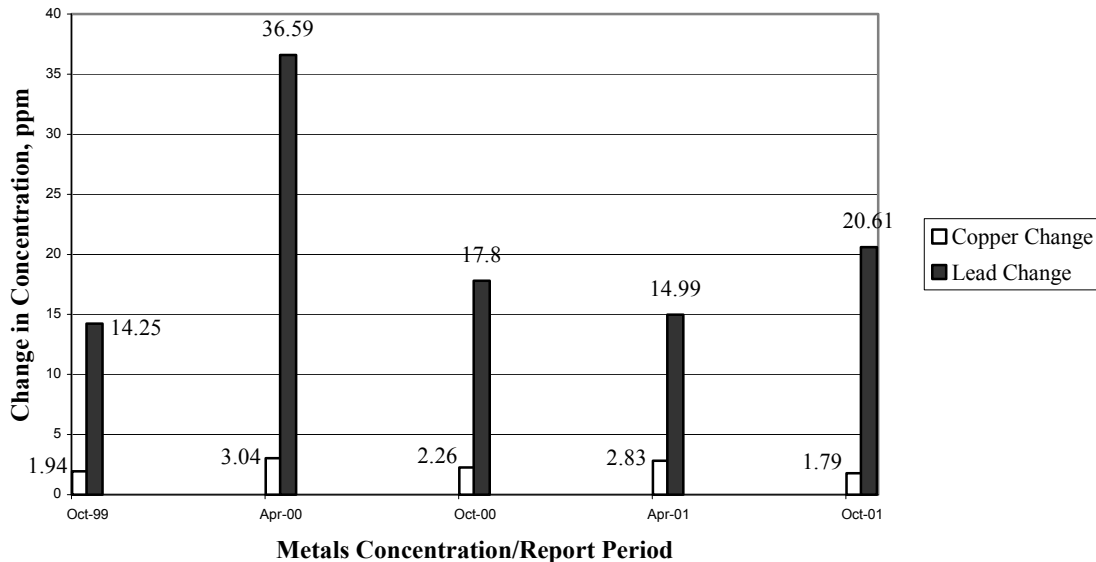
Industry Severity and Precision

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	Δ Cu Mean Δ/s	Δ Pb Mean Δ/s
4/1/01 through 9/30/01	25	0.78	0.13
10/1/00 through 3/31/01	33	0.44	-0.68
4/1/00 through 9/30/00	33	-0.33	-0.14
10/1/99 through 3/31/00	33	-0.40	-0.27
4/1/99 through 9/30/99	26	-0.39	-0.61

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 severe for the period. Figure 2 shows lead change trending slightly severe during the period, which is a reversal in trend from recent periods. Precision estimates, by report period are depicted below. Precision for both Cu and Pb change are within historical levels (see chart below).

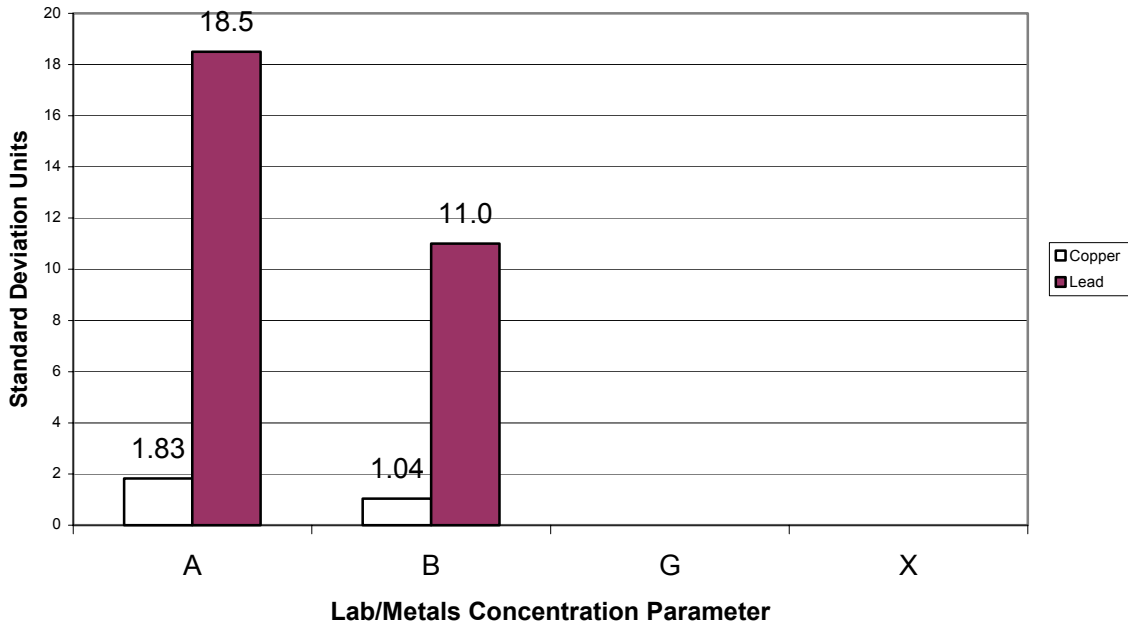
Precision Estimates by ASTM Report Period



Laboratory Severity and Precision:

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

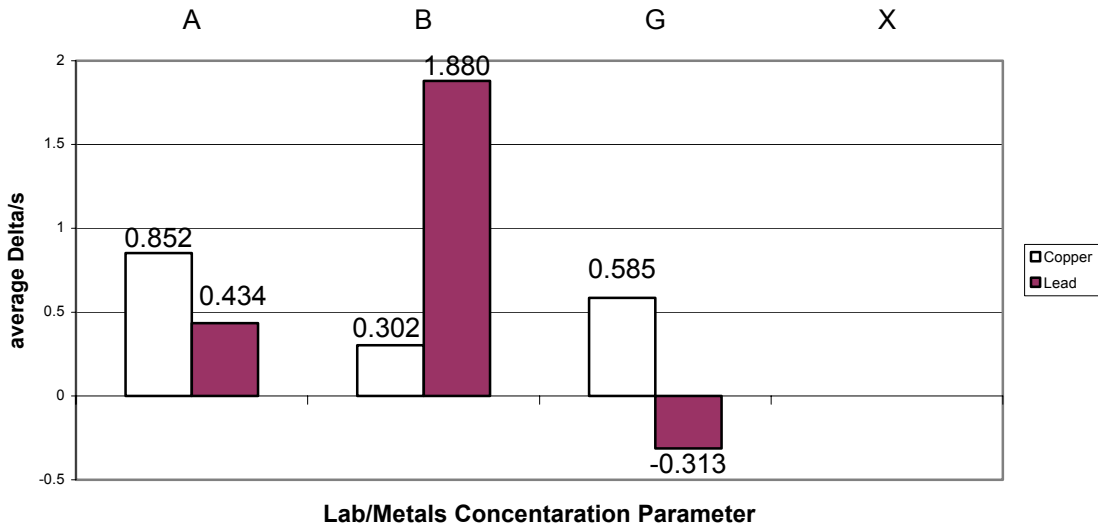
Precision By Lab, TMC Oil 43



Precision estimates for Copper illustrate good agreement between labs A and B. Precision estimates for Lead indicates that lab A has higher variability than lab B, but note the large difference in the number of tests (21 for lab A, 3 for lab B) makes it difficult to place any meaning on this difference. Precision estimates are not available for labs G (one test) and X (no tests).

The following plot shows the average Δ/s by laboratory and concentration parameter for this ASTM report period

Average Delta/s By Lab, TMC Oil 43



Lab G was mild on Lead for the period, while the remaining labs all tended to be severe. All labs were severe on Copper.

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	65.35	2000	55	10+ Years

Information Letters and Memorandum

There were no information letters or TMC Memorandum 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/mem01-146.jac.doc

c: CBT Surveillance Panel

<ftp://www.tmc.astm.cmri.cmu.edu/docs/bench/cbt/semiannualreports/cbt-10-2001.pdf>

J. L. Zalar

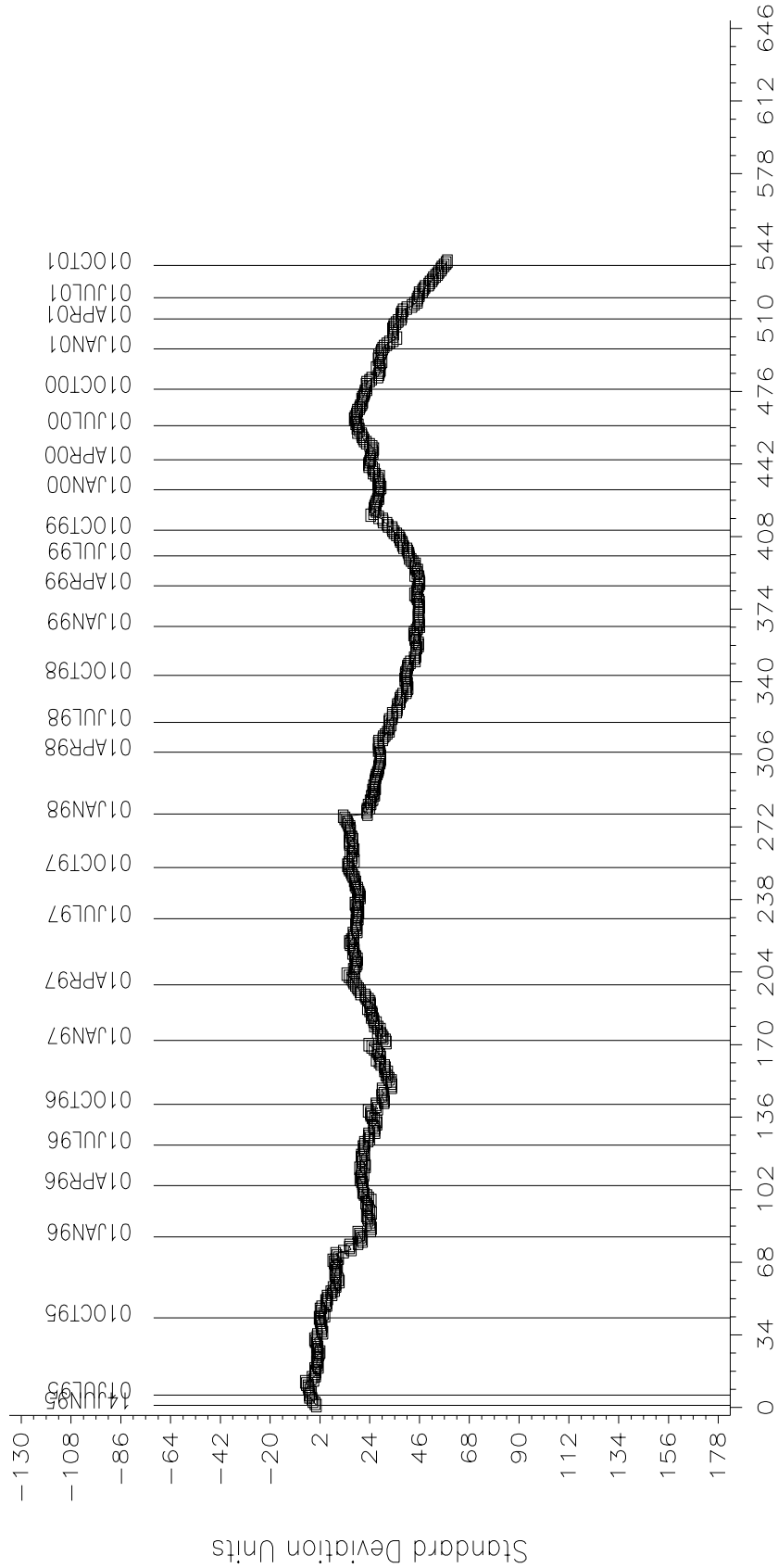
F. M. Farber

CBT INDUSTRY OPERATIONALLY VALID DATA

FIGURE 1

COPPER CHANGE IN CONCENTRATION

CUSUM Severity Analysis



COUNT IN COMPLETION DATE ORDER

CBT INDUSTRY OPERATIONALLY VALID DATA

FIGURE 2

LEAD CHANGE IN CONCENTRATION

CUSUM Severity Analysis

