Test Monitoring Center
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MEMORANDUM: 04-028

DATE: April 16, 2004

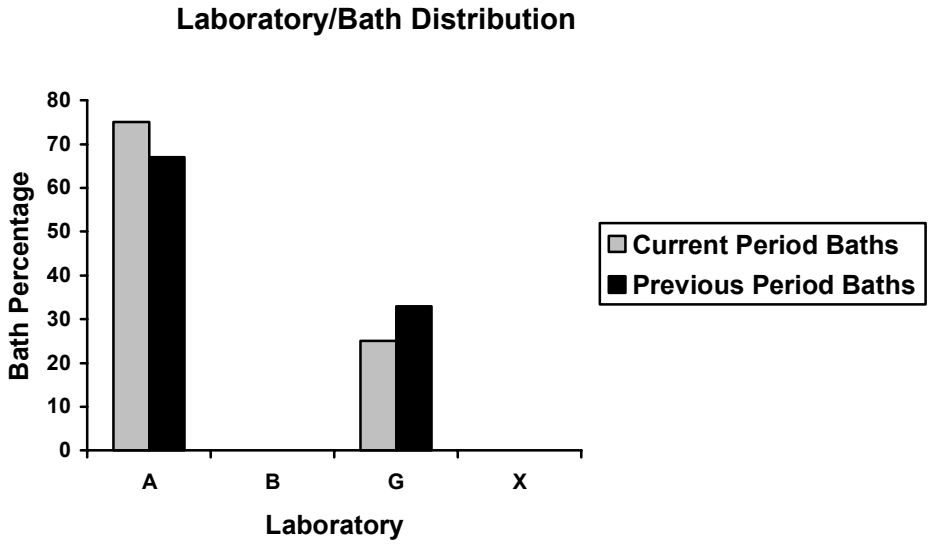
TO: Joe Franklin, Chairman, CBT Surveillance Panel

FROM: Jeff Clark

SUBJECT: Corrosion Bench Test Status for the April 2004 ASTM Report Period

A total of 34 Corrosion Bench Test results from four baths in two labs were reported to the TMC during the April 2004 ASTM report period, which began on October 1, 2003 and ended on March 31, 2004.

The following chart shows the distribution by laboratory.

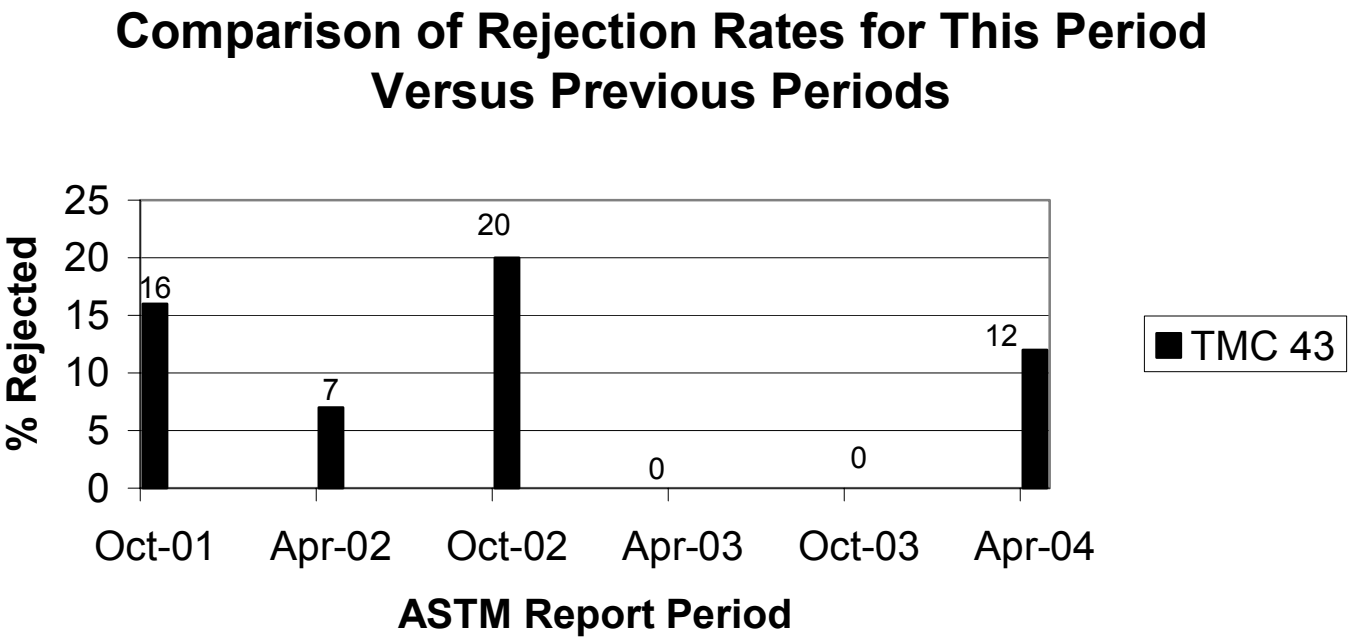


The following summarizes the status of the reference oil tests reported to the TMC:

	TMC Validity Codes	No. of Tests
Operationally and Statistically Acceptable	AC	29
Failed Acceptance Criteria	OC	4
Declared Invalid by Laboratory	LC	0
Aborted	XC	1
Total		34

All four tests that failed the acceptance criteria were due to severe lead results. There was one aborted test, which was due to a temperature failure.

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

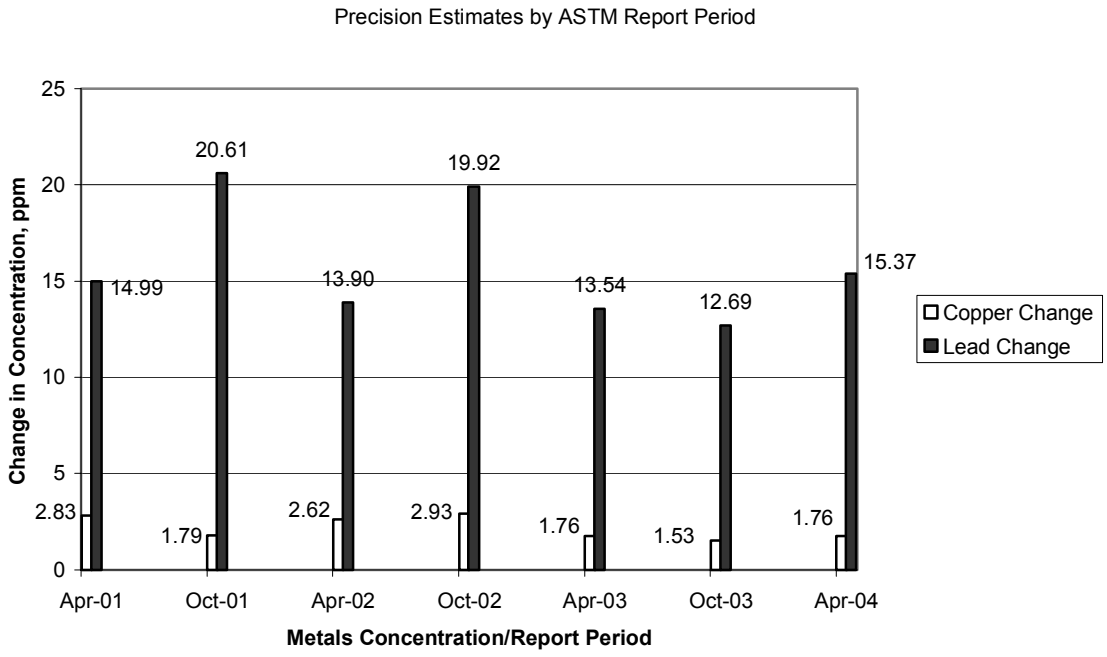


Industry Severity and Precision

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

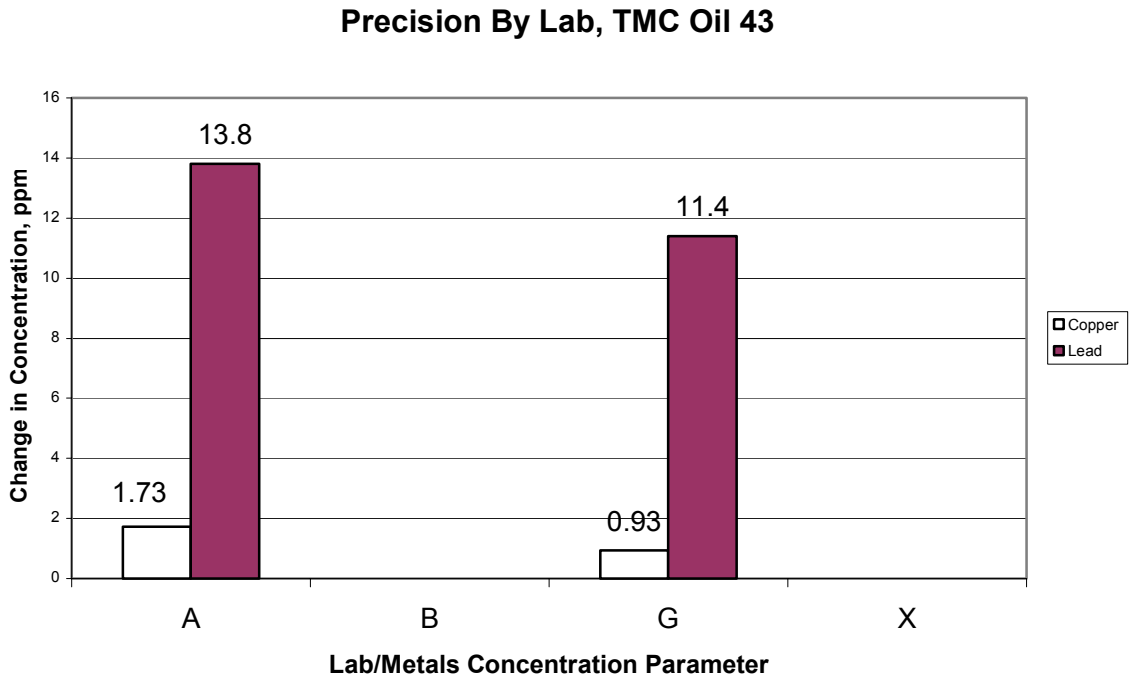
Period	n	Δ Cu	Δ Pb
		Mean Δ/s	Mean Δ/s
10/1/03 through 3/31/04	33	0.64	1.03
4/1/03 through 9/30/03	27	0.08	0.43
10/1/02 through 3/31/03	29	0.11	-0.04
4/1/02 through 9/30/02	41	0.32	0.38
10/1/01 through 3/31/02	27	0.37	-0.23

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 to be severe for the period. Figure 2 shows lead change to be severe for the period. Precision estimates, by report period are depicted below. Precision for both Cu and Pb change are within historical levels (see chart below).



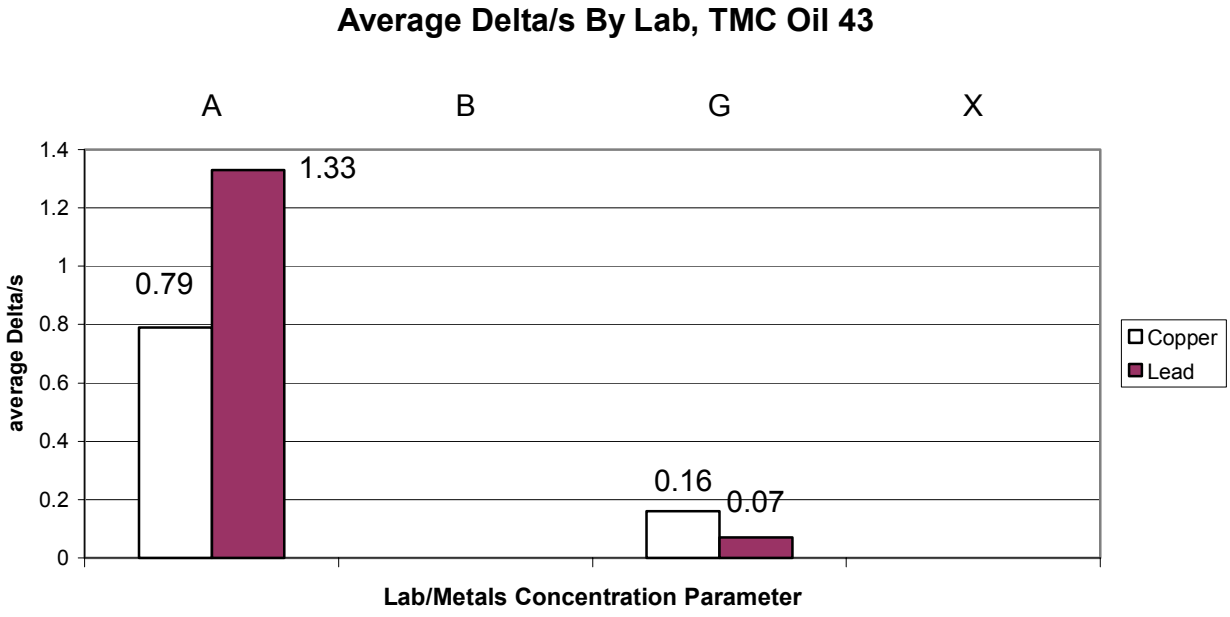
Laboratory Severity and Precision

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



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

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



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

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	59.7	~1910	18	10+ Years

Information Letters and Memorandum

No information letters were issued this report 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/mem04-028.jac.doc

c: CBT Surveillance Panel
ftp://ftp.astmtmc.cmu.edu/docs/bench/cbt/semiannualreports/cbt-04-2004.pdf
J. L. Zalar
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Distribution: Email

Figure 1

CBT INDUSTRY OPERATIONALLY VALID DATA

COPPER CHANGE (ppm)

CUSUM Severity Analysis

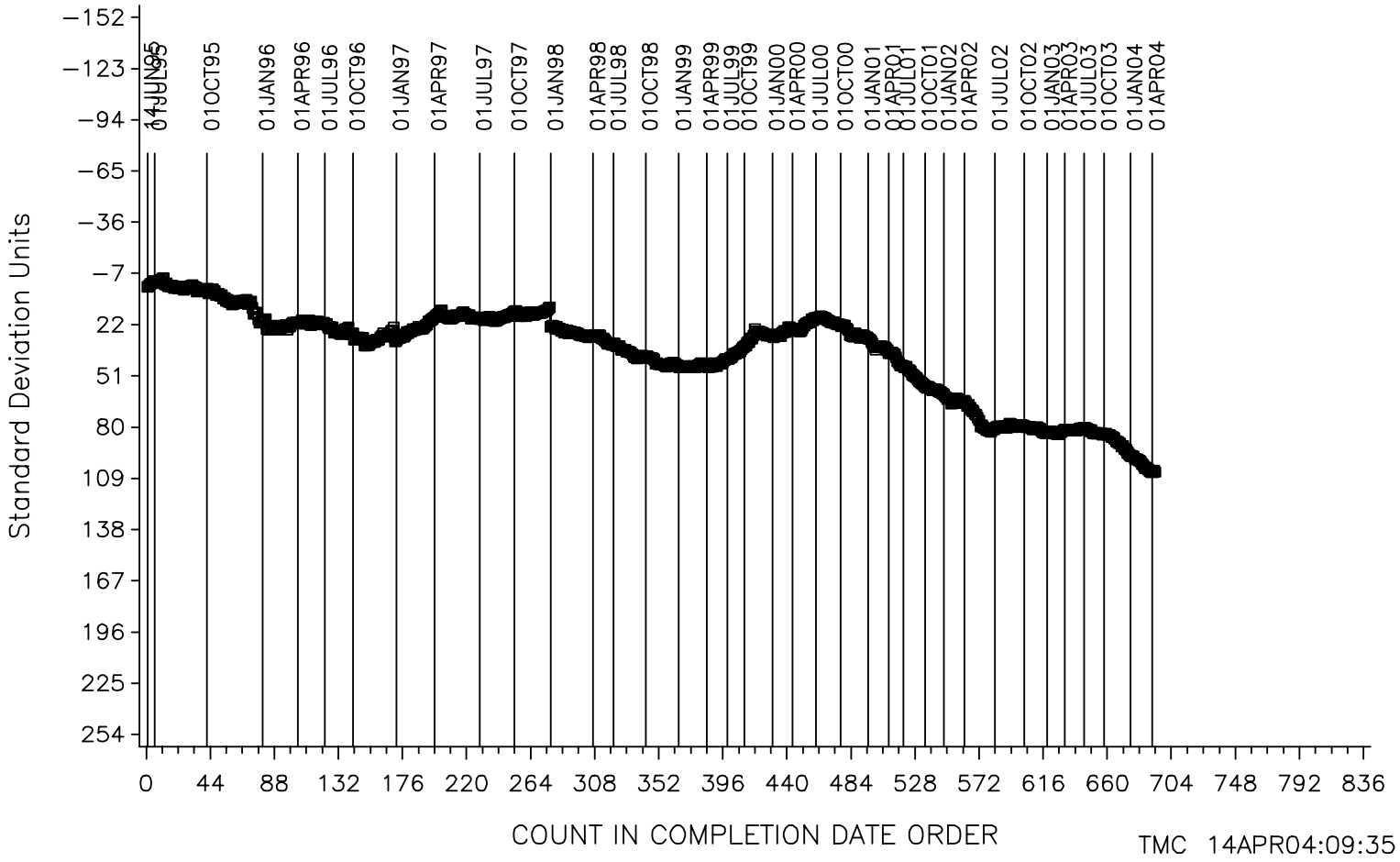

Figure 2

CBT INDUSTRY OPERATIONALLY VALID DATA

LEAD CHANGE (ppm)

CUSUM Severity Analysis