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

MEMORANDUM: 06-068

DATE: October 4, 2006

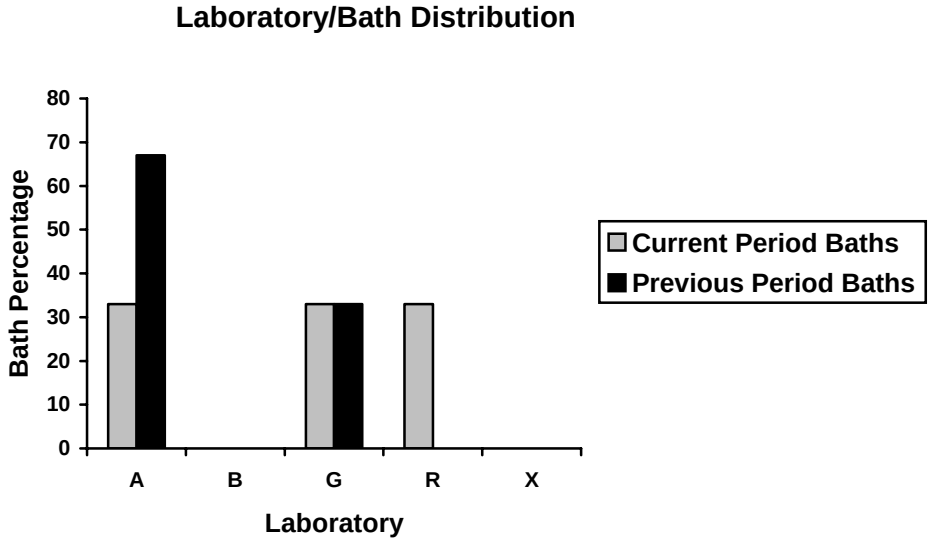
TO: Gil Reinhard, Chairman, CBT Surveillance Panel

FROM: Jeff Clark

SUBJECT: Corrosion Bench Test Status for the October 2006 ASTM Report Period

A total of 24 Corrosion Bench Test results from three baths in three labs were reported to the TMC during the October 2006 ASTM report period, which began on April 1, 2006 and ended on September 30, 2006.

The following chart shows the distribution by laboratory.

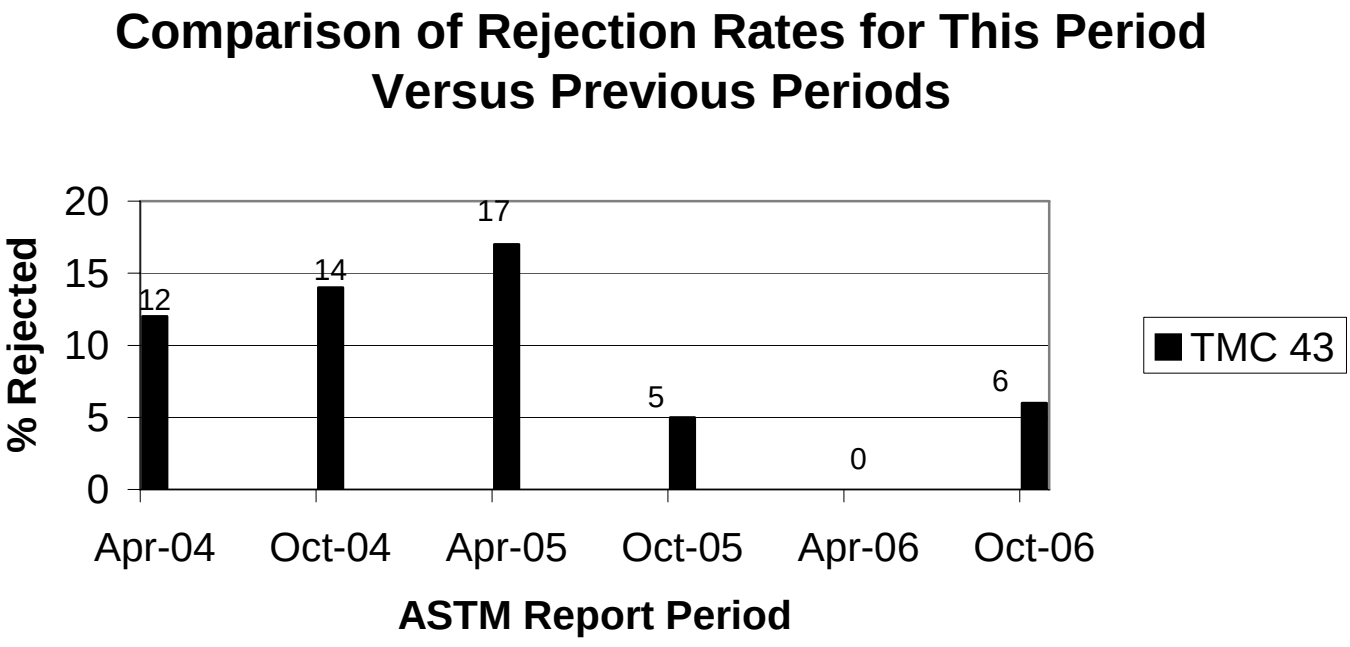


The following summarizes the status of the reference oil tests reported to the TMC:

	TMC Validity Codes	No. of Tests
Operationally and Statistically Acceptable	AC	16
Failed Acceptance Criteria	OC	1
Operationally Invalid	LC	1
Operationally Invalid, submitted by lab as Valid	RC	5
Aborted	XC	1
Total		24

The test that failed the acceptance criteria (OC validity) was due to severe Pb. One operationally invalid test (LC validity) was due to a bath temperature failure. Five invalid tests (RC validity) were submitted as valid by a new laboratory that failed to use the specified test coupons. One test was aborted (XC validity) due to incorrect air pressure.

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

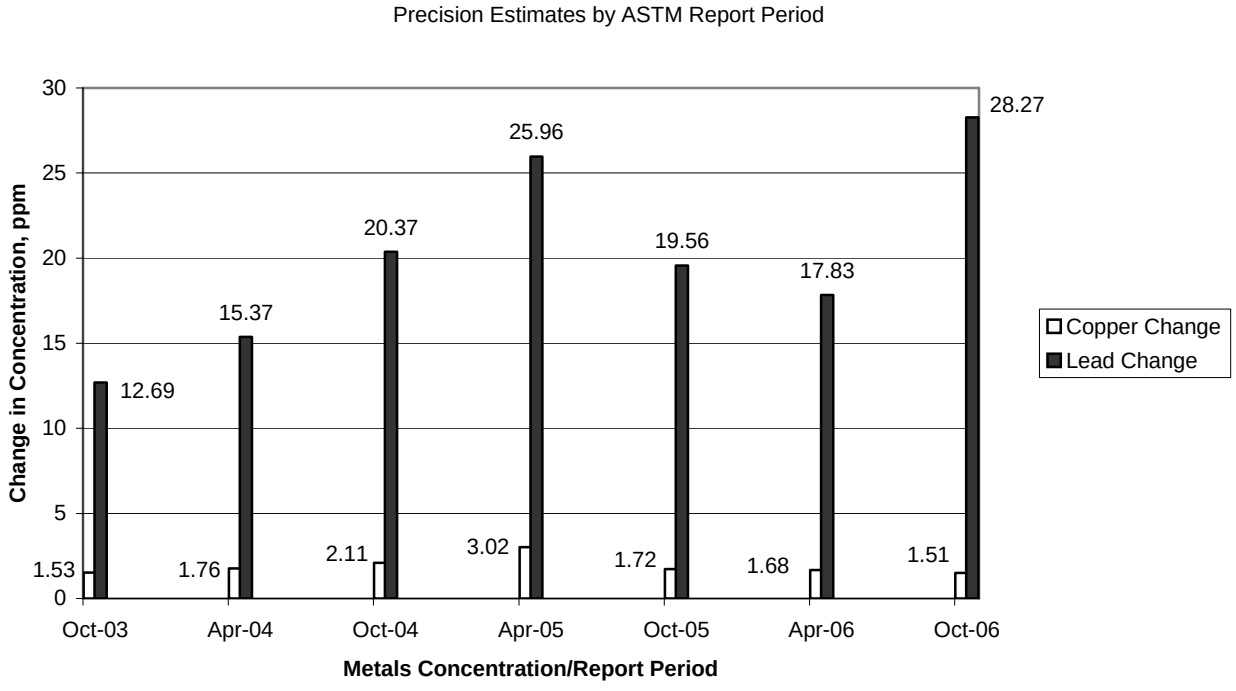


Industry Severity and Precision

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

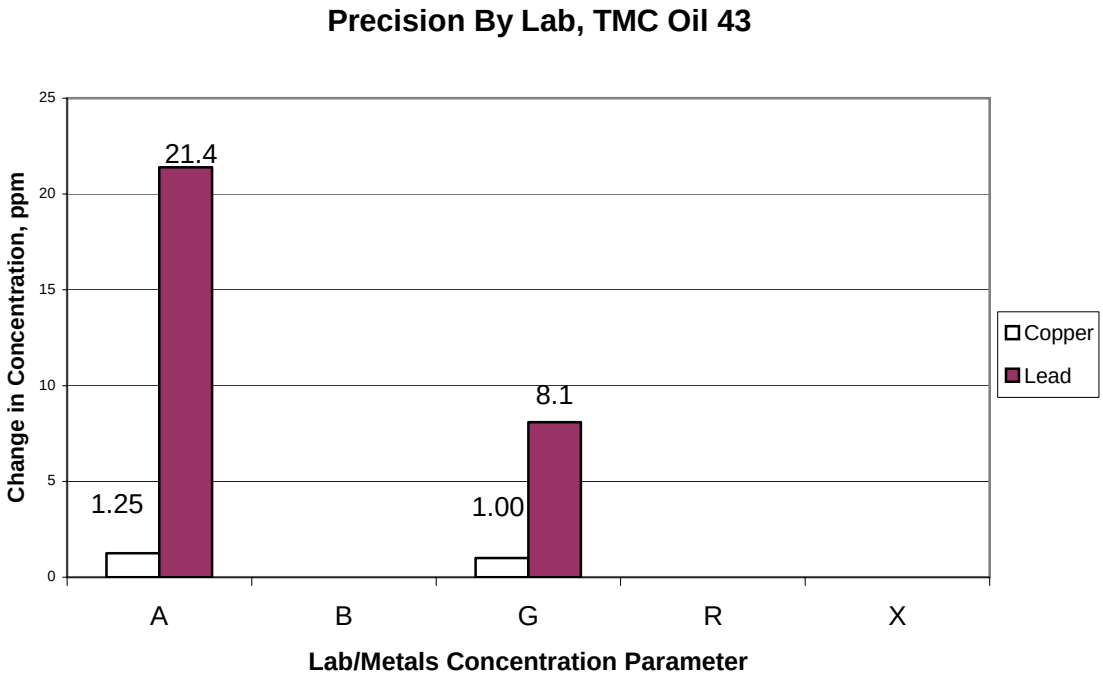
Period	n	Δ Cu Mean Δ/s	Δ Pb Mean Δ/s
4/1/06 through 9/30/06	17	-0.22	0.11
10/1/05 through 3/31/06	16	-0.30	0.02
4/1/05 through 9/30/05	21	-0.16	-0.14
10/1/04 through 3/31/05	23	-0.50	-1.17
4/1/04 through 9/30/04	29	0.04	0.38

Figures 1 and 2 plot the Summation delta/s from target for change in copper and change in lead, respectively. Copper change is trending slightly mild and lead change is trending slightly severe for the period. Precision estimates, by report period are depicted below. Precision for Cu change continues to show improvement compared to recent periods. Precision for Pb change shows degradation compared to recent and historical estimates (see chart below).



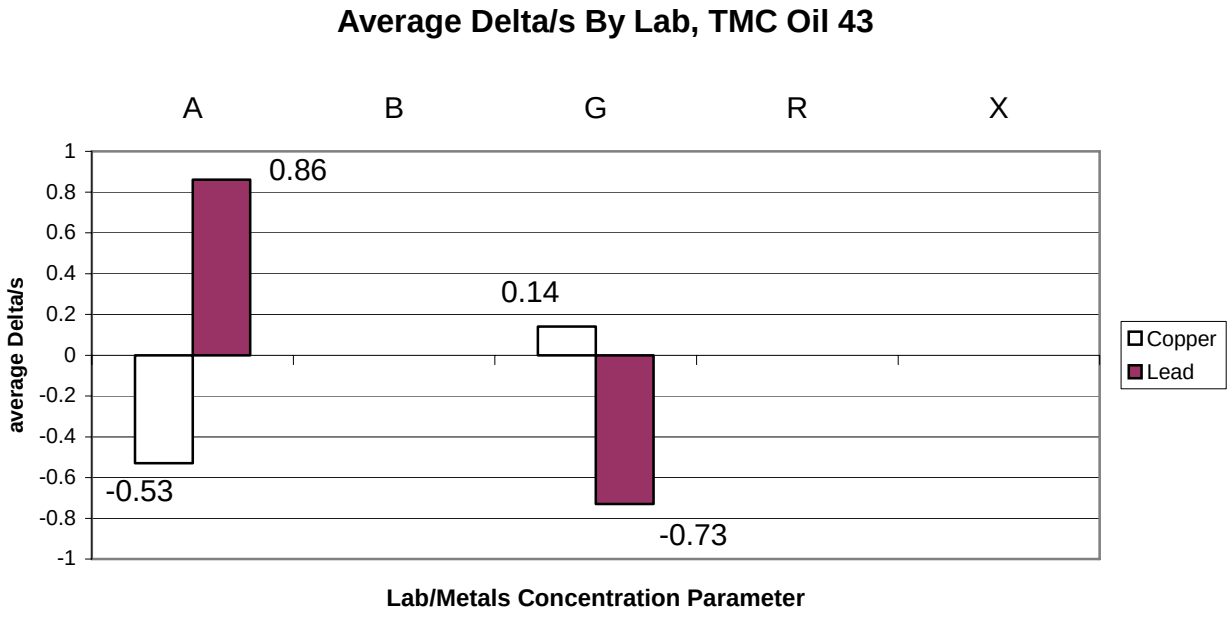
Laboratory Severity and Precision

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



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

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



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

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	54.7	~1750	32	10+ Years

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/mem06-068.jac.doc

c: CBT Surveillance Panel
ftp://ftp.astmtmc.cmu.edu/docs/bench/cbt/semiannualreports/cbt-10-2006.pdf
J. L. Zalar
F. M. Farber

Distribution: Email

Figure 1

CBT INDUSTRY OPERATIONALLY VALID DATA

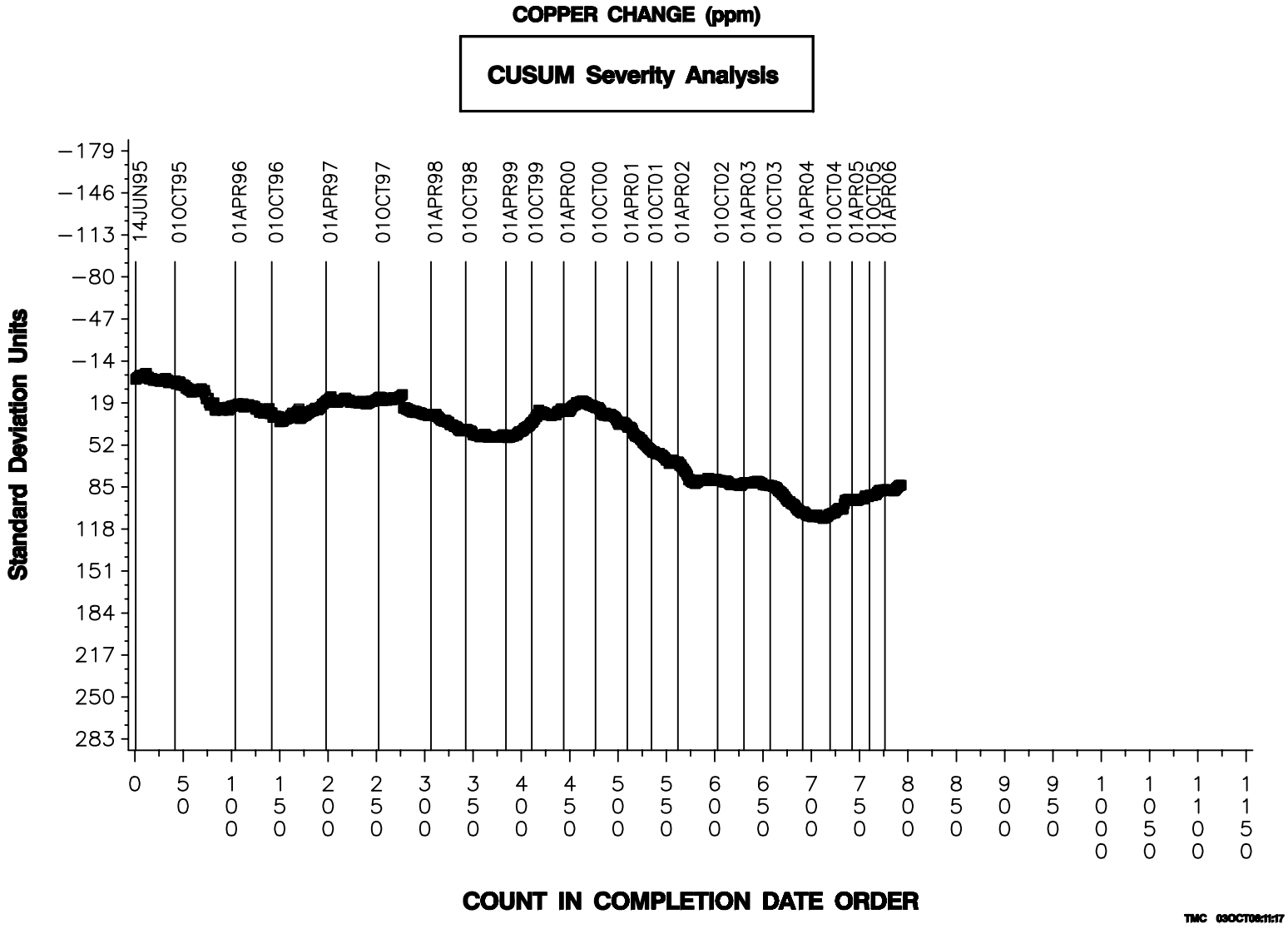


Figure 2

CBT INDUSTRY OPERATIONALLY VALID DATA