



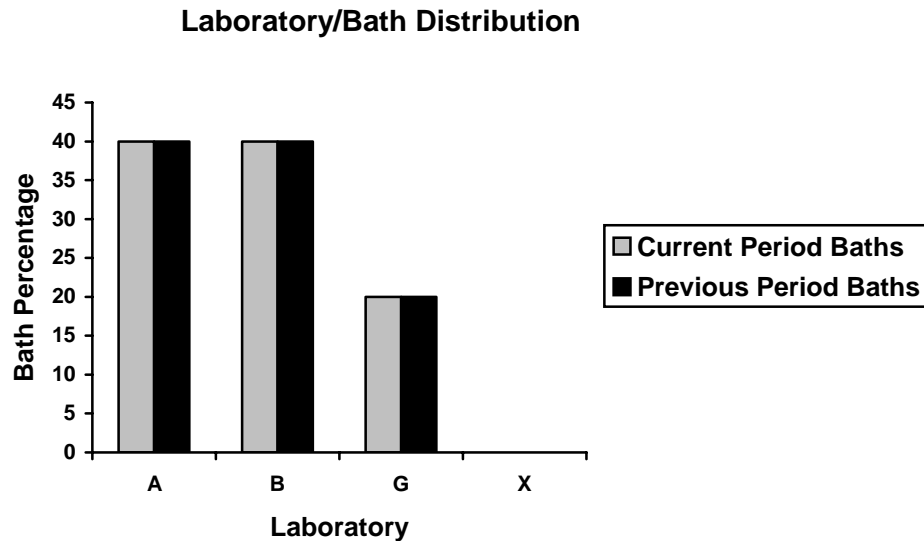
Test Monitoring Center

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MEMORANDUM: 06-015
DATE: April 5, 2006
TO: Gil Reinhard, Chairman, CBT Surveillance Panel
FROM: Jeff Clark
SUBJECT: High Temperature Corrosion Bench Testing for the April 2006 Report Period

A total of 174 High Temperature Corrosion Bench Test results from ten baths in three labs were reported to the TMC during the April 2006 ASTM report period, which began on October 1, 2005 and ended on March 31, 2006.

The following chart shows the distribution by laboratory.



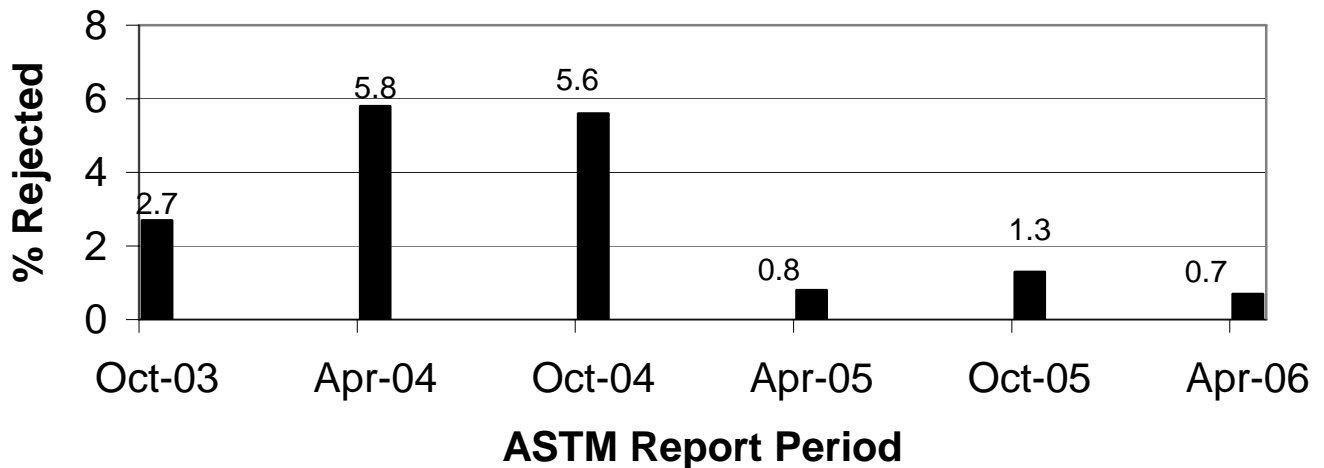
The following summarizes the status of the reference oil tests reported to the TMC:

	TMC Validity Codes	No. of Tests
Operationally and Statistically Acceptable	AC	136
Failed Acceptance Criteria	OC	1
Acceptable Donated Test	AG	30
Declared Invalid by Laboratory	LC	2
Declared Invalid by Laboratory, Donated Test	LG	2
Aborted	XC	1
Aborted, Donated Test	XG	2
Total		174

The test that failed the acceptance criteria was due to severe copper. The thirty donated tests were run to generate reference oil test targets for TMC oil 44. Two tests (one LC and one LG) were invalid due to a hose leak. Two tests (one LC and one LG) were invalid for running beyond the 168 hour test length. All three aborted tests were due to a temperature control malfunction.

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



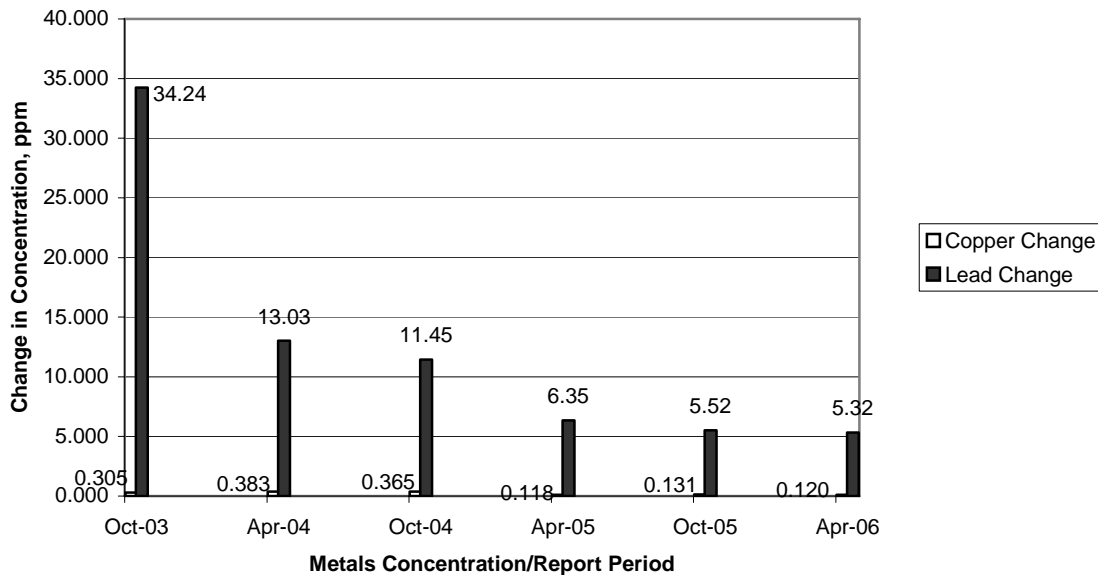
Industry Severity and Precision

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
10/1/05 through 3/31/06	137	0.50	-0.21
4/1/05 through 9/30/05	154	0.65	-0.28
10/1/04 through 3/31/05	131	0.68	-0.36
4/1/04 through 9/30/04	142	1.03	-0.26
10/1/03 through 3/31/04	120	0.35	-0.22

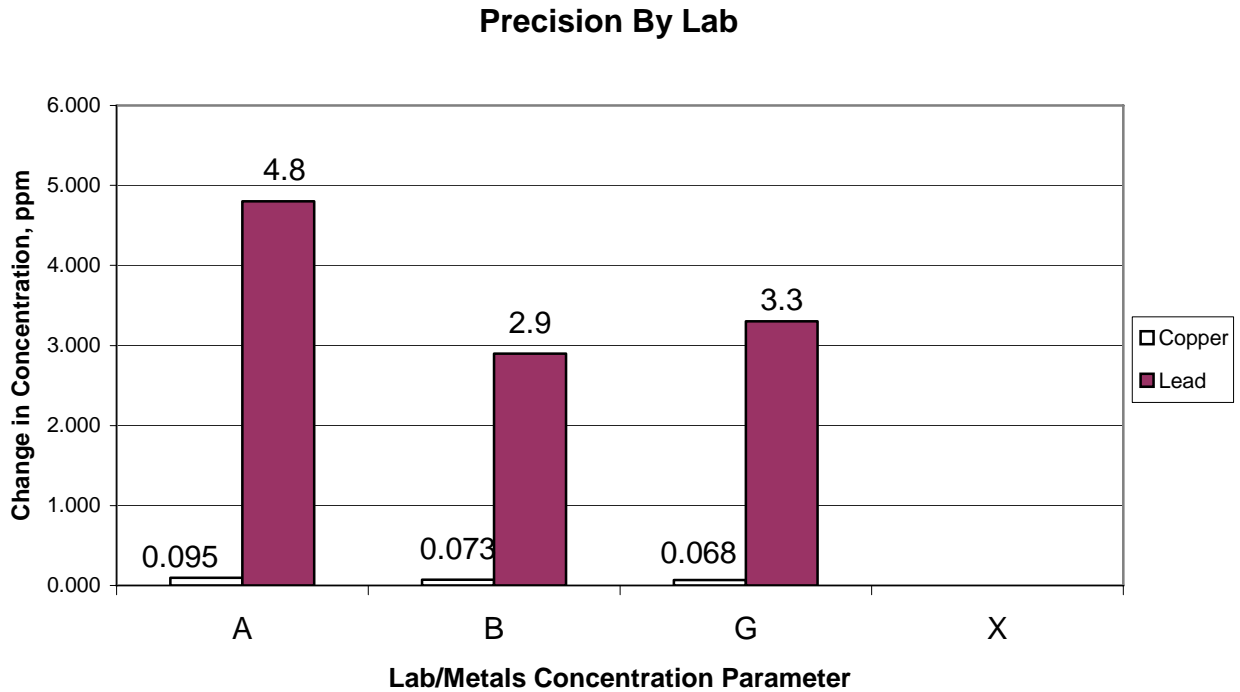
Figures 1 and 2 plot the Summation delta/s from target for change in copper and change in lead, respectively. Figure 1 shows copper change to be severe for the period. Figure 2 shows lead change to be mild for the period. Precision estimates, by report period are depicted below. Precision for both Cu change and Pb change continue to show some improvement compared to historical levels.

Precision Estimates by ASTM Report Period



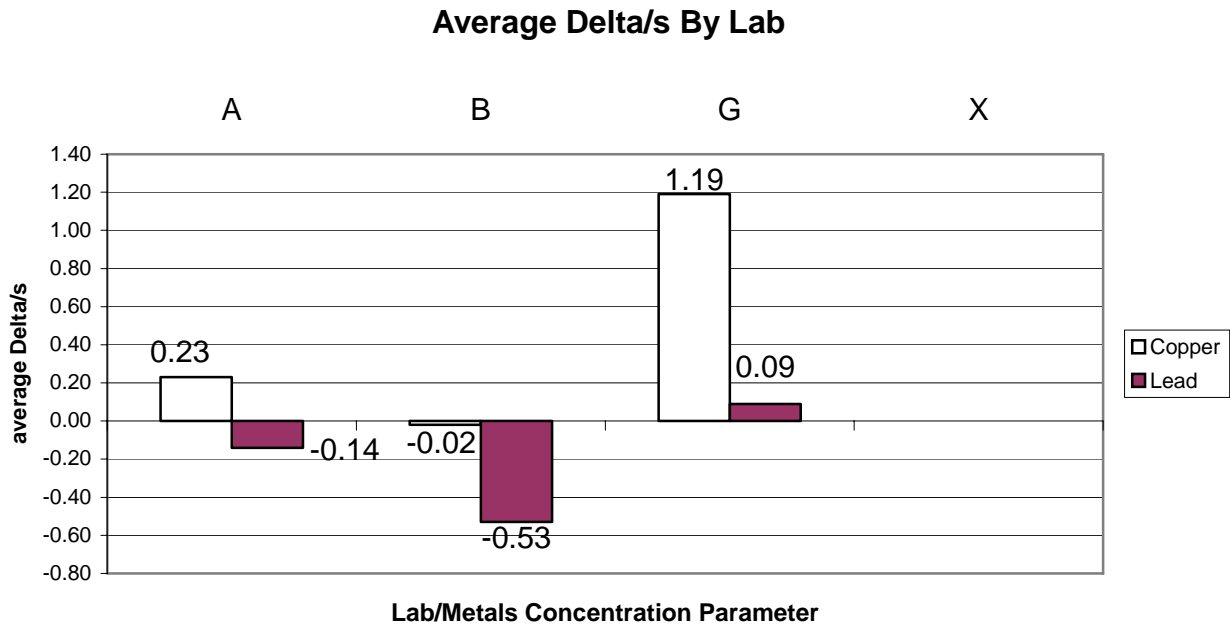
Laboratory Severity and Precision

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



Precision estimates for Copper shows better precision at lab B and G than at lab A. Precision estimates for Lead shows better precision at lab B than at labs G and A.

The following plot shows the average Δ 's by laboratory and concentration parameter for this ASTM report period. For both copper and lead, Lab G was the most severe and lab B the most 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 (gallons)	TMC Inventory (tests)	Lab Inventory (tests)	Usage Ratio (%)	Estimated life
1005	42.5	~1360	37	~75	5 years
44	7.3	~230	31	~25	3 years

Information Letters

Information Letter 05-2, Sequence No. 7, was issued November 14, 2005. This information letter removed the requirement to measure evaporation loss. Information Letter 05-3, Sequence No. 8, was issued December 13, 2005. This information letter allows the use of unsheathed thermocouples.

Additional Information

The HTCBT database is available on the TMC's website. If you have any questions on how to access this information, contact the TMC.

JAC/jac/mem06-015.jac.doc

c: HTCBT Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/bench/htcvt/semiannualreports/htcvt-04-2006.pdf>

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Distribution: Email

Figure 1
HIGH TEMP CBT INDUSTRY OPERATIONALLY VALID DATA

COPPER CHANGE (ppm)

CUSUM Severity Analysis

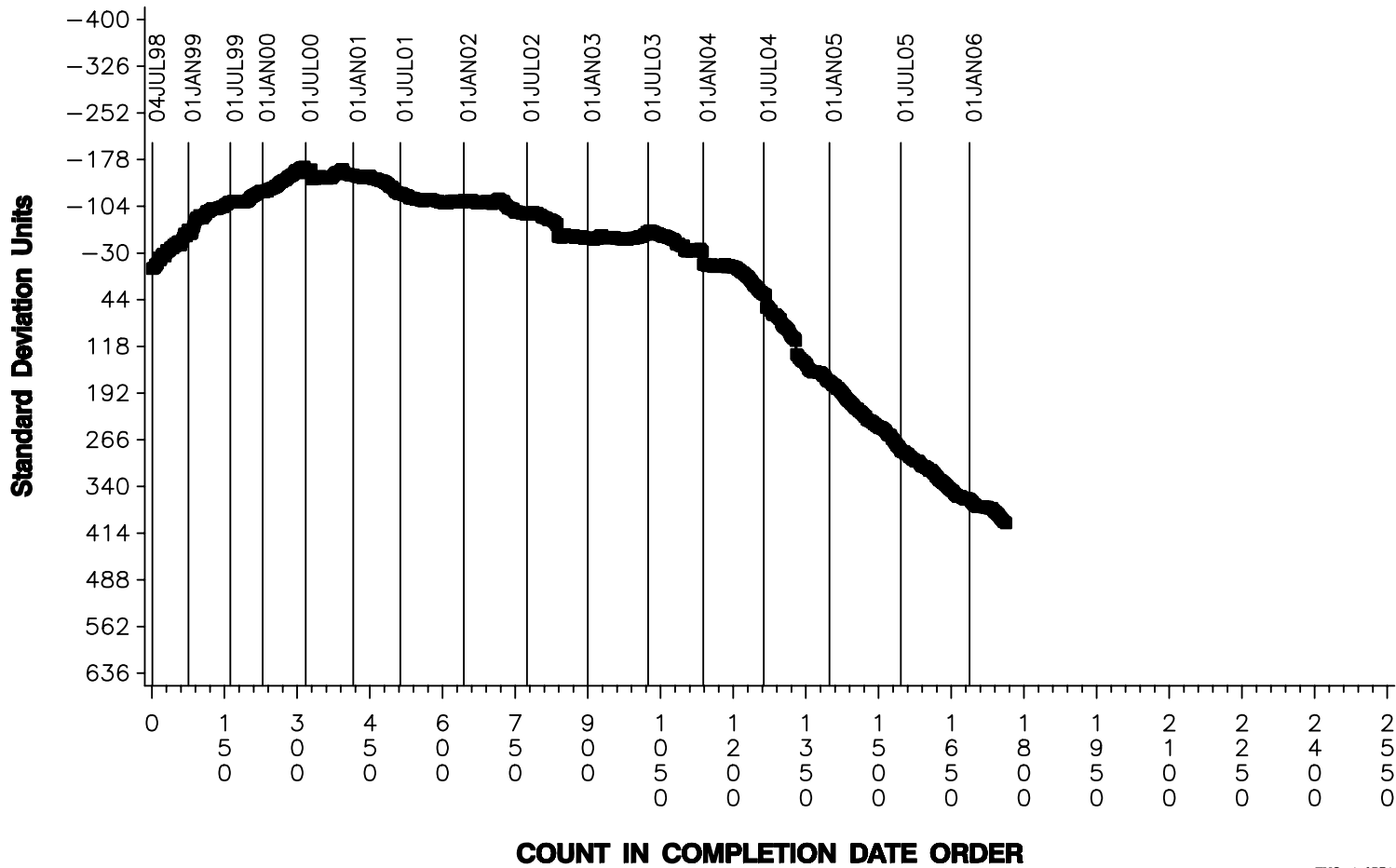


Figure 2
HIGH TEMP CBT INDUSTRY OPERATIONALLY VALID DATA

LEAD CHANGE (ppm)

CUSUM Severity Analysis

