Test Monitoring Center
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MEMORANDUM: 07-021

DATE: May 18, 2007

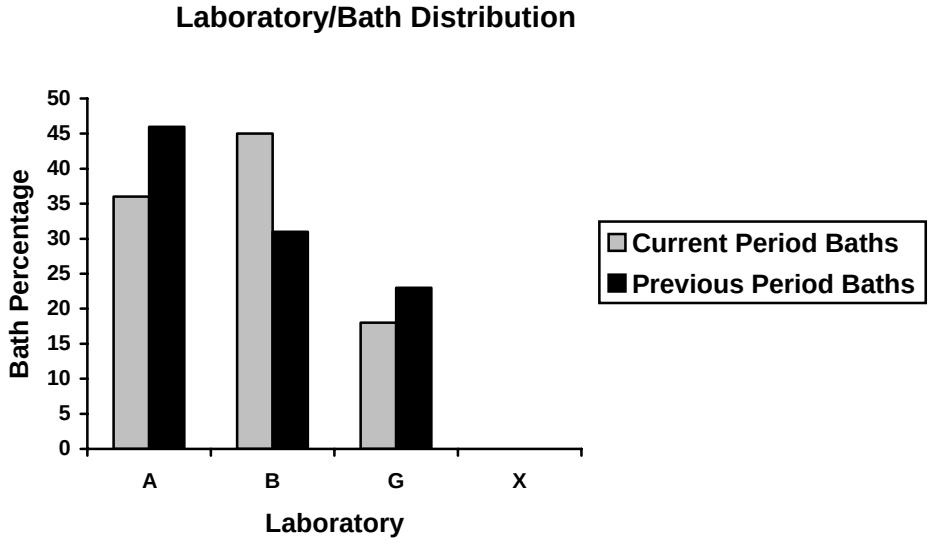
TO: Gil Reinhard, Chairman, CBT Surveillance Panel

FROM: Jeff Clark

SUBJECT: High Temperature Corrosion Bench Testing for the April 2007 Report Period

A total of 206 High Temperature Corrosion Bench Test results from eleven baths in three labs were reported to the TMC during the April 2007 ASTM report period, which began on October 1, 2006 and ended on March 31, 2007.

The following chart shows the distribution by laboratory.

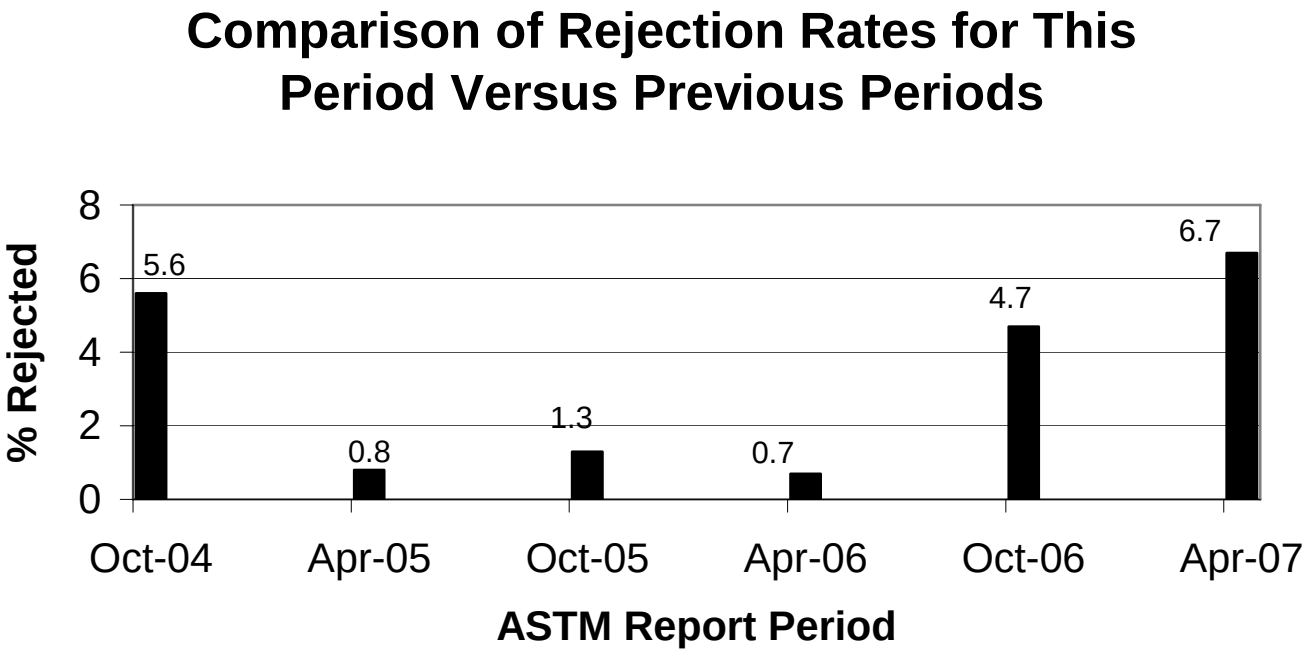


The following summarizes the status of the reference oil tests reported to the TMC:

	TMC Validity Codes	No. of Tests
Operationally and Statistically Acceptable	AC	166
Failed Acceptance Criteria	OC	12
Acceptable Donated Test	AG	16
Donated Test, Failed Acceptance Criteria	OG	8
Declared Invalid by Laboratory	LC	2
Aborted	XC	2
Total		206

Tables 1, 2, and 3 (attached) summarize any failed, invalid and aborted tests. All 24 donated tests were run for the batch F coupon approval matrix.

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

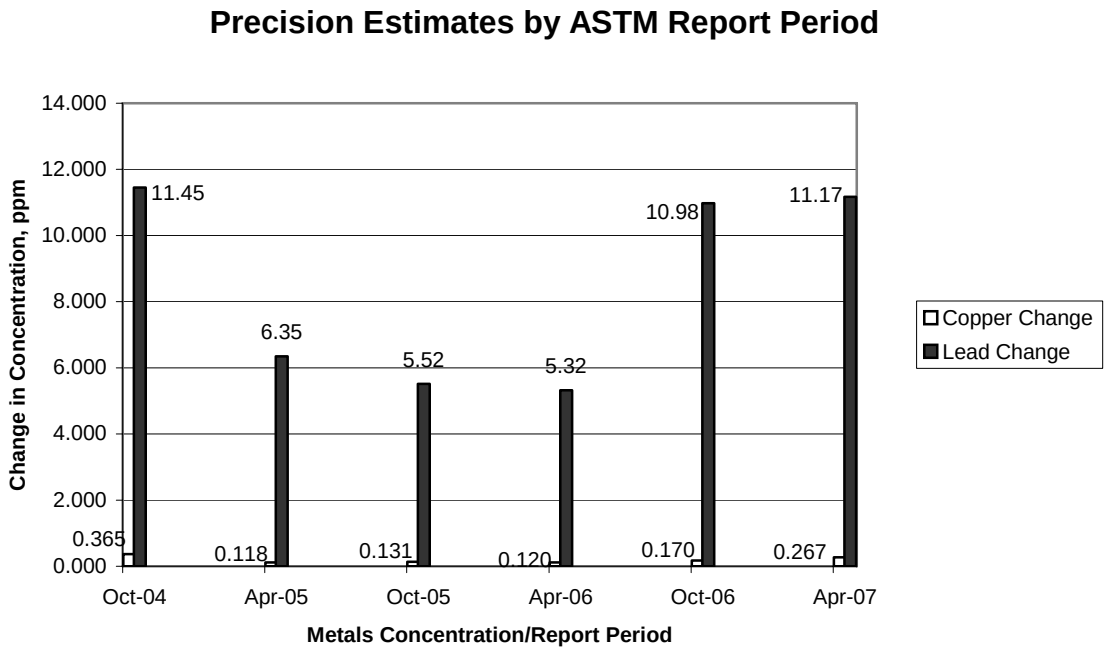


Industry Severity and Precision

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

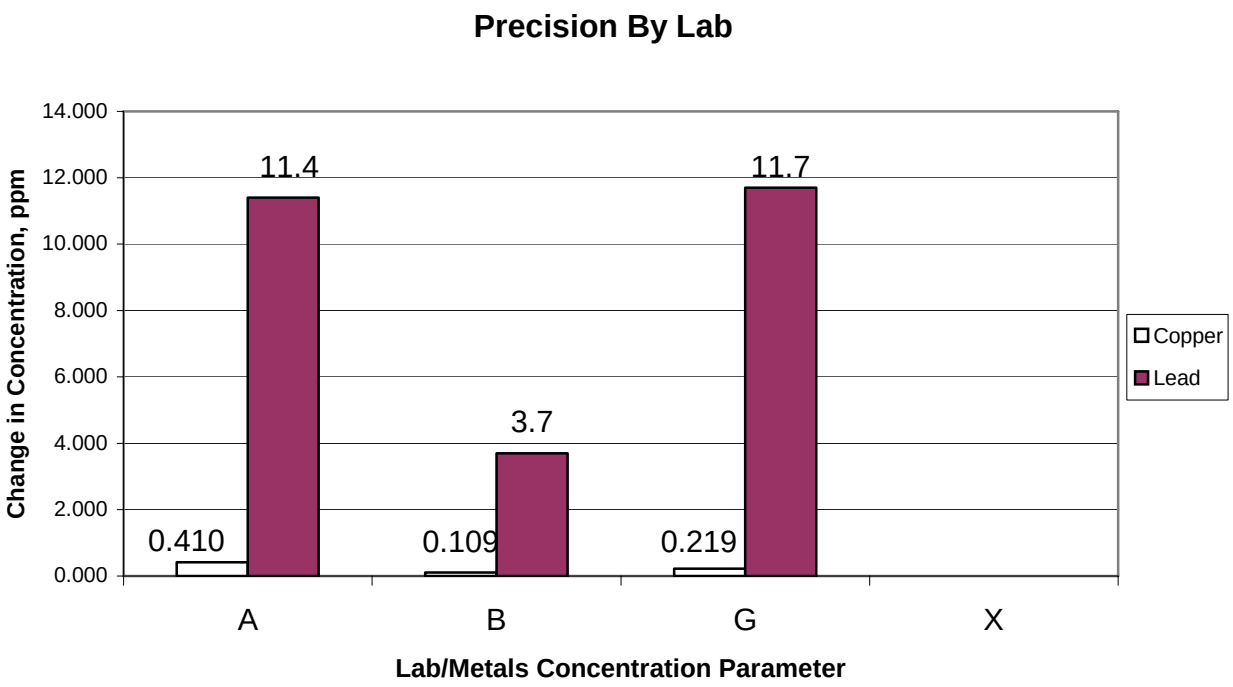
Period	n	Δ Cu Mean Δ/s	Δ Pb Mean Δ/s
10/1/06 through 3/31/07	176	0.58	0.15
4/1/06 through 9/30/06	172	0.90	0.11
10/1/05 through 3/31/06	137	0.50	-0.21
4/1/05 through 9/30/05	154	0.65	-0.28
10/1/04 through 3/31/05	131	0.68	-0.36

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 slightly severe for the period. Precision estimates, by report period are depicted below. Precision for both Cu change and Pb change show some degradation compared to recent periods, but both are within historical levels.



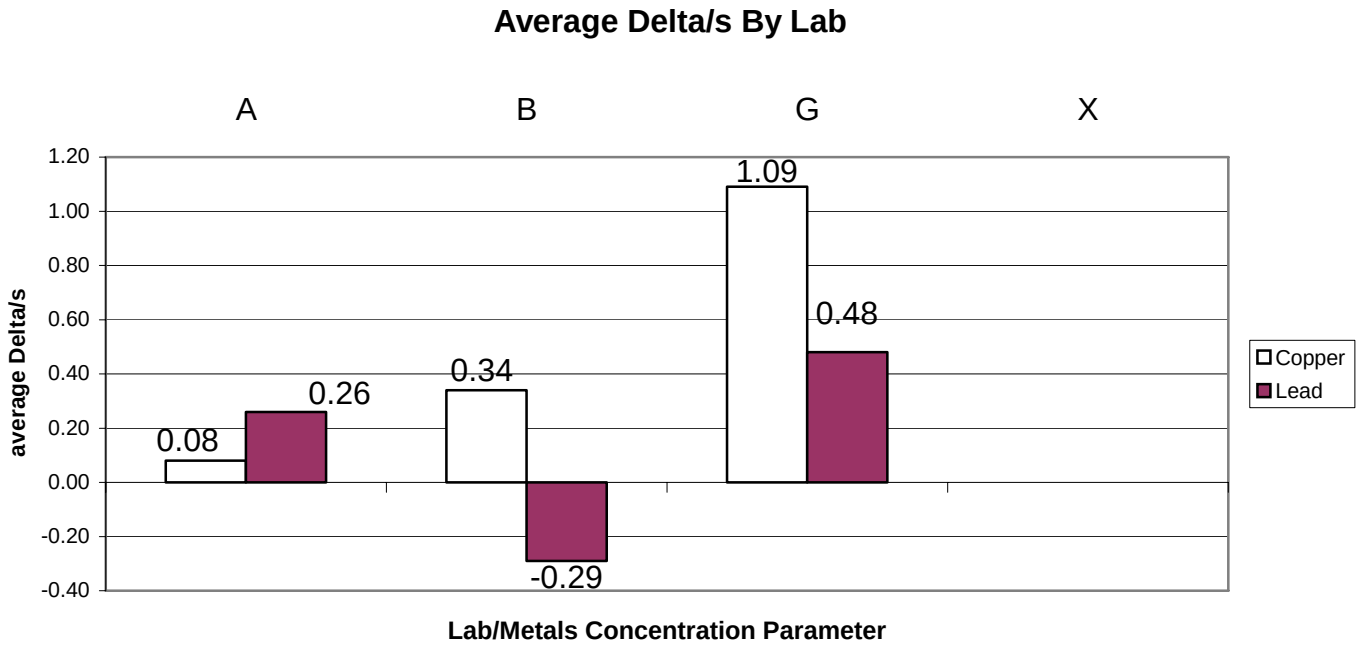
Laboratory Severity and Precision

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



Precision estimates for both Copper and Lead show better precision at lab 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; lab A was the mildest for Copper and lab B was the mildest for Lead.



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	26.2	~838	57	~75	2.9 years
44	3.2	~102	27	~25	1.3 years

Test Coupons

Batch F test coupons have been approved for use. To date, 40 tests have been run on oil 1005 and 17 on oil 44. The TMC will notify the surveillance panel once 30 tests have been completed on oil 44 for the purposes of examining what effects, if any, the coupon batch change has had on test severity.

Information Letters

No Information Letters were issued this period.

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/mem07-021.jac.doc

c: HTCBT Surveillance Panel
ftp://ftp.astmtmc.cmu.edu/docs/bench/htcbt/semiannualreports/htcbt-04-2007.pdf
J. L. Zalar
F. M. Farber

Distribution: Email

Table 1
Summary of Reasons for Failed Tests

	No. of Tests
Lead, severe	6
Lead, mild	2
Copper, mild	1
Copper and Lead, severe	2
Copper and Lead, mild	1

Table 2
Summary of Reasons for Invalid Tests

	No. of Tests
Disconnected air hose	1
Malfunctioning air flow meter	1

Table 3
Summary of Reasons for Aborted Tests

	No. of Tests
Terminated at 120 hours, client request	2

Figure 1

HIGH TEMP CBT INDUSTRY OPERATIONALLY VALID DATA

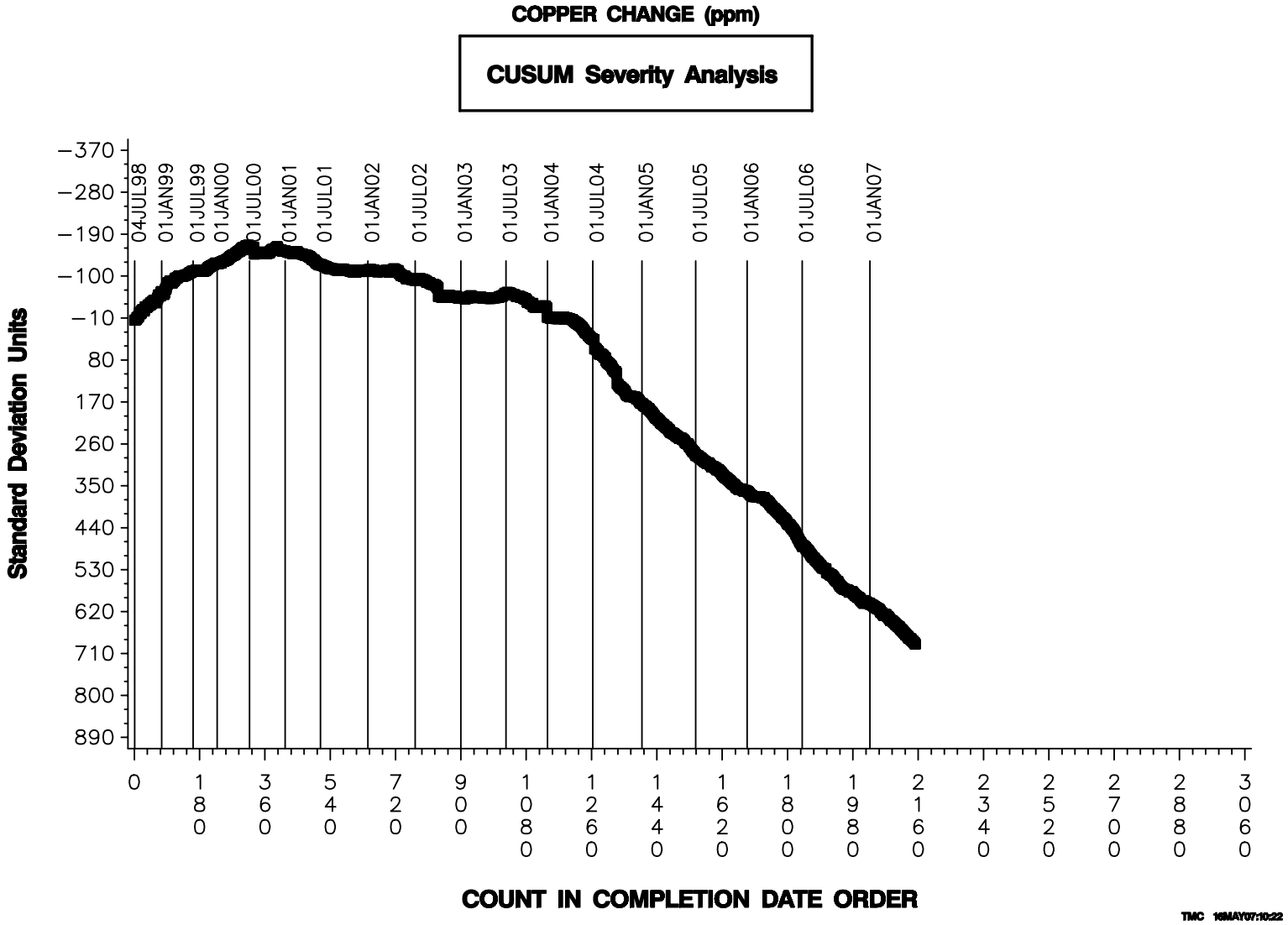


Figure 2

HIGH TEMP CBT INDUSTRY OPERATIONALLY VALID DATA