



Test Monitoring Center

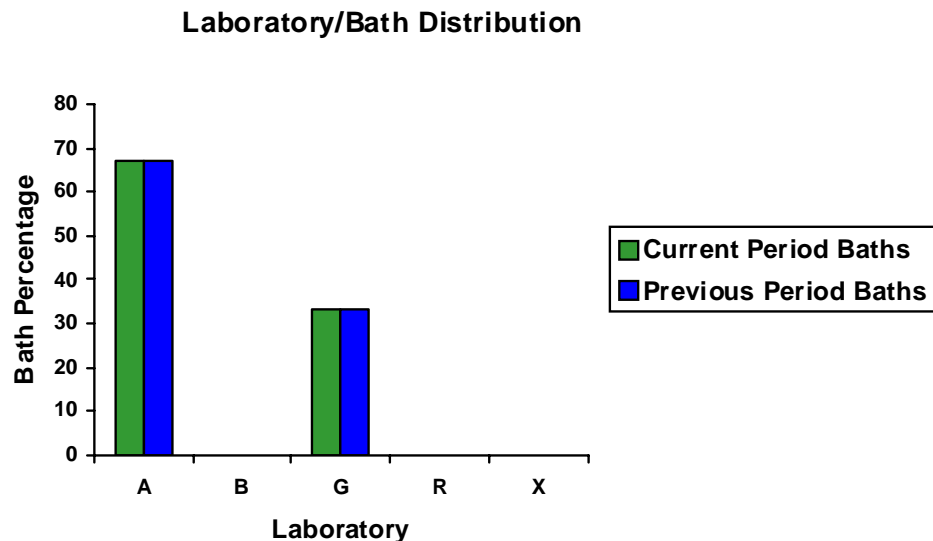
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412-365-1000

MEMORANDUM: 09-024
DATE: April 28, 2009
TO: Gil Reinhard, Chairman, CBT Surveillance Panel
FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*
SUBJECT: Corrosion Bench Test Status for the April 2009 ASTM Report Period

A total of 17 Corrosion Bench Test results from three baths in two labs were reported to the TMC during the April 2009 ASTM report period, which began on October 1, 2008 and ended on March 31, 2009.

The following chart shows the distribution by laboratory.



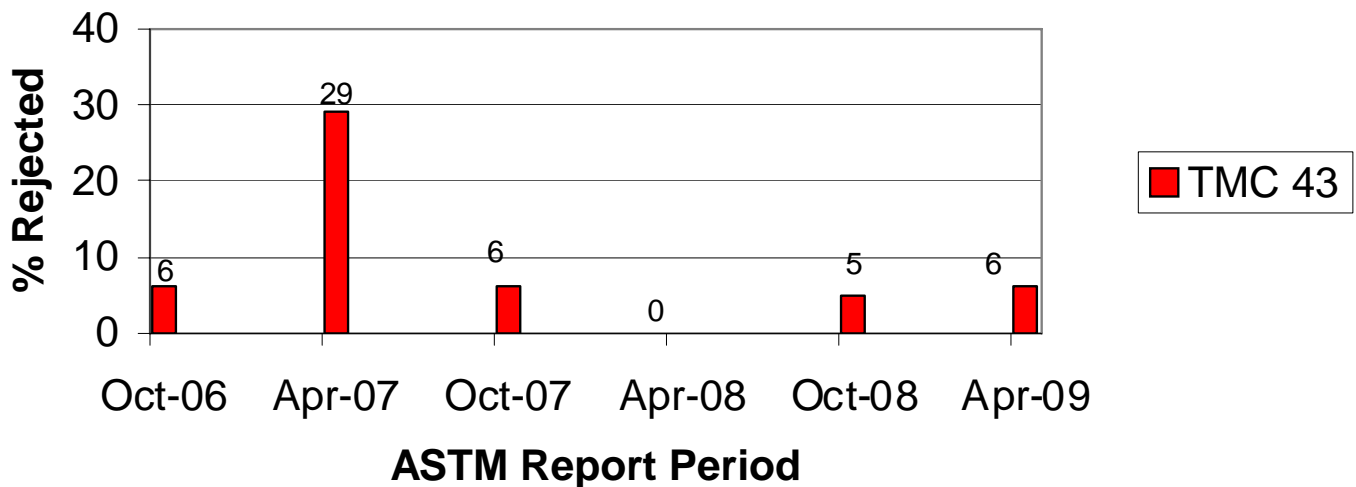
The following summarizes the status of the reference oil tests reported to the TMC:

	TMC Validity Codes	No. of Tests
Operationally and Statistically Acceptable	AC	16
Failed Acceptance Criteria	OC	1
Operationally Invalid	LC, RC	0
Aborted	XC	0
Acceptable Donated Tests	AG	0
Unacceptable Donated Tests	MG	0
Total		17

Tables 1, 2, and 3 (attached) summarize any failed, invalid and aborted tests.

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



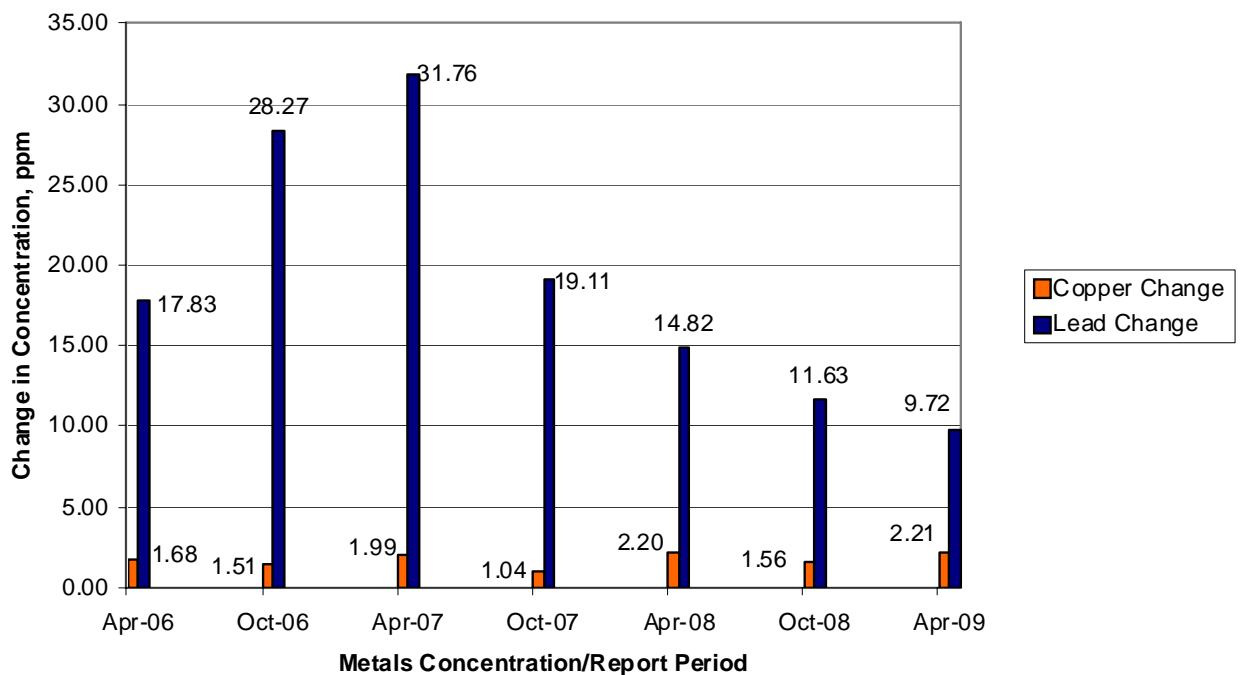
Industry Severity and Precision

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
10/1/08 through 3/31/09	17	-0.83	-0.93
4/1/08 through 9/30/08	20	-0.93	-0.95
10/1/07 through 3/31/08	11	-1.08	-0.58
4/1/07 through 9/30/07	17	-0.79	-0.36
10/1/06 through 3/31/07	29	-1.18	0.02
4/1/06 through 9/30/06	17	-0.22	0.11

Figures 1 and 2 (attached) plot the Summation delta/s from target for change in copper and change in lead, respectively. Both copper and lead change are trending mild for the period. Precision estimates, by report period are depicted below. Precision estimates for both Cu and Pb are within historical levels, though in comparison to recent periods, Pb shows some improvement while Cu has degraded slightly.

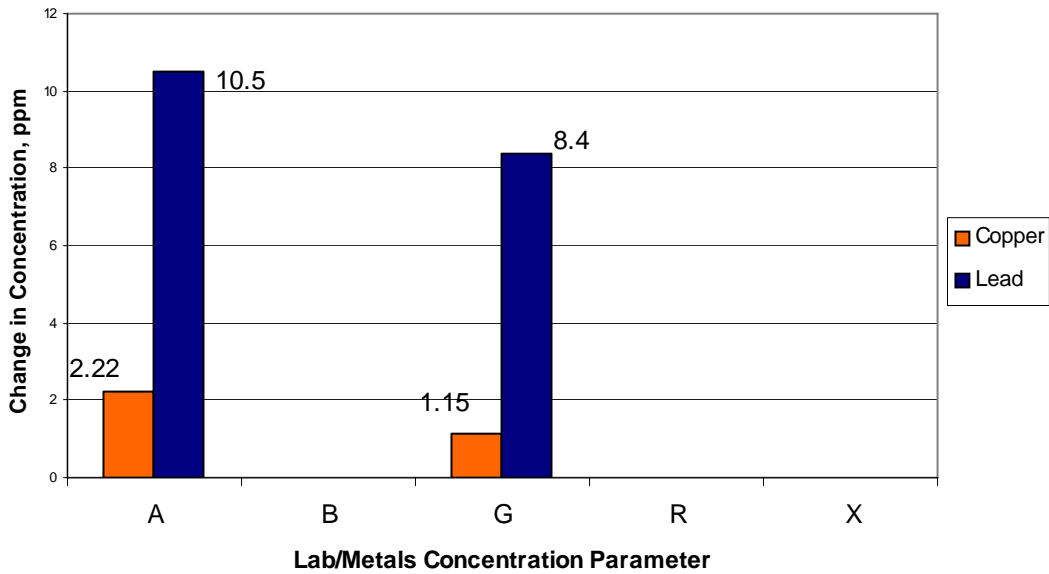
Precision Estimates by ASTM Report Period



Laboratory Severity and Precision

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

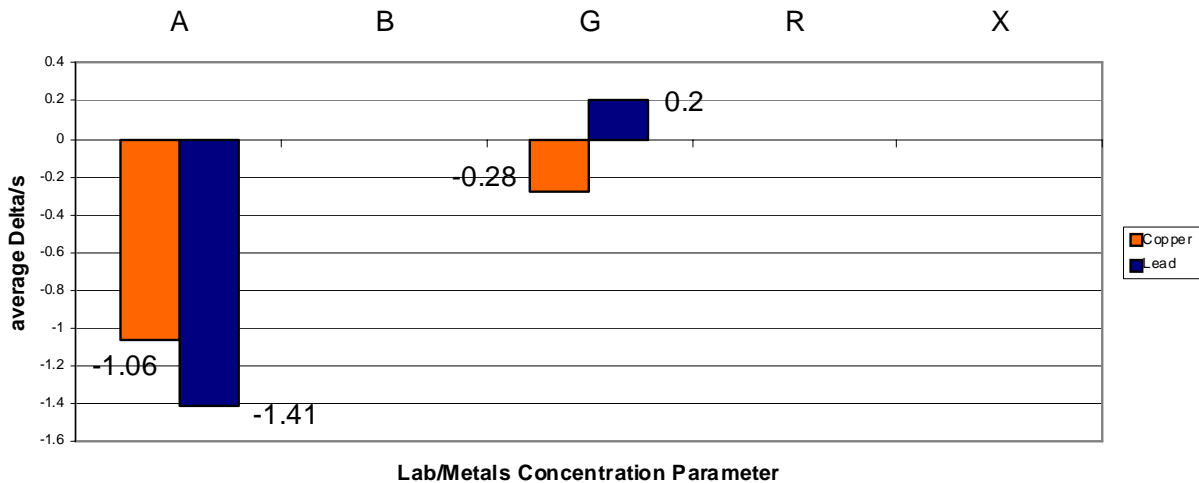
Precision By Lab, TMC Oil 43



Precision estimates for both Copper and Lead show better precision at Lab G than Lab A. Given that Lab A has two baths and Lab G only one, this is not unexpected. 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.

Average Delta/s By Lab, TMC Oil 43



For both Copper and Lead, Lab A was mild compared to Lab G.

Reference Oil and Hardware:

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	50.4	~1467	24	10+ Years

* Test Sample is 130ml

A new batch of test coupons, Batch G, has been approved for use. Reference tests with Batch G coupons will be evaluated with the current test targets until enough tests have been run to reset the targets, if necessary. The current reference oil acceptance bands are shown in the table below.

Oil	Copper Change (ppm)	Lead Change (ppm)
43	12.4 – 24.2	68.5 – 127.3

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.

MTK/mtk/mem09-024.mtk.doc

c: CBT Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/bench/cbt/semiannualreports/cbt-04-2009.pdf>

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Distribution: Email

Table 1
Summary of Reasons for Failed Tests

	No. of Tests
Lead, mild	1

Table 2
Summary of Reasons for Invalid Tests

	No. of Tests
No invalid tests	-

Table 3
Summary of Reasons for Aborted Tests

	No. of Tests
No aborted tests	-

Figure 1
CBT INDUSTRY OPERATIONALLY VALID DATA
COPPER CHANGE (ppm)

CUSUM Severity Analysis

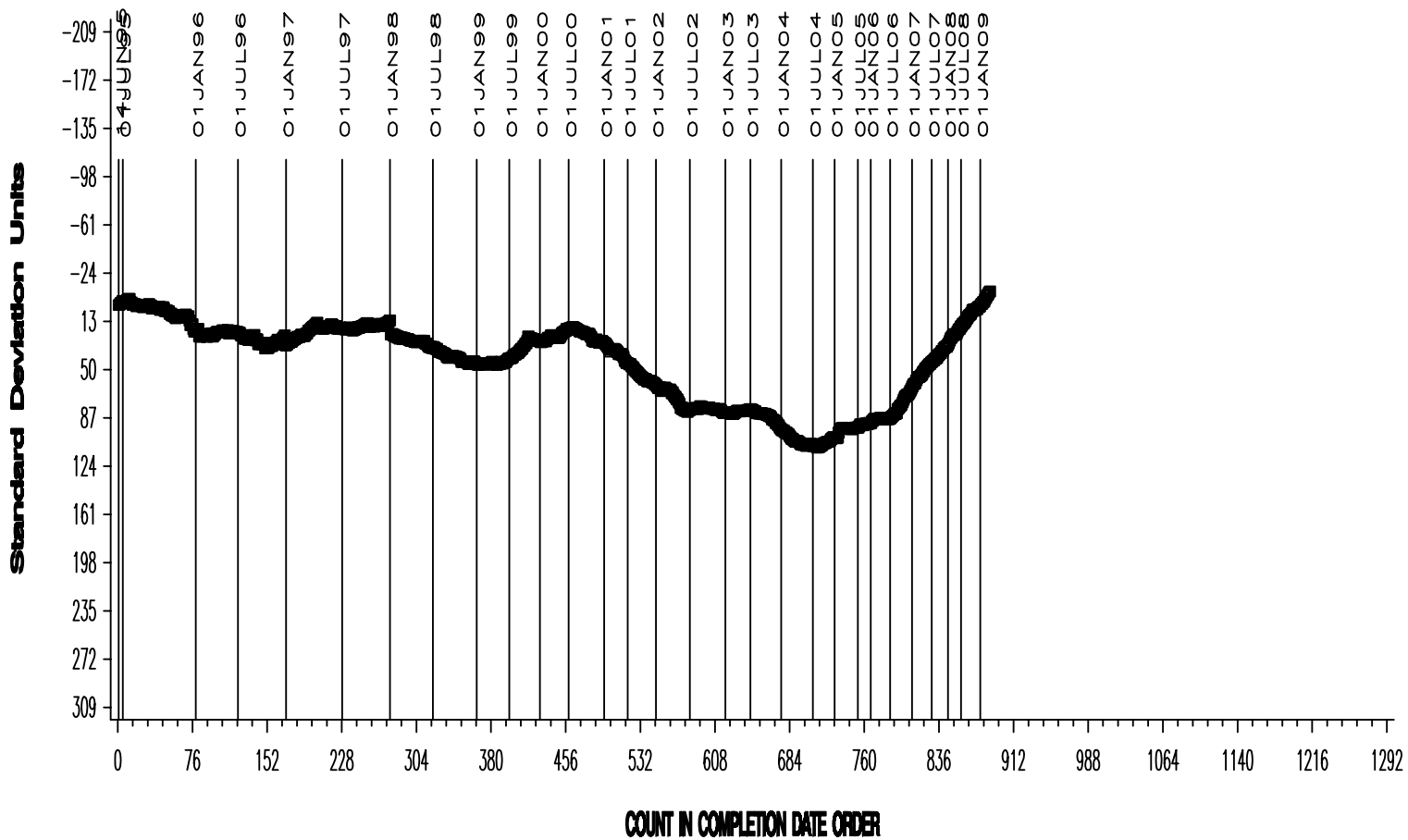


Figure 2
CBT INDUSTRY OPERATIONALLY VALID DATA

LEAD CHANGE (ppm)

CUSUM Severity Analysis

