MEMORANDUM: 05-047

DATE: June 7, 2005

TO: Joe Franklin, Chairman, CBT Surveillance Panel

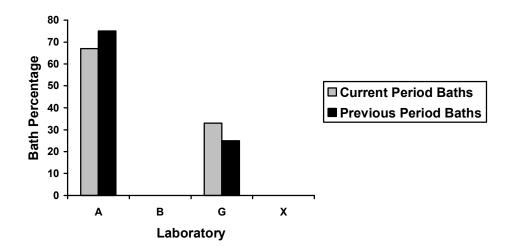
FROM: Jeff Clark

SUBJECT: Corrosion Bench Test Status for the April 2005 ASTM Report Period

A total of 29 Corrosion Bench Test results from three baths in two labs were reported to the TMC during the April 2005 ASTM report period, which began on October 1, 2004 and ended on March 31, 2005.

The following chart shows the distribution by laboratory.

Laboratory/Bath Distribution



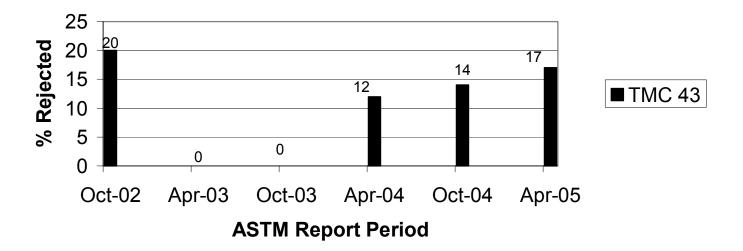
The following summarizes the status of the reference oil tests reported to the TMC:

	TMC Validity Codes	No. of Tests
Operationally and Statistically Acceptable	AC	19
Failed Acceptance Criteria	OC	4
Donated	AG	6
Total		29

Two tests failed the acceptance criteria due to mild lead results; two tests failed the acceptance criteria due to mild lead and mild copper results. The six donated tests were run as the first portion of an industry matrix on a new coupon batch.

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



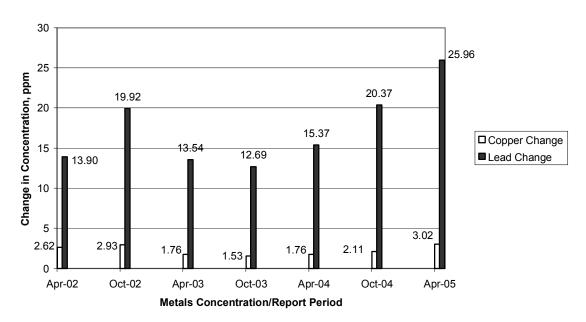
Industry Severity and Precision

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	ΔPb
		Mean Δ /s	Mean Δ/s
10/1/04 through 3/31/05	23	-0.50	-1.17
4/1/04 through 9/30/04	29	0.04	0.38
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

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 mild 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 and Pb change continue to show degradation compared to recent periods (see chart below).

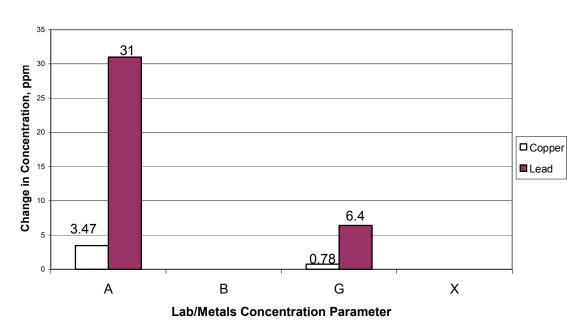
Precision Estimates by ASTM Report Period



Laboratory Severity and Precision

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

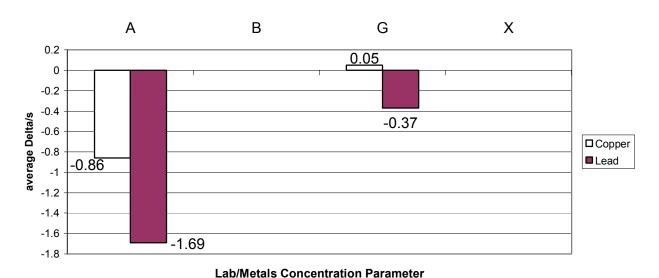
Precision By Lab, TMC Oil 43



Precision estimates for Copper shows better precision at lab G. Precision estimates for Lead shows better precision at lab G. 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.

Average Delta/s By Lab, TMC Oil 43



For both copper and lead, Lab A was mild 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	TMC Inventory, in	Laboratory	Estimated life
		gallons	tests	Inventory, in tests	
4	43	56.5	~1800	33	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/mem05-047.jac.doc

c: CBT Surveillance Panel

ftp://ftp.astmtmc.cmu.edu/docs/bench/cbt/semiannualreports/cbt-04-2005.pdf

J. L. Zalar

F. M. Farber

Distribution: Email

-0×4 000 040 000000 4 00 CBT INDUSTRY OPERATIONALLY VALID DATA \sim 00 702 01APR05 010CT04 207 40A9A10 010CT03 929 **EOAPA10 CUSUM Seventry Analysis** 9---010CT02 COPPER CHANGE (ppm) 20A9A10 0.4 Figure 1 10TO010 √ 10A9A10 010CT00 4 V O 01APR00 4 0 N 010CT99 01APR99 8/9 010CT98 M 00 86A9A10 7007 010CT97 225 76A9A10 $-\infty \infty$ 010CT96 96A9A10 o 4 010CT95 4 V - 135 - 104 - 104 - 104 0 -166 206 --104 -73 -42 144 237 268 20 51 Standard Deviation Units

COUNT IN COMPLETION DATE ORDER

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- 0 M 4 0 00 N 040 ∞ ∞ ω 4 9 CBT INDUSTRY OPERATIONALLY VALID DATA \triangleright \circ \circ COUNT IN COMPLETION DATE ORDER 722 01APR05 010CT04 709 40A9A10 010CT03 929 50A9A10 **CUSUM Severity Analysis** 9 - -010CT02 LEAD CHANGE (ppm) 01APR02 € 0 4 Figure 2 10TO010 10A9A10 4-7 010CT00 4 / 0 01APR00 4 0 N 010CT99 01APR99 8 7 3 010CT98 200 86A9A10 2007 010CT97 225 76A9A10 $-\infty \infty$ 010CT96 96A9A10 θ4 010CT95 4 V -215 -284 -4-JUN95 0 -346 26 -88-57 --284 -253 --160 --129 --98-- 67 -222.-191Standard Devlation Units

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