Test Monitoring Center
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MEMORANDUM: 02-031

DATE: May 6, 2002

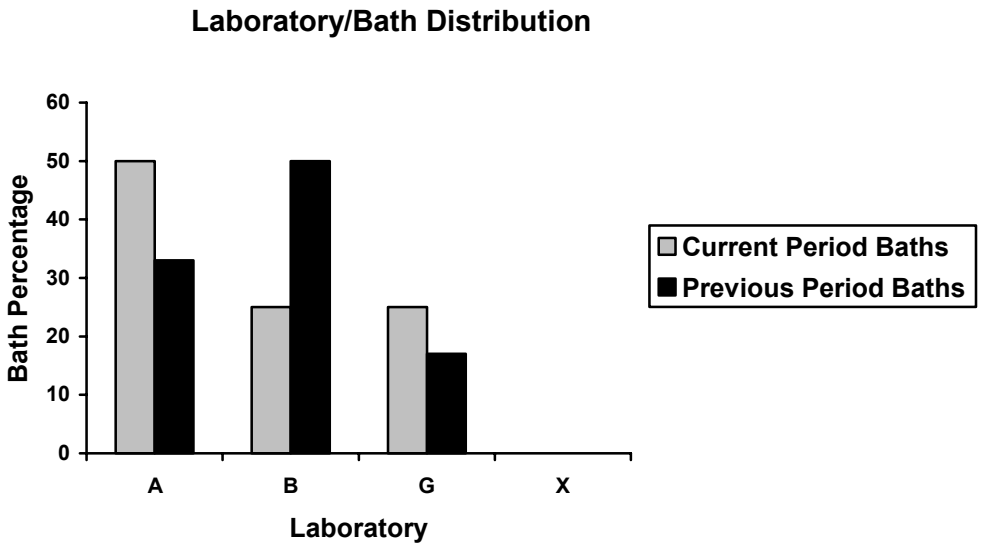
TO: Jerry Wang, Chairman, CBT Surveillance Panel

FROM: Jeff Clark

SUBJECT: Corrosion Bench Test Status from October 1, 2001 through March 31, 2002

A total of 27 Corrosion Bench Test results from four baths in three labs were reported to the TMC during the period from October 1, 2001 through March 31, 2002.

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	25
Failed Acceptance Criteria	OC	2
Declared Invalid by Laboratory	LC	0
Aborted	XC	0
Total		27

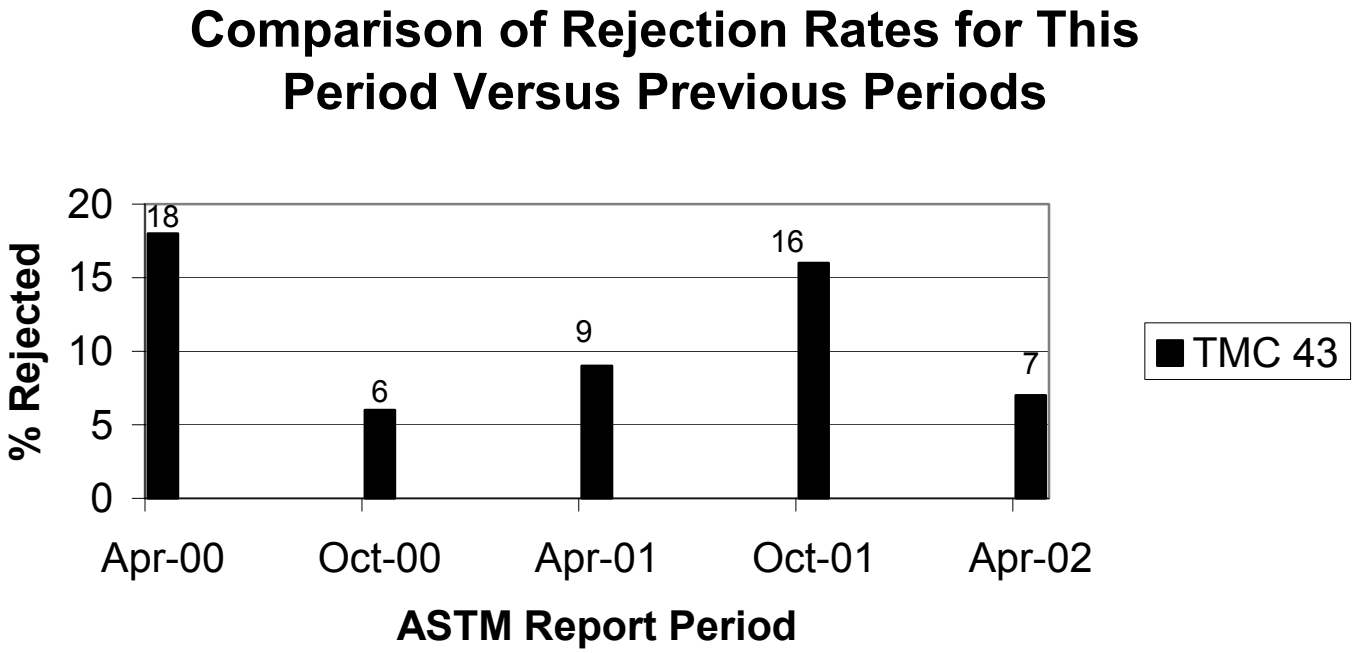
There were no operationally invalid tests reported.

The following tabulates the statistically unacceptable tests:

Reason	Number of Tests
Mild Pb	1
Severe Pb	0
Severe Cu	1

A total of 27 operationally valid results were run on reference oil 43, of which 2 failed (7% fail rate).

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

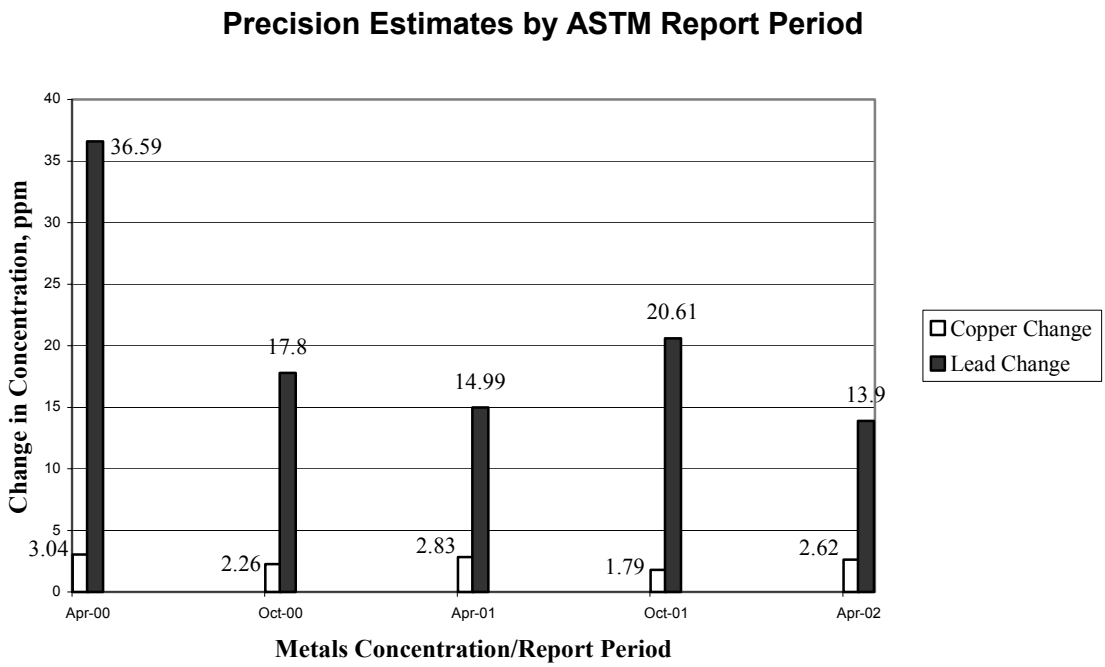


Industry Severity and Precision

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

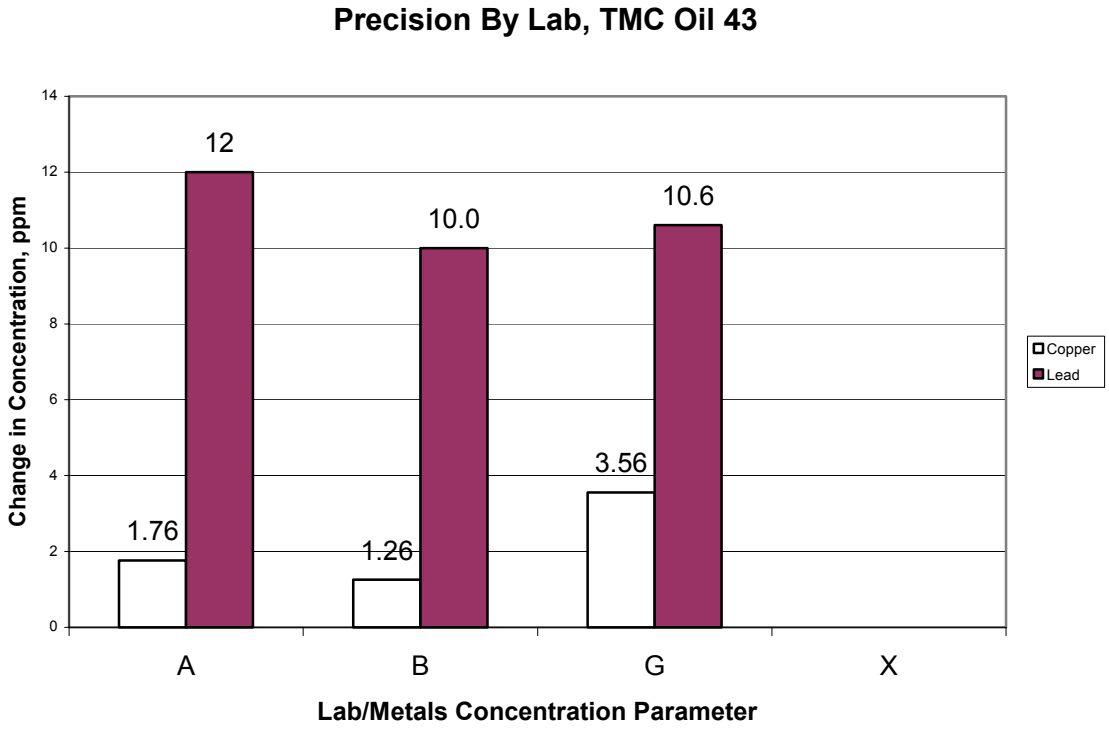
Period	n	Δ Cu Mean Δ/s	Δ Pb Mean Δ/s
10/1/01 through 3/31/02	27	0.37	-0.23
4/1/01 through 9/30/01	25	0.78	0.13
10/1/00 through 3/31/01	33	0.44	-0.68
4/1/00 through 9/30/00	33	-0.33	-0.14
10/1/99 through 3/31/00	33	-0.40	-0.27

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 trending severe for the period. Figure 2 shows lead change trending slightly mild during the period. Precision estimates, by report period are depicted below. Precision for Cu change is within historical levels and precision for Pb change shows improvement compared to the previous period (see chart below).



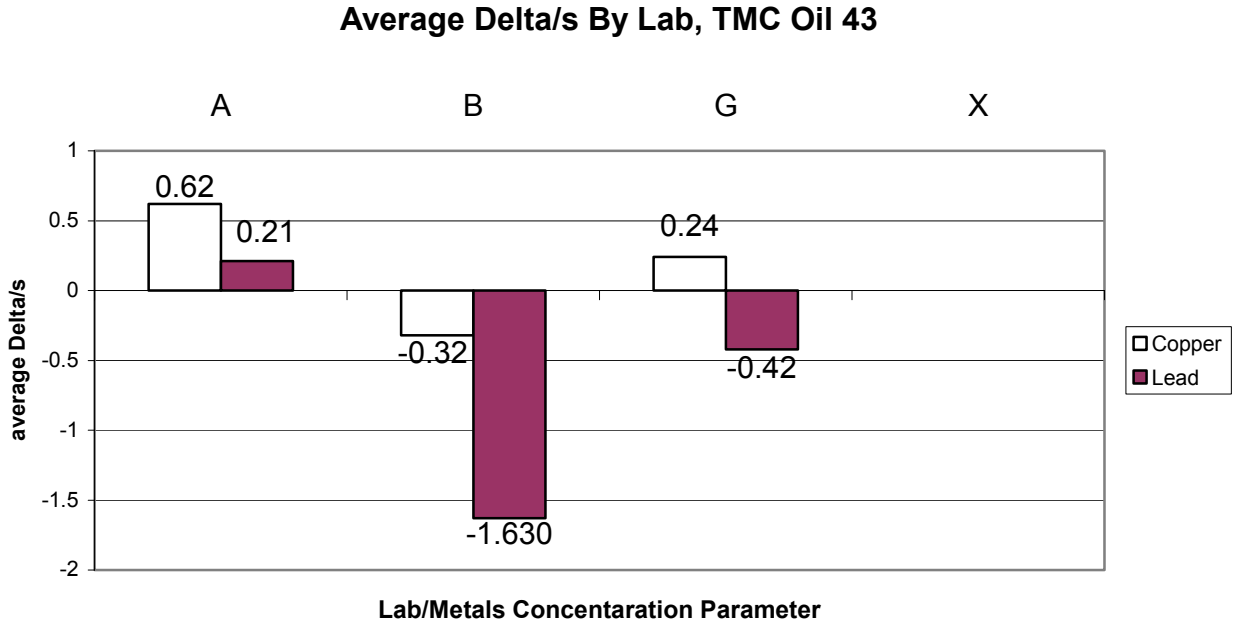
Laboratory Severity and Precision:

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



Precision estimates for Copper illustrate good agreement between labs A and B, while lab G shows higher variability. Precision estimates for Lead show reasonable agreement across all three labs, with lab A showing slightly more variability. Precision estimates are not available for lab X (no test activity).

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



For both copper and lead, Lab A was severe and Lab B was mild. Lab G was severe on copper and mild on 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, in gallons	TMC Inventory, in tests	Laboratory Inventory, in tests	Estimated life
43	64.00	>2000	63	10+ Years

Information Letters and Memorandum

There were no information letters or TMC Memorandum pertaining to the Corrosion Bench Test area 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/mem02-031.jac.doc

c: CBT Surveillance Panel
ftp://ftp.astmtmc.cmu.edu/docs/bench/cbt/semiannualreports/cbt-04-2002.pdf
J. L. Zalar
F. M. Farber

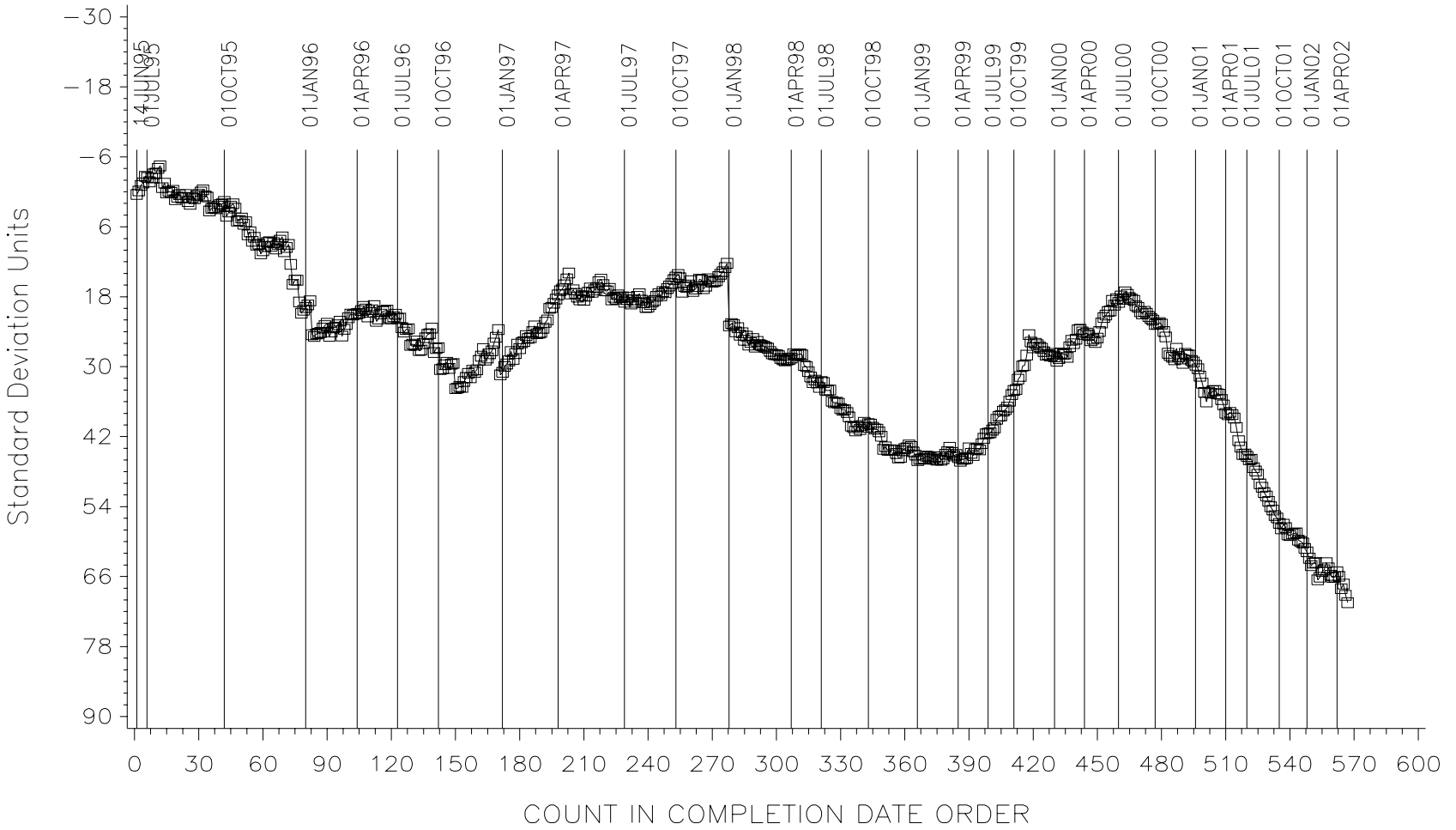
Distribution: Email

CBT INDUSTRY OPERATIONALLY VALID DATA

FIGURE 1

COPPER CHANGE IN CONCENTRATION

CUSUM Severity Analysis



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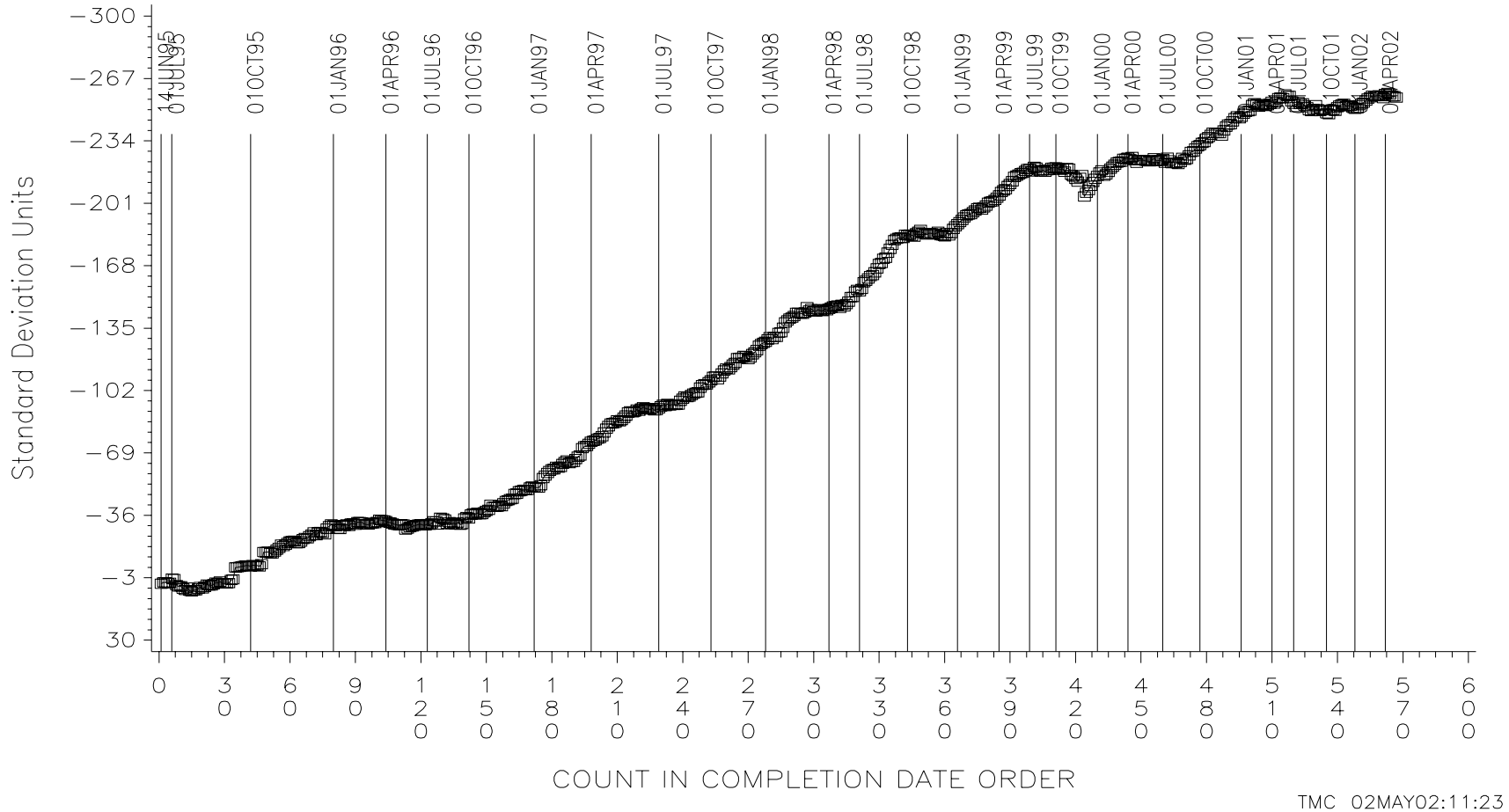
CBT INDUSTRY OPERATIONALLY VALID DATA

FIGURE 2

LEAD CHANGE IN CONCENTRATION

CUSUM Severity Analysis



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