



# Test Monitoring Center

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**MEMORANDUM:** 03-051

**DATE:** April 30, 2003

**TO:** Claire Whitton, Chairman, OSCT Surveillance Panel

**FROM:** Donald Lind

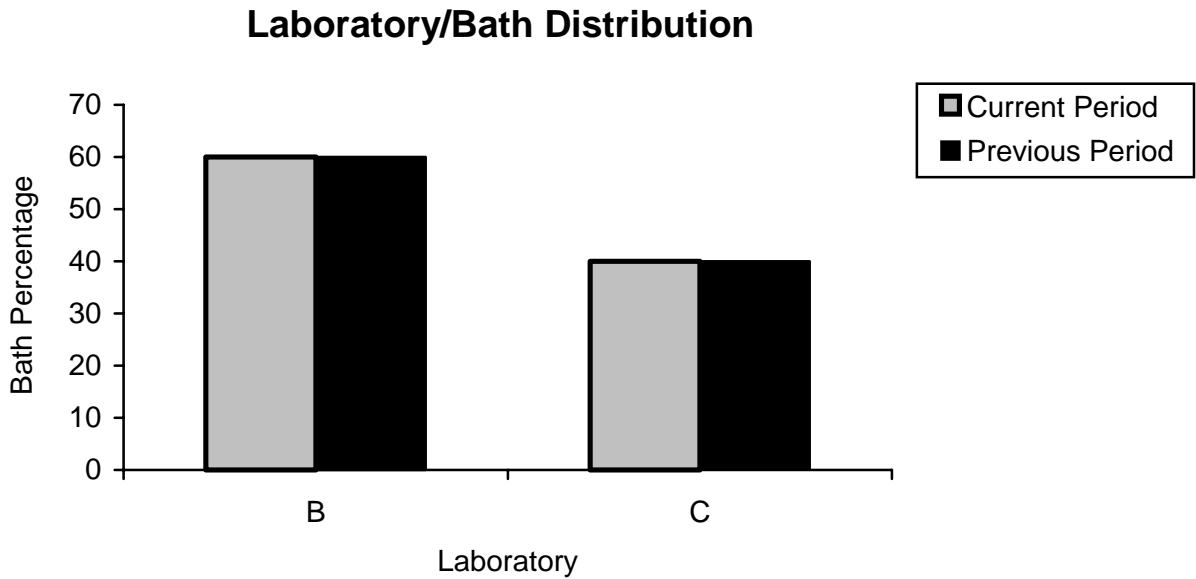
**SUBJECT:** OSCT Reference Oil Test Results from October 1, 2002 through March 31, 2003

A total of 112 OSCT reference oil results from 2 laboratories were completed during the period October 1, 2002 through March 31, 2003.

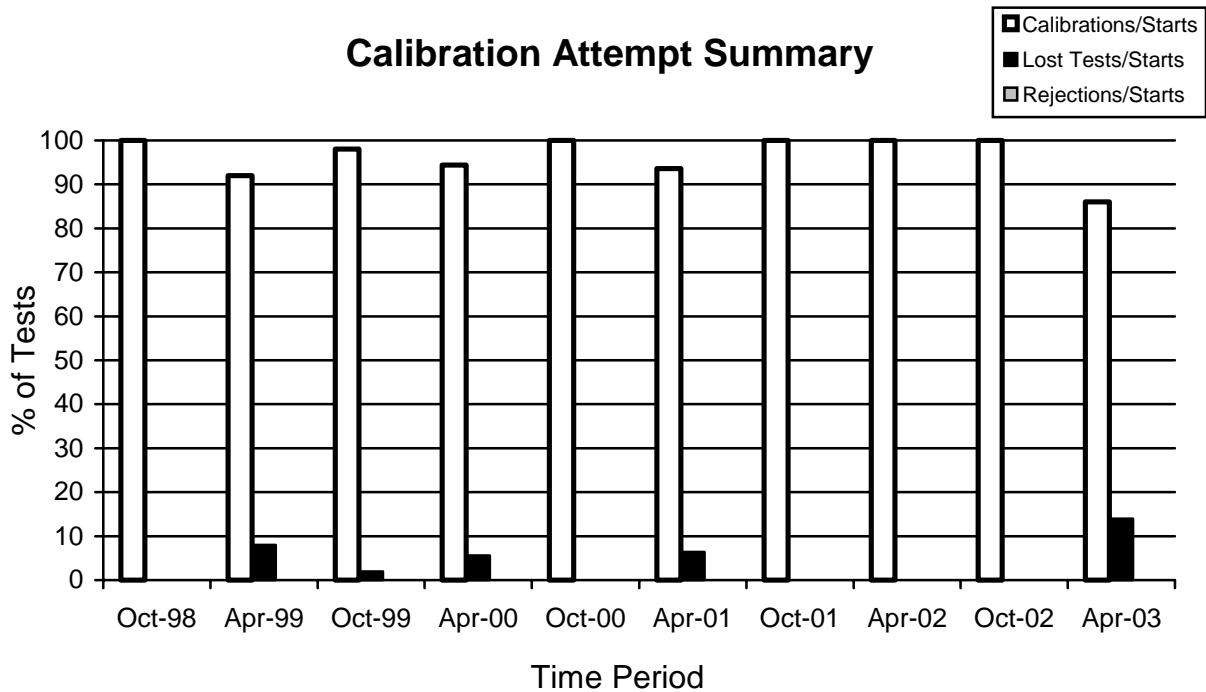
The following table summarizes the status of the reference oil test results reported to the TMC this report period:

Elastomer Type		TMC Validity	No. of Test Oil Results
Fluoroelastomer	Operationally and Statistically Acceptable	AC	30
	Statistically Unacceptable	OC	0
	Operationally Invalid	LC	1
	Aborted	XC	2
	Information Only	NN	0
Polyacrylate	Operationally and Statistically Acceptable	AC	34
	Statistically Unacceptable	OC	0
	Operationally Invalid	LC	7
	Aborted	XC	0
	Information Only	NN	0
Nitrile	Information Only	NI	32
	Operationally Invalid	LI	6
	Information Only	NN	0
	Aborted	XI	0
TOTAL			112

The following chart shows the laboratory bath distribution for data reported during this report period:



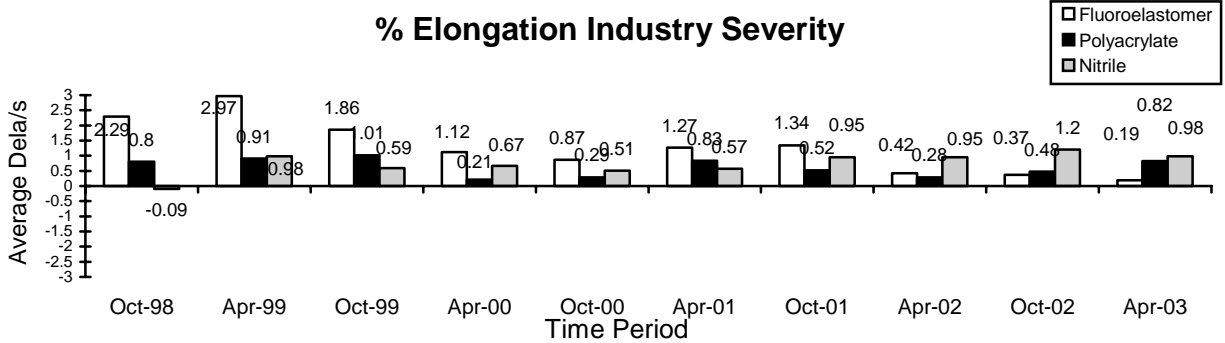
Attempted calibration tests are depicted graphically below by report period:



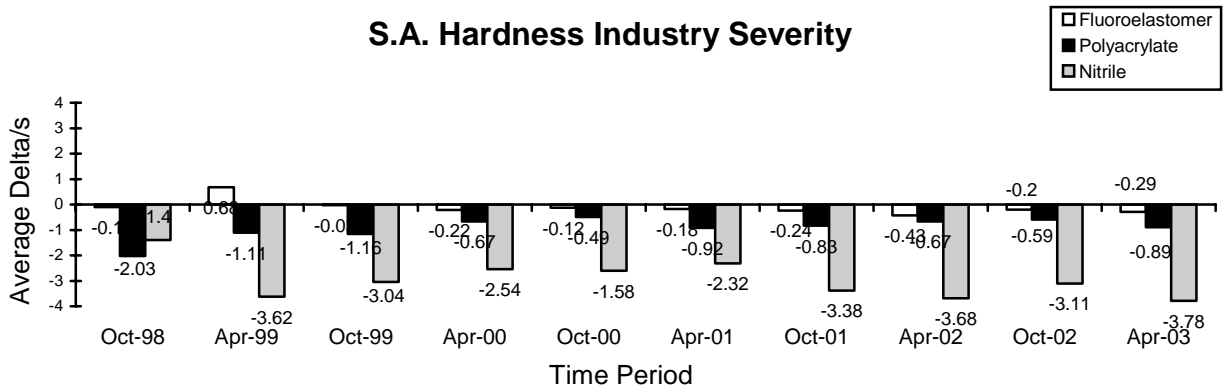
The calibration per start rate has decreased when compared to the previous period. The lost test per start rate has increased when compared to the previous period. There were no statistically rejected tests this report period. All rates are well within historical levels.

**INDUSTRY TEST SEVERITY**

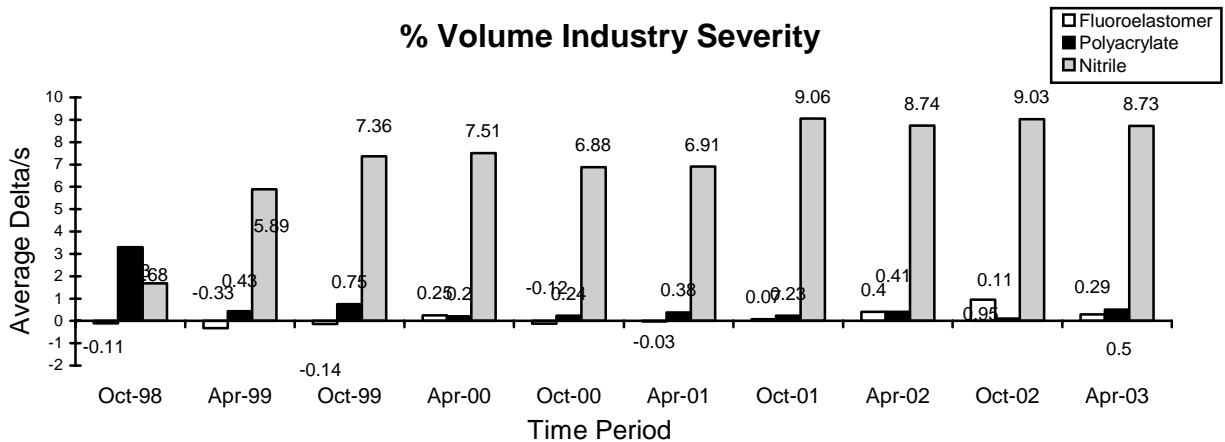
Percent elongation industry mean delta/s bar charts for each elastomer material are shown below by report period. Percent elongation for all three materials (fluoroelastomer, nitrile and polyacrylate) trended mild for the period.



S.A. hardness industry mean delta/s bar charts for each elastomer material are shown below by report period. S.A. hardness for all three materials (fluoroelastomer, nitrile and polyacrylate) trended mild for the period.

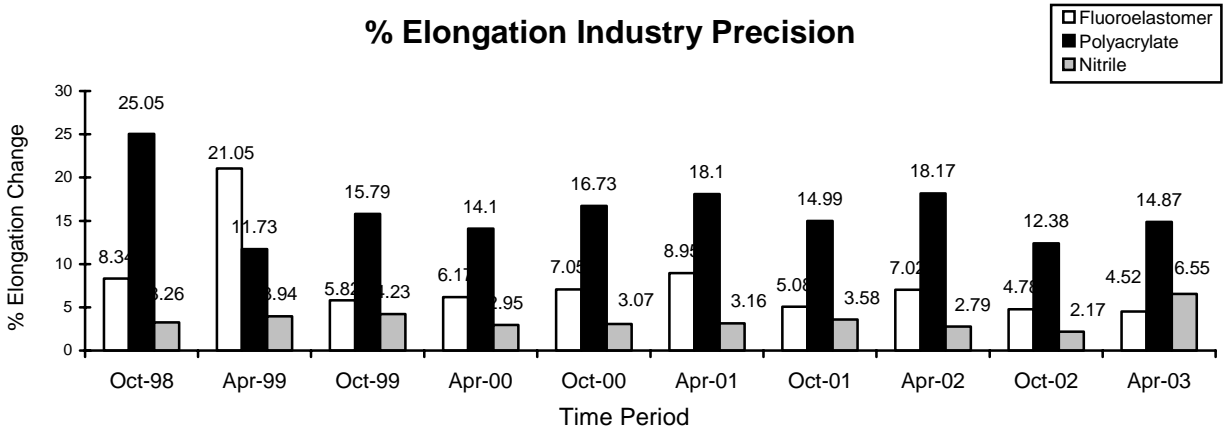


Percent volume industry mean delta/s bar charts for each elastomer material are shown below by report period. Nitrile materials were significantly mild of target. Fluoroelastomer and polyacrylate materials trended slightly mild this period. Both labs experienced mild results with the nitrile elastomer as much as 14 standard deviations from target.

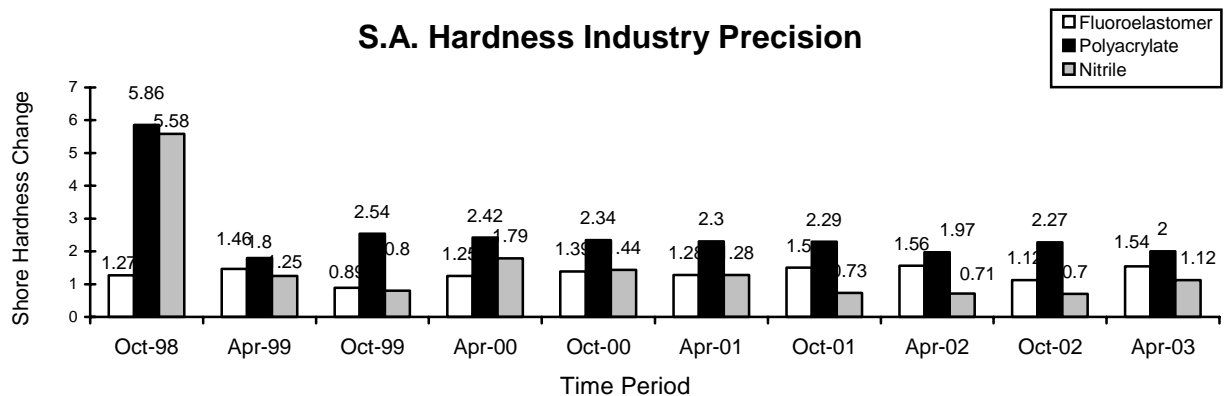


INDUSTRY TEST PRECISION

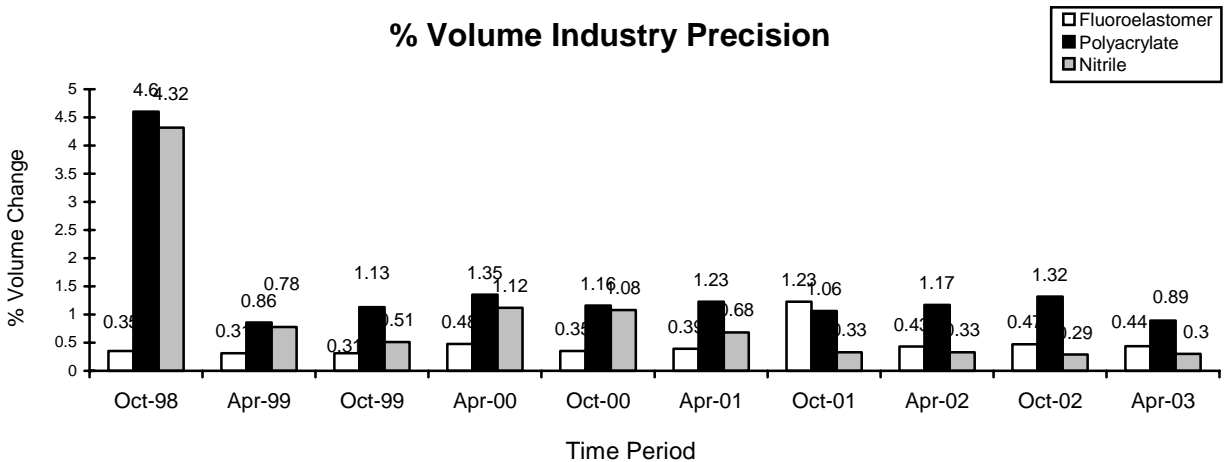
Percent elongation industry precision estimates for elastomer material are shown below by report period. Precision for polyacrylate and fluoroelastomer elastomers show very little change with respect to the previous period. Precision for the nitrile elastomer has more than doubled with respect to the previous periods.



Shore hardness industry precision estimates for elastomer material are shown below by report period. Precision for all elastomers compares well with the previous period and historical rates.



Percent volume industry precision estimates for elastomer materials are shown below by report period. Precision for polyacrylate, fluoroelastomer and nitrile elastomers show very little change with respect to the previous period and compares well with respect to the previous periods.



REFERENCE OILS

The following table quantifies each reference oil by the number of reference oil containers remaining at the TMC and each laboratory. Each reference oil container has 750 ml (0.2 gallons) of oil.

LAB	160-1	161-1	162
B	7	16	7
C	13	19	9
TMC	835	452	43

INFORMATION LETTERS

There were no information letters issued during this report period.

TMC ACTIVITIES

There were two lab visits conducted this report period with one discrepancy to report. One lab was measuring hardness with a durometer that had not been calibrated with standards traceable to NIST as Section 6.1.4.1 of the procedure requires.

DML/dml

Attachments

c: OSCT Surveillance Panel

F. M. Farber, TMC

<ftp://ftp.astmtmc.cmu.edu/docs/gears/osct/semiannualreports/osct-04-2003>

Distribution: Email