

MEMORANDUM:	04-089
DATE:	November 1, 2004
ТО	Claire Whitton, Chairman, OSCT Surveillance Panel
FROM:	Donald Lind
SUBJECT:	OSCT Reference Oil Test Results from April 1, 2004 through September 30, 2004

A total of 60 OSCT reference oil results from 2 laboratories were reported during the period April 1, 2004 through September 30, 2004.

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	20
	Statistically Unacceptable	OC	0
	Operationally Invalid	LC	0
	Aborted	XC	0
	Information Only	NN	0
Polyacrylate	Operationally and Statistically Acceptable	AC	20
	Statistically Unacceptable	OC	0
	Operationally Invalid	LC	0
	Aborted	XC	0
	Information Only	NN	0
Nitrile	Information Only	NI	20
	Operationally Invalid	LI	0
	Information Only	NN	0
	Aborted	XI	0
	TOTAL		60

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



Laboratory/Bath Distribution

Attempted calibration tests are depicted graphically below by report period:



The calibration per start rate has increased, the lost test per start rate has decreased, and the rejected per start rate remained the same when compared to the last 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 the fluoroelastomer material trended mild, the polyacrylate material trended slightly severe, and the nitrile material was on target for this period. Severity was calculated using the new test targets.



S.A. hardness industry mean delta/s bar charts for each elastomer material are shown below by report period. S.A. hardness for the nitrile and polyacrylate materials trended slightly mild and the fluoroelastomer material was on target for this period. Severity was calculated using the new test targets



Percent volume industry mean delta/s bar charts for each elastomer material are shown below by report period. Percent volume for the fluoroelastomer material trended severe, the polyacrylate material trended mild, and the nitrile material was slightly mild of target for this period. Severity was calculated using the new test targets.



INDUSTRY TEST PRECISION

Percent elongation industry precision estimates for elastomer material are shown below by report period. Precision for polyacrylate and nitrile have improved with respect to the previous period. Precision for fluoroelastomer has degraded slightly with respect to the previous period. Precision for all three elastomers compares well with historical levels.



Shore hardness industry precision estimates for elastomer material are shown below by report period. Precision for the fluoroelastomer elastomer has improved with respect to the previous period. Precision for polyacrylate and nitrile elastomers have degraded with respect to the previous period. Precision for all three elastomers compares well with respect to historical levels.



Percent volume industry precision estimates for elastomer materials are shown below by report period. Precision for polyacrylate, fluoroelastomer and nitrile elastomers have improved slightly with respect to the previous period and compares well with respect to historical levels.



INDUSTRY CONTROL CHARTS

Figures 1 through 3 are industry control charts for elongation change, shore hardness change, and percent volume change, respectively. Severity and precision EWMA charts for elongation change and shore hardness change were in control this period. Percent volume change triggered one EWMA severity warning alarm and no precision EWMA alarms. The severity EWMA warning was influenced by a test result of 3 standard deviations severe.

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
В	14	16	7
С	12	18	7
TMC	747	339	15

INFORMATION LETTERS

There were no information letters issued during this report period.

TMC LAB VISITS

There was one lab visit conducted this report period with no discrepancies to report.

DML/dml

Attachments

c: OSCT Surveillance Panel
J. L. Zalar, TMC
F. M. Farber, TMC
ftp://ftp.astmtmc.cmu.edu/docs/gear/osct/semiannualreports/osct-10-2004.pdf

Distribution: Email

Figure 1

OSCT INDUSTRY OPERATIONALLY VALID DATA



OSCT INDUSTRY OPERATIONALLY VALID DATA



OSCT INDUSTRY OPERATIONALLY VALID DATA

