




Test Monitoring Center

Carnegie Mellon University
6555 Penn Avenue, Pittsburgh, PA 15206, USA

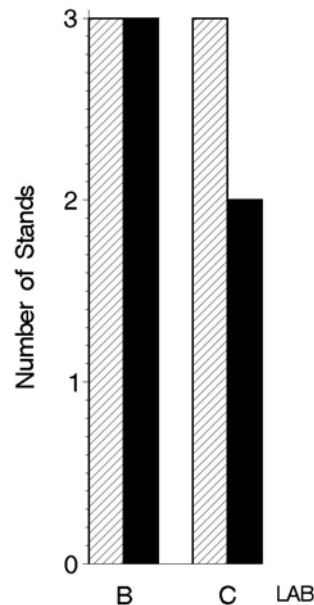
<http://astmtmc.cmu.edu>
412-365-1000



MEMORANDUM: 10-066
DATE: December 2, 2010
TO: Don Bell, Chairman, OSCT Surveillance Panel
FROM: Scott Parke 
SUBJECT: OSCT Testing from April 1, 2010 through September 30, 2010

A total of 47 OSCT tests were reported to the Test Monitoring Center during the period from April 1, 2010 through September 30, 2010. Following is a summary of testing activity this period.

	Reporting Data
Number of Labs	2
Number of Stands	5

BY-LAB STAND DISTRIBUTION

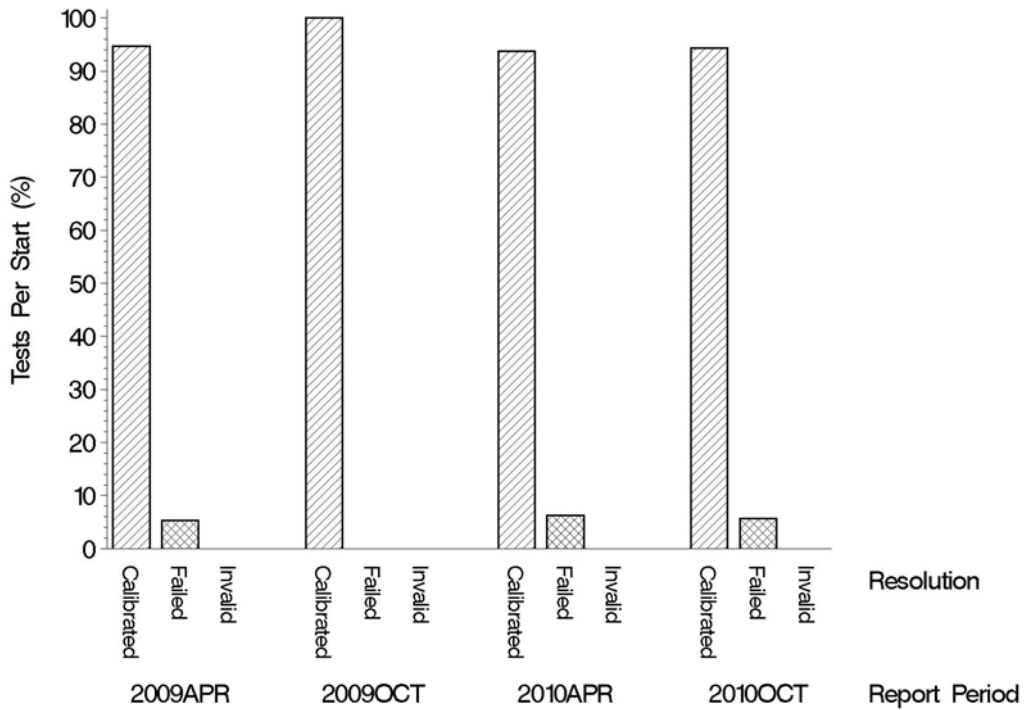


Report Period:  Current  Previous

Test Distribution by Oil and Validity

		FL	NI	PA	Totals	
					Last Period	This Period
Accepted for calibration	AC	11	11	11	45	33
Rejected (low result)	OC	0	0	0	2	0
Rejected (high result)	OC	0	0	2	1	2
Invalidated calibration	LC	0	0	0	0	0
Aborted	XC	0	0	0	0	0
Acceptable elastomer approval run	NI	4	4	3	7	11
Unacceptable elastomer approval run	MI	0	0	1	3	1
Total		15	15	17	58	47

CALIBRATION ATTEMPT SUMMARY



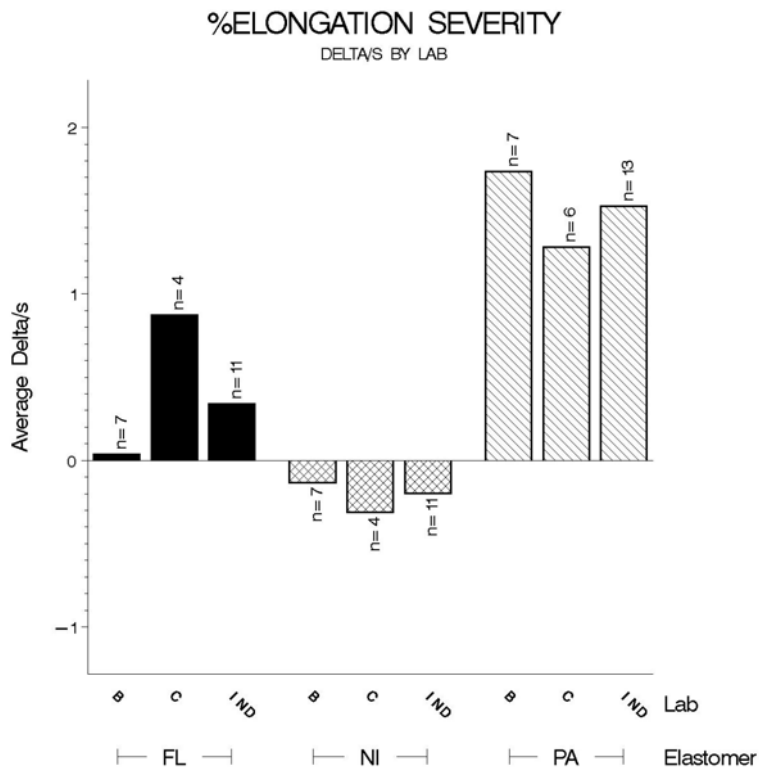
CAUSES FOR LOST TESTS:

Lab	Cause	Elastomer			Validity			Loss Rate		
		FL	NI	PA	RC	LC	XC	Lost	Starts	%
	No tests were lost this period.							0	47	0%
	Lost	0	0	0	0	0	0			
	Starts	14	16	17	47	47	47			
	%	0%	0%	0%	0%	0%	0%			

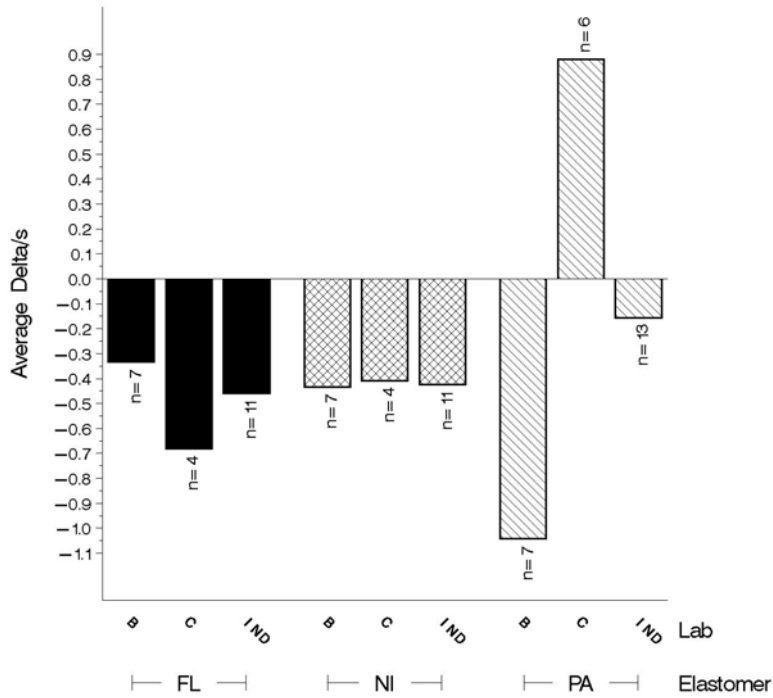
Lost tests are calibration attempts that were either aborted or operationally invalid.

Elastomer	Lab	n	Average Δ /s by Lab		
			PELA	PVCA	SAHA
FL	B	7	0.037	-0.333	-1.209
	C	4	0.872	-0.682	0.662
	Industry	11	0.341	-0.460	-0.529
	Shift*	11	2.655	-0.260	-0.746
NI	B	7	-0.132	-0.433	-0.004
	C	4	-0.313	-0.408	0.397
	Industry	11	-0.198	-0.424	0.142
	Shift*	11	-1.219	-0.284	0.186
PA	B	7	1.737	-1.043	0.316
	C	6	1.282	0.879	-0.829
	Industry	13	1.527	-0.156	-0.213
	Shift*	13	34.037	-0.249	-0.567

*as computed using historic pooled s

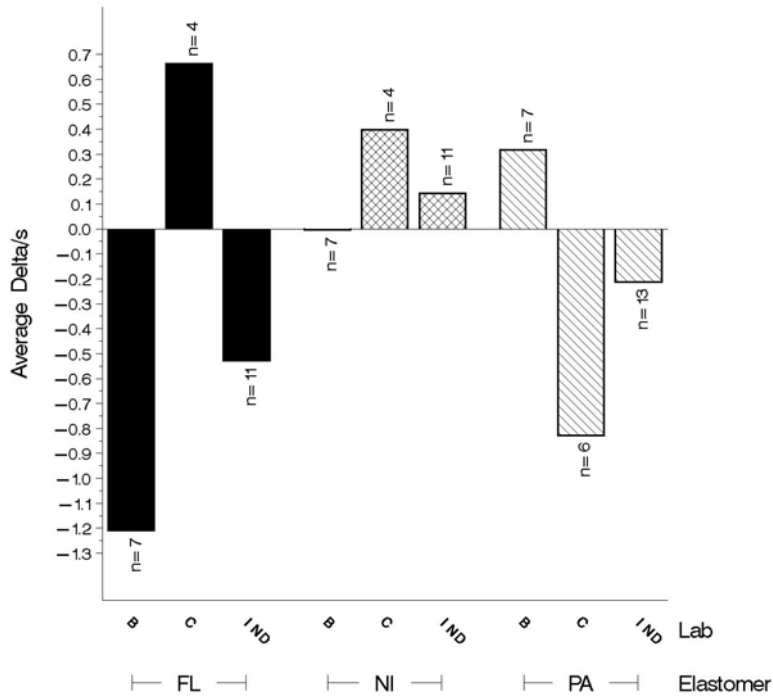


%VOLUME CHANGE SEVERITY
DELTA/S BY LAB



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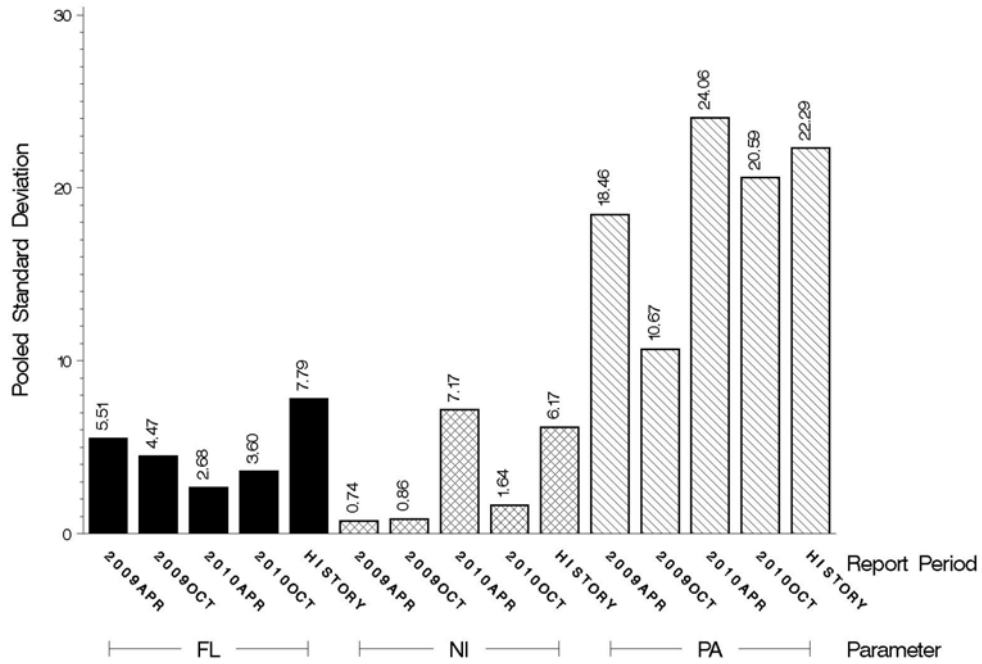
S.A. HARDNESS SEVERITY
DELTA/S BY LAB



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%ELONGATION PRECISION

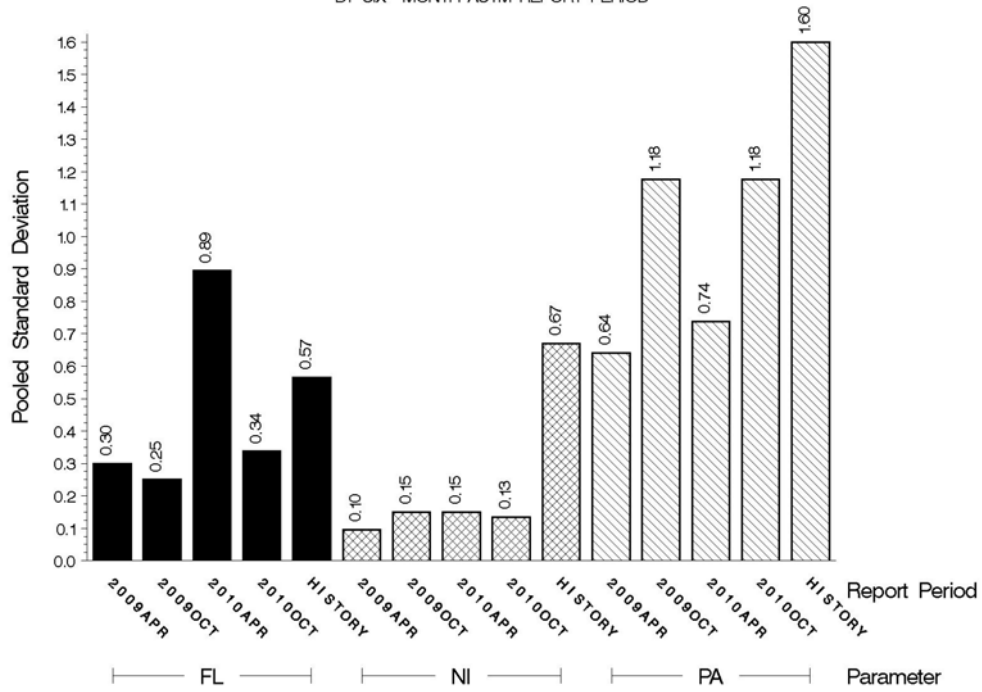
POOLED STANDARD DEVIATION
BY SIX-MONTH ASTM REPORT PERIOD



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%VOLUME CHANGE PRECISION

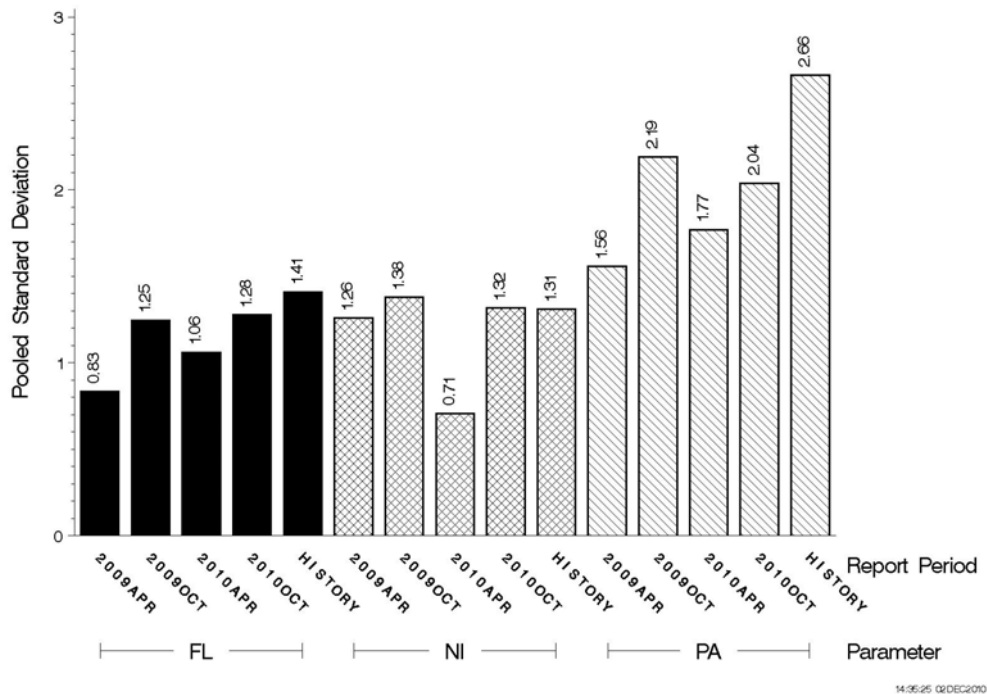
POOLED STANDARD DEVIATION
BY SIX-MONTH ASTM REPORT PERIOD



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S.A. HARDNESS PRECISION

POOLED STANDARD DEVIATION
BY SIX-MONTH ASTM REPORT PERIOD



INDUSTRY CONTROL CHARTS:

The industry control charts are shown beginning on the following page. Following the standard industry charts are charts showing only the most recent 200 tests (so as to better show detail).

During this report period, one of the tests reported was discovered to have been reported with the incorrect CMIR number. This caused the data to be misattributed to the wrong elastomer type which resulted in several of the industry alarms that have been discussed during the recent panel meetings. This error has been corrected and the data and plots included in this report reflect the correct test results.

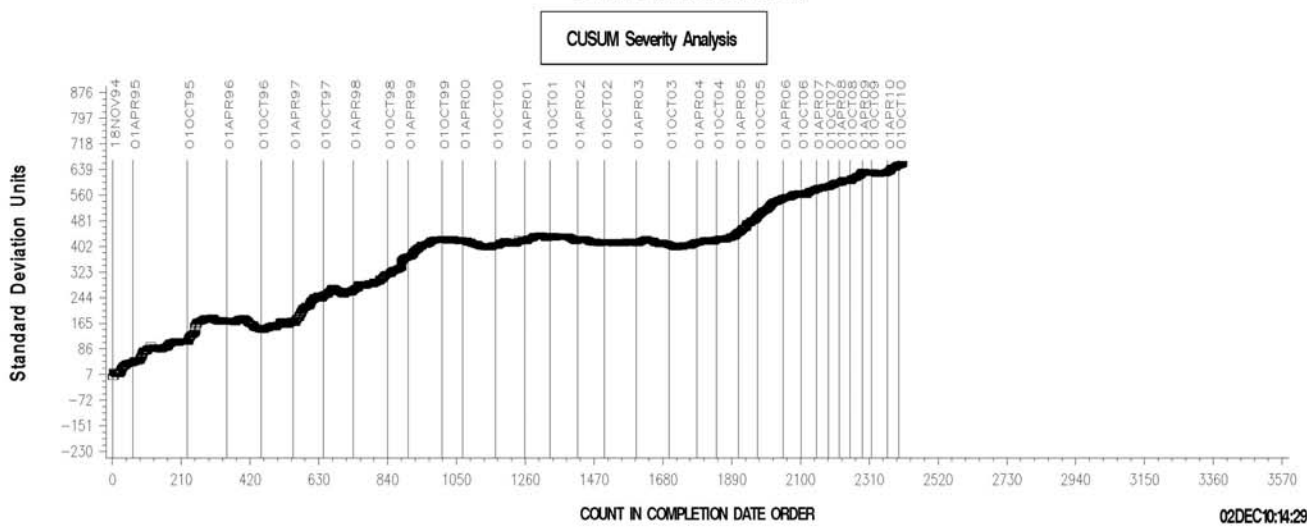
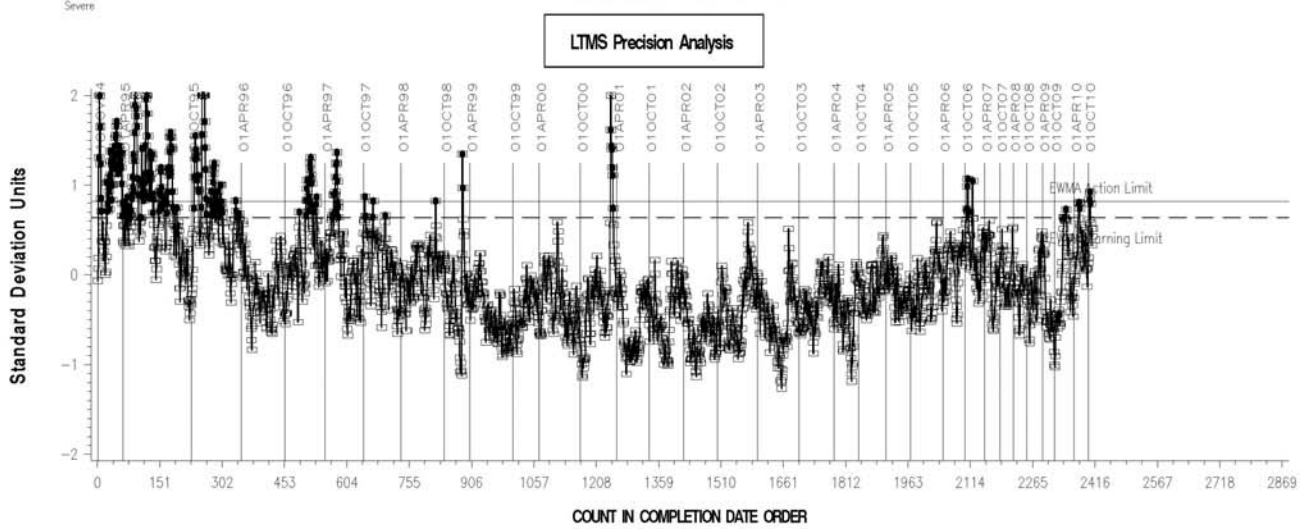
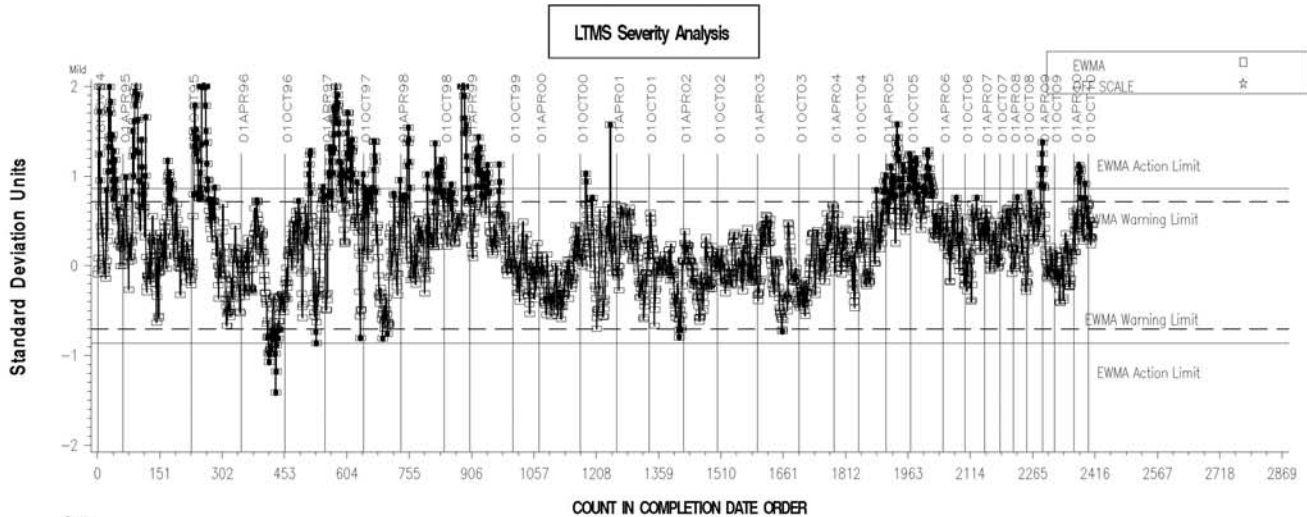
During this period, PELA exceeded the severity action limit for a string of six tests as the result of a single polyacrylate test with a Y_i of 4.553 reported on April 29. This event also resulted in a precision warning for PELA. PVCA and SAHA remained within both the severity and precision action limits throughout this reporting period.

Following the standard industry control charts is a page showing by-elastomer control charts for all three test parameters. Showing all the charts on the same page allows comparing the various parameter/elastomer combinations. The charts are small but are readable for the purpose of discerning overall performance trends. Two of the charts thus presented, polyacrylate PELA and fluoroelastomer PVCA, indicate long-standing off target performance. Polyacrylate PELA results are generally higher than target; fluoroelastomer PVCA results are generally lower.

OSCT INDUSTRY OPERATIONALLY VALID DATA

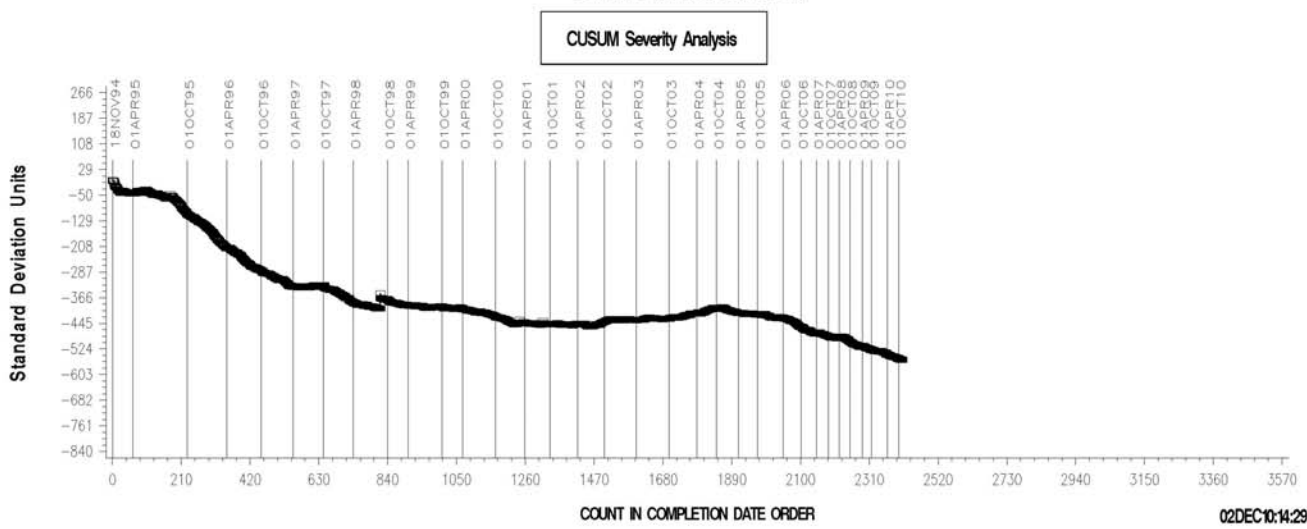
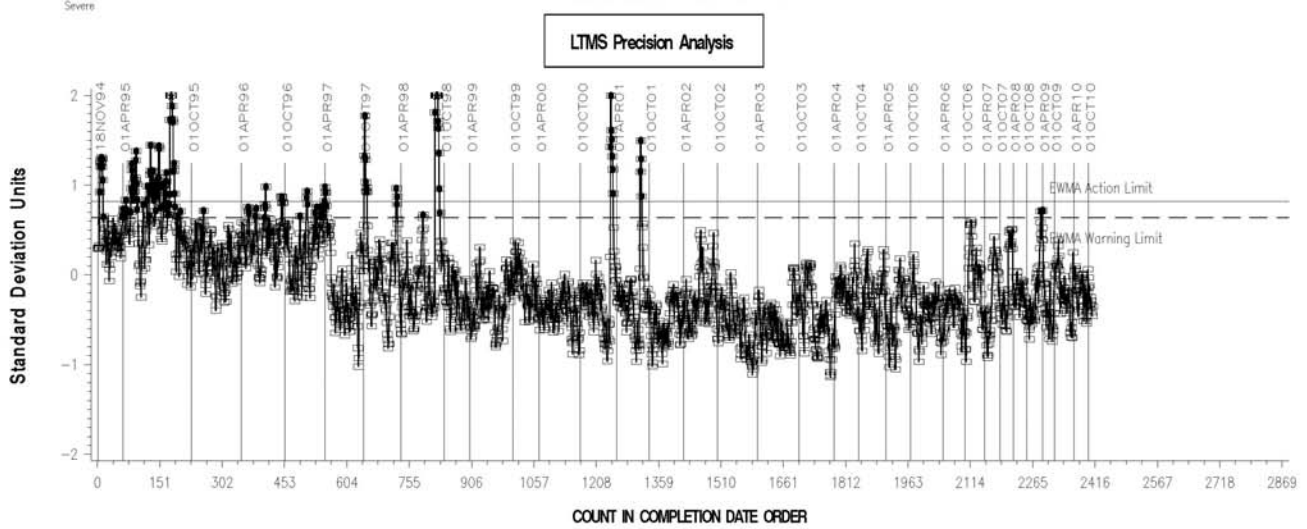
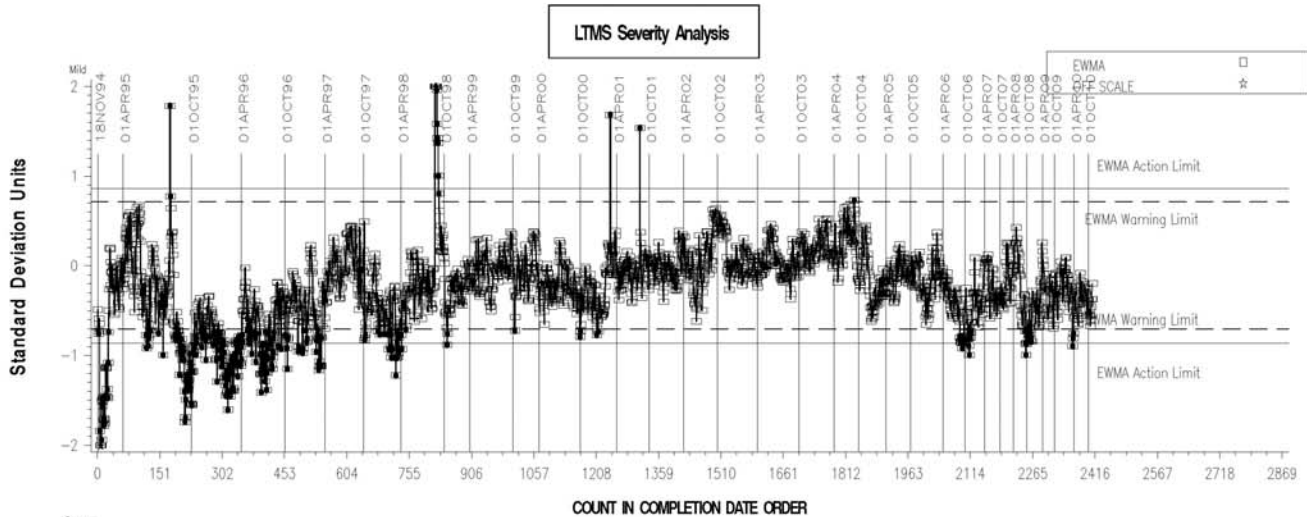


REF. ELONGATION CHANGE AVG.



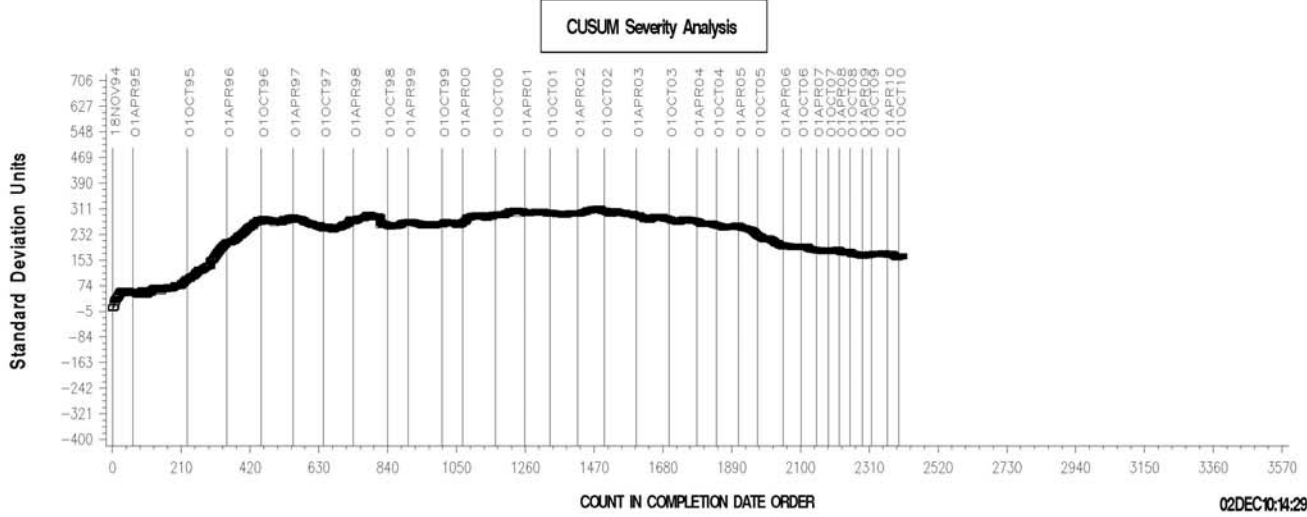
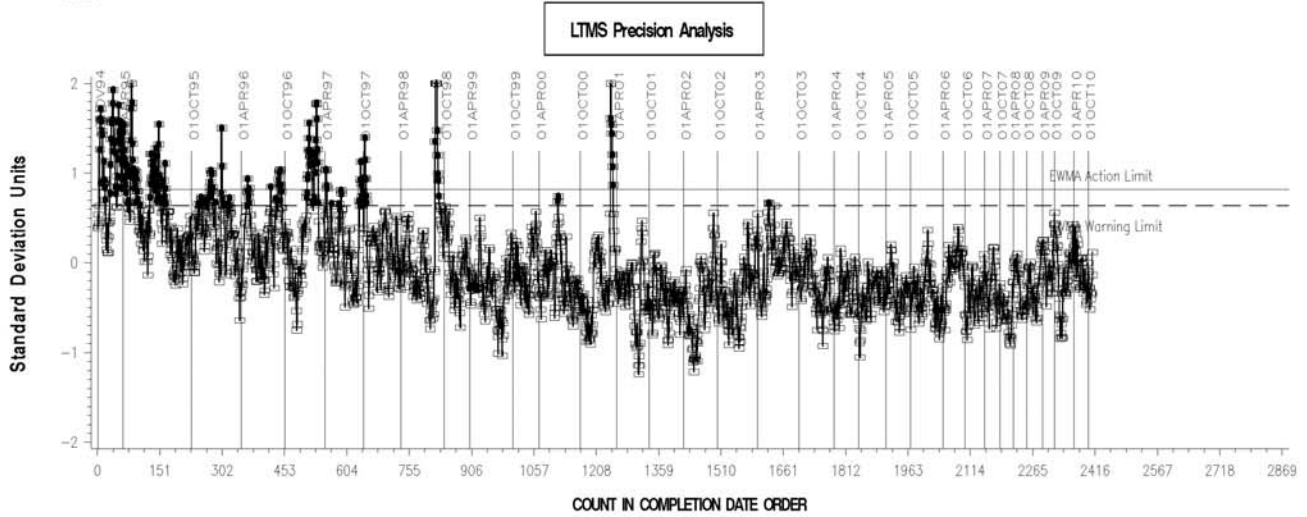
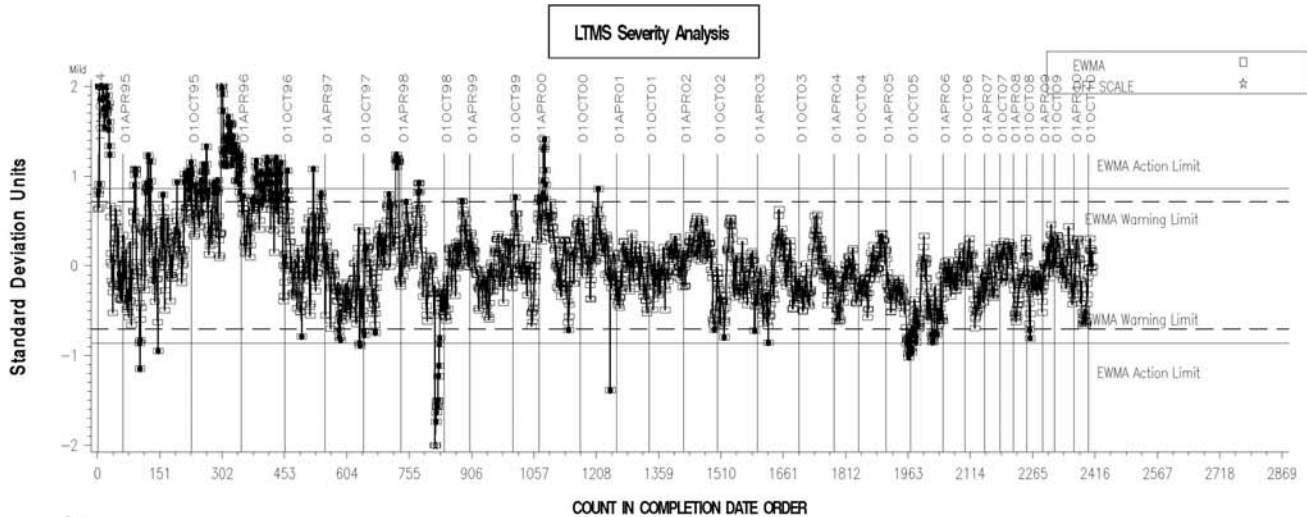
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REF. PERCENT VOLUME CHANGE AVG.



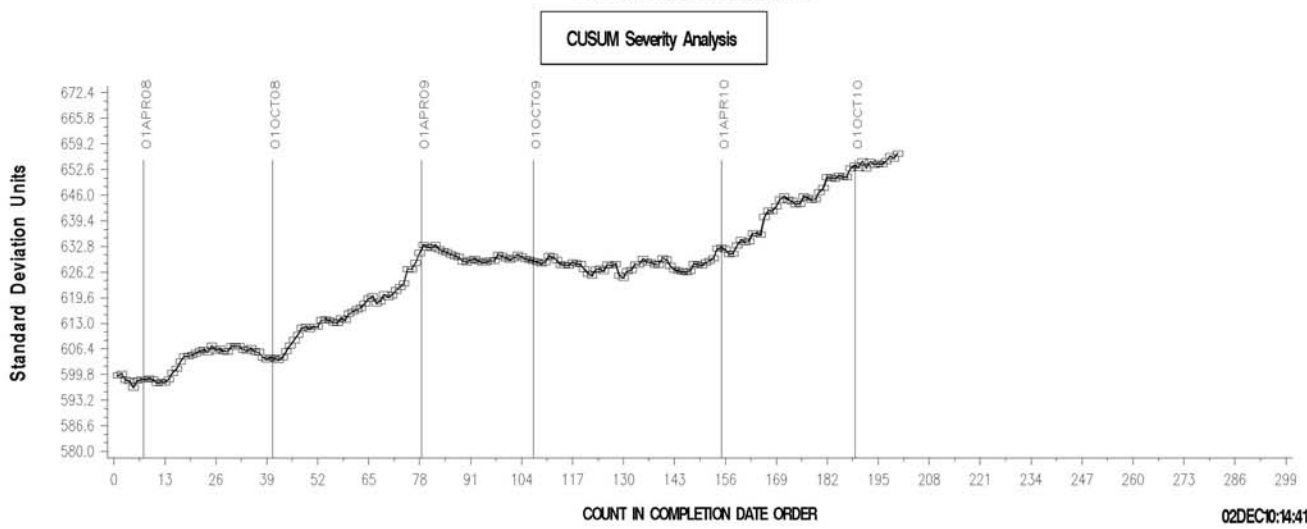
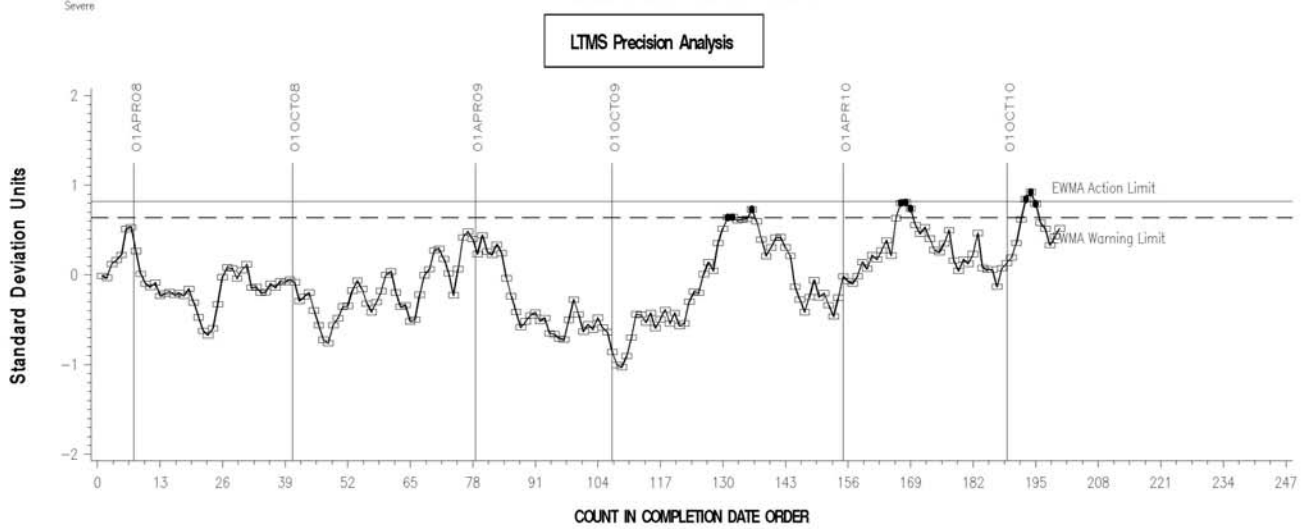
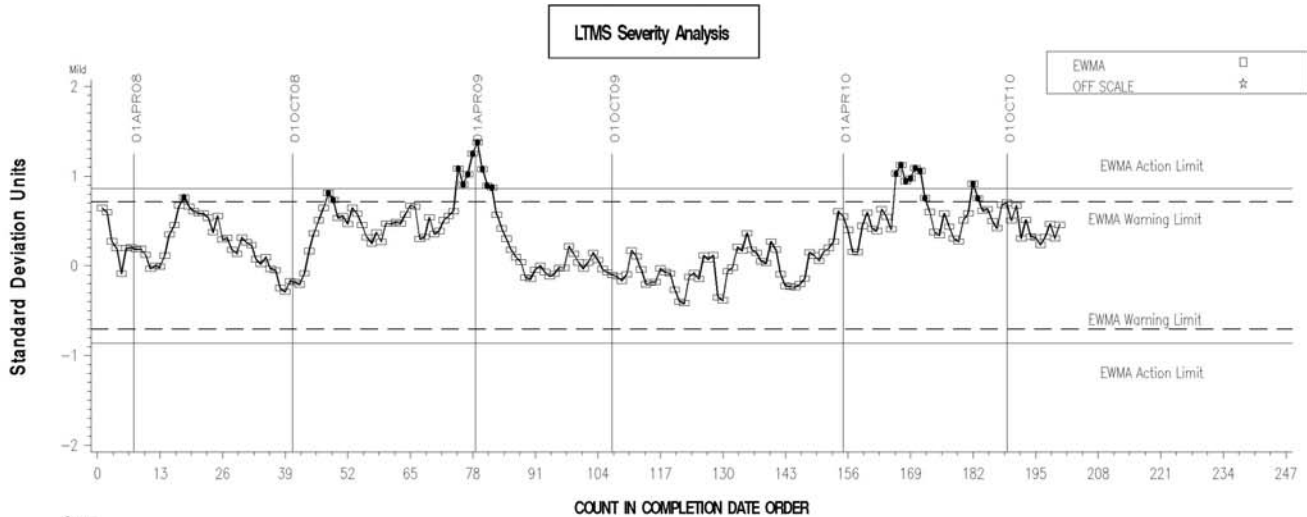
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REF. SHORE A HARDNESS CHANGE AVG.



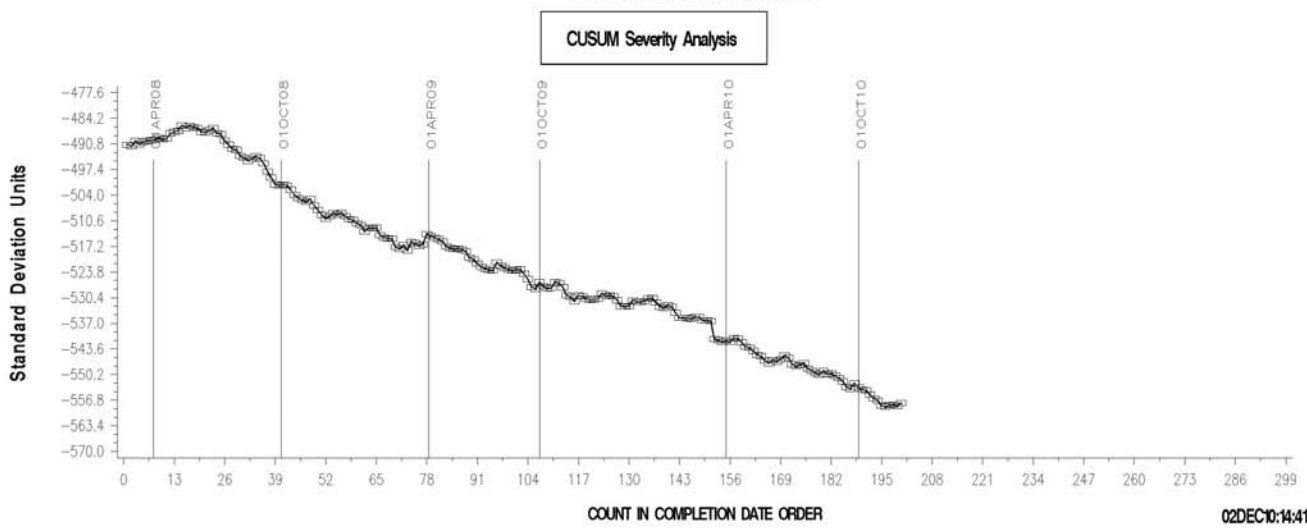
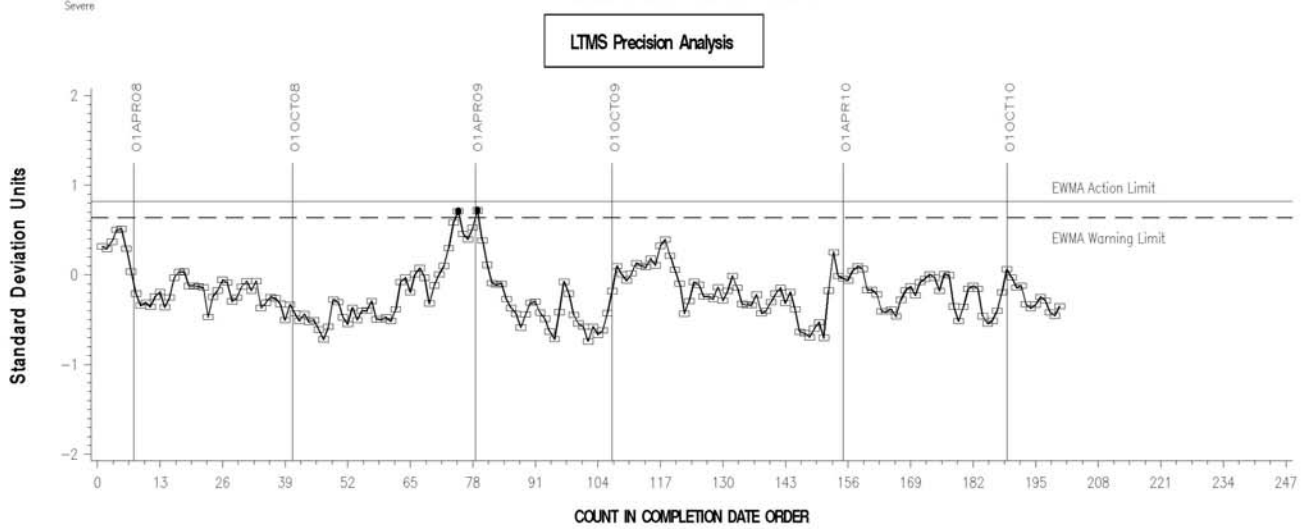
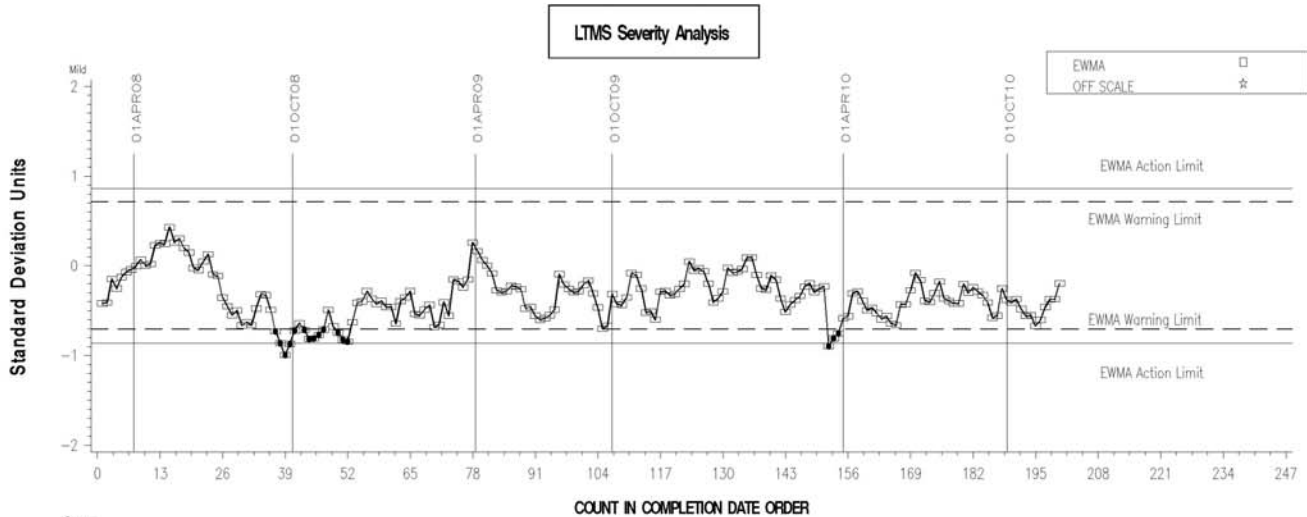
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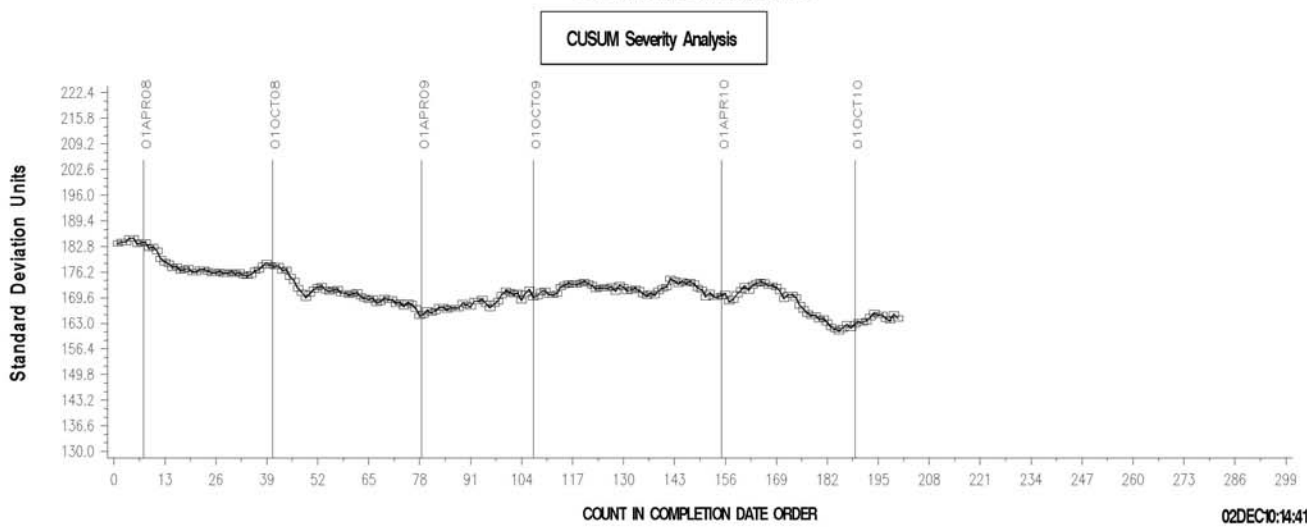
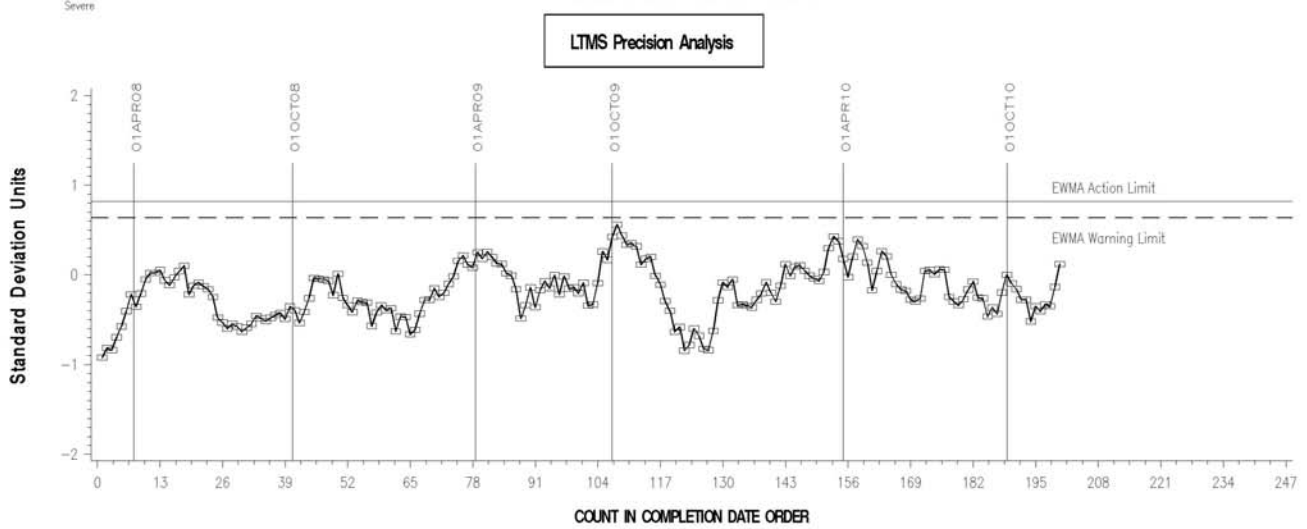
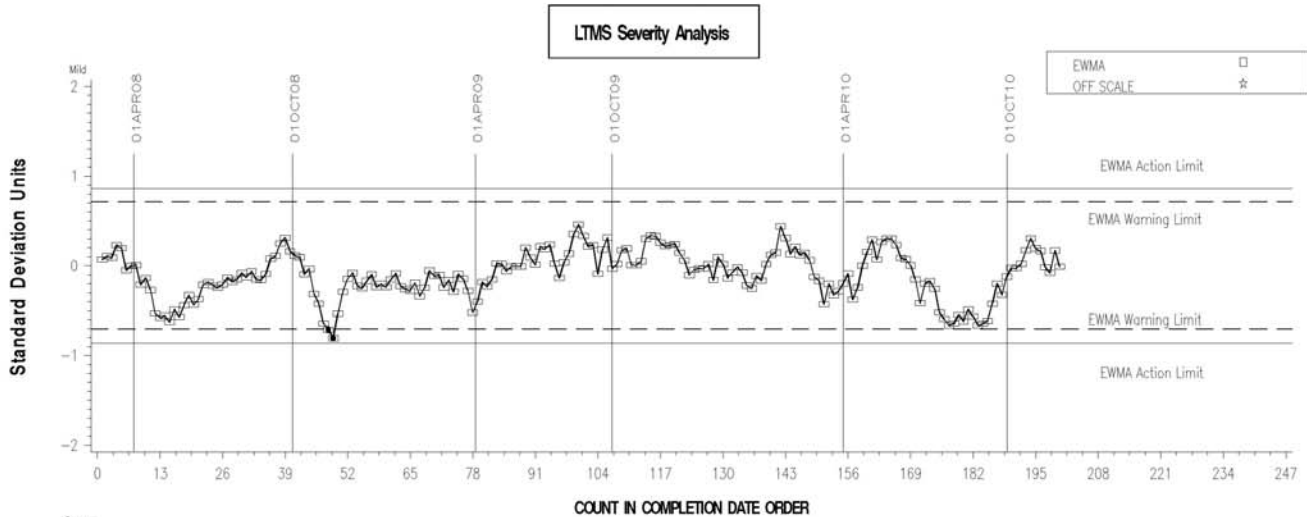
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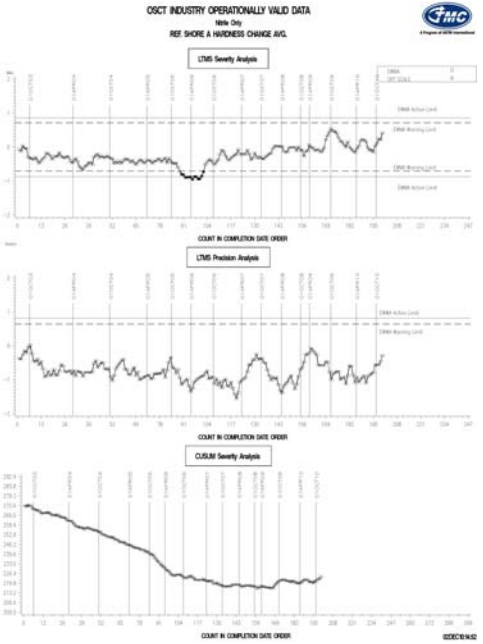
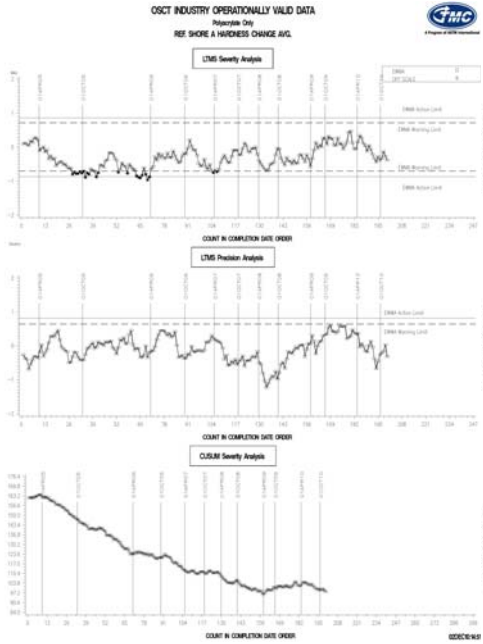
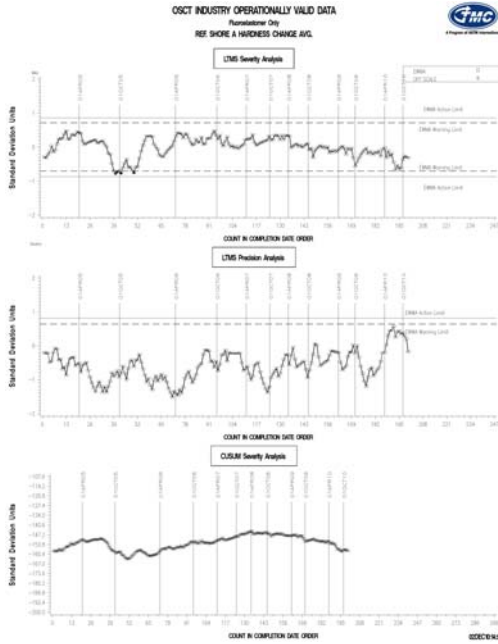
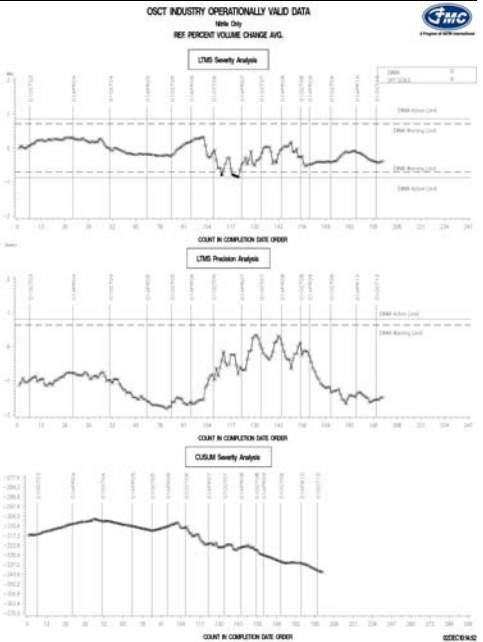
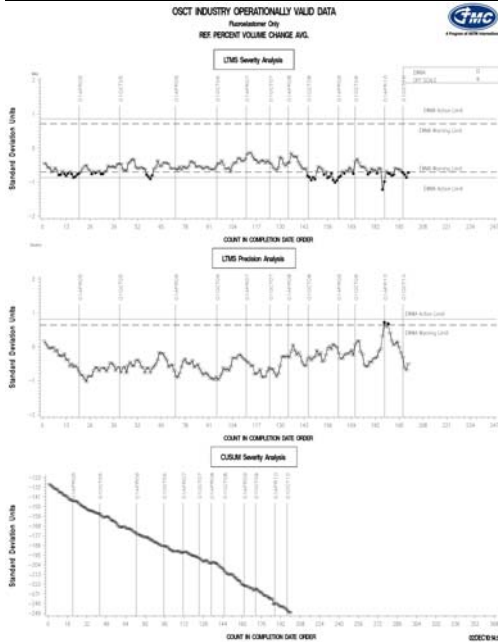
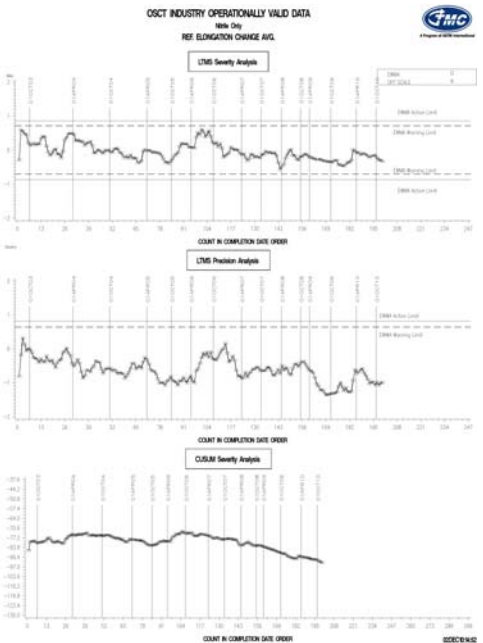
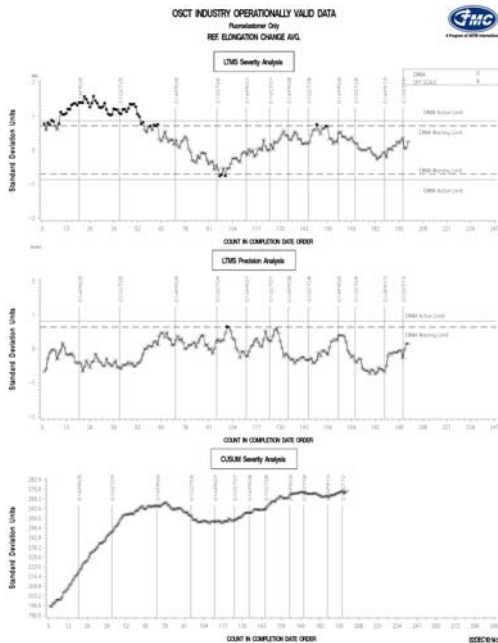
REF. PERCENT VOLUME CHANGE AVG.



OSCT INDUSTRY OPERATIONALLY VALID DATA

REF. SHORE A HARDNESS CHANGE AVG.





TIMELINE OF SIGNIFICANT EVENTS IN THE HISTORY OF THE OSCT TEST:

Effective Date	Information Letter	Event
	98-3	Section 5.2.4 Editorial Correction
19970324	97-1	Elastomer requirements for testing a non-reference oil.
19970701	97-2	Specimen cleaning procedure
19971201	97-3	Data dictionary and report forms revision
19980122	98-2	Backlash Settings Clarification
19980504	98-1	Seal Elastomer Shelf Life
19980504	98-1	Revised Reference Oil and Non-reference Oil Requirements
19980504	98-1	Addition of Calibration Requirements for Hardness Durometer, Balance, and Tension Testing Machine
20040930		Implemented LTMS Reference Oil Targets
20050815	05-1	Updated Test Precision
20050815	05-1	Rounding Test Results Using ASTM E 29
20051102	05-2	Initial and Final Volume Measurements
20060327	06-1	Addition of a Calibration Procedure for the Tension Testing Machine
20060327	06-1	New Reference Oil Testing Section
20060327	06-1	Editorial Changes
20060331	06-2	Specimen Spacer Width Revision
20071001	07-1	Test Temperature Data Logging an Tolerance
20080114	07-2	Percent Deviation Calculation for Test Oil Temperature Data Logging
20081007		Extend Nitrile elastomer batch NI332 shelf life from 10/10/2008 to 12/31/2008
20081007	08-1	Clarification of allowable oil temperature variations
20081007	08-2	Allow elastomer shelf life to extend beyond two years
20090904	09-1	Revised Extensometer Calibration Procedure

TMC LAB VISITS:

No OSCT lab visits were conducted during this report period.

INFORMATION LETTERS:

No information letters were issued this period.

STATUS OF REFERENCE OIL SUPPLY:

At the end of this report period, the testing oil supply stood as outlined in the table below:

Oil	Cans @ Labs	@ TMC	
		Cans	Gallons
160-1	18	500	99.1
161-1	21	47	9.4
161-2	0	1387	275.0
168	22	156	31.1
Total	61	2090	414.6

SDP/sdp/astm1010.doc/mem10-066.sdp.doc

cc: Frank Farber

Jeff Clark

Don Lind

Mike Kasimirsky

OSCT Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/gear/osct/semiannualreports/osct-10-2010.pdf>

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