



Test Monitoring Center


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

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

MEMORANDUM: 13-059

DATE: October 31, 2013

TO: Don Bell, Chairman, OSCT Surveillance Panel

FROM: Scott Parke 

SUBJECT: OSCT Reference oil testing from April 1, 2013 through September 30, 2013

Please find attached a summary of testing activity this period.

SDP/sdp/mem13-059.sdp.doc

cc: Frank Farber

Jeff Clark

OSCT Surveillance Panel

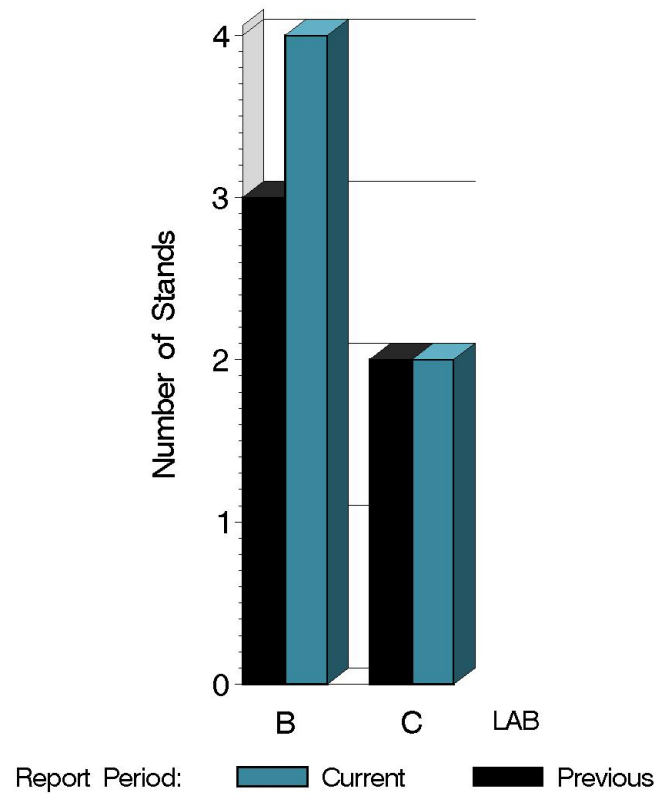
<ftp://ftp.astmtmc.cmu.edu/docs/gear/osct/semiannualreports/osct-10-2013.pdf>

Distribution: email

OSCT (D5662)

	Reporting Data	Calibrated on 9-30-13
Number of Labs	2	2
Number of Stands	6	6

BY-LAB STAND
DISTRIBUTION



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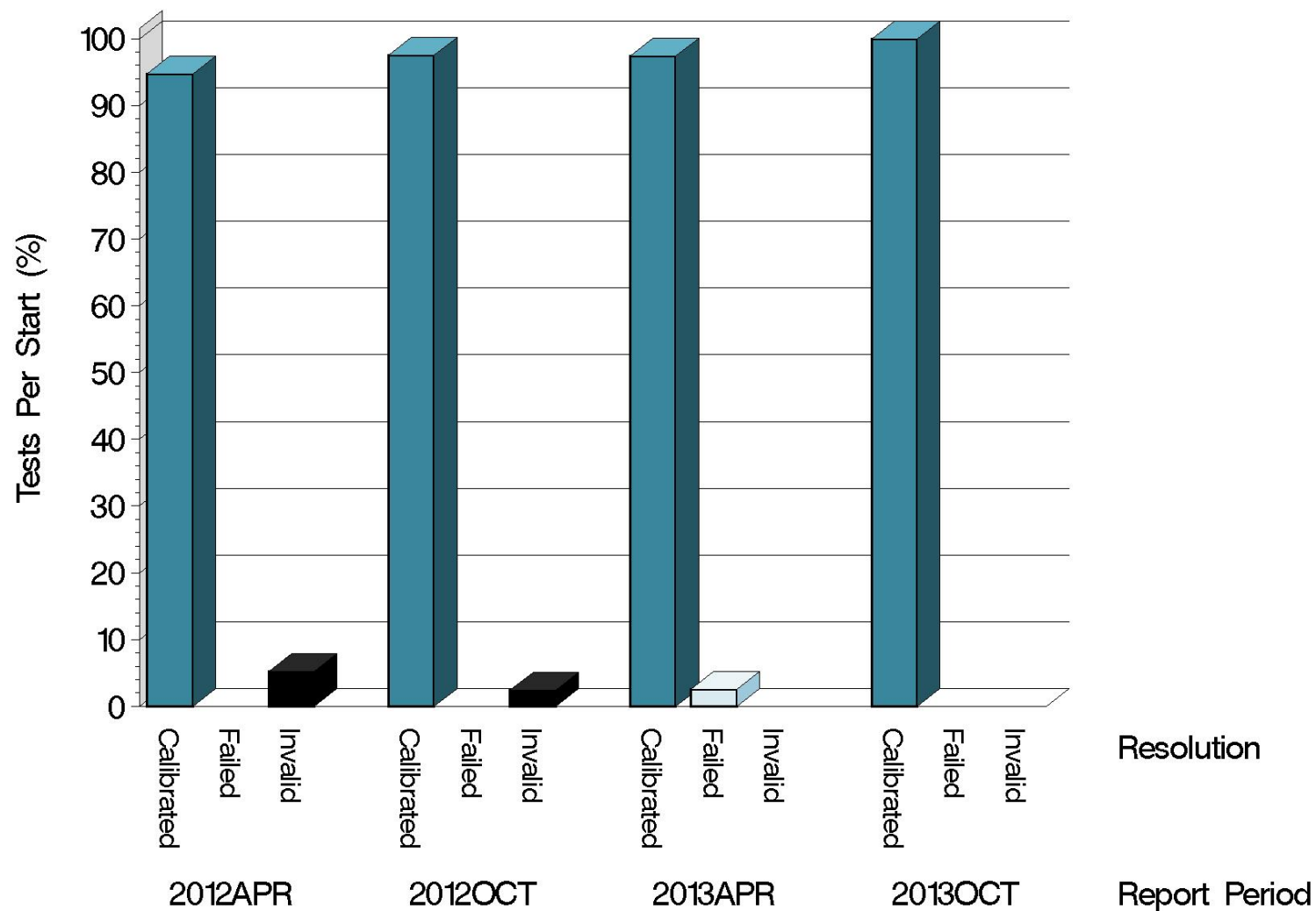
OSCT (D5662)

Test Distribution by Oil and Validity

					Totals	
		FL	NI	PA	Last Period	This Period
Accepted for calibration	AC	12	11	14	38	37
Rejected (low result)	OC	0	0	0	0	0
Rejected (high result)	OC	0	0	0	1	0
Invalidated	LC	0	0	0	0	0
Aborted	XC	0	0	0	0	0
Elastomer approval run	NI	4	4	2	23	10
Unacceptable approval run	MI	2	0	0	2	2
Total		18	15	16	64	49

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CALIBRATION ATTEMPT SUMMARY



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CAUSES FOR LOST TESTS

		Oil			Validity			Loss Rate		
Lab	Cause	FL	NI	PA	LC	RC	XC	Lost	Starts	%
	No tests were lost.							0	49	0%
	Lost	0	0	0	0	0	0			
	Starts	18	15	16	49	49	49			
	%	0%	0%	0%	0%	0%	0%			

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

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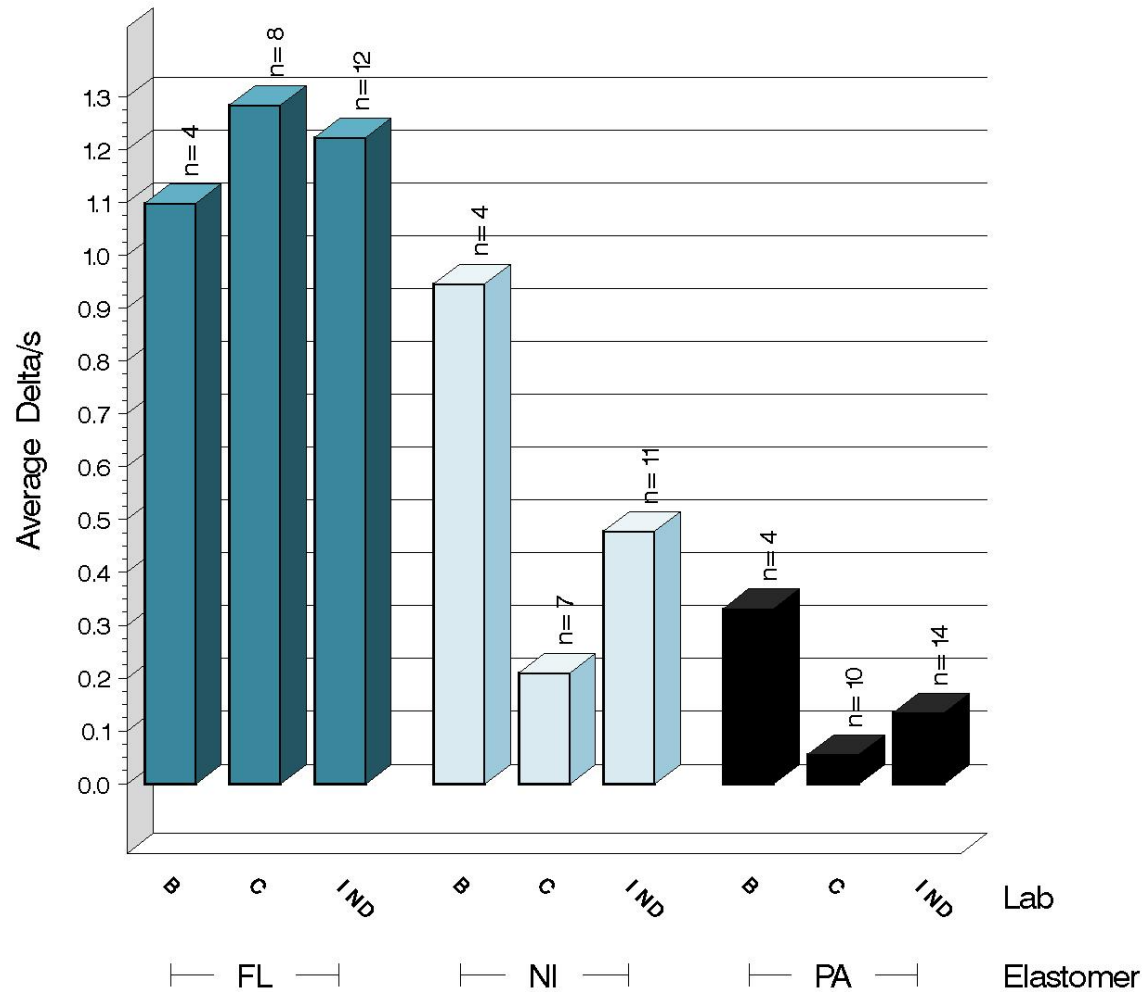
Average Δ /s by Lab					
Elastomer	Lab	n	PELA	PVCA	SAHA
FL	B	4	1.098	-0.676	-0.726
	C	8	1.284	-0.134	-0.576
	Industry	12	1.222	-0.315	-0.626
	Shift*	12	9.260%	-0.173%	-0.873 pts
NI	B	4	0.946	0.038	0.041
	C	7	0.210	-0.088	-0.253
	Industry	11	0.478	-0.042	-0.146
	Shift*	11	2.666%	-0.025%	-0.191 pts
PA	B	4	0.332	-0.219	0.825
	C	10	0.055	0.459	0.294
	Industry	14	0.134	0.265	0.446
	Shift*	14	2.953%	0.411%	1.154 pts

*computed using historic pooled s

OSCT (D5662)

%ELONGATION SEVERITY

DELTA/S BY LAB

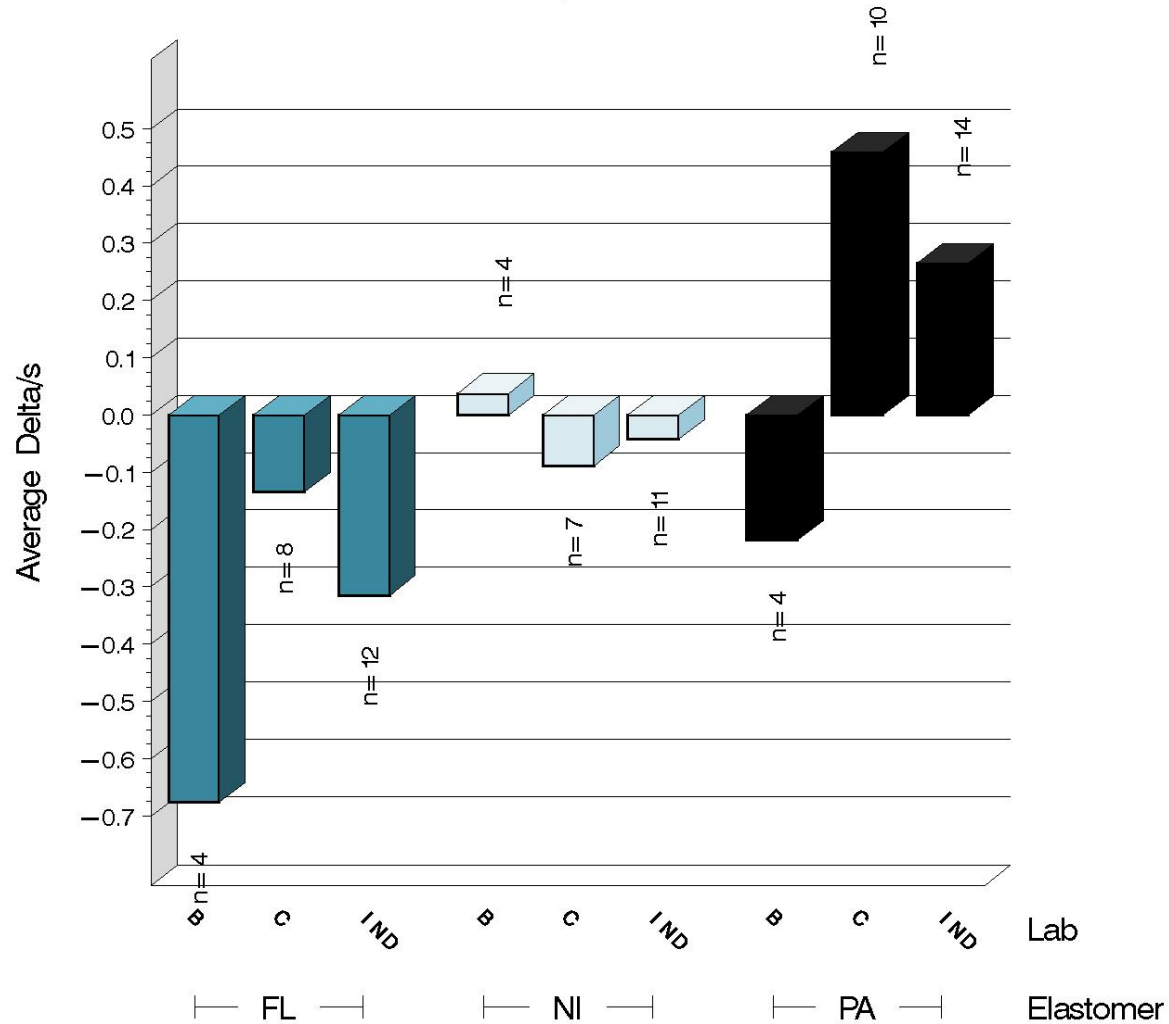


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OSCT (D5662)

%VOLUME CHANGE SEVERITY

DELTA/S BY LAB

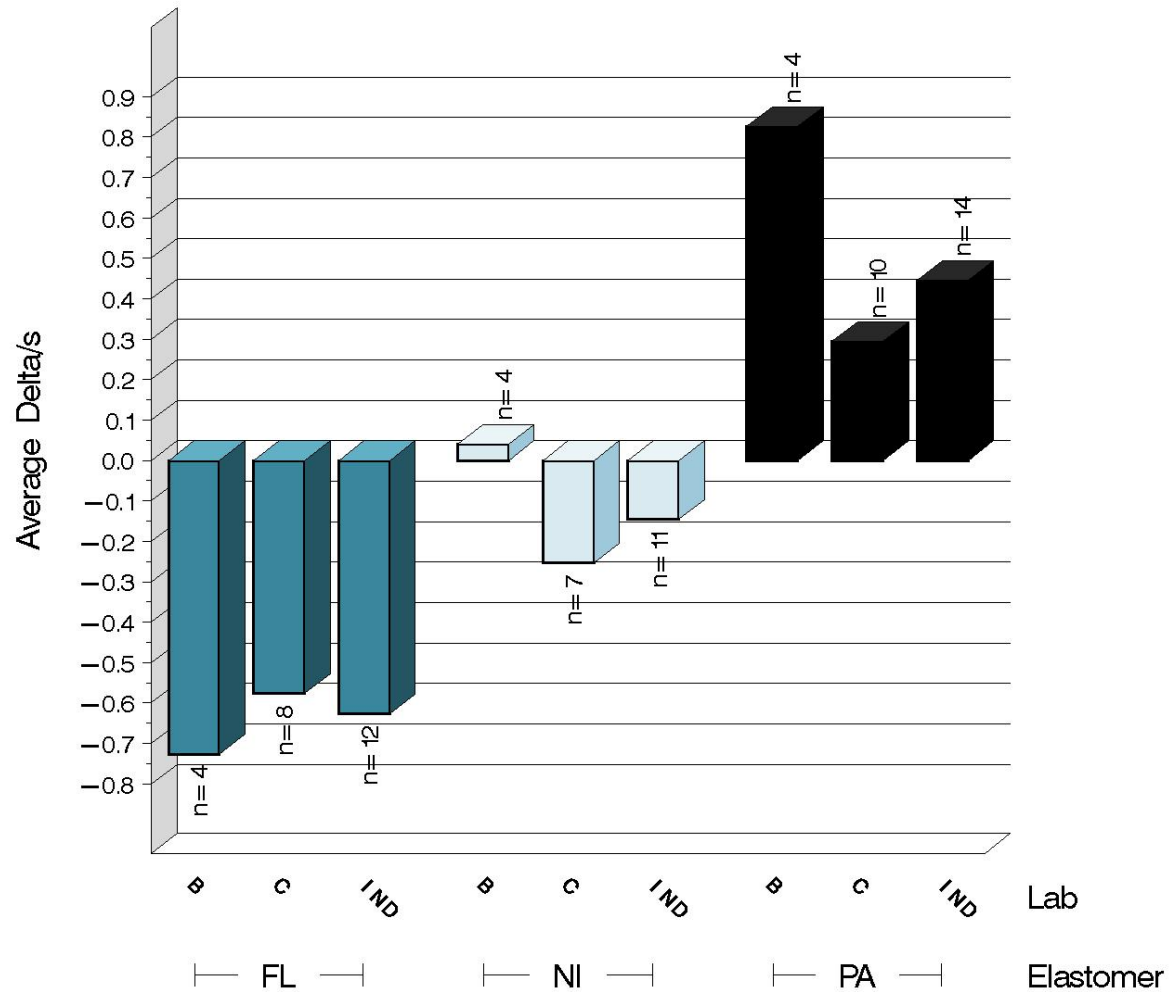


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OSCT (D5662)

S.A. HARDNESS SEVERITY

DELTA/S BY LAB

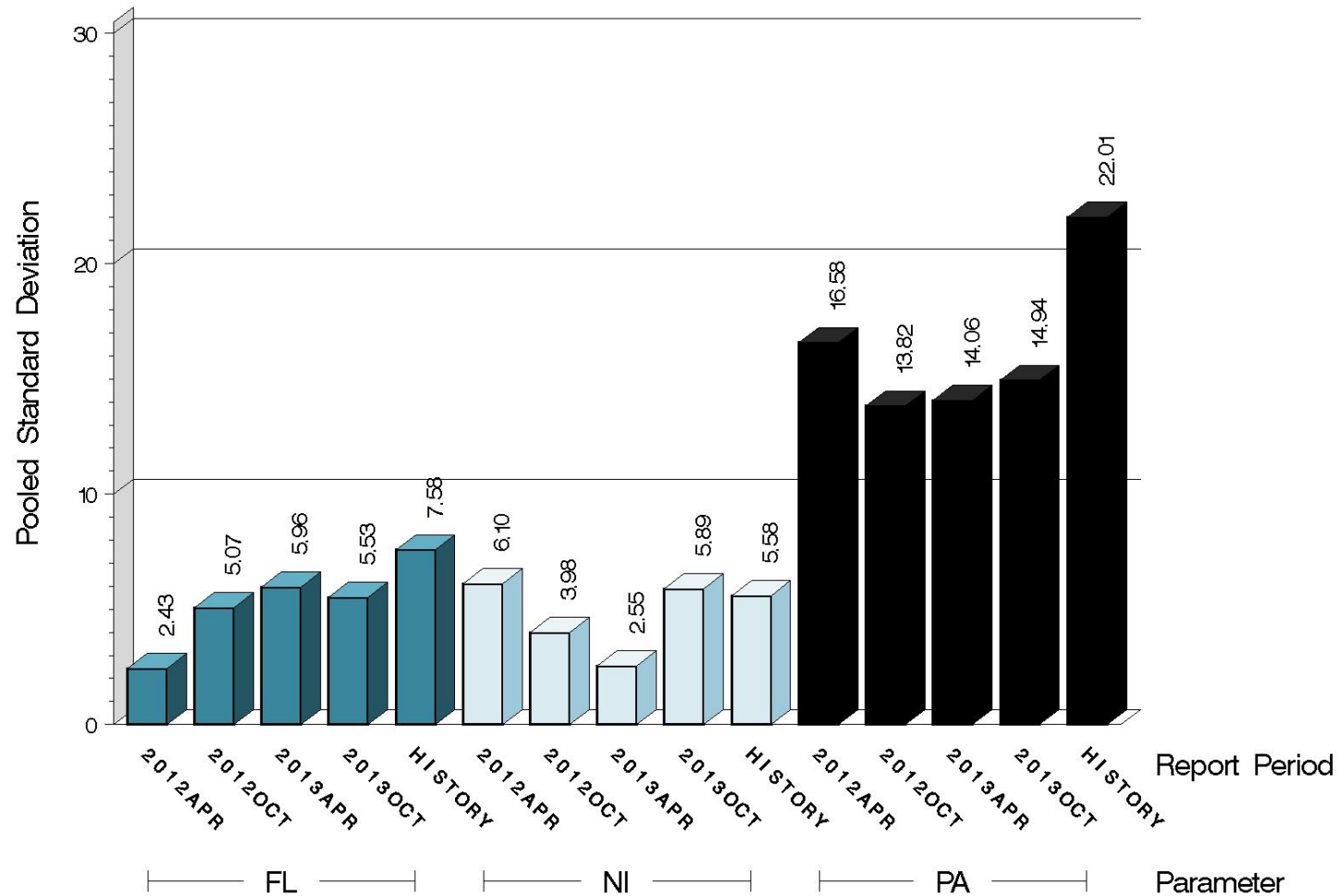


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OSCT (D5662)

%ELONGATION PRECISION

POOLED STANDARD DEVIATION
BY SIX-MONTH ASTM REPORT PERIOD

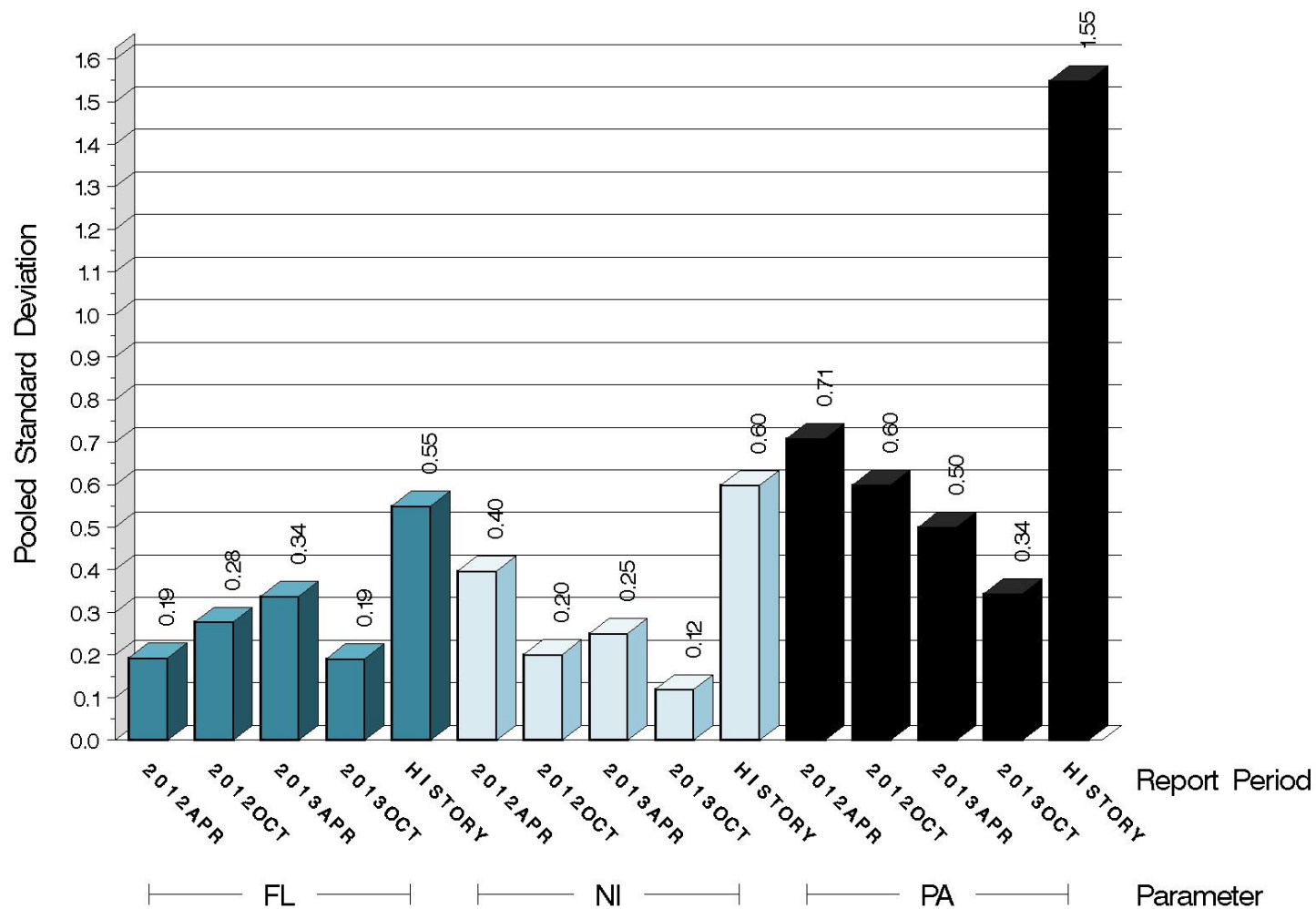


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OSCT (D5662)

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POOLED STANDARD DEVIATION
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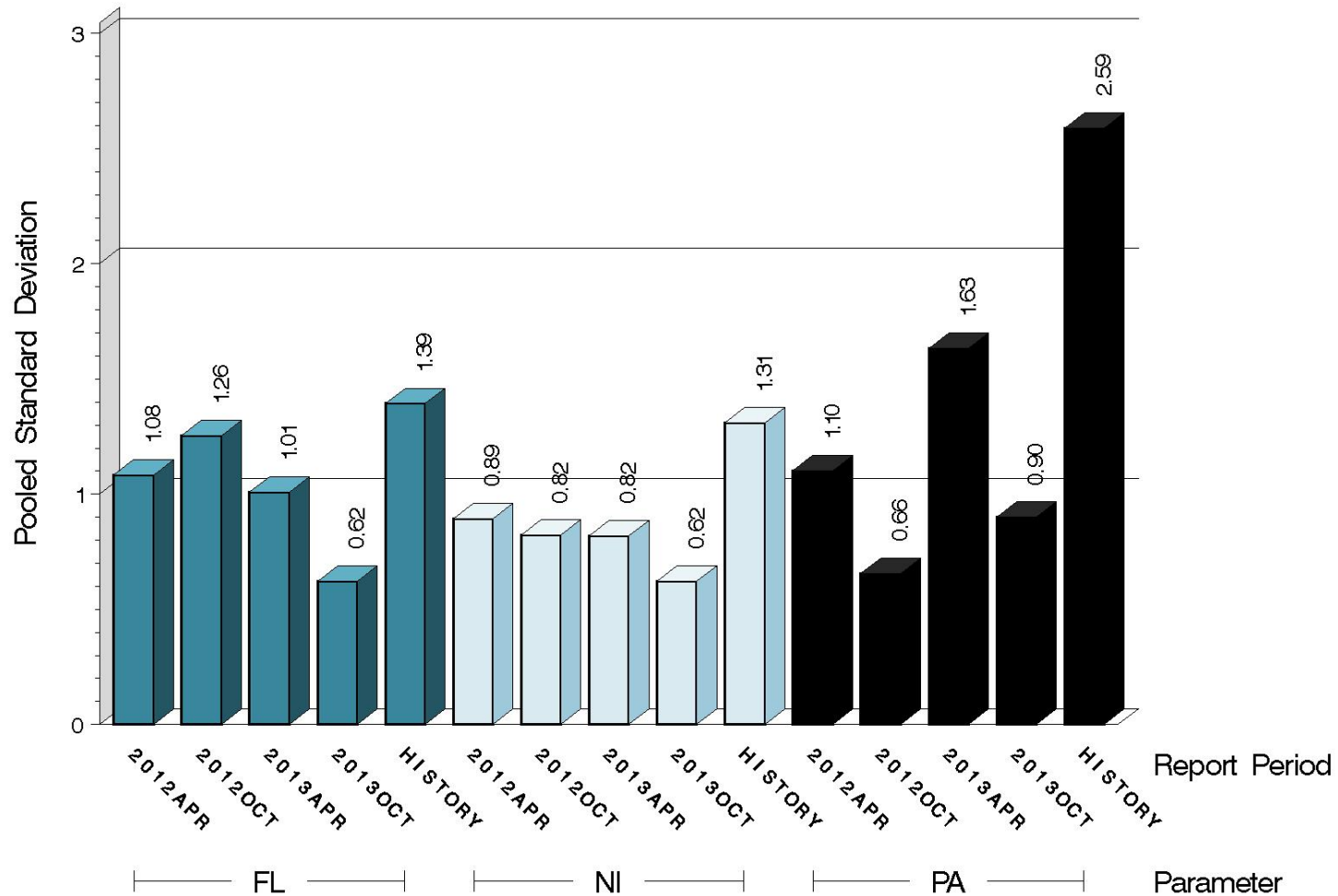


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OSCT (D5662)

S.A. HARDNESS PRECISION

POOLED STANDARD DEVIATION
BY SIX-MONTH ASTM REPORT PERIOD



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OSCT (D5662)

SUMMARY OF SEVERITY & PRECISION

Severity

Industry PELA results continue to be higher than target with fair regularity. The by-elastomer plots following the standard industry control charts show that this is entirely due to FL results. FL results over the past 18 months have been produced on 6 different elastomer batches.

Two of the by-elastomer charts, 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. In 2011, the surveillance panel briefly discussed the appropriateness of industry correction factors or revised targets for these two elastomer/parameter combinations but made no changes.

OSCT (D5662)

SUMMARY OF SEVERITY & PRECISION (continued)

Precision

Precision for all parameters continues to be good.

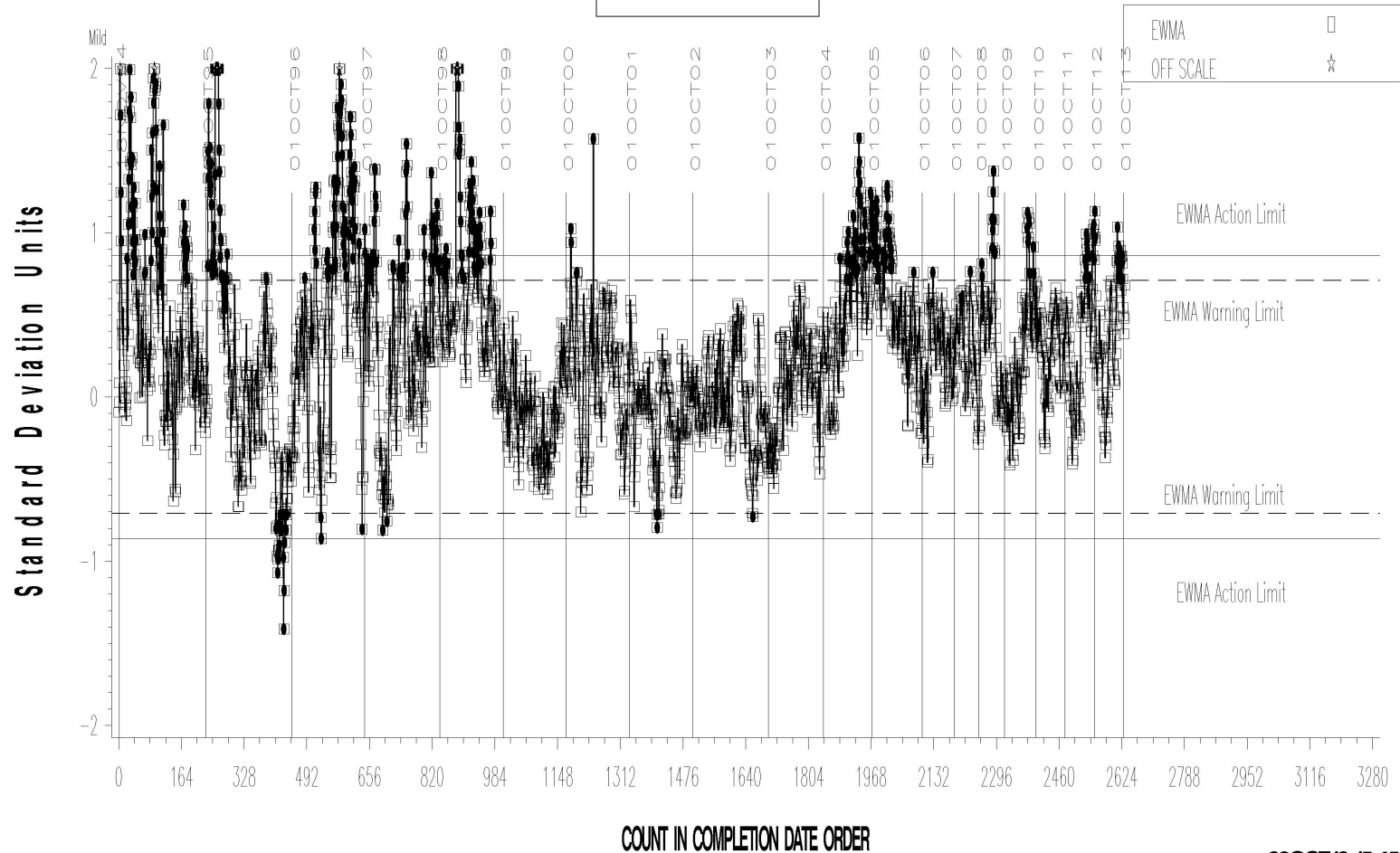
Industry control charts follow.

OSCT (D5662)

OSCT INDUSTRY OPERATIONALLY VALID DATA

REF. ELONGATION CHANGE AVG.

LTMS Severity Analysis

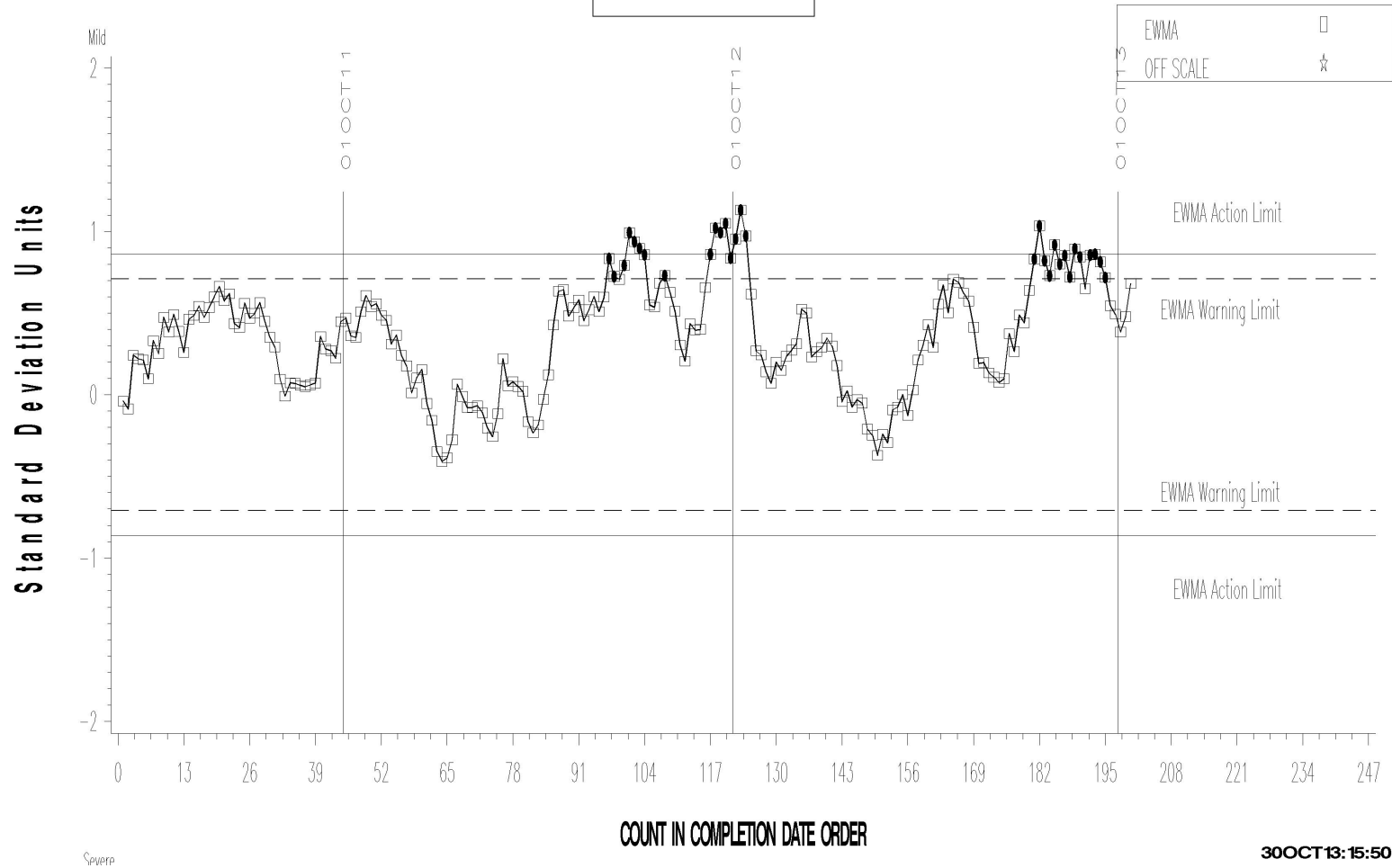


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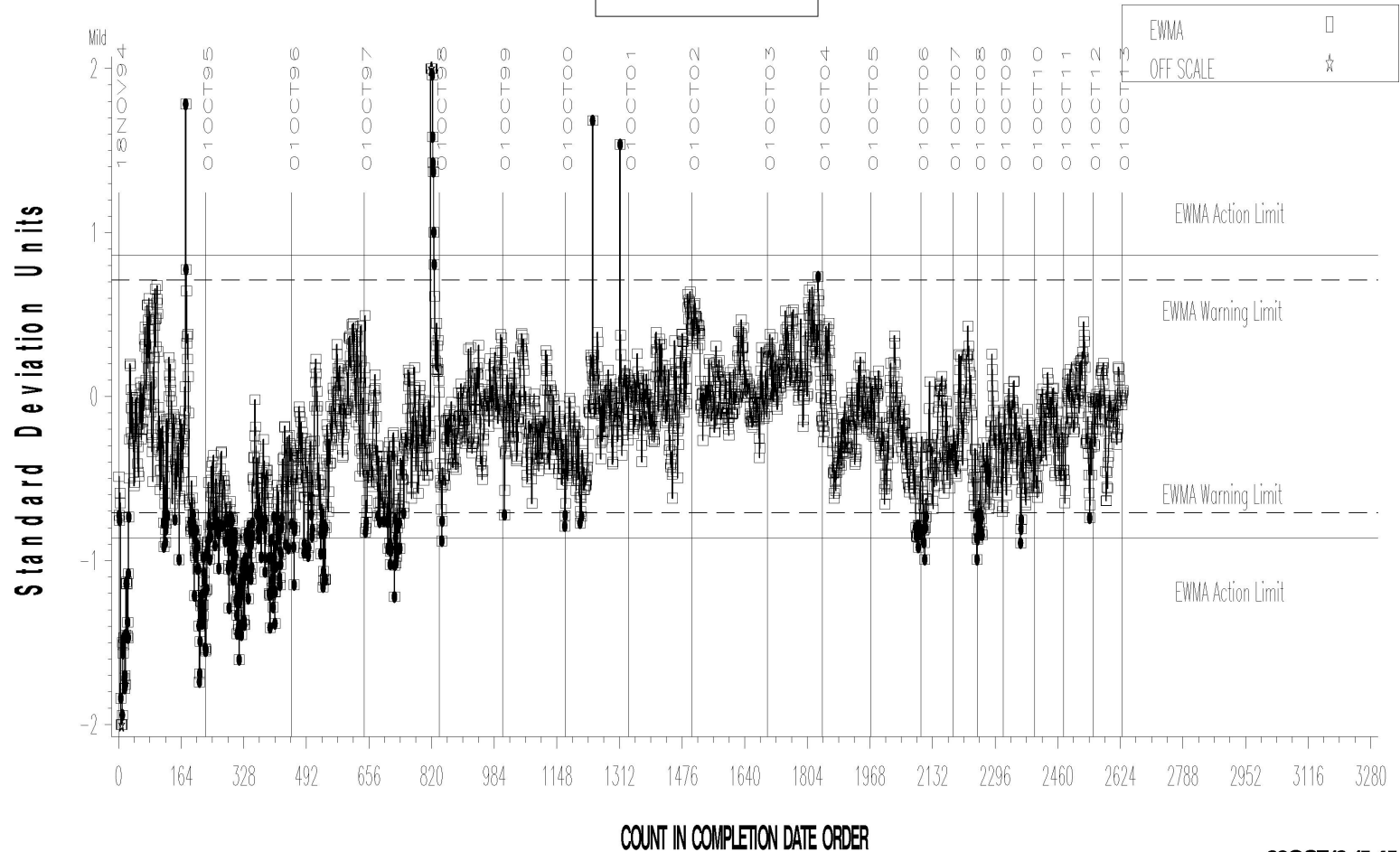


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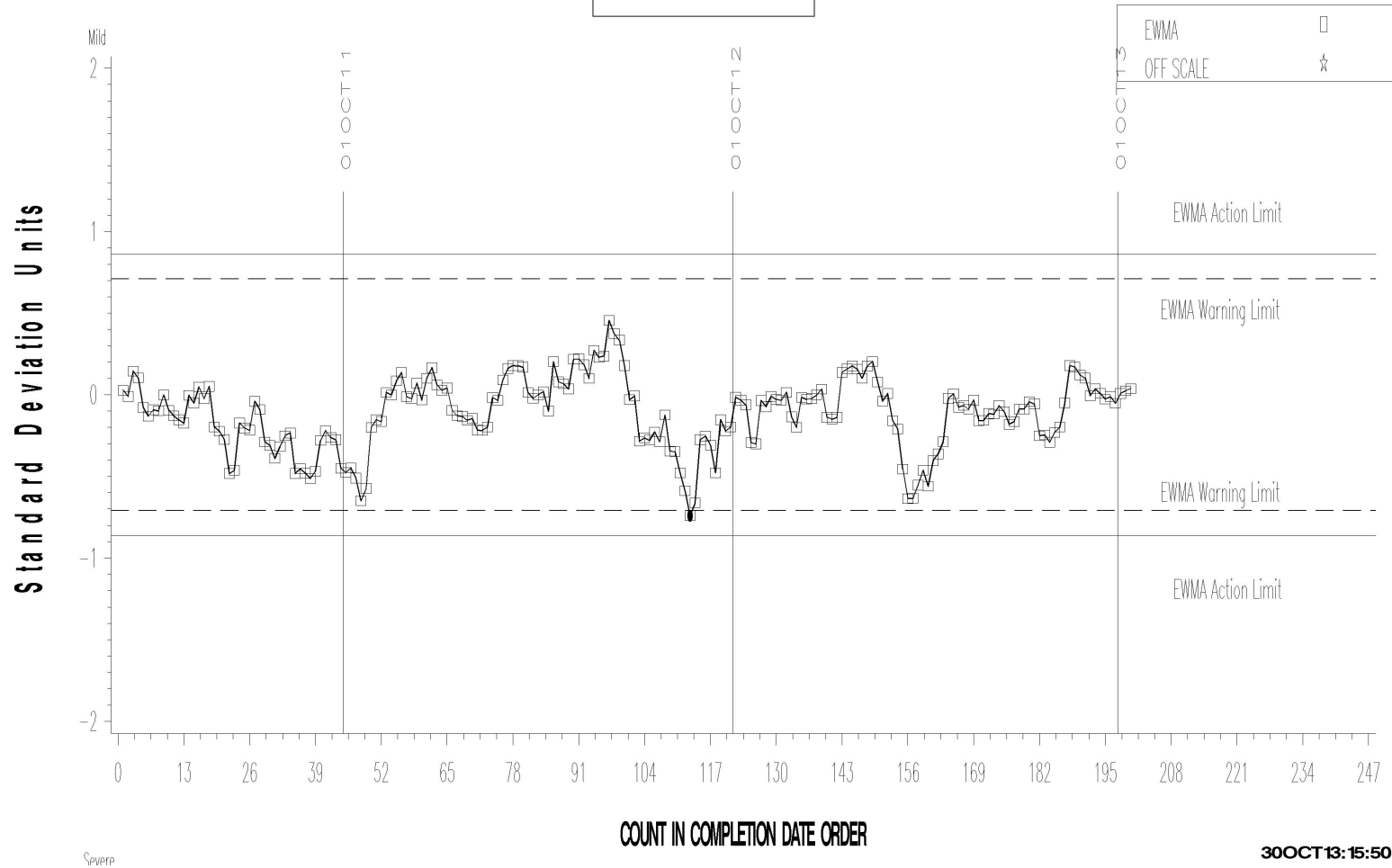


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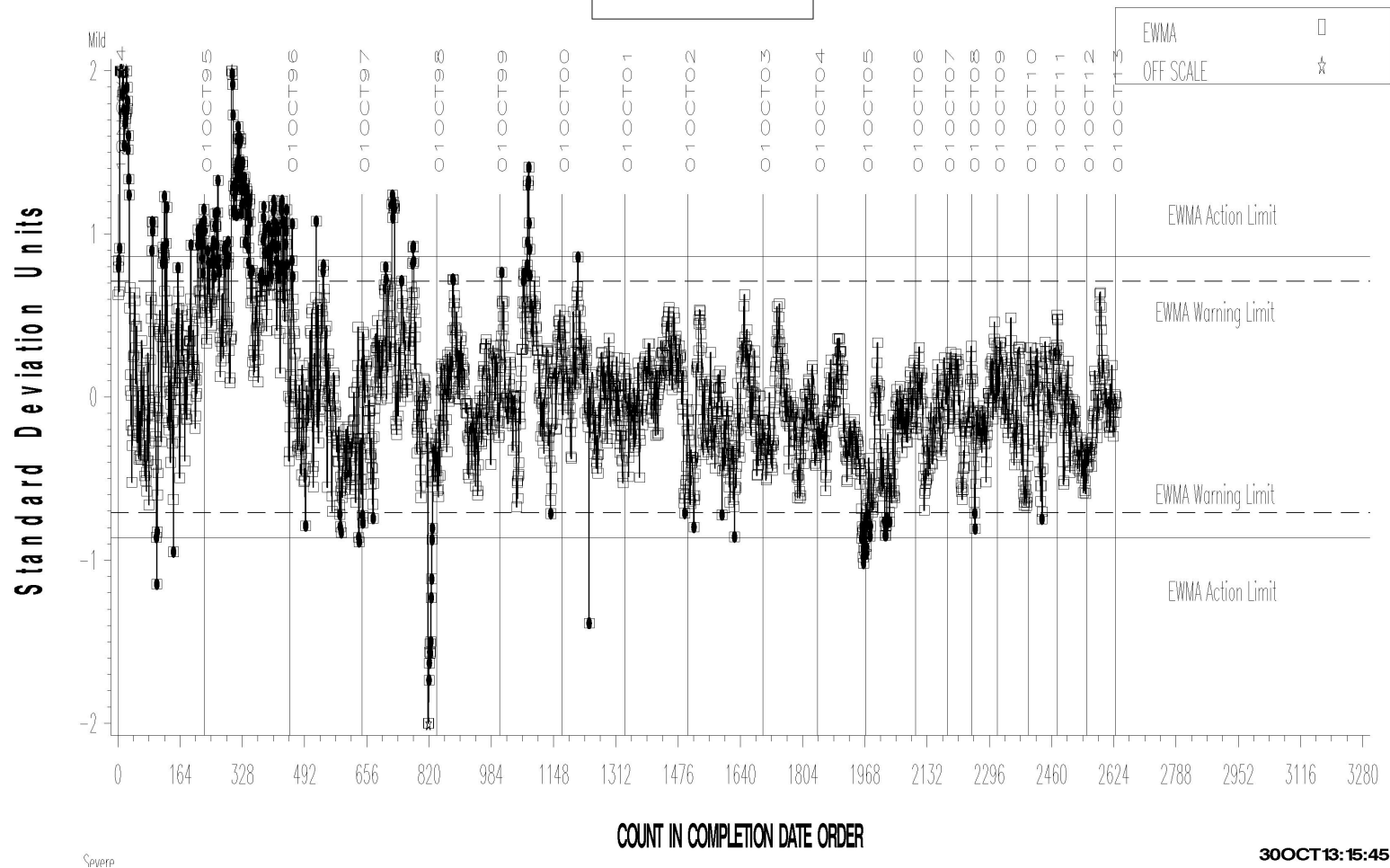


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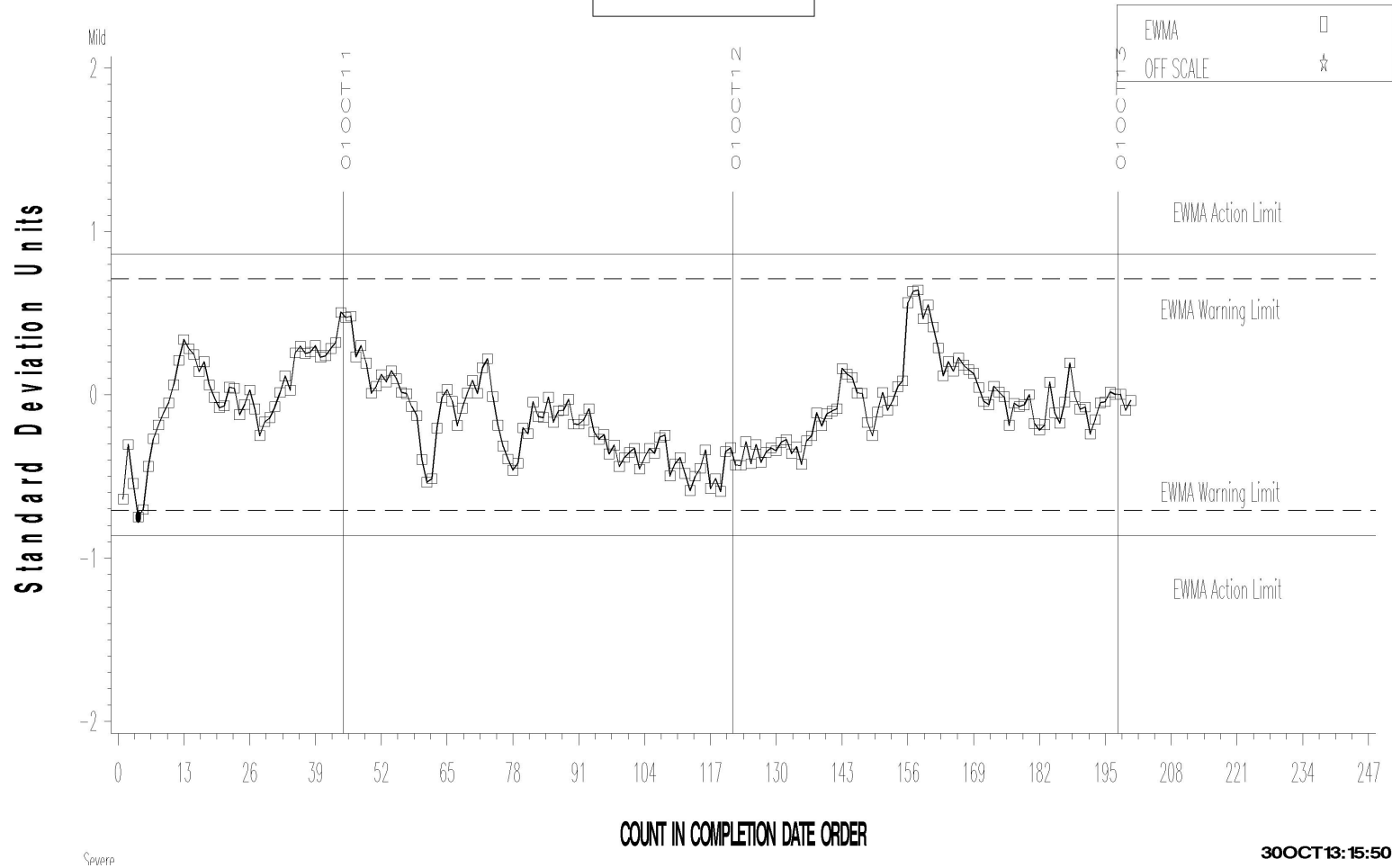


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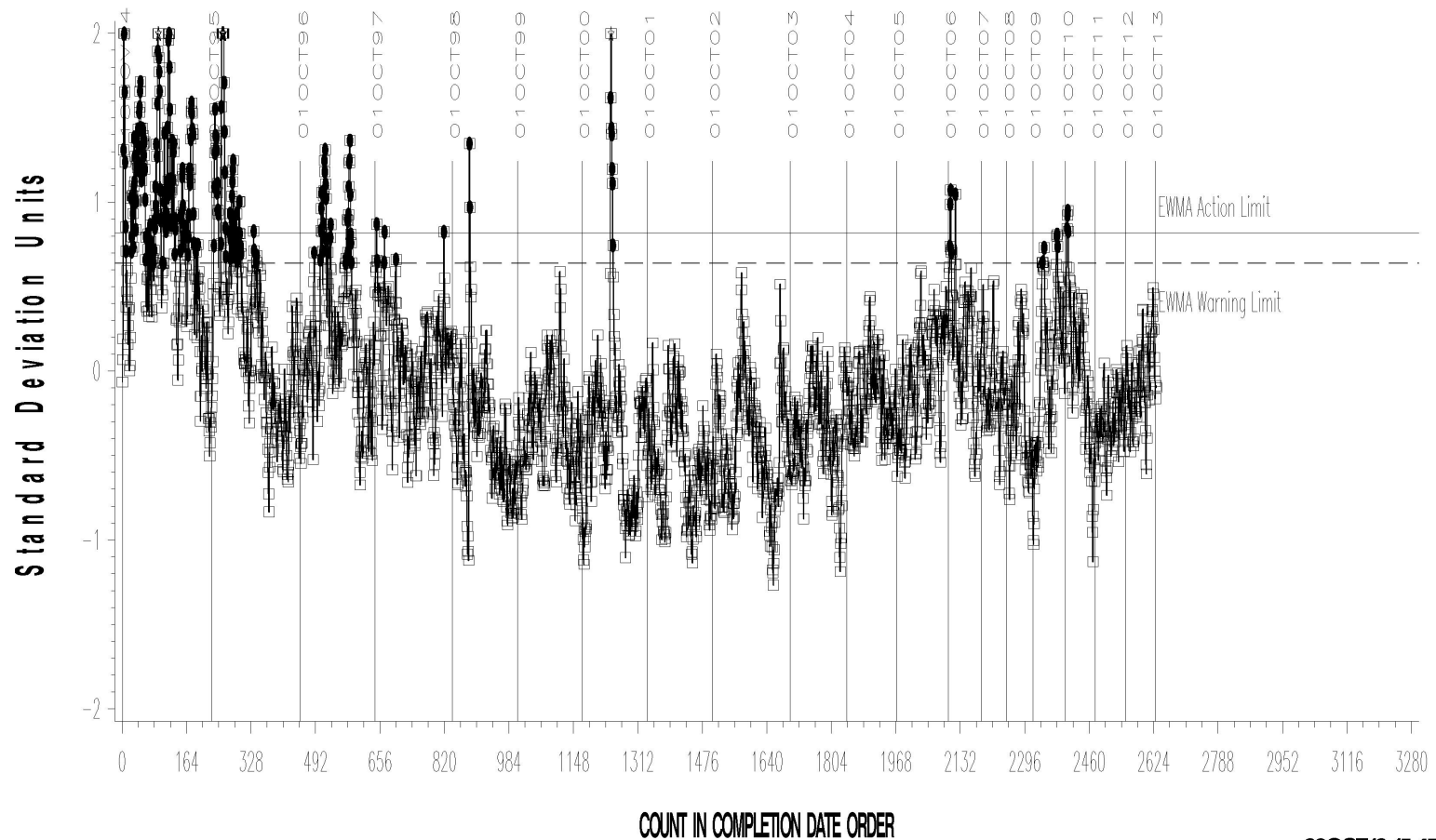


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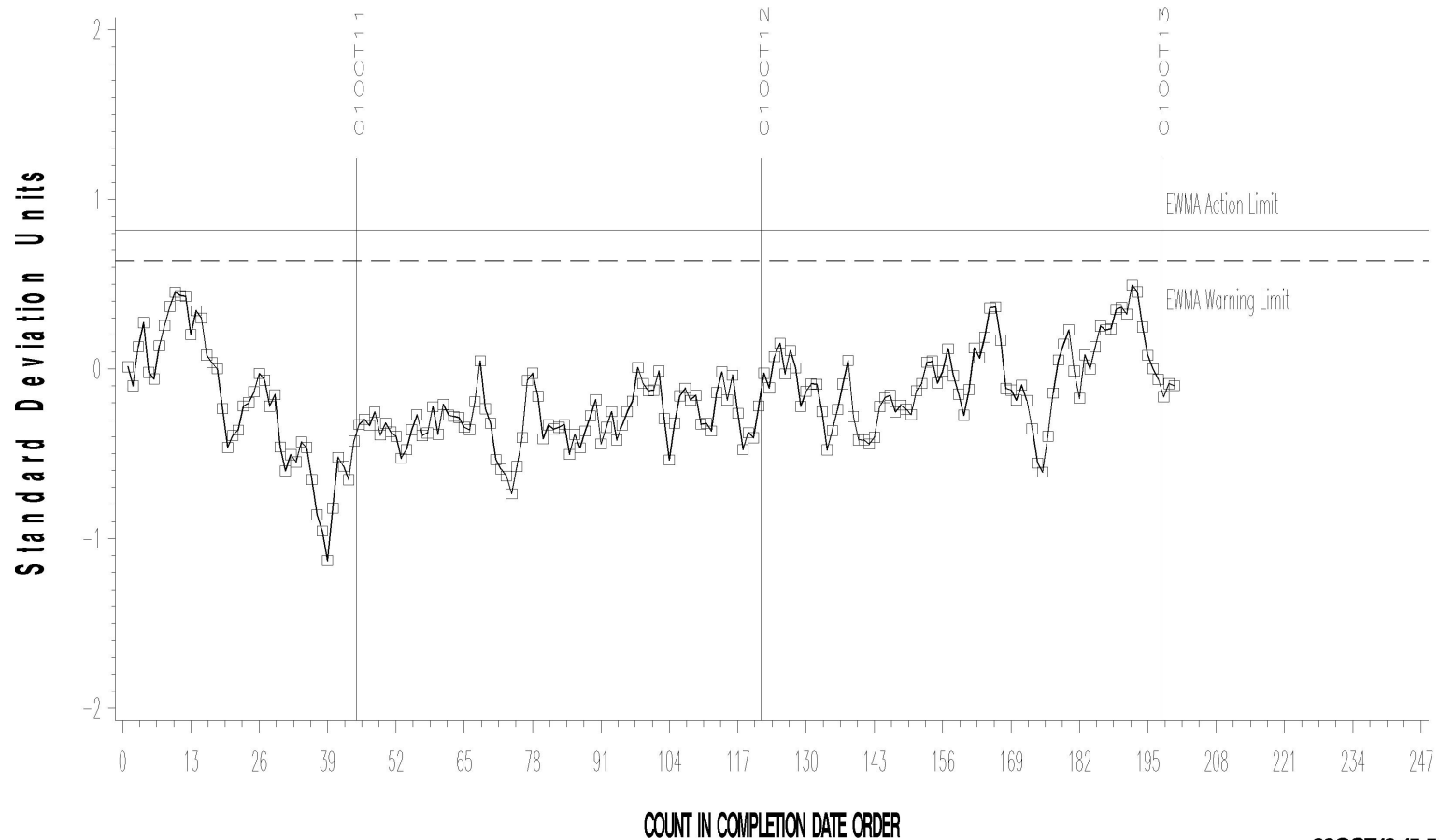
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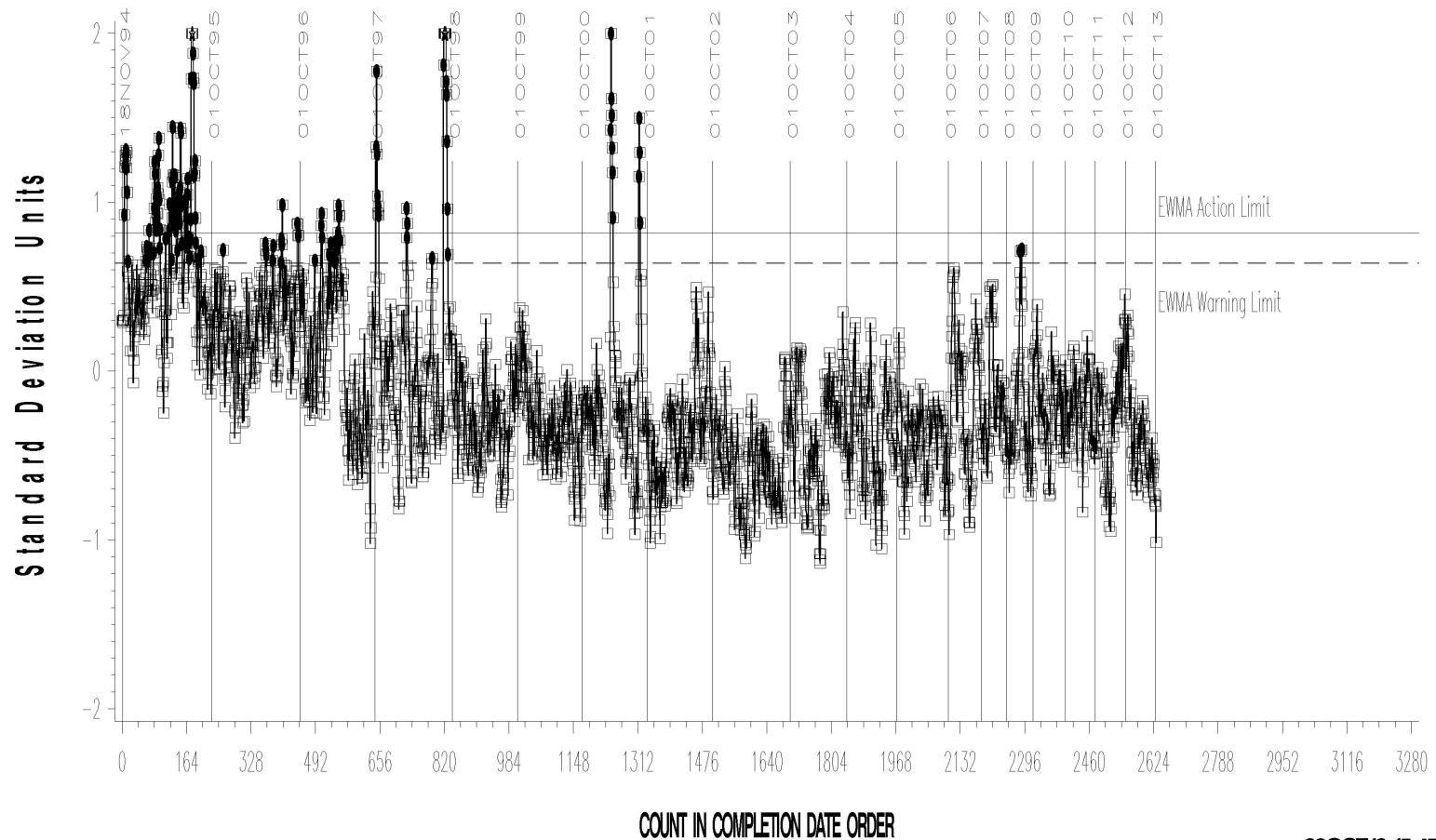
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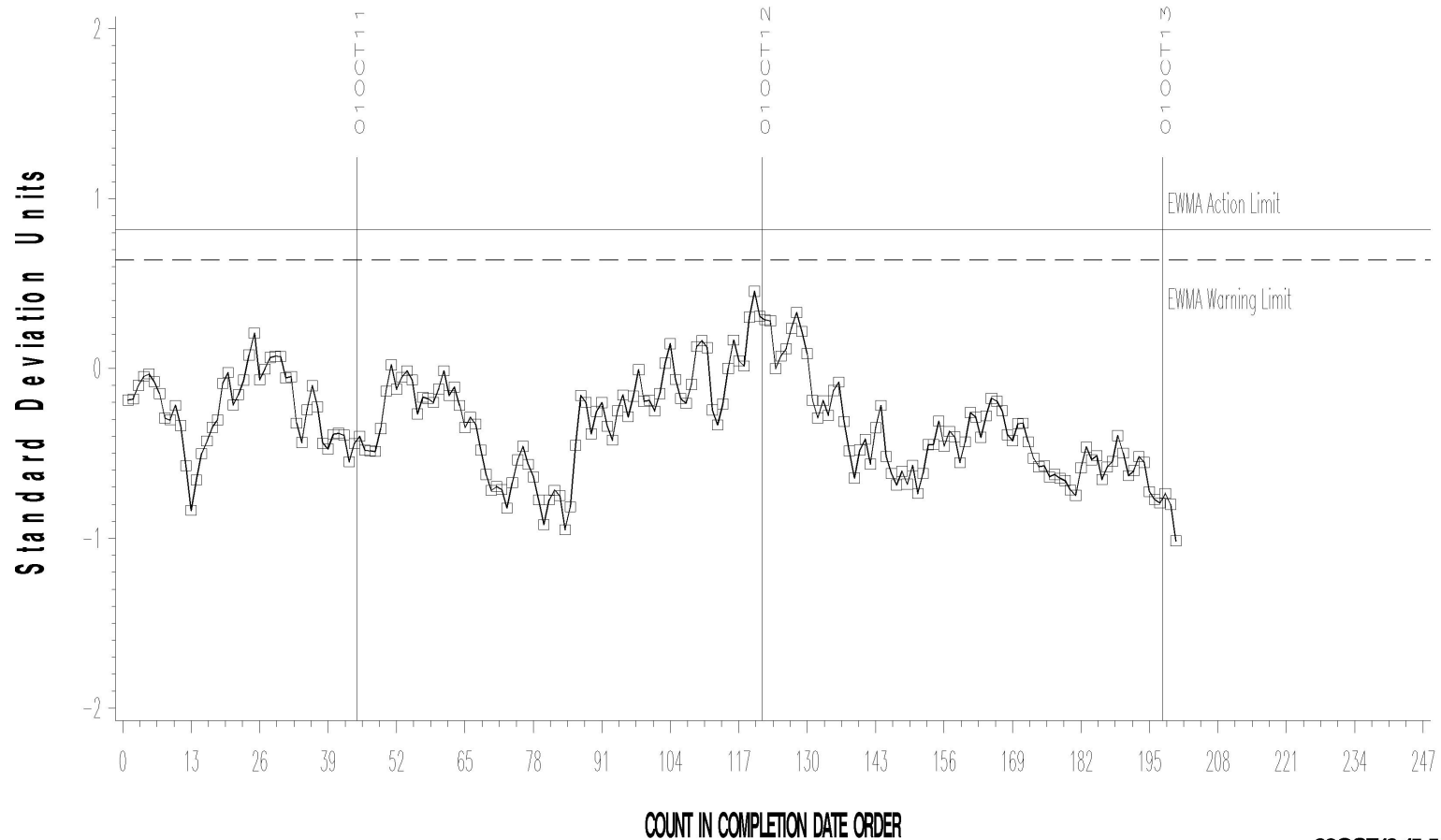
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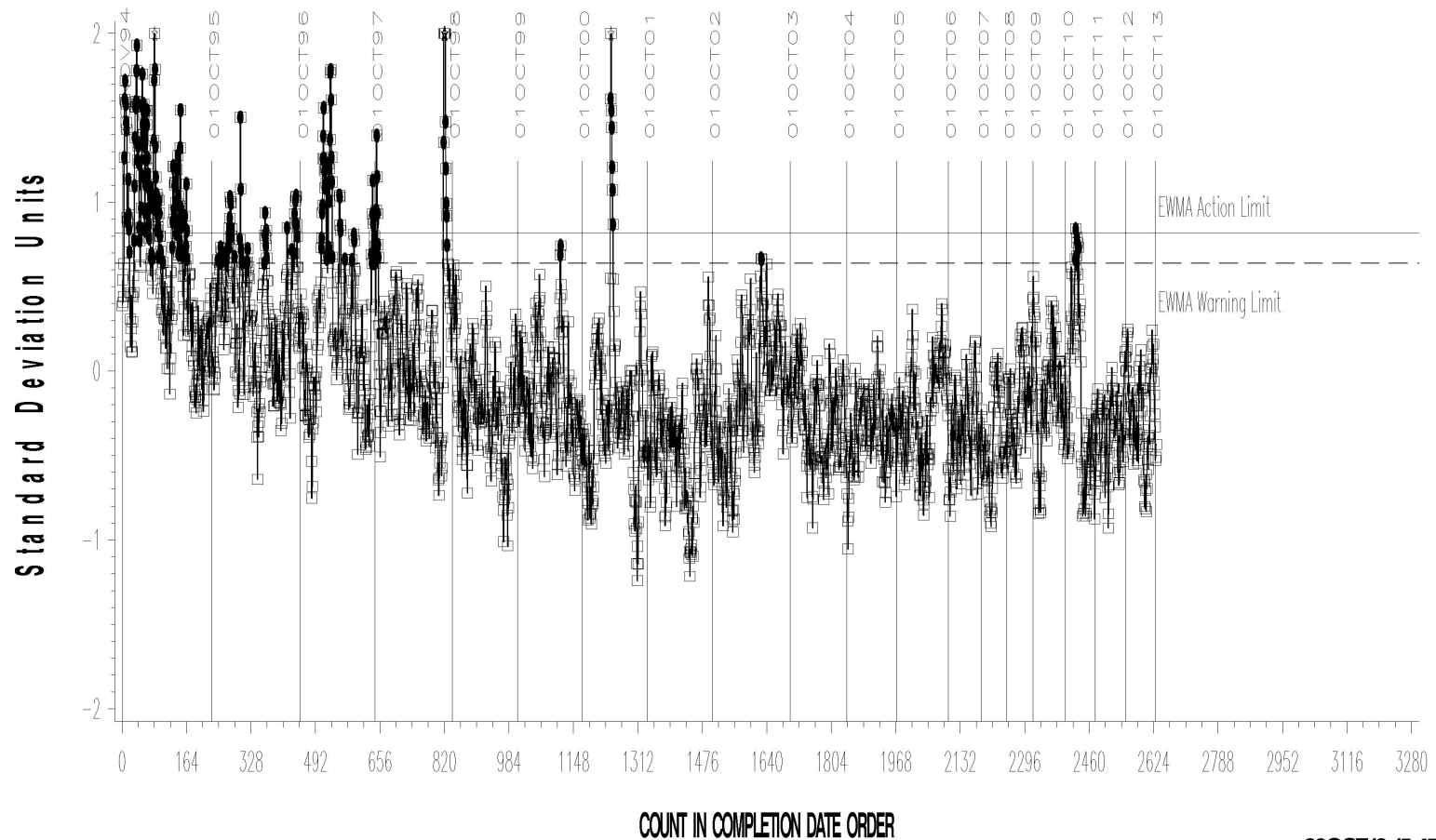
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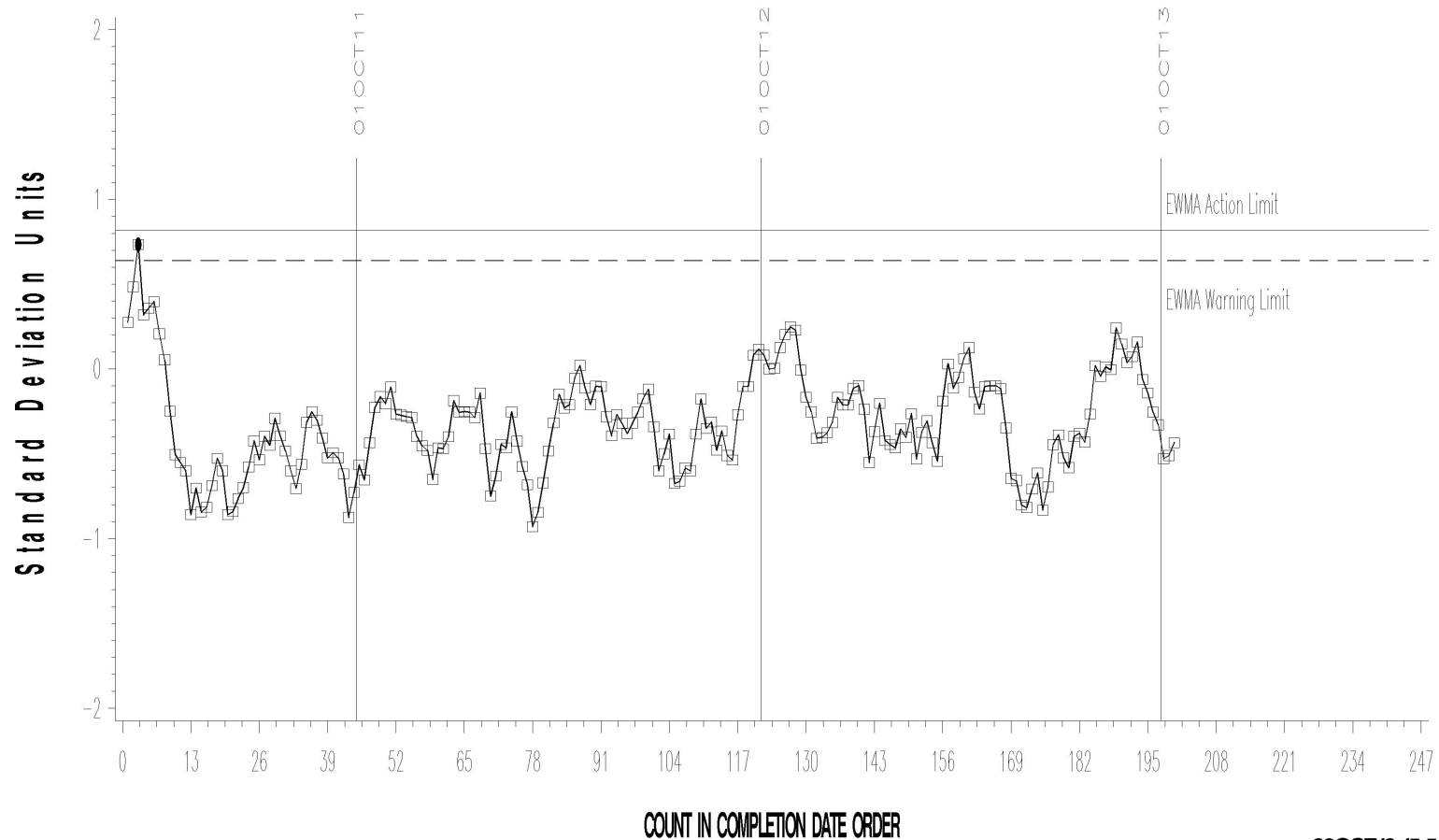
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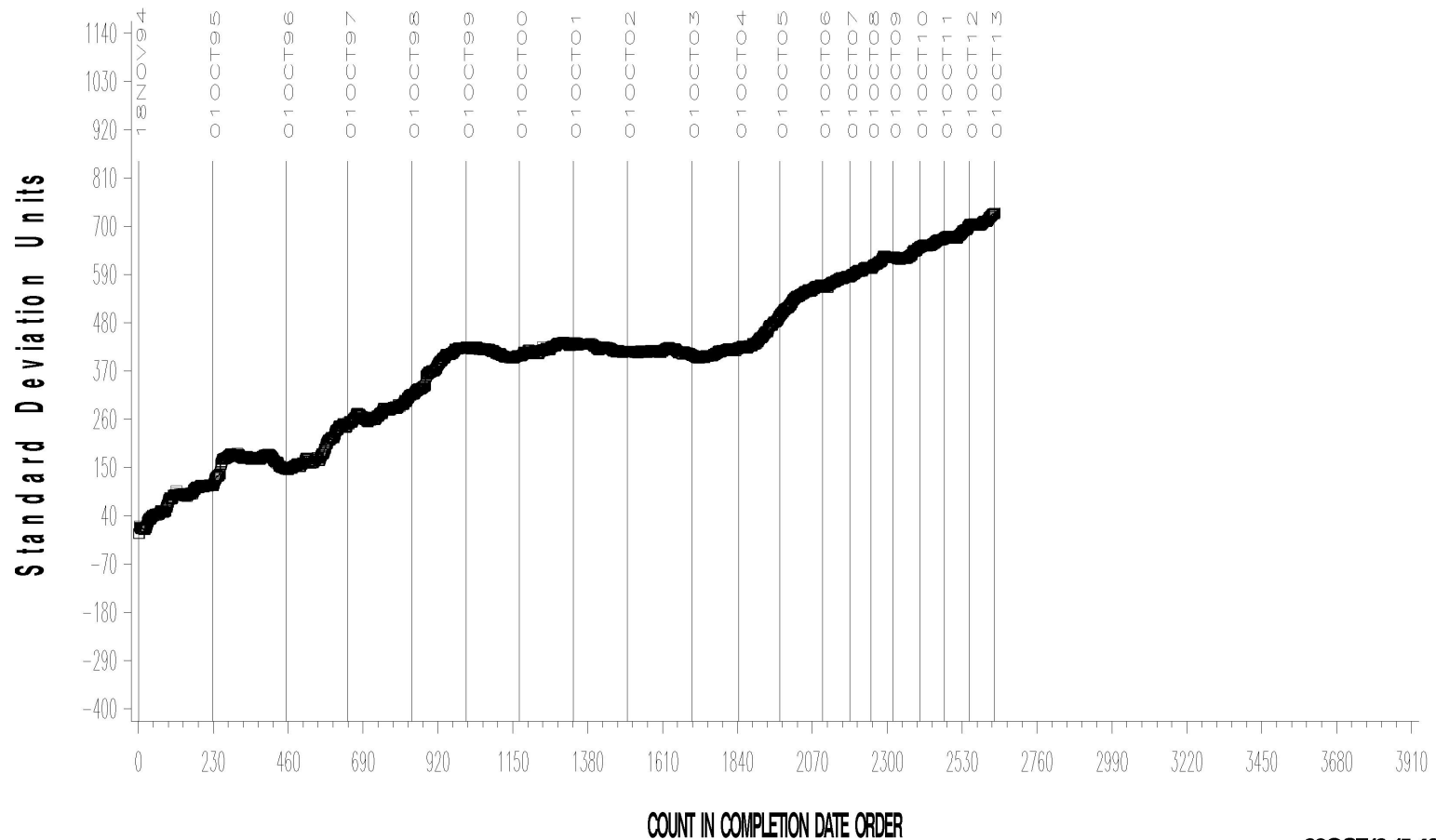
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CUSUM Severity Analysis



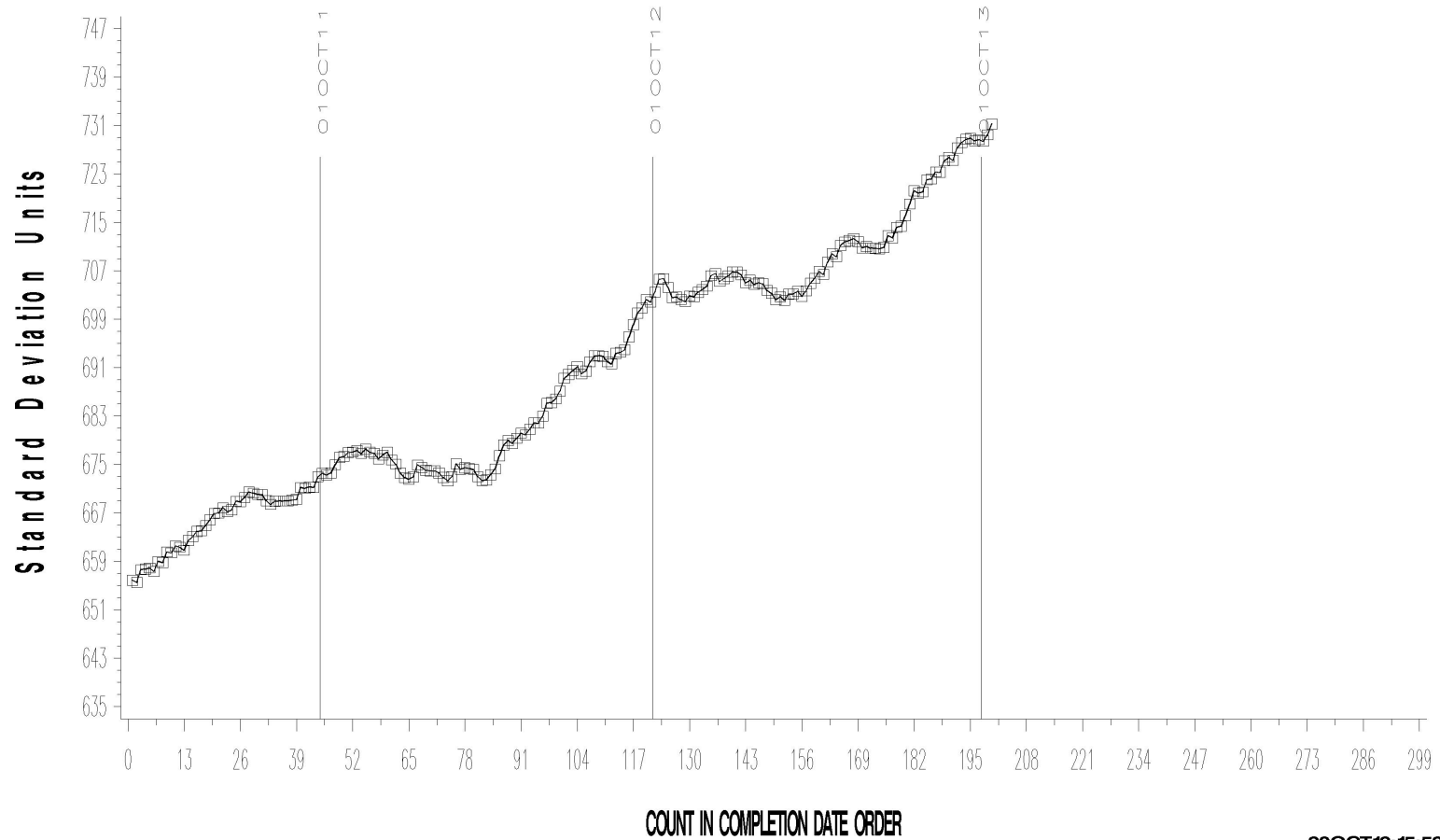
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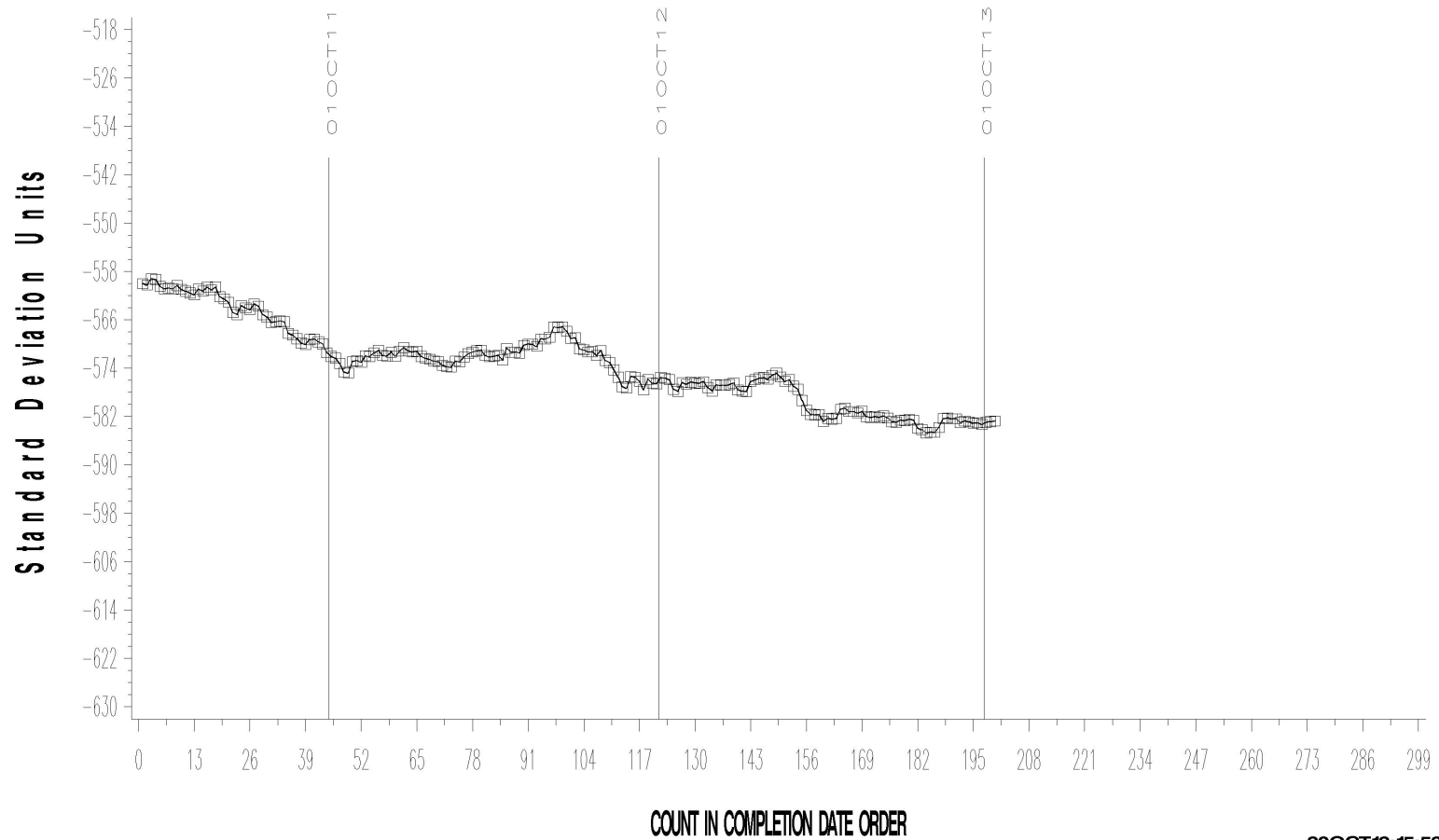
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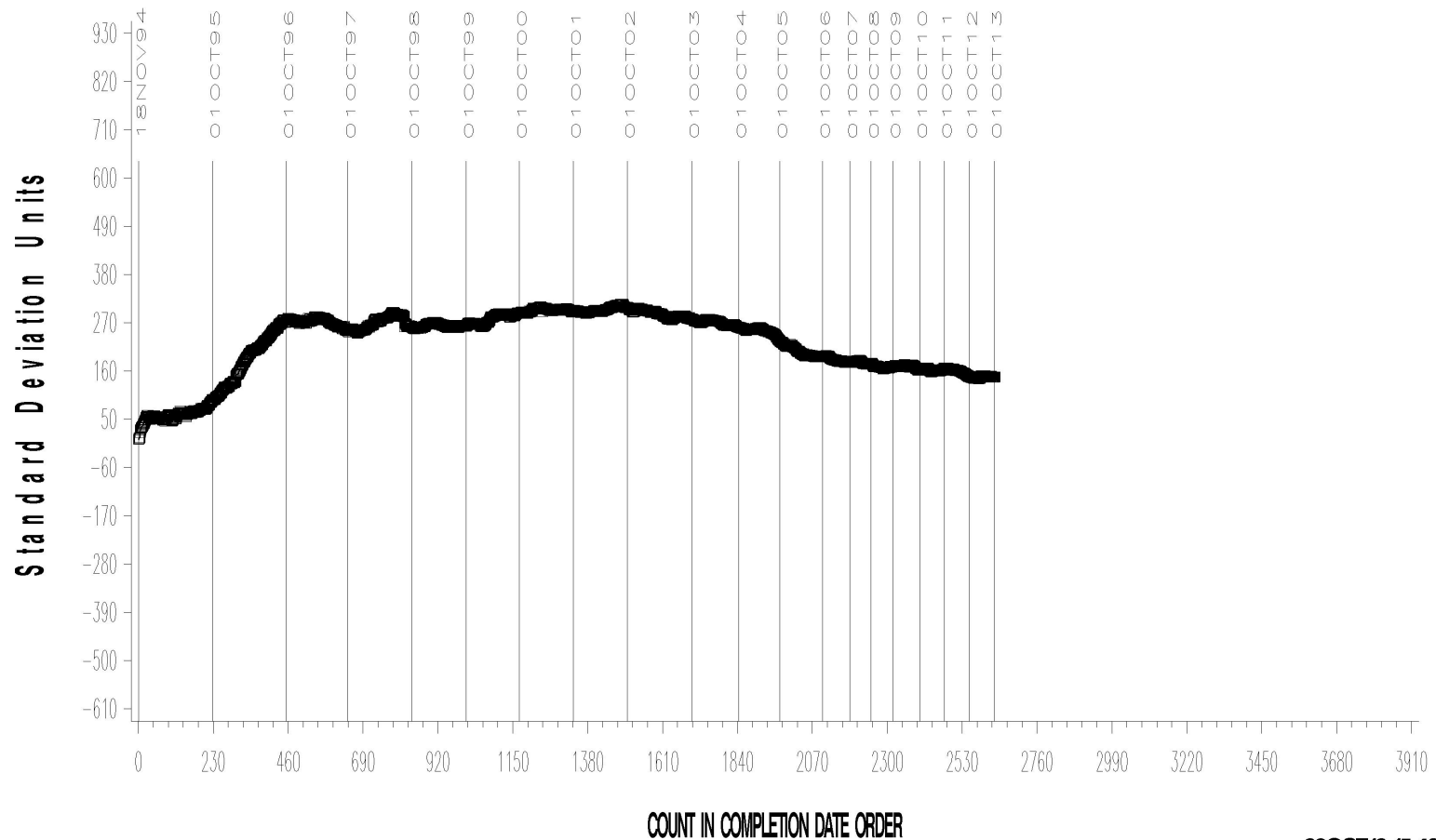
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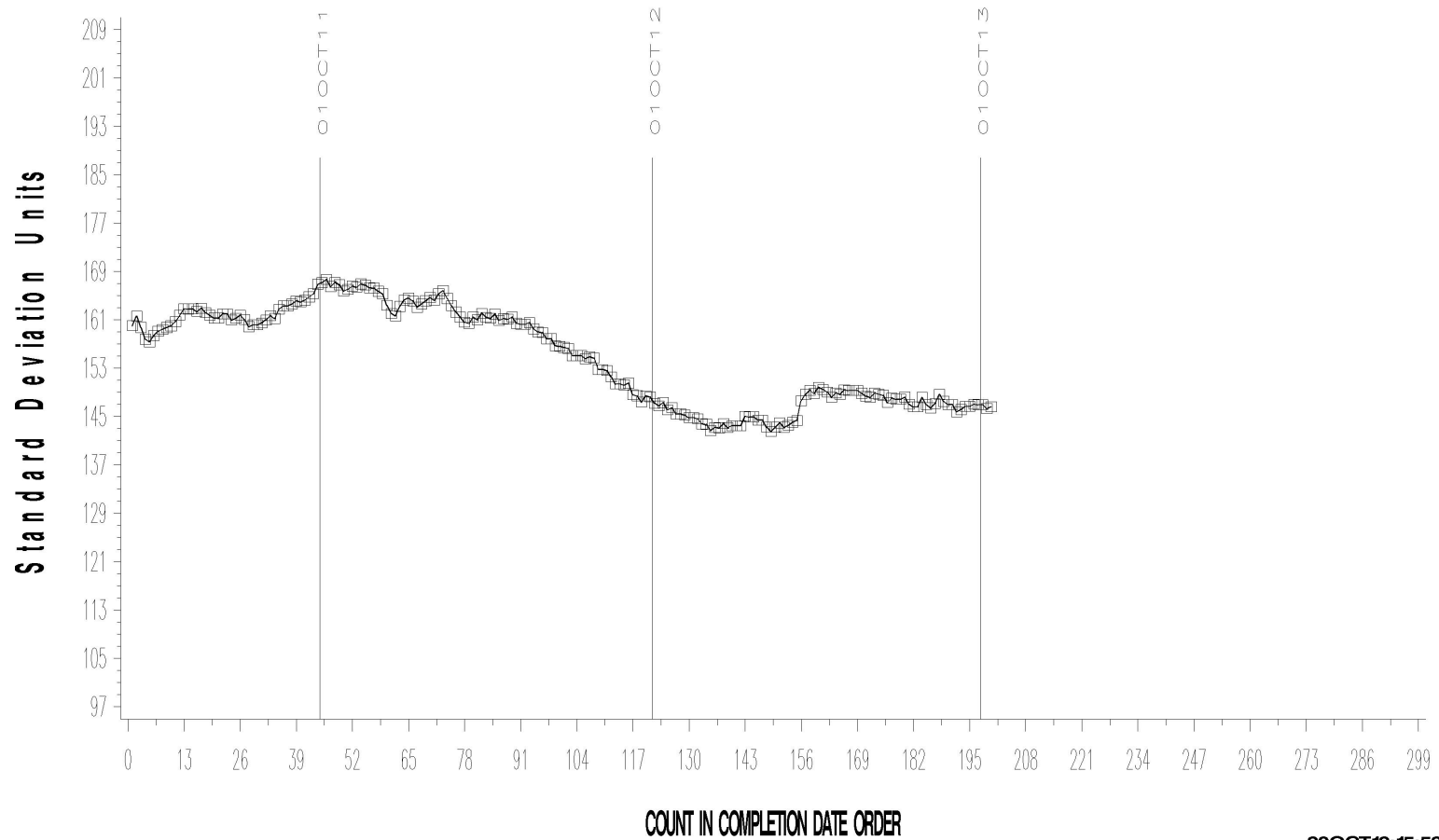
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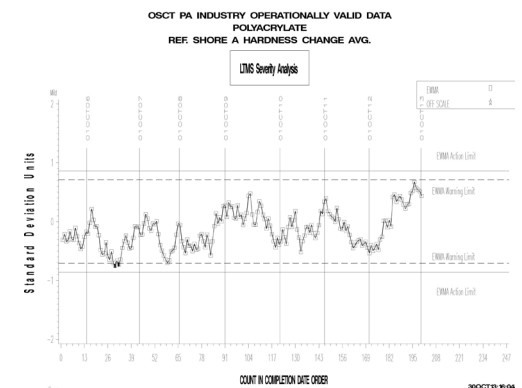
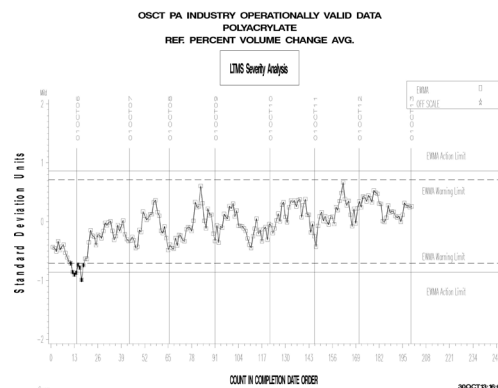
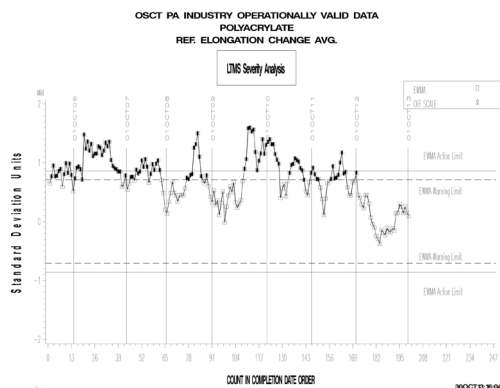
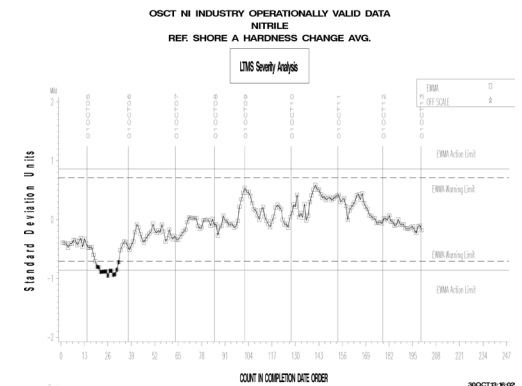
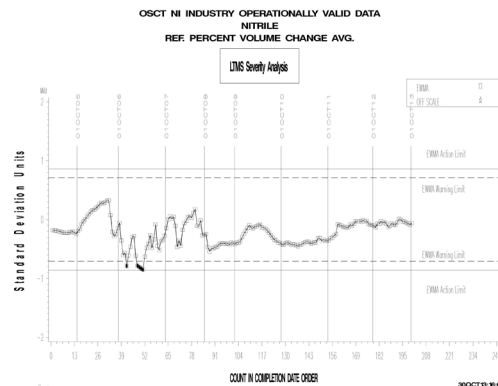
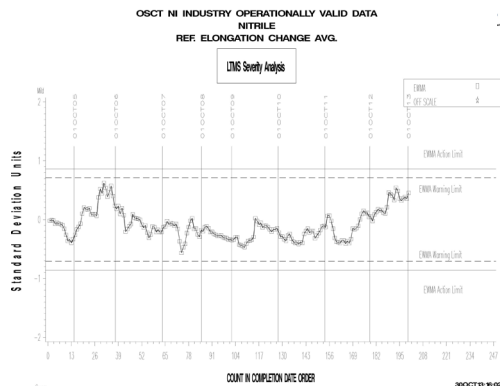
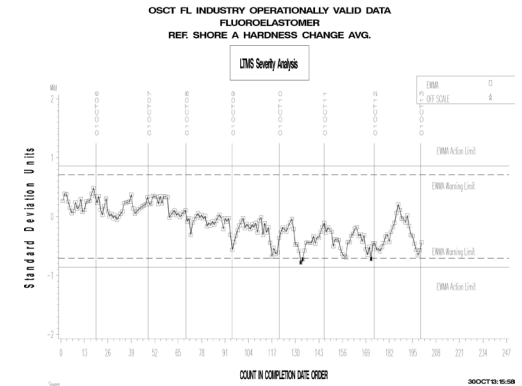
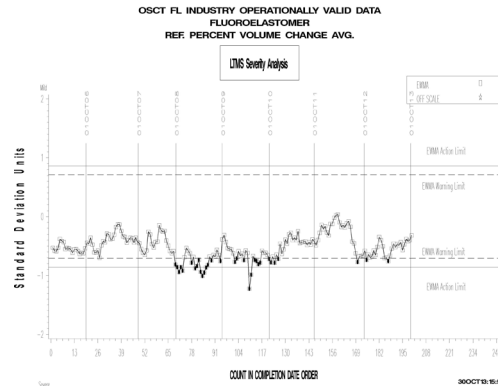
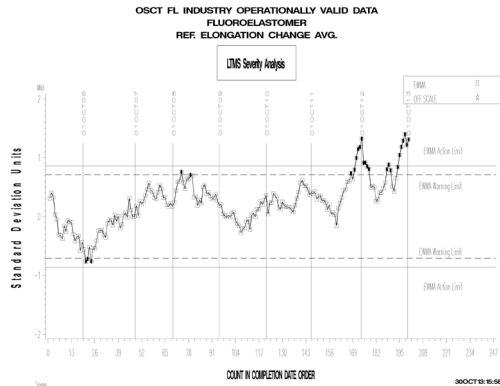
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CUSUM Severity Analysis



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OSCT (D5662)



OSCT (D5662)

TIMELINE ADDITIONS

Effective Date	Information Letter	Event
		No timeline additions this period.

OSCT (D5662)

LAB VISITS

No OSCT lab visits were conducted during this period.

INFORMATION LETTERS

No OSCT information letters were during this period.

OSCT (D5662)

STATUS OF REFERENCE OIL SUPPLY

Oil	Cans @ Labs	@ TMC	
		Cans	Gallons
160-1	46	300	59.5
161-1	4	0	0.0
168	29	69	13.7
169	37	1207	239.3
Total	116	1576	312.6

Oil 161-1 has been depleted from TMC inventory. A reblend is not available. Oil 169 has been introduced as a replacement. Oil 168 is nearing depletion and is not re-blendable.