



## Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

[www.astmtmc.org](http://www.astmtmc.org)  
412-365-1000

MEMORANDUM: 23-015  
DATE: May 9, 2023  
TO: Don Bell, Chairman, OSCT Surveillance Panel  
FROM: Dylan Beck *Dylan Beck*  
SUBJECT: OSCT Reference oil testing from October 1, 2023 through March 31, 2023

Attached is a summary of reference oil testing activity this period.

DJB/djb/mem23-015.djb.doc

cc: Jeff Clark

Sean Moyer

OSCT Surveillance Panel

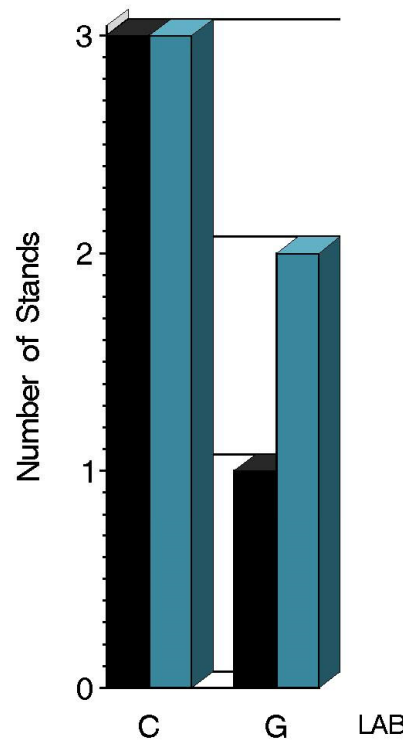
<https://www.astmtmc.org/ftp/docs/gear/osct/semiannualreports/osct-04-2023.pdf>

Distribution: email

# OSCT (D5662)

	Reporting Data	Calibrated on 3-31-2023
Number of Labs	2	2
Number of Stands	5	5

BY-LAB STAND  
DISTRIBUTION



Report Period: ■ Current ■ Previous

B:27:51 27APR2023



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## Test Distribution by Elastomer and Validity

					Totals	
		FL	NI	PA	Last Period	This Period
Accepted for calibration	AC	9	6	8	29	23
Rejected (low result)	OC	0	1	1	3	2
Rejected (high result)	OC	0	0	0	1	0
Rejected (high and low)	OC	0	3	0	1	3
Op. invalid	RC	0	1	0	0	1
Aborted	XC	0	0	0	0	0
Elastomer approval run	NI	1	7	1	15	9
Invalid information run	MI	0	2	0	5	2
Op. invalid approval run	LI	0	0	0	0	0
Total		10	20	10	54	40



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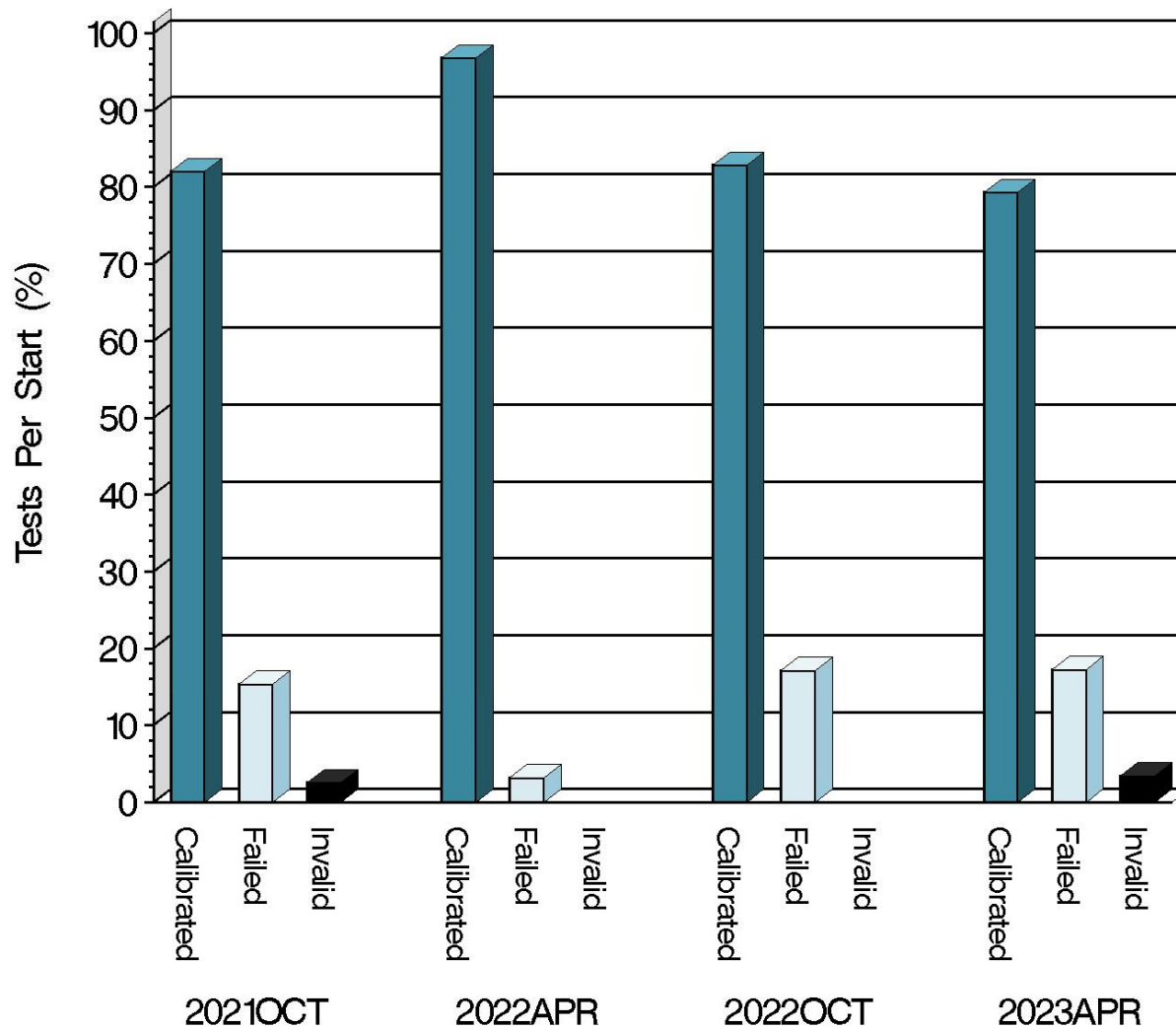
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## CALIBRATION ATTEMPT SUMMARY



Resolution

Report Period

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## CAUSES FOR LOST TESTS

Lab	Cause	Elastomer			Loss Rate				Lost	Starts	%
		FL	NI	PA	LI	MI	RC	XC			
G	Elastomer approval run, accompanying reference failed		•			•			2	15	13%
	Expired elastomer batch		•				•		1	15	6.7%
Lost		0	3	0	0	2	1	0			
Starts		10	20	10	40	40	40	40			
%		0%	15%	0%	0%	5%	2.5%	0%			



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## Average $\Delta/s$ by Lab

Elastomer	Lab	N	PELA	PVCA	SAHA
FL	C	8	-1.336	-0.572	-0.461
	G	1	-2.003	-0.986	0.538
	Industry	9	-1.410	-0.618	-0.350
	Shift*	9	-10.796	-0.338	-0.488
NI	C	7	1.945	1.308	-4.750
	G	3	0.771	0.405	-1.026
	Industry	10	1.593	1.037	-3.633
	Shift*	10	8.174	0.522	-4.178
PA	C	8	-1.594	-0.407	0.462
	G	1	-0.802	-0.629	1.413
	Industry	9	-1.506	-0.431	0.568
	Shift*	9	-31.711	-0.825	1.453

\*computed using historic pooled s



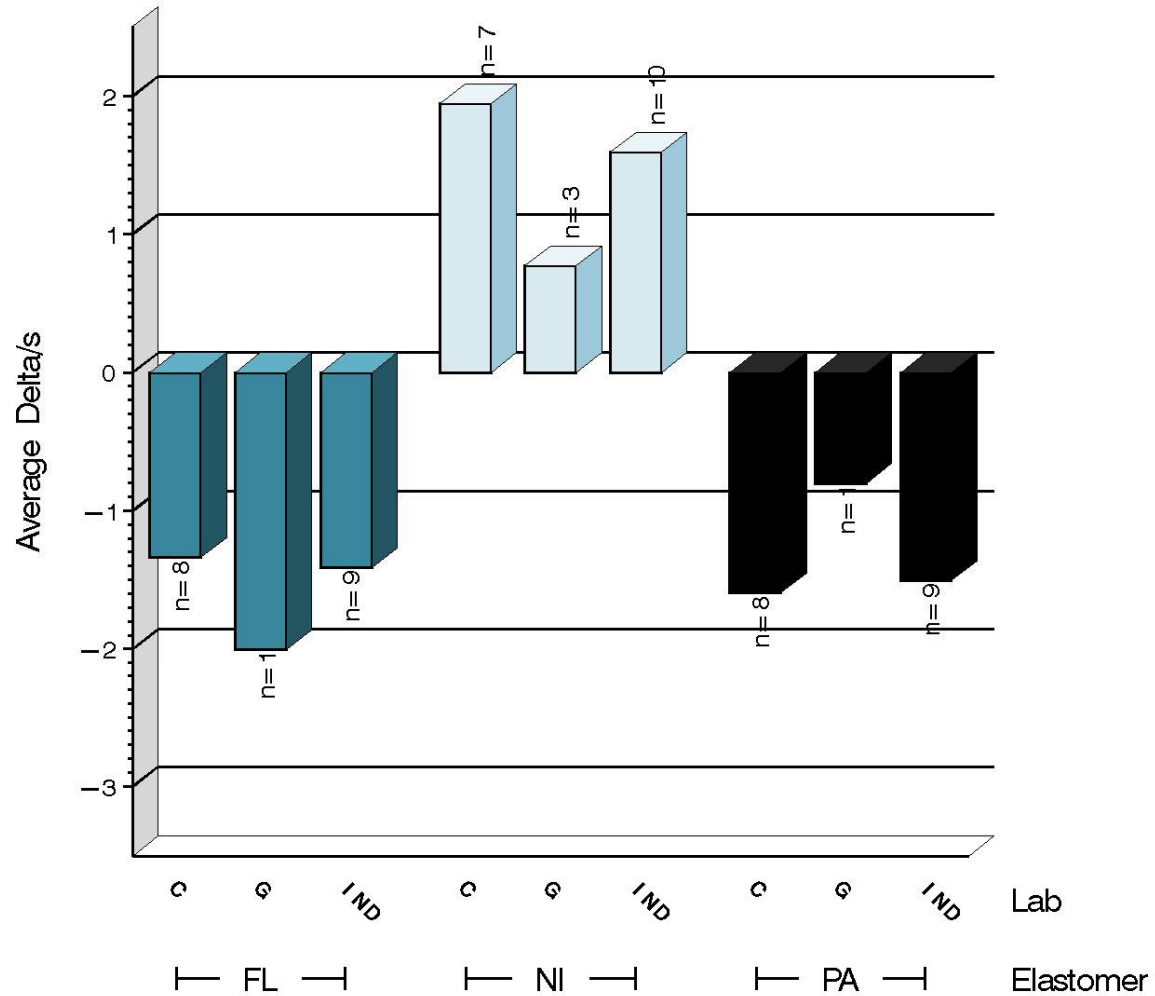
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# OSCT (D5662)

%ELONGATION SEVERITY  
DELTA/S BY LAB



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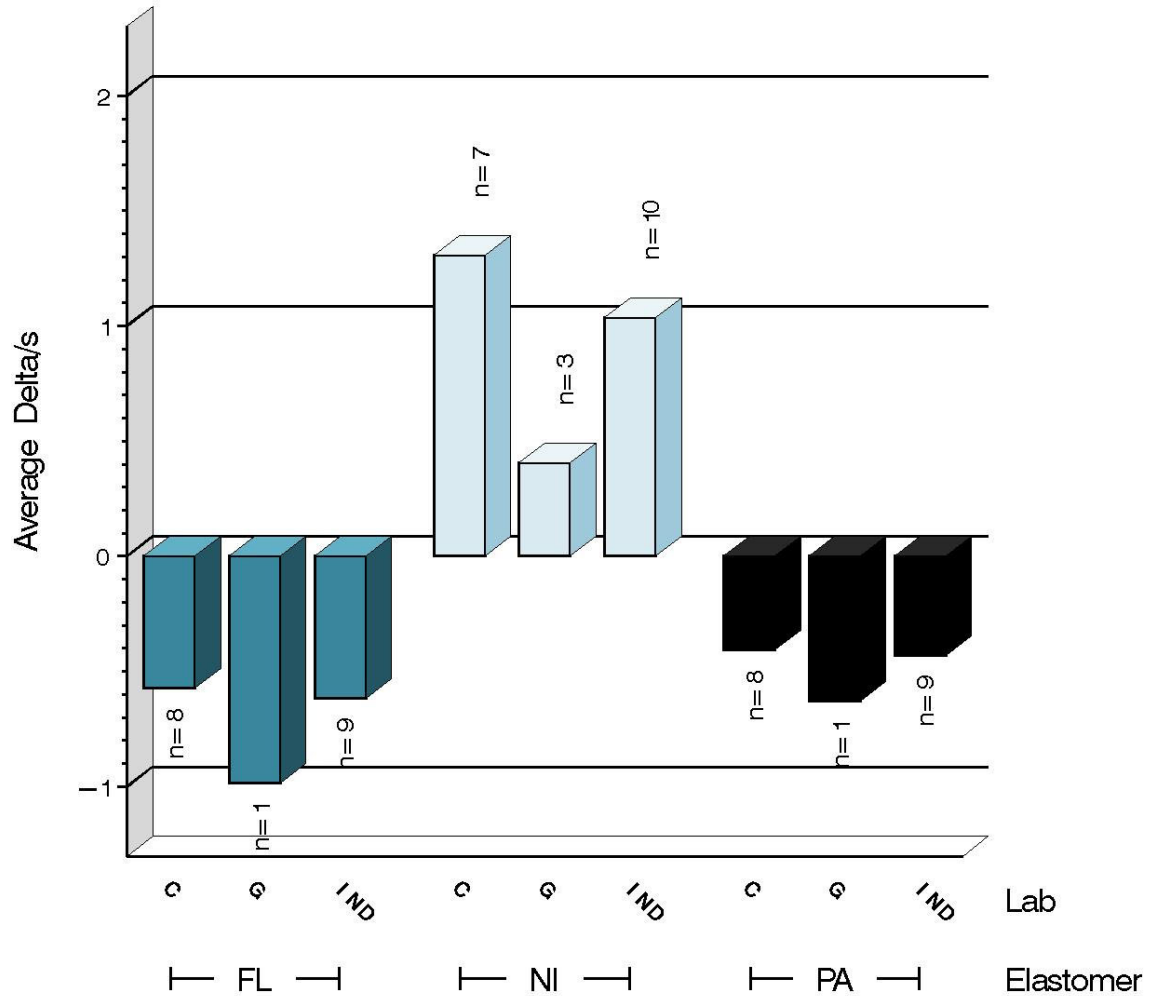
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%VOLUME CHANGE SEVERITY  
DELTA/S BY LAB



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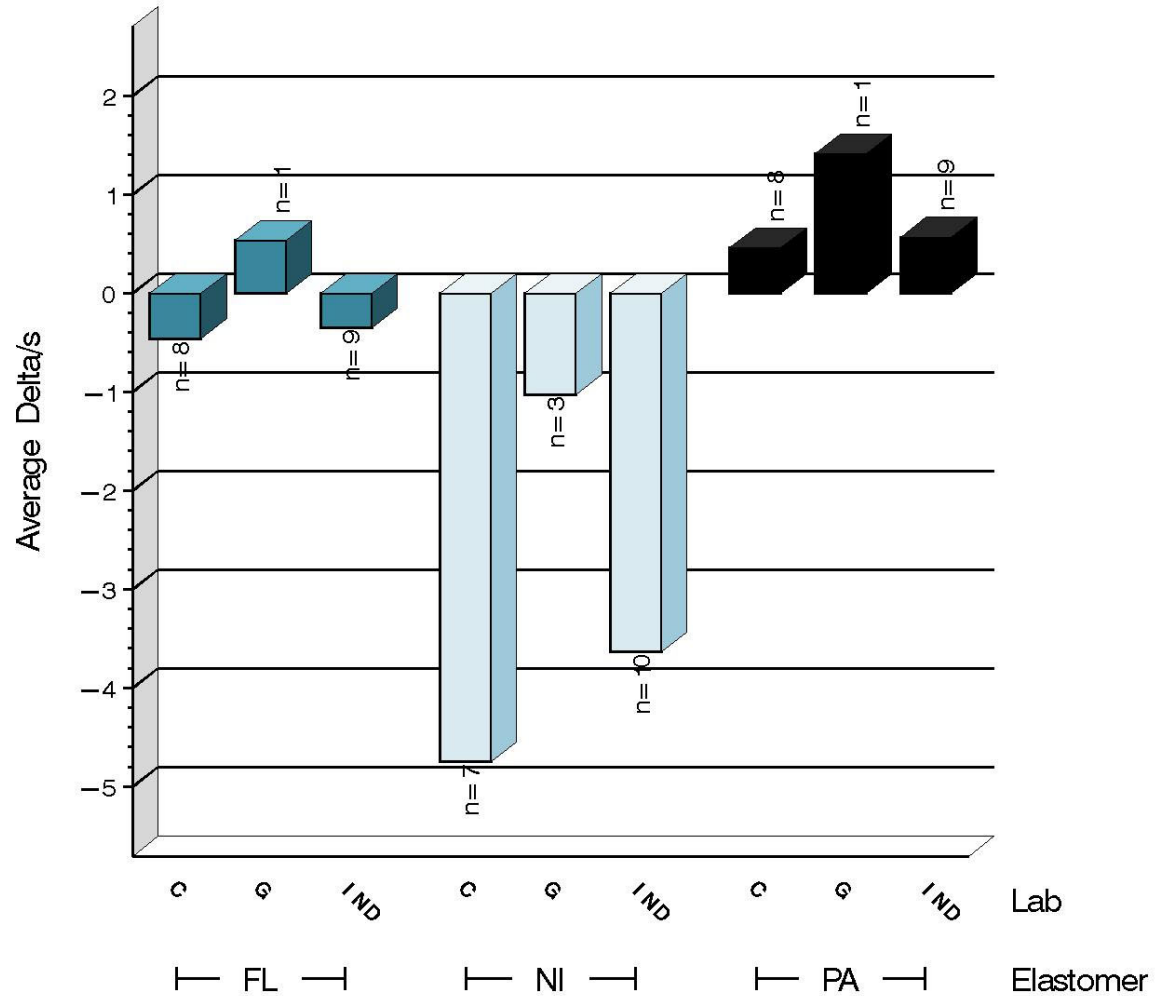
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S.A. HARDNESS SEVERITY  
DELTA/S BY LAB



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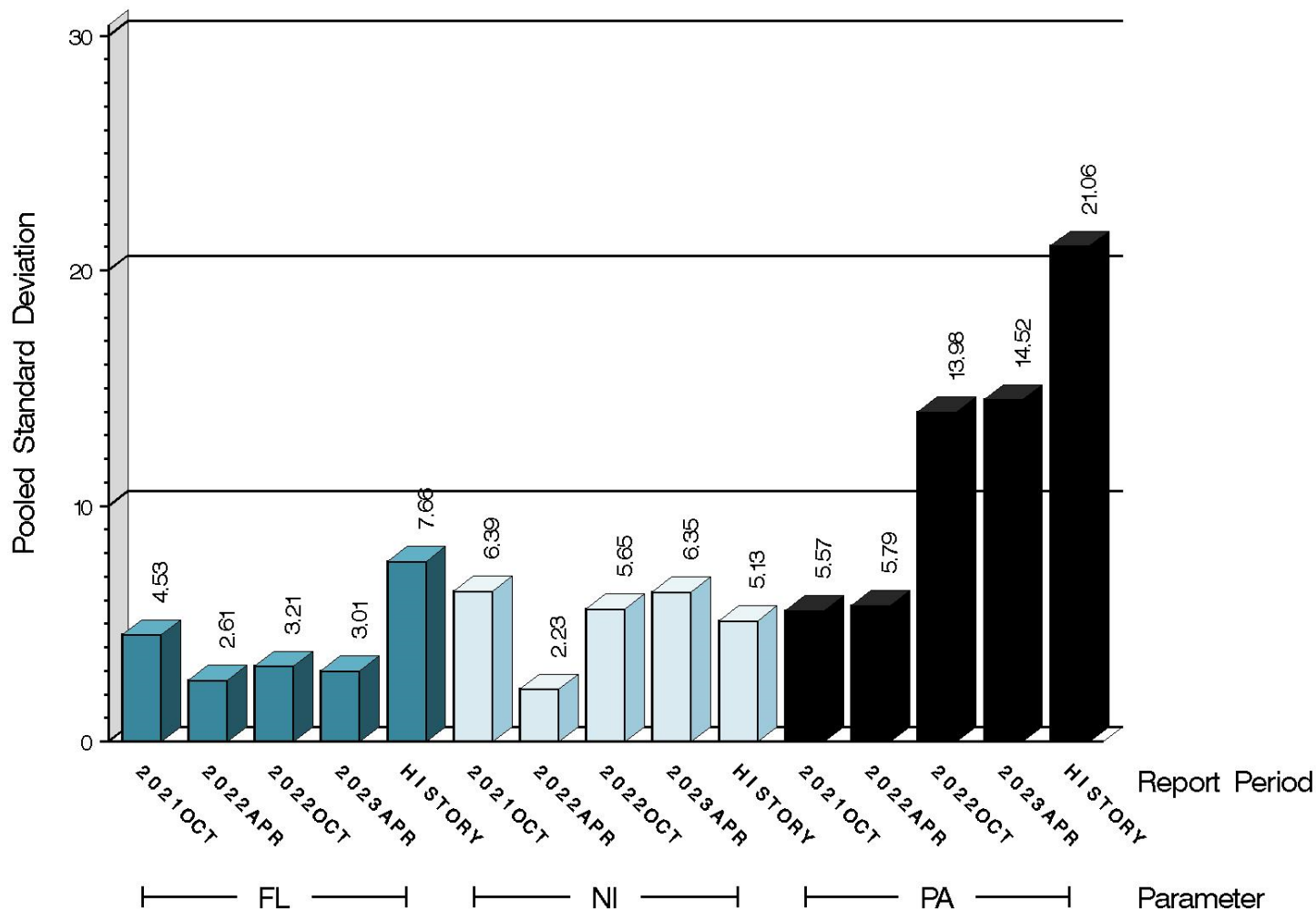
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# OSCT (D5662)

%ELONGATION PRECISION  
 POOLED STANDARD DEVIATION  
 BY SIX-MONTH ASTM REPORT PERIOD



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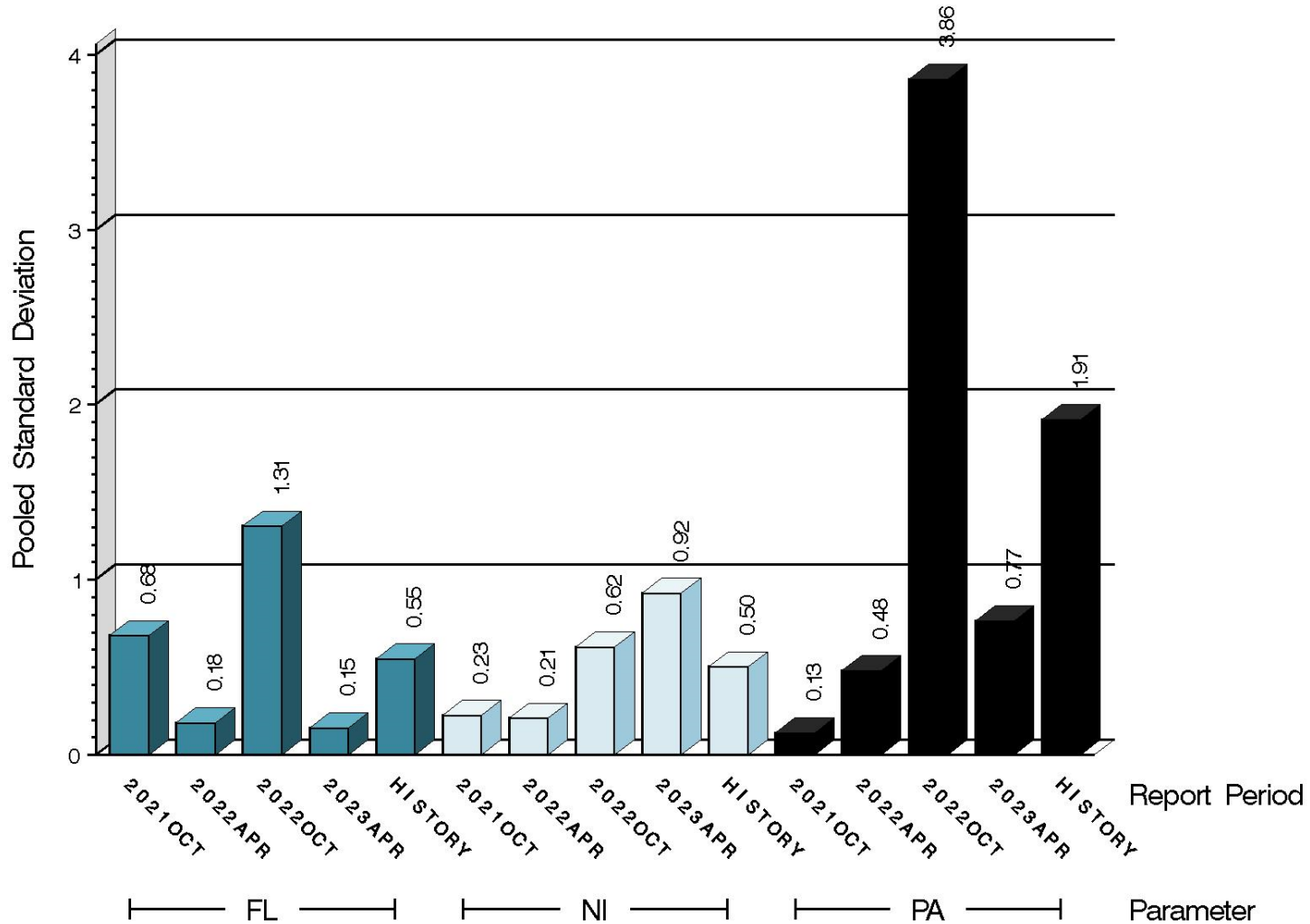
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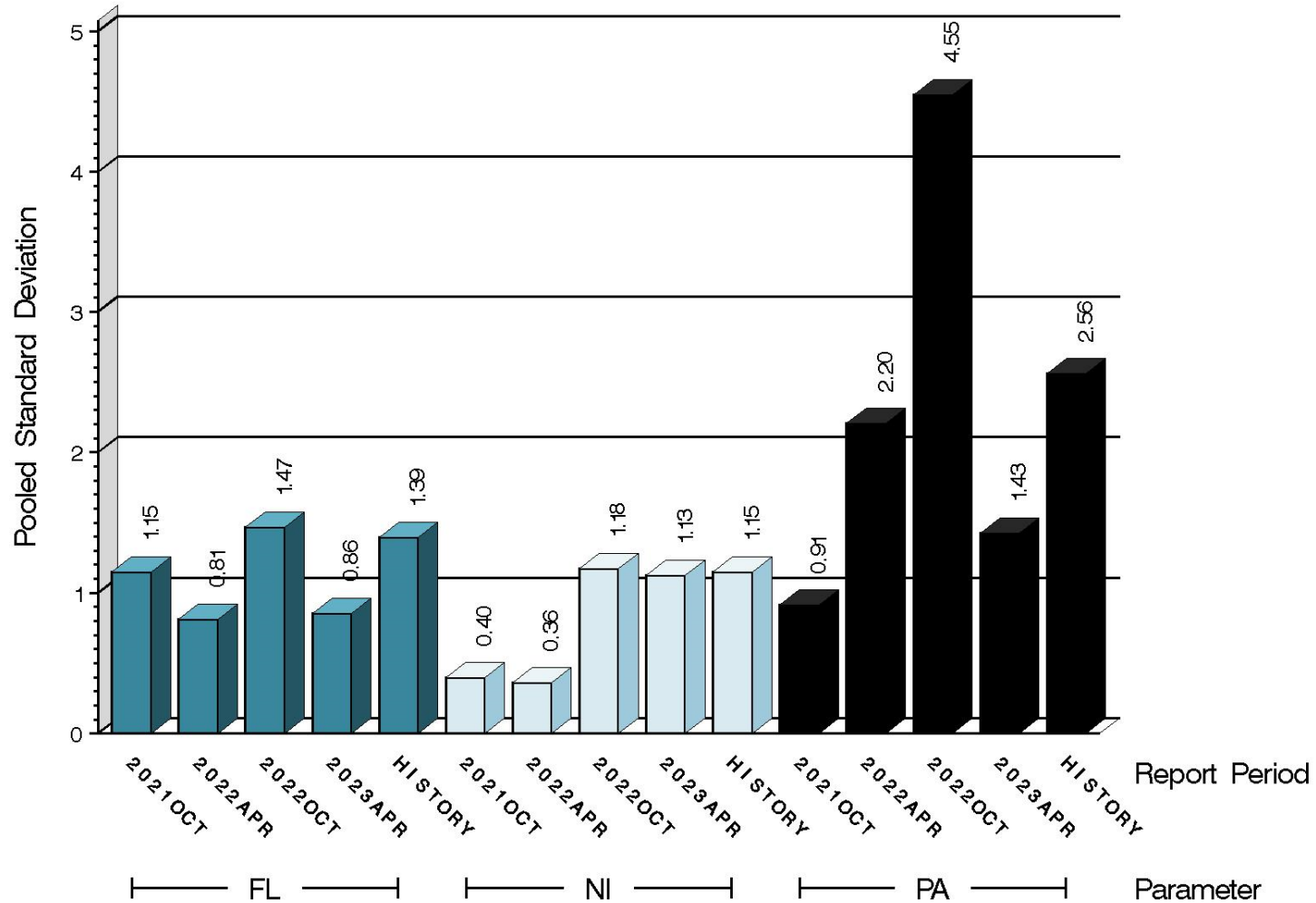
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## SUMMARY OF SEVERITY & PRECISION

### Severity

The combined-elastomer industry charts show that SAHA exceeded the limits in the severe direction for most of the reporting period.

FL PELA, NI PELA, PA PELA, NI PVCA, NI SAHA, all exceeded the limits this period.

### Precision

The combined-elastomer industry charts show that SAHA spent most of the period outside of the action limit. PVCA also exceeded the limit this period but is now within limits.

Industry control charts follow.



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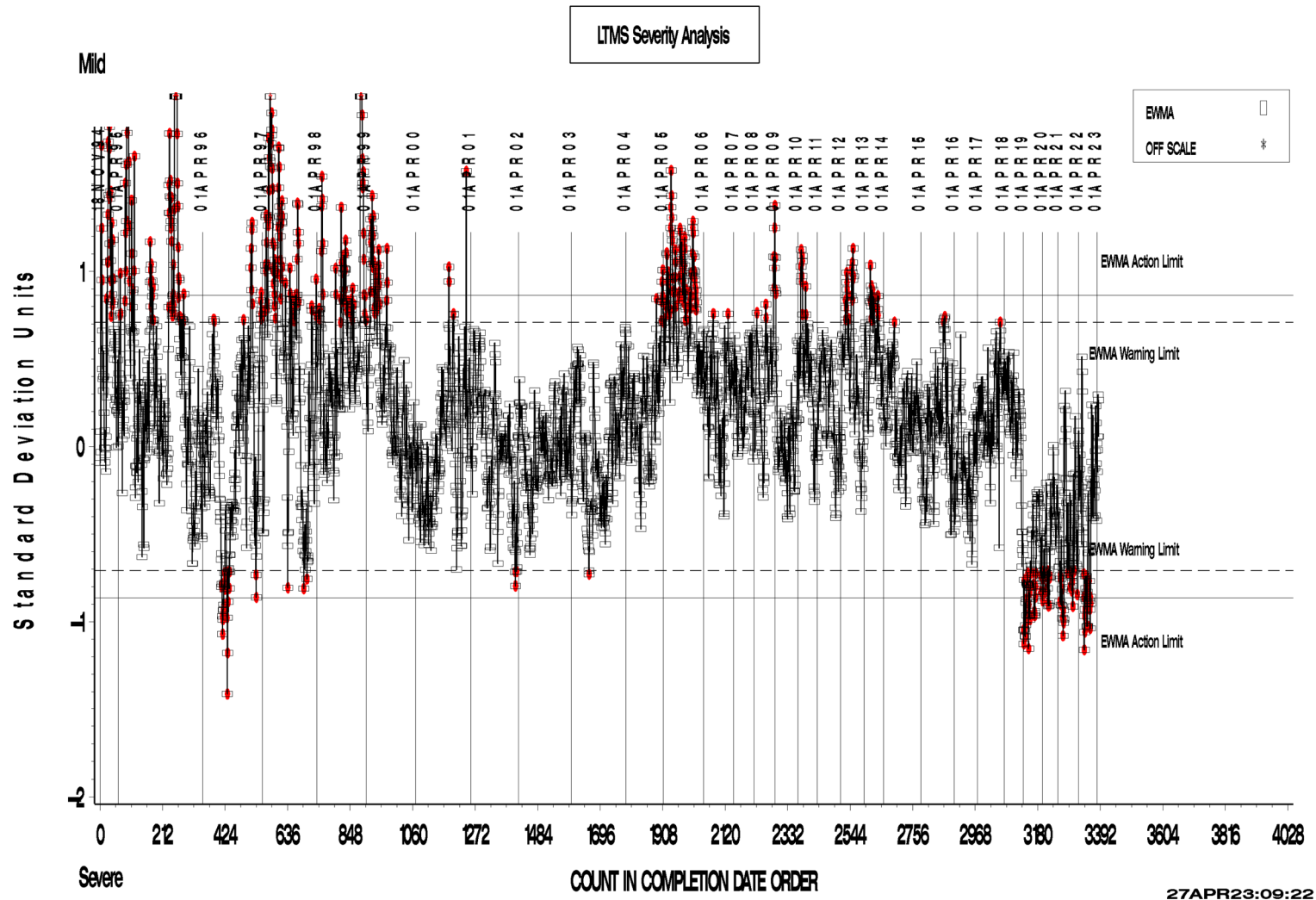
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REF. ELONGATION CHANGE AVG.



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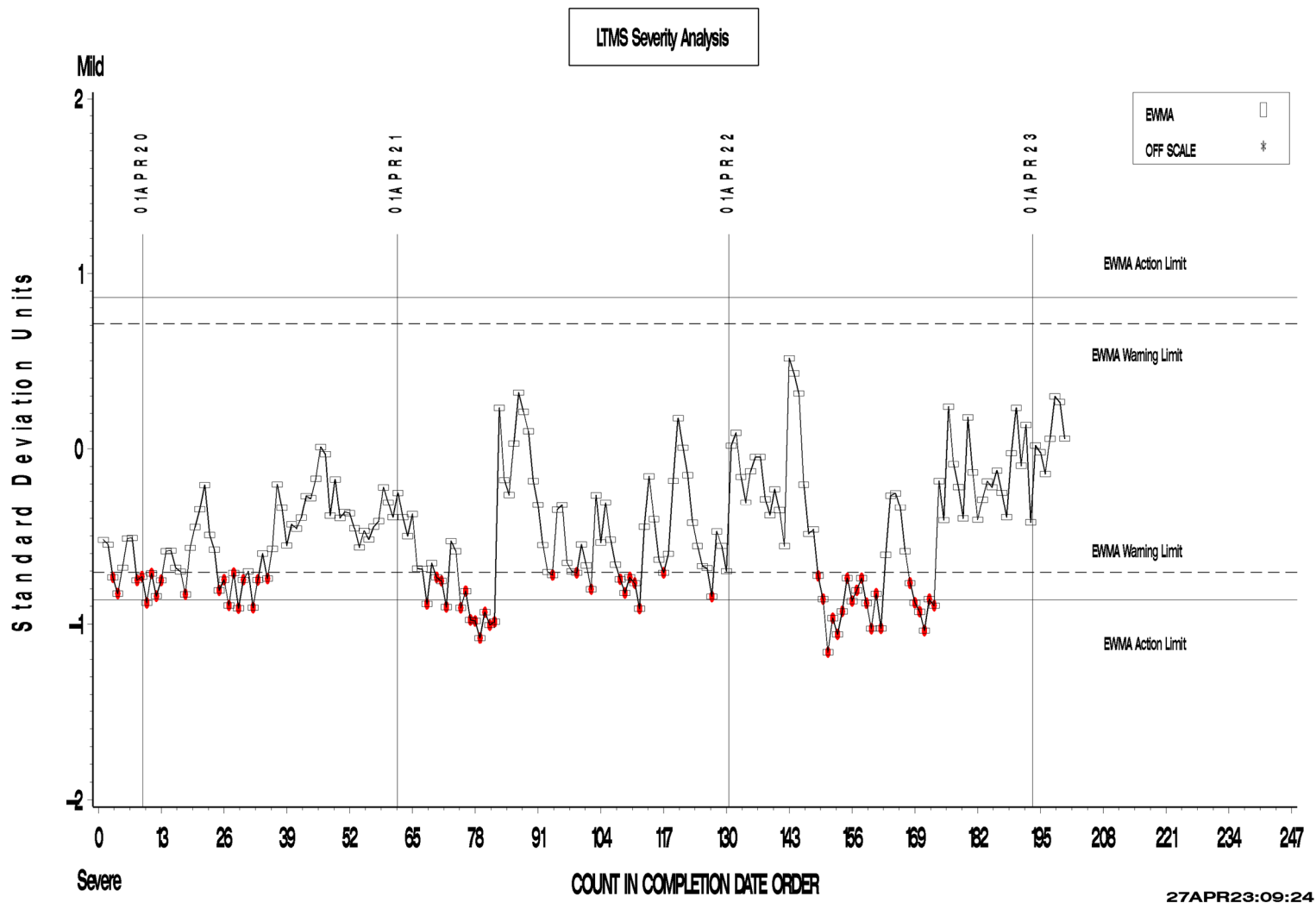
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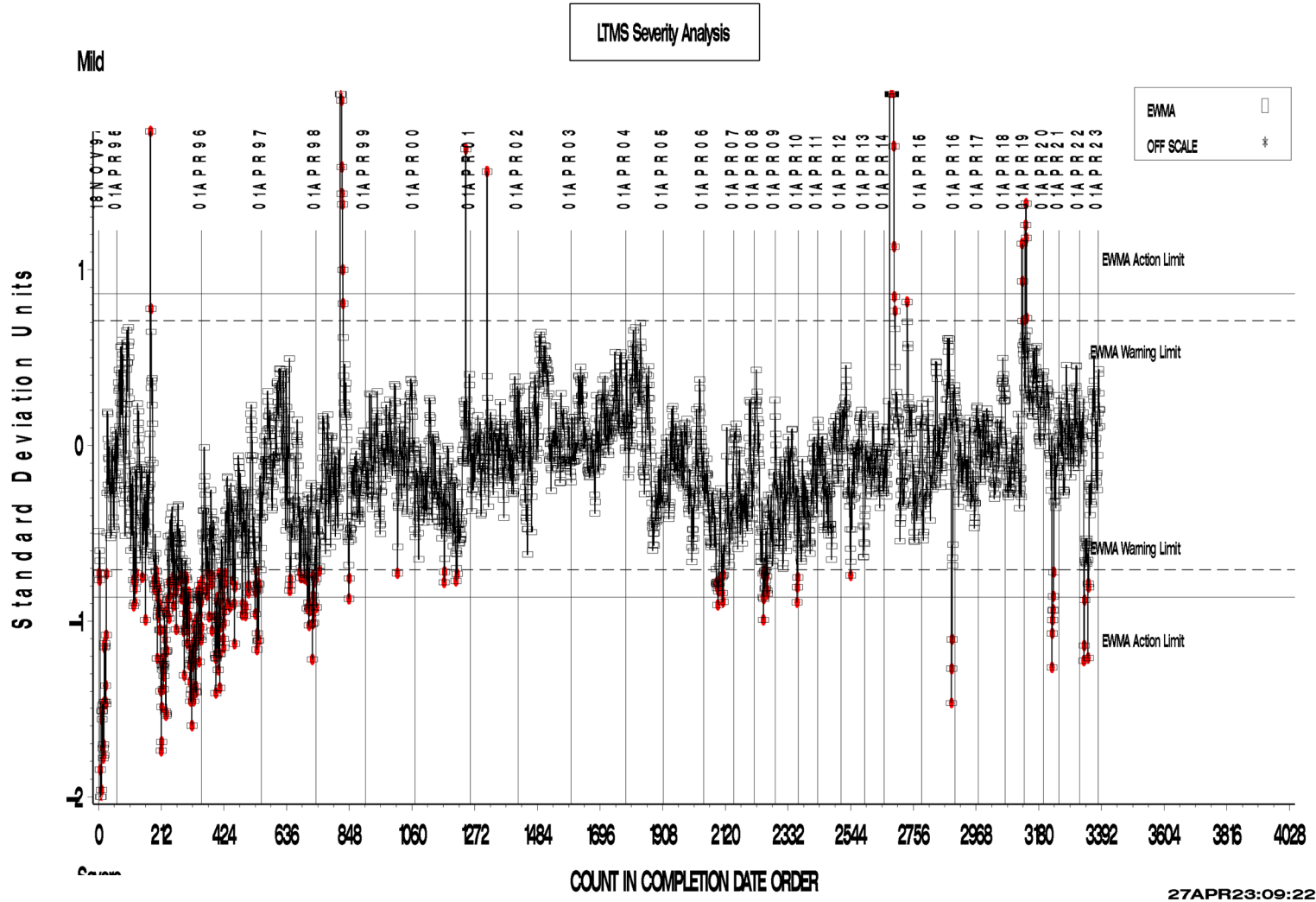
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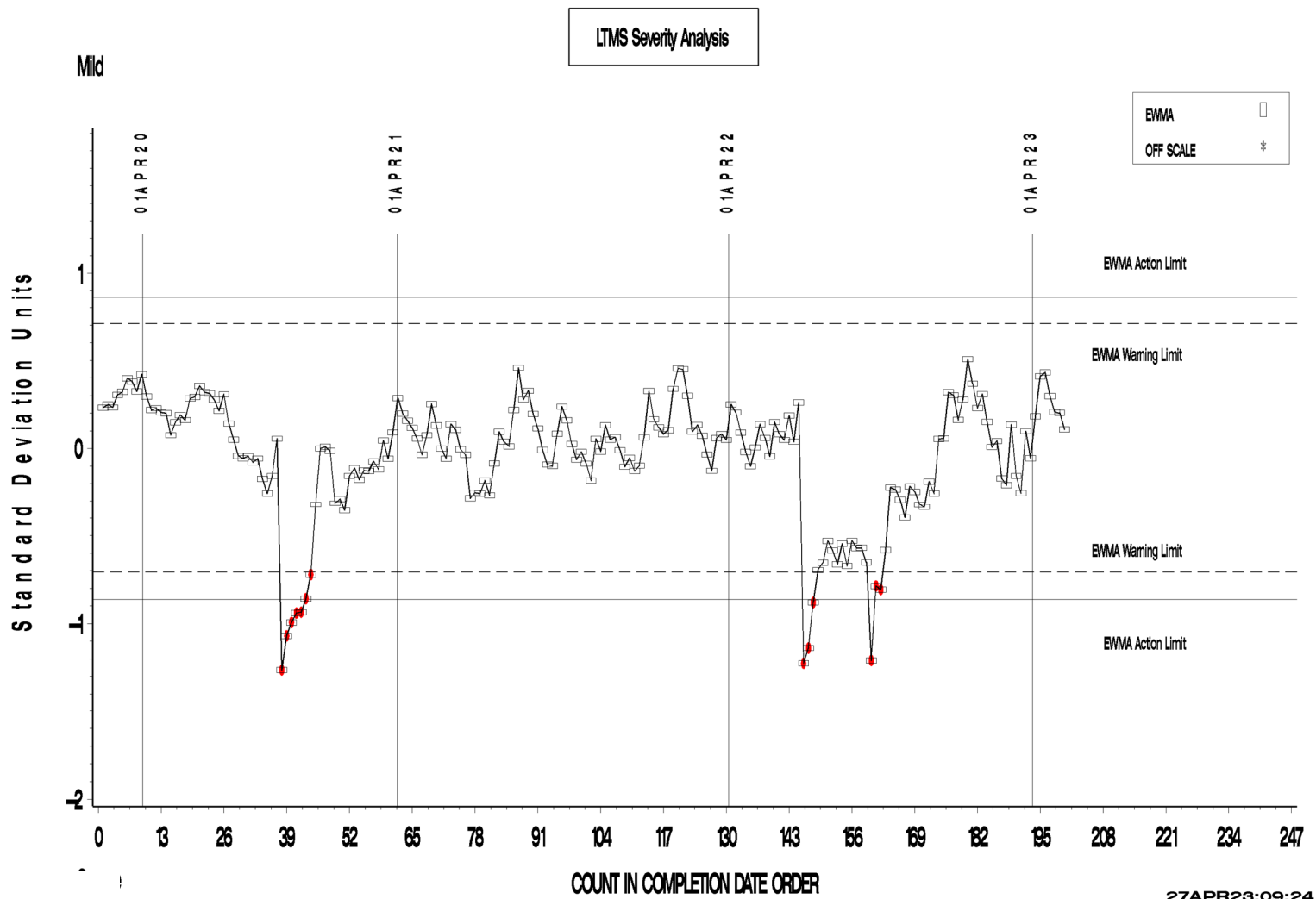
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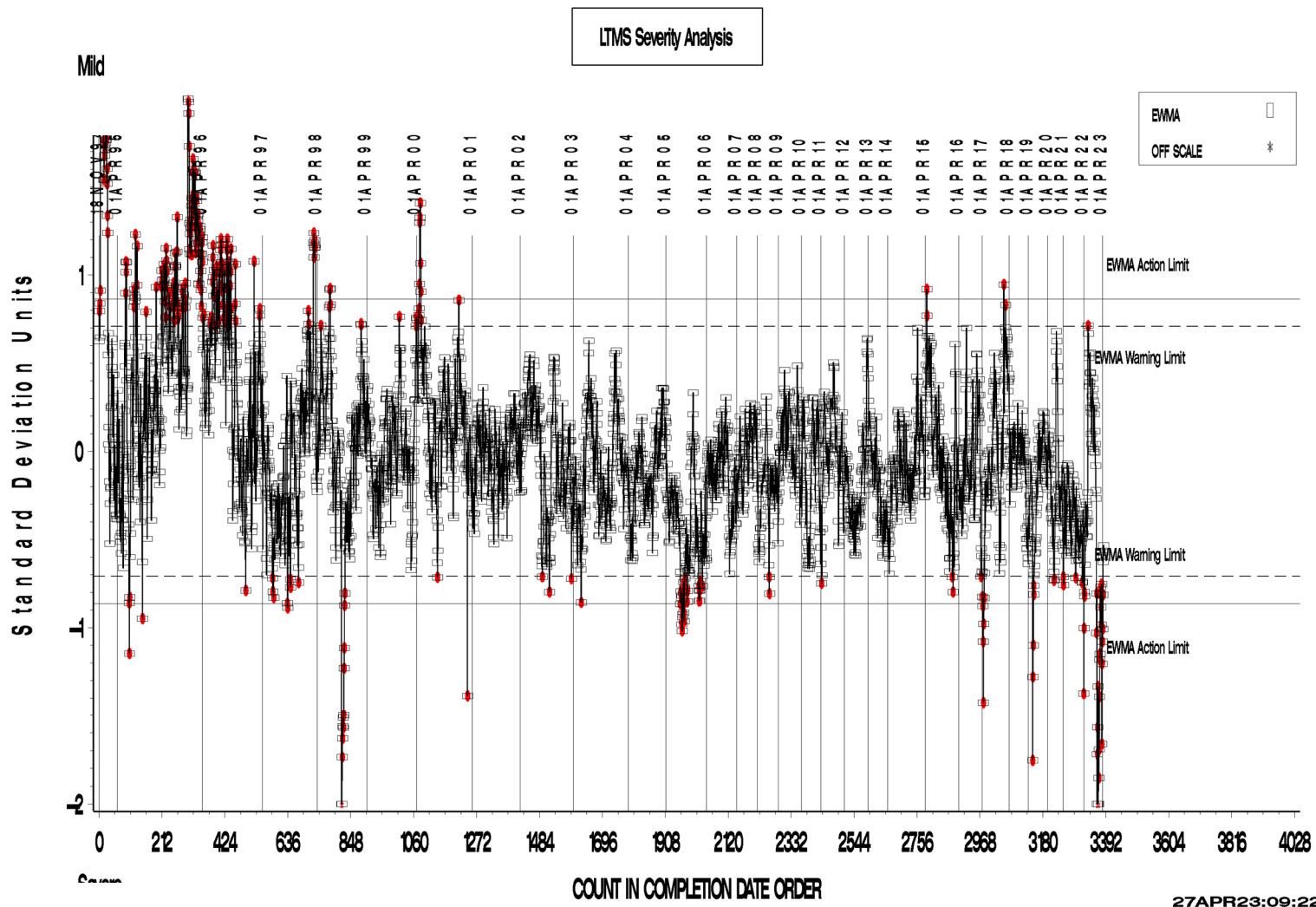
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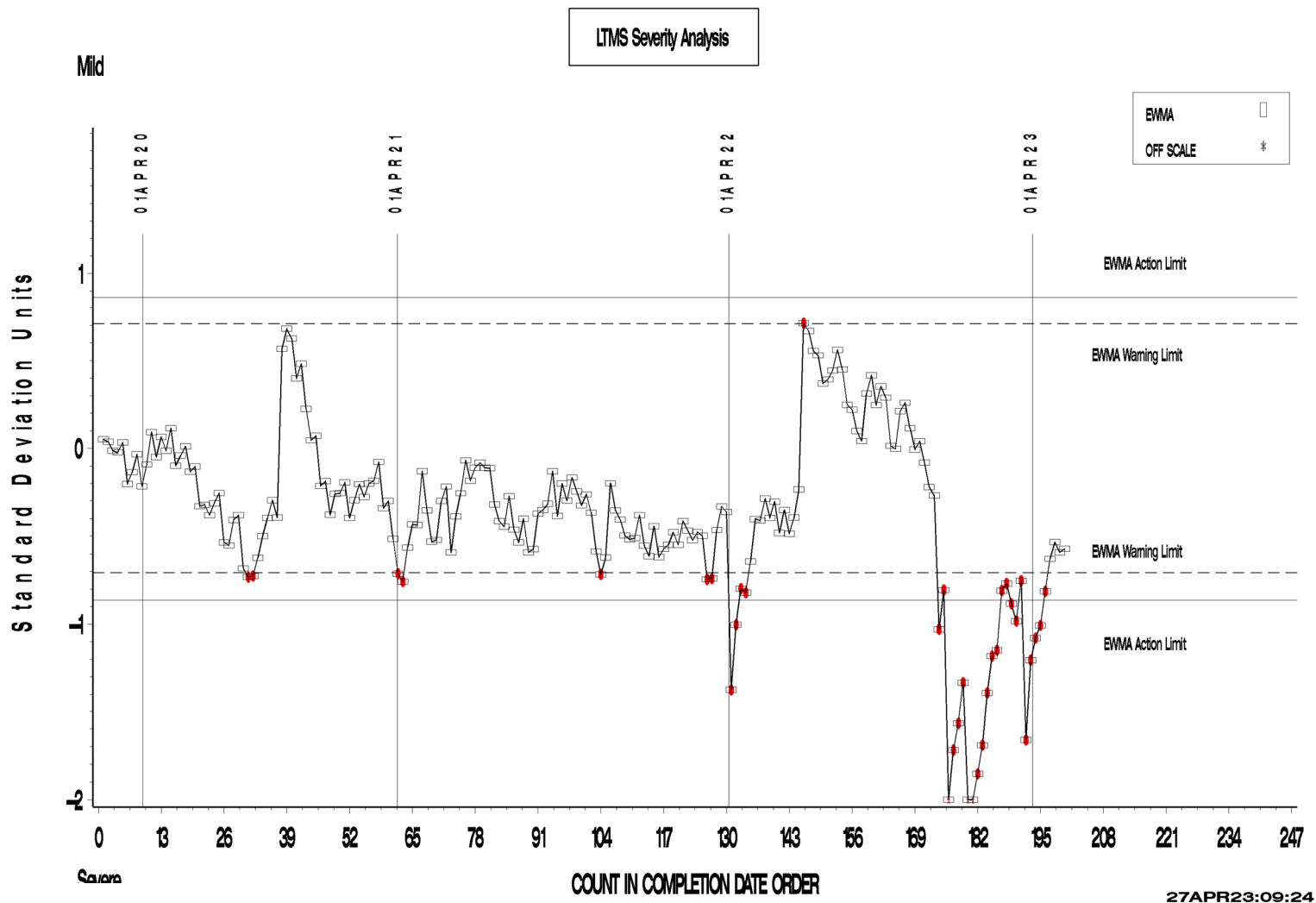
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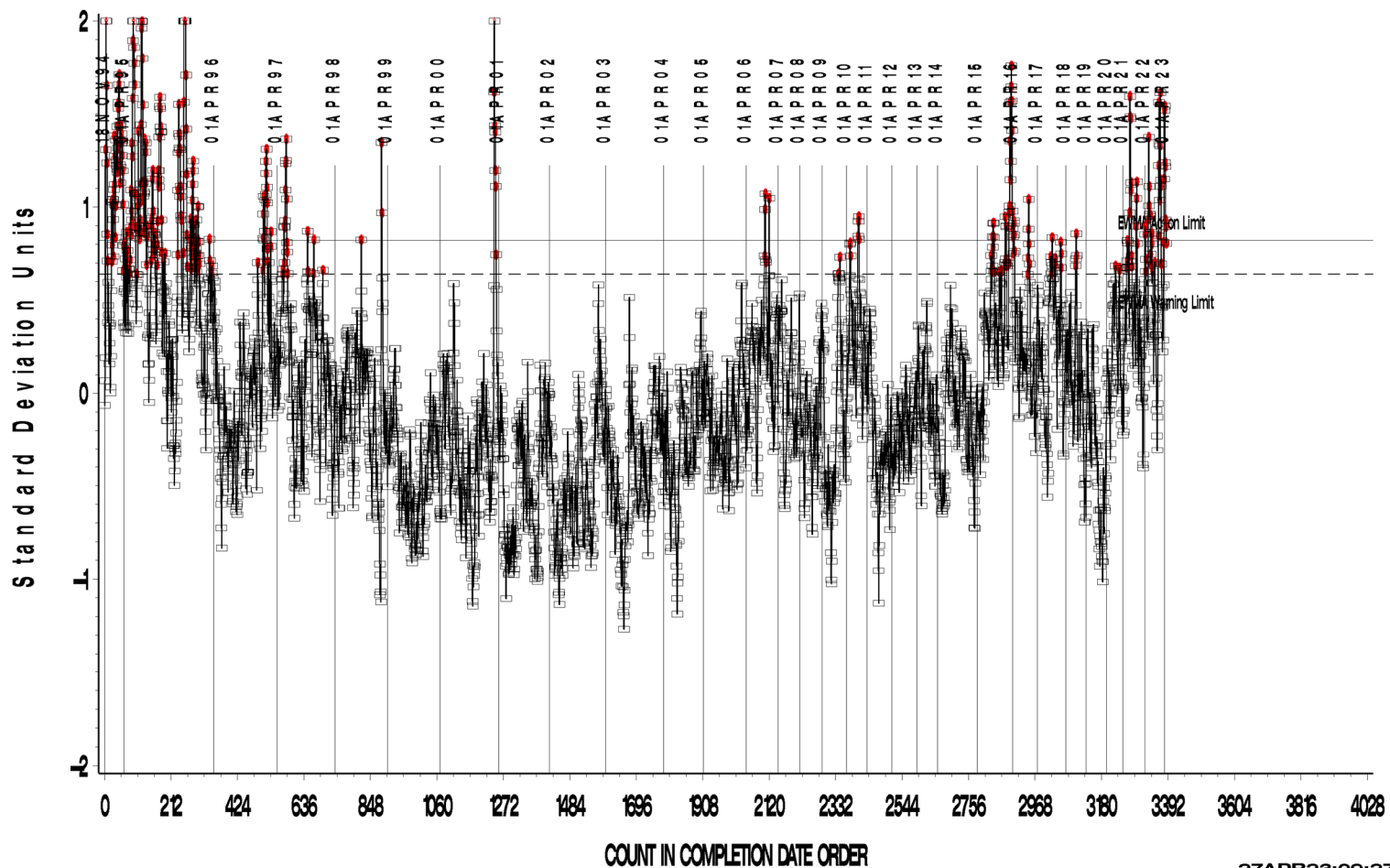
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LTMS Precision Analysis



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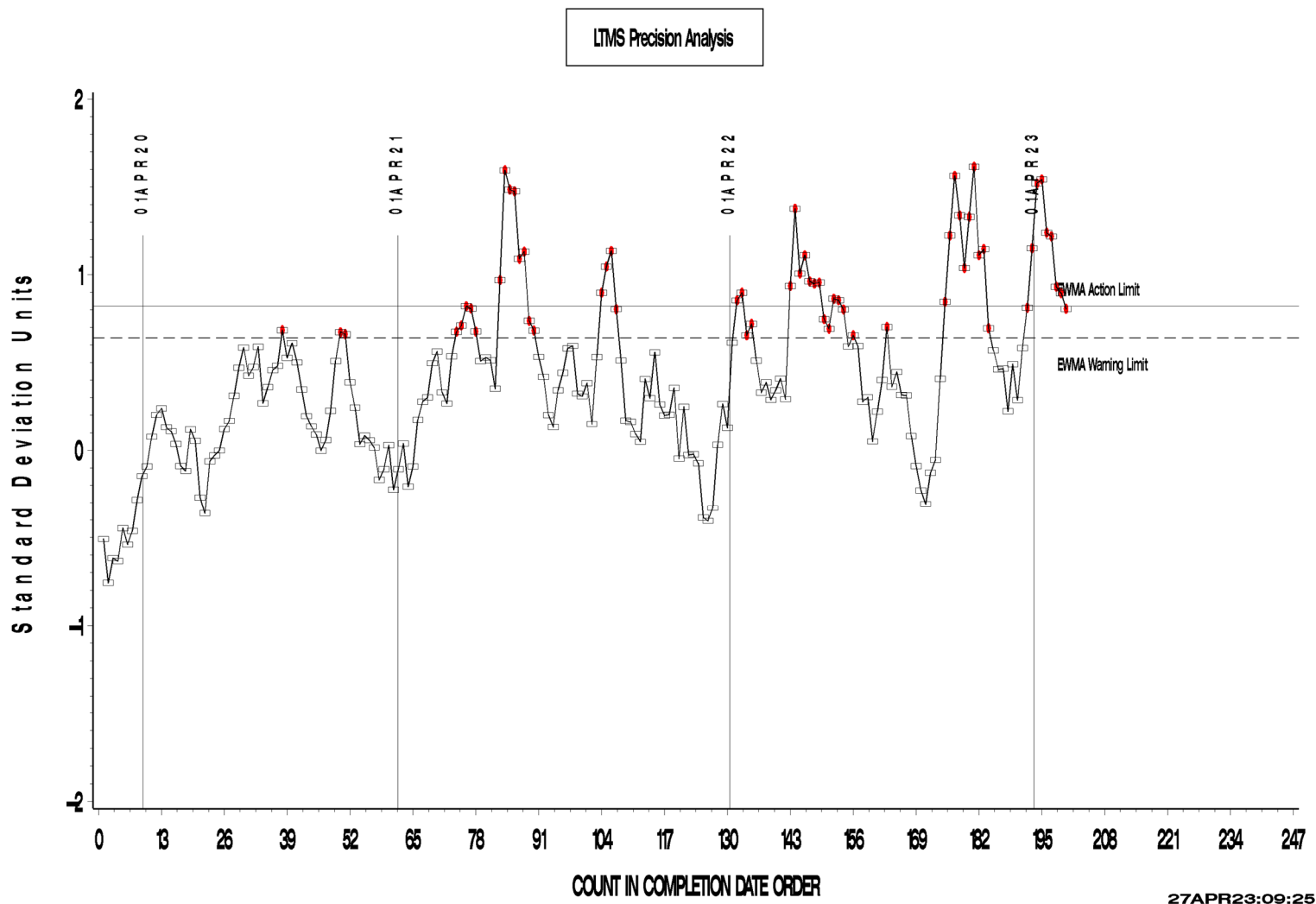
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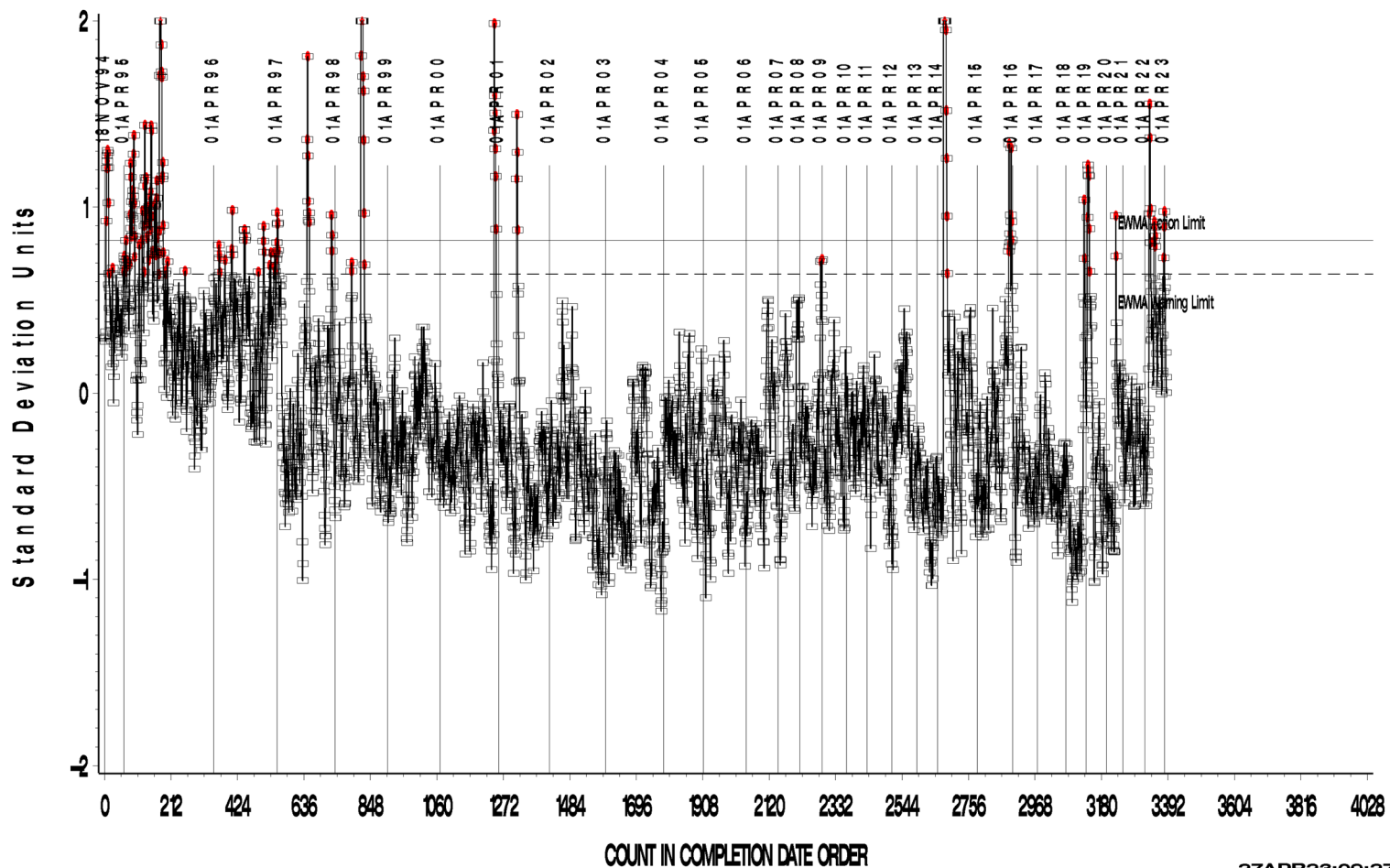
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LTMS Precision Analysis



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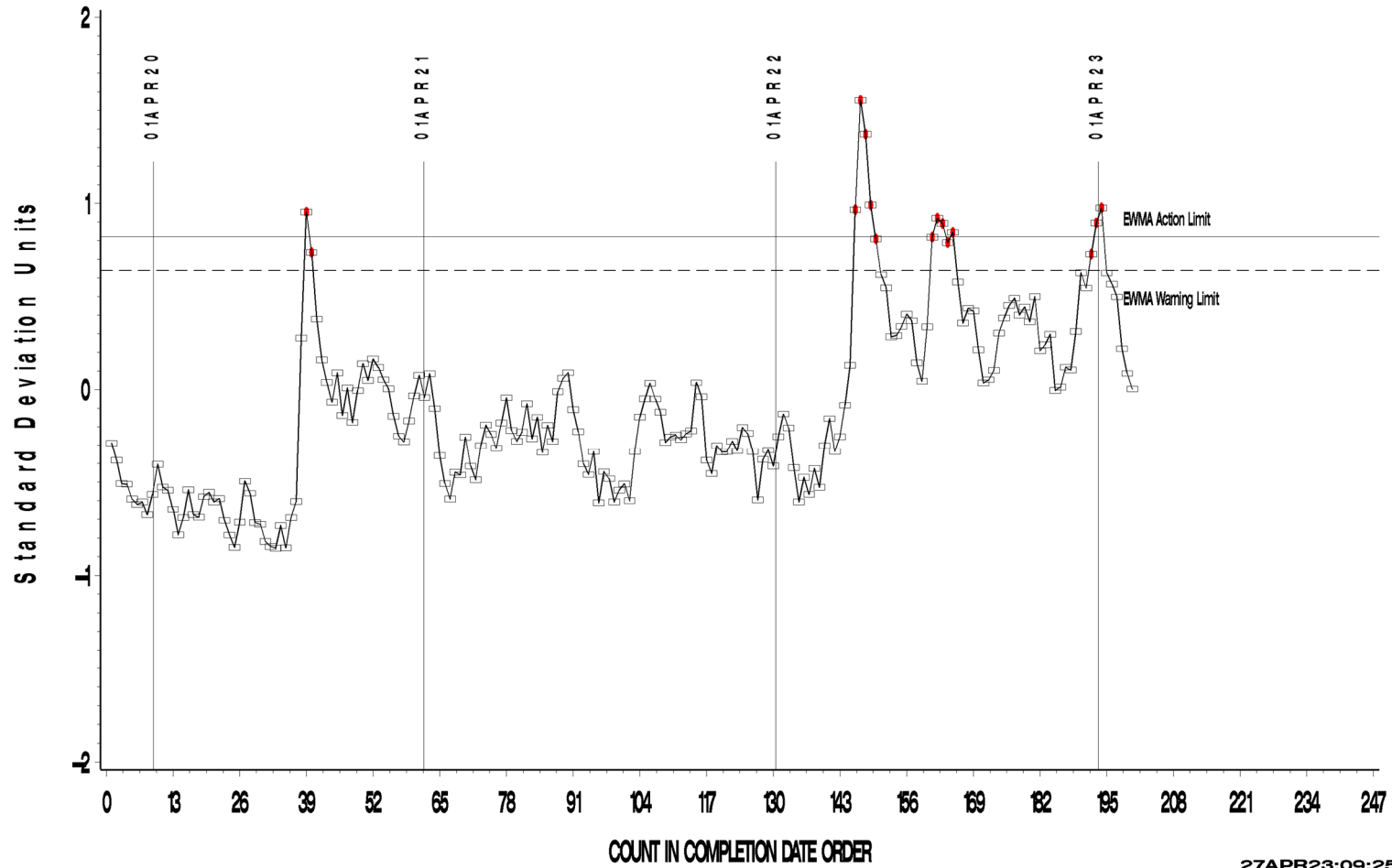
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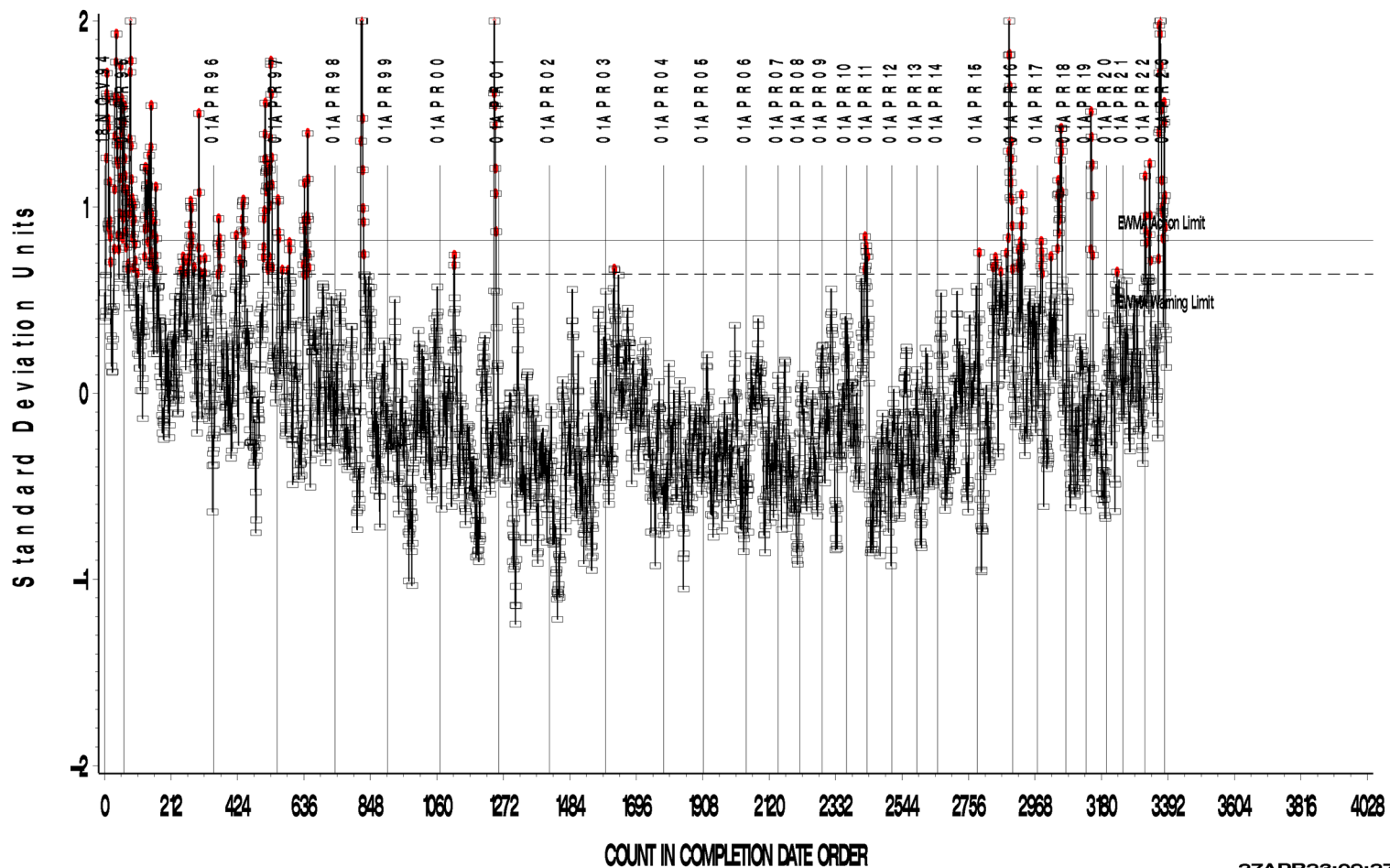
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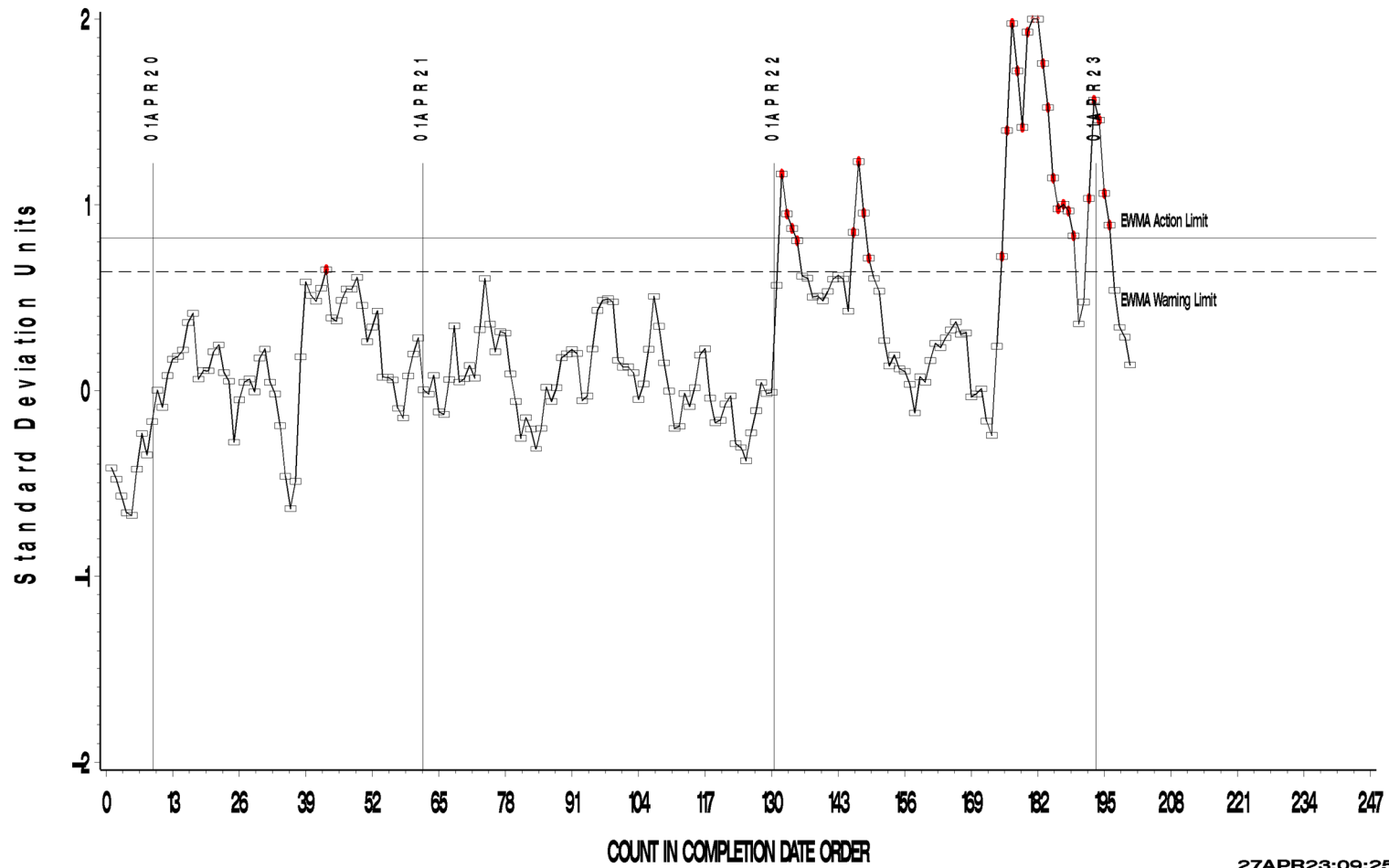
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CUSUM Severity Analysis



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CUSUM Severity Analysis



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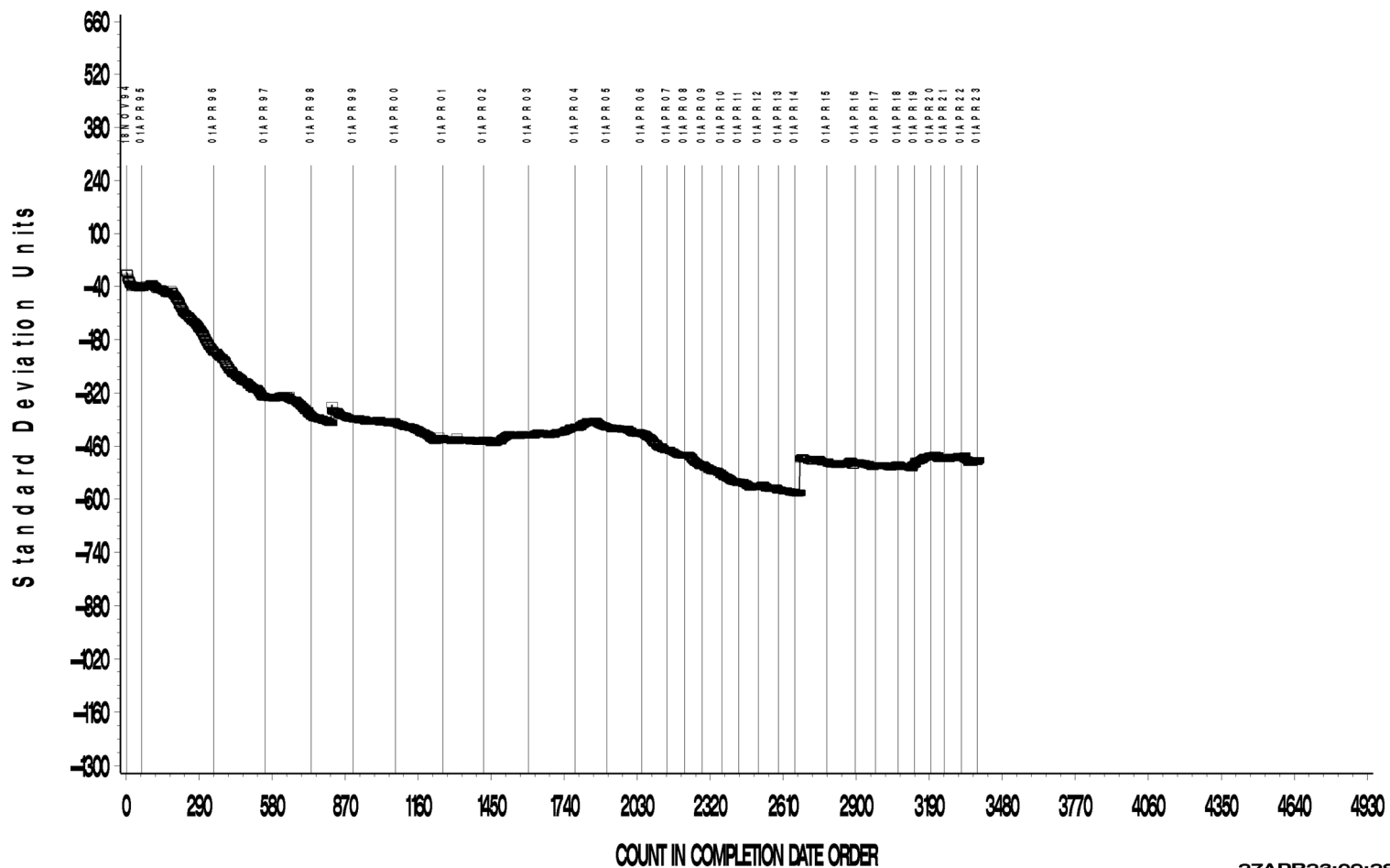
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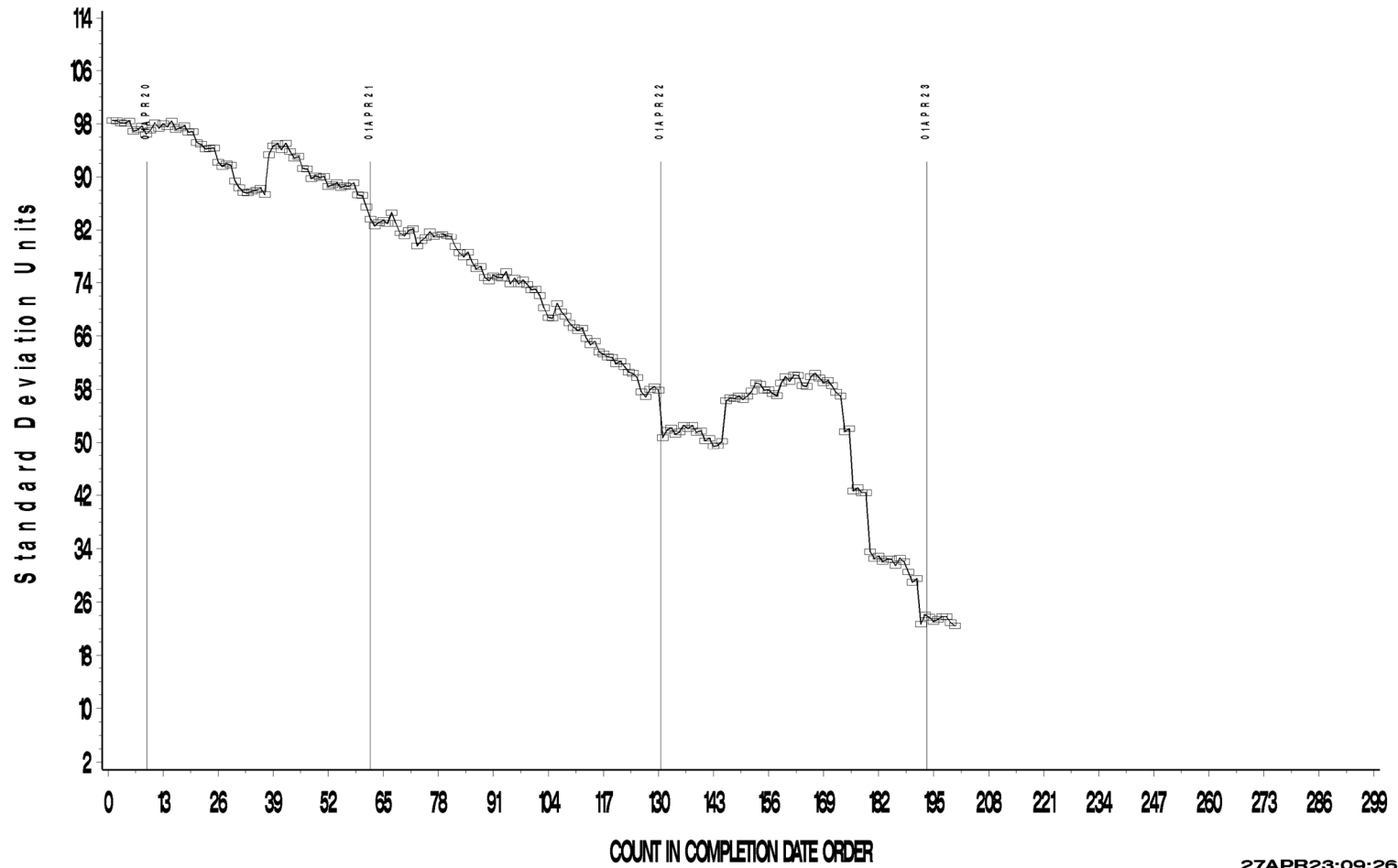
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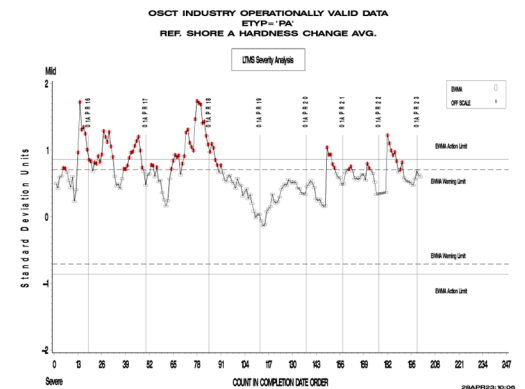
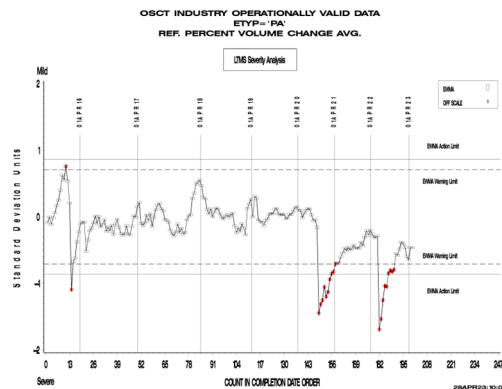
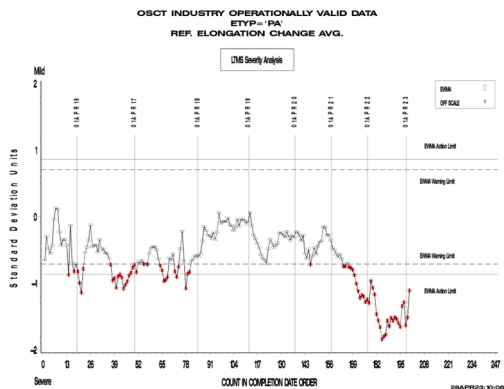
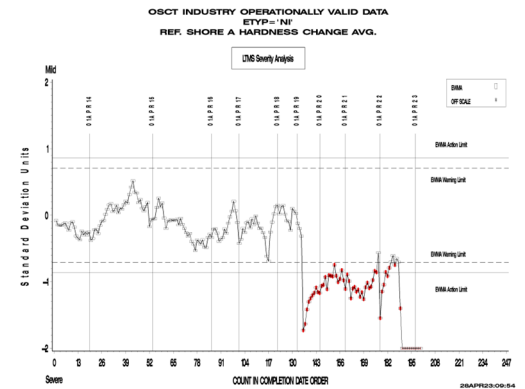
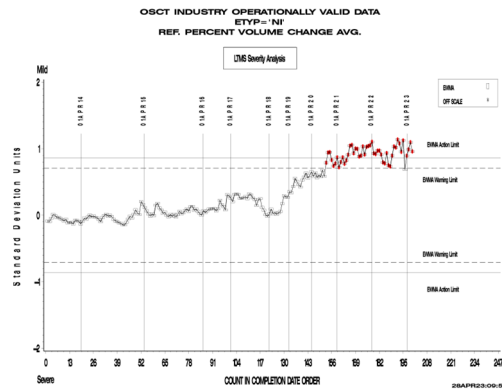
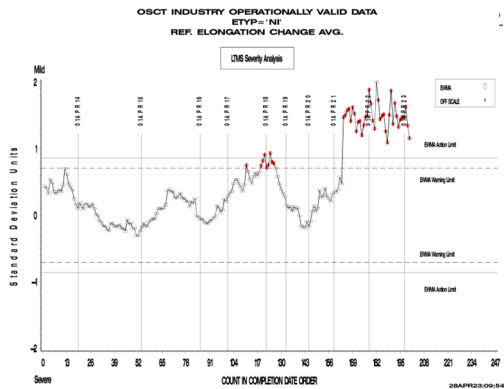
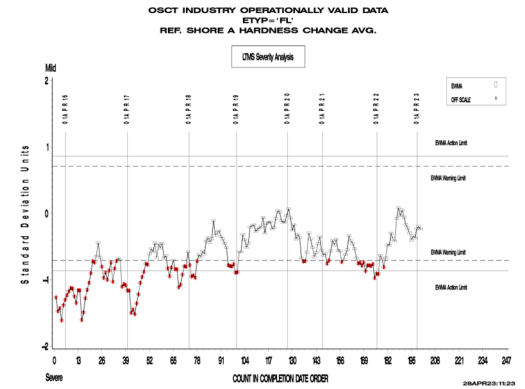
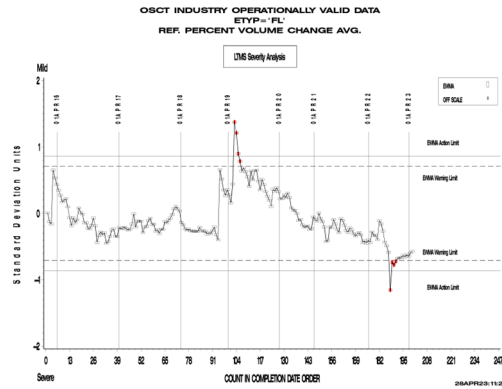
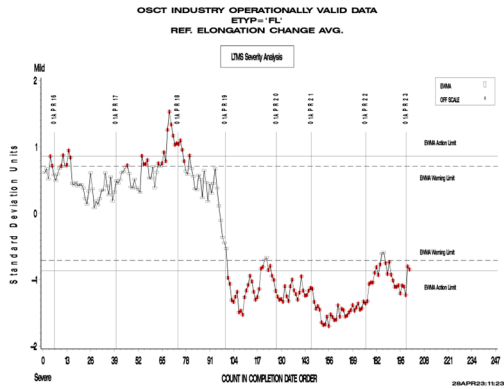
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# OSCT (D5662)

## TIMELINE ADDITIONS

Effective Date	Information Letter	Event
		No timeline additions occurred during this period.

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## LAB VISITS

No lab visits were conducted during this period.

## INFORMATION LETTERS

No information letters were issued during this period.



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## STATUS OF REFERENCE OIL SUPPLY

Oil	Cans @ Labs	@ TMC	
		Cans	Gallons
155-1	12	83	16.6
155-2	4	1227	243.3
160-1	2	0	0.0
168	13	0	0.0
169	33	625	123.9
170	26	112	22.2
171	34	64	12.8
Total	124	2111	418.8

Oil 168 is depleted. Oil 170 has been introduced as a replacement. Oil 171 is the same additive package as oil 160-1 in a different base oil and has been introduced as a replacement.