



Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

MEMORANDUM: 21-046
DATE: November 18, 2021
TO: Don Bell, Chairman, OSCT Surveillance Panel
FROM: Dylan Beck *Dylan Beck*
SUBJECT: OSCT Reference oil testing from April 1, 2021 through September 30, 2021

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

DJB/djb/mem21-046.djb.doc

cc: Frank Farber
Jeff Clark

OSCT Surveillance Panel

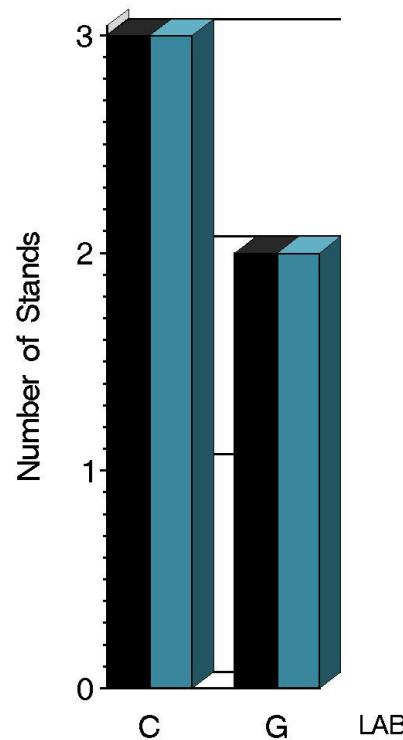
<https://www.astmtmc.cmu.edu/ftp/docs/gear/osct/semiannualreports/osct-10-2021.pdf>

Distribution: email

OSCT (D5662)

	Reporting Data	Calibrated on 9-30-2021
Number of Labs	2	2
Number of Stands	5	5

BY-LAB STAND
DISTRIBUTION



Report Period: ■ Current ■ Previous

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Test Distribution by Elastomer and Validity

					Totals	
					Last Period	This Period
		FL	NI	PA		
Accepted for calibration	AC	13	7	12	21	32
Rejected (low result)	OC	3	2	0	0	5
Rejected (high result)	OC	1	0	0	1	1
Rejected (high and low)	OC	0	0	0	0	0
Op. invalid	LC	0	0	0	1	0
Aborted	XC	0	1	0	0	1
Elastomer approval run	NI	3	0	0	1	3
Invalid information run	MI	2	0	0	0	2
Op. invalid approval run	LI	0	0	0	0	0
Total		22	10	12	24	44



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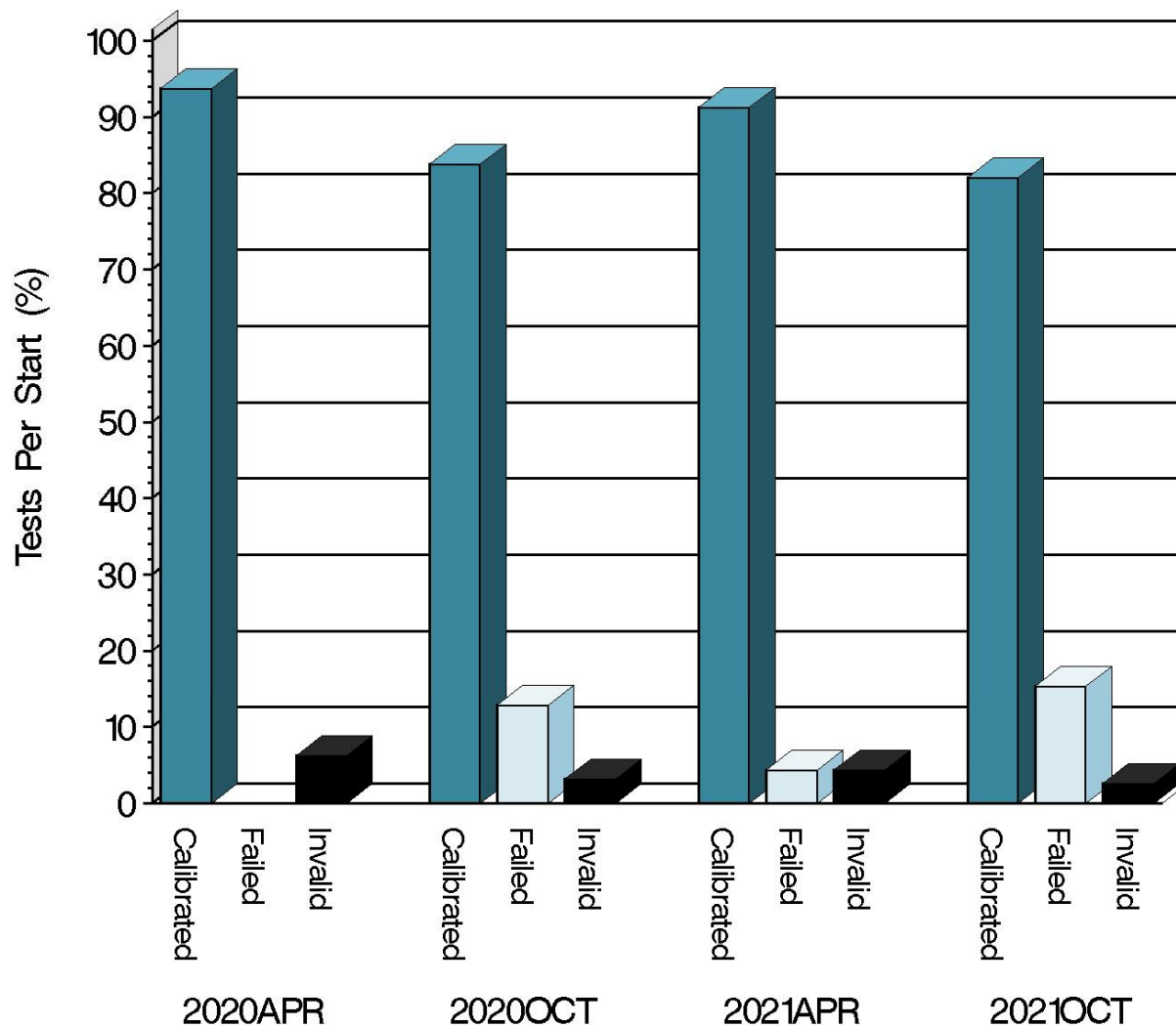
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CALIBRATION ATTEMPT SUMMARY



Resolution

Report Period

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CAUSES FOR LOST TESTS

Lab	Cause	Elastomer			Loss Rate				Lost	Starts	%
		FL	NI	PA	LI	MI	LC	XC			
C	No accompanying reference	●				●			2	34	5.9%
C	Test Data Loss		●					●	1	34	2.9%
	Lost	2	1	0	0	2	0	1			
	Starts	22	10	12	44	44	44	44			
	%	9.1%	10%	0%	0%	4.5%	0%	2.3%			



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Average Δ/s by Lab

Elastomer	Lab	N	PELA	PVCA	SAHA
FL	C	12	-1.830	-0.450	-0.341
	G	5	-1.098	0.335	-0.956
	Industry	17	-1.615	-0.219	-0.522
	Shift*	17	-12.297	-0.116	-0.729
NI	C	7	0.927	0.932	-1.340
	G	2	4.549	1.462	-0.953
	Industry	9	1.732	1.050	-1.257
	Shift*	9	8.751	0.520	-1.467
PA	C	10	-0.864	-0.362	0.753
	G	2	-0.847	-0.475	0.435
	Industry	12	-0.861	-0.381	0.700
	Shift*	12	-18.192	-0.722	1.778

*computed using historic pooled s



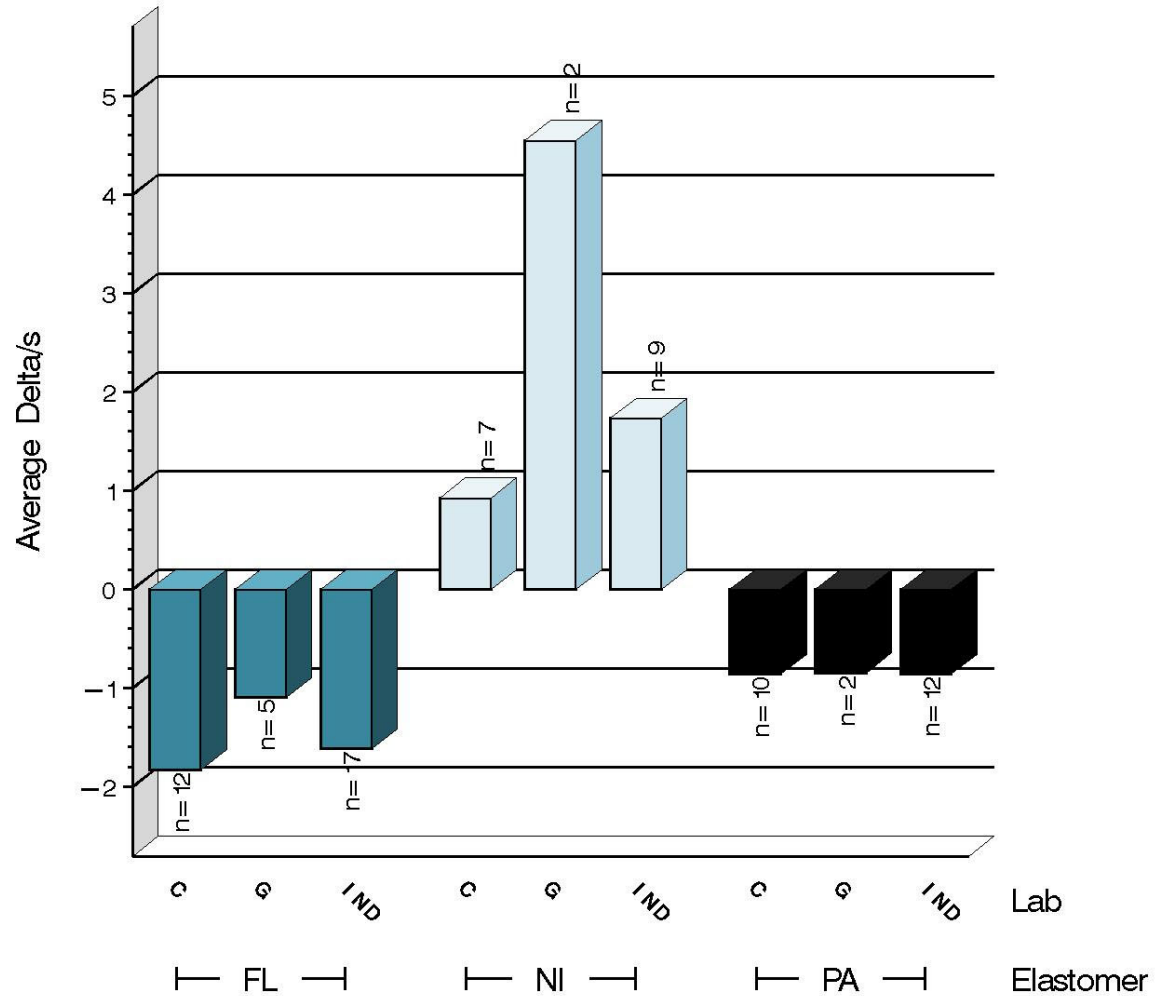
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%ELONGATION SEVERITY
DELTA/S BY LAB



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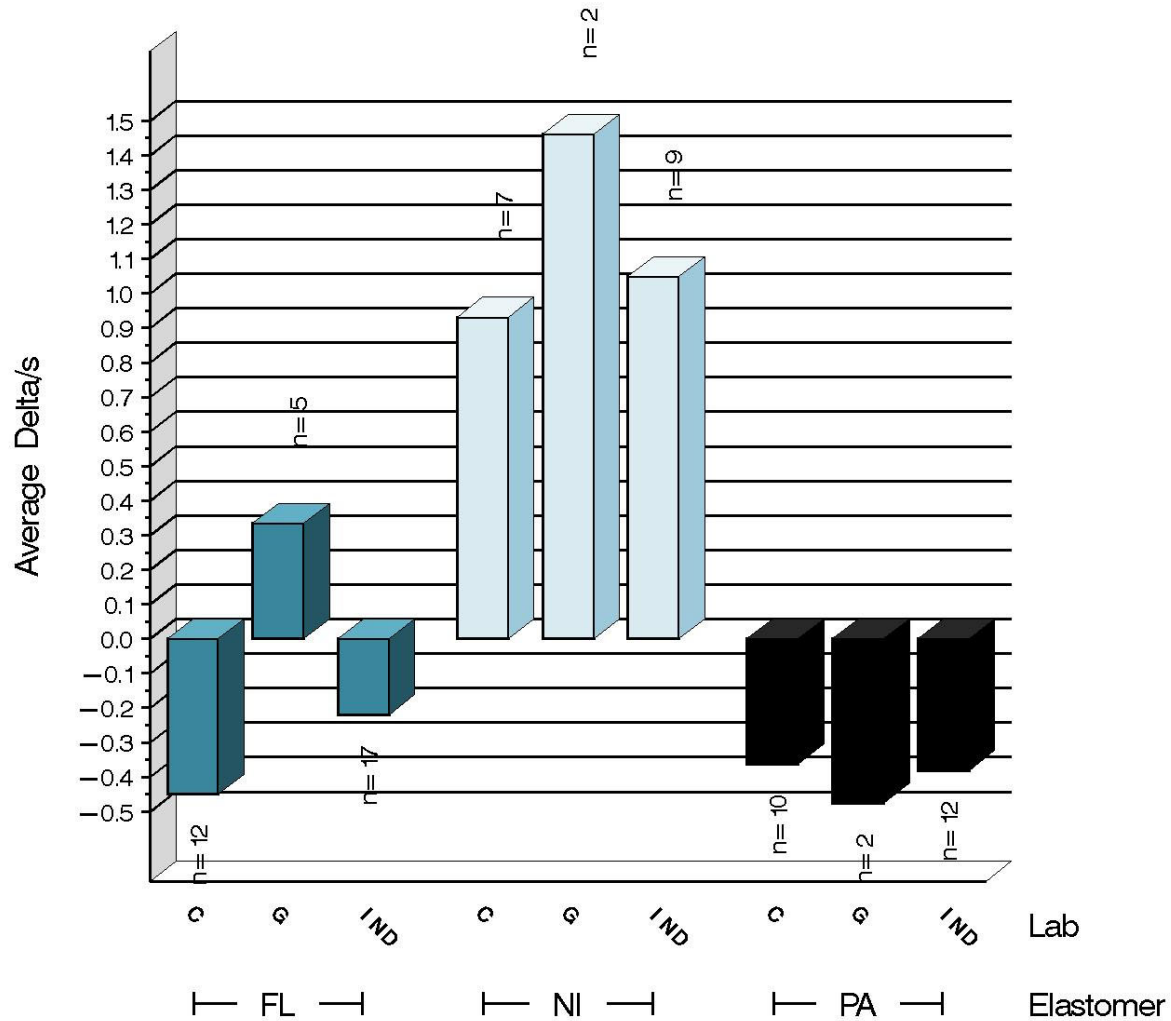
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%VOLUME CHANGE SEVERITY
DELTA/S BY LAB



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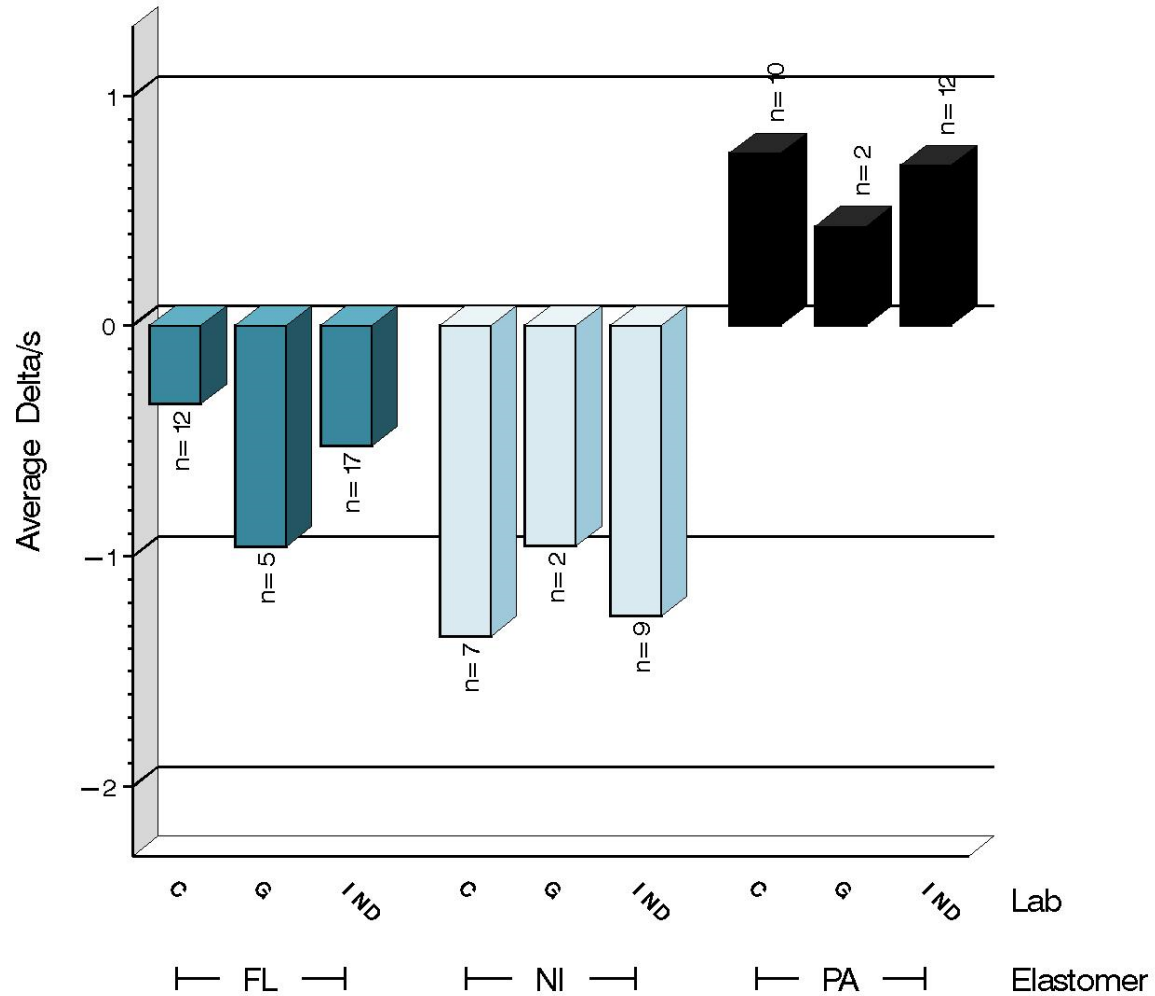
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S.A. HARDNESS SEVERITY
DELTA/S BY LAB



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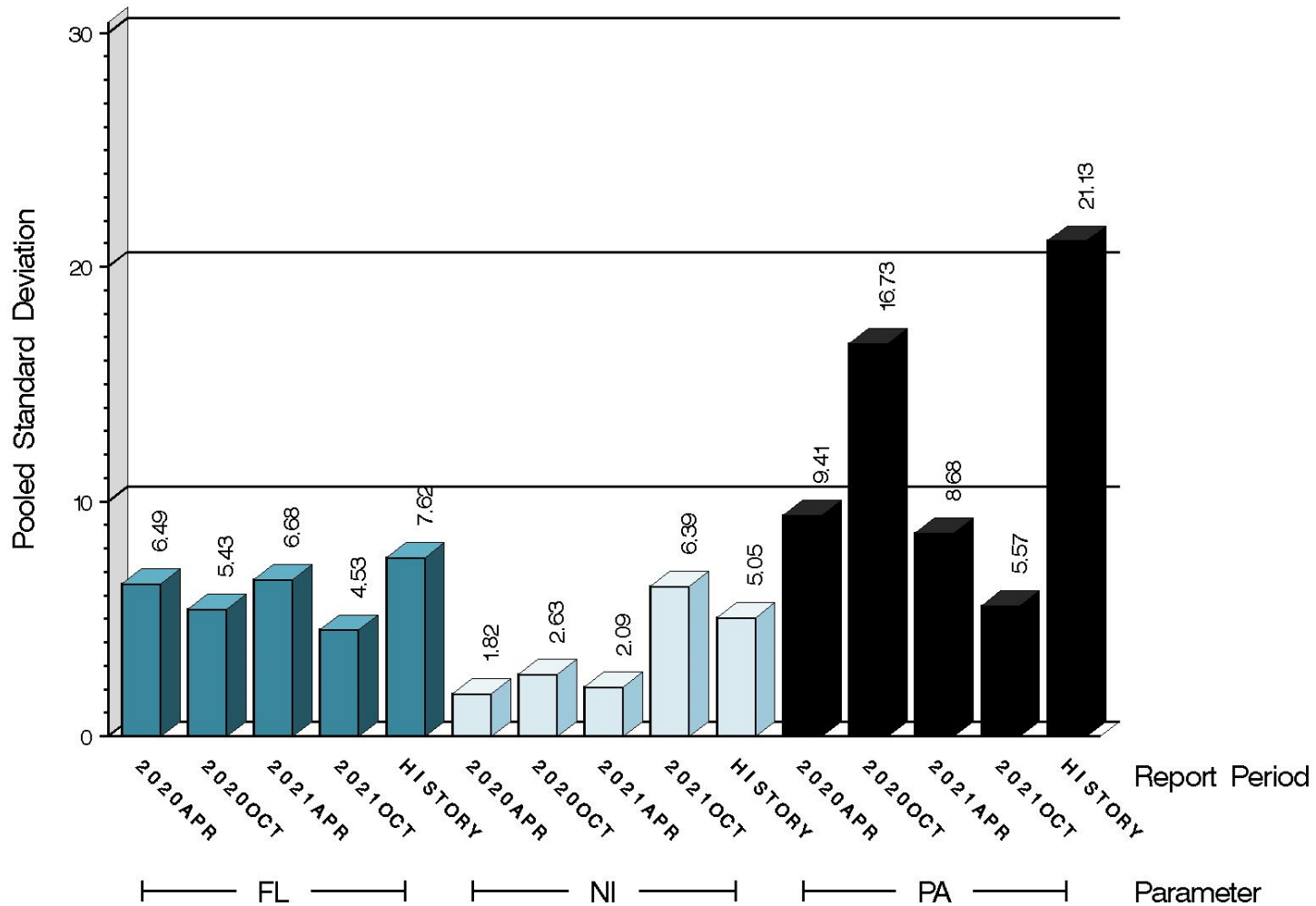
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%ELONGATION PRECISION
 POOLED STANDARD DEVIATION
 BY SIX-MONTH ASTM REPORT PERIOD



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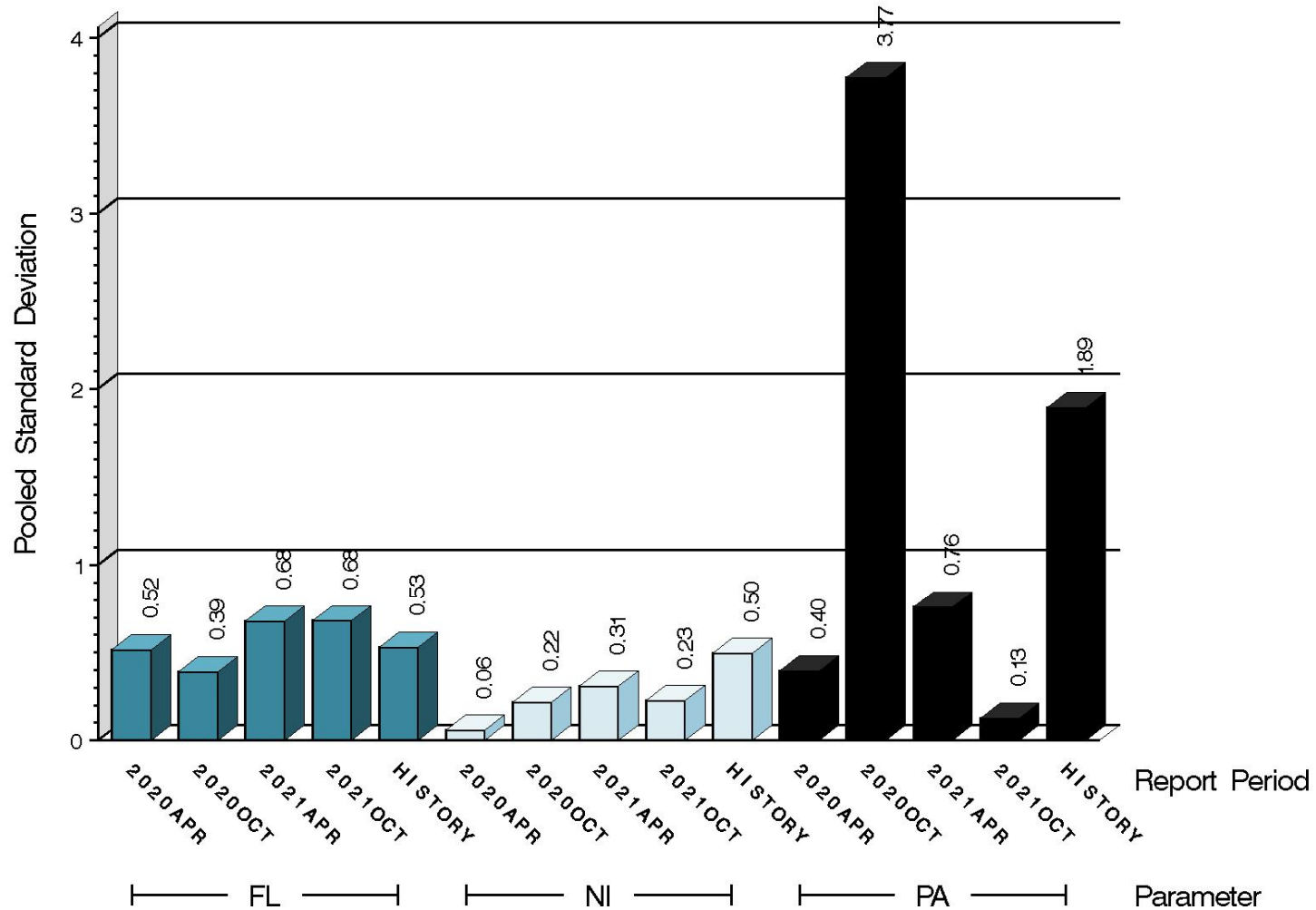
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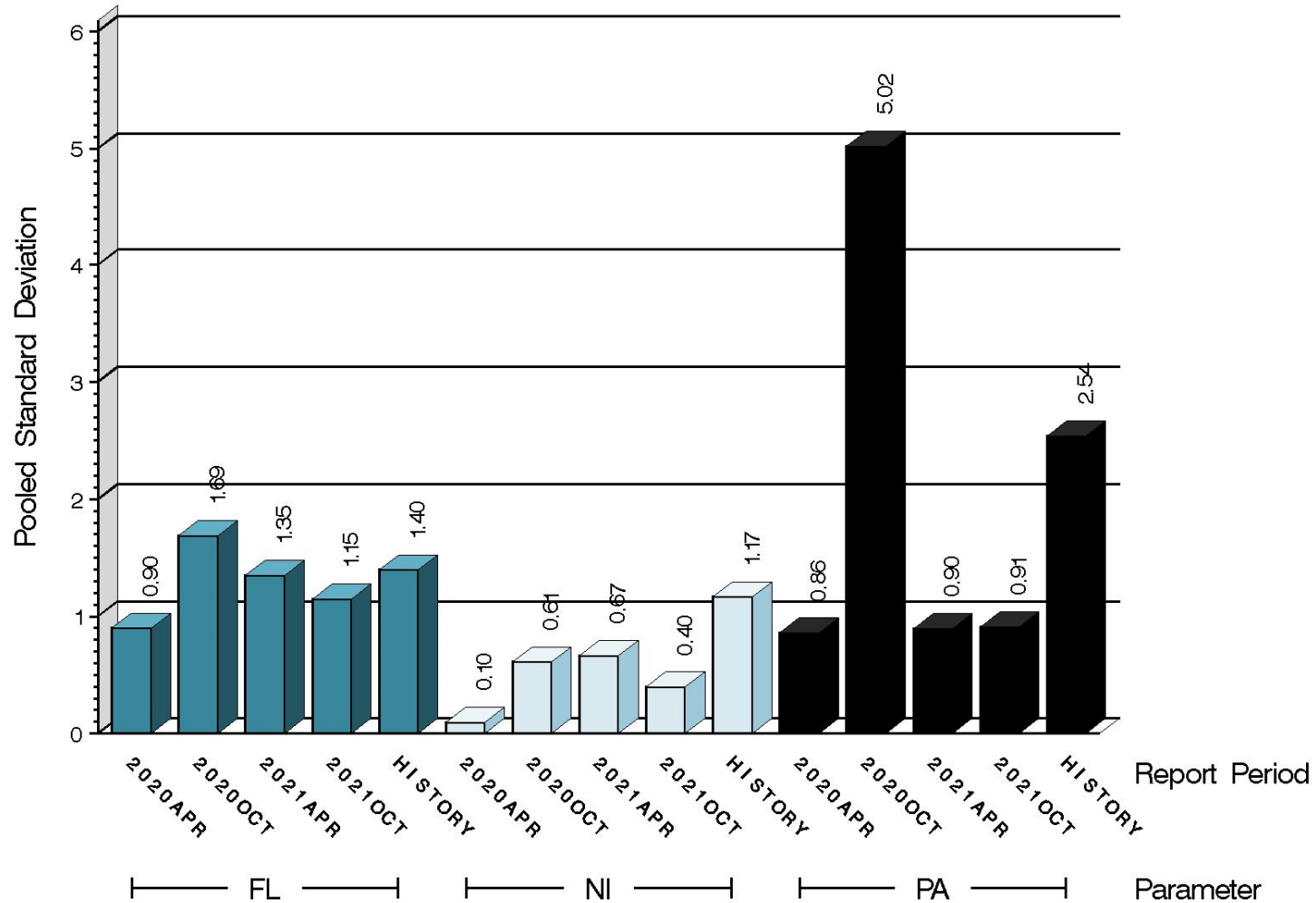
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SUMMARY OF SEVERITY & PRECISION

Severity

The combined-elastomer industry charts show that PELA exceeded the limits in the severe direction this period but is now back within the limits.

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

Precision

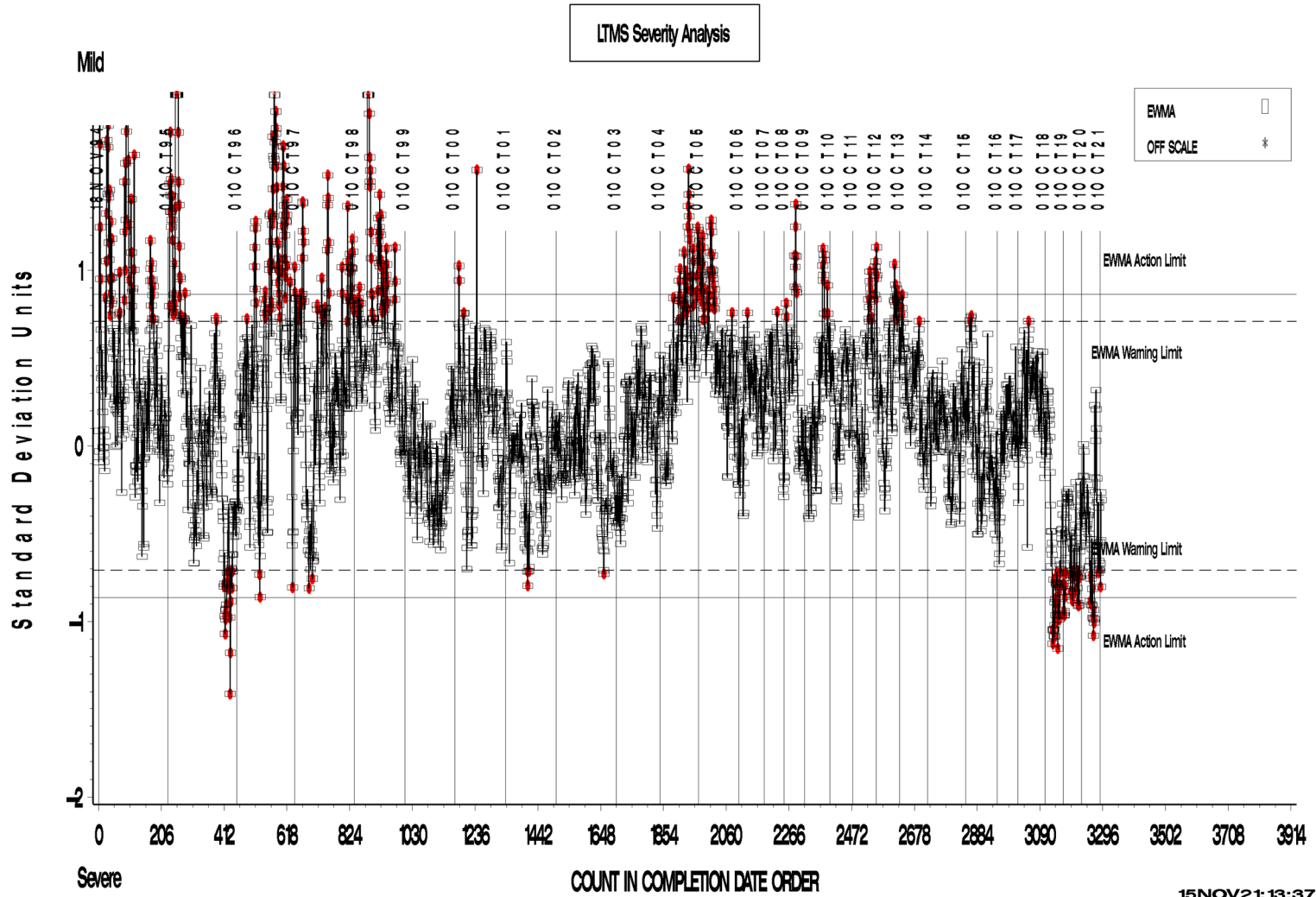
PELA exceeded the action limits this period but has since returned within limits. All other parameters remained within the precision limits.

Industry control charts follow.

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REF. ELONGATION CHANGE AVG.



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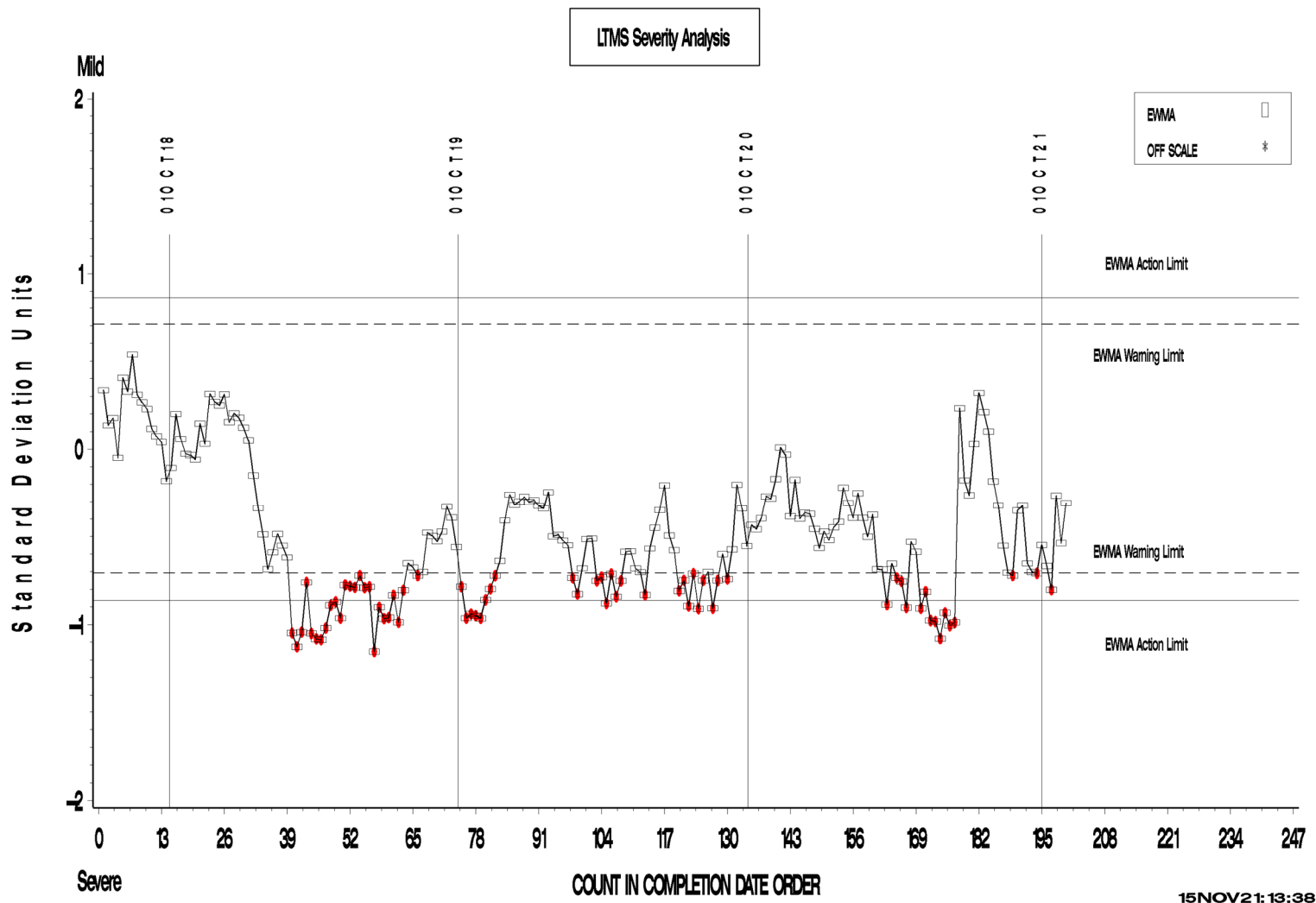
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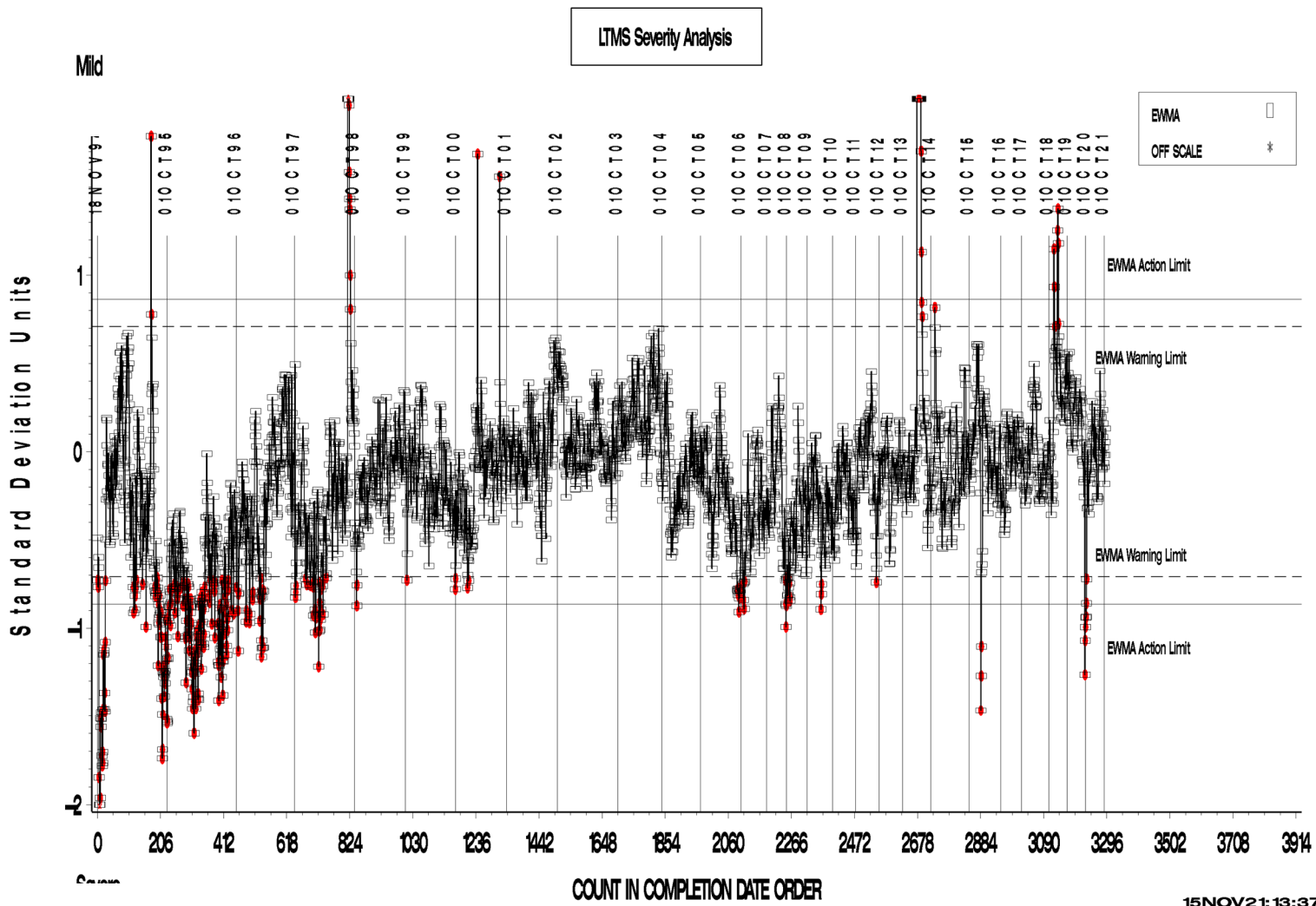
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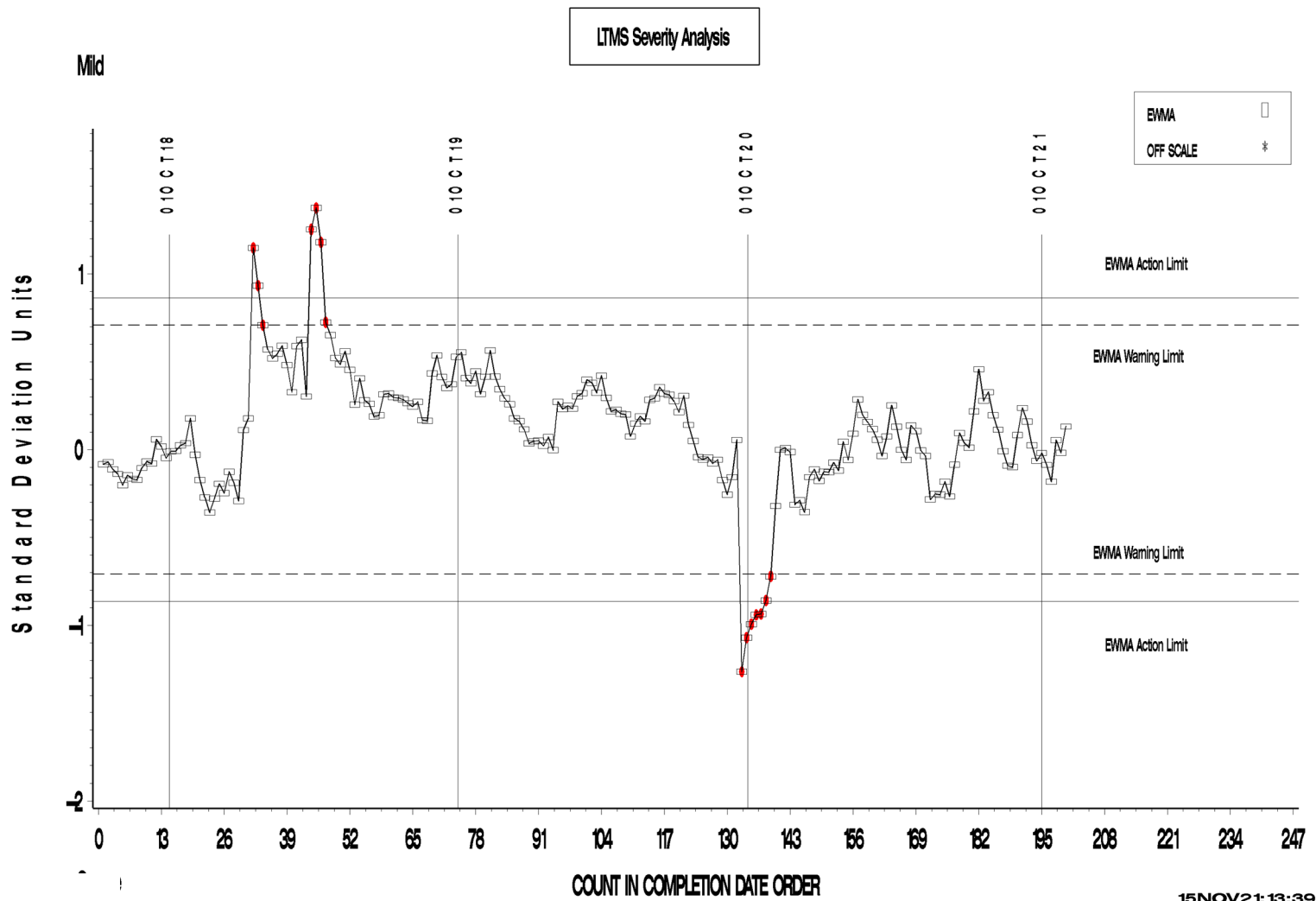
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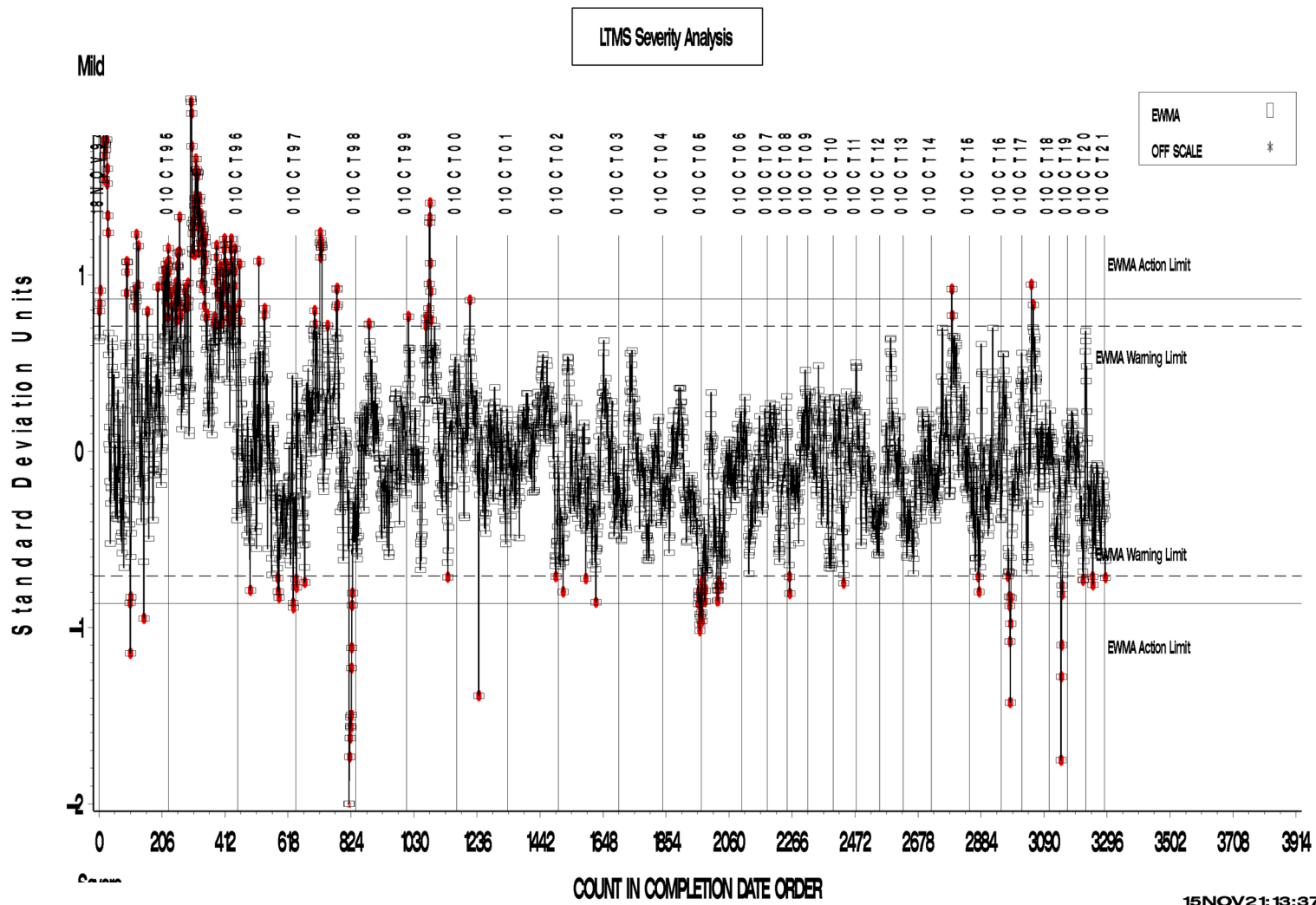
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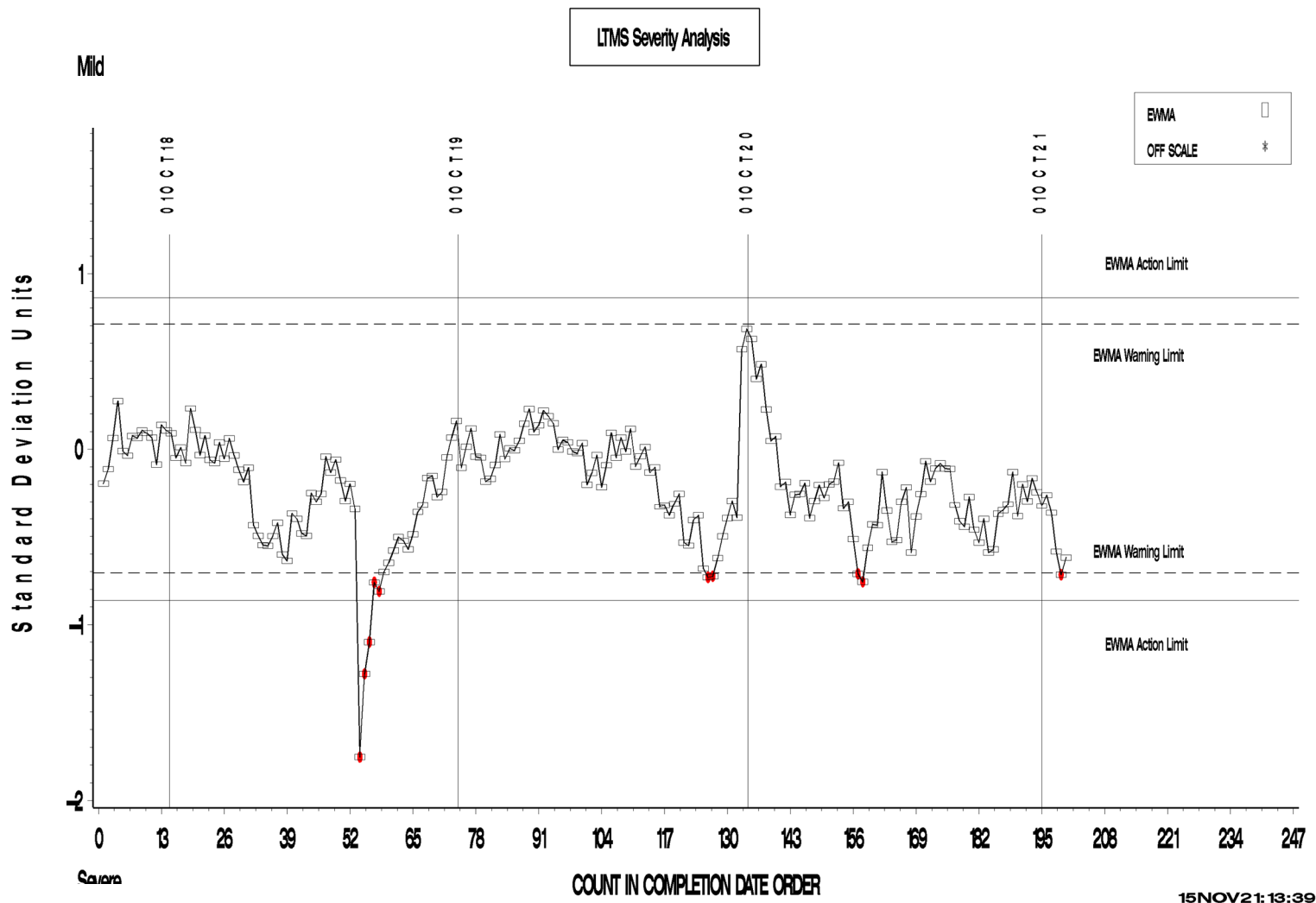
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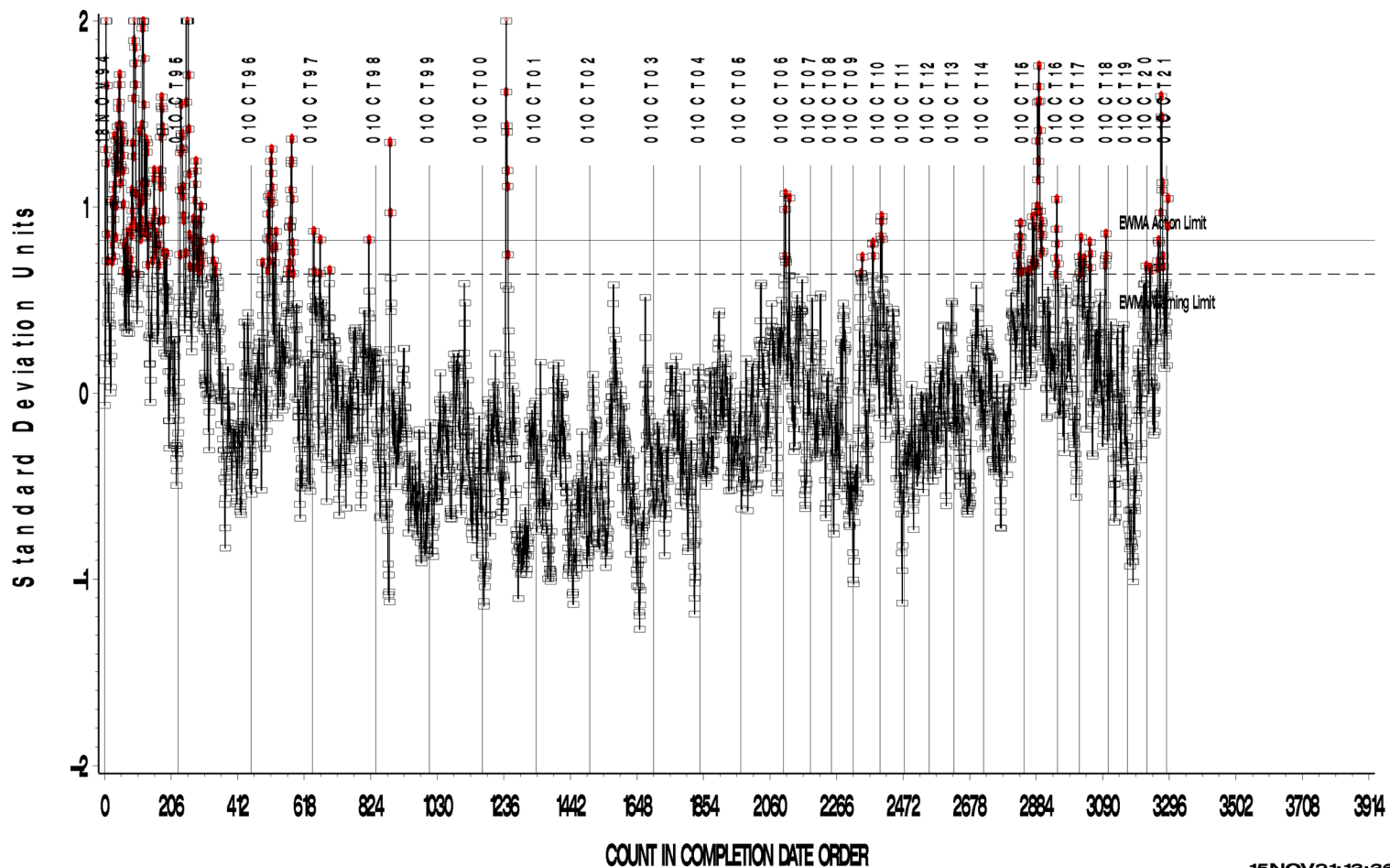
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LTMS Precision Analysis



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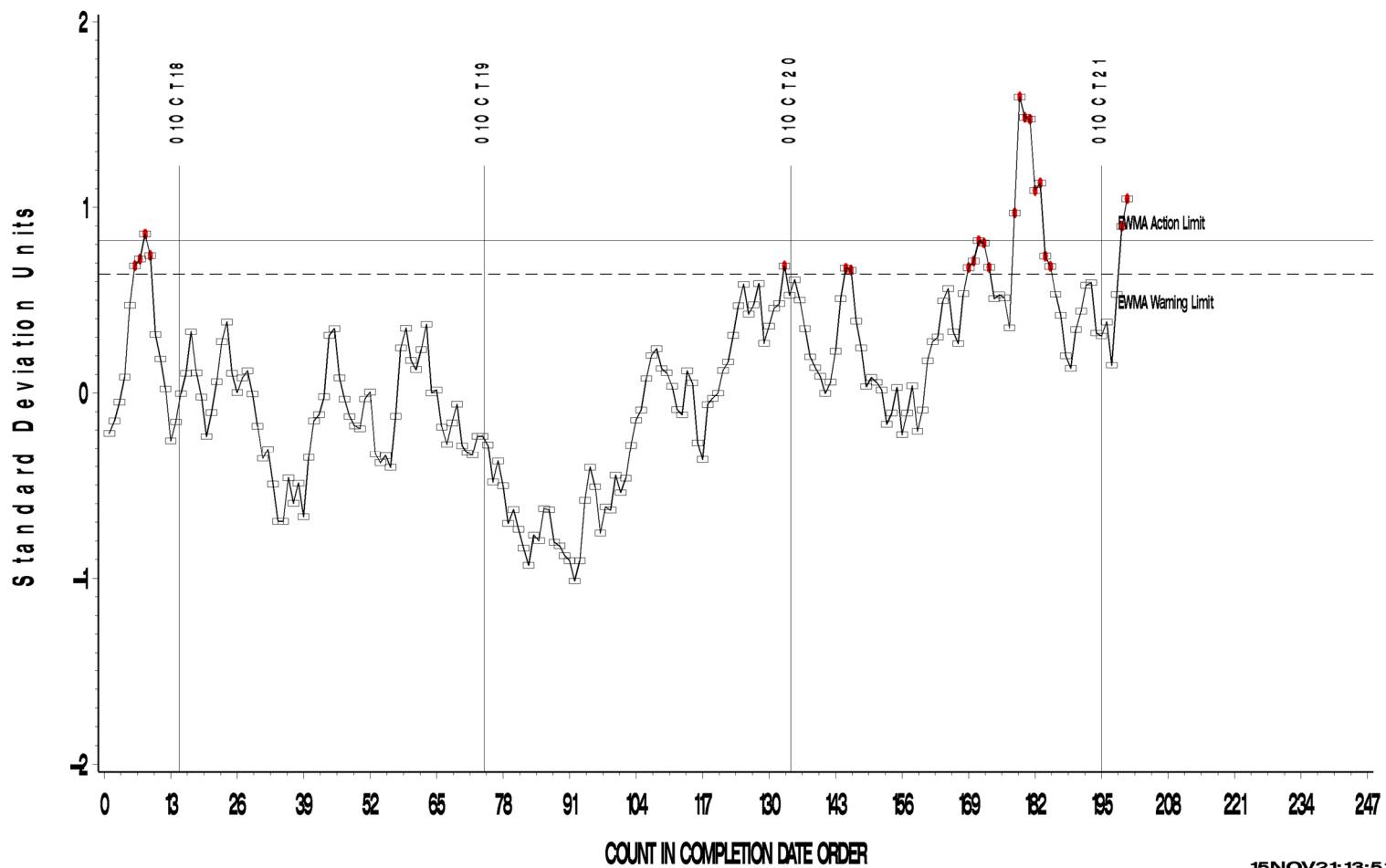
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LTMS Precision Analysis



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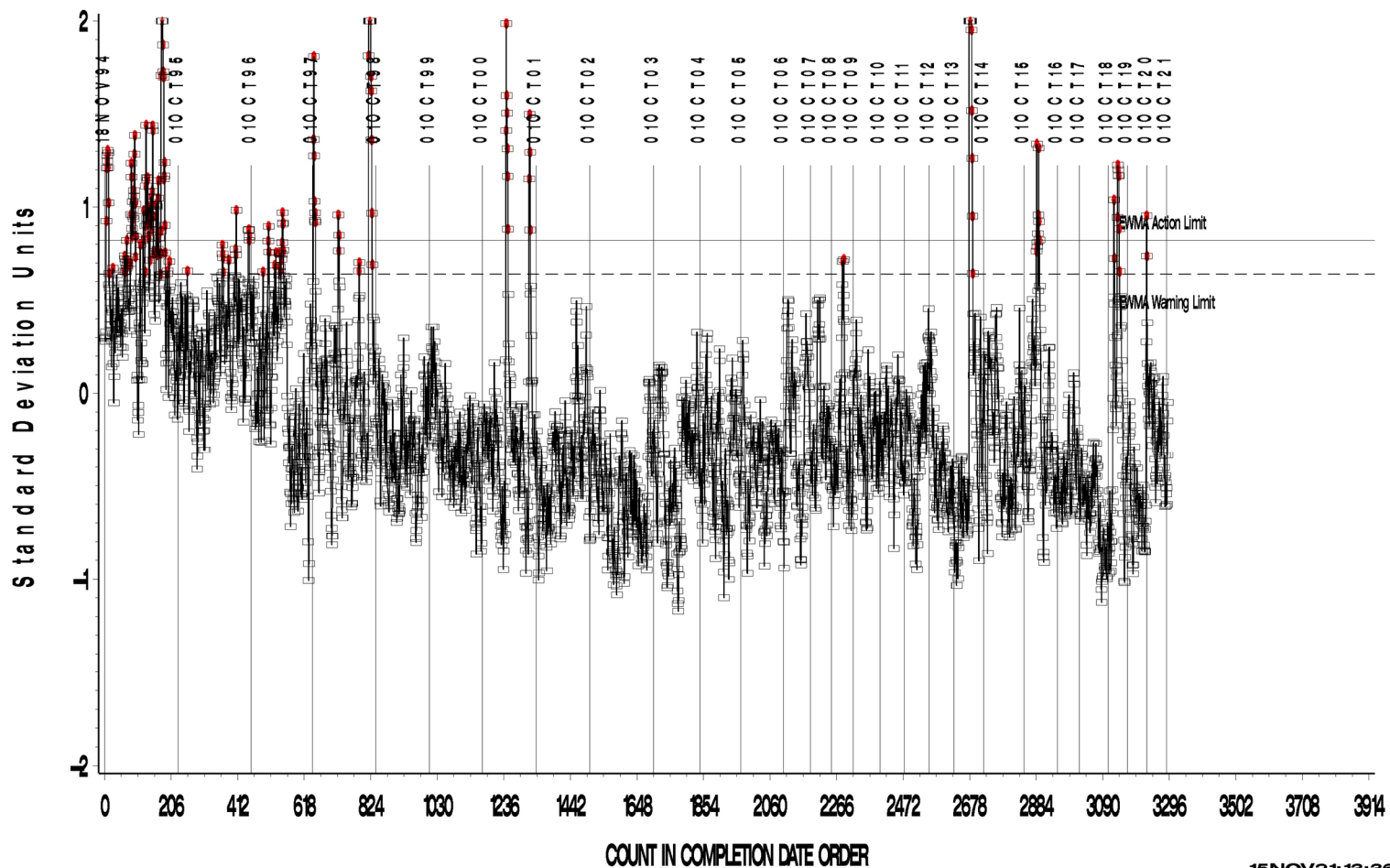
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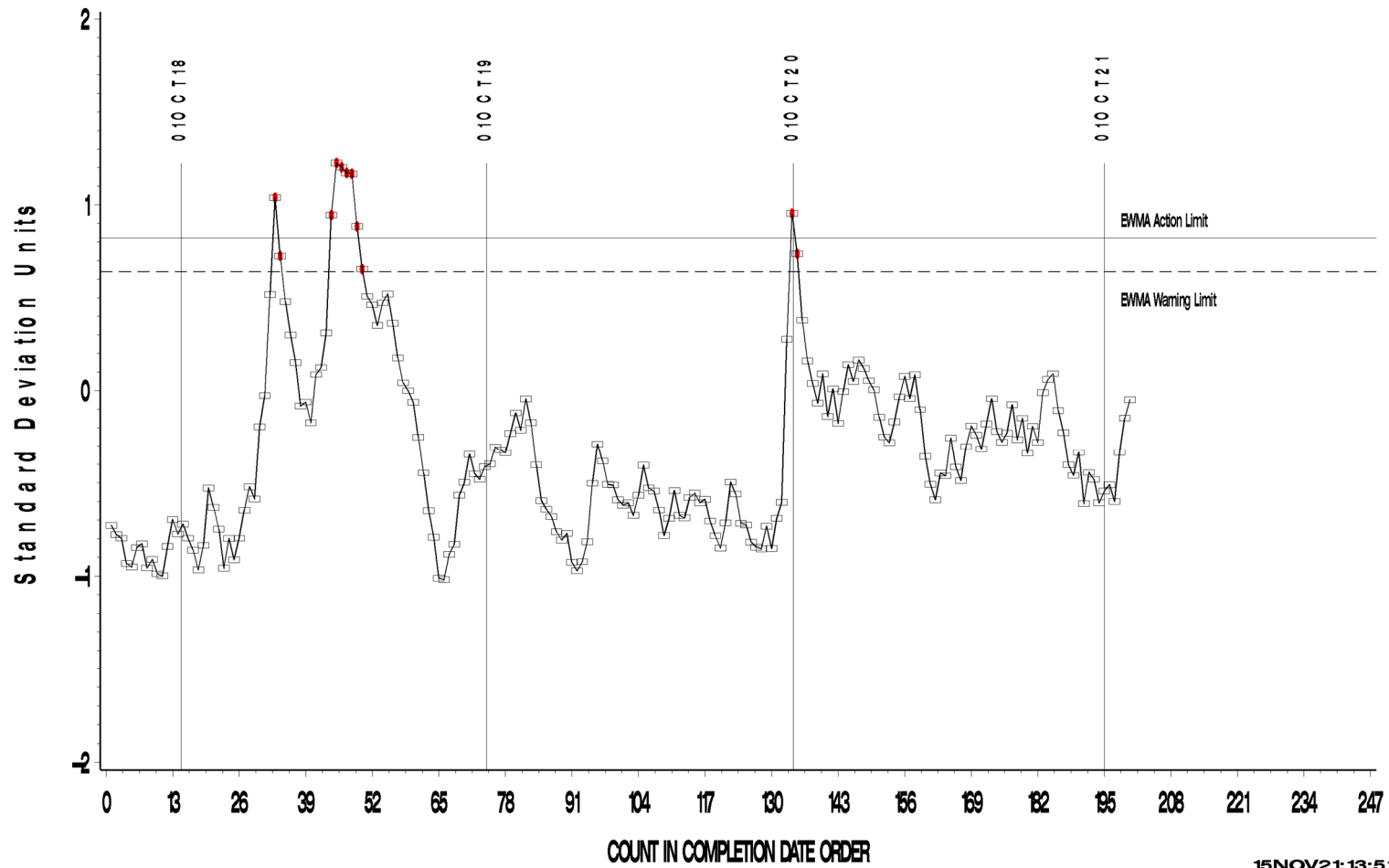
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LTVS Precision Analysis



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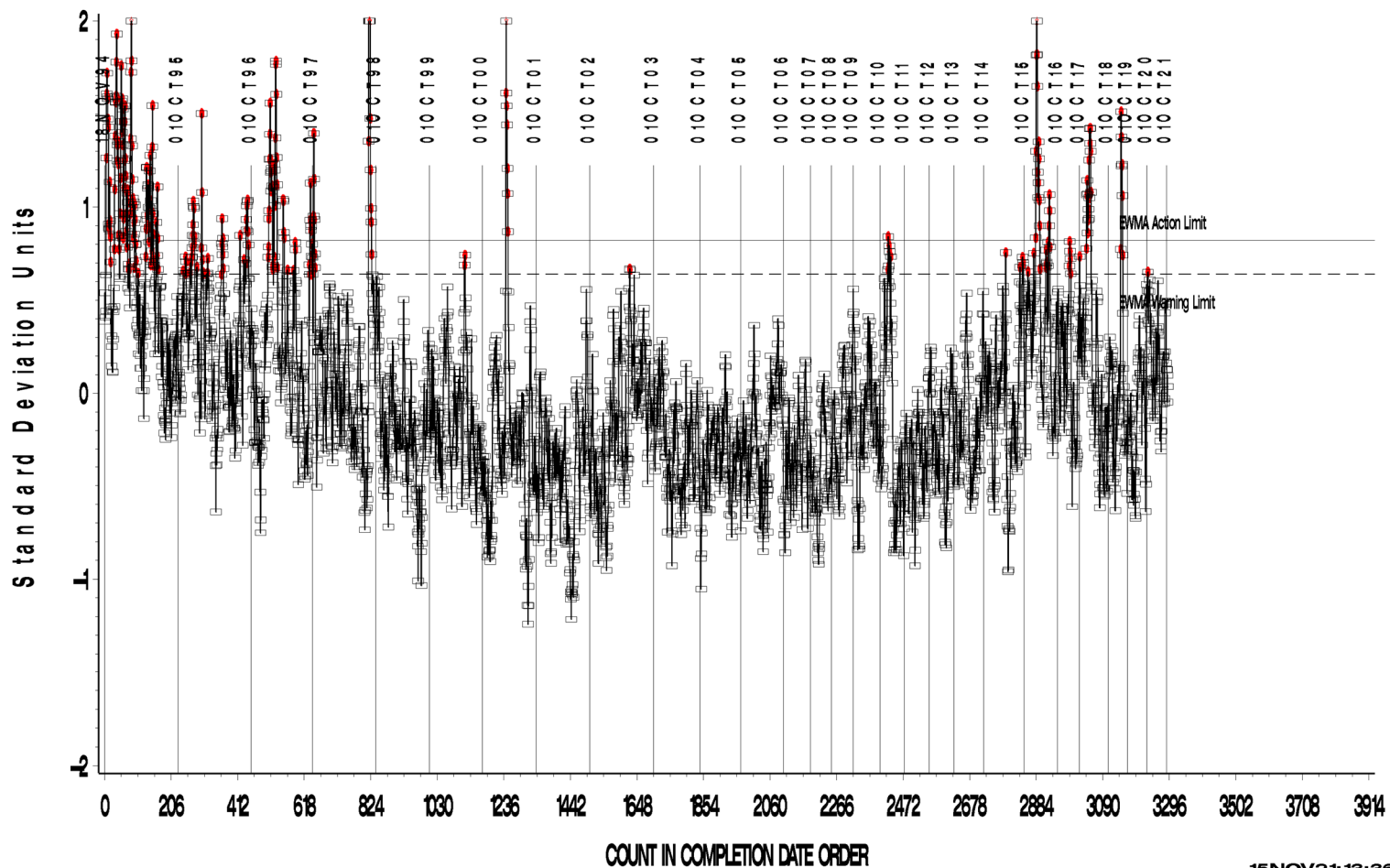
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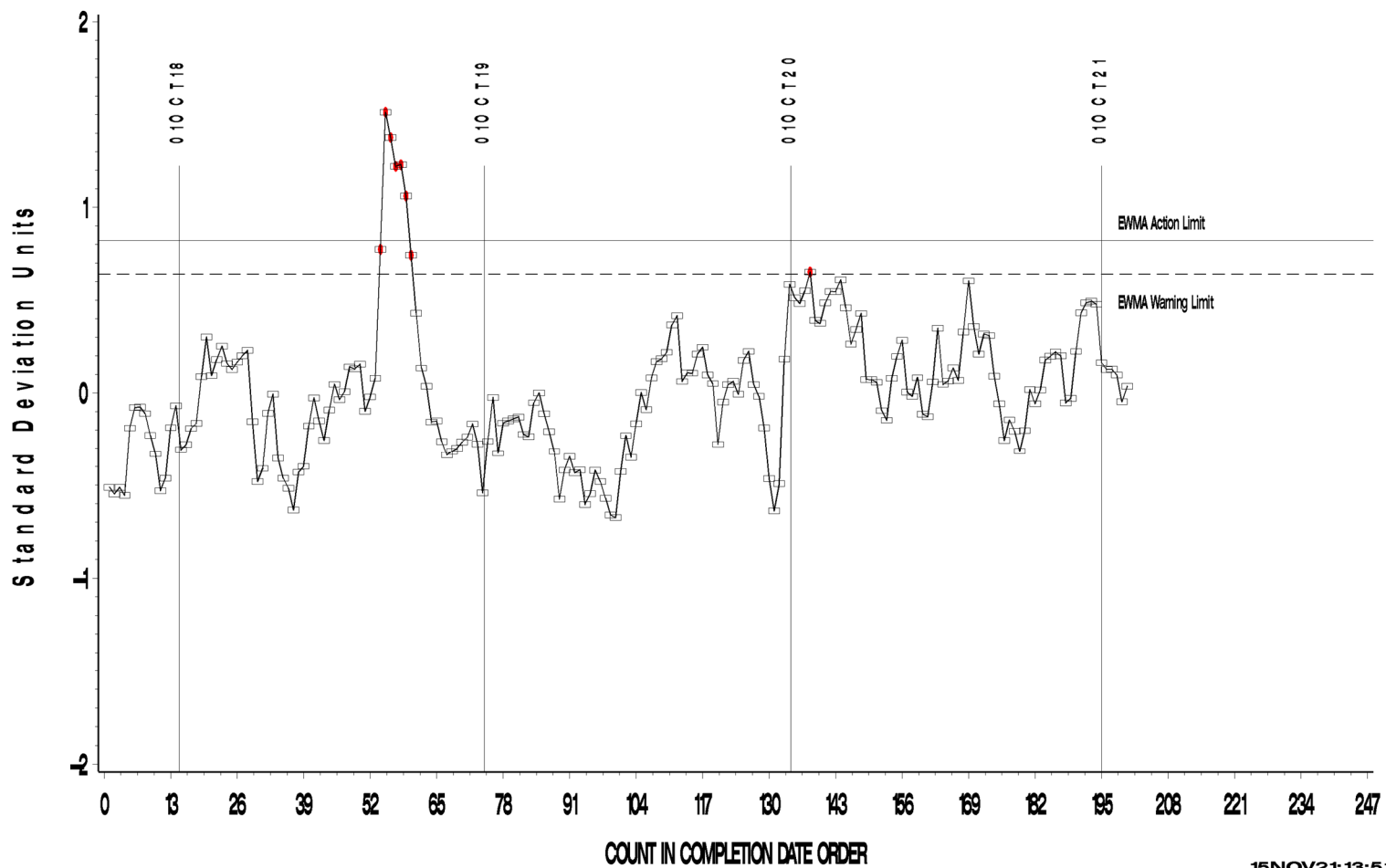
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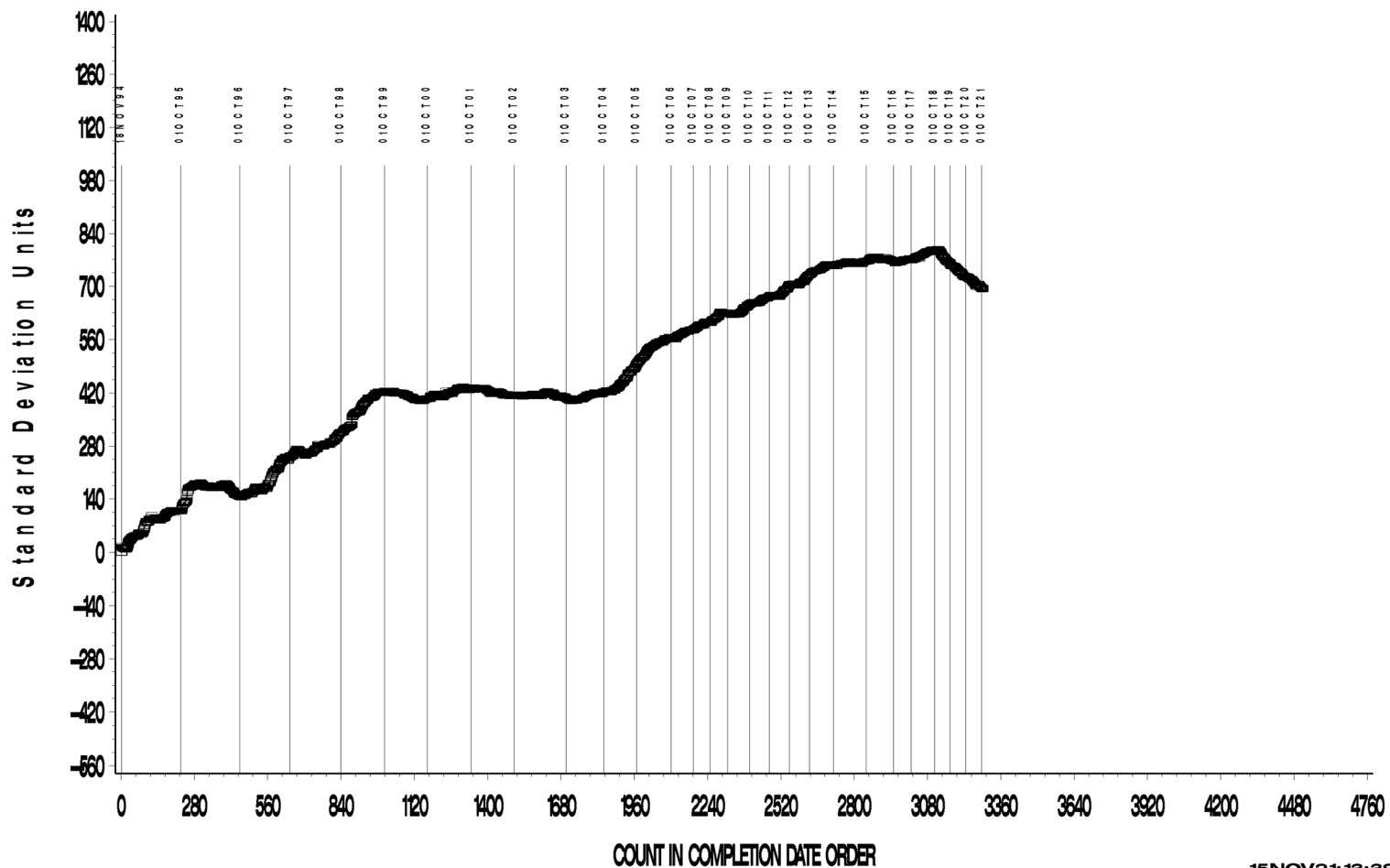
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CUSUM Severity Analysis



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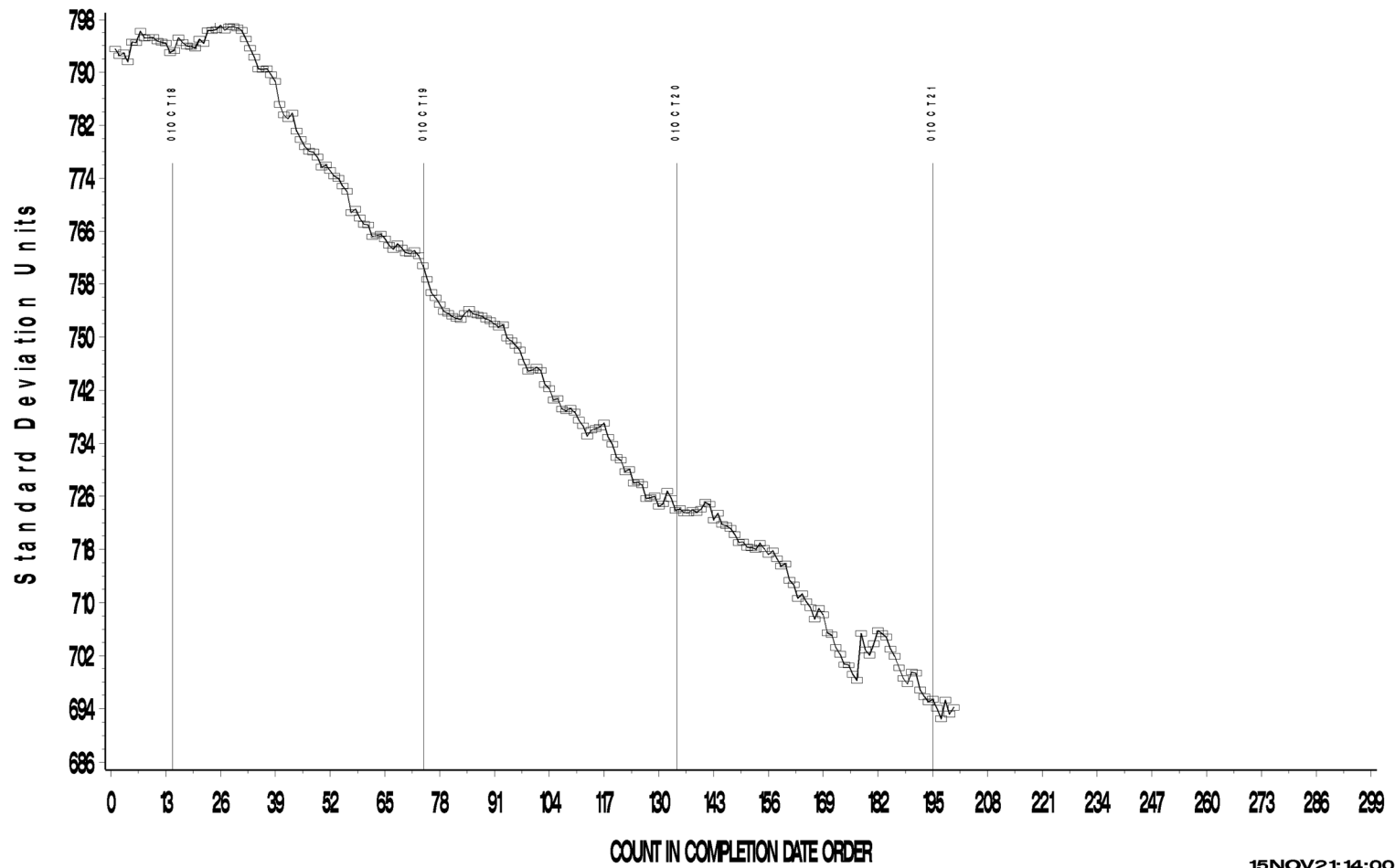
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CUSUM Severity Analysis



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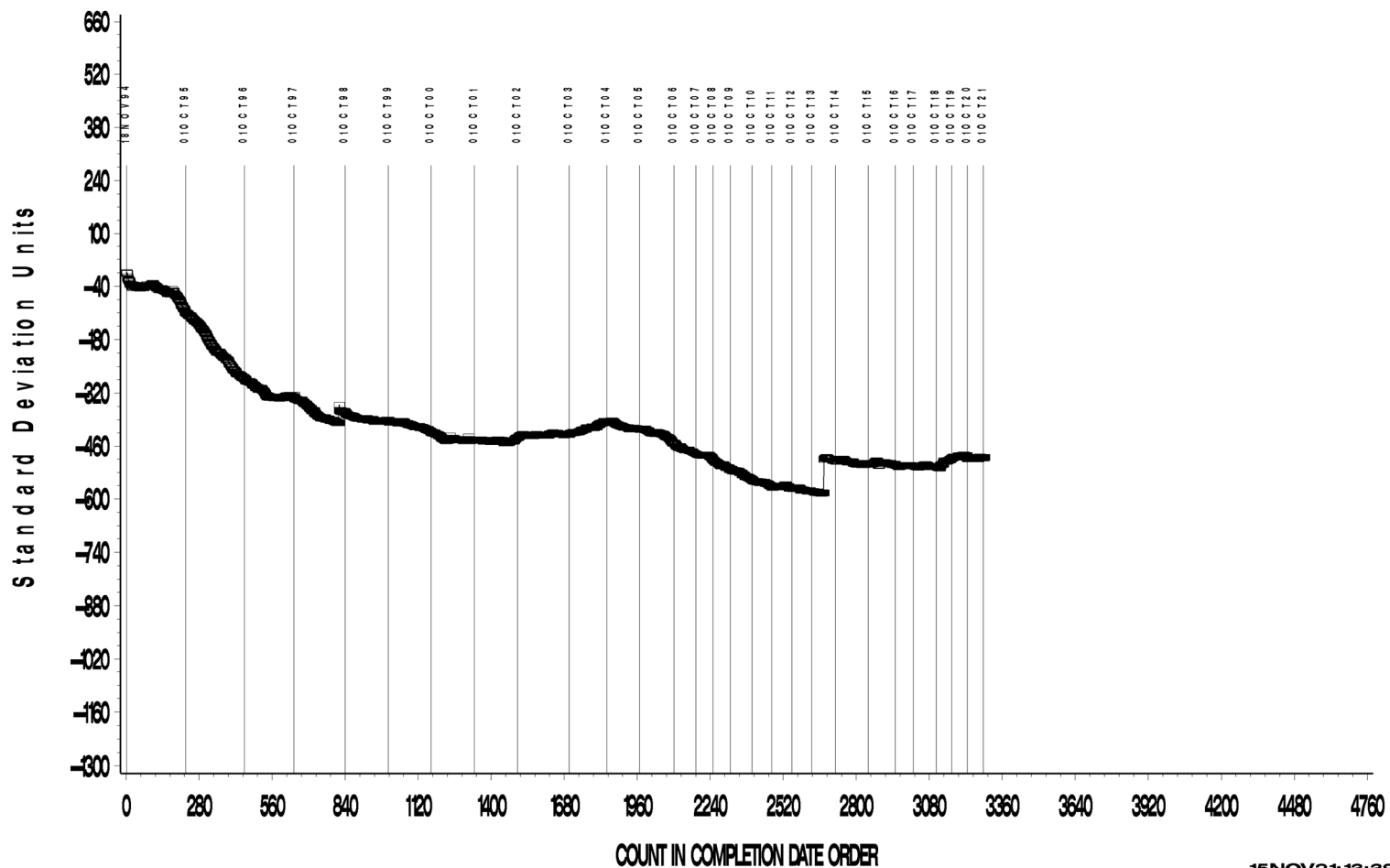
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CUSUM Severity Analysis



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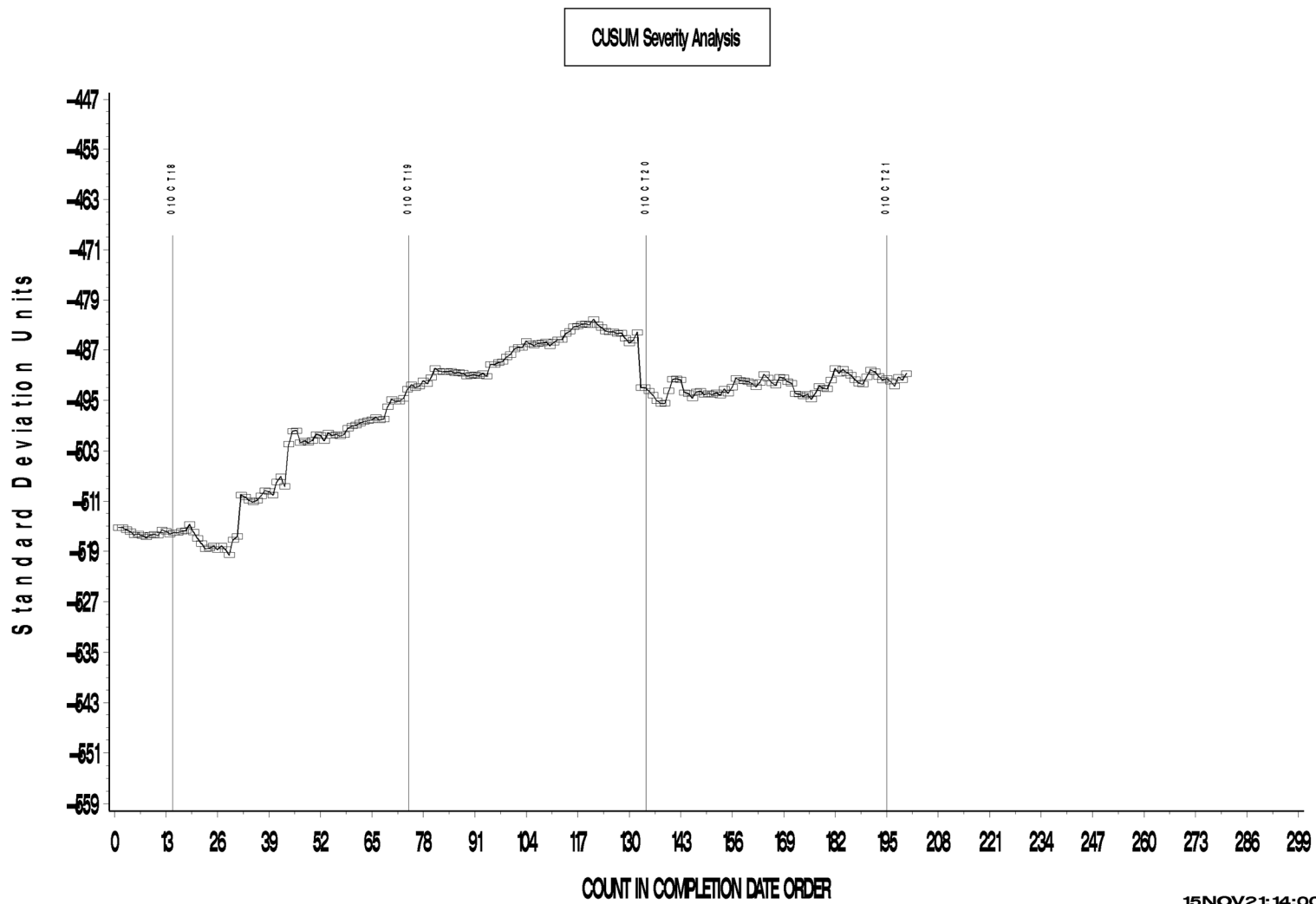
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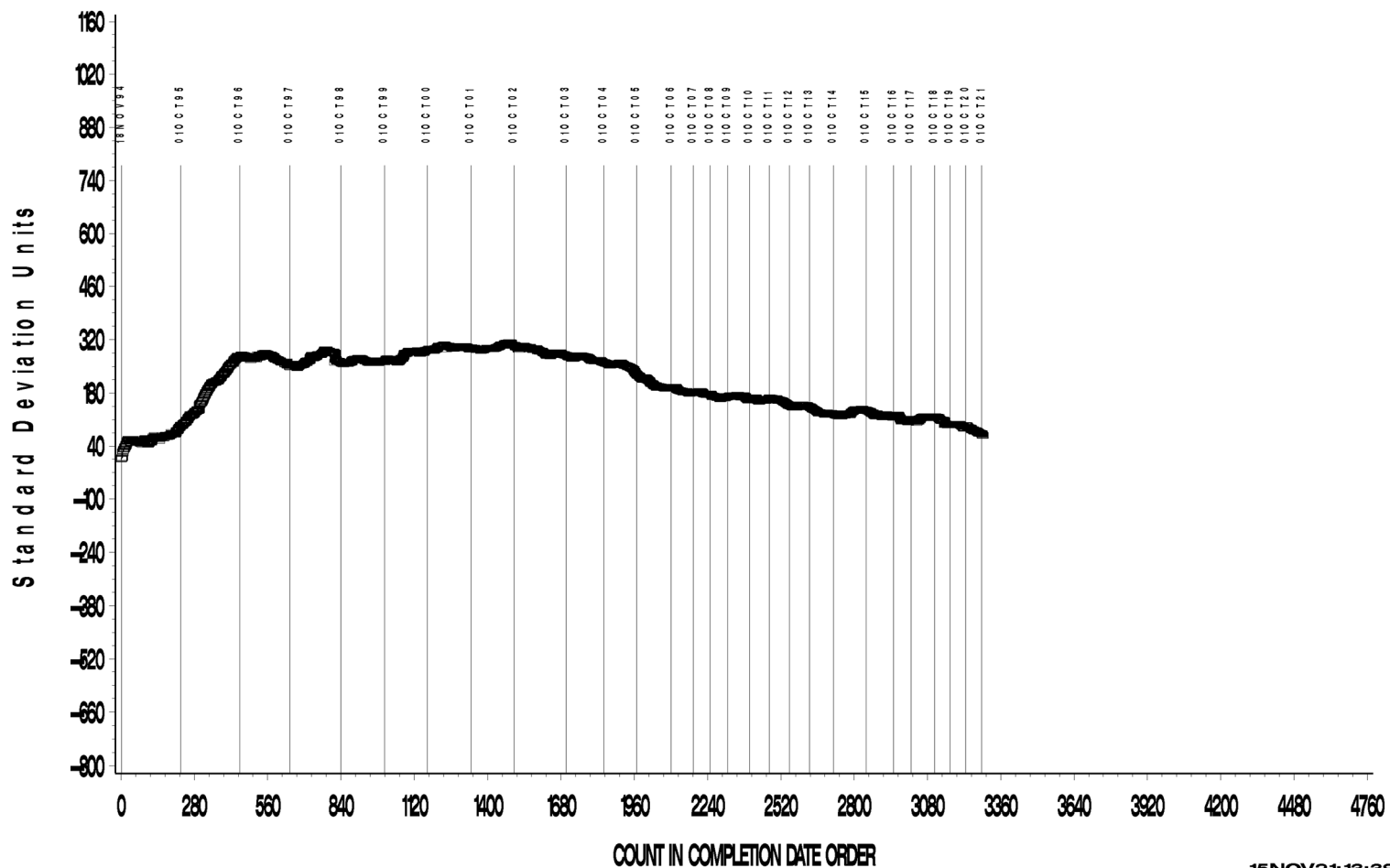
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CUSUM Severity Analysis



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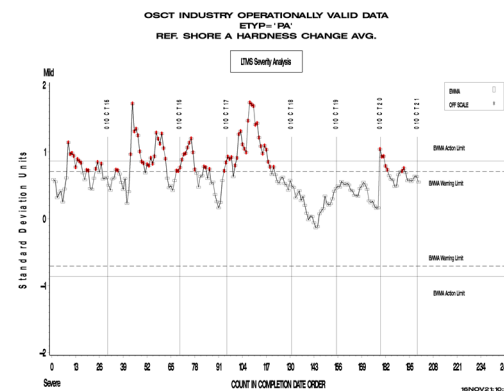
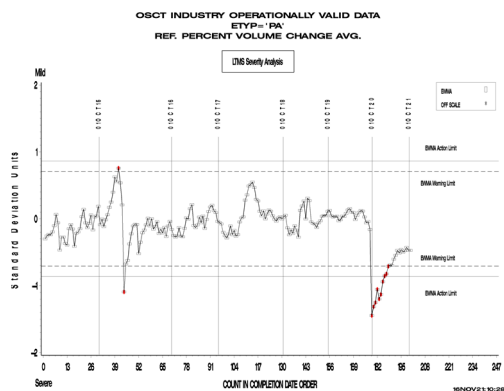
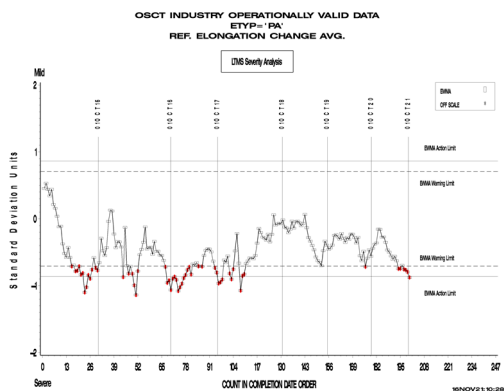
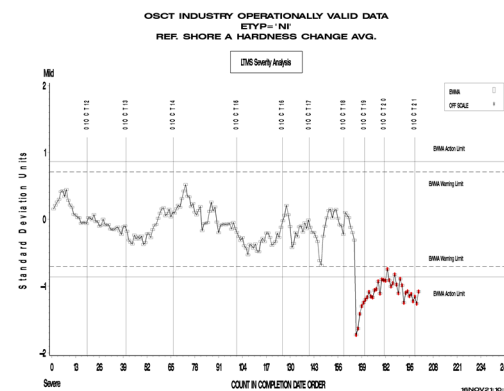
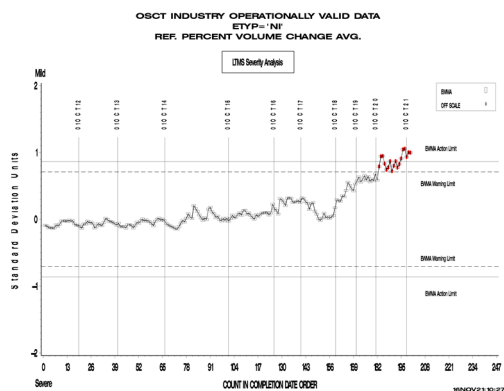
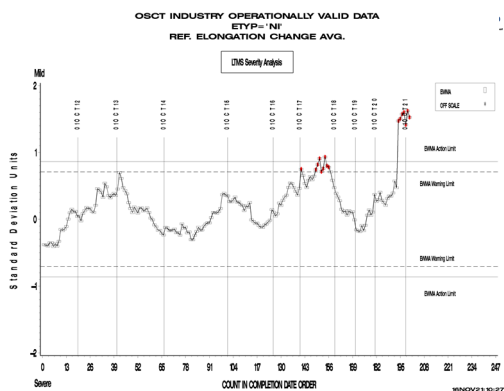
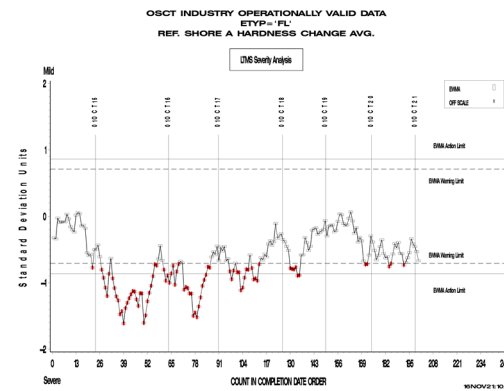
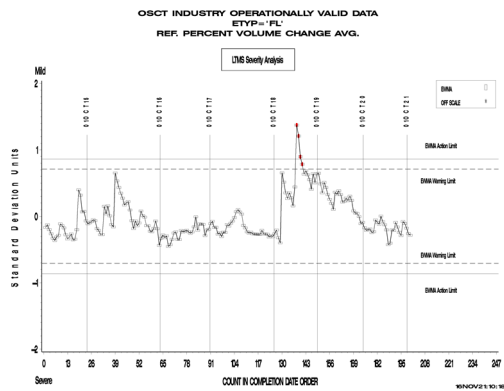
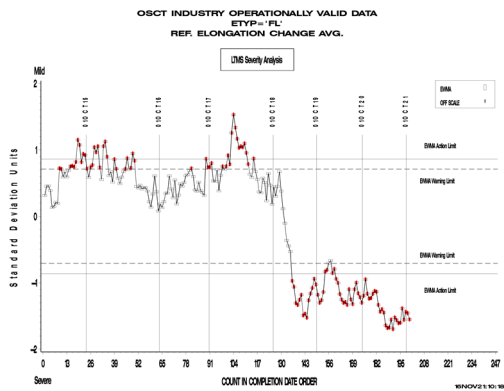
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TIMELINE ADDITIONS

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	Gallons
		Cans	
155-1	4	165	32.8
160-1	2	0	0.0
168	13	0	0.0
169	29	687	136.3
170	27	149	29.7
171	34	102	20.3
Total	109	1103	219.0

Oil 168 is nearing depletion. 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.



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