



Test Monitoring Center

@ Carnegie Mellon University
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<http://astmtmc.cmu.edu>
412-365-1000

MEMORANDUM: 20-011
DATE: April 9, 2020
TO: Dale Smith, Chairman, L-33-1 Surveillance Panel
FROM: Dylan Beck *Dylan Beck*
SUBJECT: L-33-1 Testing from October 1, 2019 through March 31, 2020

Attached is a summary of testing activity this period.

DJB/djb/mem20-011.djb.doc

cc: Frank Farber
Jeff Clark

L-33-1 Surveillance Panel

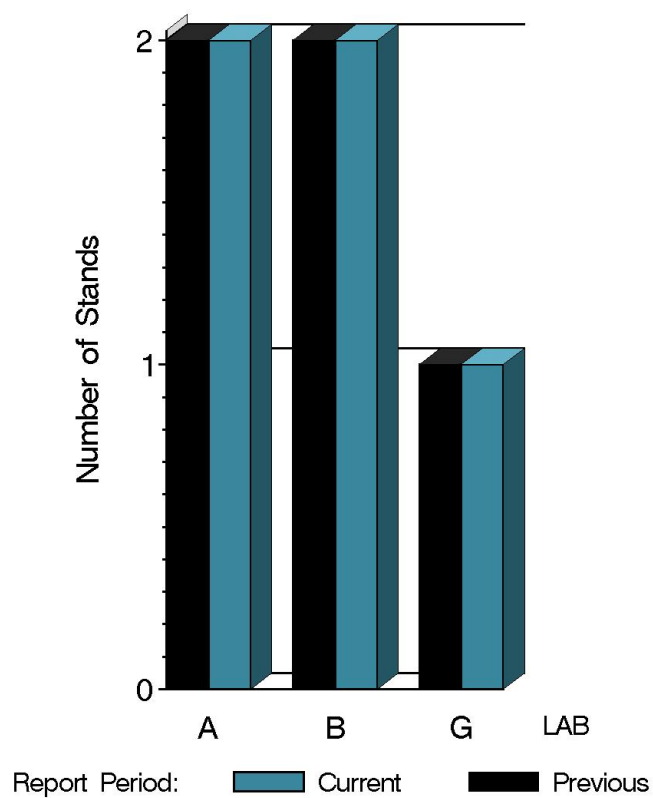
<http://www.astmtmc.cmu.edu/ftp/docs/gear/l331/semiannualreports/L331-04-2020.pdf>

Distribution: email

L-33-1 (D7038)

	Reporting Data	Calibrated on 3-31-20
Number of Labs	3	3
Number of Stands	5	5

BY-LAB STAND
DISTRIBUTION



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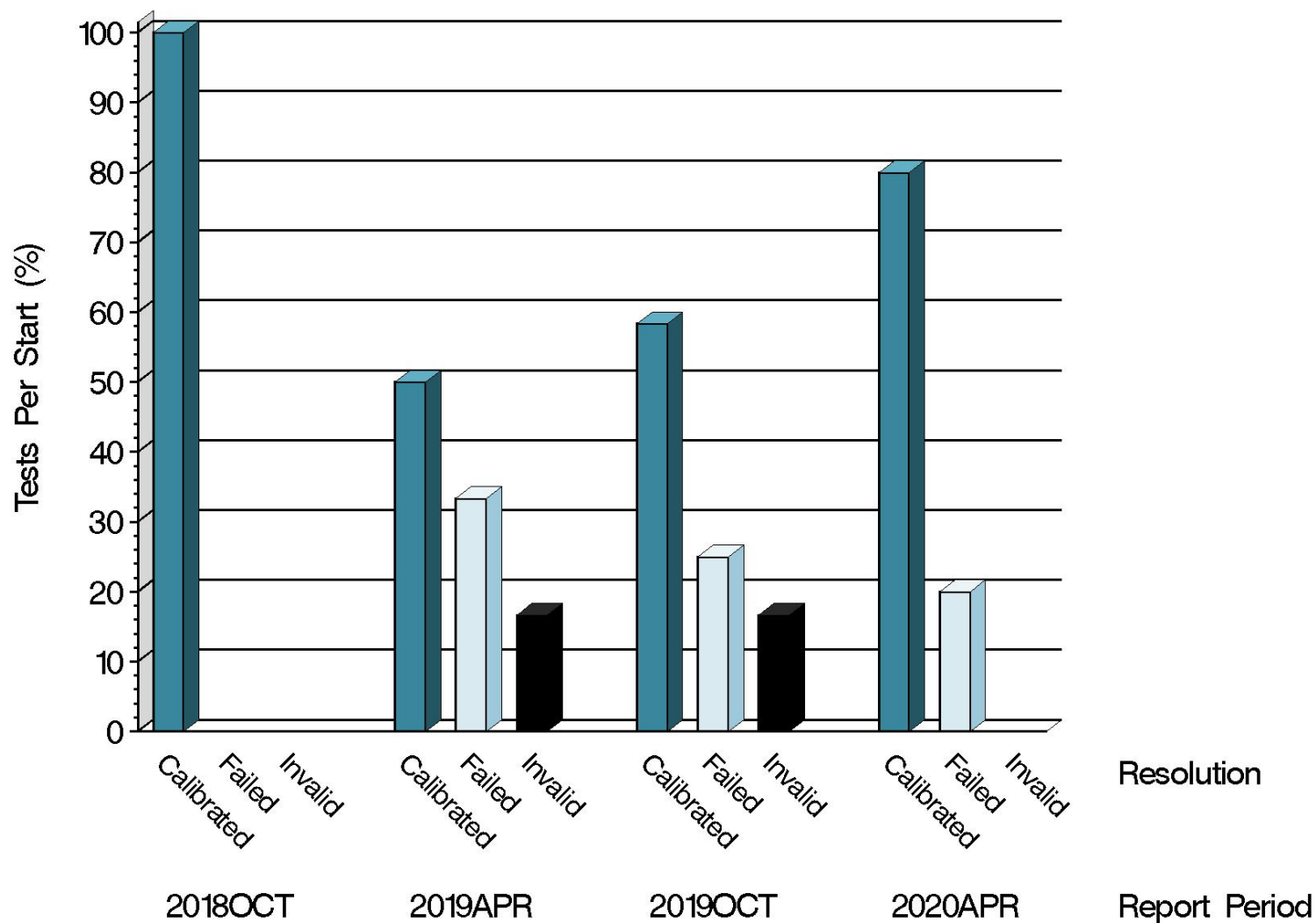
L-33-1 (D7038)

Test Distribution by Oil and Validity

					Totals	
					Last Period	This Period
		123-2	155	155-1		
Accepted for calibration	AC	3	0	1	7	4
Rejected (Mild)	OC	0	0	1	1	1
Rejected (Severe)	OC	0	0	0	0	0
Rejected (Precision)	OC	0	0	0	2	0
Invalidated calibration	LC	0	0	0	0	0
Aborted	XC	0	0	0	2	0
Unacceptable info run	MI	0	0	0	0	0
Accepted information run	NI	3	0	2	1	5
Total		6	0	4	13	10

L-33-1 (D7038)

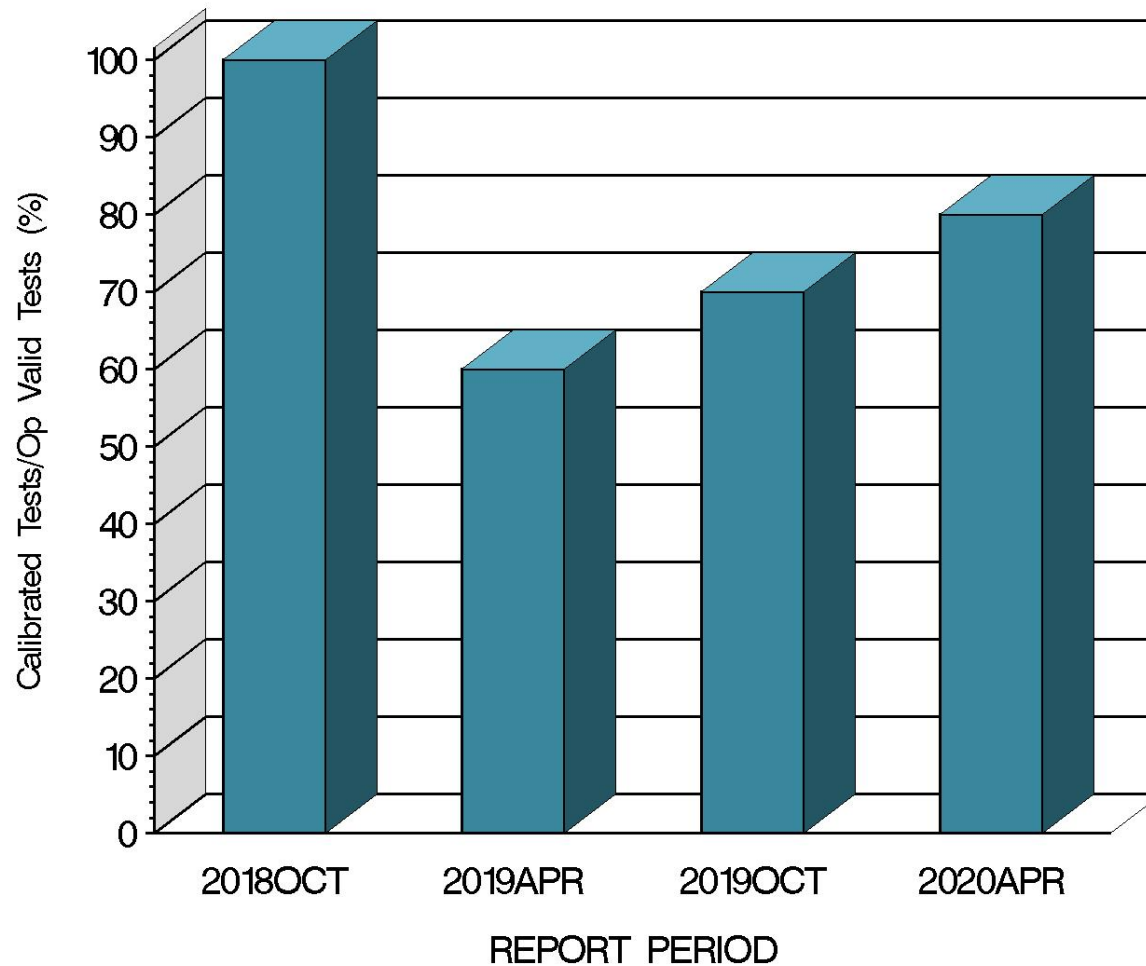
CALIBRATION ATTEMPT SUMMARY



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L-33-1 (D7038)

OPERATIONALLY VALID TESTS
MEETING ACCEPTANCE CRITERIA



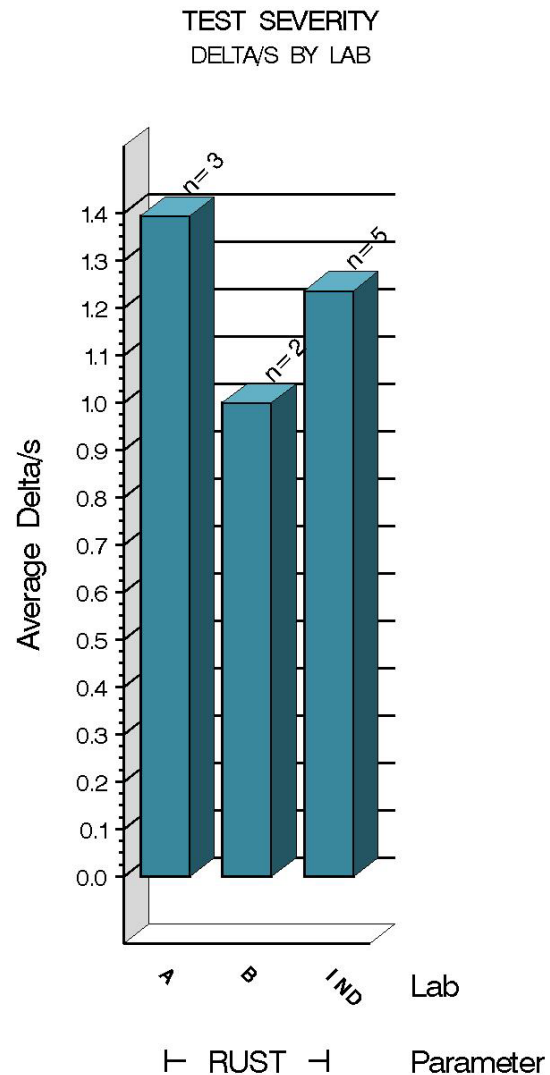
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L-33-1 (D7038)

CAUSES FOR LOST TESTS

Lab	Cause	Oil			Validity			Loss Rate		
		123-2	155	155-1	RC	LC	XC	Lost	Starts	%
	No tests were lost this period							0	10	0
	Lost	0	0	0	0	0	0			
	Starts	6	0	4	10	10	10			
	%	0%	0%	0%	0%	0%	0%			

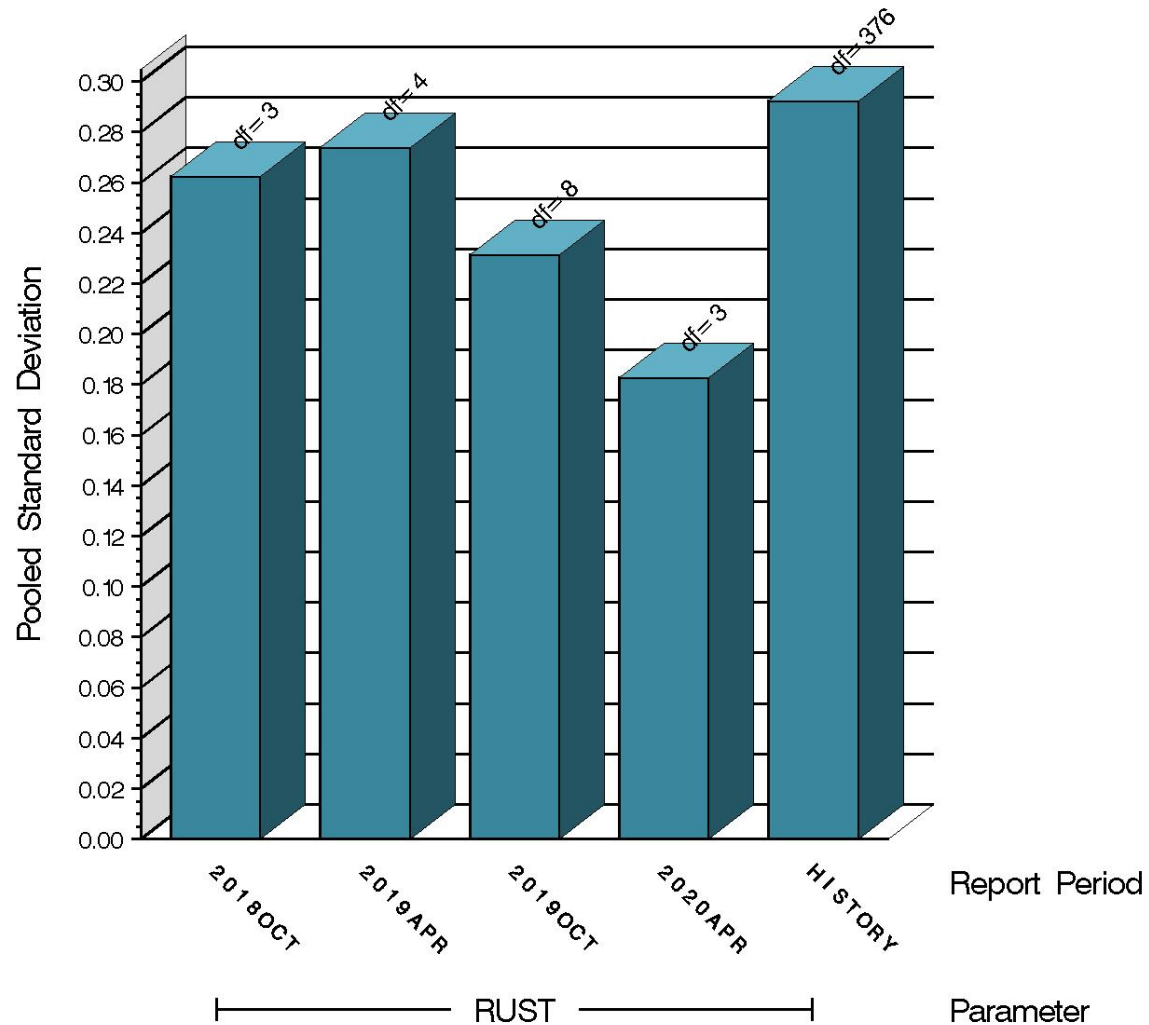
L-33-1 (D7038)



Average Δ/s by Lab		
Lab	n	RUST
A	3	1.394
B	2	1.000
Industry	5	1.236
Shift	5	0.309 merits

L-33-1 (D7038)

TEST PRECISION
POOLED STANDARD DEVIATION
BY SIX-MONTH ASTM REPORT PERIOD



9:29:58 01APR2020

L-33-1 (D7038)

SUMMARY OF SEVERITY & PRECISION

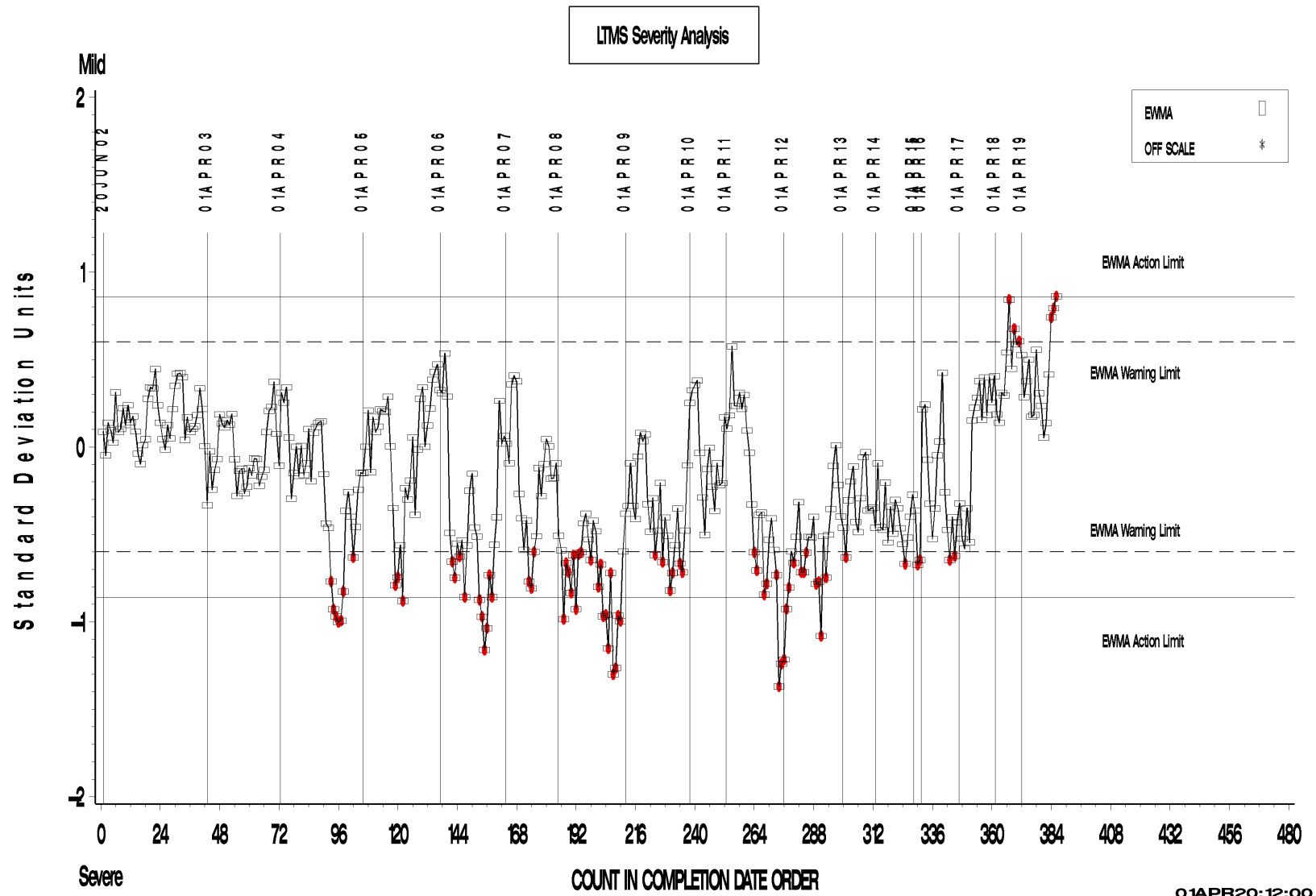
Severity
The severity action limit was exceeded in the mild direction with the last test of the period.
Precision
The precision action limit was not exceeded during this period.

Industry control charts follow.

L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA

FINAL RUST RESULT

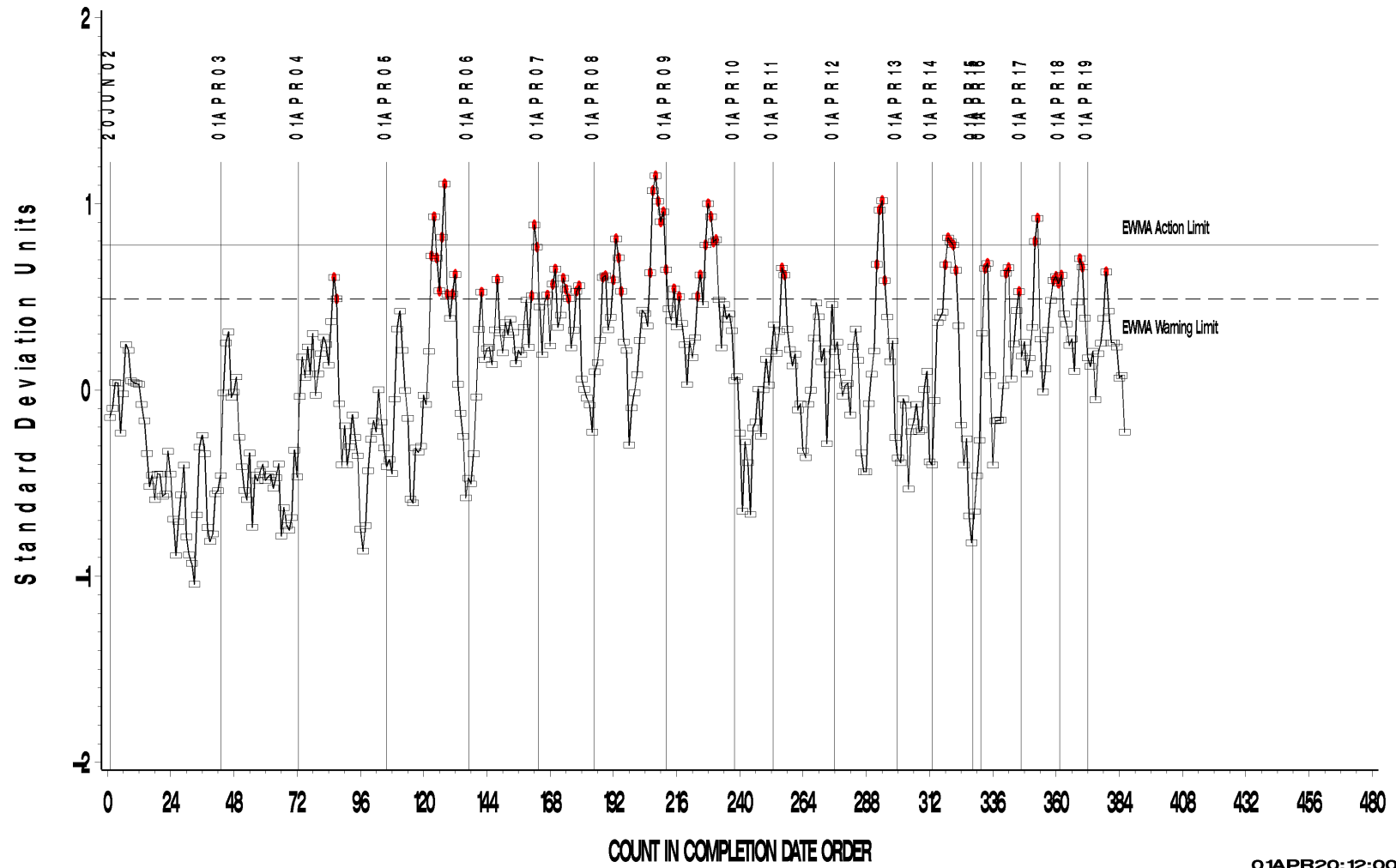


L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA

FINAL RUST RESULT

LTMS Precision Analysis



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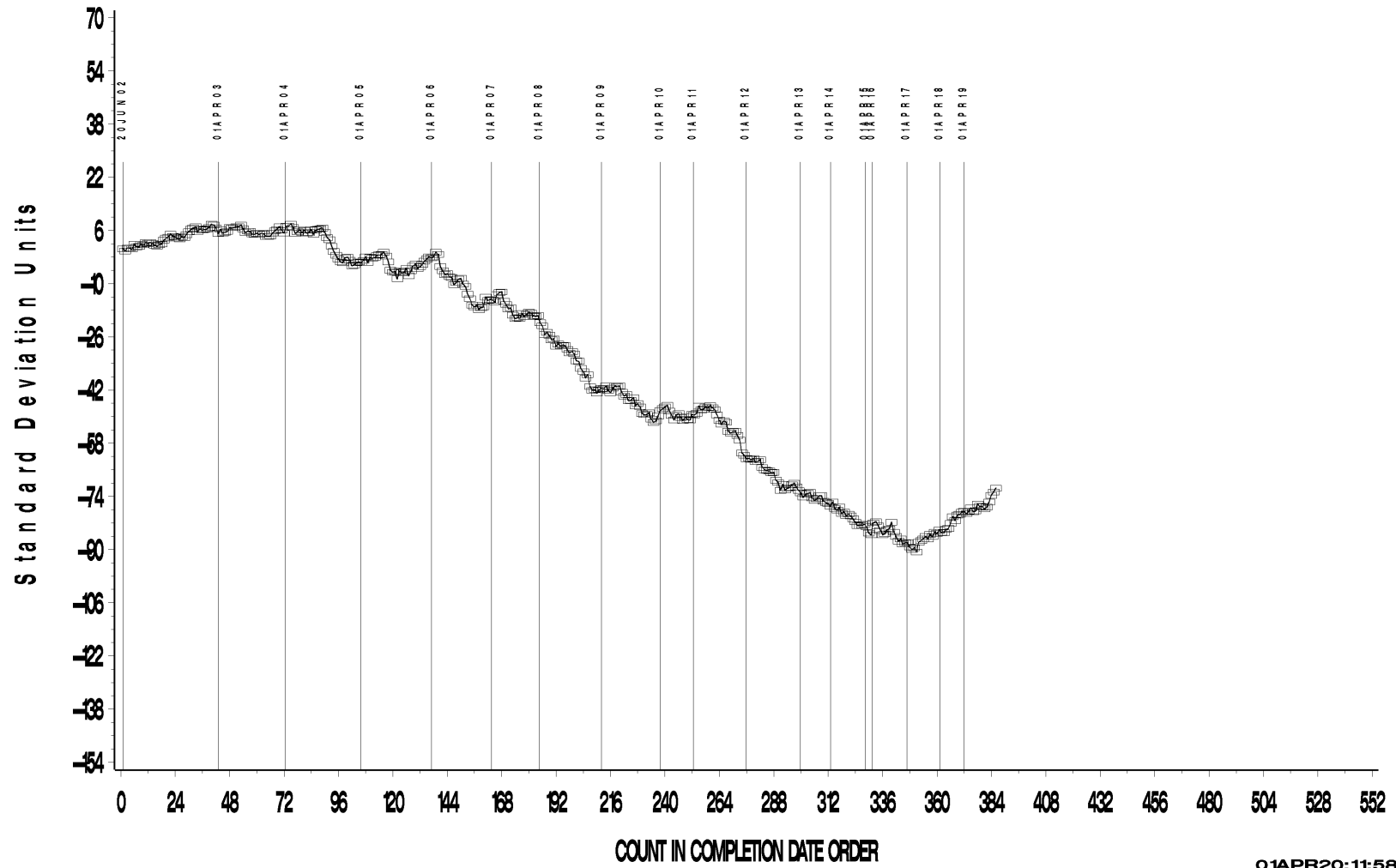


L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA

FINAL RUST RESULT

CUSUM Severity Analysis



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L-33-1 (D7038)

TIMELINE ADDITIONS

Effective Date	Information Letter	Event
Feb 25, 2020	20-1	Clarification added to the test procedure to address that the axle housing cover rating is to exclude the plug as a rated area.

L-33-1 (D7038)

LAB VISITS

One lab visit was conducted during this reporting period. All reviewed elements were found to be in accordance with the test procedure

INFORMATION LETTERS

Info letter 20-001 was issued during this period to clarify that the plug was not to be considered a rated area on the axle housing cover.

L-33-1 (D7038)

STATUS OF REFERENCE OIL SUPPLY

Oil	Cans @ Labs	@ TMC	
		Cans	Gallons
123-2	17	90	90.0
155	0	27	27.5
155-1	16	65	65.4
Total	33	182	182.9

The TMC quantity remaining presumes usage only for L-33-1 testing. Oil 155/155-1 is also used in other test areas (L-37, L-37-1, L-60-1, and HTCT).