




Test Monitoring Center

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412-365-1000

MEMORANDUM: 17-013
DATE: May 12, 2017
TO: Angela Trader, Chairman, L-33-1 Surveillance Panel
FROM: Scott Parke 
SUBJECT: L-33-1 Testing from October 1, 2016 through March 31, 2017

Attached is a summary of testing activity this period.

SDP/sdp/mem17-013.sdp.doc

cc: Frank Farber

Jeff Clark

L-33-1 Surveillance Panel

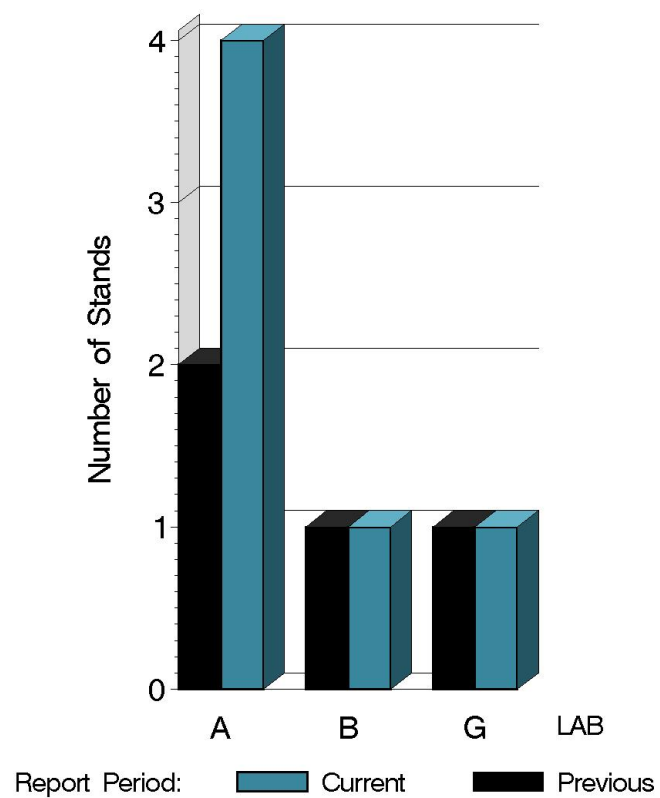
<ftp://ftp.astmtmc.cmu.edu/docs/gear/l331/semiannualreports/l331-04-2017.pdf>

Distribution: email

L-33-1 (D7038)

	Reporting Data	Calibrated on 3-31-17
Number of Labs	3	3
Number of Stands	6	4

BY-LAB STAND
DISTRIBUTION



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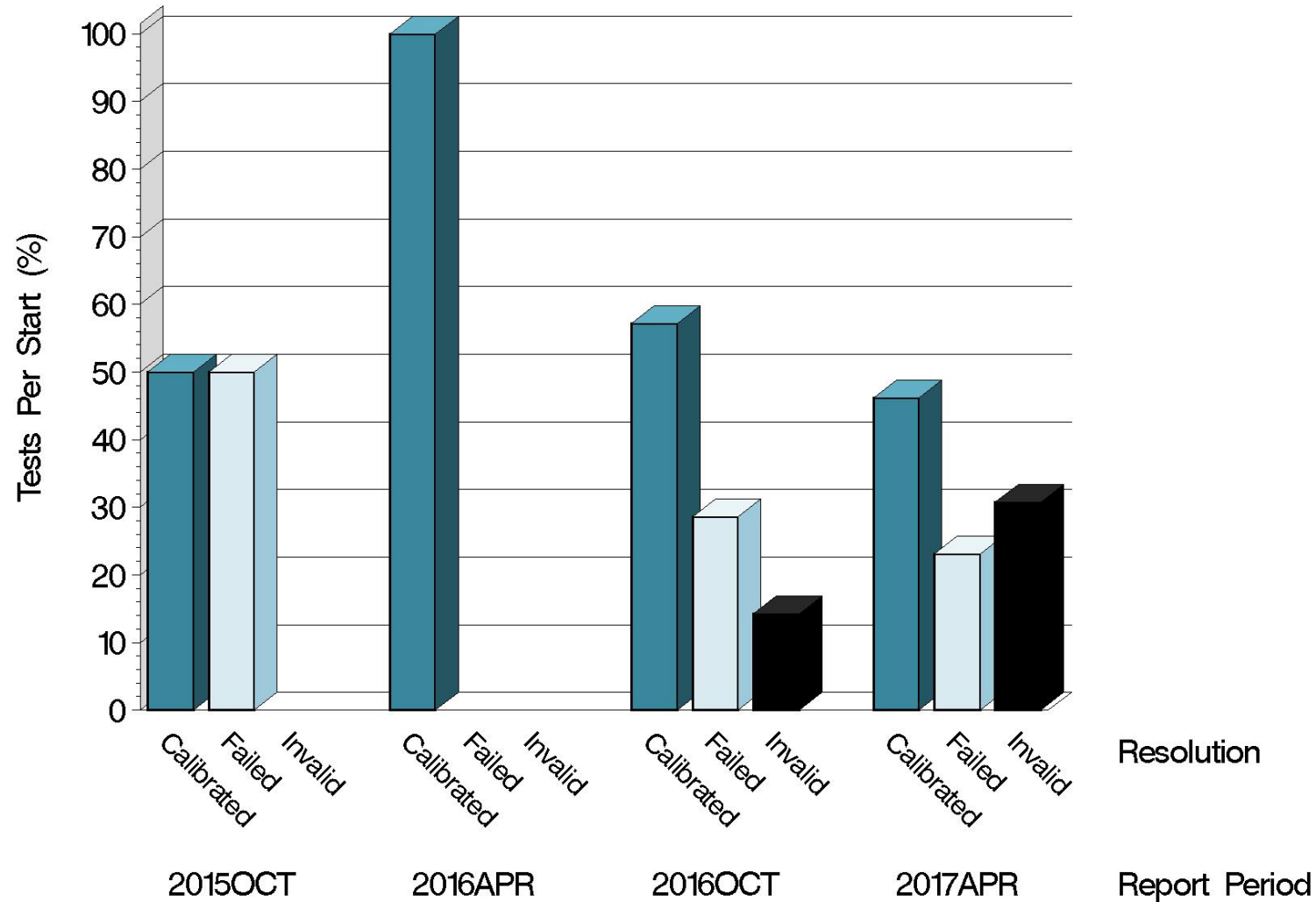
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Test Distribution by Oil and Validity

					Totals	
					Last Period	This Period
		123-2	155	155-1		
Accepted for calibration	AC	3	0	3	4	6
Rejected (Mild)	OC	0	0	0	0	0
Rejected (Severe)	OC	0	0	0	0	0
Rejected (Precision)	OC	0	0	3	2	3
Invalidated calibration	LC	0	0	1	1	1
Aborted	XC	3	0	0	0	3
Unacceptable info run	MI	0	0	0	0	0
Accepted information run	NI	0	0	1	0	1
Total		6	0	8	7	14

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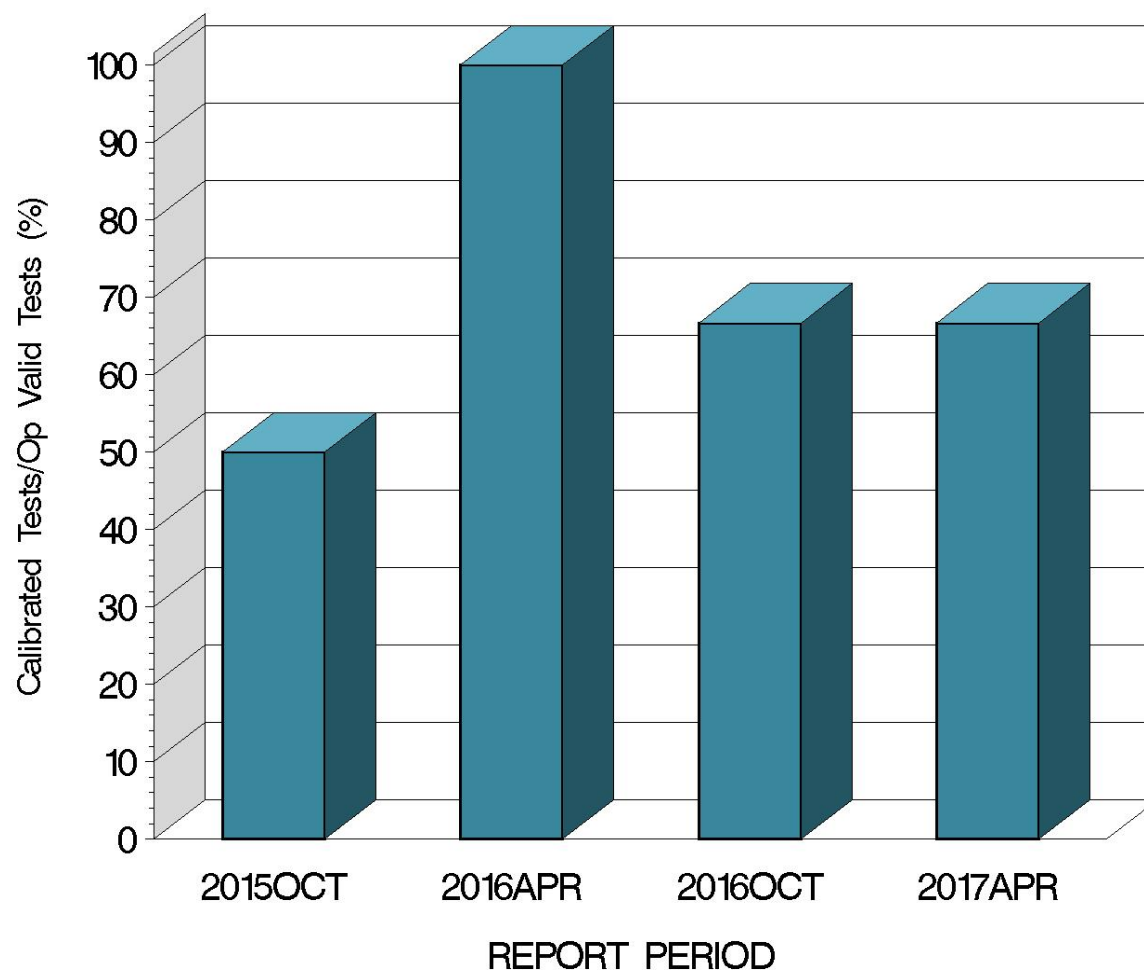
CALIBRATION ATTEMPT SUMMARY



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OPERATIONALLY VALID TESTS
MEETING ACCEPTANCE CRITERIA

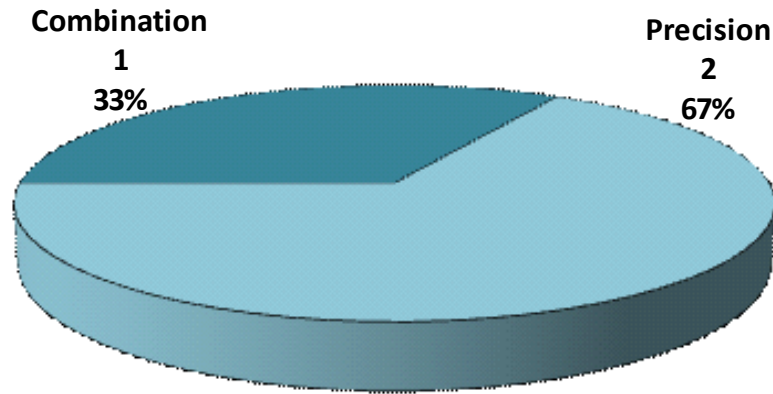


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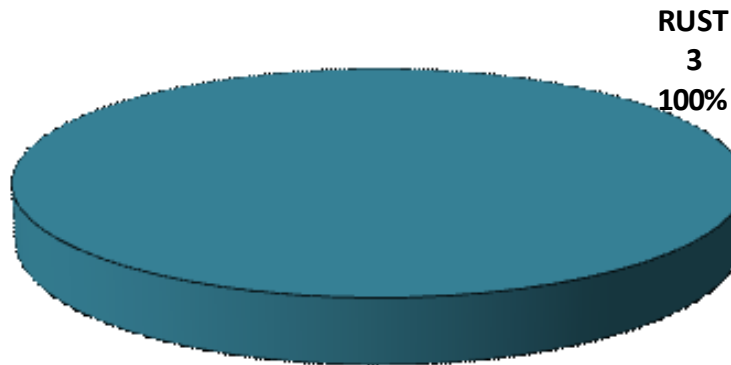
L-33-1 (D7038)

CAUSES FOR FAILED TESTS

By Alarm Type



By Parameter

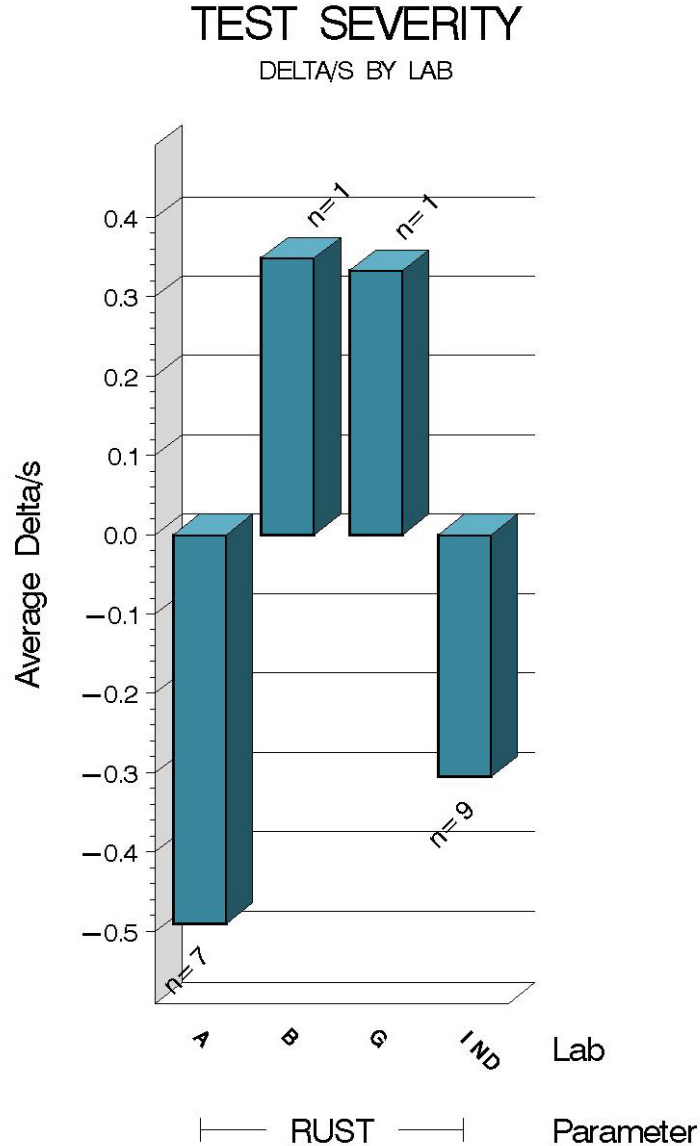


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CAUSES FOR LOST TESTS

		Oil			Validity			Loss Rate		
Lab	Cause	123-2	155	155-1	RC	LC	XC	Lost	Starts	%
A	Motoring phase temp out of spec	●					●	2	9	22%
	Severe rust attributed to motoring phase temp out of spec	●					●			
G	Motoring phase temp out of spec	●					●	2	3	67%
	Motoring phase temp out of spec			●		●				
		Lost	3	0	1	0	1	3		
		Starts	6	0	8	14	14	14		
		%	50%	0%	13%	0%	7%	21%		

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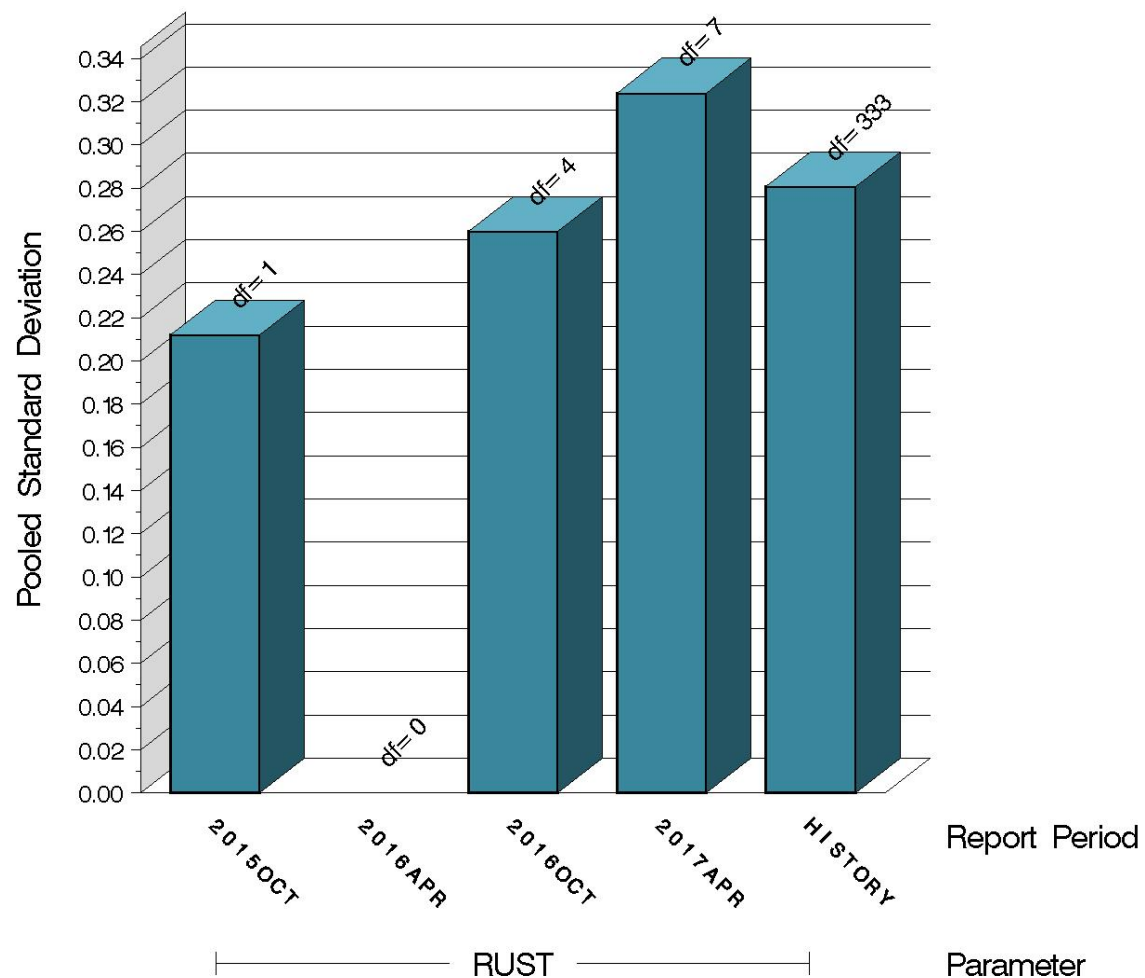


Average Δ/s by Lab		
Lab	n	RUST
A	7	-0.490
B	1	0.349
G	1	0.333
Industry	9	-0.305
Shift	9	-0.076 merits

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TEST PRECISION

POOLED STANDARD DEVIATION
BY SIX-MONTH ASTM REPORT PERIOD



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SUMMARY OF SEVERITY & PRECISION

Severity
Average RUST Δ /s this period was -0.076. Using the target standard deviation for oil 155 (0.250), this equates to 0.019 merits severe.
Precision
A very mild result ($Y_i = 2.000$) followed by a very severe one ($Y_i = -3.000$) from lab A generated precision warnings that have since been cleared.

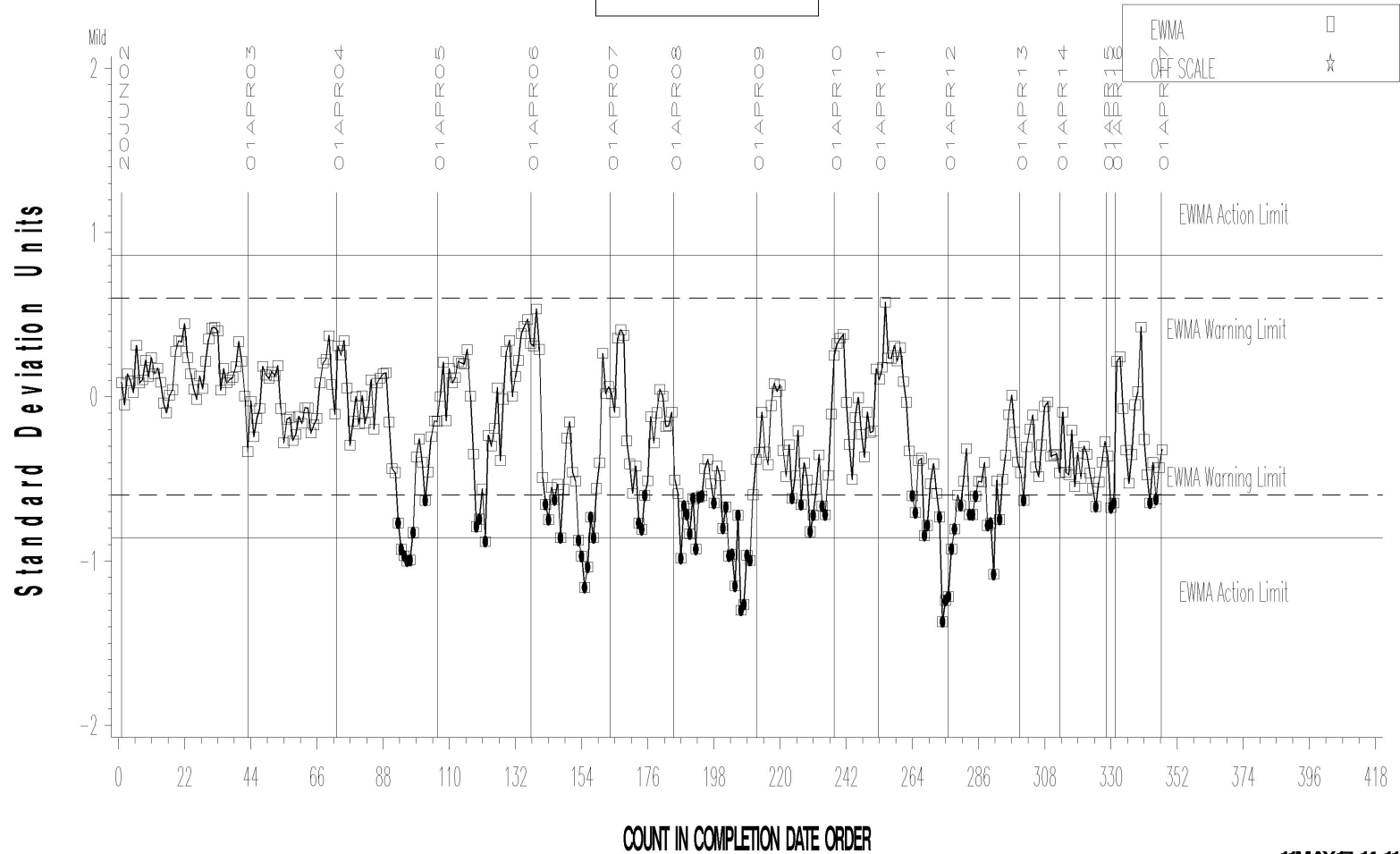
Industry control charts follow.

L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA

FINAL RUST RESULT

LTMS Severity Analysis



Severity

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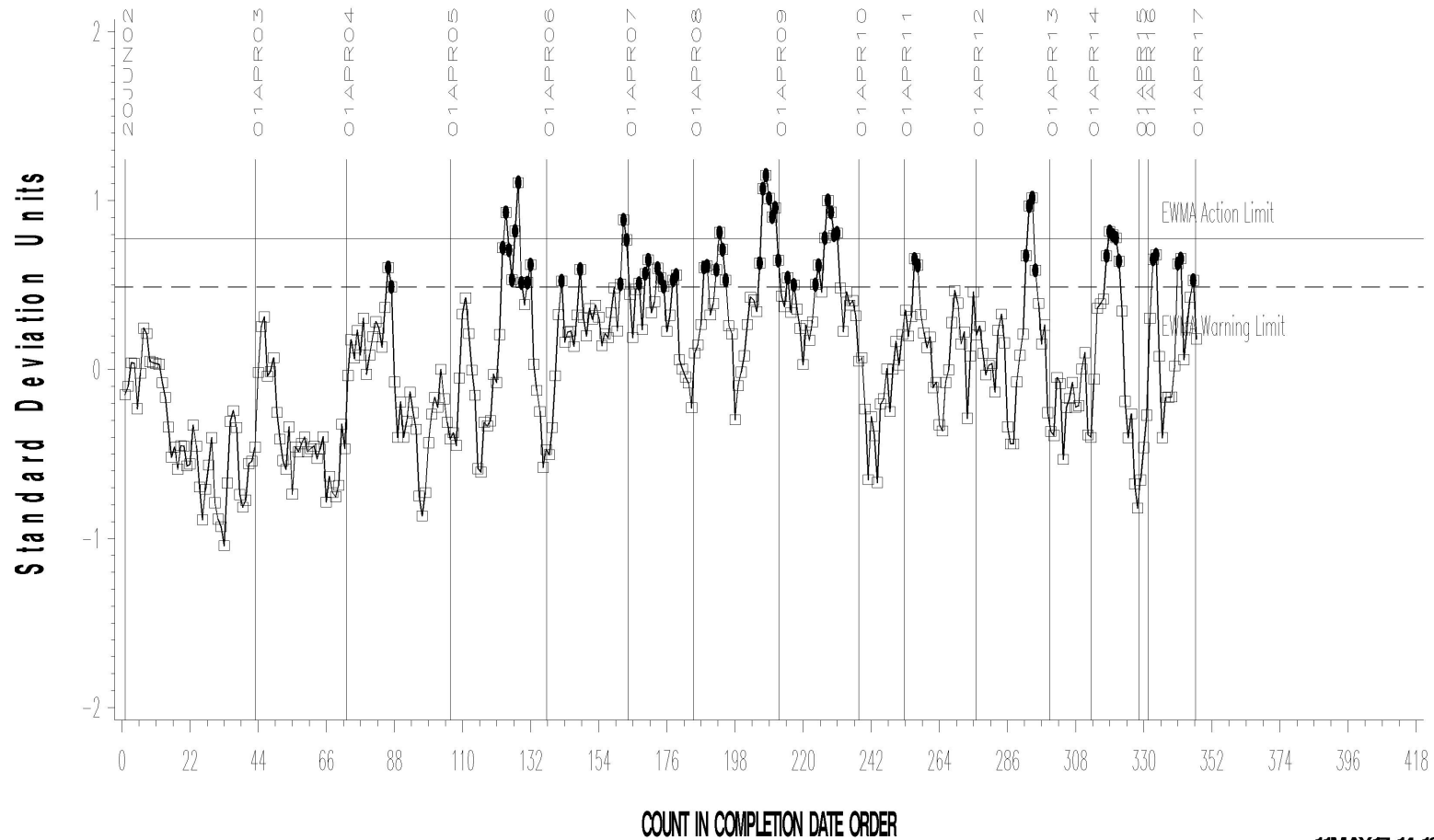
L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA



FINAL RUST RESULT

LTMS Precision Analysis



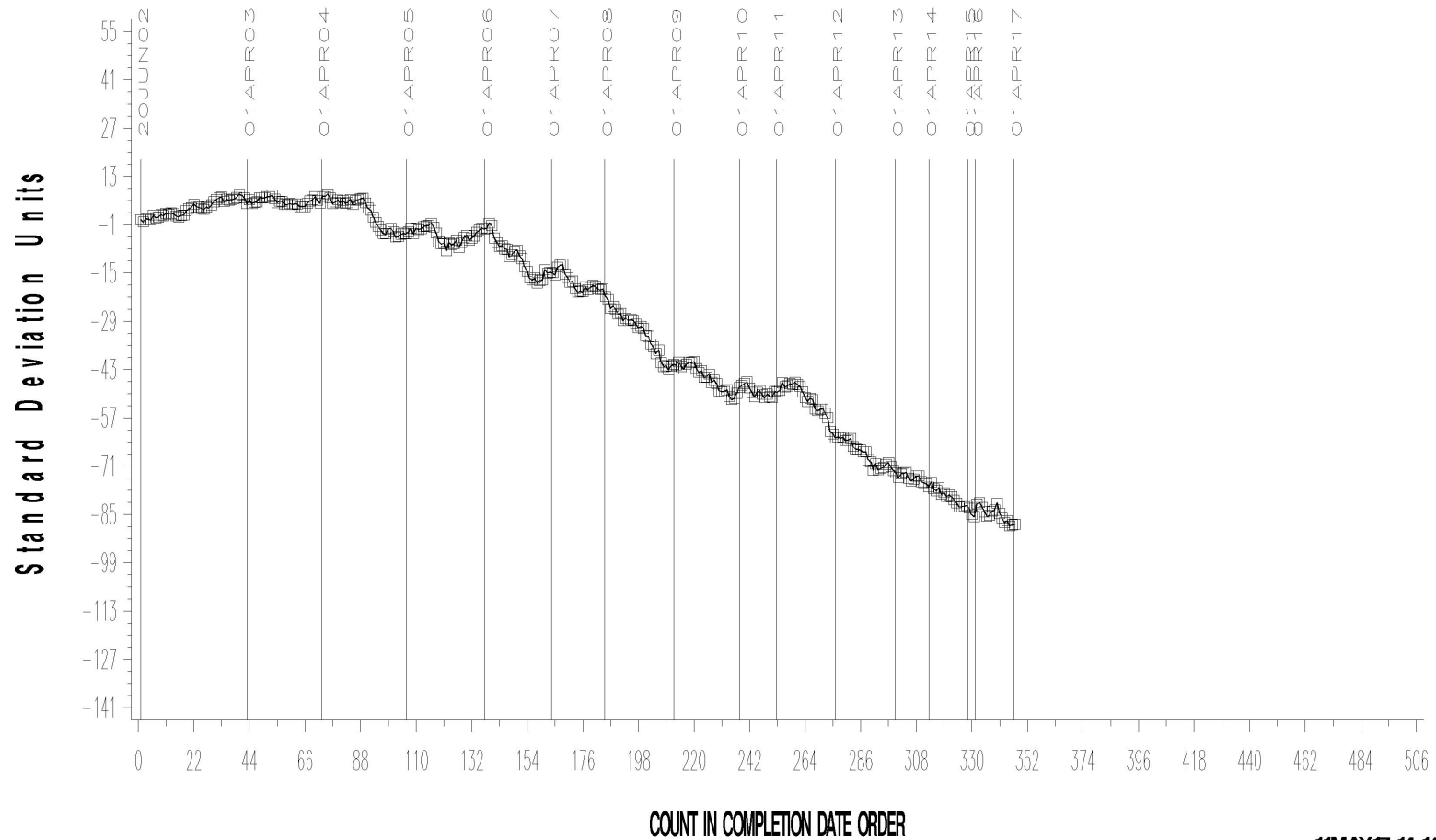
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L-33-1 INDUSTRY OPERATIONALLY VALID DATA

FINAL RUST RESULT

CUSUM Severity Analysis



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TIMELINE ADDITIONS

Effective Date	Information Letter	Event
20161220	16-3	Editorial revisions.

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LAB VISITS

One L-33-1 lab visit was conducted during this period. No procedural non-conformances were found.

INFORMATION LETTERS

Information Letter 16-3 was issued during this period to correct some minor editorial mistakes in the text introduced with Information Letter 16-1.

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STATUS OF REFERENCE OIL SUPPLY

		@ TMC	
Oil	Cans @ Labs	Cans	Gallons
123-2	16	116	116.8
155	0	15	15.0
155-1	13	186	186.5
Total	29	317	318.2

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).