




## Test Monitoring Center

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

MEMORANDUM: 14-023  
DATE: October 13, 2014  
TO: Angela Trader, Chairman, L-33-1 Surveillance Panel  
FROM: Scott Parke   
SUBJECT: L-33-1 Testing from April 1, 2014 through September 30, 2014

Please find attached a summary of testing activity this period.

SDP/sdp/mem14-023.sdp.doc

cc: Frank Farber

Jeff Clark

L-33-1 Surveillance Panel

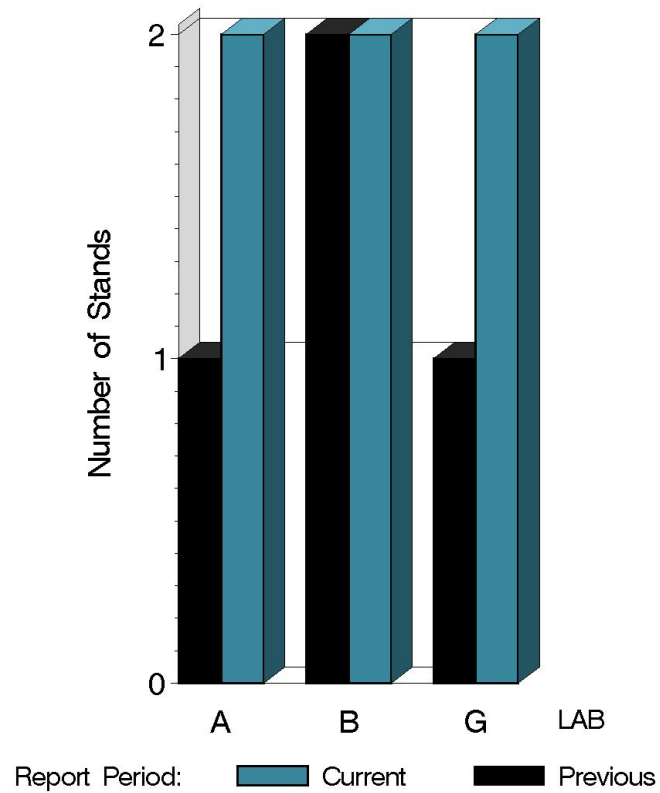
<ftp://ftp.astmtmc.cmu.edu/docs/gear/l331/semiannualreports/l331-10-2014.pdf>

Distribution: email

# L-33-1 (D7038)

	Reporting Data	Calibrated on 9-30-14
Number of Labs	3	3
Number of Stands	6	6

BY-LAB STAND  
DISTRIBUTION



10/20/28 10OCT2014

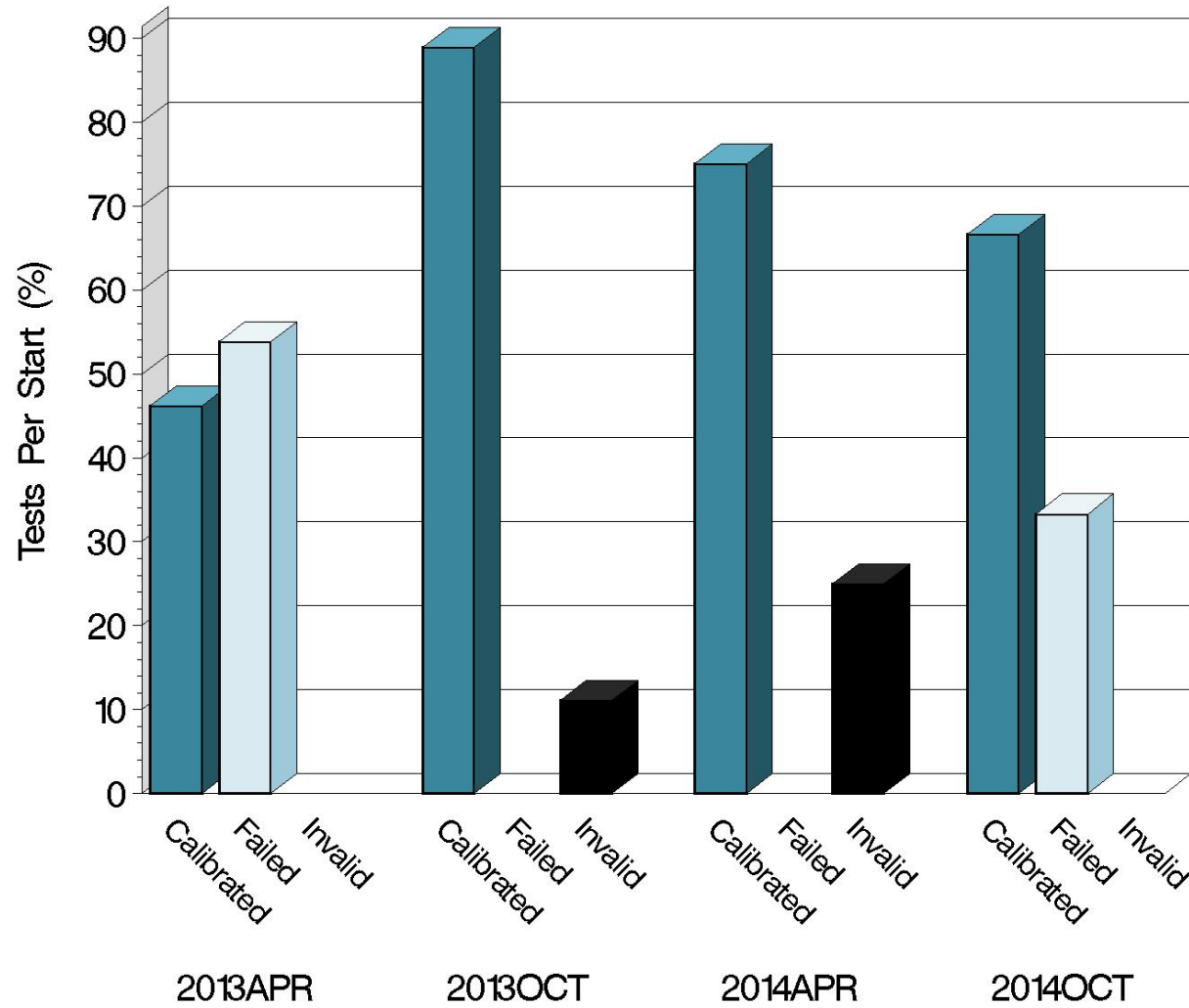
# L-33-1 (D7038)

## Test Distribution by Oil and Validity

					Totals	
					Last Period	This Period
		123-2	155	155-1		
Accepted for calibration	AC	4	0	4	6	8
Rejected (Mild)	OC	0	0	0	0	0
Rejected (Severe)	OC	0	0	2	0	2
Rejected (Precision)	OC	1	0	1	0	2
Invalidated calibration	LC	0	0	0	0	0
Aborted	XC	0	0	0	2	0
Accepted information run	NI	2	0	2	0	4
<b>Total</b>		<b>7</b>	<b>0</b>	<b>9</b>	<b>8</b>	<b>16</b>

# L-33-1 (D7038)

## CALIBRATION ATTEMPT SUMMARY



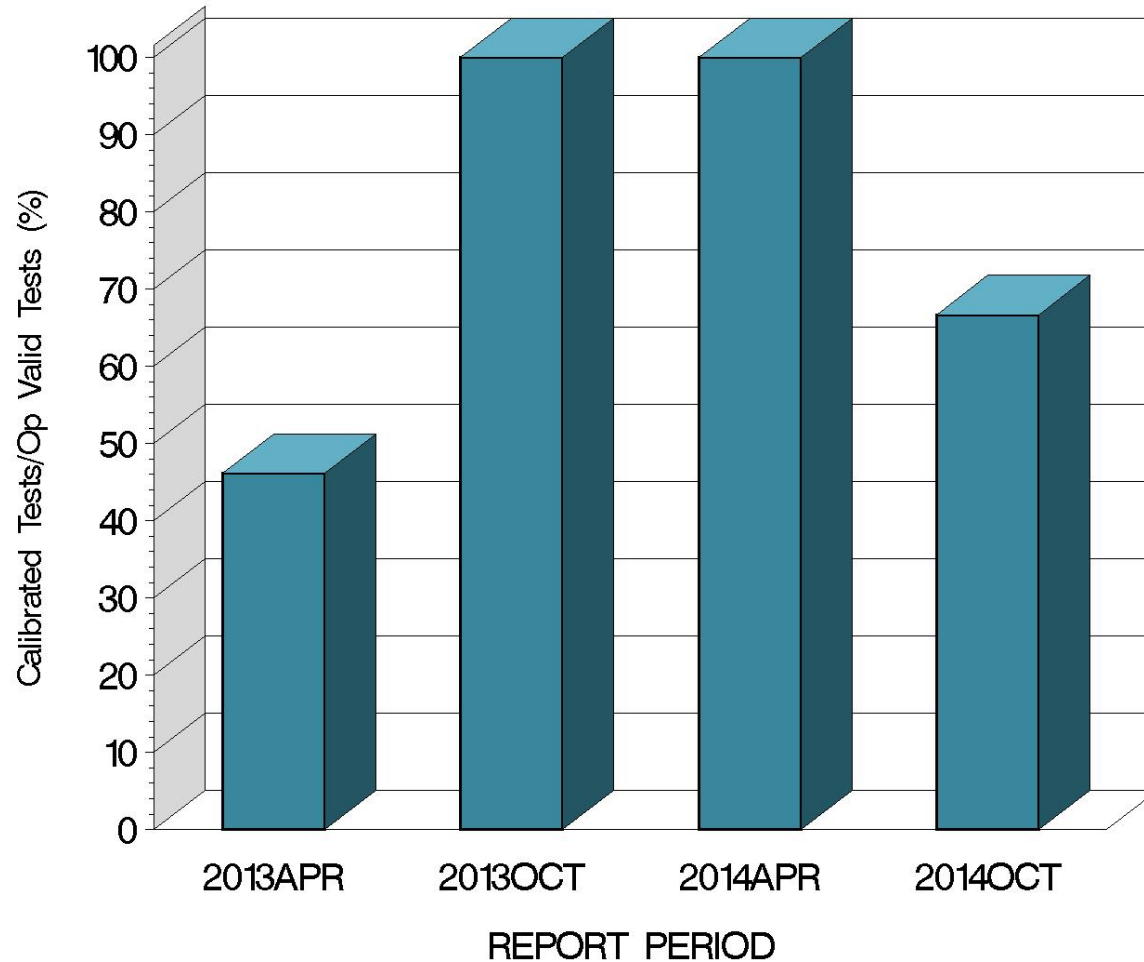
Resolution

Report Period

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# L-33-1 (D7038)

OPERATIONALLY VALID TESTS  
MEETING ACCEPTANCE CRITERIA



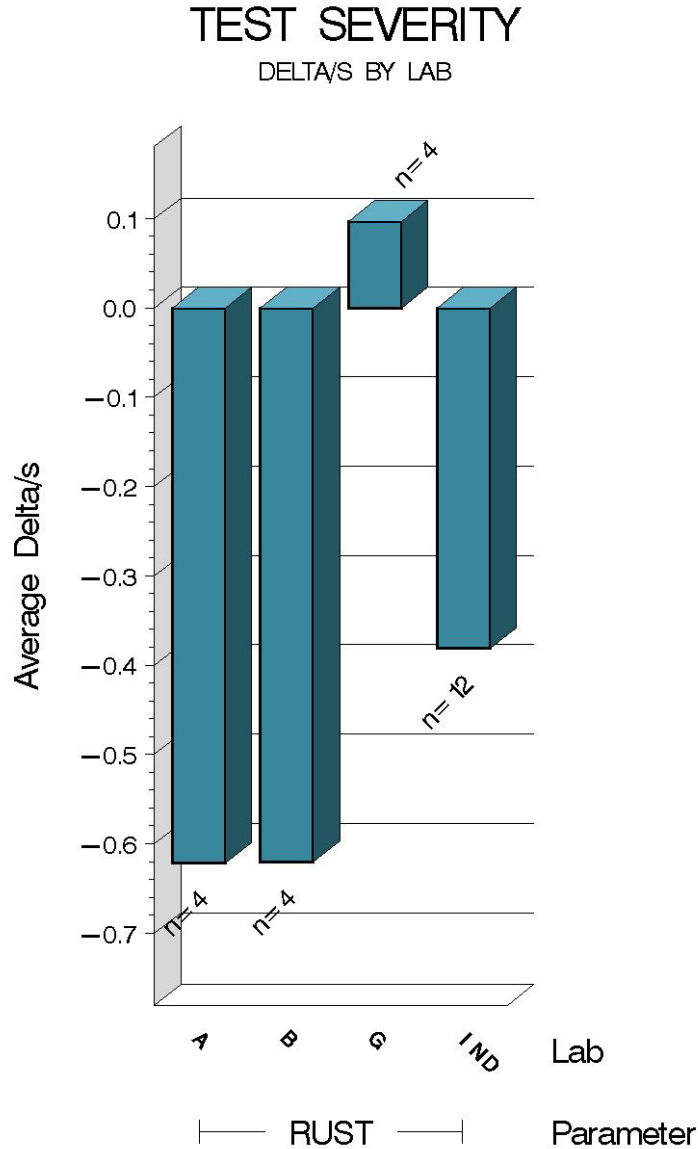
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# L-33-1 (D7038)

## CAUSES FOR LOST TESTS

		Oil			Validity			Loss Rate		
Lab	Cause	123-2	155	155-1	RC	LC	XC	Lost	Starts	%
	No tests were lost this period.							0	16	0%
	Lost	0	0	0	0	0	0			
	Starts	7	0	9	16	16	16			
	%	0%	0%	0%	0%	0%	0%			

# L-33-1 (D7038)

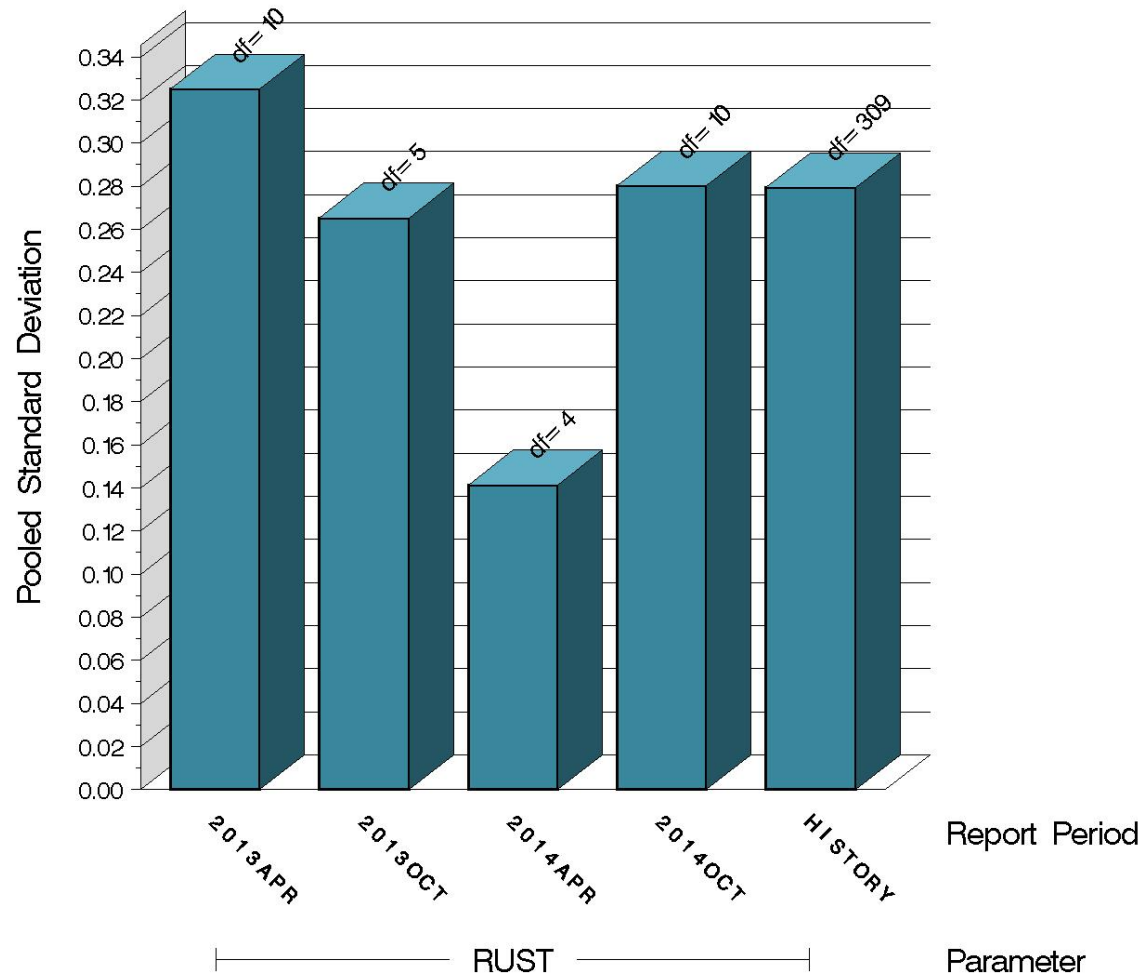


Average $\Delta/s$ by Lab		
Lab	n	RUST
A	4	-0.622
B	4	-0.620
G	4	0.097
Industry	12	-0.382
Shift	12	-0.095

# L-33-1 (D7038)

## TEST PRECISION

POOLED STANDARD DEVIATION  
BY SIX-MONTH ASTM REPORT PERIOD



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# L-33-1 (D7038)

## SUMMARY OF SEVERITY & PRECISION

### Severity

Average RUST  $\Delta/s$  this period was -0.382. Using the target standard deviation for oil 155, this equates to -0.095 merits severe. This performance is nearly identical to last report period.

### Precision

Two tests (from different labs) generated stand Shewhart precision alarms this period and resulted in RUST precision exceeding control chart limits for a time. Precision has since returned to within-limits performance.

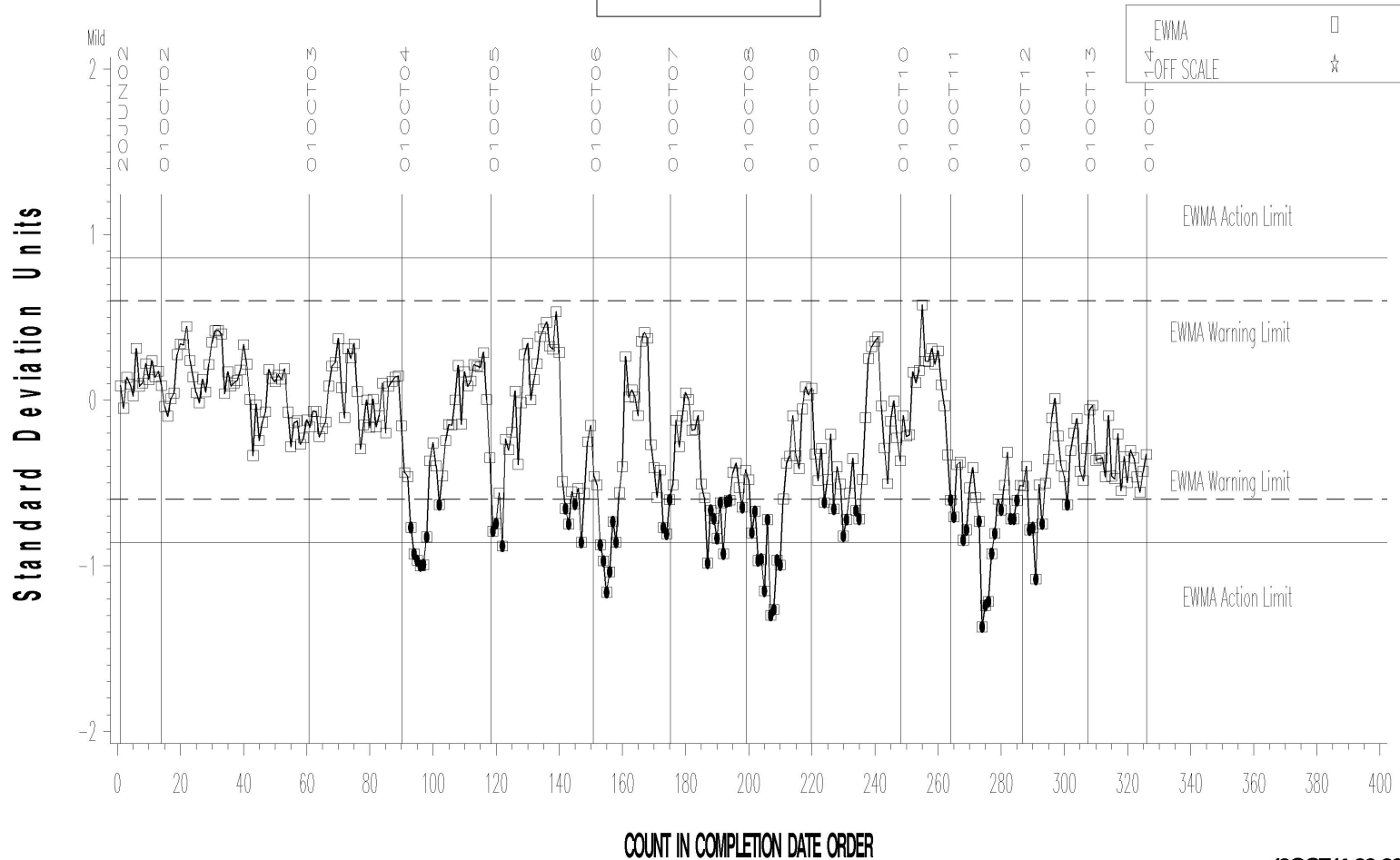
Industry control charts follow.

# L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA

## FINAL RUST RESULT

LTMS Severity Analysis



Severa

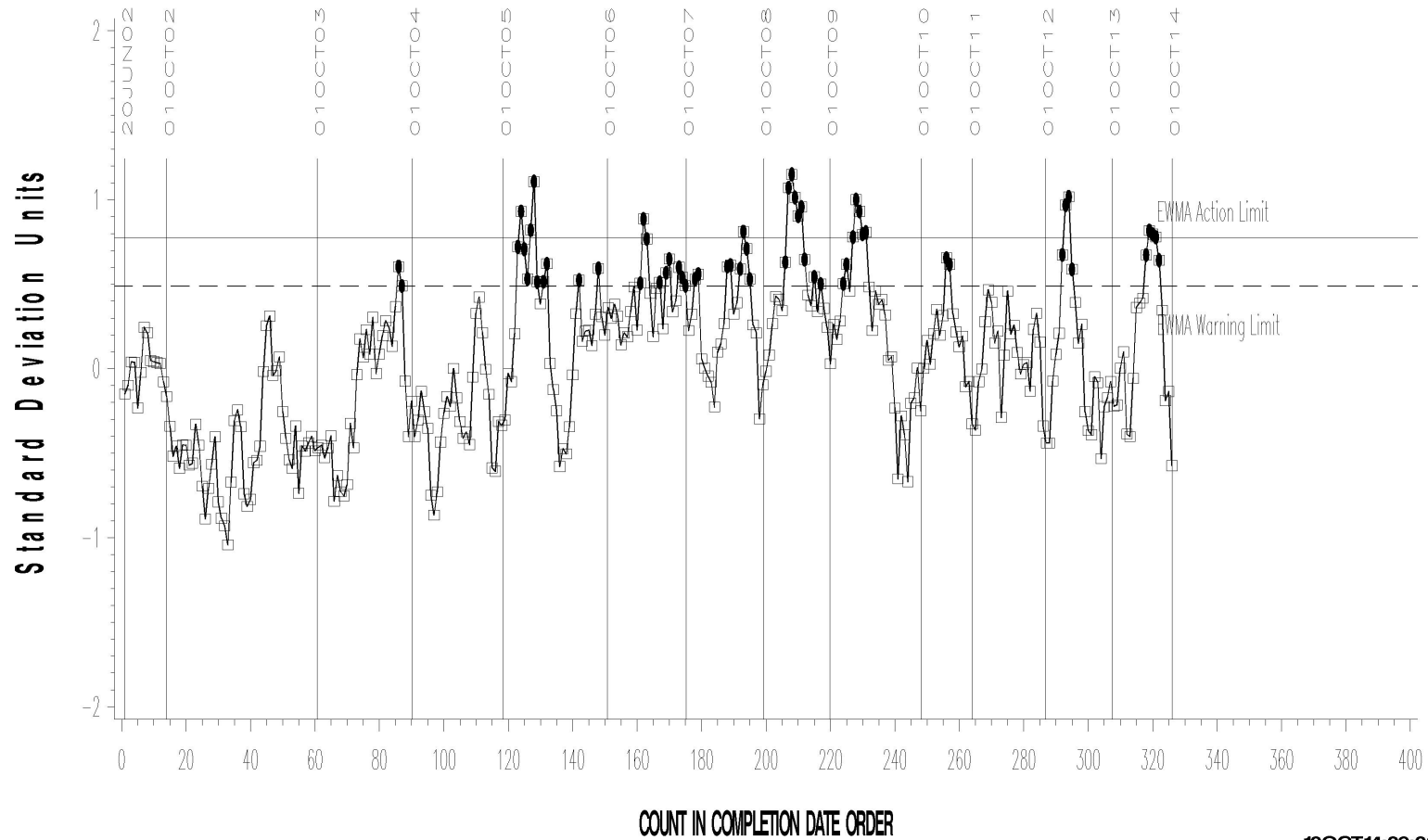
10OCT14:09:00

# L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA

FINAL RUST RESULT

LTMS Precision Analysis



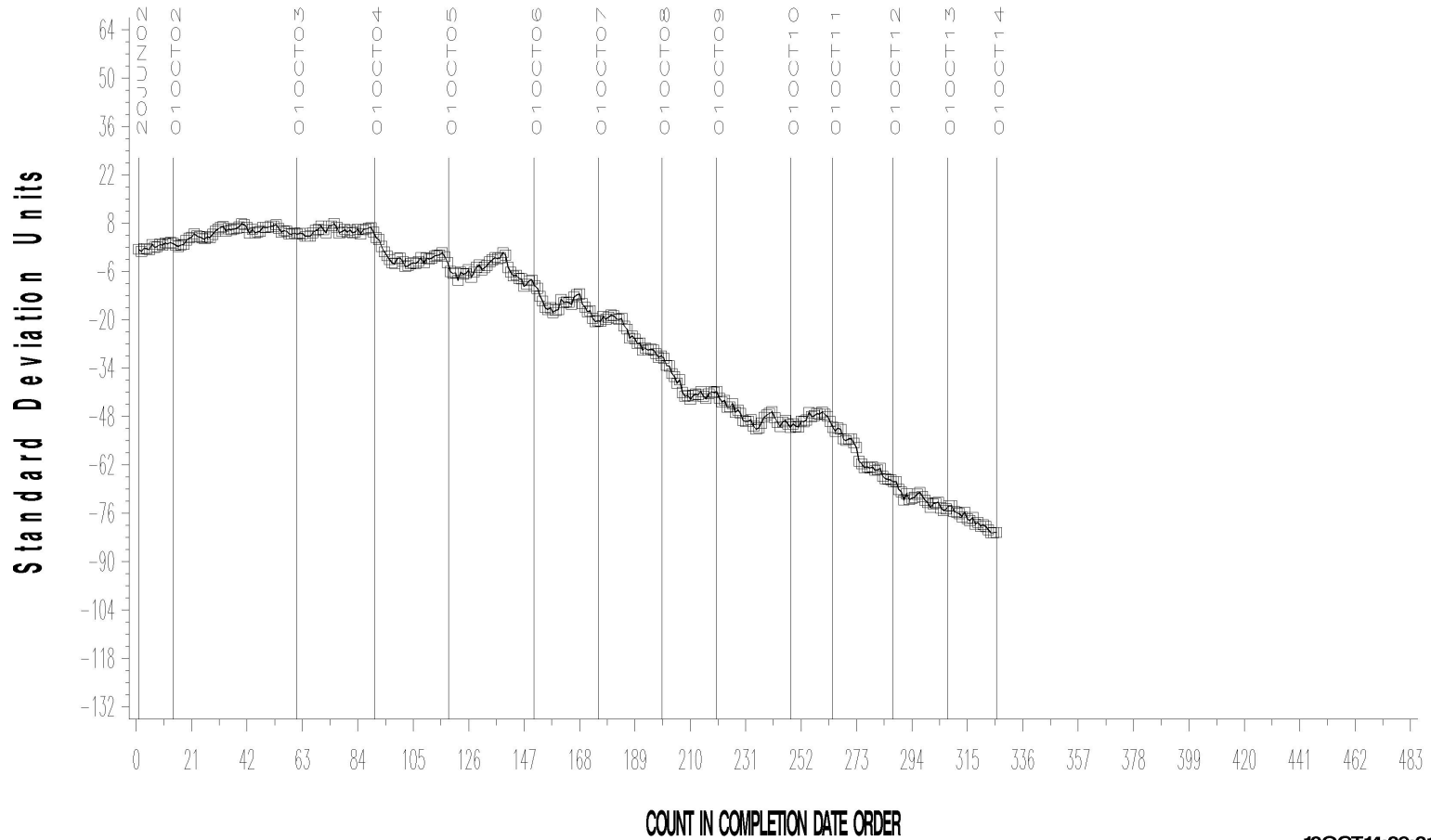
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# L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA

FINAL RUST RESULT

CUSUM Severity Analysis



10OCT14:09:01

# L-33-1 (D7038)

## TIMELINE ADDITIONS

Effective Date	Information Letter	Event
20140912	14-2	Standardized wording describing the role of the TMC.

# L-33-1 (D7038)

## LAB VISITS

Two L-33-1 lab visits were conducted during this period. No procedural nonconformances were found.

## INFORMATION LETTERS

Information letter 14-2 was issued this period to incorporate standardized wording describing the role of the TMC.

# L-33-1 (D7038)

## STATUS OF REFERENCE OIL SUPPLY

Oil	Cans @ Labs	@ TMC	
		Cans	Gallons
123-2	7	151	151.8
155	0	21	21.0
155-1	11	321	321.0
Total	18	493	493.8

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).