




## Test Monitoring Center

@ Carnegie Mellon University  
6555 Penn Avenue, Pittsburgh, PA 15206, USA

<http://astmtmc.cmu.edu>  
412-365-1000

MEMORANDUM: 13-021  
DATE: April 18, 2013  
TO: Dale Smith, Chairman, L-33-1 Surveillance Panel  
FROM: Scott Parke   
SUBJECT: L-33-1 Testing from October 1, 2012 through March 31, 2013

Please find attached a summary of testing activity this period.

SDP/sdp/mem13-021.sdp.doc

cc: Frank Farber

Jeff Clark

L-33-1 Surveillance Panel

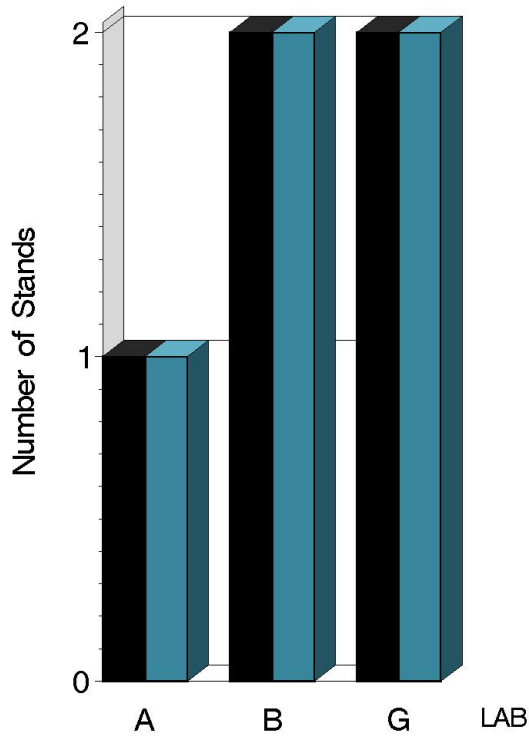
<ftp://ftp.astmtmc.cmu.edu/docs/gear/l331/semiannualreports/l331-04-2013.pdf>

Distribution: email

# L-33-1 (D7038)

	Reporting Data	Calibrated on 3-31-13
Number of Labs	3	3
Number of Stands	5	4

BY-LAB STAND  
DISTRIBUTION



Report Period: ■ Current ■ Previous

14:35:40 15APR2013

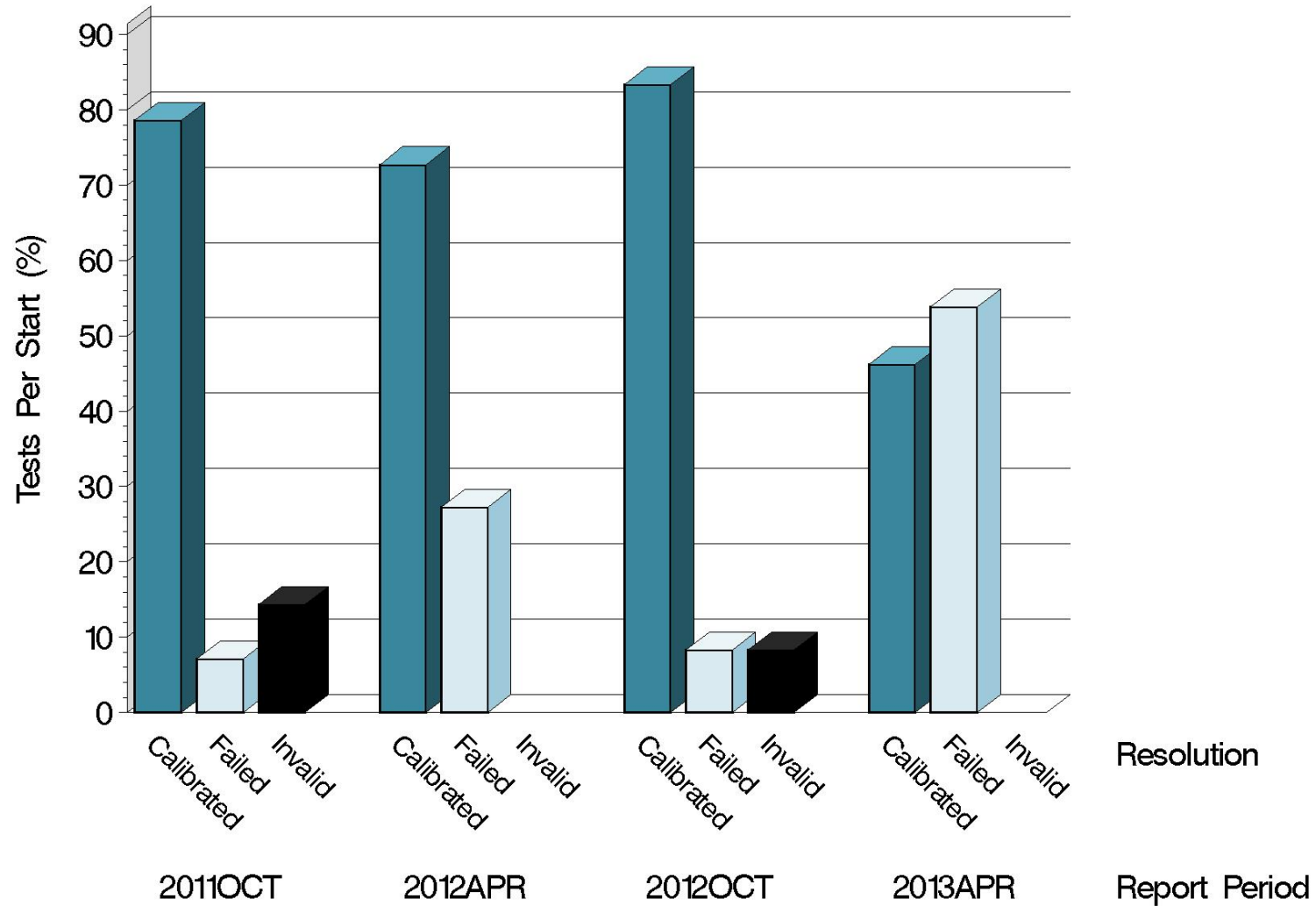
# L-33-1 (D7038)

## Test Distribution by Oil and Validity

						Totals	
						Last Period	This Period
		123-2	155	155-1			
Accepted for calibration	AC	3	1	2	10	6	
Rejected (Mild)	OC	0	0	0	0	0	
Rejected (Severe)	OC	0	0	0	1	0	
Rejected (Precision)	OC	1	0	6	0	7	
Invalidated calibration	LC	0	0	0	1	0	
Aborted	XC	0	0	0	0	0	
Accepted information run	NI	0	0	0	0	0	
<b>Total</b>		<b>4</b>	<b>1</b>	<b>8</b>	<b>12</b>	<b>13</b>	

# L-33-1 (D7038)

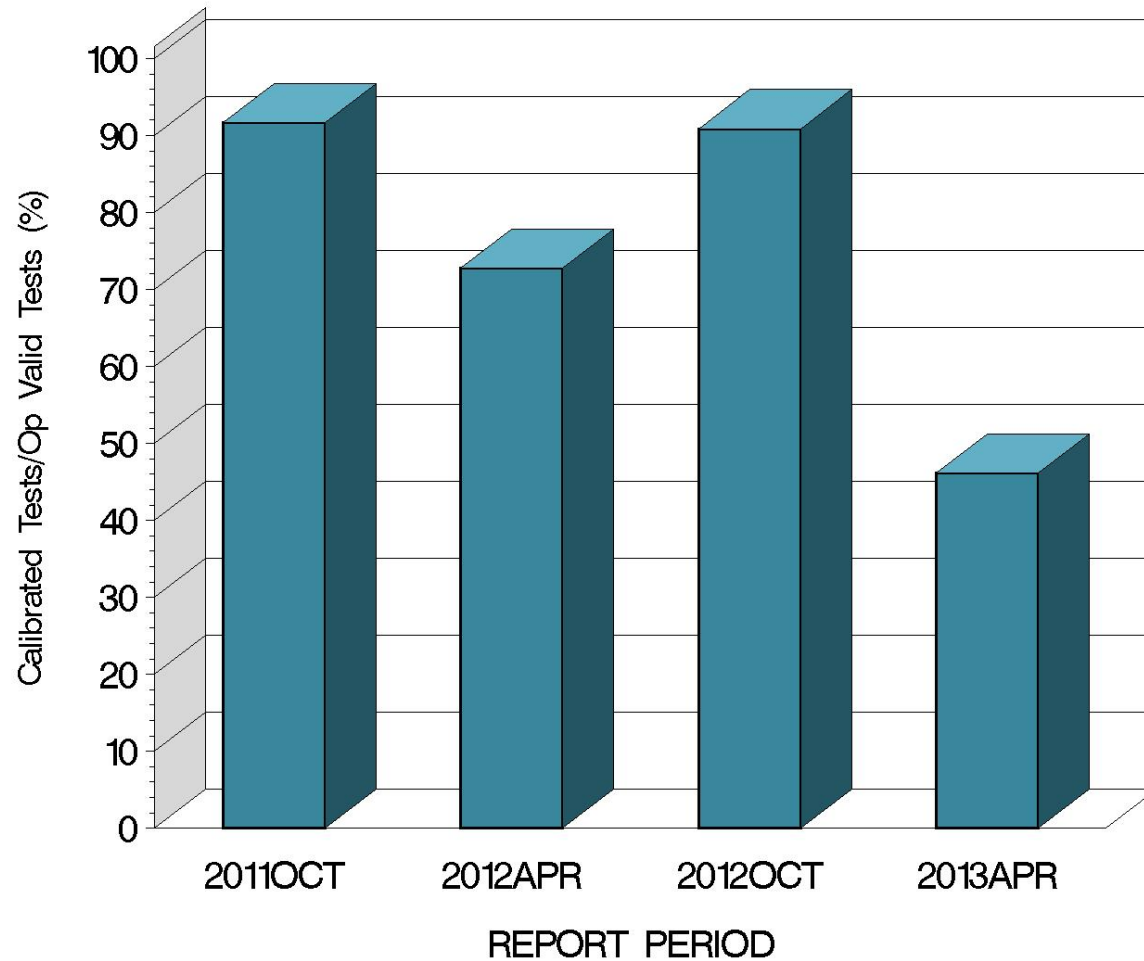
## CALIBRATION ATTEMPT SUMMARY



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# L-33-1 (D7038)

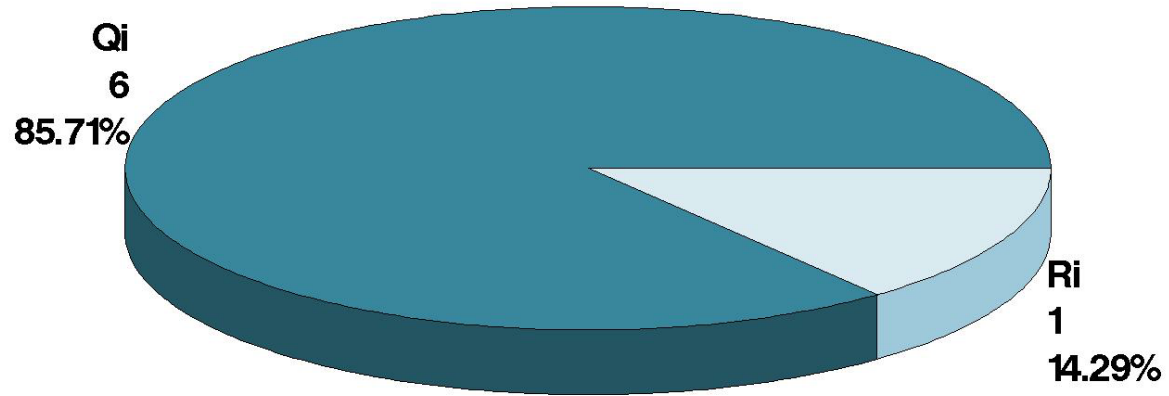
OPERATIONALLY VALID TESTS  
MEETING ACCEPTANCE CRITERIA



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# L-33-1 (D7038)

## CAUSES FOR FAILED TESTS



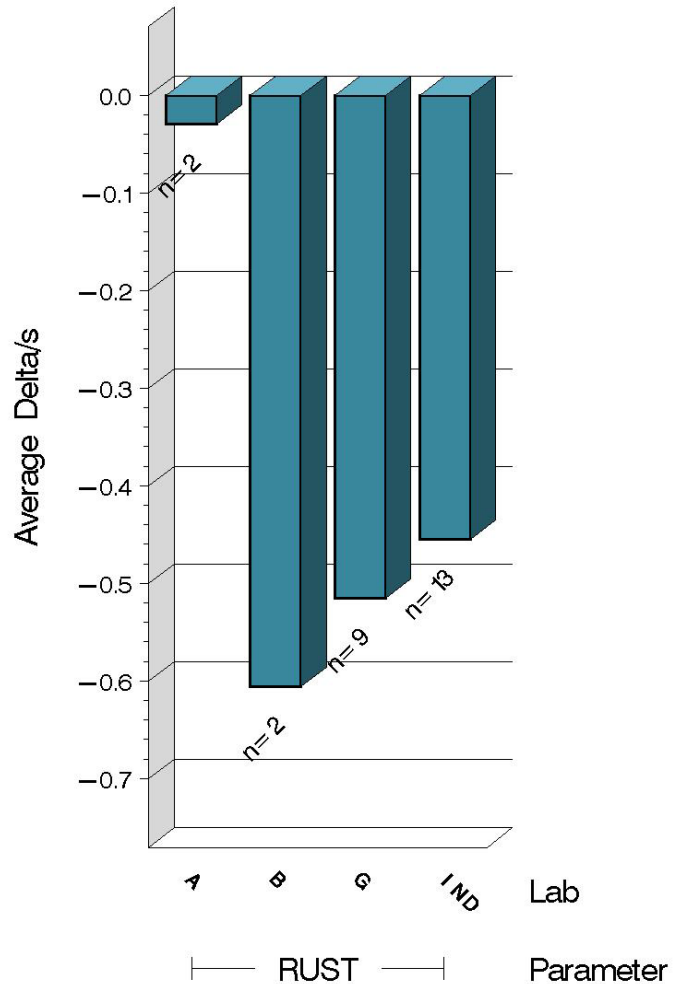
# L-33-1 (D7038)

## CAUSES FOR LOST TESTS

		Oil			Validity			Loss Rate		
Lab	Cause	123-2	155	155-1	RC	LC	XC	Lost	Starts	%
	No tests were lost.							0	13	0%
	Lost	0	0	0	0	0	0			
	Starts	4	1	8	13	13	13			
	%	0%	0%	0%	0%	0%	0%			

# L-33-1 (D7038)

TEST SEVERITY  
DELTA/S BY LAB



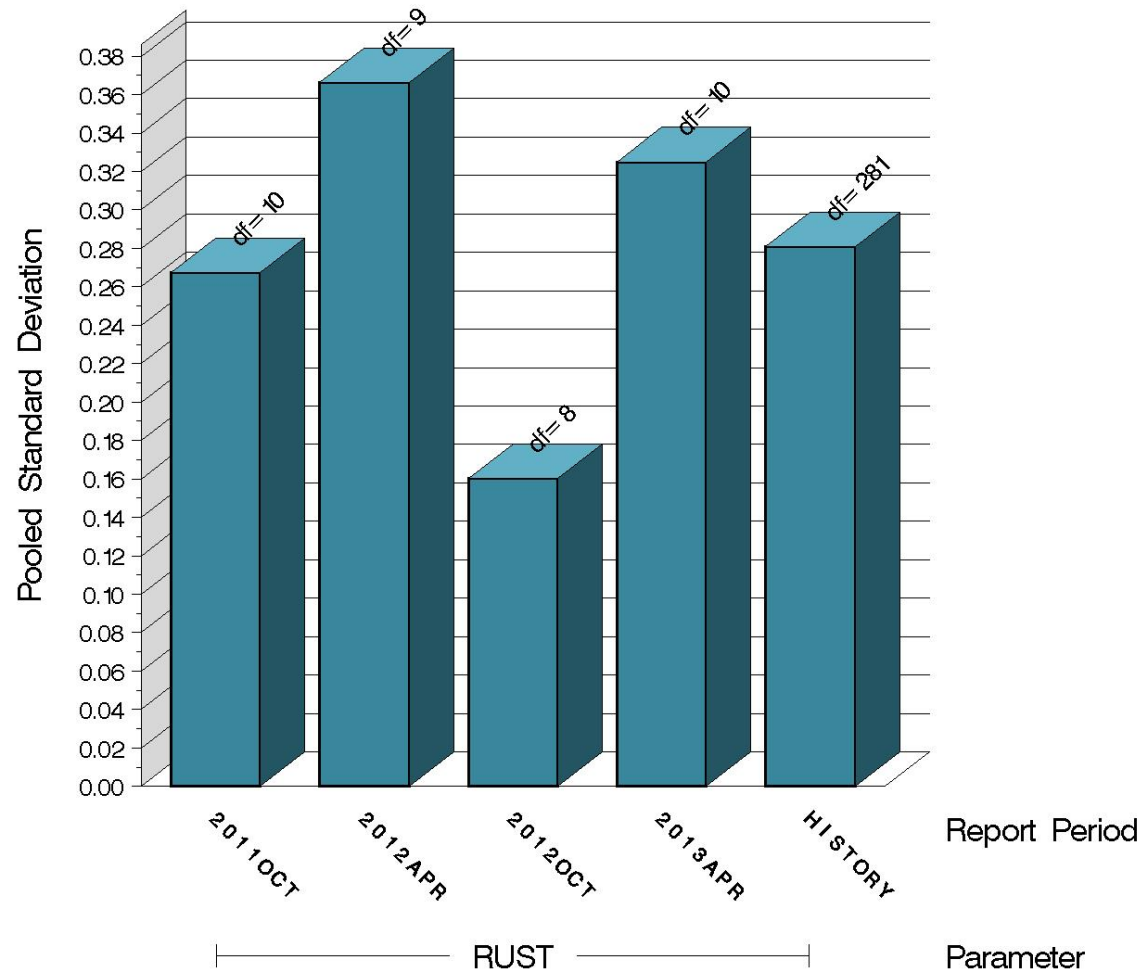
Average $\Delta/s$ by Lab		
Lab	n	RUST
A	2	-0.029
B	2	-0.606
G	9	-0.516
Industry	13	-0.455
Shift	13	-0.114



# 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 -0.455. Using the target standard deviation for oil 155, this equates to -0.114 merits.

### Precision

One stand produced a couple RUST results of 9.0 on oil 155-1. These results produced precision alarms for both the lab and industry and account for 6 of the 7 failed tests this period.

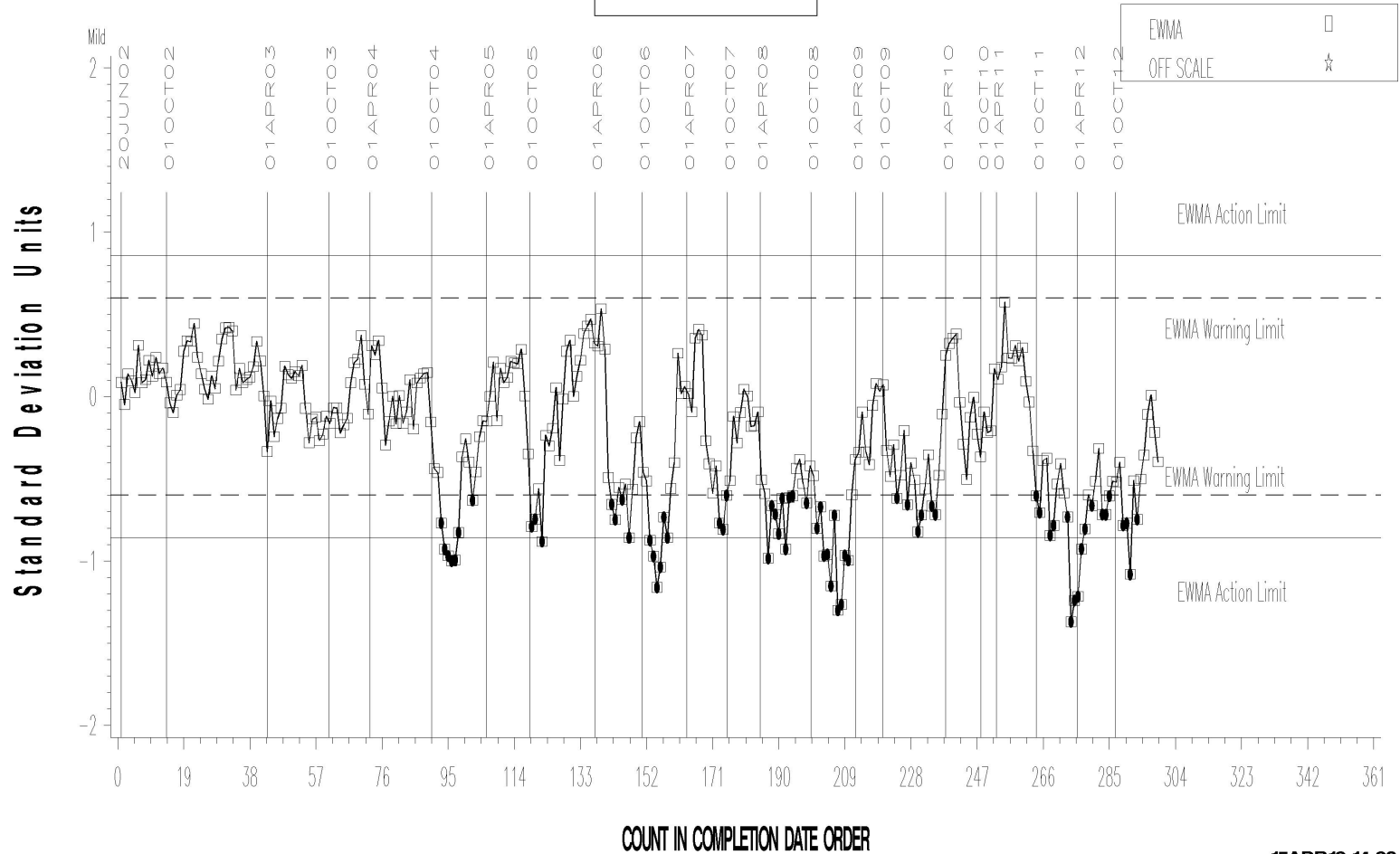
Industry control charts follow.

# L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA

## FINAL RUST RESULT

### LTMS Severity Analysis



Severp

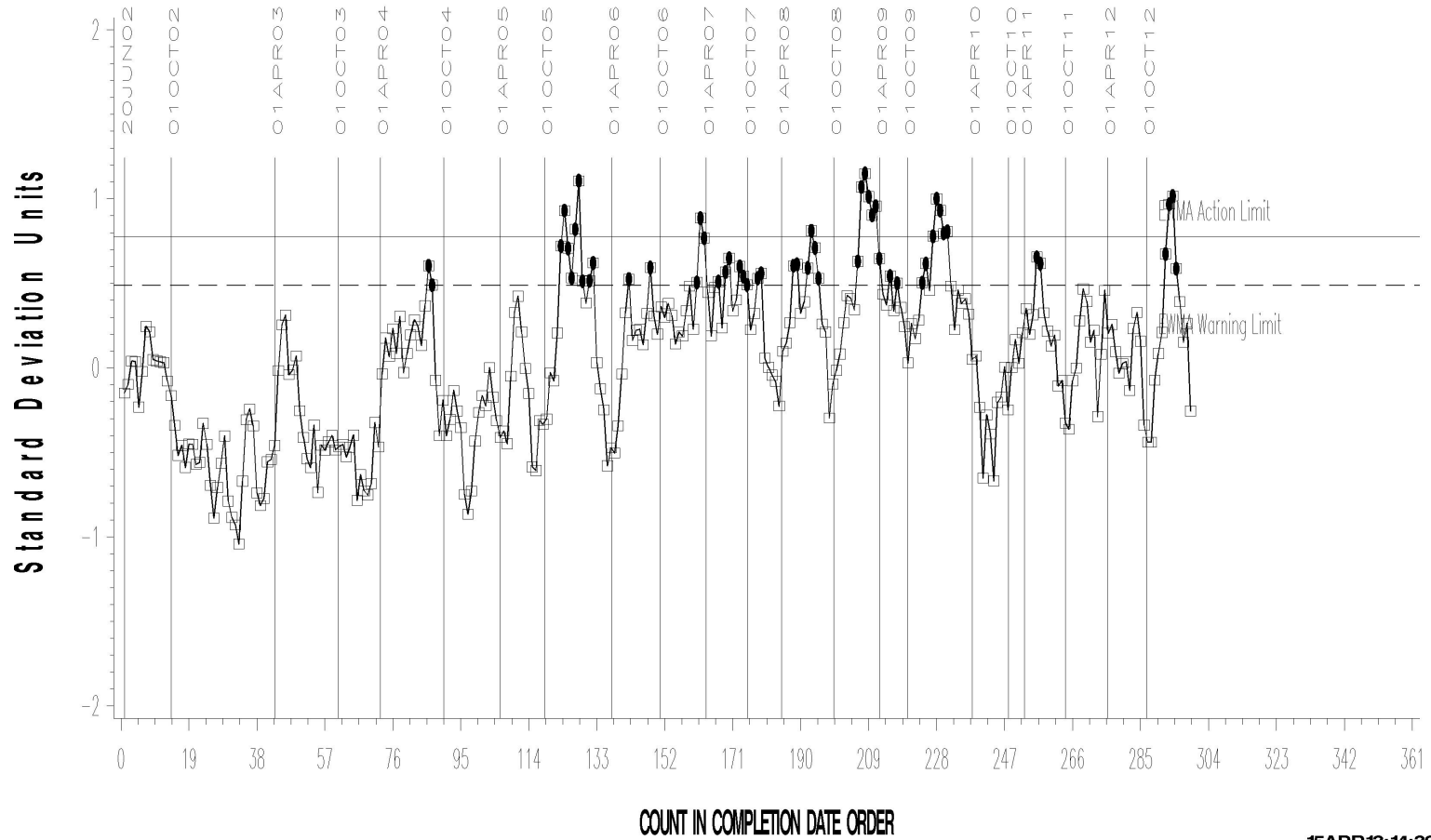
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# L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA

FINAL RUST RESULT

LTMS Precision Analysis



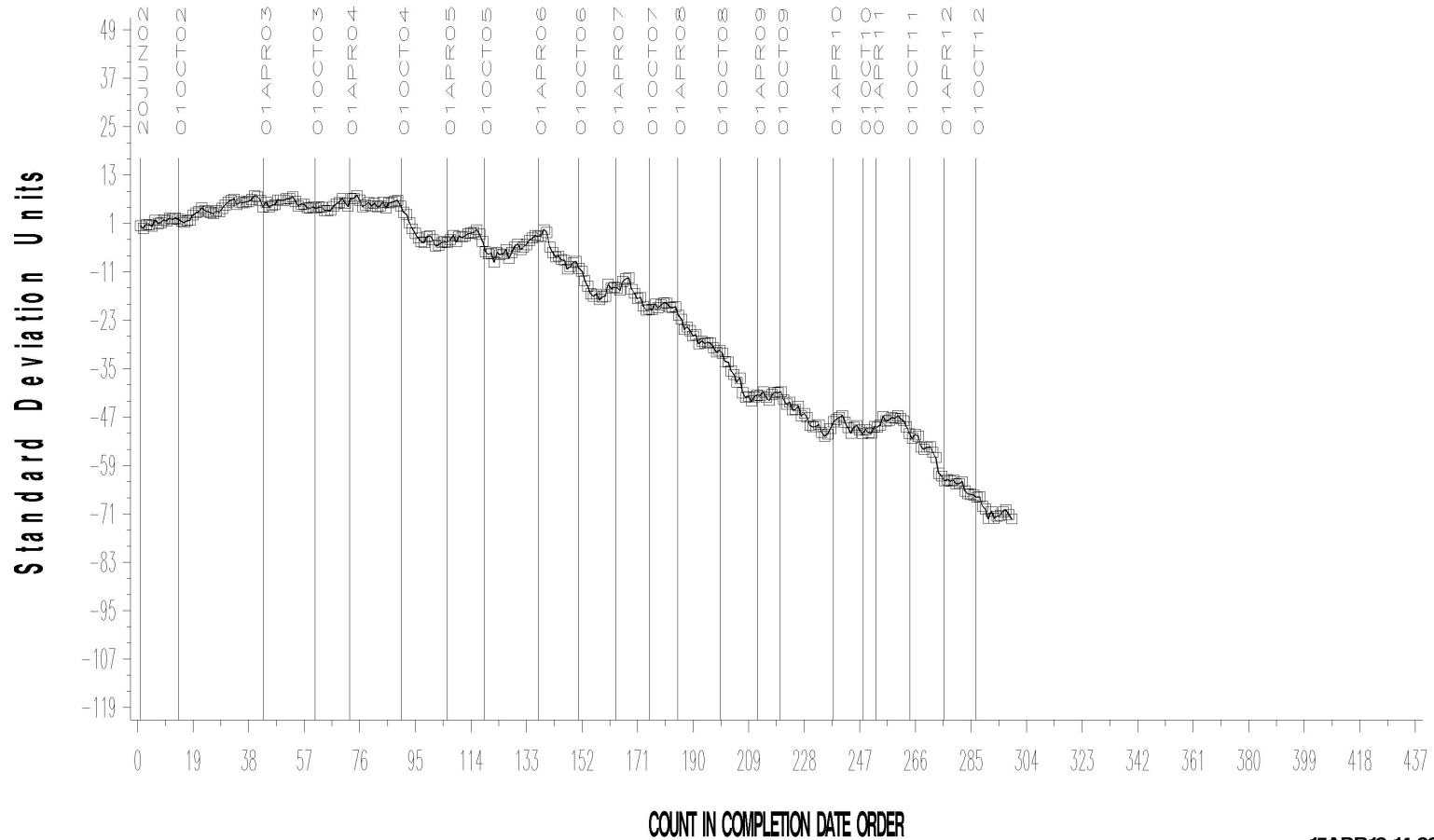
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# L-33-1 (D7038)

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
		No additions have been made this period.

# L-33-1 (D7038)

## LAB VISITS

No L-33-1 lab visits were conducted during this period.

## INFORMATION LETTERS

No L-33-1 information letters were issued during this period.

# L-33-1 (D7038)

## STATUS OF REFERENCE OIL SUPPLY

Oil	Cans @ Labs	@ TMC	
		Cans	Gallons
123-2	15	162	162.8
155	1	36	36.4
155-1	11	406	406.8
<b>Total</b>	<b>27</b>	<b>604</b>	<b>605.9</b>

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, and HTCT).