A Program of ASTM International

Test Monitoring Center

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

MEMORANDUM: 17-029

DATE: October 9, 2017

TO: Angela Trader, Chairman, L-33-1 Surveillance Panel

FROM: Dylan Beck

SUBJECT: L-33-1 Testing from April 1, 2017 through September 30, 2017

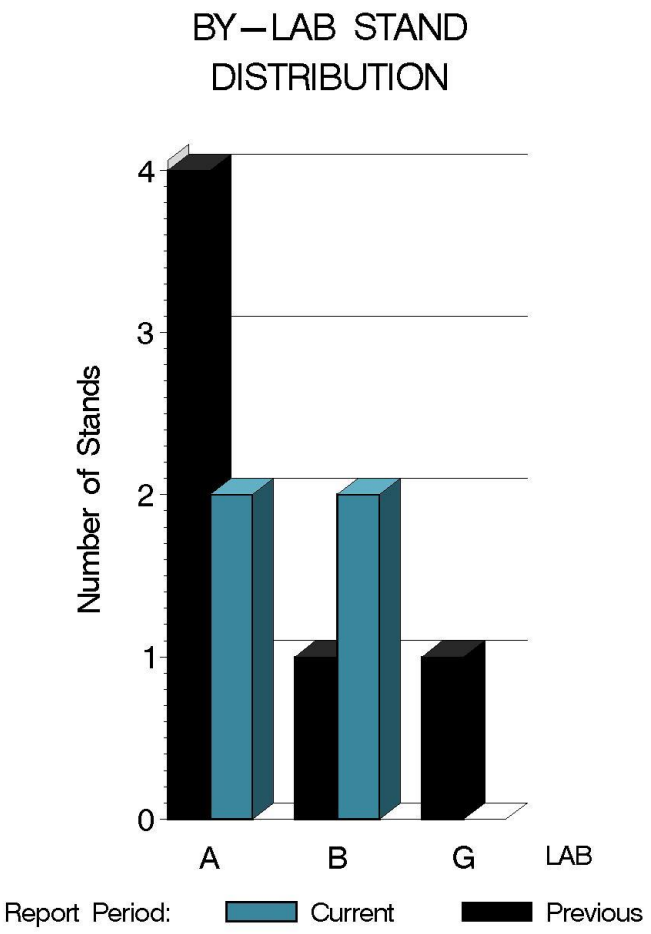
Attached is a summary of testing activity this period.

DJB/djb/mem17-029.djb.doc
cc: Frank Farber
Jeff Clark
Scott Parke
L-33-1 Surveillance Panel
http://www.astmtmc.cmu.edu/ftp/docs/gear/l331/semiannualreports/l331-10-2017.pdf

Distribution: email

L-33-1 (D7038)

	Reporting Data	Calibrated on 9-30-17
Number of Labs	2	2
Number of Stands	4	4



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Test Distribution by Oil and Validity

		123-2	155	155-1	Totals Last Period	Totals This Period
Accepted for calibration	AC	5	0	2	6	7
Rejected (Mild)	OC	0	0	1	0	1
Rejected (Severe)	OC	0	0	0	0	0
Rejected (Precision)	OC	0	0	0	3	0
Invalidated calibration	LC	0	0	0	1	0
Aborted	XC	0	0	0	3	0
Unacceptable info run	MI	0	0	0	0	0
Accepted information run	NI	0	0	0	1	0
Total		5	0	3	14	8

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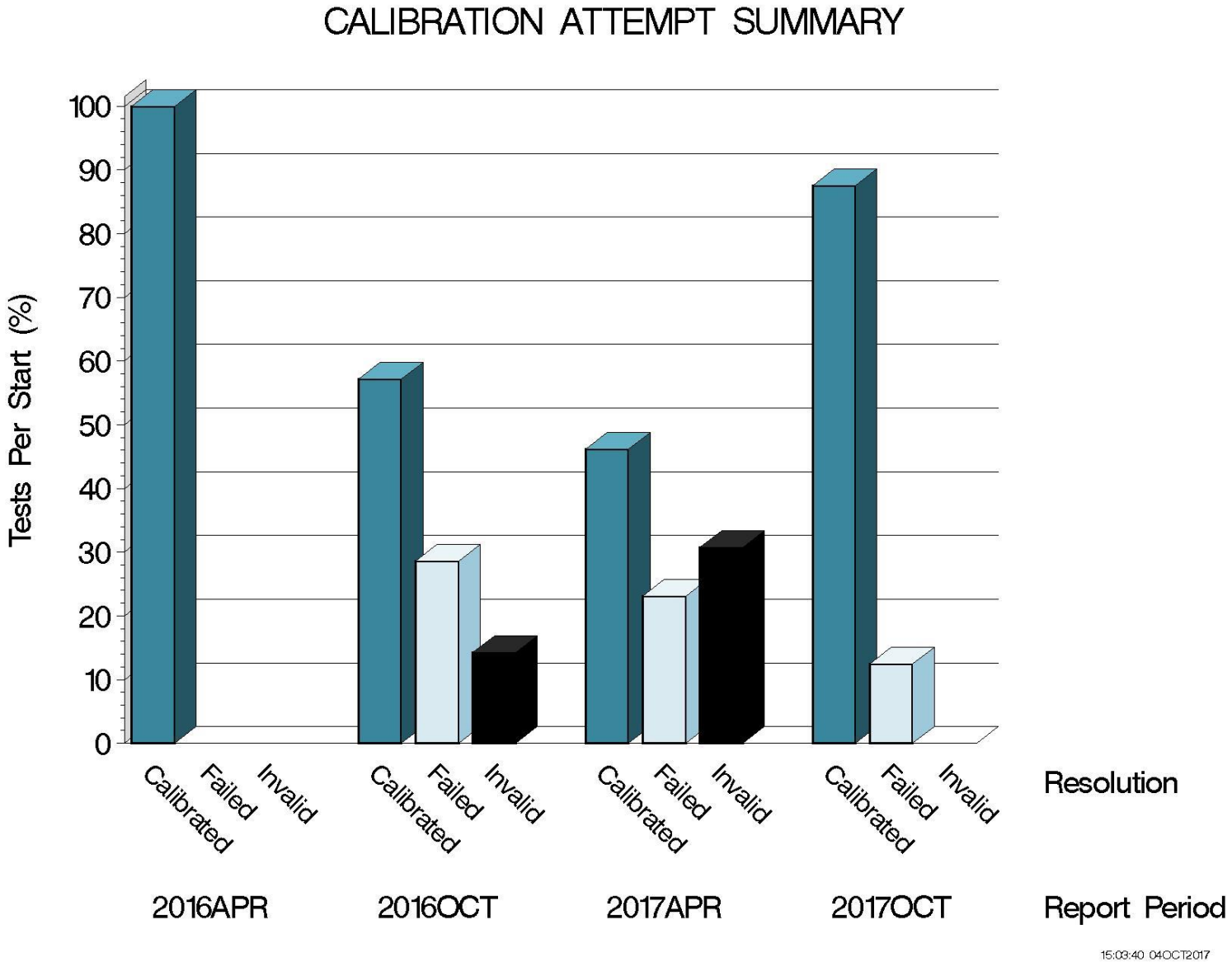
CALIBRATION ATTEMPT SUMMARY
Tests Per Start (%)
100
90
80
70
60
50
40
30
20
10
0
Calibrated
Failed
Invalid
Resolution
2016APR
2016OCT
2017APR
2017OCT
Report Period
15:03:40 04OCT2017

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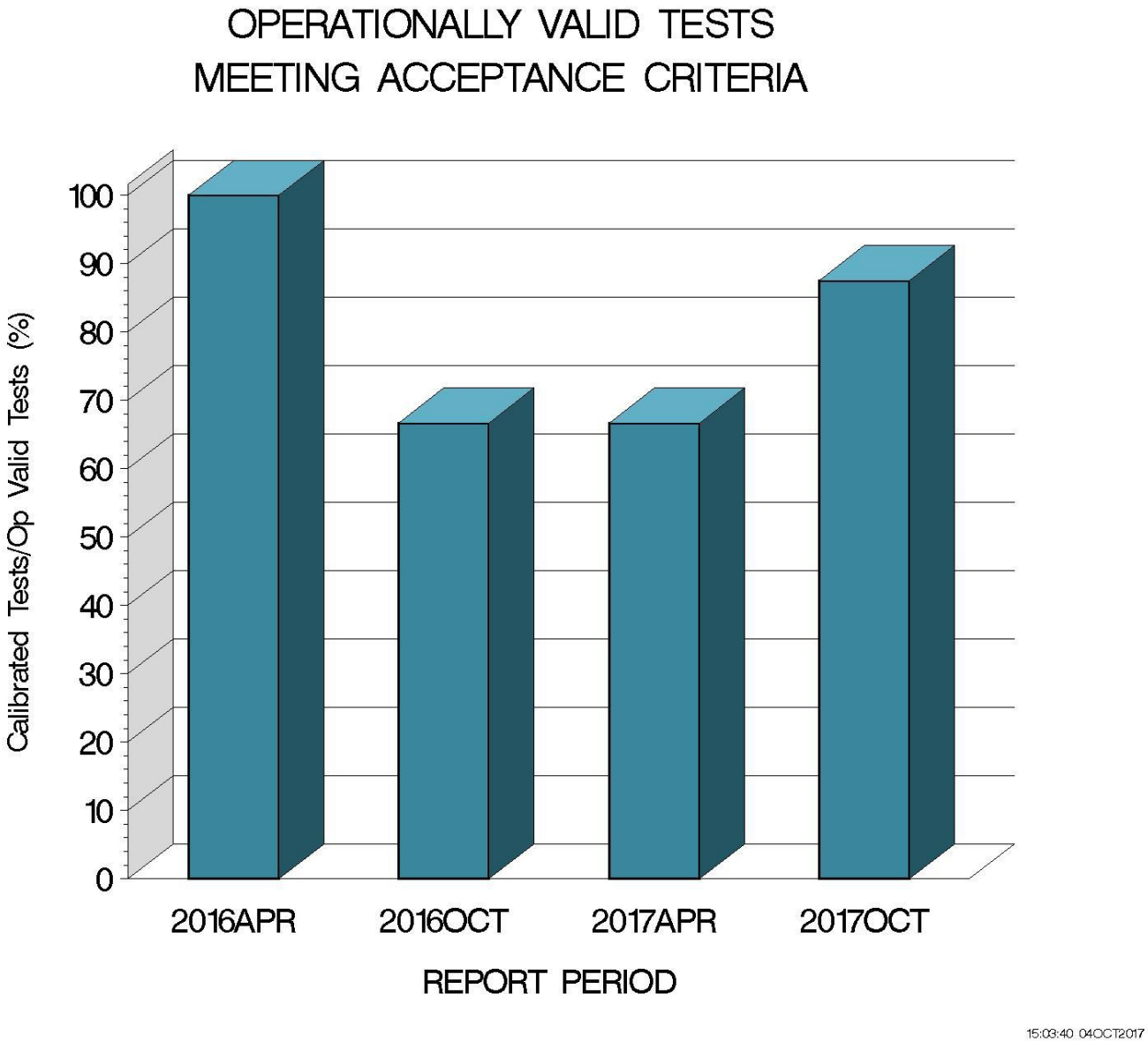
OPERATIONALLY VALID TESTS
MEETING ACCEPTANCE CRITERIA
Calibrated Tests/Op Valid Tests (%)
100
90
80
70
60
50
40
30
20
10
0
2016APR
2016OCT
2017APR
2017OCT
REPORT PERIOD
15:03:40 04OCT2017

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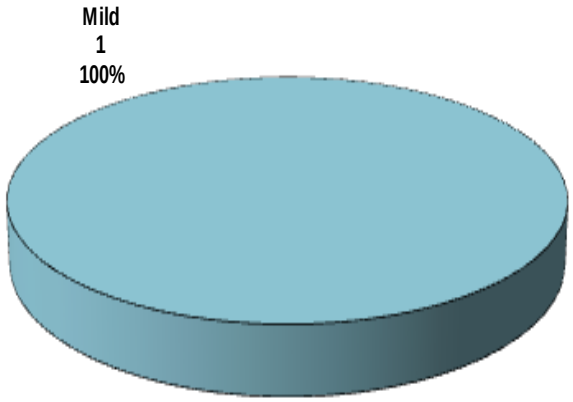
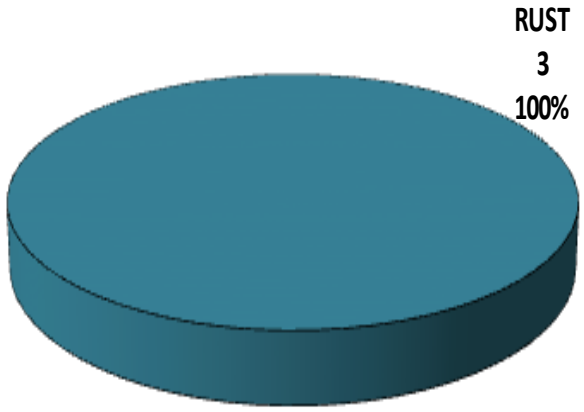
CAUSES FOR FAILED TESTS

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	%
	No tests were lost this period								0	4	0%
		Lost	0	0	0	0	0	0			
		Starts	5	0	3	8	8	8			
		%	0%	0%	0%	0%	0%	0%			

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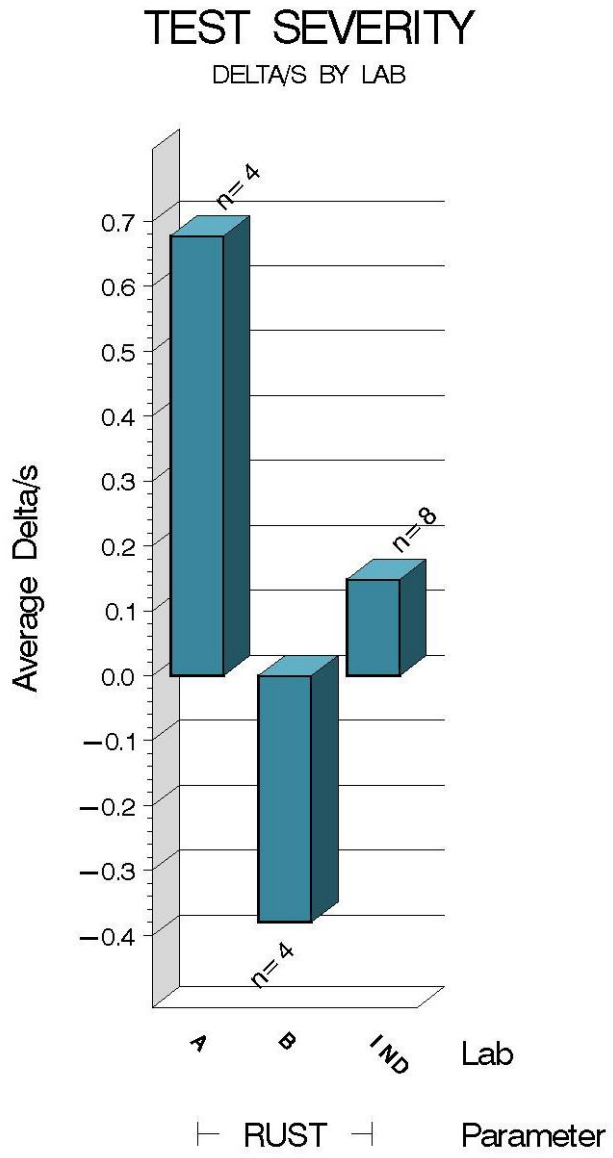

Average Δ/s by Lab		
Lab	**n**	**RUST**
A	4	0.677
B	4	-0.380
G	0	0
Industry	8	0.149
Shift	8	0.037 merits

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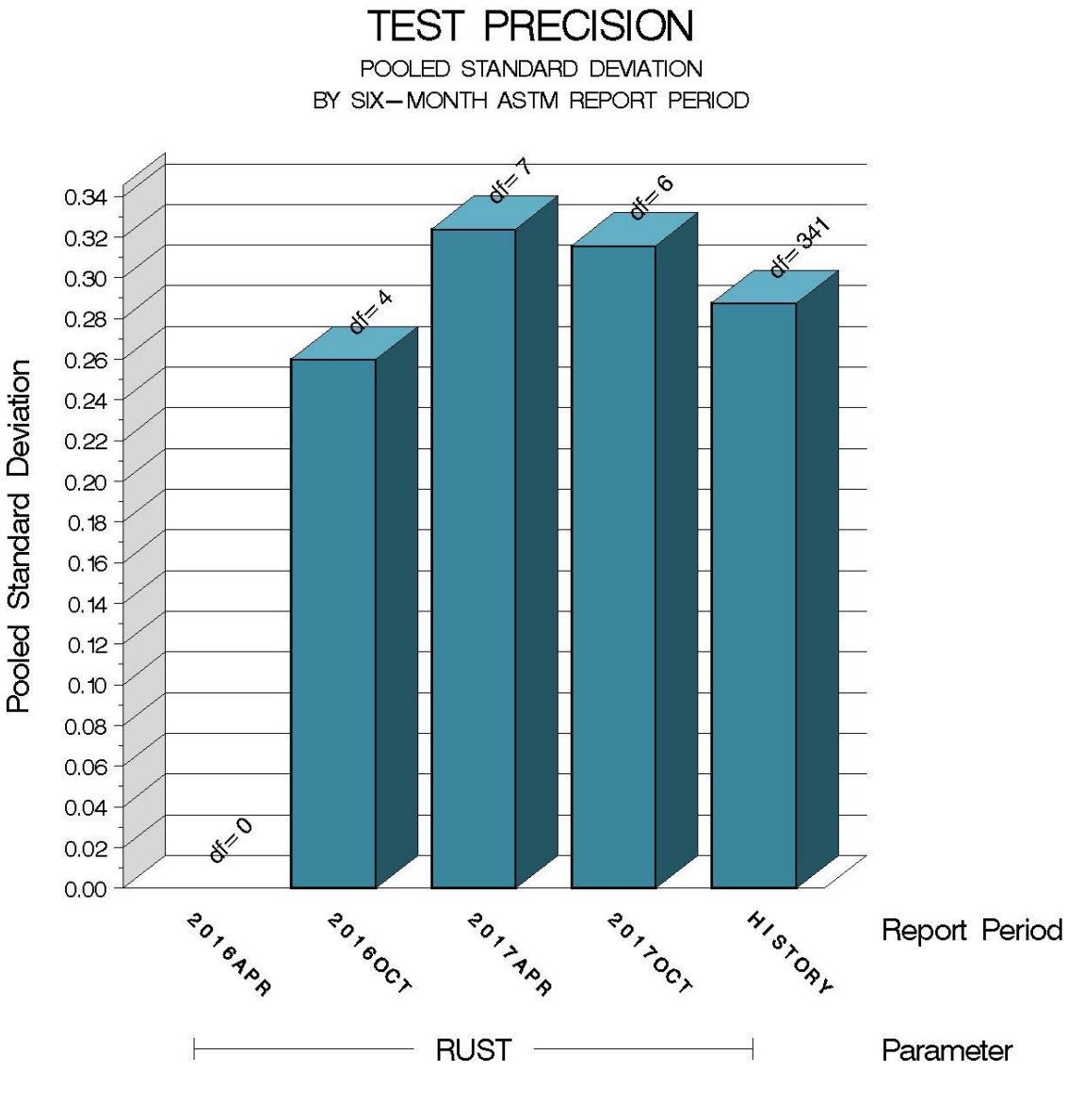
TEST PRECISION
POOLED STANDARD DEVIATION
BY SIX–MONTH ASTM REPORT PERIOD
Pooled Standard Deviation
0.34
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
df=0
df=4
df=7
df=6
df=341
2016APR
2016OCT
2017APR
2017OCT
HISTORY
Report Period
RUST
Parameter
15:03:40 04OCT2017

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SUMMARY OF SEVERITY & PRECISION

Severity
Average RUST Δ/s this period was 0.149. Using the target standard deviation for oil 155 (0.250), this equates to 0.037 merits severe.
Precision
A severe result (Y_i = +2.947) from lab A generated a precision alarm that exceeded the action limit. The alarm has since been cleared with more recent testing.

Industry control charts follow.

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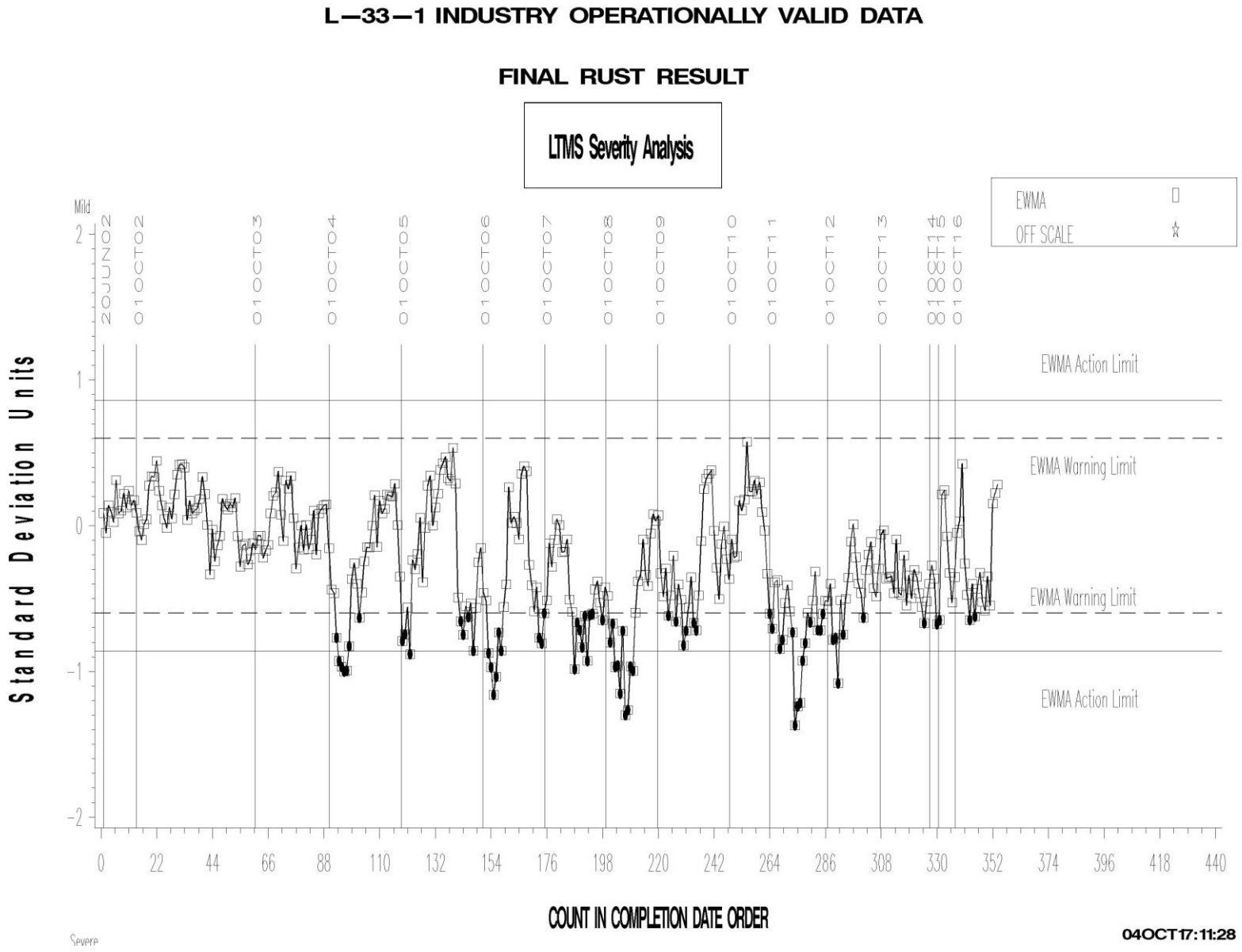
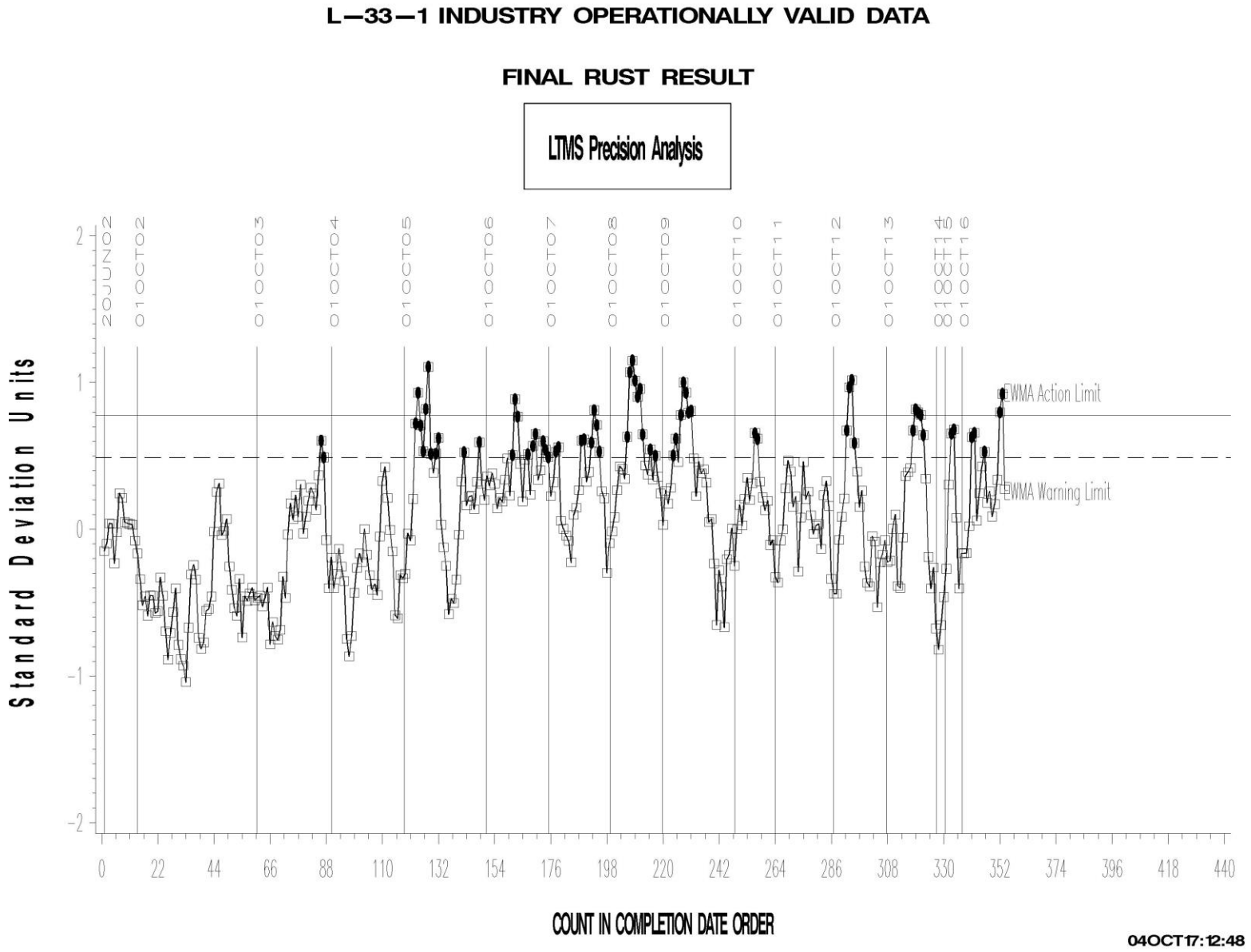
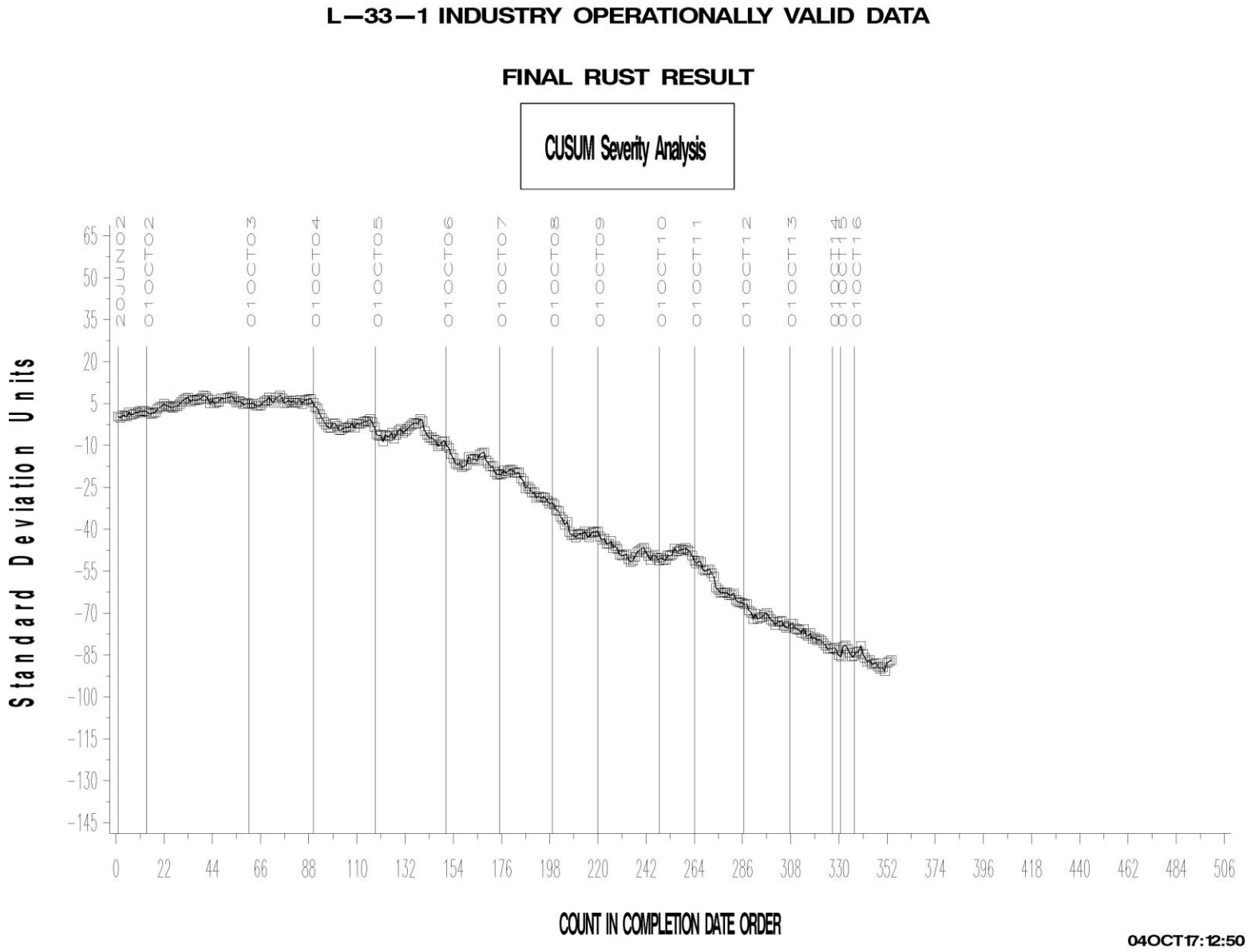

L—33—1 INDUSTRY OPERATIONALLY VALID DATA
FINAL RUST RESULT
LTMS Severity Analysis
EWMA
OFF SCALE
Mild
Severe
Standard Deviation Units
2
1
0
−1
−2
20JUN02
01OCT02
01OCT03
01OCT04
01OCT05
01OCT06
01OCT07
01OCT08
01OCT09
01OCT10
01OCT11
01OCT12
01OCT13
01OCT14
01OCT15
01OCT16
EWMA Action Limit
EWMA Warning Limit
EWMA Warning Limit
EWMA Action Limit
0
22
44
66
88
110
132
154
176
198
220
242
264
286
308
330
352
374
396
418
440
COUNT IN COMPLETION DATE ORDER
04OCT17:11:28

L-33-1 (D7038)


L—33—1 INDUSTRY OPERATIONALLY VALID DATA
FINAL RUST RESULT
LTMS Precision Analysis
Standard Deviation Units
2
1
0
−1
−2
20JUN02
01OCT02
01OCT03
01OCT04
01OCT05
01OCT06
01OCT07
01OCT08
01OCT09
01OCT10
01OCT11
01OCT12
01OCT13
01OCT14
01OCT15
01OCT16
WMA Action Limit
WMA Warning Limit
0
22
44
66
88
110
132
154
176
198
220
242
264
286
308
330
352
374
396
418
440
COUNT IN COMPLETION DATE ORDER
04OCT17:12:48

L-33-1 (D7038)


L—33—1 INDUSTRY OPERATIONALLY VALID DATA
FINAL RUST RESULT
CUSUM Severity Analysis
Standard Deviation Units
65
50
35
20
5
-10
-25
-40
-55
-70
-85
-100
-115
-130
-145
20JUN02
01OCT02
01OCT03
01OCT04
01OCT05
01OCT06
01OCT07
01OCT08
01OCT09
01OCT10
01OCT11
01OCT12
01OCT13
01OCT14
01OCT15
01OCT16
0
22
44
66
88
110
132
154
176
198
220
242
264
286
308
330
352
374
396
418
440
462
484
506
COUNT IN COMPLETION DATE ORDER
04OCT17:12:50

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TIMELINE ADDITIONS

Effective Date	Information Letter	Event
20170711	17-1	Editorial - storage box fan, blast nozzle, precision statement

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LAB VISITS

No lab visits were conducted during this period.

INFORMATION LETTERS

Information letter 17-1 was issued during this period. This letter covered clarification on storage box fan motor requirements, guidance on installing blast nozzle correctly, an editorial correction of typo in Section 8.1, and a revised precision statement for AAM hardware.

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STATUS OF REFERENCE OIL SUPPLY

		@ TMC	
Oil	Cans @ Labs	Cans	Gallons
123-2	12	116	116.8
155	0	15	15.0
155-1	11	186	186.5
Total	23	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).