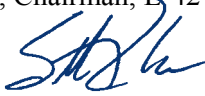




Test Monitoring Center

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

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

MEMORANDUM: 17-015
DATE: May 17, 2017
TO: Eric Donovan, Chairman, L-42 Surveillance Panel
FROM: Scott Parke 
SUBJECT: L-42 Reference Oil Testing from October 1, 2016 through March 31, 2017

Attached is a summary of reference oil testing activity this period.

SDP/sdp/mem17-015.sdp.doc

cc: Frank Farber

Jeff Clark

L-42 Surveillance Panel

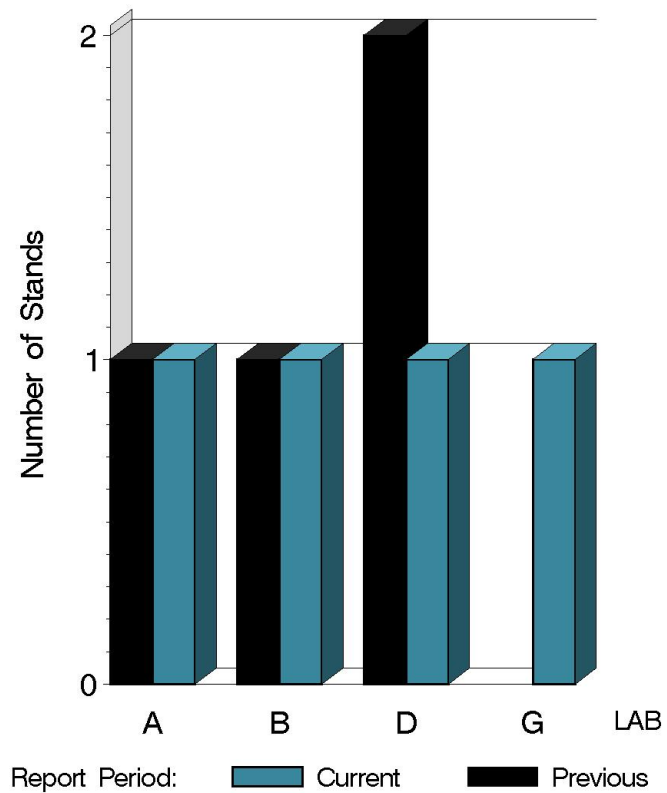
<ftp://ftp.astmtmc.cmu.edu/docs/gear/l42/semiannualreports/l42-04-2017.pdf>

Distribution: email

L-42 (D7452)

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

BY-LAB STAND
DISTRIBUTION



16:19:52 15MAY2017

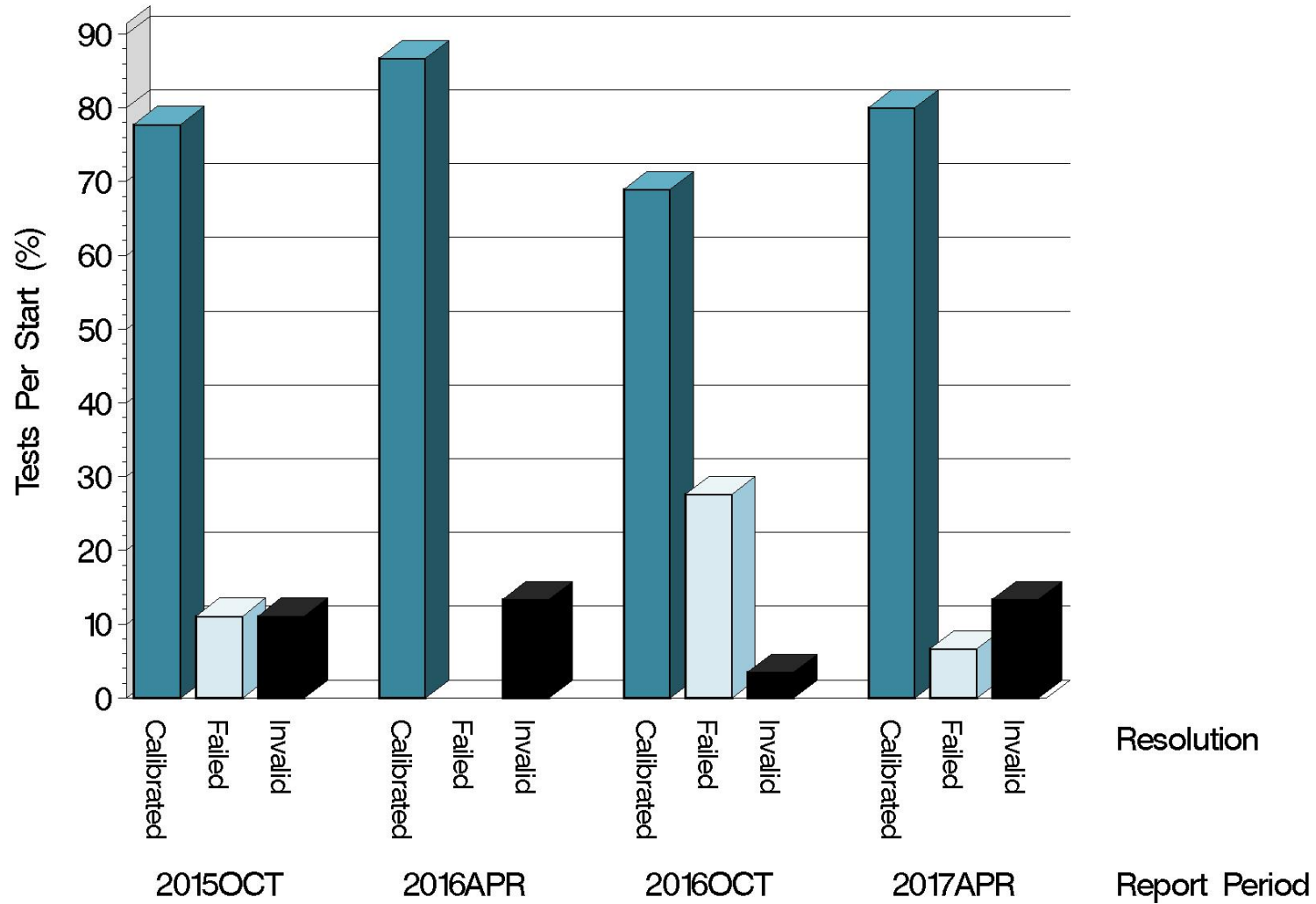
L-42 (D7452)

Test Distribution by Oil and Validity

					Totals				
					113	116-1	117	Last Period	This Period
Accepted for calibration	AC	0	2	10				20	12
Rejected (Mild)	OC	0	0	0				2	0
Rejected (Severe)	OC	0	0	1				6	1
Rejected (Precision)	OC	0	0	0				0	0
Accepted discrimination	AS	4	0	0				4	4
Unacceptable discrimination	MS	0	0	0				0	0
Invalidated discrimination	LS	1	0	0				1	1
Invalidated calibration	LC	0	0	2				0	2
Unacceptable calibration	MC	0	0	0				0	0
Aborted	XC	0	0	0				1	0
Acceptable information run	NI	0	0	0				2	0
Unacceptable information run	MI	0	0	0				0	0
Total		5	2	13				36	20

L-42 (D7452)

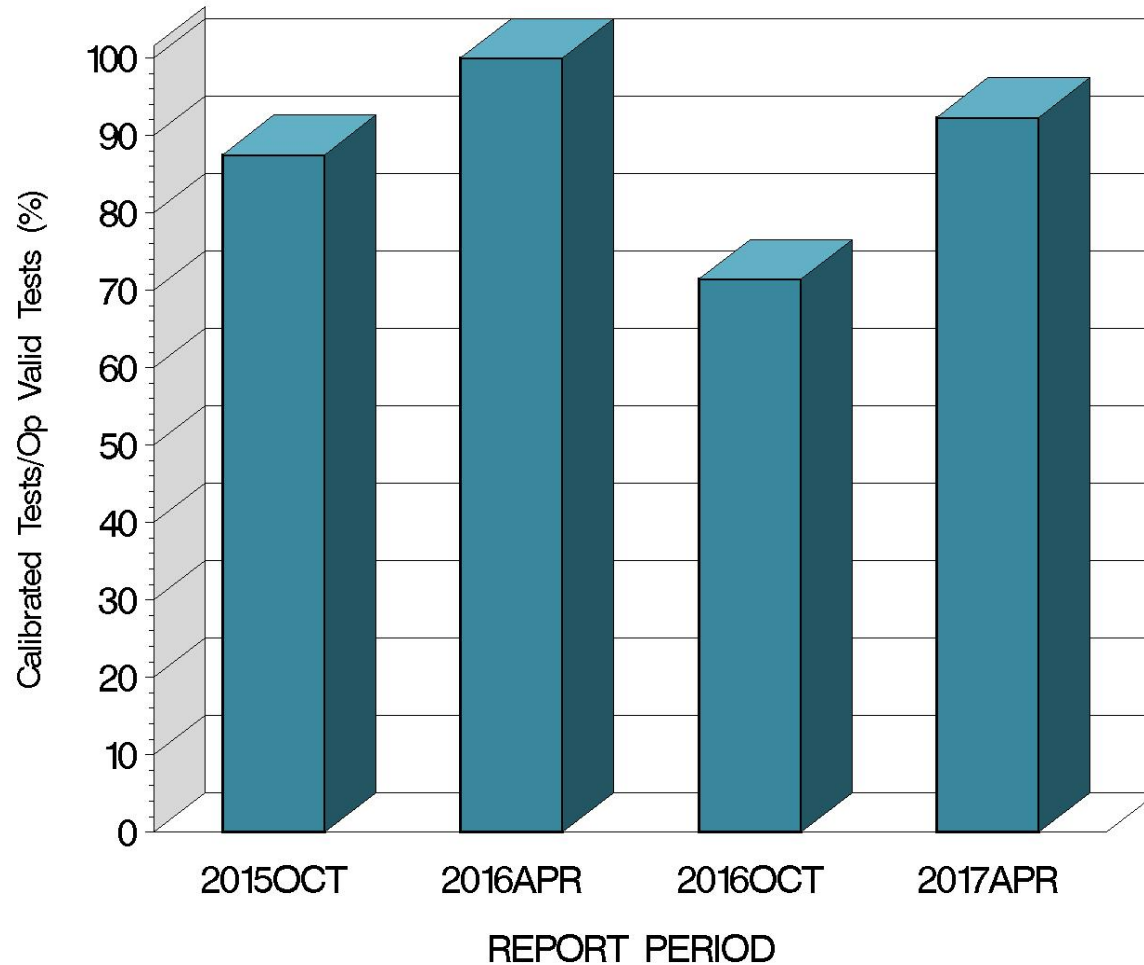
CALIBRATION ATTEMPT SUMMARY



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L-42 (D7452)

OPERATIONALLY VALID TESTS
MEETING ACCEPTANCE CRITERIA

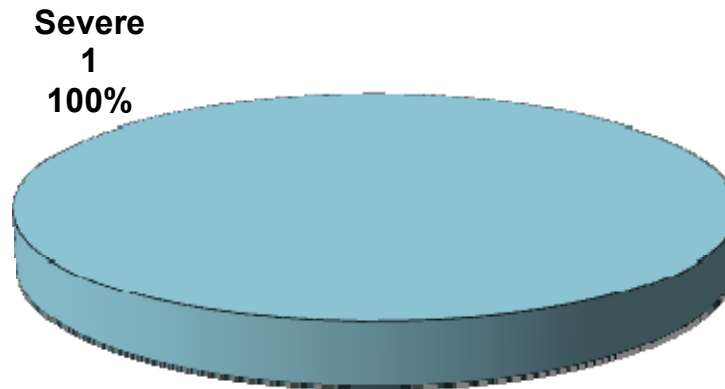


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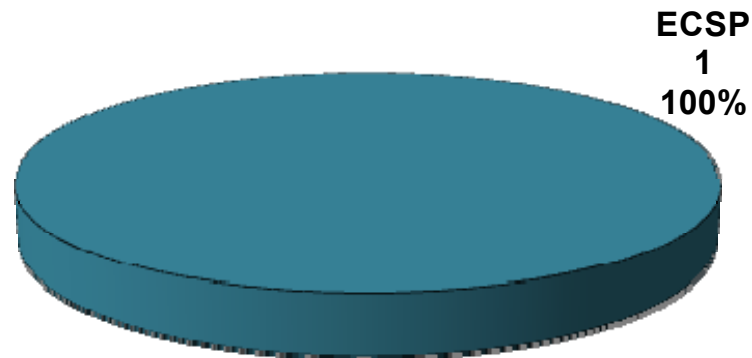
L-42 (D7452)

CAUSES FOR FAILED TESTS

By Alarm Type



By Parameter



L-42 (D7452)

CAUSES FOR LOST TESTS

Lab	Cause	Oil			Validity				Loss Rate		
		113	116-1	117	MS	LS	LC	XC	Lost	Starts	%
G	Spring perches locked			●			●		2	7	29%
	Spring perches locked			●			●				
	Lost	0	0	2	0	0	2	0			
	Starts	5	2	13	20	20	20	20			
	%	0%	0%	15%	0%	0%	10%	0%			

L-42 (D7452)

			Coast Side Pinion Scoring		
Oil	Gear Batch	N	Mean	Std. Dev.	Average Δ/s
116-1	C1L925/P8AD078X	2	22.5	2.12	-0.09
117	C1L925/P8AD078X	11	25.9	3.18	0.53

		Pooled Standard Deviation			
Lab	Coast Side Pinion Scoring Δ/s	df	Coast Side Pinion Scoring	Coast Side Ring Scoring	Shock Series I Coast Side Ring Scoring
A	0.09	1	0.71	2.12	0
B	-0.09	1	2.12	2.12	0
D	0.49	5	1.63	0.52	0
G	0.91	2	5.57	2.52	0

L-42 (D7452)

SUMMARY OF SEVERITY & PRECISION

Severity
ECSP severity remained within control chart limits throughout the period.
Precision
Precision also remained within limits throughout the period.

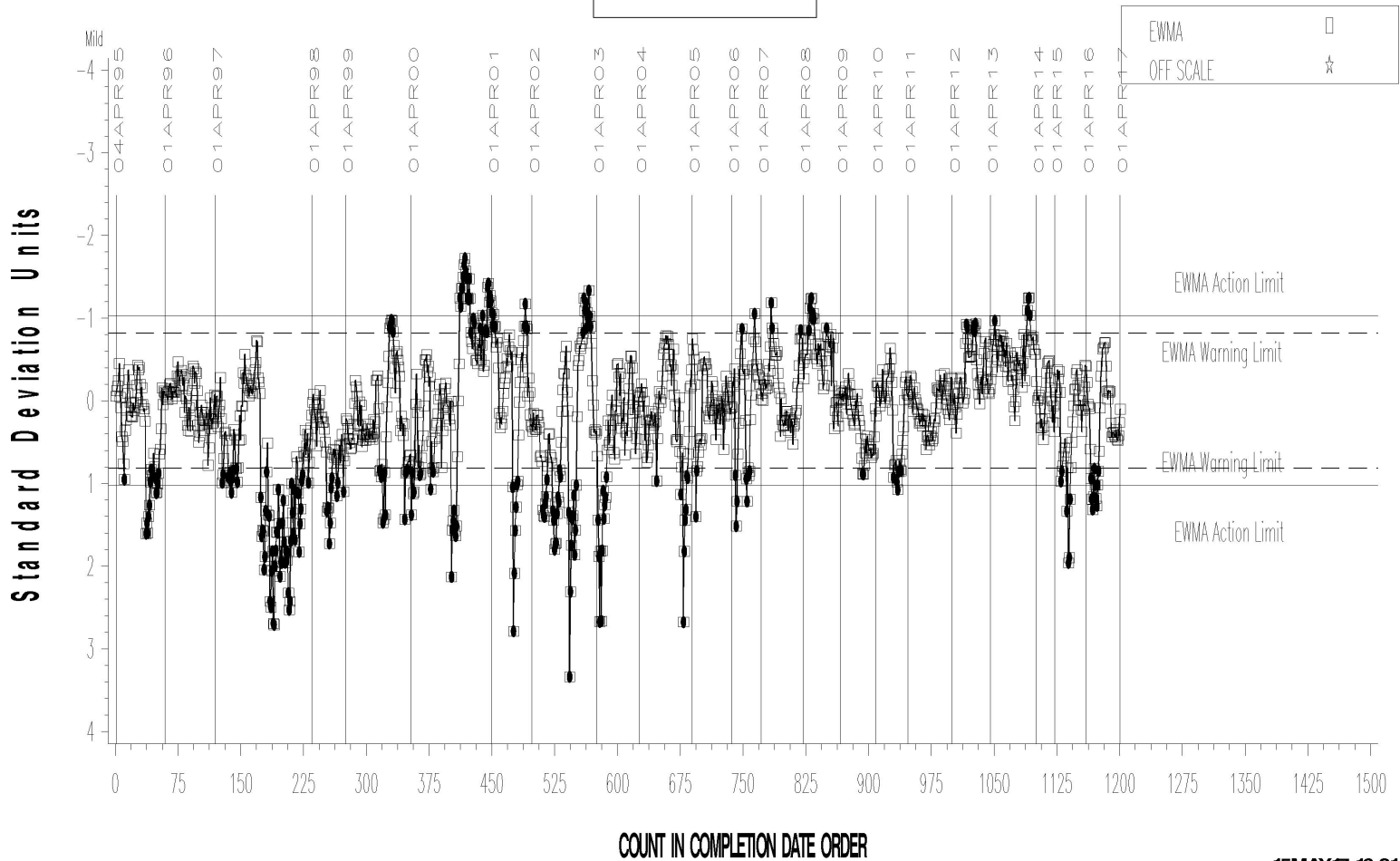
Industry control charts follow.

L-42 (D7452)

L-42 INDUSTRY OPERATIONALLY VALID DATA

FINAL EOT PINION SCORING COAST SIDE

LTMS Severity Analysis



Severe

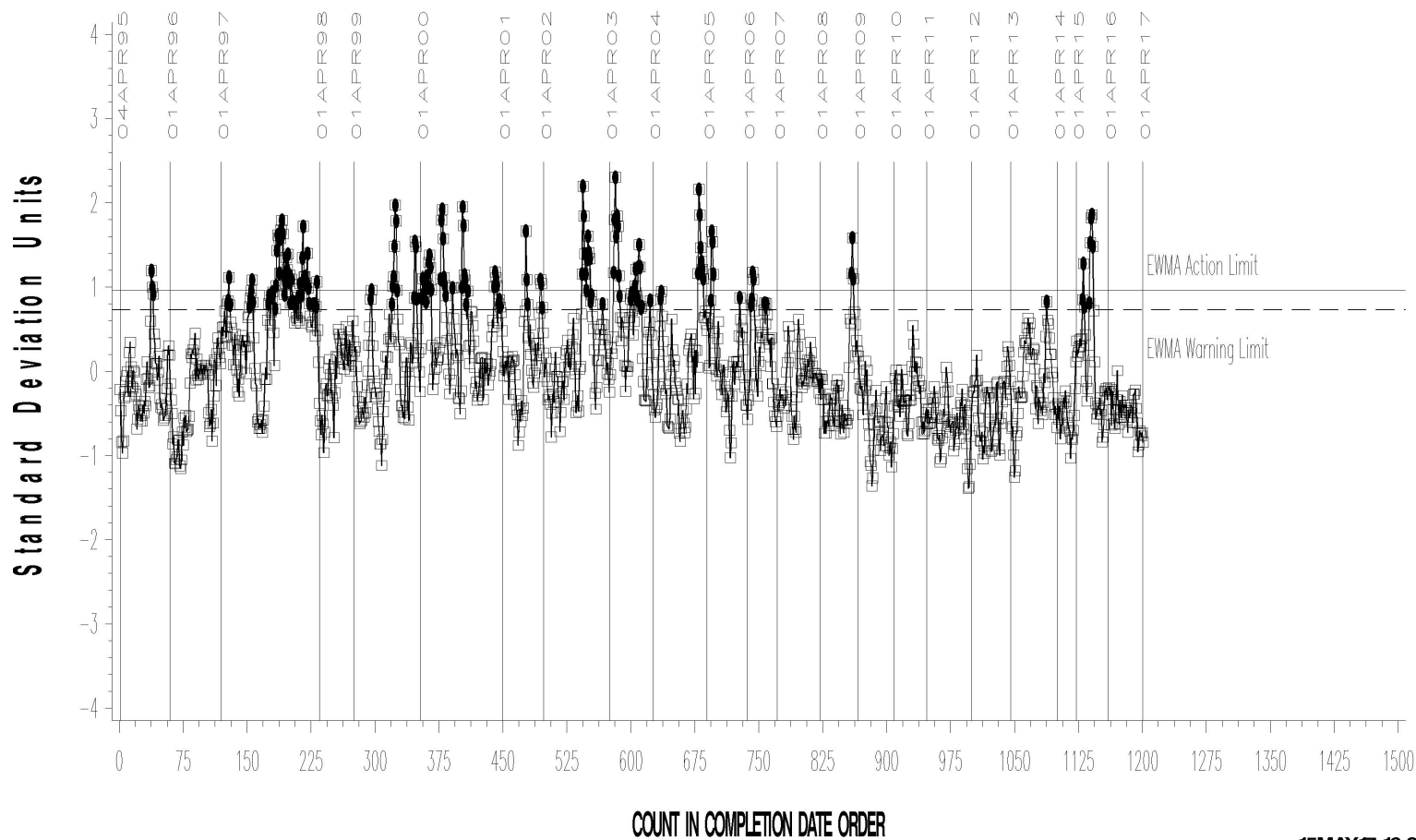
15MAY17:16:21

L-42 (D7452)

L-42 INDUSTRY OPERATIONALLY VALID DATA

FINAL EOT PINION SCORING COAST SIDE

LTMS Precision Analysis



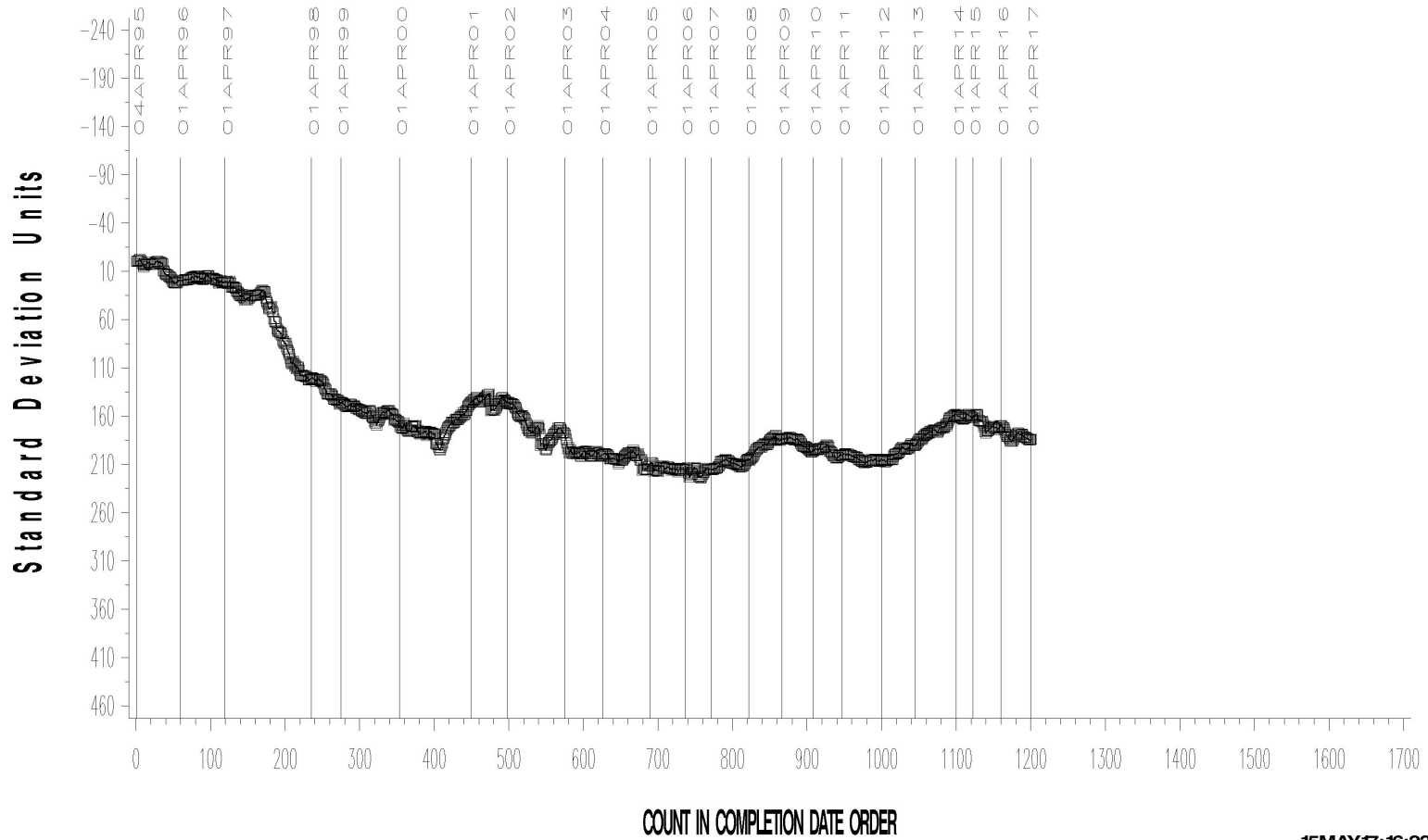
15MAY17:16:21

L-42 (D7452)

L-42 INDUSTRY OPERATIONALLY VALID DATA

FINAL EOT PINION SCORING COAST SIDE

CUSUM Severity Analysis



15MAY17: 16:22

L-42 (D7452)

TIMELINE ADDITIONS

Effective Date	Information Letter	Event
		No industry timeline additions were made this period.

L-42 (D7452)

LAB VISITS

No L-42 lab visits were conducted during this period.

INFORMATION LETTERS

No information letters were issued this period.

L-42 (D7452)

STATUS OF REFERENCE OIL SUPPLY

Oil	Cans @ Labs	@ TMC	
		Cans	Gallons
112-2	0	0	0.0
113	13	104	52.0
116-1	0	0	0.0
117	36	798	399.0
Total	49	902	451.0

At surveillance panel direction, the TMC has procured oil 117 as a replacement oil for 116-1. This is a J2360 oil which produces somewhat milder scoring. The oil has been implemented for use as the new “pass” oil with a correction factor +6% for the pinion scoring result and +4% for the ring scoring result.