




Test Monitoring Center

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

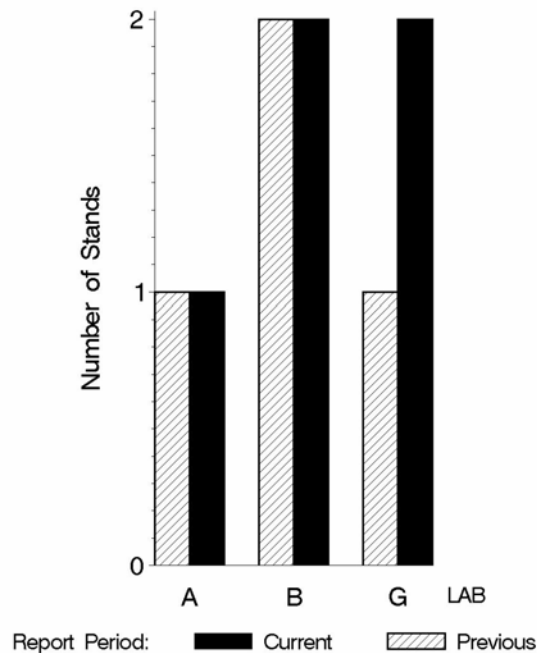
<http://astmtmc.cmu.edu>
412-365-1000

MEMORANDUM: 11-056
 DATE: November 23, 2011
 TO: Dale Smith, Chairman, L-33-1 Surveillance Panel
 FROM: Scott Parke 
 SUBJECT: L-33-1 Testing from April 1, 2011 through September 30, 2011

A total of 14 L-33-1 tests were reported to the Test Monitoring Center during the period from April 1, 2011 through September 30, 2011. Following is a summary of testing activity this period.

	Reporting Data	Calibrated on 9-30-11
Number of Labs	3	3
Number of Stands	5	5

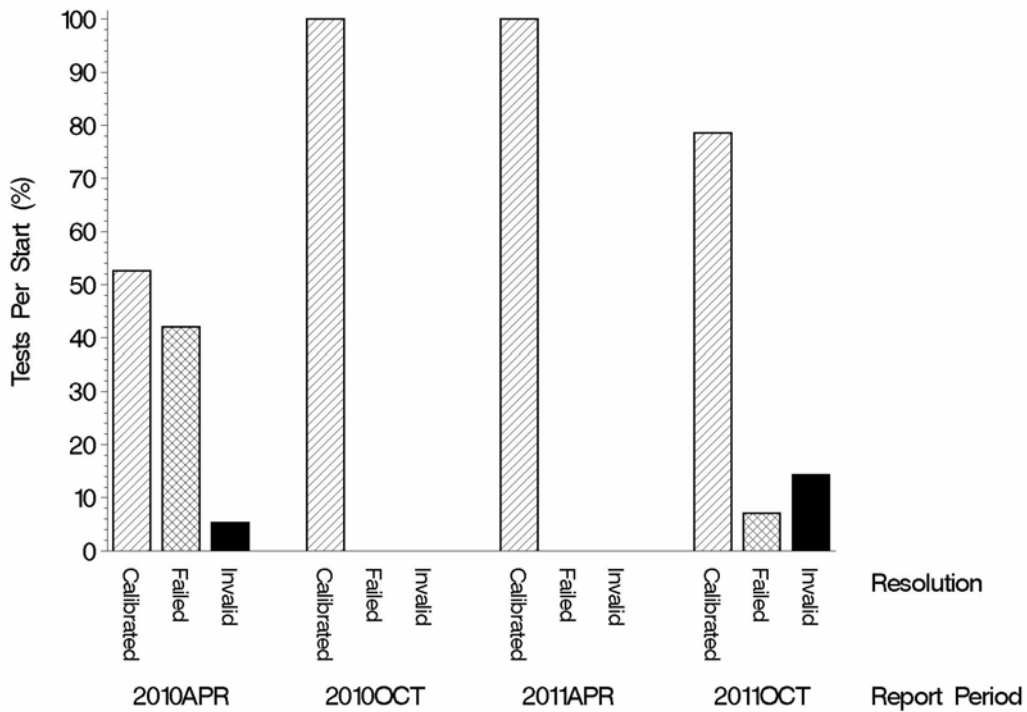
BY-LAB STAND
DISTRIBUTION



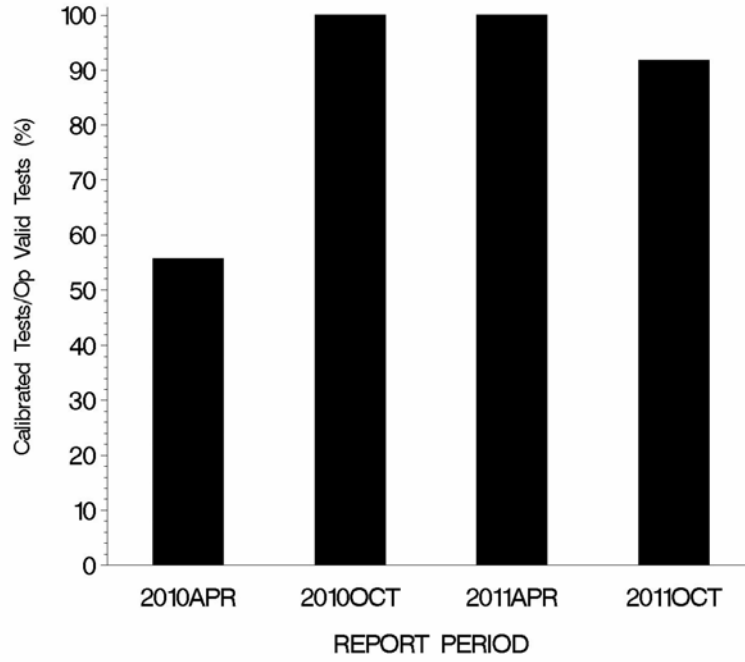
Test Distribution by Oil and Validity

		Totals				
		123-2	155	155-1	Last Period	This Period
Accepted for calibration	AC	7	4	0	4	11
Rejected (Mild)	OC	1	0	0	0	1
Rejected (Severe)	OC	0	0	0	0	0
Rejected (Precision)	OC	0	0	0	0	0
Aborted	XC	0	0	0	0	0
Invalid (by lab)	LC	0	1	0	0	1
Invalid (by lab/TMC)	RC	0	1	0	0	1
Shakedown run	NI	0	0	0	1	0
Total		8	6	0	5	14

CALIBRATION ATTEMPT SUMMARY



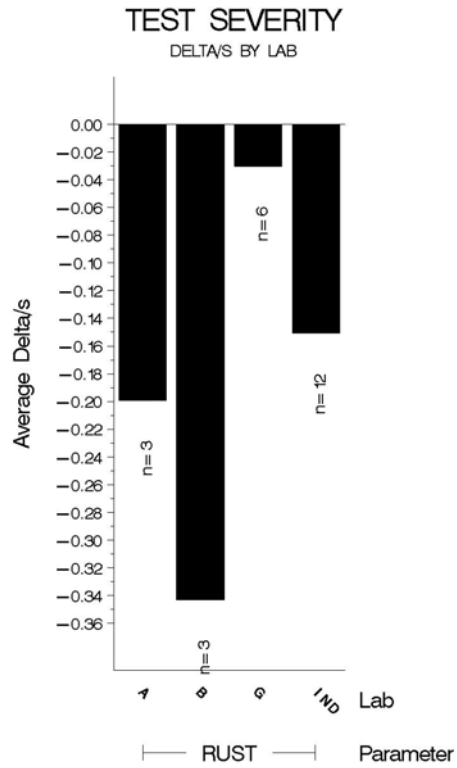
OPERATIONALLY VALID TESTS
MEETING ACCEPTANCE CRITERIA

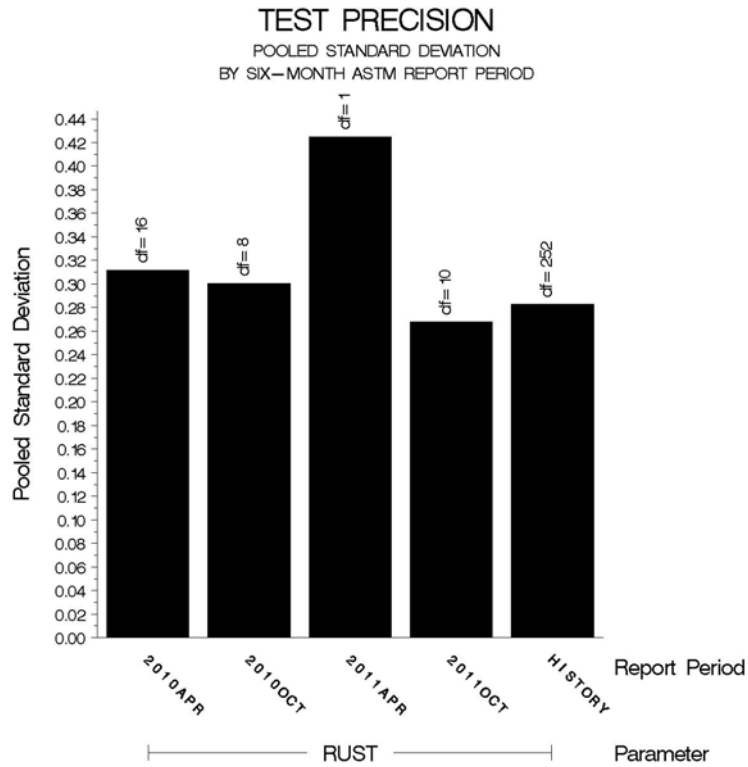


CAUSES FOR LOST TESTS:

Lab	Cause	Oil			Validity			Loss Rate		
		123-2	155	155-1	LC	RC	XC	Lost	Starts	%
G	Temperature measurement & logging problems.		•		•			2	8	25%
	Test invalidated after re-rating.		•			•				
	Lost	0	2	0	1	1	0			
	Starts	8	6	0	14	14	14			
	%	0%	33%	0%	7%	7%	0%			

Average Δ/s by Lab		
Lab	n	RUST
A	3	-0.19897
B	3	-0.34256
G	6	-0.02974
Industry	12	-0.15026
Shift	12	-0.03756





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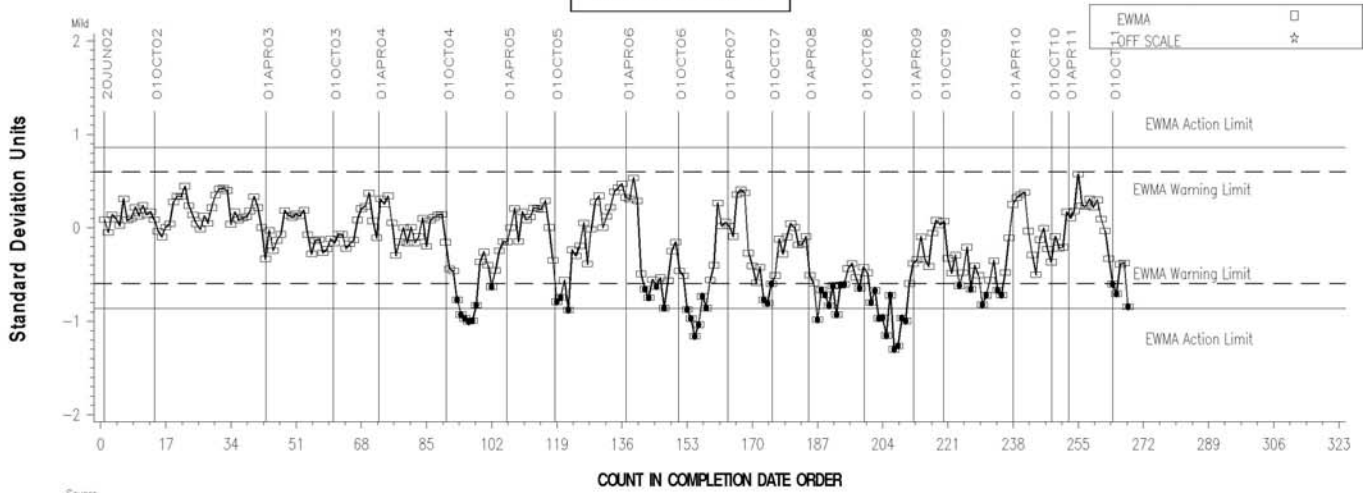
INDUSTRY CONTROL CHART:

The industry control chart is shown on the following page. Both precision and severity performance are currently within control chart alarm limits.

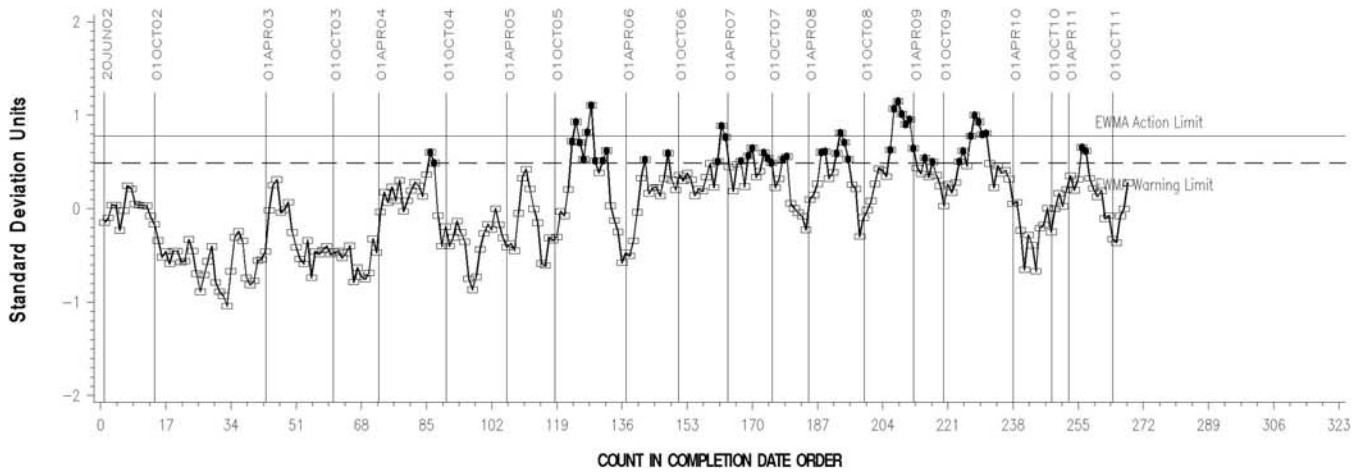
L-33-1 INDUSTRY OPERATIONALLY VALID DATA

FINAL RUST RESULT

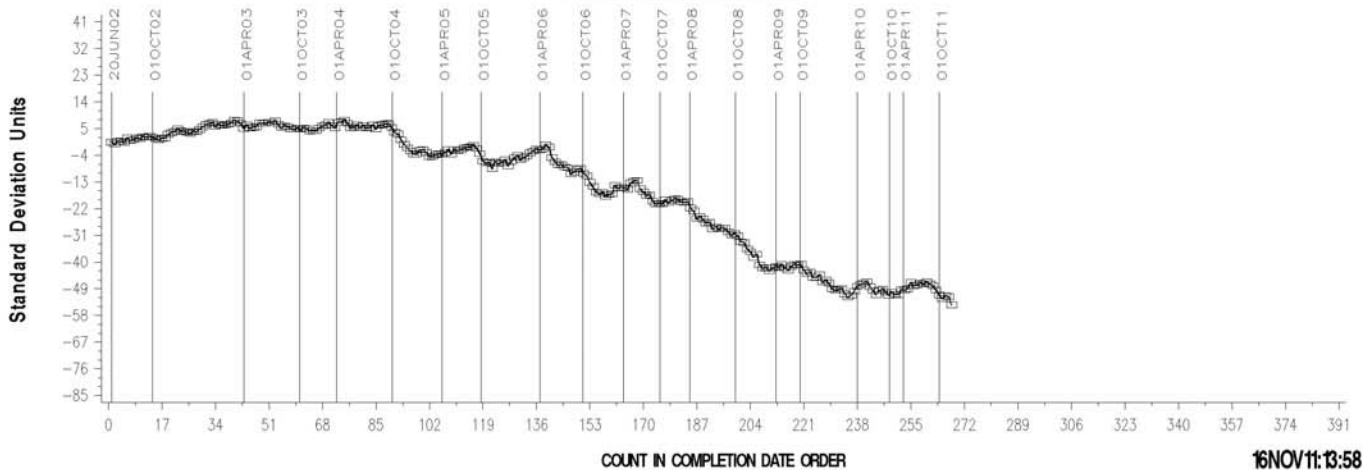
LTMS Severity Analysis



LTMS Precision Analysis



CUSUM Severity Analysis



TIMELINE OF SIGNIFICANT EVENTS IN THE HISTORY OF THE L-33-1 TEST:

Effective Date	Information Letter	Event
20030106	02-1	New L-33-1 Test Procedure
20030507	03-1	Revised test unit assembly procedure
20030507	03-1	Revise specification for the abrasive blasting cabinet regulator
20030507	03-1	Revised electric fan motor RPM specification
20030507	03-1	Non-interpretable tests
20030507	03-1	Revision to light rust definition
20030507	03-1	Editorial changes
20030916	03-2	Bearing replacement
20030916	03-2	Addition of Dana bulletin No. 5304-2
20040101	03-2	Change in solvent specification
20050221	05-1	Revised Solvent Specification
20050221	05-1	Revised Cover Plate Guide Pin Requirement
20050221	05-1	Updated Test Precision
20050221	05-1	Donated Reference Oil Test Programs/Calibration Period Length Adjustment
20050221	05-1	Revised Footnote 2
20060207	06-1	Axle Cover Rating Template
20060721	06-2	Housing Cover Gasket Supplier Name and Address Change
20061009	06-3	Aluminum Differential Case, Area 2, Hub Inside Diameter Rating Template
20061009	06-3	Editorial changes
20070214	07-1	Revised Area 1 Rating Surface Description
20070214	07-1	Editorial Changes to Figures A1.8, A1.14, and A1.15
20070411	07-2	Editorial Changes to Sections A2.2.1 and A2.2.2
20070525	07-3	Rating Procedure Using Aluminum Differential Case, Area 2, Hub Inside Diameter Rating Template
20071114	07-4	Revised Start-up Procedure
20080114	08-1	Revised Section 11.1.6.1
20090323	09-1	Revision to Percent Deviation Calculation
20091112	09-2	Revised instrumentation calibration frequency

TMC LAB VISITS:

No L33-1 lab visits were conducted during this report period.

INFORMATION LETTERS:

No information letters were issued this report period.

STATUS OF REFERENCE OIL SUPPLY:

At the end of this report period, the testing oil supply stood as outlined in the table below:

Oil	Cans @ Labs	@ TMC	
		Cans	Gallons
123	0	0	0.0
123-2	10	180	180.0
151-3	0	0	0.0
155	8	102	102.0
155-1	3	473	473.0
Total	21	755	755.0

The TMC quantity remaining presumes usage only for L-33-1 testing. Oils 151-3 and 155 are also used in other test areas. In 2005, the now nearly-depleted 151-3 was replaced by 155 which is itself nearing depletion. Oil 155 is ready for introduction. The Surveillance Panel has not yet devised a scheme for introducing 155-1.

SDP/sdp/astm1110.doc/mem11-056.sdp.doc

cc: Frank Farber

Jeff Clark

<ftp://ftp.astmtmc.cmu.edu/docs/gear/l331/semiannualreports/l331-10-2011.pdf>

Distribution: email