



Test Monitoring Center

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

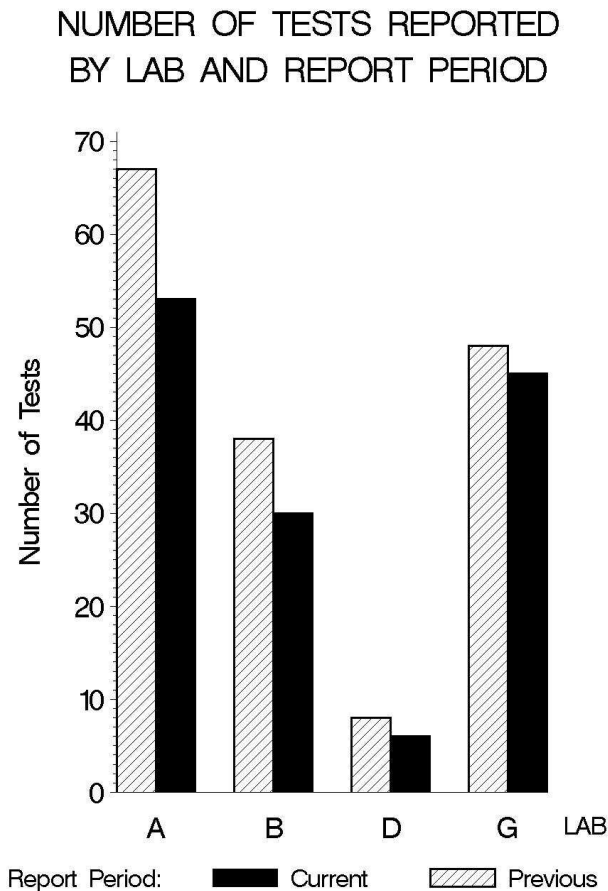
<http://astmtmc.cmu.edu>
412-365-1000

MEMORANDUM: 11-012
DATE: May 24, 2011
TO: Leonard Orzech,
Chairman, Ball Rust Test Surveillance Panel
FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*
SUBJECT: BRT Testing from October 1, 2010 through March 31, 2011

A total of 134 BRT tests were reported to the Test Monitoring Center during the period from October 1, 2010 through March 31, 2011. Following is a summary of testing activity this period.

	Reporting Data
Number of Labs	4

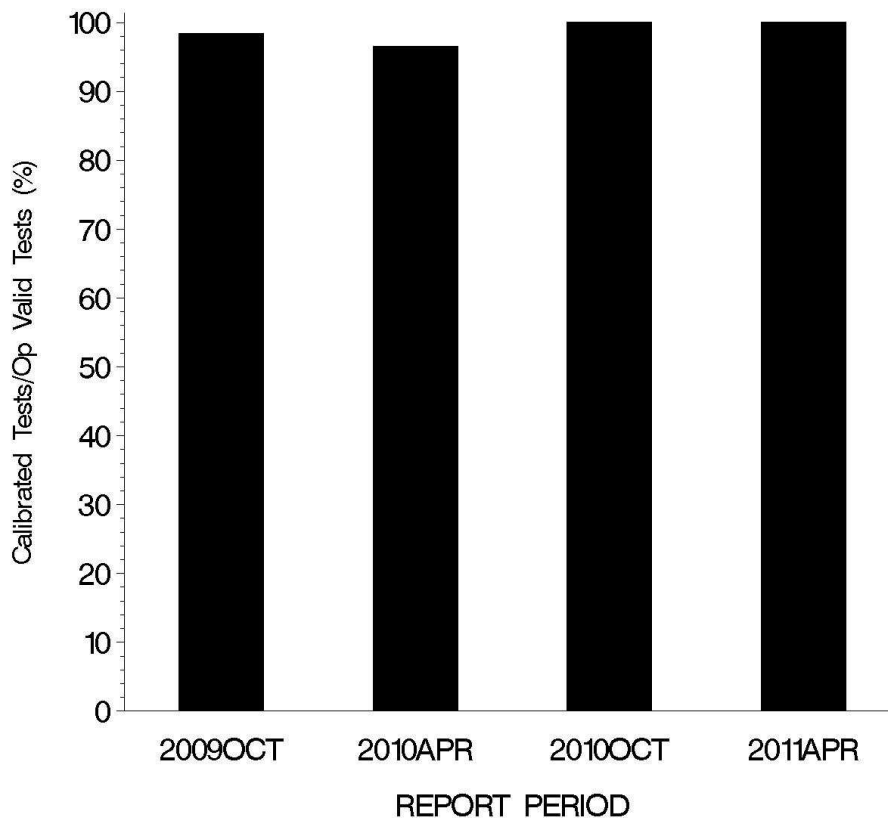
Tests reported this period were distributed as shown below:



Test Distribution by Oil and Validity

		1006	81	82	Totals	
					This Period	Last Period
Accepted for Calibration	AC	44	51	39	134	153
Hardware Qualification Run	NI	0	0	0	0	0
Unacceptable for Calibration	OC	0	0	0	0	0
Operationally Invalid (lab)	LC	0	0	0	0	4
Operationally Invalid (lab/TMC)	RC	0	0	0	0	1
Aborted Calibration	XC	0	0	0	0	3
Total		44	51	39	134	161

**OPERATIONALLY VALID TESTS
MEETING ACCEPTANCE CRITERIA**



The above chart shows the percentage of accepted operationally valid tests. No tests failed to meet the acceptance criteria this period.

Lost Tests per Start by Lab and Oil

Lab	1006			81			82			Total		
	Lost	Starts	%	Lost	Starts	%	Lost	Starts	%	Lost	Starts	%
A	0	18	0	0	20	0	0	15	0	0	53	0
B	0	11	0	0	10	0	0	9	0	0	30	0
D	0	0	0	0	3	0	0	3	0	0	6	0
G	0	15	0	0	18	0	0	12	0	0	45	0
Total	0	44	0	0	51	0	0	39	0	0	134	0

Lost tests are those that were aborted or operationally invalid. No tests were lost this period.

Causes for Lost Tests

Lab	Cause	Oil			Validity			Loss Rate		
		1006	81	82	LC	RC	XC	Lost	Starts	%
-	No lost tests were reported this period								134	0
	Lost	0	0	0	0	0	0			
	Starts	44	51	39	134	134	134			
	%	0	0	0	0	0	0			

Average Δ /s by Lab

Lab	n	AGVYI
A	53	0.551
B	30	0.751
D	6	1.622
G	45	0.907
Industry	134	0.763

Individual test results can be found on the TMC Web Page at the following link:

<ftp://ftp.astmtmc.cmu.edu/refdata/bench/brt/data/>

The test has been trending mild since August 2000 at ~ 0.5 standard deviations, which is considered significant. All four laboratories are significantly mild of target for this period. The historical reference pass rate is ~97%. The TMC recommends that an industry correction factor be discussed and that a more robust referencing system be considered to address overly off target laboratories.

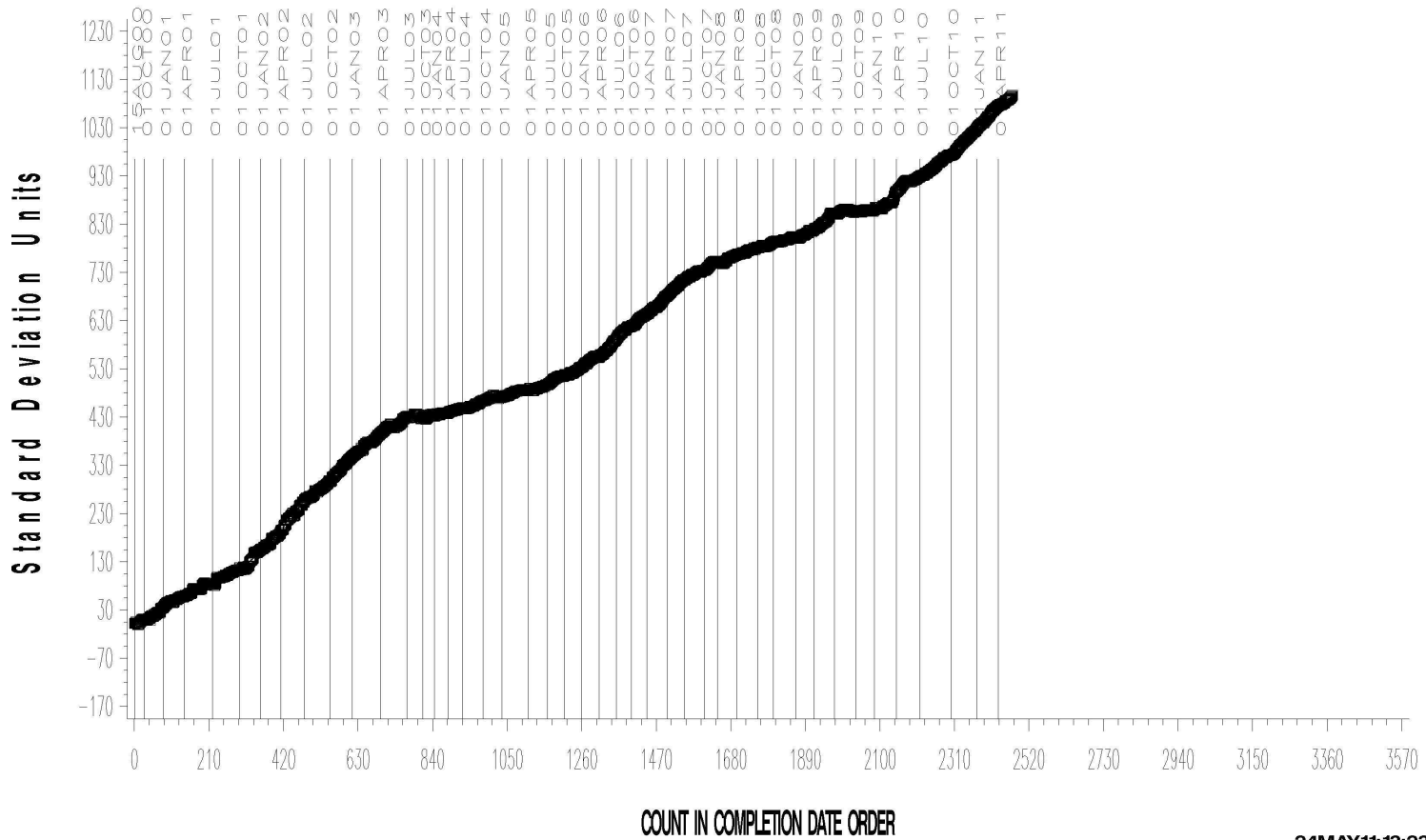
CUSUM PLOT

BALL RUST TEST INDUSTRY OPERATIONALLY VALID DATA



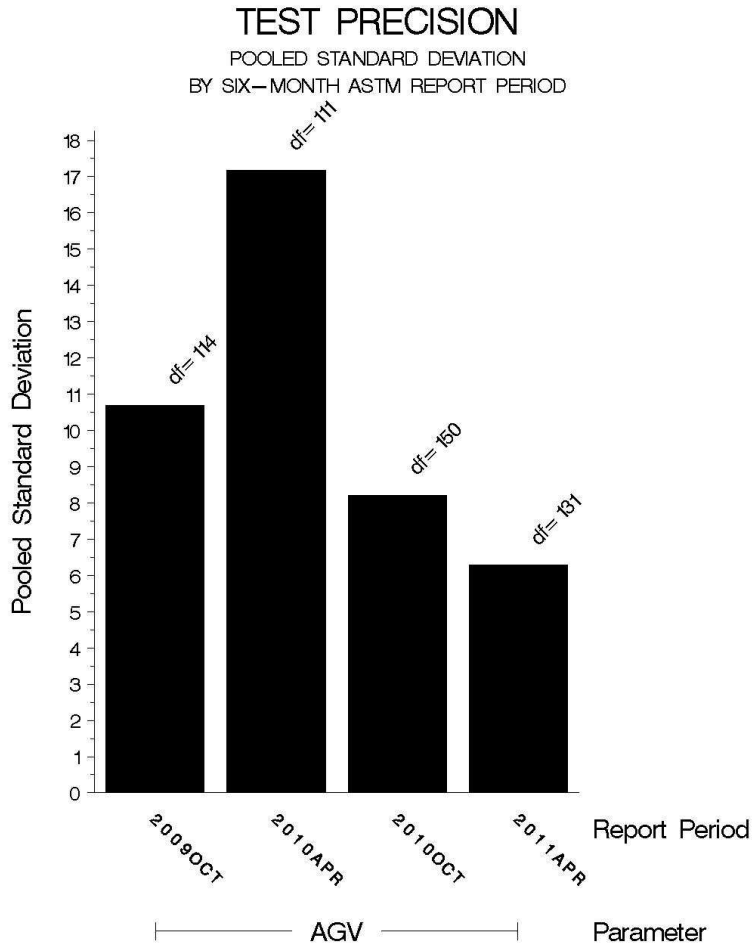
REFERENCE AVERAGE GRAY VALUE

CUSUM Severity Analysis



POOLED S:

Pooled s for this period is 6.26. Shown below is a bar chart comparing the pooled s values for AGV over the last four report periods.



STATUS OF REFERENCE OIL SUPPLY:

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

Oil	Samples @ Labs	@ TMC	
		Samples (30 mL)	Gallons
1006	33	4850	38.8
81	26	1512	12.1
82	24	787	6.3
82-1	8	1225	9.8
Total	91	8374	67.0

INFORMATION LETTERS:

No information letters were issued this period.

SUMMARY

- Over the course of this report period, AGV severity as measured by cusum plotting continued the mild trend that has existed since the inception of the test.
- Precision as measured by pooled standard deviation is better than previous periods.

MTK/mtk/astm0411.doc/mem11-012.mtk.doc

c: F. M. Farber

J. A. Clark

BRT Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/bench/brt/semiannualreports/brt-04-2011.pdf>

Distribution: email