



Test Monitoring Center

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

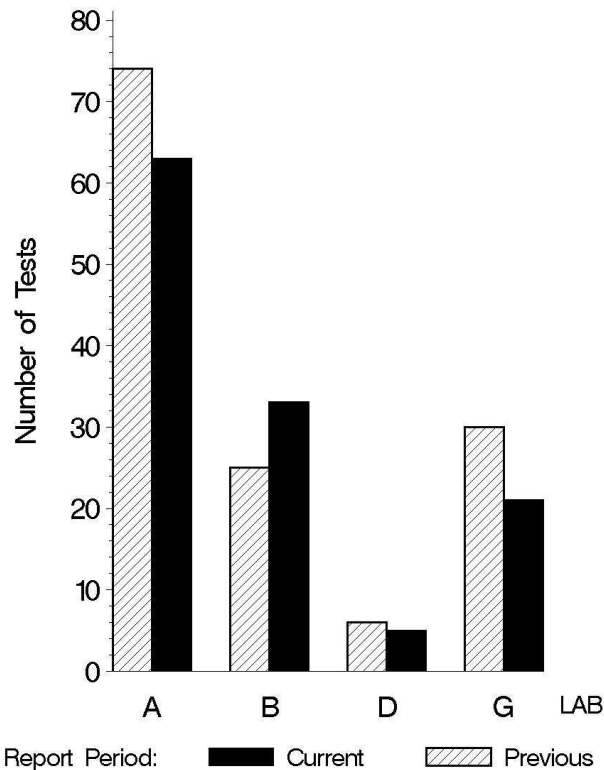
MEMORANDUM: 12-011
DATE: May 18, 2012
TO: Leonard Orzech,
Chairman, Ball Rust Test Surveillance Panel
FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*
SUBJECT: BRT Testing from October 1, 2011 through March 31, 2012

A total of 122 BRT tests were reported to the Test Monitoring Center during the period from October 1, 2011 through March 31, 2012. Following is a summary of testing activity this period.

	Reporting Data
Number of Labs	4

Tests reported this period were distributed as shown below:

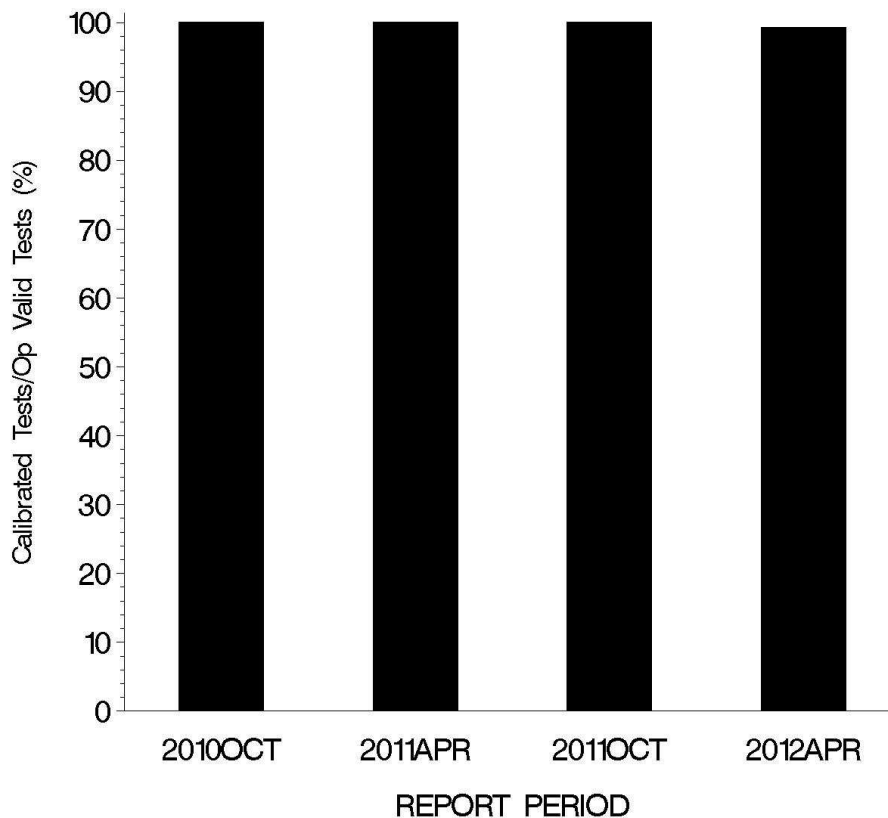
NUMBER OF TESTS REPORTED BY LAB AND REPORT PERIOD



Test Distribution by Oil and Validity

		1006	81	82	Totals	
					This Period	Last Period
Accepted for Calibration	AC	42	44	31	117	132
Hardware Qualification Run	NI	0	0	0	0	0
Unacceptable for Calibration	OC	1	0	0	1	0
Operationally Invalid (lab)	LC	1	0	1	2	1
Operationally Invalid (lab/TMC)	RC	0	0	1	1	0
Aborted Calibration	XC	0	0	1	1	1
Total		44	44	34	122	134

**OPERATIONALLY VALID TESTS
MEETING ACCEPTANCE CRITERIA**



The above chart shows the percentage of accepted operationally valid tests. One test 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	20	0	0	26	0	2	17	12	2	63	3
B	1	13	7	0	11	0	1	9	11	2	33	6
D	0	3	0	0	1	0	0	1	0	0	5	0
G	0	8	0	0	6	0	0	7	0	0	21	0
Total	1	44	2	0	44	0	3	34	9	4	122	3

Lost tests are those that were aborted or operationally invalid. Four tests were lost this period.

Causes for Lost Tests

Lab	Cause	Oil			Validity			Loss Rate		
		1006	81	82	LC	RC	XC	Lost	Starts	%
A	Airflow Problem			•	•	•		2	122	2
B	Power Failure	•			•			1	122	0.8
	Shaker Table Malfunction			•			•	1	122	0.8
	Lost	1	0	3	2	1	1			
	Starts	44	44	34	122	122	122			
	%	2	0	9	2	0.8	0.8			

Average Δ/s by Lab

Lab	n	AGVYI
A	61	0.493
B	31	0.459
D	5	0.748
G	21	-0.759
Industry	118	0.272

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

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

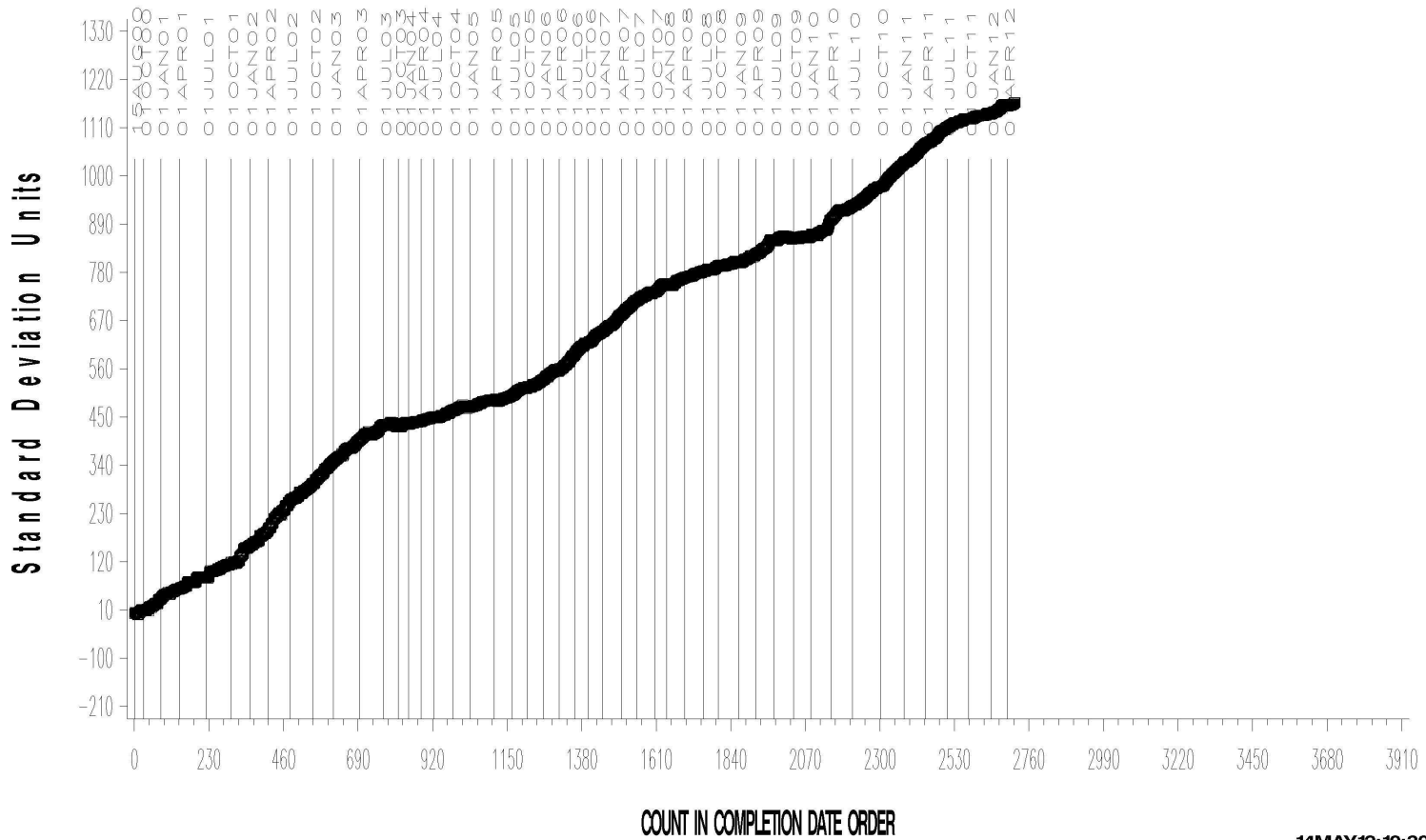
CUSUM PLOT

BALL RUST TEST INDUSTRY OPERATIONALLY VALID DATA



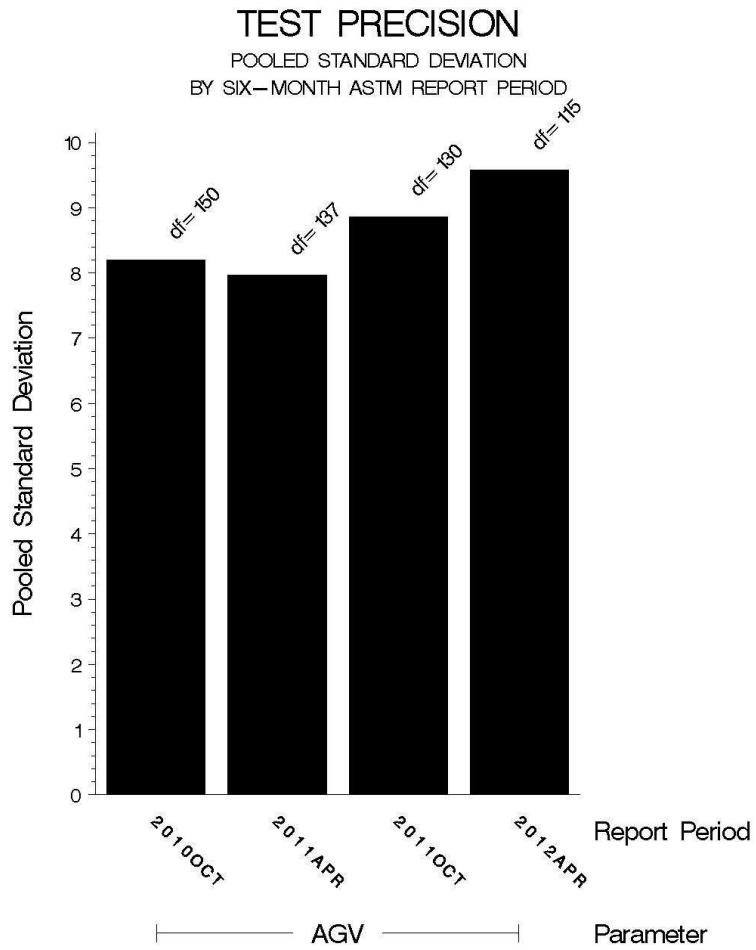
REFERENCE AVERAGE GRAY VALUE

CUSUM Severity Analysis



POOLED S:

Pooled s for this period is 9.56. 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	28	4612	36.9
81	27	1262	10.1
82	25	637	5.1
82-1	8	1225	9.8
Total	88	7736	61.9

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 slightly worse than previous periods but comparable to historical performance.

MTK/mtk/astm0412.doc/mem12-011.mtk.doc

c: F. M. Farber

J. A. Clark

BRT Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/bench/brt/semiannualreports/brt-04-2012.pdf>

Distribution: email