



Test Monitoring Center

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

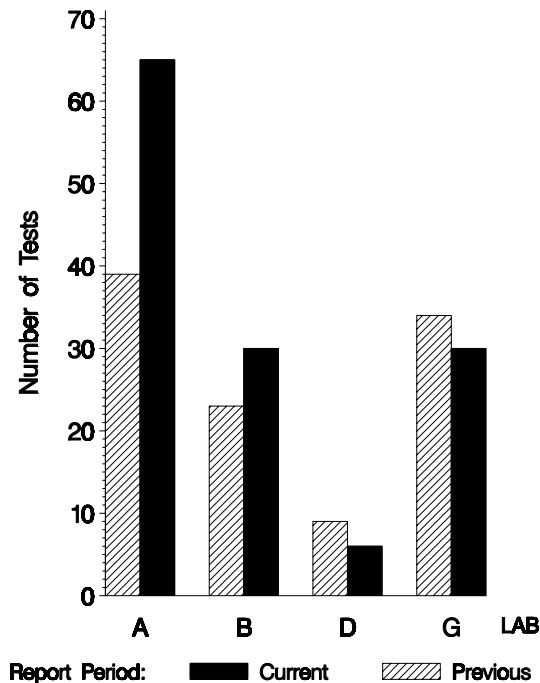
MEMORANDUM: 09-028
DATE: May 26, 2009
TO: Leonard Orzech,
Chairman, Ball Rust Test Surveillance Panel
FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*
SUBJECT: BRT Testing from October 1, 2008 through March 31, 2009

A total of 131 BRT tests were reported to the Test Monitoring Center during the period from October 1, 2008 through March 31, 2009. Following is a summary of testing activity this period.

	Reporting Data
Number of Labs	4

Tests reported this period were distributed as shown below:

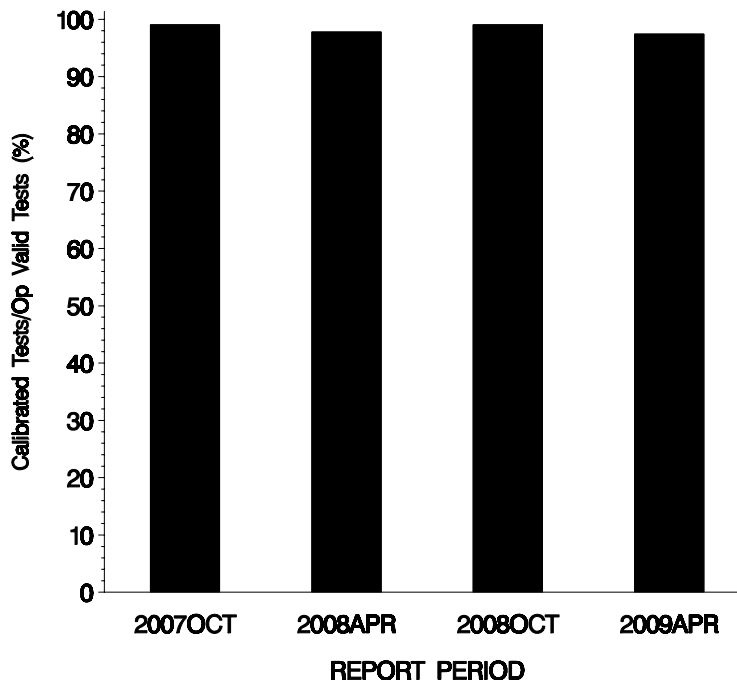
**NUMBER OF TESTS REPORTED
BY LAB AND REPORT PERIOD**



Test Distribution by Oil and Validity

						Totals	
		1006	81	82	82-1	Last Period	This Period
Accepted for Calibration	AC	43	46	24	0	102	113
Industry Support Run	NI	0	0	0	9	0	9
Rejected Mild	OC	0	0	1	0	1	1
Rejected Severe	OC	1	1	0	0	0	2
Operationally Invalid (lab)	LC	1	0	1	1	1	3
Operationally Invalid (lab/TMC)	RC	0	0	0	0	0	0
Aborted Calibration	XC	0	1	1	0	1	2
Aborted Industry Support Run	XI	0	0	0	1	0	1
Total		45	48	27	11	105	131

**OPERATIONALLY VALID TESTS
MEETING ACCEPTANCE CRITERIA**



The above chart shows the percentage of accepted operationally valid tests. Three tests failed to meet the acceptance criteria this period; two were severe and ran oils 1006 and 81, and one was mild and ran oil 82.

Lost Tests per Start by Lab and Oil

Lab	1006			81			82			82-1			Total		
	Lost	Starts	%	Lost	Starts	%	Lost	Starts	%	Lost	Starts	%	Lost	Starts	%
A	0	19	0	0	21	0	0	20	0	0	5	0	0	65	0
B	0	8	0	0	12	0	1	5	20	1	5	20	2	30	7
D	0	3	0	0	2	0	0	1	0	0	0	0	0	6	0
G	1	15	7	1	13	8	1	1	100	1	1	100	4	30	13
Total	1	45	2	1	48	2	2	27	7	2	11	18	6	131	5

Lost tests are those that were aborted, rejected by lab, or operationally invalid.

Causes for Lost Tests

Lab	Cause	Oil				Validity			Loss Rate		
		1006	81	82	82-1	LC	XC	XI	Lost	Starts	%
B	Power Failure			●	●		●	●	2	30	7%
G	Power Failure		●					●	4	30	13%
	Shaker Table Failure	●				●					
	Flow Problem			●		●					
	Wrong Oil Assignment				●	●					
	Lost	1	1	2	2	3	2	1			
	Starts	45	48	27	11	131	131	131			
	%	2%	2%	7%	18%	2%	2%	1%			

Average Δ 's by Lab

Lab	n	AGVYI
A	60	0.206
B	24	0.625
D	6	0.728
G	26	-0.227
Industry	116	0.223

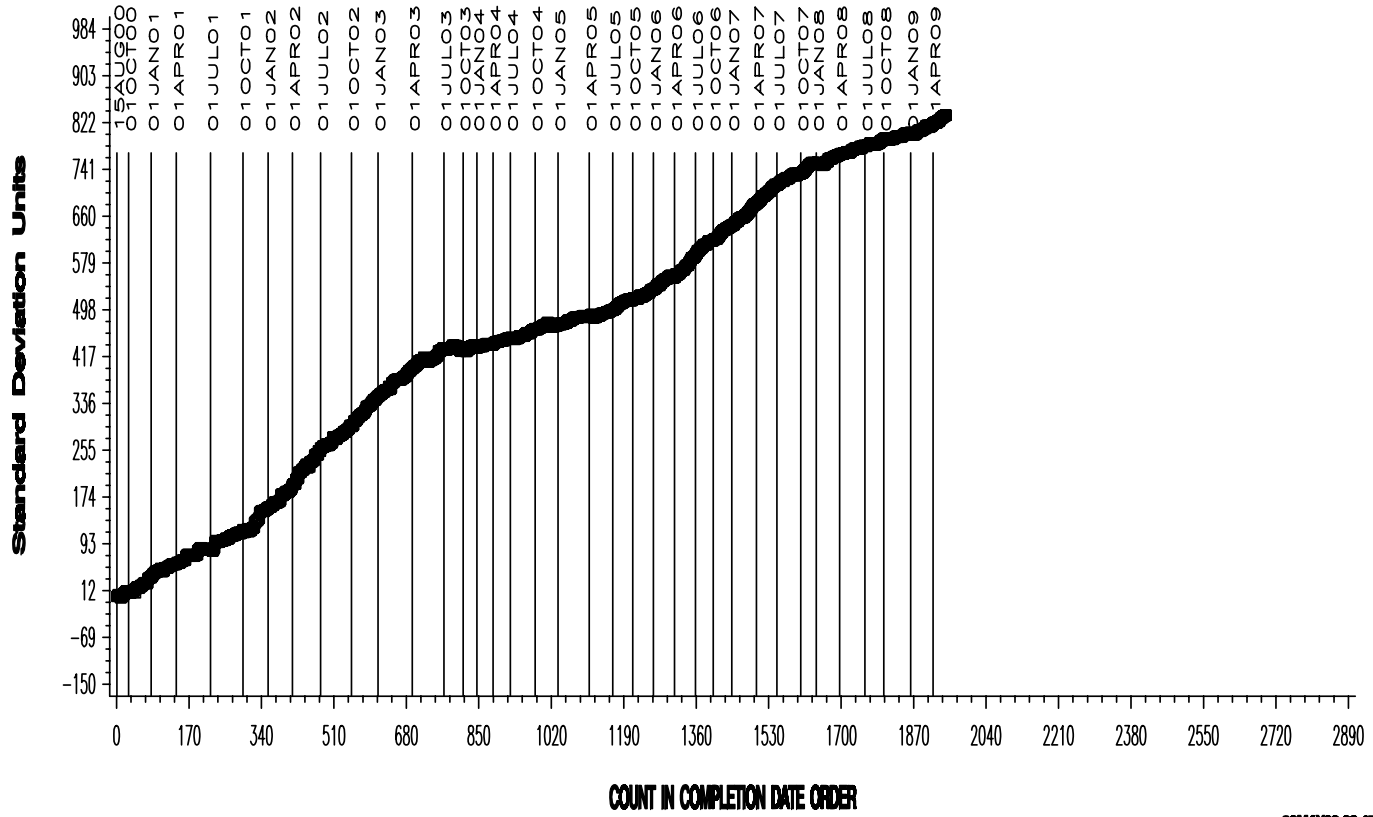
Individual test results can be found on the TMC Web Page at the following link:

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

CUSUM PLOT

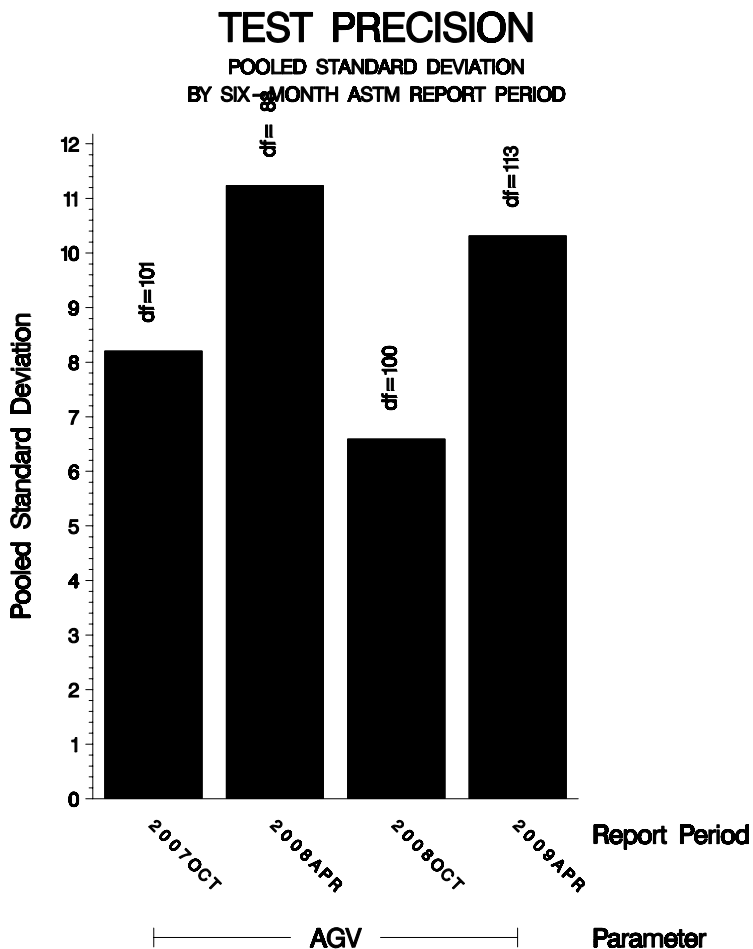
BALL RUST TEST INDUSTRY OPERATIONALLY VALID DATA
REFERENCE AVERAGE GRAY VALUE

CUSUM Severity Analysis



POOLED S:

Pooled s for this period is 10.31. Shown below is a bar chart comparing the pooled s values for AGV over the last four report periods. Where degrees of freedom equal zero, no bars will be shown. This will occur where only one test was reported or where multiple tests are reported but all are on different oils. Periods showing no information had no tests reported.



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	Gallons
1006	16	5037	40.3
81	23	1762	14.1
82	18	937	7.5
82-1	8	1225	9.8
Total	65	8961	71.7

* Future reblends of oils marked with an asterisk are not obtainable by TMC.

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 comparable to previous periods.

MTK/mtk/astm0409.doc/mem09-028.mtk.doc

c: J. L. Zalar

F. M. Farber

M. T. Kasimirsky

BRT Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/bench/brt/semiannualreports/brt-04-2009.pdf>

Distribution: email