

### **Test Monitoring Center**

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

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

MEMORANDUM: 14-010

DATE: May 20, 2014

TO: Leonard Orzech,

Chairman, Ball Rust Test Surveillance Panel

FROM: Michael T. Kasimirsky Milael J. Kasimisky

SUBJECT: BRT Testing from October 1, 2013 through March 31, 2014

A total of 162 BRT tests were reported to the Test Monitoring Center during the report period from October 1, 2013 through March 31, 2014.

Please find attached a summary of testing activity this period.

MTK/mtk/astm0414.doc/mem14-010.mtk.doc

cc: F. M. Farber J. A. Clark

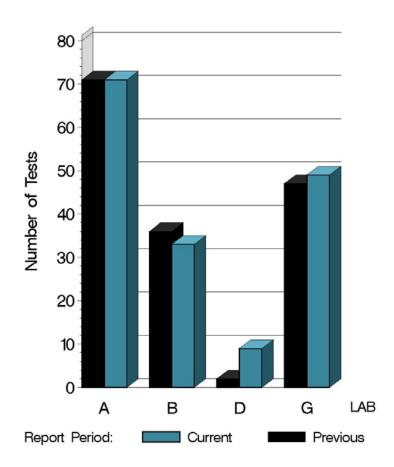
**BRT Surveillance Panel** 

ftp://ftp.astmtmc.cmu.edu/docs/bench/brt/semiannualreports/brt-04-2014.pdf

Distribution: email

	Reporting Data
Number of Labs	4

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







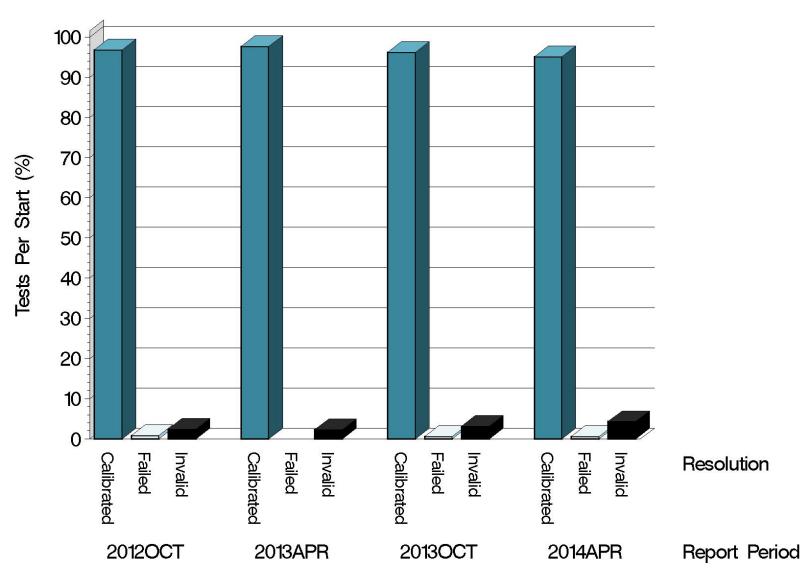
### **Test Distribution by Oil and Validity**

					Totals		
		1006	81	82	This Period	Last Period	
Accepted for calibration	AC	42	74	38	154	150	
Rejected	OC	0	0	1	1	1	
Invalidated by Lab	LC	0	0	0	0	0	
Invalidated by TMC	RC	0	0	1	1	0	
Aborted	XC	2	0	4	6	5	
Hardware Approval run	NI	0	0	0	0	0	
Unacceptable Approval run	MI	0	0	0	0	0	
Total		44	74	44	162	156	





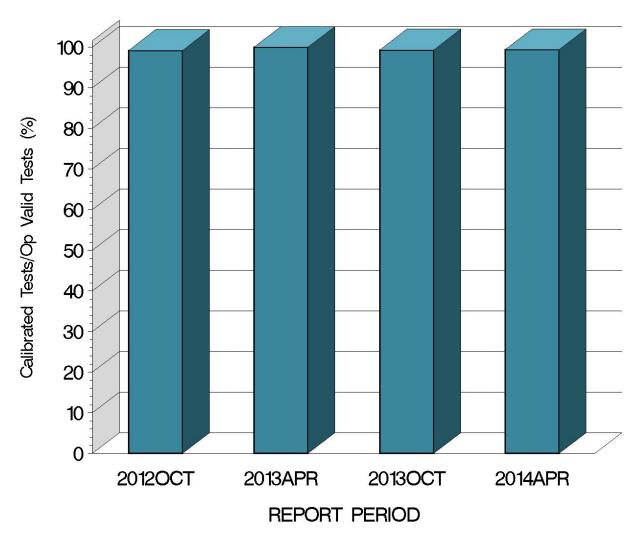
### CALIBRATION ATTEMPT SUMMARY







# OPERATIONALLY VALID TESTS MEETING ACCEPTANCE CRITERIA







### **CAUSES FOR LOST TESTS**

			Oil		Validity		Loss Rate				
Lab	Cause		1006	81	82	LC	RC	XC	Lost	Starts	%
В	Shaker Table Failure		0	0	1	0	0	1	1	33	3%
	Shaker Ta	able Failure	0	0	2	0	0	2	2	0	33%
D	Computer	r Failure	1	0	0	0	0	1	3	9	
	Image Calibration Error		0	0	1	0	1	0			
G	Power Fa	ilure	1	0	0	0	0	1	3	49	6%
	Airflow Ma	alfunction	0	0	1	0	0	1			
		Lost	2	0	5	0	1	6			
		Starts	44	74	44	162	162	162			
		%	5%	0%	11%	0%	1%	4%			

Lost tests are calibration attempts that were either aborted or operationally invalid





Average Δ/s By Laboratory						
Lab	n	AGVYI				
Α	71	0.583				
В	32	0.173				
D	6	0.910				
G	46	-0.139				
Industry	155	0.296				

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

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



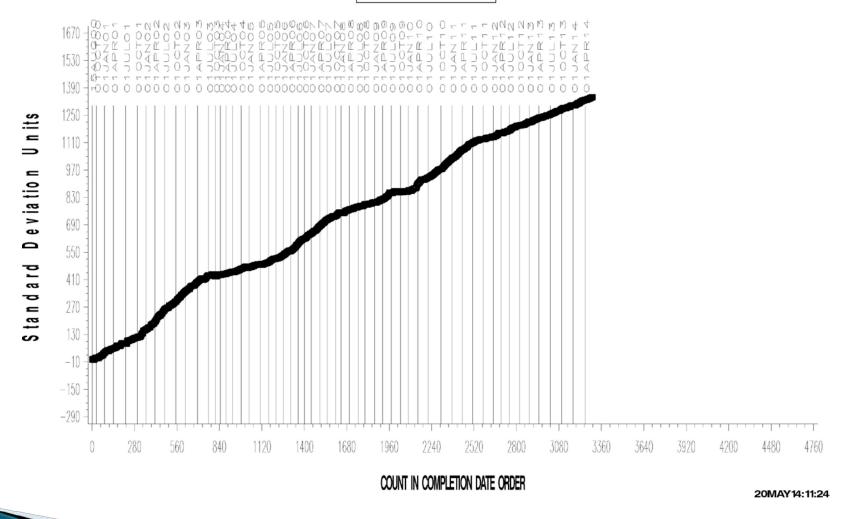


#### BALL RUST TEST INDUSTRY OPERATIONALLY VALID DATA



#### REFERENCE AVERAGE GRAY VALUE

CUSUM Severity Analysis

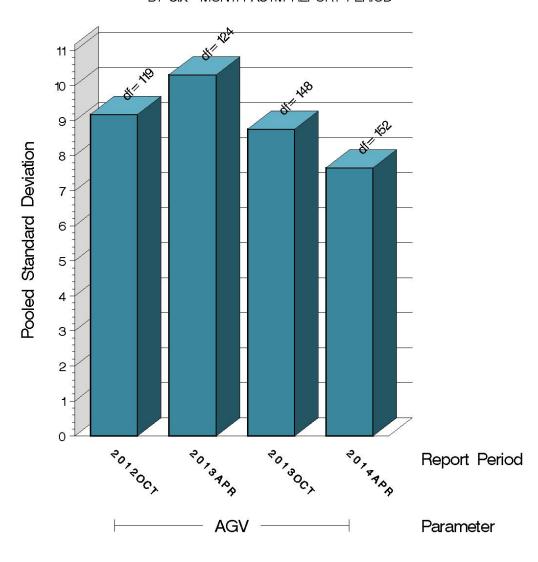






### TEST PRECISION

POOLED STANDARD DEVIATION
BY SIX-MONTH ASTM REPORT PERIOD







# BRT (D 6557) SUMMARY OF SEVERITY & PRECISION

### **Severity**

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**

Pooled s for this period is 7.65.

Precision, as measured by pooled standard deviation, is better than previous periods but still comparable to historical performance.





### **INFORMATION LETTERS**

No Information Letters were issued this period.



### STATUS OF REFERENCE OIL SUPPLY

		@ TMC		
Oil	Samples @ Labs	Samples (30 mL)	Gallons	
1006	40	4187	33.5	
81	60	937	7.5	
82	40	462	3.7	
82-1	8	1225	9.8	
Total	148	6811	54.5	

