



# Test Monitoring Center

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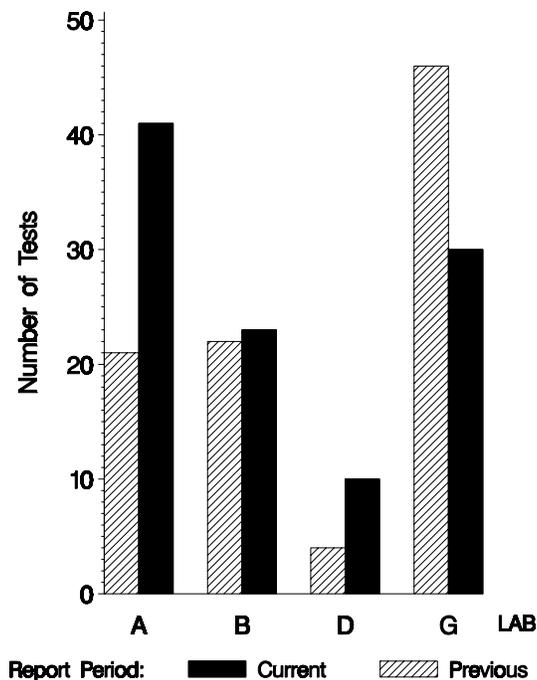
MEMORANDUM: 07-038  
DATE: June 6, 2007  
TO: Leonard Orzech,  
Chairman, Ball Rust Test Surveillance Panel  
FROM: Scott Parke  
SUBJECT: BRT Testing from October 1, 2006 through March 31, 2007

A total of 104 BRT tests were reported to the Test Monitoring Center during the period from October 1, 2006 through March 31, 2007. The data from these tests is shown on page 5. Following is a summary of testing activity this period.

	Reporting Data
Number of Labs	4

Tests reported this period were distributed as shown below:

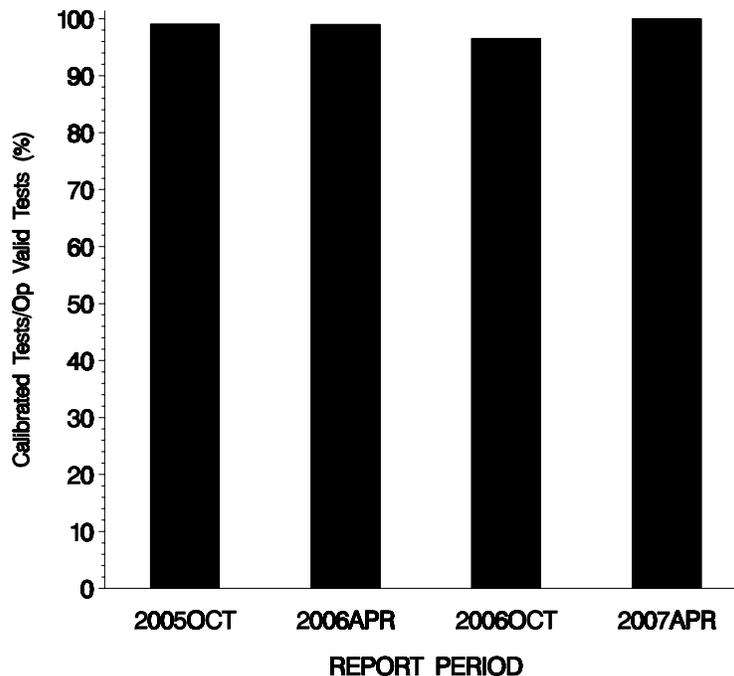
## NUMBER OF TESTS REPORTED BY LAB AND REPORT PERIOD



**Test Distribution by Oil and Validity**

					Totals	
		1006	81	82	Last Period	This Period
Accepted for Calibration	AC	24	53	25	84	102
Hardware Qualification Run	NI	0	0	0	3	0
Rejected Mild	OC	0	0	0	2	0
Rejected Severe	OC	0	0	0	1	0
Operationally Invalid (lab)	LC	0	1	0	2	1
Operationally Invalid (lab/TMC)	RC	0	0	0	0	0
Aborted Calibration	XC	1	0	0	1	1
<b>Total</b>		<b>25</b>	<b>54</b>	<b>25</b>	<b>93</b>	<b>104</b>

**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	10	0	1	21	5	0	10	0	1	41	2
B	0	6	0	0	11	0	0	6	0	0	23	0
D	0	2	0	0	6	0	0	2	0	0	10	0
G	1	7	14	0	16	0	0	7	0	1	30	3
Total	1	25	4	1	54	2	0	25	0	2	104	2

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

Causes for Lost Tests

Lab	Cause	Oil			Validity			Loss Rate		
		1006	81	82	LC	RC	XC	Lost	Starts	%
A	Syringe pump failure.	●	●		●			1	41	2%
G	Acid pump failure.	●					●	1	30	3%
	Lost	1	1	0	0	0	0			
	Starts	25	54	25	104	104	104			
	%	4%	2%	0%	0%	0%	0%			

Average  $\Delta$ /s by Lab

Lab	n	AGVYI
A	40	0.461
B	23	0.692
D	10	1.035
G	29	0.698
Industry	102	0.637

DATA FROM ALL OPERATIONALLY VALID TESTS REPORTED THIS PERIOD:

LTMS DATE	LAB	OIL	AGV	AGVYI
20061002	G	81	126	1.000
20061003	D	82	51	0.304
20061004	A	81	123	0.786
20061004	B	81	128	1.143
20061010	A	82	41	-0.565
20061011	B	82	48	0.043
20061017	A	81	119	0.500
20061017	D	81	121	0.643
20061018	A	82	37	-0.913
20061018	D	81	129	1.214
20061019	A	81	121	0.643
20061019	B	81	131	1.357
20061020	A	81	116	0.286
20061023	G	81	127	1.071
20061025	G	82	64	1.435
20061027	B	81	124	0.857
20061030	G	81	135	1.643
20061102	A	81	123	0.786
20061102	B	81	129	1.214
20061102	G	81	124	0.857
20061109	B	1006	132	0.555
20061114	A	1006	132	0.555
20061115	G	81	127	1.071
20061116	B	82	63	1.348
20061117	D	81	127	1.071
20061117	G	1006	124	-0.555
20061121	D	82	53	0.478
20061122	B	1006	132	0.555
20061128	A	1006	121	-0.971
20061128	B	81	133	1.500
20061129	A	81	120	0.571
20061129	G	82	65	1.522
20061130	B	82	36	-1.000
20061201	A	82	48	0.043
20061201	G	81	126	1.000
20061206	B	1006	126	-0.277
20061208	B	81	128	1.143

<b>LTMS DATE</b>	<b>LAB</b>	<b>OIL</b>	<b>AGV</b>	<b>AGVYI</b>
20061211	G	81	125	0.929
20061212	B	81	128	1.143
20061212	G	81	102	-0.714
20061220	A	81	116	0.286
20061222	B	82	54	0.565
20061227	G	81	133	1.500
20061229	G	1006	120	-1.110
20070104	D	81	132	1.429
20070105	A	81	124	0.857
20070106	A	1006	120	-1.110
20070109	A	82	54	0.565
20070110	A	82	52	0.391
20070112	A	81	127	1.071
20070115	G	82	62	1.261
20070116	A	81	128	1.143
20070116	B	82	60	1.087
20070116	G	82	55	0.652
20070120	A	1006	127	-0.139
20070123	A	81	126	1.000
20070123	G	81	123	0.786
20070124	A	1006	121	-0.971
20070125	A	81	121	0.643
20070126	A	82	69	1.870
20070126	G	82	70	1.957
20070126	B	1006	131	0.416
20070127	A	1006	126	-0.277
20070128	A	81	127	1.071
20070130	A	81	123	0.786
20070131	B	82	52	0.391
20070131	G	1006	127	-0.139
20070202	G	81	126	1.000
20070208	G	1006	117	-1.526
20070209	A	82	47	-0.043
20070213	A	81	126	1.000
20070214	B	81	128	1.143
20070214	A	1006	118	-1.387
20070215	G	82	59	1.000
20070216	A	82	68	1.783
20070219	G	1006	129	0.139
20070222	G	81	128	1.143
20070223	B	1006	130	0.277
20070226	G	81	121	0.643
20070227	A	81	115	0.214
20070228	A	82	64	1.435
20070301	G	81	117	0.357
20070302	A	82	59	1.000
20070306	A	81	129	1.214
20070307	G	81	126	1.000
20070307	A	1006	130	0.277
20070307	D	81	128	1.143
20070308	A	81	127	1.071

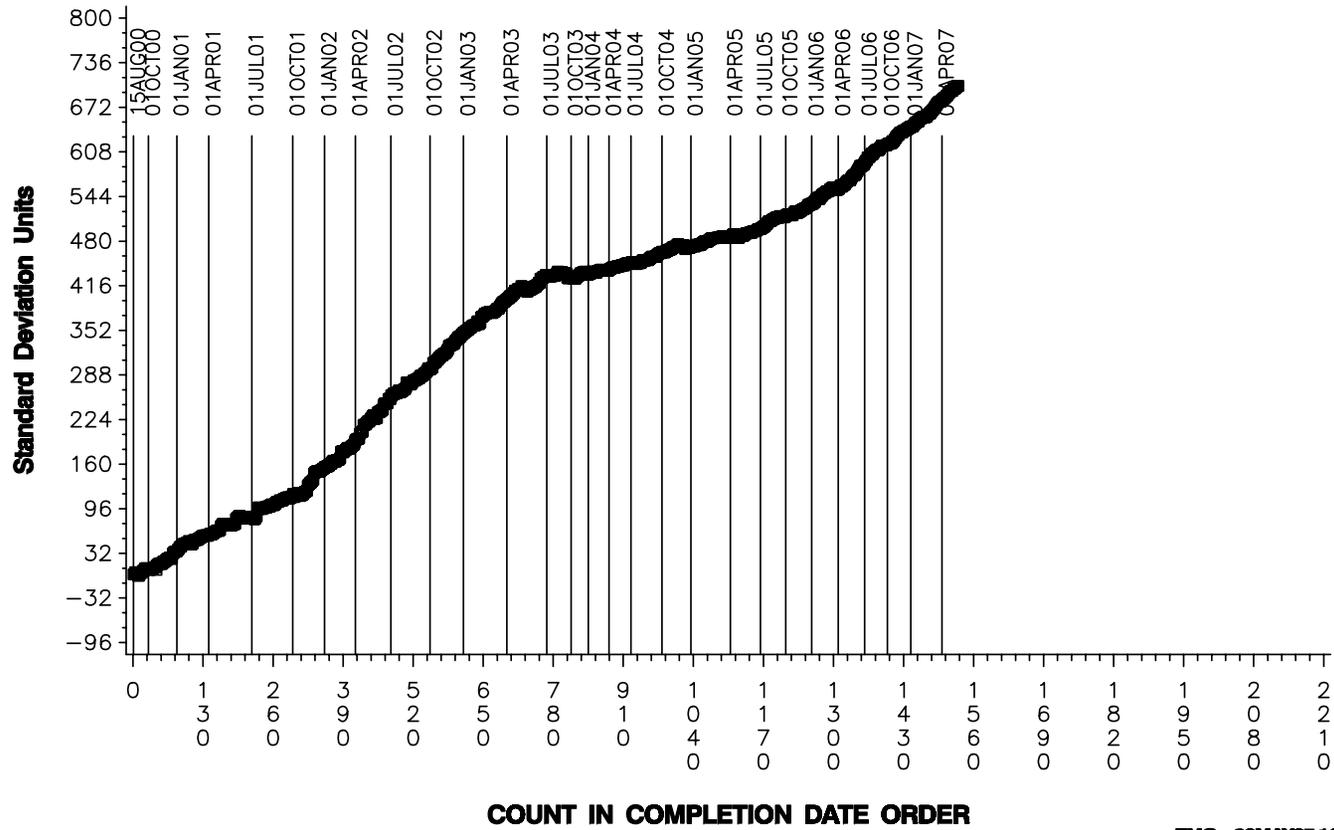
<b>LTMS DATE</b>	<b>LAB</b>	<b>OIL</b>	<b>AGV</b>	<b>AGVYI</b>
20070308	G	82	65	1.522
20070309	A	81	128	1.143
20070309	B	81	126	1.000
20070313	B	81	126	1.000
20070319	D	1006	136	1.110
20070320	D	81	134	1.571
20070320	B	81	126	1.000
20070321	A	1006	131	0.416
20070321	D	1006	138	1.387
20070323	G	1006	125	-0.416
20070327	A	1006	129	0.139
20070329	B	1006	124	-0.555
20070329	G	81	129	1.214
20070330	A	81	130	1.286

CUSUM PLOT

**BALL RUST TEST INDUSTRY OPERATIONALLY VALID DATA**

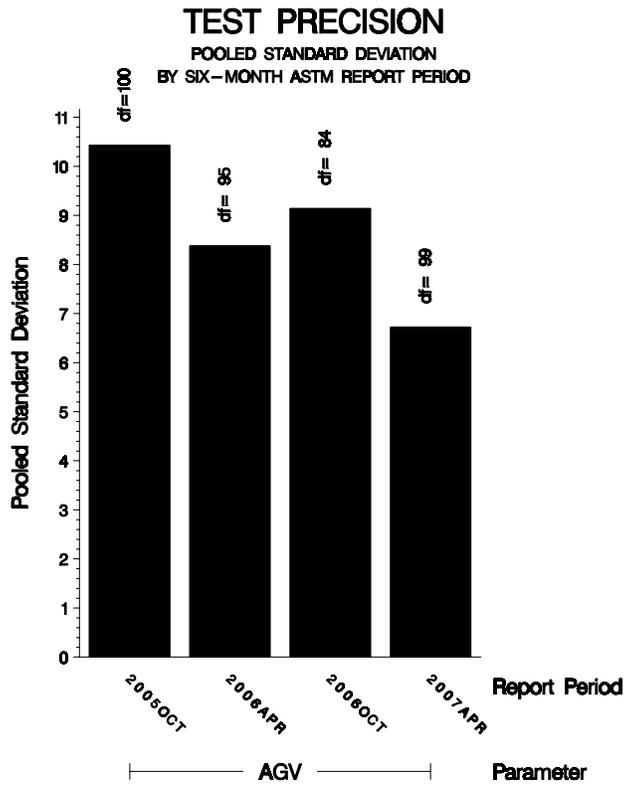
**REFERENCE AVERAGE GRAY VALUE**

**CUSUM Severity Analysis**



POOLED S:

Pooled s for this period is 6.73. Shown below are bar charts comparing the pooled s values for AGV over the last four report periods. Where degrees of freedom equal zero, no bars are 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	Cans @ Labs	@ TMC	
		Cans	Gallons
1006	29	5150	41.2
81	31	1944	15.6
82	33	1032	8.3
<b>Total</b>	<b>93</b>	<b>8126</b>	<b>65.0</b>

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

INFORMATION LETTERS:

No information letters were issued during this report 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.

SDP/sdp/astm0407.doc/mem07-038.sdp.doc

c: J. L. Zalar

F. M. Farber

BRT Surveillance Panel

<ftp://ftp.astmtmc.cmu.edu/docs/bench/eoec/semiannualreports/brt-04-2007.pdf>

Distribution: email