

 **Test Monitoring Center**  
6555 Penn Avenue  
Pittsburgh, PA 15206-4489

MEMORANDUM: 02-066  
DATE: August 9, 2002  
TO: Gordon R. Farnsworth, Chairman, Sequence VG Surveillance Panel  
FROM: Richard Grundza  
SUBJECT: Sequence VG Reference Oil Tests Statistics, Reference Oil 1009

The following are the statistics for Sequence VG reference oil 1009, based on three test results. These targets are effective for reference oil tests completing on or after August 1, 2002.

Parameter	Mean	Standard Deviation
AES	7.997	0.222
RAC	9.25	0.085
AEV	8.927	0.156
APV	7.80	0.538
OSCR	1.823	0.739
HSR	None Allowed	

Figures 1 through 5 plot the results by laboratory and the Shewhart acceptance ranges for AES, RAC, AEV, APV and OSCR, respectively. Hot stuck ring data was not plotted since no hot stuck rings are allowed and no tests exhibited hot ring sticking. Please note that laboratory results in Figures 1 through 5 have not been severity adjusted. Figure 6 summarizes the uncorrected results used in the target calculation, while Figure 7 tabulates the corrected results, where appropriate.

Attachments

REG/reg

c: Sequence VG Surveillance Panel  
Sequence VG Test Engineers  
John Zalar, TMC  
Frank Farber, TMC  
<ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencev/memos/mem02-066.pdf>

Distribution: email

Figure 1

Sequence VG (Reference Oil 1009)  
Test Target Data Set and Shewart Severity Limits

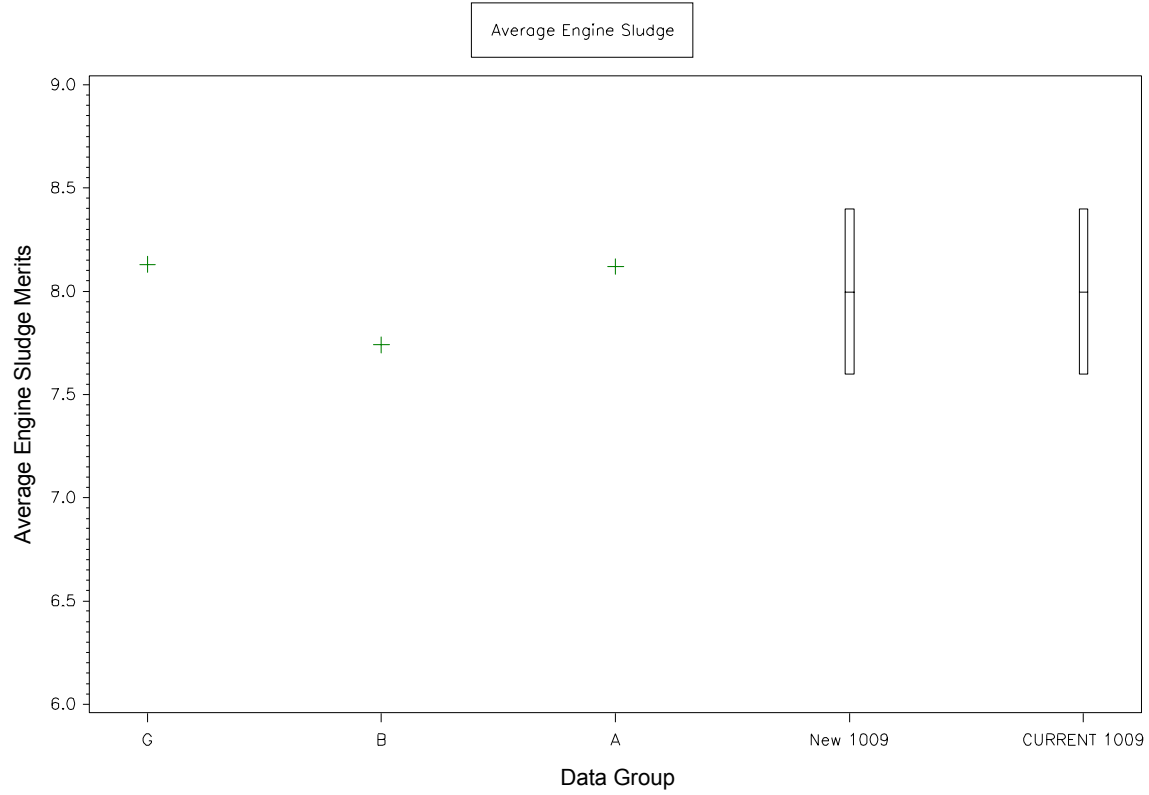


Figure 2

Sequence VG (Reference Oil 1009)  
Test Target Data Set and Shewart Severity Limits

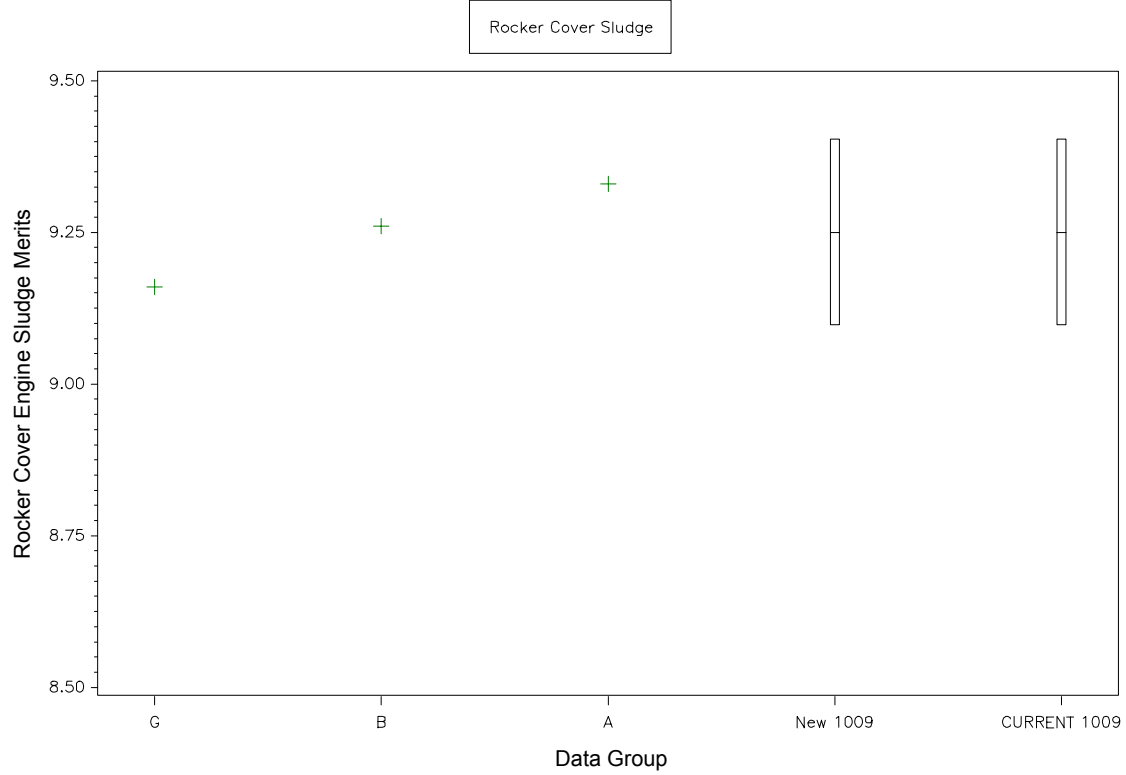


Figure 3

Sequence VG (Reference Oil 1009)  
Test Target Data Set and Shewart Severity Limits

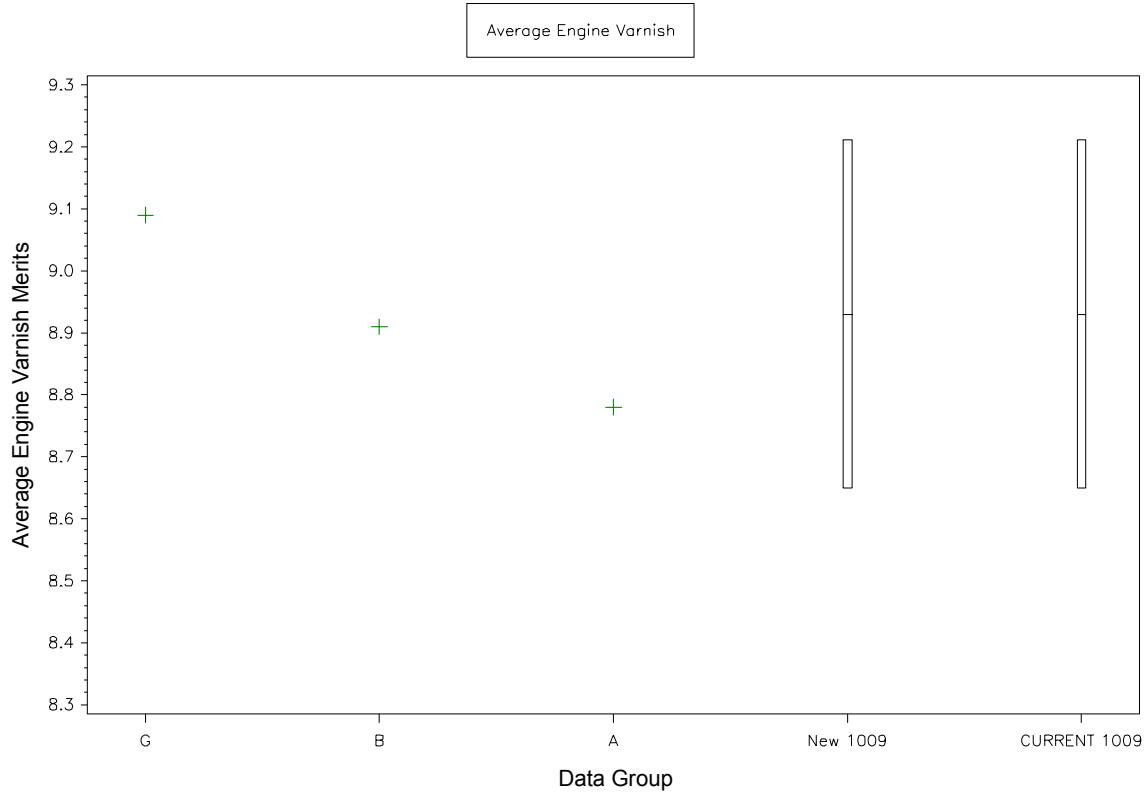


Figure 4

Sequence VG (Reference Oil 1009)  
Test Target Data Set and Shewart Severity Limits

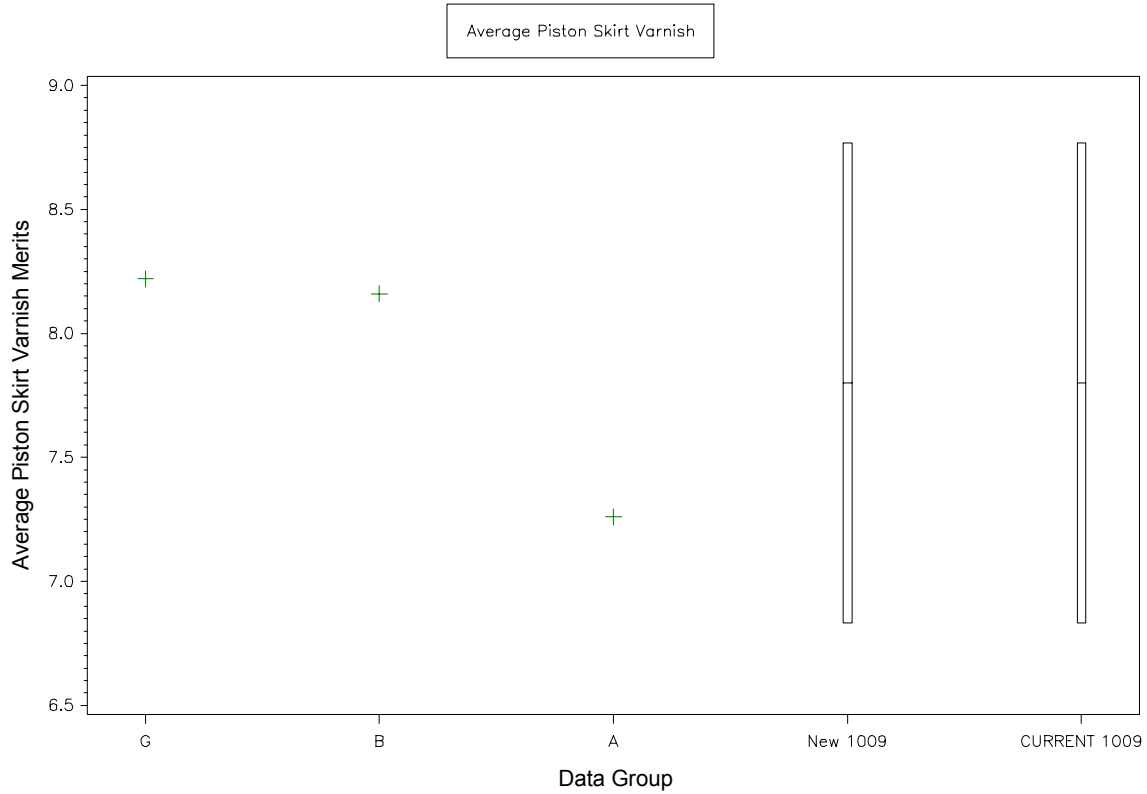


Figure 5

Sequence VG (Reference Oil 1009)  
 Test Target Data Set and Shewart Severity Limits

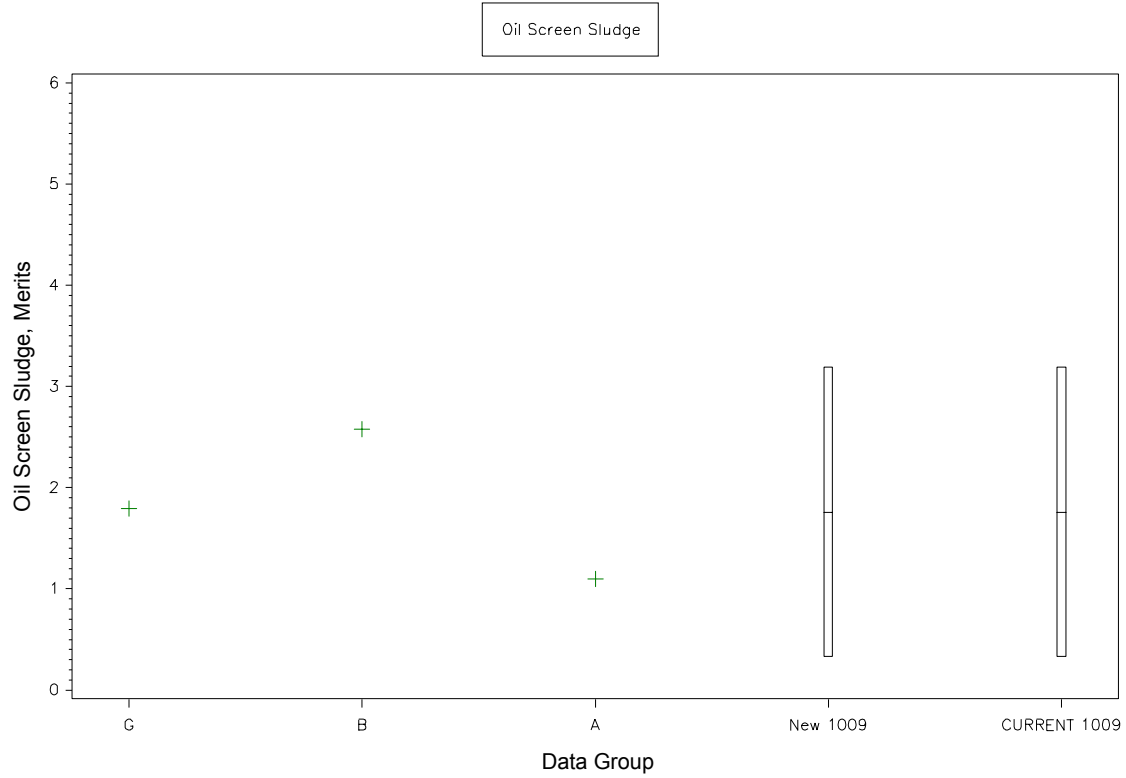


Figure 6

Lab	AES	RAC	AEV	APV	OSCR	HSR
A	8.12	9.33	8.78	7.26	2	0
B	7.74	9.26	8.91	8.16	22	0
G	8.13	9.16	9.09	8.22	5	0

Figure 7

Lab	AES	RAC	AEV	APV	OSCR	HSR
A	8.12	9.33	8.78	7.26	2	0
B	7.74	9.26	8.91	8.16	12.14	0
G	8.13	9.16	9.09	8.22	5	0