




## Test Monitoring Center

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MEMORANDUM: 09-004  
DATE: March 26, 2009  
TO: Charlie Leverett Chairman, Sequence VIB Surveillance Panel Chair  
FROM: Richard Grundza   
SUBJECT: Sequence VIB Reference Oil Test Statistics, Reference Oil 539

The following are the statistics for Sequence VIB reference oil 539, based on 20 test results. These targets are effective for reference oil tests completing on or after March 26, 2009. Targets were calculated using severity adjusted results.

Parameter	Mean	Standard Deviation
FEI1	0.91	0.22
FEI2	0.43	0.21

Figures 1 and 2 plot the results by laboratory and the Shewhart acceptance ranges for FEI1 and FEI2, respectively. Please note that laboratory results in Figures 1 and 2 have not been severity adjusted. Figure 3 summarizes both the uncorrected and corrected results, where appropriate.

Attachments

REG/reg

c: Sequence VIB Surveillance Panel  
Sequence VIB Test Engineers  
John Zalar, TMC  
Frank Farber, TMC  
<ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencevi/memos/mem09-004.pdf>

Distribution: email

Figure 1

# Sequence VIB (Reference Oil 539) Test Target Data Set and Shewart Severity Limits

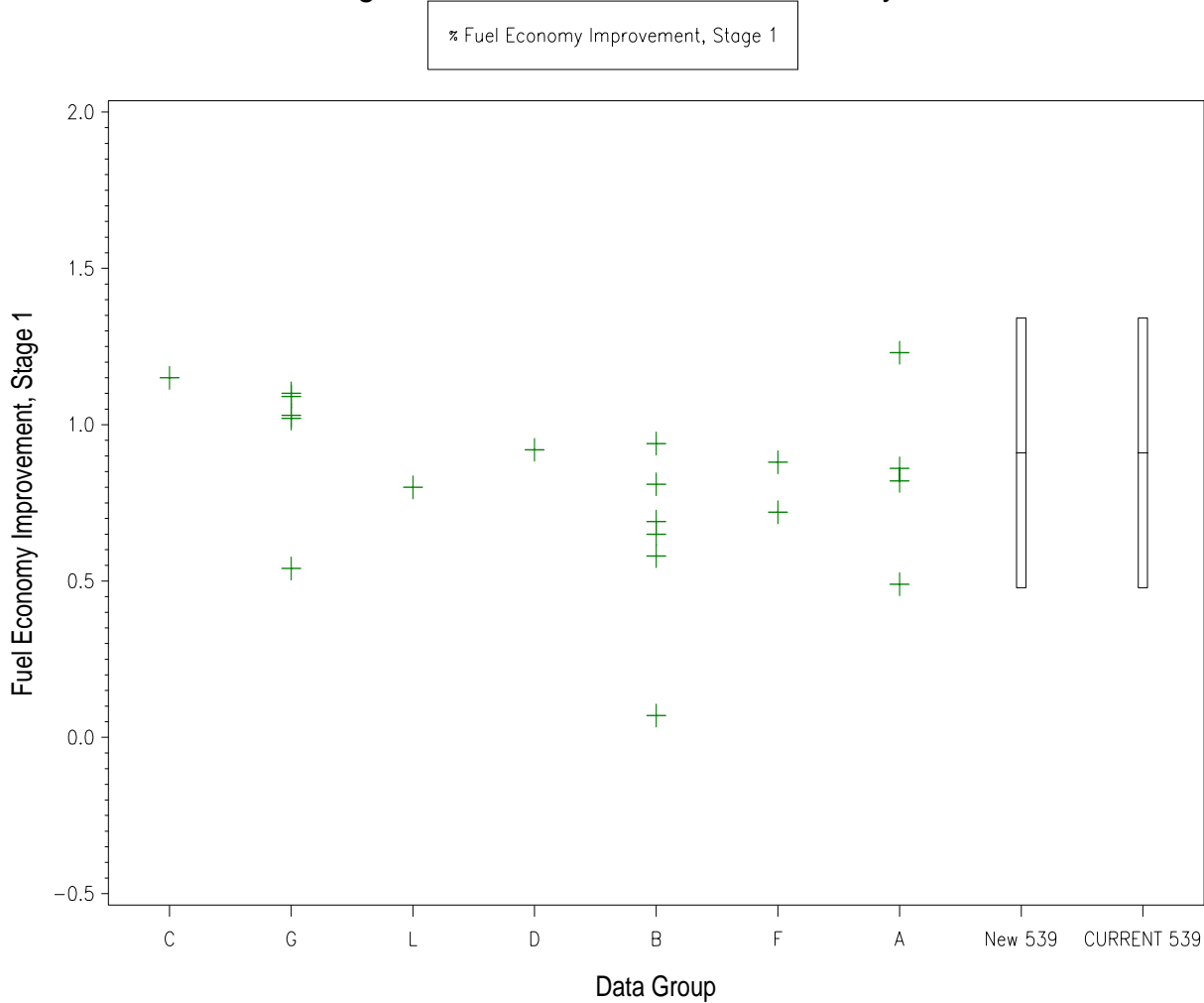


Figure 2

# Sequence VIB (Reference Oil 539) Test Target Data Set and Shewart Severity Limits

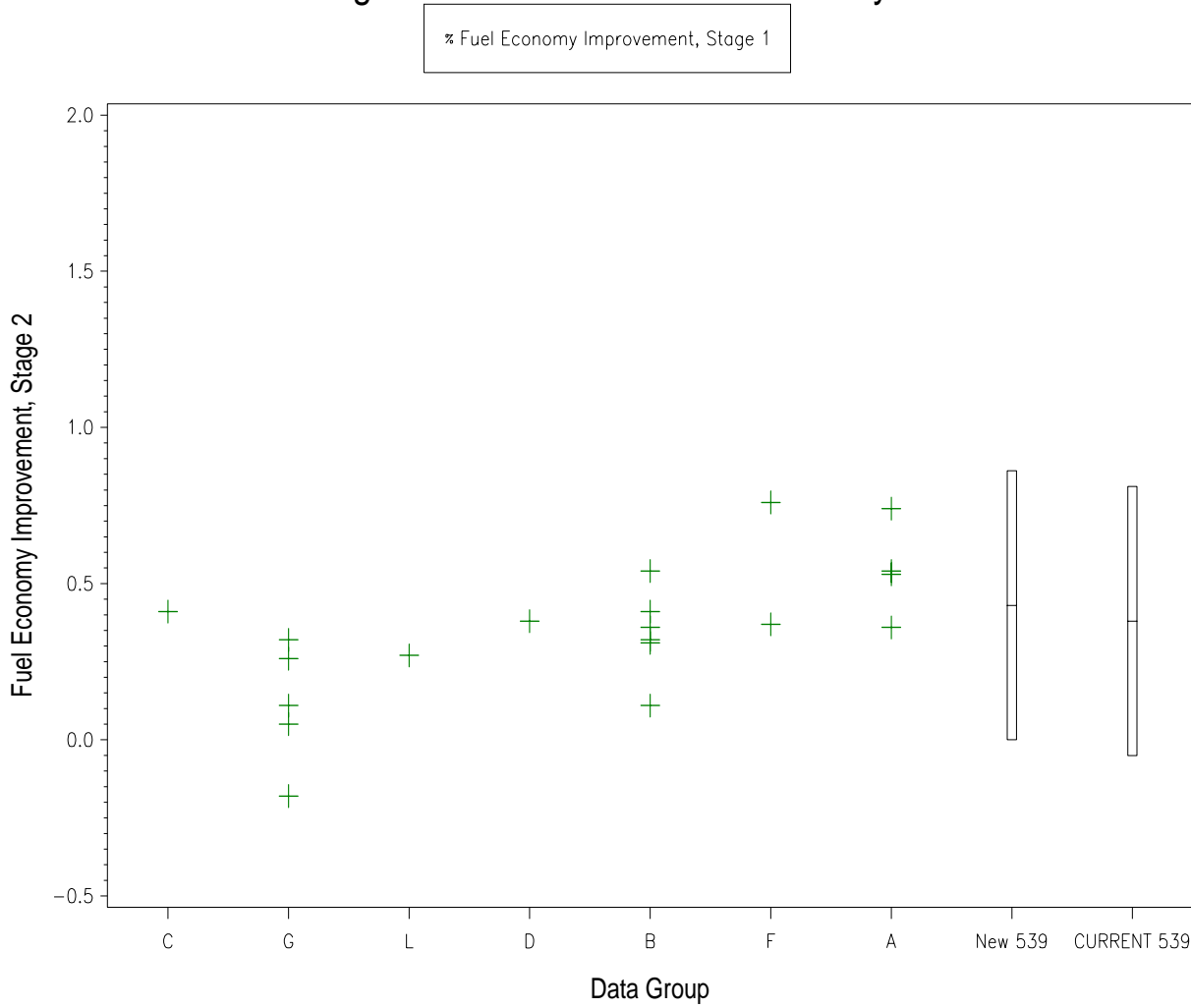


Figure 3

Lab	SA	FEI1	Corrected FEI1	SA	FEI2	Corrected FEI2
F	0.18	0.88	1.06	-0.15	0.37	0.22
A	0.02	0.86	0.88	0.22	0.54	0.76
D	0.07	0.92	0.99	0.02	0.38	0.4
G	0.14	1.09	1.23	-0.06	0.11	0.05
L	0.21	0.8	1.01	0.04	0.27	0.31
B	-0.08	0.07	-0.01	-0.08	0.11	0.03
C	0.04	1.15	1.19	0.14	0.41	0.55
B	0.27	0.58	0.85	0.22	0.36	0.58
A	0.00	1.23	1.23	0.00	0.53	0.53
B	0.00	0.69	0.69	0.00	0.41	0.41
F	0.15	0.72	0.87	0.12	0.76	0.88
G	0.08	1.03	1.11	0.21	0.32	0.53
A	0.24	0.82	1.06	-0.01	0.74	0.73
B	0.26	0.65	0.91	0.31	0.32	0.63
G	-0.04	0.54	0.50	0.04	0.05	0.09
B	0.26	0.94	1.20	0.23	0.31	0.54
A	-0.16	0.49	0.33	0.12	0.36	0.48
G	0.02	1.02	1.04	0.12	0.26	0.38
G	0.06	1.10	1.16	0.21	-0.18	0.03
B	0.08	0.81	0.89	-0.03	0.54	0.51