



Test Monitoring Center

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MEMORANDUM: 11-069
DATE: December 21, 2011
TO: Sequence VI Surveillance Panel
FROM: Richard E. Grundza
SUBJECT: Target Update, Reference Oil 1010

On the December 15, 2011 Sequence V Surveillance Panel conference call, the panel approved an update to the means and standard deviations for FEI1 and FEI2 parameters for reference oil 1010, based upon the data presented at that meeting.

The updated targets, which take effect on September 28, 2011, are shown in the following table:

Oil	FEI1 Mean	FEI1 s	FEI2 Mean	FEI2 s
1010	1.35	0.12	1.10	0.18

The standard deviations for severity calculations were also updated. For FEI1, the updated standard deviation is 0.12 and for FEI2, the standard deviation is 0.18. The value for FEI1 is the pooled standard deviation. For FEI2, the standard deviations are from the 28 operationally valid results obtained with reference oil 1010.

Attached Figures 1 and 2, plot the data against the new and old targets for FEI1 and 2, respectively. Table 1 lists the data for reference oil 1010 used in the model. The application date of September 28, 2011 allows for these targets to be applied to current tests run on this reference oil. The application allows severity adjustments to be recalculated using the new targets and will be applied to test completing on or after December 15, 2011. Please contact me if you have any questions.

REG/reg

c: <ftp://ftp.astmtmc.cmu.edu/docs/gas/sequenceVI/memo/mem11-069.reg.pdf>

Distribution: email

Figure 1

Sequence VID (Reference Oil 1010) Test Target Data Set and Shewart Severity Limits

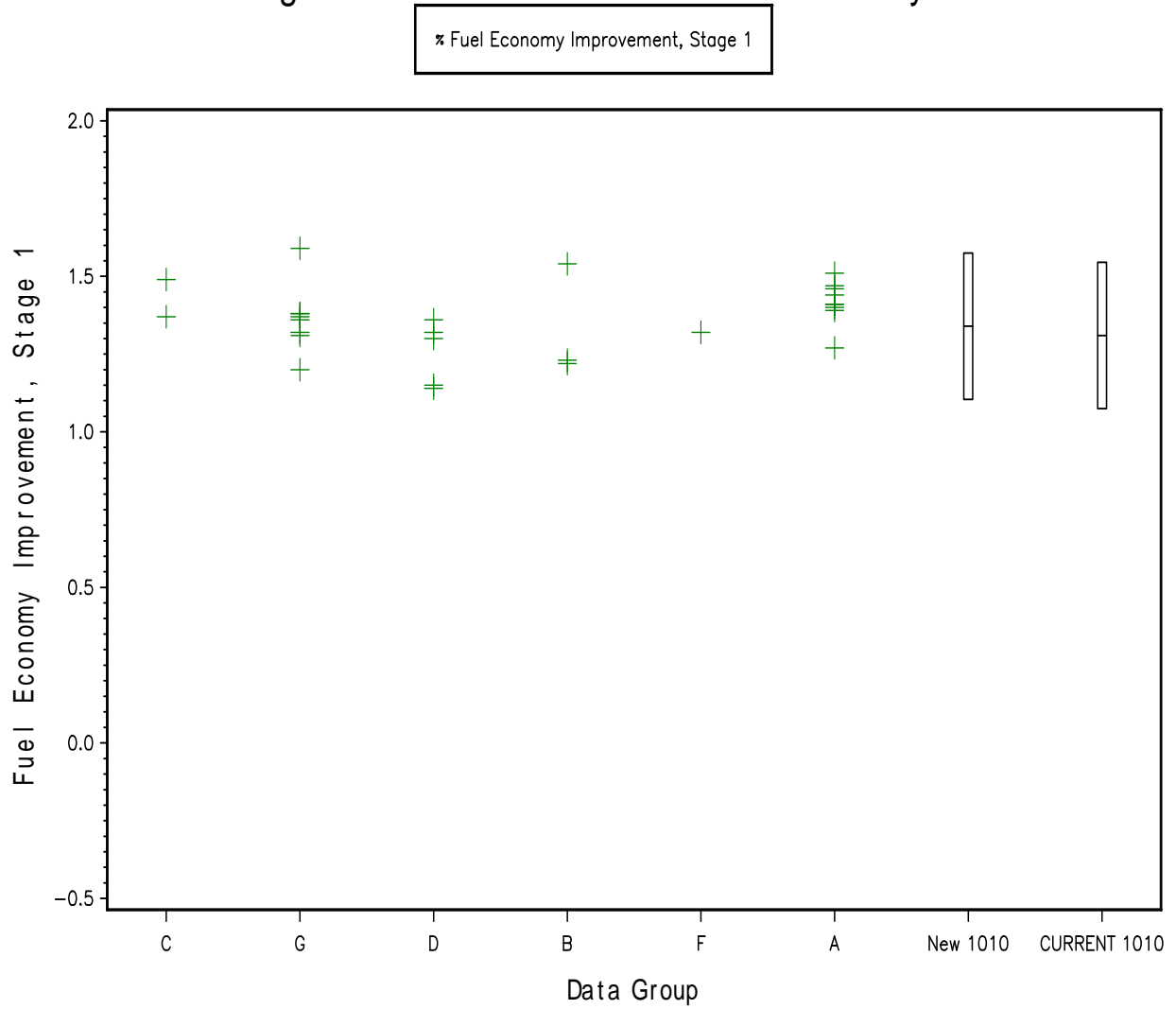


Figure 2

Sequence VID (Reference Oil 1010) Test Target Data Set and Shewart Severity Limits

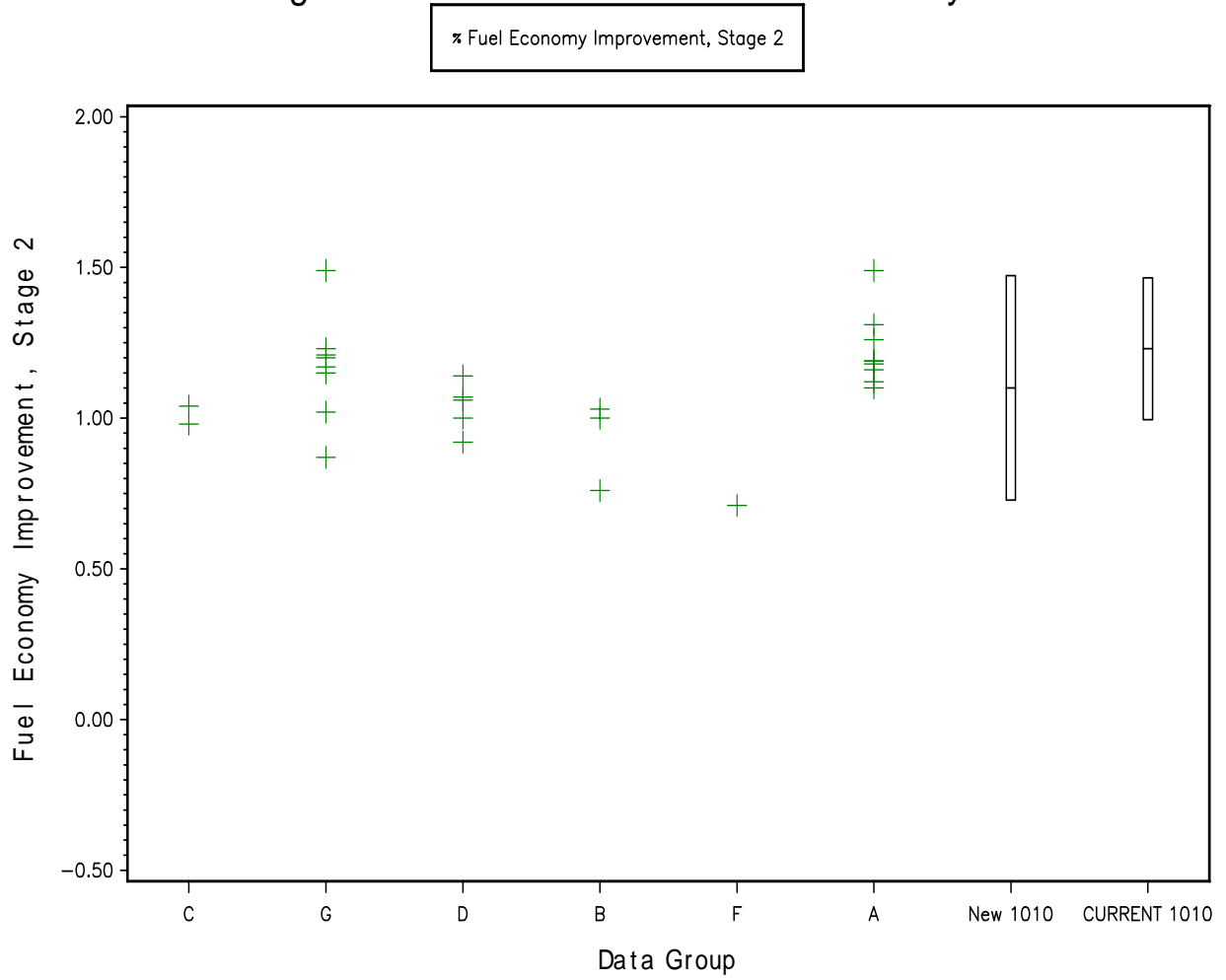


Table 1
Reference Oil Test Results

TESTKEY	LTMSLAB	LTMSDATE	IND	VAL	FEI1	FEI2
77831-VID	G	20100920	1010	AG	1.32	1.15
77832-VID	D	20100921	1010	AG	1.14	1.06
77833-VID	B	20100929	1010	AG	1.22	1.03
77836-VID	A	20101006	1010	AG	1.41	1.26
77837-VID	A	20101215	1010	AC	1.51	1.49
79852-VID	A	20101222	1010	AC	1.41	1.12
79860-VID	D	20101222	1010	OC	1.15	1
79835-VID	G	20110104	1010	AC	1.59	1.21
79853-VID	A	20110202	1010	AC	1.46	1.19
80531-VID	A	20110309	1010	AC	1.39	1.1
79848-VID	C	20110321	1010	AC	1.37	1.04
77834-VID	B	20110325	1010	OC	1.23	0.76
80872-VID	G	20110330	1010	AC	1.31	1.23
81551-VID	A	20110420	1010	AC	1.4	1.19
81585-VID	D	20110420	1010	AC	1.36	1.07
81552-VID	A	20110427	1010	AC	1.27	1.18
79858-VID	B	20110502	1010	AC	1.54	1
81586-VID	D	20110505	1010	AC	1.32	1.14
82238-VID	G	20110607	1010	AC	1.36	1.02
82239-VID	G	20110617	1010	AC	1.37	1.49
81566-VID	F	20110908	1010	OC	1.32	0.71
81553-VID	A	20110928	1010	AC	1.47	1.31
82240-VID	G	20110930	1010	AC	1.38	1.17
84337-VID	G	20110930	1010	AC	1.38	1.2
84338-VID	G	20111108	1010	AC	1.2	0.87
80097-VID	C	20111109	1010	AC	1.49	0.98
82106-VID	A	20111123	1010	AC	1.44	1.16
82786-VID	D	20111205	1010	AC	1.3	0.92

Note: Means for FEI1 and FEI2 were calculated using ANOVA Model with all oils in the model.
Means for FEI1 and FEI2 were the Least Squared Means from this oil and model.