Test Monitoring Center

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A Program of ASTM International

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MEMORANDUM: 12-033

DATE: November 14, 2012

TO: Sequence V Surveillance Panel

FROM: Richard E. Grundza

SUBJECT: Targets for Reference Oil 940

On the November 13, 2012 Sequence V Surveillance Panel conference call, the panel approved the use of reference oil 940, based upon the data presented at that meeting. Please note that the AES standard deviation is a pooled standard deviation using the standard deviation (0.13) from the five results on reference oil 940 and the standard deviation (0.55) from the twenty six results on reference oil 925-3.

The updated targets, which went into effect on November 14, 2012, are shown in the following table:

Parameter	AES	RAC	AEV	APV	OSCR
Mean	6.43	8.15	8.79	7.2	3.951
s	0.51	0.44	0.25	0.63	0.840

Attached Figures 1 through 5 plot the data against the targets for AES, RAC, AEV, APV and OSCR. Table 1 lists the data for reference oil 940 used in the target calculation. Please contact me if you have any questions.

c: ftp://ftp.astmtmc.cmu.edu/docs/gas/sequenceV/memo/mem12-033.reg.pdf

Distribution: email

Figure 1

Sequence VG (Reference Oil 940)
Test Target Data Set and Shewart Severity Limits

Average Engine Sludge, Merits

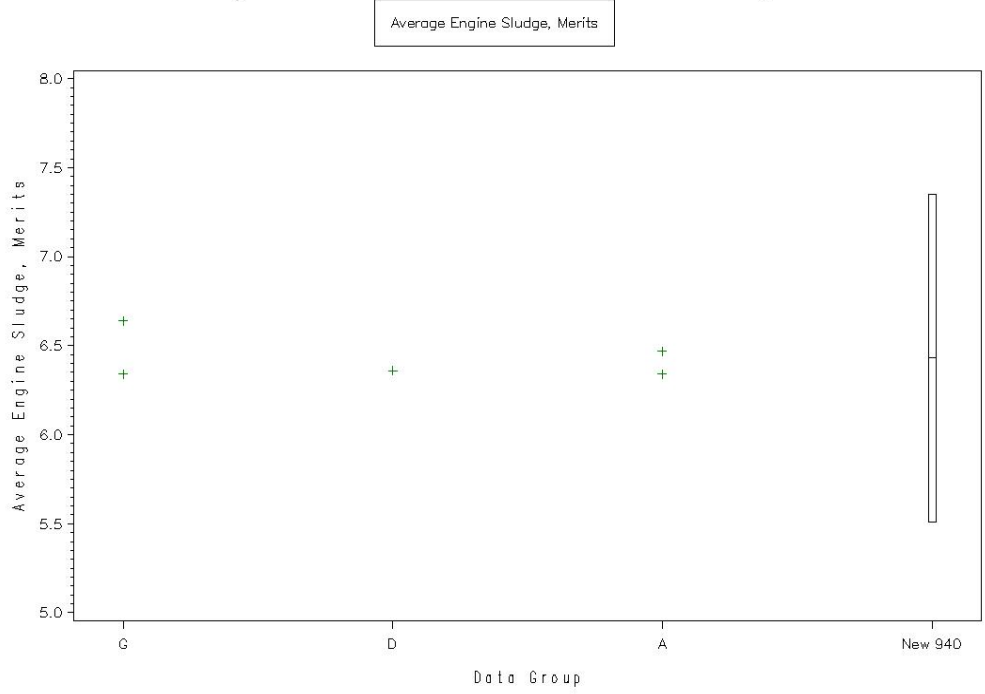Figure 2

Sequence VG (Reference Oil 940)
Test Target Data Set and Shewart Severity Limits

Rocker Cover Sludge, Merits
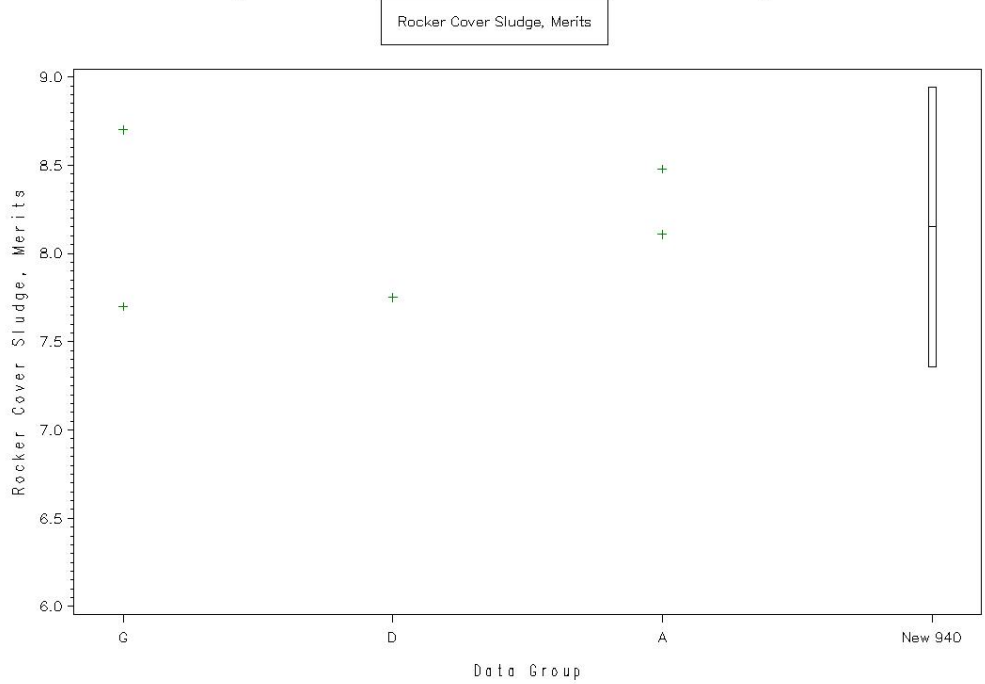
Figure 3

Sequence VG (Reference Oil 940)
Test Target Data Set and Shewart Severity Limits

Average Engine Varnish, Merits
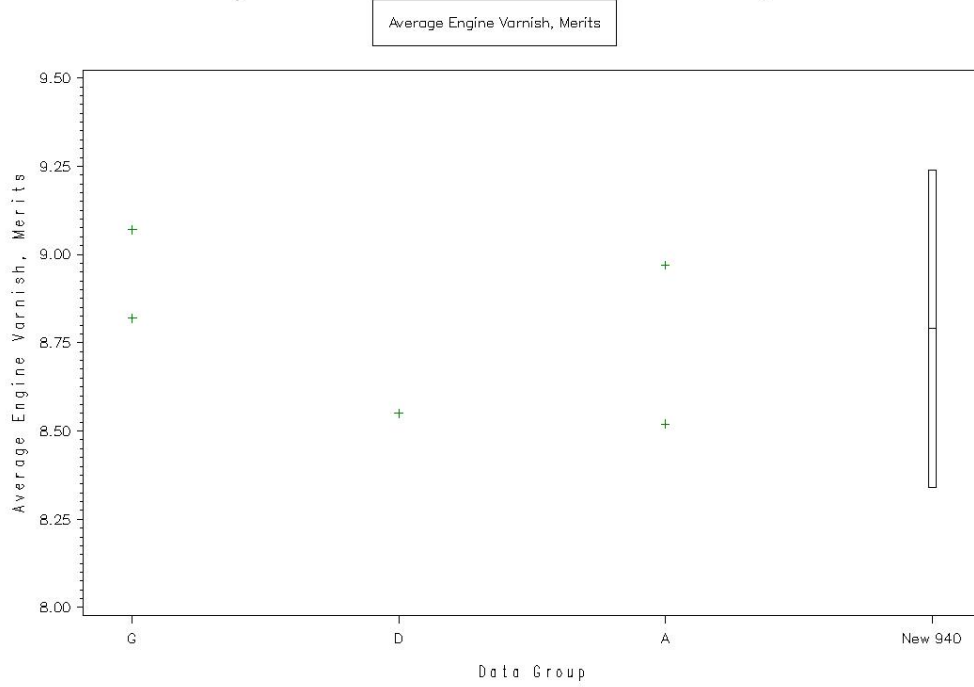
Figure 4

Sequence VG (Reference Oil 940)
Test Target Data Set and Shewart Severity Limits
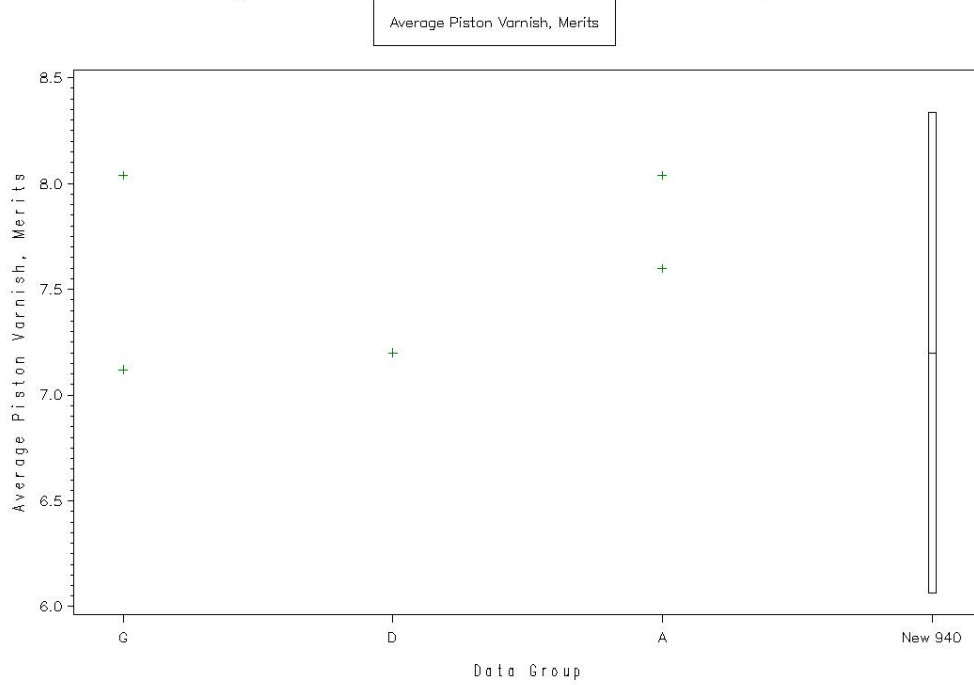
Average Piston Varnish, Merits

Figure 5

Sequence VG (Reference Oil 940)
Test Target Data Set and Shewart Severity Limits
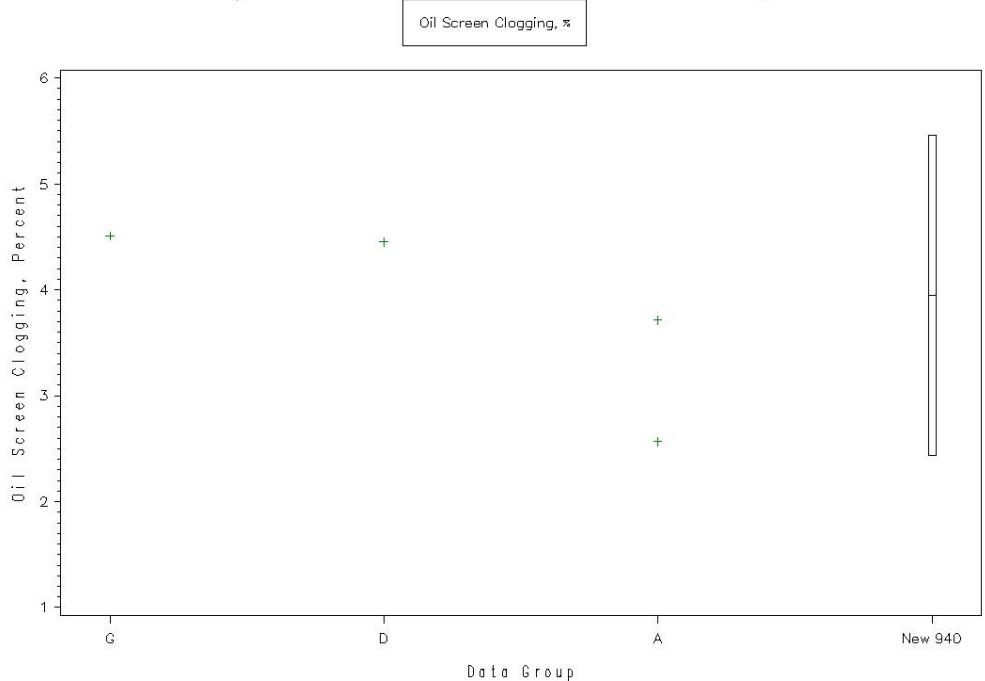
Table 1
Data Used to Generate Targets

Lab	AES	RAC	AEV	APV	OSCR
A	6.47	8.48	8.97	7.6	3.7136
G	6.34	7.70	8.82	7.12	4.5109
G	6.64	8.70	9.07	8.04	4.5109
A	6.34	8.11	8.52	6.75	2.5649
D	6.36	7.75*	8.55*	6.47	4.4543

*Results adjusted for laboratory severity