A Program of ASTM International

Test Monitoring Center

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Sequence VIE Information Letter 19-3
Sequence Number 6
October 15, 2019

ASTM consensus has not been obtained on this information letter. An appropriate ASTM ballot will be issued in order to achieve such consensus.

TO: Sequence VI Surveillance Panel

SUBJECT: 1. Updated Precision Statement
2. Addition of D445 for Viscosity Measurements

1. During the September 13, 2019 Sequence VI Surveillance Panel Conference call, the panel agreed to update the precision statement. Table 8 has been updated to include revised precision estimates.
2. During the September 13, 2019 Sequence VI Surveillance Panel Conference call, the panel agreed to include a Test Method for viscosity measurements. Reference documents has been revised and section 12.3 has been added to reference Test Method D445 for viscosity measurements.
3. As a result on an electronic ballot, the panel agreed to add FEISUM to the method. Section 12.2 has been added to instruct how to determine FEISUM. Table 8 has also been updated to include precision estimates for this parameter.

These revised text and or section(s) have been highlighted in red and are effective with the issuance of this letter.

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Attachment

c: http://www.astmtmc.cmu.edu/ftp/docs/gas/sequencevi/procedure_and_ils/VIE/il19-3_vie.pdf
Distribution: Email

Revises D8114-19a

3.1 *ASTM Standards:*

D445 Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity)

12.2 *FEISUM*--Calculate as the sum of the final result, the adjusted *FEI1* and the adjusted *FEI2*.

12.3 Using Test Method D445, determine the kinematic viscosity at 40 °C and 100 °C of the fresh (new) test oil and the EOT sample.

14.1.1 Test precision as established for the official acceptance of this procedure is shown in Table 8.

TABLE 8 Sequence VIE Reference Oil Precision Statistics[A]

Variable Fuel Economy Improvement, %	Intermediate Precision		Reproducibility	
	$S_{i.p.}$[B]	*i.p.*	S_R[B]	*R*
at 16 h	0.216 ~~0.29~~	0.599 ~~0.81~~	0.235 ~~0.12~~	0.651 ~~0.34~~
at 109 h	0.254 ~~0.29~~	0.704 ~~0.81~~	0.281 ~~0.25~~	0.779 ~~0.70~~
FEISUM	0.373	1.034	0.426	1.181

[A] These statistics are based on 127 tests conducted on 25 stands at 6 laboratories on ASTM TMC Reference Oils 542-2, 542-3, 544, and 1010-1 and were calculated on February 20, 2018.

[B] *s* = standard deviation.