



Test Monitoring Center

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Sequence VIF Information Letter 19-3
Sequence Number 3
November 4, 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. Addition of D445 for Viscosity Measurements
2. Addition of FEISUM and Updated Precision Statement

1. During the September 13, 2019 Sequence VI Surveillance Panel Conference call, the panel agreed to include a Test Method for viscosity measurements. The Reference Documents section has been revised and section 12.3 has been added to reference Test Method D445 for viscosity measurements.
2. During the October 25, 2019 Sequence VI Surveillance Panel Conference call, 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 and to correct a typographical error in the Variable Fuel Economy Improvement % hour specification.

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/VIF/il19-3_vif.pdf

Distribution: Email

Revises D8226-19

2.1 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 results, adjusted *FEI1* and 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 VIF Reference Oil Precision Statistics⁴

Variable Fuel Economy Improvement, %	Intermediate Precision		Reproducibility	
	$S_{i.p.}^B$	$i.p.$	S_R^B	R
at 16 h	0.21	0.58	0.22	0.61
at 109 h	0.19	0.53	0.30	0.83
<i>FEISUM</i>	0.27	0.75	0.42	1.16

⁴ These statistics are based on 18 tests obtained on Sequence VIF matrix oils 542-2, 543, and 1011 and were calculated on February 23, 2017.

^B S = standard deviation.