



## Test Monitoring Center

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Sequence IIIH Information Letter 19-2  
Sequence Number 11  
May 23, 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 III Surveillance Panel

SUBJECT: 1. Additional Ultrasonic Cleaning Fluid  
2. Revised Section 10.4.6 and Table 4  
3. Correction to Table 7

During the November 13, 2018 conference call, the Sequence III Surveillance Panel approved the following changes, which have been highlighted in red.

1. The panel was informed that Brulin Solution 815 QR-DF will no longer be available and has been replaced with Brulin 815 QR-NF. Section 7.5.2 has been updated to include this cleaning fluid. Labs may begin the use of 815 QR-NF at any time, but are to document its use in the test report on a subsequent reference. This change is effective with the issuance of this letter.
2. Section 10.4.6 has been revised to refer to the DACA II document for the purposes of calculation of a Quality Index. This change is effective December 1, 2018. Please note that Information Letter 18-4 added a Section 10.4.8, which has been superseded by this change.
3. Table 7 did not identify kinematic viscosity increase at EOT as a parameter that has a transformation applied to it when comparing results. A note has been added to Table 7 to identify this parameter as having a transformation. This change is effective with the issuance of this letter.

Test Method D8111-18a has been revised to incorporate these changes. The text of the revisions is shown in the attachment.

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Director  
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Attachment

c: [http://www.astmtmc.cmu.edu/ftp/docs/gas/sequenceiii/procedure\\_and\\_ils/IIIH/il19-2\\_IIIH.pdf](http://www.astmtmc.cmu.edu/ftp/docs/gas/sequenceiii/procedure_and_ils/IIIH/il19-2_IIIH.pdf)

Distribution: Email

**(Revises D8111-18 as amended by Information Letters 18-3 and 18-4)**

7.5.2 Alternatively, use a aquas cleaning solution of 50/50 of Brulin US Solutions<sup>27, 10</sup> products 815 GD and 815 QR-DF or 815 QR-NF to achieve a volume fraction of 12.5 % of the total cleaning solution, provided that the laboratory has conducted a successful reference oil test using this solution.

10.4.6 Calculate Quality Index (QI) for all control parameters in accordance with the DACA II Report. Be sure to account for missing or bad quality data in accordance with the DACA II Report as well.

10.4.6.1 Use the U, L, Over Range, and Under Range values shown in **Table 5** for the QI calculations.

10.4.6.2 Round the calculated QI values to the nearest 0.001.

10.4.6.3 Report the QI values on the appropriate form.

**TABLE 7 Test Precision for Sequence IIH<sup>A</sup>**

Quantity, units	Intermediate Precision <sup>B</sup>		Reproducibility <sup>C</sup>	
	$S_p^D$	$ip$	$S_R^D$	$R$
	Kinematic viscosity increase at EOT, % <sup>E</sup>	0.706	1.977	0.710
Average WPDE <sup>F</sup> , merit	0.475	1.330	0.497	1.392

<sup>A</sup> These statistics are based on 40 tests conducted on 8 stands at 5 laboratories on ASTM TMC Reference Oils 434-2, 436, and 438-1, and were calculated on June 6, 2016.

<sup>B</sup> See 14.1.2.

<sup>C</sup> See 14.1.3.

<sup>D</sup>  $S$  is the estimated standard deviation.

<sup>E</sup> This parameter is transformed using  $\ln(\text{result})$ . When comparing two test results on this parameter, first apply this transformation to each test result. Compare the absolute difference between the transformed results with the appropriate (intermediate precision or reproducibility) precision limit..

<sup>F</sup> Weighted piston deposits (see 12.3.5.8).