

Sequence IIIF Information Letter 07-1 Sequence No. 24 March 19, 2007

Approved by ASTM D02.B on March 5, 2007

TO: Sequence III Mailing List

SUBJECT: Sequence IIIFVIS Test Creation

At the request of the ASTM Heavy Duty Engine Oil Classification Panel, the Sequence III Surveillance Panel recently approved, via electronic ballot, the creation of a new version of the Sequence IIIF test measuring only percent viscosity increase. Appendix X2 of Test Method D6894 has been added to define the modifications necessary to conduct the test, referred to as the Sequence IIIFVIS. A revised Table of Contents and a definition for *test procedure*, Section 3.1.29, have also been added. This change is effective the date of this information letter.

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Attachment

c: <u>ftp://astmtmc.cmu.edu/docs/gas/sequenceiii/procedure\_and\_ils/IIIF/IL07-1.pdf</u>

Distribution: Electronic Mail

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3.1.29 *test procedure* n-one where test parameters, apparatus, apparatus preparation, and measurements are principal items specified.

## Renumber old Sections 3.1.29, 3.1.30, and 3.1.31 as Sections 3.1.30, 3.1.31, and 3.1.32.

## X2. SEQUENCE IIIFVIS TEST PROCEDURE

- X2.1 *Overview* The Sequence IIIFVIS test procedure was developed to support the viscosity increase requirements for Heavy Duty Diesel Category CJ-4 (Specification D 4485). The Sequence IIIFVIS test procedure consists of examining the percent viscosity increase data obtained at the end of a normal 80-h Sequence IIIF test method. No parts ratings or measurements are required in the Sequence IIIFVIS test procedure. A separate Sequence IIIFVIS report form set is available from the TMC for reporting Sequence IIIFVIS test results. Do not use the Sequence IIIF report form set to report Sequence IIIFVIS test results.
- X2.2 *Preparation of Apparatus* Prepare the Sequence IIIFVIS test engine in the same manner as a Sequence IIIF test engine. No special preparations are required or permitted on test engines for Sequence IIIFVIS use. Do not perform Camshaft and Lifter Measurements, as outlined in Section 9.11, for the Sequence IIIFVIS test procedure.

## X2.3 Calibration

- X2.3.1 There is no stand-alone calibration system for the Sequence IIIFVIS test procedure. Any stand that is considered calibrated for Sequence IIIF testing shall be considered calibrated for Sequence IIIFVIS testing.
- X2.3.2 No special calibration of stand instrumentation is required for Sequence IIIFVIS testing.
- X2.3.3 Apply Sequence IIIF percent viscosity increase Severity Adjustments (SA) to Sequence IIIFVIS results.
- X2.3.4 A Sequence IIIFVIS test procedure start counts as one run against the Sequence IIIF stand calibration period for the stand on which it is run.

- X2.4 Test Procedure- Conduct the Sequence IIIFVIS test procedure in a calibrated IIIF test stand.
- X2.5 Determination of Test Result- Determine the test result using Sections 12.7, 12.13 and 12.14.
- X2.6 *Test Reporting* Report the Sequence IIIFVIS result using the standard report form set, available from the TMC.
- X2.7 Precision and Bias
  - X2.7.1 Test precision for the IIIFVIS test procedure is assumed to be the same as that established for the Sequence IIIF test method, which is based on reference oil test results (for operationally valid tests) monitored by the TMC. The Sequence IIIF Surveillance Panel reviews the data semiannually; contact the TMC for current industry data.
  - X2.7.2 Bias for the IIIFVIS test procedure is assumed to be the same as that determined by applying an accepted statistical technique to Sequence IIIF test method reference-oil test results. When a significant bias is determined, an SA is permitted for non-reference oil test results.