



Test Monitoring Center

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Sequence VG Information Letter 01-3

Sequence No. 9

July 27, 2001

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 VG Mailing List

SUBJECT: 1. Deletion of Benzene Measurement in Fuel Stored at the Laboratory
2. Definition of Consensus Rating
3. Dropping of Pentane Insolubles, TBN and Viscosity @ 100 ° C

1. At the May 23, 2001 meeting of the Sequence V Surveillance Panel, the panel agreed to drop the requirement to monitor Benzene levels in the fuel stored at the laboratories. Section 8.2.6 has been revised to remove this requirement.
2. A description of consensus rating, supplied by the Technical Guidance Committee, was also approved by the panel. Section 13.1.4 has been added to Test Method D6593 to describe consensus rating.
3. Finally, the panel agreed to no longer require that pentane insolubles, TBN and viscosity @ 100 ° C be measured from oil samples taken at various points during the test. Section 13.6.1 has been revised and Section 13.6.3 has been deleted to remove the requirements to do these analyses. References to Test Methods D893, D3606 and D4739 have been removed from Section 2.1 also.

The attached changes to Test Method D6593 are effective the date of this letter.

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Product Engineering
Ford Motor Company

John Zalar
Administrator
ASTM Test Monitoring Center

Attachment

c: ftp://www.tmc.astm.cmri.cmu.edu/documents/gas/sequencev/procedures_and_ils/vgil01-3-9

2. Referenced Documents

2.1. ASTM Standards:

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| D86 | Test Method for Distillation of Petroleum Products ⁴ |
| D287 | Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method) ⁴ |
| D323 | Test Method for Vapor Pressure of Petroleum Products (Reid Method) ⁴ |
| D381 | Test Method for Existent Gum in Fuels by Jet Evaporation ⁴ |
| D445 | Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and the Calculation of Dynamic Viscosity) ⁴ |
| D525 | Test Method for Oxidation Stability of Gasoline (Induction Period Method) ⁴ |
| D873 | Test Method for Oxidation Stability of Gasoline (Potential Residue Method) ⁴ |
| D1266 | Test Method for Sulfur in Petroleum Products (Lamp Method) ⁴ |
| D1298 | Practice for Density, Relative Density (Specific Gravity) or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method ⁴ |
| D2622 | Test Method For Sulfur in Petroleum Products by X-Ray Spectrometry ⁵ |
| D2789 | Test Method for Hydrocarbon Types in Low Olefinic Gasoline By Mass Spectrometry ⁵ |
| D3237 | Test Method for Lead in Gasoline by Atomic Absorption Spectrometry ⁵ |
| D3525 | Test Method for Gasoline Diluent in Used Gasoline Engine Oils by Gas Chromatography ⁵ |
| D4057 | Practice of Manual Sampling of Petroleum and Petroleum Products ⁵ |
| D4175 | Terminology Relating to Petroleum, Petroleum Products, and Lubricants ⁵ |
| D4294 | Test Method for Sulfur in Petroleum Products by Non-dispersive X-Ray Fluorescence Spectroscopy ⁵ |
| D4485 | Specification for Performance of Engine Oils ⁵ |
| D5059 | Test method for Lead in Gasoline by X-Ray Spectroscopy ⁶ |
| D5185 | Test Method for Determination of Additive Elements, Wear Metals and Contaminants in Used Lubricating Oils by Inductively Coupled Plasma Atomic Emissions Spectrometry ⁶ |
| D6304 | Test Method for Determination of Water in Petroleum Products, Lubricating Oils and Additives by Coulometric Karl Fischer Titration ⁷ |
| E29 | Practice for Using Significant Digits in Test Data to Determine Conformance With Specifications ⁸ |
| G40 | Terminology Relating to Erosion and Wear ⁹ |

⁴ Annual Book of ASTM Standards, Vol. 05.01.

⁵ Annual Book of ASTM Standards, Vol. 05.02.

⁶ Annual Book of ASTM Standards, Vol. 05.03

⁷ Annual Book of ASTM Standards, Vol. 05.04

⁸ Annual Book of ASTM Standards, Vol. 03.02.

⁹ Annual Book of ASTM Standards, Vol. 14.02

8.2.6 *Laboratory Storage Tank Fuel Analysis*—Analyze the contents of each fuel storage tank that contains fuel used for calibrated Sequence VG tests bi-monthly. Analyze the fuel in run tanks, those with a direct feed line to test engines every month. Laboratories should take composite samples using Table 1 in Practice D 4057, as a guideline. The fuel supplier shall have the capability to analyze the fuel samples using the test methods specified in Table 3 and this section. The fuel supplier shall provide an adequate supply of fuel sample containers with packaging and pre-addressed return labels to each Sequence VG laboratory. Upon receipt of all fuel samples required in Section 8.2.6 from the laboratories, the fuel supplier shall perform the following analyses, report the results to the submitting laboratory, and tabulate the results in a database.

Reid Vapor Pressure (Test Method D 323)

Washed Gums (Test Method D 381)

API Gravity (Test Method D 287 or D1298)

Unwashed Gums (Test Method D 381)

Distillation (Test Method D 86)

Lead (Test Method D 3237 or D 5059)

13.1.4 If multiple ratings are deemed necessary of a given part or parts, consensus rating may be used according to the following: The raters shall be from the same laboratory or from an outside rater if required (no category 1 rater available in the lab). No averaging of ratings is permitted. Report only one rating value and this value shall be agreed to by the original rater involved. Document any consensus rating in the comment section of the test report.

13.6.1 Perform the following analyses on the used oil samples taken every 24 h and on the final drain: Viscosity at 40°C (Test Method D 445), wear metal (Test Method D 5185), and fuel dilution (Test Method D 3525). Take samples at 0, 24, 48, 72, 96, 120, 144, 168, 192, and 216 h.

13.6.3 Deleted