

**Sequence VH Surveillance Panel Meeting
May 3rd 2023, San Antonio**

Roll Call:

Afton: B. Maddock, B. Campbell
ExxonMobil: P. Rubas
Ford: M. Deegan
Haltermann: W. Hairston
Infineum: T. Dvorak, A. Ritchie (Chair)
Intertek: A. Lopez
Lubrizol: T. Catanese
OHT: M. Bowden
Oronite: R. Stockwell, R. Affinito
SwRI: D. Engstrom, T. Kostan, P. Lang
TEI: D. Lanctot
TMC: R. Grundza
Valvoline: A. Savant

Meeting Summary:

Jan 26th minutes approved. (Lopez/Stockwell).

New fuel review:

Group were meeting for the first time since approving the new fuel on Jan 26th. With only 4 more new reference oil results for 931 and 1011, group agreed it was too soon to consider any update/reassessment of the performance of the new fuel. A significant number of 931 and 1011 reference oil results are expected in the next few months and the September time frame may be a good time to look at this again. 940 remains suspended during this period.

Fuel Supplier Update: (Bill Hairston/Haltermann)

About 300,000 gallons left. Group assessed that the remaining fuel could cover around 400 more tests. More RVP data may be put on website rather than just reporting it in batch code changes. Summer months may be a critical period for monitoring RVP with the fuel stored in a tank in Nixon TX. Ritchie stated he would press for a much earlier timeline to reblend the next batch of fuel but there was plenty of time for the moment.

VH 6-month Reporting Period Review – History of VH Test Activity Levels

Ritchie: Chart of registered test activity for the 6-month reporting periods since the VH test was first registered in 2018 shows about 40-50 tests per period for the GF6 approval timeframe, but for the dexos GEN3 approval period of the last 2 years, the testing levels were approximately twice that. In terms of projecting number of tests for GF-7, the proposed limits aren't that different to GF-6 so fair to project that testing levels would imitate or maybe be lower than the GF-6 level of testing of around 40-50 tests per 6-month period. If formulations for GF-7 changed, testing levels could be significantly higher to address further GEN3 approval work and rise to around 80 tests for the 6-month reporting periods. In terms of projecting the lifetime of the test based on parts availability going forward, these 2 scenarios should be addressed.

Remaining VH Parts Review (All)

Group agreed that an estimate of remaining parts for another 540 tests was a good number to work with for forecasting purposes.

New Business:

Tony Catanese/Lubizol His company had conducted an internal audit of the VH procedure and requested a rewording of the sections 7.6.3.2 and 7.6.4. **Following the meeting a motion was made (Catanese/Lopez) and balloted by e-mail which passed without any objections.** Motion as follows:

Lubrizol is making a motion to change the wording of section 7.6.3.2 and 7.6.4 in the VH procedure. The mention of rating clean parts a 10 on the varnish scale is removed, as it is impossible to rate a used part a 10 and it is impractical for any lab to be rating clean parts.

Here are the existing sections:

7.6.3.2 Submerge the RAC in agitated organic solvent (see 7.7.2) until clean (approximately 1 h). Rinse the parts thoroughly with hot water (> 60 °C). Rinse the RAC with degreasing solvent (7.7.1) and allow to air-dry. Inspect the appearance of the inside of the RAC. **If the before test rating is less than ten on the ASTM varnish rating scale** (ASTM Deposit Rating Manual 20), polish the RAC with Green Scotch Brite General

Purpose Hand Pad #96¹⁵ to achieve a dull finish. Rinse with degreasing solvent (7.7.1) and allow to air-dry before use.

7.6.4 *Camshaft Baffle*—Submerge the camshaft baffles in agitated organic solvent (see 7.7.2) until clean (approximately 1 h). Rinse the parts thoroughly with hot water (> 60 °C). Rinse the camshaft baffles with degreasing solvent (7.7.1) and allow to air-dry. Inspect the appearance of the top surface of the camshaft baffle. **If the before test rating is less than ten on the ASTM varnish rating scale** (ASTM Deposit Rating Manual 20), polish the camshaft baffle with Scotch Brite General Purpose Hand Pad #96 to achieve a dull finish. Rinse with degreasing solvent (7.7.1) and allow to air-dry before use.

Proposed new wording:

7.6.3.2 Submerge the RAC in agitated organic solvent (see 7.7.2) until clean (approximately 1 h). Rinse the parts thoroughly with hot water

(>60 °C). Rinse the RAC with degreasing solvent (7.7.1) and allow to air-dry. Inspect the appearance of the inside of the RAC and ensure that it is free of any oil residue or varnish. Scuff the RAC with Green Scotch Brite General Purpose Hand Pad #96¹⁵ to achieve a uniform dull finish. Rinse with degreasing solvent (7.7.1) and allow to air-dry before use.

7.6.4 Camshaft Baffle – Submerge the camshaft baffles in agitated Organic solvent (see 7.7.2) until clean (approximately 1 h). Rinse the parts thoroughly with hot water (>60 °C). Rinse the camshaft baffles with degreasing solvent (7.7.1) and allow to air-dry. Inspect the appearance of the top surface of the camshaft baffles and ensure that they are free of any oil residue or varnish. Scuff the camshaft baffles with Green Scotch Brite General Purpose Hand Pad #96¹⁵ to achieve a uniform dull finish. Rinse with degreasing solvent (7.7.1) and allow to air-dry before use.

Bob Campbell agreed to organize a raters' workshop.