

Sequence V Surveillance Panel | MINUTES

REVISION DATE: 8/20/2017 12:32:00 PM

Relevant Test:	Sequence VG and VH
Note Taker:	Chris Mileti
Meeting Date:	07-26-2017
Comments:	Sequence V Surveillance Panel conference call. The purpose of this call was to discuss a series of motions for the Sequence VH test.

1. DISCUSSION:

a) Email from A. Ritchie (07-23-2017):

- i) The 07-23-2017 email contained the agenda items for this conference call.
- ii) **Agenda Items:**
 - (1) Vote on a motion to replace the APV parameter with the APV50 parameter.
 - (a) This will require the Sequence VH procedure to be amended so that the test requires 50% piston skirt ratings in place of [the original] full piston skirt ratings.
 - (2) Vote on a motion to instruct the TMC to update the VH Data Dictionary for the RCS transformation and the new 50% varnish ratings.
 - (3) Address hot stuck [piston] rings.
 - (a) The Surveillance Panel should recommend that a hot stuck ring on a reference test will be a fail, but that the test result will not be charted.
 - (4) A charting and calibration date will need to be established for the VH Precision Matrix tests.
 - (a) **Ritchie is recommending the following motion:** "All stands which completed testing and followed the criteria specified in the VH LTMS document and which met the VH test procedure draft posted 12-19-2016 shall be considered calibrated as of midnight 05-04-2017. Subsequent to this, all valid VH Matrix tests and VH calibration tests will be included in the stand charts."
- iii) Ritchie decided to hold this conference call in lieu of having an email vote.

b) Motion Regarding APV50:

- i) There is no longer a need for full piston skirt ratings for the Sequence VH test.
- ii) So the APV and AEV parameters will be replaced with the APV50 and AEV50 parameters, respectively.
- iii) **SWRI made the following motion:** "Amend the [VH] procedure to eliminate full piston skirt ratings and only rate 50% of the piston skirts."
 - (1) This motion was seconded by Ford.
- iv) There were no objections or waives to this motion, so it passed unanimously without the need for a roll call.

c) Motion Regarding Sequence VH Data Dictionary:

- i) The Surveillance Panel agreed that a motion is needed to instruct the TMC to change the following fields in the VH Data Dictionary:
 - (1) The Rocker Cover Sludge (RCS) parameter now uses a transformation.

(2) The AEV50 parameter is to replace the AEV parameter.

(3) The APV50 parameter is to replace the APV parameter.

ii) **Important Note:** Lubrizol agreed to wordsmith this motion for the official meeting minutes.

(1) As a result, the wording listed below may not be identical to the wording used in the conference call.

iii) **Lubrizol made the following motion:** *"In regards to the VH Data Dictionary, the Surveillance Panel instructs the TMC to utilize a transformation for the RCS parameter. The Surveillance Panel also instructs the TMC to change the naming conventions for the AEV, APV, PSV1, PSV2, PSV3, PSV4, PSV5, PSV6, PSV7 and PSV8 parameters to reflect the 50% piston skirt rating technique. These parameters should be renamed as AEV50, APV50, PSV1_50, PSV2_50, PSV3_50, PSV4_50, PSV5_50, PSV6_50, PSV7_50 and PSV8_50."*

(1) This motion was seconded by Ford.

iv) There were no objections or waives to this motion, so it passed unanimously without the need for a roll call.

v) **Comments from TMC:**

(1) They suggest allowing (1) week for beta testing instead of the normal (1) month.

(2) They feel that they can have these changes to the data dictionary implemented in (1) week.

(3) The TMC will update the data tables as soon as possible.

(4) All Precision Matrix tests will need to be resubmitted with the revised naming conventions.

(5) Lubrizol questioned whether there should be a cap on the RCS transformation results (to avoid results above 10.0, for example).

(a) The TMC will review the procedure to make sure that all possible transformation possibilities will be addressed.

(b) Lubrizol requested that this be made an action item.

d) **Hot Stuck Piston Rings:**

i) The Hot Stuck Rings (HSR) parameter is in both the GF-5 and GF-5+OEM specifications as a candidate requirement.

ii) There were no hot suck rings in any of the Precision Matrix tests.

iii) The TMC confirmed that there were no hot stuck rings in the last (600) VG reference tests.

iv) The VH Development Task Force previously agreed that a reference test with a hot stuck ring will be a fail, but will not be charted.

(1) The lab will still need to repeat the reference test.

(2) Ford approves this change to the HSR parameter.

v) **Ford made the following motion:** *"A hot stuck ring on a reference test will be considered a fail, but the result will not be charted."*

(1) The motion was seconded by Afton.

vi) There were no objections or waives to this motion, so it passed unanimously without the need for a roll call.

vii) **LTMS Document for the Sequence VH:**

(1) The TMC is the steward of the Sequence VH LTMS document.

(a) As a result, they will need to update the LTMS document to reflect this motion.

(2) Lubrizol noted that the number of hot stuck rings is a discreet parameter that is monitored for occurrence only.

(a) We need to make sure that the LTMS document clearly states this.

e) (ei) **Alarm in LTMS:**

i) The statisticians stated that they will "dive into" this issue in more detail at a later date.

(1) They did note that this issue will not impact how the Sequence VH LTMS requirements are currently written in the LTMS document.

ii) Comments from TMC:

- (1) There is a tentative interpretation regarding how to apply this to the test.
- (2) However, there is still not a high level of comfort among the statisticians regarding all of the scenarios that can develop.

f) Discussion about Calibration Status on Valvoline's Sequence VH Stand:

- i) Valvoline completed (2) valid tests on their stand during the Precision Matrix.
 - (1) They need a 3rd valid test in order to calibrate their stand.
- ii) Valvoline asked if they can run one more test to meet their calibration requirements without having to re-run all (3) reference tests consecutively.
 - (1) Timing is an issue for them because they have candidate oils that they would like to run.
 - (2) These candidate tests will not be registered.

iii) Comments from TCM:

- (1) There is no clear wording in the documentation regarding how to handle this.
- (2) However, per the "letter of the law", one or two intervening candidate tests would not interfere with their referencing in this case.
- (3) The TMC will need to review this scenario with the LTMS working group.

g) Retroactive Calibration Dates:

- i) Intertek would like to see later retroactive calibration dates so that they can maintain their calibration longer.
- ii) Ritchie feels that a date of 05-04-2017 is a fair compromise.

iii) O'Malley's Comments:

- (1) For some recent test types, a date is usually selected that is a few weeks after the Surveillance Panel approves the LTMS model.
 - (2) Valvoline noted that if this convention is followed, the end of the Precision Matrix did not give the labs calibration.
- iv) Ritchie cautioned that there would be a penalty for the labs that finished Precision Matrix testing first if the end date of the Matrix is used to establish calibration.
 - v) Afton is concerned about having an unusually long reference period for a new test.
 - (1) It will take too long to start collecting reference oil data.
 - vi) The TMC clarified that any tests run since the conclusion of the Precision Matrix will count towards the number of tests in a calibration period.

vii) Opinions on Date of 05-04-2017:

- (1) Valvoline prefers the 05-04-2017 date.
 - (2) Afton prefers the 05-04-2017 date.
 - (3) SWRI would like to use a date that is as late as possible, but they can accept the 05-04-2017 date if that is the consensus among the Surveillance Panel members.
 - (4) Lubrizol has no objections to 05-04-2017.
 - (5) Ford actually prefers the 06-22-2017 LTMS approval date.
- viii) **Afton submitted the motion that Ritchie outlined in his earlier email:** *"All labs/stands which completed testing and followed the criteria specified in the VH LTMS document and which met the VH test procedure draft posted 12-19-2016 shall be considered calibrated as of midnight 05-04-2017. Subsequent to this, all valid VH Matrix tests and VH calibration tests will be included in the lab/stand charts."*

- (1) Valvoline suggested changing the "stands" text in Ritchie's original draft of the motion to "labs/stands".
- (2) The motion was seconded by Ford.

ix) Roll Call to Vote on Motion:

- (1) Ritchie conducted a roll call vote on this motion.
- (2) **Approving votes:** Infineum, SWRI, Afton, Haltermann, OHT, Chevron, TMC, Lubrizol, Ford, Valvoline, and VP Racing Fuels.

(3) The motion was unanimously approved.

h) Update on Fuel Inventory for Haltermann:

- i) Inventory (gross) = 194,000 gallons
- ii) Inventory (net) = 144,000 gallons

i) Ford GF-5 Plus LSPI Protection:

- i) Ford requested that the API add "GF-5 + LSPI Protection" as a supplemental category.
- ii) This supplemental category will include 0W-16 so that this grade benefits from LSPI protection as well.
- iii) There will be no new Starburst.
 - (1) The existing Starburst will still say "GF-5".
- iv) The Doughnut will be modified.
 - (1) The new Doughnut will now say "GF-5 plus LSPI".
- v) This supplemental category currently uses the Sequence VG test.
 - (1) The Sequence VH test will be added once equivalency limits are established.
- vi) This supplemental category will undoubtedly lead to an increase in Sequence VG testing.
 - (1) Fuel and hardware inventories will become an issue.

j) Final Motion Regarding the Sequence VH Test:

- i) **TMC made the following motion:** *"The Sequence V Surveillance Panel, having established an LTMS document, draft test procedure, and approval from the AOAP, has chosen May 4, 2017 as the date to begin Sequence VH lab/stand calibration."*
 - (1) There was some discussion among the Surveillance Panel members regarding how this motion differs from the earlier motion submitted by Afton.
 - (2) This motion was seconded by Valvoline.
- ii) **Roll Call to Vote on Motion:**
 - (1) Ritchie conducted a roll call vote on this motion.
 - (2) **Approving votes:** Infineum, SWRI, Afton, Haltermann, OHT, Chevron, TMC, Lubrizol, Ford, Valvoline, and VP Racing Fuels.
 - (3) The motion was unanimously approved.

Action Items	Person responsible	Completion Date
Confirm that all possible RCS transformation possibilities are addressed in the procedure.	TMC	

Follow-up Notes/Updates	Initials	Date Added
Typo in Section-1g(vii)3 corrected per feedback from SWRI.	CHTM	08-20-2017

Attendees	Organization	Contact Information