

Sequence V Surveillance Panel Meeting
December 14th, 2020 10 AM EST

Roll Call:

Afton: B. Maddock
BP: J. Agudelo
Ford: R. Romano
Haltermann: P. Tumati, Q. Dunford
Infineum: D. Boese, C. Laufer, C. Leverett, A. Ritchie (Chair)
Intertek: A. Lopez
Lubrizol: J. Brys
OHT: J. Bowden
Oronite: R. Stockwell, J. Martinez
Shell: J. Hsu
SwRI: A. Chaudhry, T. Kostan, P. Lang, D. Engstrom
TEI: D. Lanctot
TMC: R. Grundza
Willis Advanced Consulting: A. Willis

Meeting Summary:

After listening to the input from the statisticians and other panel members, a motion was drafted by TMC:

In order for an alternate supplier to be considered capable for providing fuel for the Sequence V test, the supplier will conduct 5 reference oil tests as follows:

2 tests on reference oil 940

2 tests on reference oil 1011

And 1 test on reference oil 931

These tests may be conducted on any LTMS qualified stand. The tests will meet the LTMS criteria for stand calibration, using the Level 2 Ei criteria and appropriate Yi limits for AES, RAC, AE50 and AP50.

The motion passed 9 Approve, 4 Waive, 1 Negative and will need to be balloted at Subcommittee B. Hardware and severity shift discussions remain open items to be addressed at the next meeting.

Actions:

1. **Labs** to provide parts inventory to TMC. **TMC** to collate hardware info from each of the labs.
2. **Chair** to contact Tracey King (HCS Group) and communicate the decision of the SP that 5 scoping VH test results are required to demonstrate a technical capability to blend a Sequence VH fuel. The contract process must be completed by Feb 15th, and the large batch supply would need to be approved and introduced by November.
3. **Chair** to contact Mike Lochte and communicate that the panel requests for the contract to be resolved by Feb 15th.

Next meeting: December 21st, 2020 @ 10 AM EST

Meeting was adjourned at approximately 11:37 AM EST

Meeting Details:

The Surveillance Panel reconvened to review:

- 1) Approval of fuel scoping test requirements
- 2) Parts inventory for VH to provide an updated projection for the life of the Sequence VH.
- 3) Plans for the SP to review the possible operational and/or hardware causes for the recent RACS and AES mild shifts which triggered a number of VH test key alarms.

The Chair shared that with the update on fuel from Haltermann and the latest consumption rates, the expectation is that we will run out of fuel by November/December next year.

To continue last week's discussion of fuel testing requirements, Doyle Boese (Infineum) clarified that we need to get a lot of information from this initial scoping qualification run. Although there was a suggestion of running 3 tests all at 1 lab last week, he now believes we need to run 5 tests at 1 lab and 1 stand. Recommendation is that each of the 3 oils be run (two tests with 1011, two with 940, and one with 931). Each of these 5 results would need to be within 2 standard deviations. Rich Grundza (TMC) agreed this sounded reasonable as the idea is for the supplier to generate enough data to prove they can provide a fuel batch that can meet the criteria for the Seq VH test.

Ron Romano (Ford) questioned if we can treat these tests like reference tests or if that would be too severe if the statistician is saying the results would need to be within 2 standard deviations? Upon thinking about this more, Doyle Boese (Infineum) said it would be a better suggestion to use that particular lab's stand's LTMS to judge whether the fuel is acceptable.

The Chair summarized the proposal: 5 tests would have to meet LTMS calibration requirements. Jerry Brys (Lubrizol) asked if these would be severity adjusted. Doyle Boese (Infineum) answered that they would not be severity adjusted and that the data would be treated like any reference. We would use that LTMS for that particular stand. Travis Kostan (SwRI) agrees with Doyle's proposal and added we might want to add level 2 Ei limits for acceptance criteria (a tighter band that is sometimes used for hardware introduction). Travis explained that if a level 2 is put in place, and if a one meets the criteria, then no further review is needed. Doyle agreed and re-summarized the proposal: 5 tests, meeting LTMS calibration requirements with the additional requirement of level 2 Ei. With concerns about the amount of time available for a new fuel supplier to be to complete a scoping study, the 1 stand proposal was relaxed to allow for any number of calibrated VH stands.

Re: formal documentation, Ron Romano (Ford) commented if this will be the official requirement for a new supplier to be considered, then it should be in the Seq VH procedure, as a fuel approval procedure. Rich Grundza (TMC) offered that we could work this change in through an Information Letter. Pat Lang (SwRI) followed with the need to put this in writing and to send to the panel for review. He agreed that eventually, this should end up in the test procedure so that down the road, we don't have to reinvent this process again. Ron asked that everyone, including those who were not able to attend this call, reviews this Information Letter /Change to the procedure. With a reminder from Jeff Hsu (Shell) and the Chair that this statement is to be kept to what is necessary for qualification and that the SP is a technical group, making a technical assessment, Rich penned a draft:

In order for an alternate supplier to be considered capable for providing fuel for the Sequence V test, the supplier will conduct 5 reference oil tests as follows:

2 tests on reference oil 940

2 tests on reference oil 1011

And 1 test on reference oil 931

These tests may be conducted on any LTMS qualified stand. The tests will meet the LTMS criteria for stand calibration, using the Level 2 Ei criteria and appropriate Yi limits for AES, RAC, AE50 and AP50.

Robert Stockwell (Chevron) motioned that this should be voted on to shake out any negatives. Seconded by Al Lopez (Intertek).

The Chair asked the panel to vote on the draft above from TMC and these are the results:
9 Approve, 4 Waive, 1 Negative

Ford	Ron Romano	Approve
Afton	Ben Maddock	Approve
Lubrizol	Jerry Brys	Approve
Intertek	Al Lopez	Approve
SwRI	Dan Engstrom	Approve
Oronite	Robert Stockwell	Approve
TMC	Rich Grundza	Waive
OHT	Jason Bowden	Waive
TEI	Dan Lancot	Waive
Willis Advanced Consulting	Angela Willis	Approve
Haltermann	Prasad Tumati	Negative
Shell	Jeff Hsu	Approve
BP	Jorge Agudelo	Waive
Infineum	Caroline Laufer	Approve

Rich Grundza (TMC) commented that any negative votes would need to be adjudicated. Jeff Hsu (Shell) suggested that ASTM legal should be consulted as the negative vote could be interpreted as being motivated by commercial interest. Ron Romano (Ford) explained the process that this ballot would now go to Subcommittee B and if there's no valid technical reason for the negative vote, the vote is deemed to be non-persuasive. The ASTM committees are technical groups which adjudicate negative votes solely on the merits of the technical issues which are raised.

Re: timing, the Chair explained when the contract is awarded to fuel supplier x, a minimum of about 7 months will be needed by x to build the batch of fuel and to run the test matrix. Given this timeline and our expectation of when we will run out of fuel, Doyle Boese (Infineum) asked the panel to consider putting in a stipulation that scoping tests would need to be completed by a particular date. Rich Grundza (TMC) agreed that as a courtesy, the timeline for an upcoming batch should be known, in addition to clear criteria for what another supplier needs to do. Angela Willis (Willis Advanced Consulting) recommended that the timeline be created not so much for the supplier but for the panel to understand what needs to be accomplished and by when.

In the process of wrapping up this issue the Chair stated that he would do the following:

1. Contact Tracey King (HCS Group) and communicate the decision of the SP that 5 scoping VH test results are required to demonstrate a technical capability to blend a Sequence VH fuel. The contract process must be completed by Feb 15th, and the new fuel batch would need to be approved and introduced by November.
2. Contact Mike Lochte and communicate that the panel requests for the new contract to be resolved by Feb 15th.

Re: hardware, Ron Romano (Ford) updated the panel that he's expecting to have some information by the end of this week about the core / block parts. He is also waiting to hear back from Federal Mogul about the pistons. SP will resume next week to follow-up on the hardware and severity shift topics.