

Sequence V Surveillance Panel Meeting
June 24th, 2020 2 PM EST

Roll Call:

Afton: E. Altman, B. Campbell, T. Dvorak, B. Maddock, C. Porter
Ford: M. Deegan, R. Romano
GM: B. Cosgrove
Haltermann: P. Tumati, Q. Dunford
Infineum: D. Boese, C. Laufer, A. Ritchie (chair)
Intertek: A. Lopez
Lubrizol: J. Brys
OHT: J. Bowden
Oronite: R. Stockwell
SwRI: A. Chaudhry, T. Kostan, P. Lang, D. Engstrom
TMC: R. Grundza
Valvoline: A. Savant
PSL Services: C. Taylor

Meeting Summary:

- Semi-annual report has been issued (appended). There's been little activity in the last 6 months.
- Although we're at less than half of what we started with, a refill of fuel is not needed at this time with 278,000 gallons in the fuel supplier's tank. Fuel supplier Haltermann agreed that checking inventory and reassessing the need to refill is suitable to do every 6 months.
- TMC reported an inventory of 24 gal of 1011, enough to last at least 6 months.
- The panel unanimously passed the following motion proposed by Christian Porter (Afton), seconded by Pat Lang (SwRI):
Seq V Surveillance Panel will allow TMC to adjust reference periods to facilitate the referencing of TMC-931 reference oil.
- Some concerns were raised that southern labs are particularly challenged with the fuel analysis requirement during the summer months. Haltermann will report back on RVP fuel analysis data as this could help define an appropriate range.

Actions:

1. Supplier of 931 to share data with Ford. Ford to report back to SP.
2. Haltermann to look at fuel data from Sec 8.2.6 requirement and report back in a couple weeks.
3. Chair to schedule next meeting in 2-3 weeks.

Next meeting: in 2-3 weeks

Meeting was adjourned at 2:46 PM EST

Meeting Details:

Semi-Annual Report

The Chair reported that there's been little activity since the last meeting in December as not many Seq VH tests have been run. Semi-annual report was issued to the Surveillance Panel earlier this week. No questions on the report.

Fuel inventory

Fuel supplier Haltermann reported an inventory of 278,000 gal (down 42,000 gal from December's inventory of 320,000 gal). Although we're at less than half of what we started with, a refill is not needed at this time. Haltermann agreed that checking inventory and reassessing the need to refill is suitable to do every 6 months, timed with the semi-annual reports.

Reference oil

As 1009-1 was suspended as a reference oil (see [Oct 2019 minutes](#)), TMC has received another oil, labeled as 931, to replace 1009-1. Supplier of 931 has targeted the oil around the ILSAC GF-6 pass/fail limits for the key parameters – it is intended to be a 'borderline oil'. The Chair recommended to start the process of introducing 931 as VH will need an oil that performs in between 1011 and 940. Ron Romano (Ford) raised concern about the lack of data on 931 and the potential risk of labs having to throw out data and to be down a test. Ford requested for the supplier to get in touch with Ron Romano directly to share any data.

Al Lopez (IAR) requested for the panel to discuss a plan for reference testing. Rich Grundza (TMC) shared that we would need to get 5-6 tests lined up. Bob Campbell (Afton) confirmed that these would need to be run in a coordinated fashion and to have stands in the 'pending' category. He added to Al's point that we would need to find out where these 5-6 stands are and make sure that we're not hurting any lab too badly. Rich proposed that while stands are still calibrated, we can run references, and extend the calibration period. This is something the industry has done in the past (example: IIIH with hardware prove-outs, verifying no harm) and so is not unprecedented.

Rich Grundza (TMC) shared that there's 24 gal of 1011 remaining. Al Lopez (IAR) suggested then that it would make more sense to introduce the 1011 replacement if we're running out of it. If we do as a rolling change, we would be making the same mistake with 1009-1. Rich Grundza (TMC) commented that since 931 is a newer technology, there's a high level of confidence to hit the target performance level. Rich confirmed that we can be confident that there's enough 1011 to last at least 6 months.

Re: timeline, Al Lopez (IAR) proposed that the sooner we can introduce 1 reference oil, the better as we do not desire to have 2 reference oils unavailable at the same time. Now, when test activity is not high, would be a good time to reference but we understand that the current situation makes the donation of tests challenging. Al supports the supplier of 931 to meet with the OEM and show data, at least have a scoping run to have some confidence that when the time comes to reference, the runs won't be wasted. Business will hopefully be better by then and the labs can run, and get an extended reference period.

Ben Maddock (Afton) stated that their reference is due in late August. Bob Campbell (Afton) continued that it would then be appropriate to make the motion incase anything

pops up between now and the next SP call. Christian Porter (Afton) called for the motion to be made. Rich Grundza (TMC) worded the motion below. Seconded by P. Lang (SwRI). Passed by the Surveillance Panel with zero objections:

MOTION: Seq V Surveillance Panel will allow TMC to adjust reference periods to facilitate the referencing of TMC-931 reference oil.

Rich Grundza (TMC) updated there is one lab running a reference now. Motion is helpful because we wouldn't want this lab to terminate their test. There's a stand which will be out of calibration on July 29th. Another on August 28th, another in September, and 2 in October. Al Lopez (IAR) added that one of his stands will be out of calibration on July 20th and another on September 4th. Bob Campbell (Afton) summarized that perhaps we can get 5 tests between end of July and middle of September. Rich added that he was not sure if the labs will want their stands in calibration but yes, there's a potential for 5 tests. This drives the need for the SP to have a call in 2-3 weeks.

Fuel Storage Tank

Referring to Section 8.2.6 that requires a quarterly analysis of the fuel in the fuel storage tank, Rich Grundza (TMC) posed a question to the panel if we should be doing anything about the failing RVP values in summer months. Rich mentioned that this is a common problem even for other tests like the IIIG. Quentin Dunford (Haltermann) commented that this is typical for fuels that have been sitting for a while. He will look at the data, confer with internal colleagues, and will pull together a report for the panel in a couple weeks. Pat Lang (SwRI) added that southern labs are particularly challenged with this and sometimes, the way in which we sample can put risk on failing RVP. Getting an appropriate range would be helpful.

Semi-Annual Report



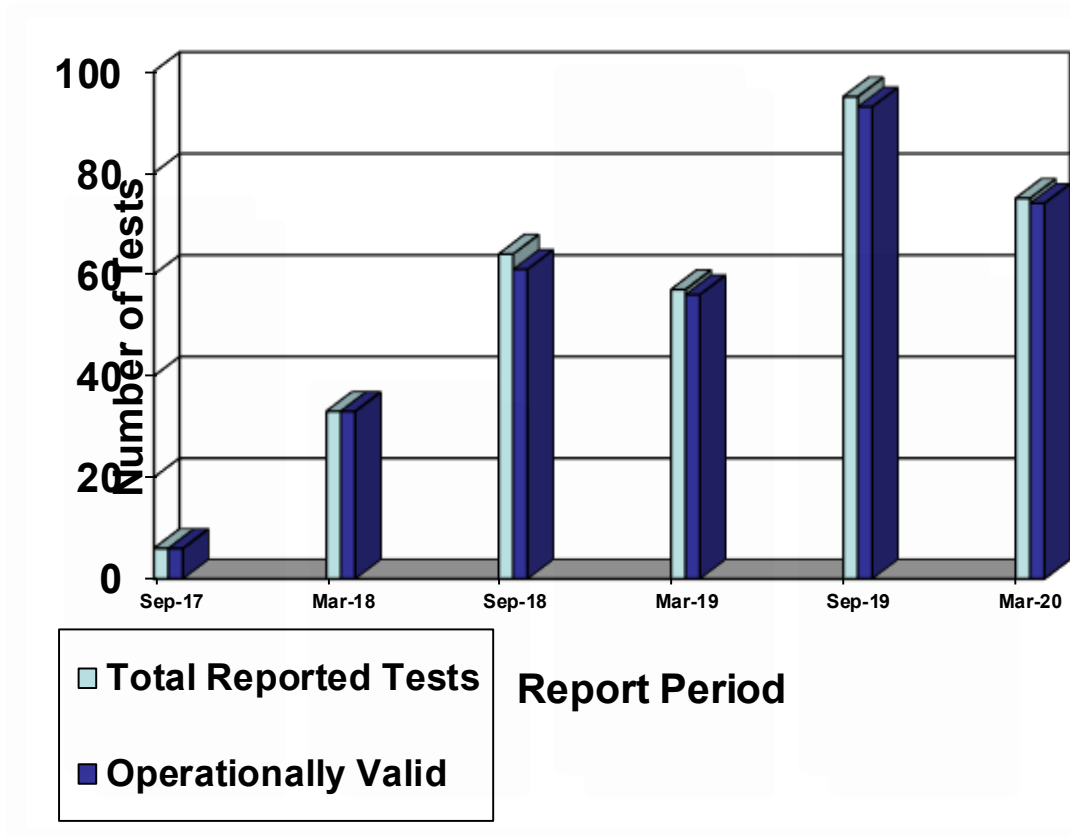
Sequence V SP
report to B June 2020

Sequence VH S.P. (ASTM D8256)

Presentation to Subcommittee D02.B

Prepared By: Andrew Ritchie, S.P. Chairman June 2020

Sequence VH S.P. Report Candidate Test Activity



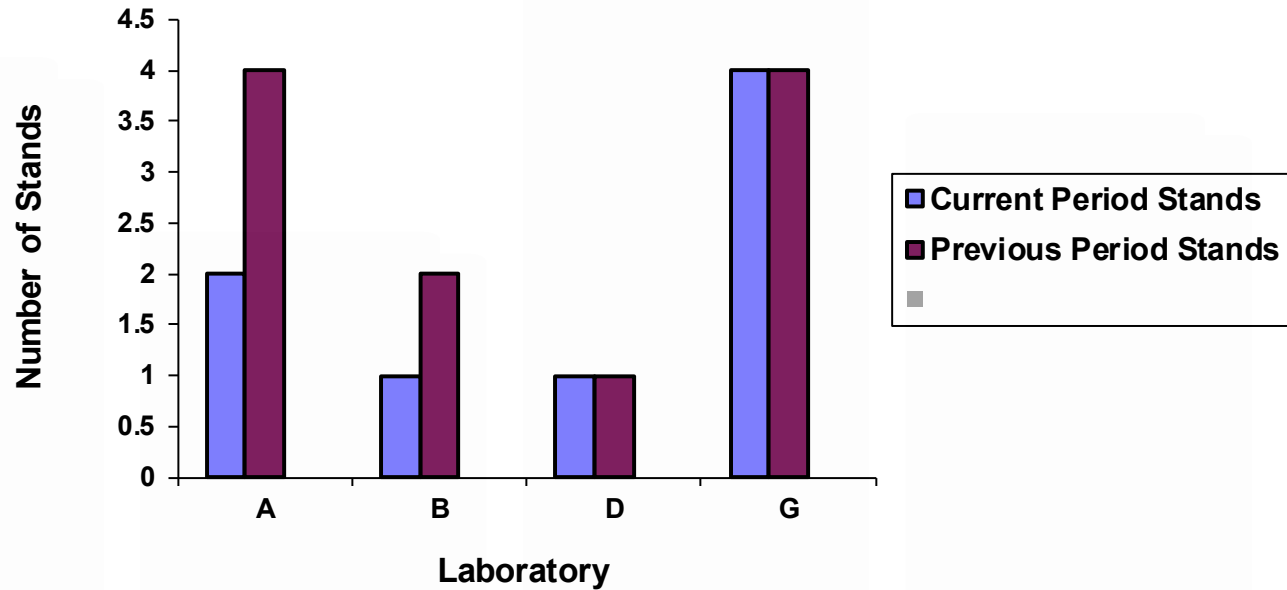
VH Candidate registration began May 2017

Sequence VH S.P. Report

LTMS Laboratory/Stand Distribution

	Reporting Data	Calibrated as of 3/31/20
Number of Laboratories	4	4
Number of Stands	8	8

Laboratory/Stand Distribution



Sequence VH S.P. Report

Industry Reference Severity Summary

6 month time frame

Variable	Pooled s All Oils	Mean Delta/s	Based on	Delta in Reported Units
RAC	0.24	-0.74	8.0	0.33
AES	0.34	0.42	7.8	0.14
APV	0.34	-0.36	7.5	-0.12
AEV	0.56	-0.31	8.9	-0.17

Sequence VH S.P. Report

Reference Oils

- **1011** SAE 0W-16 passing reference oil
Reblend 1011-1 is ready to be introduced
- **1009-1** SAE 5W30 borderline failing oil.
Concerns about reblend. 1009-1 is suspended.
- **940-1** SAE 5W30 failing reference oil.
Reblend 940-2 has been received by TMC

Sequence V S.P. Report

1H 2020 Panel Activity

- Low activity levels.
- SP call
- No issues reported with fuel batch.
 - Inventory of 278,000 gallons.
 - 42,000 gallons distributed in 1H.
- TMC has received 931 as a proposed replacement for 1009-1.
 - 931 is targeted to perform around the ILSAC GF-6 Pass/Fail lines.
 - SP wishes for Ford to review supplier dataset around 931 and make a recommendation back to SP.
 - SP voted to allow TMC to adjust reference periods to facilitate the referencing of TMC-931.
- Reblend 1011-1 will need to be introduced in next few months.