

Unapproved Minutes of the July 28, 2015 Sequence VG Surveillance Panel Conference Call

The meeting was called to order by Chairman Andy Ritchie at 2:00 PM EDT.

Mike McMillan agreed to take the minutes of the meeting.

A list of the attendees on the call is included as Attachment 1.

Chairman Ritchie listed the agenda items he would like to cover in this call:

- 1) Approval of the minutes from the July 14, 2015 Sequence VG Panel conference call
- 2) Report from Haltermann on status of contaminated fuel batch
- 3) Report from VP Racing Fuels on their plans
- 4) Discussion of next steps
- 5) Additional Old Business
- 6) New Business
- 7) Next meeting/call

Chairman Ritchie asked if there were any additions or corrections to the minutes from the July 14, 2015 VG Panel conference call. There being none, Ed Altman moved and Jason Bowden seconded a motion to approve the minutes. The motion was approved unanimously.

Chairman Ritchie asked Mark Overaker from Haltermann to provide an update on their efforts to remove the glycol ether that had contaminated the 350K gallon batch of DA fuel. Mark indicated that, despite efforts to “clean” the fuel and restore it to its original composition, analytical tests indicated that the fuel composition had changed significantly enough that he has decided it is best to deplete the storage tank and proceed to blend a new batch. Mark argued that in his opinion this is quickest way to come up with a new batch in time for testing to begin in October. Gordon Farnsworth asked if steps were being taken to ensure this would not happen again. Mark replied that the tank is locked now so it cannot be accidentally contaminated. Chairman Ritchie asked if the intention was to make the new batch identical to the current batch, noting that the three VH tests conducted on the batch

before it became contaminated indicated a mild trend. Mark replied that this was being taken into consideration in the new reblend. In response to a question about a timeline, Mark indicated the new reblend should be ready for approval matrix testing in late August.

Chairman Ritchie then asked Chris Taylor from VP Racing Fuels about the status of the testing he indicated he was undertaking during the July 14, 2015 conference call. Chris replied that VP has a 500K gallon tank in Houston, TX which could be made available to store a Sequence V fuel batch. The tank has a floating head and a dedicated pump and loading system. Chris volunteered an inspection to any of the VG Panel members who would like to visit the site where the tank is located. Ed Altman asked Chris to provide more information on his background in fuel blending and testing. Chris indicated he was the owner of a petroleum lab for over 30 years, and he has blended several batches of fuel that can cause sludge formation. He joined VP Racing Fuels in 2013, and is currently Director of Specialty Chemicals there.

Chris indicated they plan to begin running engine tests in the next two weeks on a fuel blend they believe will produce sludge. Cole Hudson of SwRI injected at this point that SwRI would be running that test for VP, and they plan to run a VH test with Oil 940. Ed Altman and Ron Romano both expressed concern about running a VH test on the fuel, saying they didn't think we would learn much from it, and that running a VG test would be better. Cole responded that it would probably be 3 weeks before they could run a VG, so that's why they wanted to start with a VH. Al Lopez recalled there had been some fuel in Europe that we didn't want to use in the Sequence V test because it contained some specific additive added to generate sludge. Chris replied they were using only streams of oil, and that the only additives added were preservatives.

With the plans indicated, Chairman Ritchie suggested that we wait for some or all of the data to be generated before scheduling another SP conference call. Mark Overaker expressed concern with Haltermann starting to blend a new fuel batch if it might not be used in the VH testing. This prompted extensive discussion. Al Lopez stated he preferred that Haltermann make the new fuel batch because of all of the testing that would have to be done to ensure an entirely new fuel from VP Racing was acceptable, especially when we need a fuel for the VG for the next 18 months. Ed Altman and Jerry Brys agreed with this sentiment. Chairman Ritchie suggested there seemed

to be a lot of encouragement for Haltermann to blend the new batch. Chris Castanien cautioned that we were venturing into discussions that could have legal ramifications because of the two competitor fuel suppliers. Chairman Ritchie replied that the VG Panel was not making a commitment to any supplier to use its fuel, nor has the Panel ever done that in advance, and it was up to a supplier to decide whether to blend a fuel and make it available for consideration by the Panel for Sequence V testing. Chairman Ritchie further stated that he wants to postpone further discussion until he has had a chance to confer with ASTM officials on this matter. Mark indicated he would have a decision on whether Haltermann would begin to blend a new fuel batch after draining the contaminated batch from the fuel tank has been completed; this will likely take about one week.

Old Business: Al Lopez asked about the availability of the new VH piston rings. Ron Romano answered that it was probably still a couple of weeks before they would be available. Ed Altman mentioned there was a problem obtaining the fluid for the sonic cleaner. Apparently, one of the components in the fluid is unavailable at the current time. There was no other Old Business brought before the Panel.

New Business: There was no New Business brought before the Panel.

Next Meeting: The next VG Panel conference call is at the call of the Chairman. Chairman Ritchie indicated he would try to give a week's notice before the next scheduled date.

The conference call was adjourned at 2:55 PM EDT.

Attachment 1

Attendance for 7/28/15 Sequence VG Call

Infineum: Andrew Ritchie, Mike McMillan, Gordon Farnsworth

Ashland: Amol Savant, Tim Caudell

VP Racing Fuels: Chris Taylor

GM: Bruce Matthews

Ford: Ron Romano

Haltermann : Mark Overaker

SwRI : Dan Worcester, Cole Hudson

Intertek: Al Lopez

Afton: Ed Altman

Lubrizol: Jerry Brys, Kevin O'Malley, Chris Mileti

Oronite: Jo Martinez

OHT: Jason Bowden, Matt Bowden

TEI: Zack Bishop, Dan Lanctot

Neste: Chris Castanien