

Minutes from 5/24/2011 Sequence VG Surveillance Panel Conference Call

Attendees:

Andrew Ritchie, Gordon Farnsworth, Mike McMillan, Doyle Boese – Infineum

Jo Martinez – Chevron

Rich Grundza - TMC

Ron Romano – Ford

Bruce Matthews – General Motors

Raham Kirkwood, Bill Buscher – SwRI

Al Lopez – Intertek

Bob Campbell, Christian Porter, Dave Glaenzer – Afton

Jerry Brys, George Szappanos, Alison Rajakumar, Chris Castinean – Lubrizol

Mark Overaker, Wayne Petersen, Jim Carter – Haltermann

Irwin Goldblatt – BP Castrol

Timothy Caudill - Ashland

Tom Wingfield - ChevronPhillips

Jason Bowden, Mathew Bowden, Dwight Bowden, Adam Bowden – OHT

Zack Bishop – TEI

- 1) The minutes from the May 17, 2011 conference call were approved with no additions or corrections. Motion made by Jason Bowden and seconded by Dave Glaenzer.

- 2) Chairman Ritchie summarized the agenda for today's meeting. The main items to be discussed are the following:
 - a. Review status of large VG fuel batch preparation.
 - b. Review statisticians' recommendation for fuel approval matrix.
 - c. Agenda for June 1 VG SP meeting in Warren, MI.
 - d. Other New Business

- 3) Mark Overaker from Haltermann summarized the status of the preparation of the large fuel batch reblend. They plan to complete blending by June 3. That would allow shipment of the fuel to the test labs by June 4 or June 7 at the latest. Fuel approval testing would begin late in the week of June 6. Chairman Ritchie pointed out that, based on this timing, the VG Panel could defer making a decision on the fuel approval matrix until the June 1 meeting, or it could make a decision on the matrix today, depending upon the amount of discussion needed today.

- 4) Jo Martinez, on behalf of the Statistical Group, summarized the Statistical Group's recommendation for the fuel approval matrix (See Attachment 1). A two-step process is recommended: Step 1 is to determine whether there is a difference between the small fuel batch (from which 925-3 was tested) and the large batch currently being blended. If no statistically significant difference among the batches is found, we would proceed to Step 2 in the matrix design. Doyle Boese commented that, with the small number of tests being run, we may only be able to detect a one standard deviation difference in AES at a 50% confidence level. There would be an approximately 90% probability of detecting something near a 0.9 merit shift (approximately a 2 SD difference) between the fuel batches as statistically significantly different. If we determine that the small and large batches are statistically significantly different, we cannot use the small batch data to determine correction factors for the large batch. If this occurs, we would then have to run a larger matrix (perhaps the proposed Row 2 plus some additional tests) to be able to calculate correction factors. Chairman Ritchie then asked if there were any other alternative proposals to offer. Doyle commented that the Statistical Group had also discussed the possibility of running 3 rows in the matrix – effectively one row for each oil.

- 5) Bill Buscher discussed his proposal which had been circulated to the Panel members to allow labs the option of declaring tests upfront to be calibration tests, and also allowing a second stand to be introduced in Row 2 testing. It was pointed out that this raises several questions with regard to correction factors, such as: should correction factors be based on Row 1

data only, Row 1 and 2 data, Row 1 and 2 data plus the 8 data points from the pilot fuel batch runs, etc. Dave Glaenzer expressed concern about introducing new stands (other than those used in testing so far) into the final approval matrix. Doyle commented that with the limited number of tests being contemplated, a result would have to be so far out to be deemed statistically different that it would be unreasonable to expect it to occur. Following extensive further discussion, the sense of the Panel members was that we should run Row 1 with the same stands as run with the pilot fuel blend batches, and then decide what to do next. Al Lopez suggested allowing labs to run additional tests (over and above those outlined in the proposal for Row 2) for calibration purposes in conjunction with Row 2 testing at the laboratory's own risk. Gordon Farnsworth supported this suggestion, as long as the laboratory declared in advance whether its testing was intended to be a calibration run or not, and if so purchased the fuel for that run. With all the uncertainty on which direction to proceed with the final fuel approval matrix, Chairman Ritchie recommended that we defer making a decision on the final matrix design until the June 1 meeting. He further asked the various labs to think about what they want to do with regard to Row 2 and possibly Row 3 testing. Dave Glaenzer asked if all labs had enough reference oils to run all of the fuel approval matrix tests being discussed; Rich Grundza answered that yes, this was the case.

- 6) The next meeting of the VG Surveillance Panel will be Wednesday, June 1, at 1:00 pm EDT at the GM Technical Center in Warren, MI to finalize the fuel approval matrix.