

Minutes from 4/5/2011 Sequence VG Surveillance Panel Conference Call

Attendees:

Andrew Ritchie, Gordon Farnsworth, Mike McMillan – Infineum

Jo Martinez – Chevron

Tom Wingfield – ChevronPhillips

Ron Romano – Ford

Jim Linden - Toyota

Raham Kirkwood, Bill Buscher – SwRI

Al Lopez – Intertek

Ed Altman – Afton

Jerry Brys – Lubrizol

Mark Overaker, Wayne Petersen , Jim Carter – Haltermann

Timothy Caudill – Ashland

Timothy Miranda, Irwin Goldblatt – BP Castrol

Jason Bowden, Dwight Bowden, Mathew Bowden – OHT

Clayton Knight – TEI

- 1) The minutes from the March 29, 2011 conference call were approved with no additions or corrections. Motion made by Jason Bowden and seconded by Ed Altman.
- 2) Chairman Ritchie summarized the agenda for today's meeting. The main items to be discussed are the following:
 - a. Status of fuel deliveries and estimates for test starts
 - b. Target dates for review of test results

- 3) Chairman Ritchie asked each of the labs to provide the status of their testing on the revised fuel blend. Lubrizol has taken delivery of the revised fuel and is running; completion expected April 13-15, if no problems are encountered. Afton has the fuel on hand and will begin the test tomorrow; completion expected by April 15. SwRI has the fuel on hand and will begin the test tomorrow; completion expected by April 15. Intertek has taken delivery of the fuel and is running; completion expected by April 15.
- 4) Mark Overaker from Haltermann asked that the data from these four runs be reviewed by the Statistical Group [Doyle Boese, Jo Martinez, Alison Rajakumar, Todd Dvorak, Martin Chadwick, and Janet Buckingham] before being provided to the VG Panel. Chairman Ritchie asked that this review be conducted within 48 hours from when the last test was completed and the results reported. Mark suggested that all data be reported directly to Haltermann, that the Statistical Group review the data within 48 hours, and that the data with the analysis from the Statistical Group then be provided to all VG SP members. The latest updated timeline for the project is attached to these minutes.
- 5) Al Lopez suggested he thought it would be better if we had interim data reports on oil chemical analyses from the labs, so if problems were encountered, they might be noted more quickly. Al also asked whether we wanted to have interim visual inspections (e.g., removal of rocker covers). Ron Romano supported this suggestion as well as the interim reporting of the data. Several members commented that they would like to have the data reported (including oil analyses) as it is accumulated. Others expressed concern that this could lead some members to draw inappropriate conclusions before all the data is in hand and it is properly analyzed. Gordon Farnsworth emphasized that, if interim inspections are conducted, we shouldn't terminate any tests on the basis of the interim inspections. There was considerably more discussion over whether to do intermediate visual inspections (perhaps at 192 hr), or let all tests run to completion at 216 hr. It was also suggested we might want to run longer than 216 hr if the sludge looks mild based on a visual inspection after 216 hr. In response to this possibility, it was also noted that we wouldn't have enough fuel to extend the test beyond 216 hr even if we wanted to do so. Following additional discussion, the decision was made that all labs will make oil analysis data available during the testing as it becomes available, but there should be no intermediate inspections of the engines. All four engines will be torn down after 216 hours, rated, and the data provided to the Statistical Group. The statisticians should have all data by April 18

and will be asked to provide their analyses by April 20. Chairman Ritchie indicated he would try to convene a VG SP call within a day or two after that, if at all possible.

- 6) The next conference call will be Tuesday, April 12, at 2:00 pm EST. The main topics for discussion will be the status of the four tests being run, discussion of any problems which might have occurred, and confirmation of the schedule indicated in item 4 above.

	10-Jan	17-Jan	24-Jan	31-Jan	7-Feb	14-Feb	21-Feb	28-Feb	7-Mar
Examination of property and speciation data from pilot, last and current batches									
Prioritization of top 2-3 hypotheses									
Identify constituents that will achieve speciation targets									
Development of hand-blends (preferably using existing batch) that achieve both specification AND speciation targets									
Complete supportive data testing to support hypothesis on candidate fuels									
Manufacture fuel for up to 4 engine tests for each candidate fuel and oil									
Ship Fuel to Labs and Conduct engine testing for each fuel candidate at lab having most experience with identified oil on single stand having highest precision for identified oil									
Convene work group comprised of subject matter expert engineers from each company including chair and Romano to review data if desired effect is demonstrated with any of the test fuel candidates for concurrence									
Based on range-finding results, develop formula for current batch adjustment and confirm with hand blends									
Procure constituents and make batch adjustment									
Send out fuel to labs to start next round of matrix testing									

Completed Work	
Projected Future Work	

14-Mar	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr	25-Apr	2-May	9-May	16-May	23-May	30-May	6-Jun

