Unapproved Minutes of the May 3, 2013 Sequence VG Surveillance Panel Conference Call

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

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) Review and approval of minutes from April 9, 2013 call
- 2) Discussion of results from modified Row 2 of fuel approval matrix for Batch No. AK2821NX10 fuel
- 3) Plans and Timeline for future testing
- 4) Old Business.
- 5) New Business.
- 6) Next Meeting

Chairman Ritchie asked if there were any corrections to the minutes from the April 9, 2013 VG Panel conference call. There being none, Ed Altman made a motion to approve the minutes. Matthew Bowden seconded the motion. The motion was approved unanimously.

Chairman Ritchie briefly reviewed what had happened during the April 9 call, with the result that Row 2 as shown in the below matrix (highlighted in green) was run following the April 9 meeting. The results from these 5 tests will be reviewed today.

Lab	Α		G		D
Stand	1	2	1	2	1
Run 1*	1009	925-3	925-3	1009	925-3
Run 2*	925-3	1009	1009	925-3	1009
Run 3	1006-2	925-3	1006-2	1009	1006-2

Rich Grundza summarized the results from those runs in a spreadsheet distributed by email to the Panel members before this call. This spreadsheet

is also included here as Attachment 2. In discussion of those results, it was noted that the 2 results obtained on the full batch blend for Oil 925-3 seemed to match pretty well with the 3 results obtained on the pilot blend for this oil. Jo Martinez had plotted the results; these plots are included as Attachment 3. The results show a difference in sludge ratings between Oils 925-3 and 1009, as desired. Doyle Boese pointed out that the two results on Oil 925-3 with the full blend of fuel bracket the three results obtained on the pilot blend. All three labs indicated their test runs had been good runs; SwRI had one rework, Intertek had a re-gap on their 925-3 run, while Afton had no reworks. All labs expressed concerns about the high values for oil screen clogging found with both oils.

The Panel members concurred that some data for Oil 1006 are needed to complete the picture. Chairman Ritchie proposed that we now proceed to run Row 3 of the matrix shown above. Ron Romano made a motion to run Row 3 as indicated above; Rich Grundza seconded the motion. In discussion of the motion, Doyle Boese proposed substituting Oil 925-3 for Oil 1009 in Lab G, Stand 2 in Row 3. This generated additional discussion, until it was finally agreed that swapping the two scheduled runs in Lab A made the most sense, and if after running Row 3 with this change it was still felt that additional data on Oil 925-3 was needed, Oil 925-3 could be substituted for one of the Oil 1009 runs in Row 1 scheduled to be run after Row 3. Ron and Rich both agreed to this change in their motion, and Chairman Ritchie asked if there was any objection to proceeding in this manner. When none was voiced, Chairman Ritchie declared the motion to have been passed unanimously.

Agreed matrix

Lab	Α		G		D
Stand	1	2	1	2	1
Run 1*	1009	925-3	925-3	1009	925-3
Run 2*	925-3	1009	1009	925-3	1009
Run 3	925-3	1006-2	1006-2	1009	1006-2

Old Business: None.

New Business: None

<u>Next Meeting</u>: Allowing time for completion of Row 3 matrix testing, the next VG Panel conference call was scheduled for Tuesday, May 21, 2013 at 2:00 PM ET.

Attachment 1

Attendees during 5/3/2013 Sequence VG Surveillance Panel Call

BP Castrol - Timothy Miranda

Afton – Ed Altman

Ford - Ron Romano

General Motors – Bruce Matthews

Haltermann – Mark Overaker, Tracey King

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

Intertek – Al Lopez

Lubrizol – Chris Mileti

OHT – Matthew Bowden

Oronite- Jo Martinez

SwRI – Raham Kirkwood, Bill Buscher

TEI – Clayton Knight

TMC – Rich Grundza

Toyota – Jim Linden