

# DD13 Surveillance Panel Teleconference Meeting Minutes

November 17, 2016

9:00 AM CST

## Call Participants:

Lubrizol - Patrick Joyce  
Southwest Research Institute – Jose Starling, Jim McCord  
Intertek - Jacob Goodale  
Daimler - Suzanne Neal  
Infineum - Bob Salgueiro, Jim Gutzwiller, Elisa Santos  
Oronite - Robert Stockwell, Jim Rutherford  
TMC – Sean Moyer  
TEI - Mark Sutherland

## Agenda Topics

- **Parts Update – Mark Sutherland**

No other parts issues to note at the moment.

- **Fuel Update – Robert Stockwell**

No update on fuel at the moment.

- **TEI Liner Roughness Measurements – Suzanne Neal/Mark Sutherland**

Stylus ordered with same tip diameter as Daimler uses for comparison, once the correct unit arrives a liner study to be conducted to see how measured results compare. The panel will need to agree on a method on how determine if the liner is in or out of specification. TEI will come up with a proposed method which is realistic to determine in and out of specification and bring to panel for review. TEI is working with Daimler on this to insure the measurement technique is appropriate.

- **Statistics Review of TEI and scuffing kit data – Patrick Joyce/SP**

Still missing some data from a few folks before the analysis can be completed it will be reviewed on the next SP meeting. TMC to look further into the reference oil to insure that there has been no missed changes in blend (864 vs 864-1).

- **Review of Lubrizol's Reference Run – Patrick Joyce**

The review on this reference done is being conducted due to current unknown severity issues, however will be conducted once test has completed and all data is available.

- **Fuel Wording – SP**

Waiting on more information from a taskforce that was developed to discuss this issue. The primary concern is whether the fuel should be a sole source supplier to minimize any variations coming from different suppliers which meet the same fuel specification. It is unknown if the variations within the specification would have any impact on the test, however the decision needs to be made. At the moment only one provider exists for PC-10 fuel and all previous testing on the DD13 has been conducted on PC-10 fuel from the same supplier as we know it. This to be kept as an agenda as the discussion moves forward within other surveillance panels.

### Other Business – Patrick Joyce/ SP

The changes brought up and discussed in the November 3, 2016 Surveillance Panel meeting regarding changes to the report format and procedure were motioned and approved in this meeting as follows.

**Motion:** Bob Salgueiro motioned and Jacob Goodale seconded, that the changes to the DD13 report forms listed below should be approved and incorporated into the report. This motion passed without objection (TEI, TMC waive).

| Changes to DD13 Report Forms Procedure  |            |              |                          |            |              |
|---|------------|--------------|--------------------------|------------|--------------|
| <b>Form 4:</b> Change the hours to scuff field to alphanumeric to accept the ">" symbol |            |              |                          |            |              |
| <b>Form 5:</b> Change the limit counts table to below:                                  |            |              |                          |            |              |
| Parameter   | Transition | Steady State | Parameter                | Transition | Steady State |
| Oil Gallery Temperature   |            |              | Intake Air Temperature   |            |              |
| Intake Manifold Temperature   |            |              | Intake Manifold Pressure |            |              |
| Coolant Jacket Out Temperature  |            |              | Torque                   |            |              |

**Form 5:** Remove the QI field from Coolant flow.

**Form 14:** Add a fuel dilution field at 31 hours

**Form 14:** Add a 150C HTHS field at EOT

Add fields for hours of test time on the engine block and number of tests on the engine block.

**Motion:** Patrick Joyce motioned and Jacob Goodale seconded, that the changes listed below to the DD13 ASTM procedure (D8074) should be approved and incorporated into the procedure. This motion passed without objection (TEI, TMC waive).

| Motion for changes to ASTM Procedure D8074   |
|--|
| Motion that the below changes be made to ASTM procedure D8074:   |
| <b>Change Section 10.7.2 to:</b> "If all liners and associated top ring pairs have a liner scuff rating less than 27.0% and a top ring mass loss less than 250.0 mg than report the hours to scuff as greater than the time on the test counter at EOT." |
| <b>Add Section 10.7.2.1 reading:</b> "If reporting the results of a calibration test using 10.7.2, report the hours to scuff value as the time on the test counter at EOT."  |
| <b>Change Section 6.2.11 to:</b> "Dynamometer—Use a dynamometer capable of controlling engine speed to the set points in Table 3. A Midwest 1519 <sup>13</sup> dynamometer has been found suitable for this purpose."                                    |

### Next Meeting and Adjournment

- The next DD13 SP Meeting is scheduled for December 14<sup>th</sup> 2016 at 11:00 AM EST.
- The DD13 Surveillance Panel meeting adjourned at 12:00 AM EST.