Everyone,

Please find the unconfirmed minutes below of the November 17th, 2015 meeting held by the Mack Surveillance Panel, held via Telecon.

Please feel free to let me know if there are any changes or revisions needed. Thanks.

Attendees:

Afton – Bob Campbell
ExxonMobil – Cliff Salvesen
Intertek – Jim Mortiz, Luiz Garcia, Juan Vega
Infineum – Bob Salgueiro (Secretary), Elisa Santos
Lubrizol – Jim Matasic
Oronite – Mark Cooper (Chairman)
SwRI – Jim McCord, Bob Warden
TEI – Mark Sutherland
TMC – Sean Moyer

Mack Surveillance Panel Meeting

The Surveillance Panel meeting was called to order at 02:05 PM, by Mark Cooper, Chairman of the Surveillance Panel. The agenda topics are listed below, with discussions and actions following.

Agenda:

How to Introduce Next Batches of Mack T-12 Bearings Implementation Rules for Correction Factor Updates

How to Introduce Next Batches of Mack T-12 Bearings

It was noted that historically there have been changes observed in reference results with the introduction of new bearing batches. The Labs were at different points in their reference periods, either having just stated, being in the process of starting, or not scheduled to start until next year. It was suggested the panel consider running grouped references for the introduction of Y batch connecting rod bearings in the Mack T-12.

Each Lab needs to determine how many kits they have left, what the kit numbers are and which bearings are in each kit.

After much discussion, it was agreed that references would be run on the new hardware and upon completion be placed in pending status. The old hardware batches could continue to be run until a determination was made on the new hardware. If the stand did not pass against the new criteria, candidates would still be valid but the lab would have to re-reference. Essentially, if a lab references early for this hardware introduction but fails, they have to re-reference, but will get back the time they would have lost.

TEI will be out of batch P main bearings in about 1 year at the current rate of use. About 75% of main bearings are being rejected by TEI, primarily for rust, rub marks, scratches, visible spots on the bearings, etc. T-12 main bearing batch P was previously rolled-in.

Given one of the labs expected to be out of the current batch of bearings by January, all the labs agreed to coordinate references, complete the analysis of the results, and assess if any correction factors are needed, all by January. To achieve this timing, the references would start around the week of Dec 7th.

Mark Cooper will verify Jim Rutherford's availability the 1st week of January to analyze the reference results.

Regarding Mack T-12 piston crowns, there are 240 batch C crowns left or about 40 kits worth. New piston crowns, batch D are due in 3 % - 4 months. So calibration will be completed on C batch pistons. Federal Mogul is measuring T-12 piston skirts. The skirts scuffing issue may not be resolved in time of this reference testing but hopefully Federal Mogul will have feedback before the start of the references. Reviewing the two prints on the piston skirts, they appear to have the same measurements on both drawings. The tolerance is +/- 3 deg on pin bore. Federal Mogul was going to measure the piston skirt that TEI sent back, which was exceeded than any measurement + tolerance on the drawings. The Surveillance Panel could have another call the week of the 30^{th} to discuss the pistons skirts issue.

Jim Moritz (Intertek) motioned that the Mack Surveillance Panel directs the TMC to adjust reference periods of currently calibrated T-12 stands, when requested by a Lab, in order to allow coordinated reference tests of batch Y rod bearings. The motion was seconded by Bob Warden (SwRI). The Motion carried, with TMC and ExxonMobil waiving, and No objections.

Bob Warden (SwRI) motioned, References to start on or before Dec 11th, or let the panel know if there is a slight delay. VUYP-C (Liners, Rings, Rod bearings, Main bearings - Piston Crown batch) are the hardware to be used in the next reference. Seconded by Jim Matasic (Lubrizol). The Motion carried, with TMC and ExxonMobil waiving, and No objections.

Next meeting tentatively scheduled for Dec 2nd at 2:00 PM Eastern. The implementation rules for correction factor updates will be discussed at the next telecom.

Respectfully submitted, **Bob Salgueiro**Industry Liaison Advisor

Infineum USA L.P. 1900 East Linden Avenue Linden NJ 07036 USA

Office: 908-474-2492 Fax: 908-474-3637 Mobile: 908-358-8742 E-mail: Bob.Salgueiro@Infineum.com