Caterpillar Surveillance Panel Conference Call 02/11/2015 12:00PM CST

Attendance:

Jim Gutzwiller Martin Thompson Hind Abi-Akar Mark Jarrett Elisa Santos Andrew Stevens **Bob Campbell** Mey Dewey Sean Moyer Jim Rutherford Mark Cooper Adam Roig Vince Caliendo Jim Moritz Michael Conrad Greg Miranda Zach Bishop

Agenda Items:

- 1P test is Unavailable to the industry do to a shortage of cylinder liners
- Update on new batch of 1P Liners
- Findings from C13 build workshop changes/updates to test procedure

Old Business:

Discussion Items:

1P Liners

The last test liner has been used and this test is in the process of being declared un-available.

This test is estimated to be unavailable until at least May of 2015.

A new supplier for these liners has been found.

The optical method previously used for inspection is no longer effective. A new method has been established and will be used on liners submitted by the labs for backwards comparison with liners from the new supplier.

The timeline for the first batch of the new liners is late May. After this the inspection will need to be done.

Prototype liners will be run at a lab prior to the final batch. This will likely be in mid April.

After the liners are mad available they will need to be brought in with a round of referencing at the test labs. 4 test labs showed interest in referencing as soon as parts are available.

The request for declaring this test unavailable need to be clarified that labs cannot reference or review data before July of 2015.

Motion: Jim Moritz Second: Martin Thompson The surveillance panel directs the TMC to adjust reference periods to manage the introduction of the new parts. Opposed: 0 Waves: TMC

C13 Surveillance Panel Build Workshop Findings Review

Meeting notes and action items sent in the document "CAT SP Build Workshop 2015" were reviewed

New date code pistons are not showing rust and are properly coated with rust preventative. These are put into boxes without bags. CAT has directed Morton to bag the pistons to prevent the RP from changing over time.

Actions remaining from workshop notes:

Add Fuel Analysis from C13 references to the LTMS document. (TMC)

Send an example of the COA received with each batch of test fuel to Mark Jarrett. (Jim Moritz)

Add the piston ring and piston cleaning procedures as reference documents to the TMC web page. The effectiveness of this procedure in correcting mild second ring deposits will be reviewed during future surveillance panel meetings. Once it is determined that this change is permanent it will be put into the C13 procedure.

Items added workshop notes:

Review topside second groove carbon. This data was put in the industry data files for the C13 on the TMC webpage under Piston Deposits.CSV

Review top land heavy carbon. This data was put in the industry data files for the C13 on the TMC webpage under Piston Deposits.CSV

Review and discuss differences in oil gallery pressure data.

Review coolant inlet temperature. This data could be skewed by incorrect thermocouple location.

Make contact with Doug Anderson at the ACC to determine what is needed to request additional data on candidate trends.

Lubrizol, IAR and SwRI will review what pre-test and post-test measurements should be proposed to be added to the test report so they are data based in the future for reference.

Si Free Gaskets for the C13 Aeration Test

The supplier for the CAT gaskets is reluctant to re-tool for Si free versions of production gaskets.

CAT will proceed with making an alternative fiber/shim gasket.