## COAT MM Sensor Calibration Procedure Conference 2-20-2017

Teleconference Attendees: Hind Abi-Akar, Mark Jarrett – Caterpillar Jim Gutzwiller (Chairman), Elisa Santos – Infineum Jim McCord, Jim Carroll (Secretary), Randy Harmon – SwRI Alex Ebner – Lubrizol Sean Moyer – TMC

Agenda: Update on progress to run new calibration procedure.

Jim Gutzwiller sent a note on COAT to Joe Franklin for the March 28 API meeting.

Alex Ebner: Emerson came and relocated their Puck 800 processor and checked transmitter to processor settings. The will need to redo their enclosure because the Puck and transmitter can only handle 70C. Should be able to then do a trial run without insulation. They may need to add a heater. He felt Intertek's earlier comments supported calibrating to 90C.

Carroll: We had our Puck 800 processor relocated by Emerson and had it and the transmitter matched. New enclosure buildup has begun.

Hind: March 28 is on our timeline to complete the calibration tests and finalize the procedure.

Hind: Asked if Alex plans to run the calibration oil through the engine.

Alex: Yes.

Hind: If you run the calibration oil through the engine will it affect its density.

Jim G: It is run at low idle for 10 minutes, not at the high idle test speed.

McCord: We should take a sample from the oil pan after the 10 minute run and run another D4052. This calibration prove out will be done with a known density oil. The real calibration will be done with a reference oil.

## New Filter tests

Elisa checked on plans to run the new filter tests after reference calibration is performed. Currently the plan is to run 2 tests per lab. A third test will be run if a Level 2 alarm is set. McCord: Reference results could show a shift with the new calibration process and new filters. Elisa: Yes, and they cannot be separated since we do not have old filters any more. McCord: I expect to trip and Level 2 alarm and run three tests. Will you take these data an compare them to the matrix results? Elisa: Yes.

Alex: Our heater may or may not work so there is no guarantee that he will have data in a week.

McCord: Will not reaching 90C be a deal breaker for the calibration?

Jim G and Mark: No but is a big step in the right direction. Hopefully we will show linearity.

Next meeting will be March 1, 2017 at 1pm CST.