Cummins Surveillance Panel Meeting Minutes

June 13, 2024 14:00-15:30 CST

Participants:

Afton - Joe Hoehn

Chevron Oronite - Marnix Torreman, Josephine Martinez

Cummins - Ryan Denton

ExxonMobil - Steve Jetter

Infineum – Elisa Santos, David Brass

Intertek – Andrew Smith (Chairman), Joshua Ward

Lubrizol - Austin Brininger, Robert Slocum

New Market - Amanda Stone

SwRI - Joe Moore, Jose Starling

TEI – Dan Lanctot

TMC - Sean Moyer

Agenda:

- New Hardware Timeline
- ISB New Reference oil Matrix Timeline
- Reference Extension Limits
- Calterm Screen File Parameter List
- ISM Hardware Update

ISB Hardware:

- New batch of tappets has arrived at TEI, all other parts still to be received.
 - Latest arrival is camshafts slated for August.
 - Chance for parts to be shipped as finished instead of in a lump shipment.
- TEI has the new block part numbers.
 - Will need to be brought in on a new reference and performance will be monitored.
- Panel will need to address test availability if labs run out of hardware before the new batch is available. The new hardware will be brought in on a reference for each stand using the new reference oil.

- Hardware will be brought in as a rolling change, relying on severity adjustments to address any CF shift until enough data is available to evaluate the need.
 - Historically, 10 tests has been enough data to see the need for a correction factor.
- For the new hardware introduction, we may need to use level 2 Ei's.
 - Will be discussed in more detail at the next meeting.

New Reference oil:

- Approx. 200 gallons of 831-4 remaining.
 - o 831-5 is available.
- The new reference oil (835) is at TMC and starting distribution.
- Matrix for the new RO targets is 8 tests across 4 stands on the current batch of hardware.

Motion: The panel will direct the TMC to adjust calibration periods so that labs have no net gain/no net loss of calibration time due to the new reference oil and new hardware batch matrices.

Andrew Smith motions, Joe Hoehn seconds

None opposed, TMC waives. Motion passes.

- A volunteer is still needed to run the proposed RO in the ISM.
 - The donated run may be used as the donated matrix test if the results are favorable, and the oil is chosen.

Reference Extension Limits:

- The procedure currently states that a reference extension would not exceed a regular calibration period (12 months/12 tests).
- At the last meeting it was discussed to limit extensions to half of a regular calibration period.
- General consensus is to leave the procedure as is.
 - The current method of TMC working with the labs to split any calibration extensions as it makes sense is working well.

Calterm Screen File Parameter List:

- TEI needs more ISB ECMs and Cummins needs to know what Calterm parameters the labs need in order to control the engine.
 - This may include "read only" parameters, Andrew is reaching out to Cummins for clarification.
- Andrew will schedule a meeting to discuss creating a standard list of the parameters used in ISB and ISB Viscosity testing.

ISM Hardware Update:

- TEI has been selling 3-4 kits a month and is now down to around 17 full kits remaining.
- Crossheads and valves are the lowest stock.
 - o Crossheads are at TEI, valves are on order.
- TEI has new ISM blocks in (7) and is in the process of machining them.
- TEI may need to set aside current batch kits for the reference oil matrix.

Next Steps:

• Labs need to tell Andrew when they expect to be able to start the matrix by the end of day Tuesday 6/18 to update NCDT at ASTM conference.

Next Meeting: Likely following the ASTM meeting next week.