May 19th, 2022

Caterpillar Surveillance Panel Teleconference Minutes

Conference Attendees:

Infineum - Jacob Goodale (Chairman), Jim Gutzwiller, Elisa Santos, David Brass, Michael Madalian Caterpillar - Hind Abi-Akar, Mark Jarrett Intertek - Josh Ward (Secretary), Hung Nguyen, Timothy Griffin Haltermann - Prasad Tumati TMC - Sean Moyer SwRI – Bob Warden, TEI - Dan Lanctot Afton – Alex Ebner, Joe Hoehn Chevron – Jo Martinez, Robert Stockwell Exxon – Ashley Montufar

Agenda Items:

- Feedback from TMC on paths forward with 832-1
- Current Inventory of Batch A filters at each lab
 - Potential redistribution of hardware
- Batch B Filter introduction
- EOAT Matrix
 - Oil Filter Discussion (Batch A vs Batch B)
 - o **Timing**

Discussion:

832-1 Reference Oil:

- Discussed the process of suspending the use of reference oil 832-1
 - Oil supplier confirmed that they can re-blend oil if requested
 - Current batch could possibly be salvaged by sourcing a high shear mixer, and remixing oil. Would need to run prove out testing on oil after high shear mixing was completed. Would need to source equipment or supplier for high shear mixer.
 - \circ General consensus was to temporarily suspend use of 832-1
- Motion by Bob Warden: Temporarily suspend assignment of 832-1 reference oil until surveillance panel reviews options to restore severity of 832-1 oil. Alex Ebner 2nd the motion. Motion passed with no negatives, TMC, TEI, and Exxon Waived

Batch A Filter Inventory and Batch B Introduction:

- Batch A Inventory: Lab A: x4 Lab B: x27 Lab G: x6 TEI: x3
- X10 Batch A filters will need to be retained for COAT EOAT compatibility testing. Lab B will send x7 filters back to TEI to retain.

- Batch B introduction options were discussed
 - Both coordinated referencing and rolling change brought in with referencing were discussed with consensus that coordinated referencing would likely be needed
 - Number of tests required to be determined
- Lab G new test stand reference testing was discussed at length
- Motion by Tim Griffin: Lab G new test stand reference testing will be run with two tests on 833-1 oil and batch A filters using level 3 LTMS alarms, followed by one test on 833-1 oil and batch B filter using level 2 alarms to determine the new test stand calibration status. Batch B filter approval will be determined by future testing on 833-1 oil and batch B filters to be determined by the surveillance panel. Bob Warden 2nd the motion. Motion passed with no negatives

Actions:

- Schedule engineering group meeting to finalize COAT procedure updates
- Continue work on COAT EOAT compatibility testing plan
- Continue work on batch B filter introduction test plan and timeline
- Provide C13 operational data from last valid reference test to Travis Kostan at SwRI for alternate fuel supplier data analysis

Next CAT SP Call TBD