## August 13<sup>th</sup>, 2020

## **Caterpillar Surveillance Panel Teleconference Minutes**

#### **Conference Attendees:**

Infineum - Jim Gutzwiller (Chairman), Elisa Santos, David Brass, Gang Hu, Charlie Leverett Caterpillar - Hind Abi-Akar Intertek - Josh Ward (Secretary), Hung Nguyen, Martin Chadwick, Timothy Griffin Haltermann - Prasad Tumati TMC - Sean Moyer SwRI - Bob Warden, Travis Kostan, Jose Starling Lubrizol - Alex Ebner, William Larch TEI - Dan Lanctot Afton - Christian Porter, Todd Dvorak Exxon Mobil - Ashley Montufar Chevron - Mark Cooper John Deere - Barbara Goodrich

## Agenda Items:

- COAT as alternative/replacement test for EOAT
- 1N Severity Issues
- Alternate Fuel Supplier Discussion

### **Discussion:**

- COAT test
  - API has preliminarily approved COAT to EOAT correlation matrix funding
  - API must officially approve the funding and labs must finalize paperwork with API before testing can begin
  - Estimated timeline for testing to begin is 1 to 2 weeks
- Elisa reviewed 1N TGF Variability Issues
  - o Reference Oil 809-1 and 811-2 have swapped severity levels for Top Groove Fill
  - Possible resolutions discussed:
    - Update standard deviations
    - Add correction factors
    - Adjust oil targets (Feedback from panel was that historically oil targets are only changed when there is a change in the reference oil)
  - No resolutions were agreed upon and further discussion and analysis need to take place before a decision can be made
  - Requesting candidate data from the ACC was discussed as a means of determining if the inverse in TGF severity has affected candidate oils

- $\circ$   $\,$  The age of the reference oils was discussed as a possible cause of the severity shifts
  - The reference oil is approximately 20 years old
  - It is unlikely that the oils could be re-blended because of the age of the additives and base stocks which are likely no longer in production
  - TMC runs chemistry analysis on the oils every year to determine if oil aging has an effect on the oil composition
  - Some follow up may be needed to determine what methods the TMC uses to evaluate the oil and if other methods may be useful in the future to monitor the oil
  - Feedback from the panel was that hardware changes are a more likely cause of the severity shifts, not oil aging
- Alternate Fuel Supplier Discussion
  - Criteria for alternate fuel supplier acceptance will be further evaluated after the 1N variability issues are resolved
  - The resolution for the 1N variability issues will likely affect how the acceptance criteria for an alternate fuel supplier is determined

# Actions:

• Statisticians will convene to discuss 1N severity data and provide feedback to the panel on recommended course of action. They will also evaluate methods for determining alternate fuel supplier acceptance criteria.

# Next CAT SP Call Scheduled for 9/17/2020 9:00-10:30 AM CST