October 29th, 2020

Caterpillar Surveillance Panel Teleconference Minutes

Conference Attendees:

Infineum - Jim Gutzwiller (Chairman), Elisa Santos, David Brass Caterpillar - Hind Abi-Akar, Mark Jarrett
Intertek - Josh Ward (Secretary), Hung Nguyen, Timothy Griffin Haltermann - Prasad Tumati
TMC - Sean Moyer
SwRI - Bob Warden, Travis Kostan
Lubrizol - Alex Ebner, Marco Ledjenac
TEI - Dan Lanctot
Chevron - Mark Cooper
Afton - Christian Porter
Chevron - Jo Martinez, David Lee
Daimler - Mesfin Belay

Agenda Items:

- Update on COAT Matrix (COAT as Replacement for the EOAT)
- COAT Alternate Fuel Supplier Discussion
- COAT Fresh Oil Stirring

Discussion:

Status of COAT Matrix:

- API has sent out contracts for the COAT matrix testing
 - One lab has signed and returned the contract, two labs still in process
 - Oils are on-site at the labs ready for testing
 - X2 tests at each lab on oil 1005-5

COAT - Fresh Oil Stirring

- Alex Ebner presented ICP data showing silicon levels in samples pulled from different levels in the reference oil drum
 - Data was also presented showing ICP silicon after mixing the oil in the drum (see attached presentation)
 - Discussion over best practices on how to mix the oil
 - ICP data from Lubrizol matches well with recent ICP data from the LTMS file
- Photos of the mixer used by Intertek below. One blade is bent to allow for use in closed top drums



- Group agreed that going forward oil will be stirred for 20 minutes prior to any samples or oil charges being pulled from the drum
- Oil needs to be stirred/mixed the same day oil is pulled from the drum
- Only applies to reference oils
- Tim Griffin will put together a draft procedure for the panel to review
- Will continue discussion on next call

COAT - Alternate Fuel Supplier Discussion:

- Bob Warden presented a draft of the COAT alternate fuel supplier criteria (see attached document)
 - Proposed testing includes a reference test on either reference oil using current fuel supplier followed by two tests using the alternate suppliers fuel
 - The two tests on the alternate supplier PC-10 fuel will consist of one test each on both reference oils
 - No operational parameters determined to be critical for alternate fuel acceptance criteria
 - Draft criteria sent out for review
 - Discussion will continue next call

Actions:

- Tim Griffin will put together a draft procedure for stirring/mixing COAT reference oil and send out to panel for review
- Labs will work with API to complete contracts and begin COAT matrix testing
- Panel members will review the draft COAT alternate fuel supplier criteria document

Next CAT SP Call Scheduled for 11/5/20 9:00AM to 10:30AM CST