February 14, 2019

Caterpillar COAT Engineering Group Teleconference Minutes

Conference Attendees:

Hind Abi-Akar, Mark Jarrett, Cynthia Rohde – Caterpillar
Jim Gutzwiller (Chairman), Elisa Santos, Bob Salgueiro – Infineum
Josh Ward (Secretary), Tim Griffin, Jim Moritz, Hung Nguyen– Intertek
Demetrius Lytle - Lubrizol
Jim McCord - SwRI
Christian Porter - Afton
Mark Cooper - Chevron
Sean Moyer – TMC
Pat Holmes - Volvo

Agenda Items:

Review operational data and results from first six matrix tests

• Review completed testing prior to running final three tests on -0 oils

Discussion:

Review Operational Data

Elisa Santos presented operational data from first 6 matrix tests (see attached presentation)

- Lab G will record and submit 1 second data during warmups going forward.
- Lab A will verify compressor discharge temperature thermocouple location.
- Tim G discussed the removal of bad quality data from the aeration data. The group agreed that removing the data in question was the correct action and there were no other comments.
- Operational data and test results were discussed at length with the decision being made to move forward and run the final three tests on the -0 oils.
- -0 and -1 oils may be used to calculate industry corrections factors and lab severity adjustments. More discussion and data analysis will be needed to decide what data is used in the calculations.

Actions:

- X3 remaining tests will be ran the week of 2/18/19 and results will be reported by 2/22/19
- Elisa Santos will compile operational data and analyze results

• Next meeting tentatively scheduled for $3/11/19 \ 1:00 - 3:00$ PM CST