July 8th, 2020

Caterpillar Surveillance Panel Teleconference Minutes

Conference Attendees:

Jim Gutzwiller (Chairman), Elisa Santos, David Brass, Gang, Hu - Infineum Hind Abi-Akar, Mark Jarrett - Caterpillar Andrew Smith - Intertek Prasad Tumati, Ed Hennessy - Haltermann Heather DeBaun - Navistar Sean Moyer - TMC Bob Warden, Travis Kostan - SwRI Christian Porter - Afton Alex Ebner - Lubrizol Dan Lanctot - TEI Jonathan VanScoyoc - CP Chem Mark Cooper - Chevron

Agenda Items:

- Update on funding for matrix testing COAT as replacement test for EOAT
- Alternate Fuel Supplier Discussion for CAT 1N
- Any old or new business

Discussion:

COAT as alternative/replacement test for EOAT

- No update on funding for COAT as alternative/replacement test for EOAT, COVID may have slowed down the process.
- A timeline will be asked for from API so the panel can plan accordingly

COAT Filters

- At least 1-month advanced notice needed for new batch of filters.
- 76 filters as of June 17th in stock, approximately a year or so of supply
- Plan to start a new batch late this year unless filter stock starts depleting at a faster rate, will continue to monitor stock
- Will need to bring filters in with referencing

Alternate Fuel Supplier Discussion – Haltermann Solutions

 Presentation by Bob Warden and Travis Kostan on initial Fuel Acceptance Criteria discussion for the 1N, and what the acceptance criteria may look like (attached to email)

- The criteria discussed within this presentation is not necessarily pass/fail parameters, but an indicator as to if further discussion or analysis of the alternate fuel is needed for acceptance
- What will the implementation process look like after acceptance? The group needs to decide how to handle introduction of the alternate fuel to each individual lab for referencing and testing after an alternate fuel is accepted by a panel
- When was the last time the standard deviations were looked at in the LTMS?
 Elisa to analyze standard deviation to determine if an update is necessary
- Travis to analyze the probability the fuel would "pass" the proposed criteria once the decision is made as to whether standard deviation changes are needed
- Are there any additional operational parameters to analyze in the study?
 - Possibly look at soot % or oxidation during these runs to make sure there is no significant difference, even though it is not part of the normal practice
- Other labs to provide data to Travis/Bob so combined operational data plots from multiple labs can be analyzed
- Travis to continue putting things together for this discussion, including combined operational data and looking at an example

CP Chem Fuel Additive Change

 Should have a 5-year supply of current additive, will provide an update if new information comes forward

Actions:

- Follow up with API on status of COAT proposal and timeline Hind
- Labs to provide operational data averages to Travis for further study
- LTMS Standard Deviation Study Elisa
- Combined operational data and example for continued discussion on alternate fuel supplier – Travis

Next CAT SP call Scheduled for 07/22/2020 1:00-2:30 PM CST