

July 22, 2016

**Caterpillar Surveillance Panel
COAT Task Force Teleconference Minutes**

Teleconference Attendees:

Caroline Laufer, Elisa Santos, Bob Salgueiro – Infineum

Jim Carroll (Secretary) – SwRI

Hind Abi-Akar, Mark Jarrett – CAT

Greg Miranda, Kevin O'Malley, Alex Ebner – Lubrizol

Sean Moyer – TMC

Mark Cooper – Chevron Oronite

Tim Griffin, Mey Dewey – Intertek

Bob Campbell – Afton

Jim Rutherford – Chevron

AGENDA

Micromotion discussion

A brief discussion of calibration vs. validation of the Micromotion systems took place. The desire was expressed for a periodic validation of the COAT Micromotion systems in all laboratories to check that they met specifications, and that all sensor/transmitters are set-up in a similar manner. In addition, the question was asked if calibration, or sensor coefficient changes were tracked, or trackable.

Another question for Emerson: Does the Puck model effect options for validation and tracking calibration changes?

Elisa Santos and Tim Griffin will contact Emerson for answers and options.

COAT 1R-1808 oil filter data collection

Elisa Santos showed an outline of the data collection plan and a graphical design of experiment. During the conference the presentation was updated, and is attached with these minutes. Notes in the presentation in red font show additional data requested and questions for Emerson. Data requested on Page 3 of the presentation that are already part of LTMS were crossed out.

Greg Miranda noted that Lubrizol had checked their aeration trends and found that filters prior to late October, 2015 exhibited the 'old' quick rise trend, and later filters had the 'new' slow rise trend.

It was noted that the data collected by Elisa would all be from Reference tests. Elisa asked Lubrizol, and they agreed, to provide some of their internal reference test data for statistical analysis.

Elisa asked that copies of the operational data for all reference tests be sent to TMC for storage, and for her to access. Sean Moyer agreed to provide online access.

When Elisa asked for a timeline for completion of data transfer it was noted that any changes to LTMS submissions require a motion to do so, and vote by the panel. In the interim, it was decided that Elisa would send a spreadsheet to the laboratories with additional data columns once she and Tim have answers from Emerson.

Status of CAT filter investigation

CAT's internal investigation has not identified any manufacturing changes to the IR-1808 filters.

CAT is preparing to set aside a batch of filters to be dedicated to COAT tests. Lubrizol is ready to test new filters, old filters, and used filters for aeration trend and endpoint comparisons. Test results may show a need for a filter correction factor.

Other information

Greg Miranda introduced Alex Ebner from Lubrizol. Alex will be taking over day-to-day operation of Lubrizol's COAT stand. Greg will be in the loop while Alex learns the ropes.

The conference ended on time.