TEOST Surveillance Panel Meeting Minutes

A TEOST Surveillance Panel teleconference was held on Thursday, April 20, 2017 with the following attendees:

Mike Faile, Kristen De Christopher – The Lubrizol Corporation
Jon Evans, Maggie Smerdon – Savant Incorporated
Greg Miiller – Tannas Company
Becky Grinfield, Yong-Li McFarland – Southwest Research Institute
Theresa Faison, Monica Johnson-Brown – Afton Chemical Corporation
Tom Schofield – ASTM Test Monitoring Center (TMC)

Agenda:

Review MHT Catalyst 16DA results

Open Discussion: any other TEOST updates

Mike Faile initiated the meeting at 11:17 EST with the reminder of anti-trust and recording policy, followed with a roll call. He then ensured the participants received the presentation he prepared and sent. Mike shared that Angelina is out on leave until July and that he will be the contact for Surveillance Panel needs and will schedule meetings in her absence.

The first topic of discussion was in regards to the MHT Catalyst Batch 16DA. Mike reviewed the background on the recent communications and previous SP meetings. Jon Evans gave additional information from past meetings saying the SP agreed to continue to look at batches which was a result of the 2013 catalyst batch. Then to test from there moving forward. As the panel becomes more confident in the catalyst blending, screening won't need to be necessary. Tom Schofield reminded the panel as to why we started screening was because of batch severity. Jon said at some point we may make a decision not to continue catalyst screening. Tom expressed that Tannas has always been accommodating to work with.

Tom led a review of the catalyst batches 15AA and 16DA data. Batch 15AA was a good batch in terms of severity for all 5 reference oils (2 TMC and 3 Tannas). Review of 16DA shows the data pushing toward upper limit on TMC Oils 432 and 434 which may cause passing problems on current acceptance bands. Greg Miiller stated the current MDF target is 49.7 (fully formulated oil), HDF target is 87 (fully formulated oil) and LDF target is 11.1 (not fully formulated). The data shows the Tannas fluids are all right near target. Jon mentioned 16DA was screened with the air flow restrictor. Tom stated the lower end cap seal may bring the result average down — won't know what the average will be until we get more data. Greg proposed to give other labs the option to screen or Tannas/Savant will do more screens. He stated the current supply on 15AA is about 3 months left. Tom expressed the data isn't uniform enough or sufficient enough to make a decision and then went into the semi-annual report data (official report not sent yet). It shows labs are pretty much on target with 434, but variability is pretty high. He then expressed what we did last time to screen was that Tannas analyzed all the data. Greg and Jon agreed to do that again. Tom stated that all data for the TMC oils should be uploaded to TMC and should be a maximum of 4 runs and have duplicate runs. It is up to the panel how to proceed from here. Last time all 5 oils were run.

Jon asked if the labs wanted to screen. All agreed that we should. Lubrizol (run on 2 of their units), Southwest (2 units), and Afton (2 units) all agreed to participate and donate runs for the screening. Tom expressed that both 432 and 434 will be used. When requesting the TMC oils state that it is not for calibration by saying for "industry information" with a comment to "screen for 16DA catalyst." It was then discussed and agreed to run using the lower end cap seal. Savant agreed to run some additional tests using the lower end cap seal as well. The group determined and agreed to the following process:

- 1. Jon will email a template for the labs to record their data and should be send back to Jon when completed.
- 2. Tannas will ship the catalyst batch 16DA to the labs early next week.
- 3. Target of 6 weeks from now (June 1st target) for the labs (Lubrizol, Southwest and Afton) to complete the donated runs and send data sheet back to Jon for data compilation.
- 4. Jon or Greg to let Mike know when data is collected and will send the compiled data to him to send to the SP.
- 5. Mike will schedule a surveillance panel meeting to discuss the results.

Greg expressed that if there are any problems, don't continue running and communicate out to the group.

After agreeing to the process, the meeting was opened for general TEOST discussion in which Tom stated for TEOST 33C there is no protocol for running 72-1. Tom will put something together for protocol for next calibration. If it passes, donate 3 tests on 72-1 and preferably run on multiple instruments. Tom to pass it by Mike then Mike to send it out to the panel.

Mike then expressed during a recent formal review of the 33C method Lubrizol found several items of concern (slide 12 of presentation). He recommended the following improvements and/or changes:

- 1. 5.21: Add as a note about using a suitable weighing device in place of a weighing boat.
- 2. 6.5: The CG-1 range is not accurate and should be updated.
- 3. 6.6: CF-1 reference oil has been replaced by T33C-1 and the range is also wider than currently listed.
- 4. 8.5: Refers to Watlow, but all new units have EuroTherms and thus need to add the EuroTherms settings or remove the settings and replace with "refer to the instrument manual for controller settings."
- 5. 10.1: Comparison to D7097 which states to "invert both the catalyst vial and the oil container at least three times" whereas the D6335 makes no mention of inverting. The methods should be consistent and best practices would be to invert.

Mike then welcomed any comments from the group. Jon expressed they were all good catches and he had no problems with the proposed changes. All of the panel agreed and expressed thanks for catching the errors. Mike thanked the group and will plan to open a work item to officially propose the changes.

No other issues were brought up by the panel, the meeting was motioned and seconded to close and the meeting was adjourned at 11:42 EST.