January 11, 2019

Caterpillar Surveillance Panel Teleconference Minutes

Conference Attendees:

Hind Abi-Akar, Mark Jarrett – Caterpillar
Jim Gutzwiller (Chairman), Elisa Santos, Bob Salgueiro, Gang Hu – Infineum
Josh Ward, Tim Griffin, Addison Schwietzer– Intertek
Bill Larch, Andrew Stevens, Demetrius Lytle Kevin OMalley - Lubrizol
Jim McCord, Jim Carroll (Secretary) Travis Kostan, - SwRI
Christian Porter - Afton
Mark Cooper - Chevron
Sean Moyer – TMC
Jason Bowden - OHTech
Dan Lanctot - TEI
Tanner Mitchell - CPCHEM
Gregory Berky, Pat Holmes - Volvo

Please note that Pat Holmes (<u>Patrick.holmes@volvo.com</u>) of Volvo will be Volvo's representative on the CAT Surveillance Panel.

Agenda items

Secretary position

COAT

• Status of API funding letter for Matrix tests on reference oils 832 and 833

Caterpillar O&H Group report

- 1N Cooling Cart System Powerpoint sent 10:45am Thursday 1/11/2019
- 1P Parts Identification quick update on work

Discussion

Panel Secretary position

Jim Carroll is leaving SwRI and Jim Gutzwiller asked for someone to take over as secretary. Josh Ward of Intertek offered and was accepted as the new secretary.

COAT

Intertek has returned their reference test matrix payment contract to API so they can start. SwRI received their contract letter this morning and should get it back to API today or

Monday. API is working on the Lubrizol contract which should be completed early next week.

Hind asked if all the reference oils are ready and Sean responded that they are at the labs.

Jim Gutzwiller put up the matrix of older reference oils on screen and reminded everyone that we only have one set of oils to perform these tests.

Tim said he can start on Tuesday. He has no intention to recalibrate. All runs will be done with the same decane calibration that we ran the last matrix tests under.

McCord suggested running shakedown runs with a lab oil to make sure the systems are fully operational.

Once all matrix data are uploaded then the statisticians will be comparing the new and old reference oil results to address backward compatibility.

McCord noted that we started this research because the older reference oils had a loss of separation. It is most likely we still won't have separation and he did not want to have the labs accountable for separation. Elisa noted this is a new setup so we don't know what results will show.

Sean said the results of the tests don't matter as long as the tests are valid.

McCord said yes but the labs should not be responsible for the cost of the test if there is no separation and it would be prudent for the labs to run a shakedown. SwRI has started up and ran for a few hours already.

Caterpillar O & H Group report

Andrew Stevens discussed the attached presentation on the CAT 1N and 1K auxiliary cooling system and draft procedure language to enable/allow the system for ASTM testing.

Hind asked if the figures mentioned showed the original system and Andrew replied that that they do.

Moritz asked if the wording would allow the orifice described in the original system set up to be removed. It was decided it would not.

Carroll noted that the pump description should read '3 phase", not "e phase". Andrew will make the change.

Andrew made a motion to adopt the language shown in the attached presentation along with the changes to Table A14.1 for the 1K and 1N ASTM D6750 test procedure.

Jim Gutzwiller seconded the motion.

Non opposed.

Non waived.

Motion carried.

Sean noted that the ASTM facilitator may come back with editorial changes.

<u>1P Parts Identification</u>

Andrew gave a brief verbal description of the work being done on the 1P parts codes for all the hardware used for the test. McCord noted that there may also be changes to submitted forms. It should be finished in the next few weeks. If anyone wants to be part of the O&H panel contact Andrew Stevens.

Hind noted that CAT needs input on any issues with parts, including inventory supply, an uptick in work that the labs foresee, an outlook on how long CAT needs to support these tests since so many are so old, etc. She notes it's a bit daunting to keep up with these old tests. The supportability of the engines are an issue. Mark noted that most of the consumables are production related.