April 11, 2017

Caterpillar Surveillance Panel Teleconference Minutes

Teleconference Attendees:
Jim Gutzwiller (Chairman), Elisa Santos – Infineum
Jim McCord, Jim Carroll (Secretary) – SwRI
Hind Abi-Akar – Caterpillar
Alex Ebner– Lubrizol
Sean Moyer – TMC
Jim Moritz, Tim Griffin – Intertek
Christian Porter – Afton
Jim Rutherford – Chevron-Oronite
Greg Shank - Volvo

<u>Update on COAT Batch A filter reference tests</u>

SwRI has done both of their tests. And ran mild on 832 oil at 10.07%, and mild on 833 oil at 11.03%.

Intertek has done one reference test. January's reference was 11.11%, new 832 reference measure 11.00%. Both tests were done on 832 oil with Batch A filters. Tim not sent his data to LTMS. Wants to re-check against the new slope and offset. Hopes to start the second test today or tomorrow, and get it done by this weekend.

Lubrizol's first test is done, the second oil is in the engine, and they are currently redoing the sensor calibration procedure. Should start their second test tomorrow. First result was 10.35% with 832 oil.

Agenda: Re-numbering of COAT tests

Sean went over reasons for changing the numbering scheme.

"It is difficult for ACC to see if a test is calibrated, or not, with current numbering system."

They want to match 6D.Why? It is a known scheme they like.

The suggested wording of the scheme matches wording from Sequence 6D.

When we reference now the test hours are reset to 0.

There was a discussion of other test's numbering schemes.

In some other tests, engine run number starts over with engine rebuild.

C13 increments the run number and adds a letter if a test is invalid.

1P, 1K, and 1N also increment the run number and adds a letter if it is a re-run.

Jim Moritz recommend we keep the COAT scheme like the other CAT tests.

Does every test started get a new test number if it is valid or not?

T12 sequential stand run numbers do not change just add an A, B to the run number after an invalid test.

Anyone prefer hours or runs for the final number?

Tim: It is more accurate to use hours.

But, engine hours are reported separately to LTMS.

In the data dictionary there is a field for engine hours since the last reference test.

Note: Invalid tests are not counted towards allowed tests per reference/calibration period.

Eg. There are 9 permissible candidate tests per COAT reference period. If the 5th test is invalid it does not count, and you may still run 5 more valid candidate tests.

Comment: There is no way for ACC to see invalid tests now.

Motion by: Jim Moritz Seconded by Jim McCord

- 1. Change proposal to put a letter increment after X (stand run number) location for any invalid test or repeated reference test.
- Include a field in the data dictionary and report forms for number of valid non-reference oil tests that have elapsed since the last successful calibration test.

Any more discussion? Any opposed? Any waivers? Motion carried.

Sean Moyer will edit the description of the numbering scheme, and post an industry information letter at the TMC website.

Regarding the next COAT conference:

Jim Gutzwiller will wait until COAT reference test data is posted to LTMS and Elisa has a chance to look at it before finalizing the call for the next conference.

For now all attendees are to pencil in April 26 <u>and</u> May 2 at 1pm CDT for a conference call to discuss filter test matrix results.

Regarding the next CAT conference:

Jim McCord asked that we get an update on CAT liners.

Hind will look into the liners.

Jim McCord asked that we the 1N shift in severity to the agenda.

It was noted that it may be impossible to re-report all the 1N data. Parts may no longer be available to get build, machining, and packaging data into the new reporting scheme. Jim Moritz asked if we should we have a face-to-face meeting for all the CAT issues. And, we should get a list together of all the issues for CAT tests.

Mack also has a number of issues and they could be discussed at a joint face-to-face conference.

Jim McCord offered to host the conference at SwRI.

Greg Shank noted that we are looking at the end of May or beginning of June for a joint conference because the D15 meeting is in the middle of May.

No date was set for a face-to-face conference.