

CAT Panel Teleconference Meeting Minutes – July 10th, 2024

Conference Attendees:

Infineum: Jacob Goodale (Chairman), David Brass, Andrew Smith

Caterpillar: Mark Jarrett, Lysie Delp

Intertek: Timothy Griffin, Joshua Ward (Secretary), Khaled Elnagi

SwRI: Bob Warden, Travis Kostan

Afton: Joseph Hoehn

TMC: Sean Moyer

Chevron: David Lee, Jo Martinez, Laura Birnbaumer

TEI: Dan Lanctot

Navistar: Heather DeBaun

Exxon: Eric Senzer

Agenda Items:

- COAT Operational data review from new reference oil runs and 1005-6 EOAT matrix testing
- COAT New Filter Batch
 - Define timeline to ensure continuity in supply
- C13 Deposit Test Low Vis prove out update
- AOB

Discussion:

COAT New Reference Oil and EOAT 1005-6 Data Review:

- 1005-6 Data Review: Please see PDF plots of the operational data in separate file
 - The 2nd 1005-6 run at Lab G run was run on batch B filters instead of batch A. This run was mild compared to the other three runs. Lab G will rerun the test using batch A filter. Initial test will be invalid
 - Lab G will re-run the 1005-6 oil with results to be reviewed during the next SP call.
 - CAC inlet, IMP, and IVA pressure has wide variability between labs.
- COAT New Reference Oil Data Review: Please see PDF plots of the operational data in separate file
 - Reviewing operational data 832-2, 833-1, and 833-2. All on batch B filters.
 - Aeration slope difference between 833-1 and 833-2 runs was discussed.
 - Coolant pressure difference between labs is a data entry issue. There are differences between the test report and test procedure concerning coolant pressure ranges and QI calculation. The test report gives 99 to 107 kPa and has a QI index. The SP will need to audit control parameter definitions in the COAT procedure to ensure the procedure matches the test report and test operation.
 - Starting aeration value was questioned as some tests were starting in the 3 to 4% range which is higher than some previous data sets. This is possibly due to the aeration unit pump control settings during engine warm ups. The SP will review data to evaluate the cause of the separation between labs.
 - Next steps for op data review is to have stats group review the data.

- Need to generate more data on 833-2 to generate a target. No funding is currently available for this testing.
- We have 162 gallons remaining of 833-1 .
- Motion: Bob Warden made the following motion, Seconded by Tim Griffin:
 - Motion to require labs to complete two donated tests on oil 833-2. One test to be completed prior to completing a reference test on 833-1 and one test to be completed immediately following. The second test on 833-2 will not count against the stand's calibration period run count. The additional tests on 833-2 will be required until the panel determines there is enough data to generate a target. The first donated test on 833-2 will be ran after the stand's calibration period has ended.
 - TMC and TEI Waived. All other votes were positive.
 - Motion carried

COAT New Filter Batch Timeline:

- CAT will begin process of acquiring next batch of filters and provide feedback on lead time.
- Current run rate needs to be evaluated to determine life of the current batch. 184 batch B filters currently in stock at TEI.

C13 Low Viscosity Prove Out Update:

- Low oil pressure warning did trip below 300 kPa, was not an alarm, did not derate, and ran for 4 hours.
- Adding piggyback harness to change resistance across sensor.
- Will prove out setup and provide feedback within next 2 to 3 weeks.
- Still need to confirm if IVA system will need to be adjusted to run the low viscosity fluid.

Other Notes:

Action Items:

- Need to audit control parameter definitions in COAT procedure
- Review older COAT data sets to determine starting oil aeration trend
- Lab G will re-run test on 1005-6 and provide results

Next Meeting:

- TBD