MACK-Volvo Surveillance Panel Meeting Notes 12/19/2022 @ 2:00 PM EST

Attendees

SwRI: Isaac Leer, Jose Starling Oronite: Josephine Martinez

Afton: Joseph Hoehn, Amanda Stone, Cory Koglin

Infineum: David Brass (Chair), Elisa Santos, Jacob Goodale

Intertek: Garrett White (Secretary), Khaled ElNagi

Lubrizol: Nick Ariemma

CP Chem: Haltermann:

Exxon Mobil: Paul Rubas

TMC: Sean Moyer TEI: Derek Grosch

Ford: Volvo:

Agenda

- 1. Mack T-11 Parts and Referencing Needs
- 2. Volvo T-13 Reference Oil Coordinated References
- 3. Volvo T-13 New Engines
- 4. All Other Business

Action Items and Key Points

- Motion carried that if Mack T-11 parts WWWEYPWB run out before Mack T-12 coordinated references begin, hardware batch combination YYYFZQWB where batch F subgroup E piston crowns are to be used until the oil consumption performance of the other piston crown subgroups is confirmed.
- Lab B received new design engine blocks for T-13. The panel requested that the lab not reference the new blocks on the new reference oil 823-1.
- There are currently the following number of drums of 823 at the following locations: 1 + 10 gallons at TMC and 1 at each of the 4 labs. TMC received 29 drums of 823-1 and coordinated references will begin no later than April 2023 on this oil.

Summary of Discussion

Mack T-11 Parts and Referencing Needs

Currently no T-11 kits at TEI as of November 30th.

Piston crown E is the limiting part. 3 total remaining which is not enough for a full kit.

Only batch F subgroup E piston crowns have been approved for use in T-12 and T-11.

Batch F subgroup A crowns were rejected for high oil consumption.

Excluding batch F subgroup A crowns there are 1862 available (304 kits)

Batch W 2nd ring is the second limiting part. 6 total remaining.

16 T-12 kits remaining as November 30th.

Limiting part for T-12 kits is the Batch X 2nd ring.

David – It would be best to not pull from the T-12 hardware to ensure we meet the next cycle of T-12 references. How many T-11 kits are currently at each lab?

Lab B - 2 T-11 kits

Lab A - 1-2 T-11 kits

Lab G - 1-2 T-11 kits

David – Recommendation is that since WWWEYPWB will run out before Mack T-12 coordinated reference to run YYYFZQWB hardware combination for T-11 coordinated referencing until the oil consumption performance for the other piston crown subgroups is confirmed. Level 2 ei can be used as the criteria for determining acceptance.

Isaac – Do we calculate ei's for the T-11?

Sam – No, we did not move to the new LTMS system for T-11 so they are not calculated.

David – Any objection to enforce referencing on new ring pack? Do we institute that the panel must meet to approve hardware?

Garrett – What will the acceptance criteria be for the new rings?

David – Oil consumption would be the main result to evaluate.

Isaac – For references performed on new builds mid 20's to mid 30's is what we typically see. This lines up with T12 phase 1 oil consumption rates.

David – Mid level 30 range would be the upper criteria for acceptance. It would be good for the panel to meet once a lab begins running these parts.

David Brass motions that if Mack T-11 parts WWWEYPWB run out before Mack T-12 coordinated references begin, recommend using new batch YYYFZQWB where batch F subgroup E piston crowns are used until we can confirm oil consumption performance of the other piston crown subgroups. This new batch of parts should be referenced by each lab introducing it, followed by a meeting of the SP to confirm performance of the parts. TMC shall adjust the reference periods to have no net gain or loss of reference period time.

Garrett White - Seconded motion

Afton – Yes

Intertek – Yes

Lubrizol – Yes

Exon - Yes

Infineum – Yes

Oronite - Yes

SwRI - Yes

TEI - Yes

TMC - Waive

CP Chem – No answer

Haltermann – No answer

Ford - No answer

Volvo – No answer

Vote count: Yes (8), No (0), Waive (1), No Answer (4)

Motion carried

Volvo T-13 Reference Oil Coordinated Reference

TMC almost out of 823, 1 drum plus 10 gallons remaining

1 drum of 823 remains at each lab

TMC has received 29 drums of 823-1

Active labs to start references on 823-1 by beginning of April 2023, motion accepted from SP meeting held on 10/6/2022

Current lab statuses:

Lab A - 3 stands, 2 are calibrated

Lab B – 1 stand, is not calibrated

Lab D – 2 stands, 1 is calibrated

Lab G – 3 stands, 2 are calibrated

Volvo T-13 New Engines

Lab B needing to bring in a new style engine block to their rotation.

Other labs currently not needing new blocks.

David – It would be beneficial to see performance of 823 on the new engine blocks before running with 823-1.

Sean – No notable changes between the new and current blends. TMC lab analysis shows to be a very good blend that closely matches 823.

David – I propose lab B does not run new engine block with the new blend. We have limited knowledge on the new blend.

Nick – Lab B plans to reference next week on 823. When will the references on 823-1 begin?

David – By April 2023

David – It may be best to safeguard the remaining 823 for references with new engine blocks.

Nick – 65 gallons of 823 remain, correct? This would be 3 tests worth since 20 gallons is used for each reference test.

Lab B plans to reference their stand using an old engine block with oil 823.

Lab B to hold off running a reference on the new engine block.

David – Nick can you put together a scope of the changes between the old and new blocks?

Nick – Yes, we can put that together.

Isaac – Plan is to use batch C liners for coordinated references on 823-1 correct?

Derek – 5 kits of C liners currently in reserve for the references on 823-1.

David – Sean, please reserve remaining 823 currently at TMC.

Sean – Will not assign other drums of oil at labs until 823-1 is approved.

1 drum at TMC on hold, Lab B will reference on 823 and lab D would like to reference early next year on their remaining 823.

All Other Business

None

Next Meeting Date/Time

Meeting adjourned 3:17 PM EST

Next meeting date not established