MACK-Volvo Surveillance Panel Meeting Notes
12/02/2024 @ 2:00 PM EST

Attendees

SwRI: Robert Warden, Isaac Leer
Oronite: Josephine Martinez
Afton: Joseph Hoehn
Infineum: David Brass (Chairman), Todd Dvorak, Andrew Smith
Intertek: Garrett White (Secretary), Khaled Elnagi
Lubrizol: Austin Brininger
CP Chem:
Haltermann:
Exxon Mobil: Mike Shea
TMC: Sean Moyer
TEI: Derek Grosch
Ford:
Volvo:
John Deere:

Agenda

1. Volvo T-13 Reference Oil Matrix Testing
2. Volvo T-13 Parts Batching
3. MACK T-12 Reference Testing with Chevron Delo Extended Life Coolant – Status
4. MACK T-12 – Data Review & ICF Evaluation
5. Volvo T-13 Procedure Update
6. MACK T-8 / T-11 / T-12 Hardware

Action Items and Key Points

- Volvo T-13 new reference oil matrix tests to begin mid-late December 2024.
- TEI has no T-13 ring sets from MAHLE's Brazil plant, only Portugal rings are currently available for purchase.
- 4, MACK T-12 references completed on Chevron Delo 50/50 Premixed Engine Coolant produced lead and lead 2 results mild of target. ICF's were recommended after statistical review, however, discussion was tabled for the next meeting due to time constraints.
- TMC to email drafted wording to the surveillance panel members for section 8.6 of the T-13 test procedure to make parameters that are not reported or defined as controlled, ranged, or uncontrolled non-mandatory to measure.

Summary of Discussion

Volvo T-13 Reference Oil Matrix Testing

- Previous surveillance panel meeting determined labs would be ready in late November- early December to begin the new reference oil matrix test for the T-13.
- David B - When are labs looking to start?
- Lab A and Lab D estimated to start the week of December 16th.
- Lab B and Lab G estimated to begin by the end of year / late-December.
- David B - With time needed for turnarounds and builds for 2nd test NCDT will be informed that we are looking at completion of the matrix in February 2025.

Volvo T-13 Parts Batching

- TEI received 3000 batch E liners, no measurements completed yet.
- Piston batch production to be completed by end of January 2025.
- Piston pin batch was previously anticipated to be completed by end of January 2025. This completion date has been moved up to December 16th, 2024.
- Top and 2nd ring batch production to complete by end of February 2025.
- Oil ring batch production currently has no firm completion date.
- TEI placed an order with Jegs for 99 Brazil rings expected to ship and a 2nd order with 72 ring sets to ship December 23rd
    - The 72 ring set order is expected to ship December 23rd.
- TEI currently only has Portugal rings in stock, however, there are only 2nd ring rejects available. These rings were rejected due to cosmetic defects.
- TEI currently has no Brazil rings in stock, other than those reserved for use in the new reference oil matrix test (10 kits).
- There are rings available in the dealership network, but the origin of those rings is unknown.
- Panel to wait on Jegs.com to deliver order and Derek to check with supplier on asking about serial numbers of the rings available with the dealership.

MACK T-12 Reference Testing with Chevron Delo Extended Life Coolant – Status

- There is a limited quantity of Pencool available for purchase.
- Previous surveillance panel meeting accepted the use of Chevron Delo 50/50 Premixed Engine Coolant in the T-11
- 4 T-12 reference tests on RO 821 have completed on Chevron Delo 50/50 Premixed Engine Coolant amongst labs A, D and G.
- Isaac shared operational data on the 4, T-12 references with Chevron Delo 50/50 Premixed Engine Coolant, reference tests from each lab on previous hardware combination (X(FsubE)YPWB) with Pencool and 1 reference test from each lab on the current hardware combination (YFZQWB) with Pencool.

- Only parameter that stood out was blowby in phase 1 appears to be marginally lower with previous hardware and higher with current hardware across all 3 labs, same was observed with blowby reported for phase 2.
- No other concerns raised regarding the operational data.

MACK T-12 – Data Review & ICF Evaluation

- The statistical review was performed with the influence from the change in the engine coolant and the hardware evaluated separately.
- Pb review with coolant factor on RO 821
- Grouped by con rod and main bearing batches Y/P and Z/Q
- Data shows slight shift caused by coolant in the mild direction on Pb, all results on Chevron Delo 50/50 Premixed Engine Coolant on the mild side of target.
- Recommended additive correction of 0.619 for tests using Chevron Delo 50/50 Premixed Engine Coolant with Z / Q bearings.
- Recommended additive correction of 0.979 for Pb2 for runs with Chevron Delo 50/50 Premixed Engine Coolant and Z/Q hardware.
- Discussion was tabled for the next meeting due to time constraints.

Volvo T-13 Procedure Update

- Suggestion made by Joseph Hoehn to deem any parameter that is not reported or defined as controlled, ranged, or uncontrolled should be considered non-mandatory to measure.
- Discussion had to determine whether to include this wording as a blanket statement in section 8.6 or to place a statement in each parameters subparagraph specifically stating which parameters are non-mandatory.
- Sean to email out proposed wording to be added to section 8.6.

MACK T-8 / T-11 / T-12 Hardware

- The consumption rate of the MACK T-8, T-11, T-12 has been less than predicted.
- These tests are potentially looking at being available for a longer period of time than previously anticipated due to this lower consumption rate of hardware.
- Discussion was tabled for the next meeting due to time constraints.

Next Meeting Date/Time

Proposed next meeting times to be sent out for vote via email.

Meeting adjourned at 3:36 PM EST