MACK-Volvo Surveillance Panel Meeting Notes 03/28/2025 @ 10:00 AM EST

Attendees

SwRI: Robert Warden, Isaac Leer, Jose Starling, Travis Kostan

Oronite: Josephine Martinez

Afton: Joseph Hoehn, Amanda Stone, Cory Koglin, Bob Campbell

Infineum: Andrew Smith (Chairman), Michael Madalian

Intertek: Garrett White (Secretary), Lubrizol: Austin Brininger, Phil Scinto

TEI: Derek Grosch

Agenda

- 1. Volvo T-13 New Reference Oil
- 2. Volvo T-13 New Hardware Introduction (EAAAAA)

Action Items and Key Points

- Volvo T-13 new reference oil matrix (824) completed. Preliminary analysis shows results are
 mild of the intended target. Statisticians will perform a more thorough analysis and provide
 recommendations in the next surveillance panel meeting.
- Motion carried to bring in new Volvo T-13 hardware group EAAAAA on level 2 ei with no net gain no net loss. If the hardware is approved, labs are allowed to introduce new hardware as a rolling change into calibrated stands mid-reference period to run on candidates.

Summary of Discussion

Volvo T-13 New Reference Oil

- Matrix completed on potential new reference oil (RO) 824; all data is now available in the LTMS database.
- 4 labs participated, each ran 2 tests in the same stand, back-to-back with no candidate testing between runs.
- Preliminary stats review put together and presented by Phil Scinto.
- Calculated IRPH standard deviation same as previous ROs (11.1). This includes ROs 823 and 823 1.
- Variability about the same between 824 and 823-1 on IRPH.
- Square root transform of the percent viscosity increase mild results on 824 does not "tighten" data as much as the more severe values seen with 823-1.
- Oil intention was to be borderline of VDS 4.5 limits, all results are mild of this intended target.
- VDS 4.5 pass/fail limits are 80 abs/cm for IRPH and 50% for percent viscosity increase from 300-360 hours.
- All new reference oil matrix tests conducted on liner batch D.
- Recommendation is no change to ICF's or calculation methods at this time.
- Statisticians will meet and discuss the results, then present their full analysis plus official recommendations in the next surveillance panel meeting.

Volvo T-13 New Hardware Introduction (EAAAAA)

- All new T-13 hardware has been received by TEI.
- New hardware will include the following changes in batch for each part (part not batched = PNB):

Liner: D to E
 Piston: PNB to A
 Top ring: PNB to A
 2nd ring: PNB to A
 Oil ring: PNB to A

- o Piston (wrist) pin: PNB to A
- 4 new hardware kits will be available by the end of next week (April 4th).
- 54 ring sets and 32 liners have been measured.
- Referring to a chart provided by TEI, Brazil Mahle rings are 0-100 and batch A ring sets are 101 –
 154.
- Notable ring measurement differences:
 - o Batch A 2nd ring tension less varying than Brazil Mahle 2nd rings.
 - o Batch A 2nd ring face width slightly more varying than Brazil Mahle 2nd rings.
 - Batch A oil ring tension lower than Brazil Mahle 2nd rings.
- Notable liner measurement differences:
 - o Batch E Rvk slightly higher than previous batches.
 - Batch E Ra slightly lower than previous batches.

- Quantity of new hardware on hand:
 - o 3000 count of each liner, ring sets, pistons, and wrist pins.
 - o Good for approximately 500 kits, minus rejects.
- Andrew S How soon can labs begin new hardware references with RO 823-1?
- Labs G, D and B able to begin mid-April with Lab A unable to run until early May.

Robert Warden motions to bring in new hardware group EAAAAA on level 2 ei with no net gain no net loss. If the hardware is approved, labs are allowed to introduce new hardware as a rolling change into calibrated stands mid-reference period to run on candidates.

Garrett White seconded the motion

SwRI – Yes

Lubrizol – Yes

Intertek – Yes

Afton - Yes

Oronite - Yes

TEI - Yes

Infineum – Yes

Vote count: Yes (7), No (0), No vote (0)

Motion carried

Next Meeting Date/Time

Next meeting around the week of April 14th

Meeting adjourned at 11:17 AM EST