

# MACK-Volvo Surveillance Panel Meeting Notes

## 02/08/2024 1:00 P.M. EST

### Attendees

SwRI: Isaac Leer, Jose Starling  
Oronite: Josephine Martinez, David Lee  
Afton: Joseph Hoehn, Amanda Stone  
Infineum: David Brass (Chairman), Elisa Santos, Jacob Goodale  
Intertek: Garrett White (Secretary), Andrew Smith  
Lubrizol: Austin Brininger  
CP Chem:  
Haltermann:  
Exxon Mobil: Steve Jetter  
TMC: Sean Moyer  
TEI: Derek Grosch  
Ford:  
Volvo:

### Agenda

- Volvo T-13 Reference Oil Testing
- MACK T-12 Coolant Change Testing
- New PC9-HS Fuel
- AOB

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### *Action Items and Key Points*

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- All labs are currently experiencing a step change in oil consumption in the Volvo T-13 from 15 - 30 g/hr. to 30 – 40 g/hr.
- **Motion carried** to allow any T-13 reference tests completed on an active, calibrated stand within the next 2 months from the date of this motion will receive no net gain or loss on time or runs barring that they meet the requirements for calibration. The purpose of this motion is to provide more data that will help with understanding the recent step change in oil consumption.
- **Motion carried** requiring the use of Chevron Delo Extended Life Coolant 50/50 in the next T-12 references at each lab. This coolant, barring calibration statuses, is to be used for the remainder of the reference periods.
- New PC9-HS batch of fuel from CP Chem with lot code 24AP9HS01 is black in color. Past batches have been red. CP Chem claims that there should not be any differences in performance based on their internal testing and results from the certificate of analysis.

## Summary of Discussion

### Volvo T-13 Reference Oil Matrix

- Reference oil chosen in previous meeting for PC-12.
- The oil chosen was to be blended as an FA-4.
- TMC has received the new oil.
- Email sent out regarding standard deviation for testing. Current standard deviations used for 823-1 are to be targeted for both IRPH and %KV40.
- MOA requirements have been met and MOA has been signed.
- New reference oil matrix will consist of 8 tests with 4 labs participating. Each lab will run 2 tests on the same stand with no candidate testing allowed between runs on that selected stand.
- David B – Do we foresee any issues with beginning this matrix testing?
- Isaac – We have seen a recent step change in the oil consumption going from 15-30 g/hr range to the 30-40 g/hr range.
- David B – Is there a kit number where you might have noticed this shift?
- Isaac - 860-875 is around where we noticed the oil consumption increase.
- Garrett – We are also seeing similar oil consumption rates. Noticed the shift around 919 to 920 kit number.
- Derek - 832 was the first kit with batch D liners.
- Austin B - Main bearing 1 spun in recent test. The kit number was 880.
- David B – Is there a way to see when certain power cylinder parts were purchased and from what dealership?
- Derek – It would be difficult to tell. But if there is a specific kit number we might be able to tell.
- Estimated kit numbers which each lab experienced the shift in oil consumption – SwRI - 860, IAR - 920, Afton - low 900s, Lubrizol - 880.
- David B – Which kit number are we on at TEI?
- Derek – We have sold up to kit 956.
- David – How many kits are in storage?
- Derek – 10-12 at this time.
- Derek – We typically order from 2 different dealerships, but both are purchasing parts from the same warehouse.
- Isaac – Would be good to obtain before and after measurements of the kits at which we noticed the change. See if there are any differences in things like the rings or liners.
- David B – What are everyone's' thoughts on moving forward? We only have a month or 2 until matrix testing is anticipated to begin.
- Isaac – Might need to test out 823-1 on the newer kits to see if the underlying change influences the reference oil.
- TEI has 1 more kit containing batch C liners.
- Afton to run kit 929 with reference oil 823-1.

**David Brass motions that if a reference test is performed on an active, calibrated T-13 stand within the next 2 months from the date of this motion, there will be no net gain or loss on time or runs barring that it meets the requirements for calibration.**

*Austin Brininger - Seconded motion*

No objections to this motion were noted.

Blanket Vote Count: Yes (9), No (0), Abstain (0), No Answer (4)

***Motion carried***

### **MACK T-12 Coolant Change Testing**

- Current coolant for MACK T-12, Pencoal, is no longer in production.
- T-11 procedure updated to allow for use of Chevron Delo Extended Life Coolant 50/50. This is the same coolant used in the Volvo T13.
- From the previous meeting data was requested from the T-12 before finalizing change.
- It is requested that next round of T-12 references use the Chevron Delo Extended Life Coolant 50/50.
- David B – A motion will be needed to enforce the use of this new coolant in the next T-12 references.

**David Brass motions that the next T-12 references performed are required to use Chevron Delo Extended Life Coolant 50/50. This coolant, barring calibration statuses, is to be used for the remainder of the reference periods.**

*Isaac Leer - Seconded motion*

No objections to this motion were noted.

Blanket Vote Count: Yes (9), No (0), Abstain (0), No Answer (4)

***Motion carried***

### **New PC9-HS Fuel**

- New batch of PC9-HS fuel produced by CP Chem made with lot code 24AP9HS01.
- Certificate of Analysis (CoA) shows all parameters with a targeted range are within tolerance.
- The concern is after production the fuel had a yellow tint. After introducing the red dye the fuel turned black.
- David B - Any concerns from this group on the fuel?
- Isaac – We received a load recently. It is darker in color; however, sulfur was within specification.
- No engine tests with this new batch of fuel have been performed yet.
- David – It would be good if Chevron can do some digging before we run any engine tests.
- David – Is there a color specification?
- Austin – None that I can see on the CoA.
- Consensus is the labs have approximately 2 months' worth of the previous batch, red PC9-HS fuel remaining.

**Next Meeting Date/Time**

March 5<sup>th</sup> in the afternoon.

Meeting adjourned at 2/8/2024 1:55 PM EST