

Mack / Volvo Surveillance Panel Meeting

March 5, 2024

David Brass (chair)

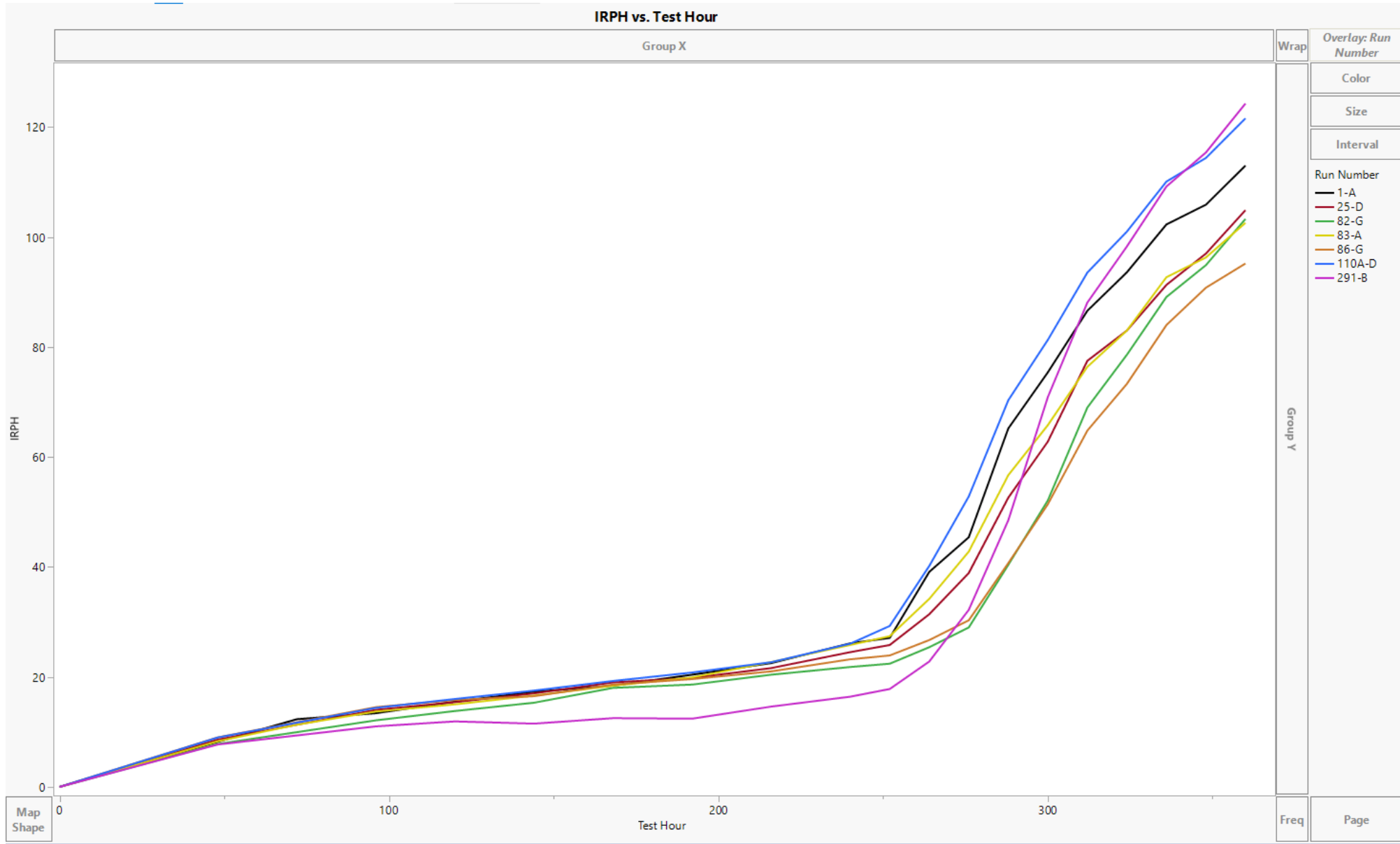
Agenda

- Volvo T-13 Reference Oil 823-1 Testing
- Volvo T-13 Oil Consumption Testing (IAR)
- Volvo T-13 Ring Analysis
- New Reference Oil Matrix
- Mack T-11 Procedure Coolant Wording
- PC9-HS Fuel Update
- AOB

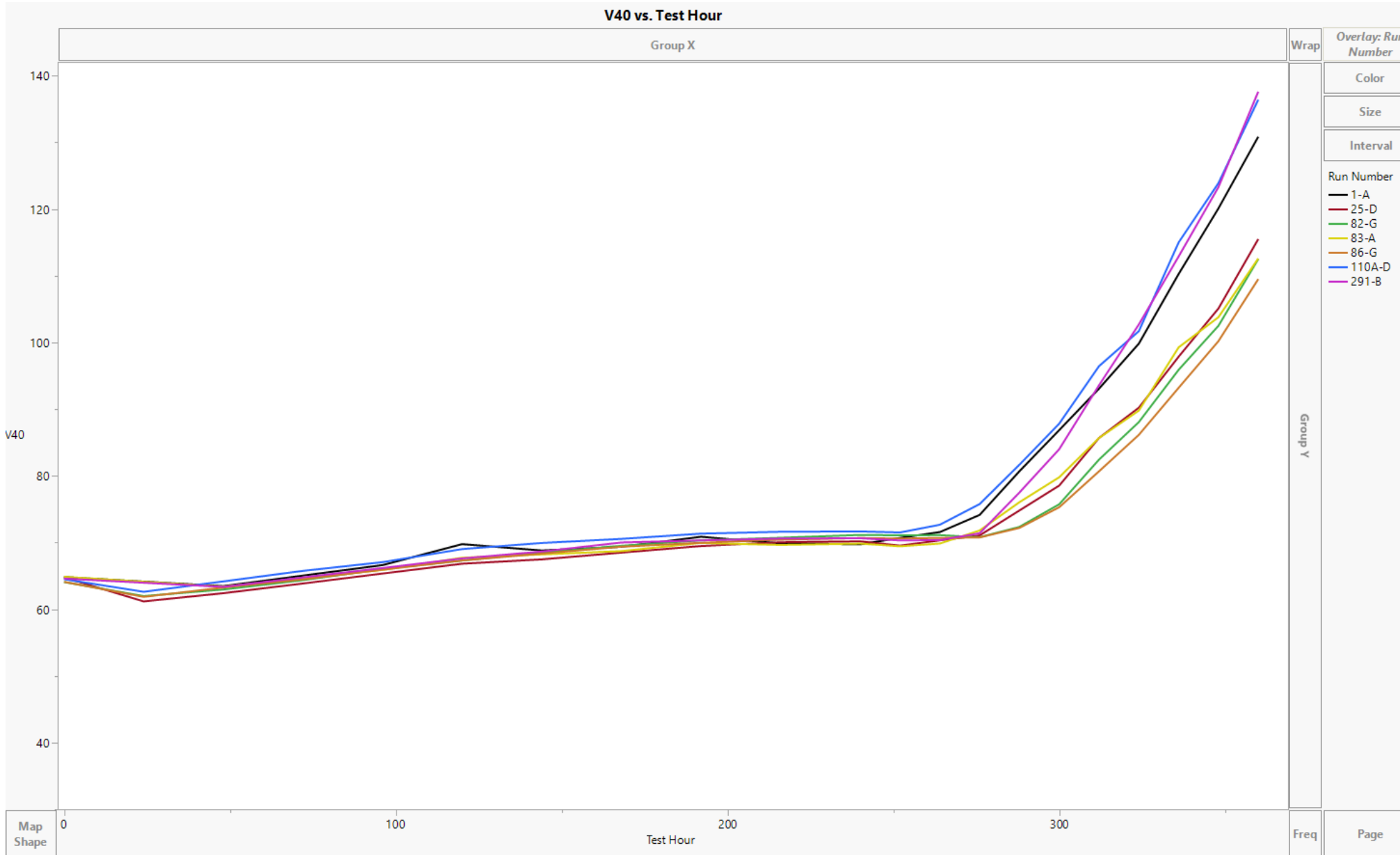
823-1 Results

Stand	FTIR Peak Height	Delta KV40 (300-360)	Oil Consumption (Avg)
A4	102.6	52.8	28.8
B3	124.3	78.2	22.9
G1	103.3	61.2	25.3
G2	95.2	57.7	28.9
D2	104.9	59.6	32.9
A8	113	63.5	31.2
D1	121.6	68.8	33.3

823-1 Plots (from LTMS) - FTIR



823-1 Plots (from LTMS) – KV40



Volvo T-13 Reference Oil Matrix Testing

Lab A / Stand 1	Lab B / Stand 1	Lab D / Stand 1	Lab G / Stand 1
New Reference Oil	New Reference Oil	New Reference Oil	New Reference Oil
New Reference Oil	New Reference Oil	New Reference Oil	New Reference Oil

Both tests must be conducted in the same stand and run consecutively (no candidates in between)

Current Reference Status

All labs have stands that are about to come off reference.

Lab	Stand	Date Reference Expires
A	2	3/14/24
A	4	3/23/24
A	8	6/17/24
B	3	3/23/24
D	1	1/3/25
D	2	3/23/24
G	1	3/23/24
G	2	5/22/24
G	3	8/16/23

Mack T-11 Procedure

The following wording was approved through information letter and ballot at ASTM for the Mack T-11 Procedure:

“7.3 Engine Coolant—Use demineralized water with less than 0.03 g/L of salts or distilled water (do not use antifreeze solutions). Use either Pencool 3000 coolant additive at the manufacturer’s recommended rate or Chevron Delo Extended Life Coolant 50/50. Pencool 3000 may be obtained from the supplier shown in A2.7, Annex A2, and Chevron Delo Extended Life Coolant 50/50 is available from local automotive distributors.”

There was a comment attached to the ballot:

“It is not clear that the additives proposed have to be added to the water, whether water was distilled or per the requirements”

Would like to editorially update the wording to remove the confusion.

Mack T-11 Procedure – Proposed Wording

7.3 Engine Coolant—Use either Pencool 3000 coolant additive or Chevron Delo Extended Life Coolant 50/50. Use Pencool 3000 coolant additive at the manufacturer's recommended rate in demineralized water with less than 0.03 g/L of salts or distilled water. Chevron Delo Extended Life Coolant 50/50 is purchased premixed and should not be diluted. Pencool 3000 may be obtained from the supplier shown in A2.7, Annex A2, and Chevron Delo Extended Life Coolant 50/50 is available from local automotive distributors.