

**Sequence VH O&H Meeting
December 3rd, 2024 at 3PM EST via MS Teams**

Attendees: Mike Deegan, Rich Grundza, Dan Engstrom, Al Lopez, Tony Catanese, Ben Maddock

Overview:

1. Hardware
2. Operation
3. Fuel
4. VJ
5. Other

Notes:

1. Hardware

- Overstock pistons
 - o All labs received their pistons
- FCS Order through TEI
 - o "The Pistons and Rings were ordered on November 1st. The lead time for the rings is 69 days and 127 days for the pistons."
 - o Rings expected January 9th, 2025
 - Arrived early but missing some from one size.
 - o Pistons expected March 8th, 2025
- Camshafts
 - o Runs per camshaft
 - Proposals
 - Match typical cylinder head life and allow for 10 uses
 - With no pressing hardware issues, consider dropping it and retaining 4 runs
 - Allow five runs per camshaft and let labs begin to generate reference data
 - Labs to clarify cam specifications that need to be monitored
 - o Lobe lift and journal diameter
 - o Add camshaft run # to the next major report form update
 - Lubrizol to share service specs
 - o Decided to table for now given no immediate hardware need. Labs should retain run 4 camshafts for future endeavors.
- Pencool 2000 shortage
 - o Afton will share their contact to the group

2. Operation

- Report Form changes
 - o If forms are unavailable by the time of fuel approval matrix, labs should retain the data separately for further analysis
 - o Tentatively planning for new reports with build values effective 1/15/2025

- OSCAR Round Robin by the Rater Group
 - 10 images shared in one document for clogging and debris rating across labs
 - Bob Campbell to bring the group together to discuss results soon.
 - Mike Deegan notified GM of the effort through an ILSAC call.

- Operational Data Study: N-10-1 approval matrix vs PM
 - Todd Dvorak provided a 356 slide presentation
 - [astmtmc.org/ftp/refdata/gas/VH/data/Precision matrix op data/VH Operational Data review of Fuel matrix Data.pdf](http://astmtmc.org/ftp/refdata/gas/VH/data/Precision%20matrix%20op%20data/VH%20Operational%20Data%20review%20of%20Fuel%20matrix%20Data.pdf)
 - Amanda Stone provided a review of N-10-1 operational data only
 - The O&H agreed that our request for analysis should be modified to:
 - Identify any differences in ramp strategy within a lab from PM to N-10-1 matrix
 - Analyze fuel rail temperature and identify if there's correlation to test severity
 - If so, what temperature could be suggested as a controlled setpoint?
 - Evaluate 1009 op data against 931. While not identical oils, they're close enough for this analysis
 - Do any of the unreported values correlate to severity?
 - **Todd is attempting to finish before end of the year but balancing his workload**

3. Fuel

- Lubrizol fuel severity effort with Haltermann
 - Run 48 hours on each batch of fuel with RO 1011-1 and evaluate changes in fuel dilution
 - Three batches of SVG M2 N-000010-1+
 - -4 from April 2023
 - -14 from May 2024
 - -20? arrived
 - -20? will be modified by Haltermann to push RVP to the top of the spec where it may impact gravity in an attempt to lower fuel dilution
 - Results expected on next call.

- New batch of fuel out for quality check against CofA, deliveries to begin late next week
 - SwRI & IAR both estimated 940 start dates week of December 16th
 - Completion and review of 940 results January 2nd
 - Lubrizol & Afton should be ready to start week of January 6th

4. VJ

- A separate effort is being led by Rob Zdrodowski with IAR & SwRI
- IAR is about to launch their first scoping run
- SwRI is refining their stand for scoping
- Lubrizol is close to operational