

Sequence VH O&H Panel Meeting
March 19th, 2024 3PM EST via Teams

Attendees: Mike Deegan, Amol Sawant, Al Lopez, Tony Catanese, Rich Grundza, Ben Maddock

Overview:

1. Fuel Analysis
2. Build Workshop
3. Hardware
4. Operation

Topics:

1. Fuel Analysis

- a. Saybolt data has been combined and shared to the group.
- b. Ben requested Amanda Stone bring the data to the Stats Group
- c. Ben to share data to Haltermann

2. Build Workshop Date

- a. Ben to send out Workshop guidance document similar to Seq X Workshop by 3/26/24 meeting
 - i. Two column page with procedure on left and space for notes on right
 - ii. Add discussion topics in relevant areas to encourage conversation. Ex:
 1. Ring gaps
 2. Surface Finish
 3. Strokes vs Load by honing stone part #

3. Piston Oil Holes

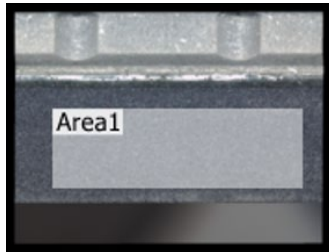
3U1L-6110-AB	PISTON - 0.125mm O/S
3U1L-6110-BB	PISTON - 0.375mm O/S
YU1L-6110-BC	PISTON - 0.250mm O/S
YU1L-6110-CC	PISTON - 0.500mm O/S

- a. Oil Holes
- b. Rich Grundza: "All the pistons have 6 holes with holes on the sides above the wrist pin area and appear to be 60 degrees apart. The holes in 0.125 pistons above the skirt area appear to be larger than the 0.25 and 0.5 mm pistons and the hole sizes vary by location. There were no .375 mm pistons at the workshop. When all the pistons are placed side by side, the differences are most notable. ..."
- c. This topic will be discussed at the Build Workshop
- d. Mike to review piston prints
- e. Ben to measure one of each at Afton and report back

4. Hardware

- a. FCS Order
 - i. Afton & Intertek completed first pass of needed hardware
 - ii. Lubrizol and Valvoline to supply their values before 3/26 meeting

- iii. SwRI wasn't present on this week's call due to vacation
- b. Still no update from Federal Mogul on piston supply
- c. Ford Reman is an option but the details surrounding what components are available are unclear
 - i. Mains and/or bores oversized to what size?
- d. Run 5 and 6 on block (0.75 and 1mm oversize)
 - i. Headgaskets are ok with 0.75mm over according to VH builder, 1mm unconfirmed but believes would be ok as well.
- e. Honing Stones
 - i. Afton identified difference in Sunnen honing stone part numbers (JHU-725 vs JHU-623).
 - ii. Keyence Measurement:

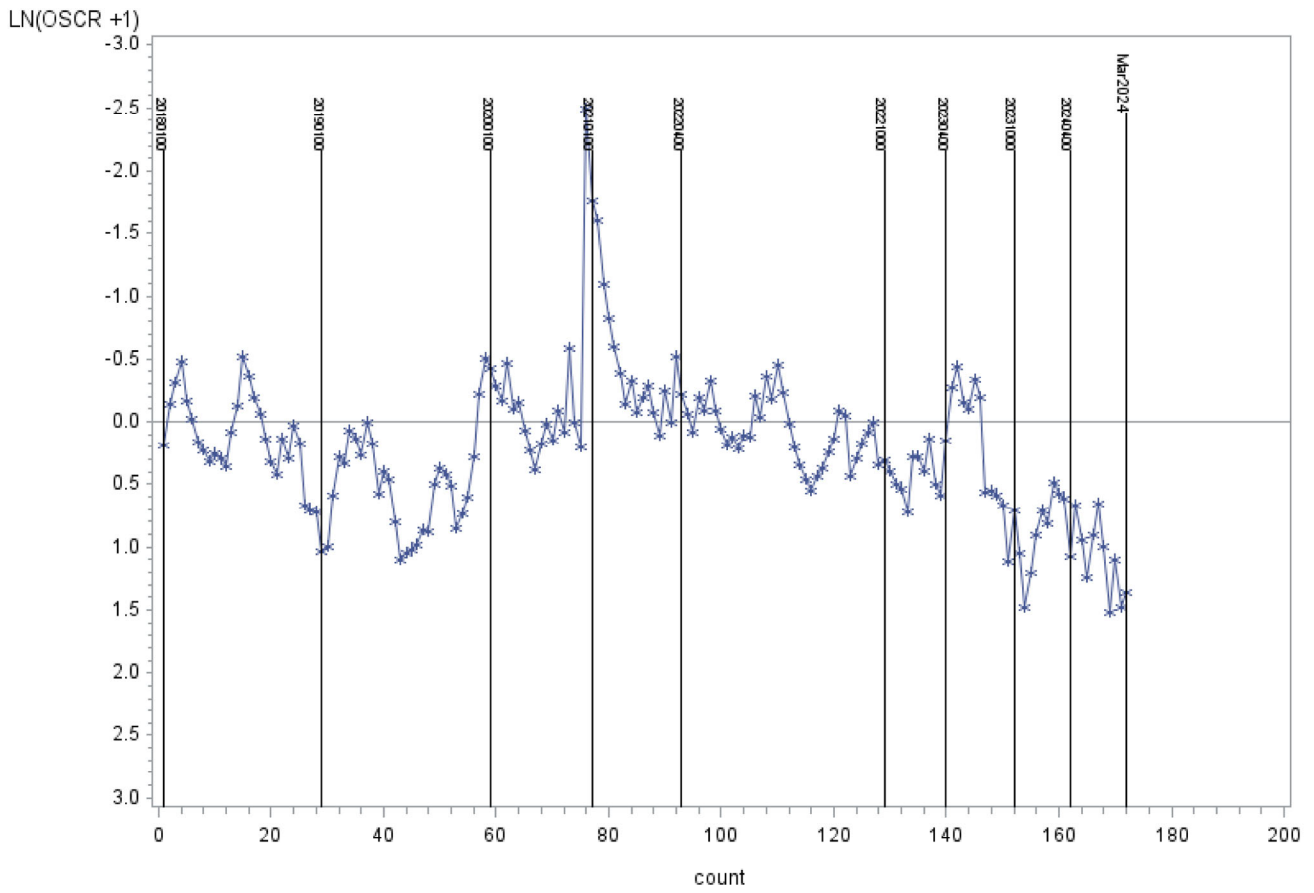


- 1.
2. JHU725: Sa = 0.1562mm (smoother) - current
3. JHU623: Sa = 0.4111mm (rougher)

5. Operation

- a. Operational Data study: N-000010-1 Fuel Approval Matrix vs Precision Matrix Data Sets
 - i. TMC template is available and will be distributed before 3/26 call.
- b. Oil Screen Clogging
 - i. TMC control chart available
 1. Results were transformed $\ln(\text{OSCR}+1)$
 2. $\text{Lambda}=0.21$
 3. Used original target data sets for testkeys. These plots use 1011-1 targets generated from the same data set used for the varnish targets.
 - ii. No Rater Workshop update available yet

Sequence VH Transformed Oil Screen Clogging EWMA



Sequence VH Transformed Oil Screen Clogging Summation Delta/s

