- Allow five runs per camshaft and let labs begin to generate reference data
- Labs to clarify cam specifications that need to be monitored
  - Lobe lift and journal diameter
  - Add camshaft run # to the next major report form update
- Journal wear observations
  - SwRI & Intertek have discarded cams prior to run 4 on either journal diameter or clearance
- Lubrizol to share service specs

# 2. Operation

- Report Form changes
  - Rich Grundza to share latest proposal that's largely based off the Seq IIIH
  - If forms are unavailable by the time of fuel approval matrix, labs should retain the data separately for further analysis
- OSCR Round Robin by the Rater Group
  - $\circ$  10 images shared in one document for clogging and debris rating across labs
  - Partially complete, Bob Campbell to bring the group together to discuss results soon
  - Mike Deegan to notify GM of the effort on the next ILSAC call
- Operational Data Study: N-10-1 approval matrix vs PM
  - Todd Dvorak provided a 356 slide presentation
    - <u>astmtmc.org/ftp/refdata/gas/VH/data/Precision matrix op data/VH Operational</u> <u>Data review of Fuel matrix Data.pdf</u>
  - 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?
  - $\circ$   $\,$  Ben to follow up with Todd on this dated request

## 3. <u>Fuel</u>

- Quarterly analyses are due
- Lubrizol fuel severity effort with Haltermann
  - $\circ$   $\,$  Run 48 hours on each batch of fuel with RO 1011-1 and evaluate changes in fuel dilution
  - Three batches of SVGM2 N-000010-1+
    - -4 from April 2023
    - -14 from May 2024
    - -20? expected this week
  - -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
- Proposed N-000010-11+ ICF pushed to Stats group
  - $\circ$   $\;$  The group agreed this is best handled by stats group for additional discussion with the wider Panel

## Sequence VH O&H Meeting October 29<sup>th</sup>, 2024 at 3PM EST via MS Teams

#### Attendees:

Mike Deegan, Rich Grundza, Dan Engstrom, Al Lopez, Tony Catanese, Amol Savant, Joe Anthony, Ben Maddock

### **Overview:**

- 1. Hardware
- 2. Operation
- 3. Fuel
- 4. Other

#### Notes:

#### 1. Hardware

- FCS Order through TEI

Description	Min. Order	Requested Order Qty.	Under Min.	Required Order Qty.	Balanced Order Qty.	Lead Time (cal. days)
Piston, + 0.125mm	256	1184		1184	1288	182
Piston, + 0.250mm	256	1288		1288	1488	182
Piston, + 0.375mm	25	1246		1246	1734	182
Piston, + 0.500mm	256	1040		1040	1120	182
Kit, Piston Rings, +0.125mm	235	222	<mark>13</mark>	235	235	99
Kit, Piston Rings, +0.250mm	254	204	<mark>50</mark>	254	254	99
Kit, Piston Rings, +0.375mm	253	192	<mark>61</mark>	253	253	99
Kit, Piston Rings, +0.500mm	202	192	<mark>10</mark>	202	202	99
Total Cost \$		\$371K		\$408K	\$435K	

o Proposal:

	Under Minimum	Lubrizol	Intertek	SWRI	Afton	Ashland
Purchasing Ratio	-	0%	48%	42%	6%	4%
Kit, Piston Rings, +0.125mm	13	0	6	5	1	1
Kit, Piston Rings, +0.250mm	50	0	24	21	3	2
Kit, Piston Rings, +0.375mm	61	0	29	26	4	2
Kit, Piston Rings, +0.500mm	10	0	5	4	1	0

Labs agreed to the proposal. Final counts sent to labs

### - Camshafts

- IMTS prototypes
  - Intertek received a ran a pair on a reference test with 1011 and generated an acceptable result. No notable operational differences in fuel flow, intake manifold pressure, etc.
- 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
  - Leading approach