

# COAT Test Variability Oil Filter Hardware

Greg Miranda 7/08/16



#### Overview



- □ A NEW aeration performance trend (shape and EOT result) was noted in WKF COAT candidate testing on 5/12/16 ☐ Trend could not be initially identified as being lubricant independent due to no prior COAT history on candidate oil ☐ Internal reference oil (OS265386) was run in the COAT procedure; Trend identified as a "stand" problem ■ Investigation included: Operational conditions ☐ Hardware investigation ☐ Oil filter housing □ Oil filter hardware Oil filter hardware has been identified as being a source of significant COAT test variability
  - Lubrizol

## Differences in Operational Parameters



| Operational differences noted between the two tests   |
|---|
| occurred in the following parameters (available in  |
| appendix):  |
| □Oil filter inlet pressure  |
| □Oil filter outlet pressure   |
| □Oil gallery pressure   |
| Experiment targeting the oil filter housing was conducted at the conclusion of a candidate oil; Result concluded that the oil filter housing was not the source of variability. |
| Focus turned toward the oil filter hardware used in the COAT procedure.   |



# Oil Filter Experiment

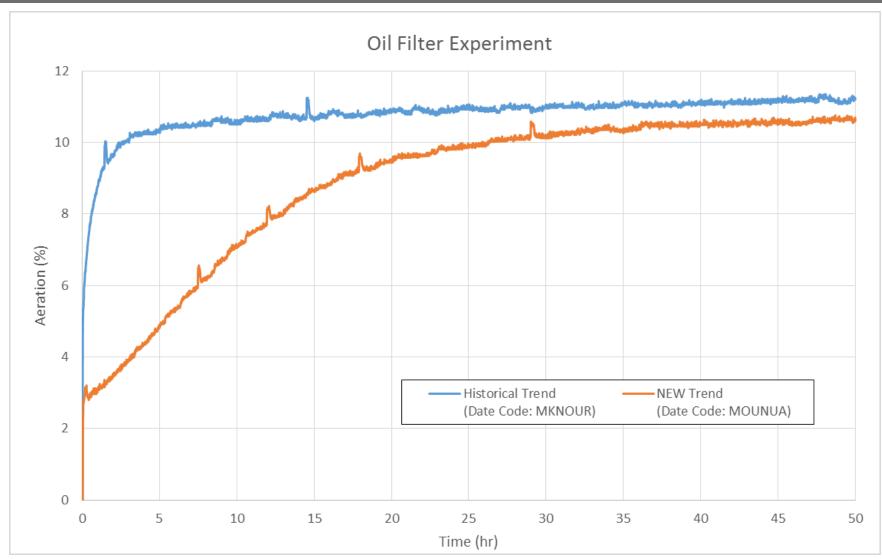


| Test# | Test Oil | Oil Filter Part<br>Number | Oil Filter Manufacture Date Code |
|-------|----------|---------------------------|----------------------------------|
| 1     | OS265386 | 1R-1808                   | MOUNUA (10/28/15)                |
| 2     | OS265386 | 1R-1808                   | MKNOUR (8/27/14)                 |



### Test Results (OS265386)











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