

# ASTM Chain Wear Task Force Conference Call

## Tuesday 19th, September 2017

**Written By: Al Lopez**

Agenda:

1. PM and additional testing data – statistical review for LTMS
2. Hardware update
3. Test procedure update
4. Timeline

**Attached is a summary of the meeting agenda items:**



CW Task Force  
Report 091917.pptx

Meeting Notes:

- Lab Updates:
  - IAR completed 2 test on the BC pistons (RO 270 and 271)
  - SWRI completed 2 tests on BC pistons (RO 270 and 271)
  - Afton invalidated test on oil 270, running test on RO 271
- Page 2 of the attached file shows the Chain Wear data generated to date. The plot has all of the PM data, additional tests requested from the stats group and 4 tests on BC pistons. Ron Romano requested that all of the data be used to generate the LTMS analysis with the following assumptions:
  - Assume all PCV/Blowby stack configurations are the same in all tests
  - Data from RO 1011 will be used in the analysis
  - Afton data on BC pistons will be included when the test is complete
  - Afton will not re-run the invalidated test on oil 270.
  - 20 PM tests, 11 Additional tests per stats group, 5 BC piston tests
  - 36 tests total
- Test review of the additional tests was not performed by the task force. The members present at the meeting felt that the review was not necessary and the validity judgement of the lab and TMC was sufficient. Test key 119723 had a negative Qi for Air Charge temperature. The lab that ran the test commented that the data was affected by one bad quality data point. The report was to be re-issued with a correction to the negative Qi and a comment for the BQD point.
- Afton committed to turning in the result on the 271 test by the 22<sup>nd</sup> of September.
- Romano requested that the LTMS analysis be completed by the October 12th AOAP meeting. Doyle Boese commented that the stats group had other pressing analysis to do in addition to the Chain Wear LTMS.
- Amol from Valvoline requested that meeting minutes be submitted in PDF due to trouble viewing attachments.

- Romano requested that the Development Group meet to review the test procedure. The final ASTM version of the procedure will be

**Hardware Update:**

- Romano announced that the Valencia plant in Spain will continue to make the 2.0L Eco-Boost engine for another three years. A group purchase will be planned in 2018.
- The order for BC piston rings and pistons was submitted to FCS. Below are the part numbers.

Ford Service Part Number	Ford Engineering Part Number	Customer Part Number	Description
AG9Z6108Q	GM5E6110AA		PISTON
EJ7Z6148A	EJ7E6148AA		KIT - PISTON RING

- The combined industry order for critical hardware (July 2017) is being delivered to the labs.

**Next Meeting:**

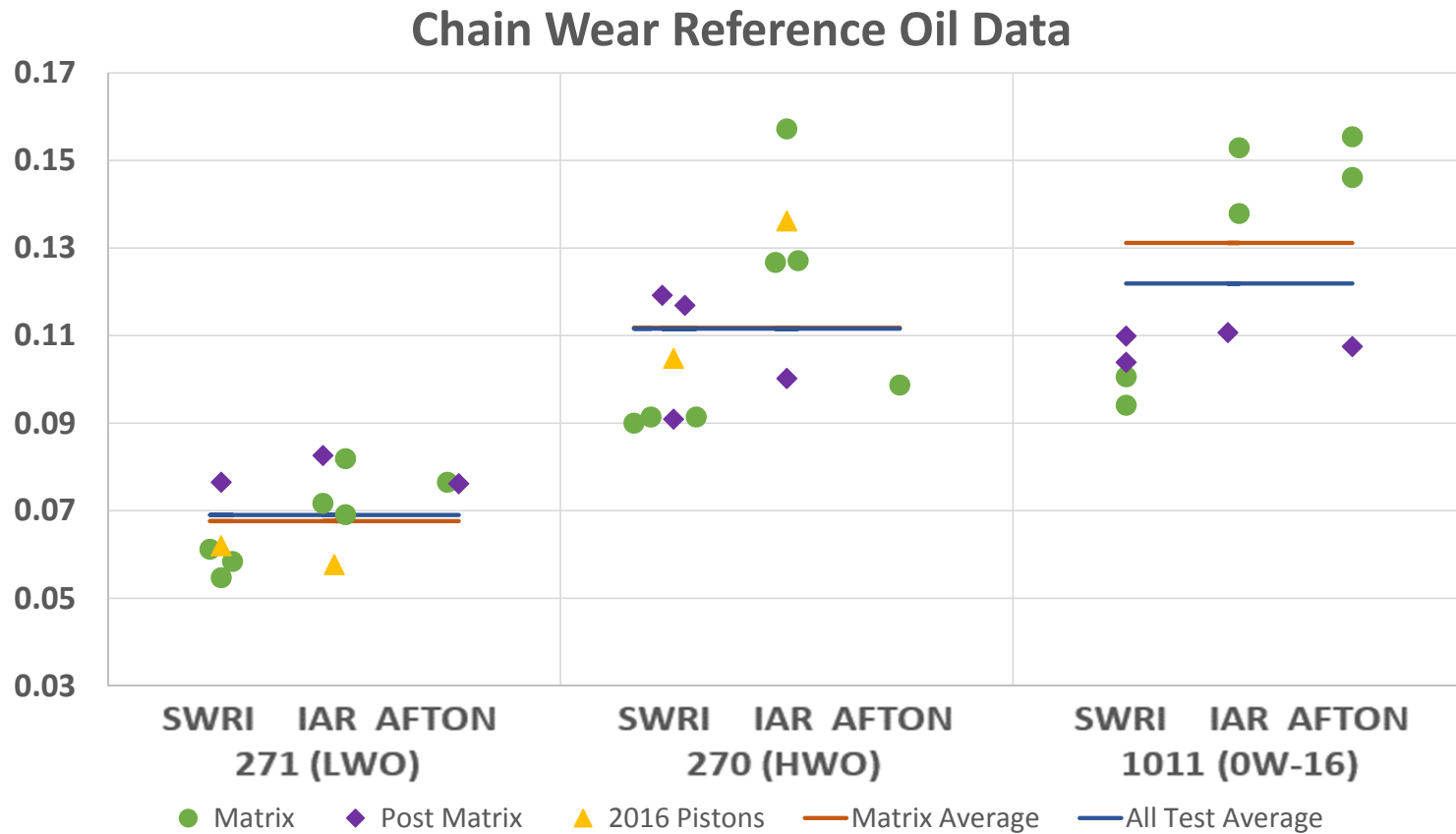
- Development group meeting will be scheduled to review the procedure and submit it for publication.
- Task Force meeting pending stats group analysis.

# Ford Chain Wear

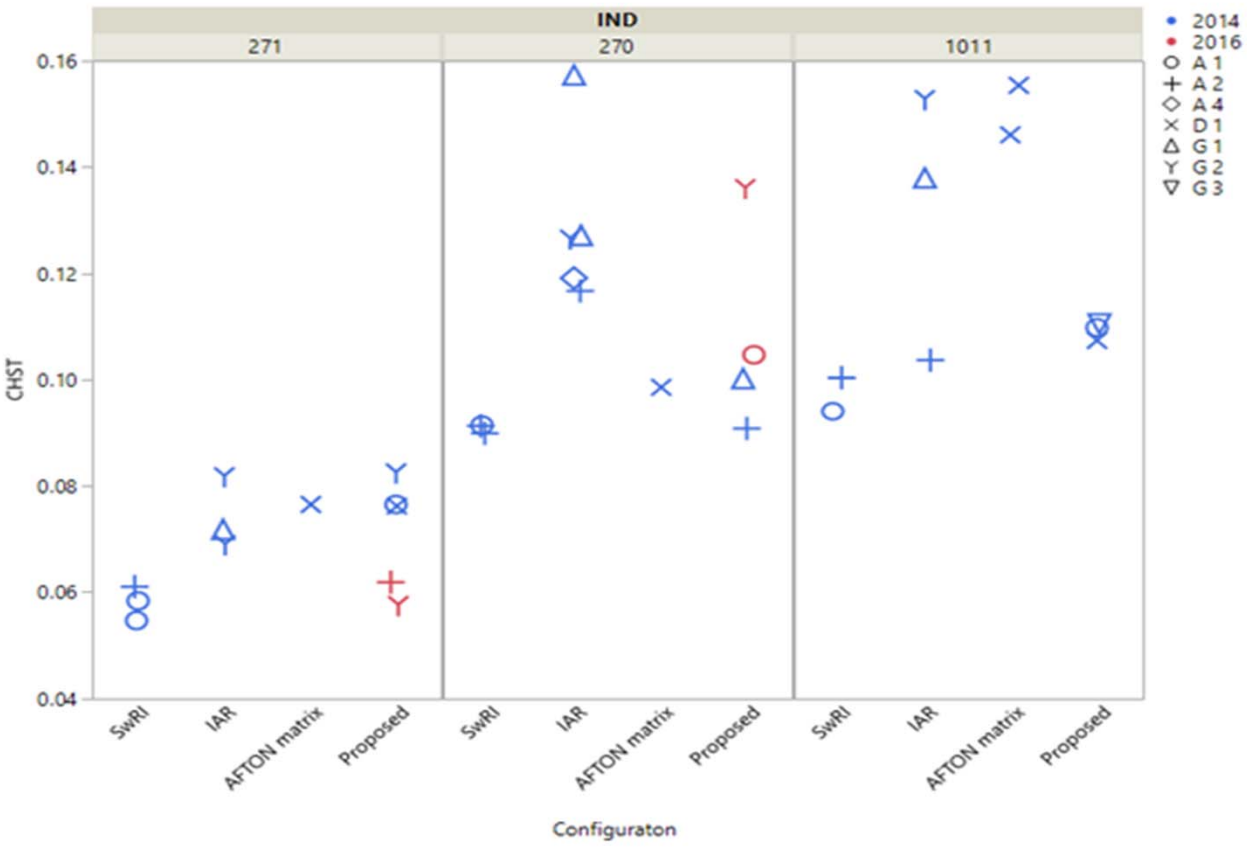
Task Force Meeting

09/19/17

# CW Data Review



# Jo Martinez Plot



# Lab Update BC Piston Tests

- IAR - 270 and 271 tests complete
- SWRI – 270 and 271 test complete
- Afton – 270 invalid , 271 running
- Additional testing or LTMS analysis?

# CW Hardware Update

- Industry order that was submitted in July for general hardware is currently being delivered to the labs.
- Solicitation for BC rings and pistons was due 09/13/17. Status?
- Additional engine purchases from Valencia