

LSPI / Chain Wear Task Force Meeting

07-20-2017

Agenda

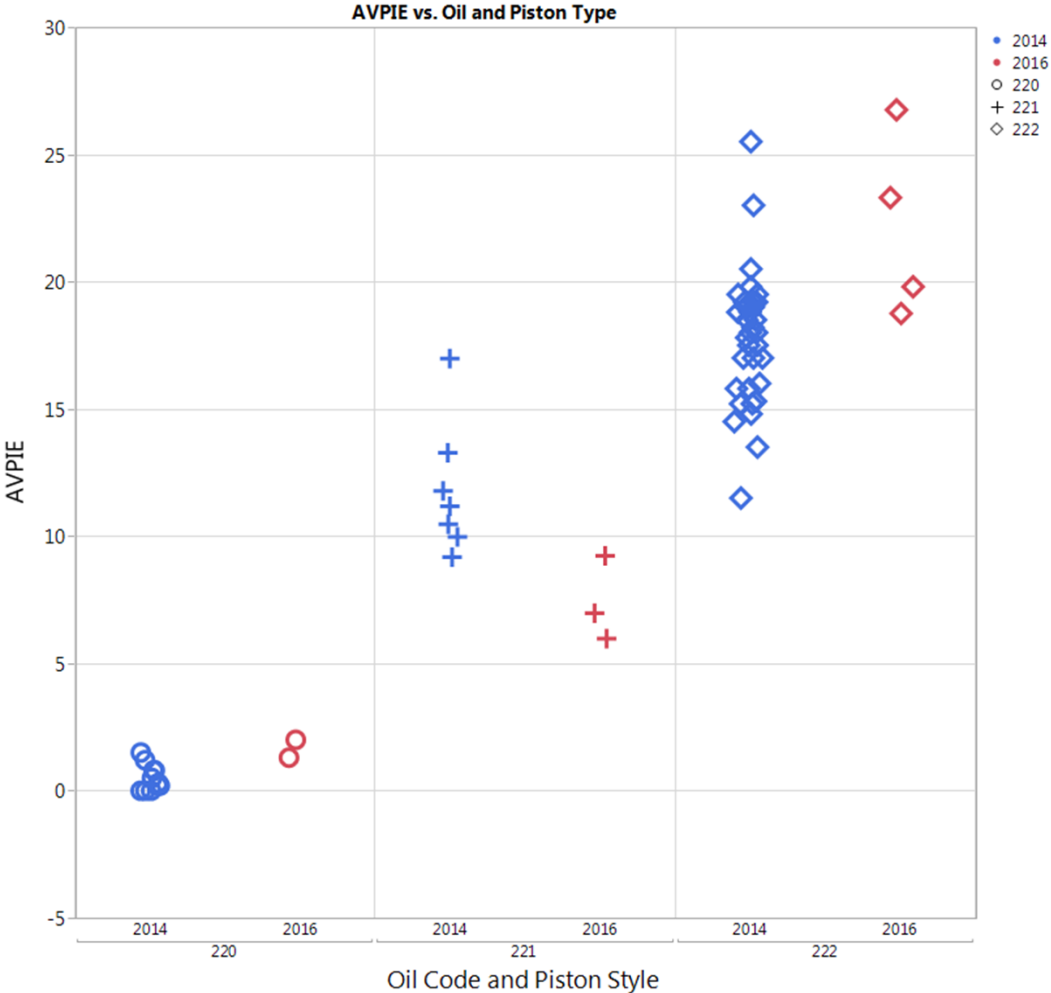
- Discuss LSPI results using 2016 pistons and rings from SwRI and IAR
- Discuss availability of 2014 pistons in 2016 engines
- Discuss which version of piston to use in the short and long terms on both Chain Wear and LSPI

Attendance

Attendee	Company
Christian Porter	Afton
Lisa Dingwell	Afton
Mark Hawthorne	APL
Thorsten	APL
Timothy Hadaway	APL
Rich Grundza	ASTMTMC
Preston Tarry	BP
Clifford Salvesen	ExxonMobil
Ron Romano	Ford
Al Lopez	IAR
Jason Soto	IAR
Andy Ritchie	Infineum
Charlie Leverett	Infineum
Doyle Boese	Infineum
Gordon Farnsworth	Infineum

Attendee	Company
Robert Stockwell	Infineum
Ryan Rieth	Infineum
Demetrius Lytle	Lubrizol
Greg Miranda	Lubrizol
Joe Gleason	Lubrizol
Kevin O'Malley	Lubrizol
Jason Bowden	OHT
Robert Stockwell	Oronite
Jeff Hsu	Shell
Cole Hudson	SwRI
Felt Mounce	SwRI
Travis Kostan	SwRI
Dan Lanctot	TEI
Nathan Bean	Valvoline
Robert Stockwell	Infineum

LSPI 2016 “BC” piston test Results



Pistons and Rings

- Industry ordered 384 engines that we refer to as the “2016” engines
- 96 of these have “2014” style pistons and rings set.
 - 48 at SwRI
 - 24 at IAR
 - 12 at LZ
 - 6 at Afton
 - 6 at Ashland

Piston and Ring Description

- Piston Style:
 - AC2 – 2014 pistons, use 2014 rings
 - BB – 2014 pistons, use 2014 rings
 - BC – 2016 pistons, use 2016 rings
 - 2017 Pistons – Intended for AC2 replacement, does not meet AC2 design, pistons are quarantined and will not be used.
- Engine Inventory
 - 0 Engines with AC2 Pistons
 - 96 Engines with BB Pistons
 - 288 Engines with BC Pistons
- Ring Inventory
 - Lifetime qty of 2014 rings
 - Zero 2016 rings

LSPI Actions

- LSPI
 - Bring BB pistons in on a reference
 - SwRI, IAR, and LZ to run four oils each on BB pistons
 - SwRI - Break-in on 220, 221, 221, 222, 220
 - LZ - Break-in on 220, 222, 222, 221, 220
 - IAR - Break-in on 220, 221, 222, 221, 220
 - Review data after testing complete before making decision on calibration
 - Use 2014 batch rings that have been measured by TEI.
 - Continue to evaluate BC pistons for future use
 - Stats group to recommend validation test qty and order by August 31st, 2017

Chain Wear Actions

- Rich to publish op data
- Meet to review op data on August 1st
- All labs to send Rich information on the PCV configuration used on each test, and any other changes that were made on Post PM tests.
- Discuss use of BB vs BC pistons at next meeting.