Cummins Surveillance Panel Teleconference January 22, 2020 10:00 – 11:00 EDT

Attendance:

Sean Moyer - TMC Andrew Stevens - LZ Christian Porter - Afton Jose Starling, Bob Warden - SwRI Andrew Smith - Intertek Mark Cooper, Marnix Torreman - Chevron Oronite Dan Lanctot - TEI Phil Shelton - Cummins Jim Gutzwiller, Elisa Santos, David Brass - Infineum Cliff Salvesen - Exxon Mobil Prasad Tumati - Haltermann Solutions

Agenda:

- 1. Update on ISM Crosshead order
- 2. Update on ISM Reference Plan and Timeline
- 3. Update on ISB Hardware

Meeting Minutes:

- 1. New ISM Crosshead Batch Discussion New crossheads ordered but no delivery date yet. Enough parts ordered to match the quantity of pushrods. (105 kits)
- 2. ISM Reference Planning and Timeline Afton reported they are getting ready to start their test today. SwRI has an engine in the build process and should start early to mid-next week. Chevron Oronite has received hardware and is waiting for a candidate to finish and should be ready to start a reference test in 2-3 weeks. Lubrizol is also a few weeks from starting a test.
- **3. ISB Hardware Update** Phil is working with suppliers to order new crossheads and pushrods. The plan is to also order tappets and switch all 3 batches at the same time. There is currently a 100 kit difference between the parts batches. There is a slight difference between how the labs and TEI are measuring the camshaft taper but the process and locations are being harmonized now. The measurement differences was around 3 microns between methods. The number of crosshead kits remaining is around 32. The rejection rate varies but is about 50% currently. The goal is to get camshafts, tappets, crossheads and pushrod batches equalized so that all 4 critical parts can be referenced at the same time.
- "Walk-ins" Andrew asked that anyone who has not emailed him to be part of the fuel supplier task force do so ASAP. Tentatively the next meeting will be February 26th at 10 EST.

Meeting adjourned at 10:31 EDT.