DD13 Task Force Meeting Minutes
October 8th 2013
11:00 EDT

Attendance:
Martin Thompson SwRI
James Pearce SwRI
Mark Sutherland TEI
Zach Bishop TEI
Jim Matasic LZ
John Alborn LZ
Chris Castanien LZ
Brad Carter IAR,
Bob Salguero IN
Mike Conrad LZ
Bob Campbell Afton
Christian Porter Afton
Greg Braziunas Detroit Diesel
John Cruz Detroit Diesel
Jim Rutherford – Chevron Oronite

Agenda: Discuss details of build workshop, Review NCDT presentation, Path forward

Workshop: October 21st-25th San Antonio, TX @ SwRI

- Each lab to build engine at workshop that will be installed in that labs stand
- SwRI will have second engine torn down and cleaned for workshop
- Parts and tools to be sent from LZ to SwRI prior to workshop
- There will be wireless access available in build room
- A large screen will be installed for build manual viewing
- LZ will arrive early to help setup
- Schedule to be 8am – 4 pm everyday
- Does it take 5 full days with clean engine?
    - Bare block build does
    - heads not serviceable as yet
    - no equipment for valve grinding from Detroit
- LZ to coordinate and work with Detroit and SA labs to get build kits

NCDT Presentation/Status:

- Shakedowns have been run at IAR and SwRI.
- Test procedure was run at IAR on poor formulation and scuffing occurred around 36th hour of test cycle
- The tests run on good oil at LZ started scuffing at 30 hours on new cylinder liners and uncoated top rings from Germany. Investigation was started to determine what has caused the shift in test
    - Peak height surface differences between old and new liner hardware. Old and new liner hardware were both from Detroit Diesel production batches.

    - This information is summarized in NCDT meeting notes
- A new run on liners with “old” surface finish and scuffing occurred again around 30 hours with uncoated new rings.
- Work is being done at LZ to analyze various metallurgical information on liners and top rings.
- Options going forward:
    - Run another test to gather more data
    - Run a test and try to change test severity by changing test procedure

Comments on moving forward:

- Should we try to leave at 50% throttle to see where the scuff point falls
- leave shut down time the same
- We need to identify the hardware problem so that test severity shifts can be isolated
- Due to the time crunch can we change the test to make current parts work
- Should we leave everything the same and run the poor oil to see what happens?
- Is it worthwhile to run the current procedure without the 25 hour shutdown and go from 50-75% throttle to see if scuffing occurs and see if there is a shutdown influence?
- There was discussion about timing and duration of shutdowns during test and the need to protect against false positives due to “unplanned” shutdowns?
- Would unplanned shutdowns invalidate a test?
- **Proposal to run next test at LZ with same shutdown procedures but only at 50% throttle to see where the scuffing event occurs. If good oil doesn't scuff until 100 or more hours increase to 75% then run poor oil to see that is scuffs at 50%. This test should be complete before the next meeting. Results will be reviewed then.**

Face to face meeting:

- Tentatively week of november 4th in Wickliffe in conjunction with T13 meetings.
- Discussion about potential F2F meeting last week of October at Afton or at San Antonio during build workshop week of October 21st
- No final decision about definite date of next F2F meeting was made.