

Caterpillar Surveillance Panel

Conference Call 9/16/2014 2:00PM CST

Attendance:

Jim Gutzwiller
Martin Thompson
Bob Salgueiro
Bill Larch
Andrew Stevens
Kevin O'Mally
Michael Conrad
Sean Dalrymple
Bob Campbell
Jim Rutherford
Hind Abi-Akar
Beth Sebright
Vince Caliendo
Jason Bowden
Jim Moritz
Mey Dewey
Mark Jarrett
Mark Cooper
Sean Moyer
Adam Roig

Agenda Items:

C13 Engine build hardware for next round of references - valve guides, valve guide seals, liners . . . ?

C13 Injectors – follow-up – Labs asked to send Part number, Trim codes to CAT to identify if NEW or Re-manned.

SCOTE parts follow-up - liners, rings - **this item will be addressed on a later call.**

Any old/new business

Old Business

None

Discussion Items:

C13 Engine Build Hardware for upcoming references

Liner 1Y-4107

Surface Finish Questions: The two liners sent to CAT were tested at TC-K and proved to be within spec despite visual differences and surface differences.

There is no issue with availability at current levels. Next year will likely see higher demand. Currently ~180 liners are available and production continues. CAT will take note of the projected demand increase for PC-11.

Rings 1Y-4108, 1Y4109, 1Y4110

No rust issue. Parts are "100% inspected" CAT will clarify on what specific items are inspected.

Valve Guides 268-2953 and stem seals 163-2478

The next round of references will be trying Valve Guides that use a Stem Seal. This stems from the change in the valve guide coating that occurred since test development.

New guides are 2 mm shorter. The old valve guide installer is part number 9V-6460. New guides use 9U-6895 valve guide driver and 455-0128 Valve seal installer.

SwRI has a head built with the new guides. They will document and present the measurements of the guides.

There was a question on whether the "umbrellas" for the rotator are still used. The 7C-8581 rotator part is without umbrella shield. The umbrellas are no longer used due to redundancy with new guide seals.

Clarification is needed on the tools used for guide installation and whether the spring base plate is in place during guide installation. CAT will clarify with a summary of the guide installation and all new parts that should be used.

Injectors

CAT has received ID numbers from the test labs and will track information to determine which injectors are re-manned and if their use is involved with the oil consumption severity shift..

Intertek has not changed injectors since the shift in severity. SwRI has old and new injectors and this has occurred during the time period of the severity shift.

The injectors will not be specially selected for the next reference. The same injectors that have been used for the last references and candidate testing at SwRI will be used. This will allow each potential variable to be separated. SwRI will document what injectors are used on the reference run with new valve guides.

Turbos

Single seal turbos are currently in use. Double seal turbos have different performance and frame design differences. The old turbos will continue to be used.

Acceptance of new parts:

After much discussion, it was proposed that all labs with active C13 stands should run at least one test on the new parts prior to the surveillance panel acceptance.

New Batch 831:

831-1 is no longer available at the test labs. 831-2 is available. The next round of references will be using a new batch.

Martin Thompson Motions, Bob Campbell Seconds

Each lab with currently active C13 stands will begin a reference using the new sealed valve guides and will track the injectors that are used. One reference test at each active lab will begin before Oct. 31st.

0 opposed 2 waves – motion carries

Concerns on 2nd ring effects on oil consumption and a possible increase in bore polish:

Additional discussions will be had on ring measurements and potentially looking at top land heavy carbon changes.
