

UNCONFIRMED MINUTES OF THE ASTM MACK SURVEILLANCE PANEL TELECONFERENCE

April 7, 2000

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1. Attendance

The Mack surveillance panel teleconference started at 11:00 am on April 7, 2000. The following people attended the conference call:

Bob Campbell
Jeff Clark
Gil Clark
Jim Collum
Riccardo Conti
Pat Fetterman
Ken Goshorn
Brian Lawrence
Charlie Passut
Scott Richards
Dino Righi
Greg Shank
Gary Tietze
Wim van Dam

2. Piston change for Mack T-8

For the standard production engines, Mack has made a change in the piston design. They went to bushingless pistons with a Manganese Phosphate coating covering the entire steel crown of the piston. While it is not believed to have any impact on the ring and liner wear process, it was decided in the past to use the previous version of pistons for all Mack lubricant tests. A large supply was set aside but with the increased volume due to the development of the Mack T-10 test, Mack now recommends that the new pistons be used for the Mack T-8 test. This test uses the same engine build for several tests and the first test is a reference test, so any unforeseen impact would be discovered quickly. A motion to accept this piston change for the Mack T-8 / T-8E tests was accepted with 10 affirmative votes and 1 abstain. Laboratories are advised to inform TMC about any reference testing with the new pistons. The new pistons will have a different part number. Kenny Goshorn provided the information below :

Piston Crown - 240GC591 becomes 240GC591AM

Piston Assembly(crown and skirt)- 240GC2246AM becomes
240GC2246BM

Cylinder Kit (crown, skirt, sleeve, rings, pin, retainers) 57GC3105 becomes
57GC3105A

The above 57GC3105A part number is the engineering released kit part number. Service Parts has for some time been using their own numbering system, which in this case identifies the 3105A as 215SB217D.

3. Reference fuel

The Mack T-10 test will be using a new reference fuel. The change was made for cost reasons, which leads to the question of changing the fuel for the existing T-8 and T-9 tests. Greg Shank proposed that this issue will be discussed at the next surveillance panel meeting in June. Although the new Phillips reference fuel specification is a subset of the current reference fuel, Gil Clark warned the group that different components are used to blend the fuel and therefore the fuels are different. Another option that was mentioned was using a different fuel that is closer to the current fuel. RD9 fuel is also a subset of the LSRD4 fuel but uses more similar componentry.

There was a discussion about the sensitivity of the Mack T-8 to fuel quality. Jeff Clark mentioned that there have been several cases in the past where fuel type differences or even batch to batch difference in fuel have lead to severity shifts in engine tests. Another issue that needs to be taken into account is the storage. If the T-8 and T-9 stay with the current fuel, dual storage tanks are needed. It was decided that a small task force will investigate all the issues and report to the panel in June. The task force will be headed-up by Jeff Clark and includes the following members: Scott Richards, Dino Righi, Greg Shank, Gil Clark, Jim Collum, and Pat Fetterman. A representative from Cummins will be invited as well, because the Cummins M11 test could be affected too.

Another fuel related issue that was brought up is the possibility of using regular pump fuel for the CF-4 tests, the Mack T-8A and the T-9. The reference fuel task force will also evaluate this issue.

4. Other Issues

There will be a Mack T-10 meeting on Tuesday April 18, 2000 organised by Lubrizol. Greg Shank mentioned that he has some T-10 data from tests run at different temperatures. The oil consumption and the possibility of increasing oil

additions will also be discussed, although Greg stated that the current level of additions was chosen to make the test more severe and therefore as short as possible. Also on the agenda is the possible correction of the T-10 data for differences in soot level.

For any questions related to the minutes of the teleconference, please contact the secretary of the Mack Surveillance Panel:

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