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Reply to: Wim van Dam

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ASTM Mack Surveillance Panel Members,

Please find attached the unconfirmed minutes of the Mack Surveillance Panel meeting held on June 21 in St. Louis, Missouri. Please let me know if you have any questions about the minutes.

Best Regards,

Wim van Dam.

UNCONFIRMED MINUTES OF THE ASTM MACK SURVEILLANCE PANEL MEETING

Held at the Adam's Mark Hotel St. Louis, Missouri June 21, 1999

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1. Call to Order

- 1.1. The Mack surveillance panel was called to order at 1:00 p. m. on June 21, 1999. The agenda is shown as attachment 1. The attendance list is shown as attachment 2.
- 1.2. Members were requested to supply their E-mail addresses so that in the future surveillance panel announcements can be communicated electronically.

2. Membership

2.1. Ralph Cerillo mentioned that he will no longer be a member of the Panel due to changes in assignment. Aimin Huang will take over Ralph's responsibilities as a member of the surveillance panel.

3. Approval of Minutes from the previous meetings

3.1. The minutes of the meeting on April 20, 1999 were approved without further comments.

4. Scope and Objectives (Charlie Passut, attachment 3)

- 4.1. The chairman presented the scope and objectives for the Mack surveillance panel, see attachment 3.
- 4.2. Base Oil Interchange (BOI) and Viscosity Grade Read Across (VGRA) guidelines are being developed for the T-8A and T-9 for CF-4 similar to the ones that exist for the T-6 and T-7.

5. TMC Report (Jeff Clark, attachment 4)

- 5.1. The TMC data indicate that all parameters of the Mack T-8/T-8E test are in control, but there seems to be a slight mild trend for the relative viscosity @ 4.8% soot.
- 5.2. Mack T-9 test activity level is low. The results that have been obtained indicate the test is on track for liner wear and ring weight loss, but there might be a mild trend for used oil Pb-content.
- 5.3. The correction factor for Top Ring Weight Loss (TRWL) is 34.1769. This has been communicated in TMC Memo 99-86. The new correction factor is based on 3 results and will be re-calculated when 5 results are available.
- 5.4. Reference oil targets have been updated and the new values have been published in TMC memo 99-86. Attachment 4 shows the new targets and the standard deviations.
- 5.5. One of the action items for the TMC was to look into the base oil saturate levels for TMC 1005 versus TMC 1005-1. Jeff has not been able to obtain this data.
- 5.6. Some investigative work has been done to find out if correlations exist between TBN depletion or TAN increase and bearing corrosion, measured as the Pb-content increase during the T-9 test. The TBN depletion does not show a correlation but the TAN increase shows some correlation.
- 5.7. The impact of the outlier / flaked ring exclusions was evaluated for the T-9 reference tests. Three of the 15 available test results would be impacted. The corrections would result in increased Average Liner Wear (AWL) for one test and decreased AWL for the other tests, so the overall average for AWL would not be impacted. The advise therefore is not to change anything to the data.
- 5.8. The connecting rod bearing batch has been changed but is not possible to find out what the impact has been from this change because it is not known which tests have been run with the original bearings and which with the new "B" batch.
- 5.9. A motion to accept Jeff Clark's TMC report was accepted by the panel.

6. CPD Report (Gary Tietze, Attachment 5)

6.1. The TEI report had been distributed to the members of the panel before the meeting. There were no questions about the report so it was accepted unanimously by the panel.

7. Old / New Business

- 7.1. Earl Hap Thompson informed the panel that draft No. 7 of the Mack T-9 test procedure was ready for Subcommittee B for ballot.
- 7.2. Greg Shank brought up the issue of test stand referencing requirements. The T-9 referencing was initially based on the industry matrix runs. Therefore, all reference tests are being run at the same time of the year and in between there are long periods without any referencing. This makes it difficult to identify any trends in the results that may occur. Will this approach of referencing stands be changes for the Mack T-10 test and should changes be made to the T-9 as well? Charlie Passut suggested that some reference tests could be delayed to obtain a situation where tests are staggered. Another question that came up during the discussion is how many reference tests are needed for new stands / new tests. After a long discussion it was decided to table the item.

8. Next Meeting

8.1 The next meeting will be held on September 9, 1999 in Richmond, VA.