

HEAVY-DUTY ENGINE OIL CLASSIFICATION PANEL
OF
ASTM D02.B0.02
December 7, 2010
Jacksonville Hyatt – Riverfront, Jacksonville, FL

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ACTION ITEMS

MINUTES

1.0 Call to order

- 1.1 The Heavy Duty Engine Oil Classification Panel (HDEOCP) was called to order by Chairman Jim Mc Geehan at 1:30 p.m. on Tuesday, December 7, 2010, in the River Terrace 3 Room of the Jacksonville Hyatt Riverfront, Jacksonville, FL.
- 1.2 There were 10 members present and 53 guests present. The attendance list is included as **Attachment 2**.

2.0 Agenda

- 2.1 The agenda circulated prior (included as **Attachment 1**) was not changed.

3.0 Minutes

- 3.1 The minutes from the previous meeting were approved as written.

4.0 Membership

- 4.1 There were no membership changes.

5.0 Projected life of CF-4 tests, Mack T-11, T-12 status

- 5.1 Mark Cooper gave a combined presentation starting with the status report of all the HD tests. **Attachment 3**. The T-11 test is available now with different fuel. The T-12 still has severity issues. The RFWT and EOAT tests now have parts available.
- 5.2 Mark then discussed the T-11 severity. The Mack Surveillance Panel learned that the fuel used still achieved the PC-9 specification even with the change in U.S. fuel sulfur levels recently. The fuel recipe was modified slightly from that blend which brought the T-11 test severity closer to target.
- 5.3 The T-12 test has a new parts batch with severity shifts. The T-12 has a 5 year build-out batch of hardware which had a coordinated round of reference oil tests conducted. The cylinder liner correction factor will be re-evaluated. The new Batch T rings adversely impact oil consumption. A correction factor will be needed. The delta lead results were quite variable across the 4 test conducted which was impacted by some rod bearing failures which are still being evaluated. The T-12 is still available at some labs with a limited quantity of parts. There could be a time in the near future that the T-12 will be unavailable.

- 5.4 Mark finished with a new 'C' category test availability slide. All tests appear to be available until 2015; some tests may be available beyond 2015. The PCOIEP announced plans for GF-6 to be available around 2015. The industry won't be able to develop two new categories at the same time. Wim van Dam suggested that the HDEOCP consider replacing individual tests to keep a category alive. Hind abi-Akar mentioned that the category needs to be representative of current engines.
- 6.0 Cummins ISM
- 6.1 Jim Moritz updated the HDEOCP with Cummins Surveillance Panel plans for the ISM on the new PC-9 fuel. The fuel is identified as PC-9HS with batch ID control. For now, the Cummins Surveillance Panel has tabled the decision to run the new fuel in the ISM. The panel is planning a coordinated round of reference oil tests to introduce the fuel.
- 7.0 EMA report
- 7.1 Greg Shank presented the EMA summary. **Attachment 4.** CJ-4 field performance has been good. The Sequence IIIG should be available until 2015. Volvo's position is that replacing individual tests is a good idea and plans to start on a T-13 replacement test. The EMA still have a few additional performance requirements. Oxidation and biodiesel compatibility are still issues. TAN increase may now be more important than TBN depletion.
- 7.2 Fuel economy is important. Volvo is looking at HTHS. The engine manufacturers now have a fuel economy mandate and engine oils are a part of solving it. CAT is still interested in emulsion which didn't make the list in the attachment.
- 7.3 Wim challenged the EMA to define requirements in the true performance measure such as viscosity or corrosion rather than oxidation or TBN and TAN measures respectively.
- 8.0 ACEA
- 8.1 Bengt Otterholm presented an ACEA update. **Attachment 5.** There has not been much activity, but recently there were low temperature pumpability field failures. ACEA also have biofuel compatibility concerns with fuel dilution. A test is being developed with Daimler 646 engine hardware running the VW TDI test cycle. If this test development work results in a severity change, then new categories will be required.
- 8.2 Fuel economy is a big concern. A dedicated engine test is not desired. One option is to have a fuel economy code of practice that can be run on any hardware. Any change to HTHS will be in the 2012 time frame. Relatively short engine tests are not differentiating oil performance that is showing up in long drain intervals in the field. Biofuel dilution test work is planned as is turbocharger deposits.
- 8.3 Possibly, ACEA will work with EMA for test work. Chairman Mc Geehan asked Bengt if he thought there could be a world oil. CJ-4 is close to E9, but ACEA needs other categories.
- 9.0 Old Business
- 9.1 D4485 needs to be modified to account for the the CF category obsolescence. **Joe Franklin moved to update D4485 to remove the CF category. Pat Fetterman seconded. CF is considered obsolete by API and should be deleted from D4485. The motion carried on a unanimous voice vote.**
- 10.0 New Business
- 10.1 Dylan Wilks announced that a new soot method is available and is being balloted in D.02.96.
- 11.0 The meeting was adjourned at 2:30 pm.