

HEAVY-DUTY ENGINE OIL CLASSIFICATION PANEL

OF

ASTM D02.B0.02

December 6, 2011

New Orleans Sheraton – New Orleans, LA

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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 McGeehan at 1:30 p.m. on Tuesday, December 6, 2011, in the Oak Alley Room of the New Orleans Sheraton Hotel, New Orleans, LA.
- 1.2 There were 13 members present and 69 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 December 2010 were approved as written. Approved unanimously

4.0 Membership

- 4.1 There are 2 membership changes: Jason Lagona replaces Cathy Devlin for Afton, and Chris Castanien replaces Dave Duncan for Lubrizol. Steven Herzog asked that his company name be updated to Evonik.

5.0 D4485 Issues

- 5.1 Lyle Bowman brought up a couple of issues with D4485. **Attachment 3.** D4485 had the 1K/1N test length listed as 250 hours in a few places. The test length is 252 hours and D4485 has been corrected. Editorial changes of that nature can be handled directly with Lyle or the TMC.
- 5.2 BSOC units in D4485 for older test types. The tests report oil consumption in g/kW-hr and D4485 lists the units in g/MJ. Some want D4485 to reflect the units used in the various test types. Since some of those tests were developed prior to the ASTM directive to use SI units, the units stated in the test method and the historical pass limits don't match D4485. Three possible actions have been proposed: retain current oil consumption units in both methods, replace the g/MJ with g/kwh in D4485, or replace both with g/h. The recommendation is to send it back to the Surveillance Panel to consider removing the power component (kW) from the units (use g/h) or update the 1K/1N method to SI units.

6.0 Support of Current Categories

- 6.1 Mark Cooper presented the projected test life timeline. **Attachment 4.** ISM parts are available "for the foreseeable future". Extending the ISB is being investigated using remanufactured 5.9L engines. For the EOAT test, salvage engines are available and the test may be replaced with a newer test. T-8 is an old engine design but still available for now. There has been some discussion whether the T-11 could replace the T-8. Sequence IIIG has limited life beyond 2015.

7.0 DEOAP Report to HDEOCP

- 7.1 Dan Arcy reported on the recent activities of the DEOAP and NCET. **Attachment 5.** Dan chaired the NCET. The EMA requested a new category which started the process of DEOAP and NCET discussing it. On November 7, the API Lubes Committee agreed to the request for the new category. Dan presented the justification and changes. The next step is the formation of the New Category Development Team (NCDT) which includes 4 associations. There was some discussion about defining fuel economy and various HTS limits. At this time there are not plans for an engine based lubricant test for fuel economy. Roger Gault of EMA indicated that the EPA rule has been finalized and that rule does not include a direct measurement fuel economy test. Reductions in fuel used would be measured with a mass balance of CO₂ in the emissions.

8.0 ACC Position on PC-11

- 8.1 Pat Fetterman presented the ACC position regarding the new category. **Attachment 6.** ACC has some concerns about some of the tasks identified that have not been assigned. One concern is the timeline is already behind schedule. This category development activity should have more involvement from the oil marketers due to the split nature of the category. Something to keep in mind is to find ways to spread development costs out such as run the matrix when a test is ready even if others are not. Backward compatibility by end users will be more difficult with the low HTS. There was agreement that there are no other issues to bring up at this time.

9.0 EMA Report

- 9.1 Greg Shank reported that the EMA met prior to this meeting. There should be an updated presentation on the CAT Aeration test in the months ahead. Greg agrees that work is behind schedule. The T-13 has been installed in one lab and will be at other labs in the coming months. Some work has started. Heather DeBaun will lead a group to investigate shear stability. Greg Shank will lead a group discussing oxidation. Ken Chao of John Deere will lead a group dealing with bio-diesel. Interested members should contact the respective sub-group leader to volunteer to help. There is still debate whether the C13 needs to go through a re-development process to shorten the test and the group wants some direction. CAT is open to working on a shorter test. One idea is that a shorter C13 could be a replacement test developed later during mid-category.
- 9.2 Mesfin Belay updated the panel on the development to date on the Daimler scuffing test. **Attachment 7.** The existing category only addresses abrasive wear; there are no tests to evaluate adhesive wear. Daimler has a concern that low-vis oils could lead to scuffing problems. Daimler is pairing with Lubrizol to develop the test. The engine is installed at Lubrizol. Daimler is planning on providing test parameters to Lubrizol by mid-January. Daimler wants this test in ASTM and ACEA. The engine is the DD13. It was stated that the scuffing test would only be for the low-vis fuel economy part of the category but the secretary has since received a clarification that the intent is to include the scuffing test in all of PC-11 as originally proposed by the EMA. A piston scuffing test has additional safety issues to get the engine shut down quickly as a piston scuffs.

- 9.3 Steve Kennedy asked the group for a deadline to announce participation on the EMA sub-groups. Oxidation – Greg Shank, Bio-Diesel Compatibility – Ken Chao, Shear Stability – Heather DeBaun. Contact them by January 6 using email. T-13 development will be handled through the Mack Surveillance Panel.

10.0 DEOAP and API LG Report

- 10.1 Steve announced that most items have been reported on and that the LG did vote to move forward. Dan Arcy will chair the NCDT. The various group's representatives have been selected. Finalizing the timeline is critical with a tremendous amount of work to be done. Chairman McGeehan asked that by the next meeting of the HDEOCP cut-off dates for test go or no-go be determined.

11.0 The meeting was adjourned at 3:30 pm.