

Facilitator Report to ASTM Section D02.B0.10 Standards Acceleration

Facilitator: Terry Bates

Report period: July 2015 to Dec. 2015

Total time spent July, 2015 to Dec 30, 2015 was 170 hours.

Caterpillar Engine Oil Aeration Test (COAT)

Surveillance Panel chair is Martin Thompson (SWRI), TMC contact is Sean Moyer.

Sections on Scope, Reference Documents, Terminology, and Significance & Use were written (these were not covered in the draft received from the TF). Editing of the sections on Apparatus, Engine Liquids, Preparation of Apparatus and Stand Calibration has been completed. In collaboration with Sean, the Procedure section has been subject to extensive rewriting to improve clarity, particularly the subsections dealing with engine break-in/silicon passivation and the determination of temperature sensitivity of density (required for the calculation of oil aeration). In this connection, an Annex A13 detailing the criteria for recalibration of the flow and density meter has yet to be provided by the TF. The section dealing the calculation oil aeration has also been extensively rewritten. Precision data were generated some months ago and are incorporated into the Precision and Bias Statement.

A draft was sent to the TF on Nov. 17 which requires the TF to approve the rewritten sections mentioned above, to provide answers to about 10 queries and to provide the text for the Annex A13. A summary of the main items needing resolution has been sent to the TF.

Recently the lab engineers found significant differences in the way they have set up their stands and the way they are running the test. These issues presumably need to be resolved before a Sub B ballot can be initiated. A guestimate would be that D02 ballot could be completed and a D number issued by end Q1.2016.

Sequence IIH (Chrysler Oxidation and Deposit Test)

Surveillance Panel chair is Karin Haumann (Shell).

Editing of the previous draft was completed in Sept. Although response to some queries is awaited, the procedure is close to being finalized and the TF consider that the test overall has the ability to measure and separate oils based on viscosity and weighted piston deposits. However, stand differences were found in the precision matrix data and a technical task force has been set up to investigate with the aim of improving precision and minimizing differences between the labs. In an attempt to increase the amount of data available, those running candidate tests may be asked to consider allowing the task force to review the engine operating data.

The timing of a Sub B and D02 ballots and the assignment of a D number will depend on the time taken to resolve the precision issues.

L-37-1 Test: Load-Carrying Capacity of Lubricants Used for Final Hypoid Drive Axles

The test is under the jurisdiction of the L-37 Surveillance Panel; Matt Umerley has replaced Chris Prengaman as the chairman.

The revised method, using pinions and rings manufactured by Gleason and installed by the laboratories in the same (Dana) housing used in the L- 37 test, has now been finalized. A revised version of the procedure has been developed and precision data will be developed shortly.