

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

**Facilitator:** Terry Bates

**Report period:** Dec. 2008 to June 2009

### 1. ROBO Test Method

This is a bench test designed to replace the Seq. IILGA oil ageing engine test and has potential for use in ILSAC GF-5.

- The first draft was received in June 2008
- The Sub B ballot closed on Dec. 5, 2008
  - 30 affirmative, 0 negative, 11 abstain (comments 0)
- The D02 ballot closed on April 2, 2009
  - 125 affirmative, 0 negative, 352 abstain
  - This represents 67% return and 100% affirmative.
- Three ballots contained comments:
  - Rey G Montemayor suggested adding a summary of changes, but as this is a new method this is not necessary (or desired) and he withdrew his comment
  - Deanne M Emory commented on the mixed use of units. These are necessary for the ROBO method and will remain
  - Luc Girard submitted 8 comments. Three were accepted as editorial changes. Five were not incorporated as there were specific reasons for the original wording.

Following the successful D02 ballot, the method has been designated **D 7528**, *Standard Test Method for Bench Oxidation of Engine Oils by ROBO Apparatus*.

This method was fast tracked to enable it to be available for ILSAC GF-5. Although considerable editing was required, excellent cooperation from the SP (who carried out the precision round robin in the period involved) and chairman, Alan Flamberg, enabled the target to be met.

### 2. E85 Emulsion Retention Test

This method has potential for use in ILSAC GF-5 and is based on a Chrysler in-house test for measuring the ability of an oil to keep contamination from water and ethanol-based fuels in emulsion. It is being developed as an ASTM method by Savant.

- The first draft was received in March 2009
  - The draft was written as a Practice on the mistaken belief that because there were no precision data it could not be progressed as a Test Method. However, because the procedure gives a result, it falls under the ASTM definition of a test method rather than a practice
  - Further, because it is a qualitative method (i.e. free water is either present or not at the end of test), precision data are not required by ASTM, the following being the recommended precision statement:  
*Precision and Bias—No information is presented about either the precision or bias of Test Method X0000 for measuring (insert here the name of the property) since the test result is nonquantitative.*
  - A substantial number of revisions and changes were proposed, most of which were taken on board except the change from Practice to Test Method.
  - A Sub B ballot was initiated by Ted Selby in April with the following results:
    - o 12 affirmative, 2 negatives, 3 comments, 18 abstentions (a 66% return)
- A new draft was written by Ted Selby to:
  - take account of the negatives and comments from the Sub B ballot
    - The negative voters accepted the changes
  - change the procedure from a Practice to a Test Method

- specify the E85 fuel more precisely and improve the precision of measuring volumes.
- make a significant number of editorial changes.
- In May Ted Selby initiated a concurrent Sub B and B02 ballot, the results of which are as follows:
  - 4 negatives, 120 affirmative, and 373 abstain. There were also 12 comments to affirmative or abstention votes.
  - The most serious negatives concerned the definition of the E85 fuel which needs to be defined in such a way that all labs use identical fuel.
- A plan of action has been devised by B07 to address the negatives and comments. A round robin is planned to help answer some of the issues raised by commentators and negative voters.

### **3. Gear Oil Storage Stability and Compatibility Test**

As agreed at the Standards Acceleration meeting in Dec. 08, the method was completely re-written as a non-quantitative method (i.e. additives either do or do not precipitate out). This allows the method to be progressed without the need for precision data which would require a very significant effort including the development of new reference oils because the current reference oils do not give precipitates. The procedures to quantify the amount of precipitated residues were placed in a non-mandatory Appendix so that they are available for research and other purposes.

The large number of changes which had been agreed in the previous drafts were also highlighted in the new draft so that the SP were appraised of all the changes being made (a new member, Intertek, joined the SP in Jan. 09).

The draft was sent to the SP for them to approve, reject or modify the proposed changes. Good input was received from 3 of the 6-member SP.

A new draft was written incorporating all the agreed changes. This left five substantive and 8 more routine items requiring resolution. A summary was prepared for the SP of these items, with proposals for resolution.

All matters were resolved at a teleconference on May 28 and a new draft produced for final SP approval for a Sub B ballot.