ASTM Section D02.B0.10
Minutes of Meeting on December 3, 2012

Call to Order
ASTM Section D02.B0.10 on Standards Acceleration met on Monday, December 3, 2012 at 8:00 am at the Norfolk Waterside Marriott in Norfolk, VA. The meeting start was delayed until 8:20 am until additional members were present. There were five members and two guests in attendance. A list of attendees is shown in Attachment 1.

Minutes from June 28, 2010 Meeting
The June 25, 2012 meeting minutes were approved as posted.

Membership
Section 10 membership was reviewed with no changes. The current membership list is shown in Attachment 2. Non-active members were changed to a non-voting status.

Facilitator Reports
Reports from three facilitators were received. Written reports submitted are shown in Attachment 3.

No other notable items were discussed.

Facilitator Assignments
Current facilitator assignments were reviewed and are summarized in Attachment 4. The chairman will monitor new test development activity an update assignments as necessary.

Old Business
The Section 10 Scope and Objectives (Attachment 5) were reviewed. No changes were made.

The chairman thanked Lyle Bowman for volunteering to perform editorial corrections of existing Sub B test methods. Lyle agreed to handle these corrections without compensation from the TMC.

New Business
The chairman presented the D4485 Sub B ballot review, Attachment 6. Laura Birnbaumer stated that several of the OEMs still used forms that reference the g/MJ limits and that if the ballot passed it would be useful to include the KW to MJ conversion in D4485.

Next Meeting
The meeting will be Monday June 24, 2013 in Montreal, Quebec

Adjournment
The meeting was adjourned at approximately 9:00 am.

Frank M. Farber
Chairman, ASTM D02.B0.10

Attachments

B10 Attendance List
December 3, 2012
Norfolk, VA

Contact Information	Membership Status	Present
Mark Adams Tribology Testing Labs 7030 East Street Saginaw, MI 48601 989-777-0839 mark@tribologytesting.com	Voting Member	
Terry Bates 50 Tower Rd. North Heswall, Wirral CH60, 6RS UNITED KINGDOM +44-151-342-1193 batesterryw@aol.com	Voting Member	
Lyle O. Bowman 728 Montecillo Road San Rafael, CA 94903 415-479-3004 FAX 415-472-1570 jbfoodie@comcast.net	Voting Member	
George E. Callis Spectrum Corporation 2019 SE Oxton Drive Port St. Lucie, FL 34952-6066 561-337-5060 FAX 561-337-5061 ecallis@spectrumcorporation.com	~~Voting Member~~ NON-VOTING	
Frank Farber ASTM Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206 412-365-1030 FAX 412-365-1047 fmf@astmtmc.cmu.edu	Chairman/Secretary	
Joe Franklin Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 210-523-4671 FAX 210-684-6074 joe.franklin@intertek.com	Voting Member	
Jerry Gropp The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092 440-347-1223 FAX 440-347-1555 jlg@lubrizol.com	Voting Member	

B10 Attendance List
December 3, 2012
Norfolk, VA

Ted Selby Savant, Inc. 4800 James Savage Road Midland, MI 48642 989-496-2301 FAX 989-496-3438 tselby@savantgroup.com	~~Voting Member~~ NON-VOTING	
WilliamSullivan W. T. Sullivan, Inc. 5 Scheiber Drive Brick, NJ 08723 908-930-3512 FAX 267-220-7750 wtsullivan@comcast.net	~~Voting Member~~ NON-VOTING	
E. A. Hap Thompson PPL Standards Development 404 Twin Oaks Lane St. Johns, FL 32259 904-287-9596 FAX 904-287-9596 hapjthom@aol.com	Voting Member	
Ben Weber Southwest Research Institute 6220 Culebra Road San Antonio, TX 78228-0510 210-522-5911 FAX 210-684-7523 bweber@swri.edu	Voting Member	

B10 Attendance List
December 3, 2012
Norfolk, VA

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Janet Barker (P) 210-522-6424 (F) 210-522-4544 Southwest Research Institute 6220 Culebra Rd San Antonio TX 78238 jbarker@swri.org		

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December 3, 2012

Sequence VI E

The ASTM Sequence VI Surveillance Panel has determined the Seq. VID shall be updated to the Sequence VIE due to the changes approved by the SP and the use of a 2012 model year engine which has shown to perform different from the VID 2009 model year engine. A Task Force has been formed to update the VID Standard to the VIE, and work will begin early 2013. I have provided some guidance to the SP chair.

Respectfully submitted,
E. A. Hap Thompson

E. A. Hap Thompson, Facilitator

Lyle Bowman's Facilitator Report to B-10
December 3, 2012

I've spent about 25 hours on various assignments since the June, 2012 Meeting. My efforts have involved preparation of 6 D-2 ballot items, reviewing editor's proofs of those items,
reviewing Information Letters, and developing a proposed D4485 revision for subcommittee balloting.

The D-2 ballot items were revisions resulting from approved Information Letters. One minor editorial comment was received on these items.

There are unresolved negative votes from the proposed D4485 revision balloted in Subcommittee B, that need to be adjudicated during the Subcommittee B Meeting.

Respectfully submitted,
Lyle Bowman

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

Facilitator: Terry Bates
Report period: June 2012 to Dec 2012

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

The aim is to update the D6121 Test Method by replacing the gasoline engine by an electric motor and to make other changes aimed at improving the repeatability and reproducibility of the test and addressing some of the issues relating to the use of test hardware which is not representative of current production hardware. The test is under the jurisdiction of the L-37 Surveillance Panel, chaired by Wes Venhoff.

The Task Force is still working to establish specific test conditions for the revised test. Meantime, it is anticipated that information will be received shortly on hardware changes (electric motor driven vs. fired engine driven test stand, AAM test hardware vs. Dana test hardware, etc).

Some sections of the current test method will likely not change significantly and, in collaboration with Wes, work has started to make editorial revisions to these to ensure they conform to the latest editorial standards.

Current Facilitator Assignments

Facilitator	Methods
T. Bates	L-37-1
L. O. Bowman	Test Method Updates, D4485, SI Units
E. A. Thompson	Sequence VIE

PC-11 Test Assignments
First License Date 1/2016
Mandatory Use Date 1/2017

Test Type	Contact Person	Facilitator
C-13 Aeration Test	Martin Thompson – martin.thompson@swri.edu	
DDC/Daimler Scuffing Test	Jon Cruz – John.Cruz@Daimler.com	
Mack T-13	Greg Shank – greg.shank@volvo.com	
Shear Stability Test	Heather DeBaun - Heather.DeBaun@Navistar.com	
BioDiesel Compatability Test	EMA Representative	

GF-6 Test Assignments
First License Date 1/2016
Mandatory Use Date 1/2017

Test Type	Contact Person	Facilitator
Sequence VH	Ron Romano – ron.romano@ford.com	Lyle Bowman
Sequence IVB	Teri Kowalski - teri.kowalski@tema.toyota.com	
Sequence VID/VIE?	Charlie Leverett – charlie.leverrett@intertek.com	Hap Thompson
Chain Wear Test	Ron Romano – ron.romano@ford.com	
Turbo Deposit Test	ILSAC Representative	
Low Speed Pre-Ignition Test (LSPI)	Ron Romano – ron.romano@ford.com	
Aeration		
Chrysler IIIH	Tracey King/Haiying Tang - tek1@Chrysler.com / HT146@Chrysler.com	

ASTM Section D02.B0.10
Standards Acceleration

Scope and Objectives

Scope

The section on Standards Acceleration maintains a staff of facilitators to expedite the establishment of standards relating to automotive lubricants. Facilitators' activities include upgrading test procedures to ASTM test methods, and revising standards as needed once they are adopted; the *Form and Style for ASTM Standards* to be followed in all cases.

Section 10 activities will include but are not limited to the following:

1. Determine priority among documents to be advanced to standards with the help of facilitators, based upon input from the appropriate subcommittee.

2. Evaluate and approve new facilitator candidates, as justified by the need for new facilitators.

3. Assign specific documents to selected facilitators.

4. Hear and evaluate the facilitators' reports presented at semiannual meetings of Committee D02. (Each facilitator's report shall be brief and shall include progress, problems, and costs related to his or her standards development activity.)

5. Assist the Test Monitoring Center in establishing funding for the Standards Acceleration Program.

6. Process revisions to D 4485, *Standard Specification for Performance of Engine Oils.*

7. Carry out any other activities relative to the Standards Acceleration Program as needed, or as directed by Subcommittee D02.B0.

Objectives

1. Report a summary to Subcommittee D02.B0 and to appropriate sections of the Standards Acceleration Program status, including actions for approval, at each semi-annual meeting of Subcommittee D02.B0.

Date of last review: 12/12

Sub B Ballot 12-6
D4485 1K/1N Oil Consumption

December 5, 2012

Closing Information

- Ballot Returns
  - 23 Affirmatives
  - 4 Negatives (1 non-official voter)
  - 16 Abstains

Background:

- D4485-08, and earlier versions, specified the maximum average oil consumption limit for D6750 (1K/1N) test results as 0.5 g/kWh.
- The D4485-09 version, and five subsequent revisions, specifies the maximum average oil consumption limit for D6750 test results as 0.139 g/MJ (the mathematically converted SI unit from 0.5 g/kWh).

Background: (continued)

- Oil consumption results in D6750 are reported to two decimal places. Historically, in D6750, the maximum allowable oil consumption result is 0.54 g/kWh. Either rounding off that result to 0.5 g/kWh, and converting to 0.139 g/MJ, or comparing with the earlier maximum limit of 0.5 g/kW/h, provides a D4485 –pass.

Background: (continued)

- If the D6750 maximum test result of 0.54 g/kWh is not rounded off for comparison with the D4485 requirement, the converted SI unit value is 0.15 g/MJ. To ensure no change in the pass/fail level of API CH-4, CI-4 or CJ-4, the primary D4485 maximum allowable average oil consumption limit for D6750 should be 0.54 g/kWh, and the secondary unit 0.15 g/MJ.

Specific Proposed D4485 Revisions:

1.5.1 Exceptions—(1) The roller follower shaft wear in Test Method D5966 is in mils. **(2) The oil consumption in Test Method D6750 is in grams per kilowatthour.** Some of the appendixes are verbatim from other sources, and non-SI units are included.

TABLE 3 C Engine Oil Categories

CH-4 Category
D6750 (1K) Average Oil Consumption, ~~g/MJ~~ **g/kWh** (0-252) h, max
(g/MJ) (0-252) h, max

One –test	Two-test	Three-test
~~0.139~~ **0.54** **(0.15)**	~~0.139~~ **0.54** **(0.15)**	~~0.139~~ **0.54** **(0.15)**

CI-4 Category
D6750 (1K) Average Oil Consumption, ~~g/MJ~~ **g/kWh** (0-252) h, max
(g/MJ) (0-252) h, max

One –test	Two-test	Three-test
~~0.139~~ **0.54** **(0.15)**	~~0.139~~ **0.54** **(0.15)**	~~0.139~~ **0.54** **(0.15)**

CJ-4 Category
D6750 (1K) Average Oil Consumption, ~~g/MJ~~ **g/kWh** (0-252) h, max
(g/MJ) (0-252) h, max

One –test	Two-test	Three-test
~~0.139~~ **0.54** **(0.15)**	~~0.139~~ **0.54** **(0.15)**	~~0.139~~ **0.54** **(0.15)**

Footnotes
[P] Refer to RR:D02-1273. Alternatively, Test Method D6750 (1N) can be used; if this test method is used, the measured parameters and primary performance criteria are the same as those shown for Test Method D6750 (1N) in the CJ-4 category, ~~**except that oil consumption, max, is 0.5 g/MJ.**~~

Statement Accompanying Negative Vote by Jerry Wang

- It does not include language on how to convert g/kWH to g/MJ nor does it say that this conversion is in the 1N method.

Chevron Oronite

Reason for Negative Vote on ASTM Work Item WK39291: Oil Consumption Units for Caterpillar 1N and 1K

Laura Birnbaumer
Jerry Wang

ASTM Subcommittee D02.B
Norfolk, VA
December 5, 2012

Making the things that go, go better.

Negative Vote on ASTM Work Item WK39291

While Oronite welcomes the return of g/kWh unit symbol to the D6750 (1K/1N) Oil Consumption in D4485, we believe that the ballot as it currently stands is incomplete as it lacks a specified conversion between g/kWh and g/MJ.

Oronite therefore requests the ballot allow for a footnote, w, with this conversion.

Specifically, the ballot would now look like

Negative Vote on ASTM Work Item WK39291

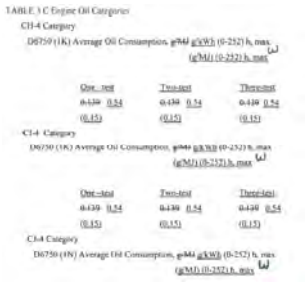
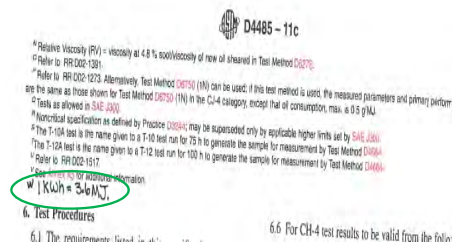


TABLE 3 C Engine Oil Categories
CH-4 Category
D6750 (1K) Average Oil Consumption, ~~g/MJ~~ g/kWh (0-252) h, max [w]
(g/MJ) (0-252) h, max
One –test | Two-test | Three-test
~~0.139~~ 0.54 (0.15) | ~~0.139~~ 0.54 (0.15) | ~~0.139~~ 0.54 (0.15)
CJ-4 Category
D6750 (1K) Average Oil Consumption, ~~g/MJ~~ g/kWh (0-252) h, max [w]
(g/MJ) (0-252) h, max
One –test | Two-test | Three-test
~~0.139~~ 0.54 (0.15) | ~~0.139~~ 0.54 (0.15) | ~~0.139~~ 0.54 (0.15)
CJ-4 Category
D6750 (1N) Average Oil Consumption, ~~g/MJ~~ g/kWh (0-252) h, max [w]
(g/MJ) (0-252) h, max

Negative Vote on ASTM Work Item WK39291

And the list of footnotes would now look like

Negative Vote on ASTM Work Item WK39291


D4485 – 11c

[H] Relative Viscosity (RV) = viscosity at 4.8 % soot/viscosity of new oil sheared in Test Method D6278.
[I] Refer to RR:D02-1381.
[J] Refer to RR:D02-1273. Alternatively, Test Method D6750 (1N) can be used; if this test method is used, the measured parameters and primary performance are the same as those shown for Test Method D6750 (1N) in the CJ-4 category, except that oil consumption, max. is 0.5 g/MJ.
[K] Tests as allowed in SAE J300.
[L] Noncritical specification as defined by Practice D3244; may be superseded only by applicable higher limits set by SAE J300.
[M] The T-10A test is the name given to a T-10 test run for 75 h to generate the sample for measurement by Test Method D4684.
[N] The T-12A test is the name given to a T-12 test run for 100 h to generate the sample for measurement by Test Method D4684.
[O] Refer to RR:D02-1517.
[P] See Annex A2 for additional information.

1 KWh = 3.6MJ.

6. Test Procedures

6.1 The requirements listed in this ...

6.6 For CH-4 test results to be valid from the follo...

Negative Vote on ASTM Work Item WK39291

Oronite believes that the addition of the unit symbol conversion footnote is an editorial change that greatly increases the usability of D4485 to the entire industry.

Statement Accompanying Negative Vote by Terry Bates

- The statement is broken up into the following seven slides

Background Information

The ballot proposes that the primary unit for 1K/1N oil consumption limits in D4485 be the non-SI unit g/kW•h with the SI unit g/MJ relegated to a secondary unit in parenthesis.

My Proposal

Reversing the primary/secondary hierarchy with the SI-unit of g/MJ as the primary unit with g/kW•h as the secondary unit in parenthesis would be in keeping with the requirements of the ASTM Form and Style Guide that the joule be the SI unit for energy.

Important Incidental Benefit

The perpetuation of the precedent that it is acceptable to relegate SI units to a secondary role is also avoided

My Agreement

I would withdraw my negative if this change is made.

Additional Action Proposed

If my proposal is adopted, I strongly recommend that, in a separate ballot, D6750 be revised to give the primary unit for oil consumption for the 1K/1N as g/MJ with the g/kW•h as the secondary unit.

Rationale for Proposed Action

This recommendation is made on the premise that, to avoid confusion and possible disputes, the units used in a specification (e.g. D4485) should be identical to those used in the cited test method (e.g. D6750).

Conclusion

If the TMC report forms in D6750 are revised so that oil consumption is reported in both units then common practice is observed, industry databases are preserved and ASTM's requirements regarding SI units for energy are upheld.

Statement Accompanying Negative Vote by Lyle Bowman

The statement is broken up into the following seven slides

History – SI Units in Subcommittee B Standards

During 2008, the ASTM Board of Directors, through the D02 Executive Committee, issued a directive to its subcommittees to implement the use of SI units in their standards. Each subcommittee, including Subcommittee B, was provided with the complete list of standards that the subcommittee was responsible for.

History – The SI unit, g/MJ, in D4485

The D6750 oil consumption limits in D4485 were subsequently revised, by mathematical conversion, from the 0.5 g/kWh non-SI unit to the 0.139 g/MJ SI unit.

This D4485 revision was balloted in Subcommittee B in 2008, and approved as D4485-09 in April 2009.

Voting History – 0.139 g/MJ in D4485

The D4485-09 and five subsequent D4485 revisions, containing the 0.139 g/MJ unit, received no comments nor negative votes.

That voting history strongly indicates that there have been no problems with the 0.139 g/MJ unit, until those being suggested by this ballot item.

IEEE/ASTM SI 10

Form and Style for ASTM Standards, states the following :

"H1.2 SI units of measurement shall be included in all ASTM standards.
H1.2.2 Follow the procedures given in IEEE/ASTM SI-10, which covers the use of SI."

IEEE/ASTM SI 10 Standard Includes This Section:

"3.4.5.1 **Energy**
The coherent SI unit of energy, the joule, together with its multiples and submultiples, is preferred for all applications. The kilowatthour (kWh) is widely used as a measure of electrical energy, but this unit shall not be introduced into any other fields."

Mandatory Requirement

That's a mandatory requirement, and the Afton Chemical representatives' proposal does just the opposite; i.e., *introduces kilowatthour into a field other than as a measure of electrical energy*.

CONCLUSION

Considering the history of no problems with the 0.139 g/MJ SI unit in D4485, and even more importantly, the IEEE/ASTM SI 10 Energy section's mandatory requirement to not introduce the kilowatthour unit into a field that is not a measure of electrical energy, ***the kilowatthour unit should not be introduced into D4485, and the current 0.139 g/MJ unit should be retained***