

ASTM Section D02.B0.10

Minutes of Meeting on June 22, 2015

Call to Order

ASTM Section D02.B0.10 on Standards Acceleration met on Monday, June 22, 2015 at 8:00 am at the Marriott Hotel in Ft. Lauderdale, FL. There were seven members and two guests in attendance. The list of membership and attendance is shown in Attachment 1.

Minutes from December 8, 2014 Meeting

The December 8, 2014 meeting minutes were approved.

Membership

No changes. The committee discussed removing non-attending members from the membership list. The Chairman will revise the list accordingly.

Facilitator Reports

Reports from three facilitators were received. Written reports submitted are shown in Attachment 2.

December 2014 - June 2015	
Facilitator	Hours
Lyle Bowman	120
Terry Bates	125.4
Hap Thompson	30

Facilitator Assignments

Current facilitator assignments were reviewed and are summarized below:

Facilitator	Test	Status
Terry	COAT	3 rd draft completed. Expect to draft B ballot in Sept./Oct. 2015
	L-37-1	A revised draft method has been issued and is awaiting round robin precision data
	IIIH	Finalized draft is awaiting precision matrix
Hap	VIE	Draft created and awaiting further test development
	IVB	Draft in process
	T-13	Draft expected to be balloted in Sept./Oct. 2015
Lyle	VH	Complete draft awaiting further revision before precision matrix.
	Chain Wear	A draft is almost ready for distribution for comments
	L-33-1	Draft is pending further development
	LSPI	A draft will be created shortly

Old Business

No old business

New Business

Three items were raised under new business.

1. Terry Bates requested the TMC create a separate folder on its website for the TMC Role Annex and removing the documents from their current location in the Meeting Minutes folder. After the meeting the TMC modified its website so the documents could be accessed via:

www.astmtmc.cmu.edu → ASTM Committee Docs → Standards
Acceleration- B10 Committee → TMC Role Annex

2. Terry also raised the need to have test area report forms adhere to SI units. The suggestion was made that perhaps the facilitators should review test report forms to ensure the correct units are being used. Frank Farber suggested that the facilitators be placed on the TMC distribution list for beta testing of report packages. The committee felt this was a good step forward. The facilitators will focus on the new test types being developed. A cursory review of existing report forms found the following measured parameters need to be addressed.

Kinematic Viscosity, cSt → mm²/s (1:1 conversion)

ICP, ppm → mg/kg (1:1 conversion)

Oil Consumption, g/KWh → kg/MJ

Each surveillance panel will be notified of the parameters that need to be changed. Appropriate footnotes should be provided to lessen the confusion during the transition.

Laura Birnbaumer noted that the units of the test reports need to be tied, if not the same, as the units of the pass/fail parameter in the specification. It was also noted that the work of Section 10 needs to fit within the rest of the industry.

A general comment and task of the committee was to ensure specifications were in conformance with SI units as well.

3. It was suggested that references to the LTMS document in the test methods should be moved to the TMC Role Annex or covered by a generic statement like, "Consult the TMC for calibration procedures". Frank Farber agreed to go back and talk with TMC staff regarding this item and to make a recommendation.

Scope & Objectives Review

Item 6 under Scope was revised to include other specifications that are currently under Subcommittee B jurisdiction (marked in RED) . Item 6 has been revised as follows:

6. Process revisions to D4485, *Standard Specification for Performance of Engine Oils*; *D7450, Standard Specification for Performance of Rear Axle Gear Lubricants Intended for API Category GL-5 Service*; *D5760, Standard Specification for Performance of Manual Transmission Gear Lubricants*; *D4859, Standard Specification for Lubricants for Two-Stroke-Cycle Spark-Ignition Gasoline Engines-TC*

Next Meeting

The meeting will be Monday December 7, 2015 in Austin, TX

Adjournment


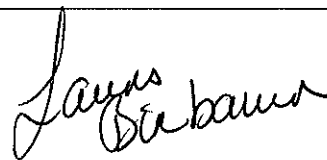



The meeting was adjourned at approximately 9:00 am.

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

Attachments



B10 Attendance List
June 22, 2015
Ft. Lauderdale, FL

Attachment 1
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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	
Laura Birnbaumer Chevron Oronite 100 Chevron Way 60-1146 Richmond, CA 94802 LABI@Chevron.com	Non-Voting Member	
Lyle O. Bowman 728 Montecillo Road San Rafael, CA 94903 415-479-3004 FAX 415-472-1570 lbowman@namwobl.com	Voting Member	
George E. Callis Spectrum Corporation 2019 SE Oxtan Drive Port St. Lucie, FL 34952-6066 561-337-5060 FAX 561-337-5061 ecallis@spectrumcorporation.com	Non-Voting Member	
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	

B10 Attendance List
June 22, 2015
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Jerry Gropp The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092 440-347-1223 FAX 440-347-1555 jlg@lubrizol.com	Voting Member	
Ryan Jilka Flint Hills Resources Wichita, KS 67220 Ryan.jilka@fhr.com	Voting Member	
Ted Selby Savant, Inc. 4800 James Savage Road Midland, MI 48642 989-496-2301 FAX 989-496-3438 tsselby@savantgroup.com	Non-Voting Member	
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	
Sara Nuss Warren Tannas Co. 4800 James Savage Road Midland, MI 48642 989-496-2309 Snuss-warren@savantgroup.com	Non-Voting Member	

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[illegible]

E. A. Hap Thompson
404 Twin Oaks Lane
St. Johns, FL 32259
904-287-9596
June 22, 2015

Sequence VI E

Sufficient parts are available for matrix and subsequent testing

-Currently there are approximately 78 of the original 150 engines available.
GM has stated they can supply additional engines; however,
manufacturing timeline relative to original engines has not been established.

The test has been run at multiple labs

-Approximately 70 tests on reference oils have been completed across 4 of the 6
labs participating in the precision matrix.

Discrimination has been shown

-Industry statisticians have shown that the prove out data ranks and discriminates
the chosen reference oils in the same order as the Seq. VID

An estimate of the test precision based on the prove out data has been completed.

The test sponsor has requested additional test data regarding 0W-16 viscosity grade
performance.

- Once completed, a vote for ready for precision matrix is expected by the surveillance
panel.

As a result of completing the precision matrix, several procedural updates are expected
including:

- Estimate of the test precision
- Updated engine hour correction factor
- Updated reference oil severity adjustments
- Number of passing reference oil tests required to calibrate new engine
- Number of candidate oil runs allowed within a reference period

Sequence IV B

Test stand design is finalized; Golden Stand concept is being used; Test hardware is finalized; development testing has been conducted to identify, optimize and finalize the test hardware design; Test cycle (7 / 8 sec transient cycle) is finalized; development testing has been conducted to identify, optimize and finalize the test cycle and operational conditions; Test length (200 hours) is finalized; a 26 test Experimental Design Matrix has been conducted to evaluate, optimize and finalize the test length; Hardware evaluated for wear is not yet finalized; plan to evaluate intake and exhaust camshaft lobes and lifters through the conclusion of the precision matrix, but intake lifter wear is most promising to-date; Wear measurement method (for lifter wear) is not yet finalized; plan to evaluate PDI MicroAnalyzer 2000 w/ standardized fixture, and either laser etched or notched lifters, and Keyence VR3000 3D Macroscopic through the conclusion of the precision matrix; Prove-out testing has been completed at Intertek and SwRI and is currently running at Lubrizol; Test procedure is currently being drafted and reviewed; Development testing has been conducted to evaluate a very good performing oil (5W-20 version of REO3), a 0W-16 version of REO3 and the third IVB precision matrix oil (0W-16 version of Tech 1); Tie-back to IVA has been evaluated using ASTM REO 1006-2, ASTM REO 300 and REO3; Initial test repeatability and reproducibility has been evaluated; a 26 test Experimental Design Matrix has been conducted to evaluate test repeatability and reproducibility (statistically found no stand or lab differences).

Status of industry matrix stands: 5 stands at 3 labs (2 at SwRI, 2 at Intertek, 1 at Lubrizol) installed and operational; the 4 stands at the independent labs have all completed 1 or more prove-out and development tests; the 1 stand at the dependent lab is currently running a prove-out test.

Status of the Golden Stand replacement hardware on-hand for precision matrix + 1 reference period: 100% complete.

Status of the consumable test hardware on-hand for precision matrix + 1 reference period: 100% complete, with the exception of the lifter indexing.

Status of precision matrix: Expected start sometime in late June or early July of 2015.

MACK T-13

The precision matrix was run at 5 labs on 7 stands. Targets were developed for the matrix oils and a reference oil was selected for the testing going forward. Stands have been granted calibration status and candidate testing has begun. Essentially the test development is completed and the test is nearly ready to move from the task force to the surveillance panel.

I spent 30 hours working on the 3 documents over the past 6 months.

Respectfully submitted,

E. A. Hap Thompson

E. A. Hap Thompson
Facilitator

Lyle Bowman's Facilitator Report to B-10
June 22, 2015

About 120 hours have been spent on various assignments since the December 2014 Meeting.

These efforts have involved preparation of 15 D02 ballot items from approved Information Letters, reviewing editor's proofs, and reviewing proposed new Information Letters.

All 15 of the D02 ballot items were approved with minor comments.

The bulk of my time has been spent in the development of the Sequence VH and Timing Chain Wear test methods. First drafts of each have been completed, and the VH draft was circulated for comments. Since the VH test method is patterned closely to the current VG test method, relatively minimum effort was required to complete the first draft, and the few comments received from reviewers have been incorporated. Adding the precision section is all that remains before submission for a subcommittee ballot.

Development of the Timing Chain Wear Test Method is a different story, since this required starting from scratch, and the majority of my time has been spent on this project. It's now almost ready to forward to reviewers for comments.

The last update received about the L-33-1 test method assignment was in April 2015, and I was informed then that a probable target date, for when new hardware would hopefully be approved, was the latter part of this year. That is the 'trigger date' for when a revised/new test method can be initiated.

Old business: Regarding the D4485 item that was balloted in the Spring 2013 D02 Ballot to replace g/MJ with g/kWh as the primary oil consumption unit in the 1K/1N, that revision to D4485 has finally been accomplished, along with inclusion of a conversion equation for calculating MJ from kWh (published May 2015).

Respectfully submitted,
Lyle Bowman

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

Facilitator: Terry Bates

Report period: Jan 2015 to June 2015

Total time spent Jan 1, 2014 to May 30, 2014 was 125.4 hours

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, chaired by Chris Prengaman.

A revised method was developed in Q4.2014 using pinions and rings manufactured by Gleason and installed by the laboratories in the same (Dana) housing used in the L- 37 test. A new draft procedure based on the revised method was received in Jan 2015. Editing was completed in Feb 2015. Response to queries was received in March along with new drawings. The method is now complete and results of the precision round robin are awaited.

Caterpillar C13 Engine Oil Aeration Test

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

A 3rd draft was received on May 15, 2015. Editing of this version is currently being carried out in collaboration with Sean. The method is now largely finalized and the precision round robin has been completed.

Sequence IIH (Chrysler Oxidation and Deposit Test)

Surveillance Panel chair is Karin Haumann (SWRI).

A new draft was received in Jan. 2015 and editing completed in March 2015. The latest draft of the procedure was received June 2015, most of the issues having been resolved. Currently all of the requirements to start the precision matrix have been met and matrix testing is expected to start end June 2015 with completion 4 to 6 weeks thereafter.

Facilitator Assignments

Item	Facilitator
D4485	Lyle Bowman
Standard Revisions	Lyle Bowman

PC-11 Test Assignments

Test Type	Contact Person	Facilitator
C-13 Aeration Test	Martin Thompson – martin.thompson@swri.edu	Terry Bates
Mack T-13	Sean Moyer – sam@astmtmc.cmu.edu	Hap Thompson

GF-6 Test Assignments

Test Type	Contact Person	Facilitator
Sequence VH	Rich Grundza - reg@astmtmc.cmu.edu	Lyle Bowman
Sequence IVB	Teri Kowalski - teri.kowalski@tema.toyota.com	Hap Thompson
Sequence VIE	Charlie Leverett – charlie.leverett@intertek.com	Hap Thompson
Chain Wear Test	Ron Romano – ron.romano@ford.com	Lyle Bowman
Low Speed Pre-Ignition Test (LSPI)	Ron Romano – ron.romano@ford.com	Lyle Bowman
Chrysler IIH	Karin Haumann – karin.haumann@swri.org	Terry Bates

Gear Test Assignments

Test Type	Contact Person	Facilitator
L-37-1	Chris Prengaman– Christopher.Prengaman@lubrizol.com	Terry Bates
L-33-2	Angela Trader – angela.trader@intertek.com	Lyle Bowman

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: 12/14