LRI Gear Lubricants Review Committee
Southwest Research Institute – San Antonio, Texas
February 8, 2024
Meeting #212 Minutes
UNCONFIRMED

OPEN COMMITTEE MEETING

1.0 QUORUM / INTRODUCTIONS

1.1 Opening Comments, Call to Order / Quorum Check

The meeting was called to order by Chairman, Troy Muransky. A quorum was established with the following representatives present. NOTE: Some members attended in-person and some attended via WebEx/Telecon only and are noted with an "*".

ATTENDANCE – LRI Review Committee Members:

Dylan Beck	ASTM/TMC
Jessica Carowick	Cummins Meritor
Steve Carr *	Dana Corporation
Allen Comfort	U.S. Army
Bruce McGlone *	Retired – Cummins Meritor
Jeanelle Morris	Navistar
Troy Muransky	American Axle & Mfg - Chairperson
Suzanne Neal *	Daimler Trucks North America
Eric Sattler (Alt)	U.S. Army
Khaled Zreik *	General Motors
Amy Zyski	Dana Corporation – Vice Chairperson

LRI Committee Members:

Nick Ariemma	The Lubrizol Corporation
Rob Banas	ExxonMobil
Don Bell	Afton Chemical Corporation
Tobias Bender	Fuchs
Margaret Caridi	BASF Corporation
Michael Charron	Southwest Research Institute
Jason Gingerich	The Lubrizol Corporation
Arjun Goyal	BASF Corporation
Hyeok Hahn	Chevron
Dan Horvath	Afton Chemical Corporation
Alexander Jackson	Chevron Oronite
Brad Jordan *	Shell International
Percy Kanga *	Retired ExxonMobil
Anthony Lange	Intertek AR
Caroline Mueller	Southwest Research Institute
Matt Sangpeal	Afton Chemical Corporation
Nick Schaup	The Lubrizol Corporation
Addison Schweitzer	Shell International
Dairene Uy	Shell International
Wes Venhoff	The Lubrizol Corporation
Rebecca Warden	Chevron Oronite

Guests:

Hector De La Fuente	Chevron Oronite
John Huron	Chevron Oronite
Bob Mlachak	The Lubrizol Corporation
Mohammad-Pour Mahdi	TriboDENS Ltd and Loughborough University

PRI Staff

Wendy Grubbs

1.2 Review Code of Ethics and Conflict of Interest

The meeting attendees were reminded of their Code of Ethics and Conflict of Interest responsibilities and Anti-Trust notification which are intended to guide all in their participation in the meeting. They were posted at the bottom of the meeting agenda.

1.3 Confirmation of Guests – Determine Membership

The attendees recognized as Guests were acknowledged.

1.4 Review Members Completion of Confidentiality Forms

No Confidentiality Forms required signature.

1.5 Request for Membership

No guests requested membership.

J. Morris made a motion, 2nd J. Carowick to approve A. Zyski as the Vice Chairperson for a term of 2 years and to approve a 2-year extension for T. Muransky as Chairperson. Unanimously approved.

2.0 Approval of Previous Meeting #211 Minutes

A.Zyski made a motion, 2nd by J. Morris to approve the LRI Meeting Minutes for meeting #211 as written. Unanimously approved.

3.0 Summary of ASTM Meetings

3.1 Report of Summary of ASTM Meetings – N. Ariemma

N. Ariemma presented a summary report of the ASTM meetings conducted Wednesday, February 7th. (Attachment 1).

4.0 Action Item Review

4.1 T. Muransky to develop verbiage for a reference fluid approval process which would include expiration dates, reblending, testing, quality assurance and quality control in between and a process to find replacement fluids. **COMPLETED FEBRUARY 6, 2024**

4.2 LRI Committee Members to review each section of PD4000 to confirm the verbiage prior to incorporating each section into J2360. **COMPLETED FEBRUARY 6, 2024**

4.3 A. Comfort to develop verbiage for PD4000 explaining the Limited Slip Differential specifics for the Army. **COMPLETED FEBRUARY 6, 2024**

4.4 PRI (when Dylan Beck is back in the office) to coordinate a conference call with the LRI Committee to develop a go forward plan to address the ASTM/TMC maintenance and rollout of new reference fluids. **CLOSED Moved Action to the ASTM Surveillance Panel**

4.5 PRI to develop a Letter to Industry regarding changing “Initial Boiling Point” replacing “1% @ °C”. “ASTM D2887” replaces “ASTM D6417” and noting the revision of GL Form 4. **OPEN**

4.6 N. Schaup to develop verbiage for ASTM D5704 for use of 150-hour data in place of 50-hour data. Include a statement indicating that extending the hours does not invalidate the test. A note to this affect also needs to be included in J2360. S. Moyer referenced ASTM D8048 Section 9.4.1. **CLOSED**

4.7 PRI to post the final 2024 LRI Meeting Schedule on the www.p-r-i.org website and include a copy of the schedule when emailing the meeting minutes from meeting #211. **CLOSED**

4.8 PRI to coordinate the meetings at both the SwRI facility in San Antonio, Texas **CLOSED** and Intertek AR in Plymouth, Michigan **IN PROCESS**.

4.9 J. Clark to determine where we can publish the Field Trial test method in lieu of including it in SAE J2360 or PD4000 – i.e., an ASTM Test Method. **OPEN**

4.10 J. Carowick to contact Mike Johns (bearings) and Ron Noteboom (seals) from Cummins Meritor to see if they will be the Subject Matter Experts (SME) to work with the Field Trial Replacement Sub-Team. S. Carr volunteered to be an SME for Seals. **OPEN**

5. LRI Meeting Attendance / Venue

5.1 Confirm Next LRI Meeting Venue (request status of field test presentations)
The next LRI Meeting #213 is scheduled for Thursday, May 9, 2024, at Intertek AR in Plymouth, Michigan. No field tests presentations are scheduled for the May LRI Meeting.

It was determined that an extra day will be added to the LRI Meeting week to include another day to work on the revision of PD4000. This meeting will be held on Tuesday, May 7, 2024.

ACTION ITEM: A.Lange to coordinate the Intertek AR conference room for Tuesday, May 7, 2024, for the PD4000 Revision Meeting.

6 Old Business

6.1 Limited Slip Differential Clutches Sub-Team Report Out

Allen Comfort, Troy Muransky, Arjun Goyal, Dan Horvath, Matt Sangpeal, Don Bell, Dairene Uy, J. Carowick, Amy Zyski, Anthony Lange, Jeanelle Morris, Wes Venhoff

i. Review Proposed Verbiage for PD4000 New Section 3.13 (A. Comfort)
The Action Item remains open.

It has been decided to include a "-A" at the end of the PRI GL number (i.e., PRI GL 1235-A) on the J2360 PRI-QPL for those products that meet the additional requirements for the Army Limited Slip Differential.
UPDATE February 9, 2023: The Action Item remains open.
UPDATE May 11, 2023: This topic and action item remains open.
UPDATE November 9, 2023: D. Mosher presented the June 2023 SAE Update article. This topic will be addressed during the February 6, 2024, PD4000 revision meeting held at SwRI in San Antonio, Texas.

ACTION ITEM: A. Comfort to schedule a WebEx/Telecon with the Sub-Team to discuss how to address the Limited Slip Differential in both PD4000 and J2360 by possibly developing an Appendix to J2360.

6.2 Review of DRAFT PD4000 by Sub-Team – T. Muransky
The Sub-Team consists of J. Carter, J. LaBond, A. Zyski, S. Neal, K. Zreik, J. Morris, S. Carr, D. Beck, A. Comfort, E. Sattler, T. Muransky, M. Caridi, H. Hahn, N. Ariemma, S. Wade and N. Schaup.

On Tuesday, February 6, 2024, an in-person meeting was held at SwRI in San Antonio, Texas to review PD4000 and prepare a draft. Since the group did not have time to review the entire document, another PD4000 Revision Meeting will be held prior to the May 2024 LRI Meeting on Tuesday, May 7, 2024, at Intertek AR in Plymouth, Michigan.

6.3 Field Trial Replacement Sub-Team Update – H. Hahn
The Sub-Team consists of H. Hahn (Lead), D. Bell, A. Lange, D. Mosher, A. Comfort, A. Zyski, N. Schaup, E. Sattler, R. Warden, D. Uy, C. Mueller, T. Muransky, M. Sangpeal, J. Carowick, S. Carr - Guests: Michael Portell (Intertek), Michael Charron

The sub-team is still interested in a company volunteering to install sensors on test vehicles. J. Carowick requested to be added to the Sub-Team.

ACTION ITEM: H. Hahn will schedule a conference call in the March/April timeframe with the Field Trial Replacement Sub-Team.

7.0 New Business / Open Discussion

7.1 LRI-QPL Submittals – Document Clarity (W. Grubbs)

Since the LRI candidate documents are scanned multiple times, the measured values on the GL Form 2 are not clear when they are submitted for original listings for the J2360 LRI-QPL.

7.2 L33-1 Rating Window – (D.Bell)

There is a need for standard re-rating language, however, we are not sure if it should be included in PD4000, ASTM Method, etc.

7.3 Review of References

T. Muransky made a motion, 2nd by C. Mueller to remove the requirement to review References during the LRI Meetings. The Reference Test Reports will still be required to be posted on the TMC website per meeting number. RGL Forms are no longer required to be submitted to the LRI Review Committee. Motion Approved.

ACTION ITEM: PRI to revise GL Form 0 to remove the Reference Tests at the top of the page.

ACTION ITEM: PRI to review the Gear Lubricant Presenters Billing Form removing the Reference Test Review fee.

7.4 Development of LRI Meeting CDs

Following confirmation that the TMC will have the ability to save LRI Meeting candidate submittals for seven (7) years, PRI will no longer be required to develop CDs of the LRI Meeting documentation.

ACTION ITEM: D. Beck to confirm that TMC has the ability to save the LRI Meeting candidate submittals for seven (7) years.

7.5 Standard Naming of LRI Meeting Documentation on the TMC Website

The LRI Review Committee requested that all postings on the TMC website be standardized and include the LRI Meeting Number / Company's Designated Letters / Individual Program Numbers.

No Reference uploads should be designated as "Initial" (when it is submitted blind) – they should all be listed as "Correction" (following receipt of the oil code from TMC).

ACTION ITEM: The LRI Review Committee to develop a list of required documents to be posted on the TMC website and what is to be provided during the in-person LRI Meetings.

ACTION ITEM: Each Test Station LRI Review Committee Member is to identify what they want included in the documentation that they review during the LRI Meeting. (L-33, L-37, L-42, L-60, Seals)

8.0 Parking Lot

None at this time.

9.0 Adjournment

NOTE: 40-Day Corrections are due to PRI by Tuesday, March 19, 2024.

The next LRI Committee Meeting is scheduled for Thursday, May 9, 2024. A notification will be distributed three (3) weeks prior to that date.

Presenters are requested to provide an expected date of field test completion and presentation to the LRI Committee by contacting the PRI Staff (Wendy Grubbs – wgrubbs@p-r-i.org or 724/772-8647).

Minutes prepared by Wendy Grubbs

***** For PRI Staff use only: ******

Are procedural/form changes required based on changes/actions approved during this meeting? (select one)

YES* ☒ NO ☐

*If yes, the following information is required:

Documents requiring revision:	Who is responsible:	Due date:
GL Form 0	**PRI**	**February 28, 2024**
Gear Lubricant Presenters Billing Form	**PRI**	**February 28, 2024**