

August 6, 2005

Reply to:

Donald T. Bartlett

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ASTM D02.B0.03 L-37 Surveillance Panel

Members and Guests:

Attached for your review and comment are the unconfirmed minutes of the June 15th, 2005 L-37 Surveillance Panel Meeting held at the PRI Headquarters in Warrendale, PA. Please direct any corrections or comments to my attention.

Sincerely,



Donald T. Bartlett, Chairman

L-37 Surveillance Panel

Attachments

**Report of Meeting**  
**L-37 Surveillance Panel**  
**PRI Headquarters, Apollo Room, Warrendale, Pa.**  
**June 15, 2005**

Sign-in/Review of Membership: The meeting was called to order at 08:06 a.m. The sign-in sheet is *Attachment 1*. There were no membership changes to report and is included as *Attachment 2*.

Meeting Agenda: The meeting agenda was reviewed and is included as *Attachment 3*.

Approval of Meeting Minutes:

**Motion 1** ⇒ **Mr. Koehler, Second** ⇒ **Mr. Koglin** -- The panel approved the April 6, 2005 Surveillance Panel meeting minutes, April 21, 2005 teleconference, and May 18, 2005 Panel teleconference meeting minutes with no corrections. The motion to approve the minutes was unanimous.

Summary of Meeting Discussions

2003 L247/T758A Lubrited Matrix -

The Panel, at the April Panel meeting, approved conducting Phase 6 of this hardware test matrix (low temperature testing plan). The three labs (Afton, PARC, and Lubrizol) that participated in the hardware purchase agreed to conduct 2 tests each (1 test on TMC 152 and 153). *Attachment 4* details a summary of 2005 activity to this point.

Mr. Lind reviewed the Phase 6 data generated to date and is included as *Attachment 5*. Five tests have completed to date with one more to be run by lab D. One test was technically invalid because it was stopped 1 minute short of the procedure requirement due to a facility wide power failure). However, the data was included for this presentation because it was felt that shorting the test time by 1 minute would not have changed the outcome of the test. Lab D has yet to finish their final test. Out of the 5 tests, 3 of them would have failed based on the pass/fail criteria. Mr. Koglin asked about the range of Pitting/Spalling values observed in the standard L-37 test matrix. The chairman reported that Pitting/Spalling on the Standard matrix tests failed 4 out of 16 runs.

Options included:

- Run more tests to confirm magnitude of correction factor options.
- Do not approve the hardware for Canadian testing.
- Approve the hardware for use in Canadian testing knowing that formulators might have to run more candidates to get a pass.

**Motion 2** ⇒ **Mr. Gropp, Second** ⇒ **Mr. Buitrago** -- Labs B, D, and E to run 2 additional tests each on TMC 152 and TMC 153. The testing is to be completed by next LRI.

Labs have minimal hardware left. Mr. Koglin cited that Afton ordered 75 axles and cannot commit to running more donated tests. The chairman reported that the three labs have donated a total of 38 tests, approximately 13 tests per lab. After much discussion, it was determined that the motion essentially failed, no votes in favor, none opposed, and 4 abstentions.

**Motion 3** ⇒ **Chris Schenkenberger**, **Second** ⇒ **Mr. Buitrago** -- Using L247/T758A lubrited hardware provided by Lubrizol, Lab B, D, and E to run 2 additional tests on TMC 152 and 2 additional tests on TMC 153. The testing is to be completed and reported by Friday August 12<sup>th</sup>, 2005 for review and action at the August 24<sup>th</sup> L37 Panel meeting. The motion passed with 3 votes in favor, none opposed, and 2 abstentions.

The goal of the panel is to have 9 tests on each oil that would then be satisfactory to develop correction factors.

It was suggested that we ask the raters to take another look at the gears (rate for consensus) because of a concern that there are lab-to-lab variations. Mr. Koglin suggested that we send the existing 5 tests from Phase 6 of this matrix to the July rating workshop. The raters would rate both ring and pinions for all distresses. Mr. Lind confirmed that there would be time for the raters to perform the rating task on the gears on the 1<sup>st</sup> day of the workshop.

**Motion 4** ⇒ **Cory Koglin**, **Second** ⇒ **Chris Schenkenberger** -- The 5 gear sets (ring/pinion) from L247/T758A matrix, Phase 6, be sent to the July 2005 rating workshop for consensus ratings. All distresses on both ring and pinions to be rated. The motion passed with 4 votes in favor, none opposed, and 1 abstention.

Note: Gears should be sent ASAP to the attention of Brian Koehler at SwRI.

### 2005 Non-Lubrited Hardware Order -

The Chairman provided an update to the panel on the order status and is included as attachment 6. Dana intends to build out the gears and deliver by the end of 2005. We are still waiting word on the new Dana representative to the ASTM surveillance panels as the Dana Corporation phasing out of the Statesville facility is still not fully defined. The chairman will provide more information when it becomes available.

New Business: None at this time.

The meeting was adjourned at 9:15 (Mr. Smith motion/second Mr. Koglin).

Respectfully submitted,

Donald T. Bartlett  
L-37 Surveillance Panel Chairman

# ASTM L-37 Surveillance Panel Membership/Mailing List

Meeting Date: June 15, 2005


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	Bryson, Tom	Voting	Mack Trucks 13302 Pennsylvania Avenue Hagerstown, Maryland 21740	Phone: 301-790-6744 Fax: 301-790-5605 E-Mail: thomas.bryson@volvo.com
<i>JAB</i>	Buitrago, Juan	Voting	Chevron Oronite Company 100 Chevron Way Richmond, California 94802	Phone: 510-242-1161 Fax: 510-242-3392 E-Mail: jabu@chevrontexaco.com

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\* Initial to indicate attendance at subject meeting

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	Huron, John	Non Voting	Chevron Oronite Company LLC Suite 210 San Antonio, Texas 78228-1374	Fax: 210 731 5699 E-Mail: HURO@chevrontexaco.com Phone: 210-522-3588
<i>BK</i>	Koehler, Brian	Voting	Southwest Research Institute PO Drawer 28510 San Antonio, Texas 78228-0510	Fax: 210-684-7523 E-Mail: bkoehler@swri.edu Phone: 804-788-5305
<i>C.K.</i>	Koglin, Cory	Voting	Afton Chemical 500 Spring Street Richmond, VA 23218	Fax: 804-788-6358 E-Mail: Cory.Koglin@affonchemical.com

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	Purnell, Keith	Non Voting	Performance Review Institute 161 Thornhill Rd. Warrendale, Pa. 15086-7527	Phone: 724-772-1616 ext 8182 Fax: 724-772-1699 E-Mail: kpurnell@sae.org
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	Okamuro, Ken	Voting	Dana Corporation 1293 Glenway Drive Statesville, NC 28677	E-Mail: Kenny.miller@dana.com Phone: 704-878-5642 Fax: 704-878-5735
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	Zakarjian, Jack	Non Voting	Chevron Products 100 Chevron Way Richmond, CA 94802	Phone: 510-242-3595 Fax: 510-242-3758 E-Mail: jaza@chevron.com
	Zreik, Khaled A.	Voting	AMSTA-TR-D/210 Tank Automotive & Armament 6501 East 11 Mile road Warren, MI 48397-5000	Phone: 586-574-4227 Fax: 586-574-4244 E-Mail: Zreikk@tacom.army.mil

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				Phone: Fax: E-Mail: Phone: Fax: E-Mail:

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## L-37 Surveillance Panel Voting Members

Donald Bartlett	The Lubrizol Corporation (Chairman)
Tom Bryson	Volvo Powertrain Corporation
Juan Buitrago	Chevron Oronite Company
John Dharte	American Axle & Manufacturing
Brian Koehler	Southwest Research Institute
Cory Koglin	Afton Chemical Company
Don Lind	ASTM Test Monitoring Center
Jim Linden	GMR Research and Development
Thelma Marougy	Eaton Corporation
Bruce McGlone	ArvinMeritor Materials Engineering
Ken Okamuro	Dana Corporation
Dale Smith	PARC Technical Services
William Sullivan	ExxonMobil Chemical Company
Paula Vettel	D.A. Stuart Company
Khaled A. Zreik	AMSTA-TR-D/210 US Army Tacom-Tardec

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## Agenda

- Call to Order/Review Membership
- Review Agenda
- Approval of Minutes:
  - April 6, 2005 Panel Meeting
  - April 21, 2005 Panel Telecom Meeting
  - May 18, 2005 Panel Telecom Meeting
- 2003 L247/T758A Lubrited Hardware Low Temperature Matrix Review
- 2005 Non-Lubrited Hardware Update
- New Business
- Adjournment

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## 2003 L247/T758A Lubrited Hardware Recap

- Phase 4 & 5 testing Completed 2nd qtr 2005.
- April 21, 2005 – Panel Teleconference Call.
  - Panel approved hardware Reference targets and bands.
  - Panel approved hardware for D 6121 Standard testing approvals only.

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## 2003 L247/T758A Lubrited Hardware Discussion (cont)

- Approved Phase 6 Test Matrix.
- Low temperature Testing Plan.
- *Three* ~~Four~~ labs to conduct two tests each.
- 1 test each on TMC 152 and 153 .
- Review at June 2005 LRI.
- TMC Presentation of Low Temperature Data.

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## 2003 L247/T758A Lubrited Hardware Discussion (cont)

- Where does the Panel chose to go from here with respect to Low Temperature testing approval?

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LUBRITED HARDWARE  
 GEAR BATCH L247/T758A  
 LOW TEMPERATURE

CMIR	Lab	STD	Run	Oil	PINBAT	RINGBAT	DTCOMP	Pwear	Pridg	Pripp	Pspit	Rwear	Rridg	Rripp	Rspit	frcrat	lpcrat
53541	B	191	2107	152	L247	T758A	20050317	5	6	8	8	7	7	9	9.4	0	2
53544	B	191	2109	153	L247	T758A	20050319	6	8	7	8	8	9	10	9.9	1	2
53461	E	2	112	152	L247	T758A	20050426	6	7	9	8	7	8	9	9.8	0	2
53465	E	2	113	153	L247	T758A	20050427	.6	9	8	9.6	7	9	9	9.9	0	2
53530 *	D	3A	355	152	L247	T758A	20050604	6	8	9	9.8	9	9	10	9.9	0	3

\* This test was invalid as it did not complete the required procedural test time

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## 2005 Non-Lubrited Hardware Order Update

- April 21, 2005 Panel Teleconference Call.
- The axles are going to cost \$ 883.00 each and have taken into account steel prices as of the April 12th date.
- Binding PO's were issued May 5th, 2005.
- After discussion and clarification, the panel consensus was that we felt comfortable with the 8620 primary steel. The panel will be advised if the primary steel cannot be obtained.

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