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**Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS**

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August 22<sup>th</sup>, 2016

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ASTM D02.B0.03 L-42 Surveillance Panel  
Members and Guests:

Attached for your review and comment are the unconfirmed minutes of the:

**August 10<sup>th</sup>, 2016 Surveillance Panel Meeting (PRI – Warrendale, PA)**

Please direct any corrections or comments to my attention.

Very Respectfully,

Eric Donovan, Chairman  
L-42 Surveillance Panel

L-42 Surveillance Panel Meeting Minutes

PRI – Warrendale, PA

August 10, 2016

**Attendees:** voting members in **bold**, \* indicates called in via teleconference

<b>R. Banas (XOM)</b>	B. Dwornick (US Army)	<b>T. Muransky (Meritor)</b>
D. Bell (Afton)	B. Foecking (LZ)	<b>S. Parke (TMC)</b>
B. Bubonic (LZ)	T. Joy (BASF)	<b>D. Smith (Intertek)</b>
<b>A. Comfort (US Army)</b>	B. Kearney (Afton)	<b>M. Umerley (LZ)</b>
<b>J. Dharte (AAM)</b>	M. Keisler (Afton)	W. Venhoff (LZ)
<b>E. Donovan (Afton/C)</b>	V. Marsic (LZ)	<b>R. Warden (SwRI)</b>
*K. Duho (Valvoline)	J. Milner (Tianhe Chemical)	

**Call to Order**

**Review of Agenda**

The meeting agenda is attached.

**Review of Membership**

No changes to the current membership list.

**Approval of Meeting Minutes**

Meeting minutes for approval:

- "20160511\_SP" → May 11, 2016 – Troy, MI

Motion by J. Dharte, second by M. Umerley to approve meeting minutes as presented. Unanimous approval, no abstentions.

**L-42 Hardware – Thinking Ahead**

E. Donovan asked the labs about current hardware inventory. All labs stated they are OK with current inventory and it was agreed to hold off on starting the process for a new Dana hardware batch. The group will review hardware inventory status for each lab and each future meeting to determine when to start the process.

**L-42-1 Development**

E. Donovan described Afton's first two L-42-1 runs, one passing and one failing reference oil run. Data from a recent L-42 reference run was used for setpoints as previously stated for L-42-1 shakedown runs. Shock 2 torques were lower than what they should have been but the final scoring rating for each run fell in line with the L-42 reference runs considering the torque difference.

Continued discussion was had about simplifying the test profile now that the fired engine and springs are removed from the apparatus. Afton to continue research and testing when rig time is available.

**New/Open Issues**

No new or open issues were discussed.

**Adjournment**

Motion by D. Smith, second by J. Dharte. All in favor.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'E. Donovan', written over a horizontal line.

Eric Donovan

L-42 Surveillance Panel Chairman



## L-42 Surveillance Panel Meeting

Performance Review Institute

Warrendale, PA

August 10, 2016

11:00 am - 12:00 pm

Passion for Solutions™

# Agenda

- 📌 Call to Order
- 📌 Agenda
- 📌 Membership Review & Update
- 📌 Approval of Meeting Minutes
- 📌 L-42 Hardware – Thinking Ahead
- 📌 L-42-1 Development
- 📌 New/Open Issues
- 📌 Adjournment

## L-42 SP Voting Members

-  Rob Banas - ExxonMobil
-  Allen Comfort – US Army
-  John Dharte – AAM
-  Eric Donovan – Afton Chemical (Chair)
-  Troy Muransky – Meritor
-  Scott Parke – TMC
-  Dale Smith – Intertek
-  Matt Umerley– Lubrizol
-  Rebecca Warden – SwRI

# Approval of Meeting Minutes

## **SP Meeting Minutes**

- ▲ “20160511\_SP” → May 11, 2016 – Troy, MI

## L-42-1 Hardware – Thinking Ahead

- 📌 **May 2016 – the group agreed the best idea is to continue with Dana hardware until L-42-1 is complete**
- 📌 **When do we want to start the process for the next batch of hardware?**

## L-42-1 Development

- 📈 Electric T-rig (input and outputs)
- 📈 Dana 44 mounted without springs
- 📈 Data from L-42 run was used to create 100 Hz setpoints for initial L-42-1 testing
- 📈 Goal is to have the rig follow L-42 setpoints first then use mathematical model for setpoints

# L-42-1– Run 4-236 (TMC 117)

**Test Method D7452  
L-42  
Form 1  
Test Result Summary**

Lab: EV	Stand No.: 4	Stand Run No.: 236	TMC Oil Code (reference only): 117
Oil Code: 112374			Lab Oil Code: EV 449

Test Date Started	Test Date Completed	Drive Side Scoring (%)		Coast Side Scoring (%)			Coast Side Torque (lbf-ft)	
		EOT Pinion	EOT Ring	EOT Pinion	EOT Ring	Shock Series 1 Ring	Shock Series 1 (Average)	Shock Series 2 (Average)
20160526	20160526	0	0	18	8	0	-75.3	-231.5
Conditioning 2 Test Time: 3.2		Conditioning 4 Test Time: 2.4		End of Test Time: 15:07		Total Test Minutes: 71		
Ring Batch: P8AD078X		Pinion Batch: C1L925		Latest Information Letter Run Against:		15-2		

Stand Reference Oil Test History In Chronological Order												
	Test Date Started	Test Date Completed	Stand Run No.	CMIR No.	TMC Oil No.	Drive Side Scoring (%)		Coast Side Scoring (%)			Coast Side Torque (lbf-ft)	
						EOT Pinion	EOT Ring	EOT Pinion	EOT Ring	Shock Series 1 Ring	Shock Series 1 (Average)	Shock Series 2 (Average)
Discrimination <sup>A</sup>												
Calibration Sequence Passing Tests Only <sup>B</sup>	20160506	20160506	2A-1642	112373	117	0	0	24	14	0	-80.2	-338.2
<b>Passing Reference Oil Test Average</b>								24	14	0	-80.2	-338.2

# L-42-1– Run 4-236 (TMC 117)

Test Number:	236	Date Completed:	20160602
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# L-42-1– Run 4-237 (TMC 113)

**Test Method D7452  
L-42  
Form 1  
Test Result Summary**

Lab: EV	Stand No.: 4	Stand Run No.: 237	TMC Oil Code (reference only): 113
Oil Code: 109023			Lab Oil Code: EV 448

Test Date Started	Test Date Completed	Drive Side Scoring (%)		Coast Side Scoring (%)			Coast Side Torque (lbf-ft)	
		EOT Pinion	EOT Ring	EOT Pinion	EOT Ring	Shock Series 1 Ring	Shock Series 1 (Average)	Shock Series 2 (Average)
20160531	20160531	0	0	64	47	0	-75.5	-225.0
Conditioning 2 Test Time: 3.2		Conditioning 4 Test Time: 2.4		End of Test Time: 16:56		Total Test Minutes: 69		
Ring Batch: P8AD078X		Pinion Batch: C1L925		Latest Information Letter Run Against:			15-2	

Stand Reference Oil Test History In Chronological Order												
	Test Date Started	Test Date Completed	Stand Run No.	CMIR No.	TMC Oil No.	Drive Side Scoring (%)		Coast Side Scoring (%)			Coast Side Torque (lbf-ft)	
						EOT Pinion	EOT Ring	EOT Pinion	EOT Ring	Shock Series 1 Ring	Shock Series 1 (Average)	Shock Series 2 (Average)
Discrimination <sup>A</sup>												
Calibration Sequence Passing Tests Only <sup>B</sup>	20160506	20160506	2A-1642	112373	117	0	0	24	14	0	-80.2	-338.2
<b>Passing Reference Oil Test Average</b>								24	14	0	-80.2	-338.2

# L-42-1– Run 4-237 (TMC 113)

Test Number:	237	Date Completed:	20160602
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# New/Open Issues

Thanks!



*Passion for Solutions™*

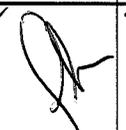
**L-42 Surveillance Panel Membership/Attendance  
Performance Review Institute - Warrendale, PA  
August 10, 2016**

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			5404 Bandera Rd. San Antonio, TX 78238	E-mail:	<a href="mailto:tony.barrera@intertek.com">tony.barrera@intertek.com</a>
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			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	<a href="mailto:loif@lubrizol.com">loif@lubrizol.com</a>
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				Phone:	
				E-mail:	
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