

L-42 Surveillance Panel Meeting Minutes

Intertek PSI, Plymouth, MI and Virtual Meeting – Microsoft Teams

May 13, 2026

Attendees: voting members in **bold**, * indicates virtual attendance

A. Arnold (Lubrizol)	D. Horvath (Afton)	N. Schaup (LZ)
D. Beck (TMC)	J. Janca (Lubrizol)	A. Schweitzer (Shell)
D. Bell (Afton)	S. Jetter (Exxon Mobil)	A. Smith (Infineum)
T. Bender (Fuchs)	A. Lange (SwRI)	B. Transue (TMC)
M. Burgman (Fuchs)	C. McCollum (Richful) *	C. Vander Wal (Daimler Truck)
B. Campbell (Afton)	J. Morris (Int'l Motors)	W. Venhoff (TMC)
M. Caridi (BASF)	D. Moser (BASF)	R. Warden (Chevron Oronite)
H. Catania (Cummins)	T. Muransky (Dauch)*	J. Westmoreland (LZ)
F. Finzenhagen (Fuchs SE)	R. Murray (IAR)	P. Wright (SwRI)
T. Gibson (Dana)	G. Parker (Lubrizol)	
J. Grewe (LZ)	M. Portell (IAR)	
A. Goyal (BASF)	M. Sangpeal (Afton/C)	

Call to Order

Review of Agenda

The meeting agenda is attached.

Review of Membership

Changes to voting member list: Replace W. Venhoff with B. Transue (TMC)

Approval of Meeting Minutes

Meeting minutes for approval:

- ▲ "20260211_SP" → February 11, 2026 – Surveillance Panel Meeting – Plymouth, MI

A motion was made to approve the meeting minutes as presented.

Motion: N. Schaup

Second: A. Lange

All in favor, no objections, no abstentions.

Action Item Review

Action items from November:

- Next-Gen L-42 Test Hardware
 - ▲ T. Gibson to update SP when more information becomes available
 - Status: Ongoing
- Referencing Requirement Clarification
 - ▲ W. Venhoff to share edits to Section 9 of D7452 and the reference requirements table during L-42-1 conf. call
 - Status: Ongoing
- L-42-1 Development
 - ▲ M. Sangpeal to schedule conference call to share edits of L-42-1 procedure within two weeks
 - Status: Ongoing

Next-Gen L-42 Test Hardware

There is a new contact at Dana Off Highway: Zach Heisey. Lou Pappademos (Sr. Gear Engineer, Dana) provided an update via email prior to the meeting:

1. I need to adjust the topography of the FH design to match the sliding velocity of the current 044GA103x.
 - a. It looks like I should adjust the toe/heel position of the drive tooth contact pattern also.
2. Overlay of the new pinion to the current pinion forging indicates that it will fit the current forging.
3. I had an overlay done for the new ring gear to a number of different forgings; unfortunately, the forging that was used for this last batch was not one of them. I will submit an EWO to design for an overlay with this forging to determine if it will fit.
4. The pinion forging was made by a vendor that we no longer have a contract with. Sourcing may be an issue.

I will provide you with an update as soon as I have the design issues completed.

Dana is checking to see where the remaining forgings from the previous order are currently located.

Action Item: T. Gibson to set up conference call to discuss next steps.

Referencing Requirement Clarification

A conference call was held on 3/4/26 to discuss edits to Section 9 of D7452. W. Venhoff is finalizing the details and the final version will be distributed to the SP via email. Panel members will be able to comment, and then an email vote will be issued to approve the changes.

Action Item: W. Venhoff to finalize changes to Section 9.

L-42-1 Development

A conference call was held on 3/4/26 to discuss progress on the L-42-1 procedure drafting (see attached slide for details). M. Sangpeal will complete the document and then distribute it to the SP for edits and comments.

Action Item: M. Sangpeal to complete L-42-1 procedure draft and distribute to SP via email.

Call for New Reference Oil

M. Sangpeal presented data on a potential new hi-reference oil for L-42. Three tests were conducted at two different labs. Performance is comparable to TMC 117 without using correction factors. A request was made of the supplier to provide three drums of the new oil to TMC. The supplier confirmed that raw material supply will not be an issue. TMC will then perform QC checks and blind-code the oil before distributing it to labs for further testing.

The request remains open to lubricant suppliers to develop a new high reference oil for L-42 testing. Any interested lubricant supplier can contact the TMC directly. The new oil should produce equivalent performance to TMC 117 without the use of any correction factors.

Action Item: M. Sangpeal will send out a separate email to the D7452 distribution list requesting submissions for a new reference oil.

New/Open Business

None.

Adjournment

A motion was made to adjourn.

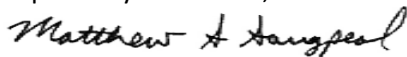
Motion: R. Warden

Second: N. Schaup

All in favor, no objections, no abstentions.

Meeting adjourned.

Respectfully submitted,



Matt Sangpeal

L-42 Surveillance Panel Chairman



L-42 Surveillance Panel Meeting

ASTM D7452

Intertek PSI

Plymouth Township, MI

May 13, 2026

11:00 AM – 12:00 PM EST

Passion for Solutions™

Agenda

- 📈 Call to Order
- 📈 Agenda
- 📈 Membership Review & Update
- 📈 Approval of Meeting Minutes
 - ▲ “20260211 SP” – Intertek PSI, Plymouth, MI
- 📈 Action Item Review
- 📈 Next-Gen L-42 Test Hardware Update
- 📈 Referencing Requirements Clarification
- 📈 L-42-1 Development Updates
- 📈 Call for New Reference Oil
- 📈 New Issues
- 📈 Adjournment

L-42 SP Voting Members

 Steve Jetter:	Exxon Mobil
 Wes Venhoff: Brad Transue	TMC
 Allen Comfort:	US Army
 M. Caridi:	BASF
 Troy Muransky:	Dauch
 Jessica Carowick:	Cummins
 Matt Sangpeal:	Afton Chemical (Chair)
 Nick Schaup:	Lubrizol
 Reagan Murray:	Intertek
 Payton Wright:	SwRI
 Trevor Gibson:	Dana
 Rebecca Warden:	Chevron-Oronite
 Andrew Smith:	Infineum
 Camden Vander Wal:	Daimler Truck
 Addison Schweitzer:	Shell
 Clarence McCollum:	Richful

Approval of Meeting Minutes

SP Meeting Minutes

- ▲ “20260211 SP” → February 11, 2026 – Surveillance Panel Meeting - Intertek PSI, Plymouth, MI and Virtual Meeting via Microsoft Teams

Motion to Approve Meeting Minutes as they stand.

Action Item Review

Next-Gen L-42 Test Hardware

- ▲ T. Gibson to update SP when more information becomes available

L-42-1 Development

- ▲ M. Sangpeal to schedule conference call to share edits of L-42-1 procedure within two weeks

Referencing Requirements Clarification

- ▲ W. Venhoff to share edits to Section 9 of D7452 and the reference requirements table during L-42-1 conf. call

Next-Gen L-42 Hardware Update

New contact for Off Highway Axles

▲ Zack Heisey

Design changes needed per Lou Pappademos:

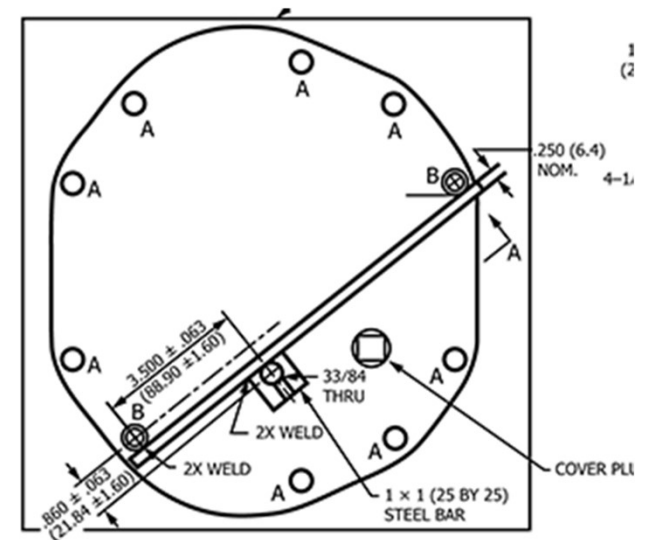
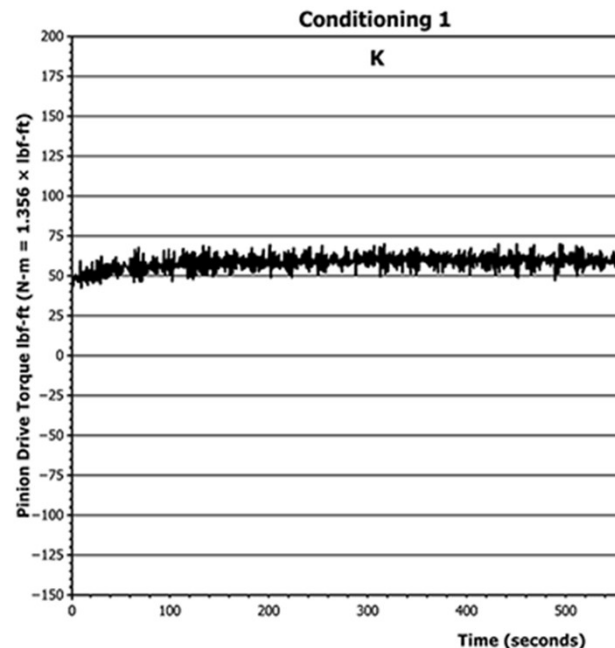
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3. I had an overlay done for the new ring gear to a number of different forgings; unfortunately, the forging that was used for this last batch was not one of them. I will submit an EWO to design for an overlay with this forging to determine if it will fit.
4. The pinion forging was made by a vendor that we no longer have a contract with. Sourcing may be an issue.

Reference Requirement Clarification

- Section 9 edits underway
- Reviewed progress during Conf. Call on 3/4/26
- Final version will be distributed via email
- Email vote to approve

L-42-1 Development Updates – Procedure Drafting

- 📌 First draft edit meeting held 3/4/26
- 📌 Rework to create L-42-1 version underway
 - ▶ Imperial to SI units
 - ▶ Driveshaft Torque Meter verbiage generalized
 - ▶ Load absorber vs. Dyno description generalization
 - ▶ Figures to be move to TMC Database



Passion for Solutions™

Call for New Reference Oil

- ▲ **A request is being made to lubricant suppliers to develop a new high reference oil for L-42 testing.**
 - ▲ Any interested lubricant supplier can contact the TMC directly
- ▲ **The new oil should produce equivalent performance to TMC 117 without the use of any correction factors.**
 - ▲ TMC 117 Correction Factors:
 - R: 4 P: 6
 - ▲ TMC 117 Targets:
 - Mean: 23 Std. Dev: 5.49
 - Low: 13 High: 32

Potential New Reference Oil

Reference 'Candidate' run at two different labs

▲ Lab 1, Run 1*:

Coast Side % Scoring			Coast Side Torque (lbf-ft)			
EOT Pinion	EOT Ring	Shock Series 1 Ring	Shock Series 1 (Average)	Shock Series 2 (Average)		
15	6	0	-106.4	-419.1		
Average for Passing Reference Oil Tests		16	9	0	-97.3	-373.5

▲ Lab 2, Run 1:

Coast Side Scoring (%)			Coast Side Torque (lbf-ft)			
EOT Pinion	EOT Ring	Shock Series 1 Ring	Shock Series 1 (Average)	Shock Series 2 (Average)		
24	15	0.0	-86.5	-364.2		
Passing Reference Oil Test Average		20	11	0	-75.3	-363.0

▲ Lab 2, Run 2:

Coast Side Scoring (%)			Coast Side Torque (lbf-ft)			
EOT Pinion	EOT Ring	Shock Series 1 Ring	Shock Series 1 (Average)	Shock Series 2 (Average)		
24	11	0	-65.0	-340.4		
Passing Reference Oil Test Average		22	16	0	-70.3	-354.9

* Invalid for S2 torque too high

New Issues



Motion to Adjourn

Thanks!

**L-42 Surveillance Panel Membership/Attendance
Intertek PSI, Plymouth, MI and Microsoft Teams Virtual Meeting
May 13, 2026**

Present	Name	Voting Non-Voting	Company Name Company Address	Contact information	
				Phone:	E-mail:
	Aguirre, Nancy	NV	Intertek Automotive Research 5404 Bandera Rd. San Antonio, TX 78238		nancy.aguirre@intertek.com
AA	Arnold, Alex	NV	Lubrizol	630-561-0634	alexander.arnold@lubrizol.com
	Baldriga, Anthony	NW	Chrysan Industries 14707 Keel St, Plymouth MI	248-720-9503	abaldriga@chrysanindustries.com
DB	Beck, Dylan	NV	ASTM Test Monitoring Center 203 Armstrong Drive Freeport, PA 16229	724-355-1854	djb@astmtmc.org
DB	Bell, Don	NV	Afton Chemical 500 Spring St. Richmond, VA 23219	804-788-6332	don.bell@aftonchemical.com

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Present	Name	Voting Non-Voting	Company Name Company Address	Contact information
TB	Bender, Tobias	NV	Fuchs Lubricants 17050 Lathrop Ave Harvey, IL 60426	Phone: 708-737-1681 E-mail: Tobias.Bender@fuchs.com
MB	Burgman, Maxim	NV	Fuchs Lubricants 17050 Lathrop Ave Harvey, IL 60426	Phone: 248-846-3120 E-mail: maxim.burgman@fuchs.com
BC	Campbell, Bob	NV	Afton Chemical 500 Spring St. Richmond, VA 23219	Phone: 804-788-5340 E-mail: Bob.Campbell@aftonchemical.com
MC	Caridi, Margaret	NV	BASF 500 White Plains Rd Tarrytown, NY 10591	Phone: 914-785-2336 E-mail: margaret.caridi@basf.com
	Carowick, Jessica	V	Cummins 2135 W. Maple Rd Troy, MI 48084	Phone: 248-872-3055 E-mail: Jessica.Carowick@cummins.com


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Present	Name	Voting Non-Voting	Company Name Company Address	Contact information
AC	Catania, Hailey	NV	Cummins-Meritor	Phone: 248-821-9862
			2135 W. Maple Rd Troy, MI 48084	E-mail: Hailey.Catania@cummins.com
	Cereghino, Brian	NV	IPAC Inc.	Phone:
			E-mail: bcereghino@ipac-inc.com	
	Charron, Michael	NV	Southwest Research Institute	Phone: 832-444-2180
			6220 Culebra Rd. San Antonio, TX 78238	E-mail: michael.charron@swri.org
	Clark, Jeff	NV	ASTM Test Monitoring Center	Phone: 412-365-1032
			203 Armstrong Drive Freeport, PA 16229	E-mail: jac@astmtmc.org
	Comfort, Allen	V	US Army DEVCOM	Phone: 586-282-4225
			E-mail: allen.s.comfort.civ@army.mil	



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	De La Fuente, Hector	NV	Chevron Oronite	Phone:	210-867-8612
				E-mail:	hdelafuente@chevron.com
	Fry, Enia	NV	Daimler Truck	Phone:	313-802-2835
				E-mail:	enia.fry@daimlertruck.com
<i>TG</i>	Gibson, Trevor	V	Dana Incorporated 3939 Technology Dr Maumee, OH 43537	Phone:	419-386-9783
				E-mail:	trevor.gibson@dana.com
<i>JG</i>	Grewe, Jake	NV	The Lubrizol Corporation	Phone:	
				E-mail:	Jake.Grewe@Lubrizol.com
<i>Arjun</i>	Goyal, Arjun	V	BASF 500 White Plains Rd Tarrytown, NY 10591	Phone:	914-785-2083
				E-mail:	arjun.goyal@basf.com <i>Arjun Goyal 1946@gmail.com</i>

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	Hahn, Hyeok	NV	Chevron Oronite	Phone: 408-507-2848	E-mail: hyeok.hahn@chevron.com
	Haynes, Troy	NV	IPAC Inc.	Phone:	E-mail: thaynes@ipac-inc.com
	Horvath, Dan	NV	Afton Chemical 2000 Town Center, Suite 1160 Southfield, MI 48075	Phone: 248-514-2551	E-mail: dan.horvath@aftonchemical.com
	Hunt, Zach	NW	VBASE Oil Company 657 S. Mechanic St Pendleton, SC 29670	Phone: 864-502-2321 x 226	E-mail: hunt@vbaseoil.com
	Janca, Justin	NV	Lubrizol	Phone: 216-789-5073	E-mail: justin.janca@lubrizol.com


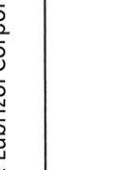

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Present	Name	Voting Non-Voting	Company Name Company Address	Contact information
	Jetter, Steve	V	Exxon Mobil 245 Hickory Corner RD East Windsor, NJ 08520	Phone: 848-214-3869 E-mail: steven.m.jetter@exxonmobil.com
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	Joy, Tisha	NV	BASF	Phone: 914-785-2206 E-mail: tisha.joy@basf.com
	Kostan, Travis	NV	Southwest Research Institute	Phone: 210.522.2407 E-mail: travis.kostan@swri.org
	Lange, Anthony	NV	Southwest Research Institute 6220 Culebra Rd. San Antonio, TX 78238	Phone: 210.522.2671 E-mail: anthony.lange@swri.org



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	McCollum, Clarence	V	Richful Xinxiang, China	Phone: 313-378-8643 E-mail: clarence.mccollum@richful.com
	Morris, Jeanelle	NV	International Motors, LLC 2701 International Dr Lisle, IL 60532	Phone: 331-332-1661 E-mail: jeanelle.morris@basf.com <i>International-Com</i>
	Mosher, Donna	NV	BASF 100 Park Ave Florham Park, NJ 07932	Phone: 269-217-1715 E-mail: donna.mosher@basf.com
	Murray, Reagan	V	Intertek Automotive Research 5404 Bandera Rd. San Antonio, TX 78238	Phone: 210-818-1847 E-mail: Reagan.Murray@intertek.com
	Muransky, Troy	V	Dauch 1840 Holbrook Ave Detroit, MI 48212	Phone: 734-564-8406 E-mail: troy.muransky@aam.com






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	Parker, Garrett	NV	The Lubrizol Corporation	Phone: 440.227.8017 E-mail: garrett.parker@lubrizol.com
	Portell, Micheal	NV	Intertek Automotive Research 5404 Bandera Rd. San Antonio, TX 78238	Phone: 210-896-8012 E-mail: micheal.portell@intetek.com
	Sangpeal, Matt	V/Chair	Afton Chemical 500 Spring St. Richmond, VA 23219	Phone: 804-788-5364 E-mail: matt.sangpeal@aftonchemical.com
	Schaup, Nick	V	The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, OH 44092	Phone: 616-710-2546 E-mail: Nick.Schaup@Lubrizol.com
	Schweitzer, Addison	V	Shell	Phone: 346-549-2481 E-mail: Addison.Schweitzer@shell.com

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	Smith, Andrew	V	Infineum	Phone: 210-823-8501 E-mail: andrew.smith@infineum.com
	Streck, Kevin	NW	BP Castrol	Phone: 440-424-1751 E-mail: Kevin.Streck@bp.com
	Thrash, Steven	NV	US Army	Phone: E-mail: steven.i.thrash@army.mil
	Transue, Brad	NV	ASTM Test Monitoring Center 203 Armstrong Drive Freeport, PA 16229	Phone: E-mail: bpt@astmtmc.org
	Uy, Dairene	NV	Shell	Phone: 281-544-6781 E-mail: dairene.uy@shell.com

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	Vander Wal, Camden	V	Daimler Truck / Detroit Diesel 13400 Outer Dr West Redford, MI 48239	Phone: 616-431-1836 E-mail: camden.vander_wal@daimlertruck.com
	Venhoff, Wes	V	ASTM Test Monitoring Center 203 Armstrong Drive Freeport, PA 16229	Phone: E-mail: wvv@astmtmc.org
	Warden, Rebecca	V	Chevron Oronite 4502 Centerview, Suite 210 San Antonio, TX 78228	Phone: 830-865-6771 E-mail: Rebecca.Warden@chevron.com
	Westmoreland, Jonathan	NV	The Lubrizol Corporation	Phone: 440-336-6947 E-mail: Jonathan.Westmoreland@Lubrizol.com
	Wright, Payton	V	Southwest Research Institute 6220 Culebra Rd San Antonio, TX 78238	Phone: 210-522-2895 E-mail: Payton.Wright@swri.org

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	Yucebiligic, Fatih	NV	Fuchs Lubricants 17050 Lathrop Ave Harvey, IL 60426	Phone: 708-539-0252 E-mail: fatih.yucebiligic@fuchs.com
	Zarins, George	NV	Dauch 1840 Holbrook Detroit, MI	Phone: 586-854-8810 E-mail: george.zarins@aam.com
	Zreik, Khaled	NV	General Motors 823 Joslyn Ave Pontiac, MI 48340-2925	Phone: 248-977-9214 E-mail: khaled.zreik@gm.com
	Finzenhagen Frank	NV	FUCHS SE Einsteinstrasse 11 68169 Mannheim	Phone: +49 170 605 9610 E-mail: Frank.Finzenhagen@Fuchs.com
				Phone: E-mail:

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