



**Address** 100 Barr Harbor Drive  
PO Box C700  
W. Conshohocken, PA  
19428-2959 | USA

**Phone** 610.832.9500  
**Fax** 610.832.9666  
**Web** [www.astm.org](http://www.astm.org)

---

**Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS**

*Chairman:* KENNETH O. HENDERSON, Cannon Instrument Co., 2139 High Tech Road, State College, PA 16803, (814) 353-8000, Fax: (814) 353-8007, e-mail: [kenohenderson@worldnet.att.net](mailto:kenohenderson@worldnet.att.net)  
*First Vice-Chairman:* BEN R. BONAZZA, TI Group Automotive Systems, Caro Research Center, 326 Green Street, Caro, MI, 48723 (989) 673-8181 ext. 227, Fax: (989) 673-3241, e-mail: [bbonazza@us.tiauto.com](mailto:bbonazza@us.tiauto.com)  
*Second Vice-Chairman:* JANET L. LANE, ExxonMobil Research & Engrg., 600 Billingsport Rd, Paulsboro, NJ 08066-0480 (856) 224-3302, Fax: (856) 224-3616, e-mail: [janet.l.lane@exxonmobil.com](mailto:janet.l.lane@exxonmobil.com)  
*First Secretary:* RALPH A. CHERRILLO, Shell Global Solutions (US) Inc., Westhollow Tech Ctr., 3333 Highway 6 South, Houston, TX 77082 (281) 544-8789, Fax: (281) 544-8150, e-mail: [ralph.cherrillo@shell.com](mailto:ralph.cherrillo@shell.com)  
*Second Secretary:* MICHAEL A. COLLIER, Petroleum Analyzer Co. LP, PO Box 206, Wilmington, IL 60481, (815) 458-0216, Fax: (815) 458-0217, e-mail: [macvarlen@aol.com](mailto:macvarlen@aol.com)  
*Staff Manager:* DAVID R. BRADLEY, (610) 832-9681, Fax: (610) 832-9668, e-mail: [dbradley@astm.org](mailto:dbradley@astm.org)

August 13<sup>th</sup>, 2018

Reply to:  
Eric Donovan  
Afton Chemical Corporation  
500 Spring St.  
Richmond, VA 23219  
(804) 788-5097  
(804) 788-6239 [FAX]  
[eric.donovan@aftonchemical.com](mailto:eric.donovan@aftonchemical.com)

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

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

**August 8, 2018 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 8, 2018

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

<b>R. Banas (Exxon)</b>	A. Goyal (BASF)	<b>R. Slocum (LZ)</b>
<b>D. Beck (TMC)</b>	T. Joy (BASF)	<b>M. Stevens (SwRI)</b>
D. Bell (Afton)	P. Kanga (Exxon)	S. Thrash (Army)
J. Clark (TMC)	B. Kearney (Afton)	J. Tian (Afton)
<b>J. Dharte (AAM)</b>	D. Mosher (BASF)	A. Trader (Intertek)
<b>E. Donovan (Afton/C)</b>	S. Parke (TMC)	W. Venhoff (LZ)
K. Drlja (LZ)	<b>J. Rucker (Meritor)</b>	R. Warden (SwRI)
B. Foecking (LZ)	<b>D. Smith (Intertek)</b>	

### Call to Order

#### Review of Agenda

The meeting agenda is attached.

#### Review of Membership

M. Stevens to replace R. Warden as the SwRI voting member.

Motion to approve by W. Venhoff, second by J. Dharte to approve the membership changes as presented. Unanimous approval, no abstentions.

#### Approval of Meeting Minutes

Meeting minutes for approval:

- "20180509\_SP" → May 9, 2018 – Troy, MI

Motion to approve by W. Venhoff, second by D. Smith to approve meeting minutes as presented. Unanimous approval, no abstentions.

#### L-42-1 Development

E. Donovan stated that Afton has not been able to perform more development due to rig availability. Once the test rig becomes available for more development, Afton will continue and share progress with the panel.

**Drive-by-wire throttle**

Lubrizol stated they will meet with their DAQ group and bring an update to the November meeting. Afton to do the same.

**TMC 113 Dropout / New Discrimination Oil Development**

W. Venhoff stated that he has presented an oil to the TMC and asked about next steps of getting that distributed to the labs for testing. Lubrizol will blend a 55USG drum and send it to the TMC for distribution to the labs. Each lab will run it on a currently referenced stand and report results to the TMC. The panel will discuss the results once they are available.

**Spray Nozzle Angle Tolerance**

The updated drawing has been sent to the TMC. The procedure is in the process of being updated.

**New/Open Issues**

No new issues were discussed.

**Adjournment**

Motion by J. Dharte, second by J. Rucker. All in favor, meeting adjourned.

Respectfully submitted,



Eric Donovan

L-42 Surveillance Panel Chairman



## L-42 Surveillance Panel Meeting

Automation Alley

Troy, MI

August 8, 2018


10:45 am - 11:15 am EST

Passion for Solutions™

# Agenda

- ▲ **Call to Order**
- ▲ **Agenda**
- ▲ **Membership Review & Update**
- ▲ **Approval of Meeting Minutes**
- ▲ **L-42-1 Development**
- ▲ **Drive-by-wire throttle update**
- ▲ **New/Open Issues**
  - ▲ TMC 113 dropout / New discrimination oil development
  - ▲ Spray nozzle angle tolerance
- ▲ **Adjournment**

## L-42 SP Voting Members

-  Rob Banas - ExxonMobil
-  Allen Comfort – US Army
-  John Dharte – AAM
-  Eric Donovan – Afton Chemical (Chair)
-  Arjun Goyal - BASF
-  Scott Parke – TMC
-  Jule Rucker – Meritor
-  Dale Smith – Intertek
-  Wes Venhoff– Lubrizol
-  Rebecca Warden – SwRI

# Approval of Meeting Minutes

## **SP Meeting Minutes**

- ▲ “20180509\_SP” → May 9, 2018 – Troy, MI

# L-42-1 Development

## Summary

- ▶ Electric T-rig (input and outputs)
- ▶ Dana 44 mounted without springs

## Goal is to have the rig follow L-42 setpoints first then use mathematical model for setpoints

## Development to date

- ▶ Data from L-42 run was used to create 100 Hz setpoints for initial L-42-1 testing
- ▶ Initial testing shows good progress, fine tuning still needed to hit exact setpoints consistently

## On hold at Afton for the near future due to rig availability



## Drive-by-wire throttle

- ▶ During the August 2017 meeting, the panel discussed options of a drive-by-wire throttle body to replace the current, old design using the Jordan.
- ▶ Is it possible to use a mid-2000s Corvette or Chevy truck throttle body?
- ▶ Lubrizol and Afton to research

# TMC 113 Dropout / New Discrimination Oil Development

## From the August 2017 meeting:

- ▲ Additive dropout was found in latest QC testing
- ▲ Gear oil drums are mixed prior to shipment. Homogenization may be limiting the impact that this has on the performance of the oil.

## From November 2017 meeting:

- ▲ Not possible to make new drum of TMC 113
  - 52 USG remaining – 104 tests worth
- ▲ Afton and Lubrizol to research possible new discrimination oils

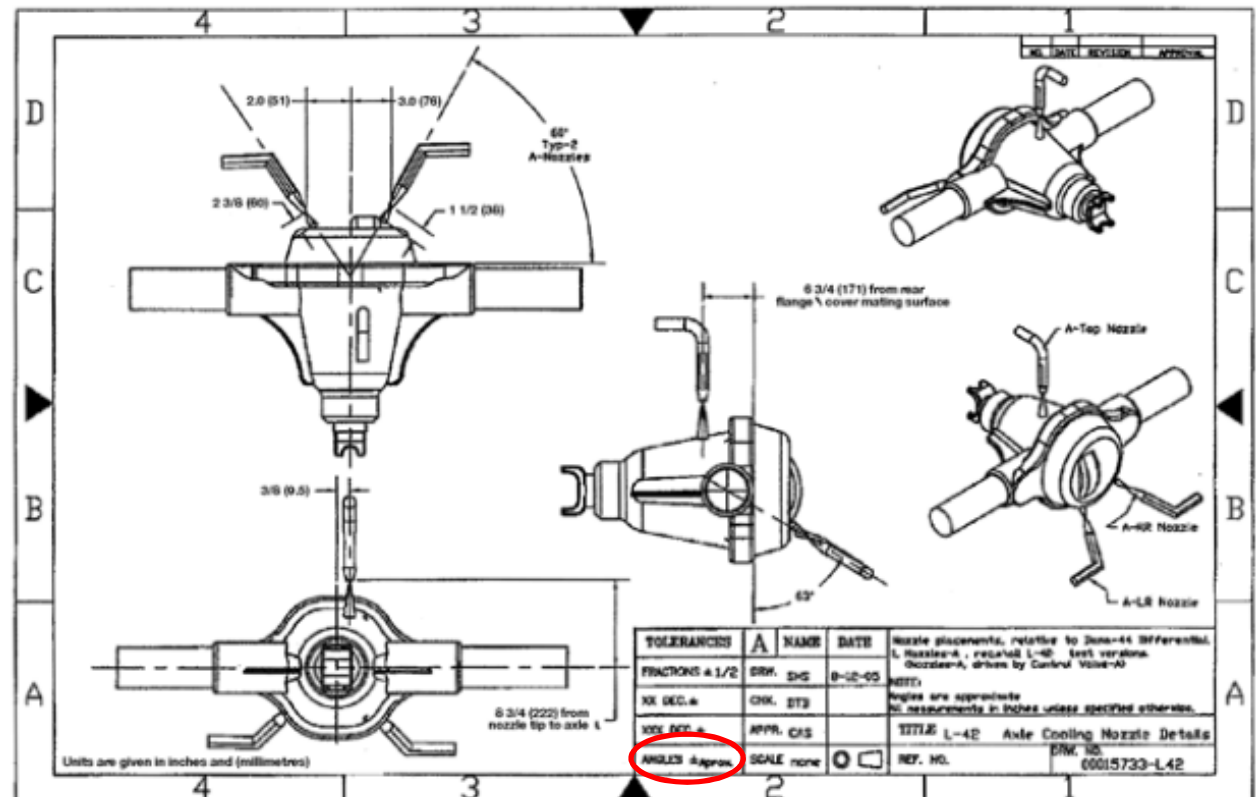
## From May 2018 meeting:

- ▲ Lubrizol has direction towards potential new discrimination oil
- ▲ The SP clarified that the new oil needs to consistently have double the scoring of the current passing oil

## Updates from Afton and Lubrizol?

# Spray Nozzle Angle Tolerance

- It has been noted that the L-42 spray nozzle diagram lacks a tolerance like the L-37 diagram
- Updated drawing has been sent to the TMC. The procedure is being updated.



# New/Open Issues

Thanks!






*Passion for Solutions™*

**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**August 8, 2018**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
	Aguirre, Nancy	NV	Intertek Automotive Research	Phone:	
			5404 Bandera Rd. San Antonio, TX 78238	E-mail:	<a href="mailto:nancy.aguirre@intertek.com">nancy.aguirre@intertek.com</a>
RB	Banas, Rob	V	ExxonMobil Fuels, Lubricants & Specialties	Phone:	678-493-3930
			114 Arcadia Park Dr. Canton, GA 30114	E-mail:	<a href="mailto:rob.a.banas@exxonmobil.com">rob.a.banas@exxonmobil.com</a>
	Barrera, Tony	NV	Intertek Automotive Research	Phone:	210-523-4653
			5404 Bandera Rd. San Antonio, TX 78238	E-mail:	<a href="mailto:tony.barrera@intertek.com">tony.barrera@intertek.com</a>
DJB	Beck, Dylan	NV	ASTM Test Monitoring Center	Phone:	724-355-1854
			6555 Penn Ave Pittsburg, PA 15206	E-mail:	<a href="mailto:djb@astmtmc.cmu.edu">djb@astmtmc.cmu.edu</a>
DB	Bell, Don	NV	Afton Chemical	Phone:	804-788-6332
			500 Spring St. Richmond, VA 23219	E-mail:	<a href="mailto:don.bell@aftonchemical.com">don.bell@aftonchemical.com</a>



**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**August 8, 2018**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
	Bubonic, Brad	NV	The Lubrizol Corporation	Phone:	
				E-mail:	<a href="mailto:babu@lubrizol.com">babu@lubrizol.com</a>
	Comfort, Allen	V	US Army TARDEC	Phone:	586-282-4225
				E-mail:	<a href="mailto:allen.s.comfort.civ@mail.mil">allen.s.comfort.civ@mail.mil</a>
	Clark, Jeff	NV	ASTM Test Monitoring Center	Phone:	412-365-1032
			6555 Penn Ave Pittsburg, PA 15206	E-mail:	<a href="mailto:jac@astmtmc.cmu.edu">jac@astmtmc.cmu.edu</a>
	Dharte, John	V	AAM	Phone:	313-758-4687
			1 Dauch Drive Detroit, MI 48211	E-mail:	<a href="mailto:dhartej@aam.com">dhartej@aam.com</a>
	Donovan, Eric	V/Chair	Afton Chemical	Phone:	804-788-5097
			500 Spring St. Richmond, VA 23219	E-mail:	<a href="mailto:eric.donovan@aftonchemical.com">eric.donovan@aftonchemical.com</a>

**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**August 8, 2018**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
K.D.	Drlja, Kristijan	NV	The Lubrizol Corporation	Phone:	440-391-6374
			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	<a href="mailto:krdr@lubrizol.com">krdr@lubrizol.com</a>
	Duho, Kwame	NV	Valvoline	Phone:	
				E-mail:	<a href="mailto:jkduho@ashland.com">jkduho@ashland.com</a>
	Dwornick, Bridget	NV	US Army TARDEC	Phone:	586-282-4221
			6501 E. 11 Mile Rd. RDТА-DP MS 110 Warren, MI 48397	E-mail:	<a href="mailto:bridget.l.dwornick.civ@mail.mil">bridget.l.dwornick.civ@mail.mil</a>
	Ebner, Alex	NV	The Lubrizol Corporation	Phone:	440-347-2664
			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	<a href="mailto:alex.ebner@lubrizol.com">alex.ebner@lubrizol.com</a>
BJF	Foecking, Brian	NV	The Lubrizol Corporation	Phone:	440-347-2130
			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	<a href="mailto:lojf@lubrizol.com">lojf@lubrizol.com</a>

**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**August 8, 2018**



Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
	Gottwald, Thomas	NV	Afton Chemical 500 Spring St. Richmond, VA 23219	Phone: E-mail:	804-788-5230 <a href="mailto:thomas.gottwald@aftonchemical.com">thomas.gottwald@aftonchemical.com</a>
	Goyal, Arjun	V	BASF 500 White Plains Rd Tarrytown, NY 10591	Phone: E-mail:	914-785-2083 <a href="mailto:arjun.goyal@basf.com">arjun.goyal@basf.com</a>
	Jackson, Matt	NV	Southwest Research Institute	Phone: E-mail:	210-522-6981 <a href="mailto:matt.jackson@swri.org">matt.jackson@swri.org</a>
TJ	Joy, Tisha	NV	BASF	Phone: E-mail:	914-785-2206 <a href="mailto:tisha.joy@basf.com">tisha.joy@basf.com</a>
	Kanga, Percy	NV	ExxonMobil Research & Engineering 1545 Rt. 22 East Clinton Paulsboro, NJ 08066 08801	Phone: E-mail:	908-335-3780 <del>856-224-2094</del> <a href="mailto:percy.r.kanga@exxonmobil.com">percy.r.kanga@exxonmobil.com</a>





**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**August 8, 2018**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
	Kearney, Bill	NV	Afton Chemical	Phone:	248-350-0640
			2000 Town Center, Suite 1160 Southfield, MI 48075	E-mail:	<a href="mailto:bill.kearney@aftonchemical.com">bill.kearney@aftonchemical.com</a>
	Koehler, Brian	NV	Southwest Research Institute	Phone:	210-522-3588
			P.O. Drawer 28510 San Antonio, TX 78228-0510	E-mail:	<a href="mailto:Bkoehler@swri.org">Bkoehler@swri.org</a>
	Kvasnicka, Kevin	NV	Afton Chemical	Phone:	804-788-5320
			500 Spring St. Richmond, VA 23219	E-mail:	<a href="mailto:kevin.kcasnicka@aftonchemical.com">kevin.kcasnicka@aftonchemical.com</a>
	Lonsway, Chris	NV	The Lubrizol Corporation	Phone:	440-347-4517
			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	<a href="mailto:chris.lonsway@lubrizol.com">chris.lonsway@lubrizol.com</a>
	Minke, Andreas	NV	BASF	Phone:	
				E-mail:	<a href="mailto:andreas.minke@basf.com">andreas.minke@basf.com</a>

**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**August 8, 2018**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
	Marsic, Vera	NV	The Lubrizol Corporation	Phone:	440-347-8024
			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	<a href="mailto:vera.marsic@lubrizol.com">vera.marsic@lubrizol.com</a>
	Milner, Jeff	NV	Tianhe Chemical	Phone:	804-252-6928
				E-mail:	<a href="mailto:jlmilner@tianhe-us.com">jlmilner@tianhe-us.com</a>
	Mosher, Donna	NV	BASF	Phone:	269-217-1715
			100 Park Ave Florham Park, NJ 07932	E-mail:	<a href="mailto:donna.mosher@basf.com">donna.mosher@basf.com</a>
	Opperman, Rob	NV	Meritor	Phone:	248-435-1544
			2135 W. Maple Rd Troy, MI 48084	E-mail:	<a href="mailto:Robert.opperman@meritor.com">Robert.opperman@meritor.com</a>
	Parke, Scott	V	ASTM Test Monitoring Center	Phone:	412-365-1036
			6555 Penn Ave Pittsburg, PA 15206	E-mail:	<a href="mailto:sdp@astmtmc.cmu.edu">sdp@astmtmc.cmu.edu</a>

**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**August 8, 2018**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
	Prengaman, Chris	NV	The Lubrizol Corporation	Phone:	440-347-4225
			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	<a href="mailto:crpr@lubrizol.com">crpr@lubrizol.com</a>
	Rucker, Jule	V	Meritor	Phone:	248-435-1430
			2135 W. Maple Rd Troy, MI 48084	E-mail:	<a href="mailto:jule.rucker@meritor.com">jule.rucker@meritor.com</a>
	Sattler, Eric	NV	US Army	Phone:	586-282-2272
			Warren, MI	E-mail:	<a href="mailto:eric.r.sattler.civ@mail.mil">eric.r.sattler.civ@mail.mil</a>
	Schwenk, Daniel	NV	Afton Chemical	Phone:	804-788-6326
			500 Spring St. Richmond, VA 23219	E-mail:	<a href="mailto:daniel.schwenk@aftonchemical.com">daniel.schwenk@aftonchemical.com</a>
	Smith, Dale	V	Intertek Automotive Research	Phone:	412-855-6854
			5404 Bandera Rd. San Antonio, TX 78238	E-mail:	<a href="mailto:dale.smith@intertek.com">dale.smith@intertek.com</a>

**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**August 8, 2018**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
RS	Slocum, Robert	NV	The Lubrizol Corporation	Phone:	440-347-5102
			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	<a href="mailto:robert.slocum@lubrizol.com">robert.slocum@lubrizol.com</a>
MS	Stevens, Mary	NV	Southwest Research Institute	Phone:	210-522-2208
				E-mail:	<a href="mailto:mary.stevens@swri.org">mary.stevens@swri.org</a>
AT	Trader, Angela	NV	Intertek Automotive Research	Phone:	210-706-1533
			5404 Bandera Rd. San Antonio, TX 78238	E-mail:	<a href="mailto:angela.trader@intertek.com">angela.trader@intertek.com</a>
	Venhoff, Wes	V	The Lubrizol Corporation	Phone:	440-347-4879
			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	<a href="mailto:wve@lubrizol.com">wve@lubrizol.com</a>
RW	Warden, Rebecca	V	Southwest Research Institute	Phone:	210-522-6266
				E-mail:	<a href="mailto:rebecca.warden@swri.org">rebecca.warden@swri.org</a>

**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**August 8, 2018**

Initials	Name	Voting Non-Voting	Company Name Company Address		Contact information
	Zreik, Khaled	NV	General Motors	Phone:	248-977-9214
			823 Joslyn Ave Pontiac, MI 84340-2925	E-mail:	<a href="mailto:khaled.zreik@gm.com">khaled.zreik@gm.com</a>
JT	Johnny Tian	NV	Afton China	Phone:	+86 182 511 55728
			26 Pingsheng Rd. Suzhou, China	E-mail:	<a href="mailto:gangqiang.tian@aftonchemical.com">gangqiang.tian@aftonchemical.com</a>
SJT	Steven Thrush	NV	US ARMY TARDEK	Phone:	586 282 5170
			6501 E. 11 mile Warren, MI, 48397	E-mail:	<a href="mailto:Steven.j.Thrush.civ@mail.mil">Steven.j.Thrush.civ@mail.mil</a>
				Phone:	
				E-mail:	
				Phone:	
				E-mail:	