



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

---

**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  
*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  
*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  
*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  
*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  
*Staff Manager:* DAVID R. BRADLEY, (610) 832-9681, Fax: (610) 832-9668, e-mail: dbradley@astm.org

March 2<sup>nd</sup>, 2015

Reply to:  
Jarrod Chalkley  
Afton Chemical Corporation  
500 Spring St.  
Richmond, VA 23219  
(804) 788-5082  
(804) 788-6239 [FAX]  
Jarrod.Chalkley@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:

**February 18<sup>th</sup>, 2015 Surveillance Panel Meeting (PRI – Warrendale, PA)**

Please direct any corrections or comments to my attention.

Very Respectfully,

Jarrod Chalkley, Chairman  
L-42 Surveillance Panel

L-42 Surveillance Panel Meeting Minutes

PRI – Warrendale, PA

February 18<sup>th</sup>, 2015

Attendees: voting members in **bold**

<b>J. Chalkley (Afton)</b>	R. Banas (XOM)	C. Prengaman (Lz)
<b>J. Dharte (AAM)</b>	D. Bell (Afton)	M. Umerley (Lz)
<b>L. Hamilton (Lz)</b>	J. Gropp (Lz)	O. Dykhno (BASF)
<b>B. Koehler (SwRI, Alt.)</b>	P. Kanga (XOM)	B. FoEcking (LZ)
<b>S. Parke (TMC)</b>	B. Kearney (Afton)	A. Goyal (BASF)
<b>A. Trader (Intertek, Alt.)</b>	M. Keisler (Afton)	

**Call to Order**

The meeting PowerPoint presentation is attached

**Review of Agenda**

The meeting agenda is attached (slide 2 of PowerPoint presentation)

**Review of Membership**

The sign-in sheet is attached

**Approval of Meeting Minutes**

Meeting minutes for November 2014 LRI have not been sent out for review, will be done so at a later date.

**C1L680 Batch Historical Data**

Correction factors for TMC 117 oil (6%-Pinion & 4%-Ring) are producing reliable and accurate data. See "L-42 Oil 117 Performance Update" sheet compiled and provided by the TMC.

**New Batch – C1L925**

One of the labs has tested two axles using the same stand settings as C1L680. Results look promising. An additional lab is planning to begin testing in the next few weeks.

Labs confirmed that the proposed Approval Matrix will suffice for this new batch:

- ▲ Minimum of (2) labs required
- ▲ (3) Pass & (2) Fail
- ▲ Teleconference to discuss results, settings, etc.

Labs agreed that PO's for surplus axles would be submitted following approval of new batch.

**L-42-1 Update**

Testing delayed due to stand availability. Plan to have initial testing results for discussion purposes by May LRI.

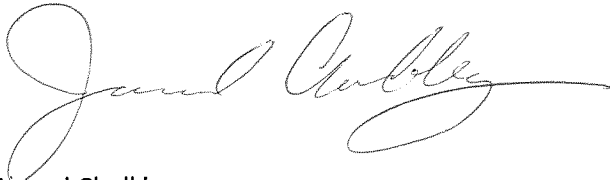
**New/Open Issues**

Nothing to report

**Adjournment**

MOTION by J. Dharte to adjourn. 2<sup>nd</sup> by L. Hamilton  
Motion passed unanimously (verbal)

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Jarrod Chalkley". The signature is written in black ink and is positioned above the printed name.

Jarrod Chalkley

L-42 Surveillance Panel Chairman



# L-42 Surveillance Panel Meeting

PRI









Warrendale, PA

February 18, 2015

10:00 AM

Passion for Solutions™

# Agenda

-  **Call to Order**
-  **Membership Review**
-  **Meeting Minutes - delayed**
-  **Current Batch C1L680**
-  **New Batch C1L925**
-  **L-42-1**
-  **New/Open Issues**
-  **Adjournment**

# C1L680 Batch Historical Data

## Using 116-1, ~2yrs, (42) Acceptable Tests

- ▲ Average 21%P & 12%R

## Using 117, beginning May/June '14, (15) Acceptable Tests

- ▲ Average 23%P & 15%R (including +6%P & +4%R)

# New Batch – C1L925

▲ So far two axles have been tested: no changes to stand from previous C1L680 batch:

<i>Oil</i>	<i>Batch</i>	<i>%P</i>	<i>%R</i>	<i>SS1CSTA</i>	<i>SS2CSTA</i>
116-1	C1L925	15	8	-88.6	-299.1
117	C1L925	19	11	-84.1	-289.1

## ▲ Proposed Approval Matrix

- ▲ Minimum of (2) labs required
- ▲ (3) Pass & (2) Fail
- ▲ Teleconference to discuss results, settings, etc.

# New Batch – C1L925 cont'd

## Lugoff has (111) additional axles

- ▲ Three labs would get (28 ea), 4<sup>th</sup> would get (27)
- ▲ PO's to follow batch approval?



# L-42-1 Update

## Our first step is to duplicate test using electric motor

- ▶ 3232 Dynos on the outputs
- ▶ Modified L-42 stand to include spring plates
- ▶ Will be using test axle initially to replicate stages
- ▶ Plan to run test axle before May LRI

# New/Open Issues

# L-42 Oil 117 Performance Update

					pinion	Reference results (pinion)					pinidelta	ring	Reference results (ring)					ringdelta
96624-L42	117	C1L680	D	20131008	<b>14</b>	26	28	28	<b>27</b>	<b>13</b>	<b>6</b>	12	15	18	<b>15</b>	<b>9</b>		
96626-L42	117	C1L680	D	20131010	<b>19</b>	26	28	28	<b>27</b>	<b>8</b>	<b>10</b>	12	15	18	<b>15</b>	<b>5</b>		
96630-L42	117	C1L680	B	20131004	<b>23</b>	21	28	20	<b>23</b>	<b>0</b>	<b>16</b>	13	15	13	<b>14</b>	<b>-2</b>		
96631-L42	117	C1L680	B	20131004	<b>16</b>	21	28	20	<b>23</b>	<b>7</b>	<b>8</b>	13	15	13	<b>14</b>	<b>6</b>		
96618-L42	117	C1L680	A	20131029	<b>15</b>	18	14	14	<b>15</b>	<b>0</b>	<b>10</b>	9	8	8	<b>8</b>	<b>-2</b>		
96619-L42	117	C1L680	A	20131029	<b>16</b>	18	14	14	<b>15</b>	<b>-1</b>	<b>11</b>	9	8	8	<b>8</b>	<b>-3</b>		
96636-L42	117	B6L544	G	20131127	<b>18</b>	26	23	21	<b>23</b>	<b>5</b>	<b>13</b>	23	16	11	<b>17</b>	<b>4</b>		
96637-L42	117	B6L544	G	20131127	<b>9</b>	26	23	21	<b>23</b>	<b>14</b>	<b>5</b>	23	16	11	<b>17</b>	<b>12</b>		
117 Average					<b>16.3</b>					<b>6</b>	<b>9.9</b>					<b>4</b>		

B6L544 116-1 Target **25.1**  
 C1L680 116-1 Target **23.0**  
 Actual C1L680 Average (n=44) **20.9**  
 n/a  
 n/a  
**12.4**


Average pinion delta (ref avg - 117 result) 6.0      4.0  
 C1L680 116-1 target - 117 avg 6.7      n/a  
 Actual C1L680 avg - 117 avg 4.6      n/a  
 Avg (ref target - 117 result) 7.3      n/a

**17.0**      **23.0**      **10.6**      14.6

Compare

TESTKEY	IND	PINBAT	LTMSLAB	LTMSDATE	ECSPrate	ECSP	ECSRrate	ECSRfNL
103606-L42	117	C1L680	A	20141219	18	24	13	17
103604-L42	117	C1L680	A	20141218	20	26	15	19
103605-L42	117	C1L680	A	20141218	22	28	15	19
103603-L42	117	C1L680	A	20141024	14	20	9	13
103602-L42	117	C1L680	A	20141021	14	20	9	13
103601-L42	117	C1L680	A	20141020	12	18	6	10
99992-L42	117	C1L680	A	20141020	10	16	4	8
99990-L42	117	C1L680	A	20140911	12	18	6	10
99989-L42	117	C1L680	A	20140910	13	19	8	12
99991-L42	117	C1L680	A	20140910	15	21	9	13
99986-L42	117	C1L680	A	20140626	24	30	14	18
99988-L42	117	C1L680	A	20140625	21	27	16	20
99987-L42	117	C1L680	A	20140624	16	22	9	13
96623-L42	117	C1L680	A	20140531	16	22	11	15
96622-L42	117	C1L680	A	20140530	22	28	13	17
96621-L42	117	C1L680	A	20140529	23	29	13	17

**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**February 18, 2015**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
				Phone:	E-mail:
	Athey, Allison	V	Volvo Powertrain	Phone:	301-573-5684
			13302 Pennsylvania Ave. Hagerstown, MD 21740	E-mail:	
	Comfort, Allen	V	US Army TARDEC	Phone:	586-282-4225
				E-mail:	
	Dharte, John	V	AAM	Phone:	313-758-4687
			1 Dauch Drive Detroit, MI 48212	E-mail:	
	Gottwald, Thomas	NV	Afton Chemical	Phone:	804-788-5230
			500 Spring St. Richmond, VA 23219	E-mail:	
	Greene, Galen	V	BASF	Phone:	973-245-5509
				E-mail:	
<i>LH</i>	Hamilton, Larry	V	The Lubrizol Corporation	Phone:	440-347-2326
			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	
	Warden, Rebecca	V	Southwest Research Institute	Phone:	210-522-6266
				E-mail:	
	McGlone, Bruce	V	Meritor	Phone:	248-435-9929
				E-mail:	

**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**February 18, 2015**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact Information	
SP	Parke, Scott	V	ASTM Test Monitoring Center	Phone:	412-365-1036
			6555 Penn Ave Pittsburg, PA 15206	E-mail:	
	Smith, Dale	V	Intertek Automotive Research	Phone:	412-855-6854
			5404 Bandera Rd. San Antonio, TX 78238	E-mail:	
RFB	Banas, Rob	NV	ExxonMobil Fuels, Lubricants & Specialties	Phone:	678-493-3930
			114 Arcadia Park Dr. Canton, GA 30134	E-mail:	
DRB	Bell, Don	NV	Aflon Chemical	Phone:	804-788-6332
			500 Spring St. Richmond, VA 23219	E-mail:	
	Boschert, Tom	NV	Aflon Chemical	Phone:	804-788-5202
			500 Spring St. Richmond, VA 23219	E-mail:	
	Bubonic, Brad	NV	The Lubrizol Corporation	Phone:	440-347-5325
			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	
JTC	Chalkley, Jarrod	V/Chair	Aflon Chemical	Phone:	804-788-5082
			500 Spring St. Richmond, VA 23219	E-mail:	
	Chambers, Harold	NV	Linamar Driveline Systems	Phone:	248-358-6038
			Travelers Tower 1 26555 Evergreen Rd. Ste 900 Southfield, MI 48076	E-mail:	



**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**February 18, 2015**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
	Clark, Jeff	NV	ASTM Test Monitoring Center 6555 Penn Ave Pittsburg, PA 15206	Phone: E-mail:	412-365-1032
	Dwornick, Bridget	NV	US Army TARDEC 6501 E. 11 Mile Rd. RDTA-DP MS 110 Warren, MI 48097	Phone: E-mail:	586-282-4221
<i>JAG</i>	Gropp, Jerry	NV	The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, OH 44092	Phone: E-mail:	440-347-1223 <i>jennold.gropp@Lubrizol.com</i>
	Hobson, Kevin	NV	Afton Chemical 500 Spring St. Richmond, VA 23219	Phone: E-mail:	804-788-5307
<i>P.A.K.</i>	Kanga, Percy	NV	ExxonMobil Research & Engineering 600 Billingsport Rd. Paulsboro, NJ 08066	Phone: E-mail:	856-224-2094 <i>percy.r.kanga@exxonmobil.com</i>
<i>WAK</i>	Kearney, Bill	NV	Afton Chemical 2000 Town Center, Suite 1160 Southfield, MI 48075	Phone: E-mail:	248-350-0640
<i>MSK</i>	Keisler, Marc	NV	Afton Chemical 500 Spring St. Richmond, VA 23219	Phone: E-mail:	804-788-5617
	Koglin, Cory	NV	Afton Chemical 2000 Town Center, Suite 1160 Southfield, MI 48075	Phone: E-mail:	248-350-0640

**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**February 18, 2015**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
	Marougy, Thelma		Eaton	Phone:	
				E-mail:	
	Mosher, Donna	NV	Eaton	Phone:	269-342-3039
				E-mail:	
	Muransky, Troy	NV (ALT)	Meritor	Phone:	248-435-1409
				E-mail:	
<i>CP</i>	Pregaman, Chris	NV	The Lubrizol Corporation	Phone:	440-347-4225
			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	
	Schwenk, Daniel	NV	Afton Chemical	Phone:	804-788-6326
			500 Spring St. Richmond, VA 23219	E-mail:	
	Thorpe, Ryan	NV	Southwest Research Institute	Phone:	210-522-6409
				E-mail:	
<i>AA</i>	Trader, Angela	<i>alternate</i> NV	Intertek Automotive Research	Phone:	210-706-1533
			5404 Bandera Rd. San Antonio, TX 78238	E-mail:	
<i>MU</i>	Umerley, Matt	NV	The Lubrizol Corporation	Phone:	440-347-4589
			29400 Lakeland Boulevard Wickliffe, OH 44092	E-mail:	

**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**February 18, 2015**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
				Phone:	E-mail:
	Koehler, Brian	NV <i>Voting Member</i>	Southwest Research Institute	Phone:	210-522-3588
			P.O. Drawer 28510 San Antonio, TX 78228-0510	E-mail:	
	Zreik, Khaled	NV	General Motors	Phone:	248-977-9214
			823 Joslyn Ave Pontiac, MI 48340-2925	E-mail:	
	Barrera, Tony	NV	Intertek Automotive Research	Phone:	210-523-4653
			5404 Bandera Rd. San Antonio, TX 78238	E-mail:	
	Jackson, Matt	NV	Southwest Research Institute	Phone:	210-522-6981
				E-mail:	
	Suresh, Arunya	NV	BASF	Phone:	914-262-8715
				E-mail:	
	Zakarian, Jack		Chevron	Phone:	
				E-mail:	
	Dykhno, Olga	NV	BASF	Phone:	914 275 5592
				E-mail:	
	Aguirre, Nancy	NV	Intertek Automotive Research	Phone:	210-523-4653
			5404 Bandera Rd. San Antonio, TX 78238	E-mail:	



**L-42 Surveillance Panel Membership/Attendance**  
**PRI - Warrendale, PA**  
**February 18, 2015**

Initials	Name	Voting Non-Voting	Company Name Company Address	Contact information	
				Phone:	E-mail:
BJF	BRIAN FOECKING	NON	LUBRIZOL	Phone:	(440) 347-2130
			29400 LAKELAND BLVD 44082	E-mail:	bjf@lubrizol.com
ARG	ARJUN GOYAL	NW	BASF	Phone:	914-785-2883
			500 White Plain Rd Tarrytown, NY 10591	E-mail:	Arjun.Goyal@BASF.com
				Phone:	
				E-mail:	
				Phone:	
				E-mail:	
				Phone:	
				E-mail:	
				Phone:	
				E-mail:	
				Phone:	
				E-mail:	