

OSCT Meeting Minutes

11/2/2005

D. Bell

Meeting Attendance:

K. Layton (Afton)	B. Sullivan (ExMo)	R. Grinfield (SWRI)
D. Bell (Afton)	D. Misich (Lz)	
J. Gropp (Lz)	J. Buitrago (CVX)	
R. Burrow (Afton)	D. Bartlett (Lz)	
C. Schenkenberger (Lz)	B. Koehler (SWRI)	
R. Kozlowski (Parc)	R. Burrow (Afton)	
H. Chambers (ACH-LLC)	D. Lind (TMC)	

Updated membership list is attached.

ASTM D5662 Oil Seal Compatibility Test Surveillance Panel Minutes

D. Bell of Afton is the new OSCT chairperson.

Replacement Reference Oil for Nitrile Seals:

TMC tested reference oil TMC 168 as a potential replacement to the depleted TMC 162 nitrile seal reference oil using NI 329 at one lab.

Oil	N	% Elongation Change	Hardness Change	% Volume Change
161-1	19	10.8	-17.5	18.0
162	19	-68.3	1.7	2.17
168	12	-84.9	8	0.98

It was decided that more data was required before TMC 168 could be approved as a replacement reference oil for the depleted TMC 162.

Motion: A motion was passed (5 approved: 0 disapproved:0 abstained) to continue to conduct ASTM D5662 using reference oil TMC 161-1 side-by-side with TMC 168 on NI batch 330 nitrile seal until a minimum of 5 tests were completed per lab to allow for voting on acceptance of TMC 168 and at that time possibly establish acceptance bands. Effective immediately, TMC 161-1 will be the current reference oil to allow the nitrile seal test to continue to be valid until TMC 168 is approved.

Controlling Between-Lab Variability:

The variability observed previously between the two labs that conduct this test (SWRI and LZ) is now under control since the Instron calibration is now standardized.

Action Item: An action item for the 2 labs was to draft a calibration procedure by the end of Nov. 2005 for inclusion into ASTM D5662 prior to reballoting it by the end of 2005. A seals task force meeting will be conducted at the end of Nov. to decide upon the revisions to D5662 for reballot, such as inclusion of a qualifying protocol for new batches of elastomer.

Motion: A motion was passed (5 approved:0 disapproved:0 abstained) to remove hanger weights during elastomer measurement phase to standardize the test procedure between labs.

All other measurements between labs show no significant differences between labs. Both labs use different baths, circulation systems (pump vs mechanical stirrer) and oil types, but do not affect results. Four thermocouples placed in the corners and middle of each bath were an acceptable +/- 1°C around target set point.

OSCT Information Letter:

One OSCT information letter was issued in 2005 that updated the reference oil test precision and required rounding test results as per ASTM E29.

Qualifying New Elastomer Batches:

Action Item: D. Lind will send the final draft of the elastomer qualifying procedure to both labs for their final comments before possibly including in D5662 prior to reballoting.

Newly qualified elastomers have a shelf life of 2 years, which the panel would like to see this removed from the procedure in favor of the references identifying when the elastomer batch is not in control and thus beyond its shelf life or collecting data using old elastomer batches to extend the shelf life. This issue will be discussed further by the task force.

Reference Oil Acceptance Bands:

Initial acceptance band limits were established in 2004. Since lab variability appears to be under control, a decision was made to continue compiling data and to review the data in ~6 months to determine if new acceptance bands could be established.

Alternate Seal Materials:

Questions have arisen as to the relevance of the current elastomer types for gear applications and if we should consider replacing or adding other types of seals to D5662.

Action Item: B. McGlone to poll seal and axle manufacturers and axle (ie., Vamac, Federal Mogul, ArvinMeritor, DANA, etc.) for potential alternate gear seals. The task force should also consider requesting the CDP to request this of the seal manufacturer. This would require extensive testing and OEM approval prior to changing seal materials.

OIL SEAL COMPATIBILITY SURVEILLANCE PANEL

Date: Nov 3, 2005

Initials	V = Voting NV = Non-voting	Name	Company & Address	Phone / FAX / e-Mail
	V	Don Bell <i>Chairperson</i>	Afton Chemical Corp. 500 Spring Street Richmond, VA 23219	Phone: 804-788-6332 FAX: 804-788-6243 e-Mail: don.bell@aftonchemical.com
DTB	NV	Don Bartlett	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: 440-347-2388 FAX: 440-347-2878 e-Mail: dtb@lubrizol.com
	V	Tom Bryson	Mack Trucks 13302 Pennsylvania Ave. Hagerstown, MD 21742	Phone: 301-790-5454 FAX: 301-790-5605 e-Mail: tom.bryson@macktrucks.com
JAB	V	Juan Buitrago	Chevron Oronite Co. 100 Chevron Way Richmond, CA 94802	Phone: 510-242-1161 FAX: 510-242-3392 e-Mail: jabu@chevrontexaco.com
HC	V	Harold Chambers	Automotive Components Holding-LLC Cube: C290-081 17000 Rotunda Drive Dearborn, MI 48120-1100	Phone: 313-755-4246 FAX: 313-755-5681 e-Mail: hchamber@ACH-LLC.com
	NV	Hector DeLaFuente	Southwest Research Institute 6220 Culebra Road San Antonio, TX 78228	Phone: 210-522-5996 FAX: 210-680-1777 e-Mail: hdelafuente@swri.edu
	V	Boris Dinzburg	CR Industries 900 N. State Elgin, IL 60120	Phone: 847-742-7840 FAX: 847-742-7845 e-Mail:
	V	Frank Farber	Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206	Phone: 412-365-1030 FAX: 412-365-1047 e-Mail: fmf@tmc.astm.cmri.cmu.edu
RG by phone	V	Rebecca Grinfield	Southwest Research Institute P.O. Drawer 28510 San Antonio, TX 78228-0510	Phone: 210-522-3652 FAX: 210-522-5907 e-Mail: bgrinfield@swri.org

OIL SEAL COMPATIBILITY SURVEILLANCE PANEL

Date: _____

Initials	V = Voting NV = Non-voting	Name	Company & Address	Phone / FAX / e-Mail
	V	Larry Grona	EG&G automotive Research 5404 Bandera Road San Antonio, TX 78238-1993	Phone: 210-684-2310 FAX: 210-681-8300 e-Mail: larry_grona@egginc.com
JLG	V	Jerry Gropp	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliff, OH 44092	Phone: 440-347-1223 FAX: 440-347-5337 e-Mail: jlg@lubrizol.com
	V	Tracey King	Daimler Chrysler Corporation CIMS 482-00-13 800 Chrysler Drive Auburn Hills, MI	Phone: 248-584-5628 FAX: 248-584-7490 e-Mail: teki@daimlerchrysler.com
BK	NV	Brian Koehler	Southwest Research Institute P.O. Drawer 28510 San Antonio, TX 78228-0510	Phone: 210-522-3588 FAX: 210-684-7523 e-Mail: bkoehler@swri.org
Kevin Layton	NV	Cory Koglin	Afton Chemical Corp. 500 Spring Street (23219) P.O. Box 2158 Richmond, VA 23218-2158	Phone: 804-788-5305 FAX: 804-788-6358 e-Mail: cory.koglin@aftonchemical.com
DL	V	Don Lind	Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206	Phone: 412-365-1034 FAX: 412-365-1047 e-Mail: dml@astmtmc.cmu.edu
	V	Jim Linden	GM R&D 480-106-160 30500 Mound Road Warren, MI 48090	Phone: 810-986-1888 FAX: 810-986-2094 e-Mail: james.l.linden@gm.com
	V	Thelma Marougy	Eaton Corporation 26201 Northwestern Highway Southfield, MI 48037	Phone: 248-354-6985 FAX: 248-354-2736 e-Mail: thelmaemarougy@eaton.com
	NV	Steve Marty	Southwest Research Institute P.O. Drawer 28510 San Antonio, TX 78228-0510	Phone: 210-522-5929 FAX: 210-680-1777 e-Mail: smarty@swri.edu

OIL SEAL COMPATIBILITY SURVEILLANCE PANEL

Date:

Initials	V = Voting NV = Non-voting	Name	Company & Address	Phone / FAX / e-Mail
DM by phone	V	Diane K. Misich	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: 440-347-8034 FAX: 440-347-8003 e-Mail: dkm@lubrizol.com
	V	Bruce McGlone	Arvin Meritor 2135 West Maple Troy, MI 48084	Phone: 248-435-9929 FAX: 248-435-1411 e-Mail: mcglonbf@meritorauto.com
	V	Dale Muyskens	Eaton Corporation P.O. Box 4013 Kalamazoo, MI 49003-4013	Phone: 616-342-3416 FAX: 616-342-3574 e-Mail: daleemuyskens@eaton.com
R. Kozlowski	V	Dale Smith	PARC Technical Services 100 William Pitt Way Pittsburgh, PA 15238	Phone: 412-826-5051 FAX: 412-826-5443 e-Mail: dbs@usaor.net
CLS	NV	Chris Schenkenberg	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: 440-347-2927 FAX: 440-347-2878 e-Mail: csc@lubrizol.com
WS	V	Bill Sullivan	ExxonMobil Company P.O. Box 3140 Edison, NJ 08818	Phone: 732-321-3351 FAX: 732-321-6064 e-Mail: william_t_sullivan@email.mobil.com
	V	Gary Tietze	Test Engineering, Inc. 12758 Cimarron Path, Suite 102 San Antonio, TX 78249	Phone: 210-690-1958 FAX: 210-690-3621 e-Mail: gtietze@testeng.com
	V	Paula Vettel	D. a. Stuart Company 4580 Weaver parkway Warrenville, IL 60555	Phone: 630-393-8859 FAX: 630-393-8577 e-Mail: prvettel@aol.com
	NV	Claire Whitton	Afton Chemical Corp. 500 Spring Street (23219) P.O. Box 2158 Richmond, VA 23218-2158	Phone: 804-788-5052 FAX: 804-788-6243 e-Mail: claire.whitton@aftonchemical.com

OIL SEAL COMPATIBILITY SURVEILLANCE PANEL

Date: _____

Initials	V = Voting NV = Non-voting	Name	Company & Address	Phone / FAX / e-Mail
	NV	Jack Zakarian	Chevron Products 100 Chevron Way Richmond, CA 94802	Phone: 510-242-3595 FAX: 510-242-3758 e-Mail: jaza@chevrontexaco.com
	V	Khaled Zreik	US Army TACOM AMSTA-TR-D/210 6501 E. 11 Mile Road Warren, MI 48307-5000	Phone: 586-574-4227 FAX: 586-574-4244 e-Mail: zreikk@tacom.army.mil