

Oil Seal Compatibility and Testing Meeting Minutes

BRTRC Facility in Warren, MI

5/11/2011, 1-2 pm EST

Attendees:

Please refer to attached membership list.

A motion was unanimously approved (7 approvals) that was made by J. Gropp and 2nd by T. Marougy to approve the previous OSCT Surveillance Panel meeting minutes from 3/28/2011 and 5/3/2011 that are available on the TMC website.

There are multiple baths available at both Lz and SWRI with no known related "stand" bath problems. Over the past month the Test Monitoring Center (TMC) sent out several warning alarms for elastomers trending severe. The TMC presented the elastomer data showing that the primary reason for the alarms is a slight severity in % elongation that is more pronounced because all three elastomers are reported on the same chart and due to a general upward shift in 2005. The root cause of the shift in 2005 is not certain but is often the result of the seal supplier receiving a different lot of base polymer which they have limited control over. TMC will graph all of the three measured parameters for each of the three elastomers on separate charts and send these to the Chairman who will then call a Surveillance Panel teleconference to discuss the issue in more detail and decide if a correction factor can be used to bring the parameter into current limits.

Test Engineering Institute (TEI) and both test labs have a sufficient quantity of elastomer batches for D5662 testing. TEI has ~268 slabs of approved polyacrylate (PA343) and ~285 slabs of PA344 in which qualification data will be ready for review by the Panel at the end of May. TEI has ~168 slabs of fluoroelastomer (FL381) and ~178 slabs of FL382 that will also have qualification data ready to review at the end of May. TEI has been instructed to order 300 more slabs of FL. TEI has 148 slabs of nitrile (NI337) and 300 more slabs were ordered on 5/3/2011.

For supply security, we are working with OH Technologies who expressed an interest in being an alternate supplier for our sole-sourced elastomers from Freudenberg FNOK. OH Technologies has vast knowledge of seal technology and has participated in similar ASTM initiatives and claim to be able to supply gear elastomers that are representative of current production materials. We will request OH Technologies to send each test lab 25 slabs of each of their best candidates for polyacrylate, fluoroelastomer and nitrile for D5662 testing in current reference oils to compare them to data generated with current elastomers. We will then decide if we want to continue to work with OH Technologies.

TMC-169 has been identified as a J2360 oil that can be used as a replacement to the discontinued TMC reference oil 161-1. TMC now has 5 drums of TMC 169 and has sent some to both labs who are conducting side-by-side testing with TMC 169 and TMC 161 to gather seal data until the TCM 161 is depleted. At that time, new acceptance bands for TMC 169 can be established.

The TMC has an initiative to go paperless. A motion was unanimously approved (7 approved) that was made by D. Smith and 2nd by B. Grinfield to revise D5662 9.1.4.2 to show the transfer of data to the TMC

will be only electronic to eliminate hard copies. This will be effective on the date that the TMC issues an information letter stating this initiative.

Motion to adjourn made by D. Bell and 2nd by T. Marougy was unanimously approved (7 approved) at 1:58 pm 5/11/2011.

OIL SEAL COMPATIBILITY SURVEILLANCE PANEL

Date: May 11, 2011

Initials	V = Voting NV = Non-voting	Name	Company & Address	Phone / FAX / e-Mail
<i>DB</i>	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
	NV	Ed Akucewicz	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: 440-347-2415 FAX: 440-347-4713 e-Mail: Edward.akucewicz@lubrizol.com
	NV	Zack Bishop	TEI	Phone: FAX: e-Mail:
	NV	Tom Bryson	Volvo Powertrain N.A. Powertrain Division 13302 Pennsylvania Ave. Hagerstown, MD 21742-2675	Phone: 301-790-5454 FAX: e-Mail: Thomas.bryson@volvo.com
	NV	Jeff Clark	Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206	Phone: 412-365-1032 FAX: 412-365-1047 e-Mail: jac@astmtmc.cmu.edu
<i>A.C.</i>	V	Allen Comfort	US Army TACOM RDTA-DP/MS110 6501 E. 11 Mile Road Warren, MI 48307-5000	Phone: 586-282-4225 FAX: 586-282-4244 e-Mail: Allen.s.comfort@us.army.mil
<i>[Signature]</i>	V	John D'harte	American Axle 1 Dauch Drive Detroit, MI 48211	Phone: 313-758-4687 FAX: 313-758-4237 e-Mail: dhartej@aam.com
<i>[Signature]</i>	NV	Bridget Dwornick	US Army RDECOM/TARDEC RDTA-DP/210 MS 110 6501 E 11 Mile Road Warren, MI 48397-5000	Phone: 586-282-4221 FAX: 586-282-4244 e-Mail: Bridget.dwornick@us.army.mil
	NV	Stephen Eliot	ExxonMobil 18486 Lanier Island Square Leesburg, VA 20176	Phone: 703-669-9916 FAX: 703-669-9917 e-Mail: Stephen.w.eliot@exxonmobil.com

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Initials	V = Voting NV = Non-voting	Name	Company & Address	Phone / FAX / e-Mail
	NV	Frank Farber	Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206	Phone: 412-365-1030 FAX: 412-365-1047 e-Mail: fmf@astmtmc.cmu.edu
<i>HG</i>	NV	Hong Gao	ConocoPhillips 1000 S. Pine Street Ponca City, OK 74602	Phone: 580-767-2126 FAX: 580-767-4534 e-Mail: Hong.gao@concoPhillips.com
<i>AG</i>	NV	Andrew Gelder	Afton Chemical Corp. London Rd. Bracknell, Berkshire RG12 2UW United Kingdom	Phone: 44-1344-35-6524 FAX: e-Mail: Andrew.gelder@aftonchemical.com
<i>RG</i>	NV	Rick Graziano	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: 440-347-2058 FAX: 440-347-2878 e-Mail: rpg@lubrizol.com
<i>GG</i>	NV	G. Greene	Lubrizol 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: 440-347-2394 FAX: e-Mail: gg@lubrizol.com
<i>B. Grinfield</i>	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:
<i>JG</i>	V	Jerry Gropp	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: 440-347-1223 FAX: 440-347-5337 e-Mail:
	NV	Larry Hamilton	Lubrizol 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: 440-347-2326 FAX: e-Mail: Larry.hamilton@lubrizol.com
<i>SH</i>	NV	Sam Higuchi	Afton Chemical Corp. 500 Spring Street (23219) P.O. Box 2158 Richmond, VA 23218-2158	Phone: 804-788-5375 FAX: 804-788-6358 e-Mail: Samuel.higuchi@aftonchemical.com

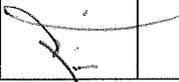
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Initials	V = Voting NV = Non-voting	Name	Company & Address	Phone / FAX / e-Mail
	NV	Matt Jackson	Southwest Research Institute P.O. Drawer 28510 San Antonio, TX 78228-0510	Phone: 210-522-6981 FAX: 210-684-7523 e-Mail: Matt.jackson@swri.org
<i>WAK</i>	NV	Bill Kearney	Afton Chemical Corp Southfield, MI	Phone: 248-350-0640 FAX: e-Mail: Bill.kearney@aftonchemical.com
<i>J. Keiter</i>	NV	Jennifer Keiter	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: 440-347-8034 FAX: 440-347-8003 e-Mail: Jennifer.keiter@lubrizol.com
<i>[Signature]</i>	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:
	NV	Peter Kamp	Lubrizol Corp. 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: 440-347-4422 FAX: 440-347-2878 e-Mail: pvk@lubrizol.com
	NV	Percy Kanga	ExxonMobil 600 Billingsport Rd. Paulsboro, NJ 08066	Phone: 856-224-2094 FAX: 856-224-3613 e-Mail: Percy.r.kanga@exxonmobil.com
	V	Clayton Knight	Test Engineering Institute 12718 Cimarron Path San Antonio, TX 78249	Phone: 210-690-1958 FAX: 210-877-0228 e-Mail: cknight@tei-net.com
<i>C.K.</i>	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

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Initials	V = Voting NV = Non-voting	Name	Company & Address	Phone / FAX / e-Mail
	NV	WenTong Lu	Research Institute of Petroleum Processing No 18 XueYuan Road PO Box 914-19 Beijing 100083 P.R. China	Phone: 011-86-10-8236-8743 FAX: 011-86-10-6231-1290 e-Mail: Luwt.shky@sinopec.com
	V	Thelma Marougy	Eaton Corporation 26201 Northwestern Highway Southfield, MI 48037	Phone: 248-226-6985 FAX: 248-226-1739 e-Mail: thelmaemarougy@eaton.com
	NV	John Mattern	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: 440-347-8034 FAX: 440-347-8003 e-Mail:
	V	Bruce McGlone	Meritor 2135 West Maple Troy, MI 48084	Phone: 248-435-9929 FAX: 248-435-6602 e-Mail: Bruce.McGlone@ meritor meritor.com
	NV	Donna Mosher	Eaton Corporation 13100 E. Michigan Avenue Galesburg, MI 49053	Phone: 269-342-3039 FAX: 269-746-6039 e-Mail: donnammosher@eaton.com
	NV	Troy Muransky	Meritor 2135 West Maple Rd. Troy, MI 48084	Phone: 248-435-1409 FAX: 248-435-6602 e-Mail: Troy.muransky@ meritor meritor.com
	V	Scott Parke	ASTM Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206	Phone: 412-365-1033 FAX: 412-365-1047 e-Mail: sdp@astmtmc.cmu.edu
	V	Dale Smith	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238	Phone: 412-855-6854 FAX: e-Mail: Dale.smith@intertek.com

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	NV	HaiQing Song	Research Institute of Petroleum Processing No 18 XueYuan Road PO Box 914-19 Beijing 100083 P.R. China	Phone: 011-86-10-8236-8182 FAX: 011-86-10-6231-1290 e-Mail: songhq@ripp-sinopec.com
<i>J. Z. (10/20/07)</i>	NV	Chintan Ved	Ford 35500 Plymouth Road Livonia, MI 48150	Phone: 313-805-9495 FAX: e-Mail: cved@ford.com
<i>WV</i>	NV	Wes Venhoff	Lubrizol 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: 440-347-4879 FAX: e-Mail: wve@lubrizol.com
	NV	Luis A. Villahermosa	U.S. Army TARADec AMSRD-TAR-D/210 MS110 6501 E. 11 Mile Road Warren, MI 48397-5000	Phone: 586-282-4207 FAX: 586-282-4244 e-Mail: Luis.a.villahermosa@us.army.mil
	NV	JingChun Xie	Lanzhou Lube Oil R&D Institute No. 369 YuMen Street XiGu District Lanzhou 730060 GanSu Province P.R. China	Phone: 011-86-931-793-3713 FAX: 011-86-139-9319-2560 e-Mail: xjc@luberdi.com.cn
<i>K-Z</i>	NV	Khaled Zreik	General Motors	Phone: 248-977-9214 FAX: e-Mail: Khaled.zreik@gm.com

JACK ZAKARIAN

CHEVRON

JZ