

Oil Seal Compatibility Test (OSCT) Surveillance Panel Meeting Minutes

May 12, 2021

Don Bell

Participants listed on attachment in Appendix.

An OSCT Surveillance Panel Microsoft Teams virtual meeting was called to order by D. Bell at 2:45 pm on 5/12/2021, and the agenda was reviewed.

The 12 OSCT Surveillance Panel voting member list below was reviewed. A motion made by D. Bell and 2nd by M. Lopez was unanimously approved with 10 votes to substitute J. LaBond with J. Carter from Meritor as a voting member. W. Venhoff to discuss Panel participation with V. Donndelinger to decide if he should continue to be a voting member.

- D. Bell Afton (Chair)
- A. Comfort Army
- T. Muransky AAM
- R. Banas ExxonMobil
- B. Grinfield SWRI
- V. Donndelinger Lubrizol
- C. Knight TEI
- J. LaBond Meritor
- M. Cabaj Linamar
- D. Beck TMC
- M. Lopez Intertek
- D. Mosher BASF

A motion made by D. Bell and 2nd by B. Grinfield was unanimously approved with 10 votes to approve the OSCT meeting minutes posted to the TMC website for 11/10/2021.

Labs C and G can conduct ASTM D5662 PA, FL, and NI tests with no known stand/bath issues.

The polyacrylate (PA) qualification status and Test Engineering Institute's (TEI) elastomer inventory were reviewed.

- PA365 TEI has 48 approved slabs
- PA366 TEI has 281 approved slabs
- PA367 TEI has 259 approved slabs
- PA368 TEI has 259 approved slabs

TEI was instructed to send out the oldest slabs first to avoid shelf life issues. PA and FL have a 5 year shelf life, while NI has a 3 year shelf life.

The fluoroelastomer (FL) qualification status and TEI's elastomer inventory were also reviewed.

- FL410 TEI has 18 approved slabs
- FL411 TEI has 35 approved slabs
- FL412 TEI has 98 approved slabs

The nitrile (NI) qualification status and TEI's elastomer inventory were also reviewed.

- NI350 TEI has 89 approved slabs
- NI351 TEI has 278 approved slabs

Since the current inventory of all three elastomers was considered sufficient, TEI was not instructed to order any more at this time. TEI was asked to determine the start date for the shelf life of both NI slab batches.

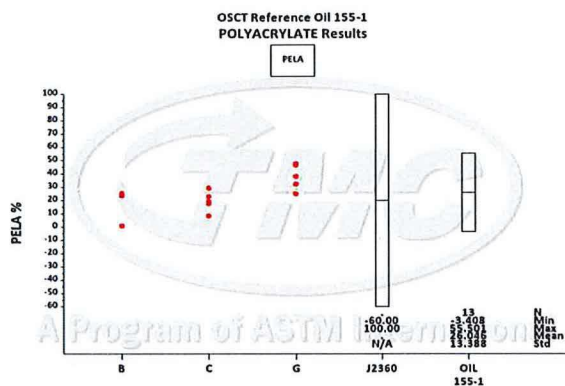
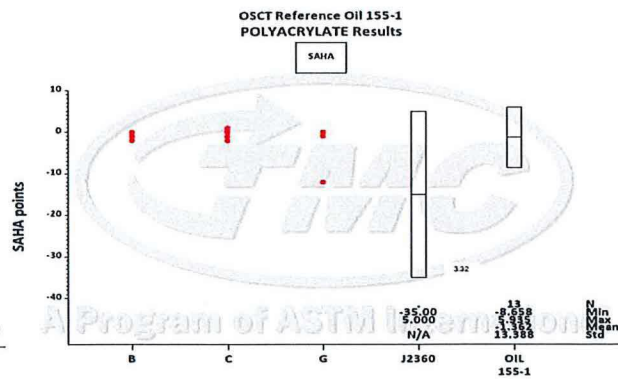
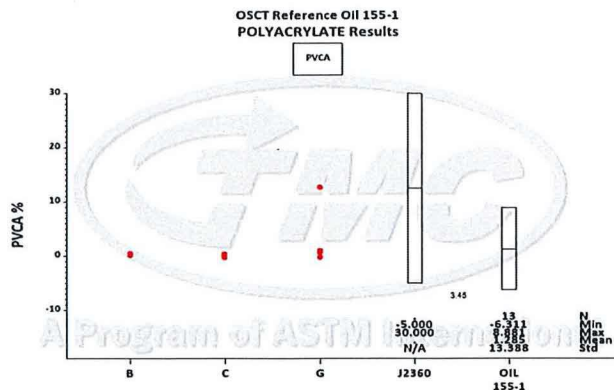
TMC reviewed OSCT LTMS edits. A motion made by D. Beck and 2nd by B. Grinfield was unanimously approved with 10 votes to add reference oil 169 to the Table on page 36-2 and to replace "test stand chart" with "Shewhart" on page 36-3 as highlighted in red below to be effective May 27, 2021.

Elastomer Type	Oil Assignments
PA	Assign reference oils 160, 161, 169 or 171 (or subsequent reblends) for every calibration sequence.
FL	Assign reference oils 160, 161, 169 or 171 (or subsequent reblends) for every calibration sequence.
NI	Assign reference oils 161, 162, 168, 169, or 170 (or subsequent reblends) for every calibration sequence.

The following are steps that must be taken in the case of exceeding control chart limits.

- Exceed ~~test stand chart~~ Shewhart limit for severity (all parameters)

As per the annual requirement, both Labs C and G submitted PA and FL data in TMC 155-1 industry reference oil to TMC to confirm the test remains in control with results consistent with J2360 limits. Lab G's PA364 results for % volume change (PVCA) and shore hardness (SAHA) were outliers as shown in the attached TMC graphed PA plots, while the % elongation change (PELA) was only slightly above the average.



Lab G repeated PA364 in TMC 155-1 and the TMC tabulated results are more in line with the average and standard deviation for PVCA and SAHA, indicating the initial results were definitely outliers, thus Lab G is in control for PA testing in TMC 155-1.

testkey	ltmslab	val	ind	ltmsdate	CHART	PVCA	SAHA	PELA	EBC
131592-OSCT	G	NI	155-1	20211214	N	-0.2	2	42.2	PA364
131591-OSCT	G	NI	155-1	20200928	N	12.7	-12	32.2	PA364
148362-OSCT	C	NI	155-1	20200924	N	-0.1	0.3	29.3	PA364
120859-OSCT	C	NI	155-1	20190905	N	-0.2	0	17.8	PA363
131595-OSCT	G	NI	155-1	20190905	N	1	0	25.2	PA360
131158-OSCT	G	NI	155-1	20181207	N	1	-1	46.7	PA362
120857-OSCT	C	NI	155-1	20171221	N	0.3	-2	23.2	PA359
120865-OSCT	B	NI	155-1	20171214	N	0.2	-2	25.4	PA359
131157-OSCT	G	NI	155-1	20171214	N	0.7	0	38.2	PA359
120861-OSCT	B	NI	155-1	20161027	N	0.5	-1	23.8	PA355
120886-OSCT	G	NI	155-1	20161020	N	-0.2	0	47.7	PA355
120856-OSCT	C	NI	155-1	20161013	N	0.1	-1	19.4	PA355
116409-OSCT	B	NI	155-1	20160412	N	0.3	0	1	PA355
111179-OSCT	C	NI	155-1	20150927	N	0.4	1	8.6	PA352
					AVG.	1.28	-1.36	26.04	N Size
					STD.	3.45	3.32	13.38	

Repeat results
Initial results

A motion made by D. Bell and 2nd by B. Grinfield was unanimously approved with 10 votes to adjourn the OSCT Panel meeting at 3:02 pm on 5/12/2021.

Respectfully Submitted,

A handwritten signature in black ink that reads "Donald Bell". The signature is written in a cursive style with a large, looping initial "D".

Donald Bell/OSCT Chairman

Appendix

OIL SEAL COMPATIBILITY SURVEILLANCE PANEL

Date: May 12, 2021

Initials	V = Voting NV = Non-voting	Name	Company & Address	Phone / FAX / e-Mail	
	NV	Nancy Aguirre	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238	Phone: e-Mail:	210-647-9428 Nancy.AGUIRRE@Intertek.com
RB	V	Rob Banas	ExxonMobil Lubricants and Specialties 114 Arcadia Park Drive Canton, GA 30114	Phone: e-Mail:	678-493-3930 Rob.a.banas@exxonmobil.com
DB	V	Dylan Beck	TMC 6555 Penn Ave. Pittsburgh, PA 15206	Phone: e-Mail:	412-365-1037 djb@astmtmc.cmu.edu
	NV	Mesfin Belay	Daimler	e-Mail	Mesfin.belay@daimler.com
DB	V	Don Bell <i>Chairperson</i>	Afton Chemical Corp. 500 Spring Street Richmond, VA 23219	Phone: e-Mail:	804-788-6332 don.bell@aftonchemical.com
	V	Mike Cabaj	McLaren/Linamar	Phone: e-Mail:	313-820-0119 Michael.cabaj@linamar.com
JC	V	Jason Carter	Meritor	e-Mail	Jason.carter@meritor.com
	NV	Jeff Clark	TMC 6555 Penn Ave. Pittsburgh, PA 15206	Phone: e-Mail:	412-365-1032 jac@astmtmc.cmu.edu
AC	V	Allen Comfort	US Army CCDC-GVSC RDTA-DP/MS110 6501 E. 11 Mile Road Warren, MI 48307-5000	Phone: e-Mail:	586-282-4225 Allen.s.comfort.civ@mail.mil
	V	Vince Donndelinger	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: e-Mail:	440-347-6589 Vince.donndelinger@lubrizol.com
KD	NV	Kristijan Drlja	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	e-Mail:	KRDR@lubrizol.com
	NV	Brian Foecking	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	Phone: e-Mail:	440-349-2130 bjf@lubrizol.com

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Initials	V = Voting NV = Non-voting	Name	Company & Address	Phone / FAX / e-Mail	
AG	NV	Arjun Goyal	BASF 500 White Plains Road Tarrytown, NJ 10951	Phone: e-Mail:	914-785-2083 Arjun.goyal@basf.com
RG	V	Rebecca Grinfield	Southwest Research Institute P.O. Drawer 28510 San Antonio, TX 78228-0510	Phone: e-Mail:	210-522-3652 bgrinfield@swri.org
	NV	Derek Grosch	TEI	e-Mail:	dgrosch@tei-net.com
KG	NV	Kimberly Gutierrez	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238	e-Mail:	kimberly.hernandez@intertek.com
	NV	Dan Horvath	Afton Chemical 2000 Town Center Southfield, MI 48075	e-Mail:	dan.horvath@aftonchemical.com
CK	V	Clayton Knight	Test Engineering Institute 12718 Cimarron Path San Antonio, TX 78249	Phone: e-Mail:	210-690-1958 cknight@tei-net.com
	NV	Dan Lanctot	Test Engineering Institute 12718 Cimarron Path San Antonio, TX 78249	e-Mail:	dlanctot@tei-net.com
	NV	Jessica LaBond	Meritor 2135 W. Maple Rd. Troy, MI 48084	Phone: e-Mail:	248-872-3055 jessica.labond@meritor.com
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ML	V	Mike Lopez	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238	e-Mail:	mike.lopez@intertek.com
DM	V	Donna Mosher	BASF 100 Park Ave. Florham Park, NJ	Phone: e-Mail:	269-217-1715 Donna.mosher@basf.com
TM	V	Troy Muransky	AAM 1840 Holbrook Detroit, MI 48212	e-Mail:	troy.muransky@aam.com

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MS	NV	Matt Sangpeal	Afton Chemical Ashland Technical Center 11289 Central Drive Ashland, VA 23005	Phone: e-Mail:	804-788-5364 matt.sangpeal@aftonchemical.com
	NV	Eric Sattler	US Army CCDC-GVSC RDTA-DP/MS110 6501 E. 11 Mile Road Warren, MI 48307-5000	Phone: e-Mail:	 Eric.r.sattler.civ@mail.mil
RS	NV	Robert Slocum	Lubrizol 29400 Lakeland Blvd. Wickliffe, OH 44092	e-Mail:	robert.slocum@lubrizol.com
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	NV	Dairene Uy	Shell	e-Mail:	dairene.uy@shell.com
	NV	Khaled Zreik	General Motors	Phone: e-Mail:	248-977-9214 Khaled.zreik@gm.com
AZ	NV	Amy Zyski	Dana Inc. 3939 Technology Drive Maumee, OH 43537	Phone: e-Mail:	419-887-3432 Amy.zyski@dana.com