

Oil Seal Compatibility Test (OSCT) Surveillance Panel Meeting Minutes

August 7, 2024

Don Bell

Participants listed on attachment in Appendix.

An OSCT Surveillance Panel meeting was called to order by D. Bell at 9:31 am on 8/7/2024.

A motion made by D. Bell and 2nd by B. Grinfield was unanimously approved with 13 votes to approve the 5/8/2024 OSCT Surveillance Panel minutes.

The OSCT membership voting list was reviewed. The 14 voting members as listed on the attached attendance sheet is a good representation of OEM, oil companies, additive companies, Army, and testing facilities. Cummins-Meritor name was changed to Cummins to reflect the new company name.

Lab C has 3 baths and Lab G has 1 bath for testing PA, FL and NI with no bath issues.

The inventory of elastomer batches at Test Engineering Institute (TEI) was reviewed as follows:

Polyacrylate (PA):

- PA369 TEI has 19 approved slabs, but 20 on hold by TEI in case additional testing is requested.
- PA370 259 approved slabs at TEI.
- PA371 TEI has 249 unapproved slabs that were sent out 5/2/2024 to both labs for qualification testing. Lab G submitted passing qualification data to TMC, but lab C data is pending.

Fluoroelastomer (FL):

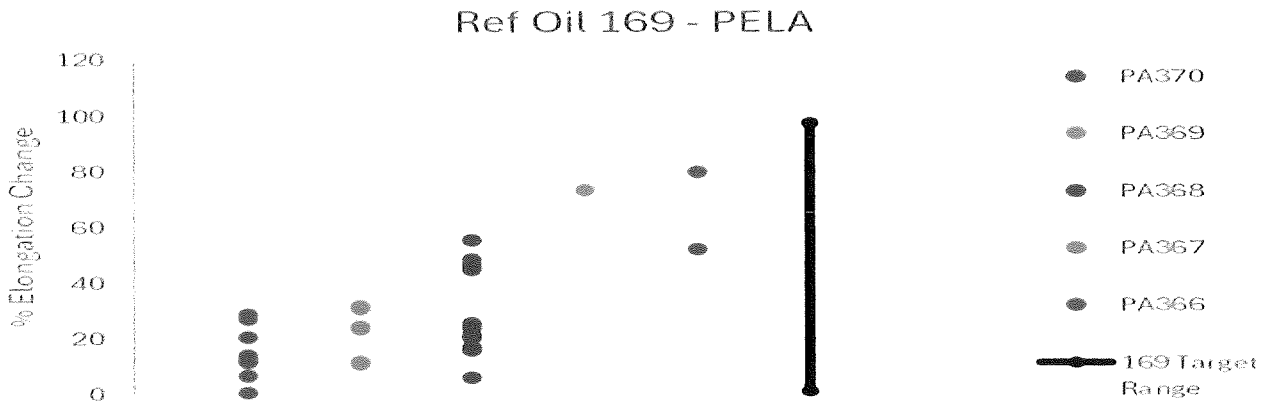
- FL418 TEI has 132 approved slabs
- FL419 TEI ordered 200 slabs on 4/2024, so TEI will ask supplier for status.
- FL420 TEI will place order for 200 slabs.

Nitrile (NI):

- NI354 TEI has 61 approved slabs
- NI355 TEI has 278 unapproved slabs. Lab G submitted passing qualification data to TMC, but lab B continues to struggle passing %elongation and hardness in only reference oil TMC 170. This has been an issue with reference oil TMC 170 since 2021 at lab B. TMC and D. Bell will meet the week of August 12th to review the TMC 170 data and possibly engage the Stats Group to decide if a correction factor can be applied.

- NI356 TEI will place order for 300 slabs.

During the May OSCT panel meeting it was noted that the TMC 169 reference oil data for PA has %elongation range of almost 1-100%. TMC double-checked this data and the target range is correctly reflected with an upper limit of 97.2 and lower limit of 1.2.



The table compares current PA targets (N=19) vs. the current chartable data set (N=182) in TMC 169:

		PVCA	SAHA	PELA	
Current Chartable Dataset	Mean	13.1	-14.7	36.6	N=182
	STD	1.80	2.80	17.53	
	Upper Limit	17.0	-8.6	75.2	
	Lower Limit	9.1	-20.9	-2.0	
		PVCA	SAHA	PELA	
Current Targets	Mean	13.1	-16	49.2	N=19
	STD	1.43	2.83	21.82	
	Upper Limit	16.2	-9.8	97.2	
	Lower Limit	10.0	-22.2	1.2	

TMC and D. Bell to work together to decide upon next steps and if Stats Group engagement is necessary.

We reviewed the TMC reference oils for seals.

TMC Ref. Oil	Data Blended	TMC inventory	Status
169 (PA, FL, NI)	6/2010 (14 yrs)	112 gals.	Sufficient quantity for ~7 yrs. Can't be reblended but supplier can provide a replacement with new base oil. Will get a new TMC #.
170 (NI)	8/2015 (9 yrs)	19.5 gals.	Sufficient quantity for ~3 yrs. Supplier provided fresh drum.
171 (PA & FL)	3/2017 (7 yrs)	2.5 gals.	Sufficient quantity for ~1 year. Supplier reblended, so will arrive at TMC soon.

In order to approve a reblended or replacement TMC reference oil, a motion made by D. Bell and 2nd by B. Grinfield was unanimously approved with 14 votes for both labs to run each elastomer using the

reblended or replacement TMC reference oil, along side an accompanying reference on a current reference oil. This will not apply to TMC 169 or 170 until it is decided if correction factors are needed for NI.

A motion made by D. Bell and 2nd by B. Grinfield was unanimously approved with 14 votes which notes that once the new TMC reference oil is approved, we obsolete the "old" reference oil and start using the newly approved reference oil immediately. The "old" reference oil will be held for 6 months in case issues arise with the new reference oil.

A motion made by D. Bell and 2nd by B. Grinfield was unanimously approved with 14 votes to adjourn the OSCT Panel at 10:21 am.

Respectfully submitted,

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

Donald R. Bell/Chairman

Appendix

Oil Seal Compatibility Surveillance Panel

Date: August 7, 2024

Initials	V = Voting NV = Non-voting	Name	Company & Address	e-Mail	Phone #
NA	V	Nick Ariemma	Lubrizol, 29400 Lakeland Blvd. Wickliffe, OH 44092	nick.ariemma@lubrizol.com	
RPB	V	Rob Banas	ExxonMobil Technology & Engineering 535 Thomas Lane Waleska, GA 30183	rob.banas@exxonmobil.com	770-833-5920
DB	V	Dylan Beck	TMC, 203 Armstrong Dr. Freeport, PA	djb@astmtmc.org	412-365-1037
DRB	V	Don Bell (Chairman)	Afton Chemical, 500 Spring St. Richmond, VA 23219	don.bell@aftonchemical.com	804-788-6332
TB	NV	Tobias Bender	Fuchs Lubricants	tobias.bender@fuchs.com	708-737-1681
	NV	Maxim Burgman	Fuchs Lubricants	maxim.burgman@fuchs.com	248-846-3120
	NV	Bob Campbell	Afton Chemical, 500 Spring St. Richmond, VA 23219	bob.campbell@aftonchemical.com	804-788-5340
HJC	NV	Hailey Catania	Cummins-Monitor, 2135 W. Maple Rd. Troy, MI 48084	hailey.catania@cummins.com	248-435-1544
MC	NV	Margaret Caridi	BASF, 500 White Plains Rd. Tarrytown, NY 10591	margaret.caridi@basf.com	845-216-5535
JJC	V	Jessica Carowick	Cummins-Monitor, 2135 W. Maple Rd. Troy, MI 48084	jessica.carowick@cummins.com	248-872-3055
SC	V	Steve Carr	Dana	steve.carr@dana.com	419-266-6146
	NV	Michael Charron	SWRI, W. Commerce, San Antonio, TX 78227	michael.charron@swri.org	
	V	Allen Comfort	US Army FCDD-GVS-ES, Bldg. 210, 6501 E. 11 Mile Rd., Detroit Arsenal, MI, 48397-5000	allen.s.comfort.civ@army.mil	571-588-6551
	NV	Enia Fry	Daimler Truck NA	enia.fry@daimlertruck.com	313-802-2835
AGP	NV	Arjun Goyal	BASF, 500 White Plains Rd. Tarrytown, NY 10591	arjun.goyal@basf.com	914-330-4362
BB	V	Becky Grinfield	SWRI, W. Commerce, San Antonio, TX 78227	becky.grinfield@swri.org	

	NV	Eric Sattler	US Army CCDC-GVSC FCDD-GVS-ES (M/S 110), 6501 E. 11 Mile Rd. Warren, MI 48397-5000	eric.sattler.civ@army.mil	571-588-7974
NS	NV	Nick Schaup	Lubrizol, 29400 Lakeland Blvd. Wickliffe, OH 44092	nick.schaup@lubrizol.com	
AS	NV	Addison Schweitzer	Shell	addison.schweitzer@shell.com	
BU	NV	Dairene Uy	Shell	dairene.uy@shell.com	281-544-6781
	NV	Wes Venhoff	Lubrizol, 29400 Lakeland Blvd. Wickliffe, OH 44092	wes.venhoff@lubrizol.com	440-347-4879
RLW	V	Rebecca Warden	Chevron Oronite, 4502 Centerview, Suite 210, San Antonio, TX 78228	rebecca.warden@chevron.com	830-865-6771
	NV	Fatih Yucebilgic	Fuchs Lubricants	fatih.yucbilgic@fuchs.com	708-539-0252
	NV	George Zarins	AAM	george.zarins@aam.com	586-854-8810
	NV	Khaled Zreik	GM	khaled.zreik@gm.com	248-977-9214
AY	NV	Amy Zyski	Dana Inc., 3939 Technology Dr. Maumee, OH 43537	amy.zyski@dana.com	419-887-3432

JAR NV Jeff Clark TMC

jac@astmtmc.org
412-365-1032

KH	V	Kimberly Gutierrez	Intertek, 5404 Bandera Rd., San Antonio, TX 78238	kimberly.hernandez@intertek.com	210-523-4675
KH	NV	Hyeok Hahn	Chevron	hyeok.hahn@chevron.com	408-507-2848
	NV	Dan Horvath	Afton Chemical, 2000 Town Center Southfield, MI 48075	dan.horvath@aftonchemical.com	248-226-3708
	NV	John Huron	Chevron Oronite, 4502 Centerview, Suite 210, San Antonio, TX 78228	john.huron@chevron.com	210-731-5609
AJ	NV	Alexander Jackson	Oronite	alexmjack@chevron.com	830-865-6771
	NV	Brad Jordan	Shell	brad.jordan@shell.com	804-516-1238
CK	V	Clayton Knight	Test Engineering Institute 12718 Cimarron Path San Antonio, TX 78249	cknight@tei-net.com	210-690-1958
	NV	Dan Lanctot	Test Engineering Institute 12718 Cimarron Path San Antonio, TX 78249	dlanctot@tei-net.com	
	NV	Anthony Lange	Intertek, 5404 Bandera Rd., San Antonio, TX 78238	anthony.lange@intertek.com	210-634-1103
MMP	NV	Mahdi M-Pour	Tribodens		
JM	V	Jeanelle Morris	Navistar, 2701 Navistar Dr., Lisle, IL 60532	jeanelle.morris@navistar.com	331-332-1661
DM	V	Donna Mosher	BASF, 100 Park Ave., Florham Park, NJ	donna.mosher@basf.com	269-217-1715
C	NV	Caroline Mueller	SWRI, W. Commerce, San Antonio, TX 78227	caroline.louis@swri.org	210-522-2671
TM	V	Troy Muransky	AAM, 1840 Holbrook Detroit, MI 48212	troy.muransky@aam.com	313-758-2444
	NV	Suzanne Neal	Daimler Trucks/Detroit Diesel	suzanne.neal@daimler.com	
	NV	Michael Portell	Intertek, 5404 Bandera Rd., San Antonio, TX 78238	michael.portell@intertek.com	210-896-8012
	NV	Kevin Rettmann	Chevron Oronite, 4502 Centerview, Suite 210, San Antonio, TX 78228	kevin.rettmann@chevron.com	
MS	NV	Matt Sangpeal	Afton Chemical, Ashland Technical Center, 11289 Central Drive Ashland, VA 23005	matt.sangpeal@aftonchemical.com	804-788-5364