

Oil Seal Compatibility Test (OSCT) Surveillance Panel Meeting Minutes

November 4, 2015

Don Bell

Participants: Please refer to attendee list in the Appendix.

An OSCT Surveillance Panel meeting was called to order at 1:00 pm on 11/4/2015 at Automation Alley with several participants on the phone.

The list of 12 voting members was reviewed and decided was up to date and sufficient.

A motion made by J. Gropp and 2nd by B. McGlone to approve the prior OSCT Surveillance Panel meeting minutes from 8/12/2015 and 9/18/2015 was approved unanimously with 8 votes.

There are multiple baths available at Lubrizol and SWRI for conducting ASTM D5662 testing with no bath related issues or severity concerns. Intertek has one bath for conducting polyacrylate and fluoroelastomer seals, but not nitrile.

A TMC information letter, 15-1, was released on 9/23/2015 to revise ASTM D5662 section 8.2.3 to correct the elastomer slab thickness from 2 +/- 1 mm to 1.9 +/- 0.12 mm to agree with the specification thickness that elastomers have always been manufactured to by FNOK.

The following seal inventory at Test Engineering Institute (TEI) as of 11/2/2015 was reviewed and found that seal inventory has been adequate to keep up with demand.

- ▲ **PA353** **TEI received 300 slabs on 8/21/2015**
 - ▲ Most thickness measured just slightly below the specification of 1.78-2.02 mm
 - ▲ Surveillance Panel voted to reject this lot on 9/18/2015 and returned lot to FNOK
- ▲ **PA354** **TEI received 300 slabs on 10/5/2015**
 - ▲ Slabs sent to labs for qualification testing that is pending
- ▲ **PA355** **TEI received 300 more slabs recently**
 - ▲ TEI will send slabs to labs for qualification testing
- ▲ **FL398** **TEI has 182 slabs, awaiting qualification approval since 7/2015**
 - ▲ SWRI & LZ submitted data to TMC, so await Intertek that is running
- ▲ **FL399** **TEI ordered on 9/16/2015 with a 90 day turn-around**
- ▲ **NI346** **TEI has 273 approved slabs**
- ▲ **NI347** **TEI received 300 slabs and sent them to test labs for qualification testing**

Reference oil, TMC 168, for use as a nitrile reference oil is nearing depletion with <4.6 gallons remaining and is not re-blendable.

Afton has identified a TMC 168 replacement oil, GO-14092-0201, and blended 1 drum that was shipped to TMC and coded TMC 170.

	TMC 168	Potential Replacement Oil (SWRI data)	Drum of GO-14092-0201, TMC 170 (SWRI data)
% elongation change	-73.6	-70.4/-65.7/-68.1	-70.1
% vol change	1.1	2.0/2.4/2.6	2.3
Shore hardness	3	2.5/3.0/1.0	1.0

SWRI and Lz are to conduct nitrile seal testing per ASTM D5662 side-by-side with the current TMC 168 reference oil. Once sufficient data is collected by the TMC, perhaps at least 6 runs at both labs, the OSCT Chairman will call a Surveillance Panel meeting to review the data and determine acceptance limits for TMC 170.

As per an 8/12/2015 approved motion, Lz and SWRI will conduct ASTM D5662 testing with a category reference oil, TMC 155-1, on all three elastomers. SWRI has completed the testing, so data is pending from Lz. Once all testing is complete, the data will be submitted to the TMC and the OSCT Chairman will call a Surveillance Panel meeting to review the data.



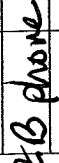

A motion for adjournment was made by B. Grinfield and 2nd by J. Gropp and approved unanimously with 8 votes at 1:13 pm on 11/4/2015.

Respectfully Submitted,

Don Bell

OIL SEAL COMPATIBILITY SURVEILLANCE PANEL

Date: Nov. 4, 2015

Initials	V = Voting NV = Non-voting	Name	Company & Address	Phone / FAX / e-Mail
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