

Minutes of the Sequence VIF Task Force teleconference call

September 16, 2015 08:00 CDT

The fourth meeting of the Sequence VIF Task Force was called to order by Chairman Dan Worcester. The meeting Agenda is included as Attachment 1. The attendance roster is included as Attachment 2.

The minutes from the September 09, 2015 meeting were approved with no changes.

The passing motion from the September 15, 2015 Sequence VU surveillance panel conference call to use ASTM RO 542-2 for both the Sequence VIE precision matrix and the proposed Sequence VIF matrix was reviewed.

Hirano-san indicated that Toyota matrix oil 400 is being blended this week and should be shipping to the TMC next week, with an estimated arrival at the labs around October 5, 2015. Rich Grundza mentioned that the supplier of oil 400 has a history of delivering on-time. Rich indicated that he will overnight the oil 400 samples for the first Sequence VIF sense check matrix tests.

The start timing of the Sequence VIF sense check matrix was discussed. As of today, the matrix start is approximately 3 - 4 weeks out, with the availability of oil 400 as the limiting factor. Each lab is to start the sense check matrix with a new engine that has just completed break-in. The labs are to run the same break-in schedule on the Sequence VIF engines as they do for the Sequence VID and VIE engines.

The task force briefly discussed fall PCMO surveillance panel week, which is projected to occur during the week of October 25th and be located in the Detroit, MI area.

Dan Worcester reported that the "Sequence VIF" test utilizing ASTM RO 542-2 has completed at Southwest Research Institute. Dan used the Sequence VID engine hour correction factor and no severity adjustments to calculate the final FEI1 and FEI2 results. FEI1 calculated to be 1.65% and FEI2 calculated to be 0.75%. Both the FEI1 and FEI2 results were milder than typical SwRI Sequence VID results for this oil and were more severe than typical SwRI Sequence VIE results for this oil. One task force member commented that lower oil temperatures are perceived to shift 5W-30 oils severe compared to the Sequence VIE. Several task force members commented that they would like to see a "Sequence VIF" result on ASTM RO 542-2 from Intertek as soon as possible. Intertek will consider this and report back to the task force.

Hirano-san asked if the logistics for test sponsorship of the Sequence VIF matrix could be discussed. He indicated that the paperwork for test sponsorship needs to be initiated and that we need to assign each test to a test sponsor. A small team will be formed to address the logistics, including Toyota (Hirano-san, Teri and Jim), SwRI (Dan) and Intertek (Bill).

The Sequence VIF test conditions were review and confirmed. The Sequence VIF stage conditions will be as indicated in the latest Toyota presentation and the Sequence VIF aging conditions will be the same as the Sequence VIE aging conditions.

Rich Grundza brought up report forms and data dictionary for the Sequence VIF. He will revise the Sequence VIE report forms and data dictionary into a version for the Sequence VIF. The primary changes will be to Forms 16, 17 and 18, where he will change the limits. The test name will also be changed on all forms. Rich requested that we cut the time for beta testing to 2 weeks and the time for implementation to 2 weeks. All task force members agreed to Rich's recommendations.

Having no further business, the meeting was adjourned. The next task force conference call is scheduled for September 23, 2015.

Respectfully submitted,

William A. Buscher III

Intertek Automotive Research

GF-6B Sequence VIF Task Force

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 (866) 588-1857
 International dial-in number:
 (678) 373-4882
 Conference code:
 2894131

Scope

The ASTM Sequence VI Surveillance Panel requested a Task Force be formed to determine if the Sequence VIE could be used for OW 16 oils. The TF will look at development of the VIF test using 100 °C oil temperature and 94 °C coolant temperature for stages 1, 3, 4, and 6.

Objective

Review the Toyota proposal attached and work on selection of reference oils, stands to support testing, and running the Sense Check and test matrices.

The agenda for this meeting is shown below, if you have any additions please send them to me and Cc this distribution.

- 1.0 Chairman's Comments
- 2.0 Roll Call
- 3.0 Approval of Minutes from Meeting 09.09.2015
<ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencevi/minutes/VIFTaskForceMinutes20150909.pdf>
- 4.0 Status of 542 Blend and 400 as reference oils for the matrix.
- 5.0 VIF test on oil 542-2 at SwRI.
 VIF with VID engine hour correction and FEI 1 and 2 SA = 0.00
 What is interesting and may require further discussion is I included the pass limits for a VID on oil 542-2 and this test is in the bands for a VID oil run to VID test conditions.

	Spectrum hrs = 403	403 = Calc hrs	VID	min	max
FEI1 vs. (0.8 BLB2 + 0.2 BLA)	2.05%	1.65%	1.49%	1.26	1.72
FEI2 vs. (0.1 BLB2 + 0.9 BLA)	1.12%	0.75%	0.80%	0.53	1.07
FEI Sum		2.40%	542-2		

- 6.0 Next call September 23, 2015 at 8:00 AM Central Time.

ATTACHMENT #2

Name	Affiliation
Adrian Alfonso	Intertek ✓
Amol C Savant	Ashland ✓
Andrew Ritchie	Infineum ✓
Charlie Leverett	Intertek
Chris Castanien	Nesteoil -
Cliff Salvensen	ExxonMobil -
Cole Hudson	SwRI -
Dan Worcester Jr.	Chairman, SwRI ✓
David Glaenger	Secretary, Afton Chemical -
Denny Gaal	ExxonMobil -
Doyle Boese	Infineum ✓
Eric Liu	SwRI -
Gordon Farnsworth	Infineum -
Guy Stubs	SwRI ✓
Jason Bowden	OH Technologies ✓
Jim Linden	Toyota - ✓
Jo Martinez	Chevron ✓
Kaustav Sinha	Chevron ✓
Kevin OMalley	Lubrizol ✓
Mark Adams	Tribology Testing -
Mark Mosher	ExxonMobil -
Martin Chadwick	Intertek
Matthew Bowden	OH Technologies ✓
Michael Conrad	Lubrizol -
Mike McMillan	Infineum ✓
Nathaniel Moles	Lubrizol ✓
Patrick Lang	SwRI -
Ray Burn	ExxonMobil -
Rich Grundza	ASTM Test Monitoring -
Robert Stockwell	Oronite ✓
Ron Romano	Ford Motor Company ✓
Satoshi Hirano	Toyota ✓
Teri Kowalski	Toyota ✓
Timothy Cushing	General Motors ✓
Todd Dvorak	Afton Chemical
Tracy King	Haltermann -
Valerie Lieu	Chevron ✓
William Buscher	Intertek ✓
Bob Campbell	Afton -
Mike Ragomo	ExxonMobil -

08/27/15		09/02/15		09/09/15	
Vote on Option#3		Vote on Alt.Sense			
P	Y			P	
	Y	P	Y	P	
P	W	P	W	P	
		P	Y	P	
P					
P	Y	P	Y		
P		P		P	
P	W	P	Y	P	
P				P	
P		P			
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P	W	P	Y	P	
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P	Y	P	Y	P	
P	Y		Y		
		P			
P	Y	P	Y		
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P		P		P	
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				P	
				P	

8-0-5 13-0-1

For 9/16/15 CONF. CALL