

## Minutes of the Sequence VIF Task Force Teleconference Call

June 08, 2016 08:00 CDT

The Sequence VIF Task Force was called to order by Chairman Dan Worcester at 08:00 CDT. The meeting Agenda is included as Attachment 1. The meeting attendance is included as Attachment 2.

Chairman Worcester opened the meeting with a few general comments; this is the first meeting using Loopup.com. Southwest Research has finished the VIF Matrix; Intertek Automotive will finish tomorrow and report results this week. SRI feels that even at 1800 engine hours the oils still separate for FEI 2.

The minutes from the April 27, 2016 meeting were approved as written and are available on the ASTM-TMC web site. A motion for approval was made by Dan Worcester, second by David Glaenzer.

<ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencevi/minutes/VIFTaskForceMinutes20160427.pdf>

Analysis will be started by the Stats Group once the final test has been submitted to the ASTM-TMC and all tests have been validity checked. A discussion took place relative to the validity of the first test on IAR stand 2. A glitch in the software on the new test stand allowed the test to continue following an unacceptable (+0.49%) BLB1/BLB2 shift. This problem was not discovered immediately and the test was allowed to continue. After discussion, it was determined that the test be declared Invalid and not included in the data analysis. Retesting is not an option as it was the first test on an engine; to repeat would require an additional engine in the matrix. All-in-all we will have 31 valid tests from the 32 test matrix.

The Stats Group plans to meet on June 13 to take a first look at the data. The group is quite busy right now as other GF-6 precision matrices are completing and asking for analyses.

Future conference call meetings are tentatively scheduled for July 12 to review VIE data and introduce an LTMS system and on July 19 to review VIF data and introduce an LTMS system. Following those meetings a face-to-face meeting is anticipated for the week of July 25 in Willoughby, Ohio.

The next call will be at the Chairman's discretion.

Having no further business, the meeting was adjourned at 08:25 CDT.

Respectfully submitted,

David L. Glaenzer, Afton Chemical Corporation

**Sequence VIF Task Force**  
**06.08.2016**

Attachment 1  
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**Toll-free dial-in number (U.S. and Canada):**

**(866) 588-1857**

**International dial-in number:**

**(678) 373-4882**

**Conference code:**

**1908975**

**Scope**

The ASTM Sequence VI Surveillance Panel requested a Task Force be formed to determine if the Sequence VIE could be used for 0W 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 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.

- 1.0 Chairman's Comments
- 2.0 Roll Call
- 3.0 The minutes for 04.27.2016 are posted. They are:  
<ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencevi/minutes/VIFTaskForceMinutes20160427.pdf>
- 4.0 VIF Test Matrix
  - 4.1 Sense Checks # 1 and 2 are completed.
  - 4.2 SwRI has completed the final matrix test to be reported 06.06.
  - 4.3 IAR is running the final test in their stand.
- 5.0 The remaining matrix is 14 tests: 7 at each lab on two engines at each lab, 4 on one engine/stand and 3 on the second engine/stand.
- 6.0 Next meeting to be determined.  
Does this group want a Face to Face meeting? If yes, when and where?

Attachment 1  
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SW 1 (Lab A)				SW2 (Lab A)			
	FEI 1	FEI 2	EOT hr		FEI 1	FEI 2	EOT hr
543	1.75	2.33	369	1011	1.53	1.31	373
542-2	2.42	1.59	572	542-2	2.45	1.36	573
542-2	2.28	1.46	777	1011	1.65	0.90	773
543	1.76	2.26	995	543	1.56	2.15	972
1011	1.70	1.69	1197	543	1.81	1.96	1264
543	1.36	1.82	1397	1011	1.52	1.40	1462
542-2	1.84	1.29	1664	542-2	1.84	1.29	1596
1011	1.27	1.23	1825				

IAR 1 (Lab G)				IAR 2 (Lab G)			
	FEI 1	FEI 2	EOT hr		FEI 1	FEI 2	EOT hr
542-2	2.10	1.44	371	1011	Invalid (BLB1/2 Shift)		
				1011	1.37	1.4	350
543	1.59	1.66	621	543	2.08	2.35	544
543	1.68	1.74	820	1011	1.33	1.89	827
542-2	Invalid (EBP issue)			542-2	2.01	1.53	1023
542-2	1.76	1.03	1236				
1011	1.27	1.07	1505	542-2	1.78	1.32	1223
543	1.50	1.50	1704	1011	1.63	1.57	1439
1011	1.27	0.81	1903	543	1.72	1.95	1639
542-2							

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	Total
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
Travis Kotan	SwRI
Thomas Hickl	GM Europe
Jonas Leber	GM Europe
Jerry Brys	Lubrizol
Christine Eickscade	SwRI
Greg Miranda	Lubrizol
Jum Matasic	Lubrizol

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