LSPI Task Force Meeting Minutes April 7, 2017

LSPI Task Force Meeting April 7, 2017

Agenda:

- 1. Roll Call
- 2. Review LTMS Documents
- 3. Discussion/Action/Motions
- 4. Next Meeting

LSPI Task Force Voting Members

Name	Contact Info	Company	Attend
Felt Mounce	Phone: (210) 522-5411	SwRI	у
Voting Member	felt.mounce@swri.org		
Greg Miranda	Phone: (440) 347-8516	Lubrizol	Υ
Voting Member	Greg.Miranda@Lubrizol.com		
Al Lopez		Intertek	Υ
Voting Member			
Nate Bean		Valvoline	у
Voting Member			
Ed Altman	Phone:	Afton	у
Voting Member			
Jo Martinez		Chevron Oronite	у
Voting Member			
	Phone:	ExxonMobil	
Voting Member			
Charlie Leverett		Infineum	У
Voting Member			
Jeff Hsu	Phone: (281) 544-8619	Shell	
Voting Member	j.hsu@shell.com		
Preston Tarry	Phone:	BP	У
Voting Member			
Ron Romano	Phone: (313) 845-4068	Ford	У
Voting Member	rromano@ford.com		
-	Phone:	General Motors	
Voting Member			
Teri Kowalski	Phone: (734) 995-4032	Toyota	
Voting Member	Teri.Kowalski@tema.toyota.com		
Haiying Tang	Phone: (248) 512-0593	Chrysler	
Voting Member	HT146@Chrysler.com		
Rich Grundza	Phone: (412) 365-1034	TMC	у
Voting Member	reg@astmtmc.cmu.edu		
Dan Lanctot	Phone: (210) 690-1958	TEI	у
Voting Member	dlanctot@tei-net.com		
Jason Bowden	Phone: (440) 354-7007	OHT	у
Voting Member	jhbowden@ohtech.com		

Meeting Attendance

Attendee	Company	Attend Y/N
Ed Altman	Afton	Υ
Rich Grundza	ASTMTMC	Υ
Preston Tarry	ВР	Υ
Ricardo Affinito	Chevron	У
Jo Martinez	Chevron	Υ
Robert Stockwell	Chevron	Υ
Ron Romano	Ford	У
Doyle Boese	Infineum	Υ
Gordon Fanrsworth	Infineum	
Al Lopez	Intertek	Υ
Jason Soto	Intertek	Υ
Martin Chadwick	Intertek	Υ
Greg Miranda	Lubrizol	У
Joseph Gleason	Lubrizol	У
Kevin O'Malley	Lubrizol	У
Jason Bowden	OHT	У
Matthew Bowden	OHT	
Felt Mounce	SwRI	Υ
Cole Hudson	SwRI	Υ
Travis Kostan	SwRI	Υ
Dan Lanctot	TEI	Υ
Nate Bean	Valvoline	Υ
Chris Taylor	VP Racing Fuels	
Bill	IAR	У
Kaustav		У

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LSPI LTMS Summary

See Document "LSPI LTMS Summary 20170407"

See Excel file "LSPI LTMS Example 20170407"

Appendix K

See document "LSPI ASTM New Test Template 20170407"

Discussions

Discussion 1	Since TMC 220 is closest to the pass/fail limits, how do we incorporate it into the reference procedure?
Discussion 2	Do the new pistons match the old pistons? If no, should we consider using the stock pistons that come with new engines instead of these new pistons?
Discussion 3	Ask if anyone wants to produce a borderline passing oil for referencing.
Discussion 4	What is the referencing period, and how do we incorporate hours.

Actions

Action 1::	LSPI development team will meet to discuss if and how to use TMC 220 in the reference
	procedure.
Action 2	Participating labs to inspect new receipt of piston to make sure they match the original
	design.

Motions

Motion 1 – Require oil TMC 220 to be run with every 3^{rd} and 5^{th} reference sequences. Calibration status will not be granted until the TMC 220 oil has been completed and accepted.

Made by Ron Romano, Seconded by Charlie Leverett

Yes - 8

No-2

Waive – 2

The resolution of this motion is tabled for discussion for inclusion in the test procedure.

Motion 2 – Use a Zi upper and lower limit of 1.5 and -1.5, and apply negative and positive severity adjustment.

Made – Felt Mounce, Second Rich Grundza

Yes - 10

Waive – 2

Motion 3 – The LTMS document will be accepted as written on April 7, 2017. The LTMS document will be reviewed within six months.

Made: Felt Mounce Seconded: Al Lopez

Unanimous with 2 waives

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Motion 4: Calibration status cannot be granted by TMC until motion 1 has been resolved and approved.

Made: Felt Mounce-withdrawn

Motion 5: The LSPI Task Force, having established severity and precision control charting via an LTMS system, having established test stand/engine calibration and reference periods, having secured sources for test parts, fuel and reference oils, having identified parameters that may be used for pass-fail criteria, and having an up-to-date test procedure (in progress), hereby wishes to inform the Passenger Car Engine Oil Classification Panel, the Auto Oil Advisory Panel and the American Chemistry Council PAPTG, that the LSPI test is ready for inclusion in ILSAC oil category GF-6, and recommends the LSPI procedure be published as an ASTM test method.

Made: Ron Romano, Second Felt Mounce

Unanimous approval with one waive.

Company	Motion 1	Motion 2	Motion 3	Motion 4	Motion 5
SwRI	Y	Υ	Υ		Y
Lubrizol	N	Υ	Υ		Y
Intertek	Y	Υ	Υ		Y
Valvoline	Y	Y	Y		Y
Afton	Y	Υ	Υ		Y
Chevron Oronite	Y	Υ	Υ		Y
ExxonMobil					
Infineum	Y	Υ	Υ		Y
Shell	Y	Υ	Υ		
BP					
Ford	Y	Υ	Υ		Y
General Motors					
Toyota					
Chrysler					
TMC	Y	Υ	Υ		Y
TEI	W	W	W		W
OHT	W	W	W		Y

Next Meeting

Meeting to discuss pistons to be scheduled with Chain Wear task force.

Meeting to be scheduled to go over test procedure.

Items rated as "A" status and marked with * require supporting documentation to be attached LSPI Test

1.0 Action Plan

1	1	\mathbf{p}	afα	ron	Ce	Ail	le

1.1 Reference Ons	
1.1.1 Do the majority of reference oils represent current technology?	A
1.1.2 Are the majority of reference oils of passing or borderline pass/fail performance?	A
One high event oil. Other two oils are above and below the expected pass fail Limit. The low event oil used for discrimination. When the pas/fail limit is esta reference oil will be solicited.	blished, another
1.1.3 Is reference oil supply and distribution handled through ASTM/TMC? Yes	_A_
1.1.4 Is a quality control plan defined and in place? TMC reference oil process	A
1.1.5 Is a turnover plan defined/in place to ensure uninterrupted	
supply of reference oil and an orderly transition to reblends? TMC reference oil process 1.16 Is a process for introducing replacement reference oils.	A
1.1.6 Is a process for introducing replacement reference oils defined and in place?	Δ
Will be handled by the SP	
1.1.7 Are oils blended in a homogeneous quantity to last 5 years? All reference oils are at TMC	A
1.1.8 How many reference oil are there and what are the identifying oil codes? Three reference oils. LEO -TMC220, HEO – TMC222 and 0W-16 - TMC221	
Comments:	
2.0 Test Parts	
2.1 Are all critical parts identified?	A
Yes, in procedure	A
2.1.1 List the parts consider as critical. In test procedure	A
2.2 Is a system defined/in place to maintain uniform hardware?	A *
Lifetime buy	
2.3 Is there a system for engineering support and test parts supply? Through test Sponsor	A
2.3.1 How many tests can be run with the supply of parts currently in stock? Life of the test	A
2.4 Are critical parts distributed through a Central Parts Distributor (CPD)? From Ford	_A
2.5 Are critical parts serialized, and their use documented in test report?	A

LSPI Task Force Meeting Minutes April 7, 2017 Yes 2.6 Are all parts used on a first in/first out basis? Yes 2.7 Are all rejected critical parts accounted for and returned to the CPD? Rejected parts are handled through Ford FCS 2.8 Does the CPD make status reports to the test surveillance body at least semi-annually? __A__ Test Sponsor at all meeting 2.9 Is there a quality control and turnover plan in place for critical test parts, including identification and measurement of key part attributes, a system for parts quality Accountability, a turnover plan in place for simultaneous industry-wide use of new parts or supply sources? Measurement are in the procedure, Surveillance Panel will handle turn-over plan. 2.10 Is the CPD active in industry surveillance panel/group, and in industry sponsored test matrices? Test sponsor at all meetings **Comments:** 3.0 Test Fuel SA CW 3.1 Is the fuel specified and the supplier(s) identified? 3.1.1 Who is the fuel supplier? _Halterman , EEE_____ 3.2 Is a process in place to monitor fuel stability over time? 3.3 Are approval guidelines in place for fuel certification? COA provided for each bacth of delivered fuel. 3.4 If the test fuel is treated as a critical part of the test procedure: Is an approval plan and severity monitoring plan for each fuel batch in place? __D__* 3.5 Is a quality control plan defined and in place to assure long term quality of the fuel? 3.6 Is a turnover plan defined, in place and demonstrated to ensure uninterrupted supply of fuel? **Comments:** 4.0 Test Procedure

4.1 Is a technical report published documenting, per ASTM Flow Plan:

4.1.1 Test precision for reference oils?	A
LTMS complete	
4.1.2 Field correlation?	A
	_
4.1.3Test development history?	B
Will be part of the research report	

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4.2 Are test preparation and operation clearly documented in an ASTM standard form	at?
B* Draft test procedure on the TMC website. Facilitator assigned.	
4.3 Are test stand configuration requirements documented and standardized? In draft procedure on TMC website	A*
4.4 Are milestones for precision improvements established?	A*
Part of SP responsibilities 4.5 Are routine engine builder workshops planned/conducted? Build workshop completed. Additional workshops determined by SP 4.5.1 How often and by whom?	_A_
Comments:	
5.0 Rating and Reporting of Results	
5.1 Are the reported ratings from single raters (i.e. not averages from various raters)? No subjective ratings	_D_
5.2 Is a suitable severity adjustment system in place? LTMS established and approved by the TF	A*
5.3 Is each pass/fail parameter unique and have a significant purpose for judging engineers performance?	ne oil A
Yes, only one pass/fail parameter is used. 5.3.1 List the pass/fail parametersAverage # of events of 4 iterations	
5.4 Do all rate and report parameters judge operational validity, help in test interpretar judge engine oil performance?	tion or D
5.5 Are routine rater workshops conducted/planned?	D
5.5.1 How often and by whom?	
Comments:	
6.0 Calibration, Monitoring and Surveillance	
6.1 Is a process in place for independent monitoring of severity and precision with an for maintaining calibration of all laboratories?	action plan A*
Monitored by the TMC with guidance of the SP 6.2 Are stand, lab, and industry reference oil control charts of all pass/fail criteria para to judge calibration status?	ameters used A*
LTMS established and approved by the TF 6.3 Does the specified calibration test interval allow no more than 15 non-reference of	il tests
between successful calibration tests?	Α

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Reference period is 5 non-ref oil tests

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	6.4 Is an ASTM Surveillance Panel in place?	B
	Taskforce will become SP once approved by PCEOCP	
	6.4.1 Who is chairman?Felt Mounce	-
Com	ments:	
7.0 T	Cest prove out data	
	7.1 Has a test development Task Force/TMC visit been made to each of the labs	
	that will participate in the industry precision matrix?A	
	Completed	
	7.2 Have prove out tests been run with the finalized test procedure and test parts?A	*
	PM completed along with statistical analysis	

7.2.1 How many labs and stands? Three Labs, Five total stands_____

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