

TEOST Surveillance Panel Meeting Minutes

Meeting Date: October 13, 2021

SP Member Attendees:

Tom Schofield – ASTM Test Monitoring Center (TMC)

Dennis Gaal – Exxon Mobil

Joe Franklin – Intertek Automotive Research

Bridget Brassell Odell, Lacey Dolsen, Mike Faile & Jerimiah Westbrook – Lubrizol Corporation

Yong-Li McFarland & Adam Ramos – Southwest Research Institute

Amy Ross – Valvoline

Additional Attendees:

Alyson Fick – ASTM

Joel Leistikov – US Lubricants

Jeremy Styer – Vanderbilt Chemicals, LLC

General Interest: Jared Cavalier, Ruby Dytioco, Deyuan Kong & Mitesh Rathod

Agenda:

1. ASTM Antitrust & Recording Policy
2. Review membership and roll call
3. Review and approve minutes from previous meeting
4. Old Business:
 - a. Review data and set permanent limits for D6335 oil 75-1
 - b. Status of D7097 TMC oil 434 batch 3
 - c. Review screening data of D7097 Catalyst Batch 20AB
5. New Business:
 - a. Data Dictionary Rod Serial Character Limit for D6335
 - b. Discuss Precision and Performance of D6335
 - c. Discuss Precision and Performance of D7097
 - d. TEOST Turbo update
 - e. TEOST Chair position
 - f. Any Additional New business

Attached: The meeting presentation is included below these meeting minutes.

Meeting Minutes:

Mike Faile initiated the meeting at 11:05 am EST with the reminder of ASTM's anti-trust and recording policy, review of agenda, and then followed with a review of the membership and roll call. Mike said to contact him to request removal or addition to the surveillance panel membership.

Mike stated the November 21, 2019 meeting minutes had been sent out to the surveillance panel members. A motion was made and seconded to approve the minutes. Mike asked for a vote and all voting members voted affirmative with no negatives or abstentions.

Under Old Business, the data of D6335 oil 75-1 was reviewed and proposed final limits were presented. After a short discussion by the members, a motion was made and seconded to make the proposal 3 limits the final limits for this oil. Mike asked for a vote and all voting members voted affirmative with no negatives or abstentions.

The final target and limits will be:

Oil	n	Mean	sR	Lower	Upper
75-1	51	54.8	6.75	41.6	68.0

Tom Schofield agreed to document this change in a TMC memo that will be published by November 3, 2021. November 3, 2021 will be the official date the temporary limits are replaced by these final limits. The LTMS changes will take longer but they will be updated in the next publication most likely.

The data of D7097 TMC oil 434 batch 3 was then reviewed. See the data and information in the presentation below. Permanent limits will be set by the panel after a minimum of 20 data points are obtained with a preference to wait until 30 data points. There was no further discussion.

D7097 Catalyst batch 20AB screening data was then discussed. There have been no TMC calibration runs performed with this batch yet.

Under new business, Bridget Brassell Odell discussed the difference in rod batch serial numbers character limit between the D6335 and D7097. It was questioned whether the full data dictionary was reviewed when this difference was examined. Bridget stated it was and no other differences were found at that time. A motion was made and seconded to approve the minutes. Mike asked for a vote and all voting members voted affirmative with no negatives or abstentions. Tom Schofield discussed that the data dictionary will need to be updated which requires a TMC update, a DCC beta testing, and then implementation at the labs (and TMC). Normally this takes about three months (or more). It was asked whether the labs could update their internal databases sooner and Tom said you could change your database internally to accommodate more characters, but it will still truncate at the TMC. Tom agreed to get the TMC process started and will progress through the process.

Mike then discussed the precision and performance of D6335 over recent periods. One lab mentioned that several instruments were recently taken out of service that were severe. Removing those should help improve the precision and performance going forward. Tom also noted that oil 75-1 has had very high standard deviation. Mike stated that setting the permanent limits today should help improve the precision and performance going forward as well.

Mike then discussed the precision and performance of D7097 over recent periods. Very little discussion occurred, and the topic was ended.

The TEOST Turbo method was then discussed. It was asked what the benefits of this possible ASTM method were and a person in attendance said that it correlates better to modern turbo-charged engines. The initial plan was to try to get it into GF-6, but the method was not developed soon enough. This could be attempted in a future specification. It was agreed that unless that occurs, it does not need to be part of this TMC Surveillance Panel.

Mike then discussed that he is stepping down from the Chair position as he has moved on to another position at Lubrizol. He nominated Bridget Brassell Odell from Lubrizol and stated that he had been working with her to get her ready to take over. Mike asked if there were any other nominees or volunteers. There were none. Mike then made a motion and it was seconded to have Bridget Brassell Odell be the new TEOST Surveillance Panel Chair. Mike asked for a vote and all voting members voted affirmative with no negatives or abstentions.

Mike then opened the meeting to all attendees for any additional New Business, but no items were brought up by the members. The meeting was motioned and seconded to close, and the meeting was adjourned at 11:51 am EST.

Mike Faile, TEOST Surveillance Panel Chair



Lubrizol

ASTM TMC TEOST Surveillance Panel Meeting

Wednesday, October 13, 2021

MOVE CLEANER
CREATE SMARTER
LIVE BETTER

Agenda

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ASTM Antitrust & Recording Policy

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The purpose of antitrust laws is to preserve economic competition in the marketplace by prohibiting, among other things, unreasonable restraints of trade. In ASTM activities, it is important to recognize that participants often represent competitive interests. Antitrust laws require that all competition be open and unrestricted.

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Review membership and roll call

Company	Voting Representative	Informational
Afton Chemical Ltd.		Emma Wade, Peter Leitner
Afton Chemical Corporation		Jeff Yang, Theresa Faison, Monica Johnson-Brown (?)
Ashland Incorporated		
BASF Corporation		Patti Cusatis
Chevron Global Lubricants		
Chevron Oronite Company, LLC		Kaustav Sinha
ExxonMobil Research and Engineering	Dennis Gaal	
Infineum USA L.P.		Andrew Ritchie
Intertek Automotive Research	Matt Schlaff	Joe Franklin, Mia Will
Imperial Oil Limited		
ISP Salzbergen GmbH & Co. KG	Udo Boecker	Michael Johnscher
Lubrizol Additive (Zhuhai) Co., Ltd	Xiao-Hu Fan	
Lubrizol Corporation	Mike Faile (Chair)	Lisa Boley, Lacey Dolsen, Ericka Fleischhauer, Bridget Brassel Odell, Jerimiah Westbrook
PetroChina Lanzhou Lube Oil Institute		Xu Li (?)
Sinopec Beijing Research Institute		WenTong Lu
Southwest Research Institute	Becky Grinfield	Yong-Li McFarland, Charlie Nystrom, Adam Ramos
Savant Incorporated	John Bucci	Ted Selby, Maggie Smerdon
Shell (Shanghai) Technology Limited	Yan Jiao	Carl Stow
Tannas Company	Greg Miiller	Gordon Cox
Test Monitoring Center	Tom Schofield	
Vanderbilt Chemicals, LLC		Ron Hiza; Christine Katrenya

Review and approve minutes from previous meeting

11/21/2019 Meeting Minutes

TEOST Surveillance Panel Meeting Minutes

Meeting Date: November 21, 2019

Attendance:

Tom Schofield – ASTM Test Monitoring Center (TMC)
Dennis Gaal – Exxon Mobil
Matt Schlaff – Intertek Automotive Research
Bridget Brasell, Lacey Dolsen, Mike Faile, Carman Robles-Feeney & Lisa Boley – Lubrizol Corporation
Maggie Smerdon – Savant Labs
Becky Grinfield, Adam Ramos & Charlie Nystrom – Southwest Research Institute
Greg Miller – Tannas Company
Christine Katrenya – Vanderbilt Chemicals, LLC

Agenda:

1. Welcome, ASTM Antitrust & Recording Policy
2. Review membership and roll call
3. Review and approve minutes from previous meeting
4. Review screening data of D7097 TMC proposed oil 434 batch 3
5. Method updates under WK69698 and WK69699
6. Any New business

Attached: The meeting presentation is included below these meeting minutes.

Meeting Minutes:

Mike Faile initiated the meeting at 10:17 am EST with the reminder of ASTM's anti-trust and recording policy, review of agenda, and then followed with a review of the membership and roll call.

Mike asked if everyone had been able to review the August 28, 2019 meeting minutes that were sent out. All had been able to and a motion was made and seconded to approve the minutes. Mike asked for a vote and all voting members voted affirmative with no negatives or abstentions.

The screening data of D7097 TMC proposed oil 434 batch 3 was then reviewed. See the data in the presentation below. It was discussed that the mean is close to the current 434 batch and that the standard deviation is slightly better. A motion was made and seconded to set temporary limits from this data set, put oil 434-3 into service, and then review the limits after at least 20 data points are obtained. There was no further discussion. Mike then asked for a vote and all voting members voted affirmative with zero negatives and zero abstentions. Tom Schofield then agreed to publish a memo with these temporary limits.

Mike then discussed that the D6335 and D7097 method updates under WK69698 and WK69699 passed the sub-committee and main ballots, and the updated methods will be published soon.

Mike then opened the meeting to all attendees for any New Business, but no items were brought up by the members. The meeting was motioned and seconded to close, and the meeting was adjourned at 10:42 am EST.

Mike Faile
TEOST Surveillance Panel Chair

Old Business



Review data for D6335 oil 75-1

- Temporary limits were approved during 4-4-2019 SP Meeting.
 - Based on round robin data of 16 total runs performed at 7 labs and on 12 test rigs
 - Excluded the screening data (5 runs) and 5 round robin runs
- TMC LTMS

Table 1
D6335 (TEOST) Reference Oil Targets and Acceptance Bands Effective 20190404

Test	Oil Code	Parameter	n	Mean	sR	Acceptance Bands*	
						95%	
						Lower	Upper
	75	Total Deposit wt. (mg)	30	53.66	6.56	40.8	66.5
TEOST by	75-1	Total Deposit wt. (mg)	16	56.9	5.02	47.1	66.7
D6335	435-2	Total Deposit wt. (mg)	30	28.71	4.76	19.4	38.0

*95% Acceptance Bands = Mean +/- (1.960 x sR)

Set permanent limits for D6335 oil 75-1

- Review Data
- Discuss proposed targets and bands

Final Limits: Proposed Targets and 95% Acceptance Bands

	Oil	n	Mean	sR	Lower	Upper	Notes
Current	75	30	53.7	6.56	40.8	66.6	
Temporary	75-1	16	56.9	5.02	47.1	66.7	Round Robin Green results only (excluded lab E1, 38.5 & 61.9 & screening results)
Proposal 1	75-1	78	55.5	11.00	33.9	77.1	All results
Proposal 2	75-1	41	54.8	5.61	43.8	65.8	Green results only (excludes screening runs, lab E1 RR, outliers, and shakedown runs)
Proposal 3	75-1	51	54.8	6.75	41.6	68.0	Green and purple results (excludes screening runs, extreme outliers and shakedown runs)

- Agree on final target and limits

Status of D7097 TMC oil 434 batch 3

- Temporary limits were approved during 11-21-2019 SP Meeting.
 - Based on screening data of 8 total runs performed at 4 labs and on 7 test rigs
- TMC Memo 19-060 published 11-27-2019

Table 1
D7097 (MTEOS) Reference Oil Targets and Acceptance Bands Effective 20191127

Test	Oil Code	Parameter	n	Mean	sR	Acceptance Bands*	
						95%	
						Lower	Upper
MTEOS by	432	Total Deposit wt. (mg)	30	47.04	4.50	38.2	55.9
D7097	434	Total Deposit wt. (mg)	30	27.37	6.57	14.5	40.2
	434-3	Total Deposit wt. (mg)	8	28.39	6.46	15.7	41.0

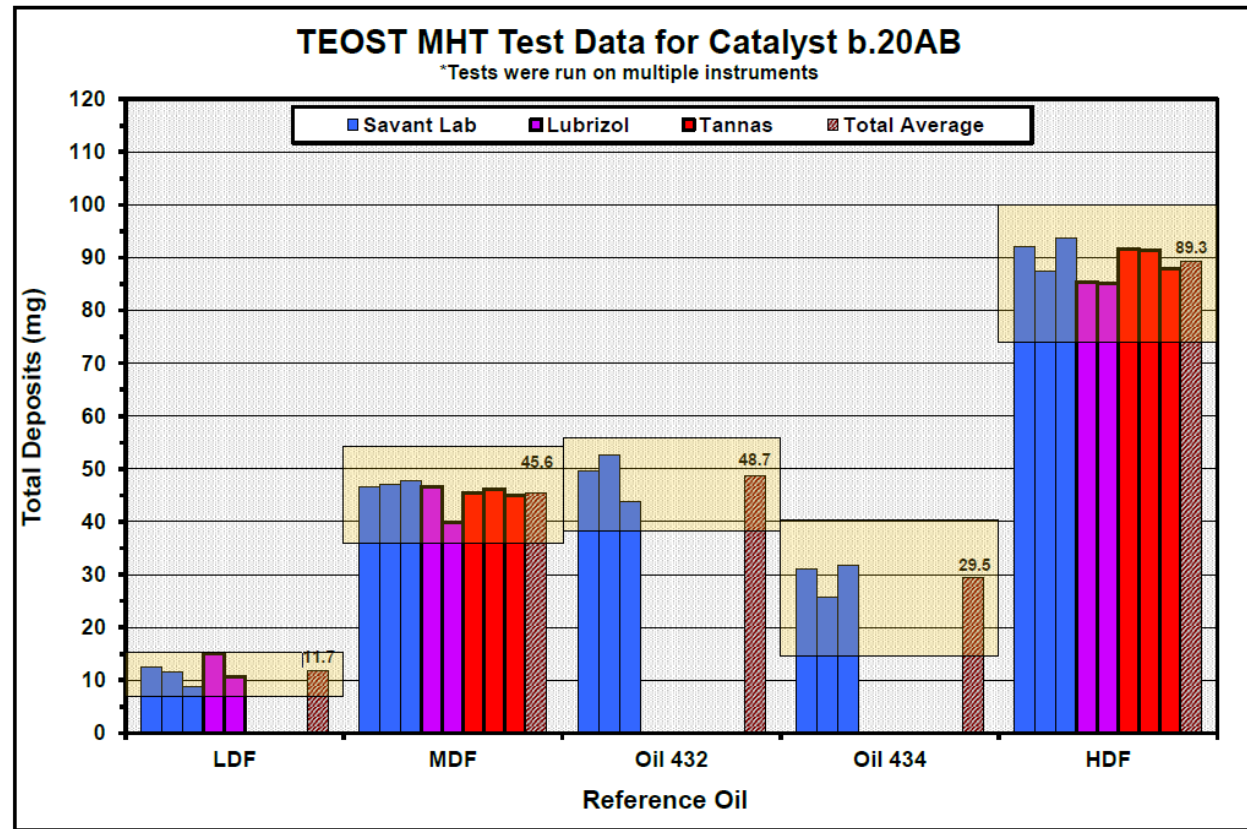
*95% Acceptance Bands = Mean +/- (1.960 x sR)

Status of D7097 TMC oil 434 batch 3

- Since introduction, only 8 additional runs have been completed (all this period)
 - All 8 have passed calibration
 - Run at 2 labs on 8 different test rigs
 - Mean $\Delta/s = -0.32$
- Therefore, 16 total runs thus far.
- Will continue to monitor and regroup after a *minimum* of 20 runs to set the permanent limits.
 - 30 runs preferred

LTMSLAB	APPARATS	TDEP	TDEPyi
V	V8	33.6	.
V	V8	29.8	.
B	B8	32.1	.
B	B15	18.6	.
G	G8	23.7	.
G	G3	38.7	.
A	A17	23.6	.
A	A15	27	.
A	A14	21.7	-1.0356
A	A4	26.3	-0.3235
A	A13	16.5	-1.8406
A	A10	18.7	-1.5
A	A16	28.3	-0.0139
G	G3	32	0.5588
G	G5	39.7	1.7508
A	A3	27.2	-0.1842

Catalyst Batch 20AB Screening



New Business



Rod Character Limits

Current batch N rods have 6-digit serial numbers
D6335 ROD SERIAL NUM are being truncated

Utilize D7079 convention and allow 10 characters

D6335	260	2	TEOST	THERMDEP	7	2	N	cm	THERMOCOUPLE DEPTH
	270	2	TEOST	RODNUM	5	0	C		ROD SERIAL NUMBER
	280	2	TEOST	RODWTEOT	8	4	N	g	ROD WEIGHT FINAL (END OF TEST)
D7097	260	2	MTEOS	CATBATCH	10	0	C		CATALYST BATCH NUMBER
	270	2	MTEOS	RODNUM	10	0	C		ROD SERIAL NUMBER
	280	2	MTEOS	SAMWT	8	4	N	g	UNTREATED TEST SAMPLE WEIGHT

Precision and Performance of D6335

- Review D02.B0.07 Semi-Annual Report
- Open discussion

Precision and Performance of D7097

- Review D02.B0.07 Semi-Annual Report
- Open discussion

TEOST Turbo Update

- WK67500
- From D02.09.0G May 11th 2021 meeting minutes:

John Bucci gave an update of the TEOST Turbo ILS. The ILS was completed with 6 labs participating. The repeatability and reproducibility calculated were comparable to the existing MHT and 33C methods. John made a motion to write a research report based on the ILS data and to ballot the method to become an official ASTM method. The motion passed unanimously.

- From D02.B0.07 June 7th 2021 meeting minutes:

7. NEW BUSINESS

Jessica Hawkins has announced that she will step down as secretary of the D02.B0.07 surveillance panel, Dennis Gaal has asked that if anyone would like to volunteer for this position to reach out to him. Matt Schlaff has also mentioned that subcommittee 9 subsection G will make a slight adjustment to the ballot for new TEOST turbo method and will hopefully be approved by the next semester. Matt was unsure if this will be added to TMC as a new test or if this will be added alongside with the other TEOST methods. Dennis Gaal suggested that this should be discussed for the December 2021 meeting as we will then have more information and time to overview for new business.

TEOST Chair Position

- Mike Faile stepping down
- Nominate Bridget Brassell Odell from Lubrizol
- Any other nominees?

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New Business

Additional New Business?

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