

# ASTM Engine Oil Gelation Test (EOGT) WK86363 Update

EOFT and EOWTT Surveillance Panel Meeting

July 24, 2025

Yong-Li McFarland, Chair



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# EOFT and EOWTT Surveillance Panel Membership

## 22 members

Sarah Fitzgerald, Afton Chemical  
Robert Stockwell, Chevron Oronite  
Quanchang Li, ExxonMobil  
Michael Deegan, Ford  
Melissa Chu, Infineum  
Angela Willis, Infineum  
Joe Franklin, Intertek  
Karina Gil, Intertek  
Yuliza Rocha, Intertek  
Michael Johnscher, ISP  
Michael Kunselman, KJA Group

Litchi Xie, Lubrizol Additive (Zhuhai) Co., Ltd.  
Victoria Fein, Lubrizol  
Jason Bowden, OH Technologies Inc  
Clarence McCollum, Richful (Xinxiang Richful)  
Greg Miiller, Savant Group  
Sean Alston, SGS North America  
Becky Grinfield, SwRI  
Yong-Li McFarland\*, SwRI  
John Loop, TMC  
Jared Cavaliere, Valvoline  
Amy Ross, Valvoline

\*Chair



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# New EOGT WK86363, ILS# 1854

- Ford request for a new Engine Oil Gelation Test (EOGT): request to add a new test filterability test to better screen oils for field issues
- Status:
  - Method: 1 draft (Afton method V9.6) uploaded on ASTM Collaboration Area
  - Oils: 11 potential reference oils offered; 17 oils received at TMC
  - Screening Tests and ILS: ILS tests ongoing
  - Timing: ILS tests to be run by April, and test available in August 2025

## Agenda:

- 1. ILS status
- 2. Data analysis and data dictionary
- 3. Funnel diameter discussion
- 4. Timing
- 5. Method review comments



# ILS Updates 7-7-25

- Afton: submitted ILS
- SwRI: completed ILS
- Savant: estimated ILS completion August 15
- Intertek: completed ILS
- Valvoline: completed ILS
- Infineum: completed ILS
- Lubrizol: completed ILS
- Richful: completed ILS



# Data review, data dictionary – Notes July 8

- TMC sent initial ILS data to stats group June 13
- Updates: Stats group working through data, decoding issues, and labs with error runs; 2 labs used funnel diameter outside method, concerns with getting the correct funnel diameter from supplier, focus on oil precision vs high/mid/low precision.
- Is a precision funnel that can be included? Please let Yongli know of possible equipment and supplier
- Need for additional cleaning language in method?
- All data (include first ILS runs) to be sent to stats group
- Funnel diameter discussion for next meeting
  
- Data dictionary and referencing process: criteria data to be reported to TMC, report results to be determined – Jared to work with John on this



# Funnel diameter discussion

Notes 7-24-25

- Data showed significant differences between Funnel ID 1 (3.7 to 4.4 mm) and Funnel ID 2(>4.4 mm): recommend only Funnel ID 1 data to be included. (1 run for lab 5 with 3.62 mm)
- This is a question for the group to decide before statisticians go forward on data analysis
  - Funnel ID: *“Mark funnels that are to be used for EOGT and provide a location to set aside.*
  - *Using a caliper that has a (2) decimal place capability, measure the funnel ID in (2) places perpendicular to each other.*
  - *Provide the funnel identification and the (2) measurements. Both measurements must be within the 3.7-4.4mm requirement.”*
- Consider lab 8 data: do we include or exclude as outlier?
- Consider normalize volume by funnel ID? Not supported
- Ask Labs to rerun ILS: all or only lab 2 and 4?



# Timeline – updated July 8, 2025

Draft Timeline	Date														
	5-6 2023	7-8 2023	9-10 2023	11-12 2023	1-2 2024	3-4 2024	5-6 2024	7-8 2024	9-10 2024	11-12 2024	1-2 2025	3-4 2025	5-6 2025	Jul-Aug 2025	Sept –Oct 2025
Develop test procedure and ILS report form	█														
Collect and prepare donated oil samples (17 oils)		█													
Screening samples shipped to labs (6 labs)		█													
Screening labs run 4 tests			█												
Test development (Screening, Proposal tests, Root cause)			█												
Pilot #1									█						
Pilot #2 and #3									█						
ILS samples shipped and labs run tests												█			
Data analysis for ILS, generate Research Report (RR) & Precision													█	█	
Ballot test procedure and RR															█
<b>Test available for industry use</b>															█



# EOGT Procedure updates and video

- Jared to review method with group
  - Please send any feedback to Jared by June 30.
  - John sent TMC wording revisions
  - Consider temperature in funnel. Record temp?
  - Measure funnel ID
  
- ASTM EOGT video – no comments
  - Section 9
  - Section 10:
  - Section 11: “air fluid interface”, order of add water and check pH in method/wording, does order of clockwise or counterclockwise
  - Section 13



# Action Items and Next Meeting

- Savant to complete ILS runs – check on timing
  - Jared and John to work on data dictionary
  - All: review latest procedure and give comments to Jared
  - All: review ASTM EOGT videos and give comments to Yong-Li
  - Labs: review previous work on funnel diameter to share at next meeting, and check on if data submitted accurately
  - All: let Yongli know of any precise funnel products and suppliers
- 
- All labs to submit data on measured funnel ID to TMC by Aug 1 – Yongli send email
  - Group to consider if all Labs to rerun ILS, lab 8 only, or labs 2, 4
  - Lab 8 to get more Oil F and review process with Jared
  - Intertek to measure temperature after shearing and before - Yuliza
- 
- Next Meeting: Monday August 4 at 10am CDT for 1.5 hrs



# Thank you for your support!

Participants		
Method Development (11)	Oil Donations (9)	Testing Labs (10)
Afton	Afton	Afton
ExxonMobil	Ford	Infineum
Ford	Infineum	Intertek
Infineum	Lubrizol	ISP
Intertek	OH Technologies (donate filters only)	Lubrizol
ISP	Oronite	Richful
Lubrizol	Subaru	Savant
Oronite	TMC (collection, shipping only)	SwRI
Savant	Toyota	TMC (monitoring system only)
SwRI		Valvoline
TMC		

