

ASTM Engine Oil Gelation Test (EOGT) WK86363 Update

EOFT and EOWTT Surveillance Panel Meeting

August 4, 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 V9.7) 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 July, and test available in **October** 2025

Agenda:

- 1. ILS status
- 2. Comment on ILS data from Stats group
- 3. Review labs' funnel diameter measurements
- 4. Data dictionary progress



ILS Updates

- Afton: submitted ILS
- SwRI: completed ILS
- Savant: estimate ILS completion August 15, Canika to update Aug 7
- Intertek: completed ILS
- Valvoline: completed ILS
- Infineum: completed ILS
- Lubrizol: completed ILS
- Richful: completed ILS



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?

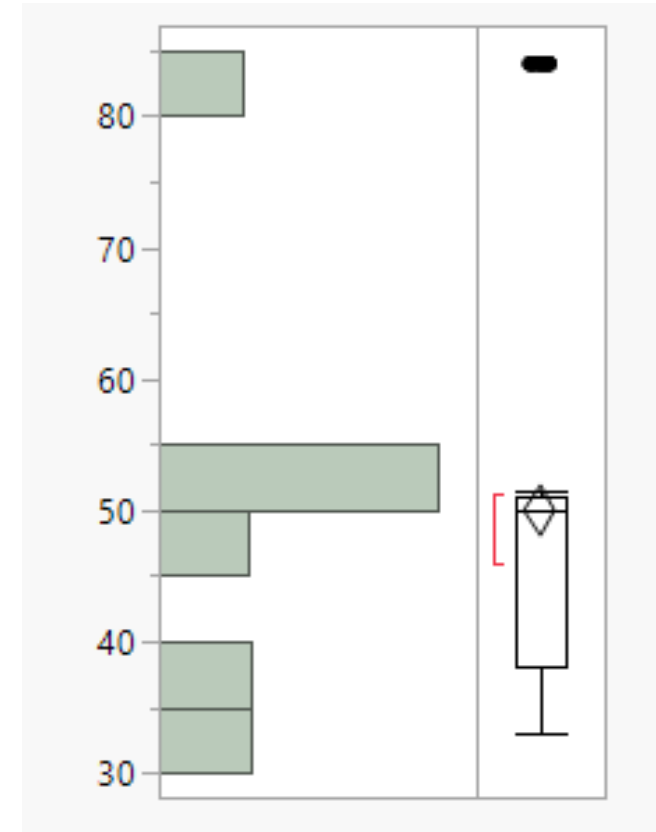
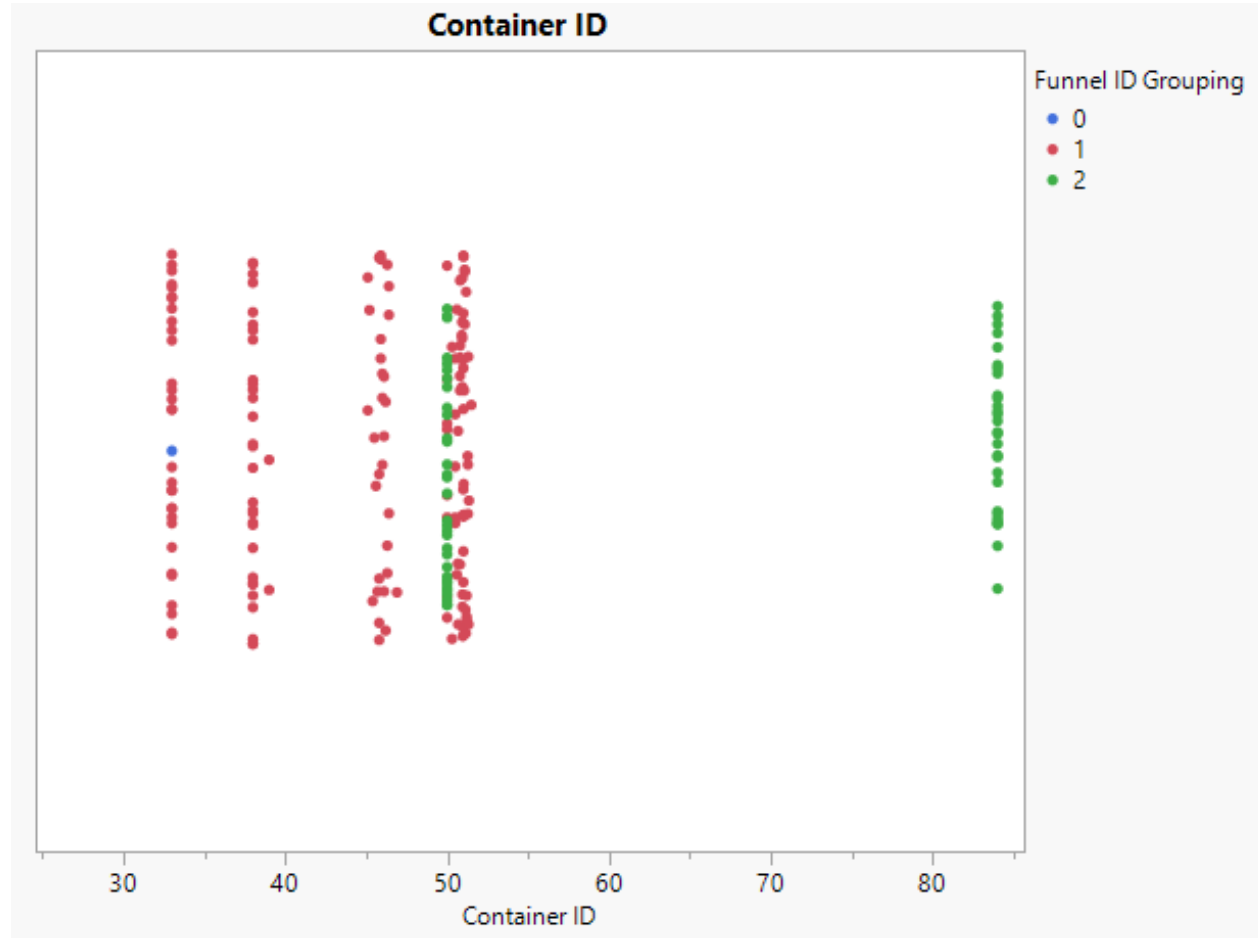


Lab Funnel ID data – Notes 8-4-25

- Current method funnel ID range: 3.7 to 4.4 mm
- Method revision:
 - 6.1. The flow apparatus shall consist of a glass funnel and a graduated cylinder.
 - Add 6.1.1.1 Glass Funnel
 - 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
- Excluded Labs 2 and 4 ILS data for funnel ID outside range?
- Labs 1(38mm), 2(84mm), 5 (33mm) to confirm jar container diameter and Amy to review how differences affect results
 - Section 6.4 glass container: 50 mm diameter; need to revise to add tolerance eventually
 - Labs to email part number of 6.4 glass container to Yong-Li, John, Jared by August 11
- Wait to do: Amy to review how container diameter relates to ILS data
 - Understand if there's any influence of jar diameter to data

- John to enter lab's additional funnel ID data to ILS data with previous data
- Group to decide at next meeting: 1) if to exclude any lab data and why, 2) any ILS reruns, 3) proceed with ILS data analysis

Distribution of Container ID



Timeline – updated August 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															█
Test available for industry use															█



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		

