ASTM Engine Oil Gelation Test (EOGT) WK86363 Update

EOGT Meeting

February 20, 2026

Yong-Li McFarland

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Electronic recording of ASTM meetings is prohibited.

EOGT Membership – please review

58 members

Name	Company
Amanda Stone	Afton
Jacob Zwilling	Afton
Joe Strukl	Afton
Sarah Fitzgerald	Afton
Brent Calcut	Afton
Josephine Martinez	Chevron
Ricardo Affinito	Chevron
Jiangao Fang	Chevron Oronite
Laura Birnbaumer	Chevron Oronite
Nicole Ketterer	Chevron Oronite
Robert Stockwell	Chevron Oronite
Quanchang Li	ExxonMobil
Dean Wingert	Ford
Michael Deegan	Ford
Rob Zdrodowski	Ford
Andrew Ritchie	Infineum
Angela Willis	Infineum
Caroline Laufer	Infineum
Melissa Chu	Infineum
Todd Dvorak	Infineum
Joe Franklin	Intertek
Karina Gil	Intertek
Martin Chadwick	Intertek
Yuliza Rocha	Intertek
Ingo Blömker	ISP
Kai Malyska	ISP
Michael Johnscher	ISP
Phillip Enking	ISP
Udo Boecker	ISP
Michael Kunselman	KJA Group
Litchi Xie	Lubrizol
Phil Scinto	Lubrizol
Rachelle McCallister	Lubrizol
Victoria Abad	Lubrizol
Sachiko Okuda	Nissan
Jason Bowden	OHT
Clarence McCollum	Richful
Dave Duncan	Richful
Michael Liang	Richful
Alisha Hoffman	Savant
Canika Owen-Robinson	Savant
Greg Miiller	Savant
Pinal Shah	SGS
Sean Alston	SGS
Samuel Demel	Shell
Aoki Hisashi	Subaru
Suzuki Yumi	Subaru
Adam Ramos	SwRI
Beck Grinfield	SwRI
Travis Kostan	SwRI
Yong-Li McFarland	SwRI
Jeff Clark	TMC
John Loop	TMC
Satoshi Hirano	Toyota
Venkat Deshpande	Toyota
Jared Cavaliere	Valvoline
Jeremy Styer	Vanderbilt
Beth Schwab	

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 (V10.3) uploaded on ASTM Collaboration Area
  - Oils: 11 potential reference oils offered; 17 oils received at TMC
  - Screening Tests and ILS: ILS tests completed
  - Timing: test available in April 2026

Agenda:

- 1. Ballot review
- 2. Research report status
- 3. Time to 40C comments
- 4. eLearning and video
- 5. Other: BOI-VGRA

EOGT Ballot

Designation: XXXX – XX

Date: January 21, 2026
To: Subcommittee B
Tech Contact: Yong-Li McFarland, ymcfarland@swri.org, 210-522-2715
Work Item #: WK86363
Ballot Action: Approval of a new test method
Rationale: A user requested a new test method to evaluate the filterability and gelation of engine oils due to field issues. Two other filterability methods, ASTM D6795 and D6794, were found not to discriminate against this failure mode. In March 2023, a task group was formed to work on developing this method with the user and other industry participants to correctly show gelation on a poor oil sample and no gelation on a good oil sample. These 2 oil samples were provided by the user and related to the gelation and decreased filterability in the field oils. The original field issue was believed to have been from calcium detergent drop out with elevated amounts of water in the oil that formed a gel, blocking filters and passage in the engine. This test was developed to be used as a bench test to screen oils for this issue. As such, this method has been added to new passenger car engine oil test specification and formal approval as an ASTM method is urgently needed.

The ILS was conducted between March and December of 2025, with the analysis producing the precision statement for the determinability, repeatability, and reproducibility on a range of industry engine oil samples. The ILS research report will be separately balloted.

Ballot History: This is the first ballot to the subcommittee. This draft test method has been repeatedly reviewed and revised by the task group. Numerous updates on the method have been given at Subcommittee B Engine Oil meetings within the last 1.5 years with invitation to anyone having comments to join the task group.

Standard Test Method for

Measuring the Gelation Propensity of Automotive Engine Oils After Treatment with Acidified Water

INTRODUCTION

Portions of this test method are written for use by laboratories that make use of ASTM Test Monitoring Center (TMC)2 services (see Annex A1).

The TMC provides reference oils, and engineering and statistical services to laboratories that desire to produce test results that are statistically similar to those produced by laboratories previously calibrated by the TMC.

In general, the Test Purchaser decides if a calibrated test stand is to be used. Organizations such as the American Chemistry Council require that a laboratory utilize the TMC services as part of their Engine test registration process. In addition, the American Petroleum Institute and the Gear Lubricant Review Committee of the Lubricant Review Institute (SAE International) require that a laboratory use the TMC services in seeking qualification of oils against their specifications.

The advantage of using the TMC services to calibrate test stands is that the test laboratory (and

D02.B0 (26-02) Ballot
Issued Jan 22, 2026
Closing Feb 21, 2026

-Currently at 54.2% returned, need 60% of official voting members to be returned for a ballot to be valid
-No negatives, no comments

-Did received edits to method: include “automotive” in front of “engine oils”

Research Report status

Yong-Li is working on the edits
-Need feedback from labs on participant name
-Need feedback on Sections 8, 9, Annexes

RR: [RR # – ASTM to assign]

Table of Contents

Additional Analysis

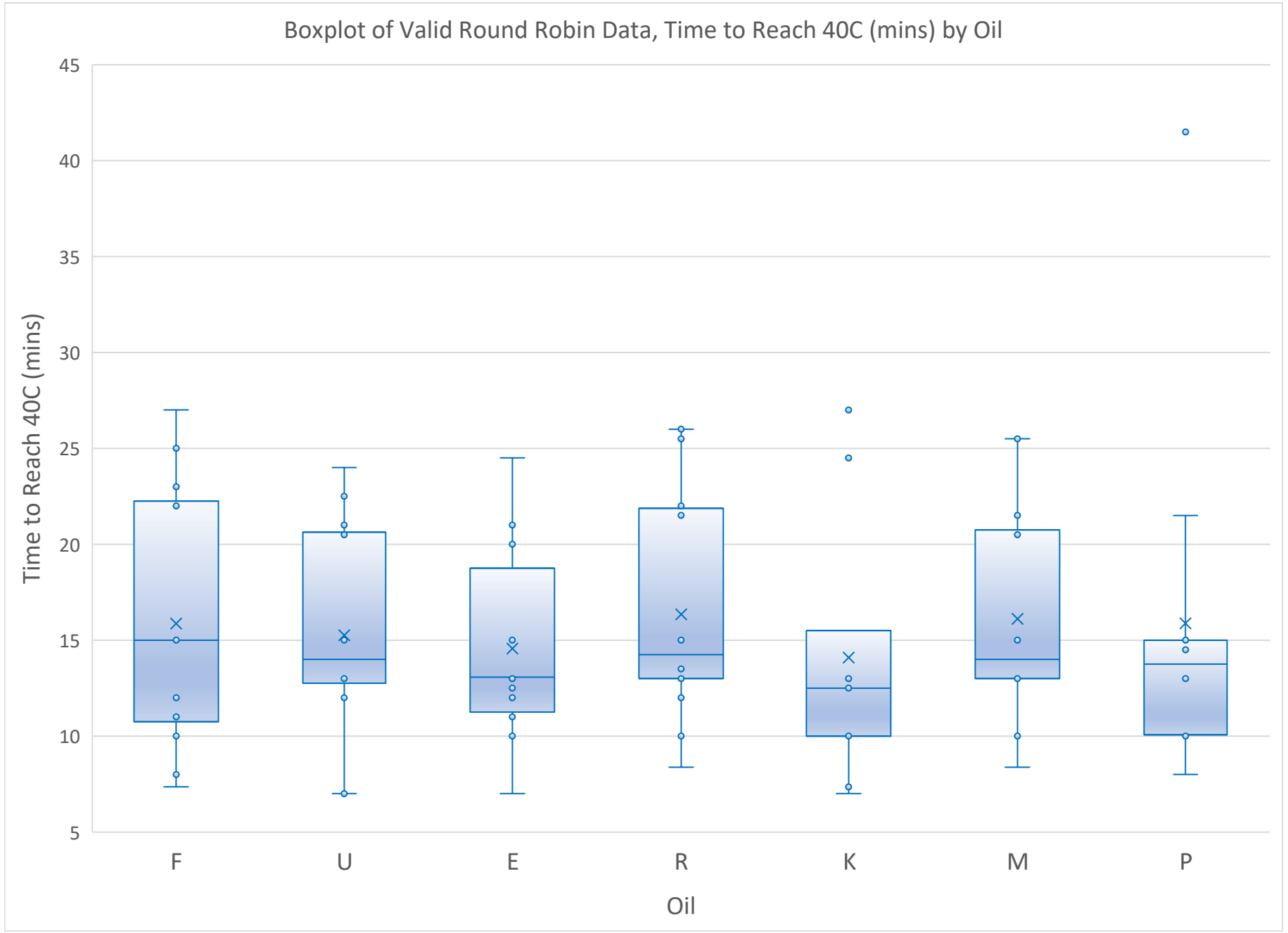
- Exploratory analysis is performed on Time to Reach 40C (mins) on Valid Round Robin Data Only
- There is no statistical evidence of correlation between Average Time to 40C and Average Volume at 120s.
- There are some Lab differences for Average Time to 40C
  - Labs that do not share the same letter are ‘different’ from each other

Level					Least Sq Mean	Std Error
7	A				24.697	0.69604
8	A				21.727	0.82952
6		B			14.678	0.72243
1		B	C		13.197	0.69604
3			C	D	11.479	0.69604
5				D	8.931	0.69604

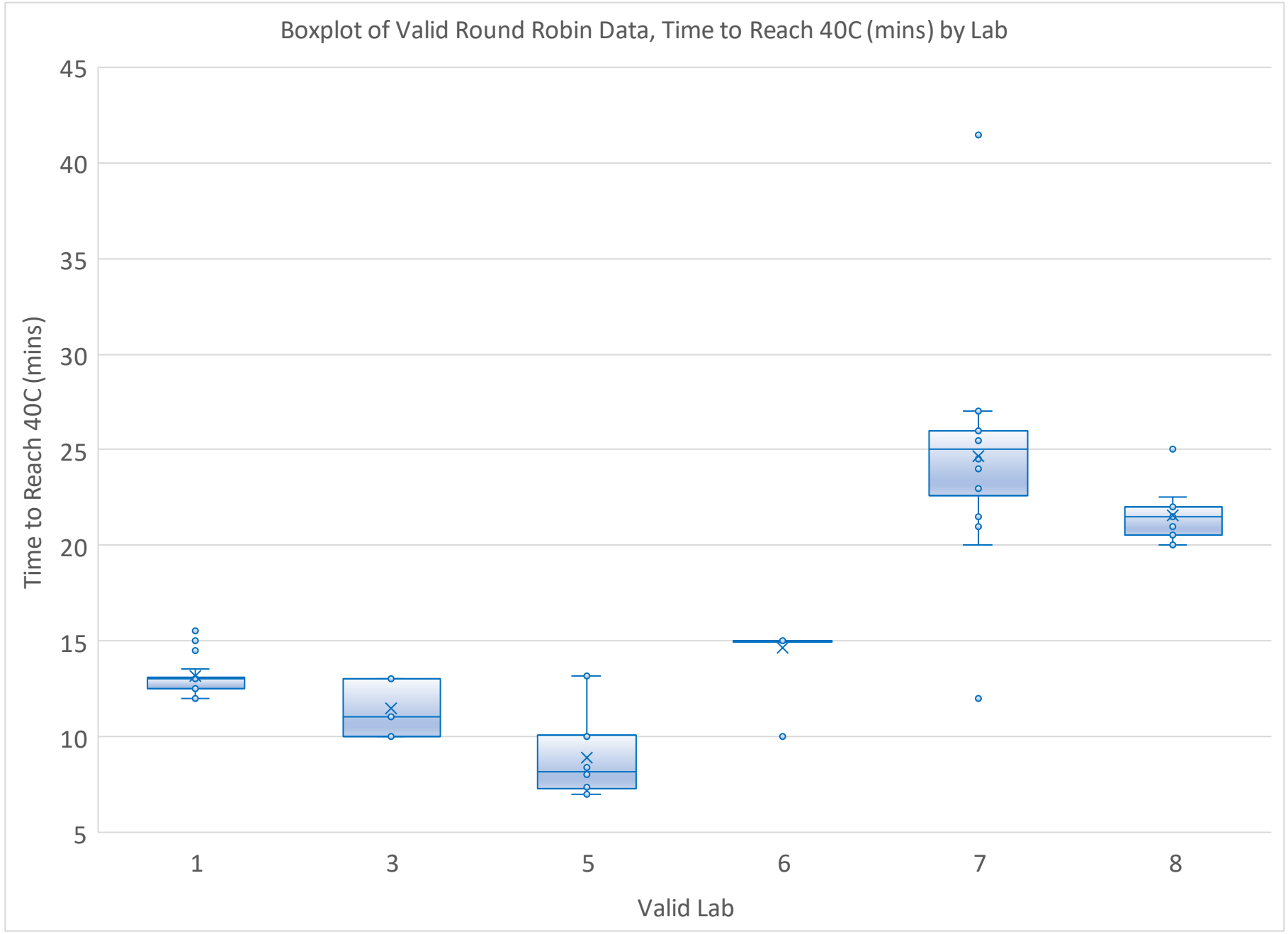
Levels not connected by same letter are significantly different.

Thank you Phil and statistics group!

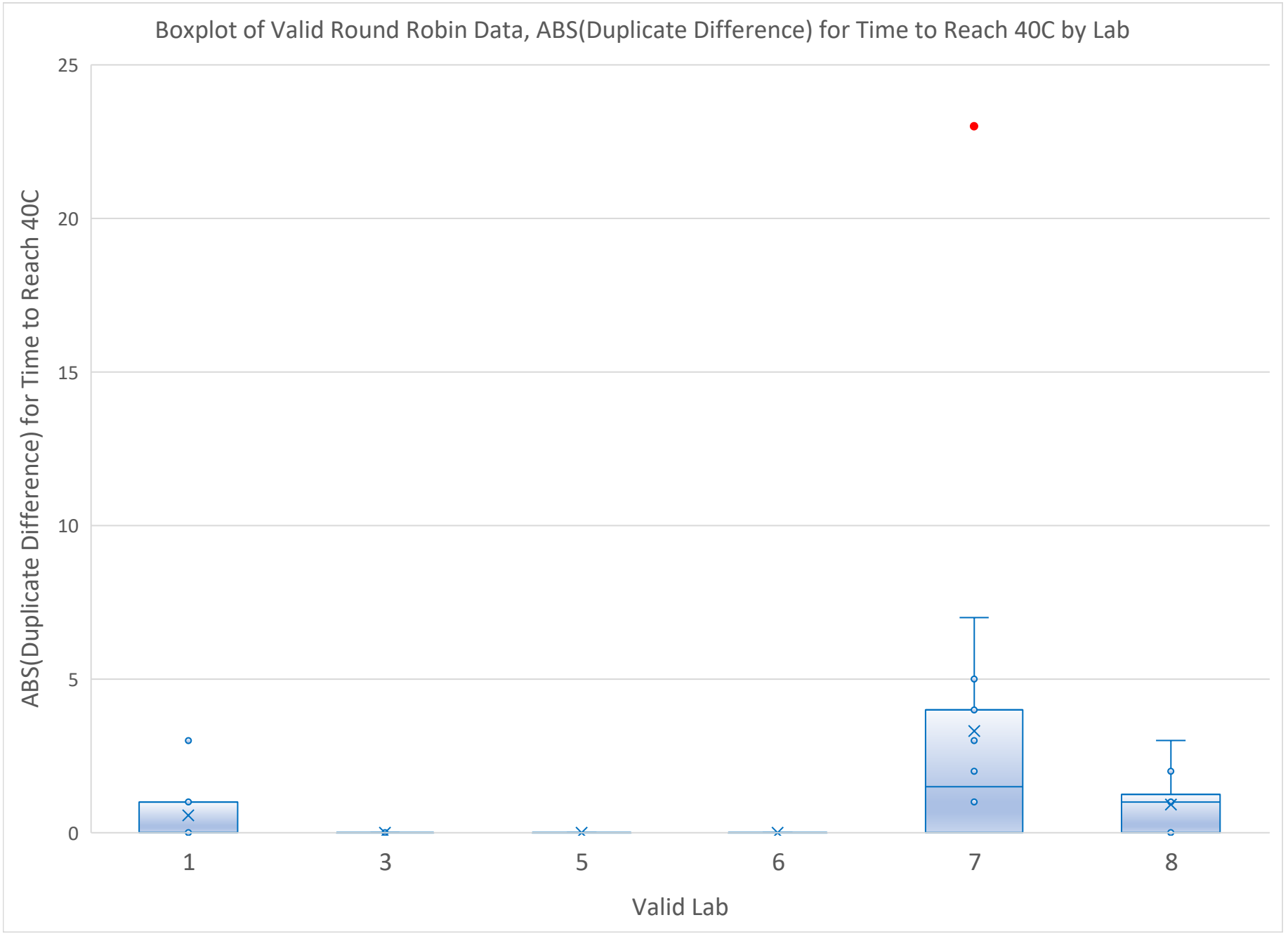
Plots of Valid RR Data for Time to Reach 40C



Plots of Valid RR Data for Time to Reach 40C



Plots of Valid RR Data for Time to Reach 40C



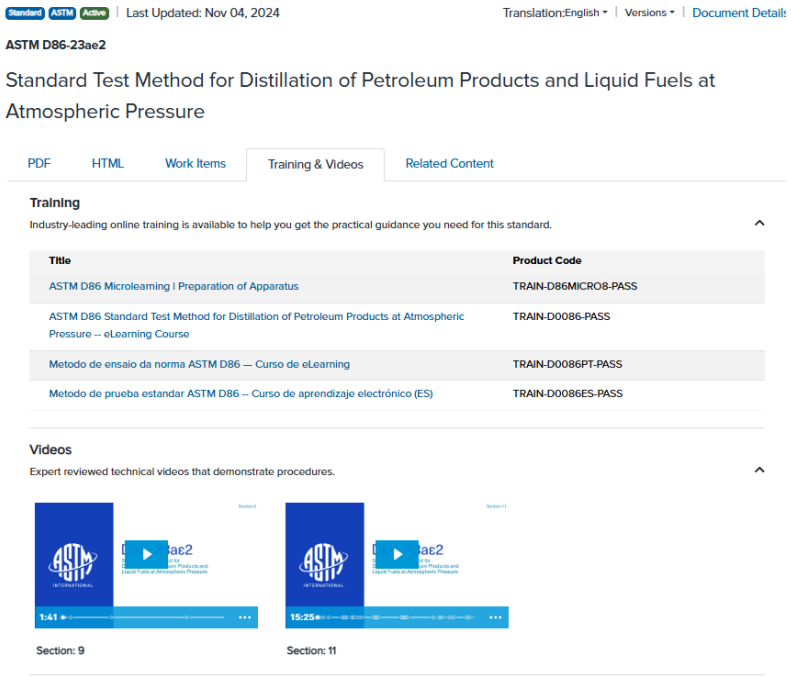
eLearning and video

- Is there interest in developing an eLearning for EOGT? No
- Do we want to incorporate the ASTM videos for certain sections into EOGT standard? Yes

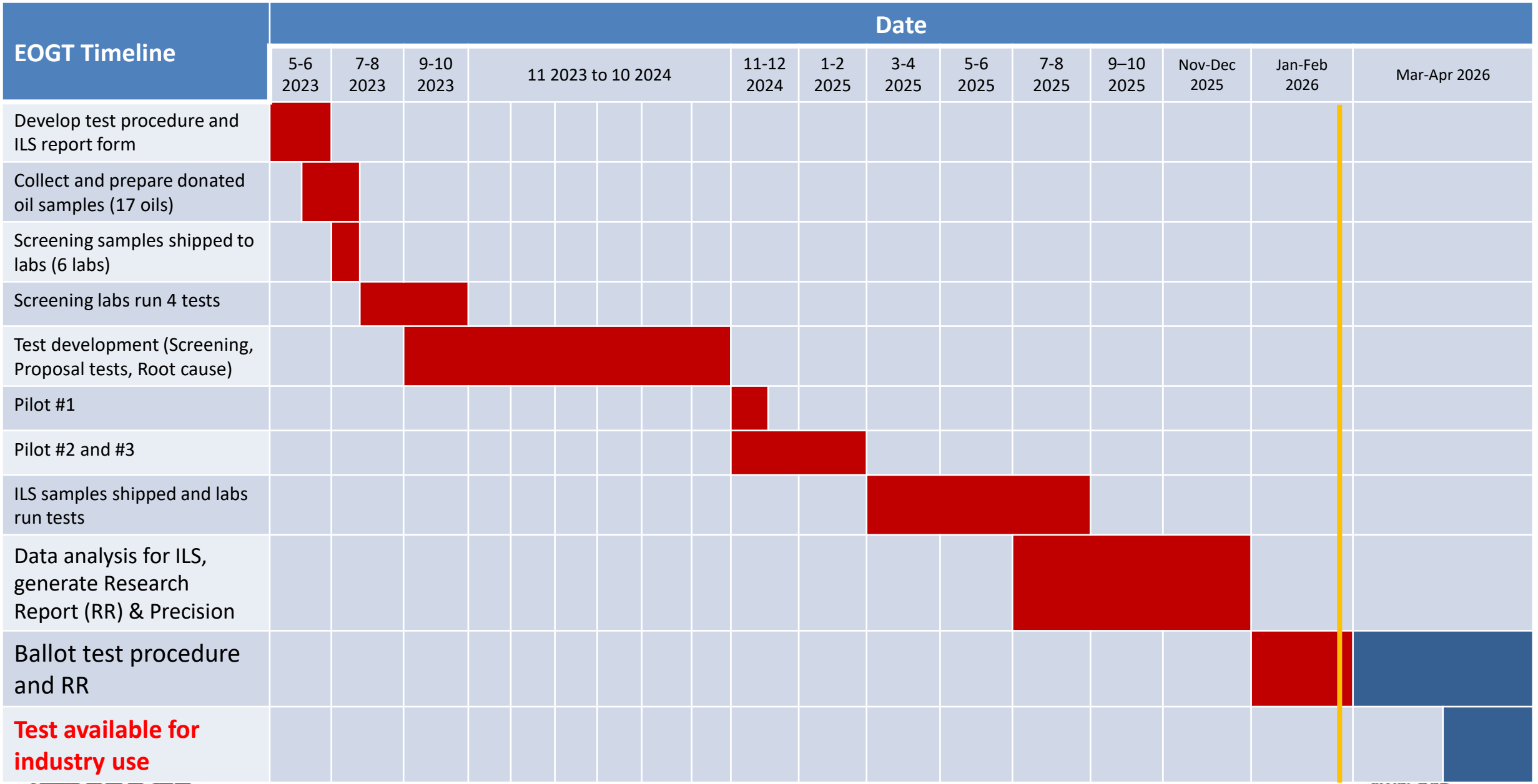
Other

BOI-VGRA: will come from API

For example, D86 has Training and Videos



Timeline – updated Feb 19, 2026



Action Items and Next Meeting

- All: send Yong-Li names for EOGT SP chair
- All: send Yong-Li membership updates
- Labs and Stats group: provide feedback on research report topics to Yong-Li
- Labs: please review your Time to 40C data to double check the results are correct.

- Next meeting: *group to review ballot comments and negatives (if any), review research report*

- Next Meeting: Wed March 25 at 10am CST for 1 hr

Thank you for your support!

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