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### COMMITTEE D02 on PETROLEUM PRODUCTS, LIQUID FUELS, AND LUBRICANTS

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STAFF MANAGER - Alyson Fick, (610) 832-9710, e-mail - afick@astm.org

### SEQUENCE VI SURVELLANCE PANEL

Date - 15 November 2023

ATTENDANCE	
SWRI	Dan Engstrom, Christine Eickstead, Pat Lang
INTERTEK	Adrian Alfonso, Bill Buscher
LUBRIZOL	Andrew Stevens, George Szappanos, Tony Catanese, Justin Wolfe
AFTON	Amanda Stone, Jason Lekavich
ORONITE	Ricardo Affinito, Jo Martinez, Robert Stockwell
INFINEUM	Andy Ritchie, Todd Dvorak, Joe Anthony
TMC	Rich Grundza
GM	Frank Cooney, Tim Cushing, Michael Raney
ТОҮОТА	
ОНТ	Jason Bowden
TEI	
FORD	
VALVOLINE	
HALTERMAN	William Hairston
GAGE PRODUCTS	
HALTERMANN CARLESS	Izabela Gabrel
BP	
EXXONMOBIL	Paul Rubas
SHELL	Jeff Hsu
IMTS	
CHRYSLER	

### 1. Attendance. See table above.

### 2. Approve minutes from 7/12 call

Motion to approve minutes: Tony Catanese, Second: Adrian Alfonso Motion passes unanimously.

### 3. New business

### 3.1 New Panel Chair Introduction

Tony introduced himself as the new Seq. VI Panel Chair. The panel expressed gratitude for Andrew Stevens' efforts as the SP chair the past ~6 years.

Andrew – Still working through SP chair handbook, appreciate support from everyone over the past few years.

### 3.2 Review Seq. VI Semi-annual Report

Tony went through semi-annual report for Seq. VI surveillance panel.

VIE – 5 labs/4 calibrated. Increase of two 17 stands (15 calibrated).

VIF – 2 labs, 3 stands.

No change in LTMS severity trends.

RO status – 4 newer blends available. Several tests have been conducted on each oil already.

Still a good supply of short blocks but running low on fuel. Looking at new batch mid-2024. Will need to discuss soon; 50,000-60,000 gal run rate per 6 months.

BL-6 has been adopted.

Candidate tests back up to 2021 levels. Expect more tests in 2024 with GF-7 coming out.

Tony – Major comments or additions needed?

Adrian – Presentation short and sweet; highlights major points. No need to change anything.

Andy – Please send out to full panel so that everyone has a copy.

Tony - Will do.

Andrew – On bench test side, before every ASTM meeting, they all present the semi-annual report to panel to give opportunity for comment on content. Thought that was a good idea to implement as standard practice going forward. Asked Tony to present the semi-annual report today to start that practice.

Rich – Andy Ritchie started that process. Others have adopted. Probably a good idea. Also forces you to look at reference oil status/reblends. Done them in the spring with full meeting, but don't think we did Seq. VI specifically because we were working through other issues.

Bill – Is one of you two going to be at New Orleans to present this?

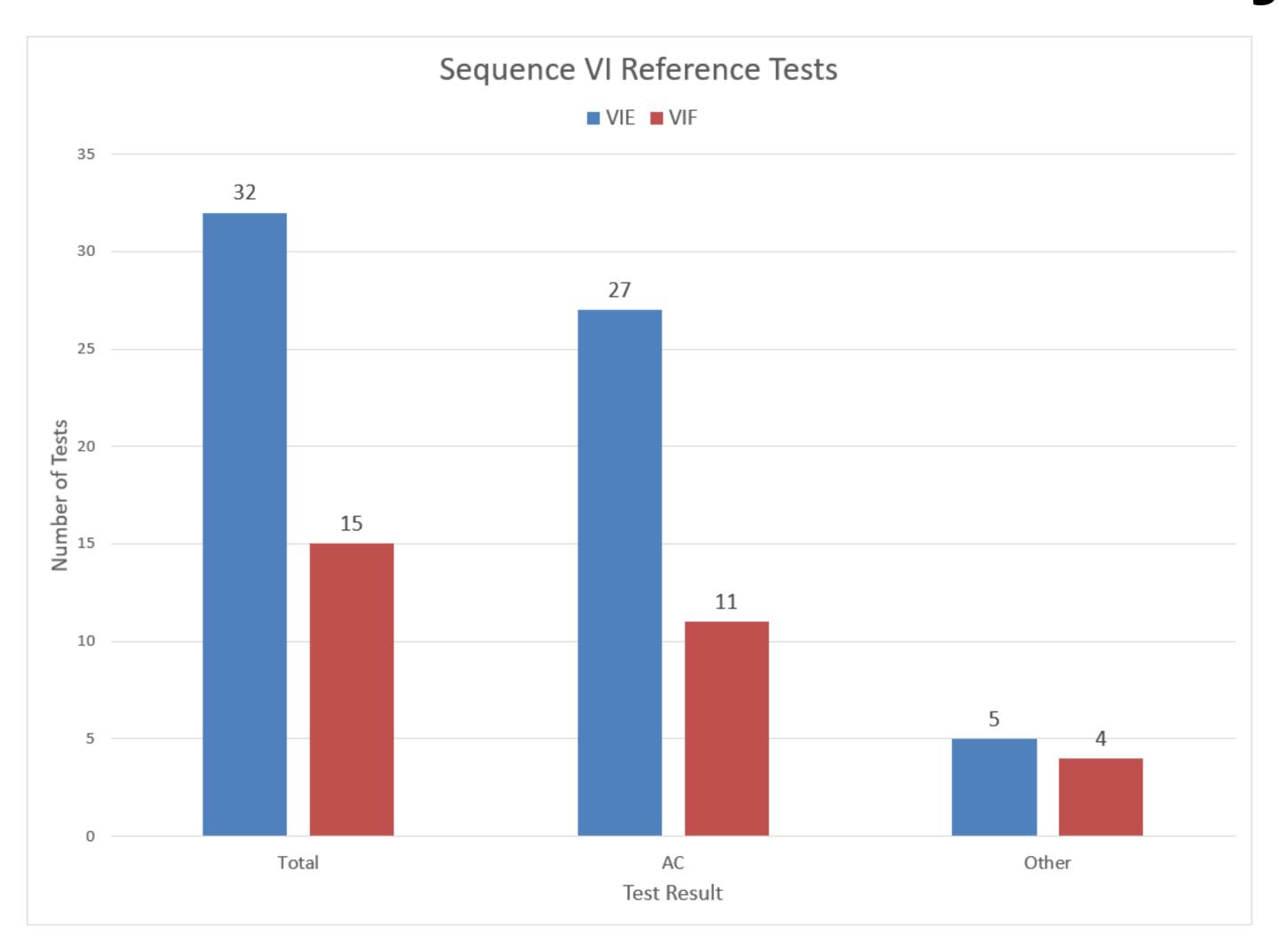
Tony – I will present, but Andrew will be there as well.

Meeting adjourned.

# Sequence VI S.P. Semi-Annual Report, December 2023 Presentation to Subcommittee D02.B

Prepared By: Tony Catanese, S.P. Chair December 2023

## Sequence VI S.P. Report 2H 2023 Reference Test Activity



## Sequence VI S.P. Report 2H 2023 LTMS Laboratory/Stand Distribution

Sequence VIE Reference Tests	Reporting Data	Calibrated as of 11/8/23
Number of Laboratories	5	4
Number of Stands	17	15

Sequence VIF Reference Tests	Reporting Data	Calibrated as of 11/8/23
Number of Laboratories	2	2
Number of Stands	3	3

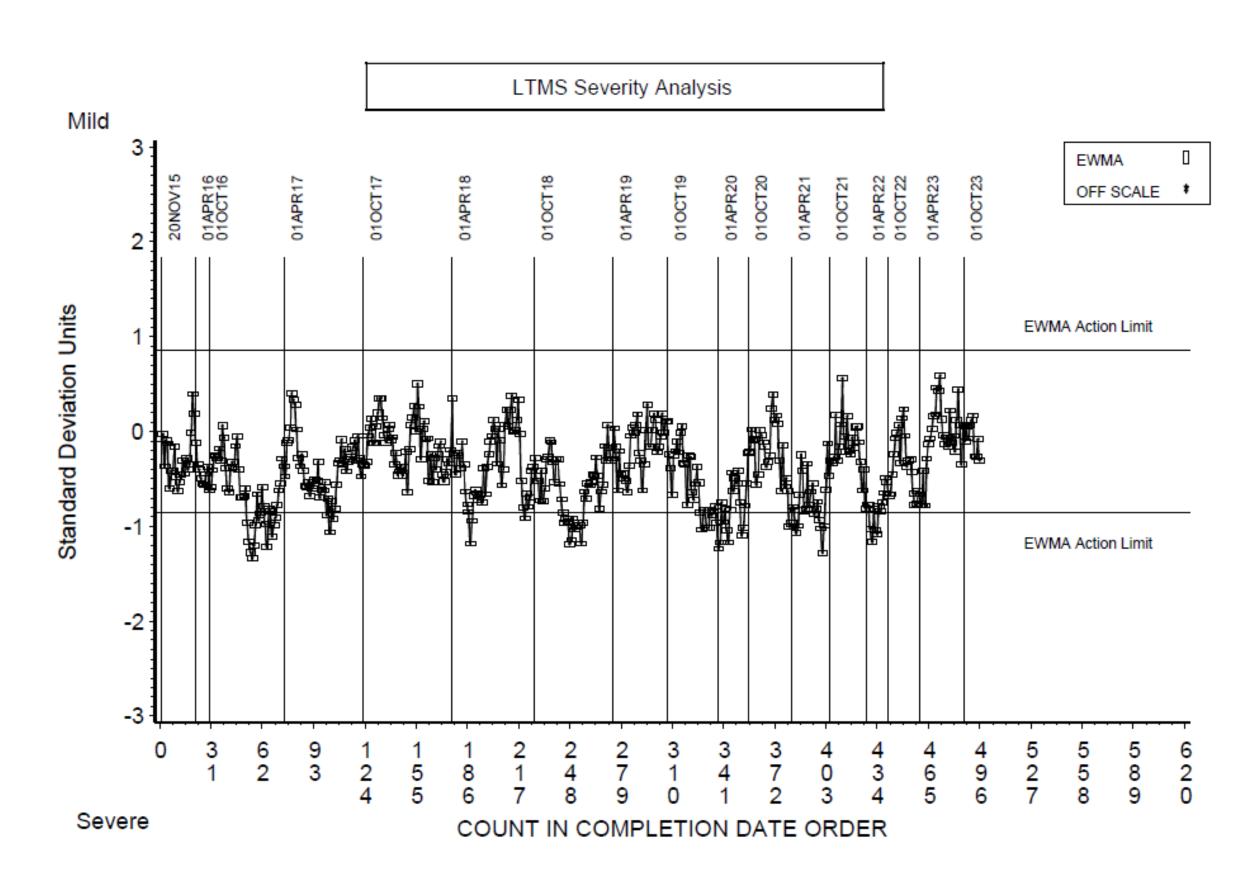
### Sequence VIE S.P. Report 2H 2023 Industry Reference Severity Summary

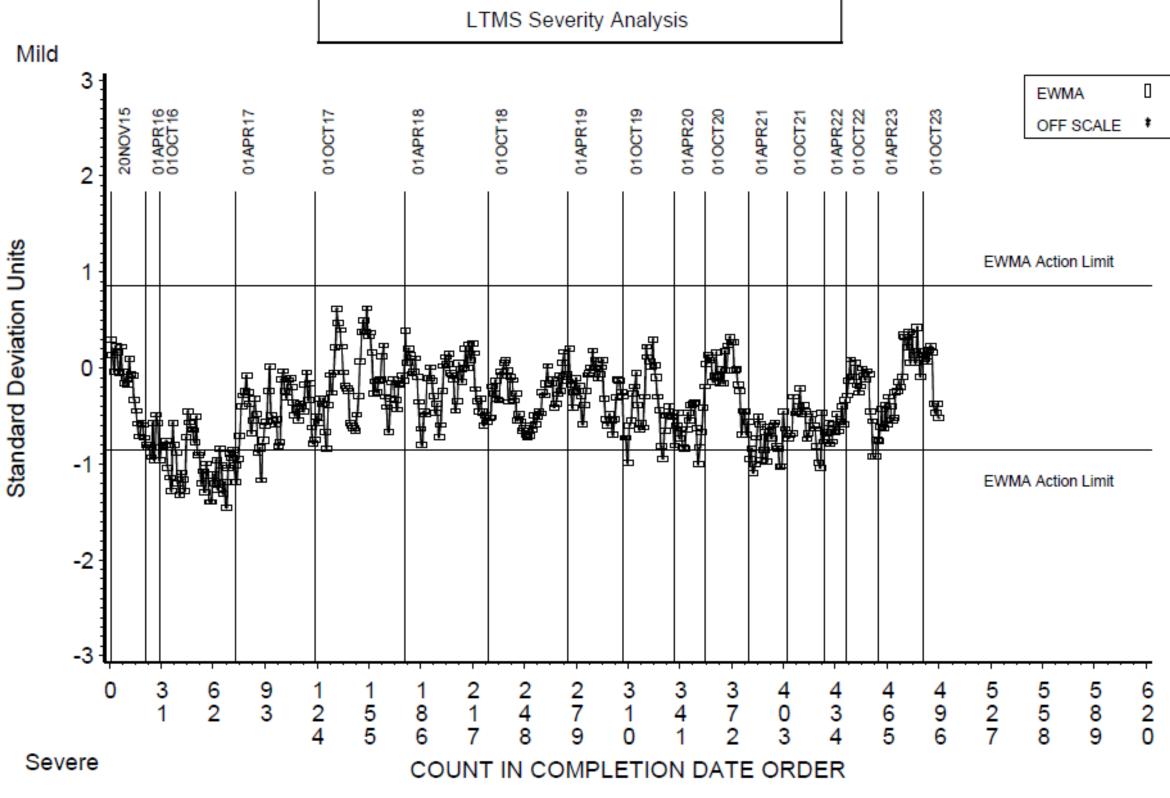
SEQUNCE VIE INDUSTRY OPERATIONALLY VALID DATA
FEI FINAL RESULT PHASE I



SEQUNCE VIE INDUSTRY OPERATIONALLY VALID DATA
FEI FINAL RESULT PHASE II







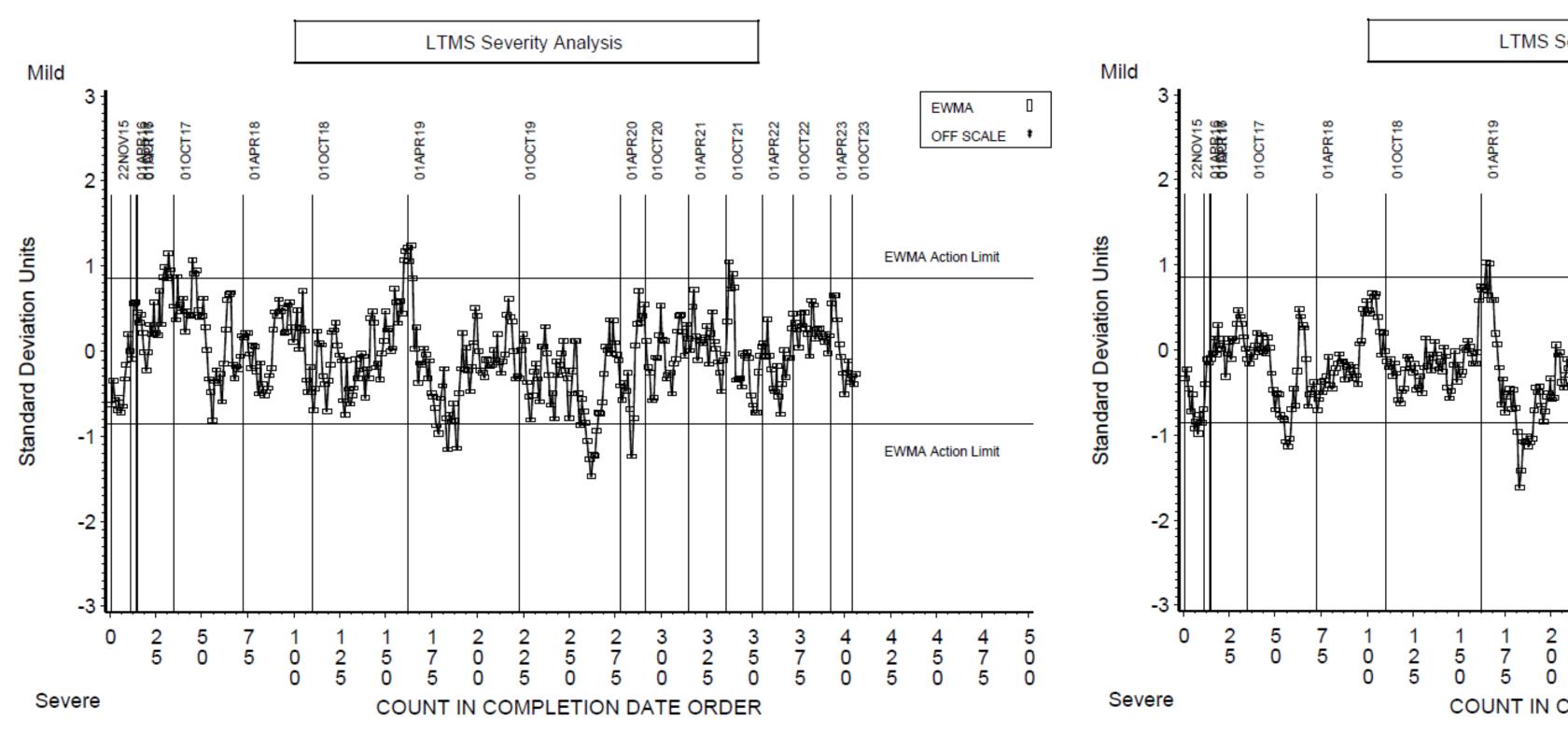
### Sequence VIF S.P. Report 2H 2023 Industry Reference Severity Summary

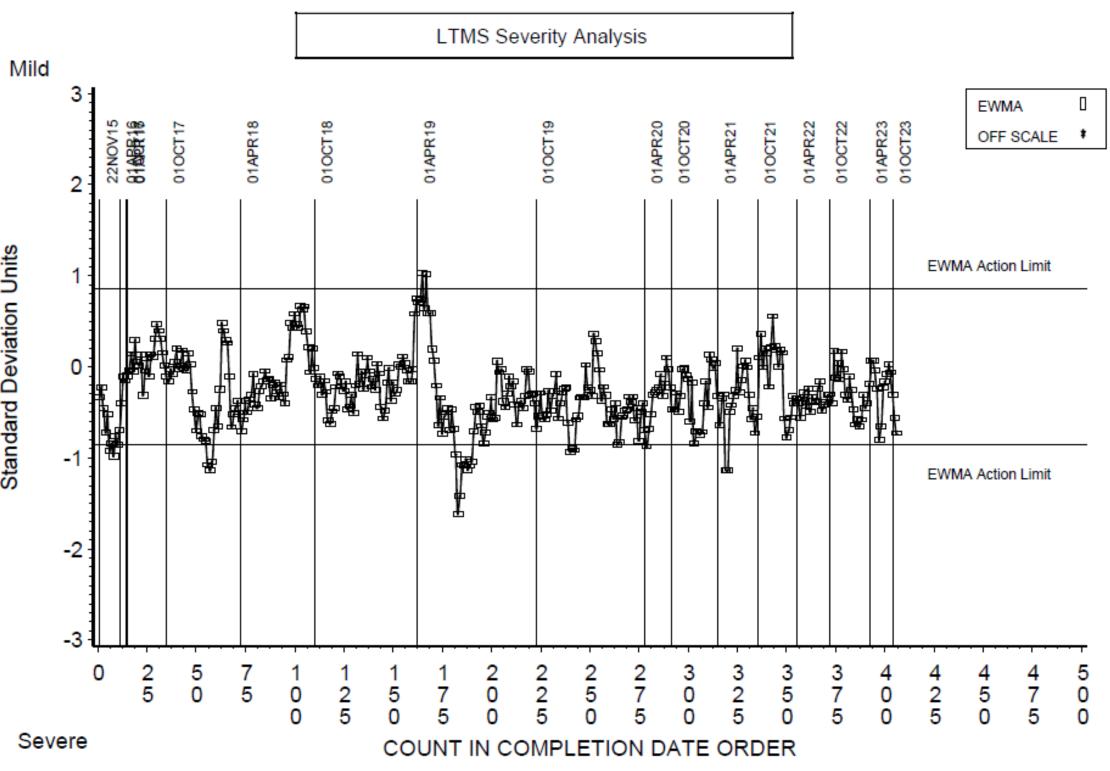
SEQUNCE VIF INDUSTRY OPERATIONALLY VALID DATA
FEI FINAL RESULT PHASE I



SEQUNCE VIF INDUSTRY OPERATIONALLY VALID DATA
FEI FINAL RESULT PHASE II







### Sequence VI S.P. Report 2H 2023 Reference Oils Status

- 1010-2 is available, 7 tests reported
- 542-5 is available, 11 tests reported
- 543-1 currently available, 1 test reported
- 1011-1 currently available, 4 tests reported

### Sequence VIE

	Seq	uence	VIF
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Oil Code TMC	Viscosity Grade	Performance Classification	Year <sup>a</sup> Introduced
542	0W-20	GF-5	2008
544	5W-30	GF-5	2016
1010-1	5W-20	GF-5	2010

Oil Code TMC	Viscosity Grade	Performance Classification	Year <sup>a</sup> Introduced
542	0W-20	GF-5	2008
543	0W-16	GF-5	2015
1011	0W-16	GF-5	2015

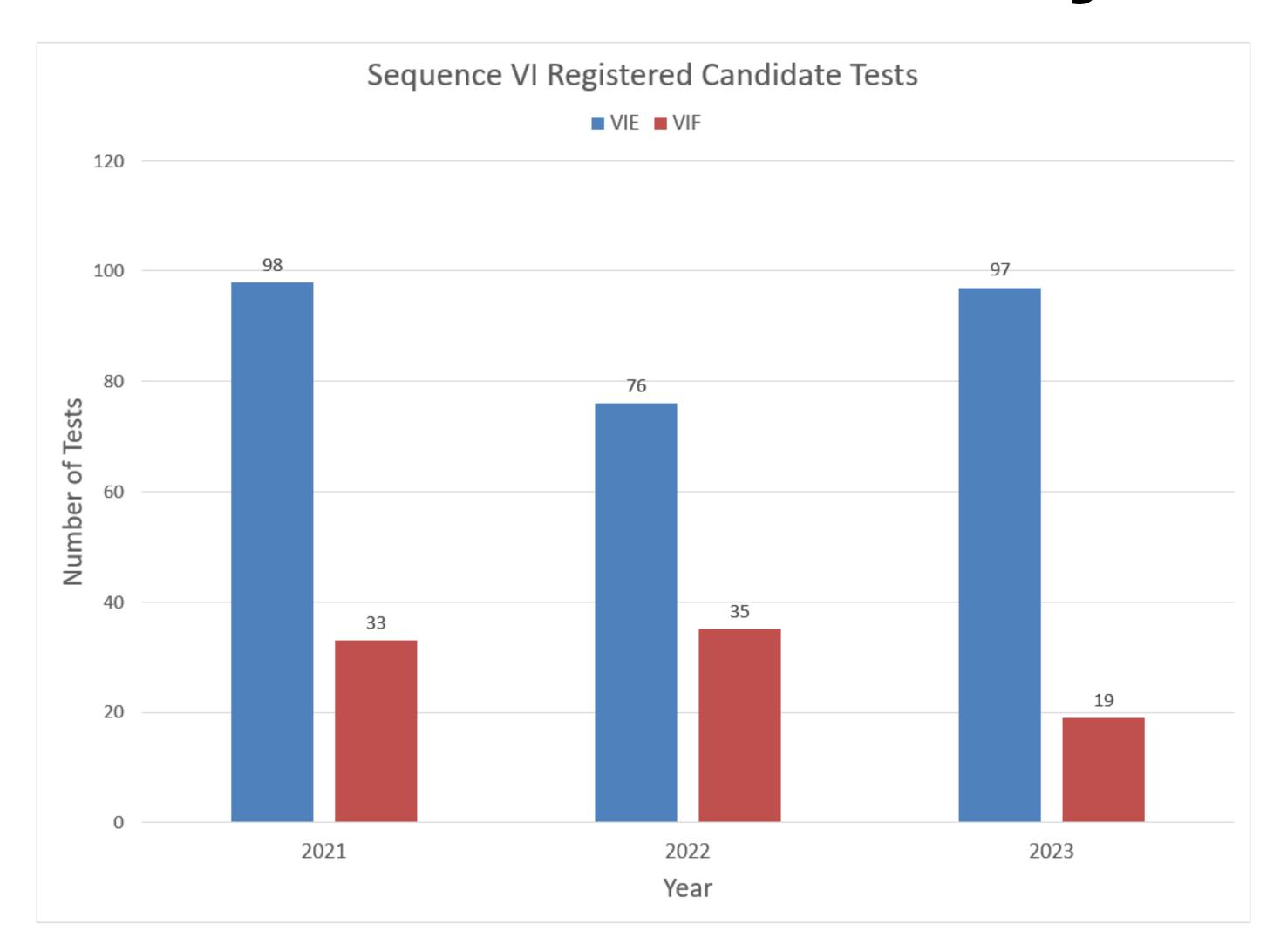
### Sequence VI S.P. Report 2H 2023 Hardware & Fuel

- Short blocks in ample supply currently. Projected to last at least until 2027.
- 73,783 gallons of HF 2003 (N-000013) available as of 11/1/2023
  - Supply expected to last to mid-2024

# Sequence VI S.P. Report 2H 2023 Panel Activity

BL6 has been adopted.

## Sequence VI S.P. Report Candidate Test Activity



### Sequence VI S.P. Report Scope and Objectives

### **SCOPE**

• The Sequence VI Surveillance Panel is responsible for the surveillance and continual improvement of the Sequence VID test, documented in ASTM Standard D7589 as updated by the Information Letter System, and the Sequence VIE and VIF tests, currently in the process of being established as industry available standards. Test precision data will be solicited and evaluated at least every six (6) months for all Sequence VI test procedures. The Surveillance Panel is to provide options for continual improvement of test operation, test monitoring, and test validation while maintaining effective communication with the test sponsors, independent test laboratories, ASTM Test Monitoring Center, the central parts distributor/s, fuel supplier/s, ASTM B0.01 Passenger Car Engine Oil Classification Panel, ASTM Committee B0.01, the ACC Monitoring Agency, and the ASTM Deposit/Distress Workshop. Strategies to ensure the continual improvement of associated test methods are to be recommended through previously stated groups, Surveillance Panel members, and industry governing bodies. It is the mission of the Surveillance Panel to ensure that technical credibility is maintained for all Sequence VI test methods in the evaluation of lubricant oil fuel economy performance.

### **OBJECTIVES**

- Monitor critical Sequence VIE/F hardware availability
- Monitor Sequence VIE/F tests