

To: API Lubricants Group  
 Cc: Lubricants Group Mailing List  
 API

**BOI/VGRA Task Force Proposal 1 Sequence IIIH BOI**

On April 4, 2019 the Lubricants Standards Group (LSG) reviewed “BOI-VGRA TF Prop 2 - Seq IIIH Tech Principles”. The BOI/VGRA Task Force proposal removes the Sequence IIIH from “Table F-1 – Technical Principles for New Viscosity Grades and Read Across”, which applies to oils with an HTHS<sup>150</sup> ≥ 2.6, and adds the Sequence IIIH to the new “Table F-x – Technical Principles for New Viscosity Grades and Read Across” which applies to oils with an HTHS<sup>150</sup> ≥ 2.3 mPa•s.

Table F-x – Technical Principles for New Viscosity Grades and Read Across is given below and in the Electronic Ballot Attachment.

<b>Table F-x – Technical Principles for New Viscosity Grades and Read Across</b>					
(Applies to oils with HTHS <sup>150</sup> ≥ 2.3 mPa•s)					
<b>Passenger Car Motor Oils</b>		<b>IIIH</b>	IIIHB	VH	X
<b>a</b>	Detergent (dispersant)-inhibitor (DI) content of the read-across viscosity grade shall be equal or higher than that of the original viscosity grade. The increase in DI is limited to the maximum allowed by the ACC Code.	✓	✓	✓	✓
<b>b</b>	Base stock blend kinematic viscosity at 100°C of the read-across viscosity grade must be equal to or higher than that of the original viscosity grade, considering the precision of the test method.	✓	NA	✓	NA
<b>c</b>	The viscosity modifier (VM) content of the read-across viscosity grade must be equal to or lower than that of the original viscosity grade.	✓	NA	✓ or Note 3	Note 4

Notes:

- ✓ = principle is applicable; NA = not applicable
- New viscosity grades and associated read-across can only be added after review by the API BOI/VGRA Task Force and approval by the API Lubricants Group
- For dispersant-type VM, the VM content of the read-across viscosity grade must be equal to or higher than that of the original viscosity grade
- Viscosity Modifier content must be no more than 2.5 times higher than the viscosity modifier content in the oil on which the test was run because this was the range of VM tested in the BOI/VGRA Matrix.
- Read-across viscosity grades must contain an equal amount of the same Group V base stock (e.g., ester) in the finished oil blend if a Group V base stock is used in the original viscosity grade

The BOI/VGRA Task Force Proposal 2 Seq. IIIH Tech Principles (Ballot Attachment 1) was discussed by the LSG. Subsequently a Motion was made: “The Lubricants Group Ballot the following changes: That the Sequence IIIH Column be added to the new Technical Principles Table in API 1509 Annex F (Slide 2) and that the Sequence IIIH Column be removed from Table F1 in Annex F (Slide 3).”

The Ballot Motion is given below and on Attachment 1, page 4.

### **Motion**

The Lubricants Group Ballot the following changes: That the Sequence IIIH Column be added to the new Technical Principles Table in API 1509 Annex F (Slide 2) and that the Sequence IIIH Column be removed from Table F1 in Annex F (Slide 3).

- Motion by: Rick Dougherty
- Second by: Bill O’Ryan

LSG Hand Ballot:

- Affirmative=16
- Negative=0
- Abstain=0

### **Motion Passes**

Lubricants Group Members should use the API Ballot System to cast their vote and make comments. The Ballot Link is: <http://Ballots.api.org>. The Lubricants Group Member votes will be counted, and all received comments reviewed and considered before the ballot results are final.

Non-Lubricants Group Members should comment on the Ballot Motion using the Ballot system. The Ballot Link is: <http://Ballots.api.org> . All comments on the Ballot Motion will be reviewed before the ballot results are final.

This Ballot will close on May 10 2019. All Votes and/or Comments must be received by that date. If approved the balloted change will be effective as of April 4, 2019.

# Attachment 1

# BOI/VGRA Task Force Proposal 2

## Sequence IIIH VGRA Technical Principles (*2 parts*)

Detroit

R. C. Dougherty

April 3, 2019

# New VGRA Technical Principles Table for Seq. IIIH – Part 1

**Table F-x – Technical Principles for New Viscosity Grades and Read Across**  
(Applies to oils with HTHS<sup>150</sup> ≥ 2.3 mPa•s)

Passenger Car Motor Oils		IIIH	IIIHB	VH	X
<b>a</b>	Detergent (dispersant)-inhibitor (DI) content of the read-across viscosity grade shall be equal or higher than that of the original viscosity grade. The increase in DI is limited to the maximum allowed by the ACC Code	✓	✓	✓	✓
<b>b</b>	Base stock blend kinematic viscosity at 100°C of the read-across viscosity grade must be equal to or higher than that of the original viscosity grade, considering the precision of the test method	✓	NA	✓	NA
<b>c</b>	The viscosity modifier (VM) content of the read-across viscosity grade must be equal to or lower than that of the original viscosity grade	✓	NA	✓ or Note 3	Note 4

Proposed 4/3

Ballot 4762

Notes:

- ✓ = principle is applicable; NA = not applicable
- New viscosity grades and associated read-across can only be added after review by the API BOI/VGRA Task Force and approval by the API Lubricants Group
- For dispersant-type VM, the VM content of the read-across viscosity grade must be equal to or higher than that of the original viscosity grade
- Viscosity Modifier content must be no more than 2.5 times higher than the viscosity modifier content in the oil on which the test was run because this was the range of VM tested in the BOI/VGRA Matrix.
- Read-across viscosity grades must contain an equal amount of the same Group V base stock (e.g., ester) in the finished oil blend if a Group V base stock is used in the original viscosity grade

# Sequence IIH Technical Principles – Part 2

Delete Reference to Seq. IIH in Table F-1 (Pending Ballot 4761 for Seq. VIE)

**Table F-1 – Technical Principles for New Viscosity Grades and Read Across**  
(Applies to oils with HTHS<sup>150</sup> ≥ 2.6 mPa·s)

Passenger Car Motor Oils		IID	L-38/VIII	IIIE/IIIF/ IIIG	IIIGA (Note 2)	IIIGB	<del>IIH</del>	IVA	VE	VG	VIA/VIB/ VID, VIE
a	Detergent (dispersant)- inhibitor (DI) content of the read-across viscosity grade shall be equal to or higher than that of the original viscosity grade. The increase in DI is limited to the maximum allowed by the ACC Code	✓	✓	✓	✓	✓	<del>✓</del>	✓	✓	✓	Note 3
b	Base stock blend kinematic viscosity at 100°C of the read-across viscosity grade must be equal to or higher than that of the original viscosity grade, considering the precision of the test method	NA	NA	✓	✓	NA	<del>✓</del>	✓	✓	✓	Note 3
c	The viscosity modifier (VM) content of the read-across viscosity grade must be equal to or lower than that of the original viscosity grade	NA	NA	Note 4	Note 4	NA	<del>Note 4</del>	✓	✓ or Note 5	✓ or Note 5	Note 3

Notes:

- ✓ = principle is applicable; NA = not applicable.
- Technical principles for the Sequence IIIGA are limited to 0W, 5W, and 10W multigrades.
- New viscosity grades and associated read-across can only be added after review by the API BOI/VGRA Task Force and approval by the API Lubricants Group.
- Viscosity modifier content must be no more than 1.5 times higher than the viscosity modifier content in the oil on which the test was run.
- For dispersant-type VM, the VM content of the read-across viscosity grade must be equal to or higher than the original viscosity grade.
- Read-across viscosity grades must contain an equal amount of the same Group V base stock (e.g., ester) in the finished oil blend if a Group V base stock is used in the original viscosity grade.

# Motion

The Lubricants Group Ballot the following changes: That the Sequence IIIH Column be added to the new Technical Principles Table in API 1509 Annex F (Slide 2) and that the Sequence IIIH Column be removed from Table F1 in Annex F (Slide 3).

- Motion by: Rick Dougherty
- Second by: Bill O’Ryan

LSG Hand Ballot:

- Affirmative=16
- Negative=0
- Abstain=0

**Ballot Passed**