

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

BOI VGRA Task Force Proposal 4 Revisions to Annex E.2.2.4

On April 4, 2019 the Lubricants Standards Group (LSG) reviewed “BOI VGRA Task Force Proposal 4 Revisions to Annex E.2.2.4, Table E.x”. The “BOI VGRA Task Force Proposal 4 Revisions to Annex E.2.2.4, Table E-3—Base Stock, Base Oil, Finished Fluid Data to Support BOI/VGRA Guideline Development for Sequence Tests Cited” includes additional Sequence X data supplied by Infineum and Sequence VH data supplied by ExxonMobil (**Additions In Red**).

The Updated “Table E-3—Base Stock, Base Oil, Finished Fluid Data to Support BOI/VGRA Guideline Development for Sequence Tests Cited” is given below and in the Electronic Ballot Attachment.

Table E-3—Base Stock, Base Oil, Finished Fluid Data to Support BOI/VGRA Guideline Development for Sequence Tests Cited

Sequence	Base Stock Groups	BOV ₁₀₀ Range, mm ² /s	Base Oil VI Range	Base Oil Sats Range (D7419), wt%	Base Oil Sats Range (D2007), wt%	Base Oil Sulfur Range, ppm	Viscosity Grade Range
IIIH	I, II, III ⁽¹⁾	4.5 - 10.7	96 - 139	96.0 - >99.8	93.1 - 98.2	< 5 - 371	0W-16 - 20W-50
IVB	II, III	4.2 - 11.2	108 - 140	96.7 - >99.8	93.4 - 99.0	< 5	0W-16 - 20W-50
VH	I, II, III, IV	4.2 - 11.1	95 - 130	I: 86.8 - 87.5 II: 95.0 - > 99.8 III: > 99.8	I: 82.8 - 83.5 II: 92.7 - 99.0 ⁽²⁾ III: 97.7-98.4	I: 1301 - 1365 II, III: < 5	0W-16 - 20W-50
VIE	II, III	4.2 - 5.9	111 - 135	96.9 - >99.8	93.6 - 99.9	< 5	0W-20 - 10W-30
VIF	III	4.2 - 4.4	122 - 130	> 99.8	98.3 - 99.7	< 5	0W-16, 0W-20
IX	II, III, IV	4.2 - 6.2	109 - 136	96.7 - >99.8	93.4 - 99.9	< 5	0W-16 - 10W-30
X	II, III, IV	4.2 - 6.2	109 - 140	96.7 - >99.8	93.4 - 98.4	< 5	0W-16 - 10W-40, 5W

Notes:

(1) Grp I blended with Grp III at 36%/64% Grp I/III ratio

(2) Data not supplied on all Group II base stocks to enable calculation of all base oil saturates levels

The LSG discussed *BOI VGRA Task Force Proposal 4 Revisions to Annex E.2.2.4*. (Attachment 1) Subsequently a Ballot Motion was made: **Motion is that the Lubricants Group Ballot the changes in Red in the Table on Slide 2 in API 1509 Annex E-x.** (Attachment 1, Page 3)

The Ballot Motion is given below.

Motion

Motion is that the Lubricants Group Ballot the changes in Red in the Table on Slide 2 in API 1509 Annex E.

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

API Lubricants Group

BOI VGRA Task Force Proposal 4

Revisions to Annex E.2.2.4

R. C. Dougherty

April 4, 2019

Modifications to Section E.2.2.4

Table E-x

Sequence	Base Stock Groups	BOV ₁₀₀ Range, mm ² /s	Base Oil VI Range	Base Oil Sats Range (D7419), wt%	Base Oil Sats Range (D2007), wt%	Base Oil Sulfur Range, ppm	Viscosity Grade Range
IIIH	I, II, III ⁽¹⁾	4.5 - 10.7	96 - 139	96.0 - >99.8	93.1 - 98.2	< 5 - 371	0W-16 - 20W-50
IVB	II, III	4.2 - 11.2	108 - 140	96.7 - >99.8	93.4 - 99.0	< 5	0W-16 - 20W-50
VH	I, II, III, IV	4.2 - 11.1	95 - 130	I: 86.8 - 87.5 II: 95.0 - > 99.8 III: > 99.8	I: 82.8 - 83.5 II: 92.7 - 99.0 ⁽²⁾ III: 97.7-98.4	I: 1301 - 1365 II, III: < 5	0W-16 - 20W-50
VIE	II, III	4.2 - 5.9	111 - 135	96.9 - >99.8	93.6 - 99.9	< 5	0W-20 - 10W-30
VIF	III	4.2 - 4.4	122 - 130	> 99.8	98.3 - 99.7	< 5	0W-16, 0W-20
IX	II, III, IV	4.2 - 6.2	109 - 136	96.7 - >99.8	93.4 - 99.9	< 5	0W-16 - 10W-30
X	II, III, IV	4.2 - 6.2	109 - 140	96.7 - >99.8	93.4 - 98.4	< 5	0W-16 - 10W-40, 5W

(1) Grp I blended with Grp III at 36%/64% Grp I/III ratio

(2) Data not supplied on all Group II base stocks to enable calculation of all base oil saturates levels

- Table added to Annex E in Ballot 4628 (Nov., 2018)
- Modifications to account for additional Seq. X data supplied by Infineum and for Seq. VH data supplied by ExxonMobil (changes in red)

Motion

Motion is that the Lubricants Group Ballot the changes in Red in the Table on Slide 2 in API 1509 Annex E.

- Motion by: Rick Dougherty
- Second by: Bill O’Ryan
 - Affirmative=16
 - Negative=0
 - Abstain=0

Ballot Passed