



Test Monitoring Center

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MEMORANDUM: 23-029

DATE: September 14, 2023

TO: Sequence III Surveillance Panel

FROM: Richard Grundza

SUBJECT: Updated Standard Deviations and pooled s for APV, PVIS, WPD and MRV

During a surveillance panel conference call on September 8, 2023 the panel agreed to update the standard deviations for reference oils 434-3, 436 and 438-2. In addition, the WPD mean for reference oil 438-2 has been updated. The panel also agreed to update the pooled standard deviations used in the application of severity adjustments. The effective date of these targets is September 12, 2023. These targets will be applied all tests completing on or after March 8, 2022, and new severity adjustment will be calculated for all currently calibrated stands and applied to all non-reference tests completing on or after September 12, 2023 and will remain in effect until the next reference cycle.

% Viscosity Increase (ln(PVIS))

TMC IND	N Size	Mean	Std. Dev.
434-3	58	5.7602	0.5845
436	91	3.3289	0.4005
438-2	32	3.9754	0.495

Weighted Piston Deposits (WPD)

TMC IND	N Size	Mean	Std. Dev.
434-3	58	4.16	0.42
436	91	4.63	0.34
438-2	32	3.87	0.26

Average Piston Varnish (APV)

TMC IND	N Size	Mean	Std. Dev.
434-3	58	9.16	0.3000
436	91	9.71	0.124
438-2	32	9.39	0.2889

Apparent Viscosity (MRV)

TMC IND	N Size	Mean	Std. Dev.
434-3	58	-----	-----
436	91	9.7854	0.2864
438-2	32	9.8189	0.6511

Parameter	Pooled s
PVIS	0.4933
WPD	0.35
APV	0.2376
MRV	0.4538

REG/reg/mem23-029.reg.docx

cc: Jeff Clark
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Sequence III Surveillance Panel

<https://www.astmtmc.org/ftp/docs/gas/sequenceiii/memos/mem23-029.pdf>

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