

GM Global Propulsion Systems

GMOD Information Letter 25-1

September 4, 2025

SUBJECT: Addition of Targets for Reference Oil GMOD02-2 to GMOD LTMS Document.

The following reference oil test targets contained in the GMOD LTMS Document have been updated to include targets for reference oil GMOD02-2. GMOD02-2 will use the same targets as GMOD02-1. In reviewing the GMOD02-2 matrix approval data, the data analytics group recommended industry correction factors for Ln(PVIS) and PHOSFNL when tests are conducted on piston batch 10 hardware. The ICF for Ln(PVIS) is 0.19 and the ICF for PHOSFNL is -1.4%. These ICF's are to be applied to all candidate tests starting 20250826. Labs should apply these ICF's to all reference tests conducted on piston batch 10 hardware and re-upload previously reported reference tests to the gmtdc.org website.

PERCENT VISCOSITY INCREASE (PVIS)

Unit of Measure: Ln(PVIS)

Add industry correction factor of 0.19 to Ln (PVIS) for tests conducted on batch 10

pistons Reference Oil Mean **Standard Deviation** 4.4245 434-2 0.33008 434-3 5.0137 0.60319 0.17583 GMOD01-1 4.3201 GMOD01-2 4.3201 0.17583 GMOD02-1 4.0608 0.40031 GMOD02-2 4.0608 0.40031

WEIGHTED PISTON DEPOSITS

Unit of Measure: Merits

Reference Oil	Mean	Standard Deviation
434-2	5.87	0.608
434-3	5.42	0.608
GMOD01-1	5.26	0.693
GMOD01-2	5.26	0.693
GMOD02-1	4.77	0.715
GMOD02-2	4.77	0.715

PHOSPHORUS RETENTION

Unit of Measure: Percent

Apply industry correction factor of -1.4% for tests conducted on batch 10 pistons

Reference Oil	Mean	Standard Deviation
434-2	73.81	1.854
434-3	73.81	1.854
GMOD01-1	81.86	3.123
GMOD01-2	81.86	3.123
GMOD02-1	82.85	3.480
GMOD02-2	82.85	3.480