



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ALS TRIBOLOGY
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Valley View, OH 44125
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CHEMICAL

Valid To: October 31, 2020

Certificate Number: 5681.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on Lubricants, Oils, Fuels and Coolants:

<u>Test:</u>	<u>Test Method(s):</u>
Acid Number by Potentionmetric Titration	ASTM D664 (Modified); ALS SOP 6003
Acid Number by Colorimetric Titration	ASTM D974
Base Number by Potentionmetric Titration	ASTM D4739 (Modified); ALS SOP 6004
Wear, Additive and Containment Metals by ICP/OES	ASTM DD5185 (Modified); ALS SOP 3006
FTIR – Oxidation, Nitration, Soot and Sulphation	ASTM D7414, D7415, D7418, D7624, D7844; ALS SOP 2005
Particle Count by Light Extinction	ASTM D7647 (Modified); ALS SOP 5003; ISO 4406
Viscosity, Houillion	ASTM D7279
Water by Karl Fischer Oven, Volumetric Titration	ASTM E203 (Modified); ALS SOP 6001
Water by Hot Plate (Crackle)	ALS SOP 5015
Fuel Dilution by Gas Chromatography	ASTM D7593
API Gravity by Hydrometer	ASTM D287, D1298
Bottom Sediment and Water by Centrifugation	ASTM D2709
Calculated Cetane Index – Four Variable	ASTM D4737
Cloud Point	ASTM D7689

Test:

Cold Filter Plugging Point

Distillation

Pour Point

Sulfur by EDXRF (including ULSD)

Anions by Ion Chromatography

Freeze Point

Metals by ICP

pH, Potentiometric

Reserve Alkalinity

Test Method(s):

ASTM D6371

ASTM D7345

ASTM D7346

ASTM D4294

ASTM D5827

ASTM D3321

ASTM D6130

ASTM D1287

ASTM D1121





Accredited Laboratory

A2LA has accredited

ALS TRIBOLOGY

Valley View, OH

for technical competence in the field of

Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 27th day of November 2019.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 5681.01
Valid to October 31, 2020

For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.