



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

POLARIS LABORATORIES, LLC
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Indianapolis, IN 46268
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CHEMICAL

Valid To: June 30, 2020

Certificate Number: 2145.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on petroleum products including oil, fuel, hydraulic fluid, lubricants, and coolants:

<u>Test(s)</u>	<u>Test Method(s)</u>
Lubricants/Oils	
Acid Number, Strong Acid	WI-329 (Based on Modified ASTM D664)
Analytical Ferrography	WI-0016; ASTM D7690
Base Number	WI-0195 (Based on Modified ASTM D4739)
Chlorine	WI-0052; ASTM D5384
Flash Point – Cleveland Open Cup	WI-0025; ASTM D92
Fuel Dilution by Gas Chromatography	WI-0086; ASTM D7593
Fuel Soot % (FTIR)	WI-0256, WI-157; ASTM E2412
Glycol	WI-0024 (Based on Modified ASTM D2982)
Gravimetric Solids	WI-0027
ICP Elemental Analysis Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn	WI-0121 (Based on Modified ASTM D5185)
i-pH	WI-0329 (Based on Modified ASTM D7946)
Karl Fischer Coulometric	WI-0259; ASTM D6304C

<u>Test(s)</u>	<u>Test Method(s)</u>
Oxidation/Nitration (FTIR)	WI-0256, WI-0157; ASTM E2412
Particle Count	WI-0322; ASTM D7647, ISO4406
Particle Quantifier	WI-0255
RPVOT	WI-0031; ASTM D2272
Soot	WI-0044
Viscosity @ 40° C or 100° C	WI-0061 (Based on Modified ASTM D445, ASTM D7279)
Viscosity Index (Calculation)	WI-0234; ASTM D2270 X2
Water % (Estimate) (FTIR)	WI-0256, WI-0157; ASTM E2412
Water % by Crackle (Estimate)	WI-0012
Water Separability Characteristics	WI-0203; ASTM D1401
Coolants	
Antifreeze % Refractometer	WI-0087
Conductivity & Total Dissolved Solids	WI-0056
Freeze Point & Boil Point (Calculation)	WI-0126
Hardness % Calcium Carbonate (Calculation)	WI-0127
ICP Elemental Analysis Ag, Al, B, Ca, Cu, Fe, K, Mg, Mo, Na, P, Pb, Si, Sn, Zn	WI-0120 (Based on Modified ASTM D6130)
Ion Chromatography Glycolate, Acetate, Formate, Chloride, Nitrite, Nitrate, Phosphate, Sulfate, Oxalate	WI-0209 (Based on Modified ASTM D5827)
Nitrites	WI-0276
pH Waters	WI-0023; ASTM D1287
SCA Number (Calculation)	WI-0127
Visual Coolant Testing	WI-0053

<u>Test(s)</u>	<u>Test Method(s)</u>
Fuels	
Aerobic Bacteria	WI-0036
API Gravity	WI-0266; ASTM D4052
Bacteria, Fungi, Mold	WI-0037
Cetane Index (Calculation)	WI-0165
Cloud Point	WI-0274; ASTM D7689
Micro – Distillation	WI-0326; ASTM D7345
Pour Point	WI-0274; ASTM D7346
Seta Flash	WI-0191; ASTM D3828
Specific Gravity (Calculation)	WI-0164
Thermal Stability	WI-0034 (Based on Modified ASTM D6468)
Water & Sediment	WI-0144; ASTM D2709



Accredited Laboratory

A2LA has accredited

POLARIS LABORATORIES, LLC

Indianapolis, IN

for technical competence in the field of

Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *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 April 27, 2018.

A handwritten signature in black ink, appearing to read "L. Sen", written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 2145.01
Valid to June 30, 2020

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