



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

POLARIS LABORATORIES, LLC
7451 Winton Drive
Indianapolis, IN 46268
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CHEMICAL

Valid To: July 31, 2022

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, WI-0390 (Based on Modified ASTM D5185) |
| i-pH | WI-0329 (Based on Modified ASTM D7946) |
| Karl Fischer Coulometric | WI-0259; ASTM D6304C |
| Oxidation/Nitration (FTIR) | WI-0256, WI-0157; ASTM E2412 |

| <u>Test(s)</u> | <u>Test Method(s)</u> |
|---|---|
| Particle Count | WI-0322; ASTM D7647; ISO4406 |
| Particle Quantifier | WI-0255 |
| RPVOT | WI-0031; ASTM D2272 |
| Viscosity @ 40° C | WI-0061 (Based on Modified ASTM D445, ASTM D7279) |
| Viscosity @ 100° C | WI-0393 (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-0497 |
| 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-0497; 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 D7777 |
| 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 |
| Sulfur | WI-0070; ASTM D7220 |
| 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 17025:2017 *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 January 2021.

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

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2145.01
Valid to July 31, 2022
Revised June 24, 2022

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