



**THE AMERICAN
ASSOCIATION
FOR LABORATORY
ACCREDITATION**

ACCREDITED LABORATORY

A2LA has accredited

POLARIS LABORATORIES, LLC
Salt Lake City, UT

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 18 June 2005*).

Presented this 30th day of March 2006.





President
For the Accreditation Council
Certificate Number 2145.03
Valid to March 31, 2008

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

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

POLARIS LABORATORIES, LLC
3060 W California Ave., Suite B
Salt Lake City, UT 84104
Susan Minges Phone: 317 808 3750 Ext.206
sminges@polarislabs.com

CHEMICAL

Valid To: March 31, 2008

Certificate Number: 2145.03

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>	<u>SOP(s):</u>
Lubricants/Oils		
Elemental Analysis (24 Elements) Ag, Al, B, Ba, CA, Cd, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn	ASTM D5185 (Modified)	C5-54-13
Fuel Soot %	FTIR-ASTM E2412	I5-54-67
Water % (Estimate)	FTIR-ASTM E2412	I5-54-67
Oxidation/Nitration	FTIR-ASTM E2412	I5-54-67
Viscosity @ 40°C or 100°C	ASTM D445 (Modified)	I5-54-85
Viscosity Index (Calculation)	ASTM D2270	I5-54-85
Total Acid Number, pH	ASTM D664 (Modified)	I5-54-84
Total Base Number	ASTM D4739 (Modified)	I5-54-87
Particle Count (Calibration 11171)	ISO 11500 (Modified)	I5-54-2
Direct Reading Ferrography	In-House Method	I5-54-22
Water by Karl Fischer (% or ppm)	ASMT D1744-92 (Modified)	I5-54-86
Water % by Crackle (Estimate)	In-House Method	I5-54-4
Glycol	ASTM D2982 (Modified)	I5-54-20
Fuel Sniffer	Manufacturer Method	I5-54-73
Chlorine	ASTM D5384	I5-54-75
Particle Quantifier	Manufacturer Method	I5-54-63
Coolants		
Nitrites	In-House Method	I5-54-16
Antifreeze % Refractometer	In-House Method	I5-54-17
pH Waters	In-House Method	I5-54-19
SCA Number (Calculation)	In-House Method	I5-54-29
Total Dissolved Solids (Calculation)	In-House Method	I5-54-82
Conductivity	In-House Method	I5-54-82
Freeze Point (Calculation)	In-House Method	I5-54-18
Boil Point (Calculation)	In-House Method	I5-54-18

<u>Test(s):</u>	<u>Test Method(s):</u>	<u>SOP(s):</u>
Coolants (Continued)		
Elemental Analysis (15 Elements) Ag, Al, B, Ca, Cu, Fe, K, Mg, Mo, Na, P, Pb, Si, Sn, Zn	ASTM D6130	I5-54-13
Visual Coolant Testing	In-House Method	I5-54-76
Fuels		
Bacteria, Fungi, Mold	Manufacturer Method	15-54-41
Aerobic Bacteria	Manufacturer Method	15-54-40