



Tribolab
ANÁLISIS DE FLUIDO Y SERVICIOS DE TRIBOLOGÍA

ENGINE

“Increase,
Performance
and reliability of your engine.”



Take a sample of the fluid, with the system operating in normal conditions.



Fill in the Tribolab® form corresponding to the Test it belongs to.



Send sample to Tribolab® to be analyzed.



Tribolab® records and analysis the sample, generating an e-report.



Tribolab® sends you an email report with the results. Customer evaluates recommendations.



Response time is 24 to 48 hr. Once the sample is registered in our laboratories.

Lubricants, coolants and fuels are vital for engines, through these fluids the pumps, shafts, pistons, gears and other engine components achieve ideal operation. One of these contaminated fluids can represent big problems for the engine, for example, exhausted additives, improper viscosity, altered acidity, incorrect pH or even the varnish formation can completely affect your engine.

Experts advise implementing a periodic analysis program, which allows predicting and detecting problems as a proactive method before they occur. Lubricant analysis can identify the biggest threats your engine can face, before it's too late. We recommend the **TRIBO 4 Basic Test** package.

The Biggest enemies of engine lubricant

- **Fuel dilution**, dilution is the amount of crude, unburned fuel that ends up in the crankcase. Dilution levels above 10% could cause a crankcase explosion.
- **Soot**, is a sign of reduced combustion efficiency and is caused by excess fuel supply, air restrictions, excessive use of the engine brake, and excessive exhaust backpressure.
- **Coolant**, typically enters an engine through broken gaskets, EGR components, cracked cylinder heads, cracked block, and faulty water pump. It can cause wear on bearings, bushings, pistons, liners, cams, and valves.
- **Dirt**, is detected by silicon and aluminum presence. Wear more quickly on components made of iron, copper, and tin, such as pistons, bearings, and liners.



www.tribo-labs.com

For more information you can contact us via email info@tribo-labs.com

DIESEL FUEL ANALYSIS PACKAGES

TRIBO 5: Basic Diesel Fuel Analysis Test.

Sample volume: 1 L

- Elemental Analysis by ICP (ASTM D5185)
- Water and Sediment (ASTM D2709)
- Bacteria, Fungi and Mold (Manufacturer)
- Soot % (ASTM E2412)
- ISO Particle Count (ISO4406.99)
- Pensky-Marten Flash Point (ASTM D3828)

TRIBO 6: Advanced Diesel Fuel Analysis Test. Sample volume: 1 L

- Elemental Analysis by ICP (ASTM D5185)
- Pour Point (ASTM D7346)
- Water and Sediment (ASTM D2709)
- Bacteria, Fungi and Mold (Manufacturer)
- Thermal Stability (ASTM D6468)
- Viscosity (ASTM D445)
- PPM Sulfur (ASTM D7220)
- FBT (ASTM D2068)
- Flash Point (ASTM D3828)
- Cetane Index (ASTM D976)
- Cloud Point (ASTM D7689)
- Distillation (ASMT D7345)
- ISO Particle Count or Particle Quantifier (ISO4406.99)
- COPPER STRIP CORROSION (ASTM D130)

OIL ANALYSIS PACKAGE

TRIBO 4: Engine Oil Analysis Test.

Sample volume: 100 ml

- 24 Metals by ICP (ASTM D5185)
- Viscosity @ 100°C (ASTM D445)
- Fuel Dilution % (ASTM D7593)
- % Soot (ASTM E2412)
- % Water by Crackle (Internal Method Tribolab)
- Base Number (ASTM DA4739)
- Oxidation / Nitration (ASTM E2412)

COOLANT ANALYSIS PACKAGES

TRIBO 8: Coolant Analysis Test.

Sample Volume: 100 ml

- Visual (color, oil and/or fuel contamination, foam magnetic/non- magnetic precipitation and odor) (Internal Method Tribolab)
- pH (ASTM D1287)
- Glycol % (ETHYLENE OR PROPYLENE)
- Freeze Point (ASTM D3321)
- Boil Point (Internal Method Tribolab)
- Nitrite (Internal Method Tribolab)
- TDS (sólidos disueltos totales)
- Specific Conductance (Internal Method Tribolab)
- SCA # (Internal Method Tribolab)
- Total Hardness (Internal Method Tribolab)

Standard Monitoring Frequency

The following is the standard monitoring frequency for engines that operate with diesel, bio diesel and gas fuels.

Engines: Every 700 hr.

“Experts recommend the ideal monitoring frequencies, depending on the industry and application. In general, the frequency shown above is set as a standard parameter”.

For more information you can contact us through the phones:

North America
Phone
+1- (786) 497.61.00 | (786) 537.49.71
Fax: +1 (786) 441.44.08

South America
Phone
+58 (414) 439.53.03 | (424) 473.04.59
(414) 342.51.61

Europe
Phone
+34- (658) 94.80.60 | (911) 84.59.96



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