Hydraulic Fluid Analysis Service

What You Don’t Know Can Hurt You

EATON
Powering Business Worldwide
Eaton’s Hydraulic Fluid Analysis Service

Fluid is the lifeblood of every hydraulic system

Fluid analysis is essential to keep your hydraulic system operating efficiently and effectively. Considering 80% of all hydraulic system failures are caused by poor fluid condition, an effective fluid analysis program will help identify contamination and other problems not visible to the naked eye.

Eaton’s Hydraulic Fluid Analysis program includes:

- Prepaid standard and optional advanced fluid analysis kits
- Fluid tests performed at ISO 17025 accredited laboratories
- Analysis reports available via email and online
- Results available 24-48 hours after laboratory receipt of fluid samples

Benefits

- Reduce potential catastrophic equipment failures
- Maintain, optimum component performance
- Identify any substandard filtration and maintenance practices
- Overall increased productivity
Hydraulic Fluid Analysis Kits

**Standard Kit:**  
Part # 894276-P  
Tests included  
- Particle Count  
- Water  
- TAN/pH  
- Viscosity  
- pH

**Advanced Kit:**  
Part # 894277-P  
Tests included  
- ICP Spectrometric Analysis  
- Particle Count  
- Water  
- TAN/pH  
- Viscosity  
- pH

**Extraction Pump:**  
Part # 5004092

**Results and Reports**
Test results are available 24-48 hours after receipt of oil samples. Recent and historical reports are available via email and online for 24 hours access and trend review. Overall report and individual test severity levels are flagged for abnormal and critical issues. In addition, recommendations and potential causes are noted based on the test results and findings.

**Test Definitions**

<table>
<thead>
<tr>
<th>Test Description</th>
<th>Details</th>
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<tr>
<td>Particle Count</td>
<td>Provides the number of particles of a specific size in a specific amount of fluid.</td>
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<td>Water</td>
<td>Measures moisture in the oil. Component life is reduced when water is present in the oil. Water can also cause the formation of oxidation products and corrosion of metallic surface.</td>
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<tr>
<td>TAN/pH</td>
<td>Total Acid Number and pH relate to the amount and strength of acidity in the system. An increasing TAN trend indicates oxidation or acid contamination.</td>
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<tr>
<td>Viscosity</td>
<td>Viscosity is a measure of the oil’s resistance to flow. Incorrect viscosity leads to fluid breakdown, inefficient equipment operation, premature system failure and damage to other components</td>
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<tr>
<td>ICP Spectrometric Analysis</td>
<td>Spectrometry measures the concentration of oil soluble elements, and indicates the additives and trace wear metal content in the fluids.</td>
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Fluid analysis kit includes the prepaid fluid analysis service, 3 oz. oil sample bottle, component registration form, and necessary packaging for mailing sample bottles.