

# Series 3 Testing

## Oil Testing and Evaluation

### Suggested Testing Applications

Hydraulics	Natural Gas Engines	Compressors
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#### Series 3 Tests:

- 💧 Spectrometry
- 💧 Viscosity
- 💧 Water Contamination (Crackle Test)
- 💧 Soot (Diesel)
- 💧 Glycol Contamination (Engines)
- 💧 Fuel Contamination (Engines)
- 💧 Oxidation/Nitration (Natural Gas)
- 💧 Acid Number

### Test Description

#### Spectrometry

Detects and measures concentrations of wear metals, additive elements and contaminants. Our method tests for the presence of 23 elements and each element is displayed in ppm on a color coded report.

#### Viscosity

Viscosity is defined as a measurement of a fluid's resistance to flow. Fluid Life reports viscosity at both 40C and 100C for all samples using our own multiple pass patented technology.

#### Water Contamination

The presence of water in an industrial system is detrimental to lubricant properties and causes corrosion to metallic parts. Fluid Life's testing describes water levels as "negative", "reportable", "unacceptable" or "severe".

#### Soot

The soot content in diesel engine oils is a key indicator in monitoring the combustion condition of the engine. Fluid Life monitors and reports soot content as a percentage.

#### Glycol Contamination

Even small amounts of glycol contamination in an engine can cause damage. Fluid Life's method of tracking glycol contamination can detect glycol as low as 50 ppm.

#### Fuel Contamination

The presence of fuel can have detrimental effects on the performance of engine oil and operating components. Fluid Life's method of tracking fuel contamination encompasses the very best analytical technology available and detects fuel presence as low as 0.5 percent.

#### Oxidation/Nitration

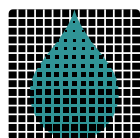
Analysis of clean burning engines such as natural gas engines use oxidation and nitration values to indicate chemical degradation, which can lead to troublesome deposits on valves and pistons.

#### Acid Number

An acid number in a lubricant context provides a measurement of oil degradation. This degradation is expressed by the change in acidity of a used sample as compared to its new, original state. Typically acid number is a good barometer of when industrial oils (hydraulics, compressors, gear oils, etc.) need to be changed.



*...because what happens on the inside really counts*



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