Fluid-Capacitance Tool

Provides qualitative fluid identification data

Applications

- Fluid identification
- Fluid holdup

Features and Benefits

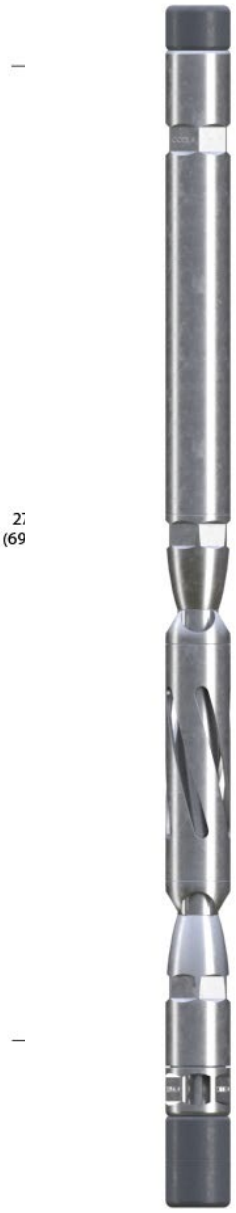
- Combinable with all high-speed digital (HD) telemetry tools for comprehensive evaluation
- Compact, versatile, and robustp

Tool Description

The Weatherford fluid-capacitance tool provides an indication of fluid type surrounding the sensor by measuring the dielectric constant of the fluid between the sensor and tool body. Used in combination with other sensors, it provides qualitative fluid identification data.

The oscillator electronics are on the sensor circuit board and not in the sensor section, reducing complexity and simplifying maintenance.

The fluid-capacitance tool provides useful qualitative analysis in high gas/oil ratio (GOR) wells.



Weatherford®

Fluid-Capacitance Tool

Specifications

Ratings and Dimensions

Maximum temperature	350°F (177°C)
Maximum pressure	15,000 psi (103.4 MPa)
Outside diameter	1.69 in. (43.3 mm)
Length	27.4 in. (697 mm)
Weight	11 lb (5 kg)

Capacitance Measurements

Measure point	9 in. (229 mm)
Effective range	0 to 40% holdup water
Accuracy*	1%
Resolution	0.1%

*Some users prefer to present raw counts only.

Hardware Characteristics

Materials	Corrosion-resistant materials used throughout
Combinability	All HD tools (RADii®, iQ™, PL, RAS™, etc.)
Acquisition Mode	Real time with telemetry Control unit (TCU) Memory with memory logging tool (MLT)

Electrical

Current	5 mA at 50 V 11 mA at 19 V