

FLUID PHASE EVALUATION TOOL

Fluid Phase Evaluation Tool (FPET) provides accurate capacitance (water holdup) and resistivity measurements in vertical and slightly deviated wells. Available in memory and SRO modes.

Applications

- Accurate fluid phase measurement in production wells
- Water/oil-producing intervals identification
- Water breakthrough determination based on resistivity (salinity) measurements

Advantages

- 2 in 1 solution
- Compact design
- Cost-effective solution for service companies

Capacitance sensor					
Water cut	0-100%				
Accuracy	±0.1%				
Resistivity sensor					
Measurement error	Less than 1 ohm-m				
General Specifications					
Maximum operating pressure	14,500 PSI (100 MPa)				
Maximum operating temperature	150°C (302°F)				
Tool OD	1.50/1.65 in (38/42 mm)				
Tool length	2.0 ft (0.6 m)				
Tool weight	6.6 lbs (3.0 kg)				
Connections	15/16 SR				
Operational time	Over 100 hrs				
H ₂ S resistance	6% standard (25% optional)				
Surface read-out / Memory	Both				







A combination of capacitance and resistivity sensors allows the differentiation of wellbore fluid phase segregation as well as changes in water salinity to determine the production from different intervals/reservoirs.

Н	Sketch	CCL	Spinner	Capacitance	Total rate
		Pass 1, mV	Pass 1, rps	Pass 1, %	Oil, bpd
		0 5000		85 100	
		Pass 2, mV	Pass 2, rps	Pass 2, %	Water, bpd
		0 5000		85 100	0 1100
		Pass 3, mV	Pass 3, rps	Pass 3, %	
		0 5000		85 100	
		Pass 4, mV	Pass 4, rps	Pass 4, %	
		0 5000	0 4	85 100	
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