

CPIDRI



General Features

Knowledge of the water-oil capillary pressure and resistivity index vs. saturation relationship is necessary for many reservoir engineering tasks such as:

- Calculate oil-in-place
- Calibrated resistivity logs
- Determine the height of the transition zone
- Model oil displacement either by free water imbibition and/or water injection

CPIDRI is dedicated to the determination of three properties for reservoir evaluation which are:

- Electrical resistivity index
- Full Capillary Pressure Curve
- Wettability indices as function of core sample saturation



CPIDRI

Specifications	
Confining Pressure Range	700 bar (10 000 psi)
Pore Pressure Range	650 bar (9280 psi)
Working Temperature	Up to 160°C
Air Bath Temperature Accuracy	0.1°C
LCR Meter Range	1 to 3 KHz fixed value
	(1 to 100 KHz in option)
Wetted Materials	Stainless Steel and Hastelloy
Resistivity Measurement	2 or 4 electrodes
Core Diameter	1 ½" (adjustable upon request)
Core Length	1 ½" to 3" (adjustable upon request)
Control Software	Falcon

This system has been used to determine automatically the full capillary pressure and resistivity curves which are essential to evaluate the potential of oil recovery from reservoir.

Benefits:

- Full data set obtained in a real time period
- High accuracy capacitance production measurement
- Automation and data acquisition software
- Direct capillary pressure curve measurement values
- Simultaneous measurement of multiple core sample

This equipment is composed of following elements:

- Oil reservoir Injection and production Pump
- Automatic 300 ml Volumetric Pump
- Water Injection and Production Measuring Pump
- Two Core Holders



