

Electrical Resistivity Measurement



Description

This apparatus is designed to measure the electrical resistivity of core plugs. This apparatus could be used in industrial laboratories to measure the electrical resistivity of reservoir core plugs which is fully saturated by reservoir brine. Knowing the resistivity of the brine, Formation Factor (F) could be calculated, and based on Archie's law the porosity of the plug could then be estimated. This estimated porosity can be used to match the data obtained by logging. Also, this setup could be used in educational laboratories of reservoir rock properties.

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Specifications

- Maximum plug length: 4”;
- Maximum plug diameter: 1.5”;
- Working temperature: ambient;
- Working pressure: ambient;
- Measurement cell material: Plexi-glass;
- Equipped with a LCR meter to measure the electrical resistivity;
- Frequency measurement range: 1 Hz to 100 kHz;
- Electrical resistivity measurement accuracy: 0.001 ohm;
- Equipped with porous copper electrodes.