



MICRO CONDUCTIVITY IMAGER (MCI)

The formation **Micro-Conductivity Imager Tool (MCI)** provides detailed borehole resistivity image data. The tool consists of six pads that are pushed against the borehole wall by independent hydraulic arms. Pad force is controllable to ensure all pads consistently make contact with the borehole wall during logging which is essential to obtaining high quality image data.

Each pad contains twenty-four (24) buttons surrounded by a metal pad which acts as a focusing guard electrode. There are a total of 144 buttons providing high quality micro-resistivity measurements with vertical and azimuthal resolution of 0.2". In a 8-1/2" borehole the six pads provide a 60% borehole wall coverage.

Pad transmit power (EMEX) is provided by independent surface DC power system to ensure high quality images even in the most challenging mud environments. The pad button measurements are scaled to resistivity values so that they can be correlated with conventional shallow measurements.



MCI TOOL STRING

FEATURES

- Acquires high-quality image data in challenging borehole conditions
- Provides scaled button measurements comparable to shallow resistivity
- Gallopstar compatible
- Real-time dynamic images while logging
- All outputs in DLIS format
- Compatible with wide-range of commercial interpretation software

APPLICATIONS

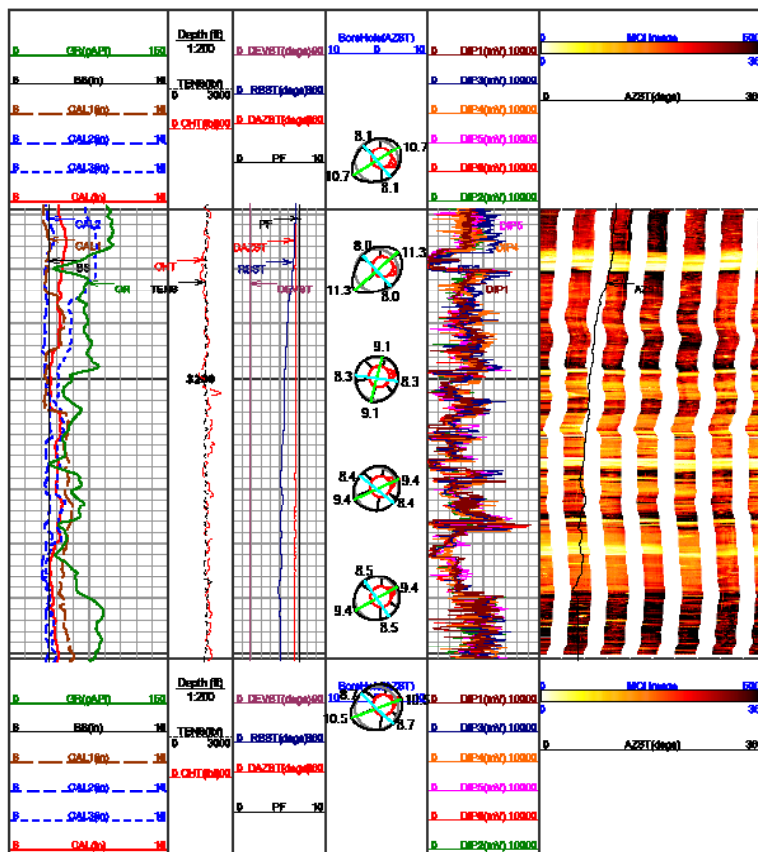
The logging data is mainly used for:

- Sedimentary feature and rock texture recognition
- Lithology identification, profile correlation and electro-facies analyses
- Fracture, vug and fault identification analysis
- Dip analysis and structural feature analysis in the vicinity of the borehole
- Borehole geometry and in-situ earth stress analysis
- Formation evaluation in carbonate reservoir and some igneous rock reservoir

PAD SECTION



LOG EXAMPLE



SPECIFICATIONS

MCI	
GENERAL SPECS	
Maximum Pressure	15,000 PSI (100 MPa)
Maximum Temperature	350°F (175°C)
Telemetry	430 Kbps/100 Kbps
Length	27.2 ft (8.3 m)
Minimum Diameter	3-1/2 in (90 mm)
Maximum Diameter	5 in (127 mm)
Wellbore Range	6.3 in - 20.8 in (160 - 530 mm)
Borehole Coverage	60% (in 8 in hole)
Sonde Inclination Measurement Range	Inclination: 0° - 90 ±0.2° - Azimuth: 0° - 360° ±0.2° (when inclination > 3°)
Resistivity Measuring Range	0.2 - 2,000 Ohmm
Vertical Resolution	0.2 in (5mm)
Caliper Measuring Range	5 in (127 mm) - 20.8 in (530 mm)
Max. Logging Speed	24.6 ft/min (7.5 m/min) in Fast Mode - 12.3 ft/min (3.8 m/min) in High Resolution