MaxCOR Service

Enhanced large diameter sidewall coring technology

Applications

- Geochemistry
- Geomechanics
- Biostratigraphy
- Reservoir geology/petrology
- Routine and advanced rock properties
- Wireline log calibration
- Grain size analysis
- Source rock and hydrocarbon characterization

Features and Benefits

- Retrieves up to 60 1.5-in. OD samples per run
  - Reliable service that saves valuable rig time
- Uses a direct-drive electric motor for maximum power transfer
  - Consistently retrieves quality core samples with less coring time
- Operates up to 25,000 psi and 400°F (204°C)
  - High core-recovery efficiency even in hostile environments
- Monitors and controls the operation in real-time through a graphical user interface
  - Provides reliable service with high core-recovery efficiency
- Acquires 225% more volume per unit length than standard 1-in. OD cores
  - Large diameter core allows more accurate analysis

The Baker Hughes MaxCOR™ Service can recover H/2-in. diameter cores, acquiring core that is 225% more volume per unit length compared to core recovered with standard rotary coring tools. This allows operators to more accurately evaluate reservoirs and maximize hydrocarbon recovery.

Large diameter cores

The accuracy of the measurement is directly proportional to the pore volume. Increasing the sample diameter from I to 1½-in. more than doubles the pore volume per unit length and impacts the accuracy of a suite of core measurements that depend on pore volume (e.g., porosity, water saturation, capillary pressure, and SCAL measurements in general). In addition, 1½-in. cores will allow much better geomechanical characterization of the rock, which in turn has significant implications to complete and produce complex reservoirs like gas shales.

Fast, reliable and efficient core recovery

- MaxCOR uses a direct-drive electric motor in place of a traditional hydraulic motor to power the bit
- MaxCOR motor controlled by an advanced downhole power management system to ensure maximum power transfer efficiency under all load and borehole temperature conditions
- The rotational speed of the bit is more than three times resulting in significant reduction of coring time
- It achieves high core-recovery efficiency even under very hostile environments with pressures up to 25,000 psi and temperatures up to 400°F (204°C)

Specifications

Temperature	400°F (204°C)
Pressure	25,000 psi (172.37 MPa)
Core capacity	60 cores
Core diameter	1.5-in.
Core length	2.5-in.
Borehole size	7.5 to 17.5-in.
OD	6.25-in.