

## **Core Analysis Services**

#### Well Site Core Handling:

At datalog we believe that quality of data produced is strongly dependent on samples quality, so it's one of Datalog missions to ensure optimum core sample catching on site, logging, preservation, stabilization and safe transportation; well site core services include:

- Core Catching and Markup with MOL.
- Wellsite Core profiling by Spectral Core gamma and mini permeability.
- Wellsite Core Plugging.
- Wellsite Core photography WL and UV.
- Wellsite Core Preservation by Corseal Wax.
- Wellsite Core Stabilization by gypsum, foam and different types of resins.
- Water base mud tracing by D<sub>2</sub>O during Coring.
- Core Transportation via wooden boxes or core cubes with reinforced sponge and DAQ shock detectors.

#### Routine Core Analysis:

Datalog understands operator's needs for rapid and reliable routine core analysis data, datalog mission is providing academic precision routine core analysis data within commercial rapid turnaround timing; Routine Core Analysis Services include:

- Total and Spectral Core Gamma.
- Fluid Saturation by both retort and Dean-stark methods.
- Core Plugging, different sizes.
- Core Cleaning and drying by different methods.
- Helium Porosity, Nitrogen Permeability and Grain density measurements at both ambient and overburden conditions.
- Core photography under White and UV light.
- Core biscuit museum preparations.
- Core samples archiving and storage.
- Core analysis database management.
- Full package of Whole Core Analysis.













# **Special Core Analysis SCAL**

**Datalog** offer a wide range of Special Core Analysis services starting from the designing of optimum SCAL projects that fit with the client's needs through to the scheduling stage. All projects are carefully reviewed throughout our QA/QC system to guarantee that representative quality data are produced.







SCAL laboratory focuses on multiple measurement types performed on a restricted number of samples from specific zones of interest to ensure representative sample conditions. These samples are selected on the basis of the Petrophysics and Petrographic parameters in addition to the lithological values of the target reservoirs. The importance of achieving a sufficient spread of representative samples, with good spatial distribution is an important part of the sample selection process.

Special Core Analysis Services include the following analyses @ Room & Reservoir conditions:

- <u>Electrical properties</u> measurements, Formation Resistivity Factor and Resistivity Index by different methods.
- <u>Capillary pressure</u> measurement by <u>Porous Plate</u> and <u>Centrifuge</u> and by <u>Mercury Injection</u>.
- Wettability measurements, Harvey Amott, USBM & Combined.
- Relative Permeability by Unsteady & Steady state methods.
- Core Flooding analyses.
- <u>Rock Mechanics</u> Acoustic properties and more!



### Advanced Core analysis and Formation Damage:

Since reservoir performance and improved hydrocarbon recovery are in top priority to all operating Co. Datalog mission is supporting in minimizing risk by screening field operations on lab scale and thus predicting near wellbore interactions with different operations, Advanced Core Analysis and Formation Damage Services include:

- Return permeability measurements.
- Water injection and Water treatment screening services.
- Reservoir souring modelling.
- Scale tendency and Scale inhibition analysis.

