



CORE SERVICES



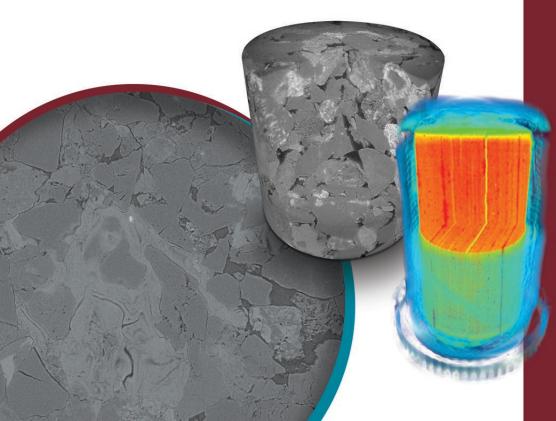
Improve your understanding of the subsurface with Premier Corex core services.

We measure the petrophysical and mechanical properties of rocks to provide superior inputs for completion design and reservoir engineering.

Accurate and relevant experimental data on reservoir rock improves completions designs and estimations of recovery. Premier Corex uses a fit-for-purpose approach that provides petrophysical and geomechanical data in unconventional reservoirs. Our expert consultants work with you to explain how experimental results will impact your assets.

Premier Corex advanced routine and special core analysis workflow

- Representative Plug Selection
- Core / Plug Prep
- Plug Screening using Micro-Ct
- Porosity and Saturations Measured Using NMR
- Nanodarcy Permeability Measured at Steady State





in specialties
in specialties
ranging from
geoscience and
engineering
to simulation
software and
technology
development.



Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt

STATIC AND DYNAMIC MECHANICAL PROPERTIES

Premier has the ability to determine rock mechanical properties on the most fissile samples. Premier can perform geo-mechanical tests on samples up to whole core diameters. We utilize cantilever bridges measuring radial deformation ensuring anisotropy is captured. Dynamic mechanical properties calibrate sonic log data providing better models for well stimulation.

NANO-DARCY PERMEABILITY MEASURED AT STEADY STATE

Measurement of steady-state liquid permeability is an industry-recognized best practice. Our process for measuring permeability on nano-darcy rock has been optimized for throughput and repeatability. The advantage of steady state liquid permeability measurements is the simplicity of the model which eliminates the assumptions associated with pressure transient tests. Our experienced geo-mechanical staff determine overburden conditions that best replicate flow at various stages of reservoir development.

REPRESENTATIVE PLUG SELECTION

The selection of locations for core analysis is critical for obtaining a representative data set. Premier uses statistical relationships between well log data, core spectral gamma, and high-frequency X-ray fluorescence (XRF) to discretize the core into characteristic facies. Big Data cluster analysis guides facies identification based on depositional environment which is often overlooked by traditional methods like visual description.

CORE / PLUG PREP

Sample preparation and handling is critical. Our experienced technical staff leverage their years of experience providing pristine samples for testing.

PLUG SCREENING USING MICRO-CT

It is important that core plugs are free from cracks or abnormalities. Premier uses micro-CT screening to identify the best plugs for testing. Micro-CT is also used to find bedding planes in geo-mechanical samples.

POROSITY AND SATURATIONS MEASURED USING NMR

Traditional Dean-Stark is destructive to the organic matter in mudstones. Premier uses NMR to quantify the volumes of oil and water in samples without disturbing the integrity of the rock. NMR T2 measurements on fully saturated samples accurately measures their porosity.

THE EXPERTISE YOU NEED.

In addition to this workflow, Premier Corex can offer a full suite of measurements on both conventional and unconventional samples.

Our experts are always available to guide you on the interpretation of experimental results ensuring maximum added value as you integrate them into your development plans.