



Overview of Petrophysical Interpretation

MODULE

About the Skill Module

This skill module provides an overview of petrophysical interpretations, focused on conventional reservoirs. The skill module introduces the goals and data sources of petrophysical interpretation and details the data quality and conditioning processes that are essential to producing reliable interpretations to inform asset development.

The skill module follows three common workflows for the petrophysical interpretation:

1. Volumetric interpretation provides the best evidentiary estimates of hydrocarbon volumes encountered by a well. It is affected by factors including mineralogy and lithology, fluid properties of sensitive volumes of measurement, porosity, rock typing with petrophysical properties, capillary pressure, and fluid saturations.
2. Dynamic properties interpretation focuses on fluid flow in porous media. This includes measures of absolute and relative permeability, fractional flow, and wettability, as well as inputs from digital rock physics or seismic rock physics.
3. Other deliverables and techniques are often essential for specific projects. These include log response modeling, uncertainty quantification, heterogeneity quantification and model-building and upscaling.

Together, these workflows allow petrophysicists and associated teams to form multi-faceted and evidentiary interpretations of an asset, whether at well or reservoir scale.



[See example online learning module](#)

Target Audience

The content is suitable to anyone wanting to understand the bases for subsurface resource interpretation of conventional reservoirs. Previous exposure to subsurface terminology and concepts is assumed.

You Will Learn

- How petrophysical interpretations address and measure the geochemical properties of conventional reservoirs, linked to the goals of specific projects
- Data sources of petrophysical studies – including why data quality is a perennial concern and how it can be addressed
- Common workflows for petrophysical interpretation and the purposes and features of each
- How volumetric interpretations are formed from petrophysical measurements
- How fluid flow is measured as the basis of dynamic interpretations
- Petrophysical approaches for addressing and quantifying uncertainty

Product Details

Categories: Upstream

Disciplines: Petrophysics

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 3.75 hours (approx.)

\$395.00