Introduction to the Petrophysical Interpretation for Unconventional Reservoirs

MODULE

About the Skill Module

This skill module introduces the Petrophysical Interpretation of Unconventional Reservoirs. Sources of information for reservoir description are covered and include hydrocarbon generation as a function of temperature and composition, wellsite data, coring, and core analysis, well logs, and dynamic testing. Organic-rich shales can be naturally enhanced beyond the initial porosity and permeability. Methods of enhancement and examples are provided.

Commonly used petrophysical models for volumetric assessment and reservoir quality are presented. Geomechanical properties can be calculated from cores and well logs and are introduced.

The content is suitable for anyone wanting to understand the bases for subsurface resource estimation of organic shales. Previous exposure to subsurface terminology and concepts is assumed.

See example online learning module

Target Audience

Geoscientists involved with the evaluation and exploitation of unconventional reservoirs including tight gas sands, shale gas, and coal-bed methane.

You Will Learn

- Important geochemical concepts of organic-rich shales
- Wellsite information, coring and core analysis, and well logging data application for shale reservoir evaluation
- Recognition of organic-rich shale with log responses
- Shales pore systems and contrasts with conventional reservoir systems
- A volumetric workflow
- Ways in which organic-rich shale porosity and permeability can be enhanced beyond the intrinsic matrix porosity and permeability
- Method for obtaining pressure and mobility on wireline
- Drilling and completion applications of geomechanical properties

Product Details

Categories: Upstream

Disciplines: Petrophysics

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 3 hours (approx.)

$395.00