

# **Basic Petroleum Geology - Unconventional Petroleum Resources**

### MODULE

#### About the Skill Module

This Skill Module provides an introduction to the petroleum geology of Unconventional Resources, which are an increasingly important part of the oil and gas industry.

The first part of the Skill Module explains the basic concepts of unconventional resources, and the key differences between conventional fields and unconventional resources. The geology and technological factors controlling productivity for unconventional resources are described, and essential operational technologies, including horizontal drilling and multistage hydraulic fracturing are discussed.

To highlight and reinforce the basic concepts of unconventional shale resource plays, the second part of the Skill Module focuses on two case studies; first, the Eagle Ford Shale Play of southeast Texas; and second, the Niobrara Shale Play of Colorado-Wyoming, as an example of a "shale hybrid play."

See example Geology eLearning module

## **Target Audience**

Geoscientists, engineers, team leaders, geoscience technicians, asset managers, and anyone involved in Petroleum Exploration and Production who needs to understand Petroleum Geology concepts at a basic level or to communicate with others about it.

### You Will Learn

Participants will learn how to:

- Explain what is meant by an Unconventional Resource and how it differs from a Conventional Field
- List the geologic factors controlling productivity of Unconventional Resource plays
- Recognize the importance of Geomechanical Factors, in particular Stress Field Orientation
- Describe key aspects of Horizontal Drilling and Hydraulic Fracturing technologies as they relate to Shale Resource Plays
- Explain the concept of a Shale Hybrid Play
- Describe key technical developments that have led to increased productivity from Shale Plays and be cognizant of World Oil and Gas Shale Resource Estimates

## **Product Details**

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Categories: <u>Upstream</u>

Disciplines: <u>Geology</u> <u>Unconventional Resources</u>

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 3 hours (approx.)

\$395.00