

# **Direct Hydrocarbon Indicators and Amplitude vs. Offset**

#### MODULE

#### About the Skill Module

This skill module explains that the effect of hydrocarbons as a pore filling material in our seismic data is at the core of seismic interpretation. This skill module also includes a section on rock physics. Amplitude variation with offset is used to modify risk in hydrocarbon prospects. This skill module introduces the concept, process and application of the technology.

See example Geophysics eLearning module

## **Target Audience**

Geoscientists, engineers, team leaders, geoscience technicians, asset managers, and anyone involved in using seismic data that needs to understand and use this data at a basic level or to communicate with others that use it

# You Will Learn

You will learn how to:

- · Explain the effect of hydrocarbons in the seismic data
- · Detect hydrocarbons in the seismic data
- · Describe rock physics
- Define amplitude variation with offset/angle (AVO/AVA)
- Make approximations to the Zoeppritz equations, including:
  - · Aki-Richards equation
  - Shuey's equation
- · Identify the Rutherford and Williams classification
- · Describe slope, intercept, and the fluid line
- Describe the methods for prestack inversion, including:
  - Simultaneous Inversion
  - Elastic Impedance and Extended Elastic Impedance
- Lambda Rho and Mu Rho

### **Product Details**

4/24/24, 7:52 PM

Categories: <u>Upstream</u>

Disciplines: <u>Geophysics</u>

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 4 hours (approx.)

\$395.00