Ref: EN07

## Seismic Reservoir Characterization - Understanding and handling seismic amplitudes

#### About the course:

To understand the wide scope of possibilities and limitations at disposal of geoscientists when studying seismic amplitudes, that course covers the following different topics:

- Introduction to wave propagation and rock physics theory
- Calibration/Seismic-to-well tie
- AVO/AVA
- Inversion (including seismic-to-well tie)
- Seismic attributes

Attendees shall have the opportunity to create and handle seismic attributes, perform an inversion feasibility survey, tie a well to seismic and make AVO/AVA modeling with EarthQuick.

Duration: 4 days.

<u>Level:</u> Intermediate.

## **Prerequisites:**

It is highly recommended to have a basic knowledge of fundamentals and/or operational Geophysics and/or Geology.

#### Course objectives:

After attending that course, participants shall understand abilities and limitations of SRC methods and how to implement them.

#### **Typical Attendees:**

Subsurface E&P professionals with experience in Geophysics and Geology.

### Agenda:

Day 1 – Introduction to wave propagation and rock physics theory,

Day 2 – Seismic-to-well tie and AVO/AVA,

Day 3 – AVO/AVA and inversion,

Day 4 – Inversion and seismic attributes.

#### Instructor:

Ludovic Peignard has been a geophysicist in the Oil and Gas Industry since 2006, in charge of many geographic areas, working for GDFSUEZ and Total groups. He founded and coded, EarthQuick, a software solution to cope with needs of swift geodata integration and interpretation. He is a freelance instructor and a vacant teacher for IFP School and EOST in Geophysics.

## Price:

8,000 EUR Tax Excluded, 8 attendees maximum, for the whole duration, excluding traveling and accommodation expenses

# Other Information:

Lecture could be made in English or French at the sole discretion of clients. Course media (slides and booklet) shall be written in English only. The booklet only shall be provided as a hard copy.

EarthQuick licenses are provided without extra costs, for the course duration only.

Attendees shall practice with EarthQuick Software for exercises, running EarthQuick on their own PC, compliant with following minimum requisites:

• OS: Windows 7, 8, 8.1 or 10,

• Free Space HD: 1 TB,

• Amount of RAM: 8 GB RAM,

CPU speed: 2.4 GHz,CPU Core count: 2,

• Video Resolution: 1280x720.

