Petrogenium. Academy

Upstream (Geology)

Subsurface Mapping

Consultant / Trainer

Evert Uitentuis

The **Petrogenium (in collaboration with EPTS) Subsurface Mapping** course will provide participants training to interpret subsurface data and provide geological models that form the basis for development planning. Construction of maps and sections of the subsurface, including integration of seismic and well data, forms an important part of the evaluation. Assessment of the connectivity between hydrocarbon-bearing areas is critical in understanding in the fluid flow within a reservoir, knowledge on faults dimensions and properties with respect to transmissibility is discussed such that will learn how to perform fault seal analysis.

Participants

This **Petrogenium.** course aims at Geologists, petroleum engineers and geophysicists involved with the development of oil and gas reservoirs. Geologists needing knowledge of Correlation and Structural/Stratigraphic mapping.

Learning Objectives

Participants will be able to apply geological concepts, construct maps and sections and validate computer-generated interpretations. They will be able to calculate subsurface volumes and assess their uncertainties.

Why select Petrogenium.?

The above support will be provided by principal consultants with 30+ years world-class experience in the technology and hands-on know-how from operation of refinery units.

Contact Petrogenium.:

Email: training@petrogenium.com
Website:https://www.petrogenium.com/training/

Because Experience Matters

Programme

DAY 1

Exploration and Production (E&P) development projects, Basin analysis

Introduction of participants and trainer, course objectives

Activities in E&P, the project life cycle

The role of subsurface maps and models in E&P projects

- Concepts of petroleum geology, structural regimes
- Hydrocarbon basins/plays
- Plate tectonics, structural regimes
- Sedimentary cycles and sequences
- Sedimentary environments overview
- Origin of hydrocarbons, source-rocks and maturity
- Hydrocarbon traps, fluid contacts and spill-points
- Various Group and Individual Exercises

DAY 2

Seismic and reservoir property data

Seismic data gathering, processing and interpretation.

Data gathering (cores and logs)

Derivation of reservoir properties and mapping thereof.

Exercises:

- Preparing property maps e.g. porosity, thickness and EOC.

DAY 3

Structural styles, maps and sections

Structural styles, Maps and Sections

Stratigraphic Principles

Structural Geology: stresses and subsurface pressures

Various Exercises

- Correlation
- Structural maps and sections
- Integration of pressure data

DAY 4

Volumetric calculations and Reservoir Conditions

Volumetric calculations, subsurface uncertainties

Introduction to Computer Mapping & Modelling (Petrel)

Exercises:

- Volumetric calculations

DAY 5

Volumetric calculations and Reservoir Conditions

Volumetric calculations, subsurface uncertainties

Introduction to Computer Mapping & Modelling (Petrel)

Exercises:

- Volumetric calculations