

Sandstone Reservoirs - SR

COURSE

About the Course

This course is essential for geoscientists and engineers involved in the exploration and development of clastic reservoirs. It focuses on methods that can be used to improve the prediction of reservoir size, shape, trend, and quality through detailed analysis of depositional environments.

The sedimentary characteristics of each of the principal clastic depositional systems are presented in detail, using examples from recent environments, outcrops, cores, wireline logs, and test/production data from oil and gas fields in various parts of the world (United States, North Sea/Atlantic, Africa, Middle East, Far East, etc.). Practical exercises are taken from each of the principal depositional settings and involve detailed mapping, interpretation of core and log characteristics, and integration of data from FMI logs. Emphasis is placed on the application of fundamental sedimentary principles (modern, ancient, and subsurface) to actual subsurface data so that the participants can immediately use the information in their exploration and development activities.

"Enjoyed exercises because they give you a practical application to the theory learned in lectures. Important because they show how to integrate well data, FMI logs and core data to get full picture/best interpretation." - Development Geologist, Canada

"Comprehensive and covers all aspects of Sandstone Reservoirs." - Staff Geophysicist

Target Audience

Geologists, geophysicists, petrophysicists, reservoir and production engineers, exploration-production managers, all team members involved in reservoir characterization, and technicians working with clastic reservoirs. The course provides a refresher in new concepts in this field for geoscientists at a foundation level.

You Will Learn

Participants will learn how to:

- Interpret clastic depositional environments using data from cores, cuttings and wireline logs (including FMI)
- Apply new sequence stratigraphic concepts to clastic reservoirs
- Correlate wells using knowledge of depositional environment
- · Predict reservoir size, shape, trend and quality

Course Content

- Genetic stratigraphic analysis
- Depositional architecture
- Basins and units
- Wireline logs and conventional cores
- Seismic and sequence stratigraphy
- Recognition of depositional systems
- Process-response facies models
- Integrated genetic stratigraphy
- Analysis of clastic depositional systems
- Alluvial fan
- Fluvial
- Eolian
- Deltaic
- Shoreline
- Shelf
- Deepwater systems
- Incised sequences
- · Shelf margins and linked downslope systems
- Characteristic log patterns
- Flow units
- · Prediction of reservoir size, shape, trend, quality
- How to select optimum well locations
- · Lateral continuity and quality of seals
- Sedimentary controls on porosity, permeability, saturation
- · Reservoir exploration and production case histories
- · Exploration and production scaled case histories

Product Details

Categories: <u>Upstream</u> Disciplines: <u>Geology</u> Levels: <u>Foundation</u> Product Type: <u>Course</u> Formats Available: <u>In-Classroom</u> Instructors: <u>PetroSkills Specialist</u> <u>Larry Lens</u> <u>Dave McGee</u>

In-Classroom Format

23 Sep '24 27 Sep '24 - | Course | In-Classroom (in Houston)