

Reservoir Quality Analysis: Sandstone & Carbonate Rocks

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Dubai (UAE)

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Reservoir Quality Analysis: Sandstone & Carbonate Rocks

Ref: 2022162714234727 **Location:** Dubai (UAE) **Fees:** 4900 GBP

Why This Course

Understanding reservoir quality is critical for maximizing hydrocarbon recovery and optimizing field development. This intensive 5-day course equips geoscientists and reservoir engineers with advanced skills in petrophysical analysis, reservoir characterization, and quality assessment for both sandstone and carbonate formations. Combining theory with practical applications, the program uses real-world case studies to ensure participants gain actionable knowledge they can apply immediately in their projects.

What You'll Learn and Practice

By attending this program, you will be able to:

- Grasp the fundamental principles of reservoir quality in sandstone and carbonate formations.
- Apply advanced petrophysical analysis and interpretation techniques.
- Conduct integrated reservoir characterization and geological modeling.
- Assess and predict reservoir quality using analytical tools and datasets.
- Gain hands-on experience with core sample analysis and data interpretation.

The Program Flow

Day 1: Introduction to Reservoir Quality Analysis

- Fundamentals of reservoir rocks and their properties
- Overview of sandstone and carbonate rock types
- Introduction to porosity and permeability concepts
- Basics of reservoir quality assessment techniques

Day 2: Sandstone Reservoir Quality

- Sandstone composition, texture, and classification
- Diagenetic processes affecting sandstone reservoirs
- Pore types and pore network analysis in sandstones
- Case studies of sandstone reservoir quality

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A graphic illustration of a chessboard with several chess pieces. A large gold king piece is prominent in the foreground, with other pieces like a silver pawn and a gold pawn visible. The board is checkered, and there are concentric circles in the background.

Day 3: Carbonate Reservoir Quality

- Carbonate rock types and classification systems
- Diagenesis and its impact on reservoir quality
- Porosity types and permeability in carbonate rocks
- Carbonate reservoir quality case studies

Day 4: Advanced Petrophysical Analysis

- Core analysis techniques and interpretation
- Well log analysis for reservoir quality assessment
- Integration of core and log data
- Pore-throat size distribution and capillary pressure analysis

Day 5: Integrated Reservoir Characterization

- Geological modeling of reservoir quality
- Upscaling petrophysical properties
- Reservoir quality prediction techniques
- Integration of reservoir quality data into field development planning

Individual Impact

Participants will leave the course with:

- The ability to conduct comprehensive reservoir quality assessments.
- Enhanced skills in interpreting complex petrophysical data.
- Improved decision-making in reservoir characterization and modeling.
- Practical experience applying advanced analytical techniques to real-world scenarios.

Organizational Impact

Organizations will benefit from:

- More accurate evaluation of reservoir potential and performance.
- Improved field development planning based on reliable data.
- Enhanced efficiency in integrating geological and petrophysical analyses.
- Better-informed decision-making that maximizes hydrocarbon recovery.

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A graphic illustration of a chessboard with several chess pieces. A large gold king piece is prominent in the foreground, with a silver pawn and a silver knight behind it. The board is checkered, and there are concentric circles in the background.

Training Methodology

- Interactive workshops and practical exercises
- Case studies from significant siliciclastic and carbonate reservoirs
- Hands-on interpretation of core, log, and analytical data
- Collaborative learning to apply reservoir quality assessment techniques effectively

Beyond the Course

By the end of the five days, participants will be ready to:

- Assess reservoir quality confidently in both sandstone and carbonate formations.
- Integrate petrophysical, geological, and analytical data into robust reservoir models.
- Apply advanced techniques to optimize reservoir management and development strategies.
- Contribute to informed, data-driven decisions that enhance project outcomes.

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A decorative graphic at the bottom right of the page shows a chessboard with several chess pieces. A large gold king piece is prominent in the foreground, with a silver pawn and a gold pawn behind it. The board has a checkered pattern, and there are concentric circles in the background.