



Applied Formation Core Analysis EP06



Oil & Gas
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Applied Formation Core Analysis (EP06)

Course Description:

This program addresses the application of reservoir core analysis in reservoir characterization. Fluid flow properties and rock properties are studied in depth, measured and calculated comprehensively. There is emphasis on the various ways and methods of calculating these properties which are crucial to hydrocarbon recovery.

At the end of the program, participants will be well versed in the various ways of calculating reservoir fluid and rock properties, pertinent to the exploiting hydrocarbon reserves effectively.

Course Contents:

1. Brief overview of objectives of core analysis

- Coring methods
- Fluid analysis
- Core description

2. Reservoir Geology and characterization

- Sedimentology, lithology, depositional environments, Diagenesis
- Thin section analysis
- Sample preparation

3. Porosity and Permeability

- Total Vs Effective Permeability
- Relative permeability, Directional Permeability
- Storage Capacity

4. Rock mechanics

- Compressibilities
- Pore volume calculations
- Elastic module

5. Flow Properties

- Darcy and Non-Darcy flow
- Permeability profiles
- Connate fluid saturation
- Conductivity
- Fluid interaction – interfacial tension

6. Flow units, Hydraulic units and Carman-Kozeny equation
7. Upscaling principles and issues
8. Formation Evaluation calculations
 - Cementation and Saturation exponents (m and n)
 - Clay effect
 - Formation Damage
 - Drilling solutions and techniques
9. Saturation Studies
 - Capillary pressure
 - Drainage and Imbibitions
 - Water saturation
10. Permeability studies
 - Relative permeability
 - Fluid phases and Oil and water wettability
 - Test methods
11. Application in fluid flow simulation

Who should attend?

- Geologists, Geophysicists, Reservoir Engineers
- Production Engineers and Petrophysicists
- All other oil and gas personnel involved with reservoir characterization

Date & Venue:

Dates & Venue open to discussion /change upon interest and commitment of 8 or more persons.

Tuition:

£3,250 +VAT

5 day program

5 easy ways to register or to make an enquiry:

1.Web

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2.Email

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