



Topic Outline

Petroleum Geology

- Origin of the solar system and depositional environments
- Geological cycle/time and reservoir rock types
- Main elements of petroleum reservoirs

Rock properties

- Porosity types and case study

Fluid properties

- Hydrocarbon classification
- Fluid behavior

Reservoir drive mechanism

- In-depth look at petroleum geology

Reserves determination

- Volumetric, material balance and probabilistic methods
- Empirical and statistical method
- Decline analysis

Methods to estimate well productivity

- Darcy equation and boundary conditions
- Inflow performance relationship (IPR) and well allowable

Well testing

- Types of tests and objectives of reservoir limit and gas well testing
- Buildup analysis

Water coning and influx

- Break-through time and critical rate determination
- Estimate of water influx

Secondary and tertiary recovery schemes

- Scheme planning, design and review

Introduction to unconventional oil and gas

- Gas content and reservoir characteristics
- Production mechanism and reserves determination

Horizontal well applications

- Productivity, estimates and optimizations
- Multi-stag Frac Horizontal Wells (MFHW)
- Performance analysis and minimizing risks

19TH – 23TH JANUARY 2015 RESERVOIR ENGINEERING FOR OTHER DISCIPLINES

How to plan data acquisition? What kind of data is needed? How to use the data as a reservoir management tool? How to increase ultimate recovery and projects' NPV's? These theoretical concepts will be covered to assist reservoir and exploitation engineers in effectively understanding and performing their main tasks: to determine oil and gas reserves and maximize hydrocarbon recovery under primary, secondary and tertiary schemes, with emphasis on bottom line results.

Participants will learn field development of unconventional gas reservoirs including shale gas, tight gas and coalbed methane (CBM). Other topics such as the application of horizontal wells, new technologies, well test analysis, and reservoir drives will also be covered. With emphasis placed on hands-on learning and application, participants will examine interesting case examples using actual field data. A thorough course hand-out for review and reference will be provided.



Reservoir Engineering Division

Register Now!

For full details on the programme principal facilitator and to register, do not hesitate to contact us.

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