

Reservoir

Reference : RRFP-E

Who should attend

• Reservoir, Production and Drilling Engineers

Instructor

Ammar JELASSI

Duration

3 days

Location

Monastir

Language

English

Fees/Trainee

1 000 DT





Course Content

1- Introduction

- Description of reservoirs
- Systems of Units used in the Petroleum Industry and on version
- Notions of Hydraulics: Physical State, Pressure, Density and Compressibility, Viscosity, Capillary Pressure, Equation of Navier-Stokes.
- Bernouilli's Equation, Applications
- Basic Notions of Rock Mechanics: Moduli and Failure

2- Rock Properties

- How they are studied (cuttings, Cores, logs, in situ Tests)

- Types of Rocks with emphasis on Reservoir Rocks; homogeneity/Heterogeneity, Isotropy/Anisotropy, layering, dip, fractures

Porosity (Primary and Secondary), Fluid Saturation, Capillary Pressure, Permeability absolute and relative,
Mechanical Properties (Density, Moduli, Compressibility, Sound Velocity), electrical properties, other properties (temperature...)

3- Fluid Flow in Reservoir Rocks

- Reservoir Fluids characterization: Petroleum and water
- Flow Equation (monophasic with and w/o gravity forces)
- Flow Equation for a vertical well and incompressible liquid (steady state); well tests
- Other cases: deviated or horizontal well, gaswell, fractured reservoir, injection wells
- Multiphase flow
- Modeling

NB : This training can be delivered in Frensh Language

Ammar JELASSI

Graduated Engineer from « Ecole Polytechnique— Paris ». 35 years experience in Reservoir Engineering and Petroleum Project Management.