

BASIC RESERVOIR ENGINEERING

This is a course designed for geologists, geophysicists, log analysts and other industry professionals who are interested in obtaining basic reservoir engineering principles and techniques. Introduction to the reservoir rock and fluid properties as well as the drive mechanisms applied in the estimation and calculation of both in-place and recoverable hydrocarbons. All of the fundamental calculations of applied reservoir engineering will be discussed.

In addition, participants will be shown the primary tools and techniques used by reservoir engineers to evaluate reservoir properties such as pressure, saturation, porosity, permeability and net pay necessary to quantify recoverable reserves and resources.

The course will cover:

- **Rock and fluid properties**
 - Porosity, permeability, wettability, compressibility, phase behavior, density, viscosity and more
- **Fluid flow**
 - Darcy's law, radial flow, well damage, etc.
- **Pressure transient analysis**
 - Horner plot, skin, reservoir pressure
- **Multi-phase flow**
 - Mobility flow, fractional flow, Buckley-Leverett
- **Driver Mechanism**
 - Fluid expansion, gas/water drive, water flood, gas injection
- **Material balance**

More information contact Wallace International, LLC @ jwallace@Wallace-international.com