

(7) Gas Condensate Reservoirs

WHO SHOULD ATTEND

This course is intended for all engineers engaged in the oil and gas industry, in particular for those engineers involved with gas condensate reservoirs.

COURSE OBJECTIVES

The course provides a basic understanding of gas condensate reservoir and fluid properties. EOS models matching PVT. The heavy fraction will be divided into pseudo-components in order to reduce the numerical dispersion. The dry gas injection will yield a modification of the reservoir fluid composition as well as its phase envelope (swelling test). Fundamentals in the estimation of original gas in place using volumetric method, correlations and material balance method.

CONTENT

*Reservoir Fluid Types: Gas and Gas Condensate. *Representative fluid sample: Molar balance, K equilibrium constant consistency. *PVT Compositional. Validation: *EOS Fundamentals: Pen-Robinson and Soave-Redlich-Kwong *Deviation of C7+
*K-value correlations *PVT input data for reservoir simulation. *EOS.*Swelling Test. *Phase Envelopes. *Field examples. *Gas Condensate Case Study *Estimation of gas condensate reserves. *Volumetric Method. *Eaton and Jacobi Correlations.*OGCIP *Material Balance. *Pressure Declination Method.*Retrograde Gas Reservoir. *Previous Field Experiences* Gas Cycling Process. *Swelling Test Results. *Conclusions *Recommendations

INTENDED FOR

Reservoir Engineers, Simulation Engineers and Reservoir Studies