

Reservoir modeling is the process of creating a computer model of a petroleum reservoir in order to improve reserve estimation and make decisions about the field's development. upper and lower boundaries that correspond to the top and base horizons (they are determined from logs and seismic interpretation). Petrophysical reservoir modelling is the process of creating a detailed, computer model of a subsurface reservoir by integrating petrophysical data from well logs, core samples, seismic and other sources to estimate its properties , such as porosity and water saturation. facies and petrophysical properties such as porosity, permeability, saturations, net-to-gross (the value of each property is implicitly deemed to apply uniformly throughout the volume of the cell). A facies constrained property model tries to capture the heterogeneity in the reservoir in such a way that the dynamics of fluid flow can be modelled more realistically. a central objective in reservoir characterization and modeling is to build reliable reservoir models, which help decision makers optimize field development. Thus, the key point is to integrate and reconcile all available data – geological, geophysical and production data – into reservoir models. properties describing the fluids in place Water–Oil Contact (WOC) and Gas–Oil Contact (GOC), coefficients describing the activity of aquifers. The study would focus on the identification of petrophysical properties to generate property model, because– they are related, directly or indirectly, to .all type of data – geological, geophysical and production data. 2.3.4