Abstract

A geological model of an onshore oil field was constructed during 2004 as part of an evaluation to deliver up-to-date \textit{(static model)} Oil-in-Place based upon current structure interpretation, well data and a recent petrophysical evaluation of reservoir properties. The field, located onshore Gabon, is producing from an 11m thick oil rim from a series of horizontal producers within a good net to gross system of Gamba and Dentale Sands.

It was found that geometrical arrangement of the models’ grid, as a result of the geology, was having an impact on the Oil-in-Place being calculated. Tests were undertaken to try to resolve the issues and some conclusions were drawn up as to the likely cause.

This case study highlights the problems encountered and possible issues with taking such a model to dynamic simulation. This talk aims to open up a discussion as how to handle such geological settings in terms of grid geometry at all scales where thin oil columns are present.