Wellbore stability problems make up huge over-costs worldwide. Since in recent years declining resource volumes and favorable oil prices are encouraging operators to drill deeper, more complex well trajectories drilling for hydrocarbons have turn into a much more challenging task. Furthermore, the complexity and variations of those wells have added the weight to planning and problem anticipation at both drilling and production stages.

The article will describe the geomechanical wellbore stability analysis of Sayındere, Karaboğaz and Karababa formations drilled in Batı Gökçe field, Adıyaman. The analysis assumes validity of linear elastic theory for porous media and requires drilling reports, well logs, laboratory tests and core analysis.

At the end of the work with the assessment of geomechanical wellbore stability analysis mud weight window, which includes minimum mud weight and maximum mud weight will be determined for the studied formations.

*Keywords*: Wellbore stability, acoustic logs, linear elastic theory, rock strength parameters