
Remaining Potential in the Burgos Basin, Mexico

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ABSTRACT

The Burgos Basin in northeastern Mexico is at a mature stage of oil extraction. With 50,000 km² in area, over 6300 boreholes and about 30,000 km² of 3D seismic, have helped produce greater than 10 trillion cubic ft of gas. Are now widely known petroleum systems and plays, thanks to several studies in different periods of exploration activities and allowed to incorporate reserves above the 5 trillion cubic ft of gas.

Three plays have been the largest in the Burgos Basin in its history and in different stages of activity for more than 65 years: Oligocene Frio, Eocene Wilcox, and Oligocene Vicksburg. However, it remains to be assessed plays whose activity has been reduced by geographical location (distance to facilities), lack adequate technological application, and financial limits that do not allow development projects.

The remaining potential of the basin is reflected in its more than 400 registered exploration opportunities and drive the additional potential play studies constantly. All of them focused on the 12 plays tested, highlighting Oligocene Frio and Vicksburg strata, as well as the Paleocene Midway unit, being the most prospective area. However, recent success of wells drilled in the Eocene Yegua and Jackson and Miocene Anahuac units been forced to consider strategies to meet these targets.

Finding alternatives in unconventional plays, two in the Cretaceous Agua Nueva and Taraisas units and in Upper Jurassic strata, is the challenge to take in the short term in the Burgos Basin.

It is vitally important to improve the technology applied in terms that allow overcoming the low permeability of the deposits of Burgos and also considering designs of low-cost wells to sustain the profitability of the project.