

## The Gas Potential of the Wilcox and Queen City Plays in the Western Burgos Basin, Mexico

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### **Abstract**

The Tertiary Burgos Basin is located in northeastern Mexico, south of the Rio Grande Embayment, and is the main producer of non-associated gas in the country with a daily production of 1.0 BCF.

The Wilcox and Queen City plays have contributed 70% of the present day production in the basin. Their cumulative production is 1.6 TCF, and the remaining reserves are 3.5 TCF.

The play studies began in 1998 with the objective of understanding the mechanisms that control productivity of the siliciclastics sequence and to identify prospective areas.

The study area covers 10,000 km<sup>2</sup> of the western part of Burgos Basin. More than 600 wells were correlated and tied with 3D and 2D seismic information. A number of cross sections were interpreted in detail applying sequence stratigraphic concepts, and the structural and stratigraphic framework was established. The sedimentary play models were defined, and petrophysical and production data were integrated.

The play study supplied increased confidence to the development of 32 fields and identified 51 exploratory prospects. The remaining undiscovered resources have been estimated at 0.7 to 1.2 TCF for the Wilcox Play and 0.5 to 1.0 TCF for the Queen City Play.