

---

---

## Paleogene Bio-Zonification of the Tertiary Veracruz Basin, Mexico

Reyna Leticia Rodríguez Contreras<sup>1</sup> and Modesto Landeros Flores<sup>2</sup>

<sup>1</sup>PEMEX Exploración y Producción, Activo Integral Veracruz, Urano 420, Colonia Ylang-Ylang, Boca de Río, Ver., C.P. 94298, Mexico

<sup>2</sup>Grupo SAFFC de México S.A. de R.L., Avenida Paseo Tabasco 1203 local 1701B Col. Linda vista, Villahermosa, Tabasco, C.P. 86050, Mexico

---

---

### ABSTRACT

Based on the proposed methodology to produce the bio-zonification of the Paleogene Veracruz Basin, we first establish the biostratigraphic framework of third-order events. This was then used to support the evolution of the paleo-environments by biozones, all of which was done within the zonal scheme with their sequence boundaries. 145 wells were used, of which 30 included the most complete information. We were able to identify all 22 biozones that were defined for the Paleogene by Blow (1969), and these data were used to generate a base map for the Paleogene. Information was available for 88 Oligocene wells, 94 Eocene wells, and 79 Paleocene wells. In addition we present the paleo-bathymetric maps for six biozones.

The project area was subdivided over three areas, the Cordoba Platform, the Veracruz Basin, and the present shoreline, in order to understand the variations that characterize each particular zone. The utilization of the biozones allow us to detail (by means of faunal associations) the different strata that comprise a basin, as well as to delineate the erosive zones (terraces) in each of the studied wells at the local and regional level, which provides precise information to be used in seismic correlation and which can be used in the future analysis of leads.