Biostratigraphic Contributions to the Tertiary Burgos Basin, Northeastern México

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ABSTRACT

The sedimentary conditions in the Tertiary Burgos Basin have motivated the construction of a biostratigraphic chart based on benthonic and planktonic foraminiferal bioevents, highlighting benthonic zonation which has been calibrated with stratigraphic sequences and lithostratigraphic units providing a high regional biostratographic value to this basin. By using benthic zonation from southern Texas as a reference, unpublished biostratigraphic studies of PEMEX-PEP from the late 1990s to present day were analyzed, with a redefined fossil index from benthonic biozones yielding a benthic column adapted to the Burgos Basin with ages ranging from Middle Miocene to Early Paleocene for the Oakville, Frio Marino, Vicksburg, Jackson, Yegua, Cook Mountain, Weches, Queen City, Queen City–Reklaw, Reklaw, Wilcox, and Midway stratal units. The redefinition of this biostratigraphic column has contributed to explaining the depositional cycles, the stratigraphic sequences, and changes in lateral and vertical facies, adding value to the sedimentary models generated for identifying areas of economic interest in this basin.

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