Palynological Events from Maastrichtian to Eocene in the Middle Magdalena Valley Basin, Colombia*

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Abstract

Middle Magdalena Valley Basin is located between Central and Eastern Cordilleras of the Colombian Andes and is one of the most explored petroleum provinces in the country with reservoirs within Upper Cretaceous to Cenozoic strata. Therefore, high quality biostratigraphic information for the basin is very important to improve and test geological models, well drilling and perform better stratigraphic correlations. Palynological data have been produced from drilled wells during the last several years in the area. This information was used to propose a sequence of biostratigraphic events from Maastrichtian to Eocene to improve present biozonation for the basin. Graphic Correlation tool was used to obtain this sequence, integrate all data in a composite section and find the total or composite stratigraphic range for each taxon. Results show the order of biostratigraphic events. Some of this data has been recognized regionally and others are restricted to the basin, they are useful to distinguish lithological units and perform regional and local correlations. This new data is contributing to improve palynological zonation for the basin and is being used with success in oil exploration.

References


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ABSTRACT

Middle Magdalena Valley Basin (MMVB) is located between Central and Eastern Cordilleras of the Colombian Andes and is being one of the most explored petroleum provinces in the country with reservoirs within Upper Cretaceous to Cenozoic strata. Therefore, high quality biostratigraphic information for the basin is very important to improve and test geological models, well drilling and perform better stratigraphic correlations. Several palynological data have been produced from drill wells during last years in the area. This information was used to propose a sequence of biostratigraphic events from Maastrichtian to Eocene to improve present biozonation for the basin. Graphic Correlation tool was used to obtain this sequence, integrate all data in a composite section and find the total or composite stratigraphic range for each taxon. Results show the order of biostratigraphic events. Some of these datums have been recognized regionally and others are restricted to the basin, both of them are useful to distinguish lithological units and perform regional and local correlations. These new data improved present palynological zonation for the basin, which is being used with success in oil exploration.

REFERENCES


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