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**“Caribbean Exploration – Planning for the Future”**

**ABSTRACT**

**TECTONIC AND STRATIGRAPHIC SETTINGS FOR HYDROCARBON  
EXPLORATION IN JAMAICA**

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Traditional models for the geological evolution of Jamaica are based on the recognition of Tertiary blocks and troughs from microfacies analysis of the Eocene-Miocene White Limestone Group. Such models have generally been extrapolated backwards to explain Cretaceous geology, but have had only limited success. In order to develop a geodynamically realistic model for the evolution of Jamaica, a detailed understanding of the Cretaceous-Paleogene geology is needed. During the last 11 years an extensive investigation of the Cretaceous and Paleogene rocks of Jamaica, as well as elsewhere in the Greater Antilles island arc system, has been undertaken. This approach has led to the development of a new model for the evolution of Jamaica that is consistent with current plate tectonic models for the evolution of the Caribbean Plate. This extensive new dataset allows a profound understanding of the geological evolution of Jamaica and its bearing on hydrocarbon exploration. The presentation will highlight some of the background behind the model, critical parts of this model significant to hydrocarbon exploration, and the results of recent fieldwork.