

**AAPG Annual Meeting
March 10-13, 2002
Houston, Texas**

Douglas G Evans¹ (1) WesternGeco, London, United Kingdom

Gabon Deepwater Hydrocarbon Prospectivity

The deep-water area of offshore Gabon, defined by water depths of 2000m or more, extends from the Congo Fan in the south for over 1000km to Equatorial Guinea in the north. This large deep-water area provides a variety of potential play types most of which are undrilled in Gabon. Recent discoveries in deep water offshore of Equatorial Guinea such as Ceiba, have renewed interest in the potential of these areas

The plays vary from simple closures above allochthonous salt swells and basement involved highs, to more subtle pinch-outs, drapes etc. Plays similar to the Ceiba type can also be identified. Potential reservoirs can be seen in Tertiary and Cretaceous sediments, these vary from basin floor fan type deposition to more channelised deposition. There are also indications of amplitude effects that can be associated with hydrocarbons.

Source rocks are proven from Cretaceous pre-salt rift and sag basin sediments, and these are likely to work in areas overlying continental crust in deep-water. For areas interpreted to be overlying transitional to oceanic crust, later Cretaceous or early Tertiary source rocks have to be invoked. Seismic data suggests that the age equivalent intervals to the source rocks certainly exist.