

THE LOWER CRETACEOUS-UPPER JURASSIC CARBONATE COMPLEX OF THE SOUTHERN MARGIN OF THE FLORIDA-BAHAMA PLATFORM IN NORTHERN CUBA

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ABSTRACT

Examination of core and cuttings samples from seven wells in northern Cuba has shown that the southern margin of the Florida-Bahama Platform is largely composed of dolomitized carbonate mound and talus material. Dolomitization was probably due to reflux of the highly saline waters from the South Florida evaporite basin to the north. At least four separate episodes of mound construction are present, accompanied by talus material.

South of the dolomitized carbonate complex the Hicacos, Puntila and Guyabo² wells penetrated a deeper-water, continental

slope facies consisting of light-colored occasionally petroliferous limestone with thin interbeds of shale and radiolarian limestone. Zones of shallow-water facies are intercalated. Farther to the south, beyond the scope of this study, volcanics and serpentine are reported in the literature.

Numerous wells in northern Cuba are cut by one or more high-angle thrust faults. Intense crumpling and faulting are present in the deeper-water facies between the continental margin complex and the oceanic volcanic-serpentine province. The intense crumpling was possibly the result of deep-water sediments being scraped off an oceanic plate by its partial subduction beneath the continental crust of the Florida-Bahama Platform.

A few beds in wells penetrating the northern Cuba carbonate complex can be correlated with the standard section of Florida as exhibited in the Cay Sal well to the north. Three anhydrite beds in the Cayo Colo well (Fig. 1) appear to correlate with the thick anhydrites of the Punta Gorda, Pumpkin Bay and Bone Island formations. Further south in the Collazo well, a limestone-anhydrite section would also appear to correlate with the Pumpkin Bay.

Three limestone intervals in the Blanquiazal well (Fig. 1) can be correlated with portions of the Rattlesnake Hammock, Pumpkin Bay and Bone Island formations in the Cay Sal well.

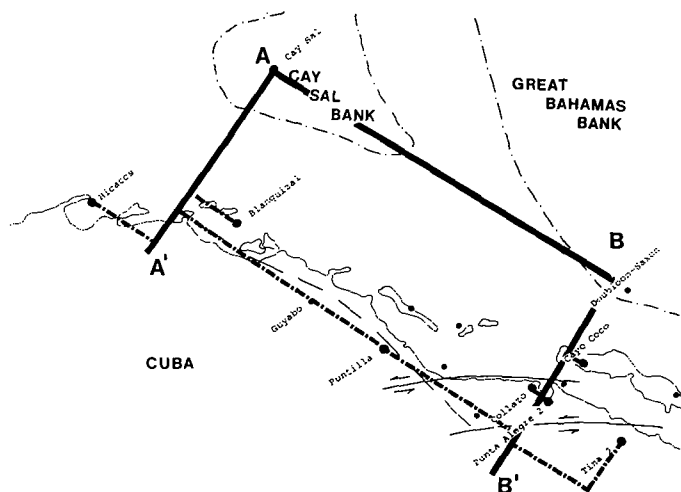


Fig. 1. Well Location Map.

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²Guyabo lithology from Texaco description - samples unavailable.