

SEDIMENTOLOGICAL CHARACTERISTICS OF BARREIRAS GROUP IN NORTHEAST BAHIA, BRAZIL

1VILAS BÔAS, G.S.; 2SAMPAIO, F. J. 1Centro de Pesquisa em Geologia e Geofísica da UFBA; 2Instituto de Geociências da UFBA

The Barreiras Group constitutes a continental terrigenous sedimentary unit of Pliocene to Lower Pleistocene age with a large occurrence along Brazilian coast. In the northeastern part of the state of Bahia these sediments occur extensively covering about 30% of its surface. In this region their sedimentological characteristics are indicative of a deposition by braided fluvial systems, with gravelly and sandy bedload associated to alluvial fans. The basal portion of the group is dominated by gravelly-sand lithofacies deposited by debris flows, with lesser occurrence of aqueous flow deposits, characterizing a proximal fluvial systems deposition, under an arid to semi-arid climate. In some outcrops the upper portion of the basal section is composed by a mud layer with thickness up to 3m. This muddy deposit possibly reflects more humid climatic conditions, leading to the establishment of a lacustrine depositional environment. The top of the basal section is truncated by an erosive contact surface, extensively cut by channels that separates it from the upper portion of the group. This last portion is made up of gravelly-sand sediments deposited by stream and debris flows, reflecting a return to a more arid climate. They suggest deposition in a more distal zone than the basal portion inferred by the larger occurrence of stream flows deposits and the presence, though rare, of downstream-accretion macroforms.