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GEOCHEMISTRY OF EARLY PROTEROZOIC SEQUENCES OF EASTERN BAHIA - BRAZIL

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The Archean Jequié Complex consists of undepleted supracrustal and plutonic granulites of mainly granitic composition, while the Caraíba Complex consists of supracrustals intruded by tonalitic to granitic rocks.

The Early Proterozoic Rio Itapicuru Greenstone Belt is composed of tholeiitic metabasalts, subdivided into a group with low Fe-Ti content and with LREE depletion, resembling MORB, and a group with high Fe-Ti content, LREE-enriched calc-alkaline andesite-dacites, and volcaniclastic and clastic metasediments with compositions similar to those of the acid-intermediate metavolcanics suggesting a local derivation.

The Early Proterozoic Itabuna Belt consists of basic to felsic granulites subdivided into a tholeiitic sequence with subordinate Fe-Ti-rich basic rocks, both with slight LREE enrichment and associated with metasediments, a calc-alkaline sequence with LREE enrichment, and shoshonitic basic rocks.

In the proposed geotectonic model the Itabuna Belt corresponds to a continental margin magmatic arc and the Rio Itapicuru Greenstone Belt to a back-arc basin which developed as the result of westward subduction of oceanic crust under the Archean Jequié and Caraíba complexes.

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