

ABSTRACT

Seabra Sheet (SD. 24-V-A) with geographic coordinates 12°00'-13°00' of Southern latitude and 40°30'-42°00' of western Gr. longitude, is located in the central region of Bahia State. Its western half is in the plateau named Chapada Diamantina and the eastern half in the flat and hilly country of its piedmont. The region was sculptured by the Post-Gondwana, Sul Americano, Velhas and Paraguaçu geomorphologic cycles.

The rocks that crop out in the Seabra sheet are part of the basement and the cover of São Francisco Craton stabilized in the Neoproterozoic. The Archean and Archean-Paleoproterozoic rocks of the basement, are distributed in the following terranes: a) Archean, within the Jequié Block, composed by migmatized hyperstene orthogneisses of the complex of same name, that are separated from the Lençóis Block by the Jacobina/Contendas Lineament. In the latter block crop out rocks of the Mairi Complex consisting of migmatized banded orthogneisses with associated metabasic/meta-ultrabasic rock as well as magnetite bearing orthogneisses and granites. b) Archean-Paleoproterozoic: these terranes are part of the Saúde-Itapicuru Belt, where crop out rocks of the Saúde Complex, that are comparable to a medium to high metamorphic grade volcano-sedimentary sequence. It's an assemblage of paragneisses, with subordinated basic and ultrabasic rocks. Within this terrane is the Rui Barbosa Dome, a

domic antiformal structure composed by migmatitic gneisses of granitic to granodioritic composition. These terranes are intruded by the Lagoa d_Anta and Lajedinho granitoids.

The proterozoic cover of the São Francisco Craton is represented by the Espinhaço Supergroup, that comprises: a) the terrigenous sequences of the western Domain of the Chapada Diamantina, where crop out the Rio dos Remédios, Paraguaçu and part of Chapada Diamantina groups and Eastern Domain comprising only the Paraguaçu and Chapada Diamantina groups. The origin of the Chapada Diamantina sedimentary rocks is related to the evolution trend of the depositional systems relatively to the tectonic evolution of the region. At first they are continental (Rio dos Remédios Group and Ouricuri do Ouro and Mangabeira formations), then they show an alternance between continental and marine (Tombador, Morro do Chapéu, Guiné and Caboclo formations respectively). Unconformably, on the Eastern Domain of the Chapada Diamantina and non-conformably on the Archean to Paleoproterozoic basement, are the Neoproterozoic sequences of the Irecê and Una-Utinga "basins" comprising the terrigenous and carbonatic sediments of the Una Group (Bebedouro and Salitre Formations, respectively). Their contact is unconformable and the Bebedouro Formation represents a glacial event, the Salitre Formation is marine, deposited in inter to sub-tidal environments, the Cenozoic surficial formations

represent detrital cover, residual alteration, alluvial, alluvial/colluvial and talus deposits.

The more important structure is the Jacobina-Contendas Lineament of the Transamazonic Cycle. It consists of an about 600km long north-south lineament originated after westwards tectonic transport of the Jequié Block crustal segment over the supracrustal formations (Saude Complex) and these latter ones over Lençóis Block. It is also outstanding in Seabra Sheet the Barra do Mendes-João Correia Lineament, represented by a contractional brittle-ductile shear zone that separates the Western and Eastern domains of the Chapada Diamantina.

There were listed and analysed 209 mineral deposits of which 111 are of diamond, that presently constitute remnant reserves. The exploration of Lead; zinc, silver and cadmium has good economic perspectives owing to the mineral potential of the Irecê and Una-Utinga "basins", already known through the deposit of these mineral goods located in the town of Nova Redenção. Limestone/dolomite with wide outcropping areas have inextinguishable

reserves. Dimension stones under exploitation in Rui Barbosa and Boa Vista do Tupim regions are the most important economic mineral resources. In the Metallogenetic/Previsional chart were selected 30 areas for prospecting and exploration of several mineral goods. The most outstanding are the Palmeiras-Lençóis-Andaraí Diamond District for placer mineralizations both recent and paleoplacers; barium and uranium in epigenetic concentrations and checking of uranium radioactive anomalies; vein mineralizations of lead, zinc, silver and cadmium in carbonatic rocks of the Salitre Formation and at least the Rui Barbosa-Boa Vista do Tupim where are being exploited the dimension stone (pink granite).

It was recommended the continuation of the regional surveys (1:250.000 scale) in the Itaberaba (SD.24-V-B) and Livramento do Brumado (SD.24-V-C) sheets as well as detailed surveys in specific areas for base metal sulfides, non metallic minerals, radioactive and native elements, precious stones and ground water prospecting.