ABSTRACT

The geologic setting of the Marabá Sheet comprises part of the three great geotectonic provinces, which are represented by the Itacaiúnas and Araguaia Shear Belts and the Parnaíba Basin.

The Itacaiúnas Belt, separated in two structural domains and occupying 10% of the area, represents the older geologic context whose evolution ranges from the Archean to the lower Proterozoic lito-structural domains. The first one comprises the imbricated domain associated to transcurrent movements involving the Bacajaí Metamorphic Suite and the Xingu Complex rocks which show an anastomosed pattern with E-W trend presenting variations to the NW-SE and NE-SW directions. The second domain is materialized by the transcurrent system with associated thrustings involving the Rio Novo, Tapirapé and Pareteão groups.

The Araguaia Belt is considered as early-middle Proterozoic and resulted from a compressive regime. It comprises 40% of the Marabá Sheet and it is represented by Xambioá, Pequizeiro and Couto Magalhães formations, which show a general imbricated relationship.

The evolution and the lithogenesis of the Parnaíba Basin took place from Paleozoic to Mesozoic through the distensive regime. In the Paleozoic, the extensional regime had the maximum oriented strechtching of its main axis, after the NW-SE direction, while, in the Mesozoic, the mentioned axis showed up along the NE-SW direction.

The Cenozoic Covers, entiring the geologic setting, comprises laterites, colluvium, elluvium and alluvium, sometimes controlled by neostructures.

During the field work, have been inventored fifty seven mineral occurrences such as diamond, ametiste, quartz, citrine, amazonite, psaronius, limestone, pebbles, sands, clays, iron concretions were detected and registered "garimpos" and deposits. A mineral water mine has been discovered.

Several favourable areas for gold, nickel-chromium (secondarily amianthus), quartz, citrine, ametiste, diamond and limestone (secondarily lead-zinc) are described.