

ABSTRACT

This report presents the results of the geological survey in the 1:100.000 scale enclosing Sanclerlândia (SE.22-X-A-II), Goiás (SD.22-Z-C-V) the sheets and Morro Agudo de Goiás (SD.22-Z-C-II) comprising 9.000 sq. km, located in the central-west region of Goiás State (50°00' – 50°30'/15°00' - 16°30'). This survey is part of the Program of Basic Geological Mapping of Brasil (PLGB) carried out by CPRM – Serviço Geológico do Brasil.

Rocks assigned to the Archaean age comprise granite-greenstone terrains, of the Granitoid- Gneissic Complex; Goiás Greenstone Belt (Goiás Velho Group); differentiated stocks and dykes of basic-ultrabasic composition (related to the greenstone belt komatiitic magma); Serra do Cantagalo Sequence comprising psamites and psamites and, by the bimodal granitic to dioritic in composition banded gneisses of the Orthomagmatic Complex.

Related to the Paleoproterozoic there are representative basic dykes which cut the granite-greenstone terrains and the Anicuns-Itaberai Sequence lithotypes, formed by metasediments and metavolcanics derived from tholeiitic and komatiitic parental magmas.

The Mesoproterozoic is defined by the Serra Dourada Sequence, of platformal deposition environment, characterized by a metasedimentary cover composed of pelites and psamites bearing intercalated levels of intraformational metaconglomerates.

The representative units assigned to the Neoproterozoic are represented by layered bodies

of Americano do Brasil Mafic-Ultramafic Suite, Anicuns-Santa Barbara de Goiás Gabbro-Dioritic Suite (tholeiitic in origin), and Itapuranga Intrusive Suite comprising a "family" of potassic subalkaline to calcalkaline rocks and, finally, by Aragoiania type granitoids characterized by crustal, sintectonic, two micas granites.

Lateritic covers and alluvial sediments are representative of Tertiary and Quaternary, respectively.

Through structural observations as well as the kinematic involved in the tectonic transportation, was defined a tectono-structural style formed under a progressive ductile shearing system (contractional/tangencial in nature) bringing about imbricated structures.

Multidisciplinary methods were added to the geological survey *sensu strictu* as: geochemical data interpretation obtained from stream sediments and pan concentrates sampling, airborne geophysical data interpretation (magnetic and gamma-spectrometric) and gravimetric data as well. Metallogenetic/previsional charts were then developed through the integration of these methods in the 1:100.000 scale in which are plotted mines, garimpos, mineral occurrences and deposits, in order to provide a metallogenetic potential of the surveyed area regarding mineral exploration. Special attention was given to the gold occurrences associated to the Anicuns-Itaberai Metavolcanosedimentary Sequence and Goiás Velho Group.