

ABSTRACT

The Programa Levantamentos Geológicos Básicos – PLGB comprises the geological mapping of Brazil and is carried out by Companhia de Pesquisa de Recursos Minerais – CPRM.

This report includes the geological mapping of three sheets: Corumbá (SE.21-Y-D), Aldeia Tomázia (SF.21-V-B) and Porto Murtinho (SF.21-V-D) in scale 1:250.000 and the evaluation of their mineral potential. All sheets are located at the western part of Mato Grosso do Sul state close to Paraguai and Bolivia borders.

The results of this work consist in an integrated report for the three geological charts including metallogenic and previsional information inventory.

The studied area is located in the southwestern of the Tocantins Province in which were characterized six tectonic-structural units: 1 – Cratonic Fragments/Ancient Core as Rio Apa Complex; 2 – Metamorphic Association Alto Tererê Mobile Belt; 3 – Plutonic-Volcanic Suite of Amoguijá Group; 4 – Platform Cover Sequences in-

cluding Jacadigo and Corumbá groups as well as Coimbra Formation; 5 – Plutonic Volcanic Alkaline Suite of Fecho dos Morros; 6 – Superficial covers represented by Pantanal and Xaraiés formations and colluvial, alluvial and elluvial sediments of recent age.

In this work is proposed a model for origin and development of Jacadigo Basin and part of Corumbá basin taking into account their tectonic-structural and depositional characteristics, similar to the pull-apart type basins.

The Surface Cover Sequences present neotectonic activity evidences.

The economic data and utilization of mineral goods are summarized in the mineral resources inventory, included in the geological charts, attached to the Explicative Note.

In conclusion, regarding the environmental features, was observed a certain degree of degradation that should be stopped or mitigated in order to preserve the Pantanal basin ecosystem.