

## **Gold mineralization of the Tapajós Mineral Province, Amazon, Brazil: a previsual model**

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Gold mineralization in the Tapajós Mineral Province shows great similarity with felsic intrusion-centered hydrothermal systems. The differences are: the mode of intrusion emplacement; the crustal level of pluton emplacement; the great influence of fault zones in fluid circulation; the strong action of laterization processes; and, mostly, the erosion depth of the granitic bodies. The veins were emplaced at several crustal depth levels and were little and heterogeneously reworked by tectonics. The veins with epithermal characteristics are mostly associated to late to post tectonic K-rich granites. The ones with meso and epithermal characteristics are associated to any of the magmatic-hydrothermal events. Stockworks occur both within and surrounding granitic intrusions, mostly related to syn - late tectonic granites. The stockwork-type mineralizations are hosted by granitic, basic and volcanic rocks, and tuffs, located in the preserved cupolas of the smaller granitic bodies, at the edges of the intrusions and in the rocks that surround the intrusions. The alluvial deposits are almost exhausted, but lateritic, residual, and undiscovered primary deposits are in part preserved. Twenty three mineralized/previsual areas, at the level of mineralized fields or small districts, were selected, relating mineralization indications and metallogenetic controls. The occurrence of these geologic controls (or metallogenetic) in areas still unexploited by "garimpeiros", shows high potential for the discovery of new gold resources.