

## Relationship between abundances of REE-bearing minerals in granites and the ion-adsorption type ore formation: Case study of the Serra Verde deposit in Brazil

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The Serra Verde REE (rare earth elements) deposit located in Goiás and Tocantins provinces of Brazil is one of ion-adsorption type deposits found outside of China. The REE ores are weathered granitic rocks and sediments underlain by the Serra Dourada Granite consisting of alkali granite and gneissic granite. The granites are high in REE (300 –1300 ppm, approximately) and contains different REE-bearing minerals such as bastnaesite-(Ce), allanite-(Ce), monazite-(Ce), xenotime-(Y), apatite and zircon. In this study, we report abundances of REE-bearing minerals in the granites and relationship with ion-adsorption type ore formation because a percentage of ion-exchangeable REE in the ores is influenced by assemblage of REE-bearing minerals in the parent granitic rocks.

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