

The First Discovery of Danalite in Tiemuli Skarn Type W-Fe Deposit in Chongyi County, Jiangxi Province, China

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Abstract: Tiemuli W-Fe skarn type deposit is located in the Chongyi-Dayu-Shangyou polymetallic metallogenic area in south of Jiangxi Province, China. This paper firstly reports the discovery of independent beryllium mineral—danalite from Tiemuli deposit on the basis of detailed observing and identifying under laser Raman spectra, X-ray diffraction and the electronic probe. The deposit has special mineral assemblage of danalite, magnetite and scheelite, which is unique in the polymetallic metallogenic area and even in the South China. Therefore, the discovery of danalite in Tiemuli W-Fe deposit is not only guiding for potential beryllium resources, but also providing the mineralogical evidence for the metallogenic coupling relationship with multi-stage granitic magma in different mineralization process in this area.

Keywords: Danalite; Tiemuli deposit; Chongyi-Dayu-Shangyou polymetallic metallogenic area; southern Jiangxi Province