

Discussion on the Metallogenesis of Landslide Accumulation Type Au Orebodies in the Nibao Gold Deposit Southwest Guizhou, China

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Abstract: A recent synthetically study on the oxidized ore of Nibao gold deposit has revealed that the deposit forming factor is landslide-accumulation. The oxidized ores restricted in the landslide, resulted from the gravity collapse northwards of the hanging wall of F_4 fault because of the uplift of Erlongqiangbao anticline. The ore dilution occurs in mixing up the ore with the wall rock during the collapse. However, the mixed ores were cracked and expanded; its porosity and permeability increased, becoming the easily dressing-smelting ores by the decomposition of gold-bearing arsenic minerals in supergene environment. All these oxidized ores belong to the type of landslide-accumulation. Researching on the landslide-accumulation orebody particularity may increase the utilization of gold resources and its exploration degree.

Keywords: oxidized gold ore body; landslide accumulation, ore-forming process; Nibao gold deposit; Guizhou