

Base Metals Exploration Northwest Argentina

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The Lower Paleozoic Metallogenic event is preferentially hosted in a Belt of Ordovician shales which in Argentina is about 1,200 km long by 100 km wide. The basin, where these shales were deposited, is the southern extension of the Peruvian / Bolivian basin that is well known for its Base-Precious Metals production in Bolivia, Peru and Argentina: Yauli (Pb-Ag-Zn-Cu), Manco Capac (Au), San José (Sn), Rosario (W), Chilicoya (Au), Pumahuasi (Pb-Zn-Ag), El Torno (Au), Rinconada (Au), Incahuasi (Au-Ag), La Cienaga (Pb-Zn-Ag) etc.

Ordovician basin hosts several vein types and one SEDEX world-class deposit. Since systematic modern exploration has never been done in the district, there is high potential for further discoveries of stratabound mineralization. Field work has identified up to 2.5% Cu across 10 m in shales, 11 % Zn across 0.1 m in chert, 0.27% Pb across 1 m in shales and 450 ppb Au across 2 m in sandstones in different locales in the basin.

Searching of massive sulfides deposits, it is of paramount importance the paleogeography, the extensional fracturing system and the stratigraphy. SEDEX deposits occur within half-grabens near the down-faulted margin or nearby bathimetric depressions, MVT deposits are formed in the platform and VMS deposits are expected associated to submarine volcanic intrusions in compressional settings.