

Metallogenic Belts in South Chile: 41°- 44°S

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Based on the distribution of mineral occurrences and prospects two north-south trending metallogenic belts have been identified in south Chile, between latitude 41°-44°S (Continental Chiloe).

The Coastal Belt is dominated for the presence of gold and copper occurrences, hosted by paleozoic metamorphic rocks and mesozoic volcanic and dioritic rocks. The mineralization include volcanic hosted massive sulfides occurrences, veins, stockworks and disseminated deposits. They consist of pyrite, magnetite, arsenopyrite and minor chalcopyrite. A paleozoic age, similar to the host rocks, is suggested for the massive sulfide occurrences. However, the age of disseminated and vein deposits hosted in dioritic volcanic rocks of Jurassic ages is unknown.

The Cordillera Belt is located to the east of the Coastal Belt, and it consists of base metals and gold-silver occurrences hosted in mesozoic granitic, volcanic and sedimentary rocks. The style of mineralization includes disseminated, breccias, veins and stockworks type occurrences with pyrite, pyrrhotite, magnetite, hematite, arsenopyrite, molybdenite, chalcopyrite, coveline, galena and sphalerite as main sulfide minerals. The style of mineralizations and their spatial association with granitic rocks suggest as Early Cretaceous age (100-110 Ma) for these occurrences.

Similarities with other ore deposits, located towards the north and south of the studied area, suggest the possible continuity for both belts.