

Geochemical exploration in the Coastal Range, Southern Chile

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In areas of extensive vegetal covering and hard access, as the Coastal Range between 40°30' - 42°00'S, sampling and chemical analysis of stream sediments are essential to define and delimitate targets of eventual mineralized areas. 1,383 stream sediment samples, covering an approximate surface of 4,000 km², were recolected, and chemically analyzed.

The results of this study show areas with anomalous metal contents characterized by the geochemical associations Cr-Ni, Au-Cu, Au-Cu-Zn and Au-As. The Cr-Ni anomalies can be interpreted as indicative of mineralization asociated to ultramafic rocks, whereas Au-Cu and Au-Cu-Zn can be related to massive sulfide deposits. Both types of deposits has been recognized in the area, hosted in the paleozoic metamorphic rocks of the Coastal Range. As-bearing gold mineralization are unknown in this part of the Coastal Range.