

British Columbia Geological Survey Geological Fieldwork 1979

K/Ar AGE DETERMINATIONS WREDE CREEK ZONED ULTRAMAFIC COMPLEX (94D/9E)

By R. H. Wong and C. I. Godwin Department of Geological Sciences, University of British Columbia

The Wrede Creek ultramafic complex is one of several zoned or Alaskan-type ultramafic bodies in the McConnell Creek and Aiken Lake map-areas of north-central British Columbia. The ultramafic body, composed of a dunite core with a pyroxenitic margin, occurs within volcanic rocks of the Upper Triassic Takla Group. K/Ar dating of hornblende from pegmatitic segregations within the dunite gave ages of 219±10 Ma and 225±8 Ma, suggesting a possible genetic relationship between the ultramafic and volcanic rocks. Secondary biotite developed in similar hornblende pegmatite yielded a K/Ar date of 175±5 Ma, while hornblende from a diorite dyke cutting the ultramafic complex gave an age of 172±6 Ma. The latter two ages are correlative with Middle Jurassic plutonism represented in the area by the Hogem batholith. Analytical data are listed in the accompanying table, page 156.

BP Minerals Limited, Vancouver, supported fieldwork for this project. The British Columbia Ministry of Energy, Mines and Petroleum Resources provided funding for microprobe analyses and K/Ar dating. An M.Sc. thesis on the study is in preparation.

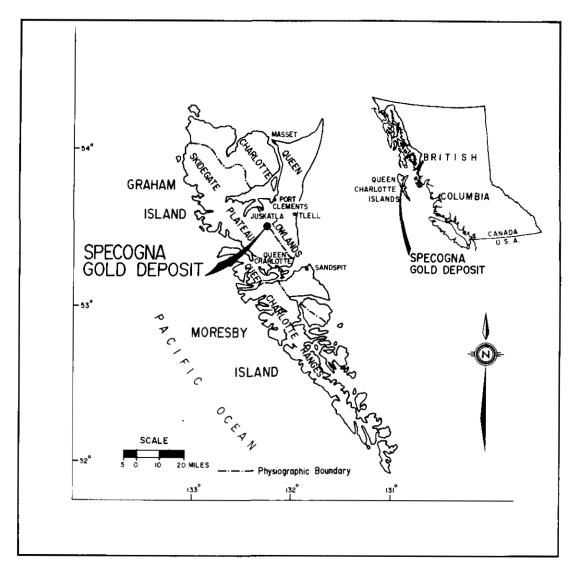


Figure 48. Location of Specogna gold deposit.