



**GALORE CREEK
(STIKINE COPPER LIMITED)
(103G/3W, 4E)**

By A. Panteleyev

Exploration resumed at the Galore Creek deposit after a two-year interruption. A systematic fill-in diamond-drill program that was started in 1972 in the Central Zone by Hudson's Bay Mining & Smelting Co., Limited was concluded during the 1976 field season. Approximately 5 232 metres was drilled in 24 diamond-drill holes, mainly in the northern part of the Central Zone. No further drilling is planned for 1977.

Renewed exploration at the Galore Creek property facilitated completion of a study of the Central Zone that was initiated by this writer in 1972. The study is being done in conjunction with a 650-square-kilometre regional mapping project (Galore Creek Map-Area, Geological Fieldwork, 1974, pp. 59-62; 1975, pp. 79-81).

During 1976, about 2 250 metres of diamond-drill core from nine drill holes from the north Central Zone was examined. A detailed description of this drill section will be presented in *Geology, Exploration and Mining in British Columbia, 1976*. The northern part of the Central Zone is underlain by a well-mineralized bedded succession of highly altered metavolcanic rocks. This contrasts with the main parts of the Central Zone where syenite porphyries and breccia zones are abundant and very little can be determined about the original lithology, composition, and texture of the bedded host rocks.

Figure 15 shows locations of described drill sections.

**RED – CHRIS DEPOSIT
(104H/12W)**

By A. Panteleyev

During 1976 Texasgulf, Inc. continued to explore the Red–Chris porphyry copper deposit. Nineteen new diamond-drill holes were completed and two holes were extended, together amounting to 3 045 metres of diamond drilling.

The mineralized zone is associated with a large quartz stockwork system in an elongate monzonitic feldspar porphyry stock. Two new K-Ar determinations from samples provided by E. A. Schink, Texasgulf, Inc., indicate a Late Triassic – Early Jurassic age for the stock. The stock has intruded Upper Triassic sedimentary and volcanic rocks and is in fault contact with Middle to Late Jurassic sedimentary rocks of the Bowser Lake Group.

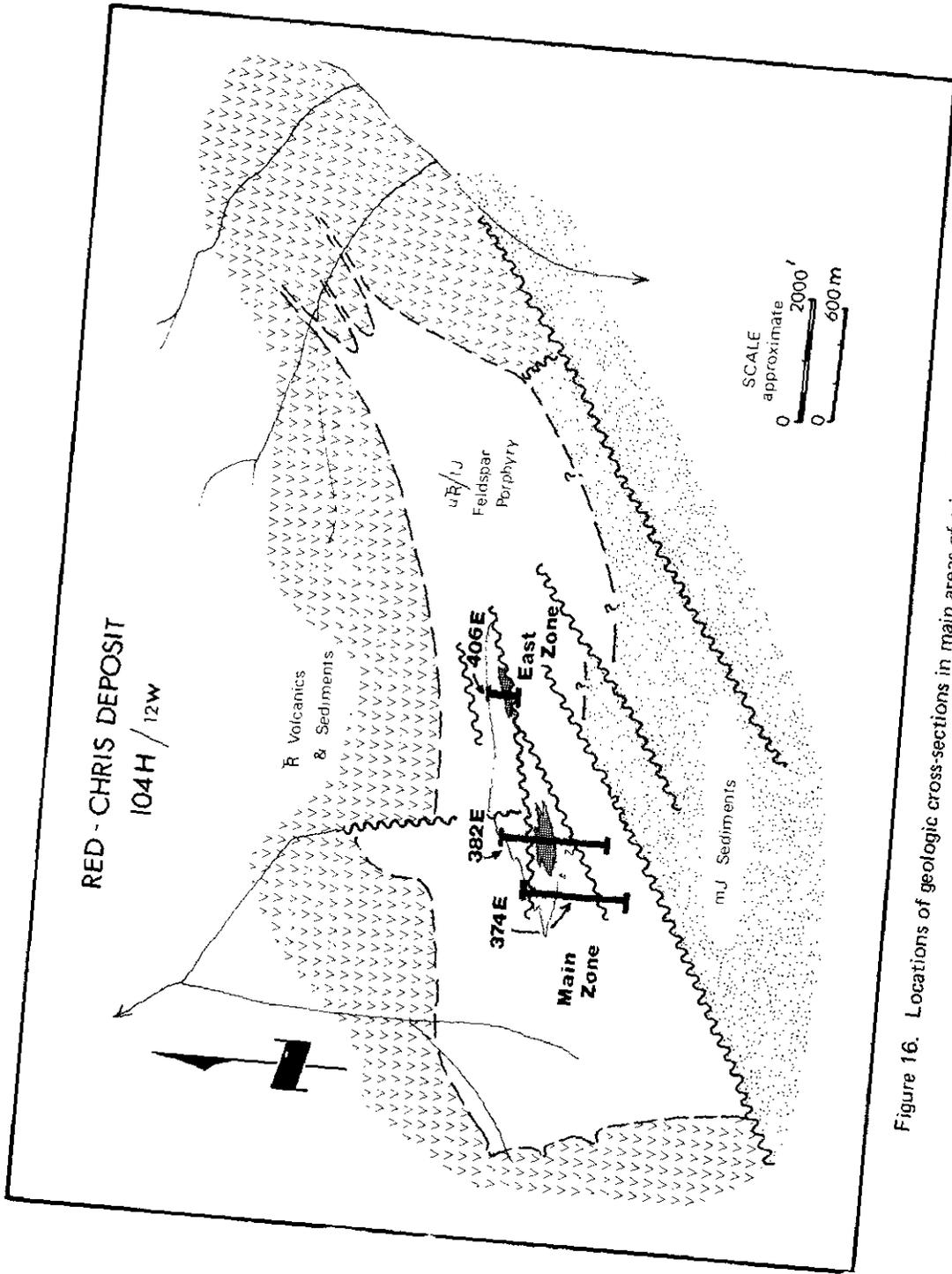


Figure 16. Locations of geologic cross-sections in main areas of mineralized quartz stockworks.

Diamond-drill core from 14 drill holes totalling approximately 2 880 metres in three sections was examined in detail. The sections are located in the Main Zone, East Zone, and in a gypsum stockwork zone west of the Main Zone (Fig. 16). The nature of the pyrite-chalcopyrite-bearing quartz stockwork and related carbonate-hematite-magnetite-chlorite-clay alteration assemblage will be studied and described in *Geology, Exploration and Mining in British Columbia, 1976*.

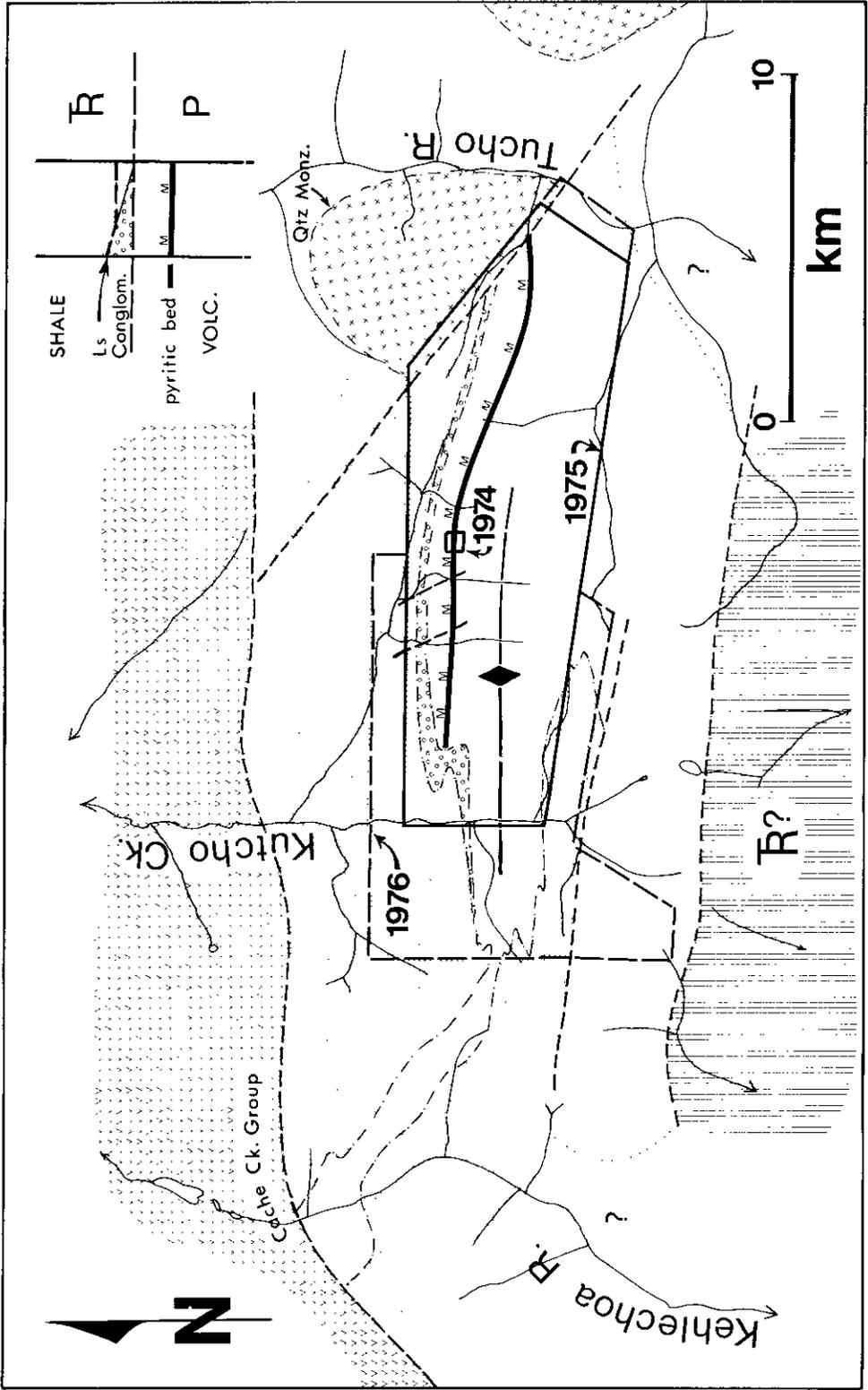


Figure 17. Major geological units mapped during 1974, 1975, and 1976, Kutcho Creek map-area.