

NAME OF PROPERTY **FOUR TWENTY EIGHT**

OBJECT LOCATED -from Geology, Exploration, and Mining, 1971.

UNCERTAINTY IN METERS	Lat. 58°10'	Long. 125°15'
Mining Division Liard	District	Peace River
County	Township or Parish	
Lot	Concession or Range	
Sec	Tp.	R.

OWNER OR OPERATOR AND ADDRESS

HISTORY OF EXPLORATION AND DEVELOPMENT
 The property is located at approximately 6,000 feet elevation 3 miles southwest of Churchill Peak.
 Windermere Exploration Ltd. staked the 428 group of 26 claims as a result of a reconnaissance geochemical survey and prospecting in 1969. Work during 1970 included geological mapping, and sampling.
 Canadian Superior Exploration Limited optioned the property in 1971 and carried out geological mapping, and trenching on 428 Nos. 3, 5, 9, and 24; the option was terminated before the end of the year.
 Windermere Exploration Ltd. in May 1972 amalgamated with Peregrine Exploration Ltd. to form Barrier Reef Resources Ltd.

DESCRIPTION OF DEPOSIT

This area is underlain mostly by grey and dark grey-weathering shale and slate of the Aida Formation, which to the west is overlain by interbedded grey impure limestone, dolomite, and calcareous shale of the same formation. These strata strike northwest and dip gently to moderately to the southwest. Many diabase dykes, ranging to more than 100 feet thick, cut the Aida strata and follow fault and fracture zones that trend northerly to northwesterly.

Copper mineralization is found on the 428 claims in quartz-carbonate veins, which occur at several places along a through-going northerly trending fault and fracture zone that extends to the south into the Book and PJ claims. Along this zone of fractures and faults, mineralized veins are found in three main clusters spaced at roughly 4,000-foot intervals and known as the North, Central, and South zones. In all these zones the veins are typically discontinuous and highly variable both in width and degree of mineralization. They generally dip steeply to the west and range in individual width from a few inches to 10 or 12 feet, but average only 2 to 3 feet.

Strike lengths of vein zones range up to 750 feet and locally reach widths of 75 feet. Chalcopyrite and a small amount of associated minerals or products of value

p.t.o.

HISTORY OF PRODUCTION

REFERENCES

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1970, p. 46; 1971, p. 99.

Mineral Policy Sector; Corporation Files: "Windermere Exploration Ltd."; "Barrier Reef Resources Ltd."

MAP REFERENCES

Geology of the Gataga, Bronson, 428, Book, and PJ claims, Figure 8, Geology, Exploration, and Mining, British Columbia Dept. of Mines, 1971.

Map 1343 A, Tuchodi Lakes, (Geol.), Sc. 1:125,000 - Accomp. Memoir 373, Geol. Surv. of Canada, 1973.

Map 94 K, Tuchodi Lakes, (Topo.), Sc. 1:250,000.

BCI 94 K - 30

DESCRIPTION OF DEPOSIT (continued)

of pyrite appear to be the only sulphides present in the veins, which have a quartz-ankerite or quartz-dolomite gangue. In and near zones of veining and strong shearing, the country rock, which is mainly shale with minor interbedded shaly limestone, is altered to a highly graphitic material with the limestone beds recrystallized to coarse aggregates of ankerite or ferroan dolomite. Detailed mapping and considerable chip sampling by company personnel during the 1971 field season indicates that veins are generally far too low in grade to be of economic interest. The values of 25 assays reported range from 0.28 per cent copper across 24 feet to 2.38 per cent copper across 3.5 feet, the latter being one of only two values exceeding 1 per cent copper.

REMARKS

Comp./Rev. By	DMacR					
Date	3-74					