

PRODUCT

COPPER

PROVINCE OR
TERRITORY

British Columbia

N.T.S. AREA 94 K/3

REF. Cu 5

NAME OF PROPERTY

BRONSON

OBJECT LOCATED—~~from~~ Geology, Exploration, and Mining, 1971.

UNCERTAINTY IN METERS

Lat. 58°11.3' Long. 125°18.2'

Mining Division Liard

District Peace River

County

Township or Parish

Lot

Concession or Range

Sec

Tp.

R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The claims are underlain by shaly limestone, dolomite, and shale or slate of the Aida Formation, conformably overlain by shale, slate, phyllite, and minor interbedded carbonate of the Gataga Formation. These strata generally dip to the west and southwest at moderate angles and are cut by a large number of northeast to northwest trending diabase dykes, some of which locally attain widths of 400 to 500 feet. Copper mineralization as chalcopyrite and bornite in quartz-carbonate veins occurs on both sides of Bronson Mountain. In addition, on the north face of the mountain between elevations 7,500 and 7,900 feet there is a zone of quartz-sericite phyllite which contains a very large number of mineralized quartz veinlets, as well as some larger, somewhat discontinuous veins. This zone, known as the Central zone, is in the order of 600 feet long and approximately 200 feet wide. It is in part bounded by faults and appears to dip

see Card 2

Associated minerals or products of value

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located on Bronson Mountain, at approximately 7,800 feet elevation, 5 miles southwest of Churchill Peak.

Windermere Exploration Ltd. staked the Bronson and Bron groups (96 claims) as the result of a regional geochemical survey and prospecting in 1969. Work during 1970 included geological mapping, stripping, and the driving of a 72 foot adit at the 6,850 foot elevation on the north slope of Bronson Mountain. From the adit diamond drilling was done in 3 holes totalling 2,501 feet to test at depth the continuity of the Central zone.

Canadian Superior Exploration Limited optioned the property in 1971. A second drill site was selected on the south face of the mountain at 7,380 foot elevation, and from it 4 diamond drill holes, totalling 4,526 feet, were drilled to intersect the Central zone at depth. The results of this program were disappointing and indicated that neither the numerous veins of the Central zone nor the mineralization continues at depth for any significant distance. The option was given up before the end of the year.

Windermere Exploration Ltd. in May 1972 amalgamated with Peregrine Exploration Ltd. to form Barrier Reef Resources Ltd.

Mineral Resources Branch, Department of Energy, Mines and Resources, Ottawa.

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HISTORY OF PRODUCTION

REFERENCES

Preto, V.A.; Bronson; Geology, Exploration, and Mining; British Columbia Dept. of Mines, 1971, pp. 97-99.
 Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1970, p. 46.
 Mineral Development Sector; Corporation Files: "Barrier Reef Resources Ltd."; "Windermere Exploration Ltd."

MAP REFERENCES

Geology of Bronson Mountain, Figure 17, and 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.

REMARKS

BCI 94K-27

Comp./Rev. By	DmacR						
Date	3-74						

NAME OF PROPERTY

BRONSON

DESCRIPTION OF DEPOSIT (continued)

steeply south. Larger veins, locally more than 10 feet wide, trend slightly north of east through the zone and also dip steeply south. High assays across appreciable widths can be obtained locally from these veins, but it appears that individual veins are on the whole short, discontinuous, and irregularly mineralized.

The East zone is located between elevations 6,500 and 7,000 feet on the north face of Bronson Mountain approximately 2,000 feet northeast of the Central zone. Mineralization is here reported to occur in well-defined quartz-carbonate veins that follow a large diabase dyke. Assays from this zone average 1.17 per cent copper across 6 feet.

The West zone occurs in an isolated area of outcrop surrounded by snow and glacial ice approximately 1,500 feet southwest of the Central zone. This zone is reported to consist of a well-defined quartz-carbonate vein mineralized with chalcopyrite and bornite and yielding assays that average 7.88 per cent copper across 5.6 feet. The veins of the West and East zones, and several of the veins in the Central zone lie along a fairly narrow zone of fractures which, though intermittent, appears to be at least 3,600 feet long.

The South zone is found on the south side of Bronson Mountain between elevations 7,600 and 8,000 feet and consists of quartz-carbonate veins and lenses that follow both sides of a diabase dyke that here trends slightly east of north. The veins are mineralized with both chalcopyrite and bornite and are reported to have yielded assays that average 16.04 per cent copper across 2.7 feet. These values, though perhaps indicative of the grade of short sections of some veins, appear to far exceed the average grade of the veins exposed in this zone. It should be noted that, although most veins in the South zone appear to be older than the diabase dyke, locally a different type of mineralization consisting of vuggy quartz veinlets with chalcopyrite and specular hematite is found, which cuts the quartz-carbonate veins and the diabase dyke.