

NAME OF PROPERTY BB (VICCAL) (FISH LAKE)

OBJECT LOCATED - Copper occurrence, Map 29-1963.

UNCERTAINTY IN METRES 300. Lat. 51°27'50" Long. 123°37'20"

Mining Division Clinton District Lillooet

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR

Taseko Mines Limited

DESCRIPTION OF DEPOSIT

The Fish Lake copper-gold porphyry prospect is associated with a mid-Upper Cretaceous quartz diorite stock and dyke complex.

Wall rocks to the porphyry intrusive complex include greywackes and shales, with variable dips and northerly strikes, together with overlying gently dipping pyroclastic rocks that are correlated with the Upper Cretaceous Kingsvale Group. The deposit lies in a north-trending embayment in the northern contact of the fine-grained porphyritic quartz diorite. The embayment is occupied by altered pyroclastic and sedimentary rocks and by a younger small stock and dyke complex of coarse-grained porphyritic quartz diorite. Mineralization occurs in fine- and coarse-grained plutonic to hypabyssal rocks, as well as in hornfels.

Four units of the porphyry intrusive complex (Units 1 to 4), are distinguished on the basis of feldspar and quartz phenocryst textures. Another, still younger, phase of quartz diorite porphyry, texturally similar to Unit 3, occurs as narrow dykes

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Associated minerals or products - Gold, silver.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at Fish Lake, 6 miles north of Lower Taseko Lake, 120 miles northwest of Lytton.

In the early 1930's, prospectors E. Calep and C.M. Vick followed float to exposures of narrow pyrite, chalcopyrite and gold-bearing zones associated with diorite or feldspar porphyry dykes some 1 km east and 0.5 km north of the deposit. These showings were held in 1935 as the Viccal group of 9 claims. Trenching was done in a search for gold values. A selected specimen of the mineralization exposed assayed 0.54 oz gold and 0.6 oz silver per ton, and 2% copper.

Phelps Dodge Corporation of Canada, Limited staked 79 claims and fractions in the fall of 1960, including the former Viccal showings. Work during 1961 and 1962 included geochemical and magnetometer surveys, trenching, and 2,005 feet of diamond drilling in 6 holes. Further diamond drilling in 2 short holes was carried out in 1964. The claims were subsequently allowed to lapse.

Taseko Mines Limited, incorporated April 1966, acquired the 60 claim BB group from insiders of the company as well as from Conrad Olafson of Lac La Hache and E.M. Collin, of Ashcroft. Magnetic and geochemical surveys and trenching were carried out that same year. Open cutting, and 180 feet of x-ray diamond drilling in 5 holes, was carried out in 1968. Work by the company in 1969 included geological mapping, magnetometer and geochemical surveys, trenching, 3,000 feet of diamond drilling in 6 holes, and 8,000 feet of percussion drilling in 20 holes. Values ranging from 0.06 to 0.29% copper were obtained over widths of from 150 to 600 feet. Additional claims were acquired in the BJ, BF, BT, and BW groups. The 158 claim property was held under option in 1970 by Nittetsu Mining Co. Ltd. Work included 9 line-miles of detailed induced potential survey on BB 24-28, 41-48 claims, and diamond drilling in 4 holes totalling 774 feet; the option was subsequently given up.

By a joint venture agreement of July 1972, Taseko optioned a 70 per cent interest in the property to Quintana Minerals Corporation. Work by Quintana during the period 1972-1974 inclusive included geological mapping, and 17,534 feet of diamond drilling in 27 holes. Based on the above work the deposit is known to contain several tens of millions of tons of material grading approximately 0.3 per cent

see Card 2

HISTORY OF PRODUCTION

REFERENCES

Reports of Minister of Mines, British Columbia:
 1935, p. 28; 1961, p. 24; 1962, p. 21; 1968,
 p. 154.

Geology, Exploration, and Mining; British Columbia Dept.
 of Mines: 1969, p. 180; 1970, p. 213; 1972, p. 314;
 1973, p. 268; 1974, p. 222.

Mineral Policy Sector; Corporation Files: "Taseko Mines
 Limited"; "Quintana Minerals Corporation".

+ Wolfard, M.R.; Fish Lake; Porphyry Deposits of the
 Canadian Cordillera, The Canadian Institute of Mining
 and Metallurgy, Special Volume No. 15, pp. 317-322,
 1976.

Dirom, G.A. and Seraphim, R.H.; Fish Lake Prospect of
 Taseko Mines Ltd.; in Taseko Mines Ltd. Statement of
 Material Facts, June 1972.

Geology in British Columbia; BCDM: 1976, pp. 84-103+.

Exploration in British Columbia; BCDM: 1980, p. 291; 1981,
 p. xi; 1982, pp. 244, 245; 1984, p. 250.

George Cross News Letter: 1985, No. 25.

MAP REFERENCES

#Map 29-1963, Taseko Lakes, (Geol.), Sc. 1":4 miles, Geol.
 Surv. of Canada.

Regional geological setting of Fish Lake deposit, Fig. 34,
 Geology in British Columbia, 1976, p. 85.

*Map 92 0/5, Mount Tatlow, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR	JL	DMacR				
Date	6-78	10-82	05-87				

PRODUCT

COPPER

PROVINCE OR
TERRITORY

British Columbia

N.T.S. AREA 92 0/5

- Card 2 -

REF. CU 1

NAME OF PROPERTY

BB (VICCAL) (FISH LAKE)

DESCRIPTION OF DEPOSIT (continued)

cutting all other intrusive types. The younger pre-mineral phases (Units 3 and 4) probably form a small stock and dyke complex, trending easterly and dipping steeply to the south. Concentric alteration zones, defined by the disappearance of epidote, and by the appearance of fracture-controlled sericite, pervasive sericite and pervasive secondary biotite, are centered on these two units.

Copper distribution is closely related to the younger quartz diorite porphyry (Unit 3) and quartz-feldspar porphyry (Unit 4) bodies, as well as to higher-grade alteration zones. Gold distribution is very similar to that of copper, although weak gold/copper zoning is apparent. Primary metallic mineralization on the property consists of pyrite, chalcopyrite, bornite, magnetite, hematite and rare molybdenite. Trace amounts of galena, sphalerite, tennantite and gold are present. Gangue minerals include sericite, chlorite, quartz, gypsum or anhydrite, and iron-bearing carbonate.

These minerals were introduced in eight stages separable by mineral assemblage and by crosscutting relationships.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

copper and 0.5 grams per tonne gold. (Wolfhard, 1976, Special Vol. 15, p. 317, C.I.M.M.). Quintana subsequently abandoned the option. Drilling during the period 1969-1973 outlined a zone containing 50,000,000 tons at 0.304% copper and 0.015 oz/t gold, plus 110,000,000 tons at 0.227% copper and 0.012 oz/t gold (NM 20/12/79, p. 17).

In 1979 Bethlehem Copper Corporation optioned an 80% interest in the property from Taseko Mines. Work by Bethlehem during 1979-82 included extensive geochemical and geophysical surveys, percussion and diamond drilling. Inferred reserves were reported as 201,000,000 tons at 0.24% Cu, 0.015 oz/t Au, 0.033 oz/t Ag (Northern Miner November 25, 1982). Bethlehem Copper was amalgamated with Cominco Ltd. on December 31, 1982 under the latter name.

The 1981-82 work included 9 616 m of diamond drilling in 47 holes and 1 548 m of percussion drilling in 19 holes. Diamond drilling in 1984 totalled 1 003 m in 5 holes. Work to date indicates the deposit has a higher-grade core; the best intercept was 1.8 oz/t Au over 10 ft.