DOROTHY (HAUT)

OBJECT LOCATED - #220, Map 69-1.

UNCERTAINTY IN METRES 300.

Lat. 55°14°40" Lo

Long. 126°10'10"

Mining Division Omineca

District

Cassiar

County

Township or Parish

Lot

Concession or Range

Sec

Tp.

R.

#### OWNER OR OPERATOR

# **DESCRIPTION OF DEPOSIT**

A quartz diorite to granodiorite porphyry, known locally and informally as biotite feldspar porphyry, occurs as an early Eocene plug 1,300 m in diameter emplaced at the contact between a dioritic stock and Jurassic volcanics and sediments. Mineralization includes disseminations and small stringers of chalcopyrite and pyrite, with minor bornite, covellite, pyrrhotite, molybdenite, sphalerite, and galena. Drilling outlined a large area in which copper grades are slightly greater than 0.2% with no significant higher-grade internal zones. The copper zone is surrounded by an annular pyrite halo.

#### HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located about 3 miles east of the south end of Nakinilerak Lake, at approximately 3,000 foot elevation.

The Haut and BI groups, totalling 46 claims, were held in 1965 and 1966 by Noranda Exploration Company, Limited. Geochemical and geophysical surveys were carried out at that time.

Twin Peak Mines Ltd. by an agreement dated January 18, 1970 purchased the Dorothy 1-48 claims from R.C. Johnson & R.W. Wollverton, principals of Evergreen Explorations Ltd. By a August 13, 1970 agreement Twin Peak optioned the property to Ducanex Resources Limited, which was owned by Lacanex Mining Company Limited (50%) and Du Pont of Canada Limited (50%). Work by Ducanex during 1970-71 included induced potential, magnetometer and electromagnetic surveys over 18 line-miles and a geochemical soil survey. Drilling was done in 4 holes in 1970 and 25 holes totalling 8,000 feet in 1971. Under the agreement Ducanex acquired a 90% interest through the exploration expenditures. Reserves were reported as 45,000,000 tonnes inferred at 0.25% Cu, 0.01% Mo, to a depth of 160 m. (Table 1, #93 CIM Spec Vol 15, 1976).

Twin Peak Mines Ltd. amalgamated with Whitesail Mines Ltd. in December 1972 under the name Twin Peak Resources Ltd. In 1974 Ducanex carried out a geochemical soil survey (120 samples) over 4 line-miles covering all claims.

### **MAP REFERENCES**

Map 69-1, Smithers, Hazelton, and Terrace Areas (Geological compilation), Sc. 1":4 miles, British Columbia Dept. of Mines.

Map 93 M/1, Old Fort Mountain, (Topo.), Sc. 1:50,000.

## **REMARKS**

Comp./Rev. By	DMacR			
Date	6-79			

## REFERENCES

- Reports of Minister of Mines, British Columbia; 1965, p. 104; 1966, p. 95.
- Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1970, p. 169; 1971, p. 184; 1974, p. 267.
- Mineral Policy Sector; Corporation Files: "Twin Peak Mines Ltd."; "Ducanex Resources Limited"; "Twin Peak Resources Ltd.".
- \*Carson, D.J.T., Jambor, J.L.; Mineralogy, Zonal Relationships and Economic Significance of Hydrothermal Alteration at Porphyry Copper Deposits, Babine Lake Area, British Columbia; Canadian Institute of Mining & Metallurgy, Bulletin, February 1974, p. 125.
- Porphyry Deposits of the Canadian Cordillera, Canadian Institute of Mining & Metallurgy, Special Volume 15, Table 1, 1976.