

PRODUCT

COPPER

PROVINCE OR
TERRITORY

British Columbia

N.T.S. AREA 94 D/2

REF. CU 5

NAME OF PROPERTY

BEAR

OBJECT LOCATED - Location from Geology, Exploration,
and Mining, 1974.

UNCERTAINTY IN METRES

Lat. 56°07'

Long. 126°52'

Mining Division

Omineca

District

Cassiar

County

Township or Parish

Lot

Concession or Range

Sec

Tp.

R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

A northwesterly trending, steeply dipping volcanic sequence of the Takla Group including at least five distinct rock types constitute the oldest rocks on the property. These include white, fine-grained rhyolites consisting of orthoclase, quartz, irregular patches of green biotite, and disseminated pyrite and magnetite. A prominent orange-brown gossan in highly fractured rhyolite is exposed near the south end of the claim group. Thinly laminated andesite tuffs occur east and west of the intrusive bodies, and up to 5 per cent pyrite is common in rocks on the western side. Associated with the tuffs are fine-grained, dark green andesites. Basic volcanic porphyries have a very fine-grained grey matrix containing plagioclase phenocrysts. Green to purple massive agglomerates with one-quarter inch to 6-inch fragments occur near the southeast edge of the intrusion.

A syenodiorite plug intrudes the volcanic sequence. The plug has been cut by a younger quartz monzonite porphyry body. The contact zone between the quartz monzonite porphyry and the
see Card 2

Associated minerals or products of value - Molybdenum.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at approximately 5,500 feet elevation on Tsaytut Spur 2 miles west of Bear Lake and 3 miles northeast of Drift Lake.

The Bear 1-54 claims were staked in the fall of 1972 by Canadian Nickel Company Limited following the discovery of chalcopyrite and molybdenite in surface exposures. Work during the period 1972-1974 included geological mapping, a frequency domain induced potential survey over 4.5 line-miles, a magnetometer survey over 8.5 line-miles, geochemical surveys comprising 588 rock chip samples, and 4,149 feet of diamond drilling in 10 holes on Bear 6, 8, 25-27, 65, 66.

120480

Mineral Development Sector, Department of Energy, Mines and Resources, Ottawa.

HISTORY OF PRODUCTION

REFERENCES

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1972, p. 479; 1973, p. 401; 1974, pp. 294-297 + .

MAP REFERENCES

Map 962 A, McConnell Creek, (Geol.), Sc. 1":4 miles - accomp. Memoir 251, Geol. Surv. of Canada, 1948.

Geology of the Bear Property, Sc. 1":1,500 ft., Fig. 32, Geology, Exploration, and Mining, 1974, p. 295.

Map 94 D, McConnell Creek, (Topo.), Sc. 1:250,000.

REMARKS

Comp./Rev. By	DMacR						
Date	10-76						

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Card 2 -
REF. CU 5

NAME OF PROPERTY

BEAR

DESCRIPTION OF DEPOSIT (continued)

syenodiorite is commonly occupied by a stockwork of fractures and quartz veinlets and randomly oriented alaskite dykes.

The syenodiorite is moderately to highly fractured throughout and contains a stockwork of quartz veinlets and aplite dykes. Pyrite, chalcopyrite, and molybdenite mineralization occurs in quartz veins, along fractures, and as disseminations. Mineralization is most widespread near the contact of the syenodiorite and the quartz monzonite porphyry.

The quartz monzonite porphyry forms the core of the intrusive body. Medium-grained phenocrysts of quartz, plagioclase, and biotite occur in a very fine-grained matrix of quartz and feldspar. Dykes of similar composition occur north and south of the main body. Along the eastern margin of the quartz monzonite porphyry there is a fairly intense stockwork of quartz veinlets carrying small amounts of pyrite and chalcopyrite. Alaskite is a fine to medium-grained quartz feldspar rock with no mafic minerals, found almost exclusively along the contact between syenodiorite and quartz monzonite porphyry where it occurs as a swarm of criss-crossing 6-inch to 1-foot dykes. Massive bodies up to 50 feet wide were noted locally. Molybdenite mineralization appears to be preferentially associated with the alaskite phase.

Chalcopyrite and molybdenite mineralization appears to be uniform with depth. Some drill holes exhibited weathering to a depth of 250 feet. Malachite staining is significant and pyrite is ubiquitous. Better grades of mineralization are associated with a saussurite plus sericite alteration rendering the rocks an apple green colour.