

NAME OF PROPERTY
NOM DE LA PROPRIÉTÉ

HARPER CREEK (GOOF, SUE, HAIL)

OBJECT LOCATED - DDH #5, from BC Inventory, 82 M #9.
OBJET LOCALISÉ

UNCERTAINTY FACTEUR D'INCERTITUDE	Lat. 51°30.9'	Long. 119°48.8'			
	Lat.	Long.			
Mining Division Division minière	Kamloops	District District	Kamloops		
County Comté		Township or Parish Canton ou paroisse			
Lot Lot		Concession or Range Concession ou rang			
Sec. Sect.	Tp. Ct.	R. R.			

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

Noranda Mines Limited,
44 King St. W.,
Toronto.

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

The area covered by the claims lies a short distance to the north of the Cretaceous Baldy Batholith and is underlain by low-grade metamorphic rocks of Permian or earlier age. These rocks consist of a succession of fine-grained phyllitic greenschist, fine grained graphitic marble and impure limestone, dark-grey phyllite, and fine grained sericitic quartzite. The metamorphic rocks generally display a very well developed foliation which trends fairly uniformly east-northeast and dips gently to the north. Fractures are common and most trend slightly east of north and dip steeply. At several localities and in drill core, subvertical fractures, that on surface trend northerly, occur en echelon. Copper appears to be the only important metal occurring on the claims, and is found chiefly as chalcopyrite. Pyrite, pyrrhotite, and magnetite are common and widespread. Magnetite forms massive lenses or sheets several scores of feet thick. Arsenopyrite, sphalerite, galena, and traces of molybdenite are present in minor amounts. Copper mineralization occurs in very diverse manner. It is found as thin

p.t.o.

Associated minerals or products
Minéraux ou produits associés

HISTORY OF EXPLORATION AND DEVELOPMENT
HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

This property is located between elevations of 4,000 and 6,300 feet at the headwaters of Jones, Baker, and the north-eastern fork of Harper Creeks, approximately 7 miles south-west of Vavenby, some 63 miles north-northeast of Kamloops.

Noranda Exploration Company, Limited staked the Goof and Sue groups (49 claims) in April 1966 as a result of reconnaissance geochemical work. Adjacent ground was staked in June 1966 as the Hail group by Quebec Cartier Mining Company. Additional staking by Noranda was done in the Beth, Harp, and Leo groups. Extensive exploration work was carried out on both properties during subsequent years. Work by Noranda during the period 1967 to 1970, inclusive, included geological mapping, magnetic, electromagnetic, and induced polarization surveys, geochemical soil surveys, extensive trenching, and 39,899 feet of diamond drilling in 87 holes. This work indicated appreciable copper mineralization over an area about 6,000 feet long and 4,000 feet wide, elongated east-west and approximately straddling the boundary between the Sue, Goof, and Hail groups.

Work in 1971-74 included further geophysical and geochemical surveys and 32,108' of diamond drilling in 37 holes. Reserves are listed as 90 000 000 tonnes at 0.4% Cu (Producing Mines, Mineral Deposits with Reserves, Sheet 2, B.C. Dept. of Mines, April 1984).

Quebec Cartier Mining in 1986 entered a mining lease agreement with Aurum Mines Ltd. Previous work blocked out a mineral reserve of 53 000 000 tonnes at .37% Cu, 0.016% molybdenum (Northern Miner, 19/05/86, p. 3). Work in 1986 included magnetometer and VLF electromagnetic surveys, trenching, and assessment of precious metal and rutile potential.

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DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)

coatings on steeply dipping fractures, as coarse disseminations and stringers in quartz and quartz-dolomite veins, as lenses that are generally concordant with the foliation in the schists, as fine-grained disseminations along foliation planes, and in lenses, sheets, and large patches of pyrite and pyrrhotite. Chalcopyrite, though widespread, is found in economically important amounts largely in sericite-quartz phyllite or in sericitic quartzite.

The host rocks are Lower Cambrian and older (?) to Mississippian Eagle Bay Formation.

REFERENCES/BIBLIOGRAPHIE

Preto, V.A.G.; Goof, Sue, Hail; Geology, Exploration and Mining, British Columbia Dept. of Mines, 1970, pp. 297-301.

Reports of Minister of Mines, British Columbia: 1967, p. 132; 1968, p. 165.

Geology, Exploration and Mining, British Columbia Dept. of Mines: 1969, p. 229; 1971, p. 74; 1972, p. 93; 1973, p. 116; 1974, p. 98.

Exploration in British Columbia; BCDM: 1986, p. A 26.

Geological Fieldwork; BCDM: 1985, p. 93.

Mineral Policy Sector; Corporation Files: "Aurun Mines Ltd."

George Cross News Letter: 1988, No. 10.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 48-1963, Adams Lake, (Geol.), Sc. 1":4 miles.

Figure 37, Geology of Parts of the Sue, Goof, and Hail claims, Geology, Exploration and Mining, 1970.

Map 82 M/12 W, Vavenby, (Topo.), Sc. 1:50,000.

Generalized geological map of the Vavenby area, Sc. 0.7 cm: 1 km, Figures 9-1 and 9-2, Geological Fieldwork, 1985, pp. 90, 91.

REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par	DMacR	DMacR	DMacR	DMacR			
Date Date	01-72	05-85	05-86	05-88			