GOLD

PROVINCE OR TERRITORY

PROVINCE OU TERRITOIRE

British Columbia

N.T.S. AREA 92 J/3 RÉGION DU S.N.R.C.

REF. AU 3 RÉF.

NAME OF PROPERTY NOM DE LA PROPRIÉTÉ

WARMAN (NORTHAIR)

OBJECT LOCATED - Discovery vein. OBJET LOCALISÉ

UNCERTAINTY 300 m FACTEUR D'INCERTITUDE Lat. 50°07'50" Lat.

Long. 123°06 ' Long.

Mining Division Vancouver Division minière

District District

New Westminster

County Comté

Township or Parish Canton ou paroisse

Lot Lot

Concession or Range Concession ou rang

Sec Sect.

R.

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT Northair Mines Ltd.

Tp.

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

In the general vicinity of the property the country rocks comprise a series of foliated volcanics including dacite, rhyo-dacite, and feldspar-crystal tuff that form a roof pendant in granodioritic rocks of the Coast Plutonic Complex.

Mineralization occurs in three faulted sections of the same vein; of these the Warman zone is known to be parallel to bedding in the host volcanics, and probably the Discovery zone is also parallel to bedding.

The vein segments strike N40°W and dip at 80 to 90 degrees. They vary in width from 1 to 12 feet and are composed of quartz carbonate. Gold is most abundant in the Warman zone, silver in the Manifold zone, and base metals in the Discovery zone. Minerals at Northair, in order of abundance are: pyrite, sphalerite, galena, chalcopyrite, tetrahedrite, argentite, bornite, ruby silver, electrum,

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

The property is located at 3,400' elevation on the west side of Sproatt Mountain some 30 miles north of Squamish.

The Northair mineralized zones were discovered in the summer of 1969 when Vancouver dentist and weekend prospector Dr. M.P. Warshawaski (then recently graduated from the prospecting course sponsored by the B.C. & Yukon Chamber of Mines) got a positive reaction from stream silts on the East Callaghan Creek road.

After tracing the reactions upstream on what is now called Anomaly Creek, Dr. Warshawaski sought help from his former instructor A.H. "Moose" Manifold, head of Mining Technology at the B.C. Institute of Technology. Subsequent work by the pair resulted in identification of the Discovery and Manifold zones. The Warman 1-13 claims were staked on the showings in September 1970.

McIntyre Porcupine Mines Limited optioned the property in the fall of 1971 and during the summer of 1972 carried out geological mapping, a geochemical soil survey (1,500 samples), and trenching; the option was subsequently dropped.

Northair Mines Ltd. by a September 21, 1972 option agreement acquired the Warman, Cat and Dog groups totalling 104 claims. During the period September-November 1972 the company carried out a geochemical soil survey (2,000 samples), trenching, stripping, and 5,000 feet of diamond drilling in 28 holes on Warman 15 and 16. The Manifold zone was located during this period by diamond drilling in an area of a high silver geochemical soil anomaly. Work during 1973 included electromagnetic and geochemical soil (295 samples) surveys over 11.5 line-miles, and surface diamond drilling totalling 17,299 feet in 53 holes. The Warman zone was discovered by diamond drilling in October 1973 following geochemical and geophysical surveys over the area between the Discovery and Manifold zones. The Discovery zone was tested by diamond drilling during the year. A crosscut adit at the 3,700 level was driven 450 feet to the Manifold zone and some 1.150 feet of drifting carried out. Underground diamond drilling totalled 3,570 feet in 31 holes.

During 1974 work on the Manifold zone included 190 feet of raising from the 3.700 level. Surface diamond drilling in 17 see Card 2

HISTORY OF PRODUCTION/HISTORIQUE DE LA PRODUCTION

In 1974, 141 tons of ore were shipped. From this ore 91 ozs gold, 43 ozs silver and 3,647 lbs lead were recovered. From the start of production in 1976 until the suspension of operations in 1982 a total of 543,158 tons of ore were milled. From this ore 162,570 ozs gold, 786,941 ozs silver, 10,522,383 lbs lead, and 13,402,651 lbs of zinc were recovered.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

General geology of part of the Callaghan Creek roof pendant, Sc. 1.65 cm: 1 km, Fig. 19, Geological Fieldwork, 1977, p. 98.

*Map 92 J/3, Brandywine Falls, (Topo.), Sc. 1:50,000.

#Geology of the Callaghan Creek Area, Sc. 2.5 cm:1 km, Fig.32, Geology in British Columbia, 1977-1981, BCDM.

REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par	DMacR	DMacR			
Date Date	11-83	06-87			

REFERENCES/BIBLIOGRAPHIE

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1971, p. 306; 1972, p. 280; 1973, pp. 245-248; 1974, pp. 200-202; 1978, p. E 175.

Western Miner, Vol. 47, No. 9, September 1974, pp. 56-58.

Canadian Mining Journal: April 1975, p. 79; March 1977, p. 51.

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George Cross News Letter: 1987, No. 100.

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

holes totalled 6,900 feet. Most of the 1974 activity was concentrated on the Warman zone 3,450 level and included 250 feet of crosscutting, 1,150 feet of drifting, and 570 feet of raising. Diamond drilling from this level totalled 172 feet in 8 holes. The exploration program was completed by the end of August. Work to that date indicated reserves (diluted) in all categories as follows:

(per cent) Zones Tons AU oz/t AG oz/t PB ZNCU 250,000 Warman 0.71 0.85 1.42 2.35 0.23Manifold-87,400 14.3 0.27 0.28 0.57 0.07 Discovery 121,800 0.10 1.18 5.43 6.58 0.55 (Northern Miner July 11, 1974)

During 1975 the 3,250 production level was driven and the installation of a 300 ton per day concentrator began. The concentrator was placed in operation April 26, 1976. Reserves at Feb. 28, 1982 were 67,236 tons at 0.25 oz/t Au, 0.77 oz/t Ag, 1.25% Pb, 1.90% Zn (Canadian Mines Handbook 1983-84, p. 260). Production was suspended in mid July 1982 due mainly to lower grades and depressed prices. Reserves are reported as indicated 65,121 tons at 0.265 oz/t Au, 0.78 oz/t Ag and approximately 2% combined Pb-Zn (Canadian Mines Handbook, 1986-87, p. 285).

In 1987 Northair reached an agreement with Falconbridge Limited for exploration on the property.