

PRODUCT GOLD
PRODUIT

PROVINCE OR TERRITORY PROVINCE OU TERRITOIRE British Columbia

N.T.S. AREA 104 G/9
RÉGION DU S.N.R.C.

REF. AU 2
RÉF.

NAME OF PROPERTY
NOM DE LA PROPRIÉTÉ

RED DOG (SPECTRUM)

OBJECT LOCATED - Drill hole 79-5.
OBJET LOCALISÉ

UNCERTAINTY 300 m
FACTEUR D'INCERTITUDE

Lat. 57°41'15"

Long. 130°29'00"

Mining Division Liard
Division minière

District
District

Cassiar

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

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

The property is underlain by a thick assemblage of Upper Triassic sedimentary and volcanic rocks, consisting of agglomerate, greywacke, grit and chert breccia, with overlying andesite, dacite, and related pyroclastic rocks. The pyroclastics are overlain by a thick section of andesite and dacite flows. The volcanic rocks are intruded by dykes, sills, and irregular masses of andesite and dacite porphyry.

The sedimentary rocks have been compressed into fairly open folds which plunge northwesterly. The dominant fracture cleavages are north 70 degrees to 80 degrees east and north 20 degrees to 40 degrees west, with generally steep dips.

The Upper Triassic strata are intruded by a north-trending dyke of Jurassic to Cretaceous age which cuts across the eastern margin of the Red Dog (2 units) claim. The dyke is steep-walled with generally sharp contacts. It shows considerable shearing and brecciation of wallrocks in places. The dyke is obscured at its south end by overlying Tertiary basalt. The dyke is mainly granodiorite but grades into syenite and monzonites in places. It is medium to coarse grained, in places

see Card 2

Associated minerals or products - Copper, silver, lead, zinc.
Minéraux ou produits associés

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

The property is located at the 4,800' elevation, 2 km southwest of the southwest corner of Nuttlude Lake and some 50 miles south-southwest of Dease Lake.

The Spectrum group of 46 claims was staked on the showings in 1969 for Spartan Explorations Ltd. under a joint exploration program with Mitsui Mining & Smelting Co. Ltd. Work during the year included geological mapping, geochemical soil sampling, and a magnetometer survey. By an agreement of August 1971, Imperial Oil Enterprises Ltd. acquired an option on the property. Additional staking expanded the property to 91 claims in the Spectrum and Owl groups. Work during 1971 and 1972 included an induced potential survey over 4.4 line-miles, geological mapping, rock chip geochemistry, and a ground magnetometer survey over 23.5 line-miles. In 1973 Imperial carried out 1,478 feet of diamond drilling in 4 holes on Spectrum 9, 11, and 13. The drilling showed only very low copper values. The option was terminated in 1974.

Sections of the drill core were re-assayed in 1975 by the Racicot Syndicate and showed interesting gold values. The ground was in part restaked for the Racicot Syndicate as the Red Dog #1 (2 units) in September 1975 and Red Dog #2 (15 units) in April 1976. The Racicot Syndicate comprised Placer Development Limited, El Paso Mining and Milling Company, and Mr. Arnold Racicot.

Consolidated Silver Ridge Mines Ltd. optioned an 80% interest in the Red Dog claims in July 1978. A geochemical survey, comprising 1,585 soil and 9 rock samples, was carried out. Work during 1979 included bulldozer trenching, a geochemical soil survey (541 samples), and 832 metres of diamond drilling in 10 holes. The best zone intersected by drilling extends N15°W for at least 60 metres with average intersection of 3.28 metres. This partially tested zone could contain 35,000 tons at an uncut average grade of 0.598 oz/t Au (Noel, G.A., 28/02/80 - in Consolidated Silver Ridge Ms L, Statement of Material Facts, 22/07/80).

Northair Mines Ltd. in 1979 assumed management of the exploration program, and financing through a share option. Work during 1979-82 included geological and geochemical soil surveys (541 samples) and 3 164 m of diamond drilling in 28 holes. Reserves were estimated Dec. 1981 by G.A.Noel & Assoc.

see Card 2

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1970, p. 57; 1971, p. 41; 1972, pp. 531-534⁺; 1973, p. 506; 1978, p. E 258⁺⁺.

Noel, G.A.; Report on the 1979 Fieldwork, Red Dog Property, 28/02/80, in Statement of Material Facts, Consolidated Silver Ridge Mines Ltd., 22/07/80.

Mineral Policy Sector; Corporation Files: "Spartan Explorations Ltd."; "Consolidated Silver Ridge Mines Ltd."; "Northair Mines Ltd.".

Exploration in British Columbia; BCDM: 1979, p. 283; 1980, p. 474; 1981, p. 208; 1984, p. 390.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 11-1971, Telegraph Creek, (Geol.), Sc. 1:250,000 - accomp. Paper 71-44, Geol. Surv. of Canada.

Geology of the Spectrum Claims, Sc. approx. 1":750 ft., Fig. 66 - accomp. Geology, Exploration, and Mining, 1972, British Columbia Dept. of Mines.

#Geology & Topography, Red Dog Property, Sc. 1:6700, Fig. 3 - accomp. Report by Noel, 1980.

*Map 104 G/9 W, Kinaskan Lake, (Topo.), Sc. 1:50,000.

REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par	DMacR	DMacR	DMacR				
Date	09-80	12-83	09-86				

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DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)

porphyritic, grey to pink hornblende-biotite granodiorite. It is considerably altered in places, showing potassic, biotite hornfels, and propylitic alterations.

Mineralization on the Red Dog property follows four distinct patterns.

1. Pyrite with minor pyrrhotite as disseminations and fracture fillings in the Upper Triassic cherts, tuffs and flows.

2. Pyrite and chalcopyrite as disseminations and fracture fillings in the granodiorite dyke and adjacent wallrocks. This porphyry-type mineralization has associated sericite and biotite alteration aureoles. The better intersections in the 1973 drilling averaged 0.2 to 0.3% Cu over 15 to 25 metres.

3. Pyrite, arsenopyrite, sphalerite, and galena in narrow quartz-carbonate veins in the sedimentary and volcanic rocks. These veins range from 1 cm to over 30 cm in width and show good gold values particularly where sphalerite and arsenopyrite are present. A 9-metre section in hole S-4 (1973) assayed 0.587 oz/t Au. Surface sampling of a number of these veins in 1978 and 1979 yielded 0.4 to 0.6 oz/t Au across 10 to 25 cm.

4. Pyrite, pyrrhotite, chalcopyrite and magnetite in small irregular pyrometamorphic replacement masses in limy sediments.

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

to be at least 2,400,000 tons averaging 0.037 oz/t gold (Northair Mines Ltd, 1983 Annual Report).

The company name (Consolidated Silver Ridge) was changed in September 1981 to Northcal Resources Ltd. The property was held at that time by Northcal (60%), Northair (30%), Placer Development and El Paso Mining & Milling (a combined 10%). The El Paso interest was subsequently transferred to Meridian Land and Mineral Company, the interest distribution then being Placer (4.5%), Meridian 4.5% and A.C. Racicot (1.0%).

Cominco Ltd optioned the property in September 1983. Work in 1984 included a soil geochemical survey (1,260 samples) over the Spectrum and adjacent claim groups. The company name (Northcal) was changed in September 1985 to Calnor Resources Ltd.