PRODUCT

#### CHURCHTLI. NAME OF PROPERTY ORJECTIOCATED-No. 1 vein. UNCERTAINTY IN METERS -200. Lat. 50 04 15" Long. 126°49\*35# Alberni Rupert Mining Division District County Township or Parish Lot Concession or Range Sec Tp. R.

## OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

Two quartz-sulphide veins occur on the property. Both are entirely in the limestone on the southwest flank of an anticlinal structure whose axis strikes southeast along the ridge between Lime and Fault Creeks.

No. 1 vein strikes about north 50 degrees west and is vertical or dips steeply to the southwest. It has been exposed by open-cuts and trenches at intervals over a strike length of about 200 feet. The southeastern part is step-faulted to the northeast by three parallel, equally spaced faults. Vein widths vary from 3 to 4 feet in the southeastern and central parts but narrow to 8 to 14 inches in the most northwesterly open-cut. At the northwest end of this pit the vein splits into two parts, each about 8 inches wide, separated by 1 foot to 2 feet of limestone.

Vein matter consists of an intimate mixture of rusty comb quartz, limonite, secondary lead minerals, and a little primary

Associated minerals or products of value - Silver, lead, zinc, copper.

#### HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at the head of Fault Creek, about 6 miles north of Zeballos. Iron showings on the property have been described separately (92 L/2. Fe 2). The No. 1 vein is 250 to 450 feet southeasterly from the magnetite pyrrhotite showings. No. 2 vein lies about 1,200 feet northeast of No. 1 vein.

The Churchill group, comprising the Churchill Fraction Nos. 1 and 2, and the Shear Fraction claims, was staked in 1941 by Sam N. Ray and owned jointly by Mr. Ray and J.W. Foster. Trenching and 2 short diamond drill holes was reported on the veins. In 1944 Privateer Mine. Limited. held an option on the property and diamond drilling in two holes was reported. Falconbridge Nickel Mines Limited acquired the property in about 1963. Diamond drilling in 1984 on No.1 quartz vein totalled 214 metres; the drill core assays gave no significant values. A combined airborne magnetometer, electromagnetic and VLF-EM survey was carried out over the Churchill and adjacent properties in 1985. Falconbridge Limited in October 1987 optioned the Churchill 1-6 and 1 and 2 Fractions (overstaked by Zeb 9-12 claims) to Footwall Explorations Ltd. A geochemical soil survey gave anomalous values of from 171 to 25,200 ppb gold in the vicinity of the veins.

Mineral Resources Branch, Department of Energy, Mines and Resources, Ottawa.

### HISTORY OF PRODUCTION

# MAP REFERENCES

Map 1028 A, Woss Lake, (Geol.), Sc. 1":1 mile - accomp. Memoir 272.

# Geology of the Churchill Group Showing Magnetite Deposits and Copper-Lead-Zinc Veins, Sc. 1":500 feet, Fig. 2, Memoir 272.

\*Map 92 L/2 , Woss Lake, (Topo.), Sc. 1:50,000.

# **REMARKS**

Comp./Rev. By	LJ	DMacR			
Date	12-76	07-88			

### REFERENCES

- Headley, J.W.; Geology and Mineral Deposits of the Zeballos-Nimpkish Area; Memoir 272, p. 59, Geol. Surv. of Canada, 1953.
- Stevenson, John S.; Geology and Mineral Deposits of the Zeballos Mining Camp; Bulletin 27, p. 131, British Columbia Dept. of Mines, 1950.
- Reports of Minister of Mines, British Columbia: 1945, p. 116.
- Muller, Northcote, and Carlisle; Geology and Mineral Deposits of Alert-Cape Scott Map-area; Paper 74-8, p. 62, Geol. Surv. of Canada, 1974.
- Gunning, H.C.; Zeballos River Area, Vancouver Island; Summary Rept., Pt. A-2, pp. 48-49, Geol. Surv. of Canada, 1932.

Exploration in British Columbia; BCDM: 1986, p. C 275.

George Cross News Letter: 1988, No. 133.

PROVINCE OU TERRITOIRE

British Columbia

N.T.S. AREA 2 REGION DU S.N.R.C. 92 L/2

REF. Au 4

NAME OF PROPERTY NOM DE LA PROPRIÉTÉ

CHURCHILL

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (con't)

residual galena, sphalerite, and pyrite. A sample across 4 feet assayed 0.70 ounce per ton gold, 2.80 ounces per ton silver, 0.74% copper, 3.93% lead, and 3.72% zinc.

No. 2 vein strikes north 35 degrees east and dips 80 degrees southeast. It has been exposed at intervals by open-cuts for a s rike length of about 100 feet. The most southwesterly exposure consists of from 2 to 6 feet of highly sheared and oxidized vein matter composed of fault gouge, mixed with small amounts of rusty comb quartz and scattered residual sulphides. However, the most northeasterly exposure contains a considerably higher percentage of sulphides, chiefly sphalerite, with some chalcopyrite.

The No. 2 vein appears to occupy a persistent narrow fault zone on the northwest side of an andesite dyke. Post-mineralization movement has resulted in pronounced shearing of vein matter and adjoining wall-rocks. A sample across 1 foot of fault gouge assayed: gold, 0.53 ounce per ton, silver, 0.56 ounce per ton, copper, 0.56%, lead, 0.05%, zinc 0.04%.