

NAME OF PROPERTY MERRY WIDOW, KINGFISHER, RAVEN

OBJECT LOCATED - Merry Widow open pit.

UNCERTAINTY IN METRES 200. Lat. 50°21'20" Long. 127°15'

Mining Division	Nanaimo	District	Rupert
County		Township or Parish	
Lot		Concession or Range	
Sec	Tp.	R.	

OWNER OR OPERATOR AND ADDRESS

Quatsino Copper-Gold Mines, Limited.

DESCRIPTION OF DEPOSIT

The formation consists of the older Karmutsen volcanic group, the Quatsino limestone, and the younger Bonanza group of lavas, pyroclastics and minor sediments; this formation continues into the Coast Copper Co. ground to the north. A gabbro-diorite stock outcrops about  $\frac{1}{2}$  mile to the west.

In the vicinity of the deposit the volcanics form a narrow, northerly trending, northerly apexing wedge between the stock on the west and the limestone on the east. The limestone forms a west dipping monocline striking north to northwest; the folding was found to be more complex at depth. Skarn and various acidic and basic dykes occur in the immediate vicinity of the deposit. The skarn consists of brown garnet with lesser amounts of epidote, actinolite, diopside and chlorite. Magnetite, closely associated with the skarn, occurs as disseminated grains and in veinlets, patches and massive bodies in a northerly trending zone that is bordered on the west by unmineralized greenstone and on the east by limestone.

see Card 2 ....

Associated minerals or products of value

HISTORY OF EXPLORATION AND DEVELOPMENT <sup>92 L/6 FE 1</sup>

The Merry Widow open pit is located at the 2,500 foot elevation on the east flank of Merry Widow mountain, 2 miles south of Benson Lake. The Kingfisher and Raven open pits lie a few hundred feet northeast and north, respectively, of the Merry Widow. The Coast Copper (Old Sport) property adjoins to the north.

The Merry Widow group (6 claims), the Blue Bird group (4 claims), and adjacent claims in the Old Sport group were staked in the fall of 1911. Assessment work was carried out in 1912. These claims were optioned in July 1913 by C. and F.R. Wolfe, of Spokane. In subsequent years only limited surface work sufficient to obtain Crown-grants was done. The King Fisher Fr. (Lot 1532) and Merry Widow No. 1 (Lot 1529) were Crown-granted to A.A. Gyes in 1918. These were apparently held in later years by Coast Copper Company, Limited. Other claims in the Merry Widow and Blue Bird groups (Lots 1529-1542) were Crown-granted in 1919 to Messrs. Anderson, Halliday, Cook, and Vaughan.

Quatsino Copper-Gold Mines, Limited, incorporated in April 1928, acquired 32 claims in 4 groups, including the Merry Widow. In 1929 an adit was driven on the south side of Bean (Merry Widow) creek at the 1,075 foot elevation. During 1930 diamond drilling was done in 5 holes totalling 4,845 feet. No further activity was reported until the latter part of 1950 when the company resumed exploration of the property. Magnetite was discovered on the Merry Widow No. 5 claim and an extensive diamond drilling program got under way in 1951.

Empire Development Company, Limited, was acquired by Quatsino Copper-Gold Mines, Limited (40%) and Mannix Ltd. (60%) to bring the property into production. A 1,500 ton-per-day concentrator was installed and production began in September 1957. Production during 1957-59 was from the Merry Widow, Kingfisher, and Raven pits. The Raven pit yielded only a few thousand tons of low-grade material and was mined out prior to 1960. The Kingfisher open pit was mined to its economic limit in August 1960 and an adit was begun to pass beneath it. The Merry Widow open pit was mined to its economic limit in July 1962 and the concentrator closed. Underground mining was in progress at the Kingfisher, the ore being stockpiled. During 1963 underground mining at the Kingfisher was completed as was

see Card 2 ....

## HISTORY OF PRODUCTION

During the period of production 1957 to August 1967, 3,786,121 tons of ore were milled at this property. From this ore 1,847,991 tons of iron concentrate were produced.

## REFERENCES

- Sangster, D.F.; The Contact Metasomatic Deposits of Southwestern British Columbia; Bulletin 172, p. 63, Geol. Surv. of Canada, 1969.
- Jeffery, W.G.; Benson Lake; Report of Minister of Mines, British Columbia; 1960, pp. 90-100.
- Reports of Minister of Mines, British Columbia: 1913, p. 282; 1916, p. 341; 1918, p. 475; 1919, p. 371; 1924, p. 225; 1928, p. 375; 1929, p. 379; 1930, p. 296; 1952, pp. 228-231; 1956, p. 117; 1957, p. 68; 1959, p. 132; 1961, p. 95; 1962, p. 96; 1963, p. 100; 1964, p. 152; 1965, p. 229; 1966, p. 66; 1967, p. 70.
- Gunning, H.C.; Geology and Mineral Deposits of Quatsino-Nimpkish Area; Summary Report 1929, Pt. A; p. 125.
- Dolmage, V.; Quatsino Sound and Certain Mineral Deposits of the West Coast of Vancouver Island; Summary Report 1918, Pt. B., p. 35, Geol. Surv. of Canada.
- Muller, J.E.; Northcote, K.E.; Carlisle, D.; Geology and Mineral Deposits of Alert Bay-Cape Scott Map-Area, Vancouver Island, British Columbia; Paper 74-8, Geol. Surv. of Canada.
- Mineral Development Sector; Corporation Files: "Quatsino Copper-Gold Mines, Limited"; "Empire Development Company, Limited".

## MAP REFERENCES

- Geology of the Kingfisher and Merry Widow Deposits, Sc. 1":600 ft., Fig. 3 - accomp. Bulletin 172.
- Map 4-1974, Alert Bay-Cape Scott, (Geol.), Sc. 1:250,000 - accomp. Paper 74-18.
- Map 255 A, Quatsino-Nimpkish Area, (Geol.), Sc. 1":2 miles - accomp. Summary Report, 1929.
- #Empire Development Company Limited, Geology in the vicinity of the mine workings, Sc. 1":1,250 feet., Fig. 9, Report of Minister of Mines, 1960, p. 94, British Columbia Dept. of Mines.
- Map 1737 G, Alice Lake, (Aeromag.), Sc. 1":1 mile. (1963).
- \*Map 92 L/6, Alice Lake, (Topo.), Sc. 1:50,000.

## REMARKS

Comp./Rev. By	DMacR							
Date	11-75							

NAME OF PROPERTY

MERRY WIDOW, KINGFISHER, RAVEN

## DESCRIPTION OF DEPOSIT (continued)

The principal orebodies are the Merry Widow, Kingfisher, and Raven. The trend of mineralization from Merry Widow through Kingfisher parallels a zone of faulting. The Merry Widow orebody is a contact metasomatic deposit consisting of a series of lenses of magnetite in banded volcanic rocks adjacent to the limestone contact. The ore contains variable amounts of sulphides including pyrrhotite, pyrite, chalcopyrite, and minor arsenopyrite and sphalerite. They occur sparingly in the upper part of the deposit but are more abundant in the northeast and lower parts. The sulphides contain a certain amount of gold-silver.

The Kingfisher orebodies, entirely in the limestone, are two pipes plunging southeast at about 70° and joining at depth before fading out. The Raven orebody is part of an elongated mineralized zone of disseminated magnetite that probably lies along a fault; the ore is a fine-grained, massive magnetite; a substantial body of sulphides occur on the east side of the magnetite zone.

## HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

diamond drilling in the floor of the Merry Widow pit; the concentrator operated most of the year. The diamond drilling indicated about 900,000 tons of ore remaining below the Merry Widow pit floor.

During 1964-65 the Kingfisher adit was extended to a total length of 1,650 feet to reach the Merry Widow ore zone and 300 feet of drifts and crosscuts and 228 feet of raising was completed in the orebody. The concentrator was destroyed by fire in 1965 and a new 2,500 ton per day concentrator was put into operation in 1966. The mine closed for economic reasons in August 1967.

Coast Copper Company, Limited, in 1965 obtained a lease from Empire Development Company, Limited, to explore for copper mineralization on the property (see 92 L/6, CU 1).

In 1975 the registered owner of the 57 Crown-granted and 8 recorded claims of the Merry Widow property was Quatsino Copper-Gold Mines Limited.