

NAME OF PROPERTY GARNET (AJAX)

OBJECT LOCATED—showing.

UNCERTAINTY IN METERS 250. Lat. 52°46'10" Long. 132°01'10"

Mining Division Skeena District Queen Charlotte

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR AND ADDRESS

Moresby Mines Limited.

DESCRIPTION OF DEPOSIT

The Garnet property is a pyrometasmatic replacement deposit. A pad of the Kunga grey limestone member overlies Karmutsen greenstone. These rocks are enveloped to the east and south by hornblende quartz diorite of the San Christoval Batholith, dykes of which cut the older rocks in the area of the showings. The limestone appears to form a synclinal keel and to trend north 35° west. Small faults oriented north to north 30 degrees east are moderately common.

Mineralization consists of two types: magnetite skarn with chalcopyrite, found chiefly in the upper part of the Karmutsen Formation, and sphalerite, pyrite, chalcopyrite, and molybdenite, found as vein-like and irregular masses in the limestone. The magnetite deposit is found around much of the western and northern periphery of the limestone keel and generally 50 to 100 feet below the contact. A body at the northeast margin of

Associated minerals or products of value - Copper, zinc, molybdenum (silver, gold, lead).
see Card 2

HISTORY OF EXPLORATION AND DEVELOPMENT

The Garnet and Ruby groups of claims are located on the northwestern end of the peninsula between Fairfax and Botany Inlets, Tasu Sound, at an elevation of between 300 and 950 feet.

In 1908 the property was staked as the Ajax group by Messrs. Chapman, Kitson, and Husband. At that time a 70-foot adit (Tommy adit) was driven on the southern boundary of the claims.

Five claims, the Garnet 1 and 2, and Ruby 1-3, were located in 1953 by R.E. Wolverton for The Consolidated Mining and Smelting Company of Canada Limited. Intermittent exploration by trenching was carried out over the next few years. The claims were retained by Mr. Wolverton after the company's interest terminated.

In 1962 Silver Standard Mines Limited optioned the five claims. Work done between Nov. 12 and Dec. 10 of that year included drilling four packsack holes totalling 213 feet, cleaning out some trenches, and conducting a magnetometer survey. The option was subsequently dropped.

Bardale Mining and Development Ltd., by an October 1964 option agreement, acquired the Garnet 1 and 2, and Ruby 1-3 claims from R.E. Wolverton and R.F. Sandner. Additional staking was done to a total of 61 claims. By an agreement of August 1965 the above option was assigned to Moresby Mines Limited. Work during the period 1964-1966 included 11,000 feet of trenching, 13 miles of line cutting, a magnetometer survey on a 200 by 50 foot grid, geological and geochemical surveying and mapping, and 1,626 feet of diamond drilling in 12 holes.

From June 1967 to August 1968, the 61 claims were under option to Canadian Superior Exploration Limited from Moresby Mines Limited. During that time the work done included mapping the surface workings, geological mapping on an area 3,000 by 2,400 feet on the Ruby 1, 2, and 4 and Garnet 15, 17, and 19, an induced polarization survey covering 15 claims, a magnetometer survey covering 6 claims, geochemical sampling on 6 claims, 13 trenches, totalling 204 feet, and drilling of 6 holes totalling 1,969 feet.

see Card 2

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

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HISTORY OF PRODUCTION

REFERENCES

Brown, A. Sutherland; Geology of the Queen Charlotte Islands; Bulletin No. 54, p. 189, British Columbia Dept. of Mines, 1968.

Reports of Minister of Mines, British Columbia: 1908, p. 62; 1954, p. 85; 1962, p. 10; 1966, p. 53; 1967, p. 56; 1968, p. 70.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1971, p. 110; 1972, p. 497; 1974, pp. 321-322.

Mineral Development Sector; Corporation Files: "Imperial Oil Enterprises Ltd."; "Moresby Mines Limited".

MAP REFERENCES

#Geology of the Queen Charlotte Islands, Sc. 1:125,000, Fig. 5, Sheet B - accomp. Bulletin No. 54.

*Map 103 C/16 E, Moore Channel, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	LJ	LJ					
Date	6-75	12-76					

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NAME OF PROPERTY

GARNET (AJAX)

DESCRIPTION OF DEPOSIT (continued)

the limestone, measuring 500 by 20 feet, gave average values of 48% iron, 2.1% copper, and 0.2 oz. of gold per ton. The pyrite, chalcopyrite, molybdenite and high-grade sphalerite areas are found adjacent to the San Christoval Batholith, between the northern nose of the limestone and the southern boundary of the Garnet No. 2 claim. These plutonic rocks have a variable fracture stockwork containing quartz veinlets with pyrite, chalcopyrite, and molybdenite. Pyrite and chalcopyrite may also be disseminated in the more massive deposits. One sphalerite-bearing vein in the limestone, 300 feet long by 5 feet wide, gave values of 12% zinc, 2.3% copper, 12% iron, 0.10% lead, and 2.6 ounces of silver per ton. Other showings are known which consist of rather random masses of sulphides replacing limestone.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

From February 1971 the claims were operated by Imperial Oil Enterprises Ltd. Development work by the company included topographical and geological mapping, a geochemical survey, an induced polarization survey, and 10 holes drilled totalling 2,132 feet. The option was dropped in 1972.

The Dowa Mining Co., Ltd. optioned the property in 1974. Three holes were diamond drilled a total of 706 feet on Garnet 1 and 2.