N.T.S. AREA 92 F/15 RÉGION DU S.N.R.C.

REF. CU 1 RÉF.

NAME OF PROPERTY MARBLE BAY NOM DE LA PROPRIÉTÉ **OBJECT LOCATED** OBJET LOCALISÉ Lat. 49°46! Long. 124°33* UNCERTAINTY FACTEUR D'INCERTITUDE Long. Mining Division Nanaimo District Division minière District County Township or Parish Comté Canton ou paroisse Lot Concession or Range Lot Concession ou rang Sec Tp. R. Sect.

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT The formation consists of chlorite schists, tuffs, lavas, and agglomerates overlain by limestone which varies from a massive thick bedded unaltered rock to a fine-grained marble. The bedded rocks are intruded by diorite and gabbro of the Coast Range batholith. This intrusion was followed by a series of basic dykes that are considered to be post-ore. The limestone strikes between north and northeast and dips steeply northwest. It is cut by many fractures and in places is brecciated. The orebodies, which are of the contact-metamorphic replacement type, usually occur in association with these fracture zones. The ore occurs in shoots in a zone of brecciation in the limestone. The borders of the shoots are broadly irregular. Generally one side of the replaced areas is rich in copper minerals, ending somewhat abruptly against crystalline limestone, and the other is comparatively lean, the payminerals fading away gradually in garnet-epidote gangue. The ore consists of intimately associated bornite and chalcopyrite, often in nearly equal quantities, which are found in a gangue made up chiefly of lime-iron garnet, epidote, tremolite, and calcite.

Associated minerals or products - Gold, silver. Minéraux ou produits associés

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

In 1897 an outcrop of copper and pyrite was found on a lot owned by Messrs. Palmer & Christie and located a quarter of a mile south of Sturt Bay and about the same distance west of the village of Vananda. The owners carried on development work until 1901 when the property was sold to a syndicate, represented by Messrs. Hewit & McIntyre, which later formed the Tacoma Steel Co. The mine operated continuously from 1897 until 1920.

The main shaft was sunk from the surface to the 10th level with stations about 100 feet apart. From a drift on the 10th level a shaft was sunk to the 13th level. The main shaft was then extended down to the 15th level. During 1919 a 45 degree inclined winze was sunk from the west drift on the 1,500 feet level for 365 feet. At 320 feet on the incline below the 1,500 foot level the 1,700 foot level was established. This level is 1,610 feet vertically below the surface outcropping at the main shaft and about 1,550 feet below sea level. During 1920 diamond drilling was done on and below the 1,700 foot level and some ore intersections were reported; the price of copper dropped during the year and the mine was closed.

In 1923 the Anaconda Copper Co. secured an option on the Marble Bay Mine from the Tacoma Steel Co. and on the adjoining Copper Queen, Cornell, Little Billy and Security groups from the Vananda Copper Mining Co., however, no work was done at this time.

Amalgamated Mines Ltd. were reported to have examined the property in 1928 but did not do any development work.

In 1929 Central Copper-Gold Mines Ltd. incorporated the Marble Bay Copper Mines Ltd. A small shipment of ore was made from the dump and a Radiore survey was done along the Marble Bay-Cornell ore zone.

In 1945 the Magnesium Development Co. Ltd. changed its name to the Marble Bay Mining Co. Ltd., took over the mine from L.A. Prosser and began a program of diamond drilling. The shaft was dewatered to 60 feet below the 6th level, diamond drilling from the 5th level and the surface totalled 8,000 feet. During 1946 the shaft was unwatered to the No. 7 level and 7,349 feet of diamond drilling was done from underground and 12,285 feet from the surface.

HISTORY OF PRODUCTION/HISTORIQUE DE LA PRODUCTION

From 1899 to 1929, 314,192 tons of ore were shipped from this property. From this ore 50,001 ounces of gold, 405,805 ounces of silver, and 14,969,202 pounds of copper were recovered.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 112 A, Vananda, Texada Island, B.C., (Geol.), Sc. 1:24,000 accomp. Mem. 58.

Map 196 A. Vancouver Sheet, B.C., (Geol.), Sc. 1":8 miles.

REMARKS/REMARQUES

1964

Comp./Rev. By Comp./rév. par

Date

REFERENCES/BIBLIOGRAPHIE

McConnell, R.G.; Texada Island, B.C.; Memoir 58, pp. 48-55, Geol. Surv. of Canada, 1914.

Annual Reports, Dept. of Mines, B.C.: 1898, pp. 1137, 1144; 1899, p. 804; 1900, p. 926; 1901, p. 1110; 1902, p. 235; 1903, p. 204; 1904, p. 246; 1905, p. 214; 1906, p. 202; 1907, p. 152; 1908, pp. 146, 152; 1909, p. 149; 1910, p. 166; 1911, pp. 195, 212; 1912, p. 197; 1913, p. 287; 1914, p. 379; 1916, pp. 351-353; 1917, p. 258; 1918, pp. 275-277; 1919, p. 219; 1920, p. 215; 1921, p. 222; 1922, p. 235; 1929, p. 393; 1945, p. 114; 1946, p. 177.

Mineral Policy Sector; Corporation Files: "Marble Bay Mine"; "Marble Bay Mining Co. Ltd.".

LeRoy, O.E.; Preliminary Report on a Portion of the Main Coast of British Columbia and Adjacent Islands; Publication No. 996, pp. 45-50, Geol. Surv. of Canada, 1908.

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