

PRODUCT

NICKEL

PROVINCE OR TERRITORY British Columbia

N.T.S. AREA 92 H/5,6

REF. Ni 1

NAME OF PROPERTY PRIDE OF EMORY

LOCATION Center of Pride of Emory No. 2 claim (Lot 794).

Radius of uncertainty - 100 metres. Lat. 49°28' Long. 121°31'35"

Mining Division New Westminster District Yale

County Township or Parish

Lot Concession or Range

Sec. Tp. R.

OWNER OR OPERATOR AND ADDRESS

~~Giant Mascot Mines Limited~~

1977 GM RESOURCES LIMITED

DESCRIPTION OF DEPOSIT

The Giant Mascot property is situated in an ultra-basic complex along the eastern edge of the Coast Range granodiorite batholith and belt of acid intrusives, which collectively intrude northerly trending, metamorphosed Paleozoic sediments. Regional northwesterly and northeasterly striking fault systems have been mapped throughout the general area. All rock types, except granodiorite, and structural features have been recognized in the underground workings.

The ultrabasic rocks vary from a dark green, almost black peridotite to pyroxenites which range from a bronzitic, brownish-green medium grained rock through to a hornblendic greenish-black medium to coarse grained variety. Either the peridotite or pyroxenites may be ore hosts. Hornblendites, which to date have not hosted ore bodies, constitute the third main ultrabasic rock type, and occur as masses, or more commonly in dyke form, in which case they may cut all other ultrabasics and sulphide mineralization.

see Card 2 ...

Associated minerals or products of value - Copper, cobalt.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at the head of Stulkawhits Creek, miles northwest of Hope.

The discovery was made by trapper Carl Zofka who was attracted to the showings by the appearance from a distance of a reddish bluff. He staked the 8 claim Pride of Emory group August 1923. In October that same year the Star of Emory group (7 claims) was staked adjoining. In 1927 the property was reportedly held by the B.C. Nickel Company Limited but there is no record of this as a Canadian incorporation. The first exploration work reported was trenching in 1928.

B.C. Nickel Mines, Limited, was incorporated in February 1929 by the Sloan, Smith, Spencer interests, of Vancouver and New York, to acquire the 24 claim property. Exploration and development work by the company from 1929 until mid 1937 included magnetometer surveys, diamond drilling totalling about 130,000 feet, and underground work in two adits. The No. 1 adit, at the 3,550 foot elevation, was begun in 1933 and driven about 4,700 feet, extending through the mountain. The No. 2 adit, at elevation 3,275 feet, was driven 2,208 feet in 1934. Some 5,000 tons of ore were shipped to Japan during 1936-37.

Pacific Nickel Mines, Limited, was incorporated in February 1938 to acquire the assets of B.C. Nickel Mines, Limited, but the property remained inactive until 1951. The Pride of Emory 1-6 claims (Lots 793-797 and 1422) and a number of other claims were Crown-granted to the company (Pacific Nickel) in 1940. Geophysical surveys were carried out by Newmont Mining Corporation of Canada Limited in 1951 with favourable results. This led to an agreement between Newmont and Pacific Nickel for the formation of a new company, Western Nickel Limited, in November 1952. Exploration and development work between 1952 and November 1954, under Newmont management, included driving a new adit at the 2,600 foot elevation for some 6,000 feet, raising, and further surface and underground diamond drilling; results were disappointing. The property lay idle from November 1954 until April 1957 when The Granby Consolidated Mining, Smelting and Power Company, Limited, agreed on a contract with Western Nickel to manage further development work and bring the mine to production. A reconditioned mill of about 500 tons per day capacity was put into operation in January 1958 but closed in July of that same year due to sales contract problems.

see Card 2

HISTORY OF PRODUCTION

From 1936-1971, inclusive, 3,862,670 tons of ore were milled at, or shipped from, this property. From this ore 33 ounces of gold, 531 ounces of silver, 23,501,085 pounds of copper, 50,404,189 pounds of nickel, and 113,545 pounds of bauxite were recovered.

MAP REFERENCES

Map 12-1969, Hope, (Geol.), Sc. 1:250,000 - accomp. Paper 69-47.

Map 737 A, Hope, (Geol.), Sc. 1":4 miles.

Fig. 1, Claims in Vicinity of B.C. Nickel Mines Ltd., (Geol.), Sc. 1":880 ft. (approx.) - accomp. Memoir 190.

Map 92 H/5 E, Harrison Lake, (Topo.), Sc. 1:50,000.

Map 92 H/6 W, Hope, (Topo.), Sc. 1:50,000.

REMARKS

REFERENCES

Clarke, Walter E.; Giant Mascot Mines Limited, Geology; Western Miner, Vol. 44, September 1971, pp. 23-61.

Aho, Aaro E.; Geology and Genesis of Ultrabasic Nickel-Copper-Pyrrhotite Deposits at the Pacific Nickel Property, Southwestern British Columbia; Economic Geology, Vol. 51, 1956, pp. 448-481.

Monger, J.W.H.; Hope Map-Area, West Half, British Columbia; Paper 69-47, p. 63, Geol. Surv. of Canada.

Eastwood, G.E.P., and Robinson, W.C.; Pride of Emory; Report of Minister of Mines, British Columbia, 1965, pp. 213-217.

Hill, H.L., & Starck, L.P.; The Giant Nickel Mine; Western Miner & Oil Review, Vol. 33, November 1960, pp. 39-42.

Horwood, H.C.; Geology & Mineral Deposits at the Mine of B.C. Nickel Mines Ltd., Yale District, B.C.; Memoir 190, Geol. Surv. of Canada, 1936.

Reports of Minister of Mines, British Columbia: 1924, p. 137; 1928, p. 227; 1929, p. 239; 1930, p. 204; 1934, pp. F-17-19; 1935, p. F-58; 1936, p. F-64; 1937, p. F-37; 1952, p. 208; 1953, p. 158; 1954, pp. 160-163; 1957, p. 66; 1958, p. 55; 1959, pp. 124-127; 1960, p. 87; 1961, pp. 86-88; 1962, p. 91; 1963, p. 89; 1964, pp. 137-142; 1966, p. 58; 1967, p. 63; 1968, p. 76.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 196; 1970, p. 248; 1971, p. 267.

Mineral Resources Branch; Corporation Files: "B.C. Nickel Mines, Limited"; "Pacific Nickel Mines, Limited"; "Western Nickel Limited"; "Giant Mascot Mines Limited"; "Newmont Mining Corporation of Canada Limited"; "Granby Mining Company Limited".

Cairnes, C.E.; Nickeliferous Mineral Deposits, Emory Creek, Yale Mining Division, B.C.; Summary Report 1924, Pt. A, pp. 100-105, Geol. Surv. of Canada.

Cockfield, W.E., & Walker, J.F.; The Nickel-Bearing Rocks near Choate, B.C.; Summary Report 1933, Pt. A, pp. 62-68, Geol. Surv. of Canada.

Mines Branch, Ottawa; Investigations in Ore Dressing and Metallurgy; 1935, Rept. 763, p. 230; 1936 (July to Dec.), pp. 43-82 (No. 688).

see reverse Card 2 ...

BCI 92 H/SW-4

NAME OF PROPERTY

PRIDE OF EMORY

DESCRIPTION OF DEPOSIT (continued)

Faulting is widespread throughout the underground workings and may be grouped into three broad categories. The first group strikes N45-50°W with dips 50-75° northeast. The second strikes from N25°W to N25°E with steep dips to the east or west. At least five north-westerly trending fault zones have been traced over strike lengths up to 2,000 feet and all are associated with important mineralization or actual orebodies. The relationships of intersecting fault systems with known ore bodies and mineralized zones presents interesting implications.

Some seventeen orebodies have been outlined in an area of about $\frac{1}{2}$ square miles underlain by ultramafic rock (peridotite, pyroxenite and hornblendite), norite, diorite and relic metasedimentary and metavolcanic rocks. The orebodies are pipe-like in form with steeply dipping long axes and occur in ultramafic rock close to contacts with the diorite. Mineralization consists mainly of nickeliferous pyrrhotite, chalcopyrite and pentlandite that forms disseminated grains, lenses, blocks, intergranular laceworks, veins and veinlets.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

Giant Mascot Mines, Limited, acquired Newmont's interest in Western Nickel Limited and the latter was dissolved in 1959. Giant Mascot (51%) and Pacific Nickel (49%) incorporated a new operating company, Giant Nickel Mines Limited, in May 1959. Production was resumed in July 1959 and by 1963 mill capacity had been expanded to 1,500 tons per day. Concentrates were shipped to Sumitomo Shoji Kaisha Ltd. of Japan. Reserves at the start of production were in the order of 1,300,000 tons averaging 1.39% nickel and 0.5% copper.

In 1961 Pacific Nickel sold its 49% share in Giant Nickel Mines Limited to Giant Mascot. Giant Nickel Mines Limited was dissolved in 1963. Giant Mascot was converted to a Limited company in 1968 under the name Giant Mascot Mines Limited. The mill was destroyed by fire in August 1970 and a new 1,500 ton per day mill was put into operation in May 1971. Reserves as of October 1, 1972, were reported at 1,706,495 tons averaging 0.68% nickel and 0.36% copper.

REFERENCES (continued)

Aho, A.E.; Pacific Nickel Property; Structural Geology of Canadian Ore Deposits, Vol. 2, pp. 27-36, Canadian Institute of Mining & Metallurgy, 1957.