

NAME OF PROPERTY	CRAIGMONT
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LOCATION - Center of open pit.

Radius of uncertainty - 50 metres. Lat. 50°12'35" Long. 120°55'25"

Mining Division **Nicola** District **Kamloops.**

County \_\_\_\_\_ Township or Parish \_\_\_\_\_

Lot \_\_\_\_\_ Concession or Range \_\_\_\_\_

Sec. \_\_\_\_\_ Tp. \_\_\_\_\_ R. \_\_\_\_\_

OWNER OR OPERATOR AND ADDRESS

Craigmont Mines Limited.

DESCRIPTION OF DEPOSIT

The deposit occurs in Upper Triassic Nicola Group rocks at the south end of the Jurassic Guichon Creek batholith. A capping of Kingsvale Group volcanics covers the contact and much of the Nicola rocks for a mile to the west of the mine. The Nicola Group rocks comprise andesitic flows, tuffs, limestone, and greywacke. The orebodies replace the dragfolded impure limestone of the Nicola rocks, which strike approximately east and are penetrated by off-shoots of the batholith. The limestone horizon has been explored for 3,600 feet along strike with mineable mineralization encountered for 2,800 feet of the length, and for 1,800 feet of vertical extent. Two major orebodies have been discovered, one in each of the major folds. Ore widths range up to 220 feet in the upper orebody and 300 feet in the lower orebody. An iron-rich skarn which contains much of the ore becomes increasingly richer in magnetite towards the eastern end closest to the batholith and richer in hematite towards the western end. Chalcopyrite is the principal ore mineral and occurs as veins, streaks, patches, and coarse disseminations. Bornite is in small amount and pyrite occurs

Associated minerals or products of value - Iron.

P.t.O. ....

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located between elevations of 3,000 and 4,200 feet on Birkett Creek, 8 miles northwest of Merritt.

Although the general area has been prospected intermittently since the turn of the century, the early history of this property is vague. Showings located about 1 mile northwest of the open pit area were discovered and staked in about 1953 by Messrs. Calder, Payie, and Stinson as the Paystin 1-6 claims. These were apparently new discoveries on ground known earlier as the Titan Queen property but details are lacking.

Craigmont Mines Limited in August 1954 acquired the Paystin 1-6 and Merchant 1-8 claims and in subsequent years expanded the property to some 150 claims and several mineral leases. A soil geochemical survey and a reconnaissance magnetometer survey over the known showings and adjacent areas during 1956 revealed several anomalies. Diamond drilling, 7 holes totalling 3,500 feet, during 1957 on a coincident geophysical-geochemical anomaly intersected the Craigmont orebody, which underlies the Merrell 7 and 8 and McLeod 5 and 6 claims.

Canadian Exploration, Limited, optioned the property in November 1957 and took in as partners in the exploration and development program Noranda Exploration Company, Limited, and Peerless Oil & Gas Company; the three formed a private operating company, Birkett Creek Mine Operators Ltd., in July 1958. By November 1959 the exploration and development work totalled 8,000 feet of drifting and cross-cutting in 2 adits (3,000 and 3,500 levels), and 50,000 feet of diamond drilling on surface and underground. Ore reserves were estimated at 22,575,000 tons averaging 2.08% copper and 19.6% iron. The construction of a mill and preparation for open pit mining began in 1960. By a reorganization in January 1961 operating control of the property was transferred to Craigmont Mines Limited. The 4,000 tons per day mill was put into operation in August 1961. Production during the early years was mainly from the open pit but included small tonnages from underground development and from experimentation with cut-and-fill and sublevel caving methods. The iron content of the ore was impounded with the tailings. Early in 1967 mining in the open pit ceased and the changeover to underground mining was completed. A magnetite recovery circuit was put into operation in 1970 and enlarged late in 1972 to an annual capacity of 50,000 tons.

Reserves as of October 31, 1972, were 10,250,000 tons averaging 1.77% copper.

P.t.O. ....  
Mineral Resources Branch, Department of Energy, Mines and Resources, Ottawa.

## HISTORY OF PRODUCTION

From the start of production in 1961 to the end of 1971, 7,811,300 tons of ore were milled. From this ore 753 ounces of gold, 7,797 ounces of silver, 467,651,631 pounds of copper, and 41,375 tons of iron concentrate were recovered (iron recovery began in 1970). (B.C. Dept. of Mines data).

Production for the period 1972 to 1981 inclusive totals 8,957,308 tons milled. From this ore 417,261,692 pounds of copper and 521,867 tons of magnetite concentrate were recovered (Craigmont Mines Limited data).

## MAP REFERENCES

Geology of the Promontory Hills Area, Sc. 1": $\frac{1}{2}$  mile, Fig. 3, accomp. Report by Carr, 1960.

Geology of the Guichon Creek Batholith, Sc. 1":2 miles - accomp. Bull. 56, B.C. Dept. of Mines.

Map 886 A, Nicola, (Geol.), Sc. 1":4 miles - accomp. Memoir 249, Geol. Surv. of Canada.

Map 5209 G, Merritt, (Aeromag.), Sc. 1":1 mile (1968).

Map 92 I/2, Merritt, (Topo.), Sc. 1:50,000.

## DESCRIPTION OF DEPOSIT (continued)

Locally as disseminations in the leaner parts of the ore zone and in the wallrocks. The ore carries almost no gold or silver.

DMacR

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## REFERENCES

Carr, J.M.; Geology of the Promontory Hills; Report of Minister of Mines, British Columbia, 1960, pp. 26-40.

Rennie, C.C., Pentland, W.S., and Sheng, C.C.; Geology of the Craigmont Mine; Canadian Institute of Mining and Metallurgy, Transactions, Vol. 64, 1961, pp. 199-203. (Also in Western Miner, Vol. 35, February 1962, pp. 50-52).

Carr, J.M.; Craigmont; Report of Minister of Mines, British Columbia, 1961, pp. 31-37.

Stephens, Fred H.; The Craigmont Mine; Western Miner & Oil Review, Vol. 33, December 1960, pp. 28-50.

Carr, J.M.; Craigmont; Tectonic History and Mineral Deposits of the Western Cordillera, The Canadian Institute of Mining and Metallurgy, Special Volume No. 8, pp. 323-326, 1966.

Reports of Minister of Mines, British Columbia: 1957, p. 28; 1958, p. 25; 1959, p. 31; 1962, p. 53; 1963, p. 49; 1964, p. 92; 1965, p. 153; 1966, p. 166; 1967, p. 163; 1968, p. 197.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 271; 1970, p. 373; 1971, p. 292; 1972, p. 176; 1973, p. 165; 1974, pp. 127-130.

Mineral Policy Sector; Corporation Files: "Craigmont Mines Limited"; "Birkett Creek Mine Operators Ltd."; "Canex Placer Limited"; "Naranda Mines Limited"; "Placer Development Limited".

Hallbaur, R.E.; Open-Pit Mining at Craigmont; Western Miner and Oil Review, Vol. 35, January 1962, pp. 26-31.

## HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

A stockpile of some 5,000,000 tons of copper ore, from open pit mining in excess of mill feed requirements, was milled along with underground ore during the 1970's. By early 1981 the available ore from underground was below mill capacity and simultaneous milling of an iron stockpile of approximately 1,000,000 tons began. Underground reserves were exhausted and the last ore mined on February 16, 1982. The milling of copper ore ended in March 1982, and of iron stockpile on December 2, 1982. About 600,000 tonnes of media grade iron concentrate remained unsold when milling was completed.