PRODUCT	COPPER	PROVINCE OR TERRITORY	British Columbia	N.T.S. AREA	93 E/11	REF. CU 2

NAME OF PROPERTY HUCKLEBERRY (LEN)

OBJECT LOCATED - Drilled area.

UNCERTAINTY IN METRES 300. Lat. 53°40'50" Long. 127°10'20"

Mining Division Omineca District Coast, Range 4

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR

Kennco Explorations, (Western) Limited.

DESCRIPTION OF DEPOSIT

The Huckleberry deposit consists of chalcopyrite and minor molybdenite deposited mainly in fractures in hornfelsed Hazelton volcanic rocks adjacent to a granodiorite stock. The stock is surrounded by a series of alteration haloes - a potassic one 60 to 300 m outside the stock; a pyrite halo at least 190 m wide and extending about 3,050 m eastward; and a chlorite halo at varying distances outside the pyrite halo. The Mid Jurassic pyroclastic rocks near the stock consist principally of clasts of plagioclase, quartz and biotite, with magnetite, set in a very fine grained matrix of the same composition. Near the stock these rocks show no recognizable structural features other than fracturing. Farther away, but within the claim group, are three areas of Hazelton sedimentary rocks which strike easterly and dip moderately southward.

The Huckleberry pluton is composed of a grey to slightly pinkish, buff-weathering porphyritic granodiorite characterized by abundant white oligoclase phenocrysts. The stock is approxi-

see Card 2 ....

Associated minerals or products - Molybdenum.

HISTORY OF EXPLORATION AND DEVELOPMENT

Huckleberry Mountain is located approximately 5 miles east of Tahtsa Lake, some 50 miles south-southwest of Houston. The mineralized zone is located at the 3,500 foot elevation in the vicinity of several small lakes at the southwesterly base of the mountain.

The deposit was discovered by Kennco Explorations, (Western) Limited during the course of reconnaissance geochemical stream silt sampling. Two streams flowing into Tahtsa Reach proved to be anomalous and prospecting these streams led to the discovery of copper mineralization. The showings were staked as the Len group of 44 claims in 1962. Exploration work during 1963 and 1964 included trenching, and 5,600 feet of diamond drilling in 14 holes. Additional staking subsequently expanded the property to 83 claims. Further exploration work through 1970 included geological mapping, induced polarization and magnetometer surveys, geochemical soil and silt surveys, trenching, and 4,557 feet of diamond drilling in 9 holes. During 1971 a geochemical soil survey was carried out over Len 5 and 6 claims, and diamond drilling totalling 2,854 feet in 5 holes was done on Len 6, 19 and 20.

The Granby Mining Company Limited in 1972 obtained an option on the property from Kennco until 1989. Eighteen holes totalling 9,282 feet were drilled in 1972 and a further 47 holes totalling 43,824 feet were drilled in 1973. Upon completion of the drilling program in December 1973 a preliminary feasibility study was undertaken.

"Based solely on drilling, the geologic reserve to elevation 817 m, a depth of 220 m, is estimated to be 87 million tonnes of 0.408 per cent copper and 0.025 per cent molybdenite, based on a cutoff grade of 0.30 per cent copper. The mineable reserve is currently estimated at 77.7 million tonnes of 0.401 per cent copper and 0.025 per cent molybdenite at a waste: ore ratio of 1.17:1, based on a cutoff grade declining with time to 0.25 per cent copper" (CIM Spec Vol 15, p. 284).

The company name, The Granby Mining Company Limited, was changed in 1975 to Granby Mining Corporation. The company was amalgamated with Granisle Copper Limited and Zapata Canada Limited on January 1, 1979 under the name Zapata Granby Corporation. Noranda Mines Limited purchased the assets of Zapata Granby on November 30, 1979.

Mineral Policy Sector, Department of Energy, Mines and Resources, Ottawa
503290

HISTORY OF PRODUCTION

MAP REFERENCES

Map 1064 A, Whitesail Lake, (Geol.), Sc. 1":4 miles - accomp. Memoir 299, Geol. Surv. of Canada.

#Huckleberry Prospect, geology and drill plan, Sc. 1": 875 ft. (approx.), Fig. 1, CIM Spec Vol 15, p. 285.

Geology of part of the Len claims, Sc. 1":800 ft., Fig. 9, Geology, Exploration, and Mining, 1970, p. 105, British Columbia Dept. of Mines.

*Map 93 E/11, Troitsa Lake, (Topo.), Sc. 1:50,000.

General Geology West-Central British Columbia, Sc. 1": 5 miles, Fig. 8, Bulletin 64.

Porphyry Deposits, Sc.1":15 miles, Fig. 4, Bulletin 64.

REMARKS

Comp./Rev. By	DMacR	DMacR					
Date	12-78	12-83					

REFERENCES

+James, Donald H.; Huckleberry; Porphyry Deposits of the Canadian Cordillera, The Canadian Institute of Mining and Metallurgy, Special Volume 15, pp. 284-288, 1976.

Hornbrook, E.H.W.; Biogeochemical Prospecting for Copper in West-Central British Columbia; Paper 69-49, Geol. Surv. of Canada, 1970.

Reports of Minister of Mines, British Columbia: 1963, p. 28; 1964, pp. 53-55.

Mineral Policy Sector; Corporation Files: "Granby Mining Corporation".

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1970, pp. 104-107 ++ ; 1971, p. 145; 1972, p. 341; 1973, p. 319; 1974, p. 243.

Carter, N.C.; Porphyry Copper and Molybdenum deposits, West-Central British Columbia; Bulletin 64, p. 119, B.C. Dept. of Mines, 1981.

BCI 93 E - 37, 38, 39

NAME OF PROPERTY HUCKLEBERRY (LEN)

DESCRIPTION OF DEPOSIT (continued)

mately 370 m wide and 760 m long, elongated to the northeast. Preliminary drilling at approximately 300-m intervals indicates that the border of the stock is very steep, even dipping slightly inward in places, except at the northeast end. Here more detailed drilling shows the dip to be 70 degrees, flattening to 60 degrees at depth. A few short intersections of granodiorite porphyry indicate that there are dykes or apophyses from the stock in this area. It is likely that these features are related to the wider and higher grade zone of mineralization adjacent to this part of the stock.

Mineralization is primarily controlled by the pluton, but the zone of significant metal content varies greatly in width and in its relationship to the contact. Better-grade copper is in some places immediately adjacent to the stock contact and in other places some distance away.

Minerals of economic value are chalcopyrite and, to a much lesser extent, molybdenite. Small amounts of bornite have been noted. The precious metal content is very small; recoverable grade from analyses of a few laboratory concentrate samples is about 0.025 ppm gold and 0.93 ppm silver.

Chalcopyrite occurs mostly in very narrow to hairline fractures, distributed as patches and blebs, and is occasionally disseminated in rock adjacent to fractures. The associated mineral in the fractures is mostly quartz, with some pyrite, magnetite, orthoclase, carbonate, chlorite and sericite. Molybdenite appears to be somewhat later chalcopyrite. It is occasionally found in the same veinlets as chalcopyrite, but most frequently in veinlets accompanied chiefly by quartz.