

NAME OF PROPERTY GALORE CREEK-BUTTE ZONE

OBJECT LOCATED - mineralized zone.

UNCERTAINTY IN METRES 200. Lat. 57°07'43" Long. 131°29'30"

Mining Division Liard District Cassiar

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR AND ADDRESS

Stikine Copper Limited.

DESCRIPTION OF DEPOSIT

The Galore Creek deposits occur in highly fractured zones within and adjacent to a complex syenite body that cuts Upper Triassic sedimentary and volcanic rocks. The syenite and the surrounding rocks are intensely altered. The original mafic constituents and feldspars are replaced by hydrothermal biotite, potash feldspar and epidote with minor gypsum and anhydrite, garnet, chlorite and carbonate.

According to Barr (1965), "The copper deposits at Galore Creek share many of the characteristic features common to both the porphyry copper type of mineralization and that of pyrometasomatic deposits. Features common to porphyry copper deposits include the disseminated character of much of the mineralization, and its relationship to hydrothermal biotite and potash feldspar alteration in shattered and brecciated areas. The prevailing linearity, in plan, of the deposits and their proximity to contacts of porphyritic masses with attendant skarn mineral assemblages are features indicative of a pyrometasomatic origin. The relationships of the deposits to intrusive contacts, and

see Card 2

Associated minerals or products of value

HISTORY OF EXPLORATION AND DEVELOPMENT

The Butte mineralized zone is located between elevations of 3,800 and 4,200 feet at the head of the south fork of Dendritic Creek about 1¼ miles west of the south segment of the Central Zone. For the history of the Galore Creek property see Ref. CU 1.

120543

HISTORY OF PRODUCTION

REFERENCES

- Barr, D.A.; The Galore Creek Copper Deposits; The Canadian Mining and Metallurgical Bulletin, Vol. 59, No. 65, pp. 841-853, July 1966. +
- Jeffery, W.G.; Geology of Upper Galore Creek; Report of Minister of Mines, British Columbia, 1965, pp. 19-29. ++
- Souther, J.G.; Telegraph Creek Map-Area, British Columbia; Paper 71-44, p. 24, Geol. Surv. of Canada, 1972.

MAP REFERENCES

- Map 11-1971, Telegraph Creek, (Geol.), Sc. 1:250,000 - accomp. Paper 71-44, Geol. Surv. of Canada.
- #Geology of Upper Galore Creek, Sc. 1":4,000 ft., Fig. 2, Report of Minister of Mines, British Columbia, 1965.
- *Map 104 G/3, Sphaler Creek, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR						
Date	4-76						

PRODUCT

COPPER

PROVINCE OR
TERRITORY

British Columbia

N.T.S. AREA 104 G/3

Card 2 -
REF. CU 9

NAME OF PROPERTY

GALORE CREEK-BUTTE ZONE

DESCRIPTION OF DEPOSIT (continued)

zones of weakness indicate the importance of structural controls."

The Butte deposit outcrops on the west margin of the Complex, between elevations of 3,800 and 4,200 feet. The deposit appears to be localized by infolding of the altered Mesozoic rocks at the contact of porphyritic units of the Complex. A prominent westerly-dipping major fault structure bounds the western part of the deposit, and the northern portion of the deposit is in fault contact with poorly mineralized epidotized syenite porphyry. The principal alteration products are biotite and potash feldspar. Mineralization occurs principally in disseminated form, and includes bornite, chalcopyrite and chalcocite, with secondary cuprite, covellite and copper carbonates.

PRODUCT

COPPER

PROVINCE OR
TERRITORY

British Columbia

N.T.S. AREA 104 G/3

- Card 2 -
REF. CU 10

NAME OF PROPERTY

GALORE CREEK-SOUTHWEST ZONE

DESCRIPTION OF DEPOSIT (continued)

zones of weakness indicate the importance of structural controls."

The Southwest mineralized zone appears to be localized at the intersection of two fracture zones which have produced a local center of brecciation in epidotized syenite porphyry. Although erratic copper mineralization, in the form of oxide copper with sparse chalcopryrite, occurs in several outcrops in the vicinity of the Southwest deposit, the discovery drill holes were spotted entirely on the basis of geophysical recommendations. The main part of the zone strikes easterly to southeasterly and dips steeply to the south. Surface alteration patterns indicate a northwesterly-trending zone of pyritic mineralization flanked by hematitic alteration which extends to the northwest of the deposit. Potash feldspar, biotite and chlorite are the dominant alteration products. The mineralization in the deposit includes chalcopryrite with minor bornite, associated partly with pyrite and magnetite. Sulphides and magnetite occur as fracture fillings, coarse replacements and disseminations.