NAME OF PROPERTY

GALORE CREEK-SADDLE ZONE

OBJECT LOCATED - mineralized zone.

UNCERTAINTY IN METRES 200. Lat. 57°06'37" Long. 131°25'50"

Mining Division Liard

District

Cassiar

see Card 2 ....

County

**PRODUCT** 

Township or Parish

Lot

Concession or Range

Sec

Tp.

R.

## OWNER OR OPERATOR AND ADDRESS

Stikine Copper Limited.

## DESCRIPTION OF DEPOSIT

Upper Galore Creek lies some 5 or 6 miles east of the main mass of intrusive rocks that forms the core of the Coast Range Mountains. In this area sedimentary and volcanic rocks ranging in age from Permian to Upper Triassic are intruded by Mesozoic and possibly Tertiary stocks. Upper Triassic volcanic rocks underlie the greater part of the area. The most abundant are pyroclastic rocks, mainly breccias and agglomerates. These rocks are intruded by a complex syenite body that has been termed by Barr (1965) the Galore Creek Complex. The Complex comprises two syenite bodies together with the intervening metavolcanic rocks, two other masses of syenite (dark syenite porphyry and buckshot porphyry), and a prominent equigranular granitized unit (called Green syenite by Jeffery (1965) and Younger syenite by Barr (1965)).

The Younger syenite and the Buckshot porphyry occur on South 110 Creek at the southeast edge of the Galore Creek syenite complex. The Younger syenite, a fine- to medium-grained equigranular rock that is derived from the alteration of volcanic

Associated minerals or products of value

## HISTORY OF EXPLORATION AND DEVELOPMENT

The Saddle mineralized zone is located at elevations of 4,750 to 4,950 feet on the steep southwesterly slope of the ridge between the West Fork of Galore Creek and South 110 Creek, approximately  $1\frac{1}{2}$  miles southeast of the Central Zone. For the history of the Galore Creek property see Ref. CU 1.

120541

Mineral Development Sector, Department of Energy, Mines and Resources, Ottawa.

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

## REFERENCES

Jeffery, W.G.; Geology of Upper Galore Creek; Report of Minister of Mines, British Columbia, 1965, pp. 19-29. +

Barr, D.A.; The Galore Creek Copper Deposits; The Canadian Mining and Metallurgical Bulletin, Vol. 59, No. 65, pp. 841-853, July 1966.

BCI - 104 G - 16.

N.T.S. AREA

Card 2 -REF. CU 13

NAME OF PROPERTY

GALORE CREEK-SADDLE ZONE

DESCRIPTION OF DEPOSIT (continued)

rocks, occurs over an area of approximately  $1\frac{1}{4}$  by  $\frac{3}{4}$  miles. The Buckshot porphyry is a fine- to medium-grained purple to green syenite, spotted with small feldspar phenocrysts. The contact with the surrounding volcanic rocks is sharp, but the relationship with the Younger (Green) syenite is not clear due to the sheared and brecciated contact that contains magnetite and chalcopyrite.

The Saddle mineralized zone is localized at the contact between the Younger syenite and the small stock of Buckshot porphyry. Observations indicate that the most strongly mineralized portion of the deposit trends easterly, with a 50°N dip, coinciding with the strike trends of fracturing and a local deviation in the trend of the Buckshot porphyry contact. Much of the surficial portion of the deposit comprises a brecciawhich is composed of angular fragments of both Buckshot porphyry and Younger syenite, cemented together by magnetite. Drill-hole information indicates that copper mineralization is not restricted to the magnetite-cemented breccia, as weakly altered and highly fractured phases low in magnetite contain secondary copper oxides including cuprite, tenorite, malachite and possibly chrysocolla with associated chalcopyrite.

104 G/3