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**NORTH FORKS PROJECT**  
**JOINT VENTURE PROPOSAL**



*Note change in  
expenditure and  
earned interest  
since the proposal  
was written in  
March  
June 10/85 T.B.*

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**CORPORATION FALCONBRIDGE COPPER**

**MARCH, 1985**

NORTH FORKS PROJECT  
JOINT VENTURE PROPOSAL

SUMMARY

Corporation Falconbridge Copper (CFC) is proposing to joint venture its NORTH FORKS Project in the Harrison Lake area east of Vancouver, British Columbia.

CFC is a successful, growth oriented company that produces Au, Cu, Zn, and Ag from its two operating divisions located at Noranda and Chapais, Quebec. Exploration is central to the Corporation's long term plans and recent programs have led to exciting new developments:

Lac Shortt Au deposit: discovered 1980, commercial production began in late 1984.

Ansil: discovered 1981; high grade Cu, Au, Zn deposit; shaft sinking in progress.

Winston: discovered 1982; high grade Zn, Ag, Cu, Au deposit: shaft completed in early 1985; underground delineation and development in progress.

Callahan: discovered 1981; Val d'Or area Au deposit; shaft sinking in progress.

Mobrun: discovered 1984; massive sulphide Au, Zn, Cu deposit; pre production engineering in progress.

The above exploration successes commit CFC to heavy developmental expenditures over the next several years, thereby restricting internal funds available to exploration in Western Canada. However, programs in British Columbia are of superior technical merit and warrant a sustained level of exploration expenditure. Therefore, the decision has been taken to seek joint

venture partners to provide exploration funds in exchange for an interest in the project.

The NORTH FORKS project is designed to find precious and base metal bearing volcanogenic massive sulphide deposits. The project contains an impressive massive sulphide showing, is located in a geological environment with known potential for massive sulphides and is within 100 km of the coast.

A joint venture with CFC offers the further significant advantage to the partner of participation with an experienced exploration team with a proven track record for economic discoveries and with operating experience and expertise to follow through to production.

CFC is prepared to be flexible on joint venture terms, but generally anticipates a partner willing to provide \$150,000 to be spent on project exploration in the next year. CFC would act as operator and would seek to retain a controlling interest in the project, but the incoming partner would have the opportunity of input to the exploration program and budget reflective of its interest.

## INTRODUCTION

The NORTH FORKS PROJECT is located on the north fork of Cogburn Creek, which drains westward into Harrison Lake, 100 km ENE of Vancouver. The massive sulphide showing was discovered during logging road construction and grades 3.19% Cu, 1.21% Zn, 33.5 g/T, 0.17g/T over 3 metres. The NORTH FORKS PROJECT consists of 2 claims (21 units) optioned from private individuals and 3 claims (21 units) staked by CFC and occurs in volcanic and sedimentary rocks of Palaeozoic age.

## GEOLOGY

The showing consists of 4 massive sulphide bands, from less than 30cm to 1.2m in thickness with accompanying stringer mineralization. The lower bands are pyrite rich with minor chalcopyrite and sphalerite and are locally bedded. The upper bands tend to be pyrrhotite rich. Host rocks are basaltic flows and tuffs with interbedded cherts and sediments. Alteration in the form of chlorite and biotite is restricted to the immediate (15-20m) footwall with epidote-quartz alteration more widespread in both the footwall and hangingwall.

## 1983 PROGRAMME

The following work was carried out during 1983:

- |              |  |
|--------------|--|
| Geology      | - detailed mapping around the massive sulphide showing, compiled at 1:5000 and relogging of 4 drill holes. |
|              | - regional mapping to define stratigraphy and to tie in areas to the south, compiled at 1:20,000.          |
| Geochemistry | - detailed bedrock samplign around the sulphide zone.  |
|              | - reconnaissance sampling elsewhere.   |

## RESULTS

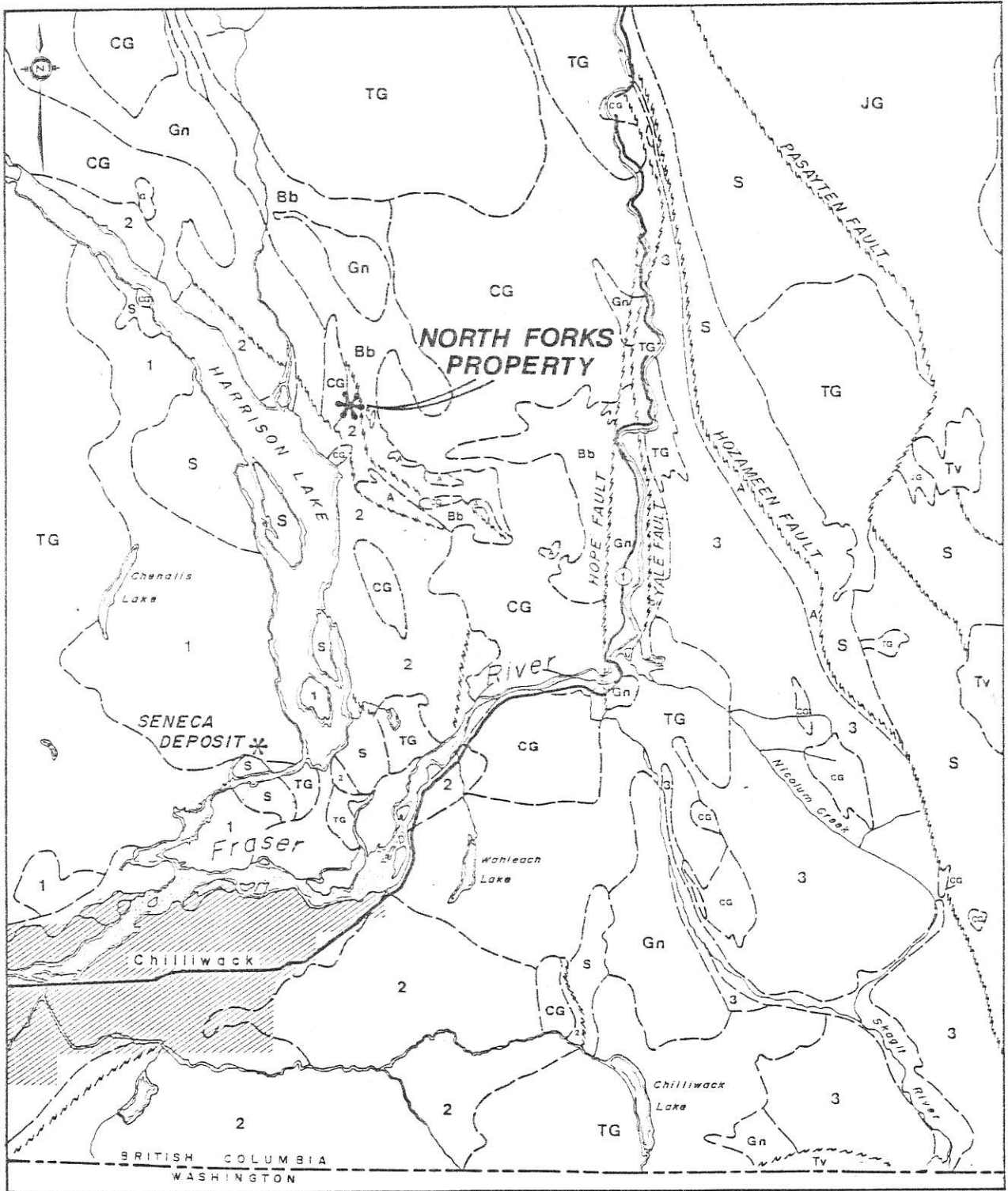
Four holes were drilled to test the showing in 1982 of which 3 undershot the target and intersected stringer sulphides. The fourth intersected the massive sulphides and the intersection graded 2.04% Cu, 0.98% Zn, and 9.2 g/T Ag. The 1983 programme indicated that the target is a steeply plunging (80-85°) rod of massive sulphides (based on alteration patterns, mapping, and observed 20:1 stretching ratios).

The 1985 program is designed to test the massive sulphides down plunge to a depth of approximately 300 metres. Three to four holes will be drilled and followed by downhole Pulse EM. Indications of continuity and a thickening or an increase in grade would obviously necessitate further testing.

These rod-like massive sulphide bodies typically have significant down-plunge extent and the target could have significant tonnage potential.

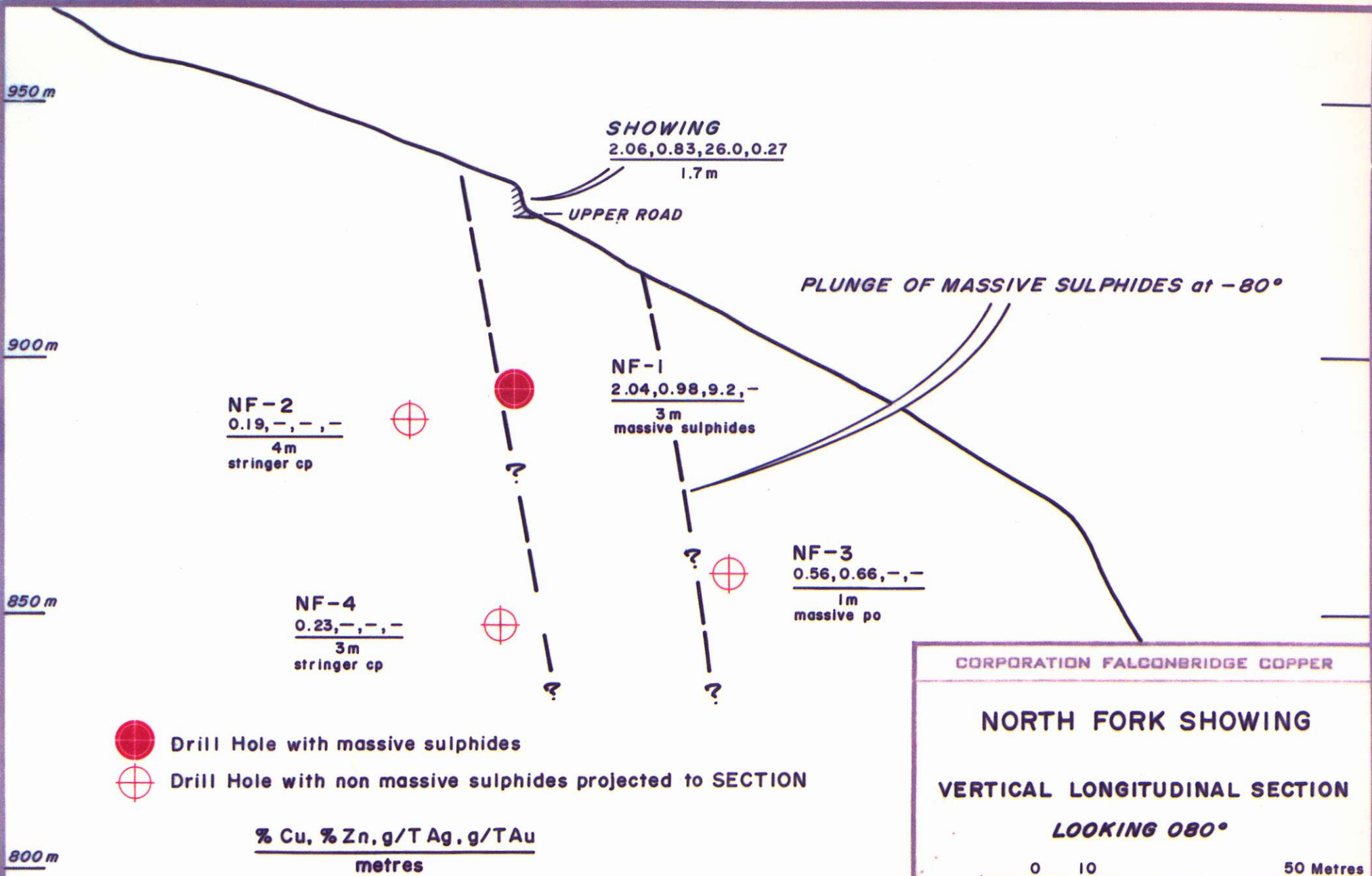
## PROPOSED JOINT VENTURE TERMS

1. The incoming partner would earn a 40% interest in the NORTH FORKS PROJECT by providing \$150,000 to be spent by CFC on exploration of the NORTH FORKS PROJECT in 1985.
2. All further expenditures would be prorata or the party would be diluted proportionately.
3. All other standard joint venture clauses would apply.



- LEGEND -

- |           |                         |           |                         |
|-----------|-------------------------|-----------|-------------------------|
| <b>1</b>  | HARRISON LAKE FORMATION | <b>Gn</b> | Gneiss                  |
| <b>2</b>  | CHILLIWACK GROUP        | <b>S</b>  | Sediment (various ages) |
| <b>3</b>  | HOZAMEEN FORMATION      | <b>Tv</b> | Tertiary volcanics      |
| <b>TG</b> | Tertiary plutons        | <b>A</b>  | Ultramafic              |
| <b>CG</b> | Cretaceous plutons      | <b>Bb</b> | Schist, amphibolite     |
| <b>JG</b> | Jurassic plutons        |           |                         |



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**NORTH FORK SHOWING**

**VERTICAL LONGITUDINAL SECTION**

**LOOKING 080°**

0 10 50 Metres

SCALE 1:1000

	DRAWN BY: /dg	FIG. NO.:
	DATE: DEC. 1983	N.T.S. 92 H/12