

# CORPORATION FALCONBRIDGE COPPER

MEMORANDUM

DATE: March 3, 1983  
TO: D. H. Watkins  
COPIES TO: I. D. Pirie, M. J. Knuckey  
FROM: Alex J. Davidson  
SUBJECT: NORTH FORK PROPERTY, HARRISON LAKE NTS 92H/12

826666

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## LOCATION & ACCESS

The North Fork property is located on the east side of Harrison Lake approximately 30 km north of Harrison Hot Springs. The showing is located at 930 m elevation on the north side of Cogburn Creek. The property is accessible by 4 wheel drive vehicles from May to November.

## PROPERTY

The property consists of two claims (20 units). North Fork 1 and North Fork 2. The claims are in good standing until mid 1984 and are owned by D. McCallum, H. Nickel and D. Crowhurst of Agassiz, B. C.

## HISTORY

The Cogburn Creek showings were found while constructing a new logging road in 1981. Surface sampling by the owners returned 3.28% Cu, 1.27% Zn, 1.28 oz/T Ag and 0.006 oz/T Au.

The property was optioned by Silver Standard Mines Ltd. in July 1981. Silver Standard carried out very limited programs of soil geochemistry (Cu, Zn) self-potential and MaxMin II surveys. Although a strong anomaly was detected over at least 100 m strike Silver Standard dropped the option in December 1981 without drilling the property.

Orbex Minerals Ltd. optioned the property in June 1982 and carried out limited geological mapping and drilled 4 holes for a total of 376.5 m. Two of the holes intersected massive sulphides and two intersected only stringer and disseminated sulphides.

Best intersections were:

DDH 1	Massive Sulphides (pyrite)	2.04% Cu, 0.98% Zn, 9.2g/T Ag/3m
DDH 2	Stringer Sulphide	0.19%Cu/4m
DDH 3	Massive Sulphide(pyrrhotite)	0.56% Cu, .66% Zn/lm
DDH 4	Stringer Sulphides	0.23% Cu/3m

#### GEOLOGY

The claims are located in a north pinching tongue of volcanics and sediments of the Chilliwack Group (similar age to Sicker Group on Vancouver Island). This tongue is bounded by Upper Cretaceous quartz diorites on both sides. The host rocks to the sulphides were logged and mapped by Orbex as a series of quartz-hornblende and biotite schists. I. D. Pirie and I relogged two of the holes in full (appended) and logged only the intersections in two others. The host rocks are dominantly epidotized and chloritized mafic tuffs, flows and breccias with short sections of extremely cherty rhyolite tuffs. Although there is no significant change in rock type from footwall to hangingwall the footwall is definitely much more chloritized and sheared. Although the sulphides when massive are pyritic and show fair banding some remobilization and recrystallization has occurred. A series of core samples has been sent out for geochemical analysis.

CONCLUSIONS AND RECOMMENDATIONS

Although only two of the four holes intersected massive sulphides the geophysics indicates a possible plunge to the south which would explain the miss in one of the holes. No mapping has been done and no grid exists.

Dale McCallum, the owner, indicated that he would like about \$5,000 down in any option type agreement but would be willing to consider selling the claims outright.

I told McCallum that we would not be able to make an offer on the property until we could visit the property itself (mid-April depending on snow). He was agreeable to this. Depending on the results of that visit we should be prepared to make an offer to option or purchase these claims. An outright purchase may be preferable in this case as only two claims (albeit 20 units) are involved. The ground around these claims is unstaked at present.



Alex J. Davidson

AJD/ik

North Fork 1

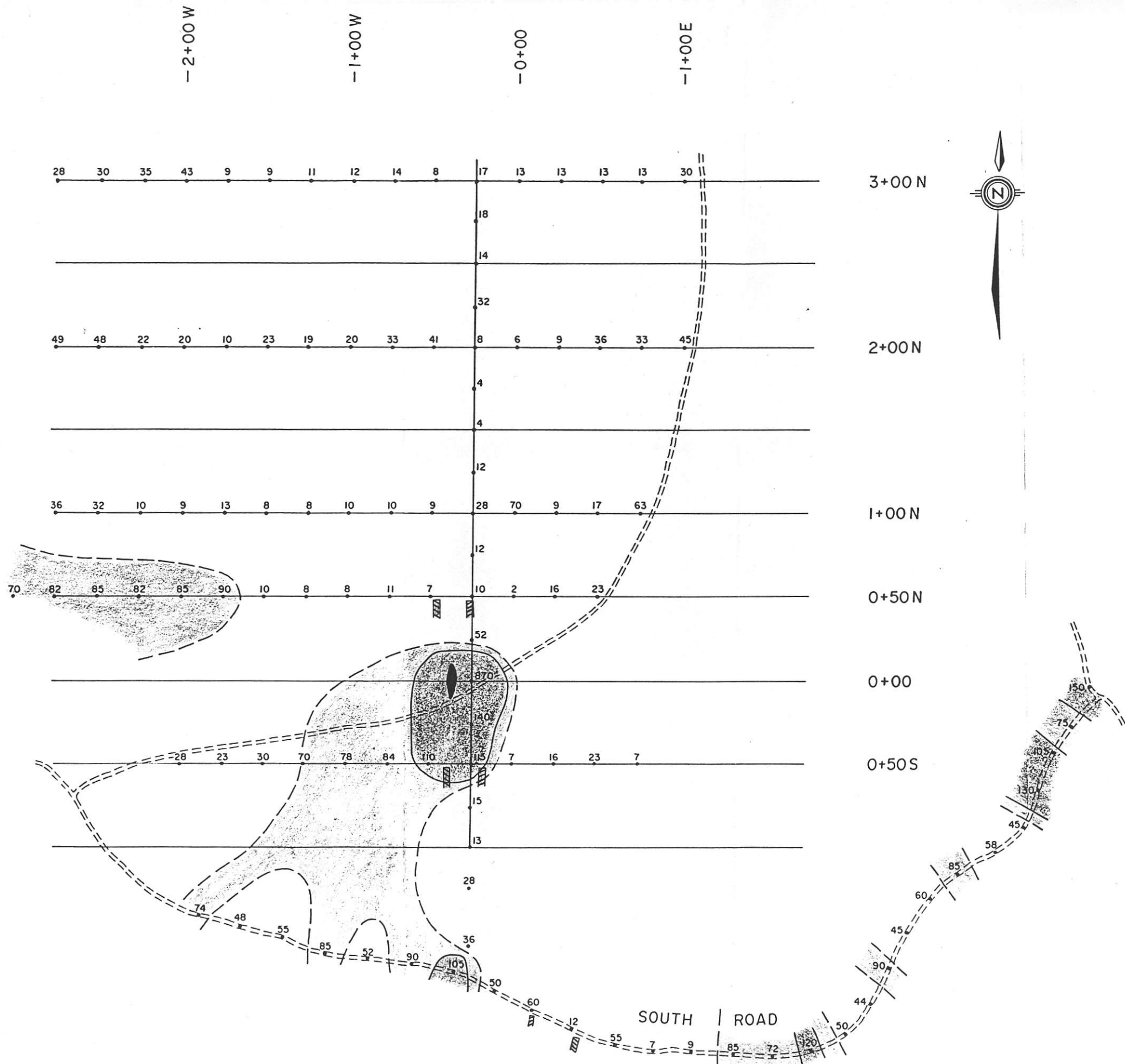
Feet

- 0-23 Mafic intrusion. Dark green, chlc epidote patches +  
gt.  
Fractures (tectonic?)
- 23-37 Heterog. mafic tuff? argillite? Swirls & bands & patches  
of epidote + gt. Could be marginal phase of intrusive.
- 37-38 Quartz vein.
- 38-66 Siliceous - cherty tuff. mod. banded in places.  
44-54 Rusty & fractured (ground water seepage).  
Sericite picks up 57' - quite strong in places.  
Locally greenish cast.
- 66-85 As 23-37 (intrusive?).
- 85-91 As 38-66. Not quite as siliceous.
- 91-92 Green, intrusive as 23-37.
- 92-97 Grey, banded, possible fragmental (pyroc).
- 97-105 Green, epidote-rich similiar to 23-37 but locally looks  
distinctly fragmental, hyaloclastite (pillow breccia?)
- 105-107 Dyke? Banded porphyritic sandy texture. Specks of  
pyrite + chalcopyrite throughout.
- 107-150 As 97-105. Local bands of less mafic lap tuff (as 92-97)
- 150-177 Light grey, more massive, homog. Dioritic in zones.  
May all be intrusive.
- 177-196.5 Probably same but more chloritic & fractured.  
Sulphides locally 5-10% some well banded.  
Increase in zinc. Now into possible stringer zone -  
sheared along foliation.
- 196.5-203 Fairly barren of sulphides. Epidote rich.
- 203-210 Massive sulphides. Remobilized and recrystallized.  
Local rafts of altered wall rock. Biotitic. Very  
weak banding possible. Good conductor.
- 210-212.5 Not so massive. 10-15% sulphides. Locally quite siliceous  
wallrock.
- 212.5-EOH(280)  
Back into mafic flow/tuff with epidote patches & bands.  
Not noticeably altered other than the epidote. Basically  
same unit on both sides of sulphides.  
259-262 Rusty fracture zone.

North Fork 2

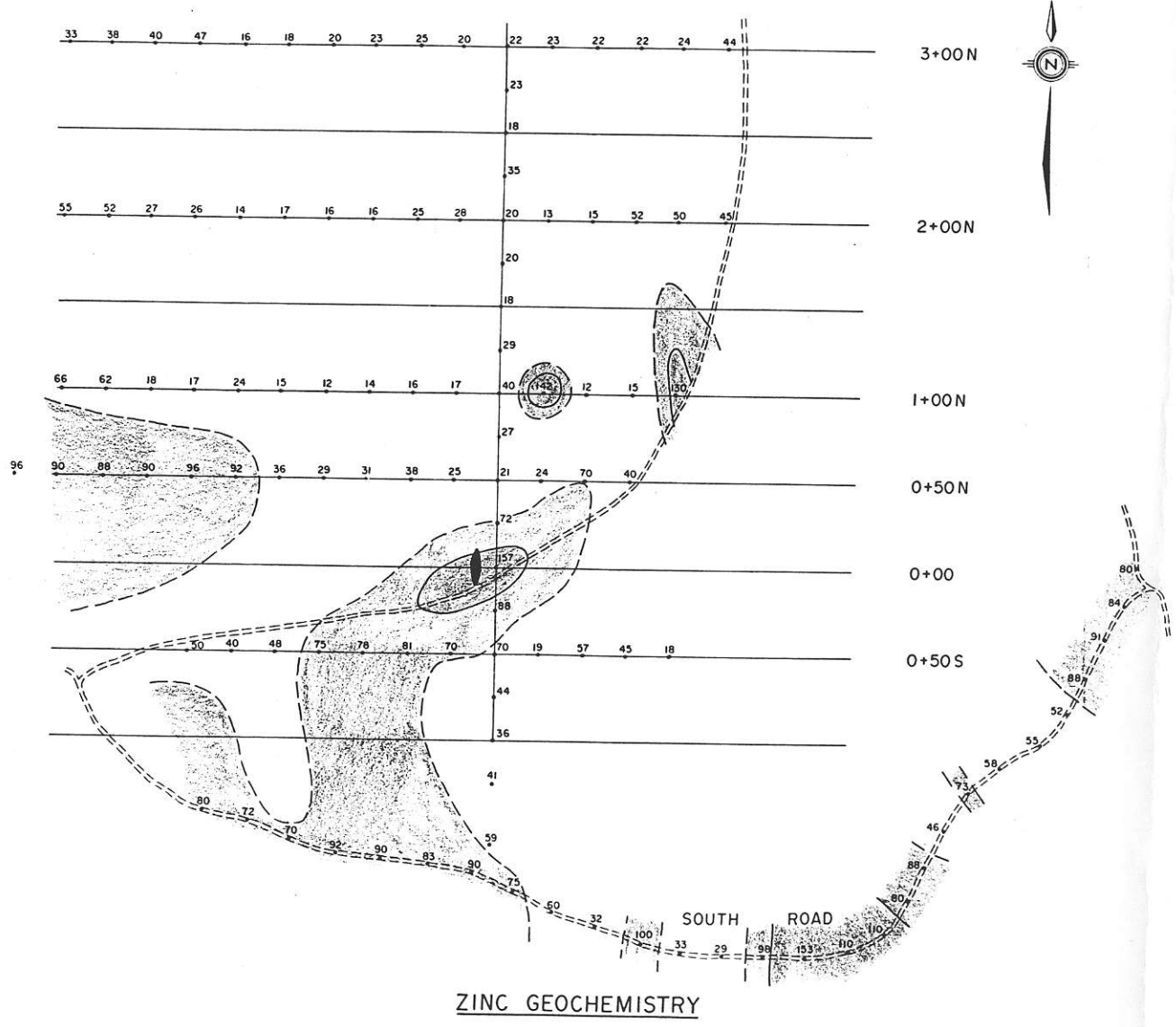
Feet

- 0-45 Heterogeneous, epidotic mafic. 30-45' Banded. Sheared loc. wispy epidote.
- 45-82 Siliceous - cherty rhyolite. Loc. banded, rusty fractures. Sericite picks up with depth. Sulphides along foliation.
- 82-96 As 0-45 but much more ep-chl rich. Biotitic loc.
- 96-105 Same but less ep. Darker.
- 105-112 Siliceous.
- 112-114 As 96-105.
- 114-117 More siliceous again.
- 117-147 Well foliated (banded) 82-96, but now much more sheared.
- 147-152 More siliceous again.
- 152-180 Dark mafic. Heterogeneous, epidote in places, chloritic.
- 180-192 Major shear/fault zone.
- 192-252 Strongly foliated, chloritic mafic with increasing sulphides, especially beyond 205'. Stringers cp-py(po) (5-10%). Becomes more po rich up to 10% sulphides. Two thin bands (1", 1/2") of po-py(cp) (massive) at 250'.
- 252-EOH (266)  
More massive mafic. Some epidote. Much less altered & foliated. Local po-py-cp veinlets.



COPPER GEOCHEMISTRY

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**LEGEND**

- 22 COPPER OR ZINC SOIL CONTENT IN PPM
- SUB-ANOMALOUS LEVEL (>70 PPM)
- ANOMALOUS LEVEL (>100 PPM)
- SULPHIDE SHOWING
- ROAD
- ▨ INTERPRETED ELECTROMAGNETIC ANOMALY
- ▨ INTERPRETED SELF POTENTIAL ANOMALY

To accompany report by J.M. Anderson, geophysicist

GEOTRONICS SURVEYS LTD. SILVER STANDARD MINES LTD. NORTH FORK CLAIMS NEW WESTMINSTER M.D., B.C.			
HORIZONTAL LOOP ELECTROMAGNETIC SURVEY AND SP SURVEY Cu AND Zn SOIL GEOCHEMISTRY			
SCALE: 1:2500	DATE: NOV. 1981	JOB No: 81-55	SHEET: 1

