

M I N N O V A I N C .

MEMORANDUM

DATE: March 10, 1988  
TO: Ian Pirie  
COPIES: Alex Davidson, David Watkins  
FROM: Colin Burge  
SUBJECT: Proposed Diamond Drill Program - North Fork Property

826697

INTRODUCTION

Two diamond drill holes totalling 575 m are proposed to continue testing the downdip/plunge of the massive sulphide body. The first hole will be a 250 metre hole which will require about 50 metres of road construction (see Figure 3), and the second hole will require 325 m of drilling to reach the target. The second hole will be drilled from an existing road and will, if successful, approximately double size (and tonnage) of known massive sulphides at the North Forks property. The second proposed drill hole will intersect the target horizon approximately 250 metres downplunge from 87-4 as shown in Figure 4. Any remaining funds should be directed toward borehole pulse EM surveys should either of these holes fail to intersect the target. Details of the individual holes are contained in Table 1 and locations are shown on Figures 1, 2 and 3.

SCHEDULE

Drilling at North Forks is scheduled to begin no later than May 16, 1988 and should be completed by the end of the month.

PREVIOUS WORK

In 1982 Orbex Minerals drilled four short drill holes intersecting massive sulphides in two of these holes, thus confirming that the massive sulphides plunged for at least 80 metres from the showing. Unfortunately, the Orbex program was ill conceived and the remaining two holes may not have been drilled deep enough to test the downdip/plunge extent.

<u>Hole</u>	<u>% Cu</u>	<u>% Zn</u>	<u>g/T Ag</u>	<u>Width (m)</u>
NF-1	2.04	0.98	9.2	3.0
NF-3	0.56	0.66	-	1.0 massive pyrrhotite

Geophysical surveys performed over the showing for Minnova Incorporated indicate a conductive strike toward the north for 50 meters and 50 meters to the south of the road cut showing. Geologic mapping by both Gibson, 1985 and Medford, 1987 suggest a steep southerly plunge of 60° to 80° while dips remain near vertical.

1987 EXPLORATION PROGRAM

Minnova Incorporated drilled four diamond drill holes totalling 685 metres designed to test for steeply plunging massive sulphides. Three of these four holes intersected massive sulphides, indicating a plunge of 60° to the south (down the hill) and dips are consistently 85° to the east. The sulphides are hosted within an east facing (Albino, 1983) 50 metre thick basalt unit (flows, flow breccia and minor tuff) which is bounded by chert and meta-sedimentary intercalations. An intrusive (sill?) unit was logged in close proximity to ore horizons.

The present dimensions of the massive sulphides measure 250 metres (plunge) by 70 metres (thickness) by 2 metres (width of intersection), and combined assay intervals give the following values:

<u>Hole</u>	<u>% Cu</u>	<u>% Zn</u>	<u>g/T Ag</u>	<u>g/T Au</u>	<u>Width (m)</u>
87-1	1.09	2.57	13.25	.07	1.80
87-2	3.67	0.90	17.02	.21	1.90
87-4	4.82	0.46	19.94	.17	2.16

Lithogeochemical sampling of drill core did not reveal the presence of a disconformable alteration zone, suggesting that the massive sulphides intersected could represent the distal edge of an exhalative system.

It should be noted that drill hole 87-4, the furthest downplunge, returned the highest grade intersection over the widest interval of all drill holes to date (see Figure 4).

REFERENCES

Albino, G., 1983 Geology of the "North Fork Property and Surrounding Area," internal Corporation Falconbridge Copper Report.

Gibson, H.L. and Davidson, A.J., 1985 "North Fork Massive Sulphide Showing Geological Report," assessment report for the New Westminster Mining Division.

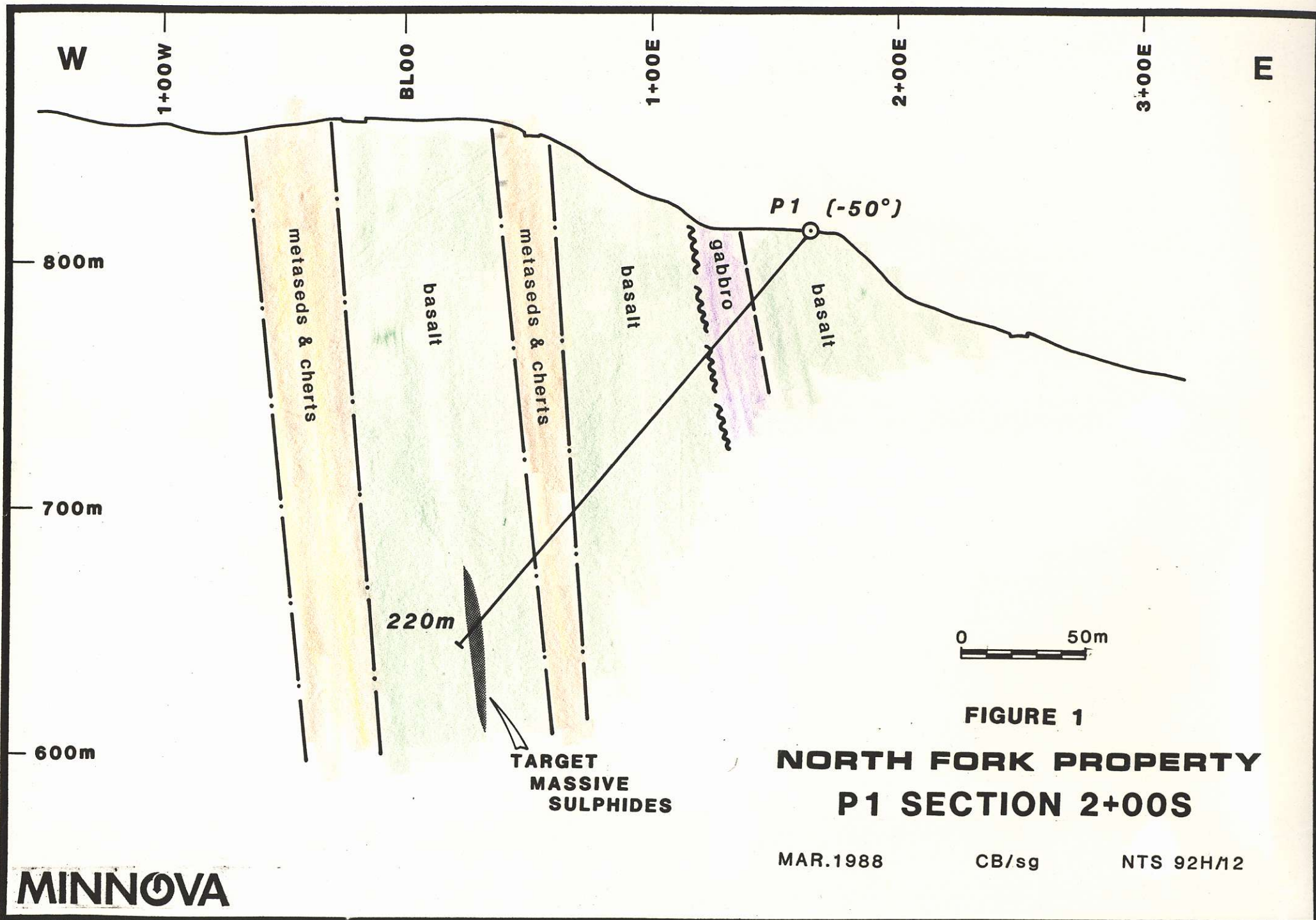
Medford, G.A., 1987 "Geological Report on the North Fork 1 - 5 Claims," for Island Star Resources Corporation.

TABLE 1

1988 PROPOSED DIAMOND DRILL - NORTH FORK PROPERTY

<u>HOLE NO.</u>	<u>LENGTH (m)</u>	<u>AZIMUTH</u>	<u>DIP</u>	<u>EASTING</u>	<u>NORTHING</u>	<u>COST<sup>1</sup></u>	<u>COMMENTS</u>
P1	220	260°	-50°	1 + 65E	2 + 00S	\$21,560	Designed to intersect steeply plunging massive sulphides 300 metres downplunge from Discovery outcrop.
P2	325	260°	-53°	2 + 27E	2 + 50S	\$31,850	P2 will test for massive sulphides at a point 250 metres downplunge from 87-4 and 500 metres from the surface exposure.
<b>TOTAL:</b>						<b>\$53,410</b>	

<sup>1</sup> Cost includes indirect drilling costs, assays, salaries etc. at \$98.00/m

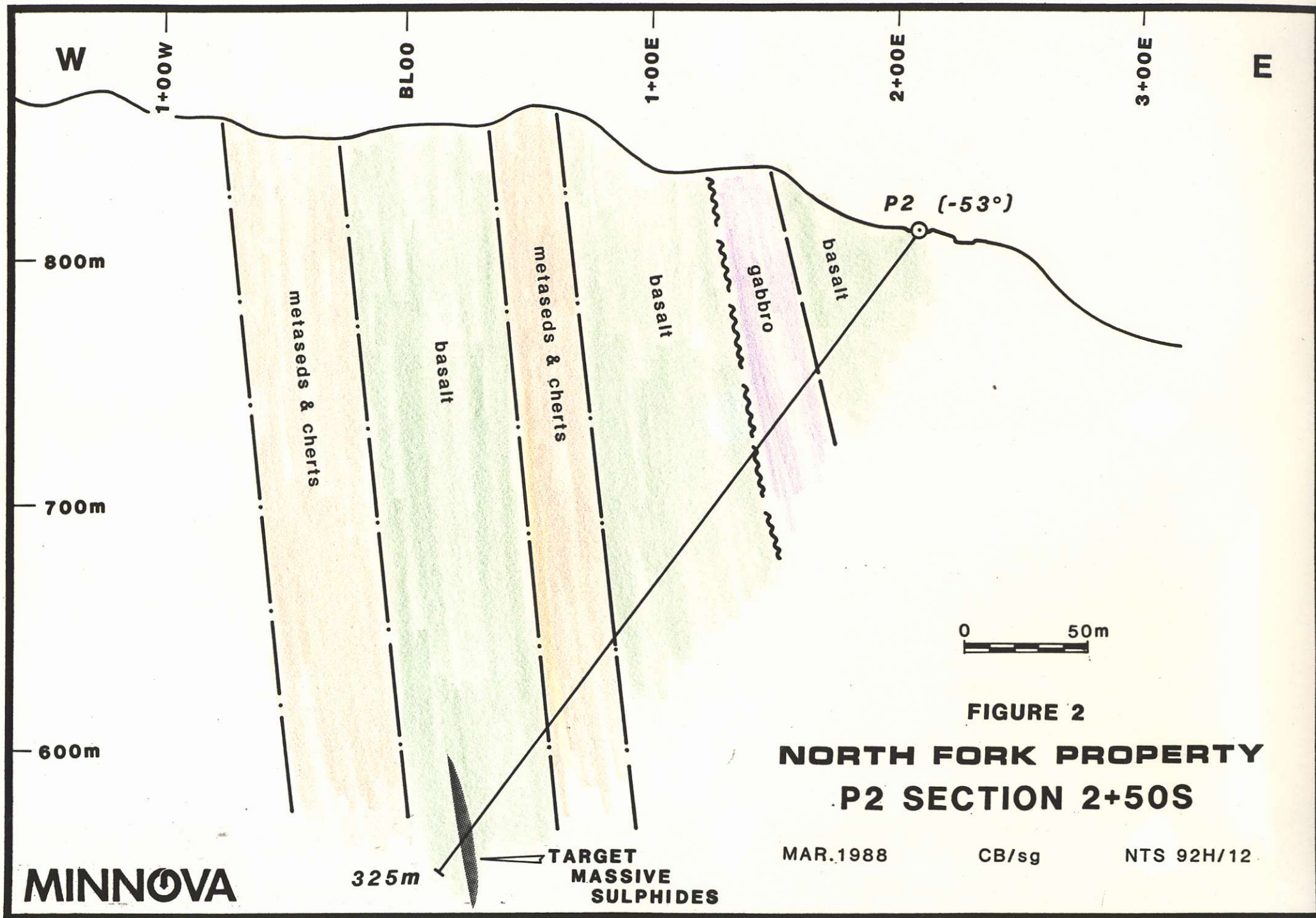


**FIGURE 1**  
**NORTH FORK PROPERTY**  
**P1 SECTION 2+00S**

MAR.1988

CB/sg

NTS 92H/12



**FIGURE 2**  
**NORTH FORK PROPERTY**  
**P2 SECTION 2+50S**

MAR.1988

CB/sg

NTS 92H/12

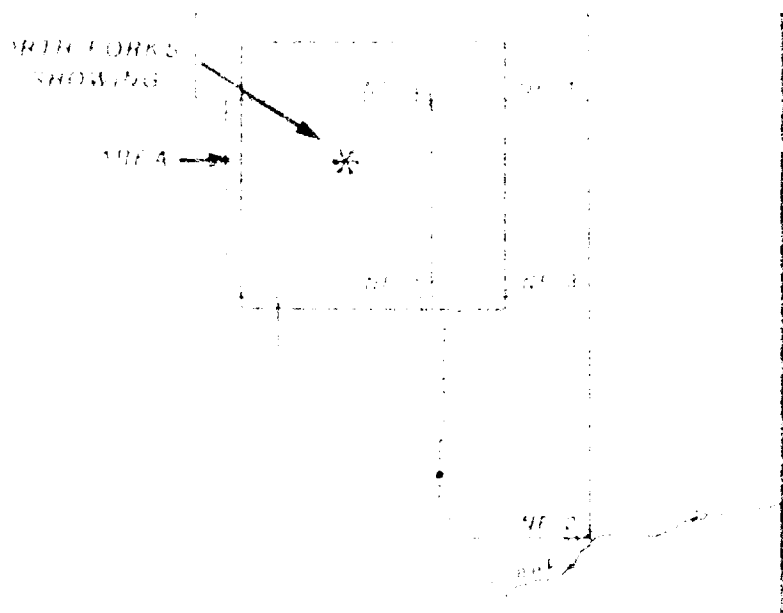
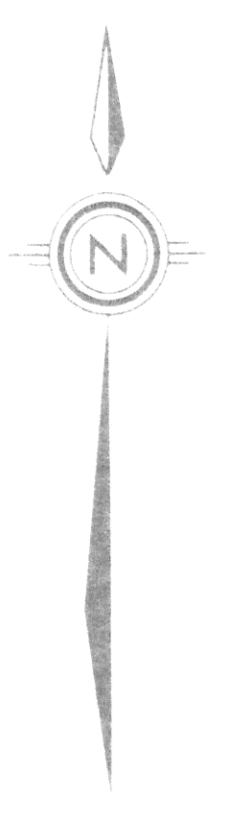


FIGURE 3

GEOLOGY AND HOLE LOCATION



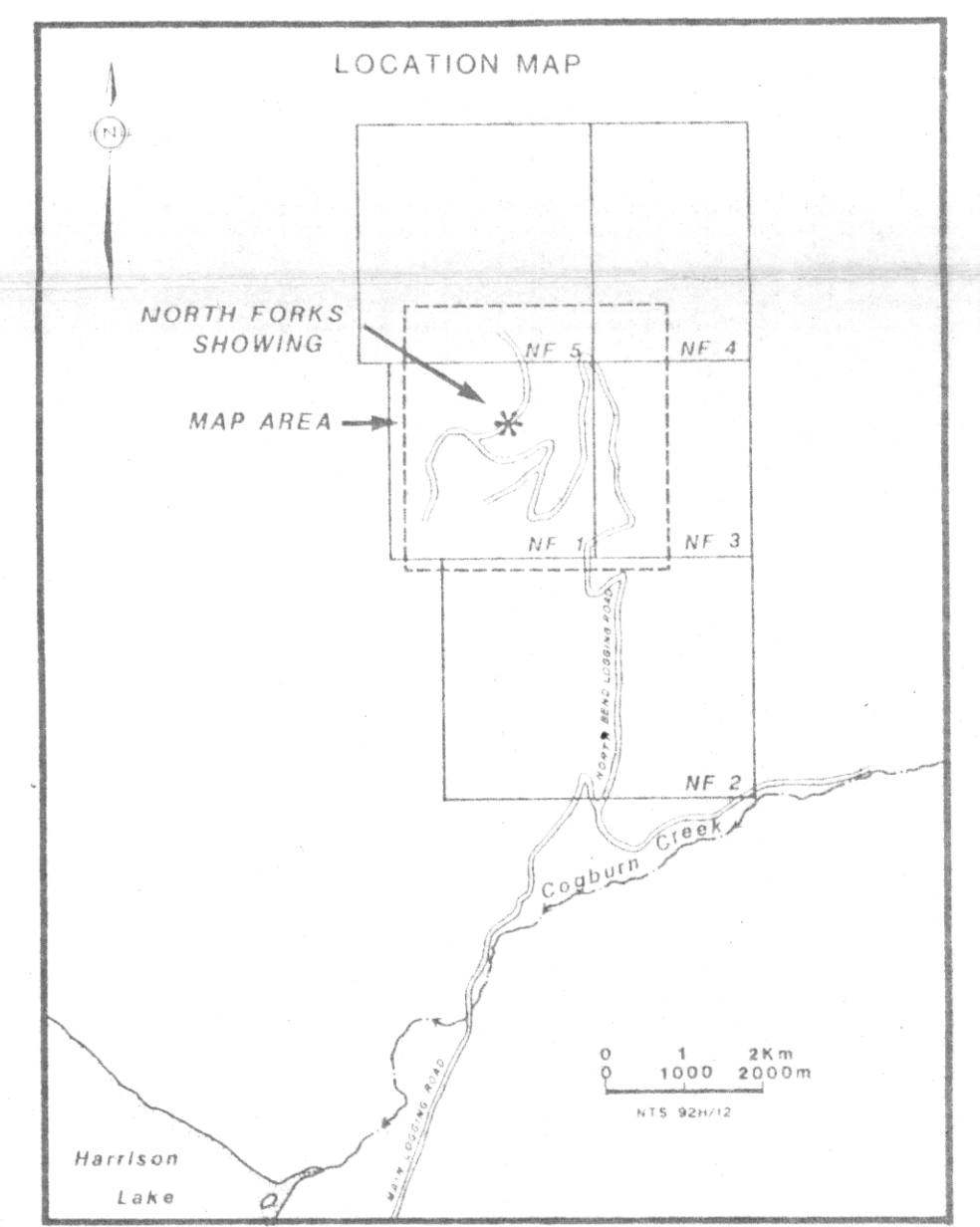
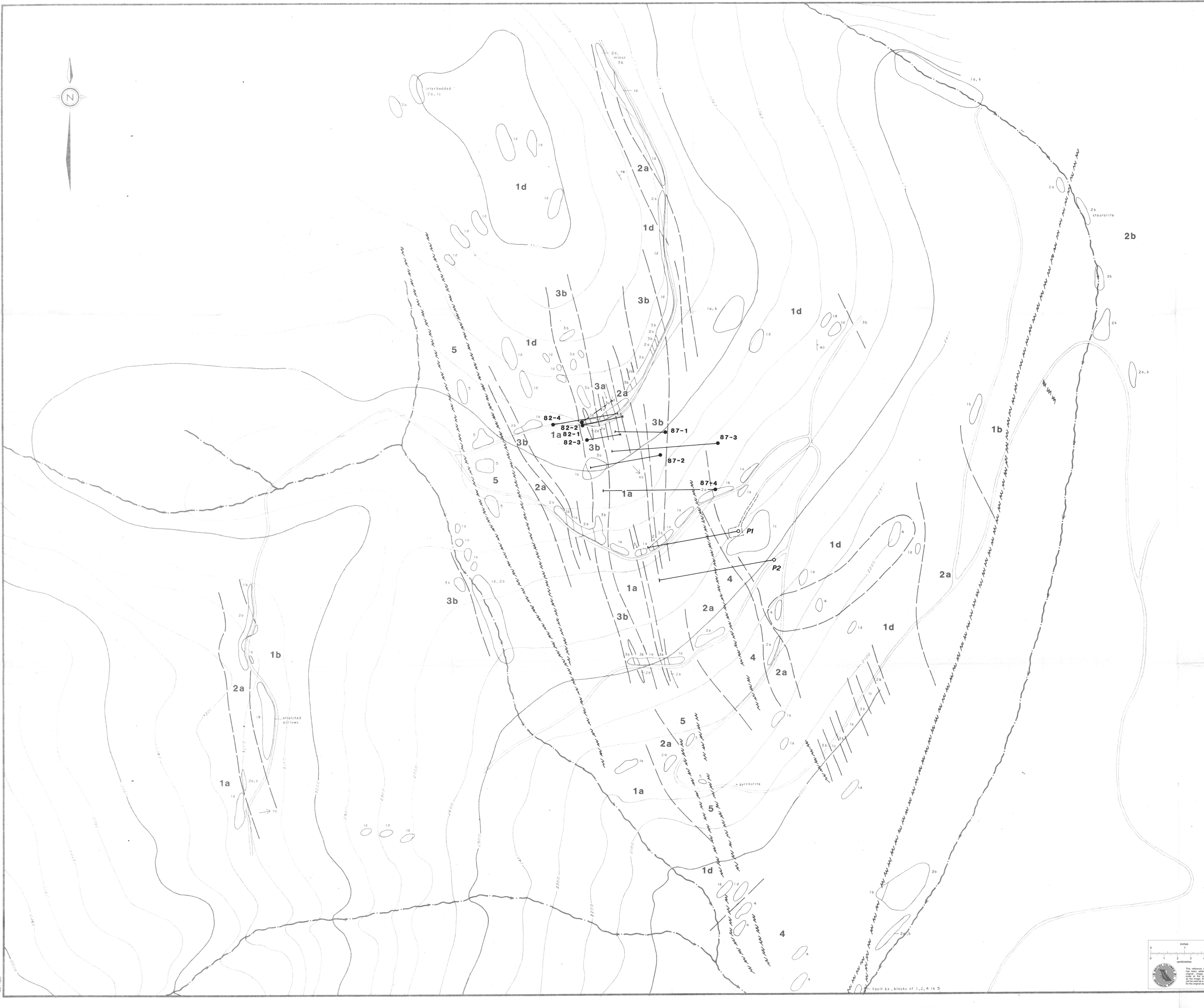


LEGEND

- METAMORPHOSED INTRUSIVE ROCKS**
- 5 Peridotite and Pyroxenite
  - 4 Gabbro
- PENNSYLVANIAN TO PERMIAN CHILLIWACK GROUP**
- 3 Chemical Metasediments
    - 3a Massive Sulphide
    - 3b Recrystallized Chert
  - 2 Terrigenous Metasediments
    - 2a Biotite-quartz schists greywackes
    - 2b Phyllitic, graphitic argillites
    - 2c Boulder to cobble, polymictic paraconglomerates
  - 1 Mafic Metavolcanics
    - 1a Fine to medium-grained amphibolites, massive flows/tuffs
    - 1b Fine to medium-grained amphibolitic pillow lava
    - 1c Fine to medium-grained amphibolitic fragmentals, lapilli tuffs
    - 1d Unsubdivided amphibole-plagioclase-quartz schist

- bedding
- foliation, schistosity
- lineation
- geologic contact
- fault, shear
- outcrop
- stream
- logging road

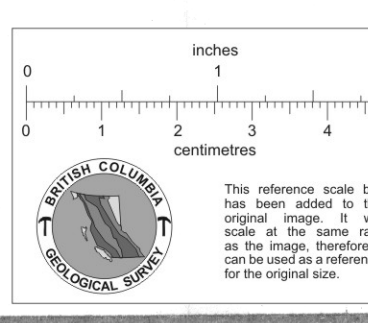
- 82- 1982 ORBEX drill holes
- 87- 1987 MINNOVA drill holes
- P1 1988 proposed drill holes
- Proposed road



**MINNOVA Inc.**  
**NORTH FORKS PROPERTY**  
**GEOLOGY WITH**  
**1988 PROPOSED DRILLING &**  
**ROAD CONSTRUCTION**  
 GEOLOGY by HLG/AJD/GA 1985

SCALE: 1:2000

DRAWN BY: CB/sg	FIG. NO.:
DATE: MARCH 1988 N.T.S. 92H/12	<b>3</b>



600m

N D

↳

*No significant assays*

' hole

massive sulphides

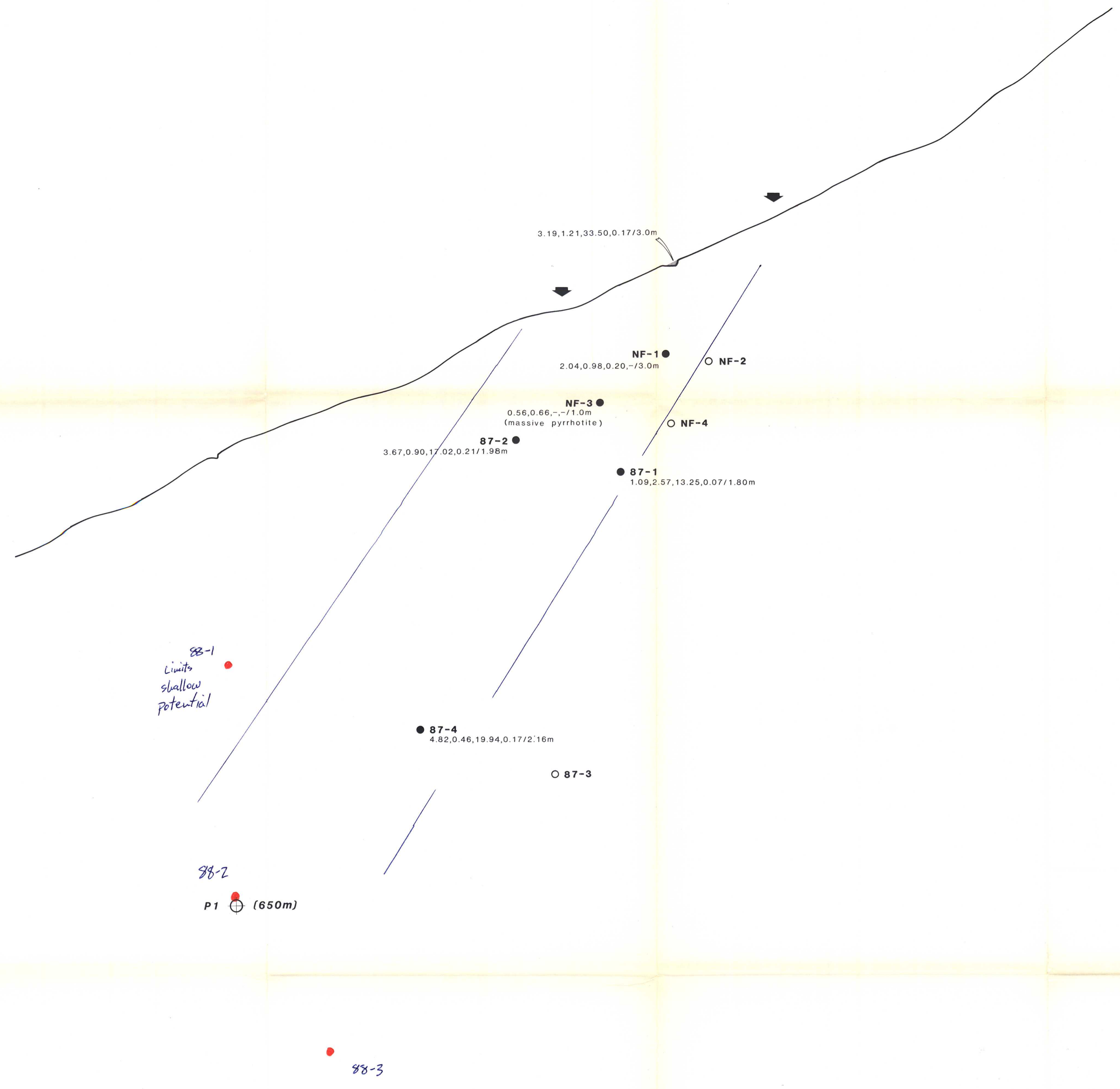
' ion

FIGURE 4

LONGITUDINAL SECTION

3'00S 2'00S 1'00S 0'00 1'00N 2'00N

1000m  
900m  
800m  
700m  
600m



**LEGEND**

- 88 intercepts No significant assays
- ⊕ 1988 proposed drill hole
- Drill hole intersecting massive sulphides
- Drill hole intersecting section with no massive sulphides
- ▬ Massive sulphide outcrop
- ↔ Misé-à-la-masse anomaly

Assays: %Cu, %Zn, g/TAg, g/TAu / metres

NOTE: NF: Denotes hole drilled in 1982 by ORBEX (locations approximate)

**MINNOVA Inc.**  
**NORTH FORK JV**  
 NORTH FORK PROPERTY  
**LONGITUDINAL SECTION**  
 THROUGH THE PLANE  
 OF MINERALIZATION (-85°)  
 LOOKING WEST

0 20 40 60 80 100m  
 SCALE: 1: 1000

N.T.S. 92H/12	MAP:
DRAWN BY: CB/sg	4
DATE: MAR. 1988	

