MINNOVA

MEMORANDUM

07 June 1988

A
TO: A.J. Davidson

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COPIES TO: D.H. Watkins, I.D. Pirie

826087

DE
FROM: C. Burge

SUJET
SUBJECT: INTERNATIONAL MAGGIE DRILL PROPOSAL

INTRODUCTION

A 2190 metre diamond drill program is proposed to follow up 1987 drill intersections and continue testing favourable stratigraphy in the Slumach area. The target is a precious metal-rich volcanogenic massive sulphide deposit hosted within the Slumach rhyolite flow sequence at or near its lower contact with the biotite-cordierite (dalmationite) altered footwall andesite; the Mar andesite.

GEOLOGY AND TARGETS

Last fall's drill program successfully identified the Slumach stratigraphy as having extremely good potential for hosting a massive sulphide deposit enriched in precious metals. Drilling encountered the following stratigraphic sequence beginning with the youngest:

Maggie sediments	- interbedded argillite and dacitic ash
Rhyolite clastics	- coarse, fragmental, minor flows, unaltered
Slumach rhyolite	- mainly felsic flows, flow breccia, minor andesite flows, pyritic sediment
Mar andesite	- andesitic to dacitic lapilli tuff, crystal tuff usually affected by biotite-cordierite hornfels

These units dip moderately toward the Southwest, forming the southwest limb of an anticline which plunges gently toward the northwest.

The Slumach rhyolite and the Mar andesite are well mineralized and both exhibit extensive zones of soda depletion. Contouring of soda values in the Mar andesite suggests that strongest alteration occurs downdip of MM-87-09 and along strike to the east. Mineralization consists of stringer-type occurrences within the Mar andesite and Slumach rhyolite as well as syngenetic semi-massive pyrite up to 10 metres thick in MM-87-05. The 1988 drill program has been designed to test the downdip extent of the following intercepts last year:

10.8% Zn, 4.6g/t Au over 0.6m in MM-09
3.4% Zn, .84g/t Au over 1.0m in MM-06

The program will also test an IP anomaly obtained on line 13+00E and the eastward strike extension semi-massive pyrite encountered in MM-87-05.

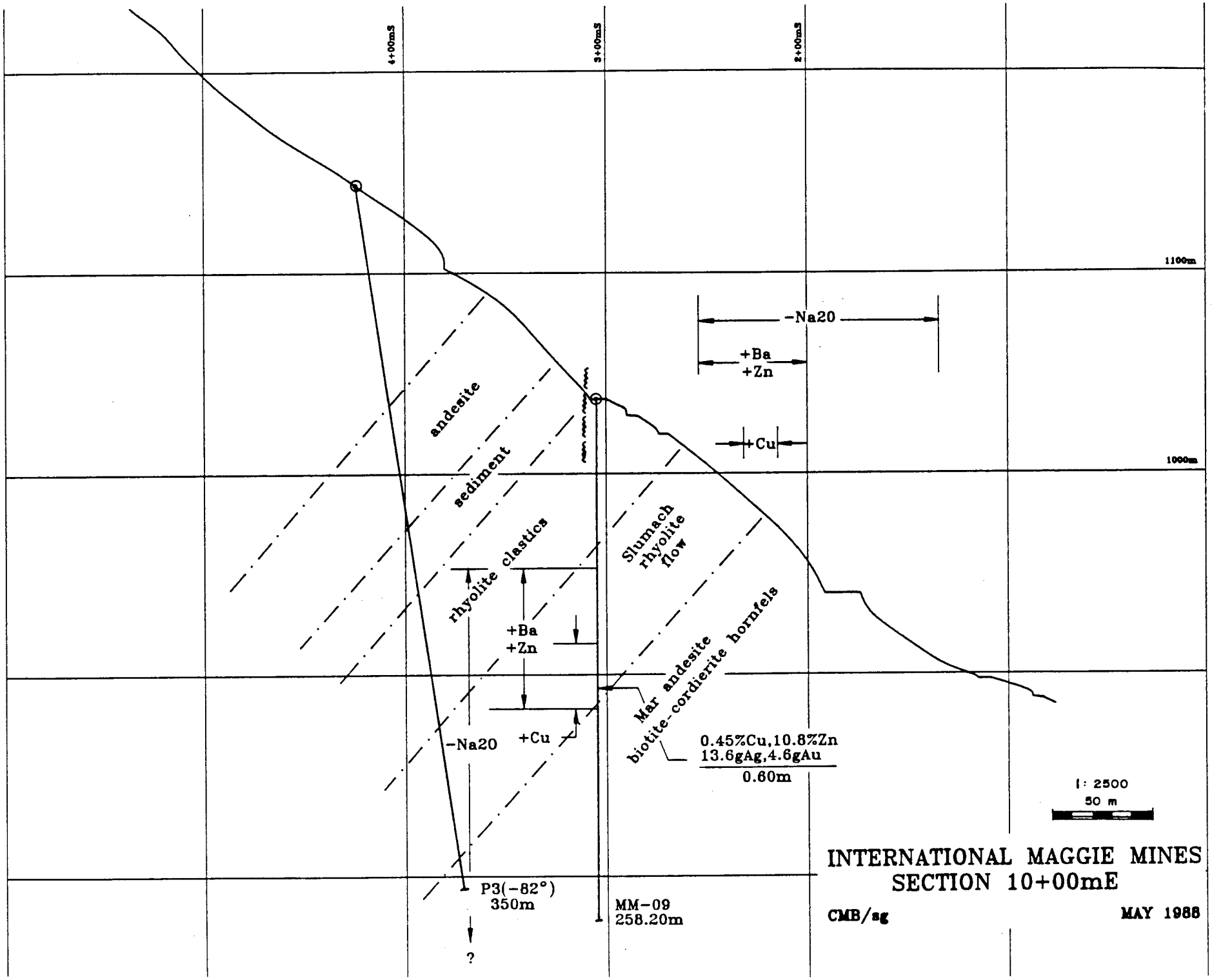
CMB/kgf

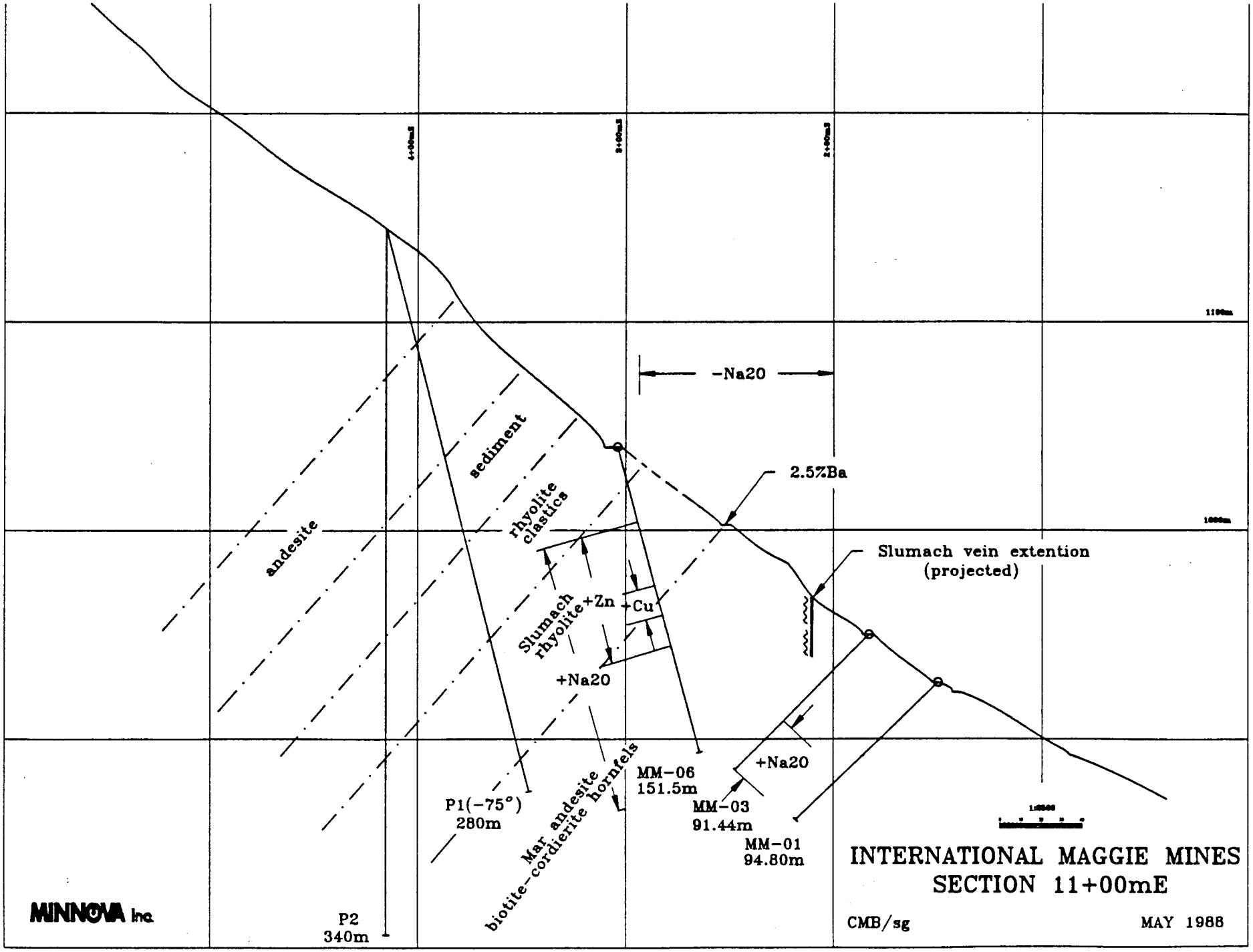
1988 PROPOSED HOLES - MAGGIE OPTION

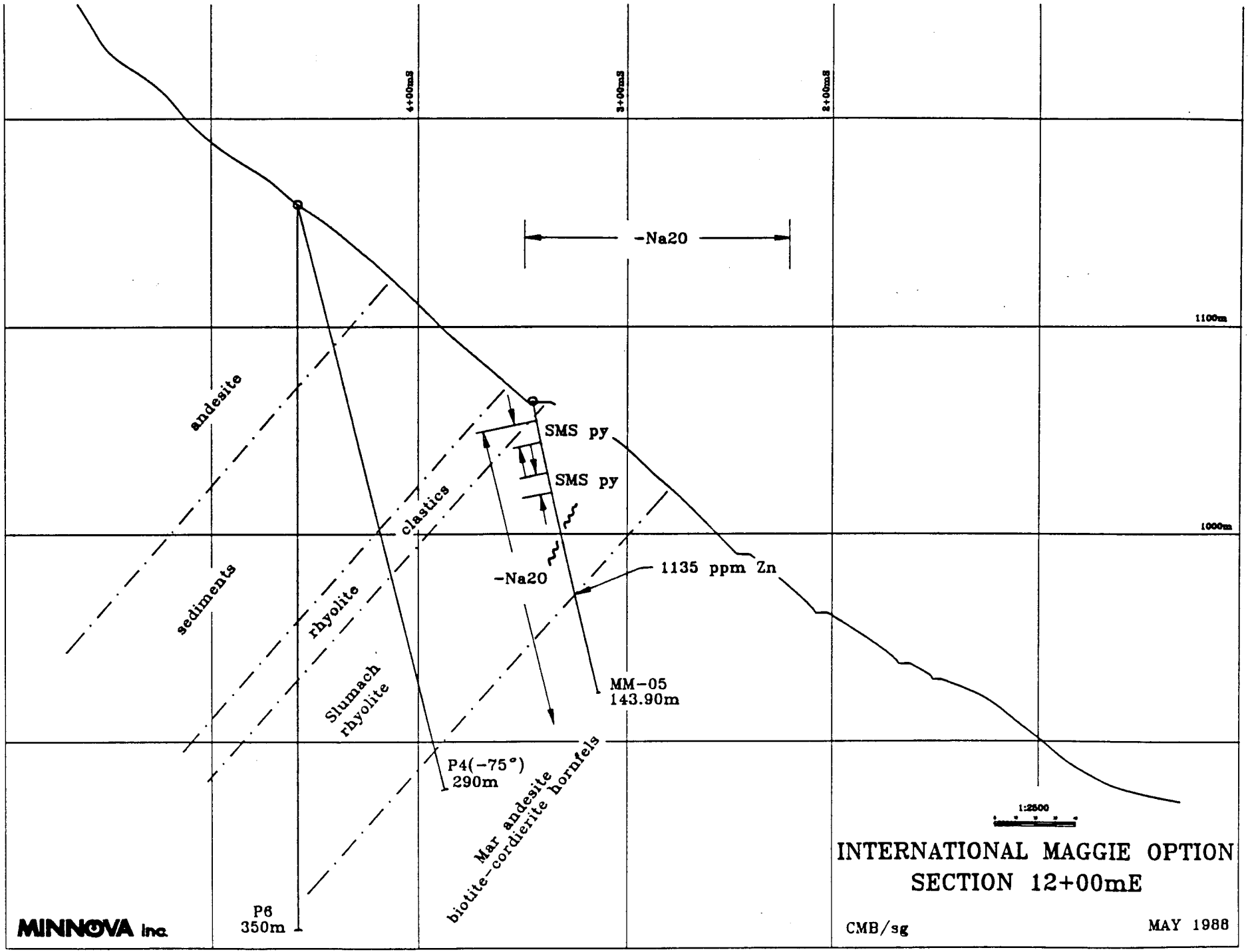
Hole	Line	Station	Azimuth	Dip	Length	Cost[1]	Comments
P1	11+00E	4+17S	045°	-75°	280m	25,200	To test Slumach rhyolite 100m downdip from 3.43% Zn, 0.84g Au/1.0m intersection in MM-87-06.
P2	11+00E	4+17S	045°	90°	340m	30,600	Contingent on results of P1, P2 will test Slumach rhyolite 200m downdip from the MM-87-09 intersection grading 10.8% Zn, 4.6g Au/0.6m.
P3	10+00E	4+25S	045°	-82°	350m	31,500	P3 will test Slumach rhyolite 100m downdip from the MM-87-09 intersection grading 10.8% Zn, 4.6g Au/0.6m.
P4	12+00E	4+60S	45°	-75°	290m	26,100	P4 will test the Slumach stratigraphy 100m downdip from two semi-massive pyrite intersections in MM-87-05.
P5	13+00E	4+42S	45°	-65°	190m	17,100	Will test the Slumach stratigraphy 100m east of MM-87-05 downdip from IP chargeability high/res. low.
P6	12+00E	4+60S	45°	-90°	350m	31,500	P6 will test stratigraphy 100m downdip of P4 and 100m grid east of P2.
P7	13+00E	4+42S	45°	-90°	250m	22,500	Again contingent on earlier P7 - will test the Slumach stratigraphy 100m downdip from P5.
P8	14+00E	4+16E	45°	-84°	130m	11,700	P8 will test the Slumach stratigraphy 200m east of semi-massive pyrite encountered in MM-87-05.
					2180m	**$196,200**	
	Road and Set-Up Construction					35,000[2]	
	TOTAL PROGRAM COST					**$231,200**	

Note: [1]Costs have been calculated assuming a direct drilling cost of $90.00/m including salaries, assays, etc.

[2]Road building costs will affect drill meterage.


4+00mS
3+00mS
2+00mS
1100m
1000m
-Na20
+Ba
+Zn
+Cu
andesite
sediment
rhyolite clastics
Slumach rhyolite flow
+Ba
+Zn
-Na20
+Cu
Mar andesite biotite-cordierite hornfels
0.45%Cu,10.8%Zn
13.6gAg,4.6gAu
0.60m
P3(-82°)
350m
?
MM-09
258.20m
1: 2500
50 m
INTERNATIONAL MAGGIE MINES
SECTION 10+00mE
CMB/sg
MAY 1988


-Na20
2.5%Ba
Slumach vein extention
(projected)
andesite
sediment
rhyolite
clastics
Slumach
rhyolite
+Zn
Cu
+Na20
+Na20
P1(-75°)
280m
Mar andesite
biotite-cordierite hornfels
MM-06
151.5m
MM-03
91.44m
MM-01
94.80m
P2
340m
INTERNATIONAL MAGGIE MINES
SECTION 11+00mE
MINNOVA Inc.
CMB/sg
MAY 1988


4+00mS
3+00mS
2+00mS
-Na20
1100m
1000m
andesite
clastics
sediments
rhyolite
Slumach rhyolite
SMS py
SMS py
-Na20
1135 ppm Zn
MM-05
143.90m
P4(-75°)
290m
P6
350m
Mar andesite
biotite-cordierite hornfels
1:2500
INTERNATIONAL MAGGIE OPTION
SECTION 12+00mE
MINNOVA Inc.
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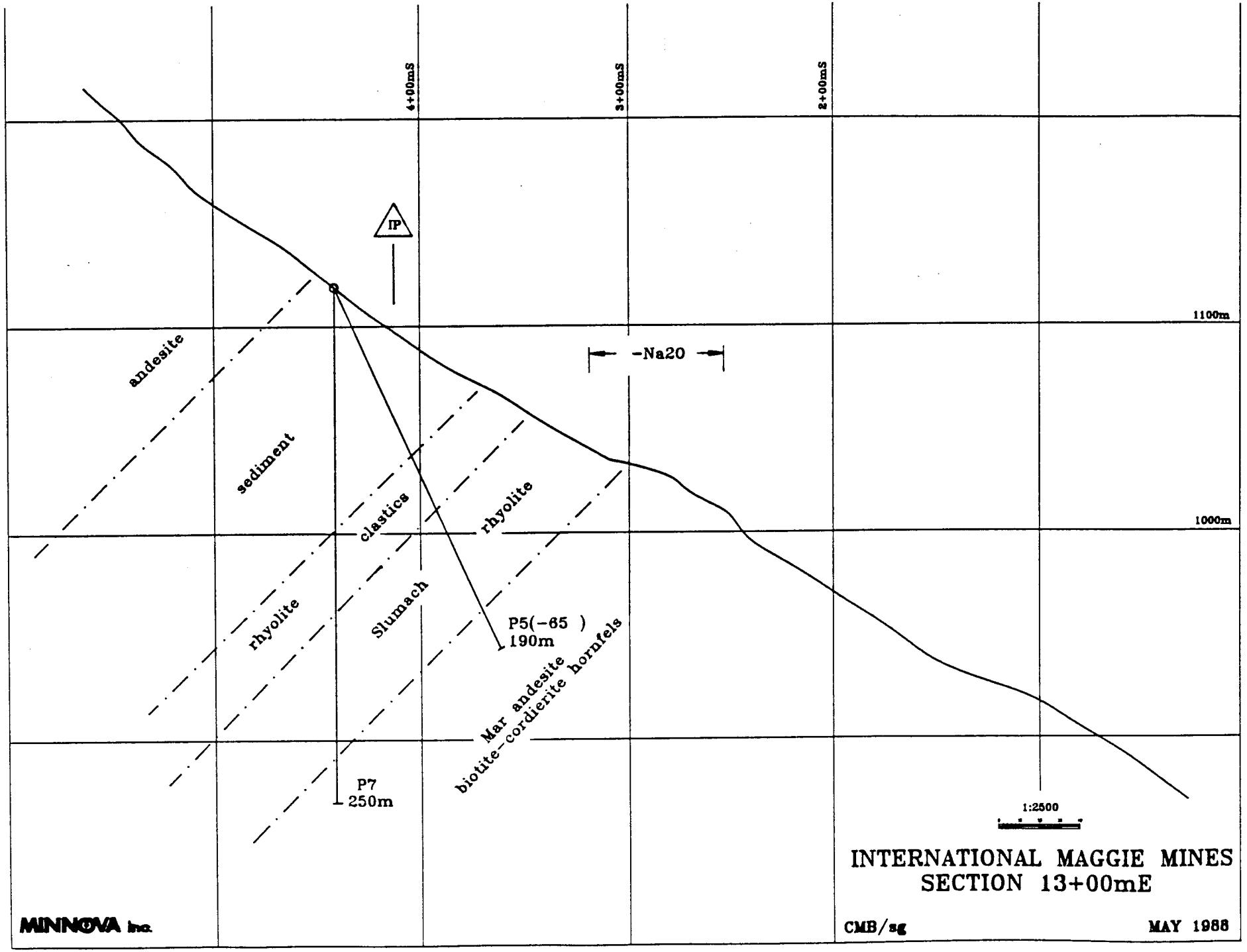
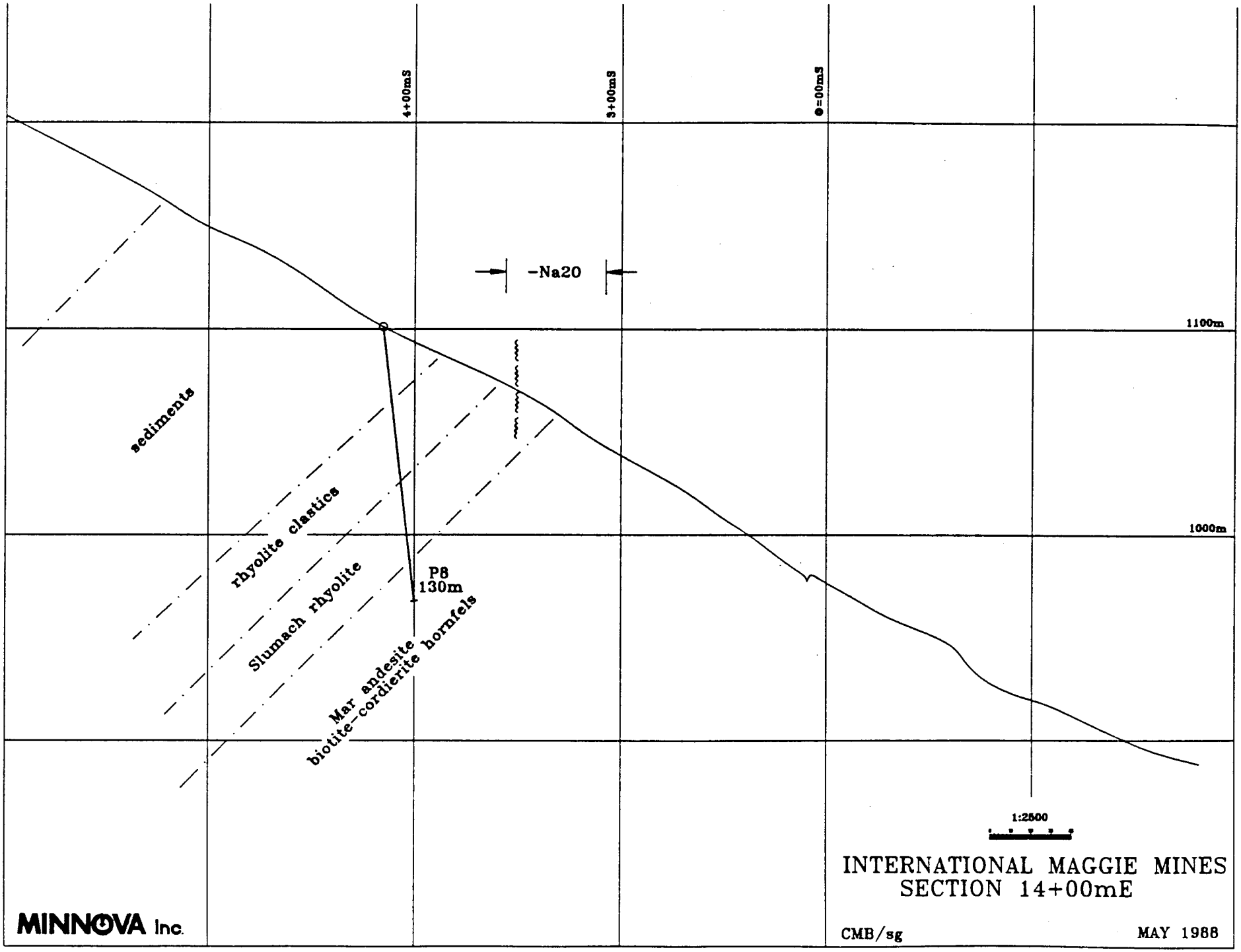
MAY 1988


4+00mS
3+00mS
2+00mS
IP
1100m
1000m
-Na20
andesite
sediment
clastics
rhyolite
rhyolite
Slumach
P5(-65)
190m
Mar andesite
biotite-cordierite hornfels
P7
250m
1:2500
INTERNATIONAL MAGGIE MINES
SECTION 13+00mE
MINNOVA Inc.
CMB/sg
MAY 1988


4+00mS
3+00mS
2+00mS
-Na20
1100m
1000m
sediments
rhyolite clastics
Slumach rhyolite
Mar andesite
biotite-cordierite hornfels
P8
130m
1:2500
INTERNATIONAL MAGGIE MINES
SECTION 14+00mE
MINNOVA Inc.
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MAY 1988

8+00mE 9+00mE 10+00mE 11+00mE 12+00mE 13+00mE 14+00mE 15+00mE

1000m

900m

800m

700m

600m

MM-08 (MS frag)

M-82-24 (dyke)

MM-06
0.50%Cu,3.43%Zn
18.0gAg,0.84gAu
1.0m

MM-05
1135 ppm Zn

MM-07 (dyke)

MM-09
0.45%Cu,10.80%Zn
13.6gAg,4.6gAu
0.60m

P1 P2 P3 P4 P5 P6 P7 P8

Na20 < 0.5% from contact to 50m below in footwall (values averaged)

Na20 < 0.5% from 50m below to 150m below in footwall (values averaged)

1987 Intercept

1988 proposed intercept

IP Anomaly

MINNOVA Inc.

FILE:D:\8X11\MAGLONG

100 metres

1:2500

INTERNATIONAL MAGGIE OPTION

LONGITUDINAL SECTION

THROUGH THE PLANE OF THE LOWER CONTACT OF THE SLUMACH RHYOLITE

(VIEWING GRIDNORTH 045)

CB/sg

MAY 1988

WAR EAGLE

JARMILA Fr.

CLARKE

MAR CLAIM

BASELINE

BASELINE

MM-87-01 (-45°)

MM-87-02 (-45°)

MM-87-03 (-45°)

MM-87-04 (-45°)

MM-87-05 (-80°)

MM-87-06 (-75°)

MM-87-07 (-85°)

MM-87-08 (-62°)

MM-87-09 (-90°)

ADIT

WEST ZONE

CREEK ZONE

SUMAC ZONE

EAST ZONE

L 6+00 E

L 5+00 E

L 7+00 E

L 8+00 E

L 9+00 E

L 10+00 E

L 10+50 E

L 11+00 E

L 11+50 E

L 12+00 E

L 13+00 E

P1
P2

P3

P4
P6

P5
P7

P8

- LEGEND -

6 Felsic Intrusion	3 Rhyolite
5 Mafic Intrusion	2 Dacite
4 Argillite	1 Andesite

Cordierite Hornfels

Geological Contact intrusive, conformable

Drill Hole (Maggie Mines)

Drill hole (Minnova 1987)

1988 PROPOSED HOLES

Fault

Bedding

Jointing

Strike & Dip

MINNOVA Inc.

MAGGIE OPTION

MAR CLAIM AREA

- GEOLOGY -

1988 PROPOSED DRILLING

0 50 100m

SCALE: 1:1000

N.T.S. 92G/10

DRAWN BY: CB/dm

DATE: SEPT. 1987

MAP.