

MINNOVA

MEMORANDUM

826208

926/10

DATE: October 1, 1987

A
TO: A. J. Davidson

COPIES A
COPIES TO: I. D. Pirie *D WARRINS*

DE
FROM: C. M. Burge

SUJET
SUBJECT: INTERNATIONAL MAGGIE OPTION SLUMACH DRILL PROPOSAL

A two phase diamond drill program designed to test massive sulphide potential and the extent of existing Slumach gold-copper-zinc mineralization is proposed.

Six holes totaling 870 metres will test a baritic zinc-rich andesitic tuff-breccia that may correlate with possible zinc-rich exhalite encountered in M-24. Geological mapping indicates this unit strikes at approximately 140° parallel to the hillside and some 50 metres south (up slope) from the Slumach trend. Dips appear to be at about 55° to the south west (into the hill) making it awkward to drill. The target horizon lies immediately above a quartz phyric rhyolite which is highly anomalous in Au, Zn, Pb and severely depleted in Na_2O . Narrow highgrade quartz-sulphide stringers occur within this unit. An andesite lapilli tuff completes the footwall package and it also show soda depletion and enrichment in base metals and barium. All units in this sequence display well developed cordierite and/or biotite alteration. The hanging wall sequence of dacite lapilli tuffs, ashes and ash-flows have not been altered.

The remaining twenty-four holes will assess the extent of the Slumach steep dipping (approximately - 85° NE, downhill) veins. Previous drilling and drifting by International Maggie has established the existence of two narrow (.75 and .5, main vein and east vein respectively) but high grade gold-rich quartz sulphide veins. The veins are separated by 10 meters and crosscut stratigraphy. The main vein occurs within a fault while the east vein appears to occur in an area of intense silicification. Both veins are hosted by the Andesite lapilli tuff previously referred to which shows strong biotite alteration and intense cordierite development within 5 meters of the veins. The alteration zone is broad measuring about 100-150 meters by 500 meters and therefore makes it difficult to locate the veins. However this does suggest the veins occur within a large alteration pipe which may accompany a volcanogenic massive sulphide deposit.

The Slumach zone is currently open both along strike to the east and downdip. Potential may still exist to the west, however, extensive diking makes this direction less optimistic. The proposed drill holes P6 to P16, totalling 640 meters, will establish whether these parallel veins are persistent enough to warrant the drilling of holes P17 to P29.

[Handwritten signature]
per
CMBURGE.

1987 PROPOSED DRILL HOLES

INTERNATIONAL MAGGIE

PHASE 1 MASSIVE SULPHIDE POTENTIAL

HOLE NO.	AZIMUTH DIP (Degrees)	LINE	STATION	LENGTH (Metres)	COST (\$)	COMMENTS
P1	045 ^o - 80 ^o	8+00E	2+70S	150	15,000	To test northwestern strike extension of baritic, zinc rich Andesite tuff-breccia stratigraphically above a large biotite-cordierite hornfels zone.
P28	045 - 85	9+00E	3+00S	200	20,000	Will test the downdip potential of possible zinc-rich tuffaceous exhalite horizon intersected in drill hole M-24 by I.M.M.
P2	045 - 70	10+00E	2+95S	130	13,000	This hole will test stratigraphy of holes P1, P28 100 metres southeast and is located above high grade quartz-sulphide stringers.
P3	045 - 75	11+00E	3+10S	140	14,000	Will test a coincident high chargeability high resistivity anomaly 200 metres to the south east of stratigraphy encountered in M-24.
P4	045 - 80	12+00E	3+23S	140	14,000	Located 300 metres southeast of M-24. P4 will also test the IP anomaly and stratigraphy mentioned in P3.
P5	045 - 85	13+00E	3+45S	110	11,000	Will test stratigraphy 400 metres southeast of M-24.
				<u>870</u>	<u>87,000*</u>	

* Cost includes direct drilling costs, assays, salaries, board, etc. at \$100.00/metre

PHASE 2. SLUMACH AU VEIN POTENTIAL

The following holes are plotted on a longitudinal section through the plane of the mineralization:

HOLE NO.	AZIMUTH DIP (Degrees)	LINE	STATION	LENGTH (M)	COST (\$)
P6	225 - 45	10+50	1+73S	50	5,000
P7	225 - 70	10+50	1+73S	70	7,000
P8	225 - 45	10+75	1+80S	50	5,000
P9	225 - 45	10+75	1+60S	70	7,000
P10	225 - 45	10+25	1+75S	40	4,000
P11	225 - 73	10+25	1+75S	70	7,000
P12	225 - 45	11+00	1+82S	40	4,000
P13	225 - 70	11+00	1+82S	70	7,000
P14	225 - 45	11+00	1+50S	80	8,000
P15	225 - 70	10+00	1+75S	60	6,000
P16	225 - 45	11+90	1+90S	40	4,000
P17	225 - 60	11+50	1+75S	80	8,000
P18	225 - 45	12+00	2+07S	40	4,000
P19	225 - 45	12+50	2+04S	50	5,000
P20	225 - 45	12+00	1+67S	80	8,000
P21	225 - 45	11+50	1+42S	100	10,000
P22	225 - 52	11+00	1+38S	100	10,000
P23	225 - 45	10+75	1+37S	100	10,000
P24	225 - 45	10+90	1+26	100	10,000

PHASE 2. Cont'd.

HOLE NO	AZIMUTH DIP (Degrees)	LINE (East)	STATION (South)	LENGTH (M)	COST (\$)
P25	225 - 45	10+25	1+20	100	10,000
P26	225 - 45	10+00	1+14	100	10,000
P27	225 - 45	13+00	1+97	60	6,000
P29	225 - 45	12+50	1+50	100	10,000
P30	225 - 45	9+50	1+40	70	7,000
P31	225 - 45	10+00	1+50	85	8,500
P32	225 - 45	9+50	1+00	125	12,500

Priority holes for 1987 Program are P6, P7, P12, P14, P15, P16, P17, P20, P30, P32

Phase 2 Total Meters 695 Total Cost \$69,500

Total Program Cost \$156,500 for 1,565 metres

SW

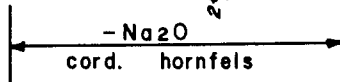
NE

1000 m

3+005

2+005

1+005



P1

cherty ash

dac It

Δ and fbx Δ

rhy

and It

+Ba

Target Horizon

+Au, +Zn, +Cu, +Ba

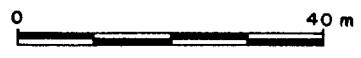
qtz veins (Slumach extension ?)

900m

**PROPOSED DRILL HOLES
INTERNATIONAL MAGGIE
OPTION**

SECTION 8+00 E

MINNOVA



N.T.S.92G/10 CB/sg SEPTEMBER 1987

SW

3+005

2+005

NE

P28

- Na₂O
cordierite hornfels

1000m

+Ba, +Zn

+Au, +Zn, +Cu, +Ba

dac It

and t bx Δ

rhy

Slumach Zone west

and It

900m

M-24

**PROPOSED DRILL HOLES
INTERNATIONAL MAGGIE
OPTION**

SECTION 9+00 E

MINNOVA

0 20m

N.T.S.92G/10

CB/sg

SEPTEMBER 1987

SW

NE

2+005

- NazO

cordierite hornfels

1000m

Slumach Au Zone (projected)

and It

P30

900m

P32

**PROPOSED DRILL HOLES
INTERNATIONAL MAGGIE
OPTION**

SECTION 9+50 E

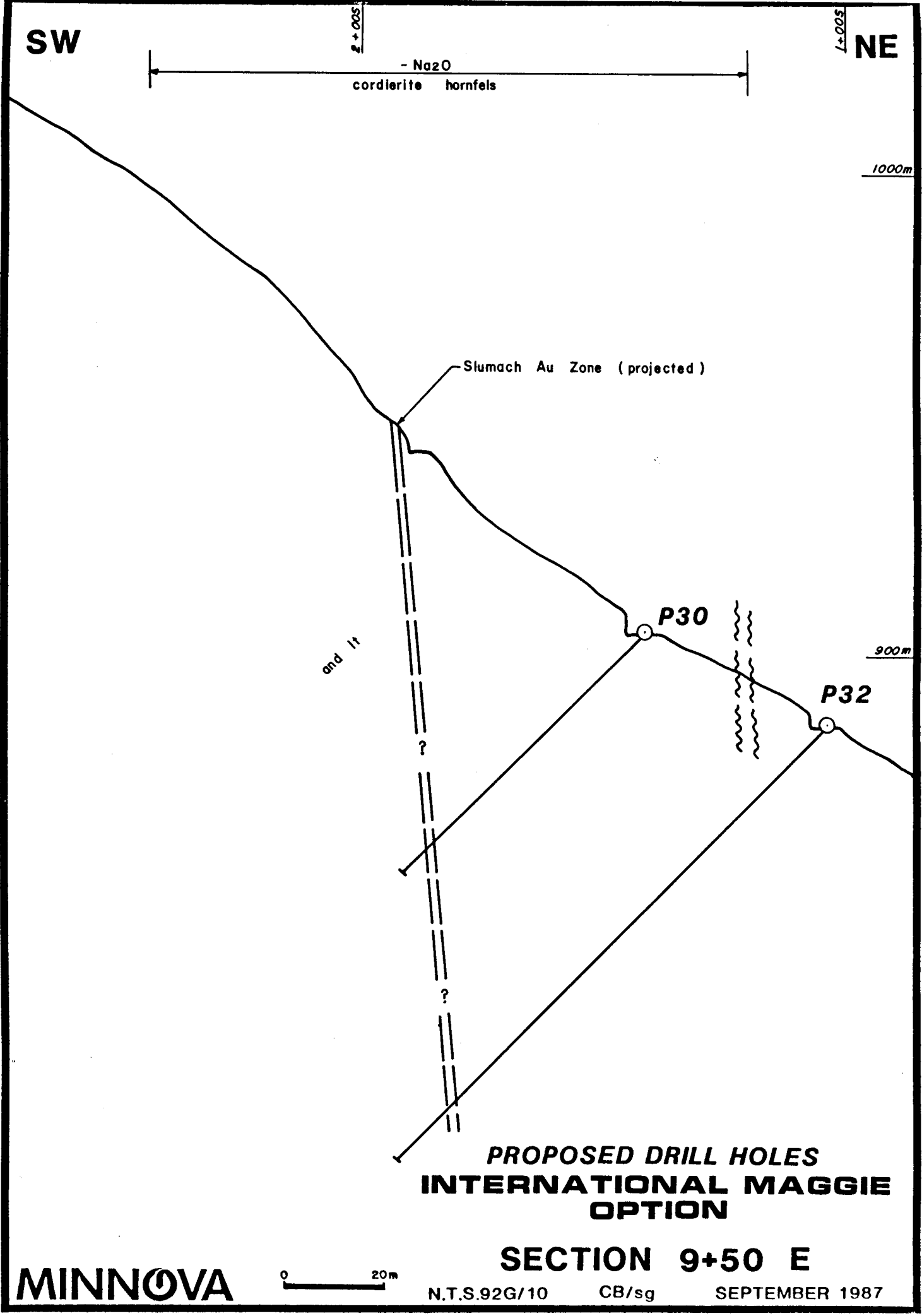
MINNOVA

0 20m

N.T.S.92G/10

CB/sg

SEPTEMBER 1987



SW

NE

3+005

2+005

1+005

dac
ash
arg

P2

dac lt

-Na₂O

cordierite hornfels

+Ba, +Zn

Target Horizon

+Au, +Zn, +Cu, +Ba

△ and 1bx △

rhy

Creek Zone: 9.2% Zn, 1.7 g Au / 0.8 m

P15

and

M-42

rhy dyke

P31

P26

1000m

900m

**PROPOSED DRILL HOLES
INTERNATIONAL MAGGIE
OPTION**

SECTION 10+00 E

MINNOVA



N.T.S.92G/10

CB/sg

SEPTEMBER 1987

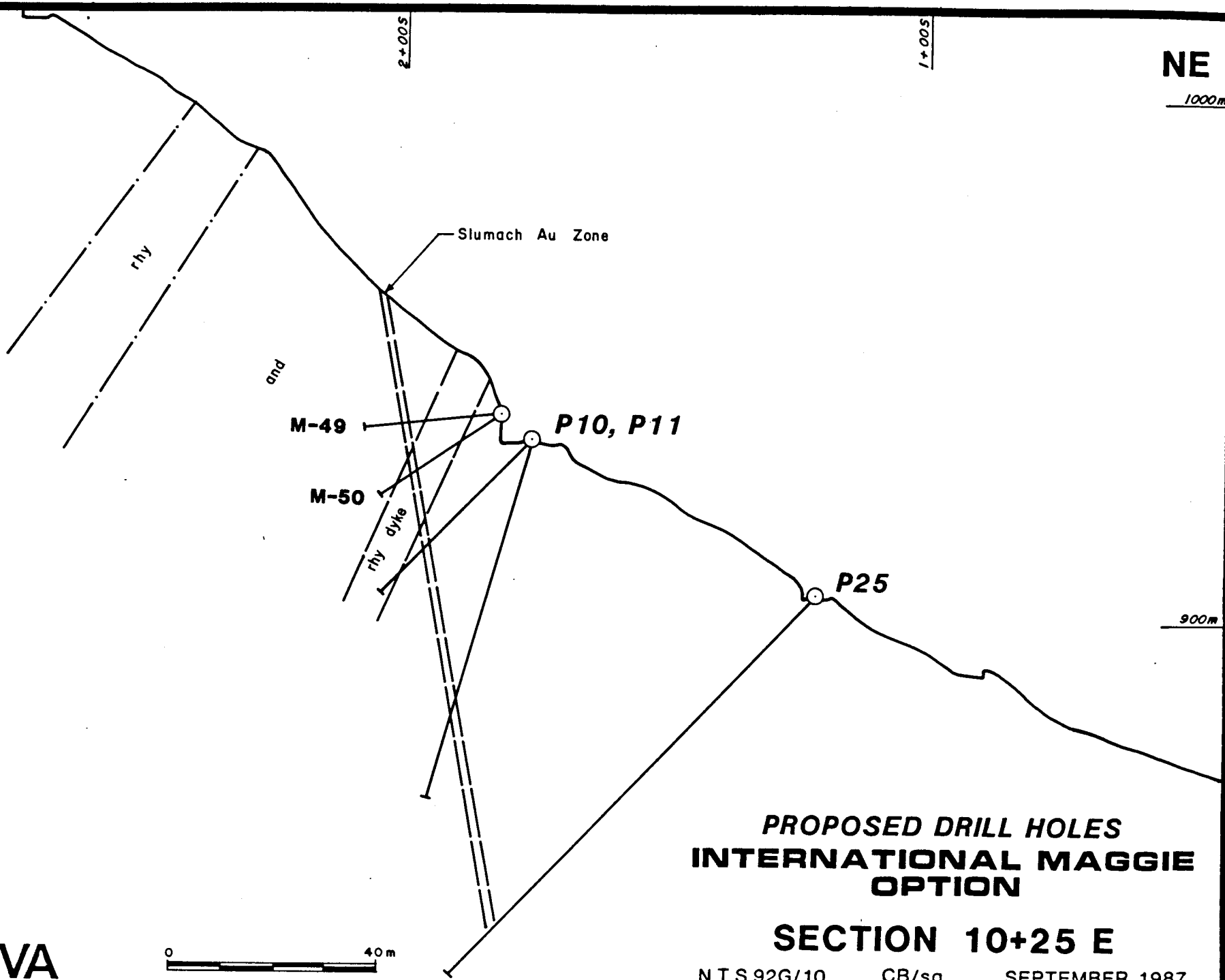
SW

NE

1000m

2+005

1+005



MINNOVA

**PROPOSED DRILL HOLES
INTERNATIONAL MAGGIE
OPTION**

SECTION 10+25 E

N.T.S.92G/10 CB/sg SEPTEMBER 1987

SW

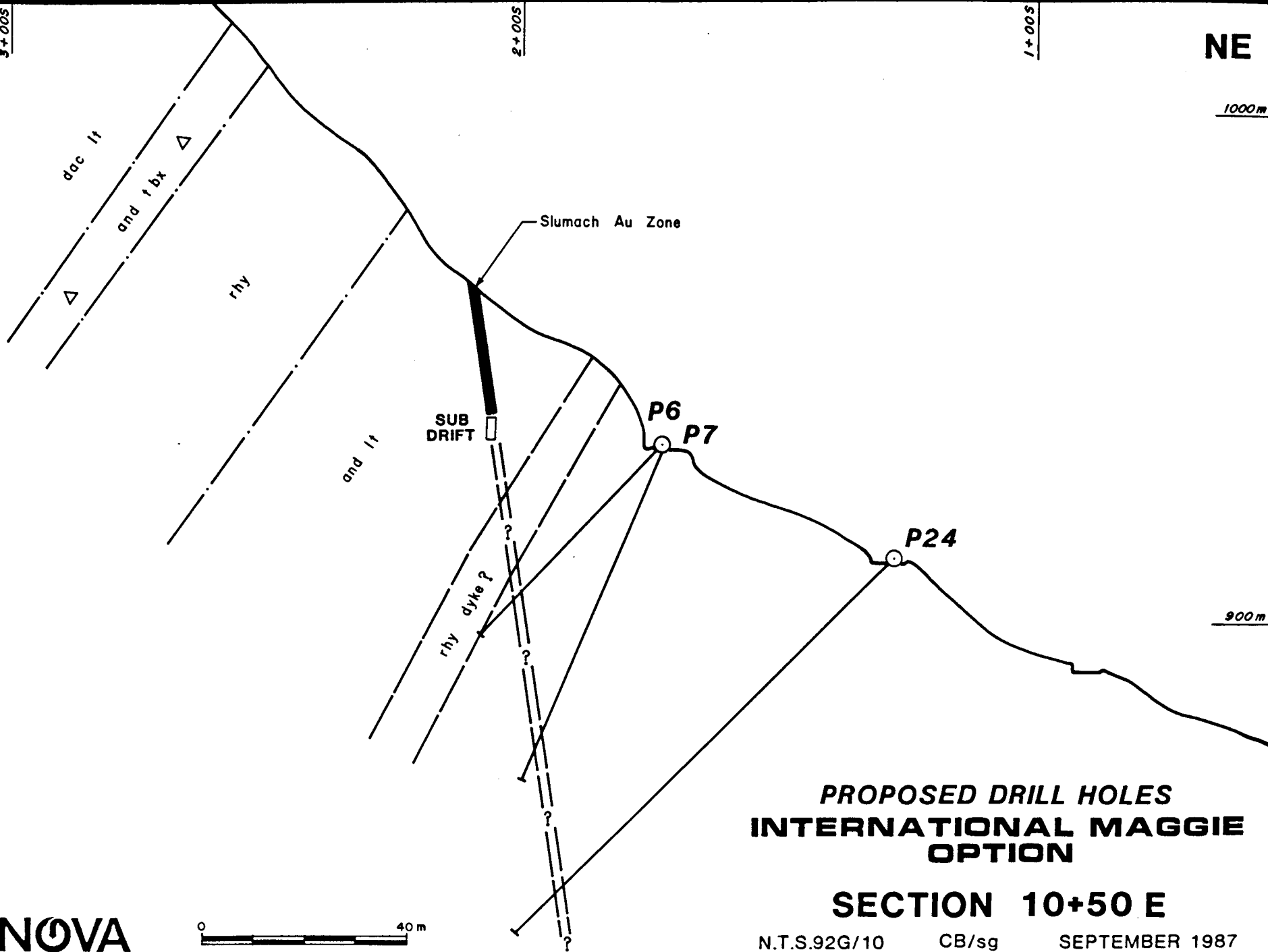
5+005

2+005

1+005

NE

1000m



MINNOVA



**PROPOSED DRILL HOLES
INTERNATIONAL MAGGIE
OPTION**

SECTION 10+50 E

N.T.S.92G/10 CB/sg SEPTEMBER 1987

SW

NE

1050 m

2+005

1+005

Slumach Au Zone

rhy

and It

P8

P9

P23

rhy dyke ?

and It

950 m

**PROPOSED DRILL HOLES
INTERNATIONAL MAGGIE
OPTION**

SECTION 10+75 E

MINNOVA



N.T.S.92G/10 CB/sg SEPTEMBER 1987

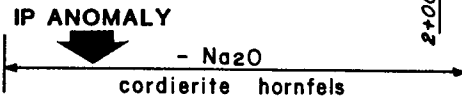
SW

NE

5+00S

2+00S

1+00S



P3

+ Ba, + Zn

Target Horizon

+ Au, + Zn, + Cu, + Ba

dac It

and ltx

rhy

Stumach Zone

P12, P13

and It

P14

P22

1000 m

900 m

**PROPOSED DRILL HOLES
 INTERNATIONAL MAGGIE
 OPTION**

SECTION 11+00 E

MINNOVA



N.T.S.92G/10

CB/sg

SEPTEMBER 1987

SW

NE

3+00S

2+00S

1+00S

1000m

900m

+Ba

Slumach Zone

rhy

and lt

P16

P17

P21

?

?

?

**PROPOSED DRILL HOLES
INTERNATIONAL MAGGIE
OPTION**

SECTION 11+50 E

MINNOVA



N.T.S.92G/10

CB/sg

SEPTEMBER 1987

SW

NE

P4

3+005

2+005

IP ANOMALY

+Ba, +Zn

Target Horizon (projection)

+Au, +Zn, +Cu, +Ba

dac lt

and f bx

rhy

Slumach Au Zone (projected)

P18

and lt

P20

1000m

950m

**PROPOSED DRILL HOLES
INTERNATIONAL MAGGIE
OPTION**

SECTION 12+00 E

MINNOVA



N.T.S.92G/10 CB/sg SEPTEMBER 1987

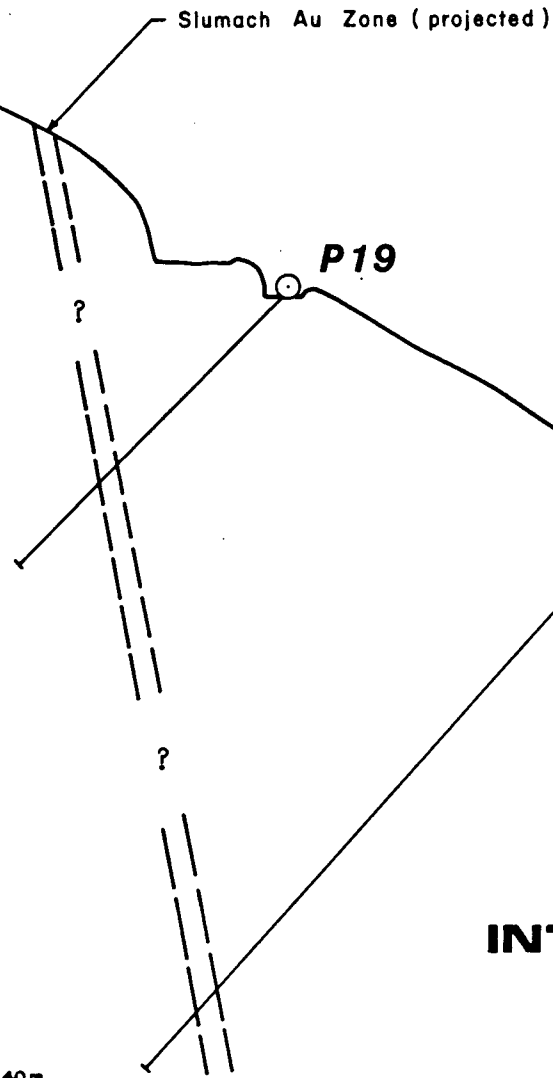
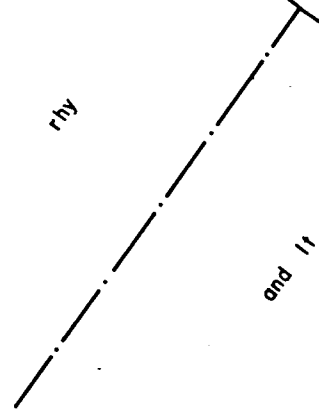
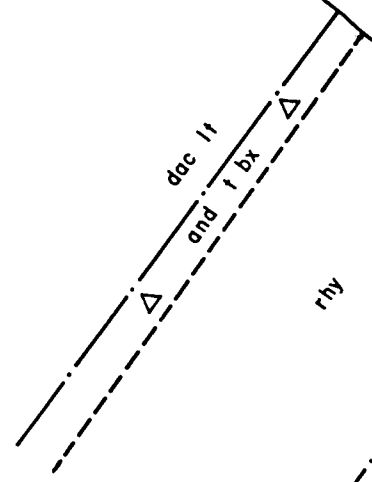
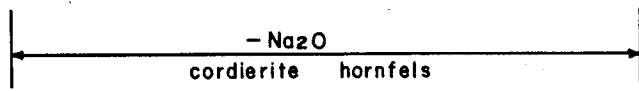
SW

NE

3+005

2+005

1+005



1000m

900m

**PROPOSED DRILL HOLES
INTERNATIONAL MAGGIE
OPTION**

SECTION 12+50 E

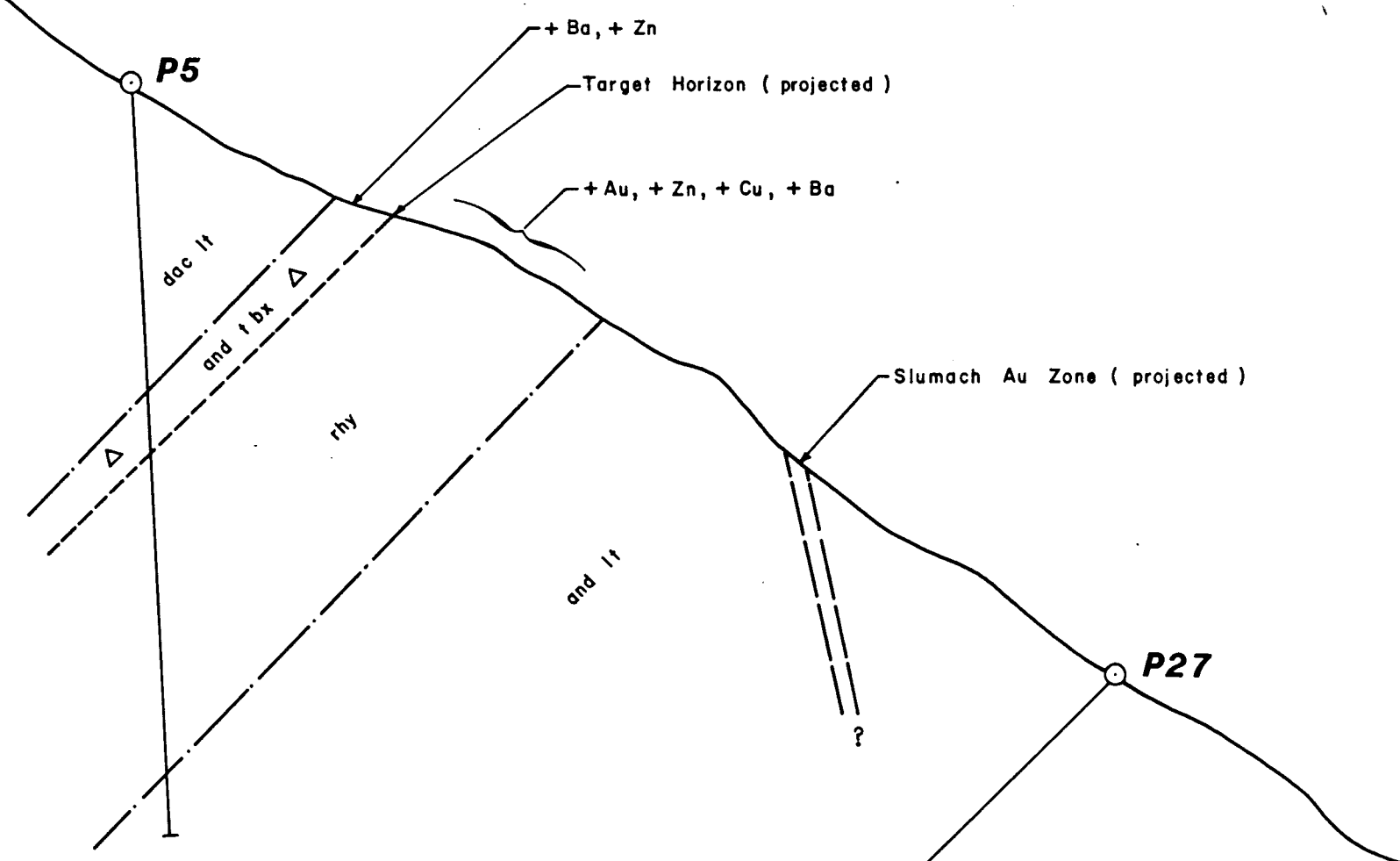
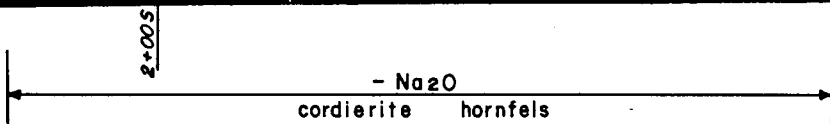
MINNOVA



N.T.S.92G/10 CB/sg SEPTEMBER 1987

SW

NE



1050m

950m

**PROPOSED DRILL HOLES
INTERNATIONAL MAGGIE
OPTION**

SECTION 13+00 E

MINNOVA



N.T.S.92G/10 CB/sg SEPTEMBER 1987



- LEGEND -

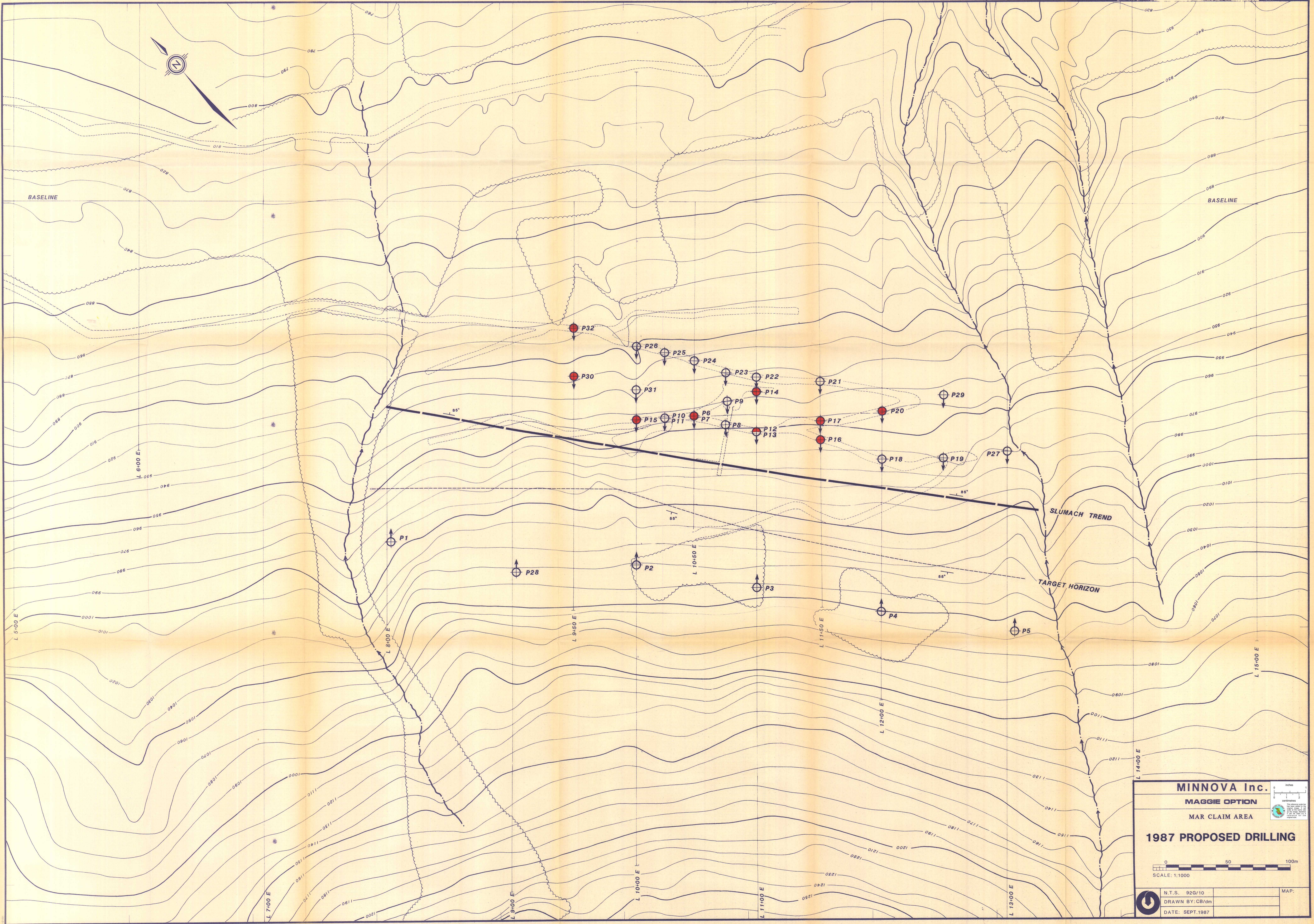
6 Felsic intrusion	3 Rhyolite
5 Mafic intrusion	2 Dacite
4 Argillite	1 Andesite
Cordierite Hornfels	Fault
Geological Contact intrusive, conformable	Bedding
Drill Hole	Jointing
	Strike & Dip

MINNOVA Inc.
MAGGIE OPTION
MAR CLAIM AREA
- GEOLOGY -

SCALE: 1:1000

N.T.S. 92G/10
 DRAWN BY: CB/dm
 DATE: SEPT. 1987

MAP:



MINNOVA Inc.
MAGGIE OPTION
 MAR CLAIM AREA

1987 PROPOSED DRILLING

0 50 100m
 SCALE: 1:1000

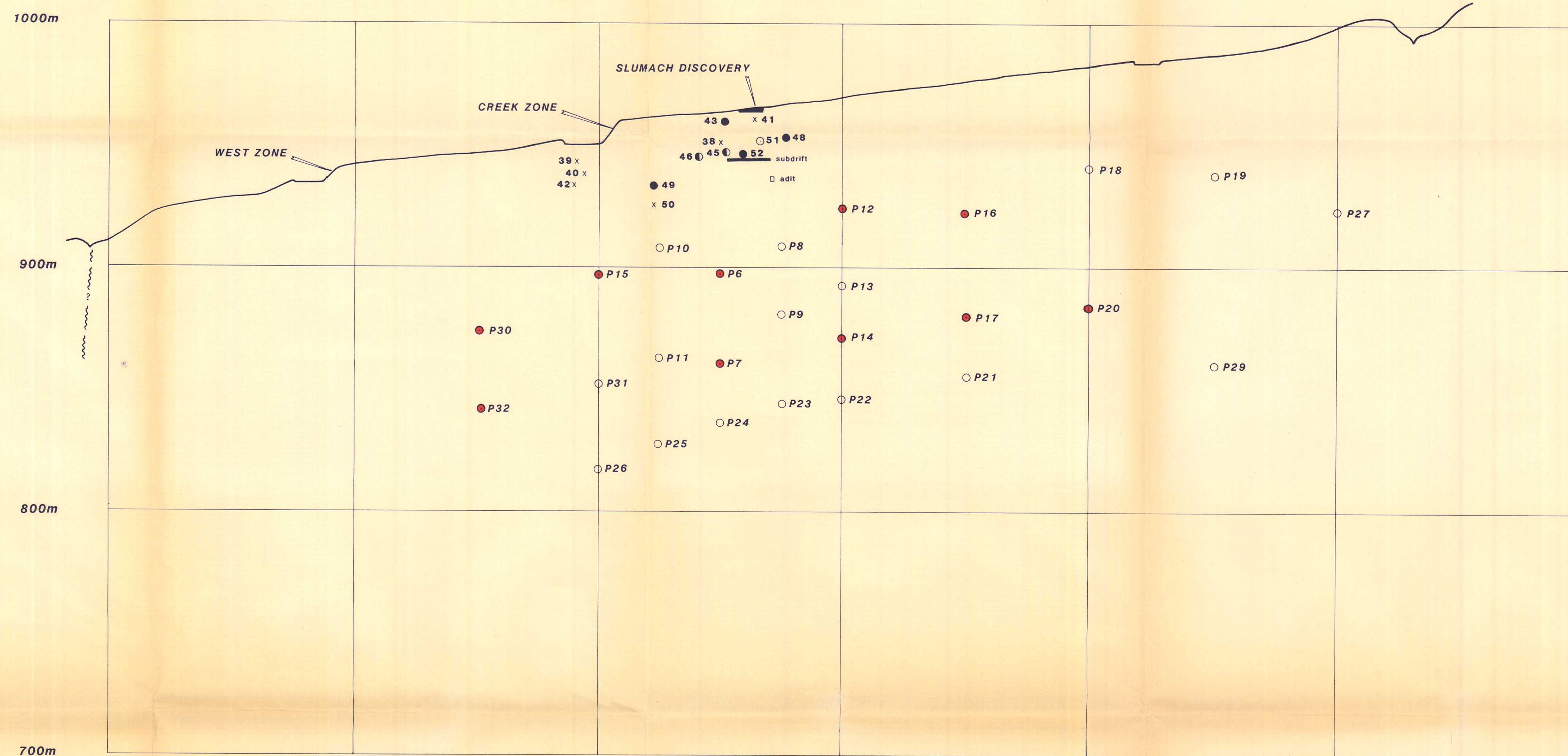
N.T.S. 92G/10
 DRAWN BY: CB/dm
 DATE: SEPT. 1987

MAP:

NW

SE

L 8-00E L 9-00E L 10-00E L 11-00E L 12-00E L 13-00E L 14-00E



- Significant intersection main vein
- Significant intersection east vein (10m NE of section)
- x Not significant mineralization
- Proposed drill hole
- 1987 Proposed drill hole

REMARKS:
 M-43 : 7.20g / 0.3m
 M-45 : 17.10 g / 0.5m East vein , Main vein dyked out
 M-46 : 9.75 g / 2.02m Main vein
 M-48 : 6.88 g / 0.46m East vein ; 24.36 g / 0.6m Main vein
 M-49 : 10.61 g / 0.3m Main vein , East vein rhyolite dyke
 M-51 : 11.12 g / 1.07m Main vein ; 1.71 g / 0.61m East vein
 M-52 : 95.10 g / 1.3m Main vein ; 4.1g / 0.6m East vein
 (all values are grams / Ton Au)

MINNOVA Inc.
INTERNATIONAL MAGGIE OPTION
 MAR CLAIM AREA
LONGITUDINAL SECTION
 THROUGH PLANE OF THE SLUMACH VEIN

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

N.T.S. 92G/10
 DRAWN BY: CB/sg
 DATE: SEPT. 1987

MAP:

