

FILE

827185

PROPOSED DIAMOND DRILL PROGRAMME

MT. SICKER PROPERTY

BRITISH COLUMBIA

NTS 92B/13

Vancouver Office
Corporation Falconbridge Copper

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Summary

A total of 6,895m. have been drilled on the Mt. Sicker Property to test the Lenora-Tyee Mine Horizon, surface showings and geophysical anomalies. All mineralized horizons, ^{← since} except the Lenora-Tyee are open along strike and down dip. The principal exploration target on Mt. Sicker is a Au-Ag-Cu-Zn volcanogenic massive sulphide deposit with anticipated grades of 0.1 oz/T Au, 3 oz/T Ag, 2% Cu, and 7% Zn. There is also potential to find Hemlo-type gold mineralization hosted by the felsic crystal tuffs. ^{← how many} _{why?}

Eleven holes (3,095m.) are proposed to test the Postuk-Fulton, Northeast Copper and Mona horizons. Nine of the holes will follow up known semi-massive sulphides with associated hydrothermal alteration and the other two will check the Postuk-Fulton/Northeast Copper Horizon beneath a diorite dike. Drilling is warranted on the Lenora-Tyee Horizon or Gabriel Chert following further field work to locate specific targets.

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Maps and Sections 1:1,000 scale in Vancouver Office

Introduction

Excellent potential exists to find a polymetallic massive sulphide deposit on the Mt. Sicker Property on Vancouver Island, British Columbia. Several favourable horizons have been identified which should be drilled to test for massive sulphides down dip and along strike. Further surface work is necessary on other mineralized zones before drilling.

A total of 6,895m. has been drilled on the Mt. Sicker Property. Over 50% of the total meterage was focussed on the Lenora-Tyee Mine Horizon (Figure 1) and its possible eastern extension. The remaining holes have tested surface showings or geophysical anomalies. All mineralized horizons, except the Lenora-Tyee, are open along strike and down dip because existing drill holes are short, closely spaced and frequently drilled down dip (>50% of holes). Significant alteration and mineralization were intersected in many of these holes.

Target

The principal target on the Mt. Sicker claims is a Au-Ag-Cu-Zn massive sulphide deposit hosted by Sicker Group volcanic rocks. Two small lenses in the Lenora and Tyee mines on the Mt. Sicker property produced 300,000 tons of ore grading 0.13 oz/T Au, 2.75 oz/T Ag, 3.31% Cu and 7.51% Zn. Sicker Group volcanics, also host the Westmin deposits at Buttle Lake which is in the centre of Vancouver Island. These orebodies have approximately the same grades as the Lenora-Tyee deposit but substantially greater tonnages.

	<u>short tons</u>	<u>oz/T Au</u>	<u>oz/T Ag</u>	<u>% Cu</u>	<u>% Pb</u>	<u>% Zn</u>
Production from Lynx Myra and Price Mines	5,204,300	0.06	3.2	1.5	1.1	7.6
Reserves in Lynx, Myra and Price Mines	1,021,000	0.06	2.6	1.0	0.9	7.4
Reserves in H-W Mine	15,232,000	0.07	1.1	2.2	0.3	5.3

1982 figures

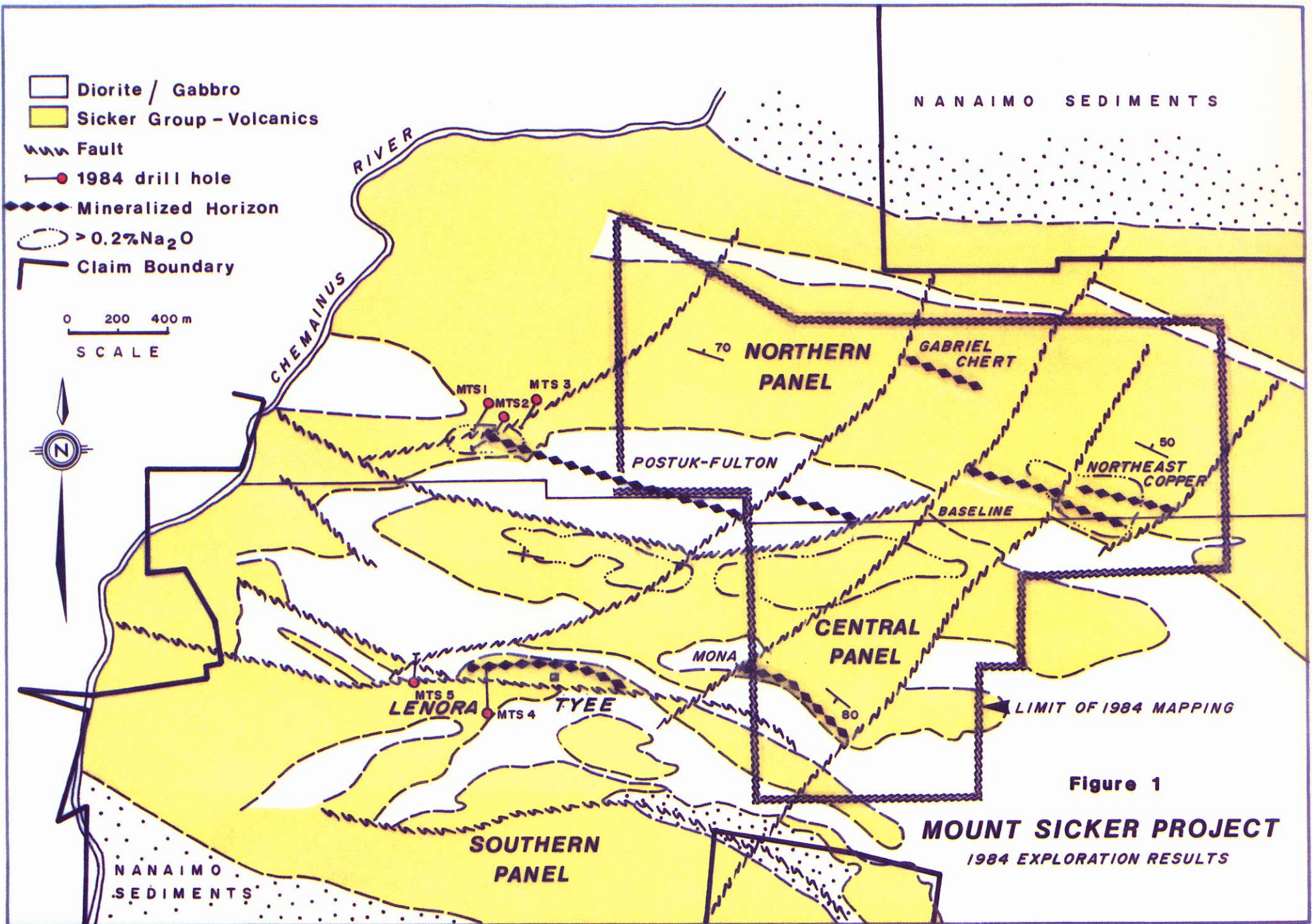


Figure 1

MOUNT SICKER PROJECT
1984 EXPLORATION RESULTS

TABLE 1 LIST OF PROPOSED DIAMOND DRILL HOLES FOR 1985, MT. SICKER PROJECT

Hole No.	Depth (m)	Dip	Azimuth	Grid Coordinates		Cost*	Comments
<u>Postuk-Fulton Horizon</u>							
P1	235	-60	180	1+22E	2+38N	\$15,040	- to test the P-F Horizon 130m ESE along strike from the MTS 3 intersection of 10.4m of chert and semi-massive sulphides - best assay from MTS 3 was 2.15% Cu, 0.05% Zn, 10.5 g/T Ag and 0.25 g/T Au over 0.5m
P2	260	-70	180	0+00E	3+00N	16,640	- to intersect the P-F Horizon immediately downdip of MTS 3 and to provide a PEM conduit to look updip towards MTS 3 (a blocked hole) - Horizon thickens downdip from S72-1 to MTS 3 and may continue to do so - 0.26% Cu over 6.4m in S72-1
P3	350	-60	180	3+22E	2+70N	22,400	- to test the P-F Horizon 200m along strike from P1 under diorite - Deepem anomaly continue onto diorite
P4	410	-75	180	2+00E	3+20N	26,240	- to cut the P-F Horizon approximately 200m downdip of P1 and 160m from P3 intersection - results from P1, P2 and P3 will influence the location of this hole
<u>Northeast Copper Horizon</u>							
P5	220	-60	180	21+00E	1+88N	14,080	- spotted to test NE Cu chert 270m downdip from strongest Deepem response in 1984 survey - area of sodium depletion in outcrop and anomalous zinc in rock and soils
P6	300	-60	180	19+80E	3+42N	19,200	- to intersect the NE Cu chert 400m downdip of 4.1m of chert with 0.2% Cu which is underlain by chloritized "schist" containing 0.08% Cu over 1m as disseminations and stringers of py and cp - area of sodium depletion in outcrop and downdip from intense chloritization (0.2% Na ₂ O) and pyrite and chalcopyrite stringers near Fortuna Adit
P7	120	-60	180	24+00E	1+00S	7,680	- to intersect both NE Cu chert and possible deeper horizon which is cut by Tom's Shaft - massive sulphide boulders (py, cp) from Tom's Shaft are up to 1m across - best grab sample contains 0.43% Cu, 0.01% Zn, 7.0 g/T Ag and 1.0 g/T Au - coincident Ba (rock), Cu (soil) and Deepem anomalies
P8	250	-60		23+00E	1+60N	16,000	- spotted to intersect NE Cu chert 380m downdip of surface showings and Deepem response at NE Copper - downdip of centre of strongest Dighem anomaly on Mt. Sicker - located to north of diorite dyke

<u>Hole No.</u>	<u>Depth (m)</u>	<u>Dip</u>	<u>Azimuth</u>	<u>Grid Coordinates</u>		<u>Cost*</u>	<u>Comments</u>
				<u>Mona Horizon</u>			
P9	250	-60	0	9+20E	9+85S	16,000	- to test the Mona Horizon between Mona Shaft and previous drill holes - massive sulphide boulders (py, po, ep) can be found on Mona Shaft dump - surface exposure of Mona Horizon contains 1.64% Cu, 0.02% Zn, 0.05% Pb, 19.5 g/T Ag and 1.35 g/T Au
				<u>Postuk-Fulton/Northeast Copper Horizon</u>			
P10	300	-60	180	13+00E	1+00N	19,200	- stepout hole to test P-F/NE Cu Horizon 500m west of Fortuna intersection in S72-3 - close to Fortuna Fault, a major structure on Mt. Sicker - will intersect horizon downdip of intense sodium depletion and weak Dighem anomaly
P11	400	-60	180	8+00E	2+00N	25,600	- stepout hole to test P-F/NE Cu Horizon 500m west of P10 and 500m east of P3 - copper anomaly in diorite could represent contamination or leakage from underlying sulphide lens
Total	<u>3095</u>					<u>\$198,080</u>	

* 1984 direct drilling cost - Rea Gold

A Hemlo-style gold deposit is a secondary target. Anomalous gold and barium values, green mica, abundant pyrite, felsic crystal tuffs and massive sulphides are all found on Mt. Sicker. These are features associated with numerous Archean gold deposits such as Hemlo, Thompson-Bousquet and Silverstack.

Plan projections of the Lenora-Tyee, Price and Myra orebodies show the approximate dimensions of the primary target (Figure 2). The orebodies are typically cigar-shaped and elongated parallel to fold hinges.

Mineralized Horizons

Five mineralized horizons have been identified on the Mt. Sicker Property. These are the Lenora-Tyee, Postuk-Fulton, Northeast Copper, Mona and Gabriel (Figure 1). A drill programme of 3095m. (\$198,080 direct drilling costs) is proposed which will focus on the mineralized chert horizon which extends from the Postuk-Fulton trenches to the Northeast Copper Showing. One hole is proposed to test the pyrite-pyrrhotite-chalcopyrite-chert Mona Horizon. Further surface work is required on the Gabriel and Lenora-Tyee horizons before they should be drilled.

Postuk-Fulton Showing

Four holes (P1-P4, 1255m.) should be drilled to test the Postuk-Fulton Horizon to the east along strike and down dip from the MTS 3 intersection (Table 1, Map 1). MTS 3 cut 10.4m. of chert, chert breccia, green mica, pyritic felsic tuff, chlorite and semi-massive sulphides. The best assay was 2.15% Cu, 0.05% Zn, 10.5 gm/T Ag and 0.25 gm/T Au over 0.5m. Anomalous gold values up to 0.45 gm/T Au occur in green mica pyritic felsic tuffs associated with the mineralized horizon. The Postuk-Fulton Horizon was also intersected in holes SRM 16, MTS-2 and S72-1. The Horizon thickens and becomes more copper-rich towards MTS 3 which indicates increasing proximity to

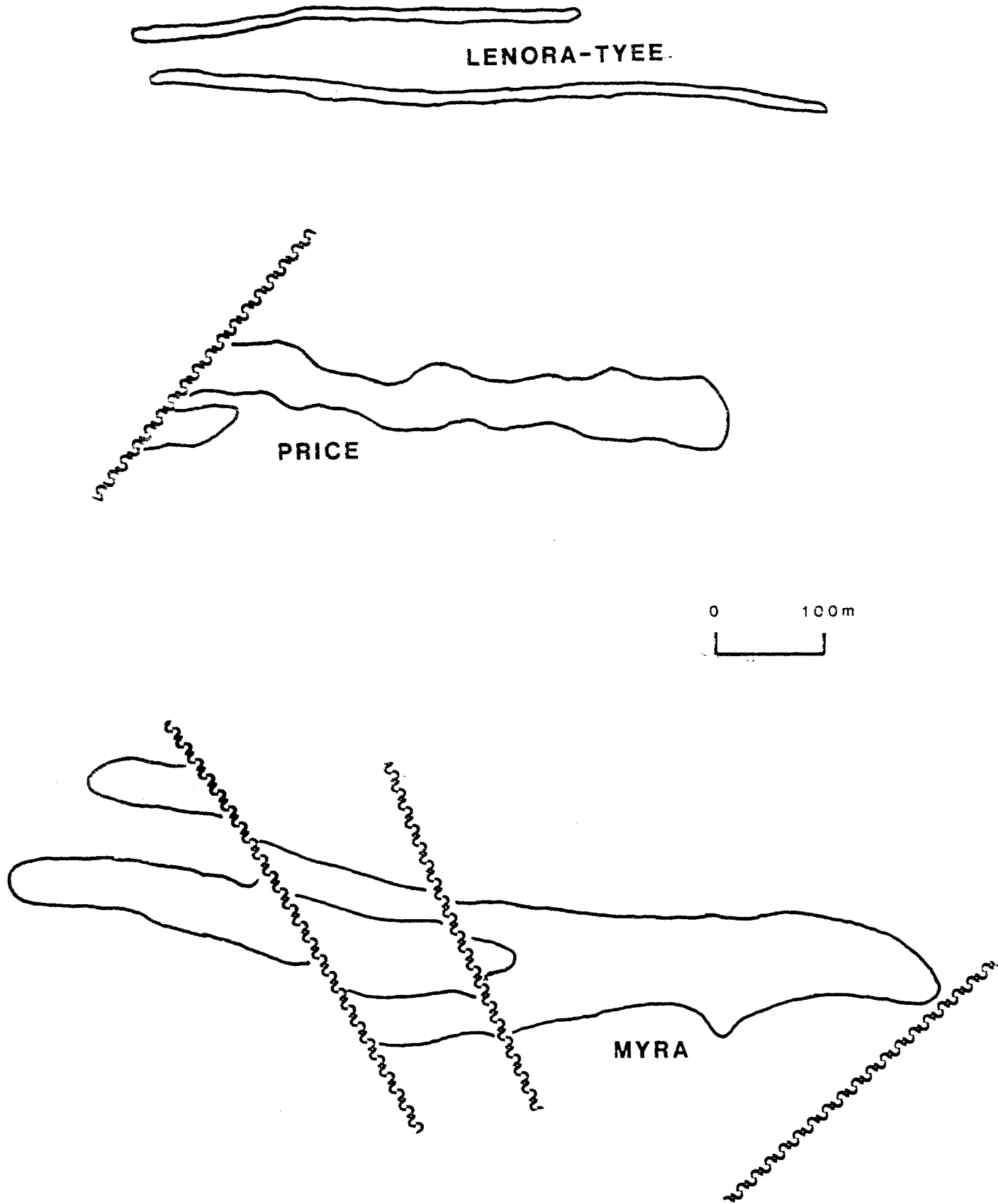


Figure 2. Plan projections of several Vancouver Island massive sulphide deposits.

1:5,000

massive sulphides. At the end of S72-1 there is 0.26% Cu over 6.4m. (Figure 3).

The Postuk-Fulton Horizon has been traced at surface by Deepem up to and under the adjacent diorite. Associated with it there is extensive sericite and chlorite, strong sodium depletion (<0.2%) and anomalously high copper, zinc and barium values.

Fortuna-Northeast Copper Showings

Numerous exposures of chert with associated chalcopyrite and pyrite are found on surface and in old workings in the Fortuna-Northeast Copper area. The host rocks are intensely chloritized with associated sodium depletion (<0.2%) and typically contain 1-5% disseminated pyrite. Anomalous Ba, Cu, Au and Zn values are found where there is outcrop. The principal chert horizon was picked up by Dighem and Deepem surveys.

For 1985 a programme of 3 holes (P5, P6, P8, 770m.) is proposed to test the chert horizon down dip from the surface mineralization within the alteration zone (Figure 4). A short hole (P7, 120m.) will test for the Tom's Shaft sulphides at a slightly deeper stratigraphic level than the chert horizon.

Mona Horizon

Semi-massive to massive pyrite with associated chalcopyrite, pyrrhotite or magnetite is found on a dump and in a trench on the Mona Horizon. A zone of sodium depletion with flanking anomalous Ba, Cu and Au lithochemical values occurs in the same area. The Mona Horizon is virtually untested as only one hole cuts it near surface (Figure 5).

An initial programme of one hole (P9, 250m.) is proposed for 1985 to test the Mona Horizon near a surface outcrop with 1.64% Cu and 1.35 gm/T Au in a grab sample and beneath the surface Ba-Au anomaly.

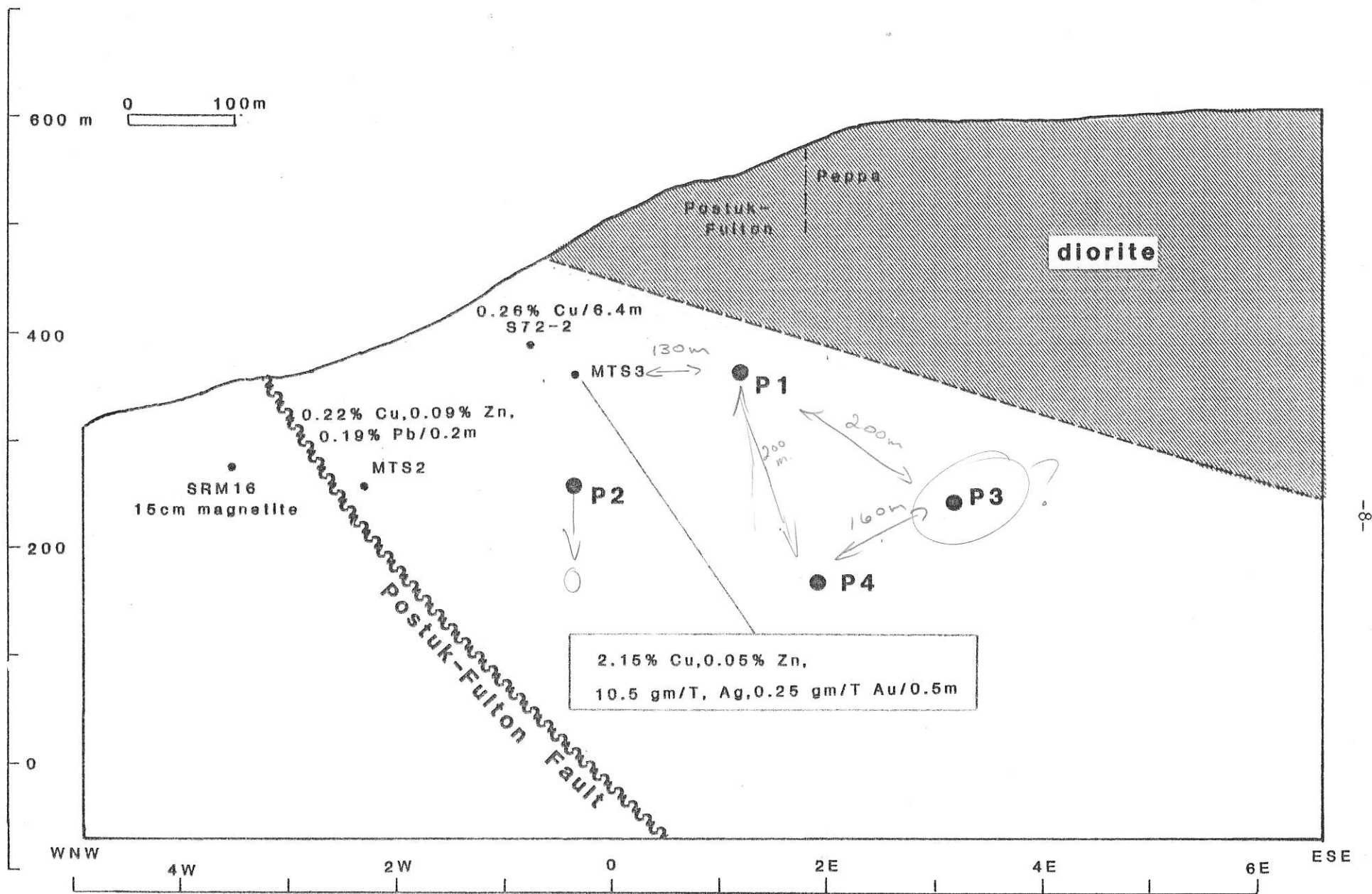


Figure 3. Vertical longitudinal section of Postuk-Fulton Horizon showing proposed holes.

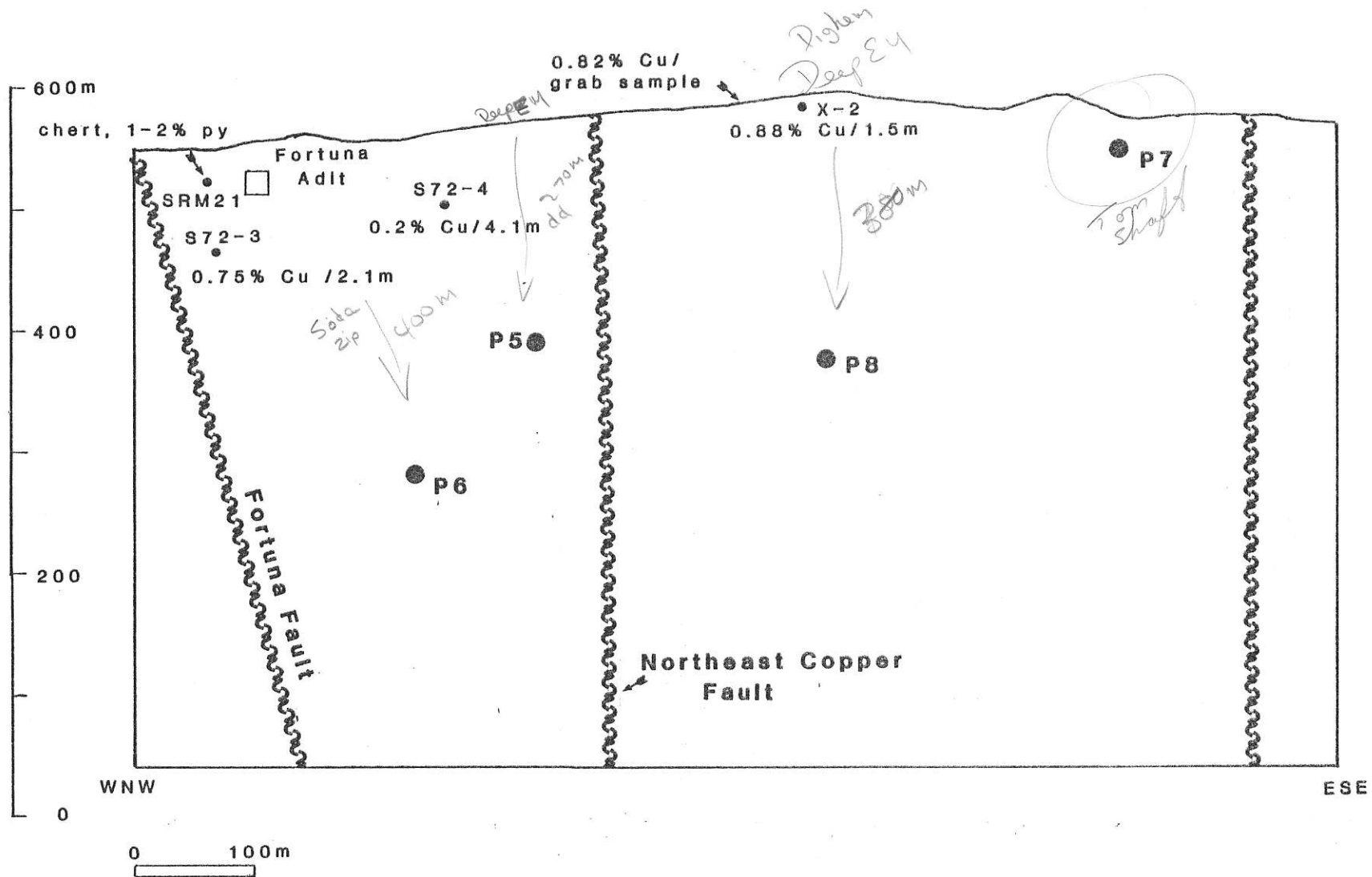


Figure 4. Vertical longitudinal section of Fortuna - Northeast Copper Horizon showing proposed drill holes.

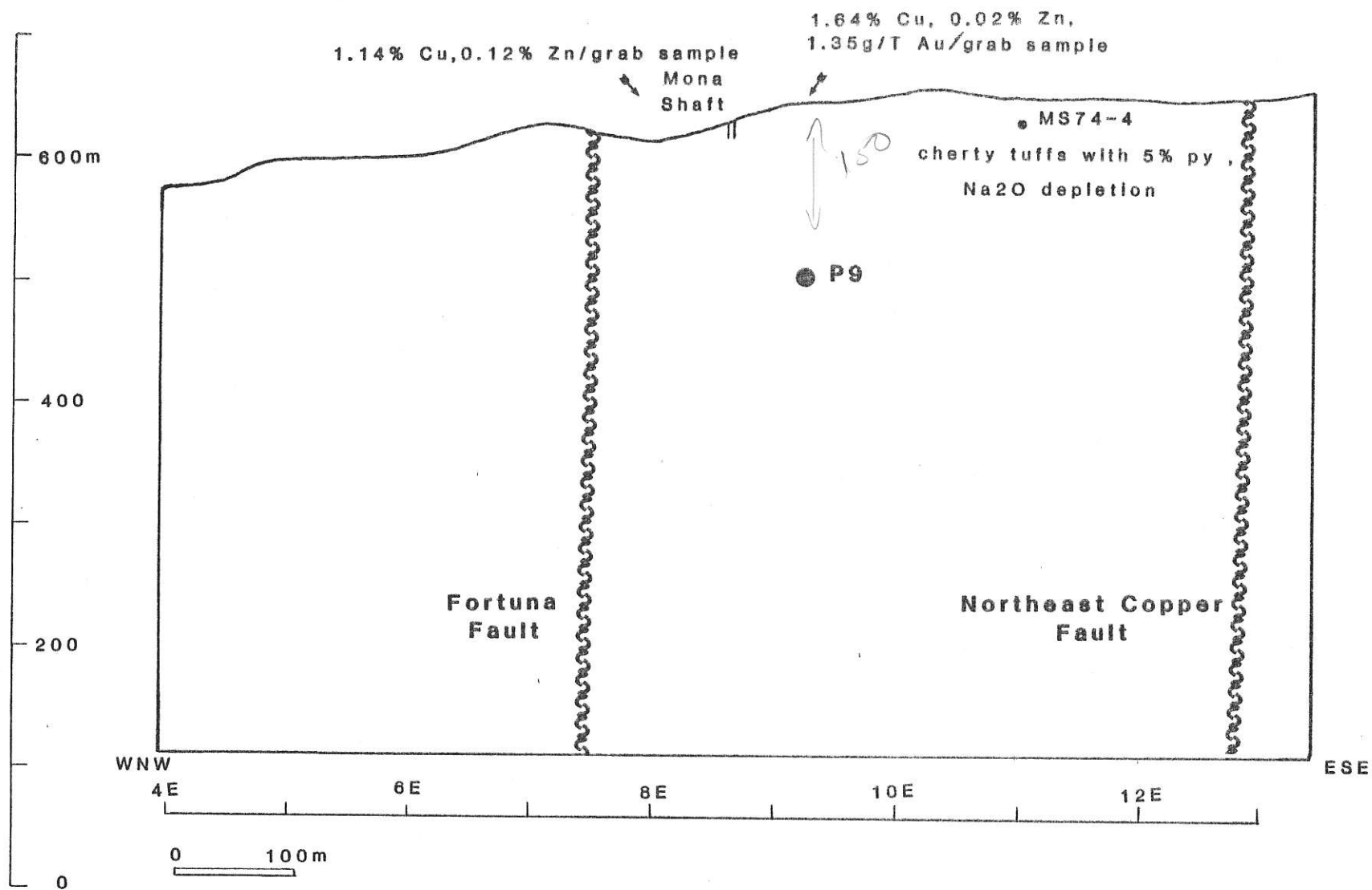


Figure 5. Vertical longitudinal section of Mona Horizon showing proposed hole.

Postuk-Fulton/Northeast Copper Horizon

Two holes (P10, P11, 700m.) are proposed to test for lateral continuity of the favourable Postuk-Fulton/Northeast Copper Horizon (Figures 6 and 7). They are spotted to test geochemical and geophysical anomalies (Table 1); the horizon lies beneath a diorite dike (a la Zenmac).

Future Drill Targets

The possible western extension of the Lenora-Tyee Horizon requires further investigation as there are coincident Deepem, Dighem and zinc lithogeochem anomalies. This is an area with good potential, no holes have been drilled more than 250m. west of the Lenora mine.

The Gabriel chert, a new horizon identified in 1984 mapping, contains up to 500 ppm zinc with an associated conformable sodium depletion zone and anomalous gold values. This horizon has not been drilled. Further fieldwork on this horizon would help delineate specific drill targets.

Another target is a thin pyrite-magnetite horizon in felsic tuffs which is associated with a strong barium anomaly centred on 16+00E and 2+50S. Immediately to the southwest, SEREM intersected 1m. of 60 to 80% pyrite with interstitial chert in hole SRM14.

Conclusions

A drill programme of 11 holes totalling 3095m. is proposed to test the Postuk-Fulton, Northeast Copper and Mona horizons. Nine of the holes are following up semi-massive sulphides intersected in drilling or old workings with associated alteration. The other two holes will check the Postuk-Fulton/Northeast Copper Horizon beneath a diorite dike. The prospect for a massive sulphide intersection during this programme is excellent. No drill holes are proposed at this time for the western extension of the Lenora-Tyee Horizon or the Gabriel Chert because they require further field work.

David Lefelme

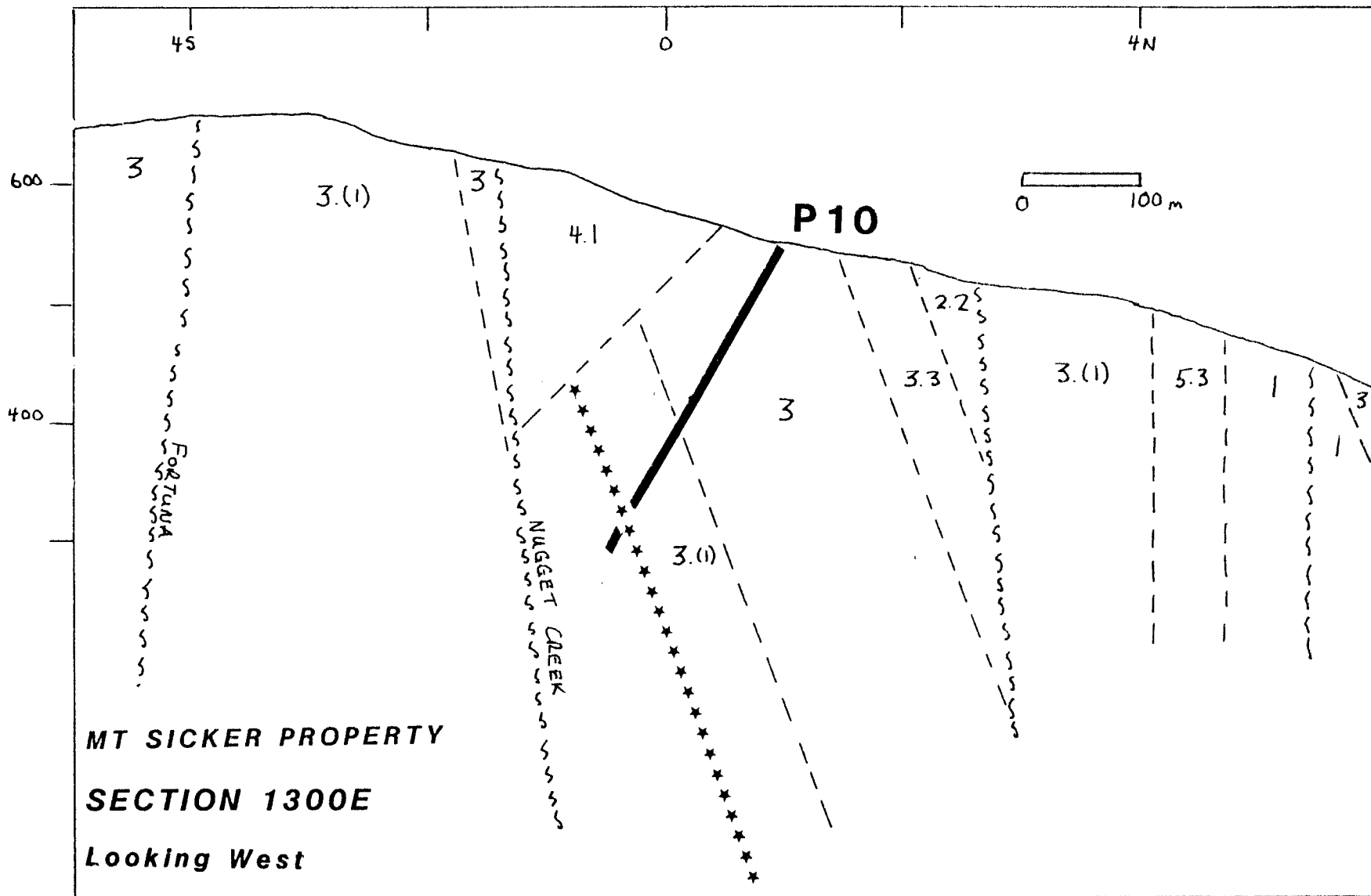


Figure 6. Cross-section 1300E showing trace of P10.

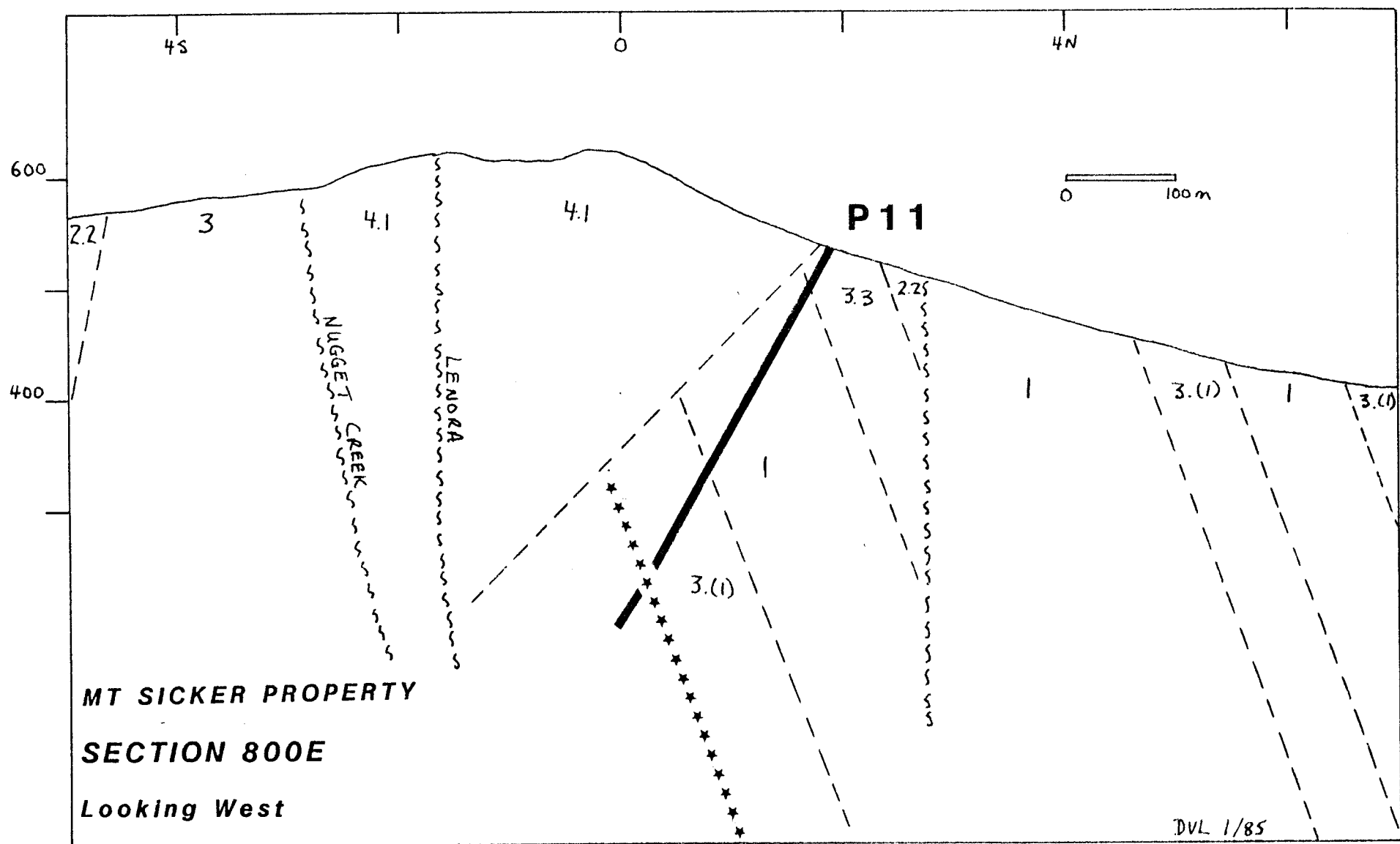


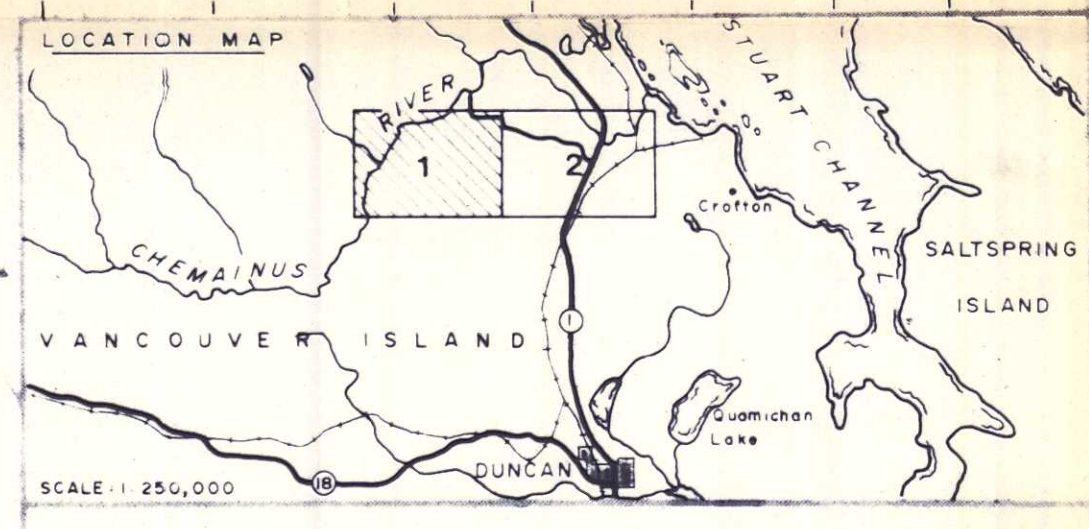
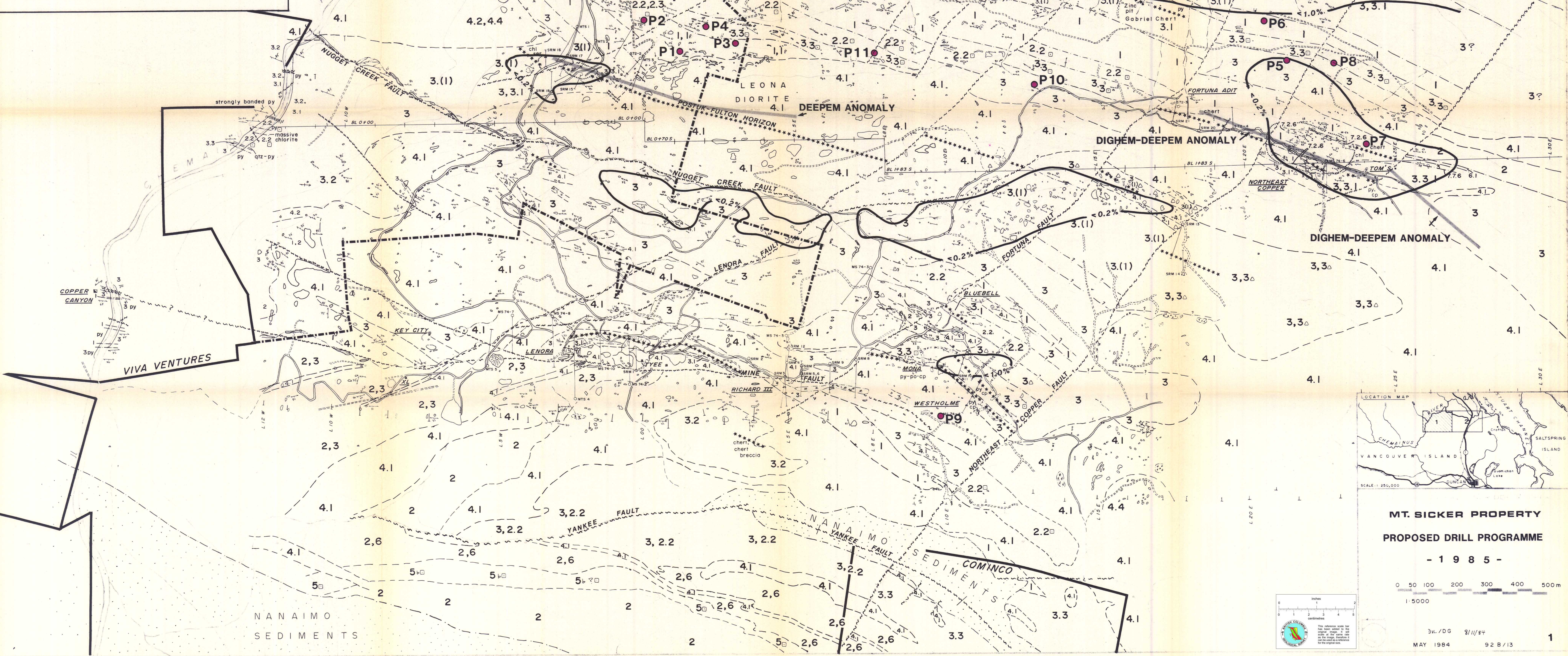
Figure 7. Cross-section 800E showing trace of P11.

- LEGEND -

- | | |
|----------------------------|-------------------------------|
| 1 MAFIC VOLCANICS | 5 FELSIC INTRUSIONS |
| 2 INTERMEDIATE VOLCANICS | 5.3 Andesite |
| 2.2 Feldspar Phyric | 6 SEDIMENTS |
| 3 FELSIC VOLCANICS | 6.1 Cherty Sediment |
| 3.1 Quartz Phyric | 6.3 Argillite / Shale |
| 3.2 Feldspar Phyric | 7 MINERALIZATION ***** |
| 3.3 Quartz Feldspar Phyric | 7.2.6 Chert with Chalcopyrite |
| 4 MAFIC INTRUSIONS | 7.7.6 Massive Chert |
| 4.1 Diorite | |
| 4.2 Gabbro | |
| 4.4 Quartz-Bearing Diorite | |
-
- | | |
|---|--------------------------------|
| □ Porphyritic (>5% phenocrysts) | ○ Alteration Zone |
| △ Flow | ○ Outcrop |
| △ Lapolistone | ○ Float |
| () Partially (ie 3(1)-some qtz phyric etc) | ○ Drill Hole |
| — Intrusive Contact | △ Survey Point |
| — Conformable Contact | △ Shaft |
| — Gradational Contact | △ Adit |
| — Foliation | — Trench |
| — Second Foliation (inclined, vertical) | — Claim Post |
| — Lincation | — Road (maintained, abandoned) |
| — Fault | — Creek |

- ABBREVIATIONS -
- | | |
|-----------------|----------------|
| ba Barite | carb Carbonate |
| cp Chalcopyrite | chl Chlorite |
| ga Galena | epid Epidote |
| mag Magnetite | ser Sericite |
| py Pyrite | sil Silicified |
| pyr Pyrrhotite | |

- Na₂O Depletion Anomalies
- EM Anomaly
- P5 Proposed drill holes



MT. SICKER PROPERTY
PROPOSED DRILL PROGRAMME
- 1985 -

0 50 100 200 300 400 500m
 1:5000

3K/DG 9/11/84
 MAY 1984 92 B/13