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MICROFILMED

MT. BISCHOFF TIN PROSPECT

(Exploration Area being part of EL 5/63)

TASMANIA

STAGE 2A PROGRAMME AND BUDGET (amended)

REPORT NO. 481

OPEN FILE

A. Jannink, April 1979

Copy No. 9

Issued to : MINES DEPT

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INTRODUCTION:1. PREVIOUS WORK

The exploration work carried out to the end of the Stage 1 Programme has indicated various categories of reserves at Mt. Bischoff. Of the two main reserve types - dolomite and porphyry - the following approximate figures have been calculated:

White Face/Stanhope Porphyry Dyke: 10,000,000 tonnes at 0.24% Sn (between Sections 860E and 1400E) to RL. 500 m.

Dolomite (Greisen Face, Pig Flat: 700,000 tonnes at 1.0% Sn Slaughteryard Face, Brown Face).

Further low grade reserves may exist in the Queen Vein - Queen Dyke Zone, and in other porphyry dykes.

2. "EARLY START" STAGE 2A PROGRAMME

Since the Stage 1 Programme was completed, some work has been continued on the prospect. This work has included surface and underground sampling of porphyry rocks, an airborne magnetic survey and bench scale beneficiation testing of porphyry rock samples.

The results of this work will be incorporated in the report at the conclusion of the Stage 2A Programme.

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3. OBJECTIVE OF STAGE 2 PROGRAMME

The objective of the Stage 2A Programme is to refine the total indicated reserve to not less than 20 million tonnes at a grade of the order of 0.3% Sn (to RL. 500 m).

A following Stage 2B Programme would then be designed to prove up these reserves.

Bench scale metallurgical work will be continued to test for optimum tin recovery.

4. TARGETS FOR STAGE 2A PROGRAMME

Four areas have been selected as targets for increasing the total reserves:

A. Stanhope Extended Porphyry Dyke

This dyke is the extension of Stanhope Dyke to the east of 1500E, i.e. to the east of the junction of Stanhope and Queen Dykes. It extends about 1 kilometer to the east, but outcrop is discontinuous after the first 500 metres. Previous testing of this dyke has been confined to a tunnel that is now collapsed, and a number of grab samples taken approximately every 100 metres over a strike length of about 700 metres. The western 350 metres averaged 0.1% Sn. A potential of 5 to 8 million tonnes exists in the dyke.

B. White Face Porphyry Dyke (Extended)

The most westerly intersection on White Face Dyke is between 41.8 and 62.5 metres in hole B 37 on Section 600E. This intersection averaged 60ppm Sn. The next most westerly section on which the dyke was cut was 880E, where three holes B 18, 19 and 38 penetrated the dyke. B 18 and 19 were sited close to outcrop (similar to B 37) and had the following values :

- 21 metres at 0.13% Sn and
- 19 metres at 0.05% Sn

B 38 struck the dyke between 76.5 and 108.5 metres near the higher grade zone around the "roll" of the dyke. This 32 metre intersection averaged 0.3% Sn with a 13.5 metre central core of 0.52%Sn. This higher grade zone has a potential of about 1 million tons per 100 metres extension to the west, and this programme could indicate about 2 million tons.

C. Queen Vein/Porphyry Dyke Zone

Sampling of the main tunnel in this zone averaged 0.17% Sn over about 50 metres, and four samples taken over part of Queen Dyke averaged 0.32% Sn.

Surface sampling of the porphyry dyke has indicated an average grade of 0.4% Sn from 5 bulk grab samples over a strike length of 450 metres.

The zone contains many quartz-sulphide veins, some of which have been exploited in the past, as has part of the Queen Dyke. A possible tonnage of 7 million tons of low grade (0.17% Sn)

material may overlie 2 million tons of porphyry reserve in Queen Dyke. There has been no previous drilling in this area.

D. South East Dolomite

Previous drilling by Comstaff Pty. Ltd. has not conclusively closed off the dolomite horizon to the south east. Should this horizon extend in this direction, then further sulphide zones with tin mineralization may exist. Line 1200E is the most easterly section on which dolomite was intersected. Four holes penetrated the horizon: B 32, B 33, AAB 1 and 2. The greatest thickness of dolomite intersected was in the southernmost hole, B 32 between 21 and 81 metres depth (i.e. thickness of 60 metres), and B 33 contained a zone of 5 metres averaging 0.63% Sn. A short hole, B 34, on section 1260E and a deeper hole, B 35, on section 1320E, both failed to intersect any dolomite. However these holes may have been sited too far to the north, and the dolomite horizon could still extend south of them. Both B 32 and B 33 bottomed in relatively high tin values of 0.48% and 0.29%. This zone is also untested, and may indicate a repetition of a dolomite horizon at depth.

E. Airborne Magnetic Anomalies

Only minor targets have been revealed as a result of the airborne magnetic survey, and a small provision has been made in the programme to test these.

5. SUMMARY OF STAGE 2A PROGRAMME

Should the targets outlined above reveal the tonnage potential

as estimated above, then the following total reserve could be anticipated :

White Face/Stanhope Porphyry Dyke Say 9,000,000 tonnes
(higher grade open pit potential to
RL. 500m, between 860E and 1400E).

Stanhope Extended Porphyry Dyke 5-8,000,000 tonnes
(east of 1400E)

White Face Porphyry Dyke (Extended) 2,000,000 tonnes
(west of 860E)

Queen Porphyry Dyke 2,000,000 tonnes

Say 20,000,000 tonnes

Dolomite Reserves Say 0.7-1,000,000 tonnes

Low Grade Queen Zone Reserves Say 7,000,000 tonnes

(From this total reserve, the objective would be to extract,
based on selective mining, a higher grade reserve of not less
than 20,000,000 t at \approx 0.3% Sn.)

PROPOSED PROGRAMME :

The accompanying tables list the proposed drilling programmes:

Nine percussion holes and one diamond hole have been planned to
test the Stanhope Extended Dyke over a strike length of 350 metres.

In order to fill in zones of the Stanhope Dyke and White Face Dyke

where both geological and assay data is sparse, seven and six percussion holes, respectively, have been designed.

Westerly projections of the White Face (Extended) Dyke are planned to be diamond drilled with two holes since the target is too deep for percussion drilling.

In the Queen Zone, seven percussion holes have been proposed to test the Queen Porphyry Dyke. Access to this area is limited, and if further sites can be made available, then possibly two more percussion holes may be drilled. In addition one diamond drill hole is planned to test the complete width of the Queen Zone.

One diamond drill hole has been allocated to test the South East Dolomite Zone for its extension and possible mineralisation.

The field programme would proceed in May with surveying and preparation of drill sites (bulldozing). Percussion drilling would commence at the beginning of June (or as soon as the sites are prepared, whichever is the earlier) and be completed in early July. Diamond drilling would begin in mid-June and be completed by early August. A report on the Stage 2A Programme would be issued by early September 1979.

A staff of two geologists (one part time), a technician and field assistant would be employed. Percussion drilling would be on a one shift basis, and diamond drilling on a two shift basis.

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Continued metallurgical work, especially on the porphyry rock types, would be carried out during the period.

BUDGET :

See separate table.

PROPOSED DIAMOND DRILL HOLES FORSTAGE 2A PROGRAMME

<u>Target</u>	<u>Co-ords</u>	<u>R.L.</u> m	<u>Depth</u> m	<u>Dip</u>	<u>Azimuth(Grid)</u>
Stanhope Extended Dyke	2184N 1640E	655	100	Vertical	-
White Face Dyke (Extended)	1900N 800E	602	140	Vertical	-
White Face Dyke (Extended)	1983N 700E	615	220	75°	180°
Queen Zone	2164N 1268E	673	220	70°	45°
South East Dolomite	1700N 1260E	596	250	65°	360°

5 holes for 930 m

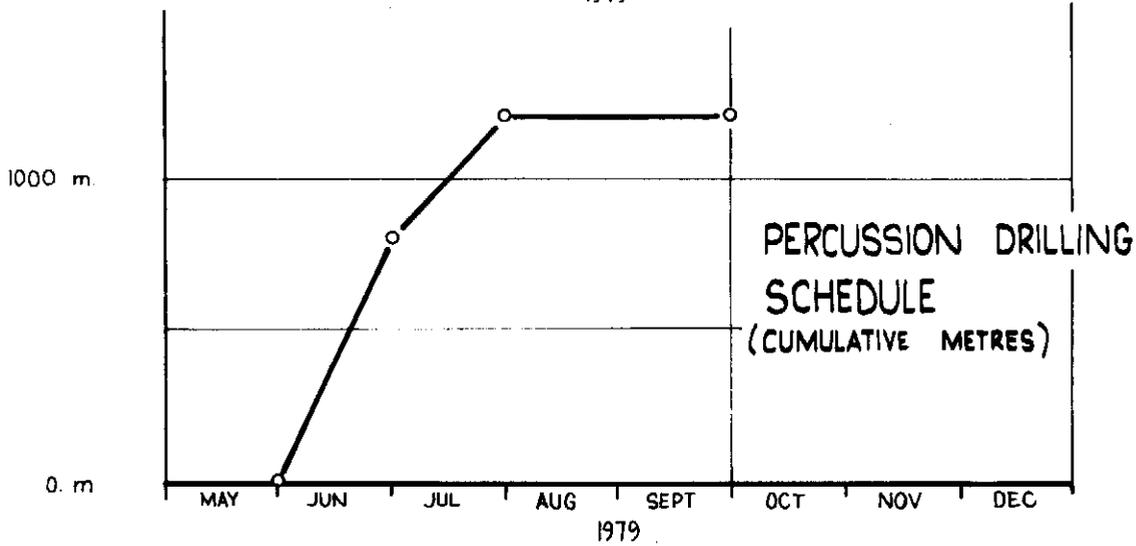
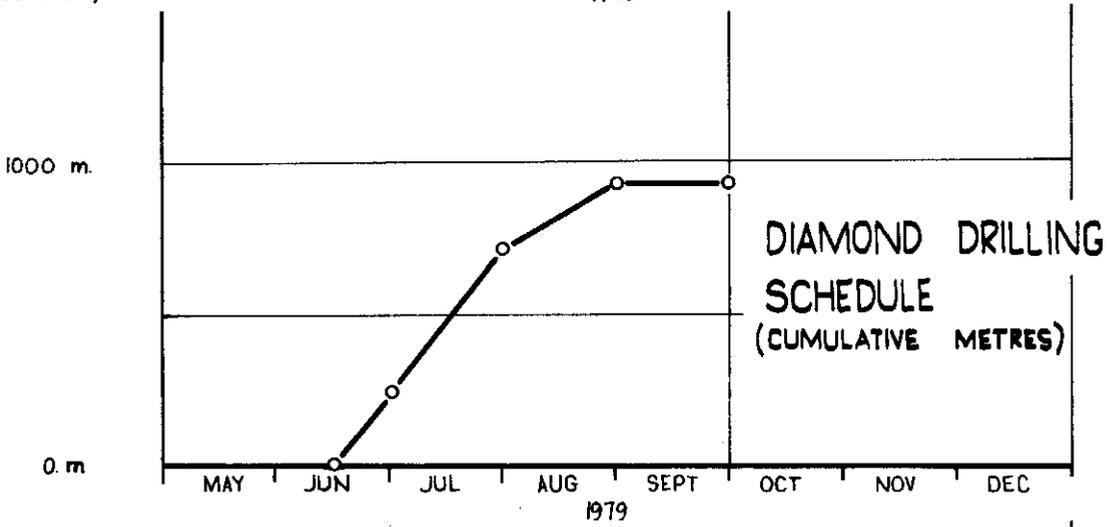
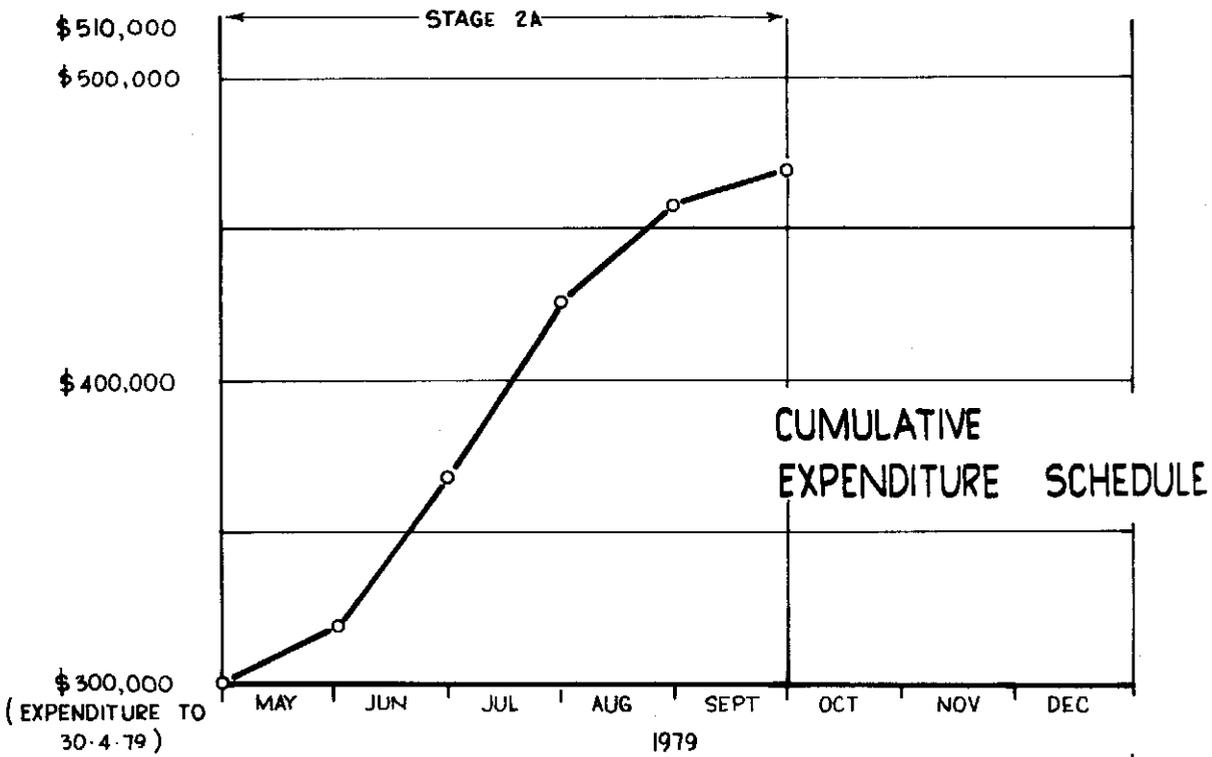
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PROPOSED PERCUSSION DRILL HOLES FORSTAGE 2A PROGRAMME

<u>Target</u>	<u>Co-ords</u>	<u>R.L.</u> m	<u>Depth</u> m	<u>Dip</u>	<u>Azimuth</u> <u>(Grid)</u>
Stanhope Extended Dyke	2055N 1520E	680	30	Vertical	-
" " "	2070N 1560E	675	30	"	-
" " "	2095N 1600E	670	40	"	-
" " "	2115N 1640E	670	40	"	-
" " "	2130N 1680E	665	40	"	-
" " "	2140N 1720E	665	40	"	-
" " "	2145N 1760E	655	40	"	-
" " "	2160N 1800E	655	50	75°	180°
" " "	2155N 1840E	650	50	75°	180°
Stanhope Dyke	2035N 1480E	695	50	Vertical	-
" "	2020N 1440E	703	40	"	-
" "	2025N 1400E	703	40	"	-
" "	2035N 1360E	695	40	"	-
" "	2050N 1320E	689	30	"	-
" "	2035N 1280E	692	50	"	-
" "	2020N 1260E	689	50	"	-
White Face Dyke	1970N 1260E	678	50	Vertical	-
" " "	1970N 1220E	678	50	75°	180°
" " "	1900N 1180E	634	30	Vertical	-
" " "	1945N 1160E	652	50	75°	180°
" " "	1910N 1120E	628	50	75°	180°
" " "	1760N 1040E	619	20	Vertical	-
Queen Dyke	2060N 1485E	695	50	Vertical	-
" "	2100N 1470E	710	40	75°	90°
" "	2140N 1460E	709	40	75°	90°
" "	2180N 1450E	710	40	75°	90°
" "	2220N 1430E	715	50	75°	90°
" "	2360N 1300E	680	40	Vertical	-
" "	2400N 1240E	680	40	"	-

29 holes for 1210 m



MT. BISCHOFF

STAGE 2A SUMMARY

5 cm

513

1600N

1800N

2000N

2200N

2400N

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700m

700m

2000m (6096m ASL)
600m

2000m
600m

500m

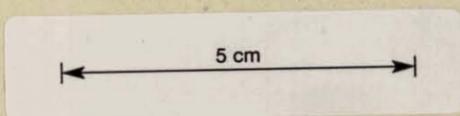
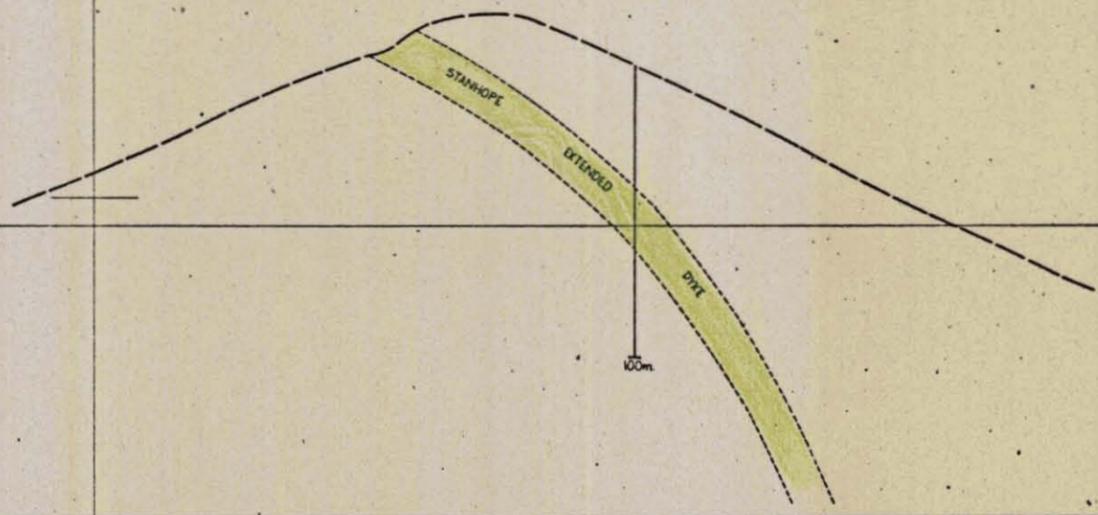
500m

400m

400m

300m

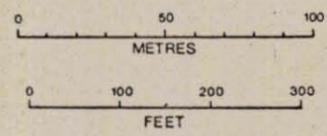
300m



- 2 DOLOMITE
- 3/1 MINERALIZED DOLOMITE / TIN ZONE
PYRRHOTITE
- ARGILLITES, QUARTZITES AND SHALES
- 7 PORPHYRY

200m.

200m.



METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 UNINTERPRETED SECTION

LINE 1640 mE

SHOWING PROPOSED STAGE 2A DRILLHOLE

SCALE 1:2400 LOOKING TO GRID WEST (240°M)

DATE: FEB '79 REVISED: DRG. NO. 79-134

514

1600N

1800N

2000N

2200N

2400N

173015

700m

700m

2000ft (6096m ASL)
600m

2000ft
600m

500m

500m

400m

400m

300m

300m

5 cm

- DOLOMITE
- MINERALIZED DOLOMITE / TIN ZONE
- ARGILLITES, QUARTZITES AND SHALES
- PORPHYRY

200m.

200m.

0 50 100
METRES

0 100 200 300
FEET

METALS EXPLORATION LIMITED
MOUNT BISCHOFF TIN PROSPECT
MOUNT BISCHOFF MINE AREA
UNINTERPRETED SECTION

LINE 800 mE

SHOWING PROPOSED STAGE 2A DRILLHOLE

SCALE 1:2400 LOOKING TO GRID WEST (240°M)

DATE: FEB '79 REVISED: DRG. NO. 79-137

U15

1600N

1800N

2000N

2200N

173016

2400N

700m

700m

2000ft (609.6m A.S.L.)
600m

2000ft
600m

500m

500m

400m

400m

300m

300m

220m

WHITE FACE DYKE (EXTENDED)

5 cm

- 2 DOLOMITE
- 3/1 MINERALIZED DOLOMITE / TIN ZONE
PYRRHOTITE
- 4 ARGILLITES, QUARTZITES AND SHALES
- 7 PORPHYRY

200m.

200m.

0 50 100
METRES

0 100 200 300
FEET

METALS EXPLORATION LIMITED
MOUNT BISCHOFF TIN PROSPECT
MOUNT BISCHOFF MINE AREA
UNINTERPRETED SECTION

LINE 700 mE

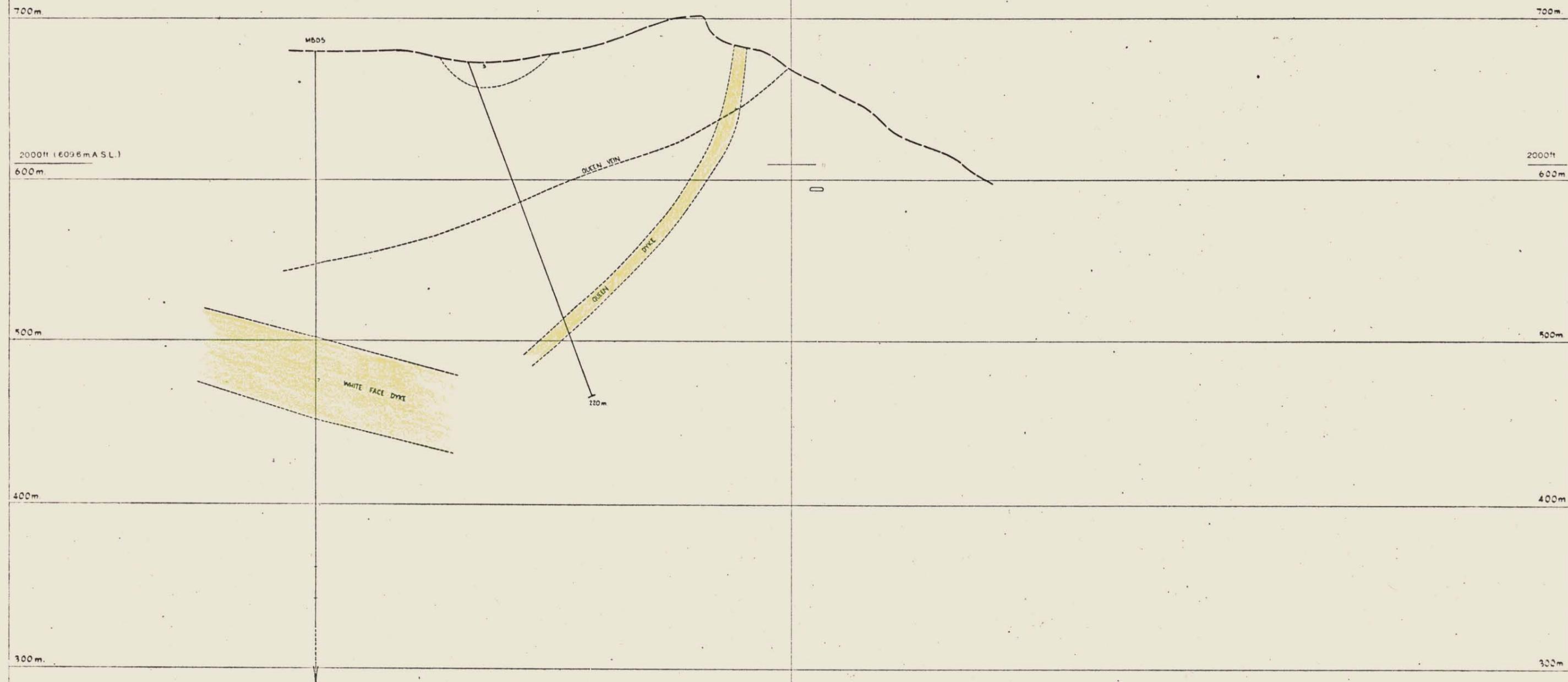
SHOWING PROPOSED STAGE 2A DRILLHOLE

SCALE 1:2400 LOOKING TO GRID WEST (240°M)

DATE: FEB '79 REVISED: DRG. NO. 79-158

516

173017

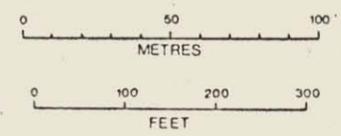


5 cm

- 2 DOLOMITE
- 3/1 MINERALIZED DOLOMITE / TIN ZONE
PYRRHOTITE
- ARGILLITES, QUARTZITES AND SHALES
- 7 PORPHYRY

200m.

200m.



METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 UNINTERPRETED SECTION

LINE BB'

SHOWING PROPOSED STAGE 2A DRILLHOLE
 BEARING 46° (M.E.L. GRID)

SCALE 1:2400

DATE: FEB '79 REVISED: DRG. NO. 79-131

017

1600 N

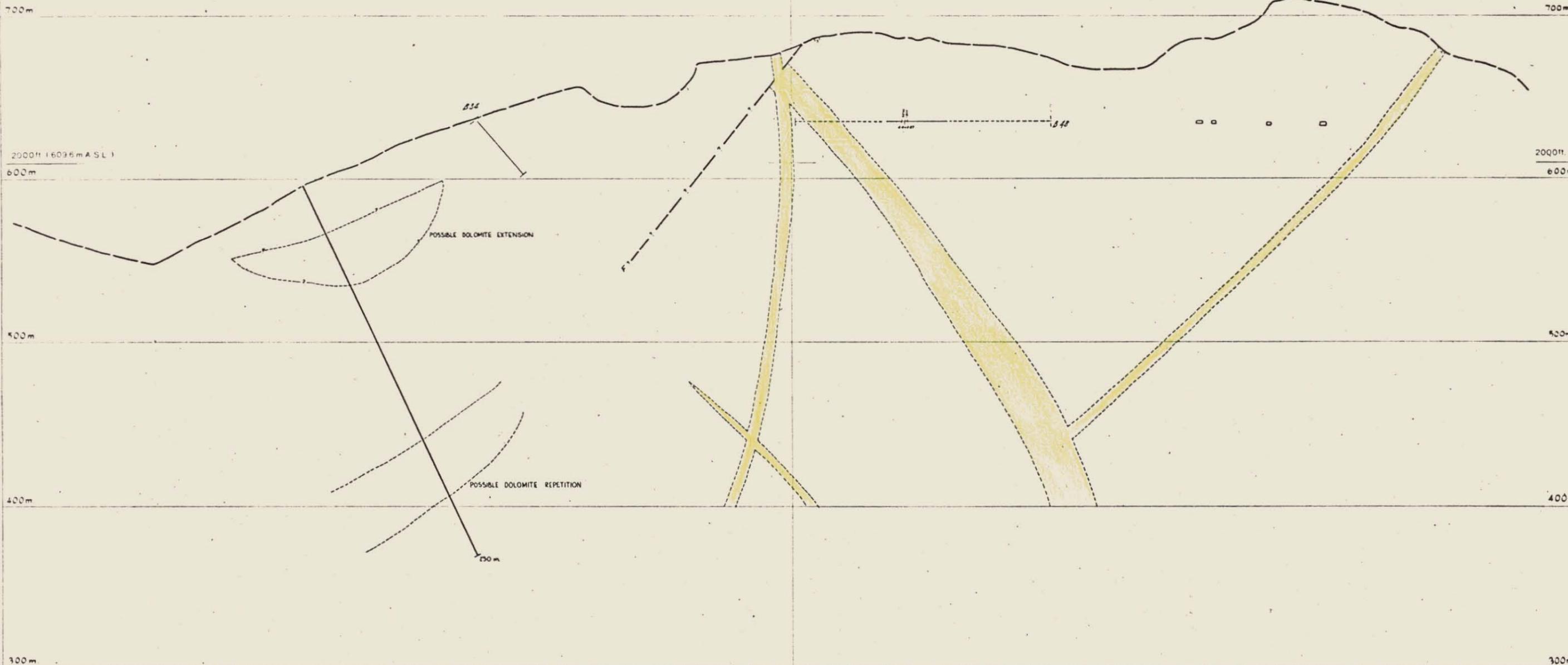
1800 N

2000 N

2200 N

173018

2400 N



2000ft (609.6m A.S.L.)

2000ft

600m

600m

500m

500m

400m

400m

300m

300m

5 cm

200m

200m

- 2 DOLOMITE
- 3/1 MINERALIZED DOLOMITE/TIN ZONE
- ARILLITES QUARTZITES AND SHALES
- 7 PORPHYRY

0 50 100 METRES

0 100 200 300 FEET

METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 INTERPRETED SECTION
 LINE 1260 mE

SHOWING PROPOSED STAGE 2A DRILLHOLE

SCALE 1:2400 LOOKING TO GRID WEST (240°M)

DATE: FEB '79 REVISED DES. NO. 78-136

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A. Jannink

15th Oct. 1979

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Interpreted geological section 860E showing : proposed Stage 2 B drill holes	1:2400	79-328
" " " 920E	"	79-329
" " " 940E	"	79-330
" " " 980E	"	79-331
" " " 1020E	"	79-332
" " " 1060E	"	79-333
" " " 1100E	"	79-334
" " " 1140E	"	79-335
" " " 1180E	"	79-336
" " " 1220E	"	79-337
" " " 1260E	"	79-338
" " " 1300E	"	79-339
" " " 1340E	"	79-340
" " " 1420E	"	79-341

1. INTRODUCTION

The previous Stage 2 A Programme was designed to assess the possibility of a large (say 20,000,000 tonnes) reserve, of the order of 0.3 % Sn, existing at Mt. Bischoff. Wide scale perimeter drilling around the known mineralisation failed to indicate such a tonnage and grade. It is the intention of this programme (Stage 2 B) to firm up, and, if possible, extend on a smaller scale, the presently estimated reserves which are :

Dolomite Sulphide Reserves	924,000 tonnes at 1.07 % Sn
Porphyry Reserves	2,642,000 " " 0.56 % Sn
Total	3,566,000 " " 0.69 % Sn

Samples from the cores of this drilling programme will be subjected to further metallurgical testing.

The core from previous drilling in the dolomite horizon will be re-boxed and logged in order to obtain a clearer geological knowledge of the mineralised zones, and to check the reliability (e.g. core recovery) of assay results within these zones.

Follow-up ground magnetic and field inspection work will be carried out on some of the anomalies found during the airborne magnetic survey. These anomalies are remote from the anomaly over the mineralisation in the workings at Mt. Bischoff.

2. PROPOSED PROGRAMME

1. Diamond Drilling:

Initially a total of 2360 metres in 27 holes will be drilled on a partial 40 x 40 metre grid for dolomite sulphide reserves and 80 x 80 metre grid for porphyry reserves. It is likely that further "limit" drilling will be necessary to finally outline the mineralisation, and provision is made in the budget for such drilling.

The locations of the drill holes are as follows :

Porphyry Targets only

Collar Co-ordinates		Depth	Dip	Azimuth
N	E	m		(grid)
1835	860	110	80°	180°
1864	920	110	75°	"
1990	920	180	65°	"
2012	1100	150	75°	"
2117	1180	200	70°	"
2094	1260	120	70°	"
2165	1300	160	60°	"
2060	1340	80	vertical	-
2082	1420	60	60°	180°
2171	1420	110	70°	"

Total 10 holes for 1280 m

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- 3 -

Combined Porphyry and Dolomite Targets

Collar Co-ordinates		Depth	Dip	Azimuth
N	E	m		(grid)
1820	980	90	vertical	-
1820	1020	60	"	-
1950	1020	130	60°	180°
1860	1060	120	vertical	-
1900	1100	80	"	-
1900	1180	50	"	-
1940	1180	30	"	-

Total 7 holes for 560 m

Dolomite Targets only

Collar Co-ordinates		Depth	Dip	Azimuth
N	E	m		(grid)
1940	940	40	vertical	-
1965	940	40	50°	360°
1940	980	60	vertical	-
1960	980	50	50°	360°
1945	1060	60	60°	"
1928	1100	30	50°	"
1860	1140	80	vertical	-
1860	1180	80	"	-
1900	1220	70	"	-
1940	1220	40	"	-

Total 10 holes for 520 m

.../4

2. Metallurgy

Some of the above diamond drill holes will be drilled in HQ size in order to provide a range of porphyry and dolomite sulphide samples for metallurgical test work.

The test work, to be carried out by AMDEL, will include:

Mineralogical work on the various size fractions of the tin rougher flotation concentrate previously obtained;

Tin flotation optimisation on a composite of porphyry rocks (front-end flotation);

Further "unconventional procedure" (i.e. front-end flotation) on 2 porphyry samples, 2 dolomite sulphide samples and 2 mixed porphyry/dolomite sulphide samples;

Conventional procedure (i.e. gravity before flotation) on a dolomite sulphide sample and a mixed porphyry/dolomite sulphide sample.

3. Old Core

All the old core (i.e. B series and AAB series) of diamond drill holes that were drilled in the dolomite horizon will be re-boxed and geologically logged, in order to standardize the logging and to obtain a possible view of zoning of alteration in the dolomite sulphide lode (e.g. talc /serpentine/pyrrhotite contents). Assayed

sections of the dolomite sulphide lode will be checked for their reliability especially with regard to core loss. If possible, some check assaying will be done.

The following drill holes will be re-logged :

B 1 to B 7
B 9, B 10
B 12 to B 14
B 17
B 20 to B 27
B 32, B 33
B 44,
AAB 1 to AAB 5

A total of 29 holes for 3618 metres of which approximately 490 metres have previously been re-boxed.

4. Ground Magnetism

The airborne magnetic survey outlined various anomalies remote from the known mineralisation at Mt. Bischoff itself. Many of these anomalies co-incide with Tertiary basalt cover, but some lie over Cambrian rocks. The sources of these anomalies may relate to basic rocks within the Cambrian sequence or possibly to pyrrhotite in underlying Mt. Bischoff series rocks. Tasmanian Mines Department drilling at Fook's Lode intersected dolomitic rocks in 3 of the 9 holes drilled (beneath basalt cover). These rocks may be on strike with some of the magnetic anomalies.

Field work will include the cutting of some lines (where necessary) and broad spaced ground magnetic traversing over the areas of interest. Geological inspection of anomalous areas will follow the magnetic surveys.

5. Draughting

In order to facilitate reserve estimations, the sections covering the central part of Mt. Bischoff will be draughted at a scale of 1:500.

3. BUDGET

The accompanying sheet sets out the budget details for the Stage 2 B Programme, which terminates on the 31st May, 1980.

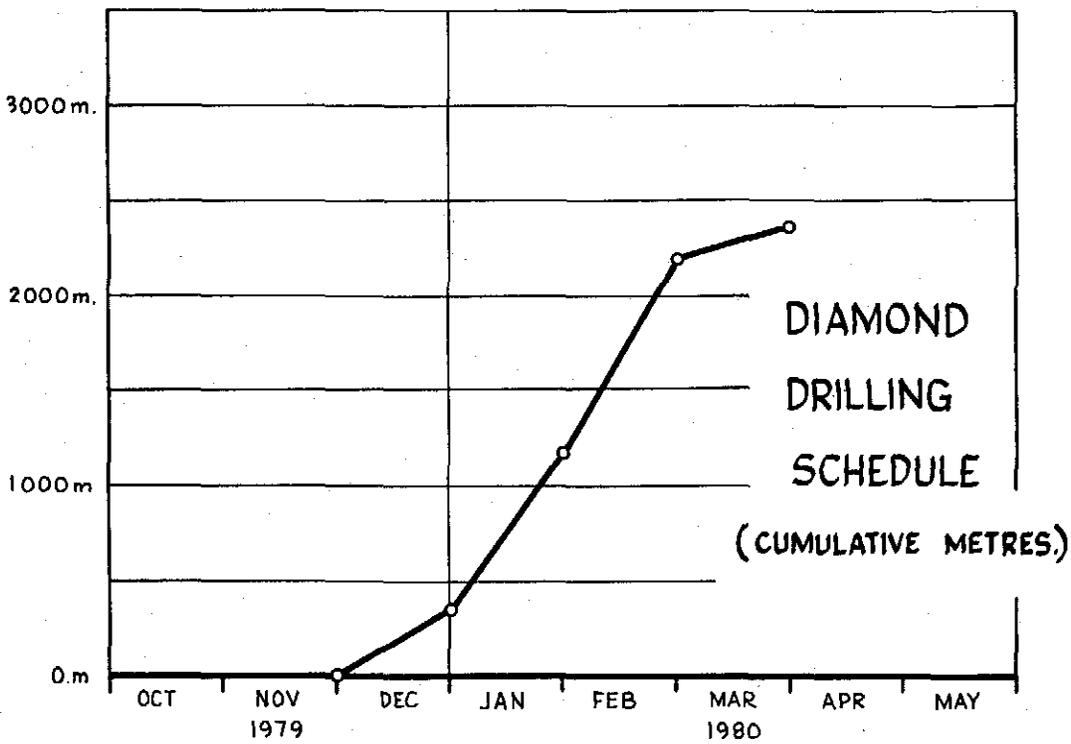
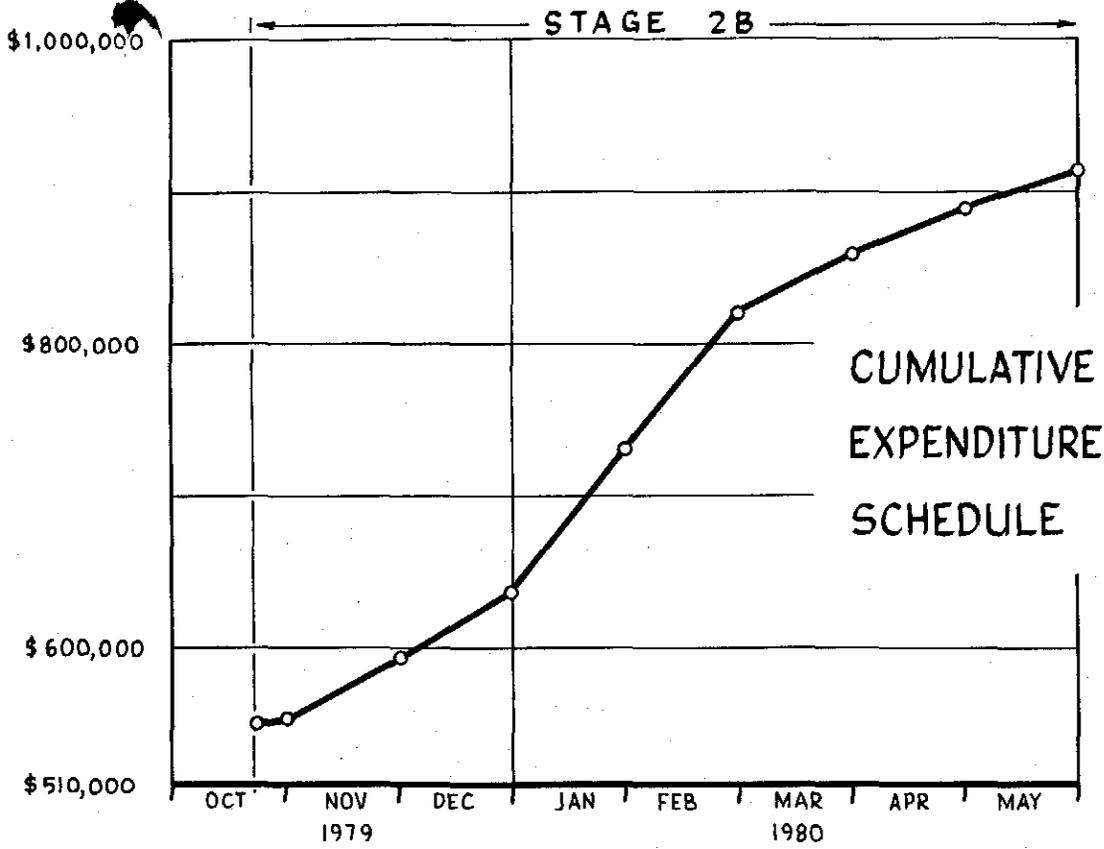
The budget for the programme is \$490,000 less previous overruns of \$39,000, leaving \$451,000. Of this amount \$366,000 has been allocated to the programme set out above, and \$85,000 has been unallotted. This unallotted sum will be used for further exploration or grid drilling to be agreed upon later in the Stage 2 B Programme.

MT. BISCHOFF TIN PROSPECT
STAGE 2B EXPENDITURE ESTIMATE.

	<u>OCTOBER</u>	<u>NOVEMBER</u>	<u>DECEMBER</u>	<u>JANUARY</u>	<u>FEBRUARY</u>	<u>MARCH</u>	<u>APRIL</u>	<u>MAY</u>	<u>TOTAL</u>
TECHNICAL SERVICES	4,700	11,000	10,500	15,000	14,500	15,000	15,800	18,500	105,000
TRAVEL & ACCOMMODATION	350	700	350	700	700	700	700	700	4,900
LABOUR		1,800	1,800	1,800	1,800	1,800	1,800	1,800	12,600
CAMP & MESSING	300	1,900	650	1,000	1,000	1,000	1,000	650	7,500
VEHICLES		1,000	1,000	1,000	1,000	1,000	1,000	1,000	7,000
EQUIPMENT RENTAL		50	250	400	450	250	50	50	1,500
CONSUMABLES & GENERAL EXPENSES (Includes core racks, boxes, foundations, pegs, freight, printing etc)	200	11,900	1,450	9,250	1,250	1,050	800	1,000	26,900
TENEMENT EXPENSES			500						500
<u>OUTSIDE CONTRACTORS</u>									
TRACK CUTTING				3,750					3,750
DIAMOND DRILLING			25,800	50,200	55,700	10,300			142,000
SITE PREPARATION		4,500							4,500
METALLURGICAL		2,500	2,500	10,000	10,000	10,000	10,000	5,000	50,000
ASSAYS			1,080	2,160	2,160	600			6,000
CAPITAL ITEMS		5,100							5,100
	<u>5,550</u>	<u>40,450</u>	<u>45,880</u>	<u>95,260</u>	<u>88,560</u>	<u>41,700</u>	<u>31,150</u>	<u>28,700</u>	<u>377,250</u>
							SAY		\$ 378,000
							OVERRUNS		\$ 39,000
									<u>\$ 417,000</u>
							UNALLOTTED		\$ 73,000
							TOTAL		<u>\$ 490,000</u>

173027

027



MT. BISCHOFF

STAGE 2B SUMMARY

as at

1600 N

1800 N

2000 N

2200 N

173029

2400 N

700m

700m

2000ft. (6096m A.S.L.)
600m.

2000ft.
600m.

500m

500m

110m

400m

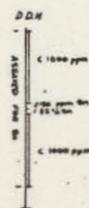
400m

300m

300m

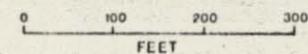
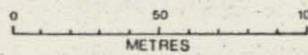
200m

200m



- DOLOMITE
- MINERALIZED DOLOMITE / TIN ZONE
- PYRRHOTITE
- ARGILLITES, QUARTZITES, SHALES / CARBONACEOUS
- PORPHYRY

5 cm



METALS EXPLORATION LIMITED
MOUNT BISCHOFF TIN PROSPECT
MOUNT BISCHOFF MINE AREA
INTERPRETED SECTION
LINE 860 mE
SHOWING PROPOSED
STAGE 2B DRILLHOLE

SCALE 1:2400 LOOKING TO GRID WEST (240°M)

DATE: OCT '79 REVISED: DRG. NO. 79-328

1600N

1800N

2000N

2200N

2400N

700m

700m

2000II (6096m A.S.L.)
600m

2000II
600m

500m

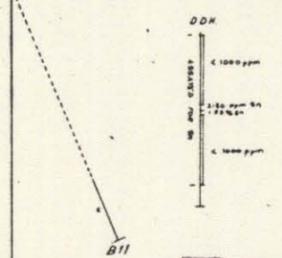
500m

400m

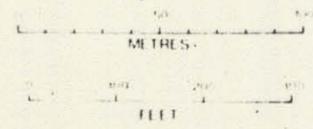
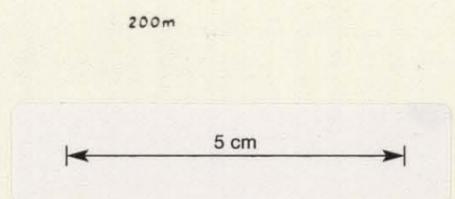
400m

300m

300m



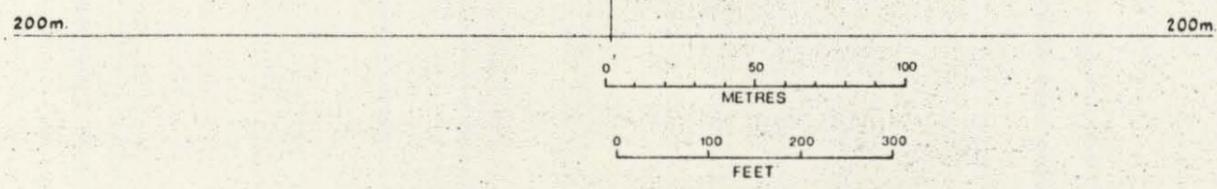
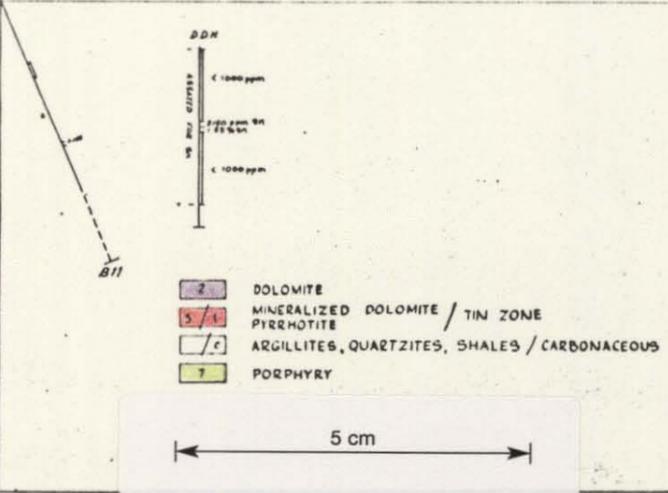
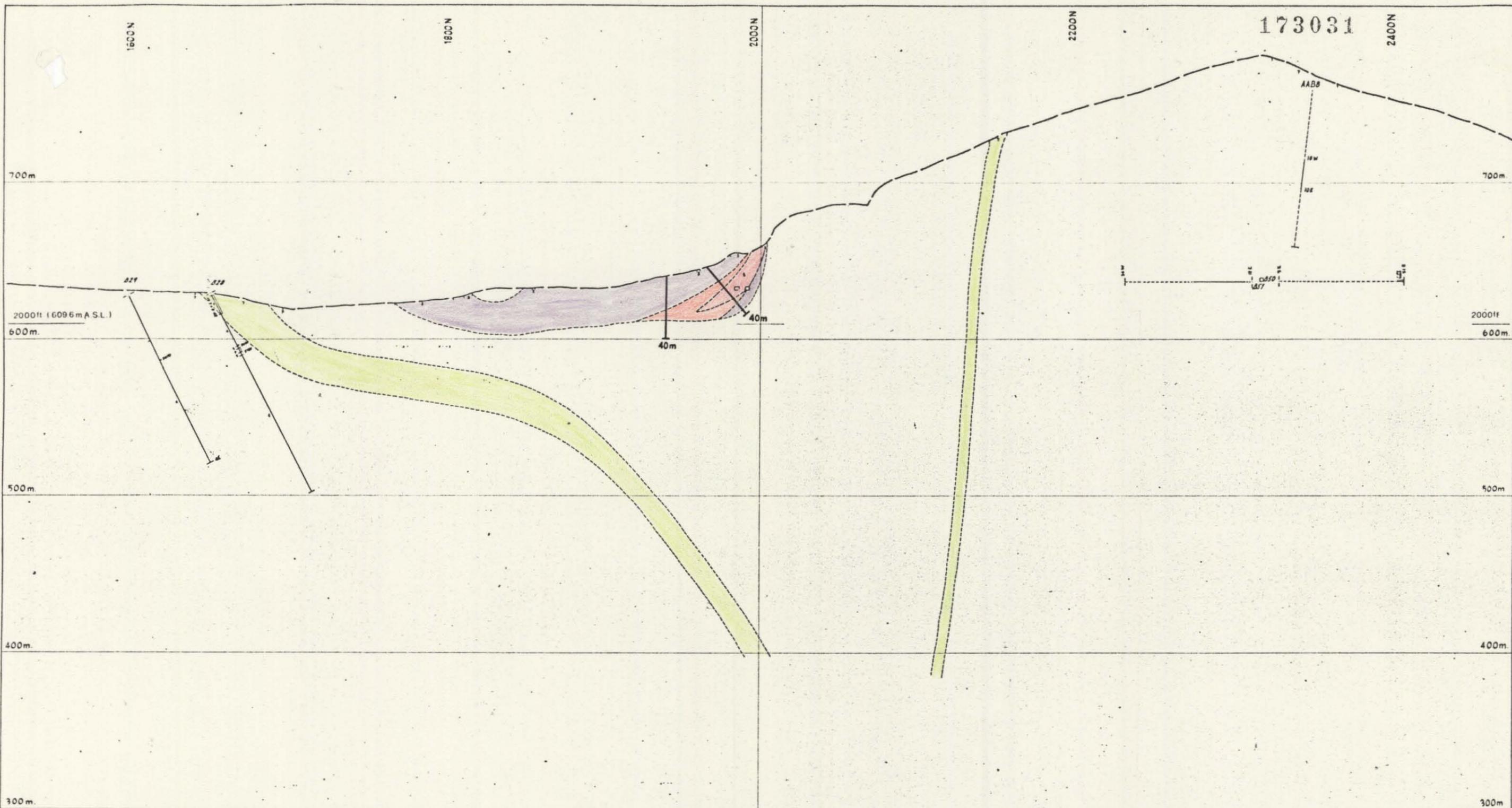
- DOLOMITE
- MINERALIZED DOLOMITE / TIN ZONE
- PYRRHOTITE
- ARGILLITES, QUARTZITES, SHALES / CARBONACEOUS
- PORPHYRY
- INTERPRETED GEOLOGICAL CONTACT



METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 INTERPRETED SECTION
LINE 920 mE
 SHOWING PROPOSED
 STAGE 2B DRILLHOLES

SCALE 1:2400 LOOKING TO GRID WEST (240°M)
 DATE OCT '79 REVISED DRG NO. 79-329

MASTER SECTION DRG NO 17-054A

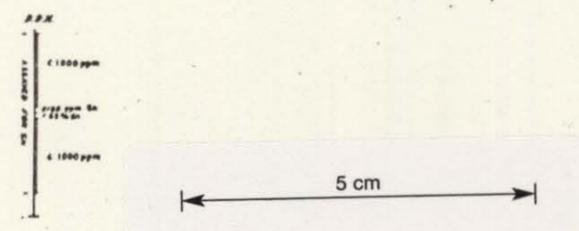
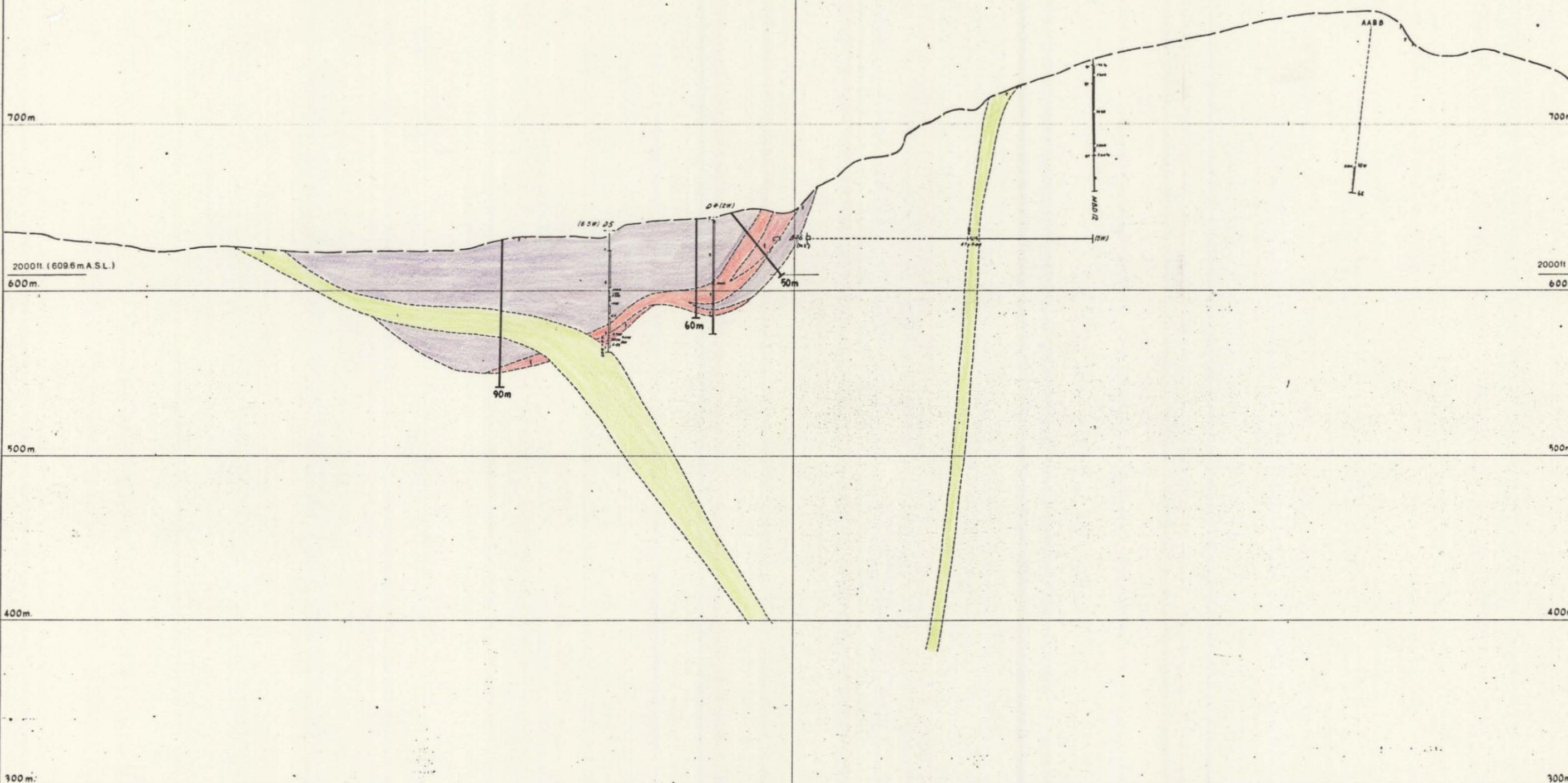


173031

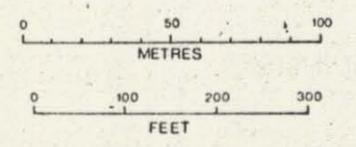
METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 INTERPRETED SECTION
LINE 940 mE
 SHOWING PROPOSED
 STAGE 2B DRILLHOLES

SCALE 1:2400 LOOKING TO GRID WEST (240°M)
 DATE: OCT '79 REVISED: DRG. NO. 79-330

1600N 1800N 2000N 2200N 2400N 173032



- DOLOMITE
- MINERALIZED DOLOMITE/TIN ZONE
PYRRHOTITE
- ARGILLITES, QUARTZITES, SHALES / CARBONACEOUS
- PORPHYRY
- INTERPRETED GEOLOGICAL CONTACT



METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 INTERPRETED SECTION
LINE 980 mE
 SHOWING PROPOSED
 STAGE 2B DRILLHOLES

SCALE 1:2400 LOOKING TO GRID WEST (240°M)
 DATE: OCT '79 REVISED: DRG. NO. 79-331

1600 N

1800 N

2000 N

2200 N

173033

2400 N

700m

700m

2000ft (609.6m A.S.L.)

600m

2000ft

600m

500m

500m

400m

400m

300m

300m

B14 (5.2m)

B13 (7.5m)

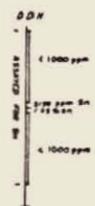
B9 (9.5m)

60m

130m

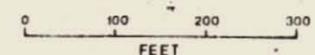
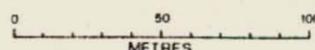
200m

200m



5 cm

200m



METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 INTERPRETED SECTION
LINE 1020 mE
 SHOWING PROPOSED
 STAGE 2B DRILLHOLES

SCALE 1:2400 . LOOKING TO GRID WEST (240°M)

DATE: OCT 79 . REVISED: . DRG. NO. 79-032

1600 N

1800 N

2000 N

2200 N

173034

2400 N

700m

700m

2000ft (609.6m A.S.L.)
600m

2000ft
600m

500m

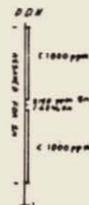
500m

400m

400m

300m

300m

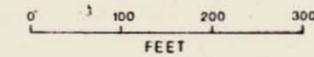
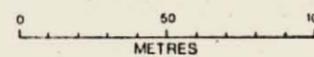


- DOLOMITE
- MINERALIZED DOLOMITE / TIN ZONE
- PYRRHOTITE
- ARGILLITES, QUARTZITES, SHALES / CARBONACEOUS
- PORPHYRY
- INTERPRETED GEOLOGICAL CONTACT

200m

200m

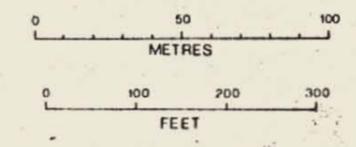
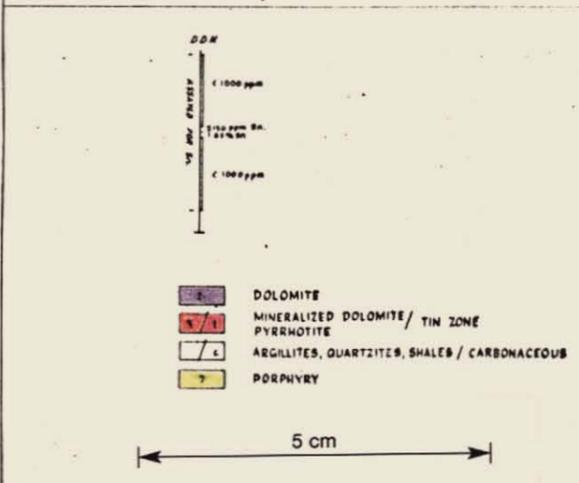
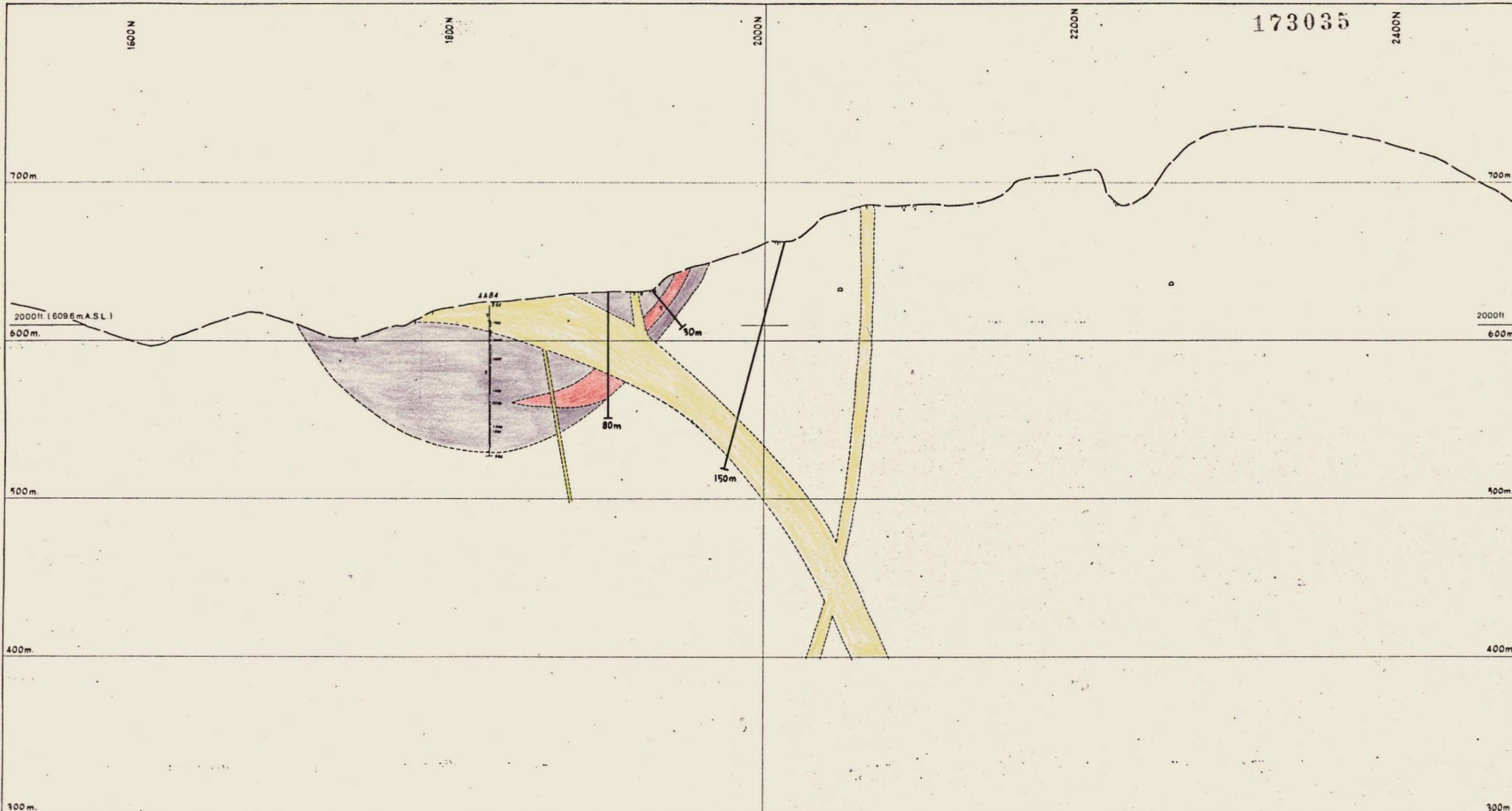
5 cm



METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 INTERPRETED SECTION
LINE 1060 mE
 SHOWING PROPOSED
 STAGE 2B DRILLHOLES

SCALE 1:2400 LOOKING TO GRID WEST (240°M)

DATE: OCT 79 REVISED: DRG. NO. 79-333



173035

METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 INTERPRETED SECTION
LINE 1100 mE
 SHOWING PROPOSED
 STAGE 2B DRILLHOLES

SCALE 1:2400 LOOKING TO GRID WEST (240°M)
 DATE: OCT '79 REVISED: DRG. NO. 79-334

1600N

1800N

2000N

2200N

173036

2400N



2000ft. (609.6m A.S.L.)
600m.

2000ft.
600m.

500m.

500m.

400m.

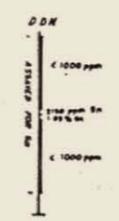
400m.

300m.

300m.

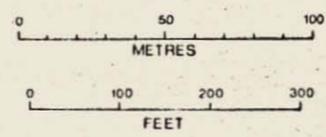
200m.

200m.



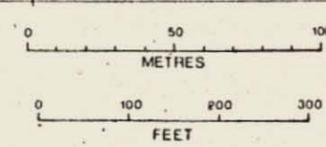
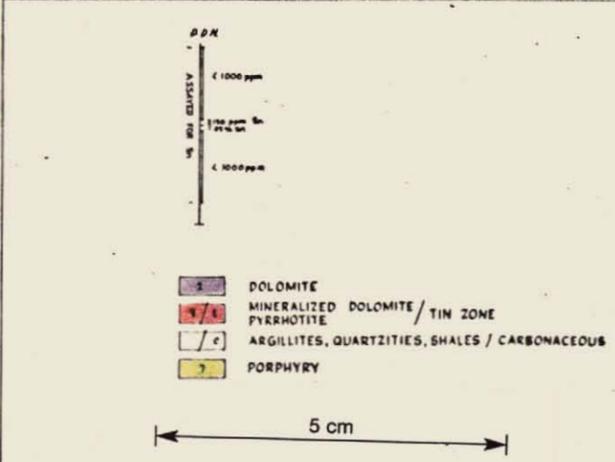
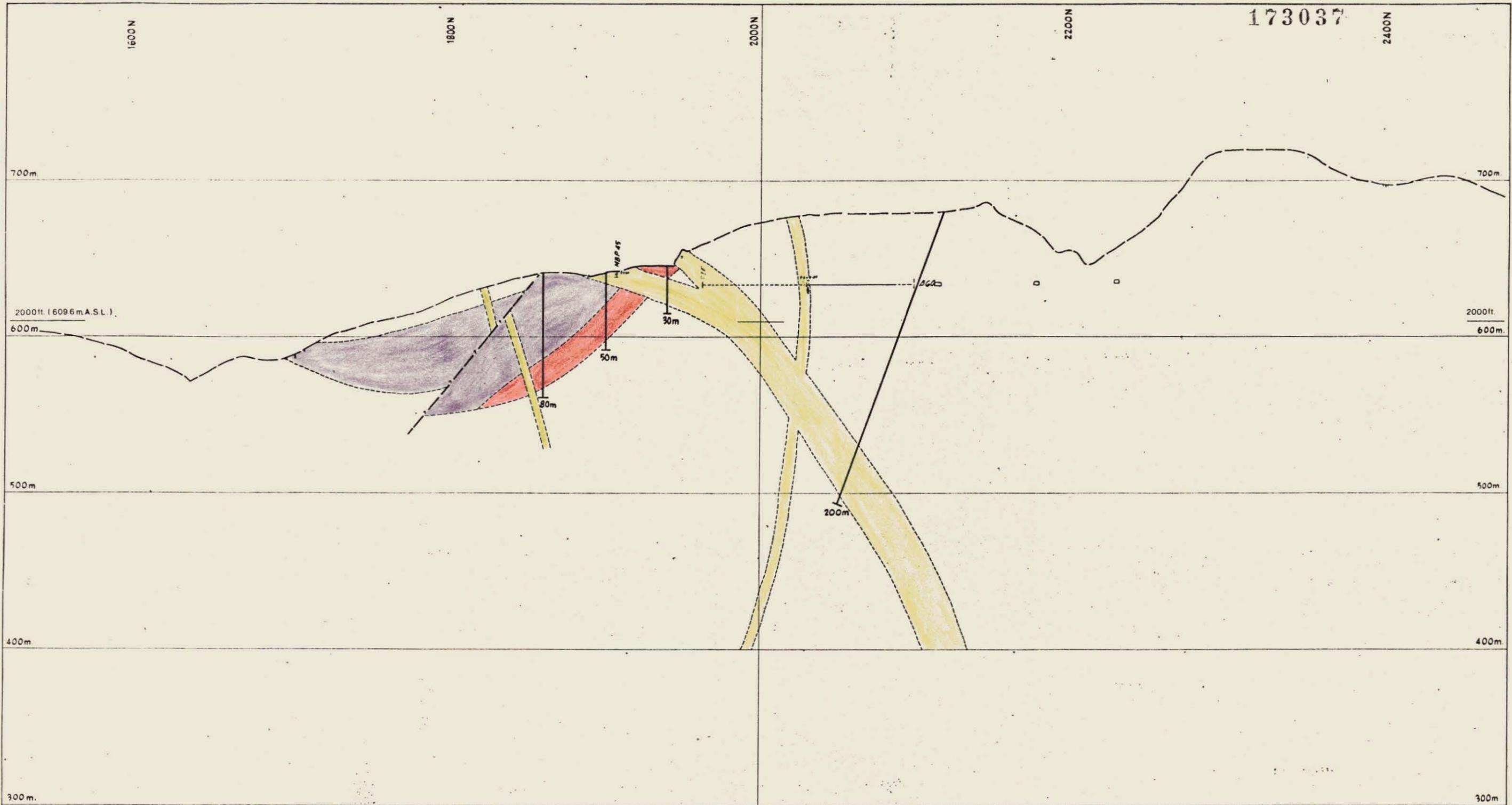
- DOLOMITE
- MINERALIZED DOLOMITE / TIN ZONE
PYRRHOTITE
- ARGILLITES, QUARTZITES, SHALES / CARBONACEOUS
- PORPHYRY

5 cm



METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 INTERPRETED SECTION
LINE 1140 mE
 SHOWING PROPOSED
 STAGE 2B DRILLHOLE

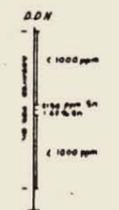
SCALE 1:2400 LOOKING TO GRID WEST (240°M)
 DATE: OCT '79 REVISED: DRG. NO. 79-335



173037

METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 INTERPRETED SECTION
LINE 1180 mE
 SHOWING PROPOSED
 STAGE 2B DRILLHOLES

SCALE 1:2400 LOOKING TO GRID WEST (240°M)
 DATE: OCT '79 REVISED: DRG. NO. 79-336

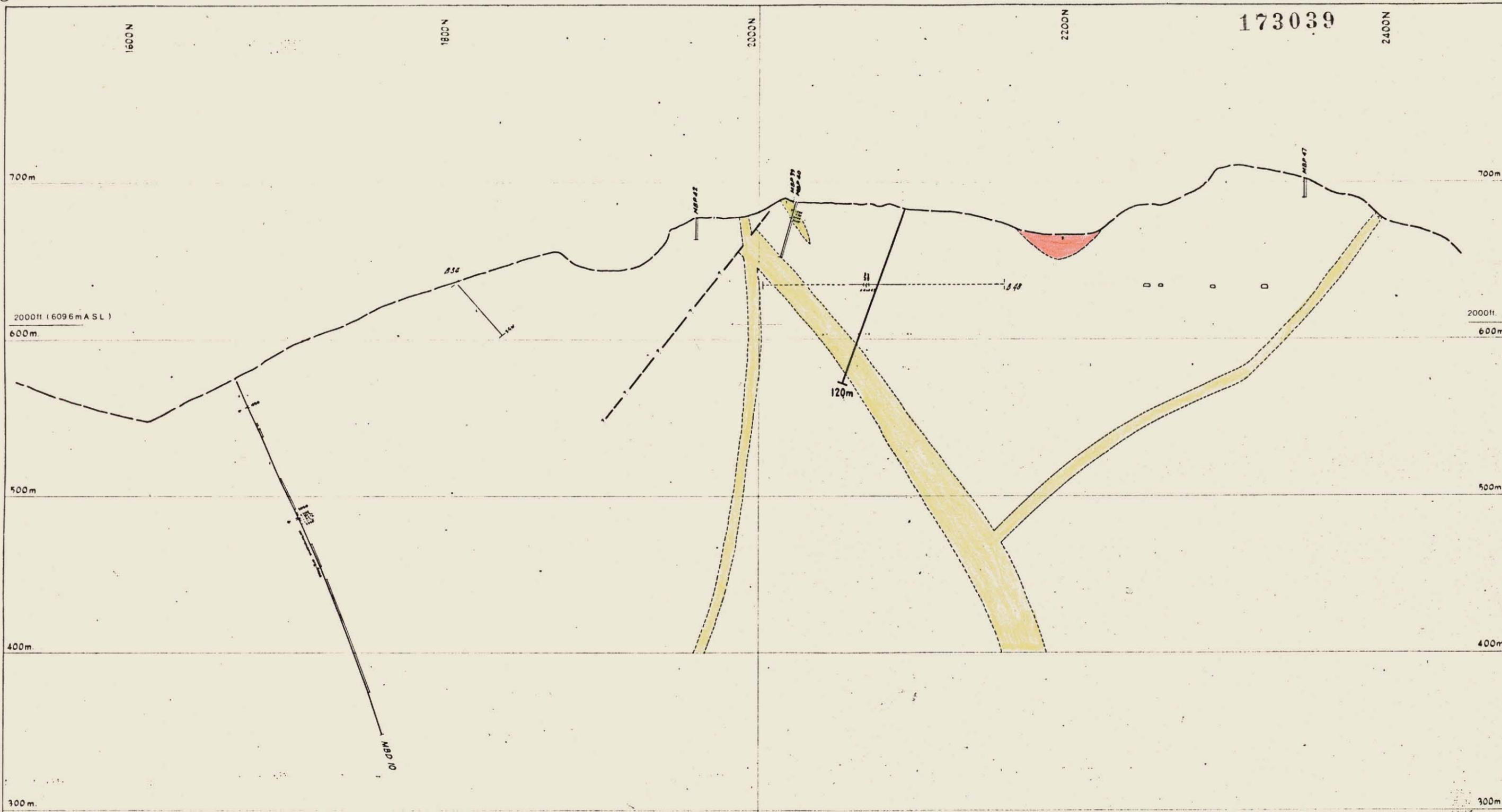


- DOLOMITE
- MINERALIZED DOLOMITE / TIN ZONE
- ARGILLITES, QUARTZITES, SHALES, / CARBONACEOUS
- PORPHYRY

5 cm

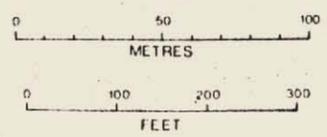
METALS EXPLORATION LIMITED
MOUNT BISCHOFF TIN PROSPECT
MOUNT BISCHOFF MINE AREA
INTERPRETED SECTION
LINE 1220 mE
SHOWING PROPOSED
STAGE 2B DRILLHOLES

SCALE 1:2400 LOOKING TO GRID WEST (240°M)
DATE: OCT '79 REVISED: DRG. NO. 79 337



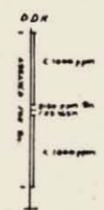
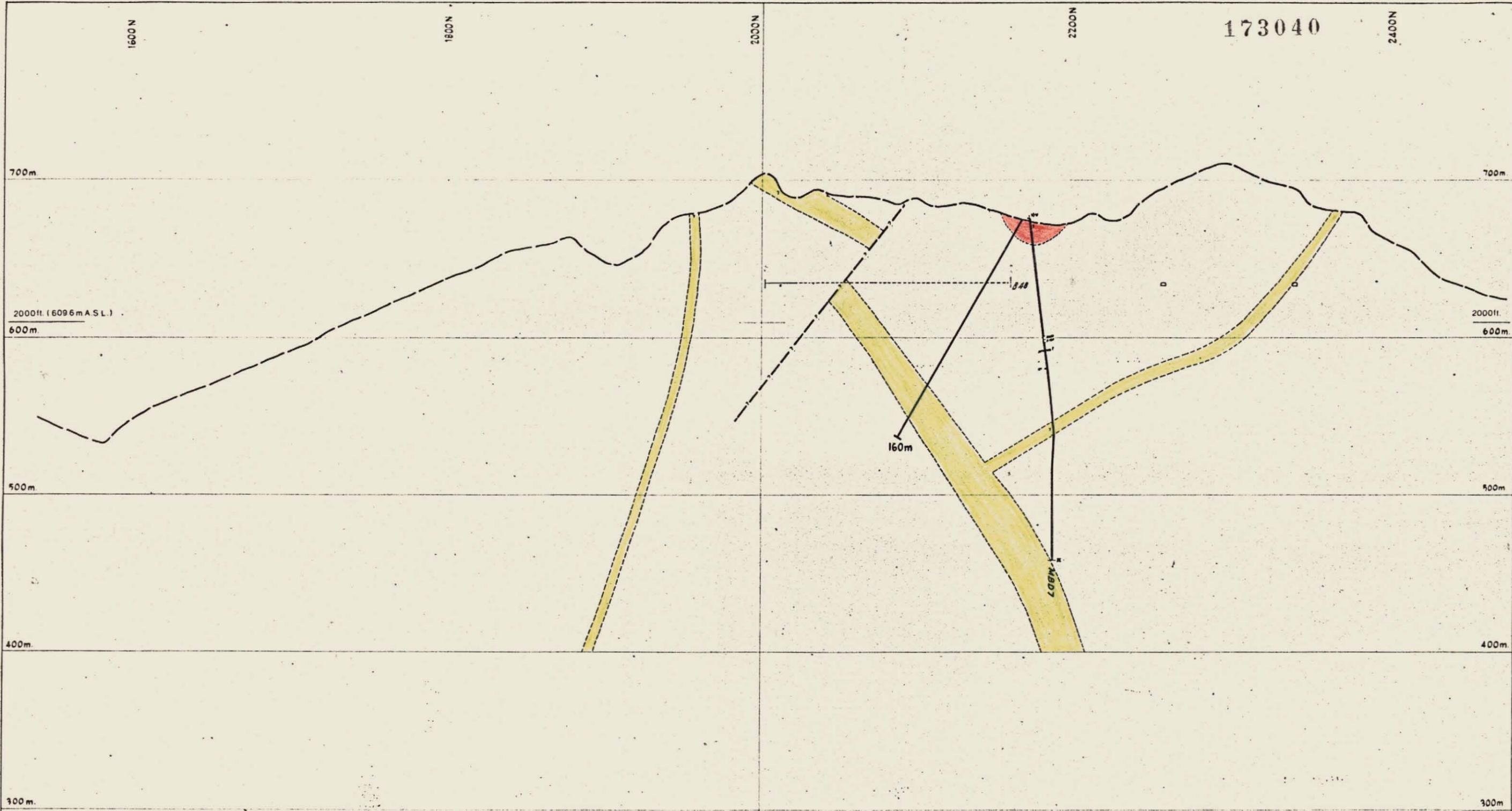
- DOLOMITE
- MINERALIZED DOLOMITE / TIN ZONE
- PYRRHOTITE
- ARGILLITES, QUARTZITES, SHALES / CARBONACEOUS
- PORPHYRY

5 cm



METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 INTERPRETED SECTION
LINE 1260 mE
 SHOWING PROPOSED
 STAGE 2B DRILLHOLE

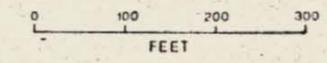
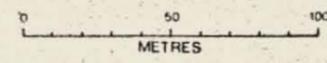
SCALE 1:2400 LOOKING TO GRID WEST (240°M)
 DATE: OCT '79 REVISED: DRG. NO. 79-338



- DOLOMITE
- MINERALIZED DOLOMITE / TIN ZONE
- PYRRHOTITE
- ARGILLITES, QUARTZITES, SHALES / CARBONACEOUS
- PORPHYRY

5 cm

200m



METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 INTERPRETED SECTION
 LINE 1300 mE
 SHOWING PROPOSED
 STAGE 2B DRILLHOLE

SCALE 1:2400 LOOKING TO GRID WEST (240°M)
 DATE: OCT 79 REVISED: DRG. NO. 79-339

1600N

1800N

2000N

2200N

173041

2400N

700m

700m

2000ft (6096m A.S.L.)
600m

2000ft
600m

500m

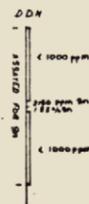
500m

400m

400m

300m

300m

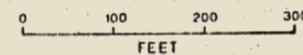
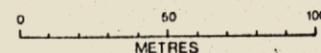


- DOLOMITE
- MINERALIZED DOLOMITE / TIN ZONE
- PYRRHOTITE
- ARGILLITES, QUARTZITES, SHALES / CARBONACEOUS
- PORPHYRY

5 cm

200m

200m



METALS EXPLORATION LIMITED
MOUNT BISCHOFF TIN PROSPECT
MOUNT BISCHOFF MINE AREA
INTERPRETED SECTION
LINE 1340 mE
SHOWING PROPOSED
STAGE 2B DRILLHOLE

SCALE 1:2400 LOOKING TO GRID WEST (240°M)

DATE: OCT '79 REVISED: DRG. NO. 79-340

1600N

1800N

2000N

2200N

173042

2400N

700m

700m

2000ft (6096m A.S.L.)

600m

2000ft

600m

500m

500m

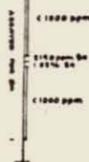
400m

400m

300m

300m

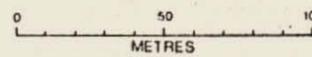
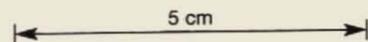
DDH



- DOLOMITE
- MINERALIZED DOLOMITE / TIN ZONE
- PYRRHOTITE
- ARGILLITES, QUARTZITE, SHALES / CARBONACEOUS
- PORPHYRY
- INTERPRETED GEOLOGICAL CONTACT

200m

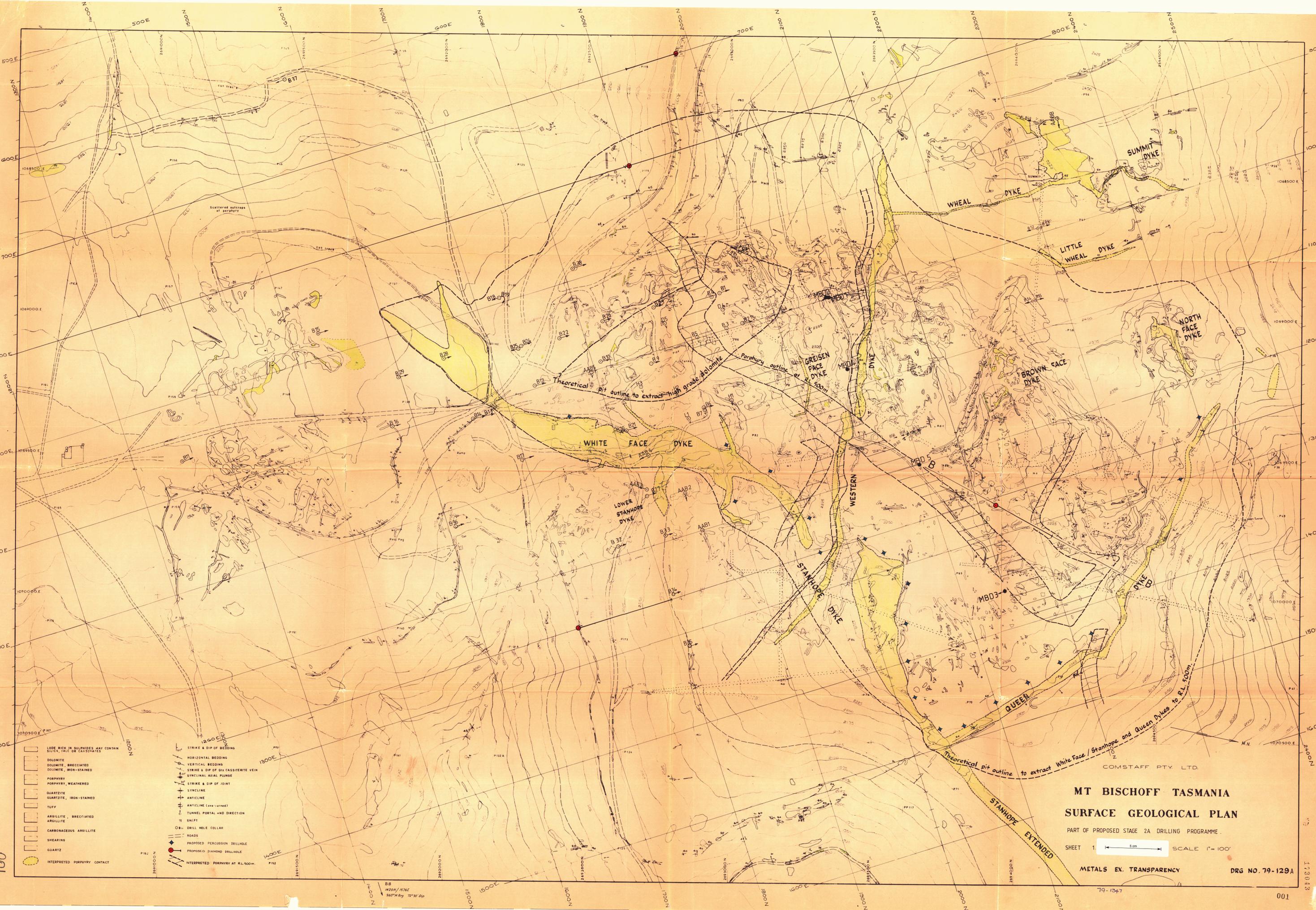
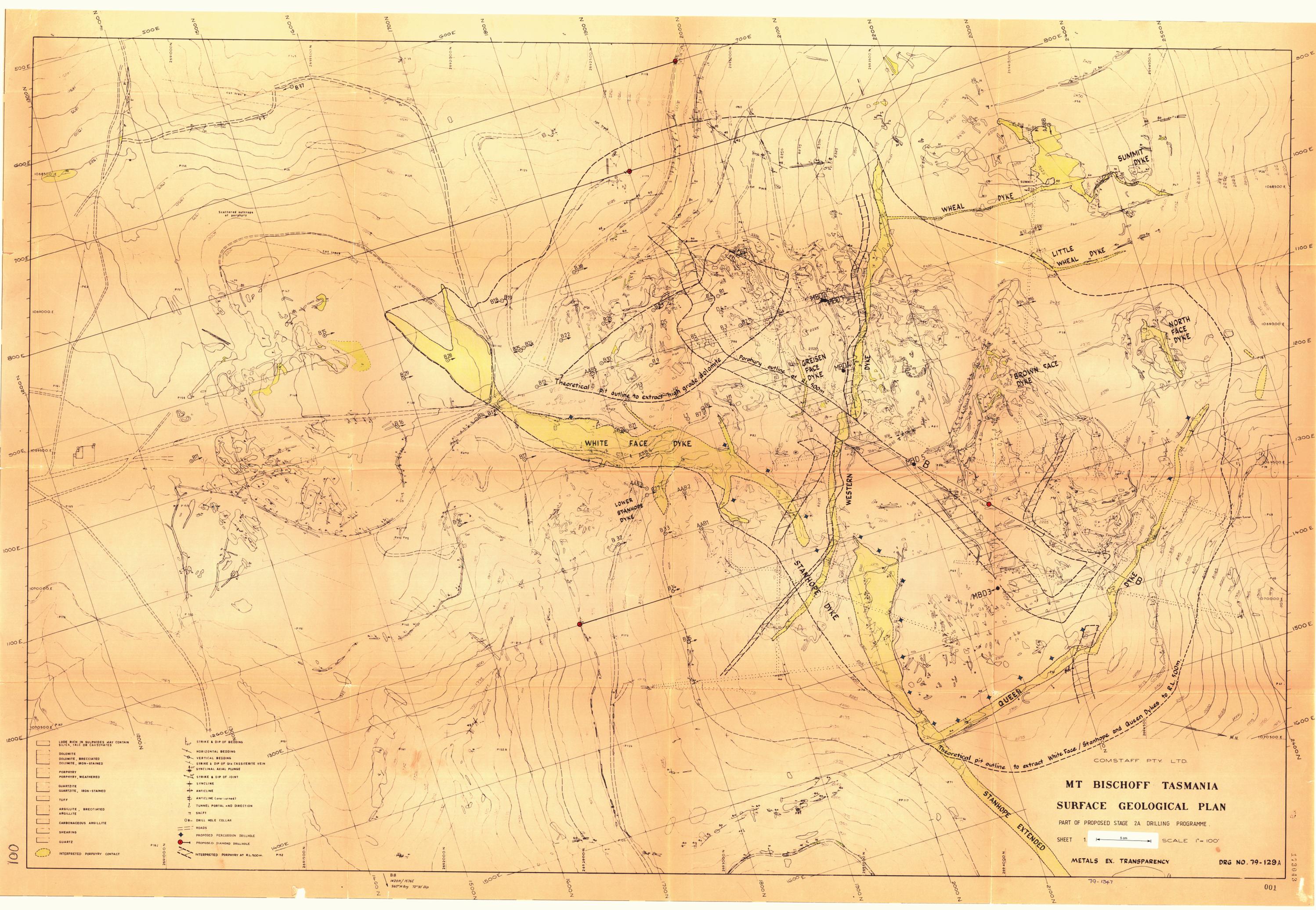
200m



METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA
 INTERPRETED SECTION
LINE 1420mE
 SHOWING PROPOSED
 STAGE 2B DRILLHOLES

SCALE 1:2400 LOOKING TO GRID WEST (240°M)

DATE: OCT '79 REVISED: DRG. NO. 79-341



- LOSE RICH IN SULPHIDES MAY CONTAIN SILICA, TALC OR CARBONATES
- DOLOMITE
- DOLOMITE, BRECCIATED
- DOLOMITE, IRON-STAINED
- PORPHYRY
- PORPHYRY, WEATHERED
- QUARTZITE
- QUARTZITE, IRON-STAINED
- TUFF
- ARGILLITE, BRECCIATED
- ARGILLITE
- CARBONACEOUS ARGILLITE
- SHEARING
- QUARTZ
- INTERPRETED PORPHYRY CONTACT

- STRIKE & DIP OF BEDDING
- HORIZONTAL BEDDING
- VERTICAL BEDDING
- STRIKE & DIP OF SILICIFIED VEIN
- SYNCLINAL AXIAL PLUNGE
- STRIKE & DIP OF JOINT
- SYNCLINE
- ANTICLINE
- ANTICLINE (Cave/Lumped)
- TUNNEL PORTAL AND DIRECTION
- SHC/PF
- DRILL HOLE COLLAR
- ROADS
- PROPOSED PERCUSSION DRILLHOLE
- PROPOSED DIAMOND DRILLHOLE
- INTERPRETED PORPHYRY AT RL 500m

MT BISCHOFF TASMANIA
SURFACE GEOLOGICAL PLAN

PART OF PROPOSED STAGE 2A DRILLING PROGRAMME

SHEET 1 SCALE 1" = 100'

METALS EX. TRANSPARENCY DRG NO. 79-129A

COMSTAFF PTY. LTD.

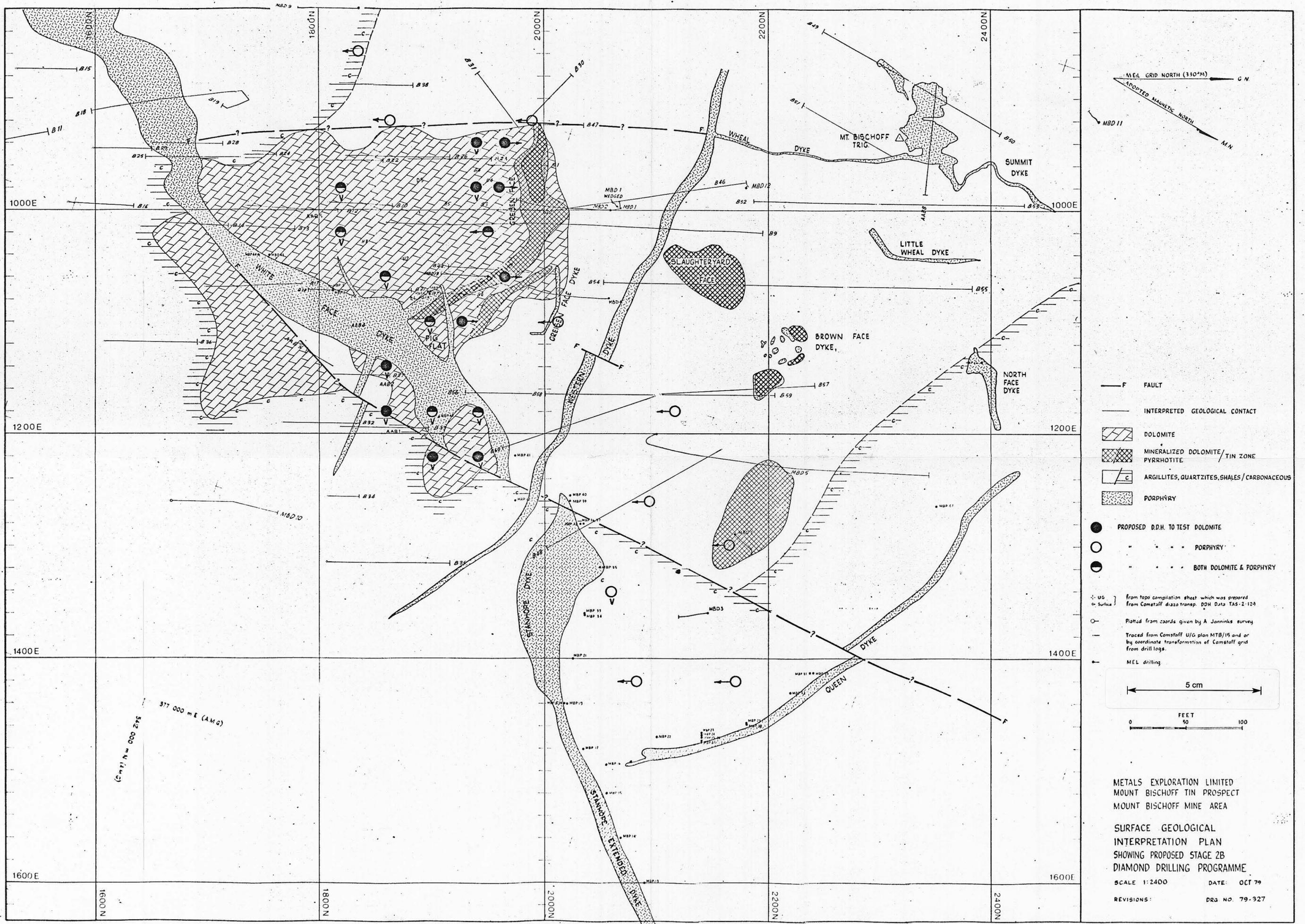
Theoretical pit outline to extract White Face / Stanhope and Queen Dykes to RL 500m

Theoretical pit outline to extract high grade dolomite

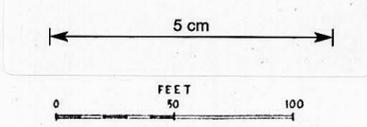
BB 1420N / 174E
360°N by 72°30' Dp

79-1347

001



- MEL GRID NORTH (310°M) G.N.
 ADOPTED MAGNETIC NORTH M.N.
- F — FAULT
 - INTERPRETED GEOLOGICAL CONTACT
 - [Hatched pattern] DOLOMITE
 - [Cross-hatched pattern] MINERALIZED DOLOMITE/TIN ZONE
 - [Pattern with 'C'] ARGILLITES, QUARTZITES, SHALES / CARBONACEOUS
 - [Stippled pattern] PORPHYRY
 - PROPOSED D.D.H. TO TEST DOLOMITE
 - " " " " PORPHYRY
 - ◐ " " " " BOTH DOLOMITE & PORPHYRY
- U.G. from topo compilation sheet which was prepared from Comstaff diazo transp. DDW Data TAS-2-129
 in Surface
- Plotted from coords given by A. Janninks survey
- Traced from Comstaff U/G plan MTB/15 and/or by coordinate transformation of Comstaff grid from drill logs.
- ← MEL drilling

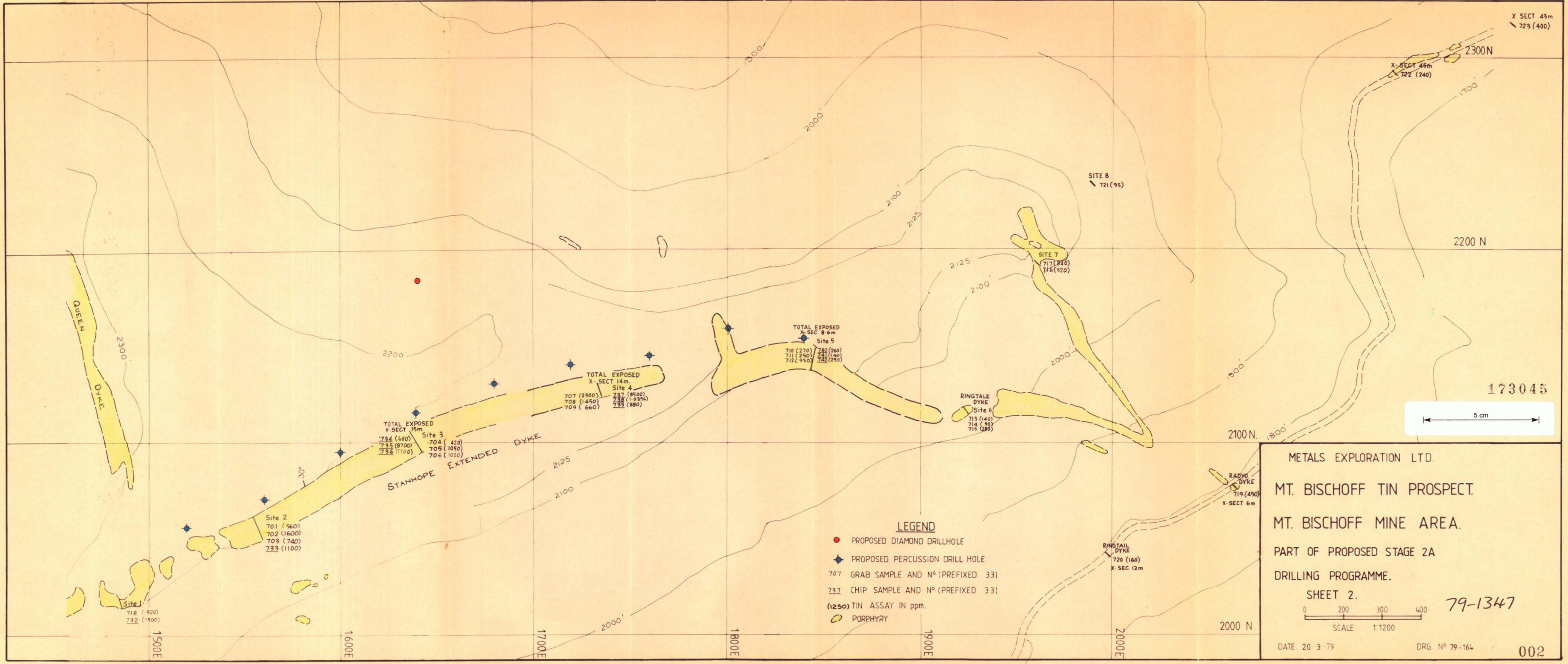


METALS EXPLORATION LIMITED
 MOUNT BISCHOFF TIN PROSPECT
 MOUNT BISCHOFF MINE AREA

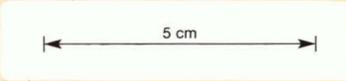
SURFACE GEOLOGICAL
 INTERPRETATION PLAN
 SHOWING PROPOSED STAGE 2B
 DIAMOND DRILLING PROGRAMME

SCALE 1:2400 DATE: OCT 79
 REVISIONS: DRG NO. 79-327

X SECT 43m
723 (400)



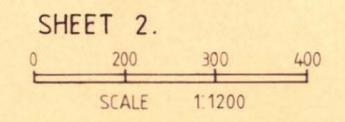
173045



LEGEND

- PROPOSED DIAMOND DRILLHOLE
- ◆ PROPOSED PERCUSSION DRILL HOLE
- 707 GRAB SAMPLE AND N° (PREFIXED 33)
- 737 CHIP SAMPLE AND N° (PREFIXED 33)
- (1250) TIN ASSAY IN ppm.
- PORPHYRY

METALS EXPLORATION LTD.
 MT. BISCHOFF TIN PROSPECT.
 MT. BISCHOFF MINE AREA.
 PART OF PROPOSED STAGE 2A
 DRILLING PROGRAMME.



SHEET 2.
 79-1347
 DATE: 20-3-79 DRG. N° 79-164 002