



METALS EXPLORATION LTD.

80 COLLINS STREET, MELBOURNE, AUSTRALIA 3000. TELEPHONE (03) 653 7100. TELEX AA32051. TELEGRAM ROCKDOC.

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MT. BISCHOFF TIN PROSPECT  
AUTHORITY TO PROSPECT 5/80  
TASMANIA  
REPORT ON STAGE 3A PROGRAMME  
REPORT NO. 542

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A. Jannink.  
11/9/81.

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SUMMARY.

Exploration work on Authority to Prospect 5/80 (Tasmania), adjacent to Mt Bischoff, during the Stage 3A Programme included:

- 25 geochemical hand auger samples taken;
- 5.5 kilometres of ground magnetic survey;
- 12 traverses of Crone Pulse EM;
- 4 traverses of Max-Min EM;
- 4 holes diamond drilled and logged for 453.1 metres, and sampled by core grinding or splitting;
- 7 Mines Department diamond drill holes re-logged, with 228.6 metres sampled by core grinding.

Significant geophysical anomalies (magnetic and EM) were obtained over, or adjacent to, the Tertiary basalt cover. Four diamond drill holes were put down to test some of these anomalies, but they failed to find tin mineralisation. All four holes intersected Precambrian rock types.

Geological interpretation of the re-logging of the Mines Department drill holes (FL 1 to FL 9), and the recent drill holes MBD 59 to MBD 62, has indicated a relatively shallow dipping sequence of Cambrian dolomites faulted against the Precambrian of the Mt. Bischoff series clastic sediments.

The Cambrian dolomite sequence may continue towards the south beneath the basalt and an airborne magnetic anomaly over the golf course, along strike from the drill intersections, presents itself as a low priority target.

A second low priority target is to test the (north) westerly extension of Fooks Lode, which is open in this direction. Fook's Lode is a 2 to 3 metre wide cassiterite lode associated with fluorite, quartz, carbonate and lesser pyrite, sphalerite and jamesonite.

Finally it is recommended that a new geophysical interpretation of the magnetic anomalies over the Tertiary basalt be made. Susceptibility readings of all holes drilled through the basalt should be taken and related to the ground/airborne magnetics. It may be possible to screen out the basaltic effects and establish magnetic profiles/contours of the sub-basaltic rocks.

1. INTRODUCTION.

This report covers the exploration work carried out on AP 5/80 during the Stage 3A Programme (November 1980 to June 1981). The work followed on from the establishment of a grid, a ground magnetic survey, and some geochemical work that had been performed during Stage 2B Programme, and airborne magnetics in the Stage 1B Programme.

Previous work on the area is reported in "Report on Stage 2B Programme, Report No. 510". The text appears in Volume 1 on pages 37 to 41 (with accompanying plan/sections), and two plans (Drawing Nos. 80-320 and 80-321) are contained in Volume 4.

2. GEOCHEMISTRY.

Twenty five hand auger samples were taken from around the northern edge of the Tertiary basalt cover. The samples were taken, as far as possible, from the "C" horizon. Three of the samples contained quartz porphyry chips. They are located to the north of lines 10440E to 10560E. The other samples contained either Precambrian sediments or Tertiary basalt.

The samples were sieved to minus 80 mesh and analysed for Sn (XRF) Cu, Pb, Zn, Ni (AA). The following maximum and minimum values were obtained:

	<u>Sn</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Ni</u>
Maximum (ppm)	210	9800	1100	250	180
Minimum (ppm)	x	4	x	x	x

(x denotes below limit of detection)

Most of the higher assays came from the vicinity of Fook's Lode.

### 3. GROUND MAGNETIC SURVEY.

The original ground magnetic survey over the Housego grid was on lines spaced 120 metres apart. This grid was closed in to 40 metre line separation. Readings were taken every 10 metres on each line using a Geometrics G 816 Magnetometer (SN 6264). 5.5 line kilometres of survey were covered.

The survey confirmed the existence and continuity of the four major anomalies detected previously:

1. An anomalous zone about 80 metres wide and 400 metres long extending in a north westerly direction between lines 10120E and 10400E. Peak values were of the order of 63300 nT, background values varied usually between 62000 nT and 62500 nT.
2. A similar broader but slightly weaker anomaly trending in the same direction between lines 10800E and 11000E. Peak values were around 63000 nT.
3. A strong anomalous zone on the northern basalt contact centred on line 10920E with peaks above 64000 nT.
4. Still further to the north, centred on line 10920E, a 30 metre wide anomaly with values up to 63700 nT. This zone is well north of the Tertiary basalt, but some basaltic rocks have been found close by.

Previous geophysical modelling of the anomalies indicated that the sources were shallow (ref. Report No. 510 on Stage 2B Programme). Further modelling was interpreted by M.F. Flis, Geophysicist, of CRAE Pty. Ltd. as follows:

"Attached are the results of modelling done on the Housego Grid. As can be expected from basaltic areas, the data is very noisy.

Due to the nature of the data I would be extremely hesitant to believe the results of any modelling done on it.

The major trend which is seen from 10200E to 10400E at an angle of 330 degrees MN is typical of a flat lying, shallow body and may possibly be due to a thicker basalt section (see attached example). As I understand the EM anomaly which was obtained over this was relatively clean, I would recommend that it be used in preference to magnetics to obtain some idea of the attitude of the body."

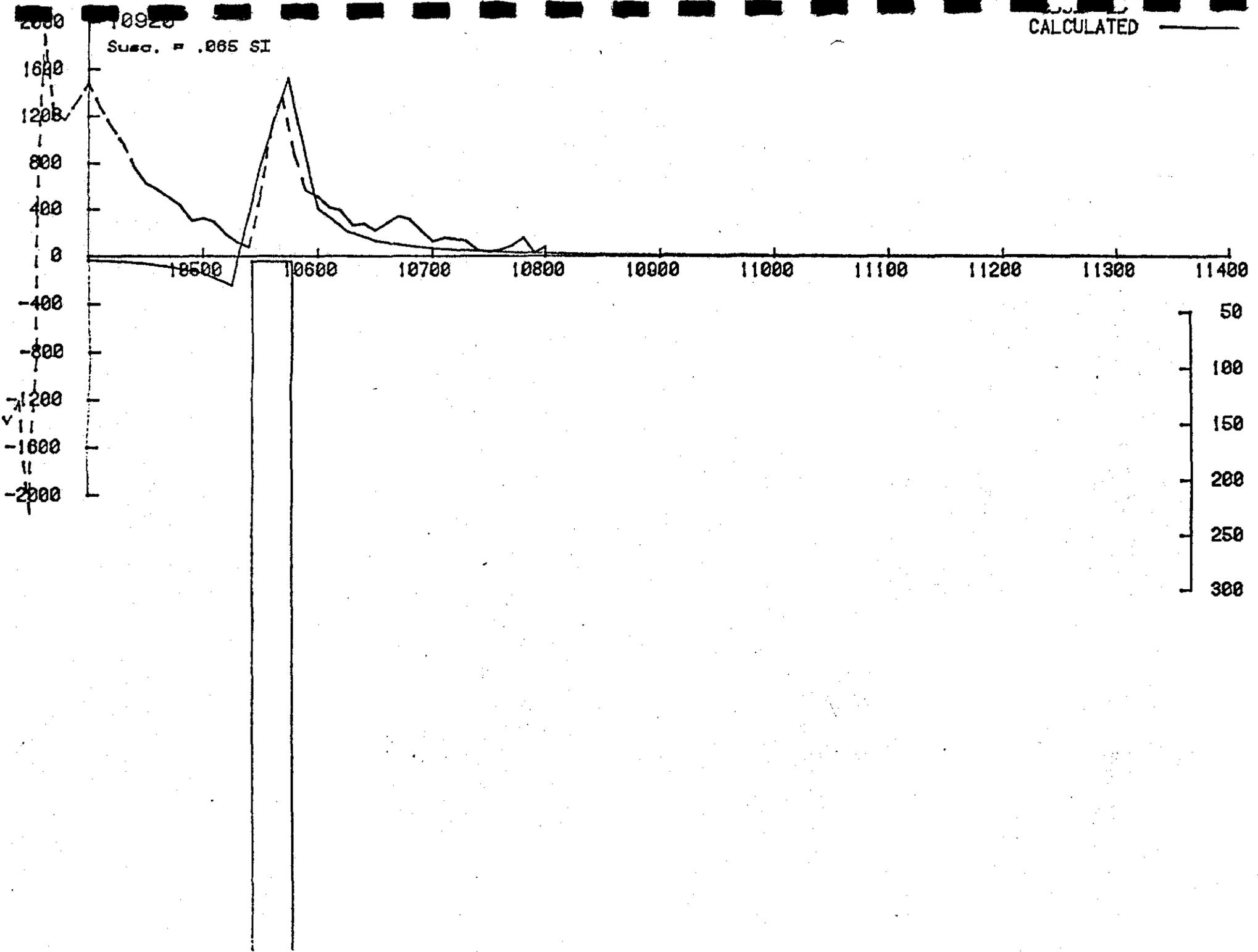
3. GROUND MAGNETIC SURVEY CONTD.

"The high on line 10920E at 10600N is also indicative of a shallow body (less than 10-15 metres) and is obviously not caused by basalts. The profile is relatively clear of noise supporting this interpretation - also the high gradient at around 10400N is almost certainly the basalt's limit to the north. The anomaly should be adequately tested with a jacro at 10580N.

The anomaly at the end of 1000E is not defined enough to be adequately modelled."

CALCULATED

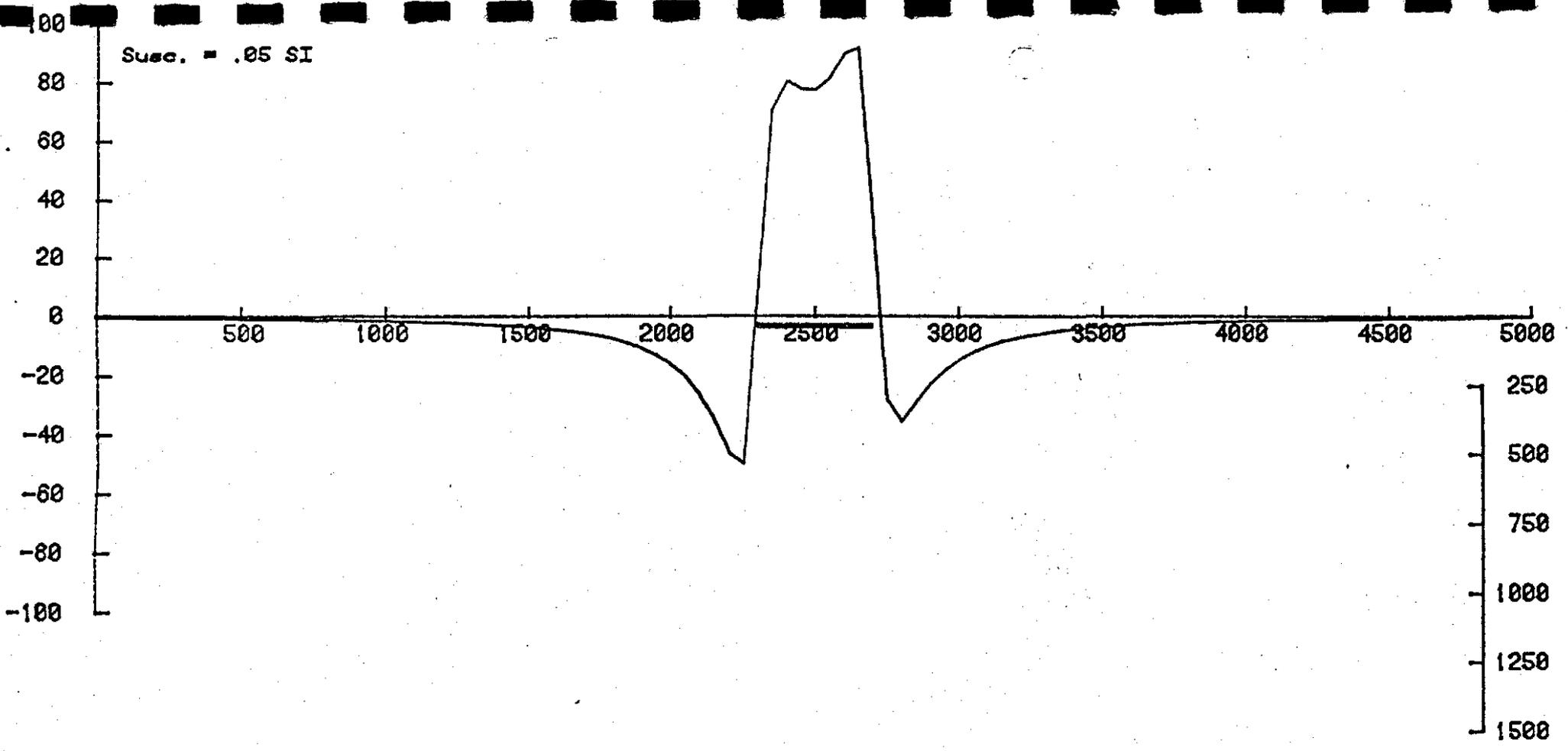
Susc. = .065 SI



926009

GAMMAS

Susc. = .05 SI



926010

#### 4. ELECTROMAGNETIC SURVEY.

Geoterrex Pty. Ltd were contracted to carry out a Crone Pulse Electromagnetic survey over the Housego grid, one of the three grids they covered during the contract. The work was performed between 13th. January, 1981 and 2nd. February, 1981. Twelve lines were traversed, each 80 metres apart, using a coil separation of 60 metres and taking readings at 20 metre stations. Three and a half lines were also covered using 100 metre coil separation.

At the conclusion of the survey an APEX MAX-MIN II (electromagnetic system frequency domain) was used to cover two lines on the Housego grid with a coil separation of 100 metres and using three frequencies (222, 888, 3555 Hz).

The following is A.M. Lynch's (Geophysicist, Geoterrex Pty. Ltd.) interpretation of the EM results:

#### INTERPRETATION.

"The most interesting anomaly on this grid occurs on line 10920E. The PEM data indicates there is a broad conductive zone just north of the edge of the basalt plateau. The width of this broad zone exceeds the 60 metre coil spacing. At the centre of this zone there appears to be a narrow (less than 10 metres) highly conductive zone, centred at 10370N. Its attitude is subvertical, perhaps steeply dipping southwards. The moderate 7 - channel PEM anomaly implies this narrow body at 10370N is of a "massive" type sulphide. Similarly the strong anomalous response of the MAX-MIN system at this location, particularly the high IN-PHASE/ QUADRATURE ratio of the 222 Hz frequency, also confirms the existence of a body of moderate conductivity at 10370N.

The MAX-MIN system has also detected a very weak conductor at about 10670N, where the corresponding PEM data indicates a "low". The source of this anomaly may be a lithological boundary, and is not considered significant.

Weak anomalies were also detected on lines 10280E and 10360E. The faint 3 - channel anomaly on line 10280E at about 9970N is associated with anomalously high magnetic values, as is the slightly stronger 6 - channel anomaly on line 10360E at 9970N. Both sources appear to be near vertical, and the depth to the top of each is probably less than 50 metres. The high noise level on both lines using the 100 metre coil separation did not permit additional information to be obtained from this data over these two anomalies."

4. ELECTROMAGNETIC SURVEY CONTD.

"Neither of these two anomalies is indicative of conductive massive sulphide mineralisation. When considered with the strong magnetic signature, however, the EM anomalies may be due to a porphyritic pyrrhotite source where there is minor interstitial sulphide between the sulphide blebs.

On the northern end of line 10200E where there is a strong magnetic anomaly the PEM indicates the magnetic source has a slightly higher conductivity than the surrounding country rock. A pyrrhotite source, of essentially a porphyritic nature, may be responsible for this situation.

Line 10120E, using the 100 metre coil separation for both MAX-MIN and PEM system, appears to have a weak anomaly centred at about 10210N; the dip appears to be sub-vertical. The faint 6 or 7 channel PEM response implies there is possibly interstitial sulphide in a porphyritic source rock, or it may reflect a degree of weathering in a small, sub-massive sulphide body.

There is a weak 4 or 5 channel anomaly on line 10520E, centred at about 10070N. The source seems to be sub-vertical, although northward extension of the line would assist in the interpretation of this anomaly."

CONCLUSION AND RECOMMENDATIONS.

"The best indication of a strong conductor (ie probably massive sulphide) on the Housego grid is on line 10920E at 10370N. This anomaly may be tested by siting a drill collar near the edge of the basalt plateau at around 10330N and drilling an angle hole northwards. Should the drilling results prove to be interesting it is recommended that the eastward and westward extension of this zone be examined using the MAX-MIN EM system.

The second priority target is the anomaly on line 10120E at 10210N which should be tested as the EM anomalies indicate the source is a moderately strong conductor. Depth to the top of the source is less than 100 metres and the dip is sub-vertical.

The third priority target is the source of the anomaly on line 10360E, centred at 9970N. The body is buried at a depth of less than 50 metres and its dip is sub-vertical. This anomaly probably represents the same horizon as that on line 10280E at 9970N. Should the source of these anomalies prove to be essentially of a porphyritic sulphide nature in a resistive matrix then the induced polarisation/resistivity method is recommended to be used if this horizon needs to be mapped."

4. ELECTROMAGNETIC SURVEY CONTD.

Marcus Flis (Geophysicist CRAE Pty. Ltd.) made the following comments on the interpretation:

"Here are the results of the quantitative interpretation you asked me to carry out on the Mt. Bischoff EM data.

Line 10920E: The 8 channel PEM and Max-Min anomaly occurring at 10370mN appears to have a steep northerly dip (greater than, say, 65 degrees). The fact that this anomaly occurs on the edge of the basalt is quite puzzling. The things that could cause this anomaly are:

- (i) Fault or shear zone - the width of the anomaly would indicate a shear zone rather than a fault - both can cause very high conductivities.
- (ii) Weathered zone due to the presence of the creek.
- (iii) Topographic effect - not expected to cause an anomaly of the size seen, and
- (iv) Genuine mineralisation.

Personally, I am not convinced that we can disregard the cause as being non-mineralogenic. Perhaps an hour on the ground at the anomaly's location could prove or refute item (i) and (ii) as a cause. If no evidence can be found as to its cause, then only drilling will give the answer - the anomaly is certainly handsome enough to justify it. A target depth of 20-30 m is indicated.

The six channel PEM anomaly at 10670mN indicates a flat lying body close to surface (10-20 m). The anomaly does not appear to be particularly strong and may be simply a lithology response.

Some shallow sampling technique (costeaming) should shed some light on it.

Line 10120E: The 8 channel PEM anomaly at 10110mN indicates a steep northerly dip. The distinct base level change on the Max-Min profile probably indicates a lithology change - the anomaly at 10210mN which Geoterrex's report mentions is hardly discernable above the noise envelope and as such is not a primary target. A depth of 40-50 m is postulated.

Line 10360E: Geoterrex's interpretation is sufficient for the anomaly at 9970N and cannot be expanded on.

4. ELECTROMAGNETIC SURVEY CONTD.

"I don't think much more can be added to the decisions arrived at at the meeting on Friday. The central magnetic trend will have to be investigated and the two targets (10200E at 10130mN and 10360E at 9970mN) should do that. I feel the question of dips is still a bit "iffy" but can be stated as "near vertical" with certainty. This should prove no problem with an angled hole."

A further two lines of Max-Min survey were subsequently run on either side of the anomaly at 10370N on line 10920E. The lines were 10880E and 10960E, and coil separation was 100 metres. A.M. Lynch's interpretation of the results was:

INTERPRETATION.

"It is evident from the quadrature response that the anomaly on line 10920E at about 10370N extends along strike, intersecting both lines 10880E and 10960E. The in-phase response however, though similar on lines 10960E and 10880E, is different to that on line 10920E. The response is possibly due to a single source at 10370N on both line 10960E and line 10880E.

The coincidence of the anomalies with the steep descent off the basalt plateau may explain the distortion of the in-phase anomalies. Small variations in true horizontal separation of the coils have a significantly greater effect on the in-phase response than on the less sensitive quadrature response.

In view of the information gained from these additional two lines the anomaly on line 10920E is re-interpreted as that due to two closely spaced very conductive sources, located at about 10360N and 10390N.

On all three lines the depth of burial is less than 50 metres from surface. On line 10920E, where the anomaly is strongest, either the depth of burial of the sources is significantly shallower or the conductivity thickness product is greater than on either of the other two lines. Of the two adjacent lines the anomaly is strongest eastwards on line 10960E. Again this may be due to a shallower depth of burial or greater conductivity thickness product than on 10880E.

The dip of the source on lines 10880E and 10960E both appear to be sub-vertical, apparently dipping northward, contrary to line 10920E. As lithological change may impose a false sense of dip, the dip direction in this case is inconclusive."

4. ELECTROMAGNETIC SURVEY CONTD.

CONCLUSIONS AND RECOMMENDATIONS.

"At this stage it is recommended that the source of the EM anomaly be drilled. The body has a strike length of at least 80 metres, and probably extends further eastwards. The source of the anomaly on line 10920E appears to be 2 sheet-like sub-vertical bodies about 30 metres apart. One of these bodies extends eastward and westward to intersect lines 10960E and 10880E both at approximately 10370N.

As recommended in the initial report, a drill site on line 10920E at about 10330N, drilling an angle hole northwards, would test the source of this anomaly."

Marcus Flis's comments were:

"I would like to make a few comments on the additional Max-Min work that was carried out on the Housego Grid recently.

1. I do not believe that the anomaly encountered on line 10920E at 10370N on the previous Max-Min and PEM surveys extends to lines 10880E and 10960E. You will notice that on these two lines the quadrature anomalies have been significantly reduced in amplitude thus indicating either a degradation of the conductive zone along strike or the absence of such a zone altogether, in which case the observed anomalies have no or very little in-phase response associated with them. I would suggest the latter interpretation to be possibly the more correct one.
2. I am not at all clear why Geoterrex suggested a twin conductor situation. The in-phase channel may suggest it but, as is obvious, this channel is particularly noisy on these two lines and it would thus be presumptuous to make such a statement.

With regard to the hole that was completed on 10920E, it is obvious that the 64 m vertical depth was not enough to test a sub-basaltic source. The possible presence of a localized thickness of (saturated?) basalt due to an old valley could cause an EM anomaly but not of the amplitude seen here.

The only way in which the situation can be resolved is to put in a steep hole drilled right down into basement. Unfortunately, I do not think the budget can handle such a hole."

5. DIAMOND DRILLING.

Four holes were drilled to test the co-incident magnetic and EM anomalies for a total of 453.1 metres. All four holes intersected Precambrian sediments after passing through the Tertiary basalt. The causes of the magnetic/EM anomalies were not established unless they were due to a local thickening, or more magnetic/conductive flow, of the basalt. Grinding of the core gave assays of less than 0.01% Sn throughout. Drill core logs are appended. The sediments intersected were typical Bischoff series rocks including carbonaceous shale, siltstone and quartzite. Minor quartz/carbonate veins with some pyrite were cut in the core.

6. MINES DEPARTMENT DRILLING.

The core of the Mines Department drill holes FL 3 to FL 9 was logged in order to standardize the logging terminology with that at Mt. Bischoff. Emphasis was put on logging and sampling the dolomitic sections of the core. A total of 228.6 metres of core was sampled by core grinding. The samples were analysed for Sn, Cu, Pb, Zn, Ag and W. Previously split core - mostly in the Fook's Lode intersections - was not re-sampled. The following zones of interest were found:

<u>HOLE NO.</u>	<u>FROM</u>	<u>TO</u>	<u>WIDTH</u>	<u>% Sn</u>	<u>% Cu</u>	<u>% Pb</u>	<u>% Zn</u>
FL 3	76.9	78.6	1.7	0.04	-	0.17	0.50
FL 4	87.2	88.1	0.9	0.01	-	0.24	0.55
FL 6	174.3	177.6	3.3	-	-	0.52	0.16
	224.6	228.0	3.4	-	-	0.05	0.62
FL 7	108.2	119.5	11.3	-	0.09	0.52	0.04
FL 9	80.6	87.8	7.2	-	0.01	0.18	0.23

<u>HOLE NO.</u>	<u>ppm Ag</u>	<u>ppm W</u>	<u>ROCK TYPE</u>
FL 3	10	20	Dolomite
FL 4	1	-	Dolomite
FL 6	18	-	Breccia
	1	-	Dolomitic/Sand/Silt
FL 7	47	-	Breccia
FL 9	21	-	Dolomite

7. GEOLOGICAL INTERPRETATION.

Logging of the core has indicated the following stratigraphic sequence within the Cambrian rocks:

- + 60 m                    Brown arkosic sandstones (similar in appearance to Mt. Bischoff "tuffs") interbedded with grey siltstones and minor shales.
  
- ~ 40 m                    A thick unit of dolomite, dolomitic sandstone and siltstone, interbedded variously with weakly dolomitic sandstones and siltstones. The rocks are pink when sandy and green/grey when dolomitic, and display pronounced lateral facies gradation.
  
- 25-70 m                  Mixed pink and grey sandstone/siltstone with minor dolomite.
  
- 20-30 m                  Mixed "conglomerate" unit with some sedimentary breccia characteristics.
  
- + 20 m                    Dolomite and dolomitic sandstones etc.

The contact between the Precambrian and Cambrian rocks appears to be invariably a fault contact. The Precambrian consists of carbonaceous shales, siltstones and quartzites, typical of the Bischoff series.

Other, later, rock types known in the area are quartz porphyry (as occasional boulders of scree on the north slope beneath the Tertiary basalt), a dolerite dyke (intersected in FL 6 and MBD 59) and the overlying Tertiary basalt.

Geological interpretation of the Mines Department drilling in the Fook's Lode area indicates that the Cambrian rocks dip fairly gently towards the south west at about 10 to 20 degrees. The core logging indicates considerable faulting in the area. The main fault between the Cambrian and Precambrian strikes north-west and dips steeply to the north east (70 to 80 degrees). This fault is offset by a northeast trending fault between holes FL 1, 2 and FL 3, 4. The Precambrian rocks, within the north and north eastern portion of the drill pattern, appear to be dipping relatively steeply north east (45 to 60 degrees) but are much disrupted and probably folded. A synclinal position may well occur between FL 5 and MBD 61.

7. GEOLOGICAL INTERPRETATION CONTD.

Mineralisation is present in the area, especially in Fook's Lode which contains cassiterite in association with abundant fluorite, quartz, carbonate, with some pyrite, sphalerite and jamesonite. Assays from the three holes that intersected the lode are:

<u>HOLE NO.</u>	<u>WIDTH (m)</u>	<u>% Sn</u>	<u>% Pb</u>	<u>% Zn</u>	<u>% Cu</u>
FL 1	~ 2.9	0.72	2.6	3.6	Trace
FL 3	~ 1.3	1.12	0.31	2.35	0.02
FL 4	~ 2.7	0.41	0.48	3.28	0.06

Some low grade lead/zinc/silver was also found, especially in the dolomitic zones, in the core ground samples in FL 3, 4, 6, 7, 9 (see under heading Mines Department Drilling).

A sub-basaltic deep lead is exposed at 10140N 9840E. The lead contains some small rounded pebbles of quartz porphyry and rounded grains of cassiterite. These have been interpreted to have travelled some kilometers. They may have emanated from Mt. Bischoff to the north, or from a source beneath the basalt to the south.

If a metal zoning model is fitted to the mineralisation, then the lead-zinc mineralisation would be peripheral to tin (copper) mineralisation. Once more the centre of this mineralisation may be Mt. Bischoff itself, or have its centre towards the south.

Although interpretation of magnetics over the Tertiary basalt has proved hazardous, two slight positive magnetic anomalies lie over the sub-basaltic Cambrian dolomitic horizon, projected towards the south-south-east. The smaller anomaly is over the town dam, the larger over the golf course. A broader high zone exists just south of the EL 13/79 boundary as an extension to the golf course anomaly.

In a study of the vein deposits around Mt. Bischoff, a rough possible reserve was placed on the Fook's Lode. Assuming a width of 2.3 metres (from FL 1, 3, 4) a depth of 120 metres (surface to intersection in FL 4) and length of 150 metres (distance between FL 1 and FL 3 intersections), then a possible reserve of 100,000 tonnes exists at a grade of 0.67% Sn (average FL 1, 3, 4). The lode appears to be closed off to the (south) east and at depth, but has not been tested to the (north) west of FL 1.

8. RECOMMENDATIONS.

Two low priority targets are present in, and adjacent to, the Authority to Prospect.

The first is to map and sample Fook's Lode to the (north) west of the FL 1 intersection, followed by drilling if warranted.

The second is to check the magnetic anomaly on the golf course where projected Cambrian dolomites may have been mineralised.

It is also recommended that susceptibility readings be taken on the core of drill holes MBD 59 to MBD 62 (also FL 1 to FL 9 if possible). These readings should be related to the ground magnetic survey, and a geophysicist should be engaged to establish whether it is possible to screen out the effects of basalt cover and thus establish magnetic profiles/contours of sub-basaltic rocks.

MINES DEPARTMENT FOOKS LODE HOLES - RELOGGING

F. L. 3

0 - 13.6 m ) (44.6 ft) )	BASALT
13.6 - 18.1 m ) (59.4 ft) )	0 - 18.1 m missing - use old logs
18.1 - 37.3 m (122.4 ft)	Grey, thinly bedded SILTSTONES, minor SHALES. Extensively weathered and bleached - soft puggy patches and some crumbly limonitic stained intervals, bedding appears to be 30-40 degrees LCA highly disrupted and deformed by soft sediment deformation. Some pinkish and greenish-grey patches appear as the influence of weathering diminishes - possible Cambrian? Last 2 m maroon-reddish grey-Cambrian.
37.3 - 39.7 m (130.2 ft)	Pink and pale grey SANDSTONES with SILTSTONES, deformed and disrupted, patches of broken core go through to leached, pitted and weathered.
Contact 40 degrees? - broken 39.7 - 45.6 m (149.6 ft)	Maroon and greeny-grey SILTSTONES, some pale grey sandy beds.
Contact Broken 45.6 - 58.9 m (193.2 ft)	Pink and grey SANDSTONES, minor SILTSTONES. Pitted and leached - possible dolomite and carbonate matrix removed?
58.9 - 78.6 m (257.9 ft)	Brecciated grey and white DOLOMITE with minor interbedded grey siltstones. Last 1.5 m (approx) grey SILTSTONES and SHALES, pyritic.
Contact 25 degrees 78.6 - 81.6 m (267.7 ft)	"FOOK'S LODE".
Contact 25 degrees 81.6 - 83.8 m (274.9 ft)	Severely disrupted and brecciated dark grey SILTSTONES (? looks like PreCambrian). Small fault 84.4 m; another at 85.3 m.

Contact 25 degrees  
83.8 - 119.5 m  
(392.0 ft)

Pale grey SILTSTONES with grey and some faintly pinkish SANDSTONES. Totally disrupted and brecciated - looks like PreCambrian seds. Gradually becomes darker grey with depth; typical siltstone "fuberite", closely similar to F.L.7, totally disrupted contorted and brecciated by soft sediment deformation. Sandstone clasts mostly light pinkish grey, occur to a greater or lesser degree.

Contact 50 degrees  
119.5 - 133.3 m  
(437.3 ft)

FAULT BRECCIA

All rock fragments appear to be PreCambrian - contorted and deformed pieces of siltstone and sandstone in a crushed rock matrix.

133.3 - 136.55 m  
(448.0 ft)  
E.O.H.

Thinly bedded dark grey SILTSTONES minor sandstones. Disrupted and deformed - most bedding angles between 50-70 degrees.



MINES DEPARTMENT FOOK'S LODE HOLES - RELOGGING

F. L. 4

0 - 22.9 m (75.1 ft)	BASALT
22.9 - 38.7 m (127.0 ft)	Grey and yellow soft weathered SILTSTONES. Very puggy and broken up. 34.1 m? Bedding 65 degrees. Improvement in quality of core at 38.7 m - not as weathered or puggy. 42.4 m So 20 degrees.
38.7 - 49.9 m (163.7 ft)	Grey SILTSTONES. Thinly bedded. 44.0-45.4 m Breccia zone - old fault? Core has a dark brown patina - dolomitic? (no fizz). Pinkish and greenish tints - possible Cambrian?
49.9 - 51.5 M (169.0 ft)	Pale grey DOLOMITE - disrupted and brecciated.
Contact 60 degrees 51.5 - 52.6 m (172.6 ft)	Green and grey thinly bedded SILTSTONES 52.0 m So 30 degrees.
Contact 30 degrees 52.6 - 53.3 m (174.9 ft)	Pale grey and white thinly bedded DOLOMITE. 53.2 m Bedding 35 degrees.
Contact 25 degrees 53.3 - 56.7 m (186.0 ft)	Faintly greenish pale grey thinly bedded SILTSTONES. Bedding disrupted and contorted.
Contact disrupted 56.7 - 58.1 m (190.6 ft)	Pale grey finely bedded DOLOMITE.
Brecciated contact 58.1 - 75.6 m (248.0 ft)	Pink Dolomitic SANDSTONES (or SANDY DOLOMITES), alternating with greeny-grey dolomitic SILTSTONES. 72.2 m Bedding 50 degrees
Gradual change 75.6 - 78.6 m (257.9 ft)	Grey QUARTZITES and green-grey SILTSTONES. Alternating sandy and silty beds 10-30 cm; minor disruption and

brecciation. Small fault 78.4 - 78.8 m.

Contact faulted & broken

78.6 - 83.4 m  
(273.6 ft)

DOLOMITE BRECCIA

Pink and grey sandy dolomite, minor siltstones in a crystalline dolomite matrix.

Contact brecciated

83.4 - 88.1 m  
(289.0 ft)

DOLOMITE

Pale creamy coloured silty fine grained, dolomite, disrupted and contorted; finely bedded.

87.2 - 88.1 m Mineralised adjacent to Fook's Lode - py, trace sp, fluorite, dissem. throughout.

88.1 - 91.6  
(300.5 ft)

"FOOKS LODE"

Strong py, fluorite, sp, cassiterite mineralisation in cavities within brecciated dolomite. Some dolomite clasts have abundant finely dissem. pyrite.

Contact 50 degrees (parallel to bedding)

91.6 - 91.9 m  
(301.5 ft)

DOLOMITE

Contact 45 degrees (Bedded)

91.9 - 98.9 m  
(324.5 ft)

Gradual change over 30 cm - interbedded dolomite and siltstone 1-2 cm.

Pink SANDSTONES and Grey SILTSTONES.

Well bedded, alternating on a 5-10 cm scale faintly greenish pale grey siltstones and minor pinkish sandstones. Hard, slightly altered, minor soft sediment deformation.

96.3 m So 55 degrees.

Contact 50 degrees

98.9 - 100.9 m  
(331.0 ft)

Hard massive pink QUARTZITE.

100.9 m So 50 degrees.

Contact 50 degrees

100.9 - 110.8 m  
(363.5 ft)

Grey Dolomitic SILTSTONES with pink Dolomitic SANDSTONES (QTZITES).

Pronounced "fizz", minor disruption, brecciation with carbonate stringers - no py, no obvious min - not sampled.

110.3 m So 50 degrees.

Contact 50 degrees

110.8 - 113.6 m  
(372.7 ft)

Thinly interbedded (1mm-2mm) Dolomitic SILTSTONE and grey SILTSTONE. Well

bedded stripey greeny grey and dark grey unit, minor disruption.

113.6 - 116.6 m  
(382.5 ft)

Finely bedded grey SILSTONES.  
Slightly bleached, hard and altered/silicified similar to footwall rocks of main dolomite, Mt. Bischoff?

Contact 50 degrees  
116.6 - 132.1 m  
(433.4 ft)

Interbedded Dolomitic SANDSTONES/  
SILTSTONES. Very hard-pink in colour-  
really carbonate-rich quartzites, more  
or less dolomitic/calcareous throughout  
entire interval - some "fizz" readily  
others not.

123.1 m So 55 degrees.

125.7 - 132.1 m - not so dolomitic.

Contact 60 degrees  
132.1 - 156.8 m  
(514.4 ft)  
E.O.H.

CONGLOMERATE.

May possibly be a true conglomerate, as  
four or five different coloured rock  
fragments may occur within a few cm of  
each other; some dark grey shale clasts  
occur here and there; everything is  
rounded and is cemented by a dolomitic  
matrix, slightly pitted by weathering in  
places.

148.7 - 149.9 m - broken, fault zone  
40 degrees.

SAMPLE NO.	SAMPLE NO	FROM	TO	INTERVAL	Sn	Sn	Cu	Pb	Zn	g	W	Au	Check Sn	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
	120173	49.9	51.5	1.6		12	100	640	760	3	<10			
	120174	52.6	53.5	0.9		6	50	160	910	2	25			
	120175	56.7	58.1	2.4		6	60	75	850	2	10			
	76	58.1	61.1	3.0		4	26	40	410	<1	<10			
	77	61.1	64.1	"		75	22	25	500	<1	15			
	78	64.1	67.1	3.0		28	16	70	310	<1	15			
	79	67.1	70.1	"		120	18	65	380	1	15			
	80	70.1	73.1	"		16	30	540	730	3	<10			
	81	73.1	75.6	2.5		14	36	700	3400	8	<10			
	120182	78.6	80.6	2.0		55	30	110	1000	<1	<10			
	83	80.6	83.4	2.8		8	6	30	380	<1	<10			
	84	83.4	85.4	2.0		8	12	30	780	2	<10			
	85	85.4	87.2	1.8		16	14	850	2200	11	20			
	86	87.2	88.1	0.9		130	55	2400	5500	1	<10			

Notes:- Sn & W by XRF  
 Bi  
 Cu, Pb, Zn by AAS

926027

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT  
 ASSAY SUMMARY SHEET HOLE NO. <sup>Forks Lode</sup> 4

SAMPLE TYPE : DRILL CORE

FROM 49.9 TO 88.1

MINES DEPARTMENT FOOK'S LODE HOLES - RELOGGINGF. L. 5

0 - 18.6 m (61.0 ft)	BASALT
18.6 - 39.2 m (128.6 ft)	SANDSTONES/SILTSTONES Very puggy, broken and weathered - sandy and silty pale yellow and grey clays, bedding unrecognisable.
39.2 - ?43.0 m (141.0 ft)	?TUFF - slightly micaceous bleached coarse grained spotted sandy rock - looks like weathered "tuff".
?43.0 - 47.2 m (154.8 ft)	Grey SILTSTONE/SHALE. Soft white and weathered, high core losses.
47.2 - 47.6 m (156.2 ft)	Porous coarse grained SANDSTONE - large quartz grains to 1 mm, leached, pitted by weathering, orange-brown due to limonite.
47.6 - 57.9 m (190.0 ft)	Grey SANDSTONE/SILTSTONE - porous, pitted, gradually becomes less weathered, well bedded with minor disruption; alternating coarse sandstones and sandy siltstones "tuffaceous" in part. 54.3 m So 50 degrees.
57.9 - ?68.6 m (225.0 ft)	"TUFF" finely speckled white and orange-brown weathered tuff, fine grained.
FAULT	
?68.6 - 76.2 m (250.0 ft)	LOST CORE - some fragments of pyritic grey siltstone - possible contact b/w tuff and grey siltstones at 71.7 m.
76.2 - 89.2 m (292.7 ft)	Grey SILTSTONES, SHALES, minor SANDSTONES, totalling disrupted and brecciated; shattered and puggy from 76.2 - 89.2 m.
89.2 - 97.0 (318.2 ft)	Black SHALES, with pyrite and minor SILTSTONES. Very black and fine grained, brecciated with abundant py in thin veinlets and stringers (10-15%). 92.4 - 100.6 m Puggy fault zone approximately 40 degrees.

Gradual Change to  
97.0 - 123.1 m  
(403.9 ft)

Grey SILTSTONES with black SHALES - dark grey, totally disrupted and brecciated. Some finely laminated black shales disappear gradually with depth. Black ?graphitic coatings on partings.  
103.0 - 105.2 m Puggy fault zone.  
108.8? m Bedding 45 degrees.  
116.9 m Bedding in 20 cm of sandstone, 50 degrees.

Contact 45 degrees  
123.1 - 124.1 m  
(407.2 ft)

Dark grey micaceous pyritic SANDSTONE, bedded 45-50 degrees.

Contact disrupted  
124.1 - 134.1 m  
(440.0 ft)

Dark grey SILTSTONES, rare SHALES and SANDSTONE beds. Black shiny ?graphitic coatings on partings. Very similar to "fuberite" seds in holes MBD 41 - MBD 46.  
130.4 m So approximately 45 degrees.  
131.7 m So 25 degrees.

Contact 35 degrees  
134.1 - 135.33 m  
(444.0 ft)

Dark grey SANDSTONES thinly interbedded with grey SILTSTONES.

Contact 70 degrees  
135.33 - 167.9 m  
(550.8 ft)  
E.O.H.

Dark grey SILTSTONES, disrupted with fine dis-continuous black shale laminae.  
151.8 m So 60 degrees.

MINES DEPARTMENT FOOK'S LODE HOLES - RELOGGINGF. L. 6

0 - 28.9 m (94.8 ft)	BASALT
28.9 - 38.6 m (126.6 ft)	Grey SANDSTONES and SILTSTONES, porous, pitted and bleached, soft, crumbly, puggy and weathered.
38.6 - 249.0 m (160.7 ft)	"TUFF" sandy textured and speckled brown/white disrupted and brecciated.
249.0 - 57.0 m (187.0 ft)	Grey SILTSTONES, thinly bedded/massive in intervals to 3 m thick. Disrupted by soft-sediment deformation - still quite fractured, but no puggy weathered zones. Some pitted and porous sandy beds 55-57 m.
57.0 - 58.0 m (190.3 ft)	BRECCIA. Broken core disappears after 58.0 m.
58.0 - 84.9 m (278.5 ft)	DOLOMITIC SILTSTONE. Change in character of core - grey siltstones, <u>dolomitic</u> , with pronounced fine fracturing very similar to the "Cherty" beds on F.L. 8, but is grey in colour with pronounced dark patina due to weathering - possibly dolomitic? Possibly correlates with 93.3 - 120.7+m in F.L. 9? <u>Looks very much more like it correlates with F.L. 7 119.5 - 130.2 m.</u> Abundant fine carbonates healing fractures. 65.8 m bedding 15 degrees, (sampled). Gradually becomes more pinkish coloured with depth - pinkish intervals more dolomitic; some sandy intervals appear. 81.9 m So 40 degrees.
Contact 40 degrees, brecciated 84.9 - 94.8 m (311.0 ft)	Grey SILTSTONE and SANDSTONE. Typical PreCambrian appearance - ash grey and darker grey (shaley siltstones) totally disrupted finely bedded siltstones and sandstones with dissem. pyrite - 2-3%, bedding mostly less than 20 degrees LCA. Sandstone increases after 92 m. 93.9 m So 45 degrees.

Small fault 94.6 - 94.8 m - 40 degrees

- 94.8 - 97.4 m  
(319.6 ft) BRECCIA/CONGLOMERATE (very similar to F.L. 9 - 147.3 - 157.1 m). Rounded fragments grey siltstone, pink and grey dolomite in a grey crystalline carbonate-rich matrix.
- 97.4 - 99.4 m  
(326.1 ft) BRECCIA with creamy coloured silty dolomitic intervals, thinly bedded and contorted/disrupted.
- 99.4 - 102.4 m  
(336.0 ft) BRECCIA/CONGLOMERATE with grey crystalline carbonate matrix as above, 94.8 - 97.4 m.
- 102.4 - ?177.6 m  
(582.7 ft) Pink QUARTZITES and green-grey SILTSTONES probably Cambrian. Very hard pink sandy quartzites, possibly weakly dolomitic, totally brecciated fabric - whether soft-sediment breccia or conglomerate impossible to tell. Probably the former some rare intervals of well bedded finely laminated grey and green silty quartzites to 20 cm (which the bedding directions quoted are taken from) which show crumpling and shedding of pieces.
- Some clasts of grey siltstone and quartzite at low angles (0-15 degrees) to core, up to 0.5 m long. Intervals of "mostly pink quartzite" and "mostly grey and green siltstone" alternate on a 1-4 m scale. Some occasional intervals of medium-grey quartzite.
- The entire unit is more-or-less permeated by thin carbonate veinlets with minor quartz, and rarely, pyrite. Some traces of dissem. py in some clasts and intervals. After 143 m (approx) some signs of pitting and removal of material by weathering.
- 103.9 m Bedding 45 degrees.
- 162.6 m - pale bluish grey DOLOMITE bed? very brecciated, some signs of mineralisation - traces py, gl in carbonate veins. Looks rather like some of the dolomite in MBD 41.
- 174.3 - 177.6 m - mineralised zone - py dissem. in interstices etc. of breccia, and also strongly dissem. (30-40%) in some siltstone clasts and minor veinlets sp, py and carbonates.

Gradual change via pyritic interval

?177.6 - 207.3 m  
(680.1 ft)

?CONGLOMERATE.

Subtle change in character of breccia - more like a conglomerate - intervals do not consist of 1 or 2 rock types in fragments, but rather 3 or 4, also weathers differently - some clasts of a porous pitted carbonate-rich coarse sandstone not previously seen.

Crumbly and broken 190.0 - 208.5 m.

Contact broken

207.3 - 211.4 m  
(693.6 ft)

Grey SANDSTONES and SILTSTONES.

Grey, massive, slightly pitted and porous, brecciated and disrupted.

209.3 - 211.4 m Breccia with abundant py (20-30% in places) and a crystalline dolomite gangue surrounding sandstone and siltstone clasts.

211.4 - 211.9 m  
(695.2 ft)

Brecciated DOLOMITIC SANDSTONE.

Pink dolomitic sandstone with dolomite and pyrite in brecciation fractures.

211.9 - 217.24 m  
(712.7 ft)

?DOLERITE - mafic crystalline igneous rock - dolerite or basalt.

Contact 10 degrees

217.24 - 218.6 m  
(717.2 ft)

Hybrid PORPHYRY/DOLOMITE?

Pale grey porous and pitted carbonate breccia with small quartz (?phenocrysts) grains to 2 mm in a grey rock which occupies the interstices - sample taken for pet.

Contact broken

218.6 - 228.0 m  
(748.0 ft)  
E.O.H.

Pink and grey DOLOMITIC QUARTZITES and grey and greeny-grey DOLOMITIC SILTSTONES. Hard massive disrupted pink and grey dolomitic sandstones alternating with green-grey dolomitic siltstones - soft pebble conglomerate fabric due to soft sediment deformation.

SAMPLE NO.	SAMPLE NO	FROM	TO	INTERVAL	Sn	Sn	Cu	Pb	Zn	.g	W	Au	Check Sn	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
	120161	948	974	26		4	65	70	140	1	<10			
	62	974	994	20		8	32	30	130	<1	<10			
	63	994	1024	30		<4	110	60	120	2	<10			
	120164	162.6	164.6	20		4	65	1500	250	6	<10			
	120165	174.3	175.7	1.4		<4	65	920	740	10	<10			
	66	175.7	177.6	1.9		22	100	2300	2200	24	<10			
	120167	209.3	211.4	2.1		160	65	260	250	5	15			
	68	211.4	211.9	0.5			32	910	190	1				
	120169	217.2	218.6	1.4		12	18	45	220	<1	10			
	70	218.6	221.6	3.0		6	36	65	230	<1	10			
	71	221.6	224.6	"		6	95	240	330	1	<10			
	72	224.6	228.0	3.4		12	24	540	6200	1	<10			

Notes: - Sn, & W by XRF.

Bi

Cu, Pb, Zn, Ag by AAS

926033

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. 60036

SAMPLE TYPE: DRILL CORE

FROM 948 TO 2280.

MINES DEPARTMENT FOOK'S LODE HOLES - RELOGGING

F. L. 7

0 - 64.2 m  
(210.6 ft)

Grey SHALES and SILTSTONES.  
 Very soft and weathered pale grey shales alternating with ochreous yellow massive siltstones, very broken and shattered - puggy in places, minor thin shaley interbeds.  
 10 m? Bedding 40 degrees  
 12.8 m So 50 degrees Was once pyritic-pits left in some sandier beds.  
 16.8 m So 45 degrees Well bedded, minor disruption  
 21.6 m So 55 degrees and contortion in places, overall bedding 40-55 degrees.  
 28.3 m So 35-40 degrees-Some intervals suggestive of  
 33.5 m So 45 degrees "laminated" units found in MBD's 44 etc.  
 32.2 m Slight change - becomes more pronounced grey colour - less broken and weathered, slightly more silt-rich rather than shale-rich. Some sparse sandy siltstone beds begin to appear; the overall fabric of the rock begins to become progressively more disrupted by soft sediment deformation after 33 m - bedding still usable and recognisable.  
 40.8 m So 45 degrees.  
 44.6 m - 64.2 m Fault? - yellow limonitic films and joint fillings permeating shattered sediments severe core losses.

64.2 - 66.2 m  
(217.2 ft)

DOLOMITIC SILTSTONE.  
 Finely laminated creamy coloured silt-rich dolomite, bedded 25-30 degrees - upper contact fault bounded, lower contact with quartzite.

Contact 35 degrees  
66.2 - 67.5 m  
(221.5 ft)

Hard grey QUARTZITE - massive.

Contact 40 degrees, bedded

67.5 - 69.1 m  
(226.7 ft)

DOLOMITIC SILTSTONE - as above, finely laminated 35-40 degrees LCA.

Contact irregular

69.1 - 81.5 m  
(267.4 ft)

QUARTZITE - very hard quartzite, massive and structureless; minor quartz - carbonate - py stringers and stockworks. Some sparse thin interbeds of laminated dolomitic siltstone as above; occasionally some fine grey interbeds of siltstone; well bedded, only minor disruption.

77.4 m So 70 degrees.

79.2 m So 60 degrees.

81.4 m So 55 degrees.

81.5 - 93.6 m  
(307.1 ft)

From 81.5 m onwards gradually changes to well bedded massive grey SILTSTONES with thin pinkish coloured QUARTZITE interbeds.

90.2 m Bedding 60 degrees.

Contact 70 degrees, bedded

93.6 - 99.0 m  
(324.8 ft)

Well bedded SILTSTONES, minor dark grey SHALES. Medium grey featureless siltstones with well defined "ribbony" bedding and some dark grey shale laminae. Rock is quite hard and siliceous, minor soft sediment disruption and later weak fracturing. Some traces of finely dissem. py. 97.5 m - bedding 70 degrees; brecciation and carbonate/quartz veinlets begin to increase.

93.6 - 96.2 - darker grey in colour, fine shale laminae begin to disappear and become greeny-grey after 96.2 m.

Contact 50 degrees

99.0 - 102.6 m  
(336.6 ft)

Hard pink DOLOMITIC QUARTZITE. Well bedded pink quartzite with well developed "fizz" and some greenish more silty intervals.

100.0 m Bedding 50 degrees.

Contact 50 degrees

102.6 - 105.8 m  
(347.1 ft)

Thinly bedded grey SILTSTONES with minor pink QUARTZITES. Alternating grey siltstones and pinkish weakly dolomitic sandy textured quartzite beds.

105.8 - 119.5 m  
(392.1 ft)

ANALOGOUS

TO

FOOK'S

LODE?

SILTSTONES, minor SANDSTONES. Grey hard massive siltstones, disrupted and brecciated.

(108.2 - 109.0 - very brecciated - grey ( clasts of siltstone and shale in a ( dolomitic breccia matrix - clean ( white dolomite.

(109.0 - 109.35 - virtually massive py - ( syngenetic in siltstone clasts with a ( gangue of dolomite in matrix with ( traces sp, cp and ?po.

(109.35 - 111.5 - Breccia with rounded ( clasts grey siltstone and sandstone, ( and crystalline dolomite matrix - ( mineralisation py, sp, cp and ?po.

(111.5 - 112.9 - totally brecciated with ( finely dissem. py. 1-2% and clasts ( etc. of pinkish dolomite. Breccia ( matrix not dolomite.

(112.9 - 114.8 - Breccia with highly ( mineralised matrix - dol, py, gl, sp ( and ?cassiterite.

(113.4 - 114.8 - dolomite bed which has ( been brecciated and mineralised - py, ( traces sp - slugs of ?cassiterite to ( 3 mm in matrix surrounding clasts?

114.8 - 119.5 - Breccia - grey siltstones and shales with minor creamy dolomite fragments.

Contact brecciated  
119.5 - 130.2 m  
(427.2 ft)  
E.O.H.

Pink and greenish grey SANDY QUARTZOSE DOLOMITES and DOLOMITIC SILTSTONES (Cambrian?).

Thinly bedded pink dolomitic sandstones and greeny-grey siltstones (dolomitic) well bedded with minor disruption and contortion, alternating with green-grey massive dolomitic siltstones on a 10-30 cm scale.

122.5 m So 25 degrees.

124.0 m So 30 degrees.

126.7 m So 15 degrees.

SAMPLE NO.	SAMPLE NO	FROM	TO	INTER-VAL	Sn	Sn	Cu	Pb	Zn	g	W	Au	Check Sn	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
	120147	642	662	20		6	8	45	910	<1	<10			
	120148	675	691	16		6	12	20	220	<1	10			
	120149	990	1026	36		6	6	15	110	<1	<10			
	120150	1082	1094	12		<4	120	7400	250	14	10			
	51	1094	10935	0.31		<4	180	3.50%	510	43	15			
	52	10935	1118	173		<4	690	3200	750	55	<10			
	120160	1118	1129	11		<4	80	460	170	3	10			
	120153	1129	1148	19		18	360	120%	180	21	<10			
	54	1148	1173	25		<4	470	1300	350	50	15			
	55	1173	1195	22		<4	3300	2500	520	110	15			
	56	1195	1225	30		<4	170	100	290	4	<10			
	57	1225	1255	"		6	50	65	100	1	<10			
	58	1255	1280	25		4	24	65	150	<1	10			
	59	1280	1302	22		10	34	90	140	<1	<10			

Notes:- Sn & W by XRF  
 Bi  
 Cu, Pb, Zn, Ag, by AAS

926037

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT  
 ASSAY SUMMARY SHEET HOLE NO. <sup>Foots</sup> <sub>7</sub>  
 SAMPLE TYPE : DRILL CORE FROM 642 TO 1302

MINES DEPARTMENT FOOK'S LODE HOLES - RELOGGING

F. L. 8

0 - 21.7 m (71.2 ft)	BASALT.
21.7 - 29.4 m (96.5 ft)	Thinly bedded pale grey and brown (bleached and weathered) SILTSTONES and mudstones - probably PreCambrian, bedding angles 5-10 degrees.
29.4 - 35.0 m (114.8 ft)	Bleached cg. quartzose SANDSTONES with thin interbedded SILTSTONES 10-30 degrees. Porous and pitted - very lightweight.
35.0 - 50.6 m (166.0 ft)	Puggy CLAYS with thin SILTSTONE and SHALE fragments extensively broken and brecciated, yellows, browns and pale greys - fault zone? in thinly bedded shales/siltstones.
50.6 - 60.1 m (197.2 ft)	Less broken and bleached - grey medium hard thinly bedded/laminated SILTSTONES, extensively disrupted by soft-sediment brecciation. Some rare clasts of crystalline dolomite.
60.1 - 71.9 m (235.9 ft)	DOLOMITE/minor SILTSTONES. Sedimentary brecciated pink and grey clasts of ?dolomite, rounded and deformed; in a grey matrix. Pronounced "fizz" may be a more Ca rich carbonate. Abundant fine stringers.
71.9 - 73.5 m (241.1 ft)	Hard speckled grey SANDSTONE with carbonate veining and trace dissem. py and veinlets of remobilised carbonate.
73.5 - 87.7 m (287.7 ft)	DOLOMITE - grey, f.gr with minor silty patches, brecciated and disrupted, weak trace dissem. py in interstices; minor carbonate veinlets and stringers. Some rare clasts of siltstone in the lower portions of the interval, some of which have finely dissem. py.

87.7 - 114.8 m  
(376.6 ft)

DOLOMITE/SILTSTONE SHALE - soft sediment breccia-rounded clasts of finely bedded/laminated siltstones - greyish brown (tourmaline rich?) interspersed in a mostly dolomitic matrix - rounded clasts to 1 cm of dol, matrix f.gr. grey and silty. Some intervals are porous and pitted by weathering - light in weight and cellular due to removal of ?carbonates or ?sulphides. In last 2 m, gradual increase in thinly bedded cherty siltstones and shales in randomly oriented clasts.

Contact obscured by brecciation

114.8 - 121.3 m  
(398.0 ft)

Thinly bedded grey SILTSTONE and SHALES. Pale greys in colour - thinly and well bedded "ribbony" appearance similar to MBD's 41-46, but no black shales, medium hard grey quartzose siltstones, locally almost massive for 0.5 m or so - trace dissem. py in places; minor thin carbonate, py veinlets and stringers. Bedding well defined with discrete disrupted intervals - angles vary from 65 degrees to 90 degrees.

Contact irregular, 45 degrees

121.3 - 140.4 m  
(460.6 ft)

"Cherty SILTSTONES" and SANDSTONES - Cambrian? Dark maroon red f.gr featureless sediments, finely bedded/laminated approx. 55-60 degrees LCA, alternating with dark grey-green intervals of same, some minor soft-sediment disruption. Colour changes are transitional from drab dark reddish browns via olive-greys to greens and browns. Finely fractured, with abundant fine carbonate stringers and stockworks which rarely carry trace pyrite.

130.9 - 134.0 - py-3-5%, finely dissem. in pink sandy beds.

Some beds 128.9 onwards have sandstone characteristics - quartz grains to 20%.  
130.9 - 140.4 - hard and silicified deformed and disrupted siltstones and quartzites, massive and featureless.  
139 m Bedding 50 degrees.

Gradual change

via thinly interbedded dolomite-siltstones @ 50 degrees

140.4 - 151.6 m

(497.4 ft)

Thinly bedded DOLOMITE Brecciated.

Upper 2 m drab brownish-grey thinly bedded silty dolomite alternating with darker siltstones on a 2 mm-2 cm scale. Progressively more dolomitic; disrupted and brecciated within these 2 metres until the rock becomes a dolomite breccia - various shades of fine grained grey silty dolomite, totally disrupted and held together by numerous (10-30%) thin carbonate veinlets, stringers and stockworks.

142.4 - 147.6 - porous and pitted, cellular due to weathering and leaching.

151.6 - 154.9 m

(508.2 ft)

Thinly interbedded SILTSTONE/SANDSTONE/DOLOMITE. As for the upper 2 m above 140.4 - 151.6, with the addition of some massive pink quartzite beds to 0.6 m thick. Dolomite beds gradually decrease to almost zero % in the last 1.0 m. Some bedding becomes apparent with decreasing dolomite %.

Contact 35 degrees, bedded

154.9 - 158.5 m

(520.0 ft)

E.O.H.

QUARTZITES/SILTSTONES. A massive green-grey rather featureless sediment, bedded at 35 degrees, with alternating sand rich and silt rich layers to 1 cm, and minor soft-sediment disruption.

SAMPLE NO.	SAMPLE NO	FROM	TO	INTER VAL	Sn	εn	Cu	Pb	Zn	Ag	W	Au	Check Sn	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
	120100	518	548	30		65	90	190	500	<1	15			
	01	548	58.6	3.8		20	130	55	1100	<1	65			
	02	586	616	30		10	60	50	300	<1	<10			
	03	616	646	"		12	30	710	2500	<1	10			
	04	646	676	"		10	28	70	440	<1	20			
	05	676	706	"		6	28	20	300	<1	15			
	06	706	735	29		6	32	30	350	<1	50			
	07	735	755	20		8	30	20	370	<1	25			
	08	755	775	"		8	24	25	240	<1	<10			
	09	775	795	"		10	20	20	310	<1	20			
	110	795	810	15		10	26	20	410	<1	10			
	120111	847	867	20		8	65	5	220	<1	<10			
	12	867	876	.9		12	160	15	270	<1	10			
	13	876	906	30		4	55	30	200	<1	10			
	14	906	936	"		4	70	25	390	<1	10			
	15	936	966	"		10	75	25	250	<1	<10			
	16	966	996	"		4	32	25	200	<1	10			
	17	997	1026	29		4	30	15	110	<1	30			
	18	1026	1056	30		4	44	15	180	<1	<10			
	19	1056	1086	"		10	26	40	230	<1	<10			
	120	1086	1116	"		6	28	45	210	<1	<10			
	21	1116	1148	32		<4	34	45	220	<1	15			
	120122	128.9	130.9	20		10	75	420	1100	1	<10			
	23	130.9	133.9	3.0		8	50	600	570	1	<10			
	120124	140.4	142.4	20		8	24	45	160	<1	<10			
	25	142.4	144.4	"		<4	18	20	160	<1	<10			
	26	144.4	146.4	"		4	22	25	250	<1	<10			

Notes:- Sn & W by XRF  
 Bi  
 Cu, Pb, Zn, Ag by AAS.

926041

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. Fook's Lade 8

SAMPLE TYPE : DRILL CORE

FROM 518 TO 146.4



MINES DEPARTMENT FOOK'S LODE HOLES - RELOGGING

F. L. 9

- |                         |         |
|-------------------------|---------|
| 0 - 11.3 m<br>(37.1 ft) | BASALT. |
|-------------------------|---------|
- |                            |   |
|----------------------------|---|
| 11.3 - 14.8 m<br>(48.5 ft) | Core missing - presumably mostly PreCambrian weathered siltstones/shales. |
|----------------------------|---|
- |                              |   |
|------------------------------|---|
| 14.8 - 240.2 m<br>(131.9 ft) | Thinly bedded SILTSTONES/SANDSTONES, minor SHALES. Highly leached, weathered and broken - bedding approx. 25-30 degrees, can be as low as 5-10 degrees, jointed 5-40 degrees LCA. 30 m Bedding 50 degrees. Gradually improves in quality with depth, fault zone from 33.0 - 37.2 m, well fractured and veined throughout - quartz and minor py, carbonates. |
|------------------------------|---|
- |  |   |
|--|---|
| Contact broken<br>240.2 - 42.4 m<br>(139.0 ft) | "TUFF" - Dark grey speckled agglomerate very similar to Bischoff "tuffs". Some dissem. py and also white mica flakes in matrix. Possibly arkosic sandstone? |
|--|---|
- |  |   |
|--|---|
| Contact 45 degrees, poss sheared?<br>42.4 - 49.7 m<br>(163.0 ft) | SANDSTONE, minor SILTSTONE. Drab grey and brown faintly micaceous (?tuffaceous) f.gr sandstone with clayey matrix and thin siltstone interbeds. |
|--|---|
- |                             |   |
|-----------------------------|---|
| 49.7 - 57.9 m<br>(190.0 ft) | Fault pug 49.7 - 51.2 m some grey siltstone and brown sandstone fragments.<br><br>Interbedded f.gr "TUFFS", SILTSTONE and brown micaceous SANDSTONES. Highly deformed and disrupted, also well sheared and broken, with high core losses in the lower portion of the interval. F.gr tuffs, which grade into brown micaceous sandstones. |
|-----------------------------|---|
- |                             |  |
|-----------------------------|--|
| 57.9 - 70.4 m<br>(231.0 ft) | SILTSTONE/SHALE BRECCIA - totally broken up and rehealed breccia with ?PreCambrian grey finely bedded siltstone and shale fragments in a f.gr siltstone matrix - some rounded blebs and clasts py., minor carbonate - quartz veining with rare ?sp and cp, with py. Mineralisation 3-5%. |
|-----------------------------|--|

- 70.4 - 72.2 m  
(236.9 ft) SILTSTONE finely laminated grey siltstone - bedding 30-40 degrees.
- 72.2 - 80.6 m  
(264.4 ft) BRECCIA - SILTSTONE SHALE with some ?Dolomitic clasts. See 57.9 - 70.4 for description - in places 72.2 - 74.9 the rock has a texture reminiscent of the "bleached" intervals noted in MBD 46 below the tuff bands. 72.2 - py in rounded blebs and clasts 3-5%, minor cp.
- 74.9 - broken core decreases and disappears - still a breccia but healed and competent.
- 80.6 - 87.8 m  
(288.0 ft) DOLOMITE/DOLOMITIC SILTSTONE. Pink sandy dolomite alternating with green-grey dolomitic shale, extensively brecciated and disrupted with numerous fine carbonate - filled fractures.
- 87.8 - 93.3 m  
(306.1 ft) Thinly bedded SILTSTONES/SHALES brecciated. Grey and pale brown and greeny-grey finely laminated siltstones and shales, completely brecciated, with fractures being healed by remobilized dolomite. Py dissem. throughout, in dolomite and in sediment clasts.
- 93.3 - 120.7 m  
(396.0 ft) DOLOMITE, SANDY QUARTZOSE DOLOMITE and DOLOMITIC SILTSTONE. Pink sandy dolomite with 10-20% quartz grains in places alternating with grey-green hard virtually massive siltstone up to 2 m thick in the upper 10 m. Extensively disrupted and brecciated - most bedding angles appear to be 40-45 degrees with fair consistency. Occasional clasts show cross-bedding - shallow water environment to produce impure dolomite? Extensive healing of brecciation fractures by thin carbonate veinlets and stringers.
- Contact 70 degrees, brecciation  
120.7 - 121.9 m  
(400.0 ft) Hard pink and grey QUARTZITE. Bedding 50-60 degrees, py dissem. approx. 3-5%.
- Contact irregular  
121.9 - 125.3 m  
(411.0 ft) Brecciated green grey DOLOMITIC SILTSTONE.

Irregular contact  
125.3 - 126.5  
(415.0 ft)

Grey and green impure DOLOMITE pinkish grey sandy dolomite alternating with green shaley dolomite.

Gradual change  
126.5 - 142.0 m  
(465.9 ft)

Grey SILTSTONES.  
Finely bedded, disrupted and deformed, virtually massive, with some possible dolomitic intervals, becomes better bedded after 135 m.  
140 m - bedding 10 degrees. Extensively fractured and veined.

142.0 - 147.3 m  
(483.3 ft)

Pink and green SANDY DOLOMITIC SILTSTONES, pink QUARTZITES, possible ?dolomite, f.gr and silty. Lower 2.5 m is totally brecciated and disrupted.

Contact  
147.3 - 159.4 m  
(523.0 ft)

?BRECCIA or ?CONGLOMERATE.  
Rounded fragments of grey, green-grey, pink siltstone in a grey silty matrix - most probably a soft sediment breccia, although difficult to tell. The upper 3 m looks almost like a shock breccia or cataclastic of some sort, though this may be due to later events. Pitted, porous and leached from 153.6 - 157.12.

From 157.12 - 159.4 - intercalated lens of grey sandy siltstones, thinly bedded, with roughly conformable contacts. Some thin lenses of rock which closely resembles the "tuffaceous" units found elsewhere. Bedding angles are 45-50 degrees, and there is some minor contortion and soft-sediment deformation. This small unit appears to be a contained sand lens or some similar thing in the "conglomerate", is probably a genuine sediment, but appears to contain fragments of pinkish and brownish rock that have elsewhere been interpreted as "Cambrian".

159.4 - 161.7 m  
(530.5 ft)  
E.O.H.

CONGLOMERATE with DOLOMITE matrix?  
In hand specimen almost looks porphyritic - but gives pronounced "fizz" with acid. Some contained siltstone and black shale clasts - specimen taken for thin section.

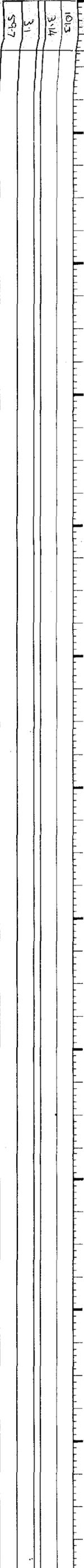




DEPTH (m)	ROCK UNIT	DESCRIPTION	STRUCTURAL AND VEIN INFORMATION	MINERALISATION	NOTES
0-4.5	TRICORNER - NO CORE	(4.5)	NC		
4.5-11.7	BASALT	(7.2) Mid-grey vesicular basalt, in parts very weathered. Contains up to 10% diuic phenocrysts from 2mm to 5mm across. Occasional to numerous large vesicles up to 10mm across, most of them containing prehnite. Vesicles micropneumatic. Numerous thin, with basalt surrounding joints slightly weathered. Joint faces thickly coated with soft iron oxide material. 4.5-7.0 Basalt finely vesicular 2mm across. 10-11.7 Very weathered and broken, containing large amounts of soft, creamy colored, amorphous material.	5.4-5.6 Very broken with large amount of iron oxide.		NIL
11.7-12.7	SOIL	HEORIZON (9.0) Reddish brown clayey material containing soft, creamy colored material (as for 10-11.7) and occasional pieces of basalt.	Broken contact		NIL
12.7-22.15	BASALT	(9.45) Mid-grey vesicular, crystalline basalt, weathered and broken in parts. Vesicles often filled with prehnite. Numerous small dark phenocrysts (2-7mm across) - some are magnesia, some a dark pyroxene. Weakly magnetic. 12.7-18.85 Coarsely vesicular - up to 30mm across. 13.85-19.00 mud-brown, soft, broken and weathered. 14.0-17.3 Finely vesicular. 15-15.3 pinkish-brown and weathered. 17.3-19.3 Moderately to coarsely vesicular. 19.3-22.15 Generally finely vesicular with rare small areas coarsely vesicular. 19.95-20.4 Slightly pinkish, soft. Becomes softer and broken towards 22.15 with strong trace of soft, cream colored amorphous material (as for 10-11.7).	17.1m ? Fault at 20-25° 19.3 ? Fault at 30-35°		NIL
22.15-23.4	TRANSITION ZONE	(12.5) Very broken, pieces of micaceous sediment and basalt.	Contact = 50°		NIL
23.4-35.3	SILTSTONE / LESSER CARBONACEOUS SHALE / MINOR QUARTZITE	(11.9) Fine to medium grained mid-grey, strongly micaceous siltstone, with carbonaceous shale and minor fine grained mid-grey quartzite, thinly bedded and as small clasts. Occasionally bedded. Rarely well bedded. Rare thin carbonate veins.	10/9/11 Broken contact 23.4-30.3 Very broken	23.4-35.3 Pyrite - made of occurrence could not be established due to broken nature of core	Trace trace
35.3-54.05	SILTSTONE / LESSER QUARTZITE / MINOR CARBONACEOUS SHALE	(18.75) Generally massive, occasionally disrupted, rarely brecciated dark-grey, medium to coarse grained, strongly micaceous siltstone with lesser medium grained dark-grey quartzite and shale occurring mainly in disrupted zones, and as occasional small lenses in massive siltstone. Occasional thin carbonate veins and stringers. 35.3-38.25 Disrupted and brecciated. 38.25-46.4 Generally massive. 46.4-47.4 Disrupted and brecciated. 47.4-47.95 Massive. 47.95-54.05 Weakly to strongly disrupted with broken areas of high carbonaceous shale content.	10/9/11 Broken contact	35.3-49.3 Pyrite - finely disseminated and in carbonate veins. Trace of op associated with carbonate veins. Trace of galena in carbonate veins.	Weak trace
54.05-61.2	QUARTZITE / MINOR CARBONACEOUS SHALE / MINOR SILTY SHALE	(7.15) Thickly bedded dark-grey, medium grained quartzite with areas of minor carbonaceous shale and dark grey silty shale. Numerous fine black fractures in quartzite. Occasional to numerous thin quartz/carbonate veins and stringers. Occasional quartz veins occurring in blocks 61.2m. 56.4-57.4 Strongly disrupted and brecciated dark grey silty shale with carbonaceous shale.	11/9/11 Contact = 25°	54.05-56.4 Pyrite - disseminated in quartzite	Weak trace
61.2-64.8	SILTSTONE / LESSER CARBONACEOUS SHALE / MINOR QUARTZITE	(3.6) Strongly disrupted and brecciated dark-grey to black fine-medium grained carbonaceous siltstone with lesser carbonaceous shale and minor medium grained dark-grey quartzite as small clasts. Occasional thin carbonate veins.	10/9/11	61.2-64.8 Pyrite - finely disseminated, in small patches and associated with carbonate veins.	<1%
64.8-70.9	QUARTZITE / LESSER SILTSTONE / MINOR CARBONACEOUS SHALE	(6.1) Generally weakly, occasionally strongly disrupted dark-grey fine-grained quartzite with lesser carbonaceous shale and minor medium grained dark-grey quartzite, and minor carbonaceous shale. Rare to occasional thin quartz/carbonate veins.	11/9/11	64.8-70.9 Pyrite - in patches, thin veins, and associated with quartz/carbonate veins. Galena - in thin veins and patches, and associated with quartz/carbonate veins. (py > galena)	1%
70.9-94.3	SILTSTONE / LESSER CARBONACEOUS SHALE / MINOR QUARTZITE	(23.4) Strongly disrupted and brecciated, occasionally massive dark-grey to black fine to medium grained micaceous and carbonaceous siltstone with lesser carbonaceous shale and minor medium grained dark-grey quartzite, and minor carbonaceous shale in moderately bedded and as small clasts in brecciated zones. Occasional thin quartz/carbonate veins. Weakly to moderately dolomitic (more dolomitic towards 74.3). 70.9-74.3 Strongly disrupted and brecciated. 74.3-77.7 Weakly disrupted to massive. 77.7-81.75 Moderately to strongly disrupted and brecciated. 79.3-79.9 Mid-grey fine-grained non-carbonaceous siltstone and shale. 81.75-82.4 Weakly disrupted to massive. 82.4-84.8 Moderately to strongly disrupted and brecciated. 84.8-89.1 Weakly disrupted to massive. 89.1-94.3 Moderately to strongly disrupted and brecciated.	10/9/11 Irregular contact	70.9-94.3 Pyrite - in thin veins, patches and finely disseminated. Galena - finely disseminated (py > galena)	Trace trace
94.3-97.9	DOLERITE	(3.4) Pale green fine grained, very weathered dolerite with 10% very finely disseminated black mineral.		94.3-97.9 No apparent sulphides	NIL
97.9-101.5	SILTSTONE / LESSER CARBONACEOUS SHALE / LESSER QUARTZITE	(3.6) Dark grey to black, fine to medium grained micaceous and carbonaceous siltstone with lesser carbonaceous shale and minor medium grained dark-grey quartzite, and minor carbonaceous shale veins towards 101.5. Generally strongly disrupted and brecciated, occasionally only weakly disrupted. Occasional to numerous fine quartz/carbonate veins and stringers. Weakly dolomitic to 116.0m. 104.9-105.8 A 80% quartzite, moderately disrupted and brecciated. 107.1-110.1 Weakly disrupted. 111.0-112.0 Weakly disrupted.	10/9/11 99.6-100.4 Lost core	97.9-101.5 Pyrite - finely disseminated, and in veins, stringers and patches. Sp. in veins with pyrite and galena. Galena and 2 stringers in quartz/carbonate veins.	2%
101.5-104.9					
104.9-105.8					
105.8-107.1					
107.1-110.1					
110.1-111.0					
111.0-112.0					
112.0-113.0					
113.0-114.9					
114.9-121.5					
121.5-125.0					
125.0-126.0					

926048

Length of core  
m



Continued from previous page  
 121.2 - 121.5 weakly to moderately disrupted quartzite  
 with minor carbonaceous shale.  
 END OF HOLE 121.5 m

120

121

122

123

124

125

126

127

128

129

130

131

132

133

926049

**DEPTH from-to : ROCK UNIT** capital letters, underlined  
 Depth : Detailed rock description and notes  
 indented about 15 mm.

**GRAPHIC LOG**  
 SEE LEGEND ON SHEET 1

**STRUCTURAL AND VEIN INFORMATION**  
 ATTITUDE = angle between feature and LONG CORE AXIS

**MINERALISATION**  
 PERCENT MINERALISATION  
 Visual estimate

**NOTES**



**MINERAL EXPLORATION  
 DRILL LOG**  
 Scale 1:100

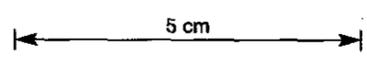
Prospect or project **MOUNT BISCHOFF**  
 Logged by **K. CANUTI** date **14 / 3 / 81**

**HOLE No. MBD59**  
 LOG SHEET **3** OF **3**  
 from **120.0** m. to **121.5** m.

DEPTH (length from collar)	DEPTH from - to : <u>ROCK U I</u> CAPITAL LETTERS, UNDERLINED Depth: Description and notes, veins over 50mm. INDENTED ABOUT 10mm	POINTER & CODE	GRAPHIC LOG	POINTER & CODE	MINERALISATION Excluding veins over 50mm. Visual estimate of % mineralisation in brackets.	ASSAYS AVAILABLE	BULKED ASSAYS Sn
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NOTES: 1. FOR ABBREVIATIONS SEE "FIELD GEOLOGIST'S MANUAL", D.A. BERKMAN & W.R. RYALL (ED.), MONOGRAPH NO. 9 AUSTRALAS. INST. MIN. METALL. - 1976  
2. ATTITUDE OF BEDDING, VEIN, ETC. IS ANGLE BETWEEN PLANAR STRUCTURE AND LONG AXIS OF CORE 3. LENGTH IS GIVEN AS METRES OR MILLIMETRES.

0.45 (4.5)	TRICONE - NO CORE		NC				
4.5-11.7 (7.2)	<u>BASALT</u> Mid-grey vesicular basalt. Up to 10% olivine phenocrysts. Prehnite occurring in larger vesiculars.				No sulphides		
11.7-12.7 (1.0)	SOIL HORIZON				Broken Contact		
12.7-22.15 (9.45)	<u>BASALT</u> Mid-grey, vesicular, basalt. Prehnite occurring in most larger vesicles 3-5% dark phenocrysts 0 some are magnetite, others dark pyroxene.				Broken Contact		
22.15-23.4 (1.25)	TRANSITION ZONE - Pieces of sediment and basalt				No sulphides		
23.4-35.3 (11.9)	<u>SILTSTONE/lesser CARBONACEOUS SHALE/minor QUARTZITE</u> Mid-grey strongly micaceous siltstone with lesser carbonaceous shale and minor fine-ground quartzite, thinly bedded and as small clasts. Occasionally brecciated, rarely. Well bedded. Rare thin carbonate veins.		10/ 9c/ 11		17.1 Fault at 20-25° 19.3 Fault at 30-35° Contact = 50° Broken Contact		
35.3-54.05 (18.75)	<u>SILTSTONE/lesser QUARTZITE/minor CARBONACEOUS SHALE</u> Generally massive, occasionally disrupted, rarely brecciated, carbonaceous and strongly micaceous siltstone, lesser dark-grey quartzite, minor carbonaceous shale. Occasional thin carbonate veins and stringers.		10/ 11/ 9c		Weak trace 35.3-49.3 - Pyrite - finely disseminated and in carbonate veins. Trace of galena and cp in carbonate veins.		
54.05-61.2 (7.15)	<u>QUARTZITE/minor CARBONACEOUS SHALE/minor SILTY SHALE</u> Thickly bedded, dark grey quartzite, with minor carbonaceous shale and minor silty shale in batches.		11/ 9c		1% 49.3-52.0 Pyrite-in veins stringers, patches and blebs Strong trace 52.0-54.05. Pyrite finely disseminated and in patches Contact = 25° Weak trace 54.05-56.4 Pyrite - finely disseminated.		
61.2-64.8 (3.6)	<u>SILTSTONE/lesser CARBONACEOUS SHALE/minor QUARTZITE</u> Strongly disrupted and brecciated.		10/ 9c/11		1% 56.4-57.4 Pyrite - in patches Weak trace 57.4-61.2 Pyrite- finely disseminated.		
64.8-70.9 (6.1)	<u>QUARTZITE/lesser SILTSTONE/minor CARBONACEOUS SHALE</u> Generally weakly disrupted. Siltstone is micaceous and carbonaceous.		11/ 10/ 9c		1% Pyrite - finely disseminated in patches and associated with carbonate veins. 1% Pyrite and galena - in thin veins and associated with quartz/ carbonate veins Irregular contact.		
70.9-94.3 (23.4)	<u>SILTSTONE/lesser CARBONACEOUS SHALE/minor QUARTZITE</u> Strongly disrupted and brecciated micaceous and carbonaceous siltstone, lesser carbonaceous shale, minor mid-grey quartzite. Weakly to moderately dolomitic. Occasional thin quartz/carbonate veins.		10/ 9c/ 11		Moderate trace - Pyrite in thin veins, patches and finely disseminated. Galena - finely disseminated.		
94.3-97.9 (3.4)	<u>DOLERITE</u> Pale green, very weathered Dolerite. ~ 10% disseminated fine black mineral.				No sulphides		
97.9-121.5 (23.6)	<u>SILTSTONE/lesser CARBONACEOUS SHALE/lesser QUARTZITE</u> Strongly disrupted and brecciated. Carbonaceous and micaceous siltstone, with lesser carbonaceous shale and lesser dark-grey quartzite. Occasional to numerous fine quartz/carbonate veins and stringers 99.6 - 100.4 Lost Core Weakly Dolomitic to 116.0m				2% Pyrite - finely disseminated, in veins, stringers and patches. Sp - in veins with pyrite and galena. Galena and ? stibnite in quartz/ carbonate veins. 109.8 30mm vein with strong ? stibnite at 15° 3% 113.1-114.9 Massive patches of pyrite Strong trace 114.9-121.5 - Pyrite - in patches, veins, disseminated in quartzite and with quartz/carbonate veins.		



CONTINUED NEXT PAGE.

FOR LEGEND  
SEE DRAWING  
NO.

926050



SUMMARY  
DRILL LOG  
Scale

Prospect or project <b>MT BISCHOFF TIN</b>	HOLE No. MBD 59
	LOG SHEET 1 OF 2

DEPTH  
(length  
from collar)

INTERVAL

DEPTH from - to : ROCK U'

CAPITAL LETTERS, UNDERLINED

Depth: Description and notes, veins over 50mm.  
INDENTED ABOUT 10mm

POINTER  
& CODE

GRAPHIC  
LOG

POINTER  
& CODE

MINERALISATION

Excluding veins over 50mm. Visual estimate  
of % mineralisation in brackets.

ASSAYS  
AVAILABLE

BULKED  
ASSAYS  
Sn

NOTES:

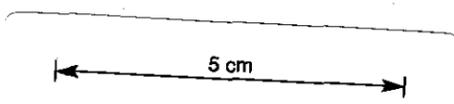
1. FOR ABBREVIATIONS SEE "FIELD GEOLOGIST'S MANUAL", D.A. BERKMAN & W.R. RYALL (ED.), MONOGRAPH NO. 9 AUSTRALAS. INST. MIN. METALL. - 1976
2. ATTITUDE OF BEDDING, VEIN, ETC. IS ANGLE BETWEEN PLANAR STRUCTURE AND LONG AXIS OF CORE
3. LENGTH IS GIVEN AS METRES OR MILLIMETRES.

120

119.75-121.5 Quartz/carbonate veins larger and more numerous.

END OF HOLE 121.5m

130



FOR LEGEND  
SEE DRAWING  
NO.

926051



**METALS  
EXPLORATION  
LIMITED**

**SUMMARY  
DRILL LOG**  
Scale

Prospect or project  
**MT BISCHOFF TIN**

HOLE No. MBD 59

LOG SHEET 2 OF 2

SAMPLE NO.	SAMPLE NO	FROM	TO	INTE VAL	Sn	Sn	Cu	Pb	Zn	Ag	W	Au	Check Sn	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
118980		23.4	25.4	2.0	10									
81		25.4	27.4	"	X									
82		27.4	29.4	"	X									
83		29.4	31.4	"	X									
84		31.4	33.4	"	X									
	118985	33.4	35.4	"		12								
	86	35.4	37.4	"		4								
	87	37.4	39.4	"		4								
	88	39.4	41.4	"		14								
	89	41.4	43.4	"		10								
	990	43.4	45.4	"		12								
	91	45.4	47.4	"		12								
	92	47.4	49.4	"		12								
	93	49.4	51.4	"		10								
	94	51.4	53.4	"		10								
	95	53.4	55.4	"		10								
	96	55.4	57.4	"		4								
	97	57.4	59.4	"		10								
	98	59.4	61.4	"		12								
	99	61.4	63.4	"		14								
	120400	63.4	65.4	"		8								
	01	65.4	67.4	"		8								
	2	67.4	69.4	"		10								
	3	69.4	71.4	"		10								
	4	71.4	73.4	"		10								
	5	73.4	75.4	"		10								
	6	75.4	77.4	"		12								
	7	77.4	79.4	"		8								
	8	79.4	81.4	"		12								
	120409	81.4	83.4	"										

Notes:—

926052

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 59.

SAMPLE TYPE : DRILL CORE

FROM

TO 83.4

SAMPLE NO.	SAMPLE NO	FROM	TO	INTE. VAL	Sn	Sn	Cu	Pb	Zn	Ag	W	Au	OTHERS	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
	120410	83.4	85.4	20		12								
	11	85.4	87.4	"		12								
	12	87.4	89.4	"		12								
	13	89.4	91.4	"		16								
	14	91.4	93.2	1.8		42								
118811		93.2	94.2	1.0	11									
12		94.2	95.2	1.0										
13		95.2	96.2	"										
14		96.2	97.6	1.4										
15		97.6	98.6	1.0	22*								50	
16		98.6	99.6	"	12*								25	
17		99.6	100.6	"	65*								70	
18		100.6	101.4	0.8	78*								65	
	15	101.5	103.5	2.0		20								
	16	103.5	105.5	"		14								
	17	105.5	107.5	"		12								
	18	107.5	109.5	"		12								
	19	109.5	111.5	"		4								
	420	111.5	113.5	"		12								
	21	113.5	115.5	"		16								
	22	115.5	117.5	"		10								
	23	117.5	119.5	"		12								
	24	119.5	121.5	"		14								

Notes: - A 134 (2000)

926053

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT  
 ASSAY SUMMARY SHEET HOLE NO. MBD 59  
 SAMPLE TYPE : DRILL CORE FROM 83.4 TO 121.5



DEPTH (m)	ROCK UNIT	DESCRIPTION	VEIN INFORMATION	MINERALISATION	NOTES
0 - 7.0	Tricone	no core recovery.			
7.0 - 28.8	BASALT (21.8m)	<p>7.0-12.6: fine-grained, dark grey basalt. Common (up to 5%) cpx phenocrysts, up to 1.5mm dia. Matrix of fine plagioclase and clinopyroxene. Minor carbonate in vesicles. Basalt is magnetic, where unaltered.</p> <p>12.6-18.0: massive basalt. Rare veins and vesicles w/ zedites and carbonate.</p> <p>18.0-21.5: vesicular basalt - alteration of ferromagnesian minerals has given red colour to rock. Vesicles up to 2cm, rimmed with zedites and prehnite.</p> <p>21.5-24.8: massive basalt, weakly magnetic, with occasional veins of pyrite &amp; carbonate.</p> <p>24.8-28.8: vesicular basalt, altered. Occasional pyrite veins.</p>	<p>70-94 Broken core</p> <p>no apparent sulphides</p> <p>20.0-20.6 pyrite-carbonate veining, 40°</p> <p>22.8 py vein 70°</p> <p>23.2 py vein 30°</p> <p>26.9 py vein 90°</p> <p>28.8 Contact 45°</p>		
28.8 - 35.7	SHALE, SILTSTONE, SANDSTONE (6.9m)	<p>Strongly disrupted &amp; brecciated pale greenish white shale, with lesser siltstone and fine white sandstone. Rock is very soft, and perhaps owing to high talc, or diagenetic component. Greenish colour may be due to glauconite.</p> <p>Towards 35.7 stringers of dark grey shale fill abundant fractures.</p>	<p>30.0-35.0 Broken core</p> <p>31.1 Breccia 0°</p>		
35.7 - 58.7	CARBONACEOUS SHALE/SILTSTONE, MINOR QUARTZITE (23.0m)	<p>Strongly disrupted black, slightly carbonaceous shale, with lesser siltstone, and minor light grey quartzite. Quartzite is invariably as irregular fragments of thin bedding.</p> <p>35.7-43.5: abundant, off-white mudrock fragments in dark shaly matrix.</p> <p>43.5-58.7: strongly disrupted black shale with abundant irregular fragments of grey quartzite and minor white mudrock. Carbonate veins and stringers become common towards 56.0m.</p>	<p>41.0 Breccia 30° (shaly)</p> <p>47.3-48 Breccia</p> <p>50.5 disrupted breccia 20°</p> <p>55.8-56.1 carbonate vein 30°</p>		Trace disseminated through siltstone and mudrock in carbonate stringers
58.7 - 65.5	SHALE (6.8m)	<p>Strongly disrupted white-green mudrock very soft - either talc-rich or ? kaolinitic. Abundant stringers of black shale along fractures. Occasional carbonate stringers.</p>	<p>58.8 Breccia 40°</p> <p>59.8 Breccia 30°</p> <p>60.0-61.3 Breccia</p>		
65.5 - 72.9	CARBONACEOUS SHALE, MINOR SILTSTONE & QUARTZITE (7.4m)	<p>Strongly disrupted brecciated in parts, black carbonaceous shale, with minor siltstone and quartzite fragments. Fragments of white mudrock occur to 67.5. Occasional thin carbonate veins and stringers. Quartzite occurs as irregular fragments, and becomes more common towards 72.9.</p>	<p>70.5-72.9 Breccia</p>		Trace disseminated through shales and silts
72.9 - 107.9	TUFFACEOUS QUARTZITE, MINOR SHALE (35.0m)	<p>Light grey, strongly disrupted quartzite, with common siltstone and occasional thin black shale. Distributed throughout. Minor black shale occurs as stringers and veins filling abundant fractures. Rare thin quartz or carbonate veins occur.</p> <p>Common zones where fractures have not filled, resulting in networks of open veins.</p> <p>Abundant breccia zones, where angular quartzite fragments are in black shale matrix, which may be up to 50% (locally).</p>	<p>76.3-76.6 Breccia</p> <p>77.4-77.7 Breccia</p> <p>80.2-80.9 Breccia</p> <p>81.3-81.8 Breccia</p> <p>82.1 Breccia 30° (core included showing dip to be 90° to 225° azimuth)</p> <p>84.1-84.3 Breccia</p> <p>85.0-85.3 Breccia</p> <p>85.8-86.0 Breccia</p> <p>86.7-88.2 Breccia</p> <p>88.5-89.5 Breccia</p> <p>89.7-91.0 Breccia</p> <p>91.7-93.3</p> <p>94.3-101.0 Breccia</p> <p>101.4-107.9 Breccia</p> <p>103.7 Breccia 70°</p> <p>104.1 Breccia 10-20°</p>		
107.9 - 116.6	CARBONACEOUS SHALE, MINOR SILTSTONE, MINOR QUARTZITE (8.7m)	<p>Strongly disrupted, or brecciated, in parts. Mainly black carbonaceous shale with lesser dark grey siltstone. Quartzite is rare, and occurs as strongly disrupted, or brecciated, beds.</p> <p>Occasional thin carbonate veins and stringers.</p>	<p>110.2 py vein 90°</p> <p>112.5 Breccia 30°</p> <p>113.3 Breccia 10°</p> <p>113.5-114.4 Breccia</p> <p>114.3 Breccia 40°</p> <p>115.3 Breccia 40°</p> <p>116.0-116.6 Breccia 10-20°</p>		Trace pyrite in carbonate stringers or disseminated through siltstone
116.6 - 116.6	HOLE COMPLETED 116.6m				

DEPTH (length from collar)	INTERVAL	DEPTH from - to : <u>ROCK U</u> Depth: Description and notes, veins over 50mm. INDENTED ABOUT 10mm	CAPITAL LETTERS, UNDERLINED	POINTER & CODE	GRAPHIC LOG	POINTER & CODE	MINERALISATION Excluding veins over 50mm. Visual estimate of % mineralisation in brackets.	ASSAYS AVAILABLE	BULKED ASSAYS Sn
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NOTES:

- FOR ABBREVIATIONS SEE "FIELD GEOLOGIST'S MANUAL", D.A. BERKMAN & W.R. RYALL (ED.), MONOGRAPH NO. 9 AUSTRALAS. INST. MIN. METALL. - 1976
- ATTITUDE OF BEDDING, VEIN, ETC. IS ANGLE BETWEEN PLANAR STRUCTURE AND LONG AXIS OF CORE
- LENGTH IS GIVEN AS METRES OR MILLIMETRES.

926056

0	0-7.0 (7.0)	TRICONE DRILLED - NO CORE							
	7.0-28.8	<u>7.0-28.8 BASALT</u> Fine grained grey basalt. Common diopyroxene phenocrysts in matrix of fine plagioclase and cpx. Abundant vesicles, in parts, lined with zeolites.					No apparent sulphides		
							py - common py-corb veins, locally up to 70% py. average 5%		
	28.8-35.7 (6.9m)	<u>28.8-35.7 SHALE, SILTSTONE, SANDSTONE</u> Strongly disrupted and brecciated, very soft greenish white shale, with off-white sandstones. Very high proportion of talc.		9/11/S			No apparent sulphides		
	35.5-58.7 (23.0m)	<u>35.5-58.7 CARBONACEOUS SHALE, SILTSTONE, minor QUARTZITE</u> Strongly disrupted black, slightly carbonaceous shale, with lesser siltstone and minor quartzite. Quartzite is usually as disrupted thin beds. Carbonate veins and stringers occur occasionally.		9/c/10/11			Py - trace disseminated through siltstone, and occasionally in carbonate veins.		
	58.7-65.5 (6.8m)	<u>58.7-65.5 SHALE</u> Strongly disrupted whitish green mudrock. Very soft, talc-or clay-rich. Abundant stringers of black shale in fractures.		9			No apparent sulphides		
	65.5-72.9 (7.4m)	<u>65.5-72.9 CARBONACEOUS SHALE, minor SILTSTONE &amp; QUARTZITE</u> Strongly disrupted, brecciated in parts, black carbonaceous shale, with lesser siltstone and quartzite. Occasional thin carbonate veins and stringers.		9/c/10/11			Py - trace disseminated through shales and siltstone		
	72.9-107.9 (35.0m)	<u>72.9-107.9 TUFFACEOUS QUARTZITE, minor CARBONACEOUS SHALE</u> Light grey quartzite, strongly disrupted, and brecciated in parts. Black carbonaceous shale occurs in fractures and breccia zones. Rare thin quartz and carbonate veins and stringers occur. Common vughs or open veins - where fractures have not filled.		11/12/9/c			No apparent sulphides		
	107.9-116.6 (8.7m)	<u>107.9-116.6 CARBONACEOUS SHALE, lesser SILTSTONE minor QUARTZITE</u> Strongly disrupted, brecciated in parts. Dominated by black carbonaceous shale, with lesser siltstone. Quartzite is rare and occurs as strongly disrupted beds.		9/c/10/11			Py-trace disseminated through siltstone, and in occasional carbonate veins Py-disseminated in siltstone, up to 10% locally.		

5 cm

FOR LEGEND  
SEE DRAWING  
NO.



**METALS  
EXPLORATION  
LIMITED**

**SUMMARY  
DRILL LOG**  
Scale

Prospect or project  
**MT BISCHOFF TIN**

HOLE No. MBD.60  
LOG SHEET 1 OF 1

SAMPLE NO.	SAMPLE NO	FROM	TO	INTE VAL	Sn	Sn						ANALYSIS	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND							
	120425	28.8	30.8	2.0		12							
	26	30.8	32.8	"		24							
	27	32.8	34.8	"		10							
	28	34.8	36.8	"		8							
	29	36.8	38.8	"		16							
120430		38.8	40.8	"	12*								
31		40.8	42.8	"	10*								
32		42.8	44.0	1.2	14*								
	120433	36.0	38.0	2.0		12							
	34	38.0	40.0	"		16							
	35	40.0	42.0	"		8							
	36	42.0	44.0	"		4							
	120437	44.0	46.0	2.0		8							
	38	46.0	48.0	"		8							
	39	48.0	50.0	"		8							
	40	50.0	52.0	"		8							
	41	52.0	54.0	"		X							
	42	54.0	56.0	"		X							
	43	56.0	58.0	"		10							
	44	58.0	60.0	"		10							
	45	60.0	62.0	"		10							
	46	62.0	64.0	"		18							
	47	64.0	66.0	"		8							
	48	66.0	68.0	"		8							
	49	68.0	70.0	"		6							
	450	70.0	72.0	"		12							
	51	72.0	74.0	"		12							
	52	74.0	76.0	"		10							
	53	76.0	78.0	"		8							
	54	78.0	80.0	"		6							
	55	80.0	82.0	"		4							
	56	82.0	84.0	"		6							
	57	84.0	86.0	"		6							
	120458	86.0	88.0	"		6							

Notes: — \* By Jmdel

926057

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT  
 ASSAY SUMMARY SHEET HOLE NO. MBD 60  
 SAMPLE TYPE : DRILL CORE FROM 28.8 TO 88.0

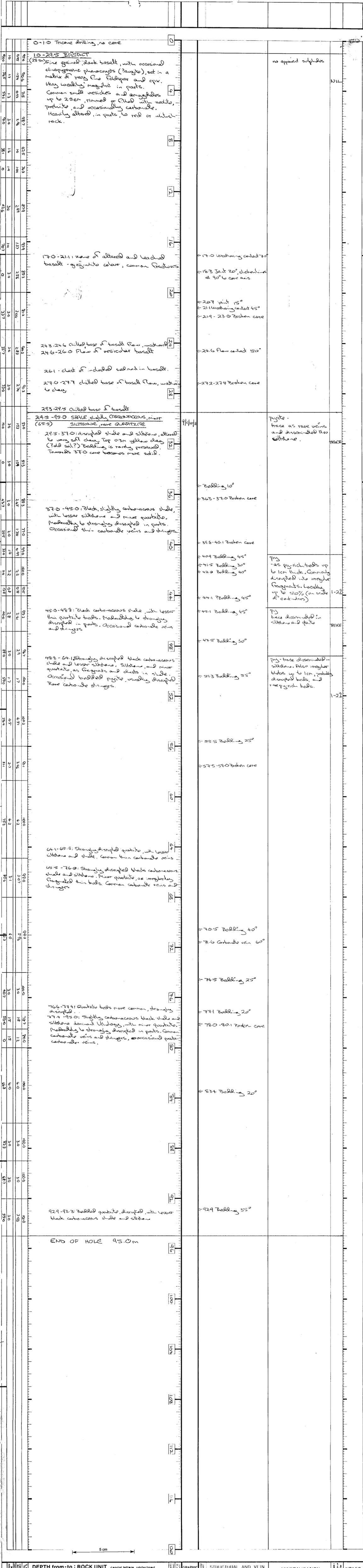
SAMPLE NO.	SAMPLE NO	FROM	TO	INTEI VAL	Sn	Sn	Cu	Pb	Zn	Ag	W	Au	Check Sn	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
	120459	88.0	90.0	2.0		10								
	60	90.0	92.0	"		6								
	61	92.0	94.0	"		6								
	62	94.0	96.0	"		8								
	63	96.0	98.0	"		10								
	64	98.0	100.0	"		14								
	65	100.0	102.0	"		8								
	66	102.0	104.0	"		8								
	67	104.0	106.0	"		10								
	68	106.0	108.0	"		10								
	69	108.0	110.0	"		12								
	470	110.0	112.0	"		6								
	71	112.0	114.0	"		12								
	72	114.0	116.6	"		6								

Notes:—

926058

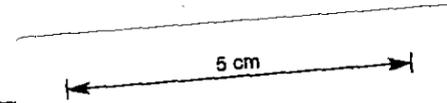
METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT  
 ASSAY SUMMARY SHEET HOLE NO. MBD 60  
 SAMPLE TYPE : DRILL CORE FROM 88.0 TO 116.6





NOTES: 1. FOR ABBREVIATIONS SEE "FIELD GEOLOGIST'S MANUAL", D.A. BERKMAN & W.R. RYALL (ED.), MONOGRAPH NO. 9 AUSTRALAS. INST. MIN. METALL. - 1976  
 2. ATTITUDE OF BEDDING, VEIN, ETC. IS ANGLE BETWEEN PLANAR STRUCTURE AND LONG AXIS OF CORE 3. LENGTH IS GIVEN AS METRES OR MILLIMETRES.

0	0-1.0m	0-1.0m TRICONE - NO CORE			
10	1.0-29.5 (28.5m)	<u>1.0-29.5 BASALT</u> Fine grained dark basalt, with occasional clinopyroxene (augite?) phenocrysts, in matrix of feldspar and cpx. Weakly magnetic in parts. Common small vesicles, rimmed or filled with zeolites and prehnite. These occur as zones, probably reflecting original flows of lava. Zone of altered and leached basalt occur at 17.0-21.1.			No apparent sulphides
20					
30	29.5 - 95.0 (65.5m)	<u>29.5-95.0 CARBONACEOUS SHALE, lesser SILTSTONE, minor QUARTZITE</u> Dominantly black slightly carbonaceous shale and siltstone with minor thin quartzite beds. Moderately to strongly disrupted for the most part. Top 7.5m (29.5-37.0) weathered to grey clay-rich material. Occasional thin carbonate veins and stringers occur throughout. Thin pyrite beds occur occasionally (see opposite). These are usually disrupted into irregular fragments ~1cm diameter.	9/c/ 10/11		29.5 pyrite trace as rare veins and stringers and disseminated through siltstone
40					40.9 pyrite-as occasional disrupted py-rich beds, and rare veins and stringers. 1-2%
50					45.1-pyrite-trace disseminated in silt stone and quartzite.
60					48.8-95.0 pyrite-1-2% disseminated through siltstone and as beds of py-rich siltstone (50%) up to 1.5cm, commonly disrupted into irregular blebs.
70					
80					
90					
100		HOLE COMPLETED 95.0m			
110					
120					



926061

FOR LEGEND SEE DRAWING NO.



**METALS EXPLORATION LIMITED**

**SUMMARY DRILL LOG**  
Scale

Prospect or project <b>MT BISCHOFF TIN</b>	HOLE No. MBD 61
	LOG SHEET 1 OF 1

SAMPLE NO.	SAMPLE NO	FROM	TO	INTEI VAL	Sn	Sn	Cu	Pb	Zn	Ag	W	Au	ANALYSIS	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
120473		29.5	31.5	2.0	14*								20	
74		31.5	33.5	"	10*								15	
75		33.5	35.5	"	12*								15	
76		35.5	37.5	"	10*								X	
	120477	37.5	39.5	"		10								
	78	39.5	41.5	"		6								
	79	41.5	43.5	"		10								
	120480	43.5	45.5	"		7								
	81	45.5	47.5	"		5								
	82	47.5	49.5	"		2								
	83	49.5	51.5	"		6								
	84	51.5	53.5	"		X								
	85	53.5	55.5	"		7								
	86	55.5	57.5	"		5								
	87	57.5	59.5	"		X								
	88	59.5	61.5	"		4								
	89	61.5	63.5	"		7								
	490	63.5	65.5	"		X								
	91	65.5	67.5	"		5								
	92	67.5	69.5	"		9								
	93	69.5	71.5	"		X								
	94	71.5	73.5	"		8								
	95	73.5	75.5	"		4								
	96	75.5	77.5	"		7								
	97	77.5	79.5	"		X								
	98	79.5	81.5	"		X								
	99	81.5	83.5	"		5								
	120300	83.5	85.5	"		5								
	01	85.5	87.5	"		10								
	02	87.5	89.5	"		7								

Notes:- XRF OIA method

\* By Jmetri

926062

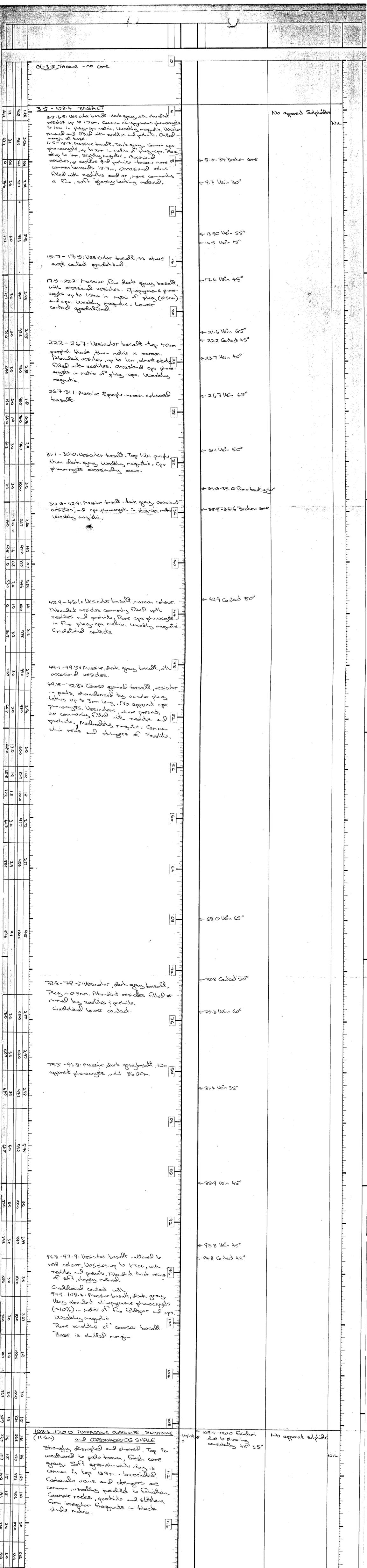
METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT  
ASSAY SUMMARY SHEET HOLE NO. MBD 61

SAMPLE TYPE : DRILL CORE

FROM 29.5 TO 89.5







0-3.5 Tuffaceous - no core

**3.5 - 108.4 BASALT**

3.5-6.5: Vesicular basalt - dark grey, with abundant vesicles up to 1.5cm. Common clinopyroxene phenocrysts to 1mm in plagioclase matrix. Weakly magnetic. Vesicles rimmed and filled with zeolites and prehnite. Chilled margin at base.  
 6.5-15.7: Massive basalt. Dark grey. Common cpx phenocrysts, up to 2mm in matrix of plagioclase. Plagioclase up to 1mm. Slightly magnetic. Occasional vesicles, with zeolites and prehnite. Occasional veins common towards 15.7m. Occasional veins filled with zeolites and/or, more commonly a fine, soft glassy-looking material.

15.7-17.5: Vesicular basalt, as above except contact gradational.

17.5-22.2: Massive, fine dark grey basalt with occasional vesicles. Clinopyroxene phenocrysts up to 1.5mm in matrix of plagioclase (0.5mm) and cpx. Weakly magnetic. Lower contact gradational.

22.2-26.7: Vesicular basalt - top 40cm purplish black, then matrix is maroon. Abundant vesicles, up to 1cm, almost entirely filled with zeolites. Occasional cpx phenocrysts in matrix of plagioclase. Weakly magnetic.

26.7-31.1: Massive purple-maroon coloured basalt.

31.1-35.0: Vesicular basalt. Top 1.2m purple then dark grey. Weakly magnetic. Cpx phenocrysts occasionally occur.

35.0-42.9: Massive basalt - dark grey, occasional vesicles, and cpx phenocrysts in plagioclase matrix. Weakly magnetic.

42.9-48.1: Vesicular basalt, maroon colour. Abundant vesicles commonly filled with zeolites and prehnite. Rare cpx phenocrysts in fine plagioclase matrix. Weakly magnetic. Gradational contacts.

48.1-49.5: Massive, dark grey basalt, with occasional vesicles.

49.5-72.8: Coarse grained basalt, vesicular in parts, characterized by acicular plagioclase lathes up to 3mm long. No apparent cpx phenocrysts. Vesicular, where present, are commonly filled with zeolites and prehnite. Moderately magnetic. Common thin veins and stringers of ?zeolite.

72.8-79.5: Vesicular, dark grey basalt. Plagioclase 0.5mm. Abundant vesicles filled or rimmed by zeolites & prehnite. Gradational lower contact.

79.5-94.8: Massive, dark grey basalt. No apparent phenocrysts, until 86.00m.

94.8-97.9: Vesicular basalt - altered to red colour. Vesicles up to 1.5cm, with zeolites and prehnite. Abundant thin veins of soft, clayey material.  
 Gradational contact with  
 97.9-108.4: Massive basalt, dark grey, very abundant clinopyroxene phenocrysts (~10%) in matrix of fine feldspar and cpx. Weakly magnetic. Rare xenoliths of coarser basalt. Base is chilled margin.

**108.4-120.0 TUFFACEOUS QUARTZITE, SILTSTONE (11.6m) and CARBONACEOUS SHALE**

Strongly disrupted and sheared. Top 9m weathered to pale brown, fresh core grey. Soft greenish-white clay is common in top 10.5m. Brecciated. Carbonate veins and stringers are common, usually parallel to foliation. Coarser rocks, quartzite and siltstone, form irregular fragments in black shale matrix.

END OF HOLE 120.0m

No apparent Sulphides

No apparent sulphides

DEPTH (length from collar)	DEPTH from - to : <u>ROCK</u> <u>IT</u> Depth: Description and notes, veins over 50mm. INDENTED ABOUT 10mm	POINT & CODE	GRAPHIC LOG	POINT & CC	MINERALISATION Excluding veins over 50mm. Visual estimate of % mineralisation in brackets.	ASSAYS AVAILABLE	BULKED ASSAYS Sn
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NOTES: 1. FOR ABBREVIATIONS SEE "FIELD GEOLOGIST'S MANUAL", D.A. BERKMAN & W.R. RYALL (ED.), MONOGRAPH NO. 9 AUSTRALAS. INST. MIN. METALL. - 1976  
2. ATTITUDE OF BEDDING, VEIN, ETC. IS ANGLE BETWEEN PLANAR STRUCTURE AND LONG AXIS OF CORE 3. LENGTH IS GIVEN AS METRES OR MILLIMETRES.

0 (3.5m)	<u>0-3.5m TRICONE DRILLING - NO CORE</u>						
(104.9m)	<u>3.5-108.4m BASALT</u> 3.5-26.7: Fine grained, dark grey basalt, vesicular in parts. Weakly magnetic. Vesicles filled with zeolites and prehnite. Common clino-pyroxene (?augite) phenocrysts to 1mm in matrix of plag-cpx.  26.7-31.1: Fine grained, pinkish maroon basalt, vesicular in parts. Cpx phenocrysts 31.1-42.9: Fine grained, dark grey basalt, vesicular in parts. Occasional cpx phenocrysts.  42.9-49.5: Maroon basalt, fine-grained and vesicular in parts. Common cpx phenocrysts.  49.5-72.8: Coarse grained basalt - plag lathes up to 3mm, cpx phenocrysts rare. Vesicular in parts.  72.8-94.8: Fine grained, dark grey basalt, vesicular in parts. No apparent phenocrysts.  94.8-108.4: Fine grained dark grey basalt, vesicular in parts. Very abundant (~10%) clino-pyroxene phenocrysts.				No apparent sulphides		
110	(11.6m) <u>108.4-120.0m TUFFACEOUS QUARTZITE, SILTSTONE and CARBONACEOUS SHALE</u> Strongly disrupted and sheared-fragments of siltstone, quartzite and soft greenish white clay in matrix of foliated black, carbonaceous shale. Common carbonate veins and stringers parallel to the foliation (~45° to core axis)		12/ 11/ 10/9/ c		No apparent sulphides		926066

END OF HOLE 120.0m

FOR LEGEND  
SEE DRAWING  
NO.

5 cm



**METALS  
EXPLORATION  
LIMITED**

**SUMMARY  
DRILL LOG**  
Scale

Prospect or project  
**MT BISCHOFF TIN**

HOLE No. MBD 62  
LOG SHEET 1 OF 1

SAMPLE NO.	SAMPLE NO	FROM	TO	INTER VAL	Sn	Sn	Cu	Pb	Zn	Ag	W	Au	Check Sn	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
	120312	56	77	21		30								
	13	77	102	25		18								
	14	102	121	19		8								
	15	121	149	28		15								
	16	149	168	19		5								
	17	168	189	21		10								
	18	189	209	20		X								
	19	209	229	"		15								
	320	229	249	"		10								
	21	249	270	21		3								
	22	270	293	23		4								
	23	293	304	11		6								
	24	304	335	31		X								
	25	335	354	19		X								
	26	354	377	23		4								
	27	377	397	20		X								
	28	397	419	22		9								
	29	419	440	21		7								
	30	440	460	20		X								
	31	460	480	"		X								
	32	480	500	"		4								
	33	500	520	"		X								
	34	520	540	"		3								
	35	540	560	"		X								
	36	560	580	"		6								
	37	580	600	"		5								
	38	600	620	"		4								
	39	620	640	"		X								
	120340	640	660	"		65								
	41	660	680	"		6								

Notes:- XRF 214 method

926067

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT  
ASSAY SUMMARY SHEET HOLE NO. mBD 62

SAMPLE TYPE : DRILL CORE FROM 56 TO 68.0

SAMPLE NO.	SAMPLE NO	FROM	TO	INTER-VAL	Sn	Sn	Cu	Pb	Zn	Ag	W	Au	Check Sn	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
	120342	680	700	20		50								
	43	700	720	"		4								
	44	720	740	"		5								
	45	740	760	"		7								
	46	760	780	"		7								
	47	780	800	"		X								
	48	800	820	"		5								
	49	820	840	"		X								
	350	840	860	"		X								
	51	860	880	"		X								
	52	880	900	"		3								
	53	900	920	"		3								
	54	920	940	"		X								
	55	940	960	"		X								
	56	960	980	"		X								
	57	980	1000	"		7								
	58	1000	1020	"		4								
	59	1020	1040	"		5								
	360	1040	1060	"		7								
	61	1060	1080	"		4								
	62	1080	1100	"		7								
	63	1100	1120	"		7								
	64	1120	1140	"		X								
	65	1140	1160	"		7								
	66	1160	1180	"		X								
	67	1180	1200	"		X								

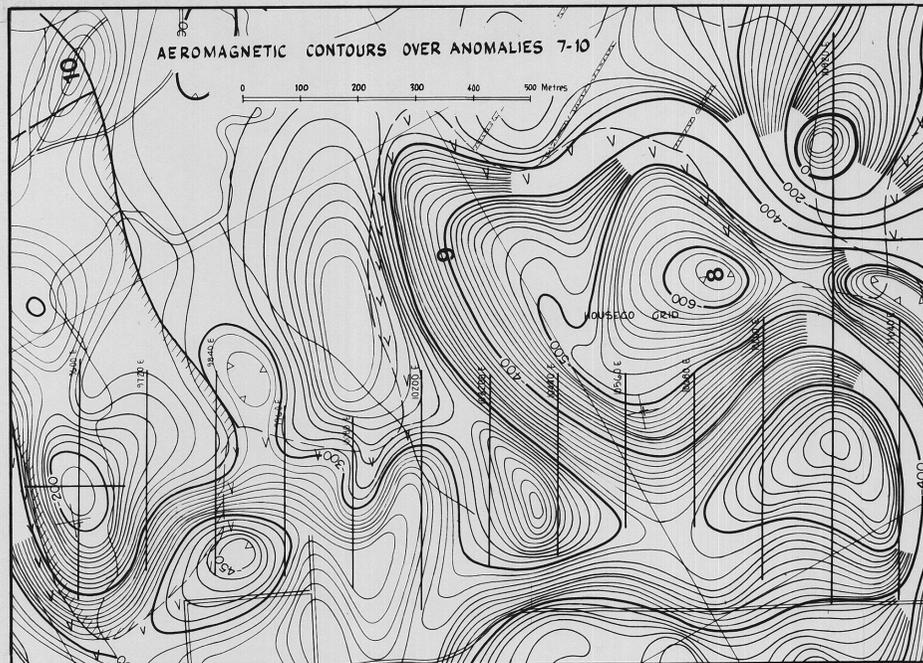
Notes:—  
926068

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT  
ASSAY SUMMARY SHEET HOLE NO. mBD 62  
SAMPLE TYPE : DRILL CORE FROM 680 TO

926069

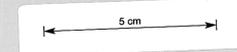
J of M.	A.O.	C.G.	E.O.	D.S. <i>WJE</i>
Received Answered				19 OCT 1981
DEPT. OF MINES				Registrar
REF. No: 9029/81				E & IL

MT. BISCHOFF TIN PROSPECT  
AUTHORITY TO PROSPECT 5/80  
TASMANIA  
REPORT ON STAGE 3A PROGRAMME  
REPORT NO. 542

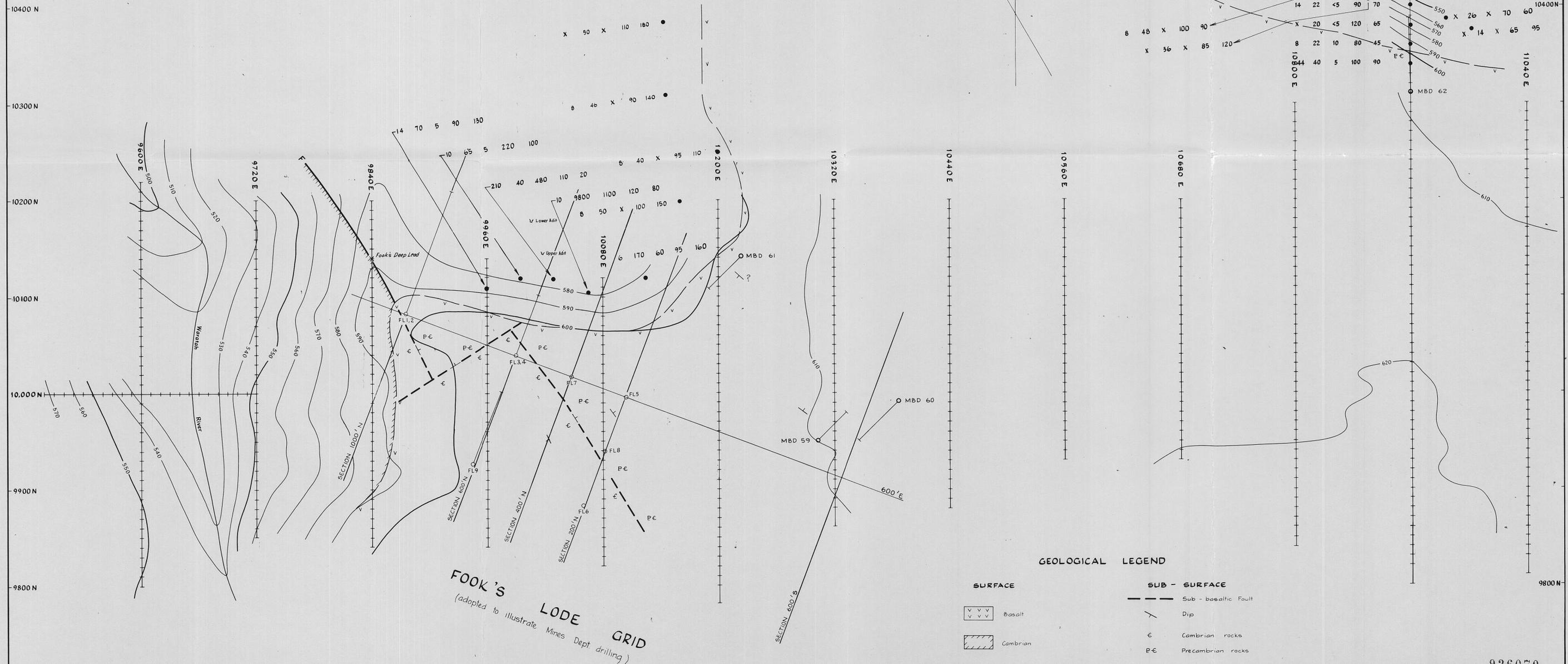
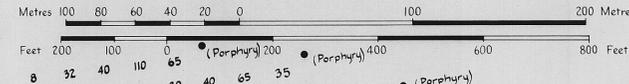


**DRILLING AND AUGER LEGEND**

Hand Auger Sampling Results  
 Line 10920 E  
 X denotes below limit of detection  
 I.S. Insufficient sample  
 14 70 21 3 7 • Sample location and Assays for Sn, Cu, Pb, Zn, Ni  
 O FL3 Fook's Lode Mines Dept. Drill Holes  
 O MEL Diamond Drillholes



**METALS EXPLORATION LIMITED  
 MT. BISCHOFF TIN PROSPECT  
 HOUSEGO GRID - MAGNETIC ANOMALIES 7-10  
 GROUND MAGNETIC SURVEY  
 TOPOGRAPHY AND GEOLOGY  
 SHOWING HAND AUGER SAMPLING AND DRILLHOLE LOCATION  
 Scale 1:2000**

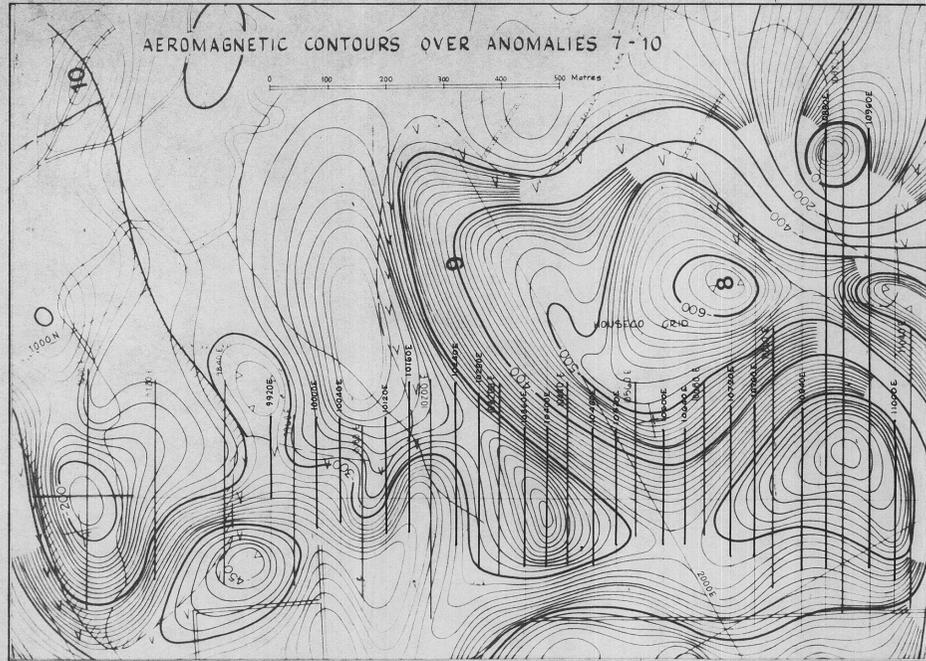


	Sn	Cu	Pb	Zn	Ni
X	48	<5	140	130	
15.	40	15	100	95	
X	50	15	140	120	
10	52	20	150	130	
16	35	5	75	90	
15.	30	10	70	75	
8	48	5	95	110	
10	50	<5	100	120	
16	42	10	75	85	
32	35	100	110	55	
10	30	<5	80	85	
18	25	<5	90	70	
140	22	5	200	85	
15.	22	<5	90	55	
14	22	<5	90	70	
X	20	<5	120	65	
8	22	10	80	45	
40	5	100	90		
14	40	X	20	20	
X	26	X	70	60	
X	14	X	65	95	

**GEOLOGICAL LEGEND**

- SURFACE**
- Basalt
  - Cambrian
- SUB - SURFACE**
- Sub - basaltic Fault
  - Dip
  - Cambrian rocks
  - P-C Precambrian rocks

**FOOK'S LODE GRID**  
 (adapted to illustrate Mines Dept drilling)



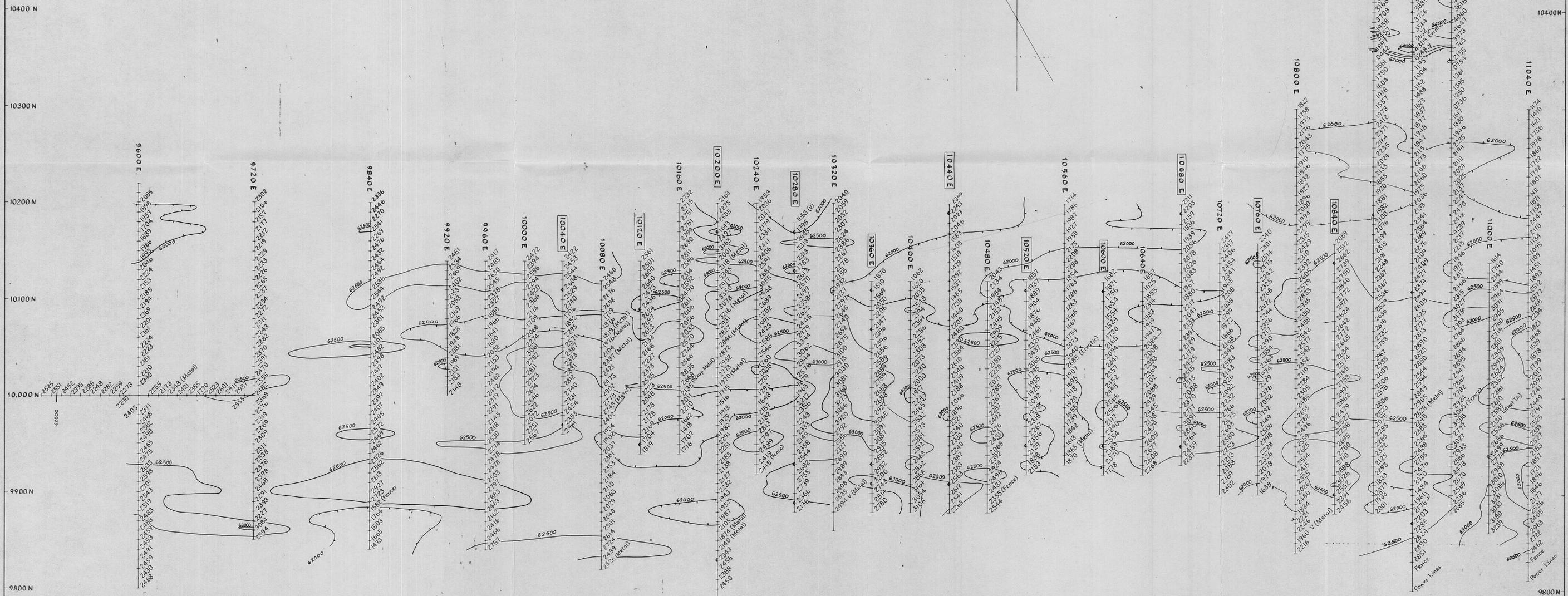
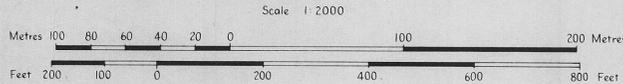
Survey by R. de Cesare using G-816 Magnetometer SN 6264.  
Readings every 10m on 120m spaced lines.

V - Variable - not repeatable within 20-30y so readings averaged.  
NR - no reading, dangerous ground, or steep slopes, or near scrap iron.

To all values add 60 000y.  
Fill in lines - Dec 80  
for previous results see drg no. 80-321

1000 E Lines covered by Crone Pulse E.M. (and/or max./min.)

METALS EXPLORATION LIMITED  
MT. BISCHOFF TIN PROSPECT  
HOUSEGO GRID - MAGNETIC ANOMALIES 7, 8 & 9  
GROUND MAGNETIC SURVEY  
TOTAL MAGNETIC INTENSITY READINGS



# PULSE ELECTROMAGNETIC SURVEY

AT

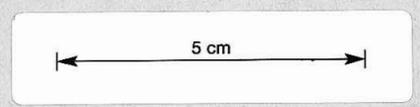
HOUSEGO GRID

WARATAH TASMANIA

FOR

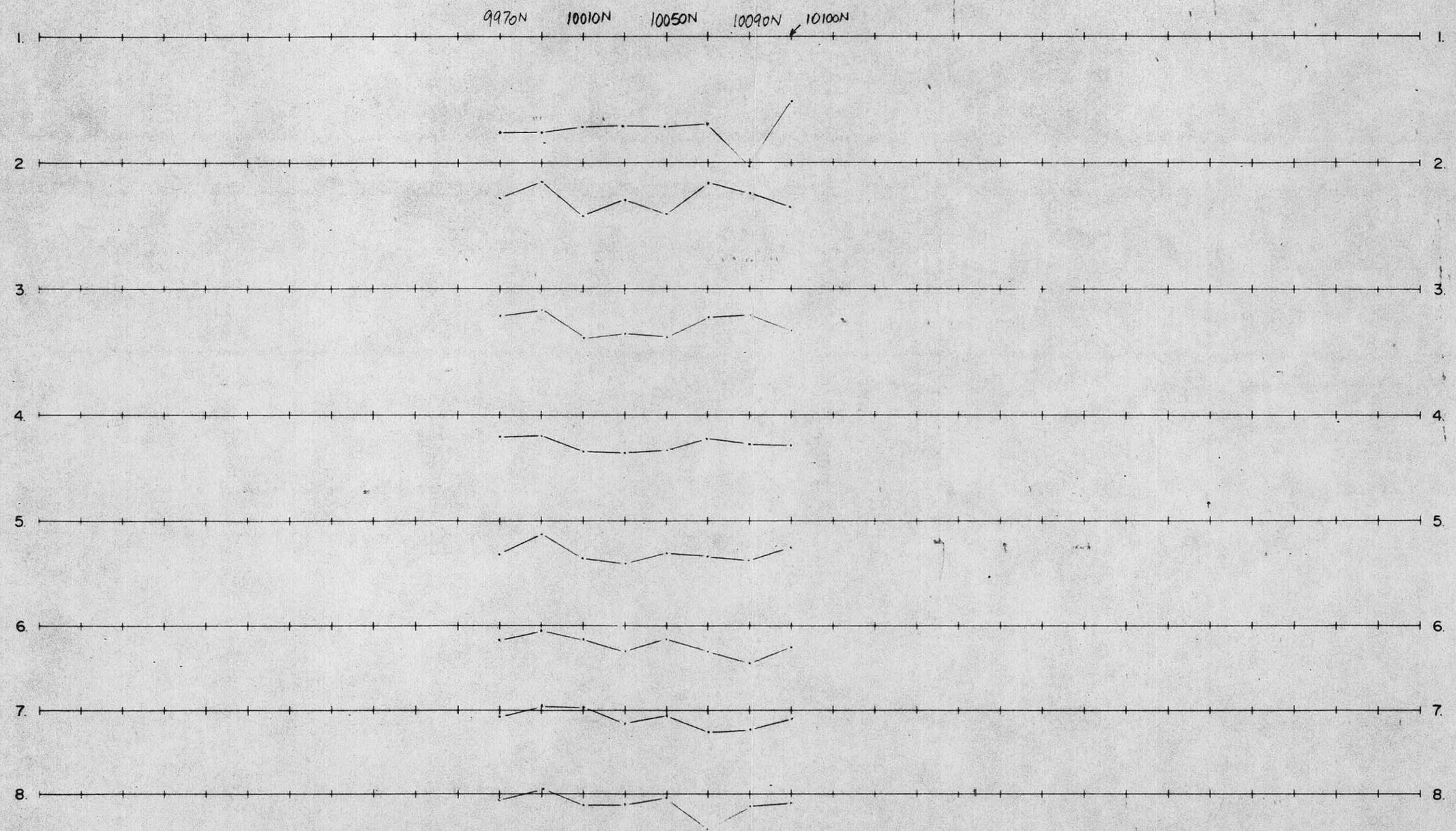
METALS EXPLORATION PTY. LTD.

Line No. 10040 E



### SURVEY SPECIFICATIONS

Mode of operation *Separated Moving Coils*  
 Transmitter receiver separation 60 metres  
 Station spacing 20 metres  
 Component plotted *VERTICAL*  
 Receiver coil orientation *HORIZONTAL*  
 Transmitter orientation *HORIZONTAL*  
 Horizontal scale 1:2000  
 Surveyed by *G. PIPER A. FLINTER*



PLOTTING SCALE  
NORMAL SCALE



SURVEYED IN JANUARY 1981

926072

JOB No 85-1276

PULSE ELECTROMAGNETIC SURVEY

AT

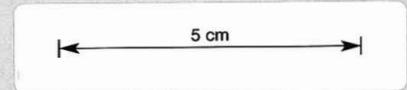
HOUSEGO GRID

WARATAH TASMANIA

FOR

METALS EXPLORATION LTD

Line No. 10120 E



SURVEY SPECIFICATIONS

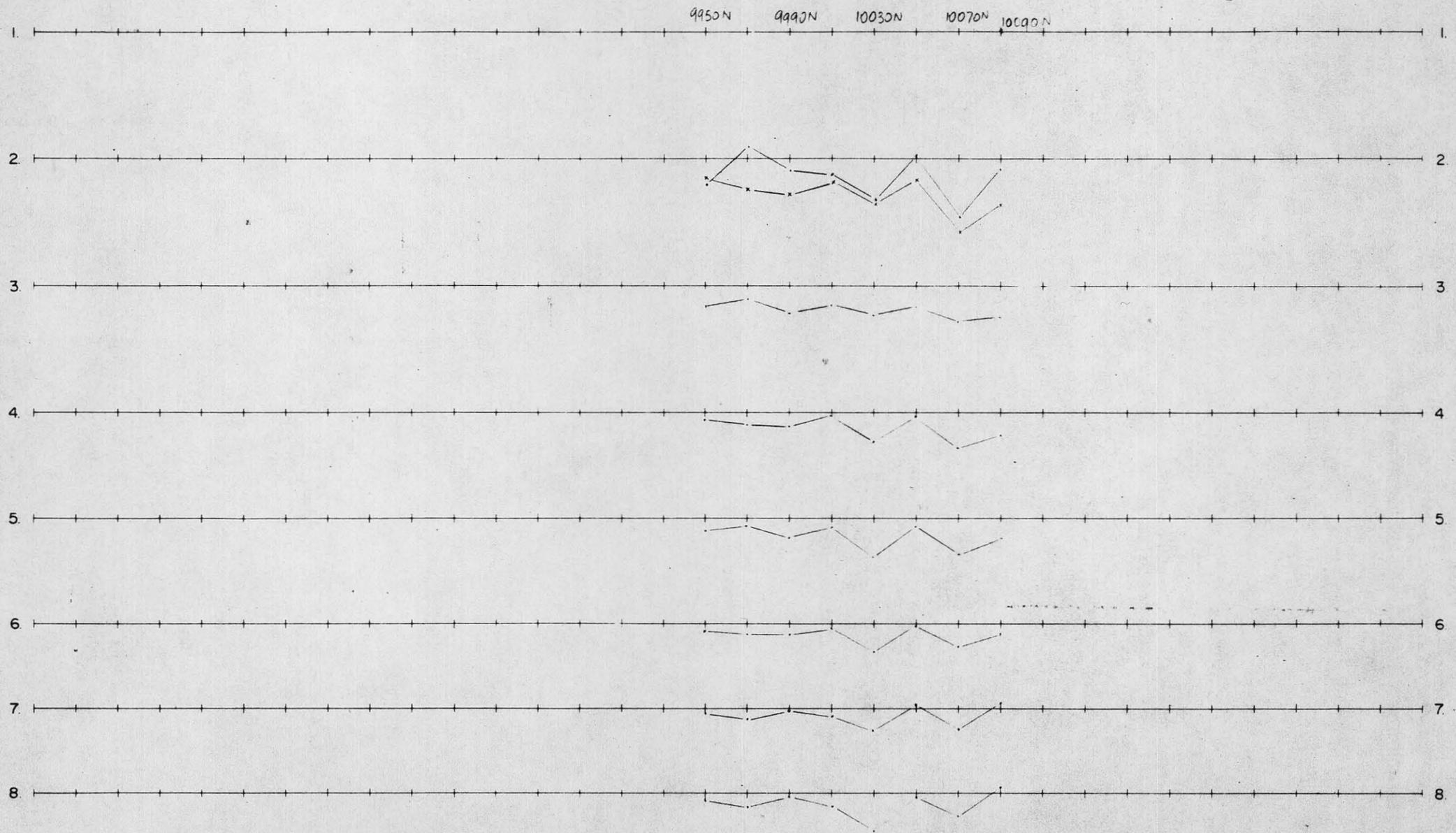
Mode of operation *Separated Moving Coils*  
 Transmitter receiver separation *60* metres  
 Station spacing *20* metres  
 Component plotted *VERTICAL*  
 Receiver coil orientation *HORIZONTAL*  
 Transmitter orientation *HORIZONTAL*  
 Horizontal scale *1:2000*  
 Surveyed by *T. LYNCH G. PIPER*  
 Time base *10 msec*



926073

SURVEYED IN JANUARY 1951

JOB No 85-1276



PLOTTING SCALE  
NORMAL SCALE

# PULSE ELECTROMAGNETIC SURVEY

AT

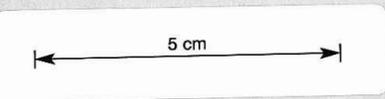
## HOUSEGO GRID

## WARATAH TASMANIA

FOR

## METALS EXPLORATION LTD

### Line No. 10200 E



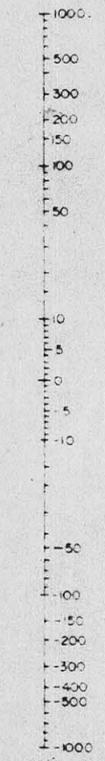
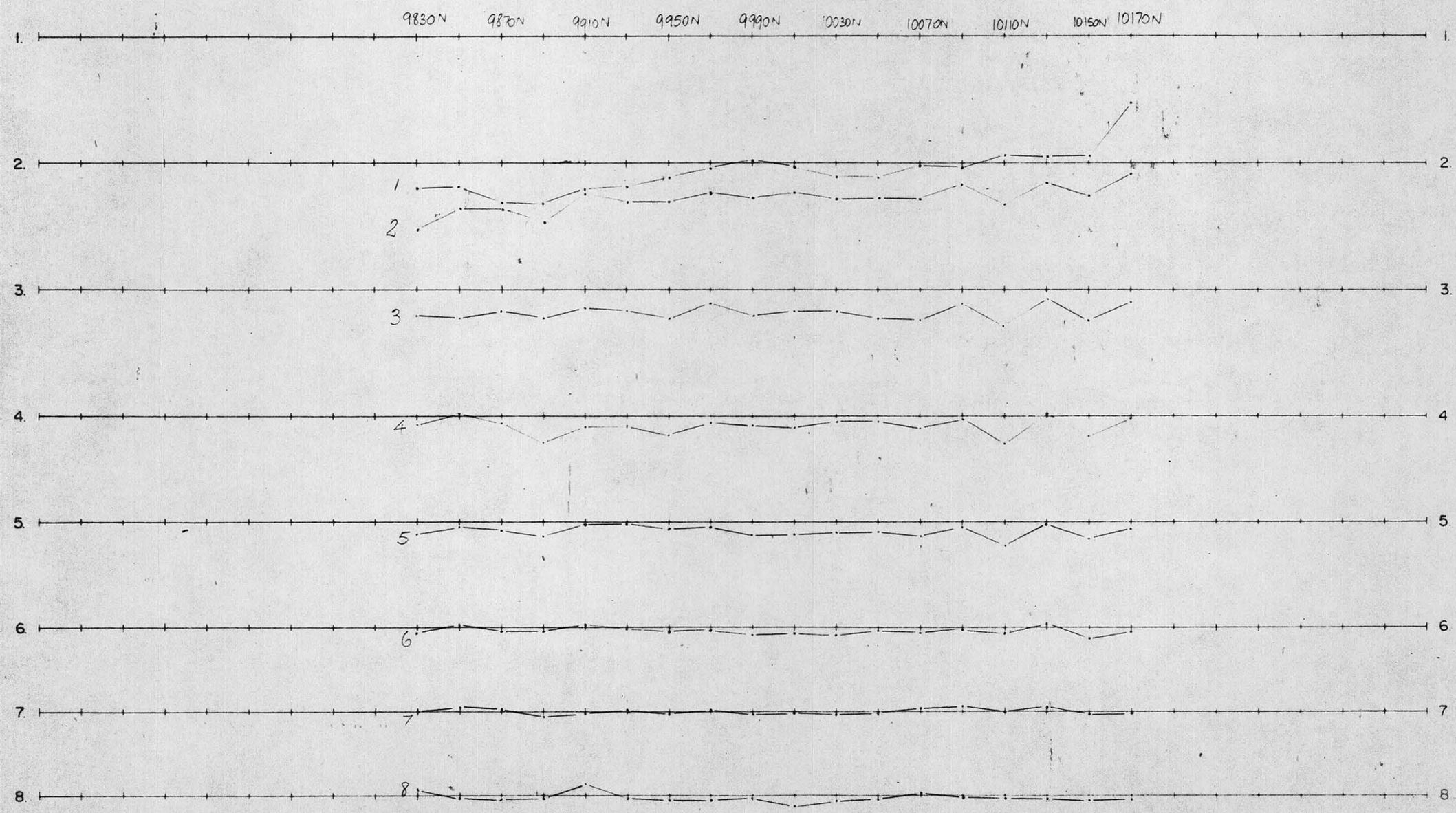
#### SURVEY SPECIFICATIONS

Mode of operation *Separated Moving Coils*  
 Transmitter receiver separation *60 metres*  
 Station spacing *20 metres*  
 Component plotted *VERTICAL*  
 Receiver coil orientation *HORIZONTAL*  
 Transmitter orientation *HORIZONTAL*  
 Horizontal scale *1:2000*  
 Surveyed by *T. LYNCH, G. PIPEX*  
 Time base *10. msec*



SURVEYED IN JANUARY 1981

926074



NORMA  
PLOTTING SCALE  
CONDUCTIVE  
OVERBURDEN SCALE

# PULSE ELECTROMAGNETIC SURVEY

AT

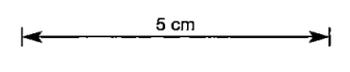
HOUSEGO GRID

WARATAH TASMANIA

FOR

METALS EXPLORATION LTD

Line No. 10280 E



### SURVEY SPECIFICATIONS

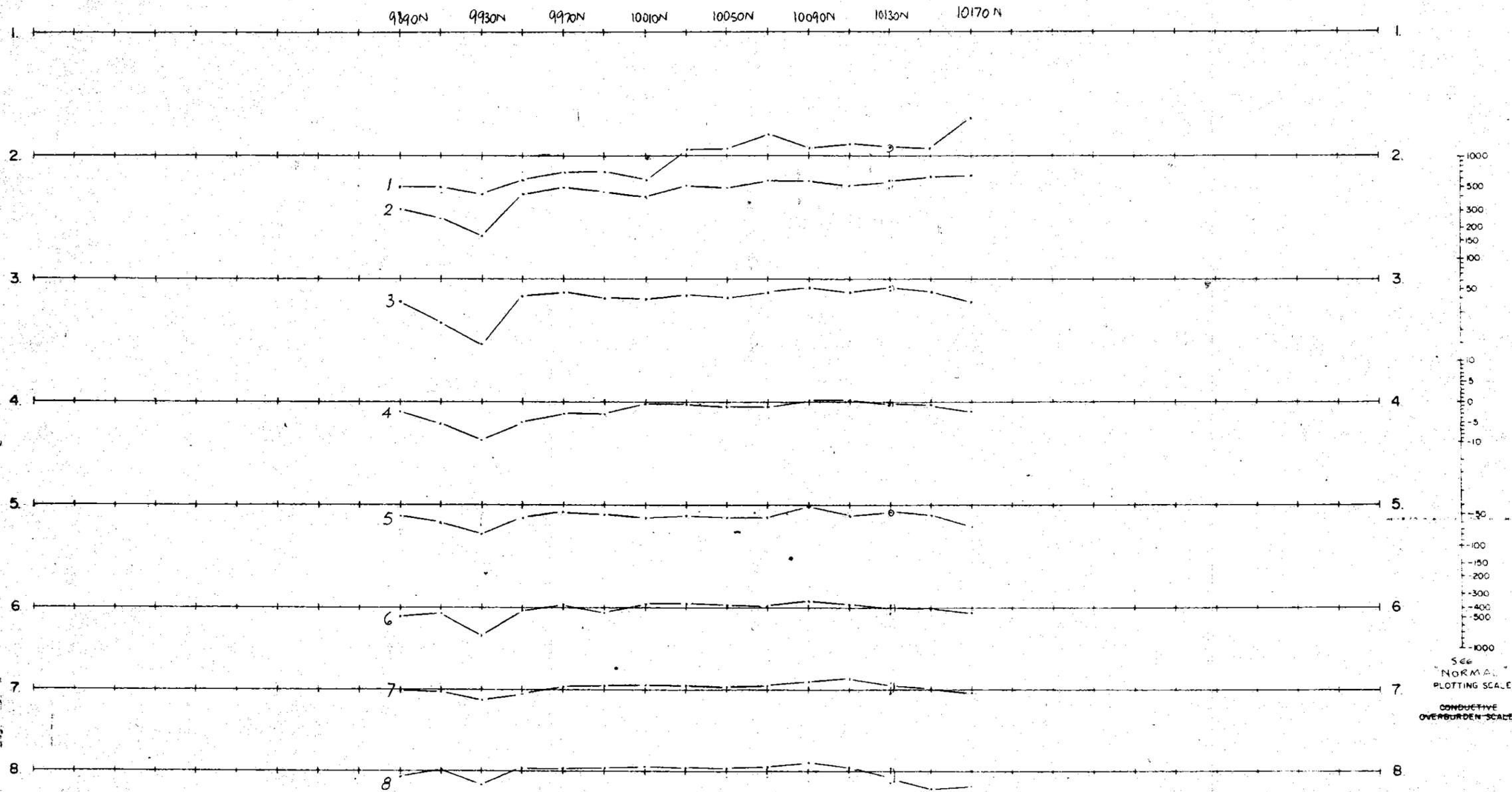
Mode of operation *Separated Moving Coils*  
 Transmitter receiver separation 60 metres  
 Station spacing 20 metres  
 Component plotted *VERTICAL*  
 Receiver coil orientation *HORIZONTAL*  
 Transmitter orientation *HORIZONTAL*  
 Horizontal scale 1:2000  
 Surveyed by *T. LYNCH, G. PIPER*  
 Time base 10 m.sec



926075

SURVEYED IN JANUARY 1981

JOB No 85-1276



M.E.L. DRG. No 81-082

# PULSE ELECTROMAGNETIC SURVEY

AT

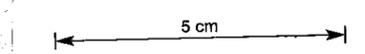
HOUSEGO GRID

WARATAH TASMANIA

FOR

METALS EXPLORATION LTD

Line No. 10360 E



### SURVEY SPECIFICATIONS

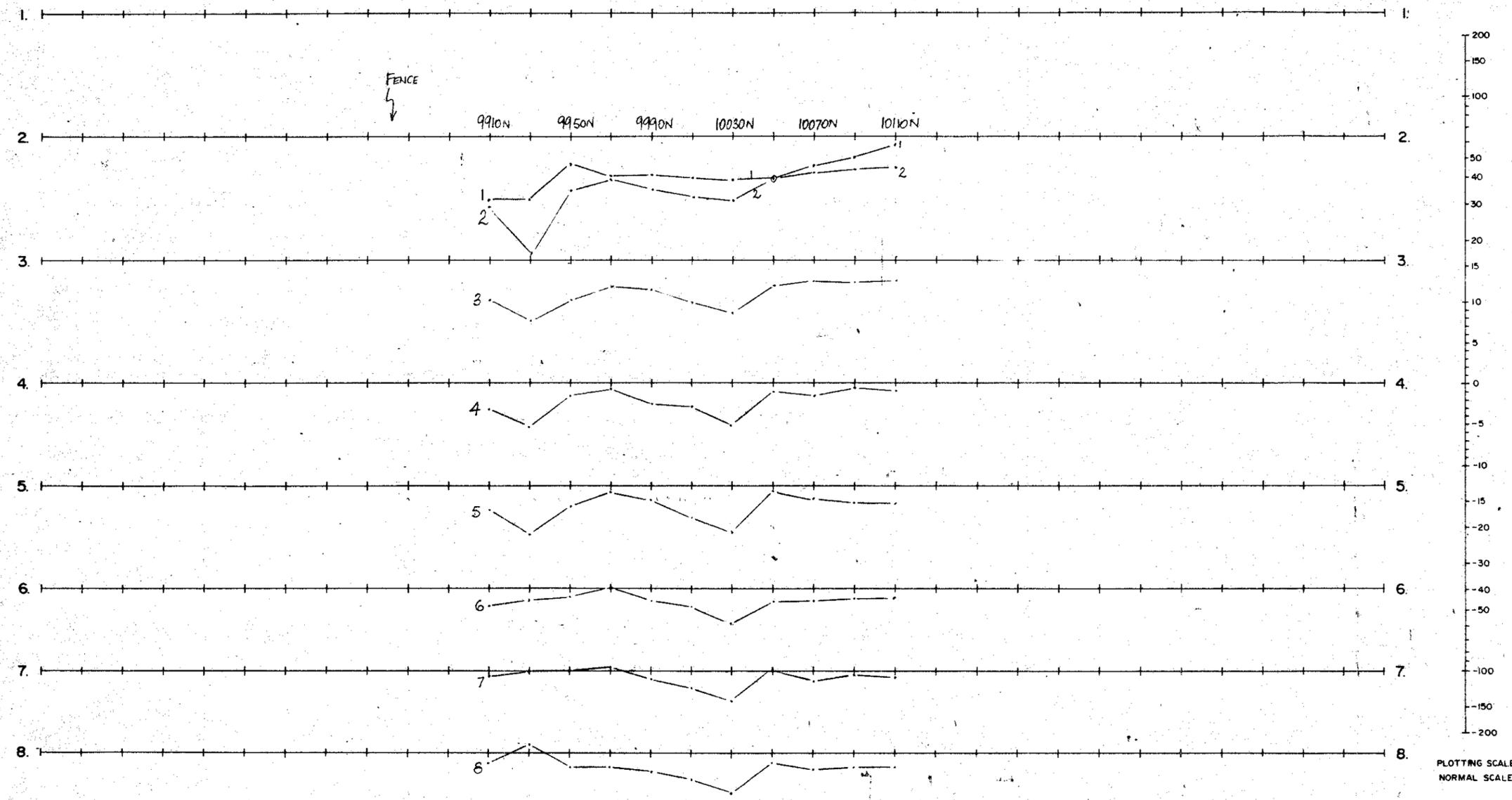
Mode of operation *Separated Moving Coils*  
 Transmitter receiver separation *60* metres  
 Station spacing *20* metres  
 Component plotted *VERTICAL*  
 Receiver coil orientation *HORIZONTAL*  
 Transmitter orientation *HORIZONTAL*  
 Horizontal scale *1:2000*  
 Surveyed by *FLYNCH & PIPER*  
 Time base *10 m. sec*



926076

SURVEYED IN *JANUARY 1981*

JOB No. *85-1276*



# PULSE ELECTROMAGNETIC SURVEY

AT

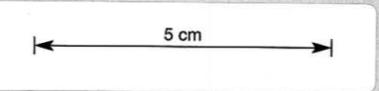
HOUSEGO GRID

WARATAH TASMANIA

FOR

METALS EXPLORATION LTD

Line No. 10440 E



### SURVEY SPECIFICATIONS

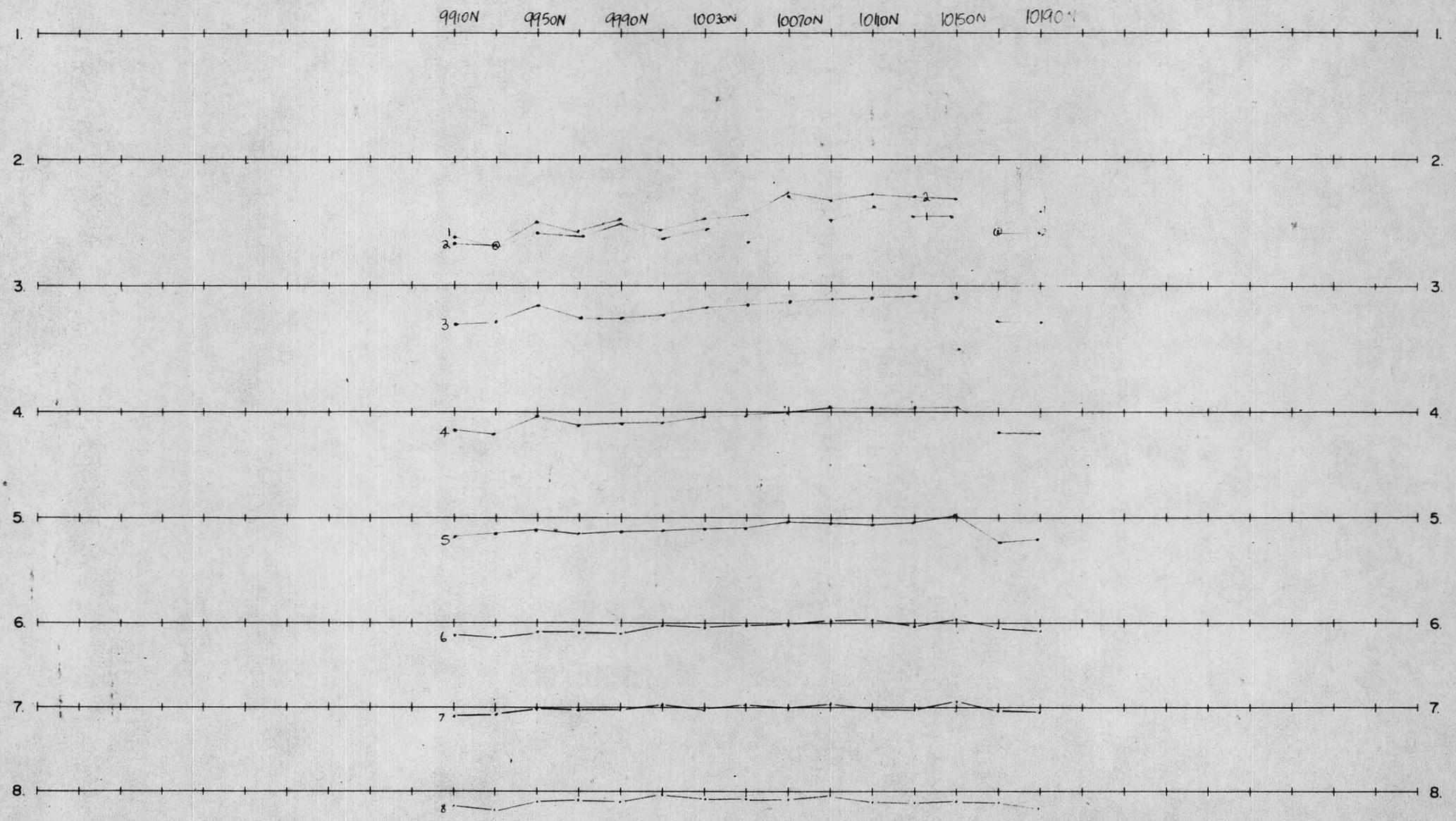
Mode of operation *Separated Moving Coils*  
 Transmitter receiver separation *60* metres  
 Station spacing *20* metres  
 Component plotted *VERTICAL*  
 Receiver coil orientation *HORIZONTAL*  
 Transmitter orientation *HORIZONTAL*  
 Horizontal scale *1:2000*  
 Surveyed by *T. LYNCH G. PIPER*  
 Time Base *10 m. sec*



926077

SURVEYED IN *JANUARY 1981*

JOB No. *85-1276*



PLOTTING SCALE  
NORMAL SCALE

M.E.L. DRG. NO. 81-086

H10

# PULSE ELECTROMAGNETIC SURVEY

AT

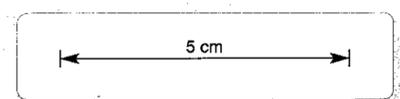
HOUSEGO GRID

WARATAH TASMANIA

FOR

METALS EXPLORATION LTD

Line No. 10520 E



### SURVEY SPECIFICATIONS

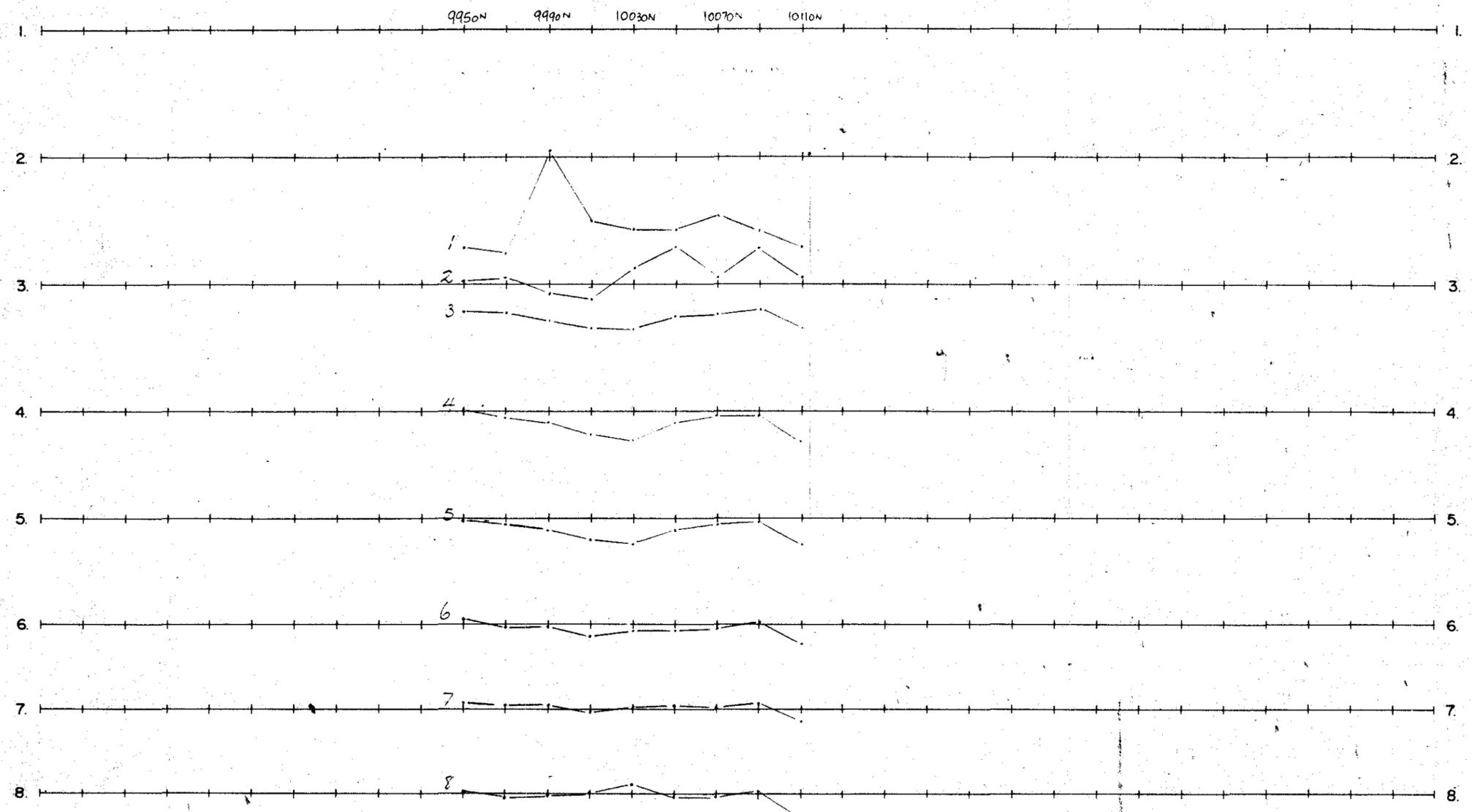
Mode of operation *Separated Moving Coils*  
 Transmitter receiver separation *60 metres*  
 Station spacing *20 metres*  
 Component plotted *VERTICAL*  
 Receiver coil orientation *HORIZONTAL*  
 Transmitter orientation *HORIZONTAL*  
 Horizontal scale *1:2000*  
 Surveyed by *T. LYNCH, G. PIPER*  
 Time base *10 msec*



926078

SURVEYED IN *JANUARY 1981*

JOB No *85-1276*



9950N 9990N 10030N 10070N 10110N

PLOTTING SCALE  
NORMAL SCALE

M.E.L. DRG. No. 81-087

PULSE ELECTROMAGNETIC SURVEY

AT

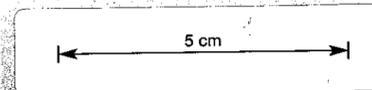
HOUSEGO GRID

WARATAH, TASMANIA

FOR

METALS EXPLORATION LTD

Line No. 10600 E



SURVEY SPECIFICATIONS

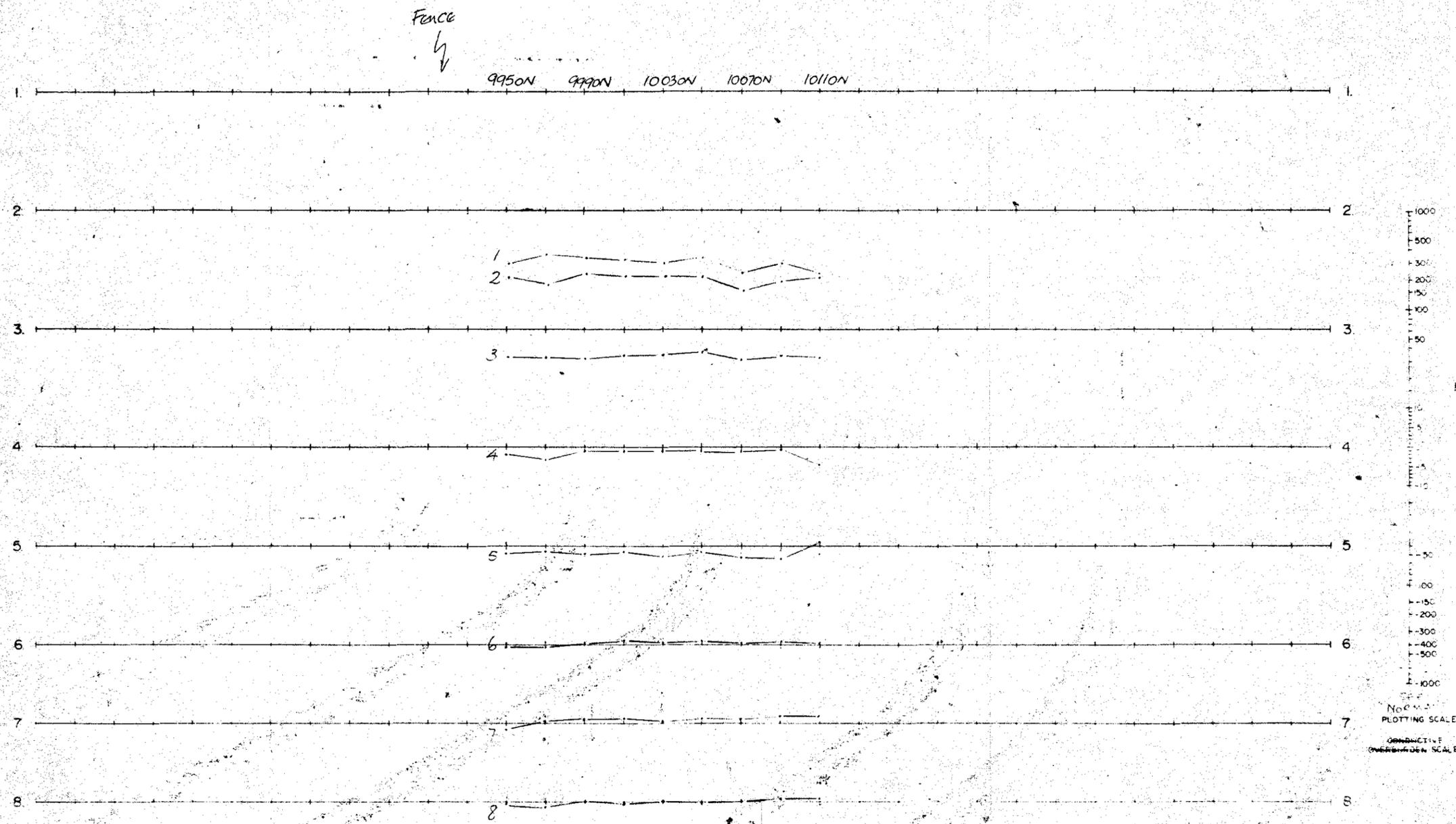
Mode of operation Separated Moving Coils  
 Transmitter receiver separation 60 metres  
 Station spacing 20 metres  
 Component plotted VERTICAL  
 Receiver coil orientation HORIZONTAL  
 Transmitter orientation HORIZONTAL  
 Horizontal scale 1:20  
 Surveyed by T. LYNCH, G. PIERCE  
 Time base 10 msec



926079

SURVEYED IN JANUARY 1974

JOB No 85-1276



M.E.L. DRG. No. 81-088

# PULSE ELECTROMAGNETIC SURVEY

AT

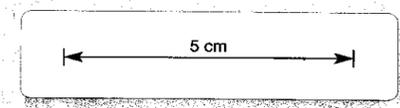
HOUSEG O GRID

WARATAH TASMANIA

FOR

METALS EXPLORATION LTD

Line No. 10680 E



### SURVEY SPECIFICATIONS

Mode of operation Separated Moving Coils  
 Transmitter receiver separation 60 metres  
 Station spacing 20 metres  
 Component plotted VERTICAL  
 Receiver coil orientation HORIZONTAL  
 Transmitter orientation HORIZONTAL  
 Horizontal scale 1:2000  
 Surveyed by T. LYACH, G. PIPER  
 Time Base 10 m. sec

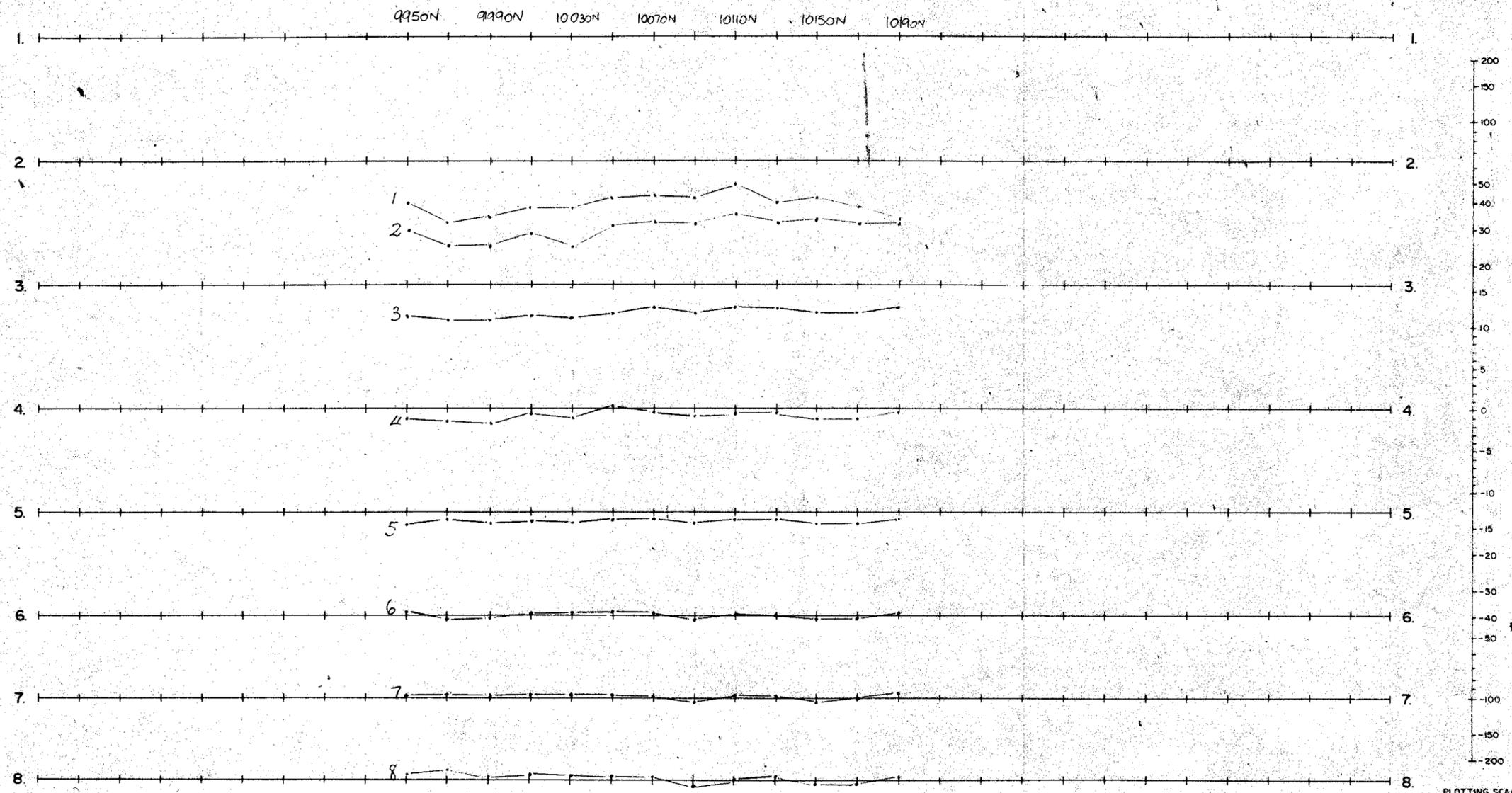


926080

SURVEYED IN JANUARY 1968

JOB No 15-1276

M.E.L. DRG. No 81-089



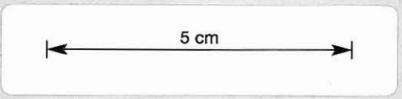
PLOTTING SCALE  
NORMAL SCALE

# PULSE ELECTROMAGNETIC SURVEY

AT  
HOUSEGO GRID  
WARATAH TASMANIA

FOR  
METALS EXPLORATION LTD.

Line No. 10760E



### SURVEY SPECIFICATIONS

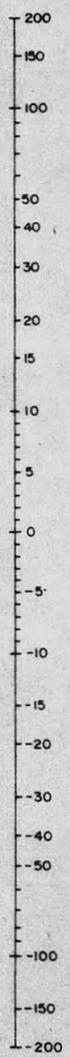
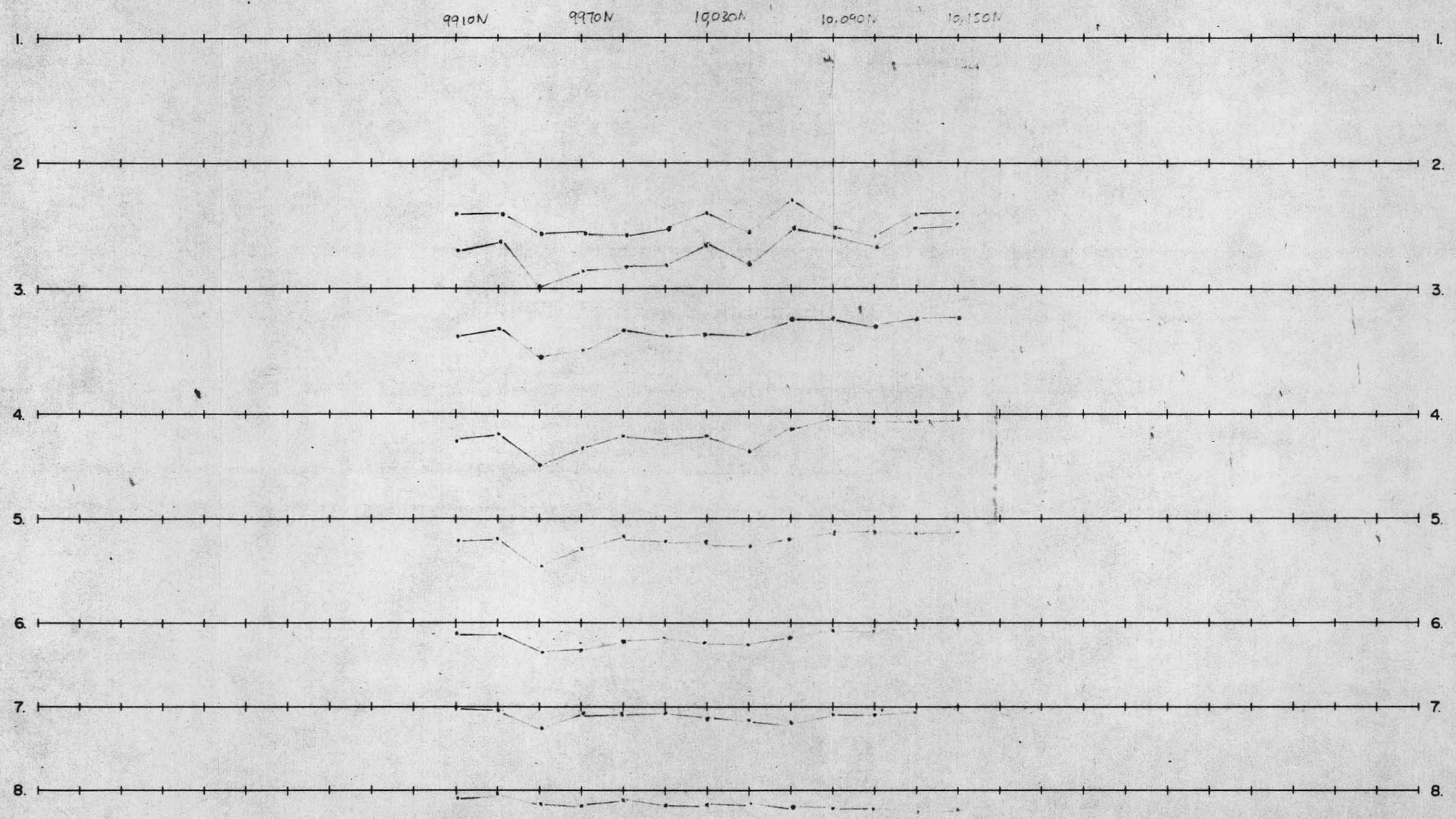
Mode of operation *RESISTIVE*  
Transmitter receiver separation *95* metres  
Station spacing *20* metres  
Component plotted *VELOCITY*  
Receiver coil orientation *HORIZONTAL*  
Transmitter orientation *HORIZONTAL*  
Horizontal scale *1:2000*  
Surveyed by *F. BROWN*  
Time base *.....* msec



926081

JOB No.

SURVEYED IN



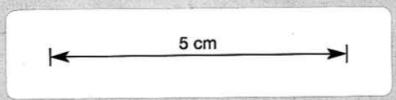
PLOTTING SCALE  
NORMAL SCALE

# PULSE ELECTROMAGNETIC SURVEY

AT  
HOUSEGO GRID  
WARATAH, TASMANIA

FOR  
METALS EXPLORATION PTY. LTD.

Line No. 10,840E



### SURVEY SPECIFICATIONS

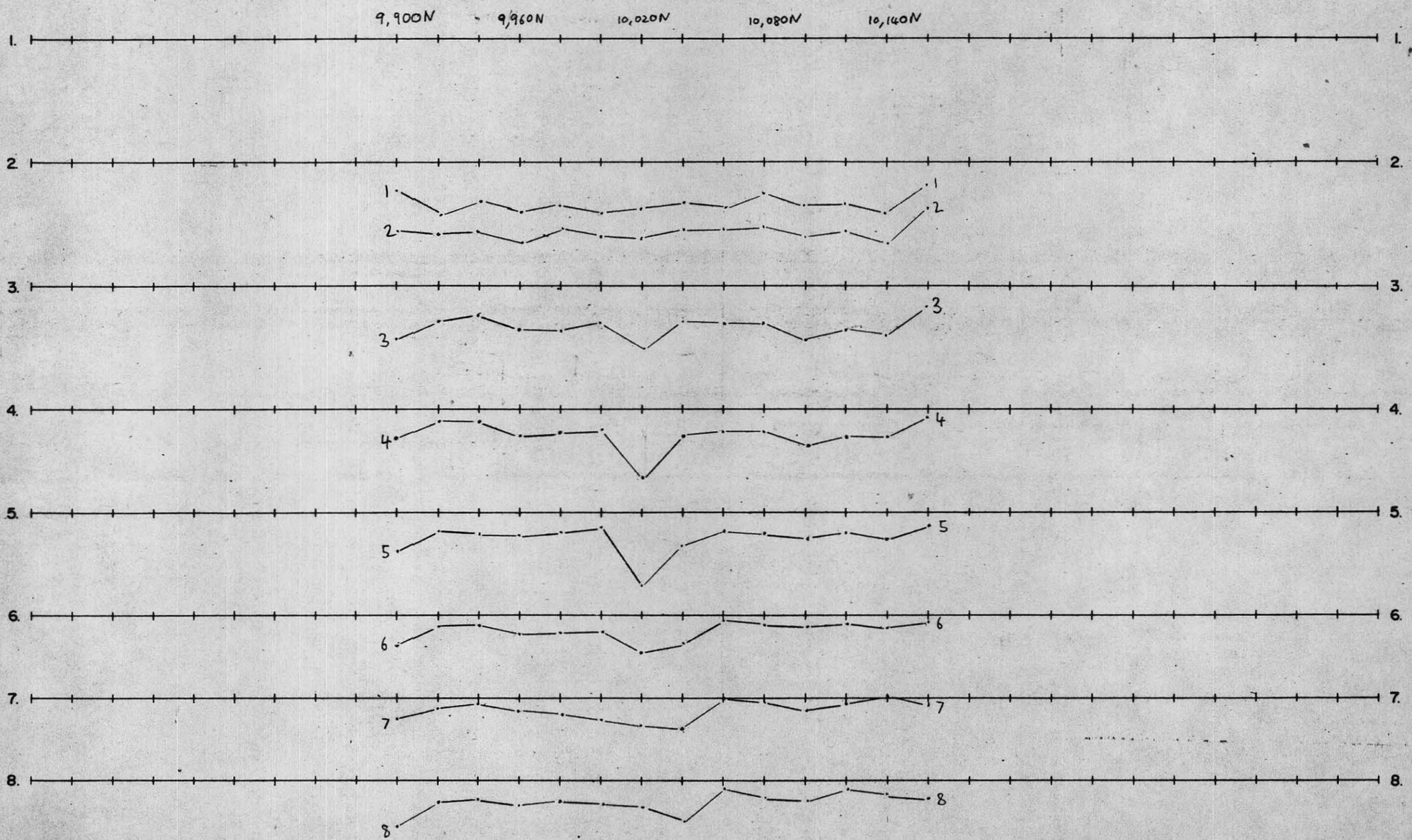
Mode of operation *SEPARATED MOVING COILS*  
 Transmitter receiver separation *60* metres  
 Station spacing *20* metres  
 Component plotted *VERTICAL*  
 Receiver coil orientation *HORIZONTAL*  
 Transmitter orientation *HORIZONTAL*  
 Horizontal scale *1:2000*  
 Surveyed by *G. PIPER, A. FLINTER*  
 Time base *10* msec



926082

SURVEYED IN JANUARY 1981

JOB No. 85-1276



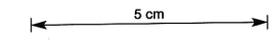
PLOTTING SCALE  
NORMAL SCALE

PULSE ELECTROMAGNETIC SURVEY

AT  
HOUSEGO GRID  
WARATAH TASMANIA

FOR  
METALS EXPLORATION PTY LTD

Line No. 10920E



SURVEY SPECIFICATIONS

Mode of operation SEPARATED MOVING COILS  
Transmitter receiver separation 60 metres  
Station spacing 20 metres  
Component plotted VERTICAL  
Receiver coil orientation HORIZONTAL  
Transmitter orientation HORIZONTAL  
Horizontal scale 1:2000  
Surveyed by G. PIPER, A. FLINTER

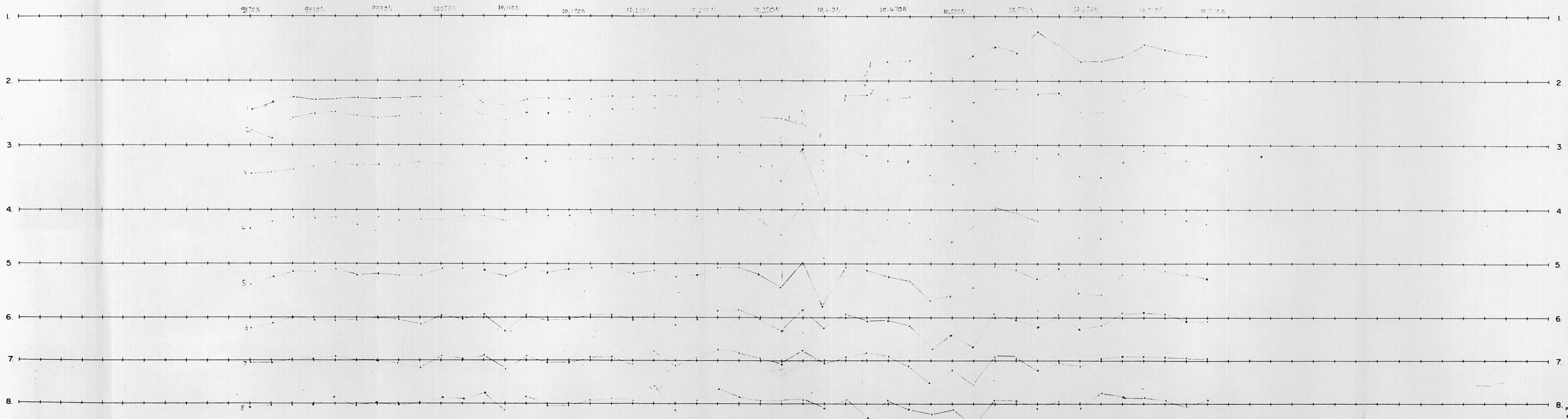


926083

SURVEYED IN JANUARY 1981

JOB No. 85-1276

M.E.L. DRG. No. 81-092

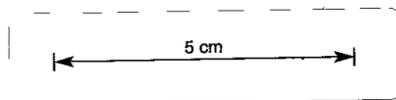


# PULSE ELECTROMAGNETIC SURVEY

AT  
*Housegc 1*  
*Waratah 100 man a*

FOR  
*METALS Exploration Pty Ltd*

Line No *10,120E*



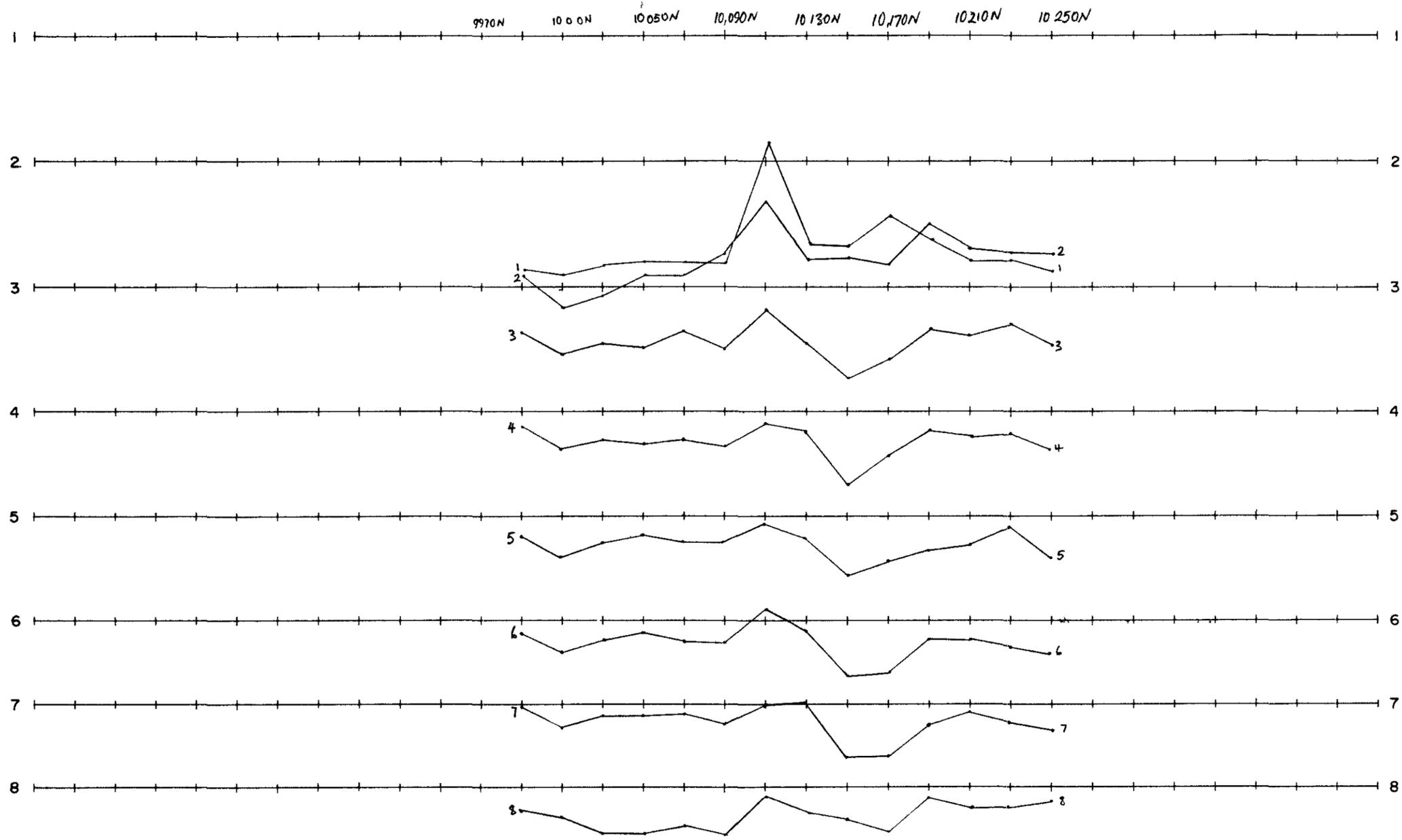
**SURVEY SPECIFICATIONS**

Mode of operation *Separated moving coils*  
 Transmitter receive separation 100 metres  
 Station spacing 20 metres  
 Component plotted *Vertical*  
 Receiver coil orientation *Horizontal*  
 Transmitter orientation *Horizontal*  
 Horizontal scale *1:2000*  
 Surveyed by *G P per A Filter*  
 Time base 10 msec



926084

JOB No



PLOTTING SCALE  
 NORMAL SCALE

SURVEYED IN

M.E.L. DRG. N. 81-080

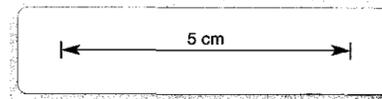
H6

# PULSE ELECTROMAGNETIC SURVEY

AT  
HOUSEGO GRID  
WARATAH, TASMANIA

FOR  
METALS EXPLORATION PTY. LTD.

Line No. 10,280 E



### SURVEY SPECIFICATIONS

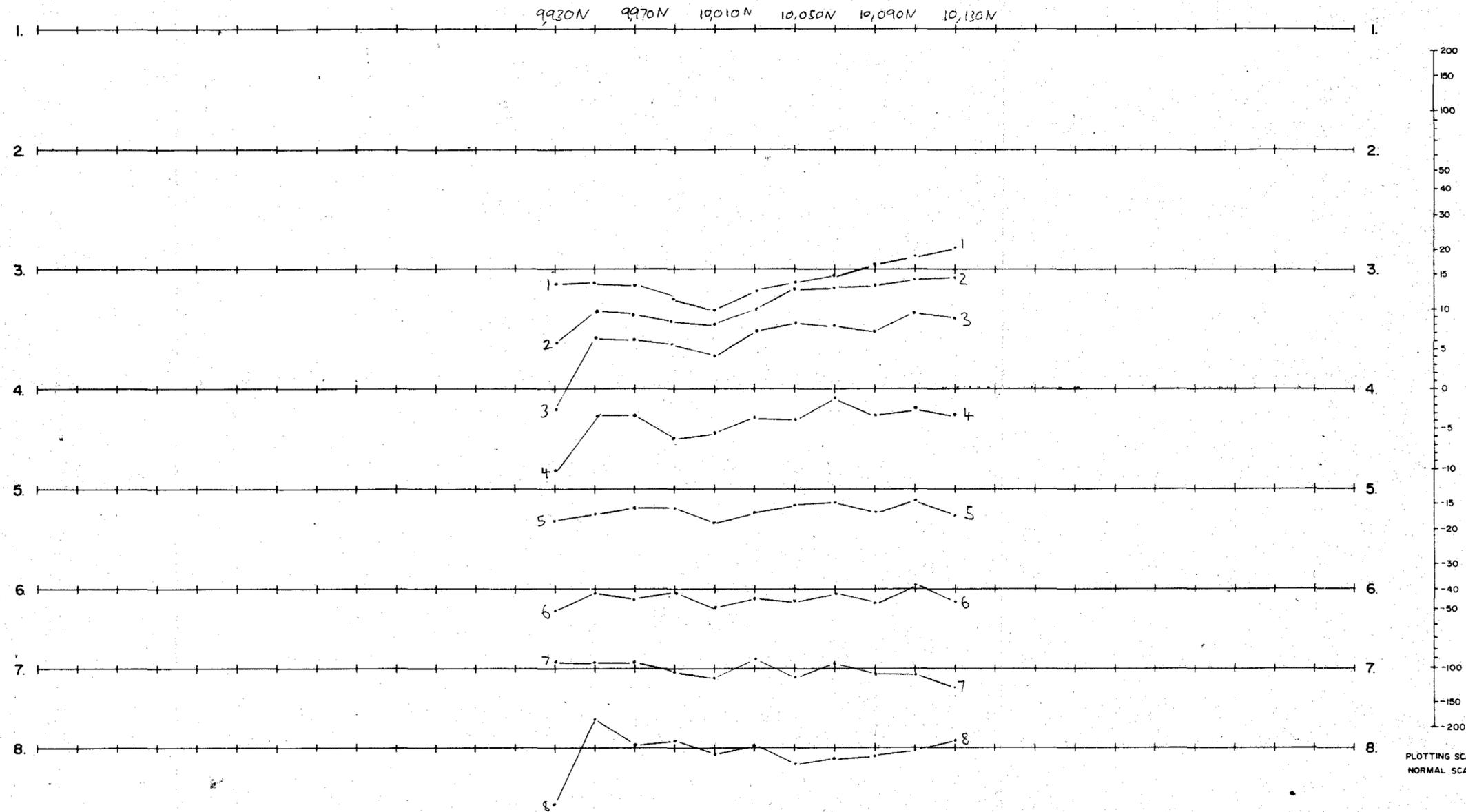
Mode of operation SEPARATED MOVING COILS  
Transmitter receiver separation 100 metres  
Station spacing 20 metres  
Component plotted VERTICAL  
Receiver coil orientation HORIZONTAL  
Transmitter orientation HORIZONTAL  
Horizontal scale 1:2000  
Surveyed by G PIPER ; A FLINTER  
Time base 10 msec



926085

SURVEYED IN JANUARY 1981

JOB No. 25-476



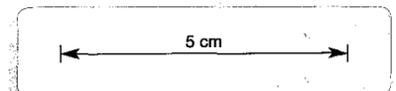
MEL DRG. No. 81-083

# PULSE ELECTROMAGNETIC SURVEY

AT  
HOUSEGO GRID  
WARATAH, TASMANIA

FOR  
METALS EXPLORATION, PTY, LTD.

Line No. 10,360 E



### SURVEY SPECIFICATIONS

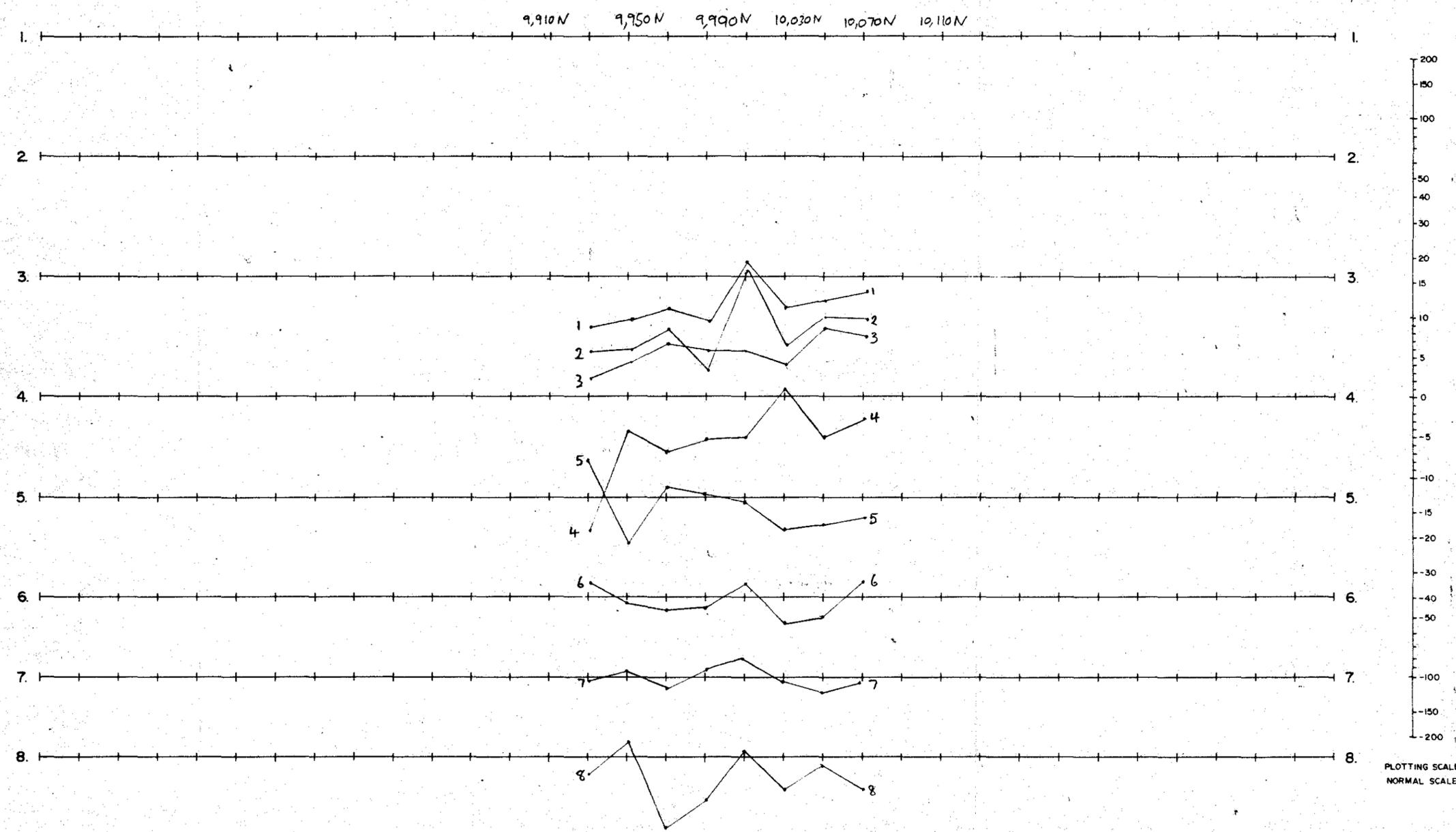
Mode of operation SEPARATED MOVING COILS  
Transmitter receiver separation 100 metres  
Station spacing 20 metres  
Component plotted VERTICAL  
Receiver coil orientation HORIZONTAL  
Transmitter orientation HORIZONTAL  
Horizontal scale 1:2000  
Surveyed by G. PIPER, A. FLINTEK  
Time base 10 msec



926086

SURVEYED IN JANUARY 1981

JOB No 85-1276



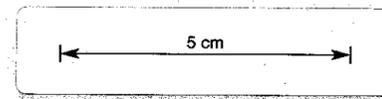
M.E.L. DRG. No. 81-085

# PULSE ELECTROMAGNETIC SURVEY

AT  
HOUSEGO GRID  
WARATAH, TASMANIA

FOR  
METALS EXPLORATION PTY. LTD.

Line No. 10,920E



### SURVEY SPECIFICATIONS

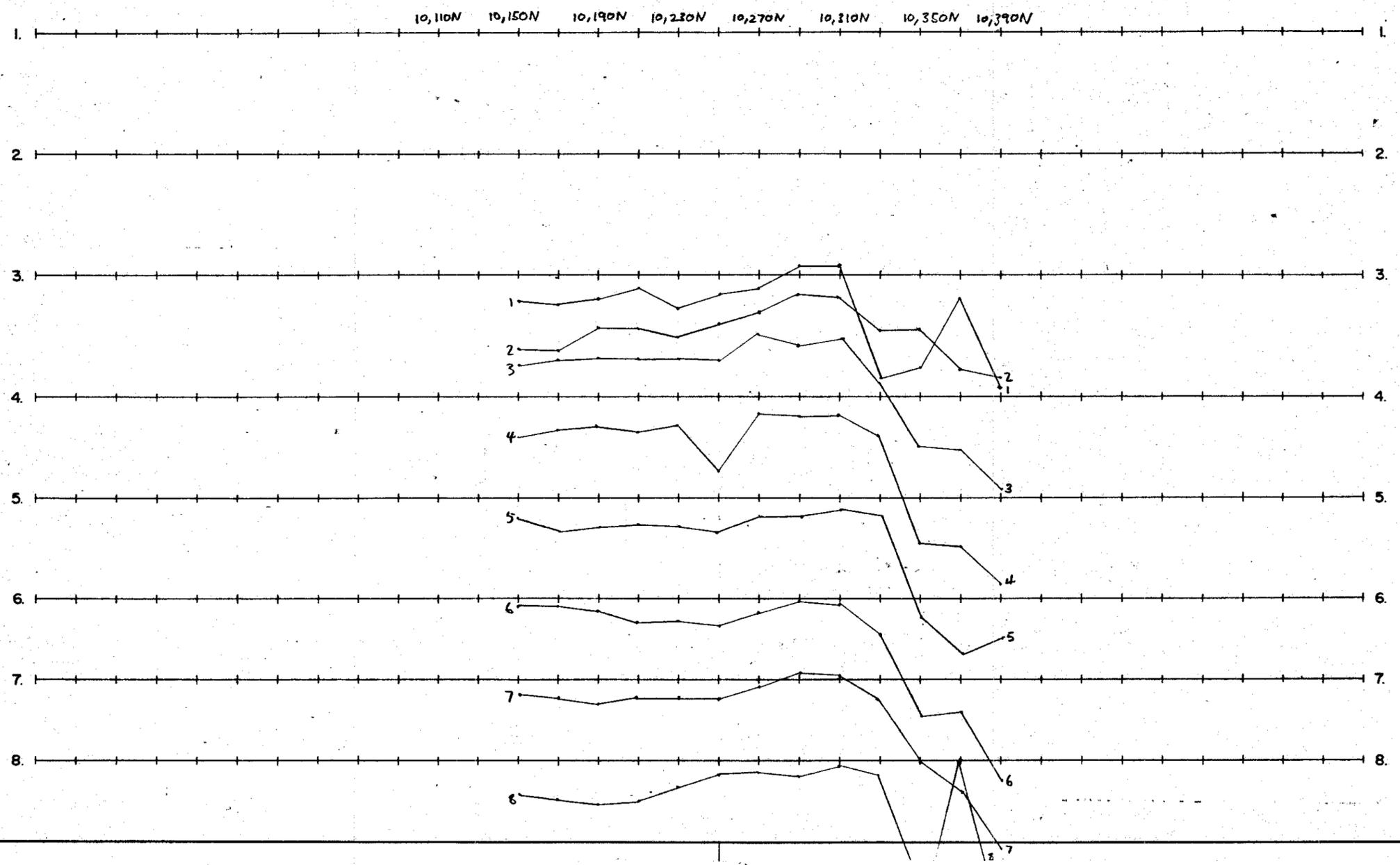
Mode of operation *SEPARATED MOVING COILS*  
Transmitter receiver separation *100* metres  
Station spacing *20* metres  
Component plotted *VERTICAL*  
Receiver coil orientation *HORIZONTAL*  
Transmitter orientation *HORIZONTAL*  
Horizontal scale *1:2000*  
Surveyed by *G. PIPER, A. FLINTER*  
Time base *10* msec



926087

SURVEYED IN *JANUARY 1981*

JOB No. *PS-1276*



M.E.L. DRG. N° 81-043

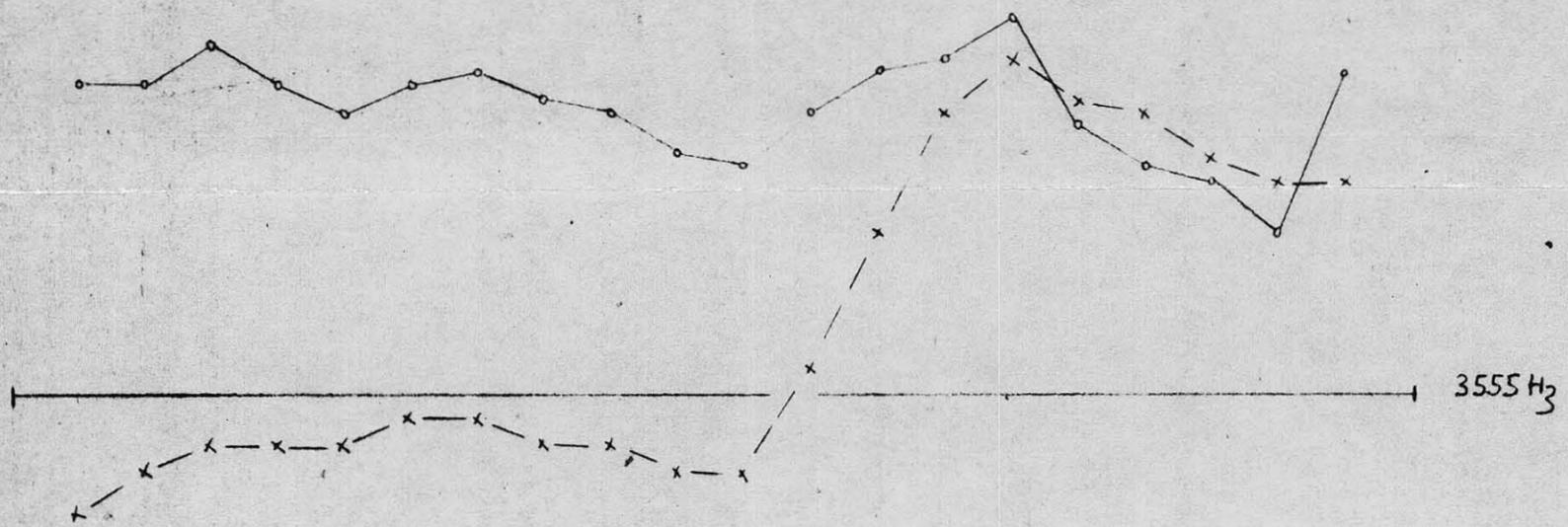
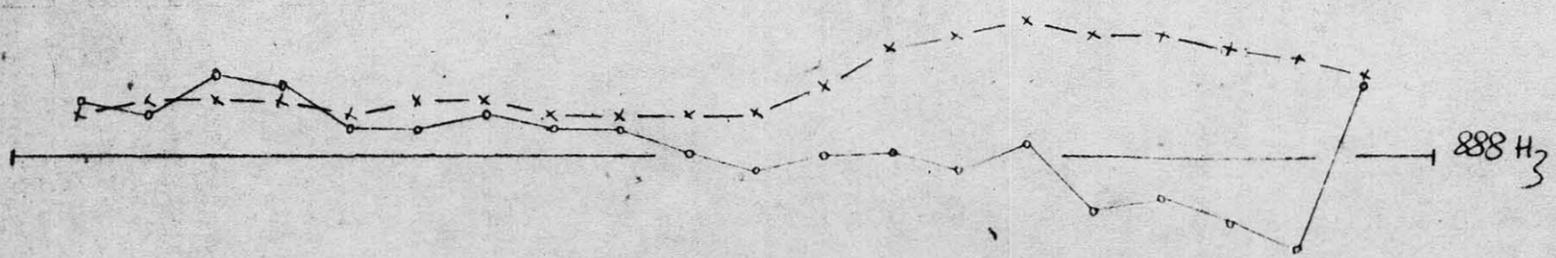
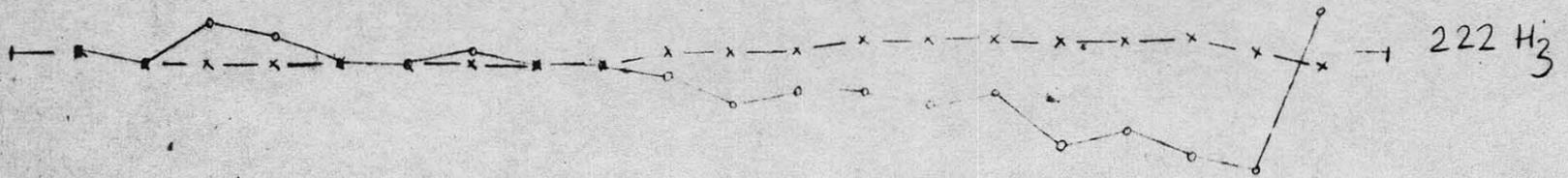
(1117)

TUESDAY 3/1/81

HOUSEGO GRID

WARATAH, TASMANIA

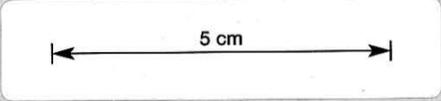
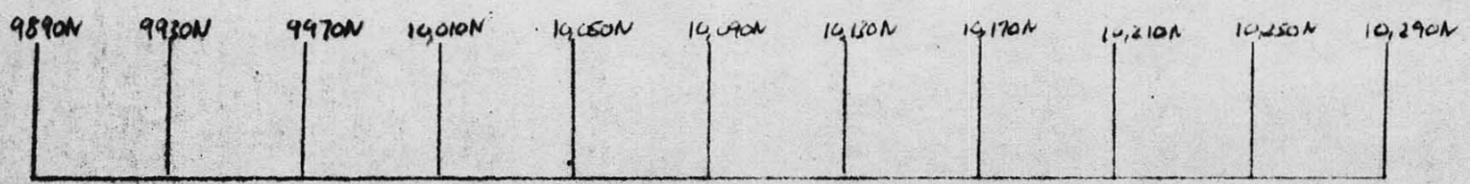
LINE 10,120E



o-o IN PHASE  
x-x QUADRATURE

5% / cm

20m / cm



M.E.L. DRG. No. 81-094

926088

MAX-MIN SURVEY - WARATAH (TAS)

4/13/81

HOUSEGO GRID: LINE 10880 E

FOR METALS EX. ITO

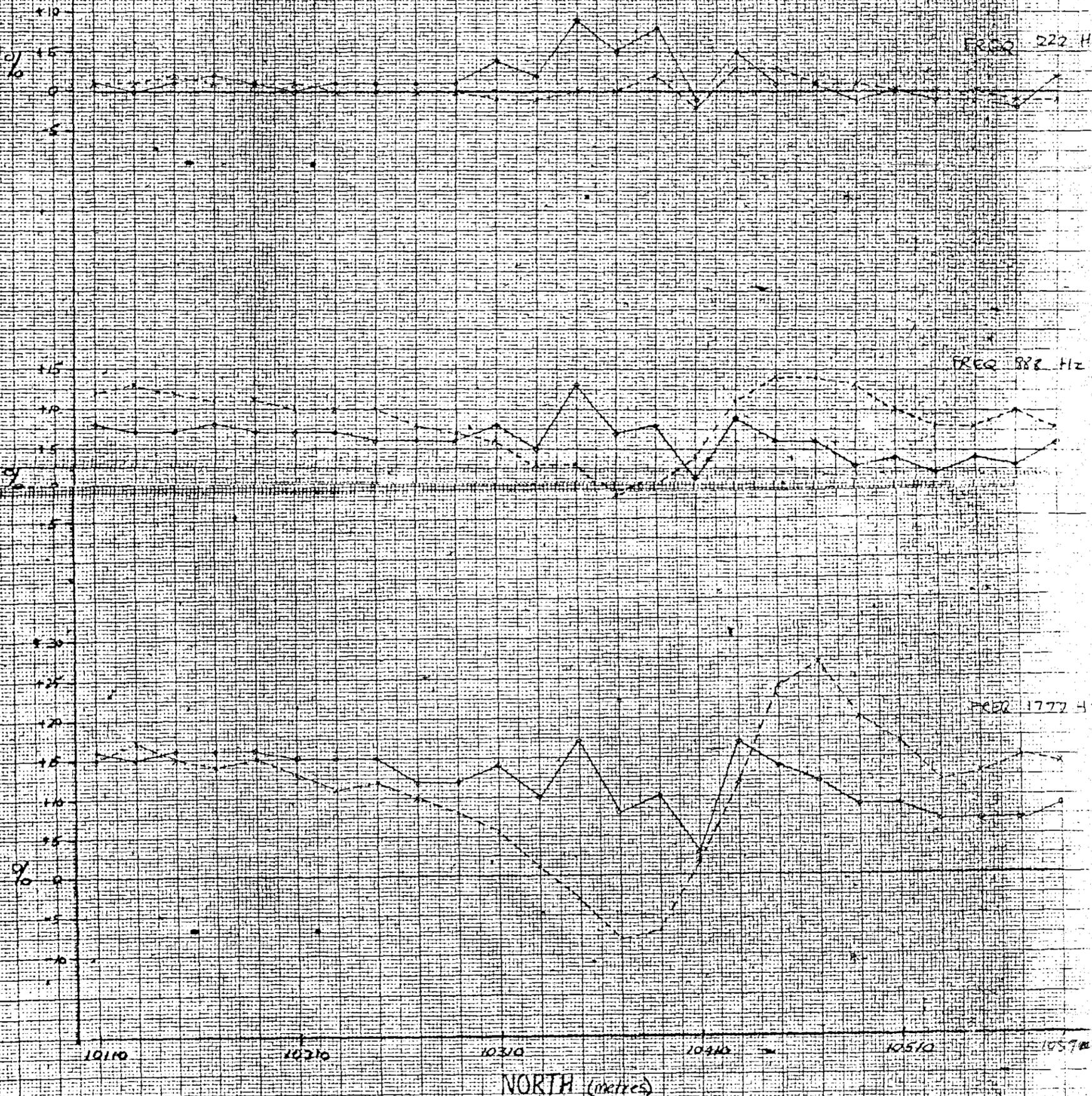
COIL SEPARATION 100 m

DOB 85-1301

FREQ 222 Hz

FREQ 888 Hz

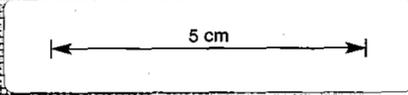
FREQ 1777 Hz



SCALE (HOR): 1cm = 20m

LEGEND: o-o-o I.P.

---x--- QUAD.



(1118)

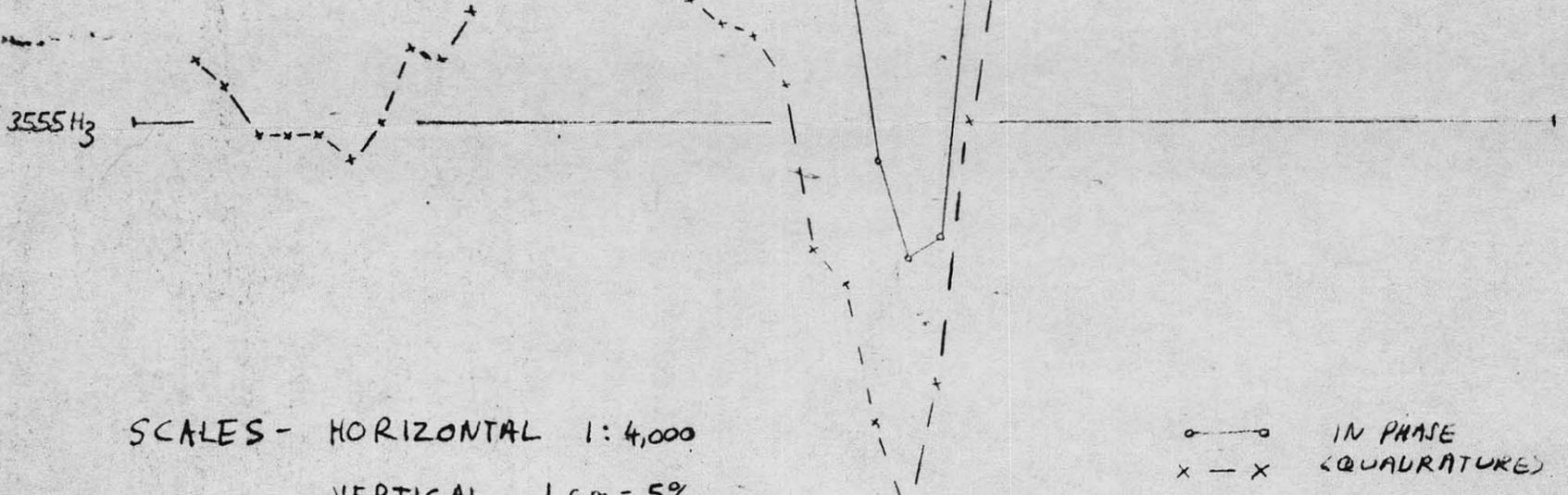
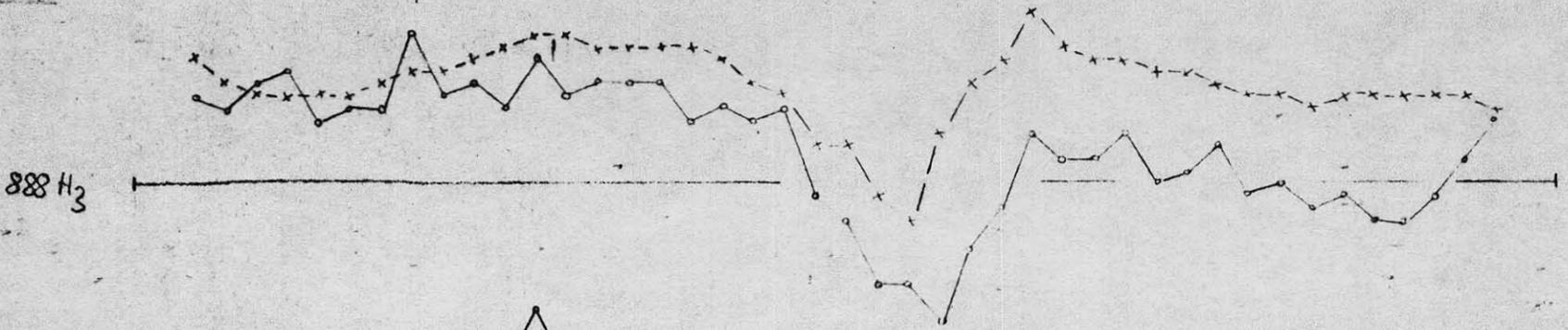
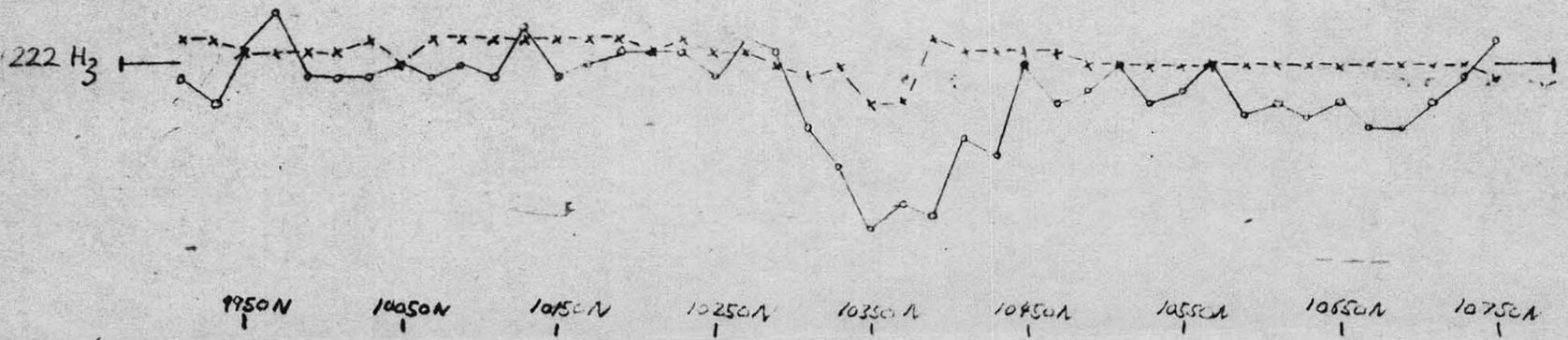
METALS EXPLORATION PTY LTD.

FEB, 4th, 1981

HOUSEGO GRID

LINE 10,920 E

WARATAH, TASMANIA

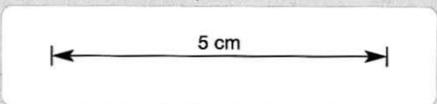


SCALES - HORIZONTAL 1:4,000

VERTICAL 1 cm = 5%

COIL SPACING 100 metres

○ — ○ IN PHASE  
x — x (QUADRATURE)



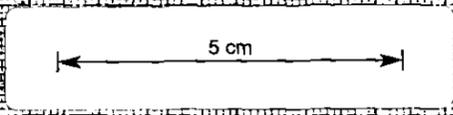
M.E.L. DRG. No. 81-095

926090

826091

MAX-MIN SURVEY

DATE 4/3/81



HOUSEGO GRID

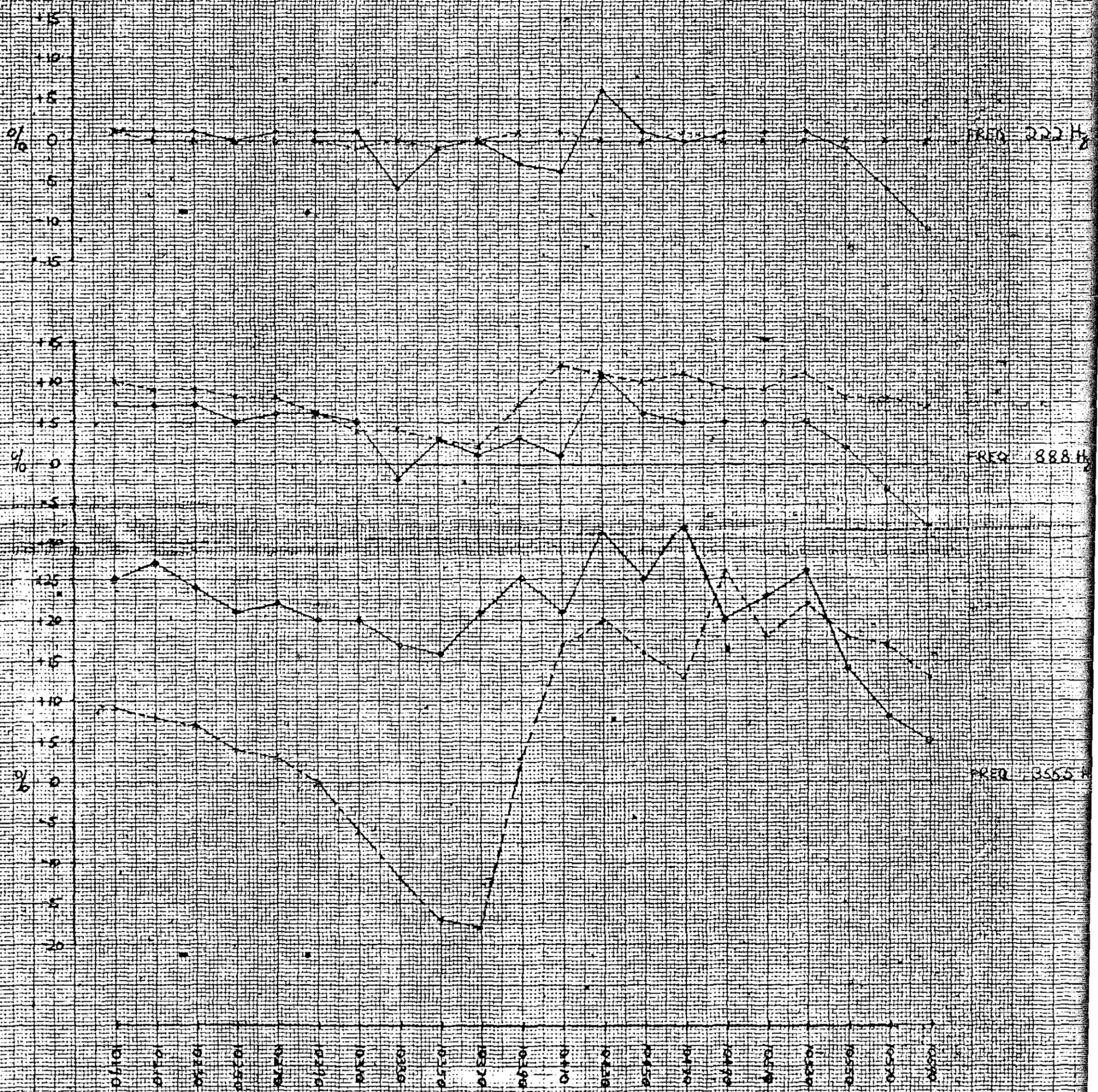
WARATAH (TAS)

FOR METALS EX. LTD.

LINE: EAST 10960 (metres)

COIL SEPARATION: 100 m

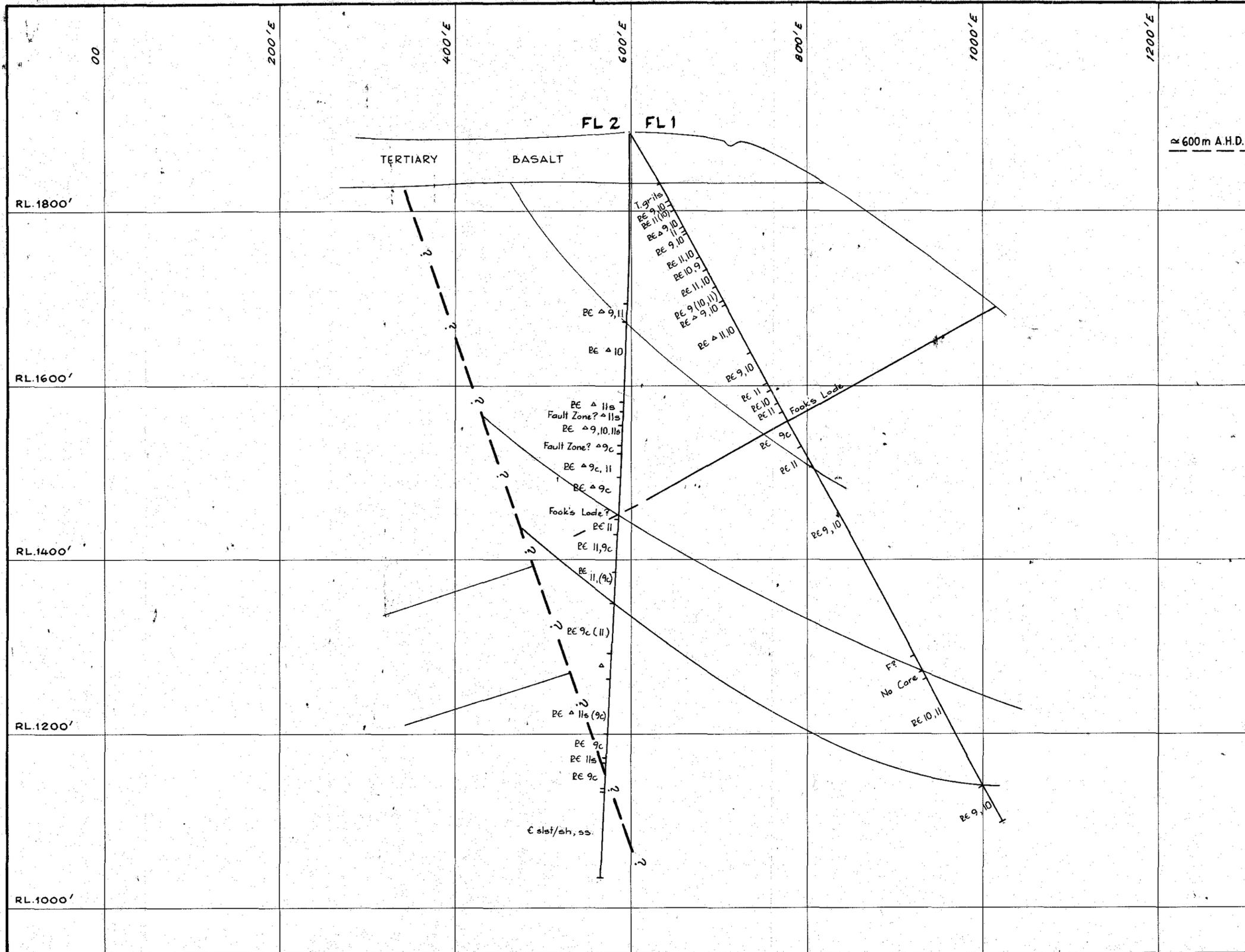
706 85-1301



NORTH (metres)

LEGEND:

- IN-PHASE
- x-x-x- QUADRATURE

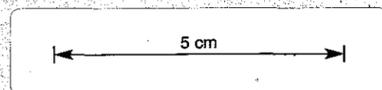


Cambrian ?		
51	ε slst/sh	siltstones / shales
18	ε ss	sandstone
88	ε dol ss & slst	dolomitic sandstone and siltstone, undifferentiated
82	ε dol	dolomite
61	ε br & wh ark ss	brown and white speckled arkosic sandstone very similar to Mt Bischoff 'tuffs'
Δ		disrupted / brecciated
Pre Cambrian		
	PC 9(c)	shales (carbonaceous)
	PC 10	siltstones
	PC 11	quartzites
	PC 12	tuffs
	(s)	? sandstone
—		fault line
F		fault zone

Note: This is a grid adopted to fit the drilling pattern. Section viewed looking to 322° Grid (M.E.L. Mt. Bischoff). Reduced Levels are roughly 30m below Aust. Ht. Datum.

100 0 200 400 FT

20 0 100 m

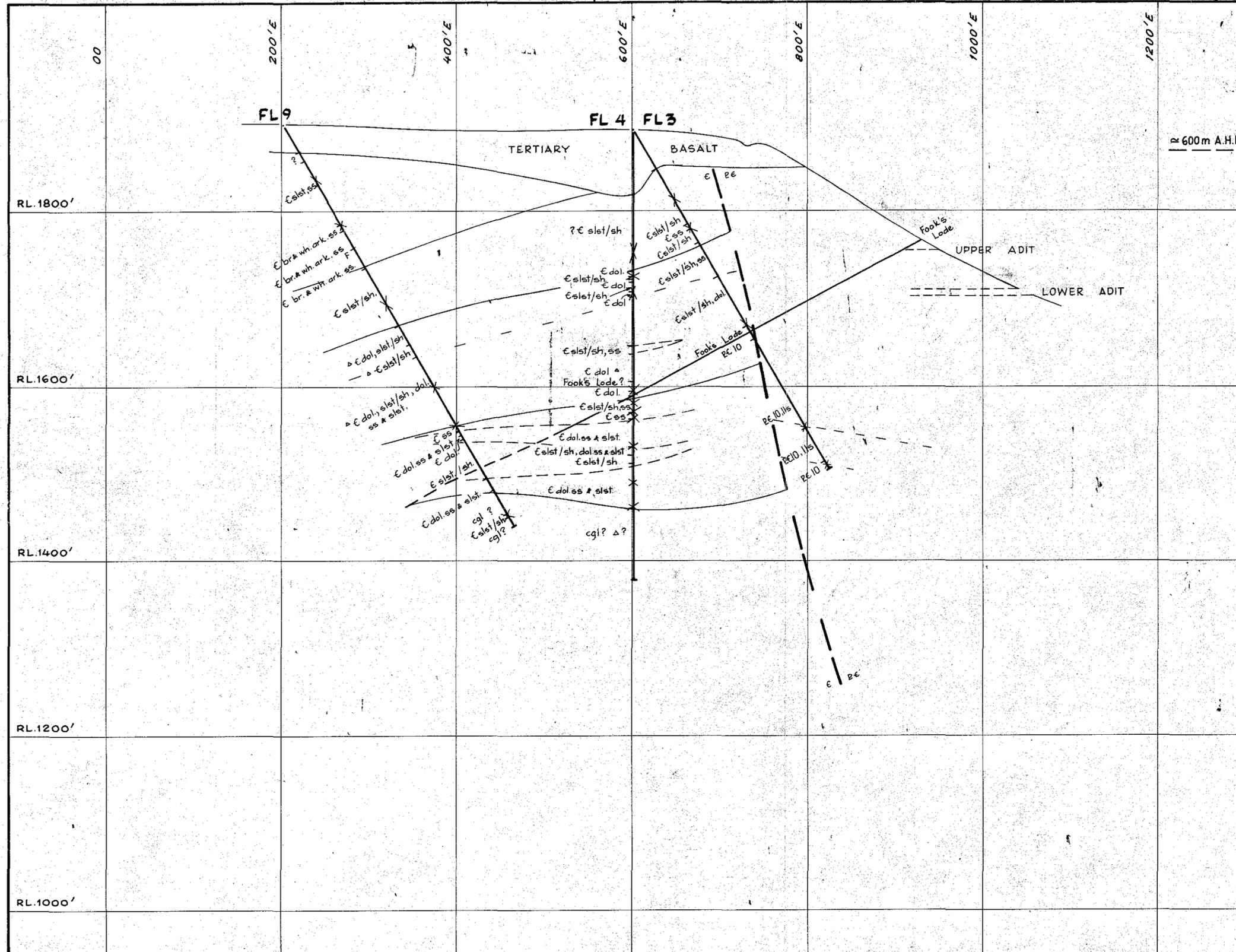


926092

**METALS EXPLORATION LIMITED**

MT. BISCHOFF TIN PROSPECT  
 AP 5/80 TASMANIA  
**FOOK'S LODGE**  
 SECTION 1000ft N  
 INCLUDING  
 MINES DEPT. DRILLING

PREPARED	DATE
DRAWN	DATE
SCALE	1: 1200 H. & V.
DRAWING No.	REV
81-288	



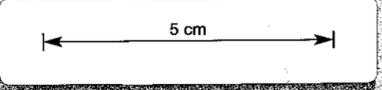
Cambrian ?

- 51 E slst/sh siltstones / shales
- 1B E ss sandstone
- 8B E dol ss & slst dolomitic sandstone and siltstone undifferentiated
- 8C E dol dolomite
- 61 E br. & wh. ark. ss brown and white speckled arkosic sandstone very similar to Mt. Bischoff 'tuffs'
- Δ disrupted / brecciated

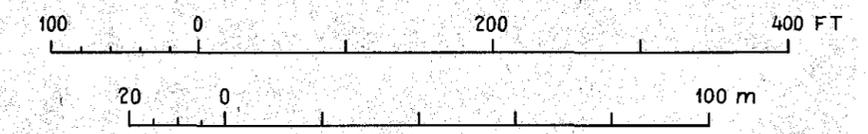
PreCambrian

- PC 9(c) shales (carbonaceous)
- PC 10 siltstones
- PC 11 quartzites
- PC 12 tuffs
- (s) ? sandstone

— fault line  
- - - fault zone



Note: This is a grid adopted to fit the drilling pattern. Section viewed looking to 322° Grid (M.E.L. Mt. Bischoff). Reduced Levels are roughly 30m below Aust. Ht. Datum.



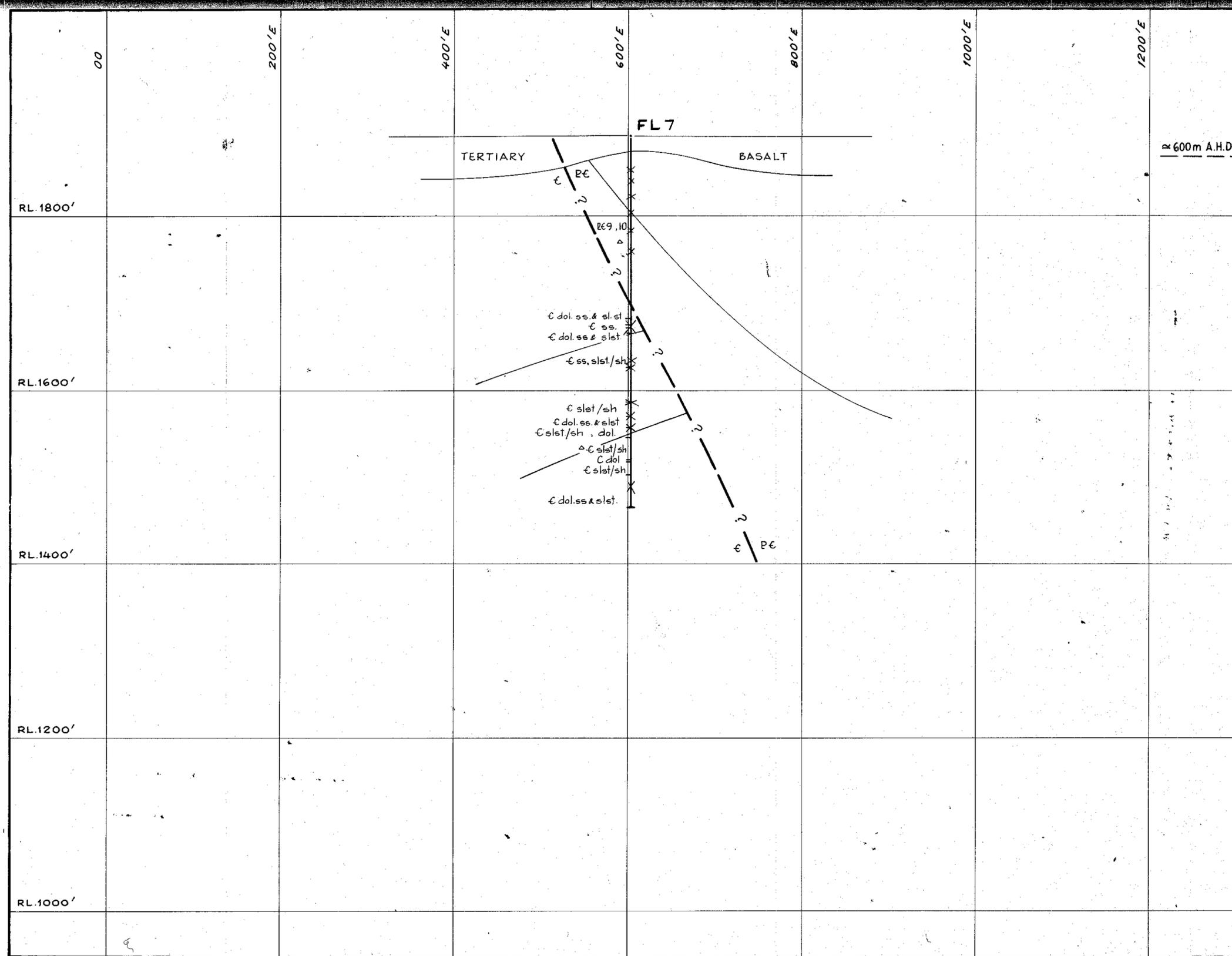
926093

**METALS EXPLORATION LIMITED**

MT. BISCHOFF TIN PROSPECT  
AP 5/80 TASMANIA  
**FOOK'S LODGE**  
**SECTION 600ft N**

MINES DEPT. DRILLING

PREPARED	DATE
DRAWN	DATE
SCALE 1:1200 H.&V.	
DRAWING No.	REV.
81-289	

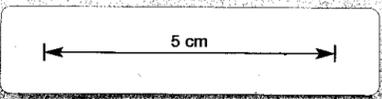


**Cambrian ?**

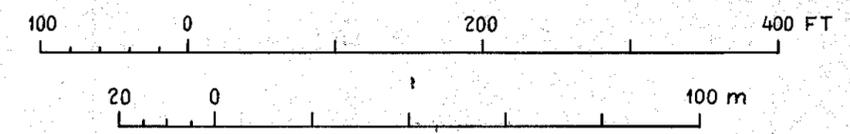
- C slst/sh      siltstones / shales
- C ss      sandstone
- C dol. ss. & slst      dolomitic sandstone and siltstone, undifferentiated
- C dol.      dolomite
- C br. & wh. ark. ss      brown and white speckled arkosic sandstone very similar to Mt. Bischoff 'tuffs'
- Δ      disrupted / brecciated

**PreCambrian**

- PC 9(c)      shales (carbonaceous)
- PC 10      siltstones
- PC 11      quartzites
- PC 12      luffs
- (S)      ? sandstone
- fault line
- fault zone



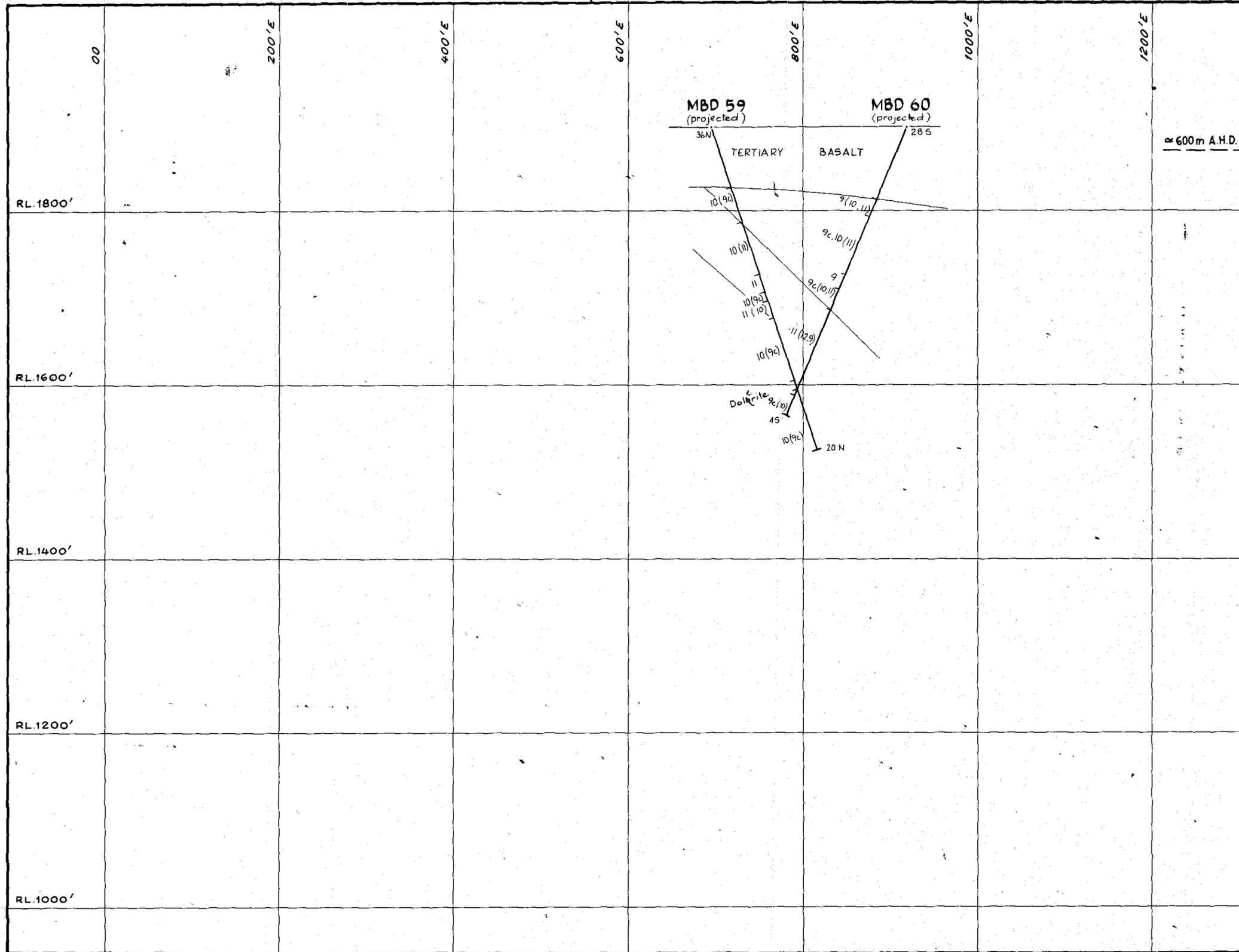
Note: This is a grid adopted to fit the drilling pattern. Section viewed looking to 322° Grid (M.E.L. Mt. Bischoff). Reduced Levels are roughly 30m below Aust. Ht. Datum.



926094

<b>METALS EXPLORATION LIMITED</b>	PREPARED      DATE
	DRAWN      DATE
<b>MT. BISCHOFF TIN PROSPECT</b> <b>AP 5/80 TASMANIA</b> <b>FOOK'S LODGE</b> <b>SECTION 400ft N</b>  MINES DEPT. DRILLING	SCALE 1: 1200 H. & V.
	DRAWING No.      REV. 81-290





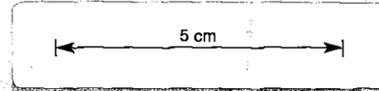
Cambrian ?

- B1 ε silt./sh. siltstones / shales
- B2 ε ss sandstone
- B3 ε dol. ss. & silt. dolomitic sandstone and siltstone, undifferentiated
- B4 ε dol. dolomite
- B5 ε br. & wh. ark. ss. brown and white speckled arkosic sandstone very similar to Mt. Bischoff 'tuffs'
- △ disrupted / brecciated

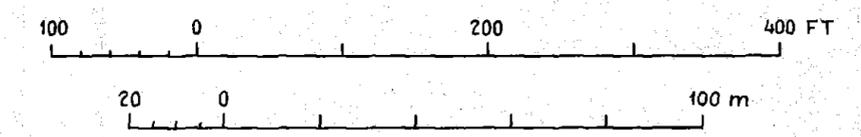
PreCambrian

- PC 9(c) shales (carbonaceous)
- PC 10 siltstones
- PC 11 quartzites
- PC 12 tuffs
- (s) ? sandstone

— fault line  
 - - - fault zone



Note: This is a grid adopted to fit the drilling pattern. Section viewed looking to 322° Grid (M.E.L. Mt. Bischoff). Reduced Levels are roughly 30m below Aust. Ht. Datum.



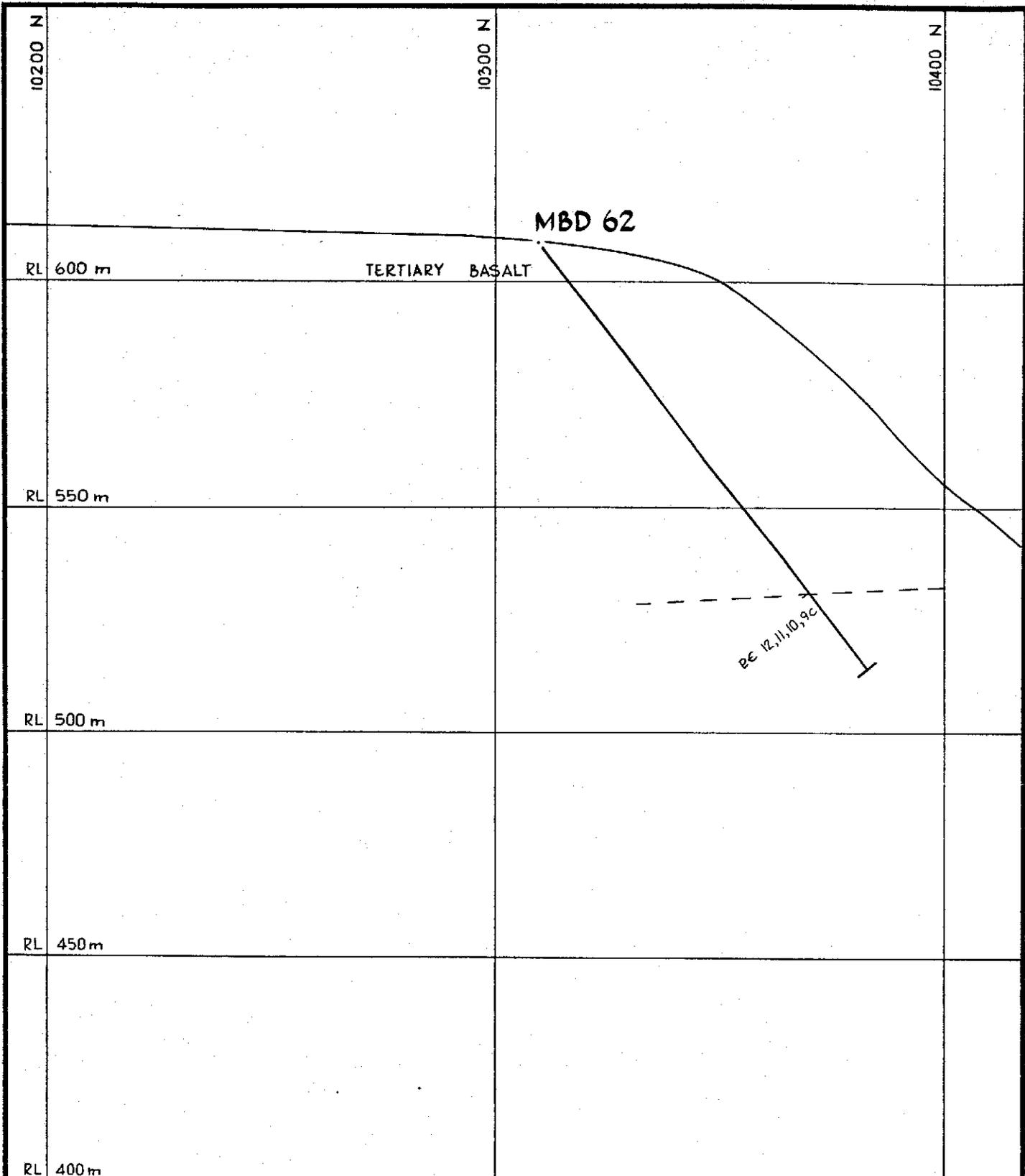
926096

**METALS EXPLORATION LIMITED**

MT. BISCHOFF TIN PROSPECT  
 AP 5/80 TASMANIA  
 FOOK'S LODGE  
 SECTION 600 ft S

PREPARED	DATE
DRAWN	DATE
SCALE	1: 1200 H. & V.
DRAWING No.	REV.
81-292	





5 cm



**METALS EXPLORATION LIMITED**

MT. BISCHOFF TIN PROSPECT  
 AP 5/80 TASMANIA  
 SECTION 10920 E - HOUSEGO GRID  
 DRILL HOLE MBD 62

926098

SCALE 1:1200 H&V

81-293