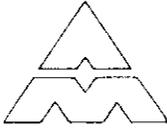


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AMDEX MINING LIMITED

TRIAKO MINES N.L., BUKA MINERALS N.L.,

GIPPSLAND MINERALS N.L., KIBUKA MINES PTY. LTD.

169 MILLER STREET, NORTH SYDNEY, AUSTRALIA 2060

TECHNICAL REPORT

EXPLORATION LICENCE 2/77

SOUTH MOUNT CAMERON

REPORT FOR THE SIX MONTHS ENDING

SEPTEMBER 8, 1980



AUTHOR:

K. MORRISON, R. MUNRO

INVESTIGATIONS CONDUCTED BY:

K. MORRISON, R. MUNRO

TYPED BY:

G. TUCKER

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1. INTRODUCTION

1.1 Scope of the report

This report documents the results of geological exploration conducted within E.L. 2/77 between the 8th March and the 8th September 1980, and as such, it follows on from the previous six monthly report. In addition, a conceptual model for Cainozoic sedimentation in part of North East Tasmania is discussed. This model is employed, along with the combined results of literature research, field prospecting and drilling to evaluate the following groups of exploration targets.

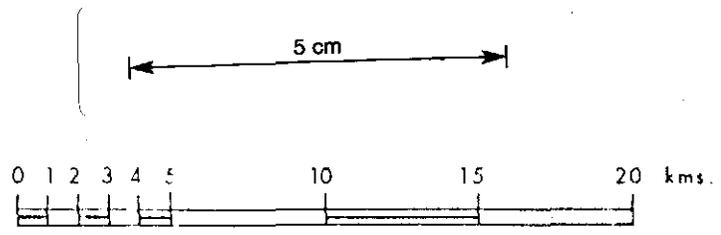
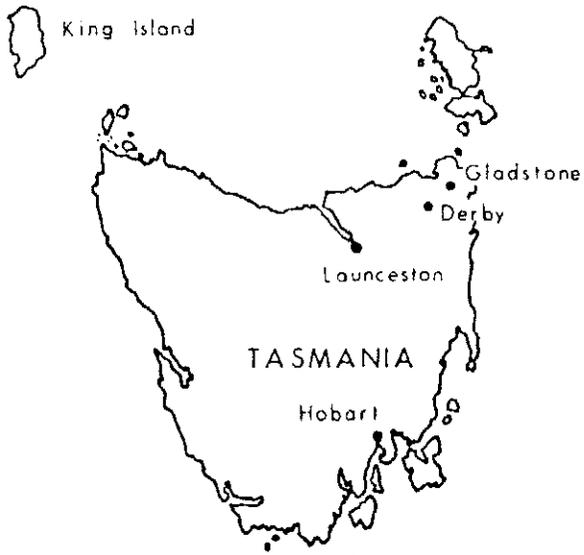
- a) Deep lead systems; Pioneer - Poverty Point, Eastern Leads, Endurance.
- b) Clifton-type deposits, Mount Cameron.
- c) Surface tin and gold deposits, Pioneer to Mount Cameron.

Alternative methods for calculating grades from drilling samples are reviewed in the light of current experiences.

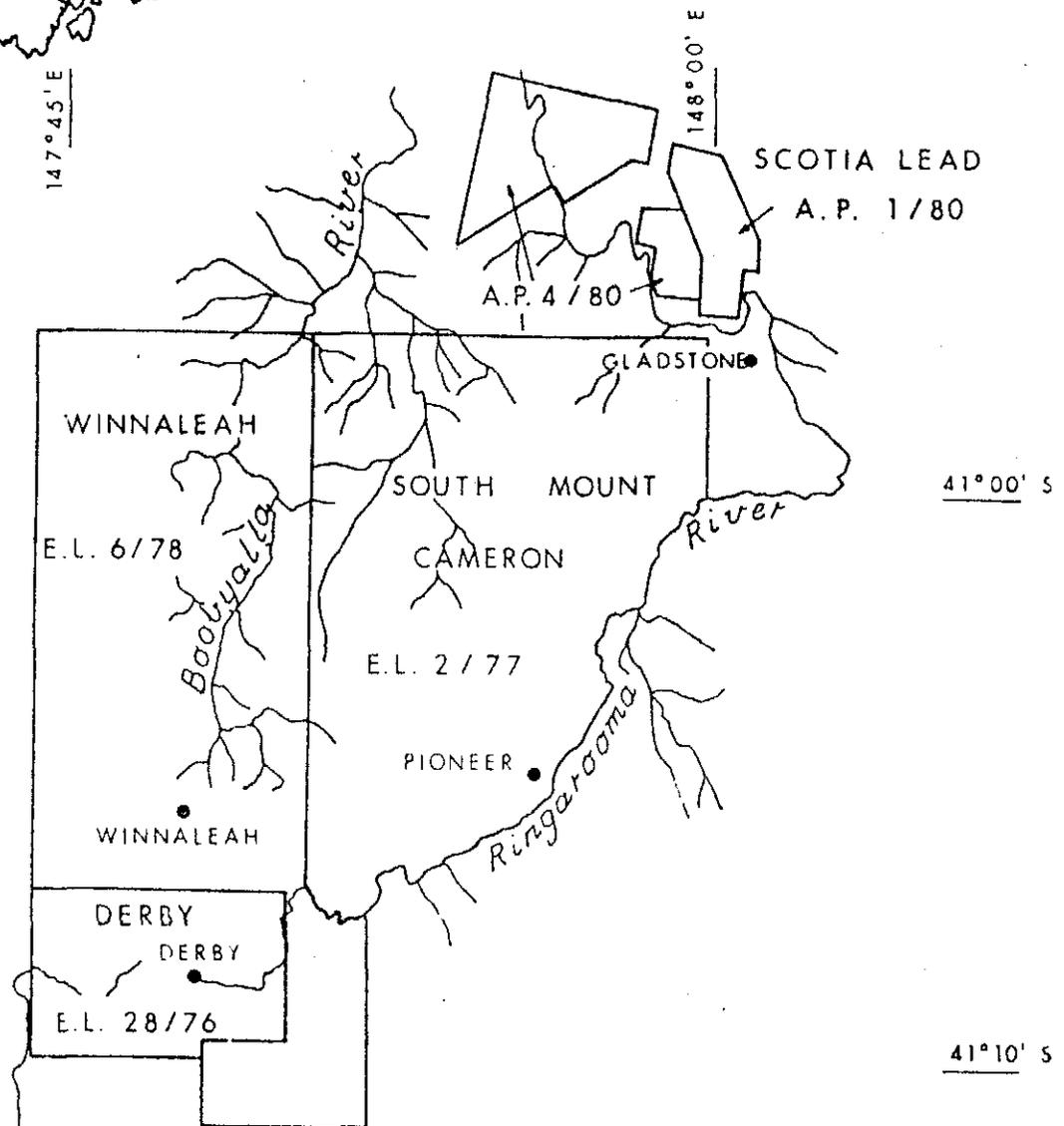
1.2 Tenement Details

The licence area covers 187km² in North East Tasmania (Fig. 1). The licence has been held continuously in the name of Kibuka Mines Pty. Limited since September 1977. Several Mining Leases are contained within the area covered by E.L. 2/77 and some exploration activities have crossed boundaries of Mineral Leases held by Amdex.

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Amdex Mining Limited

NORTH - EASTERN TASMANIA LOCATION MAP

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2. SUMMARY AND CONCLUSIONS

Three main styles of placer deposit mineralization are recognized, each with a characteristic sedimentology and heavy mineral assemblage. Their origins are best explained by a depositional model involving :-

- a) a pre-basalt system of fluvial fans, flowing from granitic highlands into a fresh water body.
- b) a post-basalt ancestral Ringarooma River which essentially followed the same course as the present river.

A strong case exists in favour of using the recovered tin/recovered sediment method of grade calculation for percussion drill samples.

Further drilling is required at Pioneer to test for outlets to the palaeo drainage system, northwest and west of the present mine. The nature of the junction between the Pioneer Lead and the Poverty Point Lead is not yet clearly understood.

An evaluation of past work on the Eastern Lead system has produced three target areas for future drilling.

Several targets have been selected for potential Clifton-type deposits around the base of Mount Cameron, and these targets are being sequentially drilled.

Potential exists for at least two more viable scraper-to-sluice box operations between Pioneer and Mount Cameron. ~~One~~ could be based at Watt's Mine and one at the site of the former Dorset Dredge operations.

3. GEOLOGY

3.1 Introduction

The regional geology of the Blue Tier granitic complex and the associated tin fields of North East Tasmania is well described by Groves (1977). In a previous Amdex six monthly report, McDonald (1979) reviews the regional geology and summarises concepts proposed by earlier explorers, with regard to the origin of placer tin in the area.

This section of the present report concentrates on current developments in the understanding of Cainozoic sedimentation in the Ringarooma Valley. These developments have resulted from; the interpretation of detailed field observation by Amdex geologists, the contribution made by research students sponsored by the company and productive communication between Amdex and Mines Department geologists.

3.2 Cainozoic Geology of the Ringarooma Valley

A rationalization of the geological variation exposed in the many mine workings within the area produces three main types of placer deposit, each with a characteristic sedimentology, heavy mineral assemblage and position relative to present sea level.

- 1) Deeply buried deposits of black and brown cassiterite with abundant ilmenite and monazite, in a sedimentary sequence dominated by stratified imbricated gravels, trough cross-bedded granules, planar cross-bedded sands and peat units (Fig. 2). This type is formed at a major break in basement slope (eg. Pioneer, Endurance, Briseis) and generally has a vertical range from 40-60 metres RL.
- 2) Deposits of coarse black cassiterite, relatively depleted in accessory heavy minerals, in poorly sorted, boulder-rich sediments (Fig. 3) at higher elevations and on steeper basement gradients than the deep leads. Examples of this type occur at Clifton, Harmons and along the Wyniford River.

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Fig. 2 Basal sediments, Pioneer Mine. Cassiterite is concentrated in inclined sets of imbricated gravels but the planar cross-bedded sands are barren. The erosional contact at the top of the gravels defines the deposit/overburden transition.



Fig. 3 Coarse, angular, poorly sorted sediments of the Type 2 deposit, Clifton 1980 Mine.

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3) Shallow surficial deposits of red, yellow, black and brown cassiterite with accessory spinel and gold, in preserved remnants of sheet-like bodies of pebbles, sands and clay (Fig. 4) . Surface deposits are restricted to the present Ringarooma River and to an elongated zone which runs essentially parallel to the river. They are not found below the level of the present river, however they commonly overlie Type 1 and Type 2 deposits. Examples of Type 3 deposits occur at Riverside, Endurance No. 1 and Watts.

A maximum age for Cainozoic sedimentation in the Ringarooma Valley has been inferred as Late Oligocene - Early Miocene (20 ± 5 m.y.) by pollen dating (Harris 1968, Morrison 1980). Regionally, basalts which stratigraphically overlie Type 1 deposits, and temporally separate Type 1 from Type 3 deposits, have been dated by the $^{40}\text{K} - ^{40}\text{Ar}$ method at 16m.y. (Brown 1977).

A depositional model, consistent with the nature of the three types of deposits recognized, involves a pre-basalt system of braided fluvial fans flowing into and being transgressed by a body of fresh water. This interpretation is based largely on a study of the sedimentology of the Pioneer deposit (Morrison 1980) and on the general agreement by company geologists currently working in the area, with work done by Tony Brown (Tasmanian Department of Mines) in relation to his fresh water deltaic interpretation of the deep lead overburden (Brown 1978). Consequent to the Miocene extrusion of basaltic lavas, which appear at their contacts with underlying sediments to have been subareal lavas deposited on dry sediment, the present Ringarooma River drainage system evolved.

This generalized model is applicable to all the placer deposits which have been examined in the area between Branxholm and Mount Cameron. In the Great Northern Plains region however, Tertiary and/or Quaternary sea level fluctuations, in response to glacial/interglacial stages, appear to have exerted a greater control over sedimentation.

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Fig. 4 Fining-up sequence of largely matrix-supported river terrace sediments, Riverside area.



Fig. 5 Small scale thrust faulting which has displaced a reduction front in basement granite, Pioneer Mine. The reduction front is related to peat units in the basal sediments and is early diagenetic with respect to these sediments.

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Apart from the nature of the depositional environment, the other major aspect of Cainozoic geology relevant to placer exploration is the degree to which post-depositional tectonics have disrupted the bodies of sediment. To date, evidence of intra-basin tectonics has been limited. In the Pioneer Mine, small scale depositional thrust faulting has been exposed (Fig. 5) and a penetrative foliation is preserved in some sets of planar cross-bedded sands. This foliation is interpreted as having formed during decollement creep, in response to either gradual tilting of the basement, or the applied load of overburden.

A northwest - southeast trending dextral fault can be inferred from Endurance Tin Mining Company and B.M.I. drilling to the west of Blue Lake (Fig. 6).

Field work within the E.L. area has produced no evidence of drastic tectonic disturbances and none is required to explain the vertical ranges of the three deposit types, considering the depositional model being proposed. This is consistent with Rattigan (1958) who measured barometric levels of basalt sediment contacts in the Ringarooma Valley and concluded that uniform uplift has occurred, prior to surface erosion then volcanism.

One of the most useful characteristics of placer geology in the Blue Tier province is the between-deposits variability of heavy mineral assemblages. A study of placer geology, with emphasis on heavy mineral species distributions, grain size distributions, chemical composition and inferred source rocks is currently being undertaken by Mr. W. Yim, a PhD student being sponsored by the company. An obvious contrast exists in the nature of the heavy mineral ore species in Type 3 deposits compared to those in both Type 1 and Type 2 deposits. A large proportion of the cassiterite grains in surface deposits are coloured red and yellow, in contrast to the black and brown cassiterite of the older deep lead deposits.

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In addition, between one and three ounces of gold per tonne of cassiterite are recovered from surface deposits, whereas gold is absent from Type 1 and Type 2 concentrates. The gold is probably derived from the Mathinna Group gold belt, parts of which are drained by the Ringarooma River. The absence of gold in the pre-basalt lead deposit implies that either a divide separated the gold belt rocks from the pre-basalt drainage system, or alternatively, that the gold belt was roofed by barren Mathinna Group rocks in the Early Miocene. The former seems more likely as many vein gold deposits hosted by the Mathinna Group appear to cut-out with depth (Groves 1963) and detrital gold does occur in other Tertiary alluvial deposits in Northern Tasmania (eg. Lefroy, Lisle).

4. SAMPLING METHODS AND GRADE CALCULATIONS

Three methods of sampling are currently employed :-

- 1) Cable tool percussion boring for deep and/or wet sediment. A 15.24cm diameter casing with a 16.03 shoe diameter is driven ahead of a slush pump with a clack valve mechanism. Samples are taken at two metre intervals down to approximately four metres below basement. The samples are left to settle and water is decanted.
- 2) A Gemco auger rig with 13.8cm auger flight diameter and a 14.2cm bit diameter is used for sampling shallow ground above the water table. Samples are taken at one metre intervals.
- 3) Manual trench sampling is used for grade control sampling in the Pioneer pit, and as an exploration method where old mine faces are exposed.

In all cases the sample volumes are measured and the samples are cradled and panned down to an estimated mass of about 100 grams including the heavy mineral concentrate. This product is powdered in a sieb technik mill and assayed for Sn by XRF at Pioneer. Cassiterite is the only mineral present containing significant quantities of Sn. The % Sn is converted to % SnO₂, assuming a 70% Sn content in cassiterite. This allows direct comparison with early methods of grade estimation and also brings the grade into line with the tin ore pricing system. Thus, proven reserves based on this system are reserves of saleable concentrate in the ground rather than reserves of pure cassiterite.

The problem of selecting the optimum grade calculation method still exists. Currently, when dealing with the results of auger drilling and trench sampling the % SnO₂ is referred to the measured volume of the original sample, and a grade of grms SnO₂ per cubic metre sediment is calculated. Percussion drill sample assays however are referred to 80% (Radford Factor) of the volume of the two metre hole when recovered volume is less than theoretical volume, and to the actual recovered volume when volume exceeds theoretical volume.

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The inconsistencies of this practise are clearly stated by Neale (1980) in his argument for the uniform use of the recovered tin/recovered sediment method. It is also noted that Toh (1978) claims that the Malaysian tin industry has demonstrated a high correlation between reserves based on the above method and true reserves, as proven by subsequent mining.

At Pioneer, the general case with percussion drill samples is for recovered volume to be less than theoretical volume. Three possible explanations for this are :

- a) Sediment is pushed away by the casing being driven into the ground.
- b) Slimes are lost in the boring process and build up inside the casing.
- c) Loss of slimes during handling and transport by the drillers.

The first process should not result in any selective sampling of heavy minerals relative to host sediment, remembering that this is an assumption of the recovered tin/theoretical volume method. Assuming that no recoverable cassiterite is contained in the slimes, which may themselves be 60% solid, explanations b) and c) would result in over-valuation if the recovered tin/recovered sediment method was used. The result of drilling on Pioneer tailings may partly elucidate the problem.

P.T.1 was drilled to a depth of 38 metres through a pile of old Pioneer Tin Mining Company elevated tailings sand. This sand is dry and of uniform fabric thus it is ideal for testing the recovery of the percussion drill equipment. Recovered volumes for the 19 two metre intervals ranged from 13 to 35 litres (Theoretical Volume = 40.31) and there is no trend in recovered volume with depth (Table 1). The absence of such a trend is typical of the Pioneer K - series drilling. The results of P.T.1 indicate that the action of driving casing displaces some material in the ground and does not encase a core with volume equal to that of the hole. This would seem to strengthen the case for referring recovered tin to the recovered

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volume of sediment, at least in relation to the Pioneer deposit. Extra care needs to be taken when handling recovered slimes and in some cases a flocculant should be used before decanting the water from the sample. Sediment expansion should approximately compensate for slimes inevitably lost during drill sampling.

5. CURRENT EXPLORATION

5.1 Deep Lead Systems

1) Pioneer - Poverty Point Deep Lead

The reconstruction of basement topography from drilling data and the interpretation of trough cross-bed dip directions in basal gravels exposed in the Pioneer pit, indicate that the present mine face is located approximately at the junction of two buried sediment-filled alluvial channels. These are the Pioneer (Wyniford , Lead, trending from the east and the Poverty Point Lead, trending from the south.

Percussion drilling during the period was confined to South Pioneer with the aim being to demonstrate a connection between the Football Ground deposit and the main deposit. This aim has been achieved with a resultant increase in probable reserves. Further in-fill drilling is needed to define a proven ore body. Drilling results are summarized in Table 2 and hole locations are shown on Fig. 7. It is intended that this drilling programme be continued in the up-lead (Poverty Point Lead) direction until the extent of the deposit is known.

An additional programme of at least 14 holes has been planned to test for outlets to the palaeo drainage system, northwest of the present mine. Although the down-lead limit to the deposit is inferred by a fence of low grade holes, it is possible that the system "pools out" again, as it appears to do in the area which contains the known deposit. Another possibility is that one or more narrow, sinuous channels containing mineralization, exist in the down-lead direction. Such deposits could be similar to those at Scotia and Locharber and thus would require a tight drilling grid to detect. In terms of the braided fluvial fan model, such deposits could represent the transition from mid-fan to lower fan (Boothroyd and Ashley 1975).

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The current approach to exploration at Pioneer involves a continual comparison between information obtained from drilling and from exposures in the mine face. Sampling of the different sediment types in the mine sequence indicates that planar cross-bedded sands and granules are consistently barren and that high grade mineralization is typically associated with; clast-supported, stratified gravels, near horizontal bodies of well-rounded quartz pebbles, and at the forest-toe of some trough cross-bedded pebbles and granules. Because of frequent lateral and vertical variation in fluvial sediments, and because of fluctuations in the supply of cassiterite at the time of deposition, it is very difficult to recognize trends in grade from the drilling data. As a result of this the grade indicated by a given hole cannot confidently be used to predict the grade of an "area of influence" about that hole.

Sedimentological information obtainable from drill samples is limited to grain size distributions and heavy mineral species, however pit sampling shows that bedding structures and the nature of clast sorting and packing exert control on heavy mineral grade. Sestini (1976) found a high correlation between packing density of gravels and high gold values in Ghanian Precambrian placers which he interpreted as braided alluvial fans. He also noted that although basal gravel bodies thickened in the downslope direction, there was an abrupt cut-off in grade, that is, the style of sedimentation which resulted in the production and preservation of a deposit was restricted to a limited distance downslope from a major break in basement slope. This principle has possible application at Pioneer, where despite the apparent abrupt downslope grade cut-off, drilling indicates a continuous basal sheet of gravel.

2) Eastern Lead System

A collation of past drilling results in the Corduroy Creek - A.B.C. Creek area was undertaken with the aims to firstly differentiate between surface deposits and the deep lead, and secondly to evaluate the potential of the deep lead, and if deemed necessary, plan a percussion drilling programme. Past drilling by Utah, Geophoto and

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Amdex is mapped on Fig. 8 and from reports by Warin and Appleby (1965) and Mortimore (1971) it is clear that most of the mineralization was encountered in the top 5 metres. Although a deep lead sedimentary sequence has been confirmed by drilling, only traces of deep lead mineralization were encountered.

Sediments exposed in Harmons Mine (grid co-ordinates 79900mE, 57900mN) appear to be remnants, the upper fan (Type 2) material, probably associated with the northern-most of the three tributaries in the Eastern Lead system, as defined by Geophoto scout drilling. A lenticular body of sandy clay exposed on the western side of Gladstone Road, about 50 metres north of the Corduroy Creek crossing, may be part of the overburden sequence of the main tributary. MacDonald (1979) pointed out that the predicted confluence of the central and southern tributaries had not been drilled and the conclusions reached from the current evaluation confirm that this area, centred at around 79000mE, 56000mN should be drilled, along with sets of holes planned to transect the northern and central gutters. The target in this area is a potential Pioneer-type deposit, however at this stage it must be considered as a low potential target relative to several others covered by the E.L.

3) Endurance Deep Lead

As the first step in a total evaluation of this deposit, a map showing the locations of previous drilling to the west of Blue Lake has been produced (Fig. 9).

5.2 Clifton-type Deposits

1) Introduction

In the fluvial fan model, the Clifton-type deposit is considered to represent upper-fan tributaries feeding into the mid-fan section, where the gradient is lower, the system fans out and Pioneer-type deposits are formed. Around the base of Mount Cameron, exposures of coarse angular basal sediments hosting coarse black cassiterite occur

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at several localities, at elevations higher than the deep deposits. This type is an attractive exploration target because they are usually contained in a well defined basement gutter and are buried beneath less than 20 metres of overburden. The high energy condition during sedimentation, and the relative nearness to source rocks, have resulted in a concentration of the heaviest and most dense sand grains in these upper-fan gutters, hence Clifton-type deposits are characterised by an abundance of coarse cassiterite and a high cassiterite to gangue heavy mineral ratio.

As a result of the successful Clifton 1980 mine, four small areas (Fig. 6) have been defined as potential depositories for cassiterite shed from a Tertiary Mount Cameron. None of these targets are of sufficient area to exceed the present size of the Clifton 1980 mine (8000 square metres) unless values extend out onto the main flat. The targets are being sequentially explored.

2) The Bonser Creek Basin

Upstream from the Bonser Creek bridge, spanning the Old Boobyalla Port Road, lies a one square kilometre button grass plain divided by a low ridge of Tertiary gravels. It is orientated northwest - southeast and abuts the granite mountain flanks at the southeastern end. The ridge sub-divides the basins into areas drained by the two major tributaries of Bonser Creek. Area 5 is an elongated strip, termed South Bonser Creek, and Area 6 is a smaller flat termed East Bonser Creek.

Limited exploration has been initiated to prospect for cassiterite which could underly these Tertiary gravels. (Table 3).

At South Bonser Creek, Area 5 a single percussion drill hole has been bored to a granite basement at 12.4 metres. Recovered cassiterite content was very low throughout. Further drill holes may be attempted further upstream, closer to the present break in slope, in dryer weather.

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The eastern Bonser Creek Area 6 is at present regarded as the most prospective target. Drainage into this flat is partly by a creek situated in a prominent N.W. - S. E. trending linearment. Its headwaters are separated from those of Clifton Creek by a small divide.

A drill line, anchored to granite outcrop at one end, is proposed for the near future to cross this basin. At least 9 bores will be needed if a 40 metre spacing is adhered to. A sledge-mounted rig and a bulldozer will be necessary equipment.

3) Sextus Creek - Ah Kaw Creek area

Exposures in old workings were examined by company geologists and research student Mr. W. Yim. Locally, very rich samples of coarse black cassiterite, with abundant topaz, were recovered from coarse wash. At this stage, the area rates below Bonser Creek in potential, however further work is planned as part of the on-going programme at Mount Cameron.

5.3 Surface Deposits

1) Introduction

Surficial deposits of ruby cassiterite with accessory gold are currently being worked by Amdex at Riverside and Endurance No. 1, and by several other miners within the area covered by E.L. 2/77. During the last period, an overall assessment of the potential for this type of deposit was undertaken in the Pioneer - Mount Cameron area. Figure 10 shows the distribution of known surface deposits and their spatial relationship to the present river. By using the river terrace concept it has been possible to predict the most likely areas of mineralization, and by recognizing that these deposits carry a diagnostic heavy mineral assemblage, it has been possible to map their distribution by hand auger prospecting and by trench sampling old mine faces. It is apparent that these terrace sediments show much less lateral variation in their sedimentary facies and their cassiterite grades, than the deep lead deposits, and consequently, less samples are required to delineate a deposit and estimate an average grade.

2) Watt's Area

A Programme of auger drilling using the Gemco rig with 13.8cm diameter auger flights and a 14.2cm diameter bit, was initiated after field prospecting revealed encouraging grades in faces of the old Watt's Mine.

A total of 31 holes (Fig. 11, Table 4) were drilled on a grid pattern originating at grid co-ordinates 79970mE, 57360mN. The auger rig proved ideal for rapidly sampling above the water table but dubious for work below the water table. Despite this problem, the method is considered suitable for exploration in shallow ground. When combined with channel sampling of faces in the mine, and extensive pan prospecting, a body of cassiterite bearing sediment surrounding Watt's Mine has been defined.

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This deposit involves an estimated 28 tonnes of cassiterite contained in 84,500 cubic metres of sediment, with a surface area of 52,500 square metres.

The prospect of further reserves buried beneath Endurance tailings is quite good as insitu wash containing cassiterite of payable grade is exposed on both sides of Clifton Creek. The nature of sediment covered by the Concrete Dam is also unknown and the drilling completed to date has not eliminated the possibility of more reserves southwest of Watt's Mine.

3) Endurance area

The pre-Endurance Mine course of Clifton Creek, south of the Blue Lake and buried beneath Endurance tailings, was predicted and a series of percussion holes (Fig. 6, Table 5) were bored in an attempt to find mineralization in the creek bed. The hypothesis behind this project was that Clifton Creek essentially follows the course of a Tertiary tributary to the Endurance deep lead system and therefore Clifton Creek may have reworked some of these Tertiary sediments and produced deposits which were subsequently buried by Endurance tailings.

The drilling showed that between 2 and 5 metres of tailings overlie between 0 and 5 metres of unworked sediment. Although overall grades up to 259 grms SnO₂/cubic metre were encountered in the unworked sediment (E. P. 33), the dilution effect of the overlying tailings reduces the grade to sub-economic levels. Heavy minerals recovered from all seven bore holes were of the surface deposit assemblage and no basement gutter was defined. These results imply that the area sampled is an extension of the sheet of terrace sediment which is currently being worked at Endurance No. 1. The tailings were sampled in two holes (E.P.32, E.P.33) and both were barren.

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4) Riverside - Swains Area

By analogy with the previously mined Post Office deposit in combination with detailed prospecting and air photo interpretation it is estimated that reserves in the order of 50 tonnes of cassiterite and 50 ounces of gold remain in this area. The mineralization is contained in both unworked ground and tailings. A profitable operation is currently supported by this deposit and the ground is continuously monitored.

5) A.B.C. Creek - Corduroy Creek Area

As mentioned in Section 5.1 (2) previous drilling for an Eastern Lead deposit encountered reasonable cassiterite grades in the surface 5 metres and this area has recently been prospected with the view to find a deposit suitable for another scraper-to-slucice box operation.

On the eastern side of Gladstone Road, tin-bearing terrace sediment is exposed at the site of the Dorset Dredge ruins, and this is a likely site for setting up an operation should adequate reserves be demonstrated. To date a surface deposit in the order of 50 tonnes has been inferred, however, silicrete and ferricrete hard pans are common near the surface and much of the cassiterite may be unavailable to entirely hydraulic separation methods.

6. PROPOSED EXPLORATION FOR THE NEXT SIX MONTHLY PERIOD.

During the next exploration period, the following programmes are expected to be continued or initiated.

- 1) Percussion drilling for possible outlets to the Pioneer system, west of the proven deposit.
- 2) Percussion drilling for a possible Eastern Lead deposit.
- 3) Drilling and backhoe testing in the Monarch area.
- 4) Continuing percussion drilling to find Clifton-type deposits around the base of Mount Cameron.
- 5) Compilation and analysis of all past work on the Endurance deep lead.
- 6) Auger drilling and backhoe sampling to test for surface deposits south of Dorset Flats.

7. REFERENCES

- Boothroyd, J.C. & Ashley, G.M. 1975. Processes, bar morphology and sedimentary structures on braided outwash fans, northeastern Gulf of Alaska, in Jopling, A.V. & McDonald, B.C. Eds. Glaciofluvial and glaciolacustrine sedimentation. S.E.P.M. Special Pub. 23, 193 - 222
- Brown, A. V. 1977. Preliminary report on age determination of basalt samples from Ringarooma 1:50,000 sheet. Unpublished Report Dept. Mines Tasmania 1977/25
- Brown, A. V. 1978. Tertiary lead and basin - Winnaleah Map Sheet. Unpublished Report Dept. Mines Tasmania 1978/7
- Groves, D.I. 1963. Geology of the Lefroy Goldfield. Tech. Report Dept. Mines Tasmania 9: 59 - 76
- Groves, D. I. 1977. The geology, geochemistry and mineralization of the Blue Tier Batholith, in Groves, D.I. et. al. The Blue Tier Batholith. Geol. Surv. Bull. Dept. Mines Tasmania 55: 7 - 116
- Harris, W. K. 1968. Tasmanian Tertiary and Quaternary microfloras. Summary Report. Palaeont. Rep. Dept. Mines S.A. 5/68
- McDonald, L. 1979. Exploration Licence 2/77 South Mount Cameron. Unpublished 6 monthly report for the period ending 8/3/1979.
- Morrison, K. C. 1980. Sedimentology of the Pioneer placer deposit. Hons. Thesis. University of Tasmania : Hobart
- Mortimore, I. 1971. Report on percussion drilling on the Eastern Leads alluvial tin prospect - South Mount Cameron area, E.L. 6/78, N.E. Tasmania. Open File Rep. Dept. Mines Tasmania 32/38

Neale, T. I. 1980. Ore reserves of alluvial tin deposits in North-East Tasmania. Unpublished Tech. Report. Amdex Mining Ltd.

Rattigan, J. H. 1958. The prospects for alluvial and other secondary tin deposits within S.P.L. 323, N.E. Tasmania.

Open File Rep. Dept. Mines Tasmania. 32/4

Sestini, G. 1973. Sedimentology of a palaeoplacer: The gold-bearing Tarkwaian of Ghana, in Amstutz, G.C. and Bernard, A. J. Eds. Ores in sediments. 275 - 305

Toh, E. S. C. 1978. Comparison on exploration for alluvial tin and gold. Proc. 11th Comm. Min. Metall. Congress, Hong Kong: 269-275

Warin, O. N. & Appleby, W. R. 1965. Progress of investigations for tin in North-East Tasmania. Utah Development Company.

Open File Rep. Dept. Mines Tasmania. 32/15

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APPENDIX I

AMIDEA MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Ared: **PIONEER** Hole No: Pioneer Collar Co-ordinates: 52210 mN 78305 mE Drilling Method: **PERCUSSION**
 tailings l.
 Surface R.L.: **94.7** m Basement R.L.: **56.7** m Cutting Shoe / Bit diameter: **16.02cm.** Theoretical Volume: **40.3** litres

Date: **30/6/80** Driller: G. Groves Assistant: S. Woods Sample Washer: S. Moore Geologist: **K. Morrison**

Section	Metres	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * (g SnO ₂ /m ³)	Grade + (g SnO ₂ /m ³)	Description of Sample
0m	To								
0	2	5022	21LTRS	152.6	8.18	17.83		29.1	C & f sand, heavy drift, white clay, birds eye wash. Ilmenite, Monazite.
2	4	5023	26 1/2 "					29.1	C & f sand, heavy drift, white clay, birds eye wash. Ilmenite, monazite.
	6	5024	18 "					29.1	C & f sand, heavy drift, white clay, birds eye wash. Ilmenite, monazite.
6	8	5025	17 "					29.1	C & f sand, heavy drift, white & yellow clay, birds eye wash. Ilmenite, monazite.
8	10	5026	35 "					29.1	C & f sand, heavy drift, white, yellow & brown clay, birds eye wash. Trace of f. tin, ilmenite.
10	12	5027	16 "					29.1	C & f sand, heavy drift, white clay, birds eye wash. Trace of f. tin, ilmenite, monazite.
12	14	5028	17 "	19 grouped samples				29.1	C & f sand, heavy drift, yellow clay. Ilmenite, monazite.
14	16	5029	25 "					29.1	C & f sand, heavy drift, birds eye wash. Trace of tin, ilmenite, monazite.
16	18	5030	16 "					29.1	C & f sand, heavy drift, birds eye wash, white clay. Ilmenite, monazite.
18	20	5031	23 1/2 "					29.1	C & f sand, heavy drift, birds eye wash, white clay. Ilmenite, monazite.
20	22	5032	24 "					29.1	C & f sand, heavy drift, birds eye wash, white clay. Ilmenite, monazite.
22	24	5033	19 1/2 "					29.1	C & f sand, heavy drift. Ilmenite, monazite.
24	26	5034	13 "					29.1	C & f sand, heavy drift, white clay. Ilmenite, monazite.
26	28	5035	21 "					29.1	C & f sand, heavy drift, birds eye wash, white clay. Trace of tin, ilmenite, monazite.
28	30	5036	21 "					29.1	C & f sand, heavy drift, birds eye wash, white clay. Sm. amount tin, ilmenite, monazite.

Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad F=80%
 illers reported basement at m. Grade from surface to inferred basement at m g SnO₂ / m³ *
 total recovered volume, surface to basement **390** l. at **38.0** m **29** g SnO₂ / m³ +
 total recovered tin **17.83** g SnO₂

045028

AMDEX MINING LIMITED - NORTH EAST TASMANIA - DRILLING SUMMARY

AREA: WATTS - HARMONS

YEAR: 1980

DRILLING METHOD: 14.2 cm. Auger

TABLE 4

Core No	Collar Coordinates mN mE	Surface P.L.	Basement R.L.	Depth Drilled (m)	Depth to Basement (m)	Area of influence (m ²)	Volume (m ³)	Total rec volume to basement (l)	Total rec SnO ₂ (g)	Grade * (gSnO ₂ /m ³)	Contained SnO ₂ (kg)	Grade + (gSnO ₂ /m ³)	Contained SnO ₂ (kg)				
A78				5	2			29		5							
A79				2	1			10		7							
A80				2	1.5			18.5		10							
A81				3	2			26		16							
A82				3	0.8			8		31							
A83				2	2			21		27							
A84				2	1.2			12.6		71							
A85				2	1			14		61							
A86				1	1			11		26							
A87				8	NOT	BOTTOMED				9							
A88				4	3			37		57							
A89				8	NOT	BOTTOMED				28							
A90				5	4.5			50.5		535							
A91				2	1.5			22		211							
A92				3	2.6			38.6		91							
A93				3	NOT	BOTTOMED				110							
A94				3	1.9			22.8		216							
TOTALS																	

* See calculated by relating recorded volume to recovered tin

Author:

+ See calculated by relating Radford factored volume to recovered tin (Rad Fac = 80%)

Date:

045032

AMDEX MINING LIMITED - NORTH EAST TASMANIA - DRILLING SUMMARY

AREA: WATTS HARMONS

YEAR: 1980

DRILLING METHOD: 14.2 cm. Auger

Core No.	Coilar Coordinates mN mE	Surface R 1	Basement R 1	Depth Drilled (m)	Depth to Basement	Area of influence (m ²)	Volume (m ³)	Total rec volume to basement (L)	Total rec SnO ₂ (g)	Grade * (gSnO ₂ /m ³)	Contained SnO ₂ (kg)	Grade + (gSnO ₂ /m ³)	Contained SnO ₂ (kg)				
A95				3	1.8			25.2		323							
A96				2	1			15		87							
A97				2	NOT BOTTOMED					9							
A98				2	1.4			20.3		16							
A99				3	1			11		21							
A100				3	2			21		10							
A101				3	2			16		40							
A102				7	3			45		178							
A103				3	2			24		341							
A104				3	2			21		572							
A105				6	3			34		331							
A106				3	2			25		50							
A107				5	4.6			56.4		57							
A108				3	2.2			21.4		19							
TOTALS																	

Grade calculated by relating recorded volume to recovered tin

Author:

Grade calculated by relating Radford factored volume to recovered tin (Rad Fac = 80%)

Date:

045033

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: Pioneer Hole No: K124 Collar Co-ordinates: 451900 mN 577500 mE Drilling Method: Percussion.....

Surface R.L. 85.43 m Basement R.L. 51.63 m Cutting Shoe / Bit diameter: 16.02 cm Theoretical Volume: 40.3 litres

Date: 20-3-80 Driller: M. Moore Assistant: G. Groves Sample Washer: S. Moore Geologist: K. Morrison.....

Section	Metres	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * g SnO ₂ / m ³	Grade † g SnO ₂ / m ³	Description of Sample
From	To								
1	2	4060	27.4	133.4	0.24	0.46	16.8	14.2	Black topsoil, coarse & fine sand, Trace of very fine tin, monozite.
2	4	4061	30.2	137.8	5.26 5.03	10.35 9.90	342.9 327.8	321.1 307.1	C&F sand, organic silt wood. heavy drift. Fine tin, ilminite & monozite.
4	6	4062	29.0				3.6	2.9	C&F sand, organic silt & wood. Pyrite.
6	8	4063	24.9				3.6	2.9	C&F sand, organic silt, brown clay. Pyrite & ilminite.
8	10	4064	24.2				3.6	2.9	C&F sand, brown clay. Pyrite & ilminite.
10	12	4065	28.6				3.6	2.9	C&F sand, organic silt.- Pyrite.
12	14	4066	31.8				3.6	2.9	C&F sand, Pyrite.
14	16	4067	21.4	11 grouped samples			3.6	2.9	C&F sand, white clay, Pyrite.
16	18	4068	23.8	141.4	0.47	0.95	3.6	2.9	C&F sand, brown clay - Pyrite.
18	20	4069	29.0				3.6	2.9	C&F sand, brown cement - Pyrite.
20	22	4070	20.9				3.6	2.9	C&F sand, brown clay - Pyrite.
22	24	4071	12.5				3.6	2.9	C&F sand, brown & white clay - Pyrite.
24	26	4072	20.2				3.6	2.9	C&F sand, brown & white clay heavy drift. Pyrite & ilminite.
26	28	4073	13.7	100.3	3.18	4.56	332.6	141.3	C&F sand, brown & white clay heavy drift. Trace of tin, ilminite & pyrite.
28	30	4074	35.5	172.7	3.11	7.67	216.1	238.0	C&F sand, white clay heavy drift Trace of tin & Pyrite.

* Grade calculated by relating recovered volume to recovered tin † Grade calculated by relating Radford factored theoretical volume to recovered tin Rad F = 80%
 Drillers reported basement at 33.80 m Grade from surface to inferred basement at m
 Total recovered volume surface to basement 422.9 l at 33.80 m 194 (199) g SnO₂ / m³ *
 Total recovered tin 105.85 g SnO₂ (108.59) at 33.80 m 250 (257) g SnO₂ / m³ †

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: Pioneer Hole No: K125 Collar Co-ordinates: 77500 mN 52100 mE Drilling Method: Percussion

Surface R.L.: 94.30 m Basement R.L.: 51.50 m Cutting Shoe / Bit diameter: 16.02 cm Theoretical Volume: 40.3 litres

Date: 28-3-80 Driller: N. Moore Assistant: G. Groves Sample Washer: S. Moore Geologist: K. Morrison

Section	Metres	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * (g SnO ₂ /m ³)	Grade † (g SnO ₂ /m ³)	Description of Sample
From	To								
0	2	4079	34.3					2.7	Black topsoil, coarse & fine sand, heavy drift, brown cement, yellow clay. Trace of very fine tin, monozite.
2	4	4080	28.2*					2.7	C&F sand, yellow clay. Ilminite & monozite.
4	6	4081	23.8*					2.7	C&F sand, yellow clay. Ilminite & monozite.
6	8	4082	20.2*					2.7	C&F sand, white clay. Ilminite & monozite.
8	10	4083	19.3*					2.7	C&F sand, white & yellow clay. Ilminite & monozite.
10	12	4084	35.1					2.7	C&F sand, ilminite & monozite.
12	14	4085	22.2*					2.7	C&F sand, white clay. ilminite & monozite.
14	16	4086	14					2.7	C&F sand, brown & white clay. heavy drift -Pyrite.
16	18	4087	18					2.7	C&F sand, brown clay. pyrite.
18	20	4088	28	19	grouped	samples.		2.7	C&F sand, organic silt, pyrite lumps. Pyrite.
20	22	4089	26	106.3	1.12	1.70		2.7	As above.
22	24	4090	19					2.7	As above.
24	26	4091	26					2.7	C&F sand, organic silt, brown clay, Pyrite.
26	28	4092	26					2.7	C&F sand, brown clay - Pyrite.
28	30	4093	52					2.7	C&F sand, brown silt & clay - Pyrite.

* Grade calculated by relating recovered volume to recovered tin † Grade calculated by relating Radford factored theoretical volume to recovered tin RadF=80%
 Drillers reported basement at 42.80 m Grade from surface to inferred basement at _____ m
 Total recovered volume, surface to basement 531.7 l at 42.80 m 79 g SnO₂/m³ *
 Total recovered tin 54.86 g SnO₂ at _____ m _____ g SnO₂/m³ †

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: Pioneer Hole No.: K125 Collar Co-ordinates: 77500 mN 52100 mE Drilling Method: Percussion

Surface R.L.: 49.30 m Basement R.L.: 51.50 m Cutting Shoe / Bit diameter: 16.02 cm Theoretical Volume: 40.3 litres

Date: 8-4-80 Driller: M. Moore Assistant: G. Groves Sample Washer: S. Moore Geologist: K. Morrison

Section	Metres	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (gSnO ₂)	Grade * (gSnO ₂ /m ³)	Grade † (gSnO ₂ /m ³)	Description of Sample
From	To								
	32	4094	32				2.7		Coarse & fine sand, white clay. Pyrite.
32	34	4095	17				2.7		C&F sand, heavy drift. Ilminite & monozite.
34	36	4096	28				2.7		C&F sand, ilminite Monozite.
36	38	4097	19				2.7		C&F sand, white clay, ilminite & monozite.
38	40	4098	19	99.9	2.39	3.41	105.8		C&F sand, white clay, small amount of birds eye wash, small amount tin, ilminite.
40	42	4099	19*	86.5	22.3	27.56	854.7		C&F sand, birds eye wash, white clay. Tin & ilminite.
42	43	4100	14*	73.8	11.8	12.44	771.7		Decomposed granite, C&F sand, birds eye wash. Tin & ilminite.
43	44	4301	8*	79.6	4.96	5.64	349.9		Decomposed granite, small amount tin, ilminite.
44	45	4302	16*	81.7	1.81	2.11	131.1		Decomposed granite Trace of tin ilminite & pyrite.
45	46	4303	18*	66.1	1.31	1.23	76.7		Decomposed granite, v/fine trace tin mono. Pyrite.
	47	4304	10.5*	82.0	0.66	0.77	48.0		Decomposed granite, Pyrite & monozite.

* Grade calculated by relating recovered volume to recovered tin † Grade calculated by relating Radford factored theoretical volume to recovered tin RadF=20%
 Drillers reported basement at 42.80 m. Grade from surface to inferred basement at m g SnO₂ / m³ *
 Total recovered volume, surface to basement ... 531.7 ... l. at 42.8 m 79 g SnO₂ / m³ +
 Total recovered tin 54.86 g SnO₂

045038

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: **Pioneer** Hole No.: **K126** Collar Co-ordinates: **52100** mN **77600** mE Drilling Method: **Percussion**

Surface R.L.: **90.98** m Basement R.L.: **51.48** m Cutting Shoe / Bit diameter: **16.02** cm Theoretical Volume: **40.3** litre

Date: **14-4-80** Driller: **M. Moore** Assistant: **G. Groves** Sample Washer: **S. Moore** Geologist: **K. Morrison**

Section	Metres	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (gSnO ₂)	Grade * gSnO ₂ /m ³	Grade + gSnO ₂ /m ³	Description of Sample
From	To								
0	2	4305	39 Ltrs.	3 grouped samples.			10.0		C&F sand, heavy drift. Trace of fine tin; ilminite & monozite.
2	4	4306	34 " "	83.0	0.82	0.97	10.0		C&F sand, yellow & white clay. Ilminite & monozite.
4	6	4307	35 " "				10.0		C&F sand, yellow clay, brown cement. Ilminite & monozite.
6	8	4308	22½ " "	100.1	1.07	1.53	47.5		C&F sand, heavy drift, small wash, brown clay small amount of tin, ilminite & monozite.
8	10	4309	23 " "				7.5		C&F sand, brown clay. Trace of fine tin, ilminite, monozite.
10	12	4310	24 " "				7.5		C&F sand, white clay, heavy drift. Ilminite & monozite.
12	14	4311	33 " "				7.5		C&F sand, white clay, wood. Ilminite & pyrite.
14	16	4312	32 " "				7.5		C&F sand, organic silt. Pyrite.
16	18	4313	25½ " "				7.5		C&F sand, organic silt. Pyrite.
18	20	4314	17 " "	14 grouped samples.			7.5		C&F sand, organic silt. Pyrite.
20	22	4315	16½ " "	161.9	1.46	3.38	7.5		C&F sand, brown & white clay. Pyrite.
22	24	4316	23 " "				7.5		C&F sand, Brown & white clay. Pyrite.
24	26	4317	21 " "				7.5		As above.
26	28	4318	11 " "				7.5		As above.
28	30	4319	26 " "				7.5		C&F sand, white clay. Ilminite & monozite.

* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad.F =
 Drillers reported basement at **39.50** m. Grade from surface to inferred basement at **39.50** m **155** g SnO₂ / m³ *
 Total recovered volume, surface to basement **467.9** l. at **39.50** m **155** g SnO₂ / m³ +
 Total recovered tin **99.06** g SnO₂

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: **Pioneer** Hole No.: **K126** Collar Co-ordinates: **52100** mN **77600** mE Drilling Method: **Percussion**

Surface R.L. **90.98** m Basement R.L. **51.48** m Cutting Shoe / Bit diameter: **16.02 cm** Theoretical Volume: **40.3** litre

Date: **18-4-80** Driller: **M. Moore** Assistant: **G. Groves** Sample Washer: **S. Moore** Geologist: **K. Morrison**

Section Metres		Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * (g SnO ₂ /m ³)	Grade + (g SnO ₂ /m ³)	Description of Sample
From	To								
30	32	4320	17 Ltrs.					7.5	Coarse & fine sand, white clay. Ilminite & monozite.
32	34	4321	19 "					7.5	C&F sand, white clay, heavy drift, small wash. Very fine trace of tin, ilminite & monozite.
34	36	4322	13 "					7.5	C&F sand, heavy drift, small wash. Ilminite & monozite.
36	38	4323	25 **	137.0	30.0	58.71		1821.2	C&F sand, white clay, birds eye wash & med. Tin & ilminite.
38	40	4324	17 **	118.8	13.4	22.74		705.4	C-F sand, granite, Tin, ilminite & pyrite.
40	41	4325	18 ***	124.7	3.68	6.56		406.7	Decomposed granite. small amount of tin & pyrite.
41	42	4326	21 **	171.2	1.11	2.71		129.3	Decomposed granite. Trace of tin & pyrite.
42	43	4327	18 **	149.0	0.82	1.75		108.3	Decomposed granite. V/F trace of tin & pyrite.
43	44	4328	17 **	104.7	0.26	0.39		24.1	Decomposed granite. Pyrite.
44	45	4329	18 **	88.4	0.25	0.32		19.6	Decomposed granite. Pyrite.
AMDEX ASSAY									
* Denotes sample settled prior to measuring recovered volume.									

* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad.F =
 Drillers reported basement at **39.50** m. Grade from surface to inferred basement at m g SnO₂ / m³ *
 Total recovered volume face to basement **99.08** L. at **39.50** m g SnO₂ / m³ *
 Total recovered tin g SnO₂

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: **Pioneer** Hole No: **K127** Collar Co-ordinates: **542 100** mN **77 700** mE Drilling Method: **Percussion**

Surface R.L.: **84.53** m Basement R.L.: **53.23** m Cutting Shoe / Bit diameter: **16.02** cm Theoretical Volume: **40.3** litres

Date: **28-4-80** Driller: **M. Moore** Assistant: **O. Groves** Sample Washer: **S. Moore** Geologist: **K. Morrison**

Section from	Metres To	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * g SnO ₂ / m ³	Grade + g SnO ₂ / m ³	Description of Sample
0	2	4330	31 Ltrs.				11.0	C&F sand, Trace of fine tin & monozite.	
2	4	4331	41 "				11.0	As above.	
4	6	4332	18 "				11.0	C&F sand, white clay. Ilminite & monozite.	
6	8	4333	30½ "	246.6	1.41	4.97	11.0	C&F sand, heavy drift, brown silt. Pyrite Ilminite.	
8	10	4334	28 "				11.0	C&F sand, organic silt. wood, Pyrite.	
10	12	4335	16 "				11.0	C&F sand, organic silt. Pyrite.	
12	14	4336	50½ "				11.0	C&F sand, white clay, organic silt, pyrite lumps. Pyrite.	
14	16	4337	23 "				11.0	C&F sand, brown clay, wood. Pyrite, monozite.	
16	18	4338	28 "				11.0	C&F sand, brown clay & silt, wood. Pyrite.	
18	20	4339	28½ "				11.0	C&F sand, brown clay, pyrite lumps. Pyrite.	
20	22	4340	26 "	14	samples grouped		11.0	C&F sand, brown clay. Pyrite.	
22	24	4341	14 "				11.0	C&F sand, heavy drift. Trace of tin & pyrite, ilminite.	
24	26	4342	26 "				11.0	C&F sand, brown clay, small wash. Trace of tin, ilminite & pyrite.	
26	28	4343	16 "				11.0	C&F sand, brown clay. Ilminite & pyrite.	
28	30	4344	26 "	133.2	0.82	1.56	48.4	C&F sand, brown clay. Very fine trace of tin & pyrite.	

Grade calculated by relating recovered volume to recovered tin at **31.30** m. + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad.F = 60%
 Drillers reported basement at **53.23** m. Grade from surface to inferred basement at **30.3** m.
 Total recovered volume, surface to basement **404.3** l. at **30.3** m **71** g SnO₂ / m³ +
 Total recovered tin **1400** g SnO₂ at **30.3** m **71** g SnO₂ / m³ +

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: **Pioneer** Hole No: **K128** Collar Co-ordinates: **52 200** mN **77 550** mE Drilling Method: **Percussion**

Surface R.L.: **91.82** m Basement R.L.: **61.82** m Cutting Size / Bit diameter: **16.02** cm Theoretical Volume: **40.3** litres

Date: **6-5-80** Driller: **M. Moore** Assistant: **G. Groves** Sample Washer: **S. Moore** Geologist: **K. Morrison**

Section from	Metres To	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * (g SnO ₂ /m ³)	Grade + (g SnO ₂ /m ³)	Description of Sample
0	2	4351	30% Ltrs.					9.3	C&F sand, Trace of fine tin, ilminite & monozite.
2	4	4352	16 "					9.3	C&F sand, brown silt. Trace of very fine tin, monozite.
4	6	4353	9 "					9.3	White clay, c&F sand, Ilminite & monozite.
6	8	4354	22% "	190.5	1.32	3.59		9.3	C&F sand, white clay. Ilminite & monozite.
8	10	4355	10 "					9.3	C&F sand, Ilminite & monozite.
10	12	4356	30 "					9.3	C&F sand, brown clay. Ilminite & monozite.
12	14	4357	20% "	12 grouped samples				9.3	C&F sand, brown clay. Ilminite & monozite.
14	16	4358	16 "					9.3	C&F sand, Ilminite & monozite.
16	18	4359	28 "					9.3	C&F sand, brown & white clay. Ilminite & monozite.
18	20	4360	23 "					9.3	C&F sand, brown & white clay. Pyrite.
20	22	4361	15% "					9.3	C&F sand, organic silt. Pyrite.
22	24	4362	13 "					9.3	C&F sand, white sandy clay. Pyrite.
24	26	4363	23 "	80.2	1.02	1.17		36.2	C&F sand, heavy drift, Trace of Tin & ilminite & monozite.
26	28	4364	20 "	81.0	0.16	0.19		5.7	C&F sand, white clay. Ilminite & monozite.
28	30	4365	14 "	86.5	0.04	0.05		1.5	C&F sand, white clay, granite. Trace of ilminite & pyrite.

Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Raaford factored theoretical volume to recovered tin Rad.F=80%
 Drillers reported basement at **30** m. Grade from surface to inferred basement at **30** m.
 Total recovered volume, surface to basement **291** l. at **30** m. g SnO₂/m³ +
 Total recovered tin **5.35** g SnO₂ at **11** m. g SnO₂/m³ +

045044

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: **Pioneer** Hole No: **K128** Collar Co-ordinates: **52 200** mN **77 550** mE Drilling Method **Percussion**

Surface R.L. **91.82** m Basement R.L. **61.82** m Cutting Shoe / Bit diameter: **16.02** cm Theoretical Volume: **40.3** litres

Date: **9-5-80** Driller: **M. Moore** Assistant: **G. Groves** Sample Washer: **S. Moore** Geologist: **K. Morrison**

Section from	Metres To	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * (g SnO ₂ /m ³)	Grade + (g SnO ₂ /m ³)	Description of Sample
30	31	4366	16 Ltrs*	125.4	0.08	0.14	8.9	Decomposed granite, C&F sand, Trace of Pyrite.	
31	32	4367	8 "	96.2	0.05	0.07	4.3	Decomposed granite, Trace of Pyrite.	
32	33	4368	8½ "	99.3	0.05	0.07	4.4	Decomposed granite. Trace of Pyrite.	
33	34	4369	11 "	74.3	0.07	0.07	4.4	Decomposed granite. Trace of Pyrite.	
AMDEX ASSAY									

* Denotes sample settled prior to measuring recovered volume.

* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Rafford factored theoretical volume to recovered tin Raff.F=80%
 Drillers reported basement at **30** m. Grade from surface to inferred basement at **30** m. g SnO₂ / m³ =
 Total recovered volume, surface to basement **291** l. at **30** m **11** g SnO₂ / m³ +
 Total recovered tin **5.35** g SnO₂

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

COPY TO
T.N.
G.B.

Area: FIGHELLER X Hole No. K 129 Collar Co-ordinates: 52250 mN 77450 mE Drilling Method: PERCUSSION

Surface R.L.: 91-25 m Basement R.L.: 53-45 m Cutting Shoe / Bit diameter: 16.02 cm Theoretical Volume: 40.3 litres

Date: 15-5-80 Driller: R. HOCKEY Assistant: G. GROVES Sample Washer: L. MOORE Geologist: K. ROBRISON
MUNRO

Section	Metres	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (gSnO ₂)	Grade * (gSnO ₂ /m ³)	Grade + (gSnO ₂ /m ³)	Description of Sample
From	To								
0	2	4370	28	81.0	1.32	1.77		3.23	C & F sand, white clay. Trace of fine tin, ilmenite and monozite.
2	4	4371	29%					3.23	C & F sand. Ilmenite and monozite.
4	6	4372	20					3.23	C & F sand, white clay, ilmenite and monozite.
6	8	4373	30	17	Grouped Samples			3.23	C & F sand, white clay, ilmenite and monozite.
8	10	4374	25					3.23	C & F sand, white clay, ilmenite and monozite.
10	12	4375	19%					3.23	' As above '
12	14	4376	19%					3.23	C & F sand, brown and white clay, ilmenite and monozite.
14	16	4377	13					3.23	C & F sand, brown clay, ilmenite and monozite.
16	18	4378	22%					3.23	' As above '
18	20	4379	20					3.23	C & F sand, ilmenite and monozite.
20	22	4380	18					3.23	C & F sand, brown clay, ilmenite and monozite.
22	24	4381	23					3.23	C & F sand, white clay, trace of ilmenite.
24	26	4382	15%					3.23	C & F sand, white clay, ilmenite and monozite.
26	28	4383	27					3.23	' As above '
28	30	4384	30					3.23	White clay, C & F sand, ilmenite and monozite.

* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad F=80%
 Drillers reported basement at 37.80 m. Grade from surface to inferred basement at m g SnO₂ / m³ *
 Total recovered volume, surface to basement 412.2 l. at 37.8 m 54.4 g SnO₂ / m³ +
 Total recovered tin 34.39 g SnO₂

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: PIONEER Hole No.: K 129 Collar Co-ordinates: 52250 mN 77450 mE Drilling Method: PERCUSSION

COPY TO
F.Y.
T.N.
C.B.

Surface R.L.: 91-25 m Basement R.L.: 53-45 m Cutting Shoe / Bit diameter: 10.02 cm Theoretical Volume: 40.3 litres

Date: 22-5-80 Driller: S. FOCRE Assistant: G. GROVES Sample Washer: S. FOCRE Geologist: M. MORRISON

Section	Metres	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * (g SnO ₂ /m ³)	Grade + (g SnO ₂ /m ³)	Description of Sample
From	To								
	32	4385	15				3.23		F sand, white clay, ilmenite and monazite.
	34	4386	22				3.23		C & F sand, white sand, clay. Ilmenite and monazite.
	36	4387	21	93.5	11.60	19.49	470.5		C & F sand, medium wash, white clay, small amount of tin and ilmenite.
	38	4388	18	106.1	8.15	12.35	383.2		C & F sand, small & medium wash, granite, tin, ilmenite and monazite.
	39	4389	11	92.1	2.21	2.91	180.4		C & F sand, decomposed granite, small amount tin and ilmenite.
	40	4390	14	110.9	0.74	1.17	72.7		Decomposed granite, trace of tin and pyrite.
	41	4391	16	98.1	0.25	0.35	21.7		Decomposed granite - pyrite.
	42	4393	5	99.3	0.10	0.14	8.8		' As above '
	43	4394	11	84.8	0.17	0.21	13.8		' As above '

* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad.F = 80%
 Drillers reported basement at 37.80 m. Grade from surface to inferred basement at 37.80 m 54.4 g SnO₂ / m³ *
 Total recovered volume, surface to basement 415.2 l. at 37.80 m 54.4 g SnO₂ / m³ +
 Total recovered tin 34.39 g SnO₂

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: PIONEER Hole No: K130 Collar Co-ordinates: 52.000 mN 77.700 mE Drilling Method: PERCUSSION

Surface R.L.: 84.31 m Basement R.L.: 58.01 m Cutting Shoe / Bit diameter: 16.02 cm. Theoretical Volume: 40.3

Date: 9th June 1980 Driller: M. Kerrison Assistant: J. Groves Sample Washer: S. Moore Geologist: K. Morrison

FY
T.N
litres
G.B

Section	Metres	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (gSnO ₂)	Grade * gSnO ₂ /m ³	Grade + gSnO ₂ /m ³	Description of Sample
From	To								
0	2	7242	19½LTRS	191.0	0.06	0.16		5.1	Black topsoil, c & f sand, white clay. Trace of v. fine tin, ilmenite, monazite.
2	4	7243	28 "	105.0	4.42	6.63		205.6	c & f sand, heavy drift, sm. wash. Tin, ilmenite, monazite.
4	6	7244	23 "	85.0	2.22	2.70		83.6	c & f sand, heavy drift, brown clay. Sm. amount tin, ilmenite, monazite.
6	8	7245	22 "					1.3	c & f sand, pyrite lumps. Pyrite
8	10	7246	16½"					1.3	c & f sand, organic silt, wood. Pyrite
10	12	7247	25½"					1.3	c & f sand, pyrite lumps. Pyrite
12	14	7248	35 "	221.1	0.11	0.35		1.3	c & f sand, brown clay. Pyrite
14	16	7249	23 "	8 samples grouped				1.3	c & f sand, organic silt, brown clay. Pyrite
16	18	7250	23½"					1.3	c & f sand, brown clay. Pyrite, ilmenite
18	20	7251	28 "					1.3	c & f sand, white clay, heavy drift. Pyrite, ilmenite
20	22	7252	17½"					1.3	c & f sand, brown clay. Pyrite
22	24	7253	21 "	147.1	0.17	0.36		11.1	c & f sand, heavy drift. Pyrite
24	26	7254	25 "	165.7	1.12	2.67		82.7	c & f sand, birds eye wash. Pyrite
26	27	7255	15½"	136.3	1.39	2.71		167.9	c & f sand, decomposed granite. Pyrite
27	28	7256	11½"	104.1	0.56	0.98		60.9	Decomposed granite. Pyrite.

* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad F = 80%
 Drillers reported basement at 26.30 m. Grade from surface to inferred basement at m g SnO₂ / m³ *
 Total recovered volume, surface to basement 312.1 l at 26.3 m 42 g SnO₂ / m³ +
 Total recovered tin 17.76 gSnO₂

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AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: **PIONEER** Hole No: **K132** Collar Co-ordinates: **52.100** mN **77.800** mE Drilling Method: **PERCUSSION**

Surface R.L. **83.30** m Basement R.L. **55.30** m Cutting Shoe / Bit diameter: **16.02** cm. Theoretical Volume: **40.3** litres

Date: **9th June 1980** Driller: **N. Kerrison** Assistant: **J. Groves** Sample Washer: **S. Moore** Geologist: **K. Morrison**

COPY TO: **F.Y.**
litres **T.N.**
G.B.

Section		Metres	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * (g SnO ₂ /m ³)	Grade + (g SnO ₂ /m ³)	Description of Sample
From	To									
0	2		7264	16LTRS	167.8	0.10	0.24		7.4	Black top soil, c & f sand, yellow clay, heavy drift. Trace of v. fine tin, monazite.
2	4		7265	21LTRS	95.0	8.58	11.64		561.2	c & f sand, heavy drift, sw wash, organic silt. Tin, ilmenite, monazite.
4	6		7266	15 "	111.2	0.98	1.56		48.3	c & f sand, organic silt. Small amount tin, ilmenite, pyrite
6	8		7267	15 1/2 "	153.7	0.22	0.48		2.5	c & f sand, organic silt. Pyrite
8	10		7268	17 "	6 samples grouped				2.5	c & f sand, organic silt, brown clay. Pyrite
10	12		7269	42 "					2.5	c & f sand, organic silt, brown clay Pyrite
12	14		7270	28 "					2.5	c & f sand Pyrite
14	16		7271	30 "					2.5	c & f sand Pyrite
16	18		7272	27 "					2.5	c & f sand & white clay. Pyrite
18	20		7273	42 "	105.9	0.09	0.14		3.2	c & f sand, heavy drift & white clay. Pyrite
20	22		7274	22 1/2 "	110.5	2.47	3.90		120.9	c & f sand, heavy drift & white clay, pyrite lumps. Pyrite
22	23		7275	18 "	110.5	1.06	1.67		103.8	c & f sand, heavy drift & trace of decomposed granite. Pyrite
23	24		7276	13 " *	118.7	1.38	2.34		145.2	c & f sand, decomposed granite. Pyrite
24	25		7277	15 1/2 " *	91.8	0.97	1.27		78.9	c & f sand, trace of birds eye wash, decomposed granite. Pyrite
25	26		7278	43 "	172.1	1.34	3.29		76.6	c & f sand, decomposed granite, birds eye wash. Pyrite.

* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad.F=80%
 Drillers reported basement at **28.0** m. Grade from surface to inferred basement at m g SnO₂ / m³ *
 Total recovered volume, surface to basement **425.5** l. at **28.0** m **60** g SnO₂ / m³ +
 Total recovered tin **30.68** g SnO₂

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: PIONLER Hole No: K 133 Collar Co-ordinates: 52200 mN 77650 mE Drilling Method: PERCUSSION

Surface R.L.: 88.03 m Basement R.L.: 53.63 m Cutting Shoe / Bit diameter: 16.02 cm Theoretical Volume: 40.3 m³

Date: 11-6-1980 Driller: G. GROVES Assistant: S. WOOD Sample Washer: S. MOORE Geologist: R. MURRO

COPY TO: F.Y.
T.N.
G.B.

Section		Metres	Sample No.	Recovered Volume (l)	Weight Conc. (g)	Conc. Assay (%Sn)	Recovered Tin (gSnO ₂)	Grade * (gSnO ₂ /m ³)	Grade + (gSnO ₂ /m ³)	Description of Sample
From	To									
0	2		4395	31					13.7	C & F sand, heavy drift. trace of very fine tin.
2	4		4396	29					13.7	C & F sand, white clay. Ilmenite and Monazite.
4	6		4397	32½					13.7	C & F sand, heavy drift, brown cement, brown clay. Ilmenite and Monazite.
6	8		4398	28					13.7	C & F sand, heavy drift, brown clay, Ilmenite & Pyrite.
8	10		4399	33					13.7	C & F sand, heavy drift, brown clay, Ilmenite and Monazite.
10	12		4400	22½	208.2	2.37	7.05		13.7	C & F sand, heavy drift. trace of tin, Monazite Ilmenite.
12	14		5001	14½					13.7	C & F sand, heavy drift. trace of tin, Ilmenite and Monazite.
14	16		5002	23½	16	sample	grouped		13.7	C & F sand, brown clay, trace of tin, Ilmenite and Monazite.
16	18		5003	19½					13.7	C & F sand, brown clay. Pyrite.
18	20		5004	10½					13.7	C & F sand, brown clay and silty, pyrite.
20	22		5005	12					13.7	white clay, no trace of any mineral.
22	24		5006	9					13.7	C & F sand, white clay, Ilmenite and Monazite
24	26		5007	27½					13.7	C & F sand, brown and white clay. Pyrite and Ilmenite.
26	28		5008	18					13.7	C & F sand, brown clay, pyrite.
28	30		5009	20½					13.7	C & F sand brown clay. Wood pyrite.

* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin RadF=80%
 Drillers reported basement at 34.40 m. Grade from surface to inferred basement at 34.40 m. 37 g SnO₂ / m³ *
 Total recovered volume, surface to basement 388.2 l. at 34.40 m. 37 g SnO₂ / m³ +
 Total recovered tin 20.77 g SnO₂

Dwg. no. : P 136 / 64

045052

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: **PIONEER** Hole No: **K134** Collar Co-ordinates: **52300** mN **77000** mE Drilling Method: **Perforator**

Surface R.L.: **93.74** m Basement R.L.: **45.24** m Cutting Shoe / Bit diameter: **16.02cm.** Theoretical Volume: **40.3**

Date: **1/7/80** Driller: **M. Kerrison** Assistant: **J. Groves** Sample Washer: **S. Moore** Geologist: **K. Harrison**

Recovered Tin: **64**
 T.N.
 Litres
615

Section		Sample No.	Recovered Volume (l)	Weight Conc. (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * (g SnO ₂ /m ³)	Grade + (g SnO ₂ /m ³)	Description of Sample
From	To								
0	2	7285	26 LTRS	148.3	1.74	2.83	4.4	Black top soil, c & f sand, yellow & white clay, crown cement. Trace of fine tin, ilmenite.	
2	4	7286	28 "				4.4	C & f sand, yellow & white clay. Trace of fine tin, ilmenite, monazite.	
4	6	7287	21 "				4.4	C & f sand, white clay. ilmenite, monazite.	
6	8	7288	23 "				4.4	c & f sand. Ilmenite, monazite.	
8	10	7289	28 "				4.4	C & f sand, heavy drift, white sandy clay. Monazite, ilmenite.	
10	12	7290	24 "				4.4	C & f sand, white clay. Ilmenite, monazite.	
12	14	7291	26 "	20 samples grouped			4.4	C & f sand, white clay, heavy drift. Ilmenite, pyrite.	
14	16	7292	25 "				4.4	C & f sand, brown & white clay, heavy drift, pyrite lumps. Pyrite.	
16	18	7293	25 "				4.4	C & f sand, heavy drift, pyrite lumps. Pyrite.	
18	20	7294	18 "				4.4	C & f sand, organic silt. Pyrite.	
20	22	7295	21 "				4.4	C & f sand, white clay. Pyrite.	
22	24	7296	15 "				4.4	C & f sand. Ilmenite, pyrite.	
24	26	7297	20 "				4.4	C & f sand, brown clay. Ilmenite, pyrite.	
26	28	7298	27 "				4.4	C & f sand, brown clay. Pyrite.	
28	30	7299	27 "				4.4	C & f sand, brown clay. Pyrite.	

* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad.F = 80%
 Drillers reported basement at **48.50** m. Grade from surface to inferred basement at **48.5** m. g SnO₂ / m³ *
 Total recovered volume, surface to basement **589.5** l. at **48.5** m **272** g SnO₂ / m³ +
 Total recovered tin **212.49** g SnO₂

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: Plot 2 Hole No.: K134 Collar Co-ordinates: 52300 mN 27000 mE Drilling Method: percussion

Surface R.L.: 93.74 m Basement R.L.: 45.25 m Cutting Shoe / Bit diameter: 16.02 cm. Theoretical Volume: 40 m³

Date: 1/7/80 Driller: M. Kerrison Assistant: J. Graves Sample Washer: S. Moore Geologist: K. Morrison

COPY TO: EX
T.N
G.B

Section		Metres	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * g SnO ₂ /m ³	Grade + g SnO ₂ /m ³	Description of Sample
From	To									
32	32		7500	38.5					4.4	C & f sand, heavy drift. Ilmenite, pyrite.
32	34		7501	36 "					4.4	C & f sand, heavy drift, yellow clay. Ilmenite, monazite.
34	36		5502	20 "					4.4	C & f sand, white clay. Ilmenite, monazite.
36	38		5503	18 "					4.4	C & f sand, mod. wash, white clay. Pyrite & ilmenite.
38	40		5504	17 "					4.4	C & f sand, med. wash, grey clay, wood. Trace of tin, pyrite.
40	42		5505	14 "	115.4	3.50	5.77		179.0	C & f sand, med. & lge wash, grey clay. sm. amount tin, pyrite.
42	44		5506	22 "	108.3	9.29	14.37		445.8	C & f sand, med & lge wash, white clay. sm. amount tin, ilmenite, pyrite.
44	46		5507	35 " *	143.8	26.61	54.66		1695.5	C & f sand, birds eye wash, white clay. Tin, ilmenite, pyrite.
46	48		5508	26 "	147.8	25.43	49.47		1634.5	C & f sand, white clay. Ilmenite, pyrite.
48	49		5509	16 " *	206.8	38.00	76.81		4765.0	C & f sand, birds eye wash, granite. Tin, ilmenite.
49	50		5510	11 "	102.9	3.70	5.44		337.4	Decomposed granite. Sn. amount tin, pyrite.
50	51		5511	8 "	112.1	0.81	1.30		80.5	Decomposed granite. V. sm. trace of tin, pyrite.
51	52		5512	10 "	213.2	0.30	0.91		56.7	Decomposed granite. V. sm. trace of tin, pyrite.
52	53		5513	17 "	93.1	0.70	0.93		57.8	Decomposed granite. Pyrite.

* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad.F = 20%
 Drillers reported basement at 48.50 m. Grade from surface to inferred basement at 48.50 m 272 g SnO₂ / m³ *
 Total recovered volume, surface to basement 589.5 l. at 48.50 m 272 g SnO₂ / m³ +
 Total recovered tin 212.49 g SnO₂

APPENDIX 2

045069

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: *Pioneer* Hole No: *AA89* Collar Co-ordinates: mN mE Drilling Method: *Auger*

Surface R.L.: m Basement R.L.: m Cutting Shoe / Bit diameter: *14.2cm* Theoretical Volume: *15.83* litres

Date: *9/6/80* Driller: *E King* Assistant: *A Dennis* Sample Washer: *S Moore* Geologist: *K Morrison*

Section	Metres	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (gSnO ₂)	Grade * gSnO ₂ /m ³	Grade + gSnO ₂ /m ³	Description of Sample
From	To								
0	1	5972	16 Ltrs	104.3	0.90	1.34	83.8		Black topsoil, coarse and fine sand, yellow clay. Trace of tin, ilmenite.
1	2	5973	14 Ltrs	108.4	0.30	0.46	33.2		Yellow clay, coarse and fine sand. Trace of tin, ilmenite, monazite.
2	3	5974	15 "	168.6	0.15	0.36	24.1		Coarse and fine sand, white and yellow clay, heavy drift, ilmenite and monazite.
3	4	5975	7 "	129.0	0.04	0.07	10.5		Coarse and fine sand, yellow and white clay, ilmenite & monazite.
4	5	5976	5 "	100.1	0.03	0.04	8.6		Coarse and fine sand, white clay, ilmenite and monazite.
5	6	5977	2 "	79.3	0.04	0.05	22.7		Coarse and fine sand, heavy drift and white clay. Trace of ilmenite.
6	7	5978	2 "	98.3	0.03	0.04	21.1		Coarse and fine sand, heavy drift and white clay. Trace of ilmenite and monazite.
7	8	5979	3 "	89.7	0.04	0.05	17.1		Coarse and fine sand, white clay. Trace of ilmenite.
NOT BOTTOMED									

* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad.F = 80%
 Drillers reported basement at m. Grade from surface to inferred basement at m 28 g SnO₂ / m³ *
 Total recovered volume, surface to basement l. at m g SnO₂ / m³ +
 Total recovered tin g SnO₂

045082

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: *Pioneer* Hole No: *AA102* Collar Co-ordinates: mN mE Drilling Method: *Auger*

Surface R.L.: m Basement R.L.: m Cutting Shoe / Bit diameter: *14.2cm* Theoretical Volume: *15.83* litres

Date: *9/6/80* Driller: *E. King* Assistant: *A. Dennis* Sample Washer: *S. Moore* Geologist: *R. Munro*

Section		Metres	Sample No.	Recovered Volume (l)	Weight Conc. (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * g SnO ₂ /m ³	Grade + g SnO ₂ /m ³	Description of Sample
From	To									
0	1		6014	14 Ltrs	100.8	1.42	2.04	146.1		Black topsoil, yellow clay, coarse and fine sand. Trace of tin, ilmenite.
1	2		6015	14 Ltrs	122.0	2.25	3.92	280.1		Yellow clay, grey silty clay, coarse and fine sand, birds eye wash, small amount of tin, and ilmenite.
2	3		6016	17 Ltrs	106.9	1.19	1.82	106.9		Coarse and fine sand, heavy drift, small wash white clay, very fine trace of tin, ilmenite.
3	4		6017	4 Ltrs	112.7	0.08	0.13	32.2		Coarse and fine sand, decomposed granite, ilmenite, monazite.
4	5		6018	10 Ltrs	110.7	0.12	0.19	19.0		Decomposed granite, ilmenite and monazite.
5	6		6019	3 Ltrs	101.5	0.16	0.23	77.3		As above.
6	7		6020	8 Ltrs	102.4	1.87	2.73	341.9		Decomposed granite, very small amount of tin, & ilmenite.

* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad.F = 80%
 Drillers reported basement at *3* m. Grade from surface to inferred basement at *3* m *178* g SnO₂ / m³ *
 Total recovered volume, surface to basement l. at m g SnO₂ / m³ +
 Total recovered tin g SnO₂

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: Pioneer Hole No.: AA105 Collar Co-ordinates: mN mE Drilling Method: Auger

Surface R.L.: m Basement R.L.: m Cutting Shoe / Bit diameter: 14.2cm Theoretical Volume: 15.83 litres

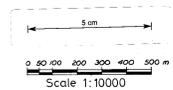
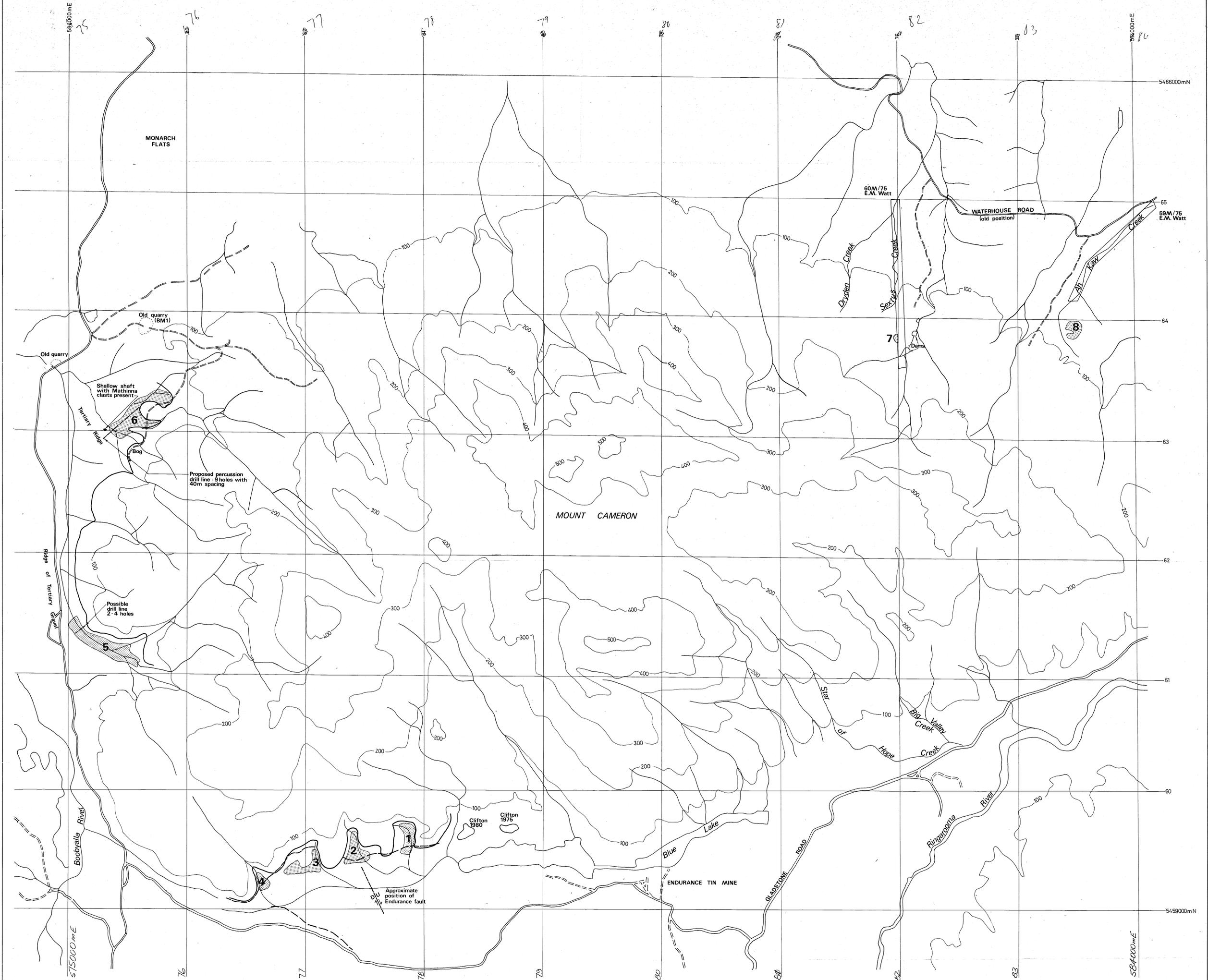
Date: 9/6/80 Driller: E King Assistant: A Dennis Sample Washer: S Moore Geologist: R Munro

Section		Metres	Sample No.	Recovered Volume (l)	Weight Conc (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO ₂)	Grade * g SnO ₂ /m ³	Grade + g SnO ₂ /m ³	Description of Sample
From	To									
0	1		6027	14 Ltrs	104.8	3.50	5.24	374.3		Yellow clay, coarse and fine sand, birds eye wash, tin, blackjack.
1	2		6028	12 Ltrs	92.3	4.32	5.70	474.7		Yellow and grey clay, coarse and fine sand, birds eye wash, tin, blackjack.
2	3		6029	8 Ltrs	96.5	0.83	1.14	143.0		Coarse and fine sand, white sandy clay, birds eye wash. Trace of tin, ilmenite.
3	4		6030	4 Ltrs	95.8	0.23	0.31	78.4		Coarse and fine sand, white sandy clay, birds eye wash. Trace of tin, ilmenite.
4	5		6031	7 Ltrs	90.0	0.10	0.13	18.4		Coarse and fine sand, decomposed granite, ilmenite, pyrite.
5	6		6032	9 Ltrs	96.2	0.12	0.16	18.3		Decomposed granite. Pyrite and ilmenite.

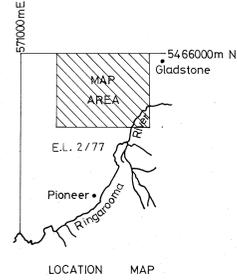
* Grade calculated by relating recovered volume to recovered tin + Grade calculated by relating Radford factored theoretical volume to recovered tin Rad F = 80%
 Drillers reported basement at 3.0 m. Grade from surface to inferred basement at 3.0 m 331 g SnO₂ / m³ *
 Total recovered volume, surface to basement l. at m g SnO₂ / m³ +
 Total recovered tin g SnO₂

045085

APPENDIX 3



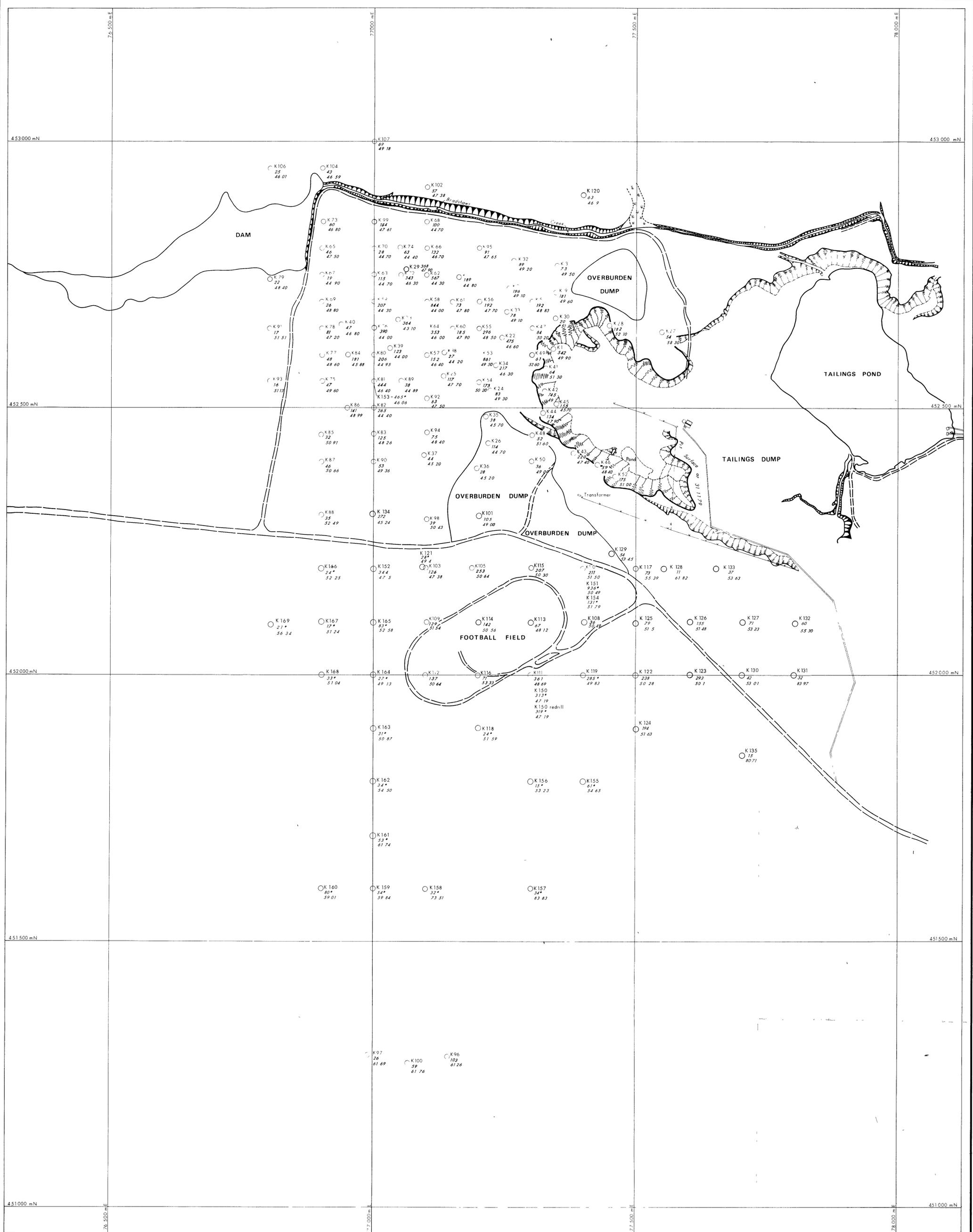
Contour interval : 100 metres



AMDEX MINING LIMITED
PROSPECTING AROUND THE TOE OF
MOUNT CAMERON - N.E. TASMANIA

LEGEND	
	Creeks
	Drains
	Boundary between granite and sediments
	Secondary roads
	Tracks
	Target areas

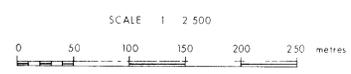
Scale: 1:10,000
Date: Sept. 1980
Data: R. Munro
Drawn: L. Rodgers
Drawing No. P136/101
Figure 6



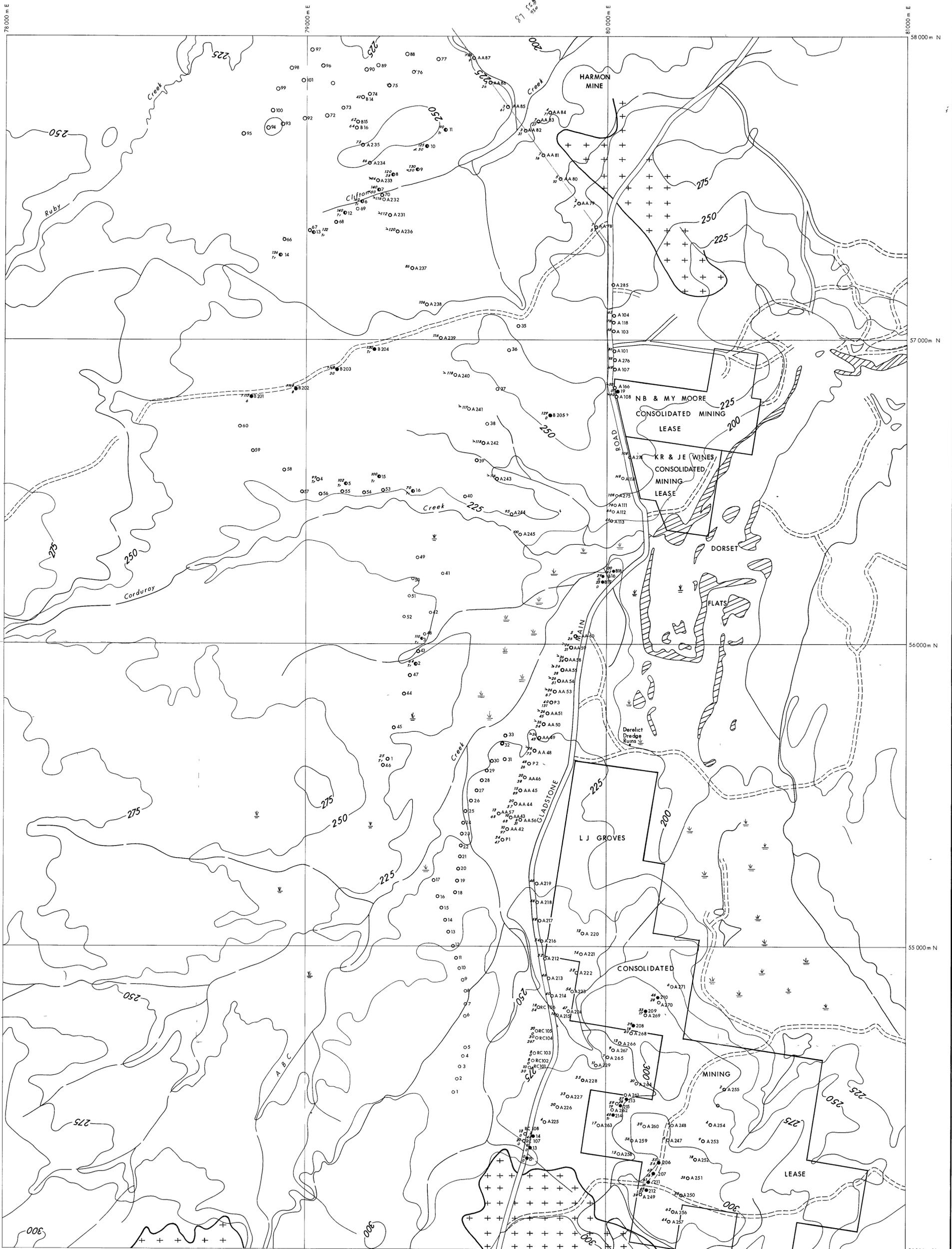
LEGEND

- Road
- Track
- Power line
- Swamp
- Embankment
- Pit face
- Water pipe

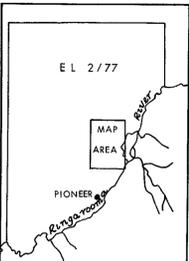
○ K100 Kibuka percussion drill hole
 overall grade g SnO₂/m³
 Basement RL
 * Grade calculated by relating Radford
 factored volume to recovered tin
 (Rad fact = 80%)



Amdex Mining Limited
 N E TASMANIA
PIONEER TIN MINE
PIONEER DRILLING,
SEPTEMBER 1980

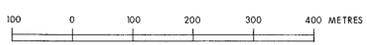


LOCALITY MAP



- 212 Utah percussion hole no
- 5 Geophoto percussion hole no
- P3 Amdex percussion hole no
- RC 108 Amdex reverse circulation hole no
- A 249 Utah auger hole no
- 12 Geophoto auger hole no
- AA 60 Amdex auger hole no
- 18 ○ Depth to basement (feet)
- 54 ○ Overall grade (grams SnO₂/metre³)
- N.B Not bottomed
- Tr Trace

- 250 Surface R.L. (feet)
- Road track
- ≡ Button grass marsh
- ▨ Shallow water - area worked by dredge
- ++ Granite outcrop



SCALE 1 : 5000

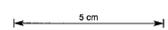


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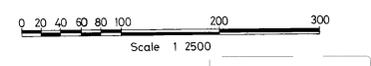
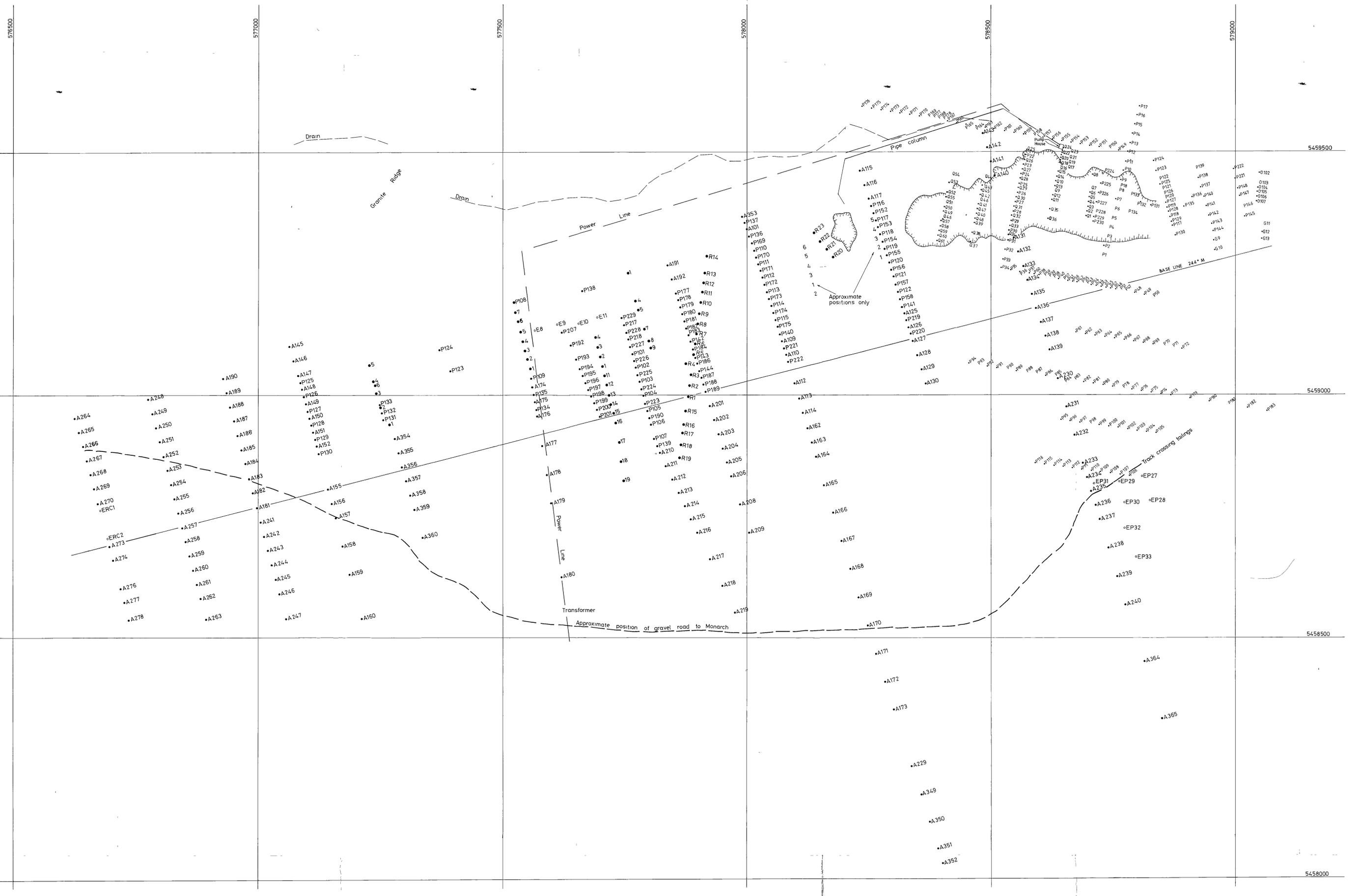
AMDEX MINING LIMITED
EL 2/77, TASMANIA

EASTERN LEADS AREA

PREVIOUS DRILLING: AUGUST 1980



80-144 SP

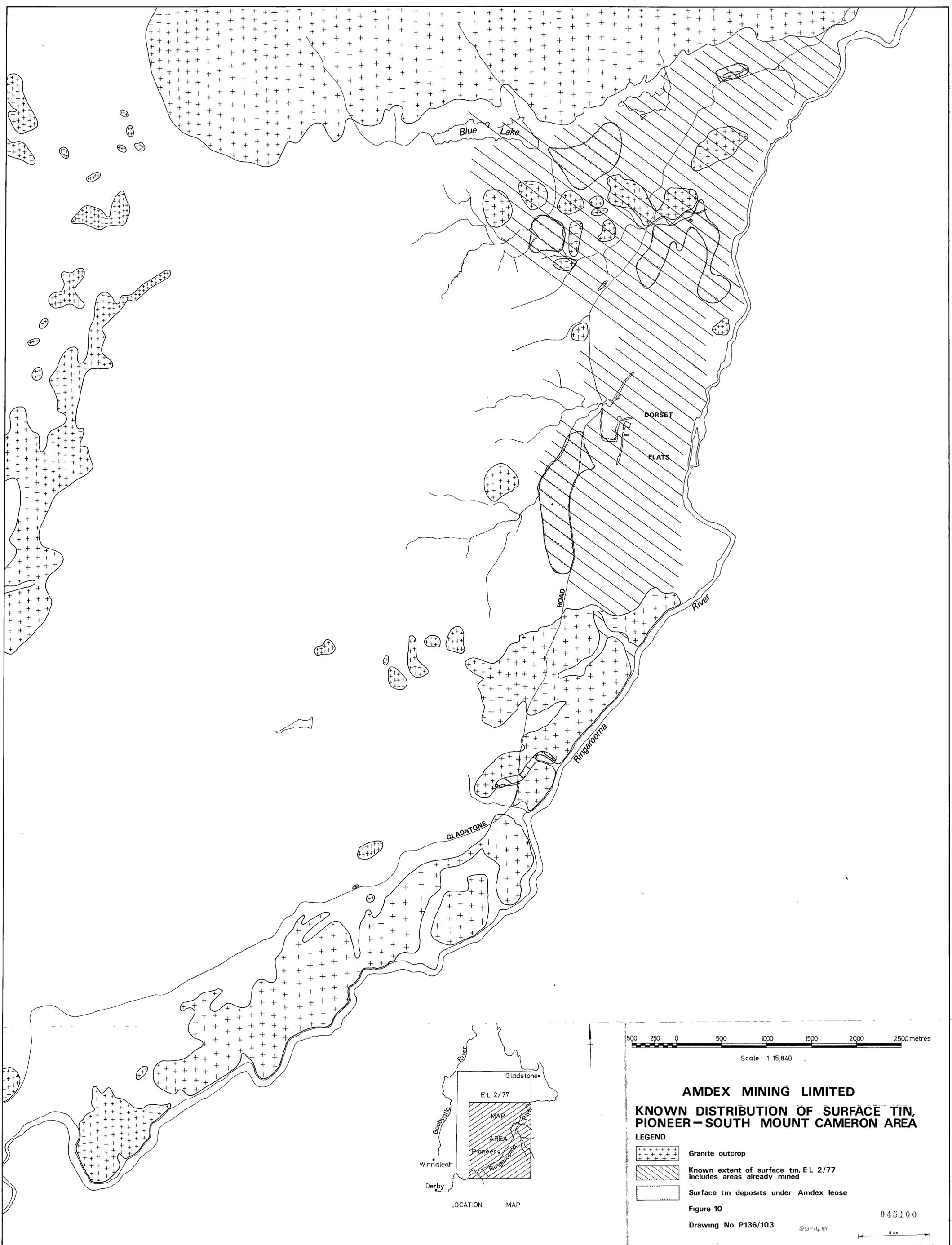


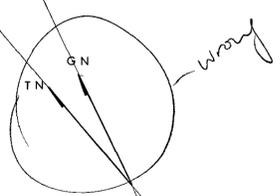
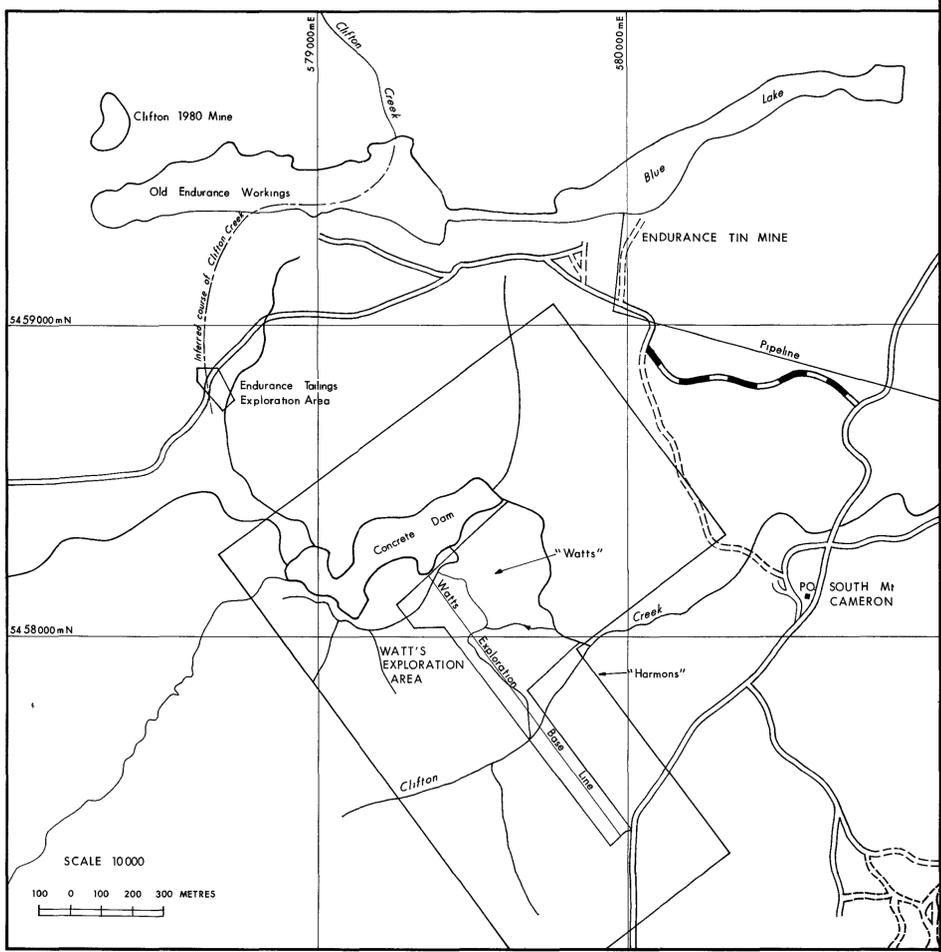
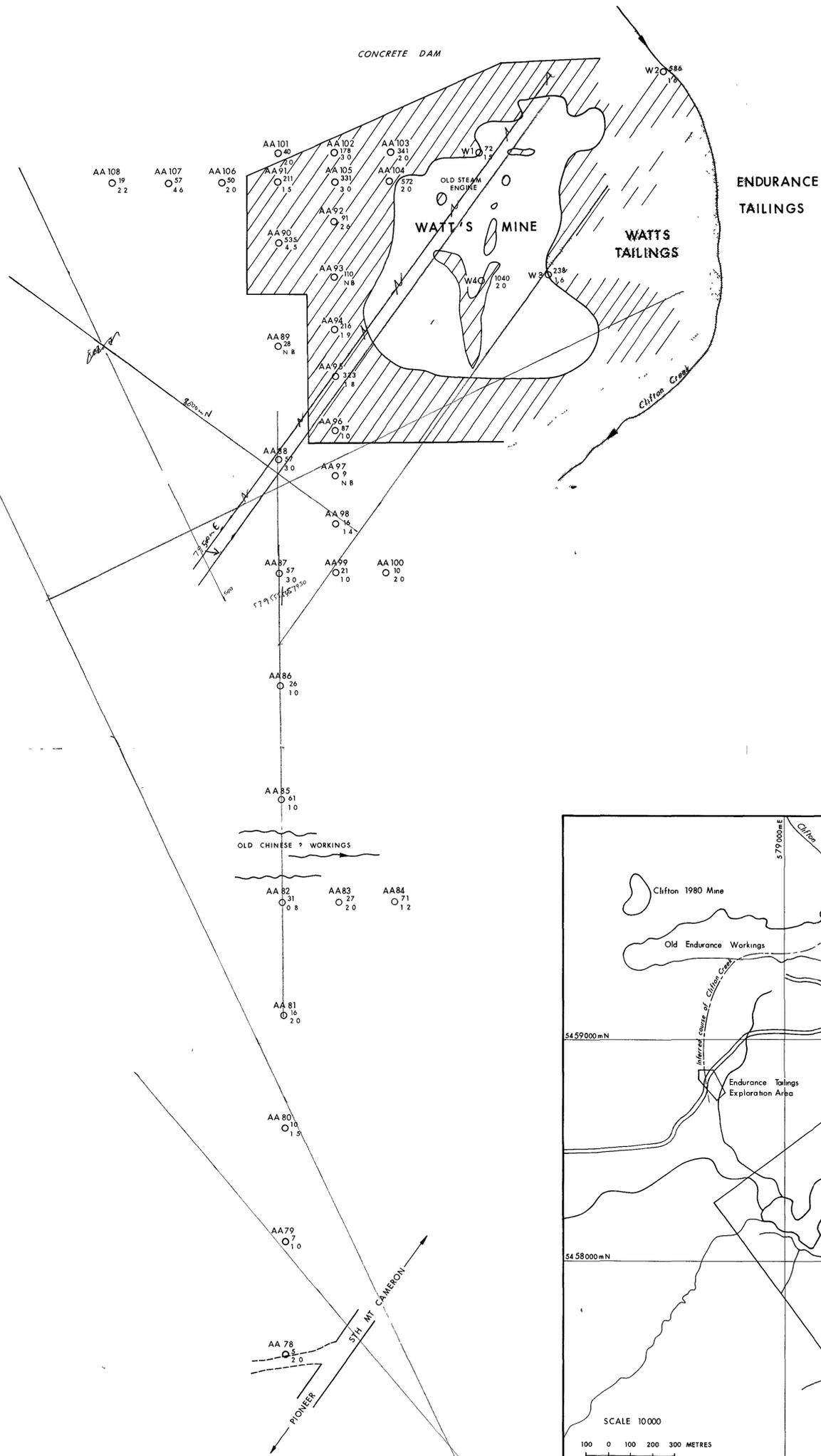
Scale	1 2500
Date	Oct 1980
Data	R Munro
Drawing No	P136/102
Figure	9

**WESTERN ENDURANCE COMPILATION - STAGE 1
LOCATION OF AMDEX ENDURANCE TAILINGS DRILLING**

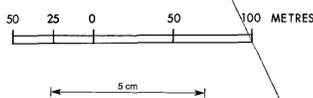
045009

DRILL HOLE IDENTIFICATION LEGEND					
SYMBOL	LEASE HOLDER	DRILLING COMPANY	METHOD	YEAR	
•G10	•P5 •Q52	Endurance Tin Mining Co	Endurance Tin Mining Co	Hand Plant Bores	pre 1953
•R15	Endurance Tin Mining Co	Endurance Tin Mining Co	Hand Plant - "R" Bores	1940 s	
4	Endurance Tin Mining Co	W.L. Sides and Co	Percussion	1967	
•16	Endurance Tin Mining Co	Tasmanian Government	Percussion	1969	
•P126	BMJ Mining	W.L. Sides and Co	Percussion	1971-1972	
•A146	BMJ Mining	H.J. Stackpole BMJ Mining	Auger-non sample	1971-1972	
•ERC1	BMJ Mining	W.L. Sides and Co, Mono Pumps	Reverse Circulation	1980	
•EP31	Amdex Mining Limited	Wallis Geochemical Drillers	Auger-non sample	1979-1980	
	Amdex Mining Limited	Amdex Mining Limited	Percussion	1979-1980	





W 2 Trench Sample Number
 AA 82 Auger Hole Number
 0.31 Surface to basement grade, $\text{gsm SnO}_2/\text{m}^3$
 0.8 Depth to basement, metres
 N B Not Bottomed
 Deposit



AMDEX MINING LIMITED
 N E TASMANIA
WATT'S - HARMON'S EXPLORATION

045101