

TCR 96-38 944

330001



1995 ANNUAL REPORT
EL30/92 & EL6/94

TASMAN ALLUVIALS

Alluvial Tin Mining & Exploration

Enquiries: F J Griffiths
Phone: (004) 731365
File Ref: EL 30/92.6/94.62/94

15 January, 1995

MICROFILMED
FICHE No. 013903-

FILE NO.	
19 JUN 1996	
DOC. NO.	
EL30/92	
See folio 60	
EL6/94	
See folio 34	
RESULTANT TO	DATE

TASMAN RIVER ALLUVIAL TIN PROSPECT LOCATION MAP



**TASMAN RIVER
ALLUVIAL TIN PROSPECT**

Mercury-Walch Pty Ltd

96-3844

ANNUAL REPORT TASMAN RIVER 1996
LAFFER AND GRIFFITHS - O'TOOLE D

Tasman Alluvials

ROSEBERY TAS 7470

TASMAN ALLUVIALS
C/O FRANK GRIFFITHS
7 SASSAFRAS COURT
ROSEBERY TAS. 7470

1995 ANNUAL REPORT
EL30/92 & EL6/94

TASMAN RIVER & BIG ROCK CREEK

1.0 INTRODUCTION

Exploration during the 1995 year incorporated the commencement of a GPS surveying and drilling program for the Big Rocky Creek and Tasman River exploration licences. Environmental approval was granted for an initial program of seven cable tool percussion drilled holes, 3 holes on EL6/92 and 4 holes on EL30/92. The objective of this drilling program was to provide information on the profile of the Tertiary sediments incorporating the Tasman River deep lead at two locations 3.5km apart. The development of the drilling strategy was in accordance with recommendations made by consultant geologist Mr K.C. Morrison in his assessment of the Tasman River alluvial tin exploration target, 6th April 1994.

Bush fires delayed the commencement of the drilling program during February-March 1995 and subsequent wet weather conditions and poor accessibility further delayed commencement of drilling.

2.0 GPS SURVEY PROGRAM

During March 1995 Tasman Alluvials commissioned West Coast Mining and Engineering Surveys to undertake a GPS survey of the proposed drill hole locations and sampling sites. Two GPS units were utilised to increase the level of accuracy of the survey. A fixed base station unit was positioned at the Donnellys Lookout trig point and a mobile unit used to locate the drill sites. Radio communication was maintained between operators of both units and simultaneous readings take at each location to enable the mobile GPS readings to be reference back to the known AMG grid coordinates of the Donnellys Lookout trig point. All GPS surveyed locations were plotted on a 1:25000 scale map overlay by West Coast Mining and Engineering Surveys with a reported accuracy of +/- 25m.

3.0 CABLE TOOL DRILLING PROGRAM

The first 150mm diameter cable tool percussion drill hole was located near the junction of the Granville Tramway formation and the north-south access track which intersects the Heemskirk road approximately 5.5km east of the Granville Harbour Road turn off (Plate 1). The hole was collared vertically in an area previously mapped as Tertiary Basalt (Morrison, 1994). Previous drilling conducted ahead of the Heemskirk Tin Syndicate mine workings indicated the Tasman

River deep lead extending to the north of the mine beneath the basalt (Waterhouse, 1915). A deepening and widening of the alluvial sediment body is indicated to the north (Morrison, 1994. Waterhouse, 1915).



PLATE 1.0 Drill rig and bagged samples at location 12 (Hole 1).

The hole was drilled to refusal on bedrock at a depth of 39.5m. A 1.0m long sampling/cutting tool fitted with a oneway foot gate was used for sample recovery. Casing was typically drive 3.0m ahead of the sampling tool. The hole was generally maintained full of water however some problems with sediment wash in were noted at 18m depth. No evidence of weathered/decomposed basalt was encountered in the samples recovered from the drill hole. All samples were bagged separately for each 1.0m interval. Samples from each interval were examined by hand panning for the presence of tin fractions. Hand panning generally indicated very low tin concentrations. Details of the hole are shown in Table 1.

TABLE 1.0 EL30/92 TASMAN RIVER: DRILL HOLE @ LOCATION 12

Hole Number	1.0
Collar Coordinates	345475mE, 5369325mN AMG
Hole Orientation	Vertical
Hole Diameter	150mm
Hole Depth	39.5m
Drilling Method	Cabletool Percussion
Drilling Fluid	Water
Sampling Interval	1.0m
Driller	F.Griffiths & N.Hewitt

Completion of the hole and commencement of drilling at the next site was delayed due to the casing becoming jammed upon attempted withdrawal. A number of weeks were lost recovering the casing. It was necessary to weld lifting brackets to the protruding casing and use two 50tonne hydraulic jacks to manually withdraw the casing.

After successful recovery of the casing the drill rig was moved to location 11 in an area previously mapped as Cainozoic (mainly Tertiary) Sediments (Morrison, 1994). This location is close to the eastern perimeter of the Tertiary Sediments near the contact with the outcropping Precambrian Oonah Formation metasediments. The hole was collared vertically and drilled to refusal on bedrock at a depth of 22m. Samples were taken at 1.0m intervals for the entire length of the hole. Fossil wood was noted at two horizons within the drill hole. Hand panning of samples indicated the presence of tin within the gravels. The details of the hole are given in Table 2.0.

TABLE 2.0 EL30/92 TASMAN RIVER: DRILL HOLE @ LOCATION 11

Hole Number	2.0
Collar Coordinates	345950mE, 5369875mN AMG
Hole Orientation	Vertical
Hole Diameter	150mm
Hole Depth	22m
Drilling Method	Cabletool Percussion
Drilling Fluid	Water
Sampling Interval	1.0m
Driller	F.Griffiths & N.Hewitt

The casing was successfully withdrawn at completion of drilling and the drill rig prepared for moving to the next location. Drilling has not commence on the next site as maintenance to the access track is necessary to permit all weather vehicular traffic.

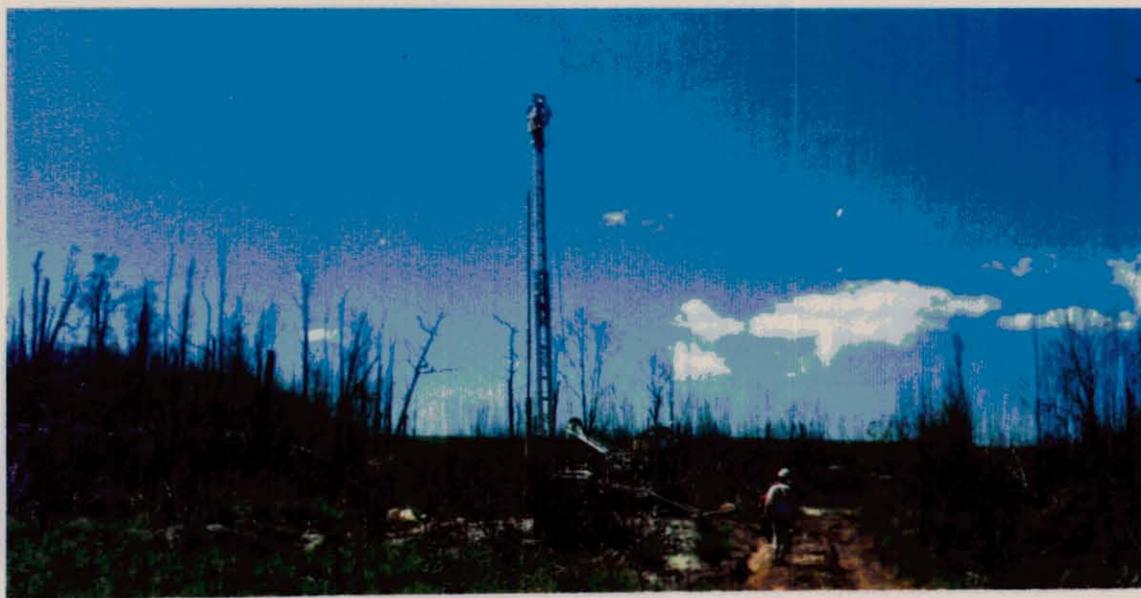


PLATE 2.0 Drill rig at location 11 (Hole 2) showing area burnt out in February 1995.

4.0 METALLURGICAL RESULTS

Three metre composite samples from hole 1. were taken to Melbourne for metallurgical analysis. Unfortunately the tin concentrations were too low in these samples to permit detailed analysis of

cassiterite grain analysis to assist in assessing the origin of the source of tin. Earlier work had shown promising results in using cassiterite grain morphology to distinguish between tin derived from skarn mineralisation and tin derived from a greisenised granitic source (Roberts, 1989 & Geopeko, n.d.).

The composite samples were split and a portion from each 3 meter composite assayed for tin and penalty elements, arsenic and iron. The results of these assays are included in Appendix A. The variation with depth of each metal is plotted in Figure 1.0. These results show traces of tin in the interval from surface to 6.0m and from 24.0 to 30.0m. There is no apparent relationship between the distribution of Tin, Arsenic and Iron.

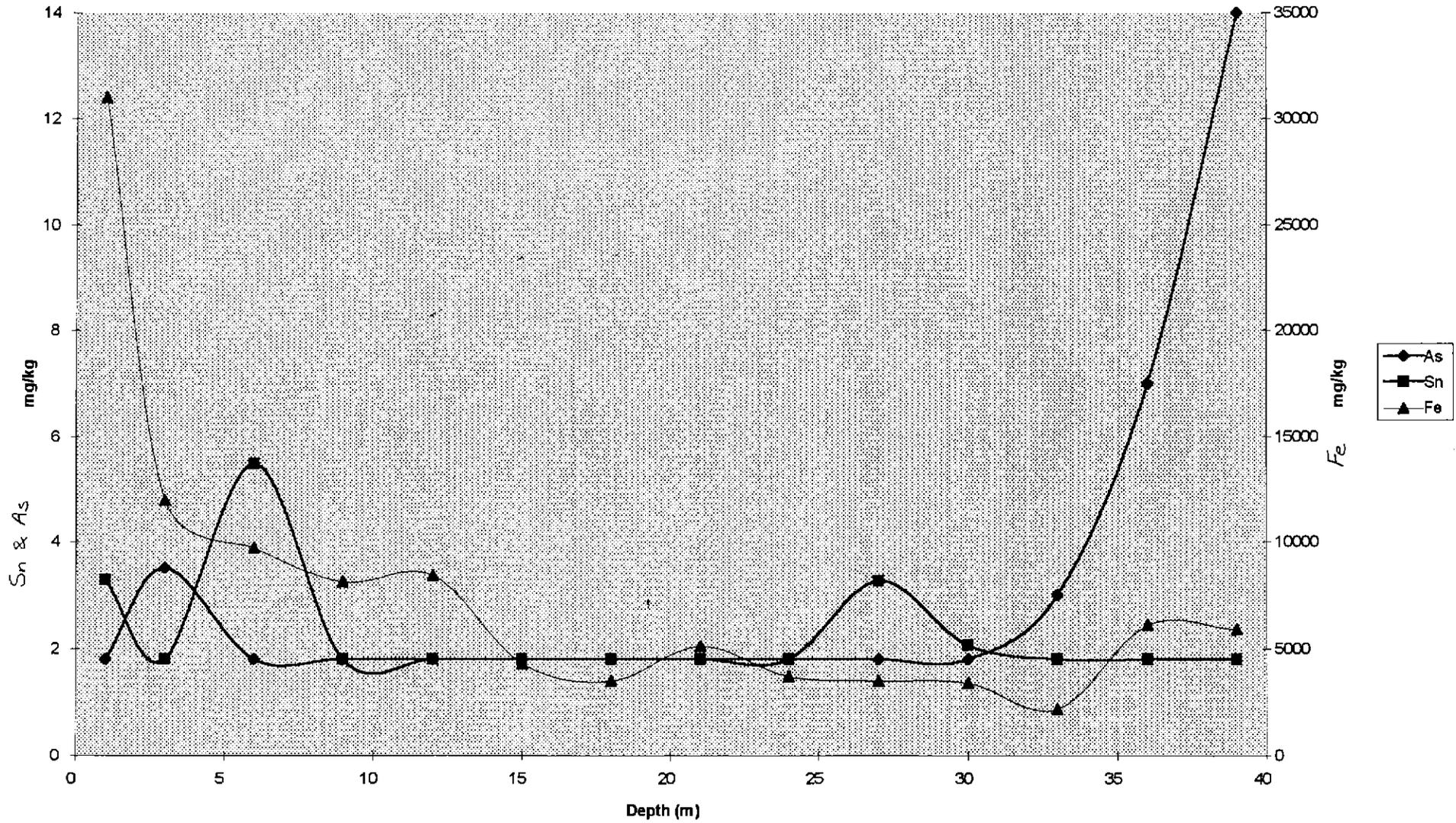
6.0 FURTHER WORK

It is planned to complete the drilling program in 1996. Should the results prove promising it is intended to conduct trials of seismic surveys over the drill location to assess potential for defining the bedrock contact. A program of shallow excavator costeaning is also being considered to define a bulk sample for trial milling at the Heemskirk mill of S. Laffer.

REFERENCES

- Morrison K C., 1994; Assessment of the Tasman River Alluvial Tin Exploration Target.
Unpublished Report.
- Waterhouse L L., 1915 Reconnaissance of the North Heemskirk Tinfield,
Tasmanian Dept. Mines Geol. Surv. Report, No.6
- Roberts P A., 1989 The St. Dizier Tin Skarn, Western Tasmania.
James Cook University unpublished MSc thesis.
- Geopeko, n.d., Morphology of cassiterite grains from panned tin concentrates,
stream sediment sampling Big Rock Creek area.
Unpublished Report.

FIGURE 1.0 Drill Hole No.1 Geochemistry
Tasman River Alluvial Tin Prospect





NATIONAL ANALYTICAL LABORATORIES PTY LTD

ACN 006 716 963

585 Blackburn Road Notting Hill Victoria Australia 3168 Tel 03 562 5899 Fax 03 562 0336

330007

CERTIFICATE OF ANALYSIS

DATE 29 February 1996

LABORATORY NUMBER FEBD5280

CLIENT Dan O'Toole

SAMPLE Samples received 23/2/96 - Job Ref: Hole 12

METHOD NAL E102.21

RESULTS



National Association of Testing
Authorities, Australia
NATA ENDORSED DOCUMENT
This document may not be reproduced
except in full

Please refer to attached page/s for results

Approved By


E D Jones BSc M R A C I
CHIEF CHEMIST

Authorised By


Dr G J Baxter PhD M R A C I
MANAGING DIRECTOR

FEBD5280...1 OF 3



DATE :29/02/96 Client : DAN O'TOOLE Job Reference : HOLE 12

Results in mg/kg Dry Weight
LABID Received Sample

As Fe Sn

FEBD5280	23/02/96	12/1	< 2.0	31000	3.28
FEBD5281	23/02/96	12/3	3.5	12000	< 2.00
FEBD5282	23/02/96	12/6	< 2.0	9700	5.49
FEBD5283	23/02/96	12/9	< 2.0	8100	< 2.00
FEBD5284	23/02/96	12/12	< 2.0	8400	< 2.00
FEBD5285	23/02/96	12/15	< 2.0	4300	< 2.00
FEBD5286	23/02/96	12/18	< 2.0	3500	< 2.00
FEBD5287	23/02/96	12/21	< 2.0	5100	< 2.00
FEBD5288	23/02/96	12/24	< 2.0	3700	< 2.00
FEBD5289	23/02/96	12/27	< 2.0	3500	3.26
FEBD5290	23/02/96	12/30	< 2.0	3400	2.06
FEBD5291	23/02/96	12/33	3.0	2200	< 2.00
FEBD5292	23/02/96	12/36	7.0	6100	< 2.00
FEBD5293	23/02/96	12/39	14	5900	< 2.00

330008



QUALITY ASSURANCE REPORT

Page : 3 of ...3 FINAL REPORT

DATE :29/02/96 Client : DAN O'TOOLE Job Reference : HOLE 12₁

Results in mg/kg Dry Weight

LABID	Received	Sample	As	Fe	Sn	
FEBD5523	23/02/96	12/1	< 2.0	32000	2.41	duplt/FEBD5280
FEBD5280	23/02/96	12/1	< 2.0	31000	3.28	
FEBD5523	23/02/96	12/1	0	3.2	30.6	Rel % Difference
FEBD5524	23/02/96	12/1	100		125	spike/FEBD5280
FEBD5524	23/02/96	12/1	130		129	Expected Result
FEBD5524	23/02/96	12/1	76.9		96.8	% Recovery
FEBD5280	23/02/96	12/1	< 2.0		3.28	
FEBD5525	23/02/96	12/1	99		120	spike/FEBD5280
FEBD5525	23/02/96	12/1	130		129	Expected Result
FEBD5525	23/02/96	12/1	76.2		92.8	% Recovery
FEBD5280	23/02/96	12/1	< 2.0		3.28	
FEBD5526	23/02/96	BLANK	< 2.0	< 2	< 2.00	

330009

TASMAN ALLUVIALS
 Alluvial Tin Mining & Exploration
TASMAN RIVER ALLUVIAL TIN PROSPECT
 GENERAL GEOLOGY AND GEOGRAPHY

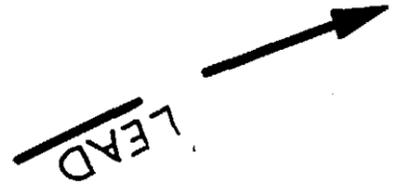
MAP SCALE 1:25,000

Tasman Alluvials
 7 SASSAFRAS COURT
 ROSEBERY TAS 7470

5 cm

330010

E345 000



AXIS

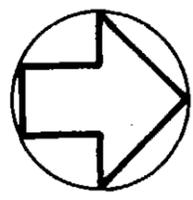
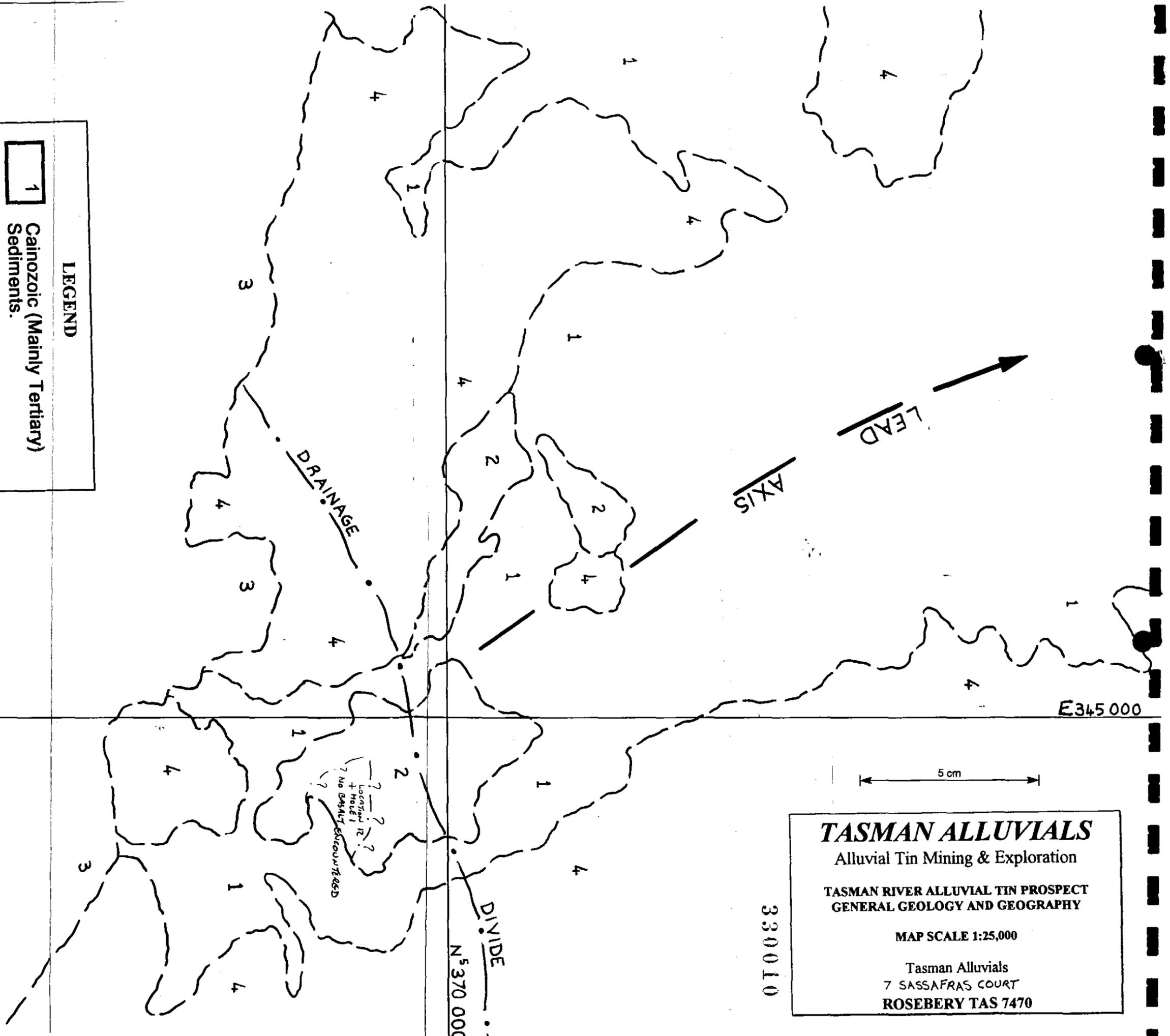
DIVIDE

N 5370 00C

DRAINAGE

Location of Hole 1
 ? No BASALT exposure traced

LEGEND	
1	Cainozoic (Mainly Tertiary) Sediments.
2	Tertiary Basalt
3	Devonian Granite
4	Proterozoic Metasedimentary Rocks & Minor Cambrian, Ordovician Igneous & Sedimentary Rocks.



330011

CROWN LAND
EL 6/94

EL 62/94

EL 30/92

