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**OPEN FILE**

E.L. 40/87 TASMANIA

RELINQUISHMENT REPORT ON EXPLORATION COMPLETED  
IN THE BRIDPORT - ANDERSON BAY AREA  
OF NORTH - EASTERN TASMANIA

**MICROFILMED**

Prepared for Bach Holdings Pty. Ltd  
and Pennant Holdings Ltd.

A. Dove  
December, 1989

AMG REFERENCE POINTS ADDED

90-3074

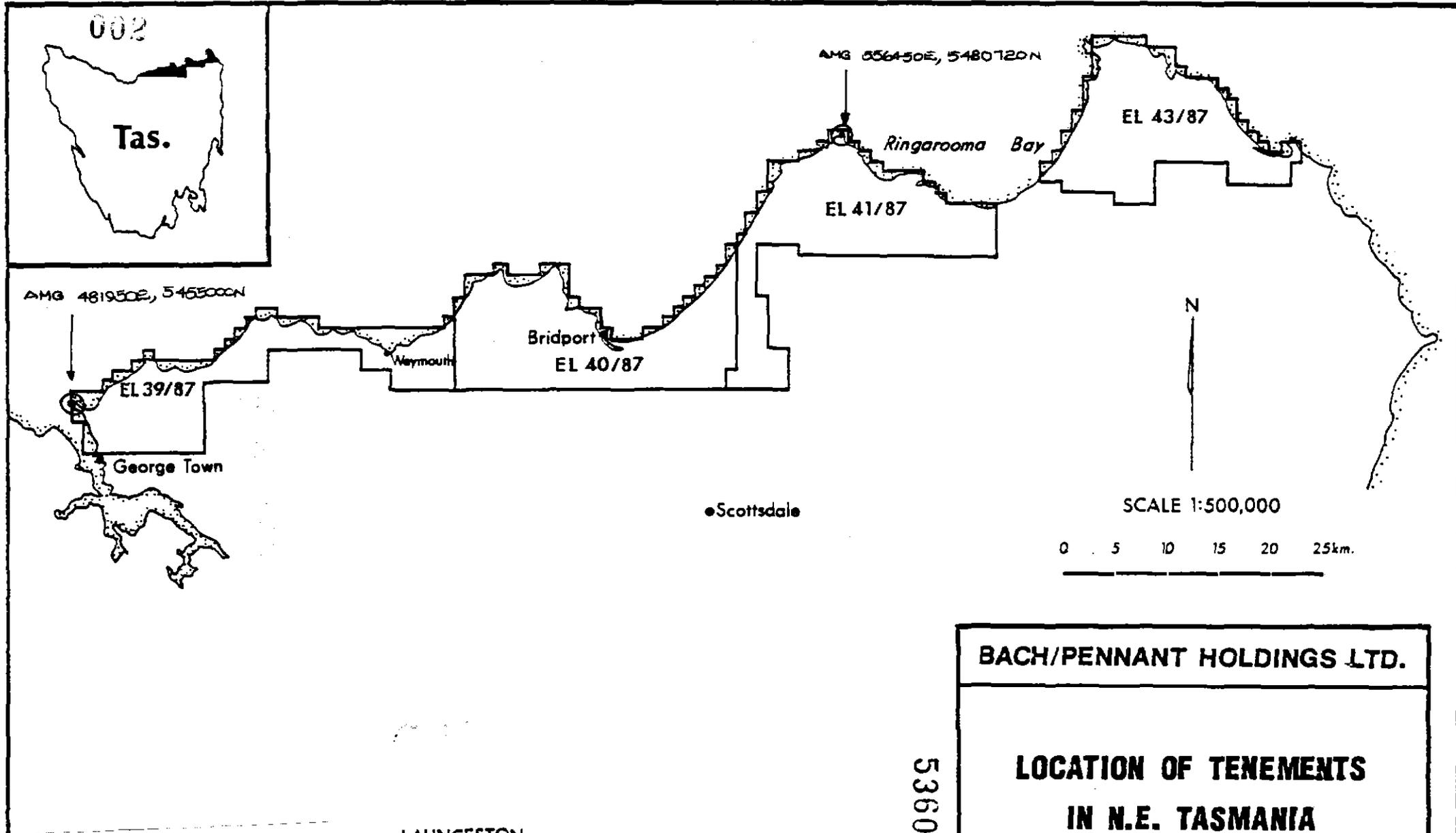
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AMG REFERENCE POINTS ADDED

■ LAUNCESTON

**BACH/PENNANT HOLDINGS LTD.**

**LOCATION OF TENEMENTS**

**IN N.E. TASMANIA**

(as originally granted)

Author: A. DOVE | Date: MAR. '89 | Fig.No: 1

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## SYNOPSIS

### 1. AIM

To examine the Tasmanian north coast around Bridport - Anderson Bay for economic heavy mineral sand occurrences.

### 2. REASON

Increases in the price of mineral sand commodities, particularly rutile and zircon, over recent years has resulted in a resurgence of exploration activity for these mineral commodities. The price rises, combined with technological advances in processing mineral sands have given impetus to the examination of areas previously considered to be unattractive.

### 3. SUMMARY AND CONCLUSIONS

- 3.1 Exploration Licence 40/87 originally covered an area of 243 km<sup>2</sup> between Briport and Anderson Bay on the north coast of Tasmania.
- 3.2 Upon licence renewal in 1989 the area was reduced to 126 km<sup>2</sup> following aerial photography studies and ground reconnaissance.
- 3.3 Detailed ground invesigation activities were confined to a dune system at Barnbougles Beach and to the strandlines in the St Albans Bay area.
- 3.4 Both traverse lines were drilled using hand auger

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and hand operated cased sludging techniques.

- 3.5 All samples were tested by the Tasmanian Department of Mines Laboratory in Launceston.
- 3.6 At Barnbogle only two drillholes, B-2 and B-30, contained any sample interval with greater than 1.0% H.M. The remaining intervals averaged approximately 0.5% H.M.
- 3.7 At St Albans Bay encouraging heavy mineral grades were recorded in the drillholes traversing the frontal dune system.
- 3.8 While the heavy mineral grades are encouraging in the St Albans Bay area, the overall sand tonnages are small and this combined with the fact that the area is a coastal reserve, makes it a target of low prospectivity.

#### 4. RECOMMENDATIONS

It is recommended that this exploration licence be relinquished since:

- results obtained to date have indicated that a deposit larger and/or of higher grade than is likely to occur would be needed to achieve economic viability.

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- the prevailing uncertain situation with respect to future exploration and subsequent mining within reserves, protected and conservation areas mitigates against continued expenditure on projects which depend upon significant resources within such land categories.

## REPORT

5. INTRODUCTION

A preliminary programme of exploration was carried out by Peter H. Stitt & Associates on behalf of Pennant Holdings Ltd. and Bach Holdings Pty. Ltd on their jointly held Exploration Licence 40/87 located on the north east coast of Tasmania. The work is recorded in Report No. 5/89, prepared by Peter H. Stitt & Associates Pty. Ltd.

The exploration was principally directed at testing the coastal dunes for heavy mineral sand deposits, containing economic minerals: particularly rutile, leucoxene, ilmenite (TiO<sub>2</sub> raw materials), zircon and monazite. In addition exploration was carried out to recognize any other detrital minerals if they occurred in economic quantities.

During the past four years the world market has been dominated by a short fall in supply, particularly for the TiO<sub>2</sub> pigment minerals, zircon and the rare earth heavy minerals. As a consequence the price for these minerals has risen to historically high levels.

This combined with technological advances and the greater understanding of heavy mineral deposits has resulted in a re-evaluation of prospective areas.

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#### 6. TENEMENT INFORMATION

Exploration Licence 40/87 was originally granted to Bach Holdings Pty. Ltd. and Minproc Mining (Tasmania) Pty. Ltd. The licence covered an area of 243 square kilometres in the Land District of Dorset in the vicinity of Bridport. Pennant Holdings Ltd. later replaced Minproc Mining as joint title holder with Bach Holdings.

Upon licence renewal on the 22/3/89 an area of only 126 square kilometres was retained. The area relinquished generally represented hard rock basement outcrop with no or little development of coastal sand dunes or shore lines. These areas were recognised following aerial photography studies and ground reconnaissance.

## 7. FIELD INVESTIGATIONS

Exploration activities within the licence were confined to two areas known as Barnbougles Beach and St Albans Bay located to the south and north of Bridport respectively. (see figure 2)

In both areas north - south traverse lines were drilled. At Barnbougles Beach nine (9) drillholes were completed and at St Albans Bay fourteen (14) drillholes were completed. All drilling was carried out by hand auger and hand operated cased sludging, using Dormers Engineering equipment. Holes were hand augered to water table using a 50mm. diameter hand auger. When water table was reached 50mm. casing was inserted into the hole and the hole advanced by sludging using a whistle top sludger on aluminium extension rods. Samples were logged and bagged at two metre intervals and delivered to the laboratory for heavy mineral test work.

All holes were shallower than expected due to the shallow nature of the frontal dune system and the coarse gravel and pebbles encountered in these holes. Drilling behind the frontal dune was terminated at a thick dark clay layer or when gravel and pebbles impeded drilling operations. The drilling at Barnbougles Beach and St Albans Bay completed a total of 35.8 metres over a traverse length of 300 metres and 55.85 metres over a traverse length of 500 metres respectively.

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A brief descriptive log for each drillhole showing heavy mineral assay data is included as Appendix 1 of this report.

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## 8. LABORATORY INVESTIGATIONS

All samples were treated by the Tasmanian Department of Mines, Metallurgical Laboratory in Launceston. The test procedure adopted is as follows:

1. Dry sample as recieved.
2. Screen on a coarse sieve (say 2mm.) to break up agglomerated lumps.
3. Riffle split to obtain an approximately 100 gm. working sample.
4. Re-pack balance of sample.
5. Weigh working sample.
6. Screen on a 1mm. seive and weigh plus 1mm. fraction.
7. Using TBE, seperate heavy minerals.
8. Dry and weigh heavy minerals.
9. Calculate heavy minerals as a percentage of the sample weighed in step 6 above.
10. Package heavy mineral for despatch.

Copies of the laboratory result certificates are included as Appendix 2 of this report.

9. DISCUSSION

As previously mentioned the drilling was confined to two north - south traverse lines located to the northwest and east of Bridport.

At Barnbougale Beach the traverse line was located on a sand spit between Anderson Bay and Trent Water. As is the case with much of the surrounding areas, the deeper sand tends to occur at the present day frontal dune system and once past this system drillholes have to be terminated at shallow depths.

The frontal dune system covered a width of 140 metres and only one sample interval (B-2, 8.0-9.9m), returned an assay of greater than 1.0%. The remaining intervals averaged approximately 0.4%. Once past the dune system holes became shallow with dark clay and coarse gravel impeding drilling. Again only one interval (B-30, 0-2.0m), returned an assay of greater than 1.0%. The remaining intervals averaged approximately 0.5%.

St Albans Bay situated between West Sandy Point and East Sandy Point Coastal Reserves returned the most encouraging results in the drilling programme, with good mineral grades encountered in drillholes covering 140 metres. This again represented a frontal dune system, with the depth of sand and heavy mineral grades decreasing very noticeably once this system was traversed. As was the case with Barnbougale

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Beach once past the frontal dunes all holes became shallow with drilling stopping at clay or coarse gravel.

Although the area returned some encouraging results the overall tonnages are very low owing to the thin nature of the dunes. Assuming that the mineralised frontal dune system continues along the length of the beach (3.0 km), has a width of 80 metres and a depth of 10.0 metres, a maximum of four (4.0) million tonnes of sand exist. Assuming an average grade of 2.2%, only in the order of 90 000 tonnes of heavy mineral exist.

The above figure may be increased if the mineralised frontal dunes are present at West and East Sandy Points, due to the greater volumes of sand occurring.

In this region of the Tasmanian north coast it has been noted that concentrations of heavy mineral occur on the western side of large bays. It is therefore likely that the eastern facing sections of West Sandy Point would be a target for a heavy mineral concentration, in addition to the mineralised frontal dune system.

Despite the favourable geomorphology, the results obtained to date have indicated that a larger and/or higher grade deposit would have to be located to achieve economic viability.

In addition, it should be noted that East and West Sandy Points, and the land containing the frontal dune system are

all part of the Double Point Coastal Reserve. This is particularly important when considering the prevailing uncertain situation with respect to future exploration and subsequent mining within reserves, protected and conservation areas.

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APPENDIX 1

DRILLHOLE DESCRIPTIVE LOGS

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CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-0

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, coarse to very coarse grained, amber. HM >1%		0.1	3.6
2.0 - 2.7		SAND, very coarse grained, amber, abundant shell. Hit WT 2.0m. Hit pebbles and coarse shell. HM ~ 1%		0.5	1.7
		E.O.H. 2.7m.			
DOWN HOLE AVERAGE					3.11

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018

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-2

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, coarse grained, amber. HM ~ 1%		0.5	1.5
2.0 - 4.0		AS ABOVE, becomes finer at base. HM ~ 1%.		Trace	1.9
4.0 - 6.0		SAND, fine to medium grained, amber. HM ~ 1%.		Trace	2.1
6.0 - 8.0		AS ABOVE. HM ~ 1%.		Trace	1.2
8.0 - 10.0		AS ABOVE, becomes coarser with depth. HM ~ 1%.		Trace	0.9
EOH 10.0m.					
DOWN HOLE AVERAGE					
					1.52

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017

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-6

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, fine to medium grained, light grey organics. Grades to amber. HM > 1%.		0.5	3.5
2.0 - 4.0		SAND, fine to medium grained, amber. HM ~1%.		Trace	2.2
4.0 - 6.0		AS ABOVE. HM ~1%.		Trace	2.0
6.0 - 8.0		AS ABOVE. HM ~1%.		Trace	2.9
8.0 - 10.0		AS ABOVE. HM ~1%.		Trace	3.2
		EOH 10.0%			
DOWN HOLE AVERAGE					2.76

533018

018

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-10

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, fine to medium grained, amber. HM ~ 1%. Hit WT started sludging		0.3	1.7
2.0 - 3.25		SAND, coarse to very coarse grained, grey. Abundant fine shell. HM > 1%. Hit coarse pebbles and rock.  EOH 3.25 ROCK		1.5	3.8
DOWN HOLE AVERAGE					2.51

536019

013

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-14

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, fine to medium grained, grey organics then grades to amber. Grades to coarse to very coarse grained light grey, then into dark grey clay layer. Hit WT.  Started sludging		0.5	1.8
2.0 - 4.0		SAND, coares to very coarse grained, grey. Abundant gravel, coarse shell at base.		1.9	0.5
4.0 - 4.4		AS ABOVE, abundant coarse shell. Hit clay at 4.4m.  EOH 4.4m CLAY		4.7	0.8
DOWN HOLE AVERAGE					1.12

533020

020

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-18

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND fine to medium grained, dark grey, organic then sand, coarse to very coarse grained, amber. Hit WT 0.7m. Started sludging 1.0m. Grades to grey. Hit gravel at 1.5m.		4.1	0.6
2.0 - 4.0		SAND, coarse to very coarse grained, light grey. Hit hard layer, probably clay.  EOH 4.0m.		0.4	0.5
DOWN HOLE AVERAGE					0.55

535021

021

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-22

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, fine to medium grained, dark grey, organic then coarse to very coarse grained, light grey. Hit light grey clay layer 1.0m. Started sludging. Coarse shell. Hit clay 2.0m. Casing jammed.  EOH 2.0m.		1.5	0.6
DOWN HOLE AVERAGE					0.6

536022

022

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-26

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, fine to medium grained, dark grey, organic then coarse to very coarse grained, amber. Hit WT 1.0m. Becomes grey.		1.4	0.5
2.0 - 4.0		SAND, coarse to very coarse grained, grey. Abundant fine shell.		1.5	0.4
4.0 - 4.7 No sample		Went to 4.7m. Hit hard layer possibly sandstone or clay.  EOH 4.7m.			
DOWN HOLE AVERAGE					0.45

535023

023

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-30

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, fine to medium grained, dark grey, organic. Went into coarse to very coarse grained amber. Hit clay layer 1.0m. Started sludging. Abundant coarse shell.		1.1	0.5
2.0 - 3.4		SAND, coarse to very coarse grained, grey. Abundant coarse shell. Hit hard layer.  EOH 3.4m.		2.0	0.3
DOWN HOLE AVERAGE					0.42

533024

021

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-34

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, fine to medium grained, dark grey, organic then coarse to very coarse grained, amber. Abundant coarse shell. Started sludging 1.0m.		2.1	0.5
2.0 - 3.0		SAND, coarse to very coarse grained, grey. Abundant coarse shell. Hit clay layer 2.5m. Silty.  EOH 3.0m CLAY		1.6	0.4
DOWN HOLE AVERAGE					0.47

533925

020

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-38

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, fine to medium grained, dark grey, organic. then coarse to very coarse grained, amber. Abundant coarse shell. Started sludging 1.0m. Grades to grey.		1.2	0.5
2.0 - 2.5		SAND, coarse to very coarse grained, grey. Abundant shell. Hit clay 2.5m.  EOH 2.5m. CLAY		1.5	0.5
DOWN HOLE AVERAGE					0.5

535026

025  
 CLIENT : BACH/PENNANT HOLDINGS  
 AREA : ST. ALBANS  
 LOGGED BY : A. DOVE  
 METHOD : HAND

TITLE No. : EL 40/87  
 LINE No. : 1  
 HOLE No. : SA-42  
 DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, fine to medium grained, dark grey, organic then coarse to very coarse grained, amber. Abundant shell. Started sludging 1.0m. Hit white clay 1.2m. Silty.		0.6	0.4
2.0 - 2.5		Silt and clay  EOH 2.5m.		0.1	0.3
DOWN HOLE AVERAGE					0.38

535027

027

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-46

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, fine to medium grained, dark grey, organic then coarse to very coarse grained, amber. Started sludging 1.0m. Hit coarse shell.		1.0	0.5
2.0 - 2.4		SAND, coarse to very coarse grained, grey. Abundant shell. Hit hard layer, probably clay.  EOH 2.4m.		0.1	0.4
DOWN HOLE AVERAGE					0.48

536028

028

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : ST. ALBANS

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : SA-50

METHOD : HAND

DRILL DATE: 13.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 1.0		SAND, fine to medium grained, dark grey then coarse to very coarse grained, amber. Abundant coarse shell. Tried sludging but wouldn't go down.  EOH 1.0m.		0.7	0.7
DOWN HOLE AVERAGE					0.7

536029

023

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : BARNBOUGLE

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : B-0

METHOD : HAND

DRILL DATE: 12.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 1.0		SAND, very coarse grained, amber. Abundant coarse shell and gravel. H.M. present.  E.O.H. 1.0m.		8.6	0.2
DOWN HOLE AVERAGE					0.2

533030

036

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : BARNBOUGLE

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : B-2

METHOD : HAND

DRILL DATE: 12.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, coarse to very coarse grained, amber. Some mica present. H.M. present.		0.2	0.3
2.0 - 4.0		SAND coarse to very coarse grained, amber. H.M. present.		0.1	0.4
4.0 - 6.0		AS ABOVE		0.1	0.4
6.0 - 8.0		AS ABOVE, becomes dark grey at base.		Trace	0.3
8.0 - 9.9		SAND coarse grained, grey to dark grey. H.M. present. Grades back to amber at 8.5m. for 10 cm. Hit WT 9.5m. Hit clay at 9.8m.  E.O.H. 9.9m. CLAY		0.9	1.1
DOWN HOLE AVERAGE					0.49

536031

031

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : BARNBOUGLE

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : B-6

METHOD : HAND

DRILL DATE: 12.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND coarse to very coarse grained, amber/grey mottle. Hit dark grey clay.  E.O.H. 2.0m. CLAY		0.2	0.5
DOWN HOLE AVERAGE					0.5

536032

032

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : BARNBOUGLE

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : B-10

METHOD : HAND

DRILL DATE: 12.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, very coarse grained, amber. Gravel present, slightly organic.		0.8	0.6
2.0 - 4.0		SAND, very coarse grained, amber. Becomes coarser with depth.		0.1	0.4
4.0 - 6.0		AS ABOVE		0.1	0.2
6.0 - 8.0		AS ABOVE, hit several dark grey layers.		0.1	0.4
8.0 - 8.1		SAND, coarse to very coarse grained, dark grey. Hit dark grey clay.		0.2	0.5
		E.O.H. 8.1m. CLAY			
DOWN HOLE AVERAGE					0.40

536033

030

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : BARNBOUGLE

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : B-14

METHOD : HAND

DRILL DATE: 12.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, coarse grained, amber. Slightly organic.		0.4	0.4
2.0 - 4.0		AS ABOVE, becomes coarser with depth. Started sludging 3.0m. Grades to grey.		1.3	0.5
4.0 - 5.3		SAND, coarse to very coarse grained. Abundant pebbles and gravel. Jammed sludger.		4.9	0.4
		E.O.H. 5.3m. PEBBLES			
DOWN HOLE AVERAGE					0.44

536034

034

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : BARNBOUGLE

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : B-22

METHOD : HAND

DRILL DATE: 12.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, coarse grained, amber, grades to dark grey. Silty. Hit WT 0.75m. Started sludging. Abundant gravel and pebbles.  Sludger jammed in casing.  E.O.H. 2.0m. PEBBLES AND GRAVEL		1.9	0.6
DOWN HOLE AVERAGE					0.6

536035

035

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : BARNBOUGLE

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : B-26

METHOD : HAND

DRILL DATE: 12.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 -2.0		SAND, coarse to very coarse grained, amber, grades coarser with depth.		0.4	0.6
		AS ABOVE, hit dark brown clay layer at 3.0m. Started Sludging at 3.0m, could not proceed.		0.2	0.5
		EOH 3.0m CLAY.			
DOWN HOLE AVERAGE					0.57

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036

CLIENT : BACH/PENNANT HOLDINGS

TITLE No. : EL 40/87

AREA : BARNBOUGLE

LINE No. : 1

LOGGED BY : A. DOVE

HOLE No. : B-30

METHOD : HAND

DRILL DATE: 12.4.89

INTERVAL (m)	DRY Wt. (kg)	DESCRIPTION	SLIMES %	+1000um %	H.M. %
0 - 2.0		SAND, coarse to very coarse grained. Amber, becoming coarser with depth.		1.1	1.1
2.0 - 4.0		AS ABOVE, becoming coarser. Gravel present.		2.1	0.5
4.0 - 4.5		AS ABOVE. Hit dark brown clay layer.  E.O.H. 4.5m.		0.2	0.6
DOWN HOLE AVERAGE					0.78

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03.

APPENDIX 2

LABORATORY RESULT CERTIFICATES

<u>Reg. No</u>	<u>Description</u>	<u>% + 1.0mm</u>	<u>% Heavy Minerals</u>
121	2.0 - 2.75	20.5	0.1
122	SA 0 0 - 2.0	0.1	3.6
123	2.0 - 2.7	2.1	1.7
124	SA 2 0 - 2.0	0.5	1.5
125	2.0 - 4.0	Trace	1.9
126	4.0 - 6.0	Trace	2.1
127	6.0 - 8.0	Trace	1.2
128	8.0 - 10.0	Trace	0.9
129	SA 6 0 - 2.0	0.2	3.5
130	2.0 - 4.0	Trace	2.2
131	4.0 - 6.0	Trace	2.0
132	6.0 - 8.0	Trace	2.9
133	8.0 - 10.0	Trace	3.2
134	SA 10 0 - 2.0	0.3	1.7
135	2.0 - 3.25	1.5	3.8
136	SA 14 0 - 2.0	0.5	1.8
137	2.0 - 4.0	1.9	0.5
138	4.0 - 4.4	4.7	0.8
139	SA 18 0 - 2.0	4.1	0.6
140	2.0 - 4.0	0.4	0.5
141	SA 22 0 - 2.0	1.5	0.6
142	SA 26 0 - 2.0	1.4	0.5
143	2.0 - 4.0	1.5	0.4
144	SA 30 0 - 2.0	1.1	0.5
145	2.0 - 3.4	2.0	0.3
146	SA 34 0 - 2.0	2.1	0.5
147	2.0 - 3.0	1.6	0.4
148	SA 38 0 - 2.0	1.2	0.5
149	2.0 - 2.5	1.5	0.5
150	SA 42 0 - 2.0	0.6	0.4
151	2.0 - 2.5	0.1	0.3
893152	SA 46 0 - 2.0	1.0	0.5
153	2.0 - 2.4	0.1	0.4
154	SA 50 0 - 1.0	0.7	0.7

## DEPARTMENT OF MINES

536040



TASMANIA

Launceston Office:  
 Chemical and Metallurgical  
 Laboratory,  
 287 Wellington Street,  
 LAUNCESTON 7249

Enquiries: Peter H. Stitt Pty Ltd  
 Phone: 5th Floor  
 Your ref.: 32 York Street  
 Our file: Sydney 2000

4.7.89

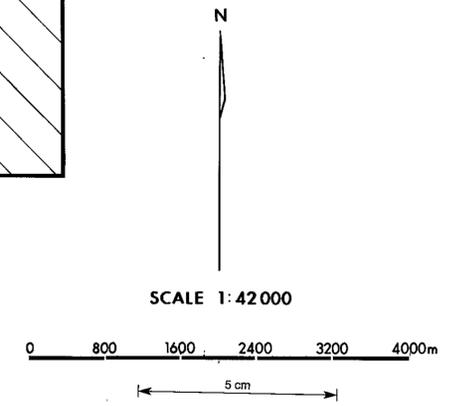
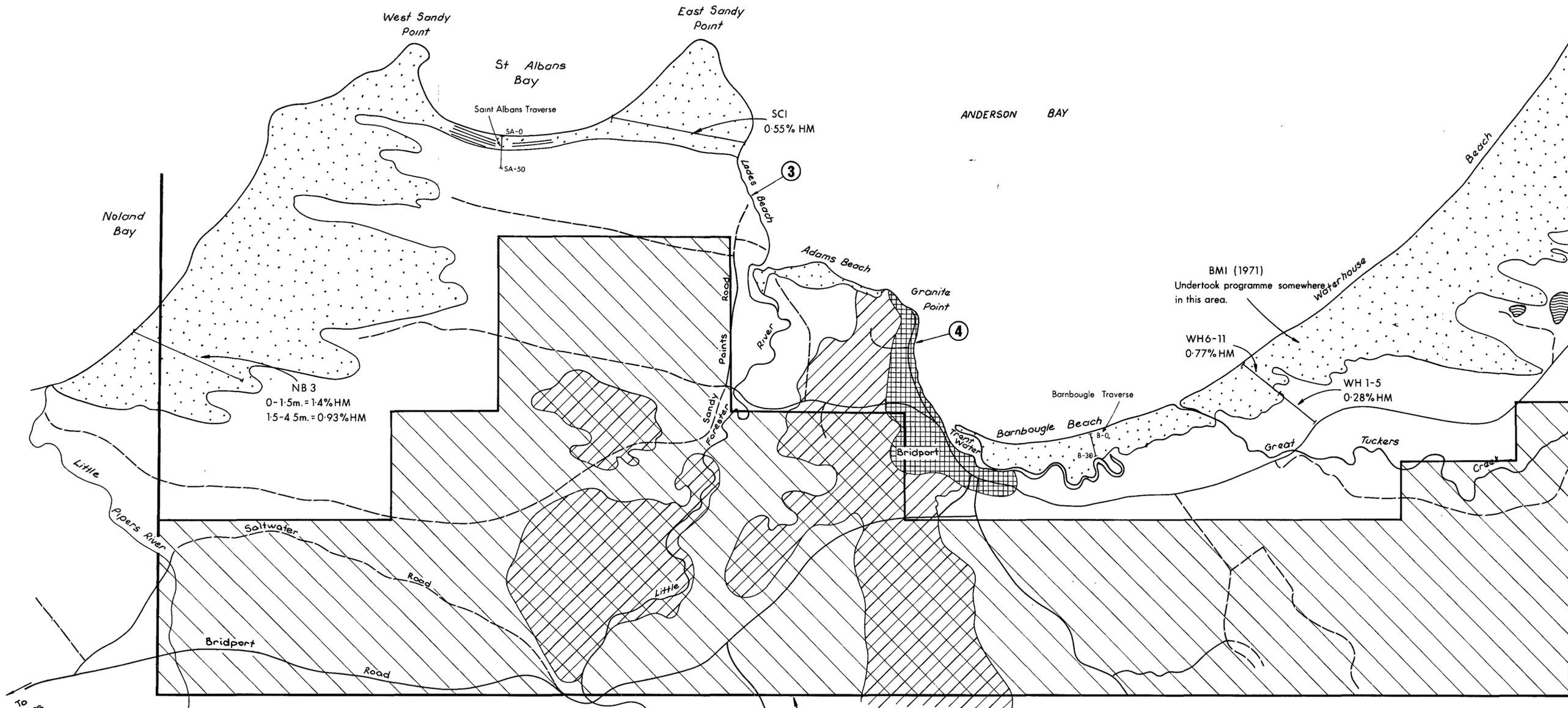
Reg. Nos 893056-154 & 893262-280

Dear Sir,

Please find below results of samples submitted to  
 this laboratory.

<u>Reg. No</u>	<u>Desc.</u>	<u>% + 1.00mm</u>	<u>% Heavy Minerals</u>
078	B 0 0 - 1.0	8.6	0.2
079	B 2 0 - 2.0	0.2	0.3
080	2.0 - 4.0	0.1	0.4
893081	B 2 4.0 - 6.0	0.1	0.4
082	6.0 - 8.0	Trace	0.3
083	8.0 - 9.9	0.9	1.1
084	B 6 0 - 2.0	0.2	0.5
085	B 10 0 - 2.0	0.8	0.6
086	2.0 - 4.0	0.1	0.4
087	4.0 - 6.0	0.1	0.2
088	6.0 - 8.0	0.1	0.4
089	8.0 - 8.1	0.2	0.5
090	B 14 0 - 2.0	0.4	0.4
091	2.0 - 4.0	1.3	0.5
092	4.0 - 5.3	4.9	0.4
093	B 18 0 - 1.3	1.9	0.4
094	B 22 0 - 2.0	1.9	0.6
095	B 26 0 - 2.0	0.4	0.6
096	2.0 - 3.0	0.2	0.5
097	B 30 0 - 2.0	1.1	1.1
098	2.0 - 4.0	2.1	0.5
099	4.0 - 4.5	0.2	0.6

BASS STRAIT



- LEGEND
- Aeolian
  - Basement
  - Lake or Lagoon
  - Traverse Line
  - Strand Lines
  - Road
  - Area Relinquished
  - SFLWL Syndicate traverse line & H.M. averages.
  - Track or Road

**BACH/PENNANT HOLDINGS LTD.**  
 EL 40/87 TASMANIA  
**AIR PHOTO INTERPRETATION** 536041  
**BRIDPORT - ANDERSON BAY**  
 Author: A. DOVE | Date: DEC. '89 | Fig. No.: 2