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EL 1/98 - SCAMANDER

ANNUAL  
REPORT  
2000/2001

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A GRIFFITH

28 March 2001

GRIFFITH GEOLOGICAL CONSULTANTS PTY LTD  
A.C.N. 074 958 544

01\_4543

Annual Report - 2000/2001 - EL 1/1998 - Scamander  
Griffith Geological Consultants Proprietary Limited\*  
Griffith, A. EL-1/1998

**ABSTRACT**

Exploration Licence EL 1/98 was initially granted to Griffith Geological Consultants Pty Ltd on 24<sup>th</sup> April 1998 for a period of five years.

Exploration activities during year one of the exploration licence were initially directed towards the reassessment of the alluvial tin deposits in the north of the licence area and the completion of a regional geochemical sampling program.

The regional sampling program was initiated to assess the potential of the Scamander Tier and Mathinna Beds to host previously undiscovered gold mineralisation. Anomalous gold geochemistry was detected from the drainage of Johnny Fitz Creek in the west of the licence and is to be evaluated at a later stage.

Exploration of the alluvial tin and the potential of the Scamander Tier Dyke to host economic gold mineralisation proved disappointing. These areas were relinquished from EL 1/98 at the end of year 1, reducing the exploration licence is size to 40 square kilometres.

Diamond drilling continued at the Orieco Prospect during year two and was aimed at further evaluating the potential of the prospect to host a small tonnage, high-grade resource. One diamond drill hole was completed at the Orieco Prospect and returned encouraging results. A second diamond drill hole was completed to the south east of the prospect as an exploration drill hole. No significant mineralisation was intersected in the second hole.

Detailed follow-up of the gold anomaly identified in Johnny Fitz Creek was completed during the year. No significant gold mineralisation was detected during the follow-up sampling program. No further geological work is recommended for the Johnny Fitz Creek area.

Additional drilling is scheduled to commence during year 4 to further assess the potential mineralisation at the South Orieco Prospect.

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## **1.0 Introduction**

Exploration Licence EL 1/98 comprising 202 square kilometres was initially granted to Griffith Geological Consultants Pty Ltd on 24<sup>th</sup> April 1998 for a period of five years.

Following disappointing results from regional exploration activities, the exploration licence was reduced in total area to 40 sq km during 1999.

Exploration activities completed during the reporting period include the completion of follow-up stream sediment sampling of the drainages surrounding Johnny Fitz Creek to assess the area to host potential gold mineralisation.

The following report summarises exploration activities and results completed within the licence during the period 2000/2001.

## **2.0 Exploration Philosophy and Objectives**

Exploration activities during year three of the exploration licence were directed towards:

- The reassessment of the potential of previously identified prospects within the licence area to support a small tonnage, high grade mining operation.
- Follow up stream sediment sampling of the drainages surrounding Johnny Fitz Creek.

### **3.0 Location and Access**

Exploration Licence EL 1/98 is located between the coastal townships of St Helen's and Scamander, situated on the north-eastern coast of Tasmania (Figure 1).

The licence is largely situated within State Forest and is serviced by an excellent network of all weather, graded roads and fire trails.

Topographic relief varies from undulating to steep hills and ridges developed in the central area of the licence changing to gentle slopes and flat laying areas in the vicinity of the coastal regions.

Vegetation within the licence is dominated by light, open eucalypt forest with dense undergrowth generally restricted to areas adjacent to established drainages. The central area of the licence from Scamander through to the Loila Tier contains established radiata pine plantations.

595000E

600000E

605000E

670008



Scamander

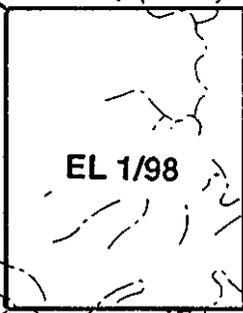
St. Helens

5425000N

5420000N

5415000N

5410000N



EL 1/98

EL 1/98

Scamander

5 cm

0 5km

SCAMANDER EL 1/98  
 8515  
 LOCATION  
 MAP

Scale 1:100,000

FIGURE 1

#### 4.0 Regional Geology

The geology of the exploration licence is dominated by the Silurian-Devonian Mathinna Beds, which comprise an alternating sequence of bedded quartzites, sandstones, siltstones and slates. The quartzites have a lithic component and display graded structures locally. The sequence has been interpreted to represent turbidites from previous studies.

The Mathinna Beds have been regionally folded during the Tabberabberan Orogeny around north northwest trending fold axes to produce open folds with two to four kilometre wavelengths and gentle southeast plunges. Deformation intensity may vary locally to produce tight folding and over-turned bedding has been recognised at both the Great Pyramid Prospect and Scamander Tier area.

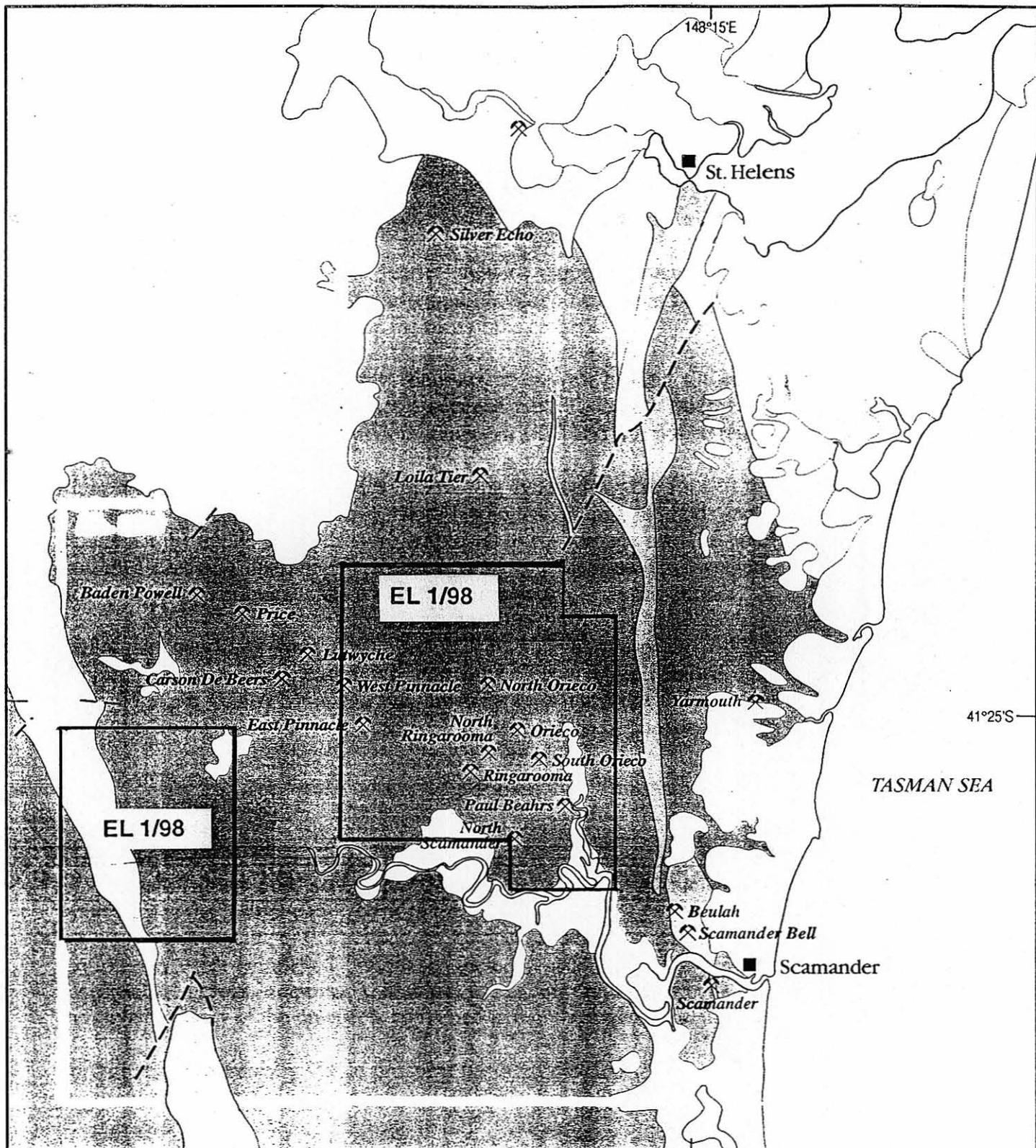
A number of north northwest trending faults and shear zones transect the Mathinna Beds and act as the focus of significant mineralisation at a number of prospect localities e.g. Orieco.

A suite of granitic intrusives, which form the southern region of the Blue Tier Batholith which may be broadly classified into two categories, has intruded the Mathinna Beds. These include non-tin bearing hornblende-biotite granodiorites-adamellites, which may occur as narrow dykes e.g. Scamander Tier, and the tin bearing biotite adamellite-granites.

Metamorphism of the sedimentary sequence adjacent to intrusive contacts has lead to the formation of spotted hornfels and quartzites in the west and northwestern areas of the exploration licence.

A complex cycle of erosion and deposition has continued from the Tertiary leading to the deposition of fluvial and marine clays, sands and gravels. Continued erosion of the tin bearing granites during the Quaternary resulted in the deposition in a number of economically important tin bearing alluvial deposits including Thureau's Lead, Transit and Constables Creek in the north of the licence area.

The regional geology and significant prospects developed within the exploration licence including relinquished areas is given in Figure 2.



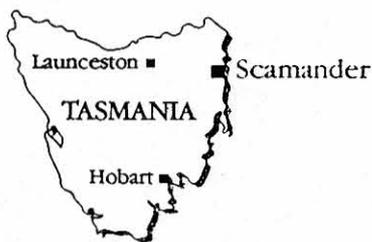
Source : Geological Survey of Tasmania  
Dept Mines - Hobart

5 cm

0 5km

LEGEND

-  Quaternary alluvium
-  Tertiary conglomerate
-  Devonian-Silurian (?) Turbidite sandstone & mudstone
-  Devonian Horneblende granodiorite
-  Devonian undifferentiated granodiorite



SCAMANDER EL 1/98

**GEOLOGY MAP**

Scale 1:100 000

FIGURE 2

## **5.0 Previous Work**

### **5.1 Mining History**

The St Helen's and Scamander district contains numerous metal occurrences including gold, silver, lead, zinc, tungsten, wolframite and tin which have been subjected to varying degrees of exploration and development since the turn of the century.

Early exploration and prospecting focused on the tin bearing Quaternary gravels and wash developed in the St Helen's district associated with Thureau's Deep Lead. The Lead has been described in detail previously by Montgomery in 1893 and will not be repeated here.

Numerous No Liability companies and mining syndicates were formed to prospect and develop the alluvial tin deposits in the district. Traditional mining methods including sluicing, gravel pumps and hydraulic methods were employed to recover the tin. The potential of the district to sustain a dredging operation was assessed by the Siamese Tin Syndicate during the 1930's. However, disappointing results prevented the project progressing further.

Exploratory workings were developed at a number of prospects within the district including Beulah, Scamander Bell, Yarmouth, and Silver Echo. More detailed development and mining occurred at the Orieco Mine and the Great Pyramid Tin Mine. Eighty-five tons of copper with silver credits was won from the Orieco Mine and 2.9 tons of tin was worked from Great Pyramid.

### **5.2 Previous Exploration**

A number of exploration companies including Mt Lyell, EZ, Austminex, Geophoto, BHP, RTZ, Shell-Billiton and Scamander Mining have employed modern systematic exploration techniques to the district dating back to the 1950's.

Exploration work completed previously includes geochemical, ground and airborne magnetic geophysical surveys, mapping, trenching, costeaning, reverse circulation and diamond drilling employed at many of the prospects contained within the exploration licence.

To date, no economically viable project has been developed within the licence despite the high level of exploration undertaken within the district.

## 6.0 Exploration Completed During the Period

### 6.1 Johnny Fitz Creek

Following the disappointing results of diamond drilling at the Orieco Prospect, exploration focussed on the potential of Johnny Fitz Creek to host a small tonnage, high grade gold resource. The assumption is based on anomalous gold geochemistry returned from previous sampling and the location of the Golden Ridge Prospect further to the west.

## 7.0 Discussion of Results

### 7.1 Johnny Fitz Creek

Four stream sediment samples were collected from each of the four creeks that drain into Johnny Fitz Creek. Due to the poor nature of the sample sites, it was not possible to collect a panned concentrate or whole rock samples.

Each sample was submitted to Analabs Pty Ltd, 14 Thirkell Street Burnie and assayed for gold and silver.

The assay results proved disappointing, with the highest gold value recorded being 0.05 ppm Au. The source of the gold anomaly responsible for the higher anomaly from Johnny Fitz Creek could not be replicated.

The assay results for the sampling program are given in the following table.

**Table 1**

### **Johnny Fitz Creek Assay Results**

Sample Number	Northing AMG	Easting AMG	Au (ppm)	Ag (ppm)
P1155	5412400	595300	0.04	<1
P1156	5412600	595200	0.05	<1
P1157	5412400	595200	0.01	<1
P1158	5414300	594800	0.01	<1

## 8.0 Conclusions

Based on the results of the exploration completed during year three the following conclusions are drawn:

- The low order gold anomaly previously located at Johnny Fitz Creek does not have the potential to host significant gold mineralisation.

Additional diamond drilling is recommended at the South Orieco Prospect during year four to further test the strike, depth, continuity and grade of the mineralisation.

## **9.0 Environment**

All exploration activities completed during the year were conducted in accordance with the Exploration Code of Practice issued by the Mineral Resources of Tasmania.

The follow-up geochemical assessment of the Johnny Fitz Creek area caused no environmental disturbance during the course of the program. No rehabilitation was required during this exploration phase.

## 10.0 Expenditure

The total expenditure for EL 1/98 Scamander as at 31 March 2001 is \$110,805.99.

## 11.0 References

- COLMAN, W.R.G., 1934. Prospecting and Development of an Alluvial Tin Mining Area in Tasmania. Proceedings Aus. I.M.M. (Inc),93.
- CROMER, W.C., 1990. EL 76/87. Partial Relinquishment Report (End Year 3) Seabed Resources NL.
- GRIFFITH, A., 1999. EL 1/98. Annual Report 1998/1999.
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## 12.0 Keywords

Scamander, St Helen's, Johnny Fitz Creek, Orieco, Gold, Silver.

### **13.0 Acknowledgments**

I would like to thank the following people from a number of organisations for their contributions to the success of the exploration activities during the year. In particular,

Mr David Gatehouse Mineral Resources Tasmania,

Mr Dan Ryan, State Forestry Commission,

**APPENDIX 1**

670020

**A N A L A B S**



Our reference : BU018336  
Your reference : **Drop Off 24/1/2001**  
Project code : Stream Sediment Samples  
Date received : 24/01/01  
Date reported : 31/01/01

**Analabs Pty. Ltd.**  
ACN 004 591 664  
14 Thirkell St, Burnie  
Tasmania 7320  
Telephone : (03) 6431 6837  
Facsimile : (03) 6431 8890

[Empty rectangular box]

Number of pages of results : 1  
Number of Samples : 4  
First Sample : P1155  
Last Sample : P1158

Invoice to:

Electronic Data Transmission :  
Modem Y 31/01/01  
Facsimile / /  
Disk Report Y / /

Results to:

Results to:

Remarks :

Authorised by ... *M.A. Good* ...  
On behalf of:

Rob Chapman  
Laboratory Manager

The results in the following analytical report pertain to the samples provided to this laboratory for preparation and/or analysis as requested by the client.

