



**GOLDEN RIDGE - TASMANIA  
EL36/2008**

**ANNUAL PROGRESS REPORT  
31<sup>st</sup> May 2011 – 30<sup>th</sup> May 2012**

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**Note: All figures, grids, and contained data are according to the GDA/MGA94 grid system.**

## ABSTRACT

The Golden Ridge exploration tenement remains highly perspective for gold. Over the past 12 months no field work has been completed on the ground of this tenement, but work has continued here as part of the regional 'Prospectivity Review' being undertaken by Tamar Gold.

The next 12 months will see the continuation of this review with specific targets and work programs for this tenement being proposed.

## **CONTENTS**

## **Page**

1. INTRODUCTION	1
1.1 Location	1
1.2 Geology Overview	2
1.2.1 Stratigraphy	2
1.2.2 Structure and Mineralization	3
1.3 Exploration Rationale	6
2. REVIEW OF PREVIOUS WORK – Prior to current tenement	7
2.1 Historical Mining	7
2.2 Exploration prior to current licence area	7
3. CURRENT WORK	
3.1 Data Capture	9
3.2 Geological Model	9
3.3 Tailings Assessment	9
3.4 Stockpile Assessment	9
4. PROPOSED EXPLORATION	11
5. ENVIRONMENT	11
6. EXPENDITURE	11

## **LIST OF FIGURES**

Figure 1.	Golden Ridge EL36/2008 location map	2
Figure 2.	Lineament Interpretation .	4
Figure 3.	Geology of NE Tasmania MRT copy	5
Figure 4	Local tenement geology	6

## **LIST OF TABLES**

Table 1.	Revised Stratigraphy of the Mathinna Supergroup	3
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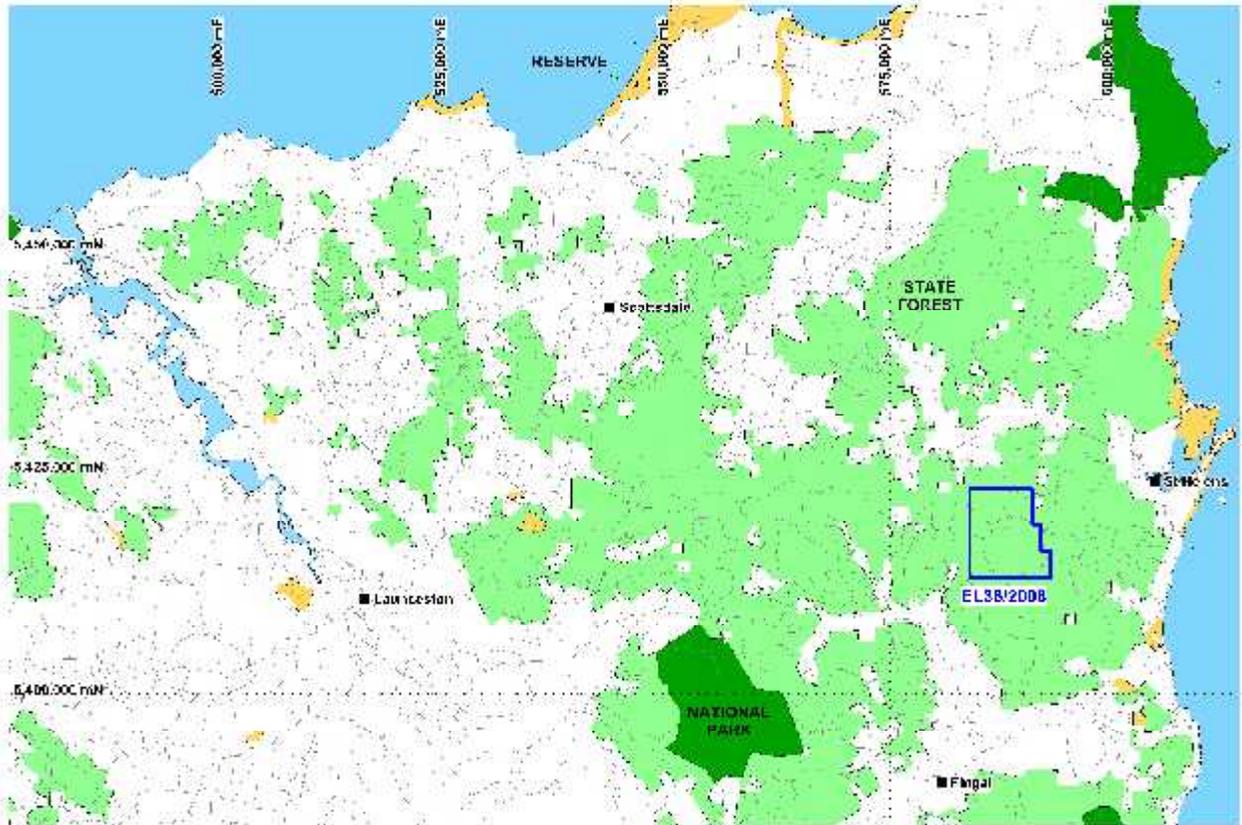
## **1. INTRODUCTION**

This report is a summary of the exploration activities conducted on the Golden Ridge exploration tenement EL36/2008, for the period of 31<sup>st</sup> May 2011 to 30 May 2012. The area of the licence is 79sq km.

### **1.1 Location:**

The tenement is located approximately 25 km NNE of the township of Fingal, in eastern Tasmania (Figure 1).

The licence area can be found on the Mathinna (5640) 1:25,000 scale, and the Forester (8415) 1:100,000 scale; topographic map sheets.



**Figure 1. Golden Ridge Licence (EL36/2008) is located in north eastern Tasmania and wholly comprises state forest.**

## 1.2 Geology Overview

### 1.2.1 Stratigraphy

The tenement comprises sub- and outcropping Mathinna Supergroup siltstones, sandstones, subordinate shales and Devonian granites. Revision of the internal stratigraphy of the Mathinna Supergroup as detailed in Seymour et al. (2011) and summarized in Table 1 below,

Group	Formation	Member	Age	Brief description
Panama Group	Sideling Sandstone		Early Devonian (plant fossils)	Dominantly fine-grained sandstone, some interbedded siltstone
	Lone Star Siltstone		Late Silurian (graptolites)	Dominantly thin-bedded siltstone with interbedded fine-grained sandstone increasing towards the top
	Retreat Formation		Silurian?	Interbedded turbiditic medium to very fine-grained sandstone and subordinate siltstone-mudstone
	Yarrow Creek Mudstone		Silurian?	Dominantly thin-bedded mudstone, with subordinate cross-laminated siltstone
Inferred faulted unconformable contact				
Tippogoree Group	Turquoise Bluff Slate		Early-Middle Ordovician (graptolites)	Phyllitic dark grey-black slate; recumbent folds and cleavage
		Industry Road Member	Ordovician?	Interbedded phyllitic slate and foliated very fine-grained sandstone; ridge-forming recumbent folds and cleavage
	Stony Head Sandstone		Ordovician?	Graded thick-bedded fine-grained turbiditic sandstone with minor interbedded pelite; large-scale recumbent folds and cleavage

**Table 1. Revised Stratigraphy of the Mathinna Supergroup**

### 1.2.2 Structure and Mineralization

The locations of known gold prospects in the Golden Ridge belt of deposits appear to be controlled by structural intersections (Figure 2).

Note that there is a good correlation between either gold deposits and linear features or gold deposits and the intersection of linear features.

While in other parts of NE Tasmania, structure and associated gold mineralisation is interpreted to pre-date granitoid intrusion, previous workers have recognised a distinction between mineralisation styles inside and outside the contact aureole. This is manifest, generally, as stockwork style veining within the hornfelsed aureole and discrete reef style veining and mineralisation outside; due to competency contrasts of the rock-types. This relationship, if found to be accurate, suggests that the vein-related mineralisation postdates at least the immediate granitoid intrusion in the tenement.

Further work to investigate vein style relative to host-rock lithology (e.g. siltstones vs sandstone) may shed light on an alternative explanation based purely on rheological contrast due to lithology.







## **2. REVIEW OF PREVIOUS WORK – Prior to current tenement**

### **2.1 Historical Mining**

Small scale open pit and underground gold mining occurred at the now abandoned workings marked on Figure 1, between the late 1890s and the mid 1930s. Several unpublished reports by W. H. Twelvetrees and Q. J. Henderson, archived in the MRT library, describe these workings, most of which only produced small parcels of ore grade vein quartz for testing. The Brilliant workings were by far the largest, with ferruginous sandstone as well as vein quartz mined from a small pit and limited shallow underground stopes. Evidence of a mill and eroded tailings are still visible down slope from the Brilliant and Golden Ridge workings, extending to Brilliant Creek.

### **2.2 Exploration Prior to Current Licence Area (from EL6/1999 ann rept 2002 – K Morrison)**

The only significant modern gold exploration in the Golden Ridge area consists of two programs conducted between 1989 and 1998.

#### **1989-1992 Billiton Australia and Joint Venture partners; Aureole NL, American Horizon Resources Inc; Federation Resources NL EL 58/88**

- Rock chip, stream sediment sampling, reconnaissance mapping and sampling of workings.
- Grid based mapping, BLEG soil survey, costeans, further stream sediment sampling. Consultants studies on structural, geochemical and contact metamorphic controls on mineralisation.
- Support for two Honours projects.
- 7 RC percussion drill holes (574 m) tested the Brilliant and Trafalgar-New Carthage prospects.

Billiton withdrew from the JV late in 1992 because they considered that the potential was too small for their objectives and no further work was done by the licensee group.

#### **1993-1998 MPI Gold Pty Ltd EL 12/93**

- Extension of the Billiton stream sediment survey.
- Re-establishment and survey control of grid.
- Mapping, soil, rock chip survey.
- 10 cored diamond drill holes (2125 m) under the Brilliant-Golden Ridge workings.
- Petrography, geological interpretation of Brilliant-Golden Ridge mineralisation.

MPI relinquished the EL in 1998, due to a perceived lack of size potential and continuity of mineralisation.

**Shaw Excavations Pty Ltd** submitted a successful bid for ETA 495 in February 1999 and EL 6/99 was subsequently granted in July 1999.

During licence Year 1 Surpac modelling of previous exploration drilling around the

Golden Ridge-Brilliant workings identified a steeply plunging envelope of low grade gold mineralisation containing approximately 25,000 ounces @ 1.6 – 1.9 g/t (depending on the model parameters) from surface to 300 metres vertical depth. The mineralisation was modelled to a confidence level sufficient for an Inferred Resource estimate but the overall grade is too low on such a small resource. Mineralisation is open at depth and to the northeast and the distribution of higher grade intersections inside the envelope suggests there is reasonable potential, via infill and extensional drilling, to double the resource and delineate a higher grade deep zone beneath a low grade surficial oxide zone deposit (Morrison, et al., 2000).

Preliminary investigations into the potential for discovering a “black granite” dimension stone resource within the Hogans Road Diorite identified one facies – a coarse grained hornblendite – which at the hand specimen scale exhibits the colour, texture and polishing properties sufficient to justify an exploration program. Magnetic susceptibility measurements on cut boulders showed the hornblendite to be consistently more magnetic than other rock types within the Hogans Road Diorite and therefore magnetics was considered a promising mapping tool. In Year 2, two inclined 60 metre RC percussion holes were drilled to test the east-west strike option for mineralisation sourcing the surface rock chip anomalies discovered by Billiton in the New Carthage portion of the area currently called the Trafalgar prospect (Morrison, 2001).

Both holes were drilled within the contact aureole, approximately 100 metres east of outcropping granite at the Trafalgar workings and confirmed a broad zone of very low grade gold dispersed through the mainly granoblastic biotite hornfels in that part of the aureole. Although 22 one metre intervals returned assays of >0.1 ppm Au, only three disconnected intervals returned >1 ppm Au. The dispersed nature of the gold, the lack of correlation between gold values and logged visible pyrite and the absence of evidence for a structural control on gold, all downgrade the prospect. The results are essentially identical to those achieved by Billiton in their three hole east-west fence of percussion holes drilled in 1992, suggesting that the aureole carries widespread elevated gold (which may be fracture hosted at the very small scale) and that supergene enrichment during regolith development may explain both the rock chip anomalies and the frequent shallow prospectors diggings around the prospect area.

The results to date provide little encouragement for a near surface economic deposit remaining undetected inside the 10 ppb soil BLEG contour anomaly threshold.

Work subsequent to this focussed on the dimension-stone potential of the Hogan’s Road Diorite.

### **3. CURRENT WORK**

#### **3.1 Data Capture**

All existing data (RC/DD drilling, soils, rock-chip) has been captured digitally and will be compiled into database form in the coming reporting period.

#### **3.2 Interpretation**

Initial interpretation of the licence area suggests some ambiguity in the potential orientation of mineralised structures and vein packages. The schematic cross-section illustrated in Figure 4 could be equally interpreted assuming mineralized veins dipped gently to the east compared with the sub-vertical zones as shown. Observations by previous geologists recorded in the drill-log data for the holes GRD2, 4, and 6 indicate that the angle of veining to the core axis is generally between 0 (that is parallel with the drill-hole) to 30 degrees.

Targetted, oriented diamond-drill holes are required to test for both the continuity of mineralization and orientation of the mineralized veins. It is important to note that the enveloping surface to the mineralized veins may remain the same.

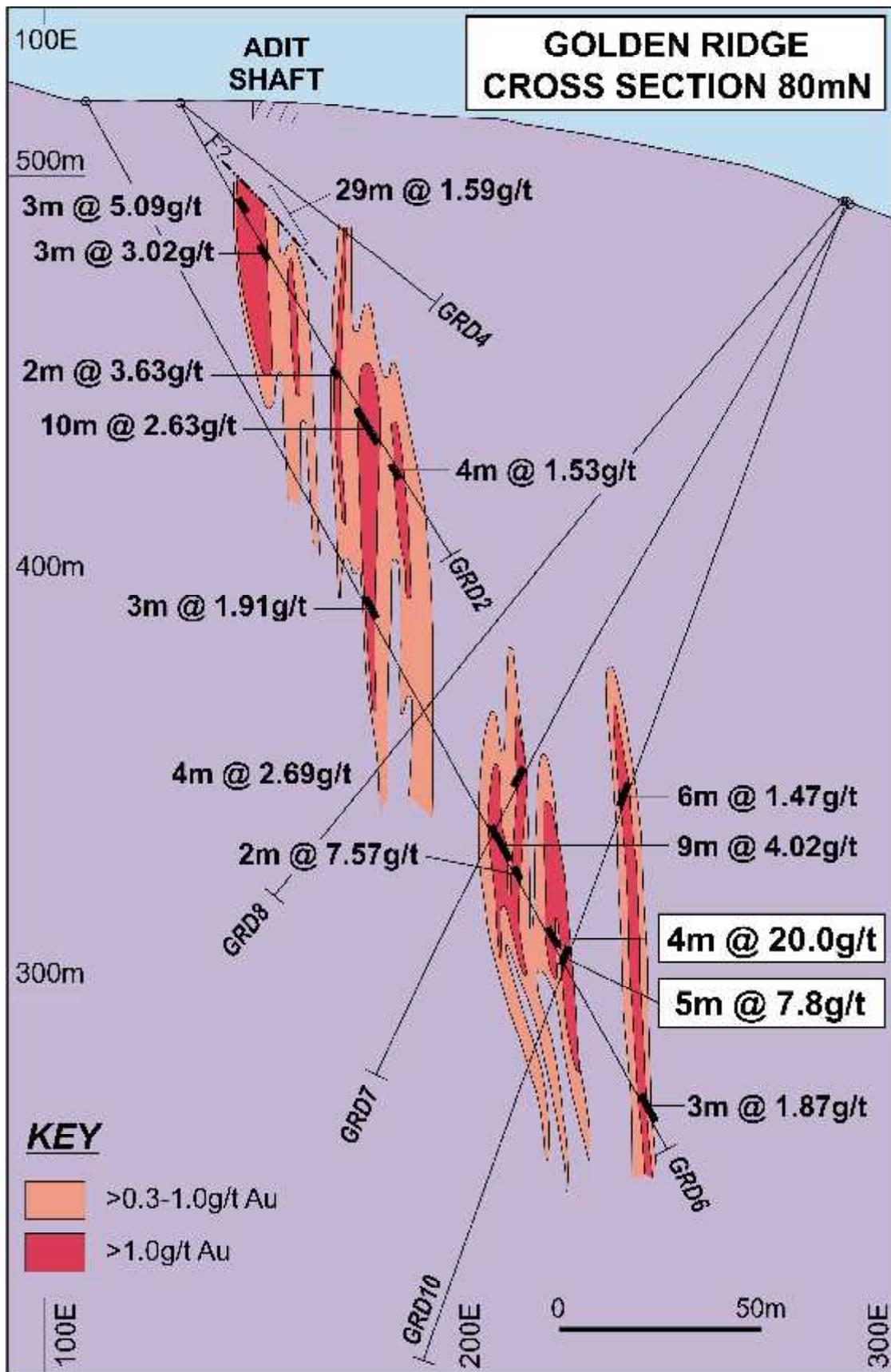


Figure 4. Schematic cross-section – Brilliant prospect

#### 4. PROPOSED EXPLORATION

On the completion of the Regional Prospectivity review, specific areas will be targeted for further exploration.

#### 5. ENVIRONMENT

No activities were undertaken within the reporting period which would have caused disturbance to ground or vegetation.

The company has environmental policies in place, including compliance with the Mineral Exploration Code of Practice, which minimise the impact that exploration activities have on the environment. The policies include guidelines on how to reduce the risk of spreading plant diseases and weeds as a result of day-to-day exploration tasks.

#### 6. EXPENDITURE

31 <sup>st</sup> May 2011 – 30 <sup>th</sup> May 2012		
Geoscientific Costs	Prospectivity Review	2952
	Geochemistry	
	Geophysics	
	Remote Sensing	
Drilling & Gridding Costs	Gridding	
	Drilling	
	Land Access Costs	
	Rehabilitation Costs	
	Feasibility Study Costs	
	Other Costs	202
	Admin Costs	1293
	<b>Total - eligible</b>	<b>4447</b>

Table 1. Expenditure 31<sup>st</sup> May 2011 to 30<sup>th</sup> May 2012



