



**MANGANA - TASMANIA  
EL11/2011**

**REPORT  
to March 2013**

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**Distribution:**

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## **ABSTRACT**

EL11/2011, Mangana, was granted on the 11/7/2011 and covers 183 sq km. Over the life of the licence a regional prospectivity review of all ground held by Tamar Gold was undertaken. Four small pits were excavated at the Twilight workings in late 2012.

After a review of the Tamar Gold tenements this licence was identified as not being prospective for the type of gold target that was going to be the focus of the Tamar Gold future exploration program. It is Tamar Gold's intention to transfer this tenement to Nigel Webb.

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## **INTRODUCTION**

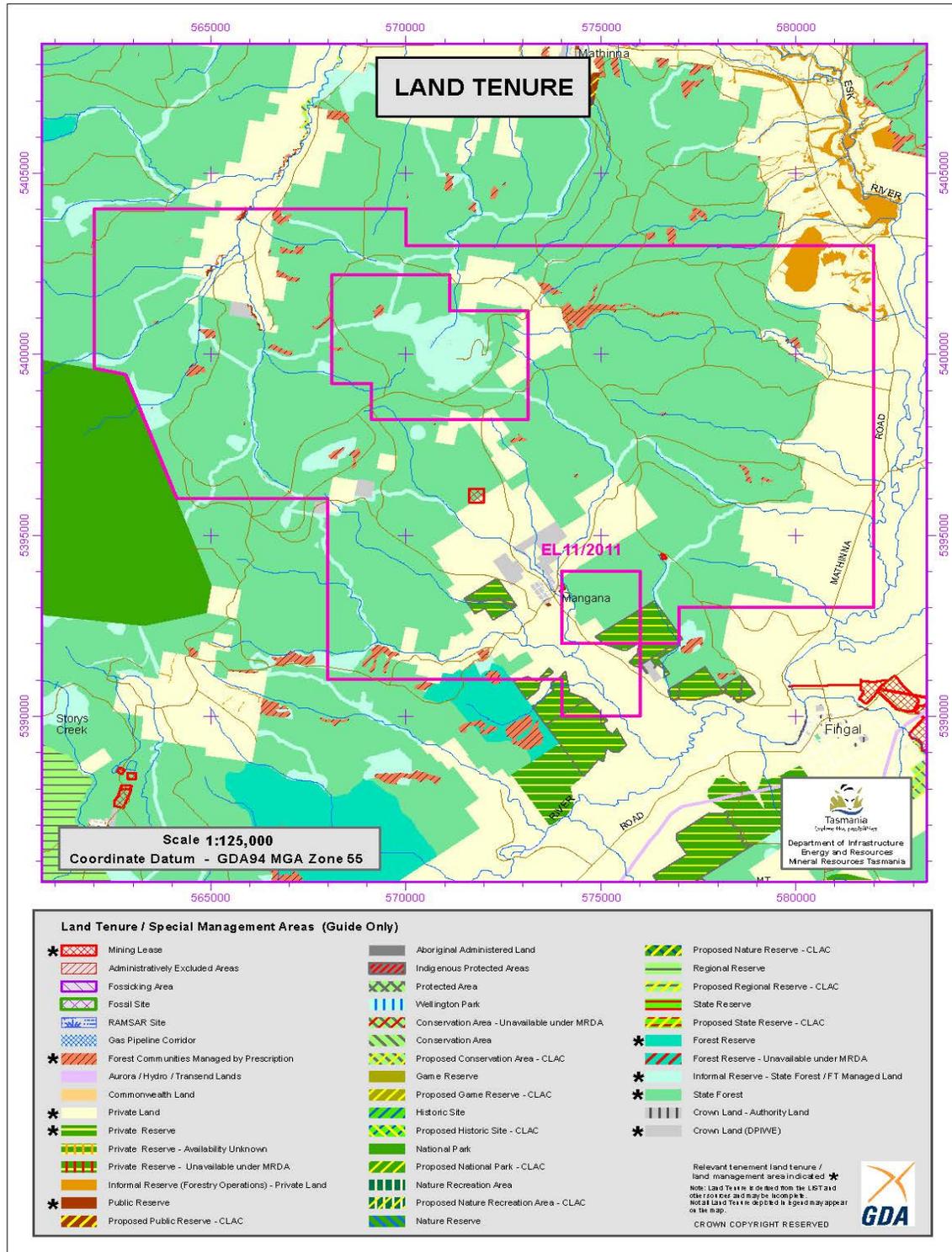
This report is a summary of the exploration activities conducted on the Mangana exploration licence EL11/2011, for the period from the 11<sup>th</sup> July 2011 to 14<sup>th</sup> February 2013. The area of the licence is 183 sq km.

### **Location**

The tenement is between Mathinna and Fingal in eastern Tasmania (see Figure 1 below). Access to the licence is via the Esk Highway and Mathinna Road.

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

**Figure 1. The Mangana Exploration Licence (EL11/2011) is located in north eastern Tasmania to the north of Fingal and south of Mathinna (map from MRT).**



## Geology Overview

The tenement comprises Mathinna Supergroup siltstones, sandstones, subordinate shales and Devonian Granite. Revision of the internal stratigraphy of the Mathinna Supergroup as detailed in Seymour et al. (2011) and summarised below has been used during this work:

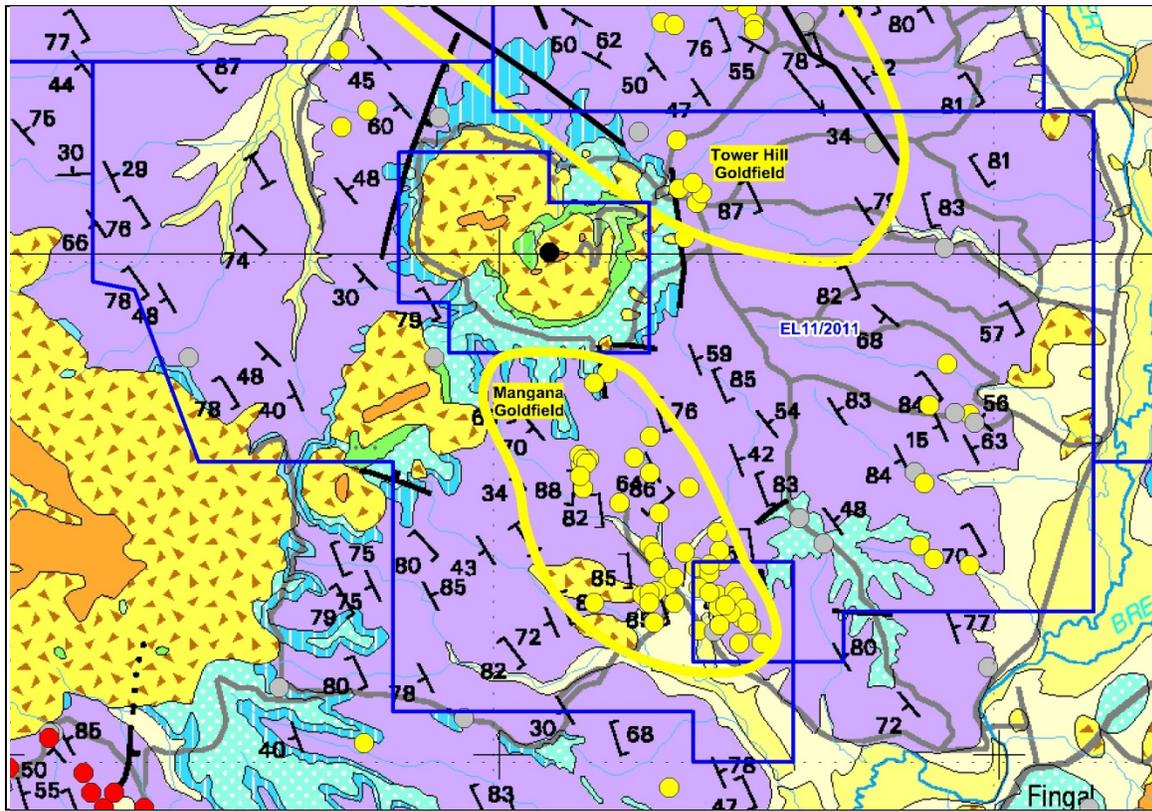
Group	Formation	Member	Age	Brief description
Panama Group	Sideling Sandstone		Early Devonian (plant fossils)	Dominantly fine-grained sandstone, some interbedded siltstone
	Lone Star Siltstone		Late Silurian (graptolites)	Dominantly thin-bedded siltstone with interbedded fine-grained sandstone increasing 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**

## Mineralisation

The mineralisation in EL11/2011 is of the orogenic quartz vein gold style. The historically large, high grade turbidite hosted narrow vein style gold deposits such as Bendigo, Ballarat, Beaconsfield and Golden Gate was the proposed target for this exploration licence.

Figure 2. Geology of the Mangana area from MRT 1:250 000 Geology Map



## **WORK COMPLETED**

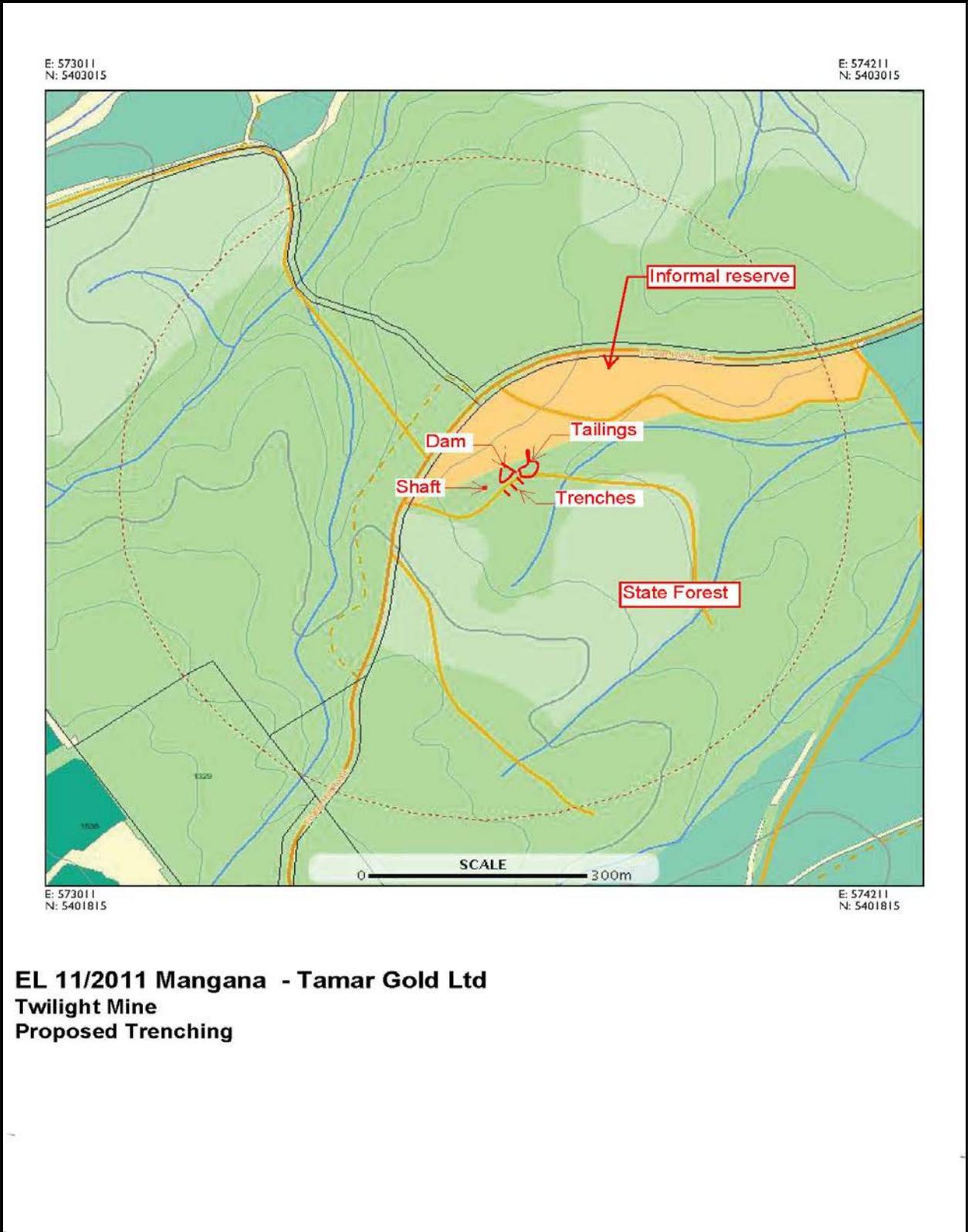
A small program of three trenches was approved immediately south of the Twilight tailings dump in the northern part of EL 11/2011 in late 2012. This followed reports from John Taylor, an old time prospector, of gold in younger rocks at the tailings site.

The program was changed to four shallow pits with one of them uncovering a similar specimen to that found by John. The rock was identified as being from the Lower Parmeener Supergroup and interpreted to have been part of the footings for the Twilight crusher.

The pits were rehabilitated immediately after excavation.



**Figure 3. Sample from pit immediately adjacent to Twilight tailings dump.**



**EL 11/2011 Mangana - Tamar Gold Ltd  
Twilight Mine  
Proposed Trenching**

**Figure 4. Sketch map of Twilight workings (map from LIST).**

As this licence is immediately to the south of the Golden Gate Retention Licence and part of the company structure at the time of the acquisition of this ground included that area, it was the intention to explore for structurally controlled high grade slate belt gold to the north and south of Mathinna.

Following a change in the management at Tamar Gold, and a review of the tenements held, it was decided that this style of mineralisation was no longer an attractive exploration target because of the cost of drilling sufficient holes to control grade variability and the general lack of tonnes per vertical meter. It was the intention to relinquish this ground but after an approach from Nigel Webb it was agreed that the ground would be transferred to his organisation. The future program and proposed expenditure will be submitted to MRT by Nigel Webb on completion of the transfer.

## **ENVIRONMENT**

The pits at the Twilight workings were rehabilitated immediately after digging. No other on ground work was undertaken.

**EXPENDITURE**

<b>July 2012 – December 2012</b>		
<b>Geoscientific Costs</b>	<b>Prospectivity Review</b>	
	<b>Geochemistry</b>	
	<b>Geophysics</b>	
	<b>Remote Sensing</b>	
<b>Drilling &amp; Gridding Costs</b>	<b>Gridding</b>	
	<b>Drilling</b>	
	<b>Land Access Costs</b>	
	<b>Rehabilitation Costs</b>	
	<b>Feasibility Study Costs</b>	
	<b>Other Costs</b>	6900
	<b>Admin Costs</b>	134
	<b>Total -</b>	<b>7034</b>

**Expenditure July 2012 to December 2012.**

Total expenditure through the life of the licence was \$9093.

## REFERENCE

Seymour, D. B., Woolward, I.R., McClenaghan M.P. and Bottrill R.S., 2011,

Stratigraphic revision and re-mapping of the Mathinna Supergroup between the River Tamar and the Scottsdale Batholith, northeast Tasmania: Explanatory report for parts of the 1:25 000 scale Low Head, Tam O'Shanter, Weymouth, Retreat, Lilydale, Bridport, Bowood, Nabowla, Lisle and Patersonia map sheets. 1:25 000 Scale Digital Geological Map Series Explanatory Report 4: Mineral Resources Tasmania, Hobart, pp. 1–82.