



**MATHINNA GOLDFIELD - TASMANIA
EL14/2013**

**ANNUAL PROGRESS REPORT
14th February 2016 – 14th February 2017**

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Disclaimer

The conclusions and recommendations expressed in this report represent the opinions of the Authors based upon the data available and provided to them at the time of preparation of this report. While all due care has been taken in preparation of the report, Mathinna Gold Pty Ltd and its employees take no responsibility for accidental inclusion/omission of erroneous data, particularly that sourced from previous work on this licence by other parties.

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

ABSTRACT

Mathinna Gold Pty Ltd applied for the area covering EL14/2013 for two reasons:

1. to secure the area around the currently held Retention Licence for the future expansion and conversion of the RL into a ML and;
2. to explore the surrounding area for further sources of ore to compliment the current resources at the New Golden Gate mine.

The company conducted no on-ground work during this reporting period and instead focused on an overall plan to develop the goldfield in conjunction with the Exploration Target at the New Golden Gate (NGG) mine.

Part of this development plan is to extend the current 3D model at the NGG to include all workings along approximately 3 kilometres of strike to the south, to the Jubilee Gold Mine.

The development of this model will be conducted over the remainder of the tenement period with a view to then spending \$5m on drill testing defined targets for new mineralised reefs.

The expanded 3D model will cost on the order of \$200,000 to complete

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INTRODUCTION

This report is a summary of the exploration activities conducted on Exploration Licence EL14/2013, for the period of 14th of February 2016 to the 14th of February 2017. The area of the licence remains 68km². The owner of the tenement is Mathinna Gold Pty Ltd.

The tenement is of particular interest to Mathinna Gold as it hosts the Mathinna Goldfield and surrounds RL2/2008. RL 2/2008 hosts the New Golden Gate and Tasman Consols mine workings and associated tailings. This was the most significant historical gold mine in this part of NE Tasmania and produced 260,000oz at a calculated average head grade of ca. 26g/t Au. Mathinna Gold believes that there is scope for further discovery of new resources within this tenement area.

Location

The tenement is located around the township of Mathinna, in eastern Tasmania (Figure 1). Access to the license area is excellent via sealed (Upper Esk and Tyne Valley Roads) and various gravel roads on State Forest and private property. Mathinna is located 26km NNW from Fingal and is accessed by sealed road (Upper Esk Road).

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.

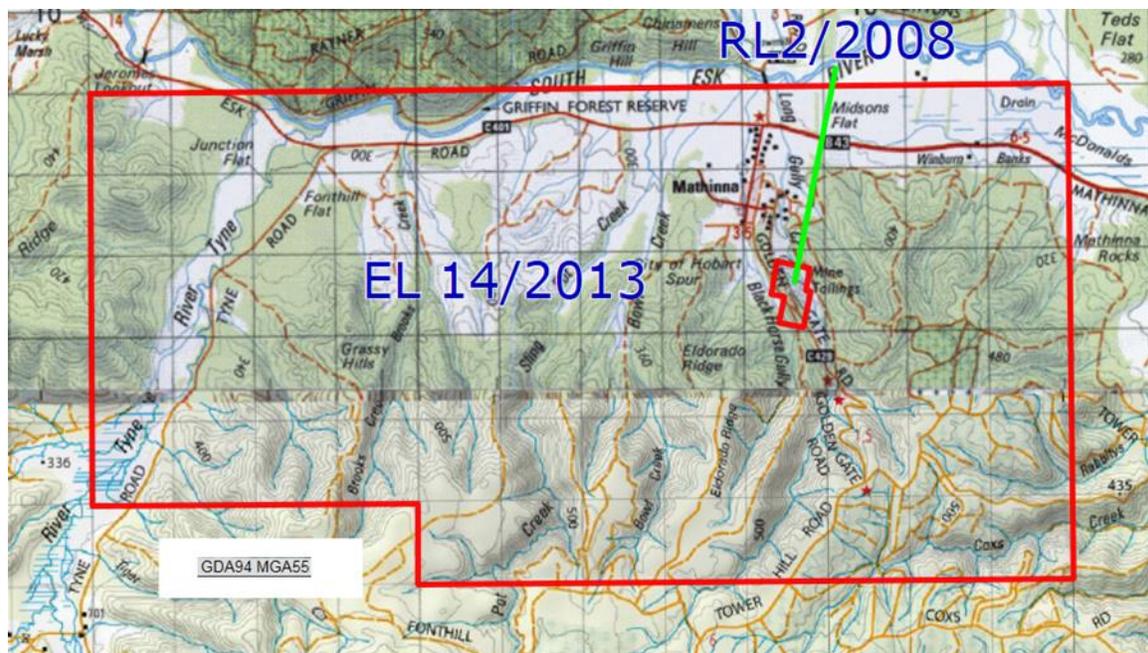


Figure 1. EL 14/2013 is located in northeastern Tasmania, surrounding the township of Mathinna.

Geology Overview

Stratigraphy

The tenement comprises sub- and outcropping Mathinna Supergroup siltstones, sandstones, and subordinate shales. 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

The New Golden Gate and associated vein deposits are hosted within the Lone Star Siltstone formation (pers. comm M. Vicary 2011). The Lone Star Siltstone Formation comprises basal bioturbated marine siltstone/shale/mudstone which is laminated to thinly bedded (Seymour et al., 2011). Minor black shale occurs and is commonly pyritic. The Lone Star Siltstone Formation grades upward with quartz-rich thick-bedded sandstone becoming more common toward the boundary with the overlying Sideling Sandstone Formation (Seymour et al., 2011).

The regional geology (Figure 2) is dominated by Mathinna Supergroup rocks and granitoids. Note that the granitoids are interpreted to be at a depth of approximately 4km below the New Golden Gate gold system (Leaman D.E. & Richardson R.G., 1992).

Structure and Mineralization

The host-rocks to gold mineralization in the Mathinna area preserve several overprinting deformation features which are documented in Keele (1994) and modified for the specific geometries and observations of the New Golden Gate mine area below.

D₁

Observations by Keele (1994) of minor folding and spaced cleavage overprinted by the dominant S₂ cleavage. Not observed at the New Golden Gate deposit to date.

D₂

Regional folding with NW/NNW trending axial planes. Pervasive slaty cleavage. Dominant fabric in hand-specimen (Figure 3).

D₃

Local folding with N/NNE trending axial planes. Antiformal fold observed by Twelvetrees as central to the reefs of the New Golden Gate and Tasman Consols mines is likely to be and F₃ fold. S₃ cleavage recorded in geological logs of Defiance Mining diamond-drilling in the licence area. Intersection lineation (L⁰₃) in hand specimen (Figure 3) post-dating S₂ and pre-dating late kinking. Occurs at ~60degree angle to L⁰₂ in the plane of bedding. Observations by Twelvetrees (1906) that the 'apparent' drag of reefs into the main slide, previously assumed to be fault-drag folding, is actually a manifestation of simultaneous brecciation along the reef line and the main slide. This gives the effect of the reef turning sharply. His evidence for this was that although the reefs exhibited this 'apparent' drag on intersection with the main slide, bedding in the host-rocks did not. This observation is supported by TGL interpretation of the controls on high-grade and wider mineralization in the mine as being located at the intersection of NW striking faults and the NNE striking reef structures. NNW trending faults (Main Slide, Western, Central, East and West branch) may represent domainal reactivation of the S₂ slaty cleavage concurrent with the development of N/NNE trending fault/shear-zones which became reef 'channels'. Folding of bedding and the main S₂ cleavage may have created a zone of restraining during D₃ reactivation of S₂ and this is seen as the contributing factor as to why the New Golden gate reef system is located where it is. Note that both orientation of structures are mineralised. The main phase of gold mineralisation is interpreted as late- to post D₃.

Post-D₃

Kink-folding is recognized in hand-specimen and overprints all other fabrics (see Figure 3).

Exploration Rationale

The New Golden Gate mine was one of the most significant gold mines in Tasmania when operating ~1888 – 1908. The mine produced ca. 260,000oz from a multiple reef system.

The discovery of the Dylan's and Sophie's reef system (Defiance Mining 1999) along strike from the New Golden Gate historic workings shows that there is potential to discover new reefs within the tenement area.

Mathinna Gold plans to explore the tenement area with the aim to provide additional resources to those discovered in RL 2/2008

REVIEW OF PREVIOUS WORK

A review of previous work has been undertaken with a view to expanding the current 3D model at the New Golden Gate mine along strike to the south.

WORK DURING THE CURRENT REPORTING PERIOD

No on-ground work was undertaken during the reporting period.

PROPOSED EXPLORATION

The following program has been identified as the best development plan for this tenement:

- Extend the company's 3D model to include structure and all soil results for the surrounding goldfield from the New Golden Gate in the north and south to the Volunteer Mine and from the Main Slide in the east and west to an area parallel with the City of Hobart. Also review how this ties in with the area further to the west.
- Based on the new model define near surface drill targets both around the NGG and to the south and west and commit a 2000m drill program to test these targets
- Review data post initial drill program with a view to undertaking a further 18,000m of drilling to further test hits from the previous program and hopefully start to define resources.

The initial focus over the remainder of the current tenure will be on developing the 3D model for the whole goldfield at a cost of approximately \$200,000. The total, 5-year, commitment for the tenement is \$183,600.

The company plans of spending approximately \$40,000 during this tenure period.

ENVIRONMENT

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.

EXPENDITURE

14 th February 2015 – 14 th February 2016		
Geoscientific Costs	Geology	
	Geochemistry	
	Geophysics	
	Remote Sensing	
Drilling & Gridding Costs	Gridding	
	Drilling	
	Land Access Costs	
	Rehabilitation Costs	
	Feasibility Study Costs	
	Other Costs	
	Admin Costs	
	Total - eligible	\$0

Table 3. Expenditure for the reporting period.

Note that no admin costs have been lodged for this tenement.