Annual Report

EL 36/2006 Golconda

2013/2014

Authors: Ken Morrison and John Pemberton

Date: June 2014

Distribution: Tamar Gold Ltd
Mineral Resources Tasmania

Abstract

Tamar Gold Ltd underwent a change of management in late 2012 and after a review of the ground held a decision was made to only explore areas that were prospective for the Intrusive-related Gold System (IRGS) style of mineralisation. The area covered by EL 36/2006 is regarded as having all the characteristics required to be prospective for IRGS mineralisation.

During the past year an RC drilling program at the Potoroo Prospect confirmed that magmatic sulphide and low grade gold mineralisation is genetically related to an unusual type of granodiorite. The granodiorite body has a magnetic and soil geochemistry signature and both exploration methods have been productive in defining the target. The presence of disseminated sulphide suggests that dipole-dipole IP could also have potential for defining chargeability anomalies worth drilling.

The aim of future exploration at Potoroo will be to demonstrate a type deposit of the IRGS style with the potential to be an example of the source rock for much of the detrital gold previously mined at Lisle-Golconda. The mix of exploration methods found to be successful at Potoroo will be applied to drill target generation within all of Tamar Gold's ground at Lisle-Golconda.

It is proposed that a further five 100m RC holes are drilled at Potoroo to the south of the recently drilled RC line and one diamond drill hole of approximately 300m under the main zone of mineralisation. At the Cradle Creek Prospect it is proposed to do an IP survey and one diamond drill hole. An interpretation of the regional magnetics is planned to identify target areas which will then be followed up with soil sampling and IP survey if warranted.

Contents pg

List of Figures

Appendices

Appendix A

Drill logs and RC Rock Chip photographs.

Appendix B

Assay Results

Introduction

Exploration objective

Tamar Gold Ltd underwent a change of management in late 2012 and after a review of the ground held a decision was made to only retain areas that were prospective for the Intrusive-related Gold System (IRGS) style of mineralisation.

Bruce Pertzel was asked to comment on the IRGS style of mineralisation (see Pemberton and Morrison, 2013). As a consequence of his positive summary and the unrecognised potential within some of the ground held by Tamar Gold the company decided to focus its exploration effort on those areas in North East Tasmania that were prospective for IRGS mineralisation.

Geological setting

The area is dominated by ridges of hornfelsed Mathinna Supergroup sediments surrounding basins which have eroded Lisle Granodiorite on the slopes and floors.

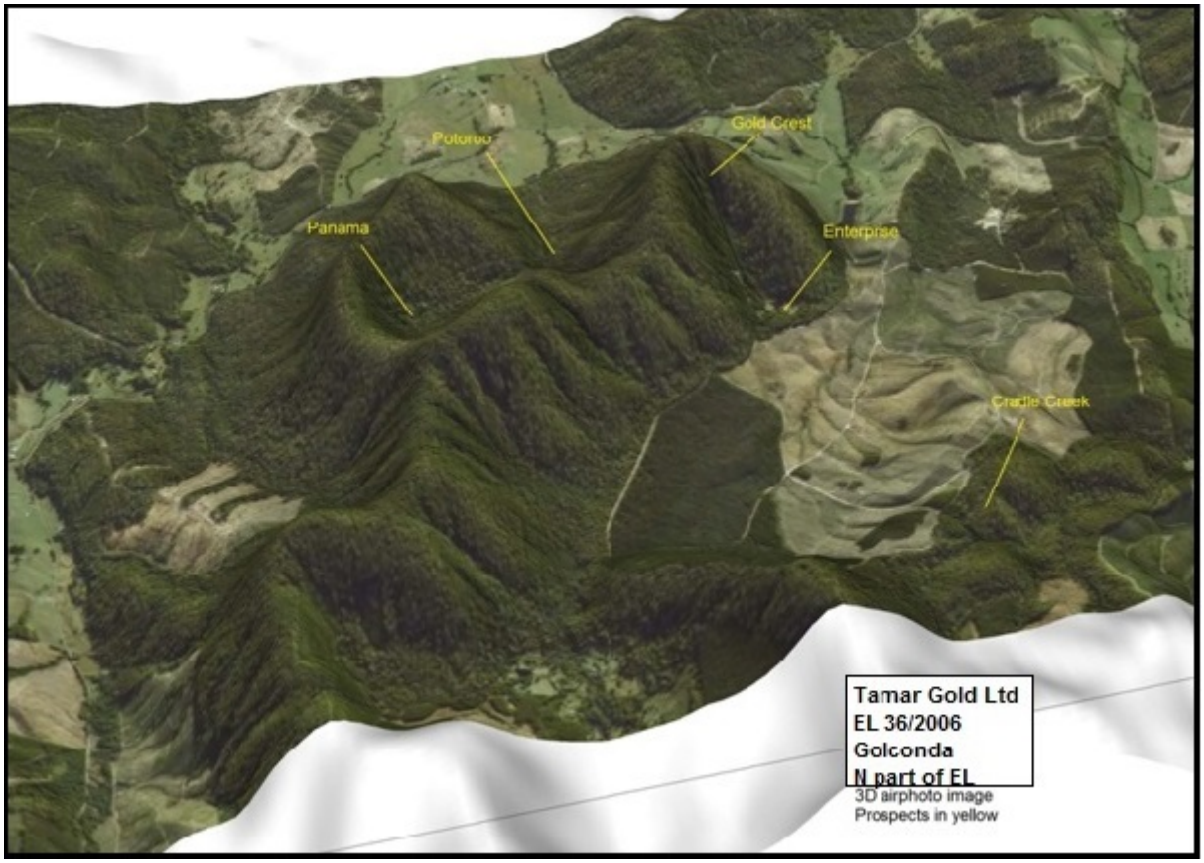


Figure 1. 3D image of northern part of EL36/2006 from the south west.

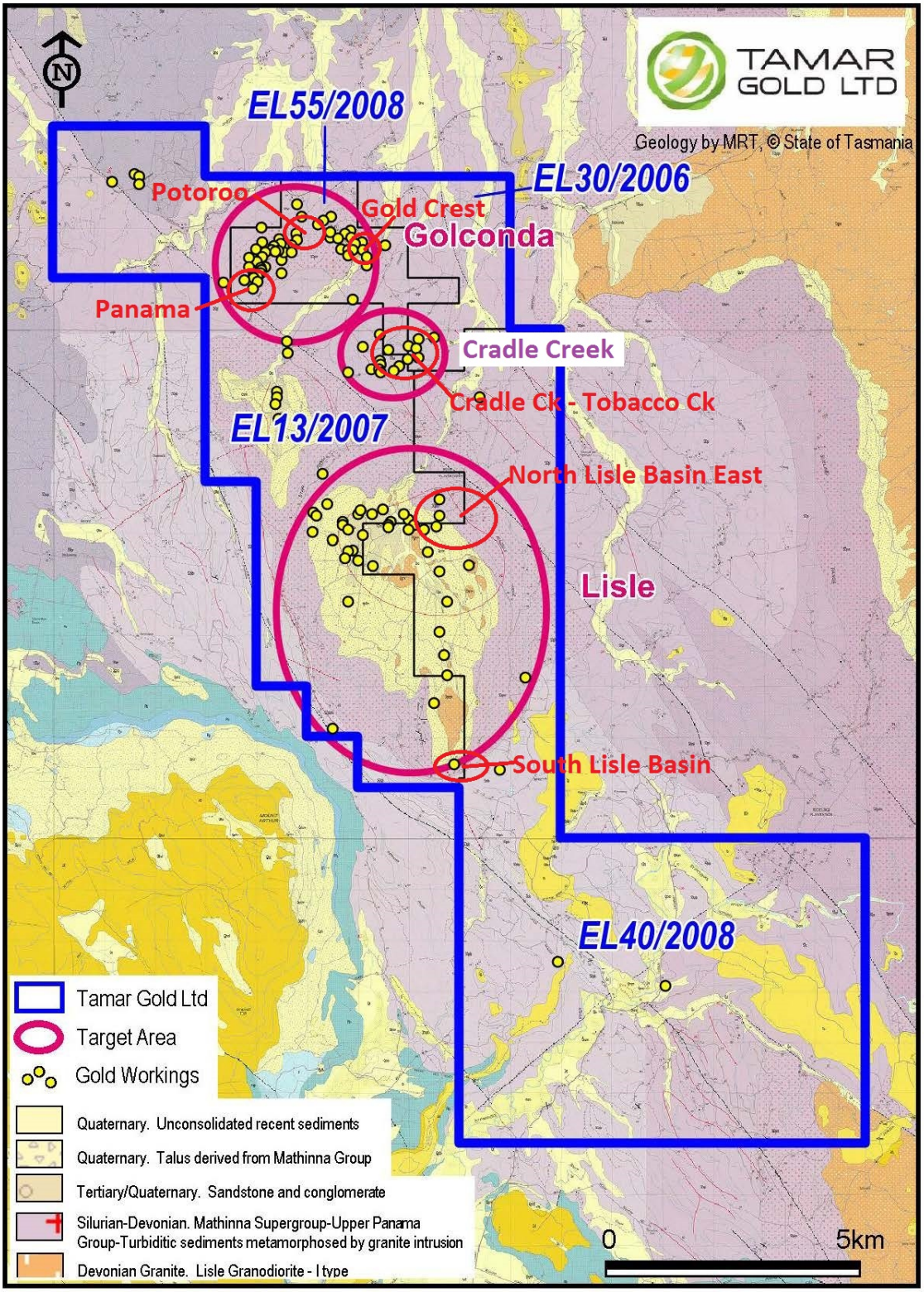


Figure 2. Geology, tenement boundary (ELs 55/2008, 13/2007 and 30/2006 combined as EL 30/2006) and areas regarded as being prospective for IRGS.

The Mathinna Supergroup (see the MRT revision of the Mathinna Stratigraphy in figure 3 and map in figure 4 below) in the Lisle – Golconda area has now been

designated as the Lone Star Siltstone which consists of a sequence of thin bedded siltstones coarsening up to fine grained sandstones (Seymour et al., 2011). They form NNW trending folds with several fold closures and a weak north NW striking cleavage.

Revised stratigraphy for Mathinna Supergroup

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

Figure 3. Stratigraphy of the Mathinna Supergroup (from Seymour et al, 2011).

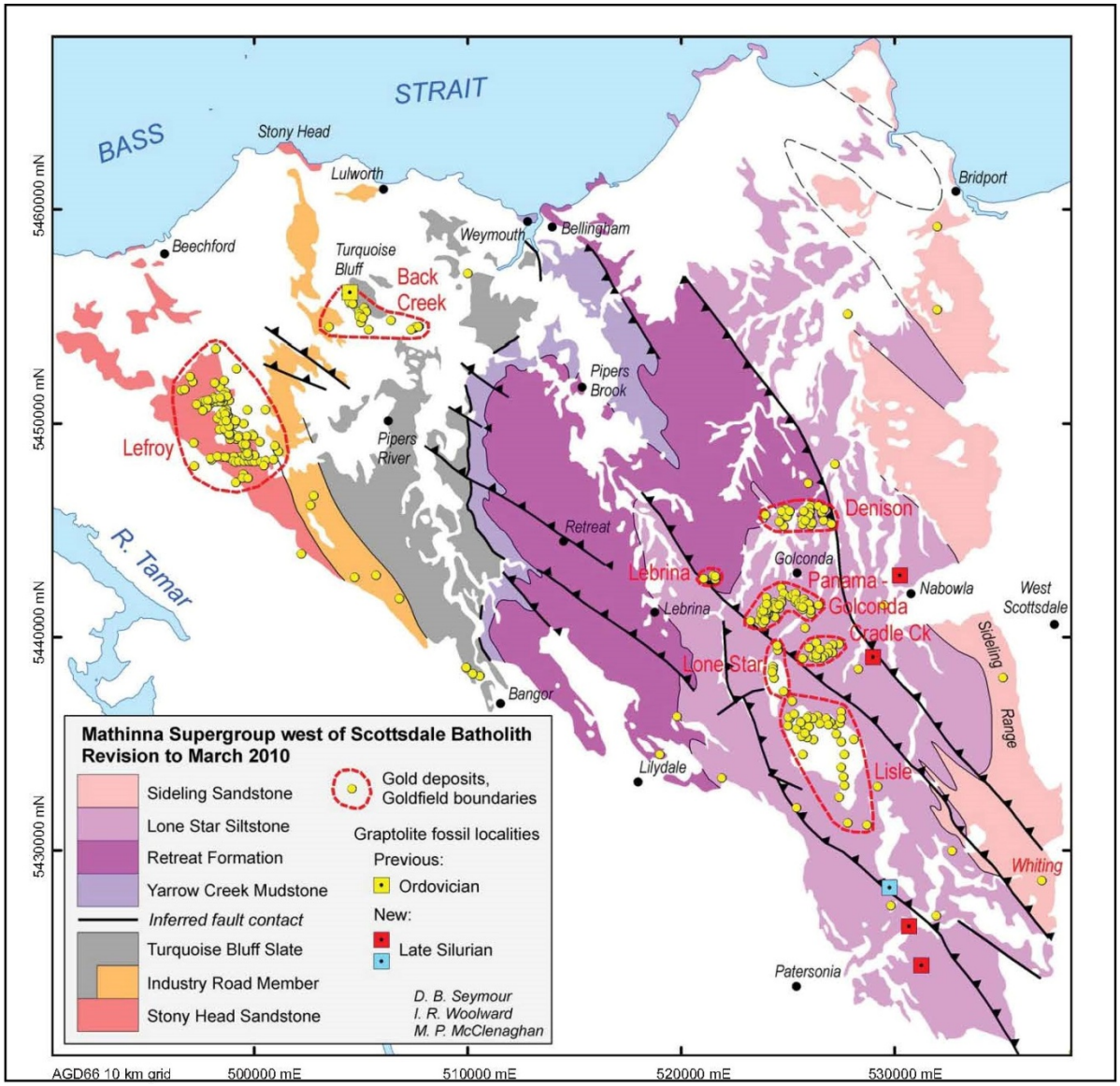


Figure 4. Mathinna Supergroup with Lisle, Cradle Creek, Golconda-Panama Goldfields from Seymour et al, 2011.

The Lisle Granodiorite is deeply weathered and rarely outcrops. These intrusives are complex and heterogeneous with numerous inclusions of hornfelsed Mathinna Supergroup and dark diorite. Textures vary from equigranular, feldspar-biotite-quartz granodiorites to feldspar-hornblende-biotite porphyritic diorites. Intrusions occur as dykes and small cupolas or porphyritic apophyses.

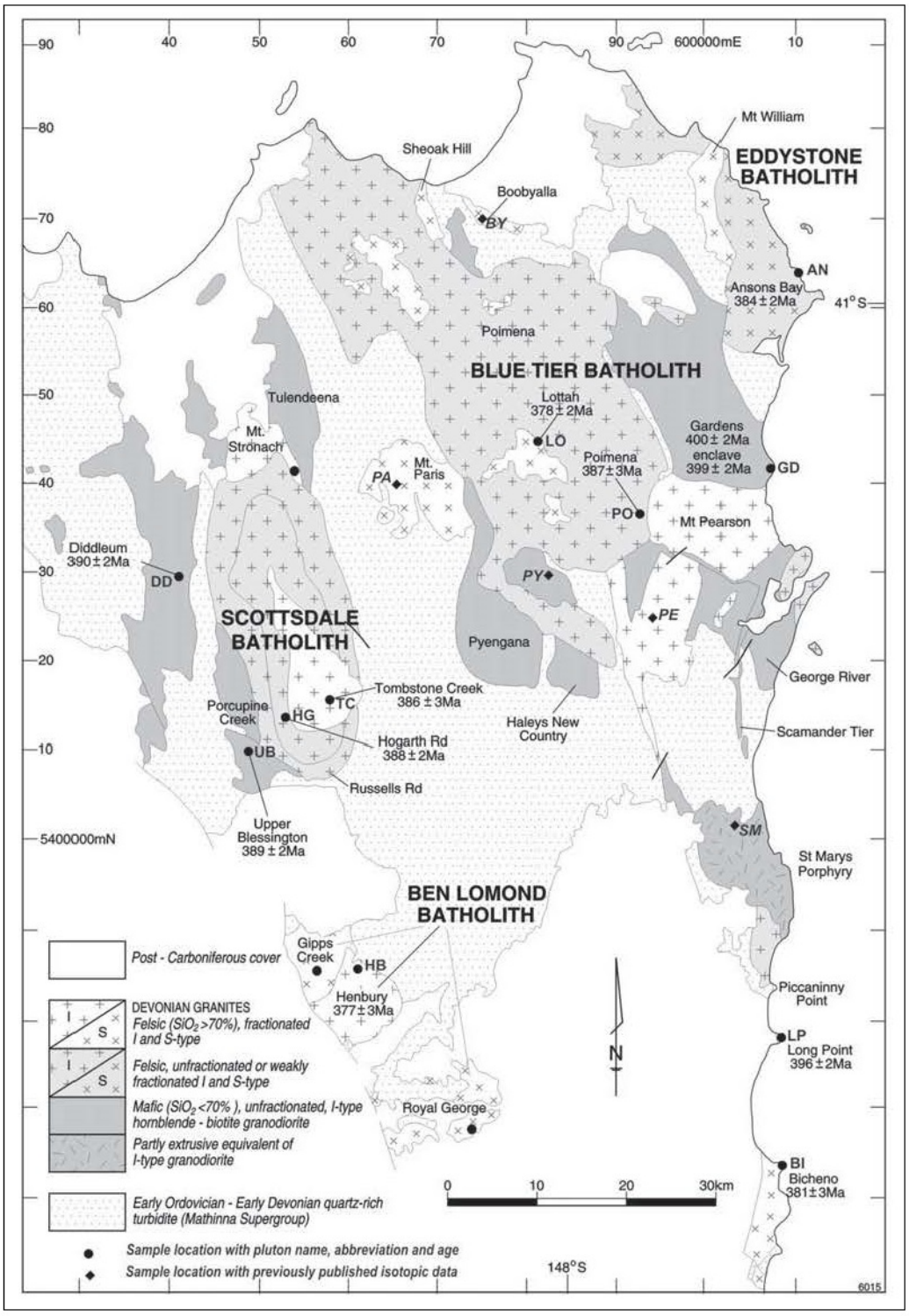


Figure 5. North East Tasmania showing Devonian granite batholiths and plutons from Black et al., 2005.

Roach (1992) analysed 16 samples of the various granodiorites from Lisle, Golconda, Panama and the western margin of the Scottsdale Batholith known as the Diddleum Pluton (see figure 5). There is a clear distinction between the rocks of the Scottsdale Batholith and the granodiorite from the Lisle area. In terms of Rb

and Sr the Lisle granodiorites are the least fractionated of the Tasmanian Devonian Granitoids (see figure 6).

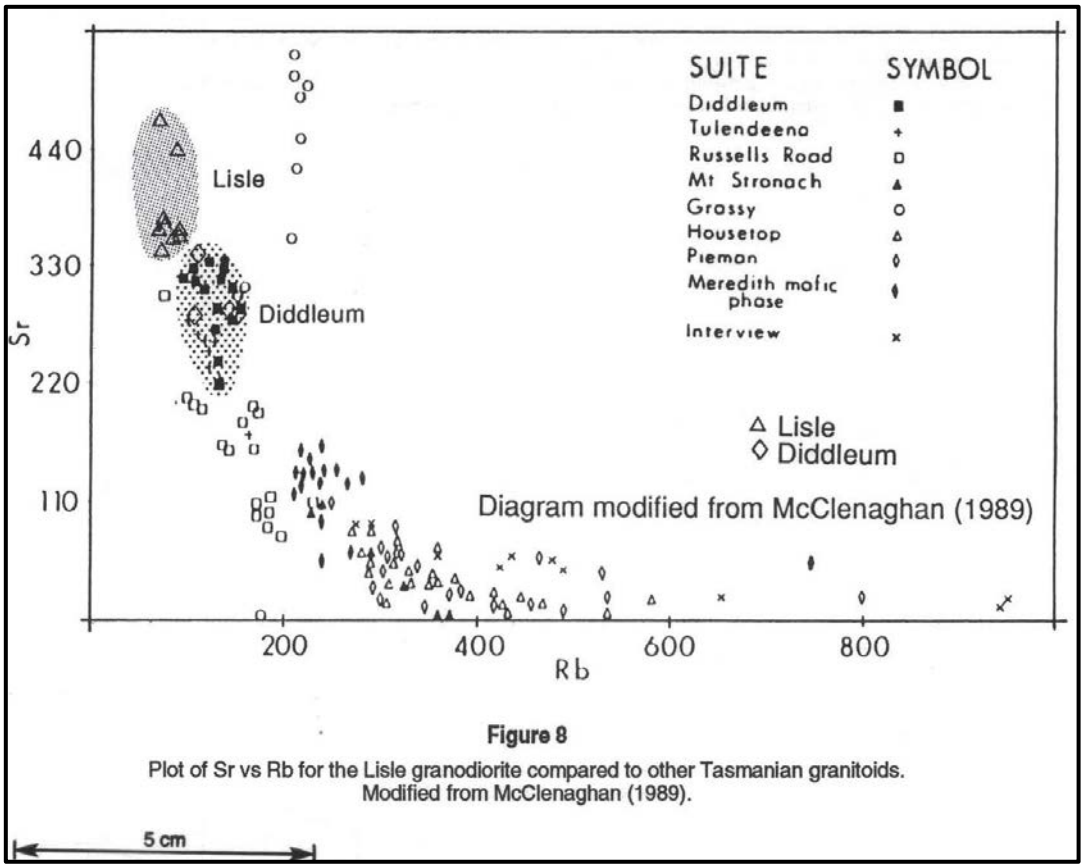


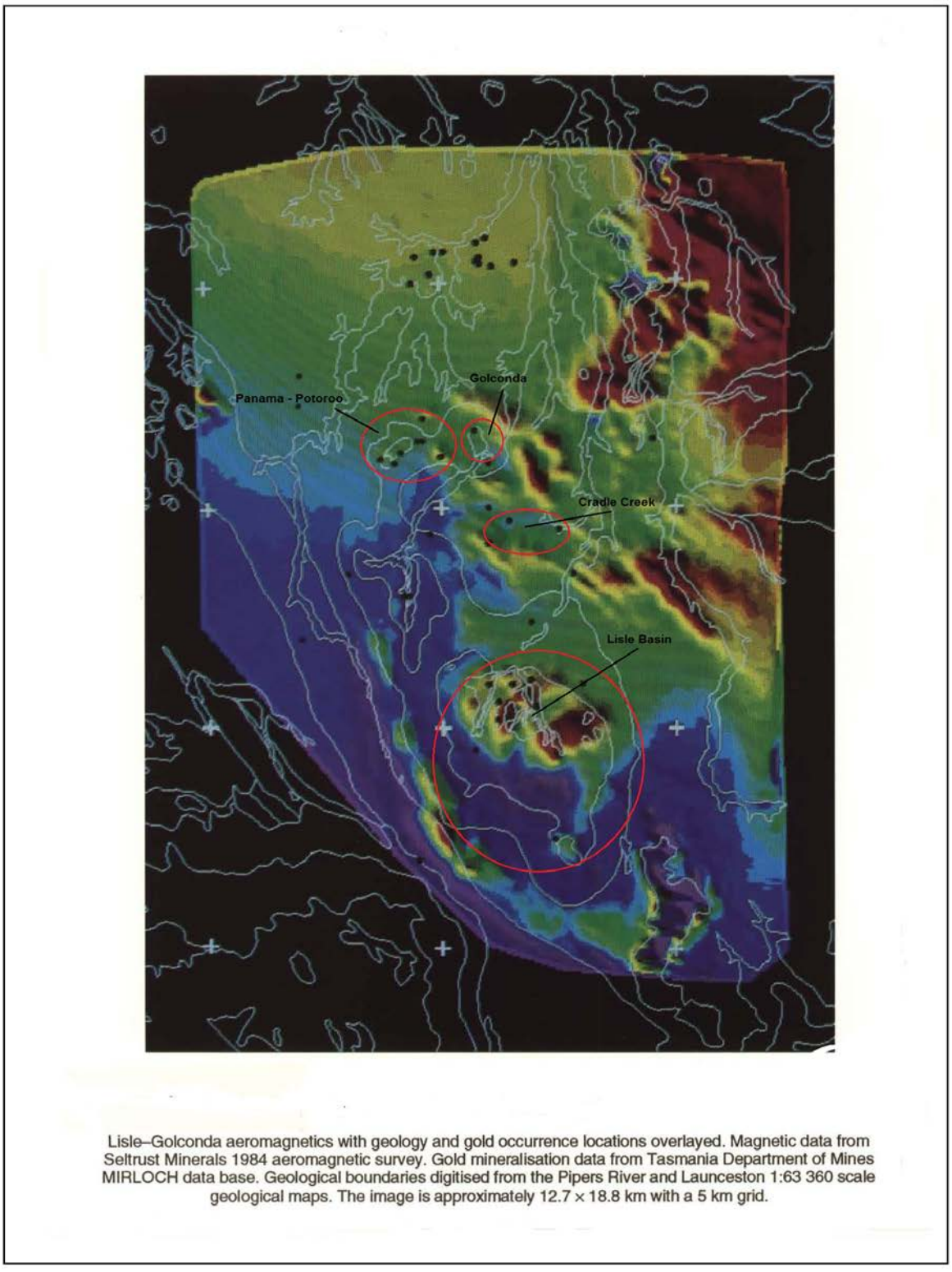
Figure 6. Sr vs Rb Lisle Granodiorite and other Tasmanian granitoids (from Roach, 1992).

Callaghan (2002) noted that there is a marked variability of the magnetic susceptibility of the granodiorites. This is probably a reflection of varying geochemistry between the complex intrusives but may also represent areas of magnetite destruction associated with hydrothermal alteration.

In Roach (1992) an image of the Seltrust Minerals (Storer, 1985) aeromagnetics (see figure 7 below) shows the high-frequency negative magnetic anomalies that correspond with the Tertiary basalt flows. The NW trending highs occur over the Mathinna Supergroup and are parallel to the regional strike. These linear highs are truncated along a NE structural feature.

Roach (1992) discusses the irregular magnetic anomalies associated with the Lisle Granodiorite as seen in the northern part of the Lisle Basin. Both highly magnetic and effectively non-magnetic samples were obtained from this location with the two rock types appearing identical in hand specimen. A zone of magnetic anomalies resulting from the magnetic granodiorite stretches north from the Lisle valley to

Panama. A small anomaly is associated with the outcropping granodiorite at Panama but no anomaly is directly associated with the intrusion at Golconda. Roach (1992) notes that there are two different magnetic types of granodiorite within the Lisle-Golconda area and that the differences are not simply the result of either weathering or alteration.



Lisle–Golconda aeromagnetics with geology and gold occurrence locations overlayed. Magnetic data from Seltrust Minerals 1984 aeromagnetic survey. Gold mineralisation data from Tasmania Department of Mines MIRLOCH data base. Geological boundaries digitised from the Pipers River and Launceston 1:63 360 scale geological maps. The image is approximately 12.7 × 18.8 km with a 5 km grid.

Figure 7. Magnetic image from Roach (1992).

In Bulletin 70 Roach (1992) noted that the Lisle - Golconda goldfields are unusual in North East Tasmania in that in excess of 95% of all the gold recovered comes from alluvial workings. It is estimated that the Lisle field produced 250,000 oz. In total it is estimated that 300,000 oz was produced from all the goldfields with no obvious source for the alluvial gold.

Twelvetrees (1909) and Reid (1926) both commented on the morphology of the gold from Lisle and Roach, 1992, noted;

- That it was extremely fine in grain size, generally less than 0.4 mm in diameter. Nuggets were rare.
- That it was rarely found with vein quartz attached.
- That it was generally of very high fineness.
- Gold concentrations were highest in wash material immediately overlying the weathered granodiorite surface.
- Gold was often concentrated within sediments with either a high organic carbon content or with wash material stained with manganese oxides.

Tenement information

Tenement number:	EL 36/2006
Tenement name:	Golconda
Tenement location:	North East Tasmania
Reporting period:	12/06/2013 to 12/06/2014
Tenement Holder:	Tamar Gold Ltd.
Tenement Area:	58 sq km

Location

EL 36/2008 is located immediately south of the Lilydale/Scottsdale road approximately 20km west of Scottsdale in North East Tasmania.

Tenure

EL 36/2006 is held by Tamar Gold Ltd after completing a purchase agreement with BCD Resources in January 2013. The licence includes what was previously EL 55/2008 Lone Star Creek, EL 13/2007 Lisle and EL 36/2006 Golconda (see Fig x below). The combined licence was established in late March 2014.

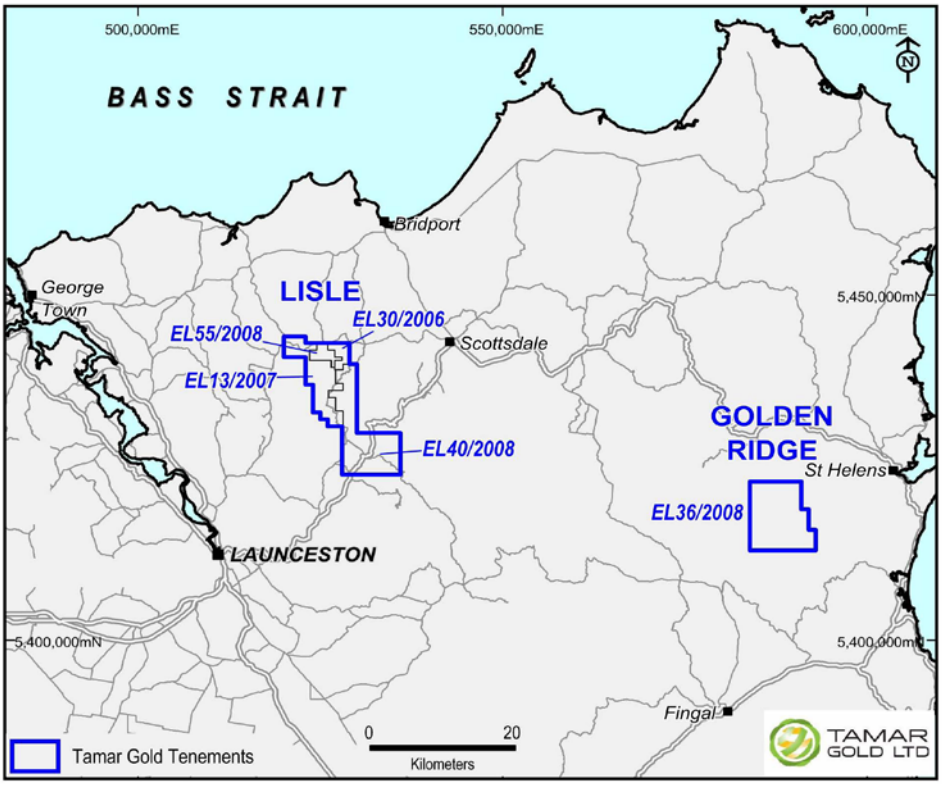


Figure 8. Previous ELs in the Lisle-Golconda area combined to form EL 36/2006.

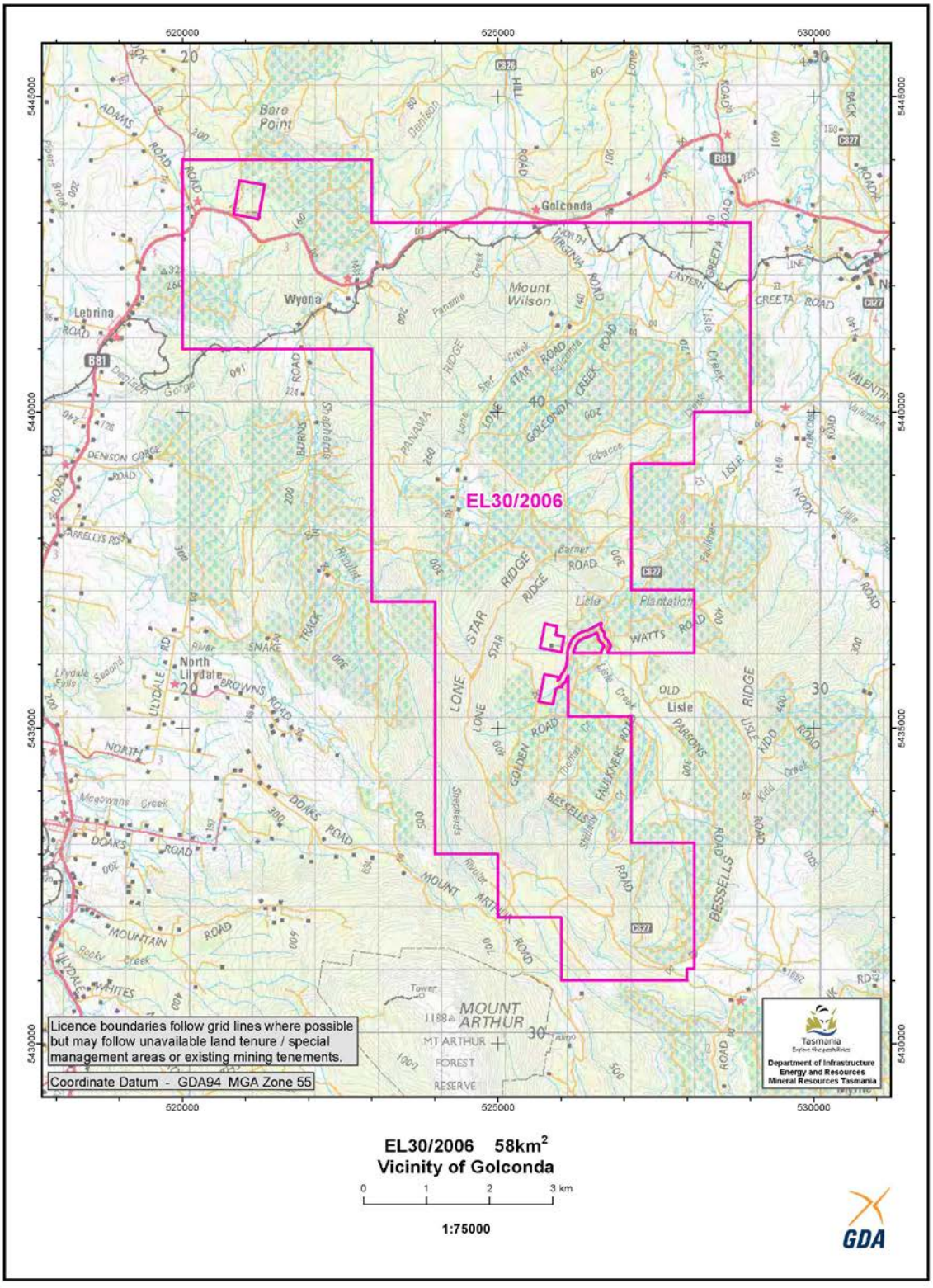


Figure 9. New combined EL 36/2006 Golconda.

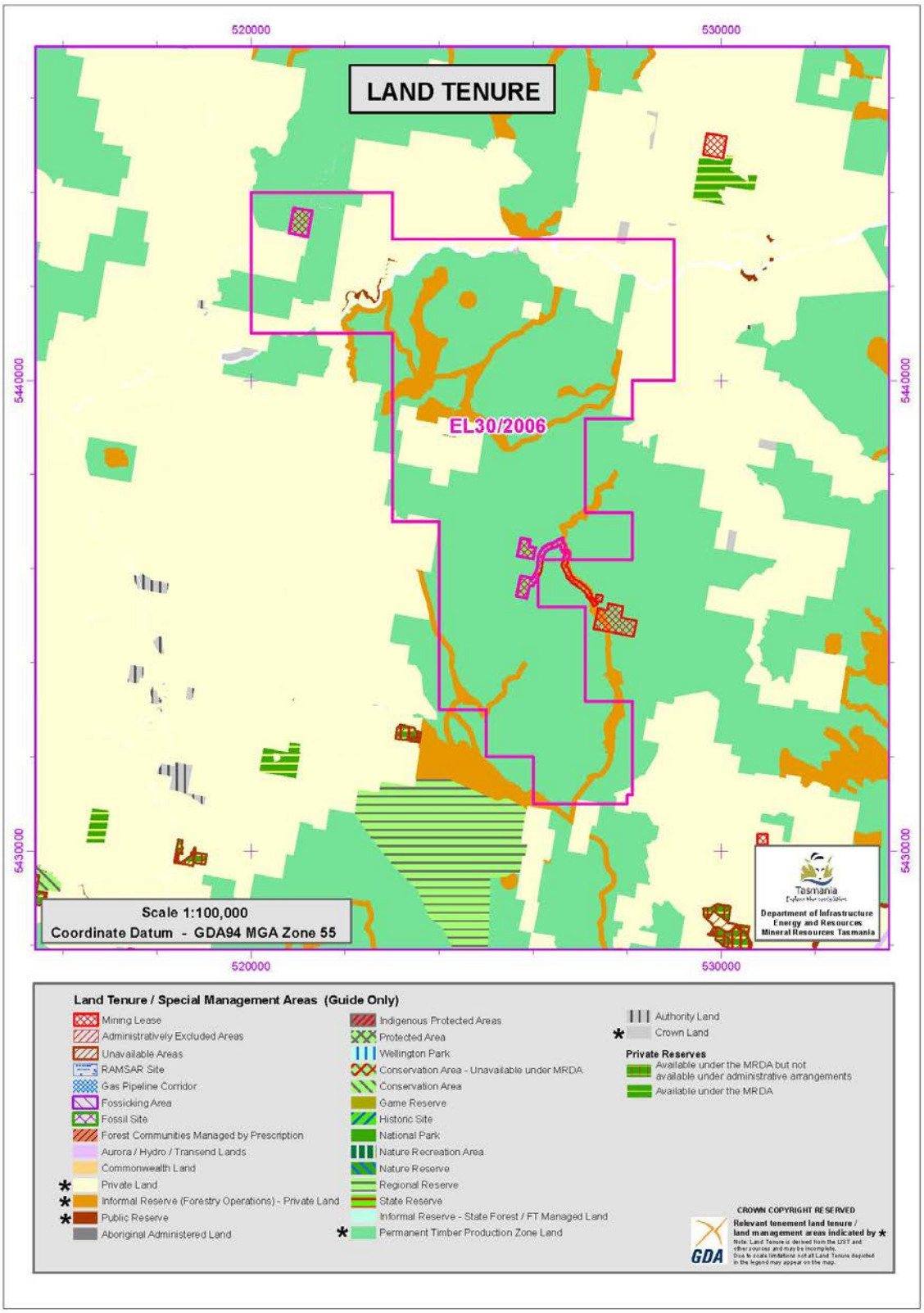


Figure 10. Land Tenure (from MRT).

The land tenure map from MRT shows State Forest with Informal Reserves and some private property at Golconda on the northern boundary and at Lone Star. The State Forest is a mixture of pine and eucalypt plantations and regrowth native forest.

Access is via a network of all weather gravel forestry roads and exploration vehicle tracks, which all connect to the Lilydale Road, the bitumen road to the city of Launceston, some 40km by road to the southwest, or to Scottsdale, 10km to east.

Review of previous work

In the modern era from 1992 to 2007 various incarnations of MacMin NL (Tasmine Pty Ltd, TasEx Resources Ltd, TasGold Ltd, Frontier Resources Ltd) held EL 2/92 which covered the larger Lisle-Golconda area (see literature review in Pemberton and Morrison, 2013).

Regional soil sampling, structural interpretation, trenching, percussion and diamond drilling were conducted during that period. Four main areas of prospectivity were identified in the area covered by EL 36/2006 - Enterprise, Gold Crest, Potoroo and Panama.

In the 2013-2014 Tamar Gold Annual Report on EL 55/2008 (see Pemberton and Morrison, 2013) the following work was presented:

- A literature review.
- A review of IRGS.
- Compilation of mineral deposits from the MRT database.
- Compilation of the prospect scale magnetics and DTMs by Phil Muir.
- Soil and panned concentrate surveys at Cradle Creek Goldfield and the South Lisle Prospect.
- Recompilation of the soil sample results from the work BCD Resources did on EL55/2008.

Exploration completed during the report period

Introduction

Tamar Gold's main exploration aim in the Lisle-Golconda district is to demonstrate the existence of IRGS style magmatic gold mineralisation hosted in and genetically related to specialised facies of Devonian granitic intrusions. The Potoroo prospect is a favourable target to test the concept, due to the fact that previous Tas Gold and Frontier Resources exploration had discovered significant drill and trench intersections of low grade gold mineralisation hosted in granitic rocks which locally subcrop and appear to have generated a magnetic high. Re-contouring of previous BCD Resources B/C horizon soil geochemistry results suggested a prominent ESE-WNW fabric trend, especially for bismuth and molybdenum, which had not been adequately tested by previous drilling (see Pemberton and Morrison, 2013).

The 2014 Tamar Gold drilling program at Potoroo was designed to test the proposition that more continuous mineralisation may be revealed by drilling an azimuth normal to the main trend in the soil data.

Drilling Program

In April 2014 six angled RC percussion holes were drilled at Potoroo, on azimuths of 200-020 GDA, for a total of 594m. Drill hole locations and survey details are shown on Figure 10 below. Site preparation earthworks were done by Kelly Gerke, Tonganah Holdings Pty Ltd from Bridport, using a 20t excavator. The drilling contract was awarded to Spaulding Drillers Pty Ltd from Devonport, who used a truck mounted G&K 850 rig with air delivered from a separate truck mounted two stage Sullair compressor with maximum capabilities of either 350psi/1350cfm or 500psi/1150cfm using the booster. A face sampling 120mm diameter Sandvik RE004 hammer was used from surface on all holes and a 3m length of 150mm ID PVC was inserted into the over gauge collar and sealed with two liquid quick set foam.

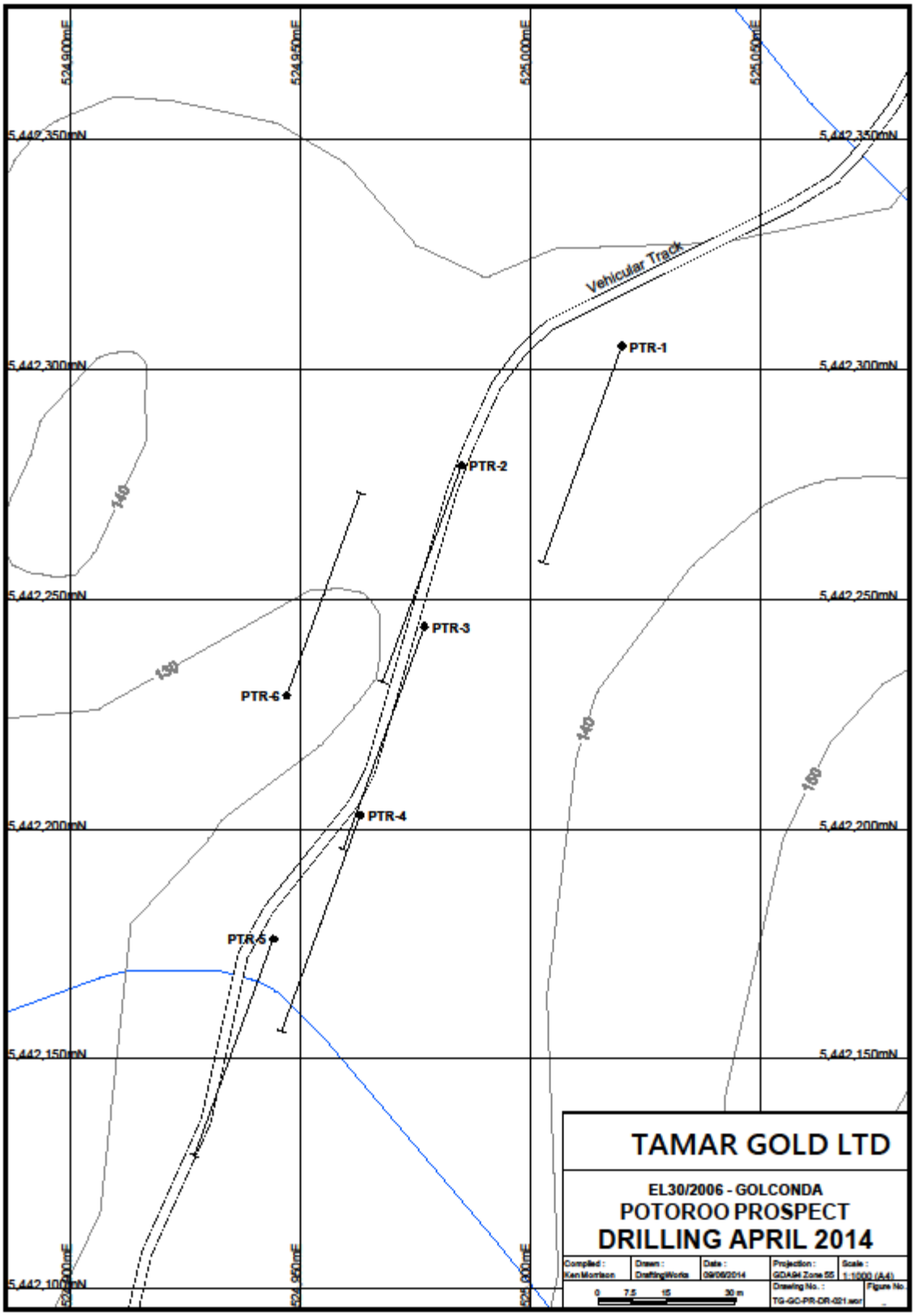


Figure 11. RC Drill Hole Locations.

Potoroo Drilling Program Summary – April 2014

Hole ID	GDA-E	GDA-N	RL scaled	GDA-Azi	0m Dip	52m Dip	100m Dip	88m Dip
PTR-1	525020	5442305	137	200	-60	-60.6	060.7	
PTR-2	524985	5442279	135	200	-60	-61.3	-61.8	
PTR-3	524977	5442244	132	200	-59	-59.1	-60.2	
PTR-4	524963	5442203	134	200	-60	-60.3	-60.0	
PTR-5	524944	5442176	133	200	-60	-60.7	-62.3	
PTR-6	524947	5442229	128	20	-60	-60.3		-60.6

Hole ID	Top Granodiorite	Base Granodiorite	EOHm Significant Intersections
PTR-1	n/a	n/a	100
PTR-2	64	100+	100
PTR-3	29	100+	100
PTR-4	18	100+	100
PTR-5	30	100+	100 26m @ 0.94 g/t Au from 16m
PTR-6	25	71	94 5m @ 0.95 g/t Au from 29m

Below the collar interval, bagged samples were taken through the cyclone at one metre intervals. Dry samples were split through an onsite two stage riffle splitter and sample splits were taken manually from wet cyclone bags. All holes encountered ground water (see logs for depths) but no artesian flow occurred. Cyclone plastic bag samples averaged approximately 15kg and calico bag splits from each one metre interval cyclone bag averaged approximately 2kg. These split samples were all dried, pulverised and assayed for gold only, at ALS, Burnie, by 30g charge Fire Assay/AAS finish.

Drill logs and chip tray photos are in Appendix A and assay results Appendix B.

At the completion of each hole the PVC collar pipe was pushed by the rig mast as far as possible into the ground and at the end of the campaign each collar site was rehabilitated manually by digging about 50cm below ground level, breaking any protruding PVC, blocking the hole at about one metre depth with pressure pack quick set builders foam, and filling the cavity to surface with rock and soil material. All cyclone bags have been removed, (see Environment section below).

Discussion of results

Figure 10 (map) shows that holes PTR-1 to PTR-5 were drilled as a SSE trending continuous fence across the target as defined by the bismuth soil anomaly (Figure 12 below), which also coincides with a magnetic high defined by both a previous Frontier Resources ground survey and MRT aeromagnetic data interpreted by Tamar Gold (Figure 13 below).

PTR-6 was drilled parallel to the fence but with the opposite azimuth and offset to the west. PTR-1 was drilled entirely in partly hornfelsed Mathinna Supergroup sandstone and siltstone and PTR-2 and PTR-6 both intersected the Mathinna-granodiorite contact. These three holes define a northern edge to the granodiorite body, at least over the eastern part of the target. PTR-5 finished in granodiorite so the target is open to the south of the Tamar Gold drilling.

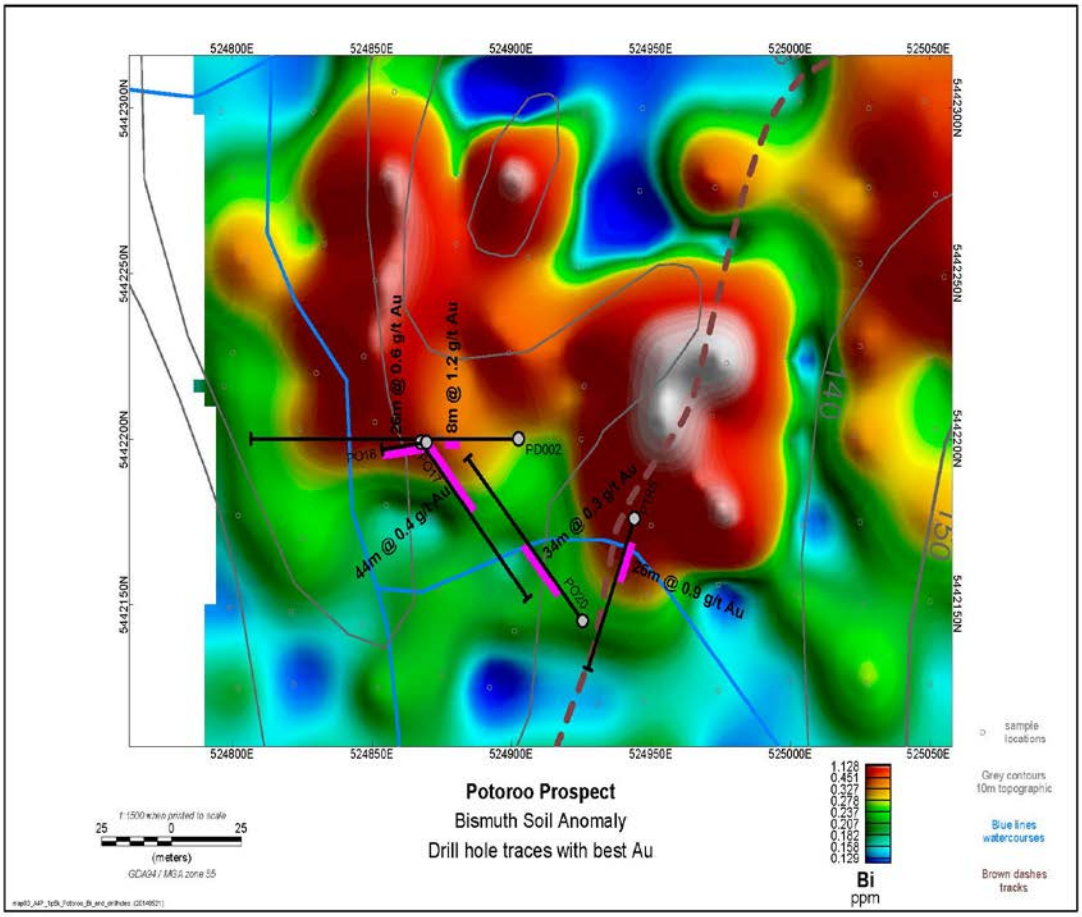


Figure 12. Bismuth soil anomaly map.

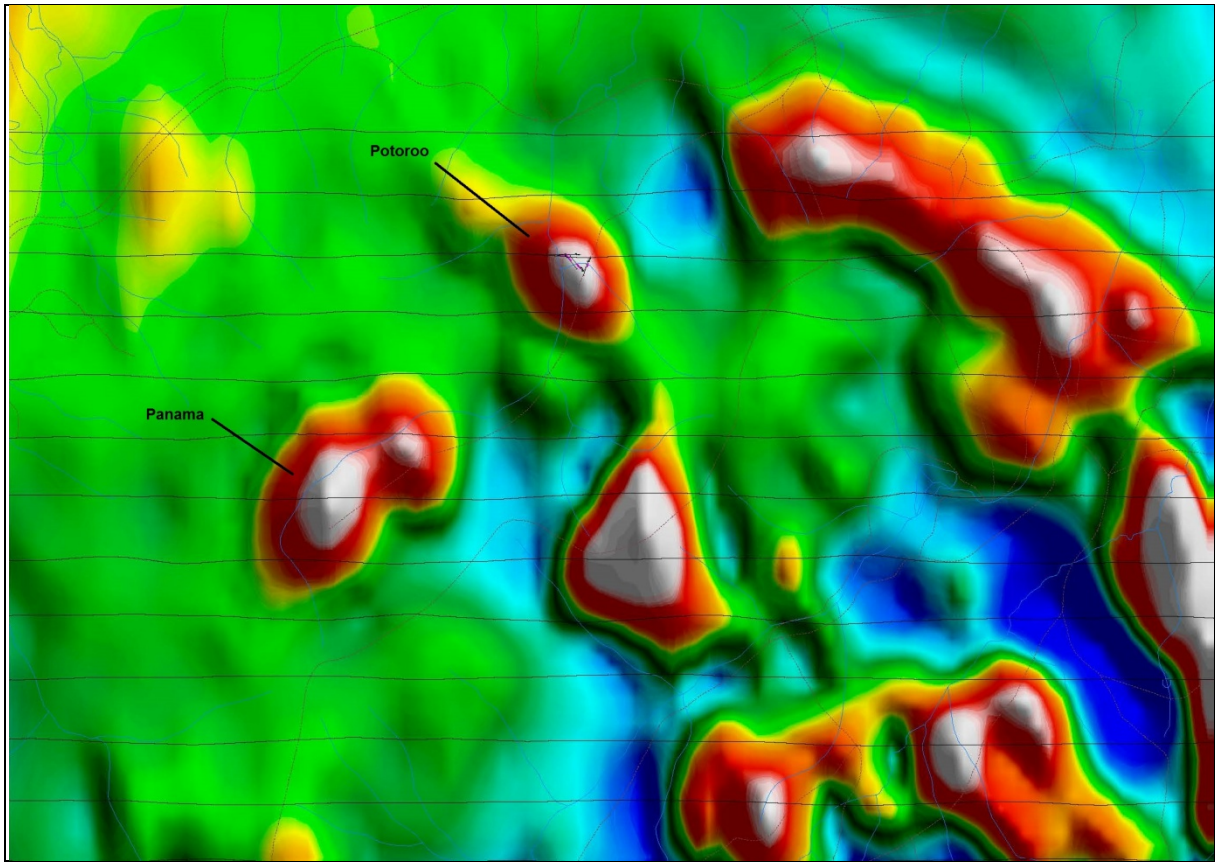


Figure13. MRT regional aeromagnetic data – Potoroo drill holes just visible.

The granodiorite is a fine grained plagioclase, reddish brown biotite, +/- minor hornblende and quartz rock with consistent estimated 0.3-0.5% (locally up to 1%) disseminated fine pyrite and patchy fine sericite alteration. Texturally the fine sulphide appears to be a primary magmatic phase. The rock is consistently magnetic but neither magnetite nor pyrrhotite were confirmed during logging the percussion cuttings. Interpreted thin quartz veins, some with traces of arsenopyrite, and rarely possible bismuthinite, were occasionally encountered and greisen like textures are associated with some intervals carrying sericite alteration. Similar narrow vein intersections also occasionally occur in the Mathinna hornfels. Overall the granodiorite is uniform and due to its texture, sulphide content and magnetic response, it is an unusual intrusion in comparison to observed outcropping Devonian granitic rocks in the Lisle-Golconda district.

Broad intervals of geochemically anomalous gold occur in the granodiorite, increasing in tenor from north to south. Patchy background concentrations in the range of 10-100ppb also occur in the hornfels aureole drilled in PTR-2, suggesting that the gold was sourced from the intrusion and fluids mineralised the roof rocks during contact metamorphism. PTR-5 produced the most encouraging intersection; 26m @ 0.94g/t Au from 16m. Figures 14 (below) show that the PTR-5 intersection

correlates with previous holes drilled by Tas Gold/Frontier Resources to indicate a zone of low grade mineralisation along the southern margin of the granodiorite body.

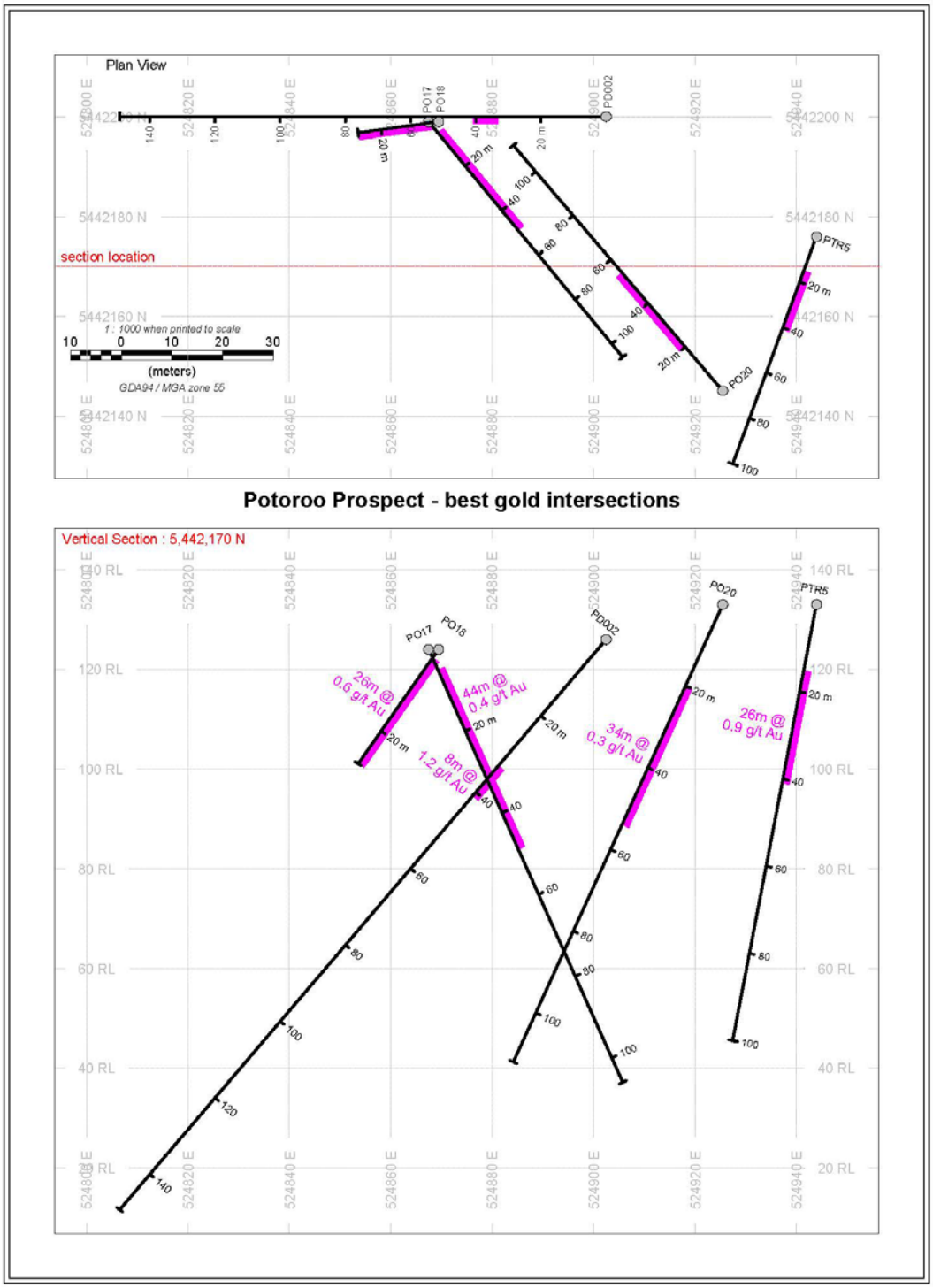


Figure 14. Drill holes cross section.

The location and orientation of this mineralised zone relative to the surface drainage also suggests a degree of structural control which may account for the upgraded gold concentration at the margin of the intrusion. Further drilling is needed to test this interpretation and to determine whether supergene remobilisation of gold is a factor in the localised enrichment. An intersection of; 5m @ 0.95g/t Au from 29m was achieved in PTR-6, however, it is likely that localised veining over two metres produced this result.

A series of bulk tonnage intrusion hosted targets grading in the order of 1-2g/t gold is consistent with the IRGS/gold porphyry style of target driving Tamar Gold's exploration strategy at Lisle –Golconda and this initial drilling program provides cautious encouragement that the district is prospective for this project.

Conclusions

The recent drilling program confirmed that magmatic sulphide and low grade gold mineralisation is genetically related to an unusually type of granodiorite at Potoroo. The granodiorite body has a magnetic and soil geochemistry signature and both exploration methods have been productive in defining the target. The presence of disseminated sulphide suggests that dipole-dipole IP could also have potential for defining chargeability anomalies worth drilling. An IP survey over the Potoroo granodiorite is recommended. Further drilling is needed to define the strike, dip attitude, horizontal thickness and depth extent of the apparent zone of relatively higher grade and probably structurally controlled mineralisation along the southern margin of the Potoroo granodiorite.

The aim of future exploration at Potoroo will be to demonstrate a type deposit, albeit probably a small one, of IRGS style mineralisation with potential to be an example of the source rock for much of the detrital gold previously mined at Lisle-Golconda. The mix of exploration methods found to be successful at Potoroo will be applied to drill target generation within all of Tamar Gold's ground at Lisle-Golconda.

Proposed program for 2014/2015:

Potoroo Prospect:

It is proposed that a further five 100m RC are drilled at Potoroo to the south of the recently drilled RC line and one diamond drill hole of approximately 300m under the main zone of mineralisation. Estimated expenditure $200k.

Cradle Creek Prospect:

An IP survey and one diamond drill hole at the Cradle Creek Prospect. Estimated expenditure $120K.

Regional exploration:

Interpretation of the regional magnetics to identify target areas which will then be followed up with soil sampling. Estimated expenditure $80k.

Environment

In compliance with the "Abandonment of Drill Holes" section of the Mineral Exploration Code of Practice and the approval conditions for this work the following records the abandonment procedure for the RC drilling (see Drilling section above for more details):

- Collar position – see table in Drilling Section.
- Depth sealed – at least 1m below surface.
- Quantity and type of sealant – expandable builders foam followed by backfilling with soil.
- Casing and /or collar details –casing rammed down hole to below sealing zone with no visible collars.
- Photographs – see below.
- All sample bags have been removed from site with excess cuttings spread on the pads and the Panama track.

Figure15. RC Rig and compressor truck at work.

Figure 16. RC Rig.

Figure 17. Sample bag cleanup underway at PTR-3.

Figure 18. PTR-3 after cleanup.

Expenditure

Expenditure to June 2014 is estimated to be $159,285.

References

Black, L. P. , Everard, J. L. , McClenaghan, M. P. , Korsch, R. J. , Calver, C. R. , Fioretti, A. M. , Brown, A. V. and Foudoulis, C. 2010 Controls on Devonian-Carboniferous magmatism in Tasmania, based on inherited zircon age patterns, Sr, Nd and Pb isotopes, and major and trace element geochemistry, Australian Journal of Earth Sciences, 57: 7, 933 — 968

Callaghan, T. 2003. Annual Report on Exploration, EL 2/1992. TasGold Ltd. *Unpublished Annual Report, Mineral Resources Tasmania.*

Pemberton and Morrison, 2013. Annual Report EL 55/2008 Lone Star Creek Tamar Gold Ltd May 2013. *Unpublished Annual Report, Mineral Resources Tasmania.*

Reid, A. M. 1926. The Golconda Mining District. *Bull. Geol. Surv. Tas. 37.*

Roach, M. J. 1992. Geology and Geophysics in the Lisle Golconda Goldfield, NE Tasmania. *Bull. Geol. Surv. Tas. 70.*

Seymour, D. B., Woolward, I. R., McClenaghan, M. P., 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. Explanatory Report 1:25 000 Scale Digital Geological Map Series Mineral Resources Tasmania 4.

Storer, R. M. 1985. Relinquishment report for EL 20/83 and tenement application 542, Lisle Project. BP Minerals Australia. *Unpublished Annual Report, Mineral Resources Tasmania.*

Twelvetrees, W. H, 1909. The Lisle Goldfield. *Bull. Geol. Surv. Tas. 4.*