

De Grey Identifies 50 kms of Under Explored Shear Zone

Highlights

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- Recent diamond drilling at Wingina assists significant new geological interpretation of a large Wingina Shear Zone (“WSZ”) within the greater Tabba Tabba Thrust (“TTT”);

- The revised interpretation, when reviewed with historical geophysical, geochemical and drilling databases show substantial exploration upside along strike of the WSZ;

- 10 kms of shear zone – bookended by gold deposits Wingina and Amanda - shows anomalous gold across its entire length;

- Other prospects along strike with significant drill results not included in current resource estimates include:

Edkins	2m @ 43.2g/t Au
	3m @ 29.3g/t Au
	3m @ 7.3g/t Au
Lost Ark	16m @ 1.5 g/t Au
Wingina Well 2	4m @ 26.9g/t Au

- Exciting new 6 km x 2 km large gold target has been identified – Wallareenya – at intersection of Tabba Tabba Thrust and Splay Structure;

- Wallareenya potential shown by:
 - mineralization on historic wide spaced drilling; and
 - gold nuggets found at surface within prospect;

- New Drilling Program under preparation for Mt. Berghaus;

- Preparatory Feasibility Study work commencing.

De Grey Mining is pleased to advise that recent diamond drilling at Wingina Well (ASX: 20.09.16) has also provided a substantial advance in the geological understanding of both the deposit and the shear zone within which it resides. This provide the Company with ongoing impetus to review the longer term potential along the regional WSZ and greater TTT.

Wingina Shear Zone and Tabba Tabba Thrust Potential

The recent diamond drilling program at Wingina has provided a significant new geological understanding of the immediate Wingina deposit. More importantly it has highlighted the greater potential along the entire TTT (Figure 1). Using this new geological information, a review of the historical geophysical, geochemical and drilling databases shows the TTT is poorly tested in many places along strike on the WSZ and the greater TTT.

The Wingina (268,000oz) and Amanda (35,000oz) gold deposits together with the Lost Ark, Edkins, Crusade and Amanda East prospects (Figure 1 and 2) are all hosted by the WSZ which extends for over 10km with anomalous gold over its entire strike length. This large regional scale structure and associated gold mineralisation represents a major gold fluid pathway (“plumbing system”) and gold deposit host. Figure 2 also shows the density of drilling along this highly prospective structure with a number of selected significant results requiring further follow-up including:

Edkins	2m @ 43.2g/t Au 3m @ 29.3g/t Au 3m @ 7.3g/t Au
Lost Ark	16m @ 1.57g/t Au
Wingina Well 2	4m @ 26.9g/t Au

The WSZ, which drilling indicates is up to 50m wide, represents only one shear zone within the much larger scale TTT that extends for hundreds of kilometres regionally. De Grey’s tenements control 50 kms of the TTT, which remains largely untested. The TTT is an early and major deep seated regional tectonic structure that divides the younger turbidite sediments of the Mallina Formation to the north from the older Warrawoona Group mafic and ultramafic rocks and BIF and sediments of the Cleaverville Formation to the south.

De Grey is fortunate to control approximately 60 kms strike of TTT, most of which remains to be fully tested.

Wallareenya Gold Target

The Wallareenya Gold Target, is a large high priority 6km x 2km zone defined by highly anomalous gold and arsenic in surface rock chip and lag sampling, together with encouraging aircore drilling intercepts and recent discovered gold nuggets at surface (Fig 3). This zone is parallel to, and approximately 500m north of, the Orchard Tank-Discovery-Hakea base metal trend in Tabba Greenstone rocks.

Overall this substantial anomaly is coincident with outcropping sheared rocks of the ENE trending TTT, which is anomalous in gold and other indicator elements over its entire strike length. The Wallareenya anomaly occurs at the intersection of the TTT with a NNE trending Splay Structure. This intersection of two major regional scale structures is an encouraging location for prospective dilation features that often host large gold deposits.

Further encouragement for this target is shown by historical wide spaced aircore drilling on lines generally 400m to 800m apart where significant mineralised intercepts are already defined (Figure 3, and below)

1m @ 3.12g/t,
7m @ 1.69g/t,
1m @ 6.64g/t,
1m @ 3.72 g/t;
4m @ 0.79g/t.

Recently, De Grey engaged a local prospector to test a portion of the anomaly with a metal detector. A collection of small gold nuggets as shown in Figure 3 were discovered, highlighting the potential of the area. The nuggets generally occur with quartz veining and are interpreted to have not travelled far due to the sharp, angular and non-rounded nature.

Further detailed infill geochemistry and subsequent aircore drilling is currently planned as a priority for this area.

Planned Programmes

The Company is very encouraged by the results of the drilling and geological advances being made as the extensive database continues to be assessed. Programs are currently being planned for the following.

Mt Berghaus	RC drilling currently being planned and awaiting statutory approvals. Drilling expected to commence before the end of October.
Wallareenya Gold Target	Detailed geochemical sampling to be undertaken to infill the anomaly in preparation for subsequent infill aircore drilling.
Resource updates	Wingina gold and Discovery and Orchard Tank base metals resource updates currently underway, with reports due in October.
Development Studies	Long lead items for development are currently under review and planning, such as environmental surveys, native title, hydrology and mining lease applications.

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The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr. Andrew Beckwith, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Mr. Beckwith is a consultant to De Grey Mining Limited. Mr. Beckwith has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr. Beckwith consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Figure 1 Turner River Project Location Plan, showing main prospects and the major regional Tabba Tabba Thrust over magnetics image

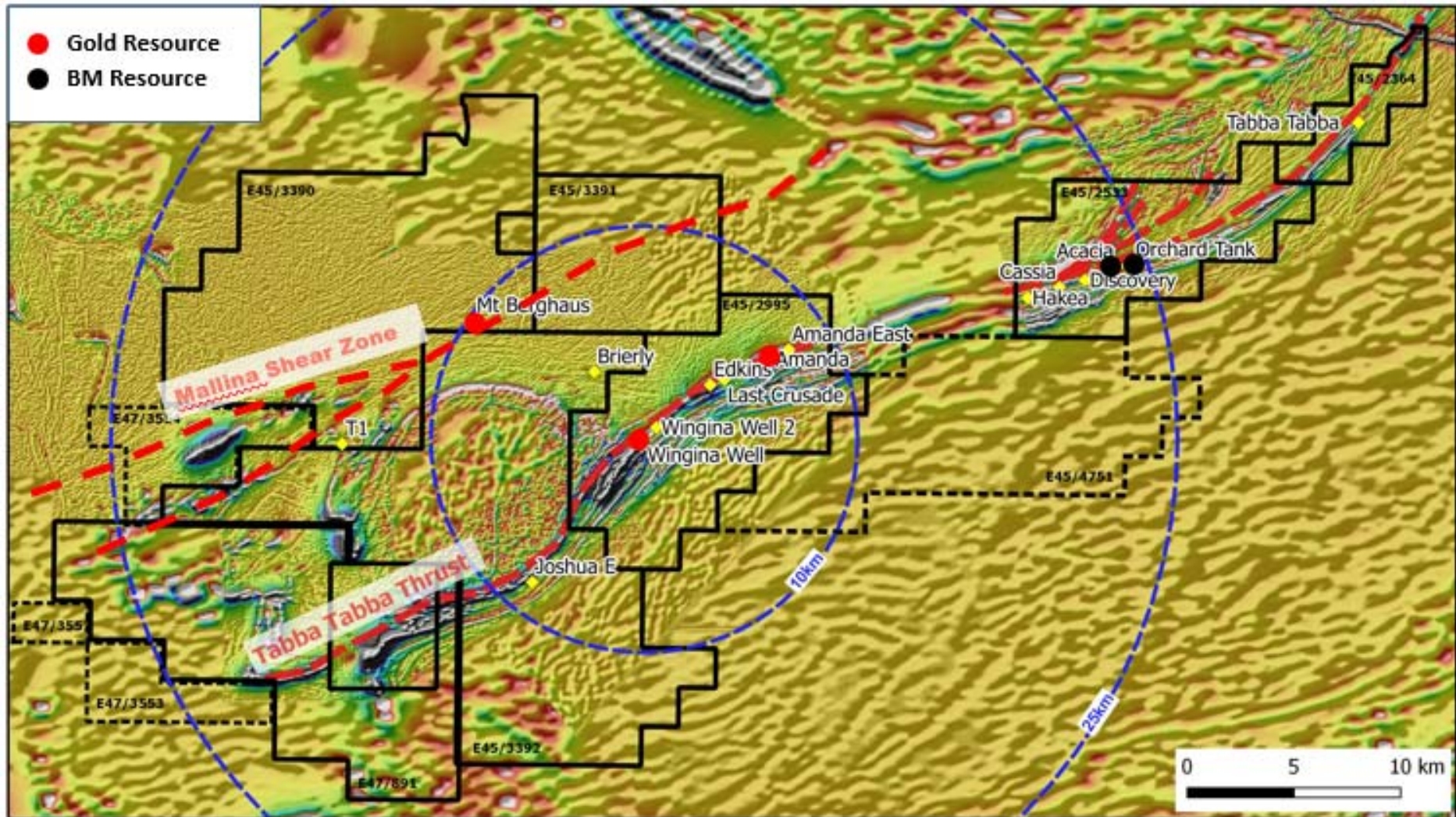


Figure 2 Long-section along the Wingina Shear Zone (WSZ), showing Wingina resource area and density of drilling

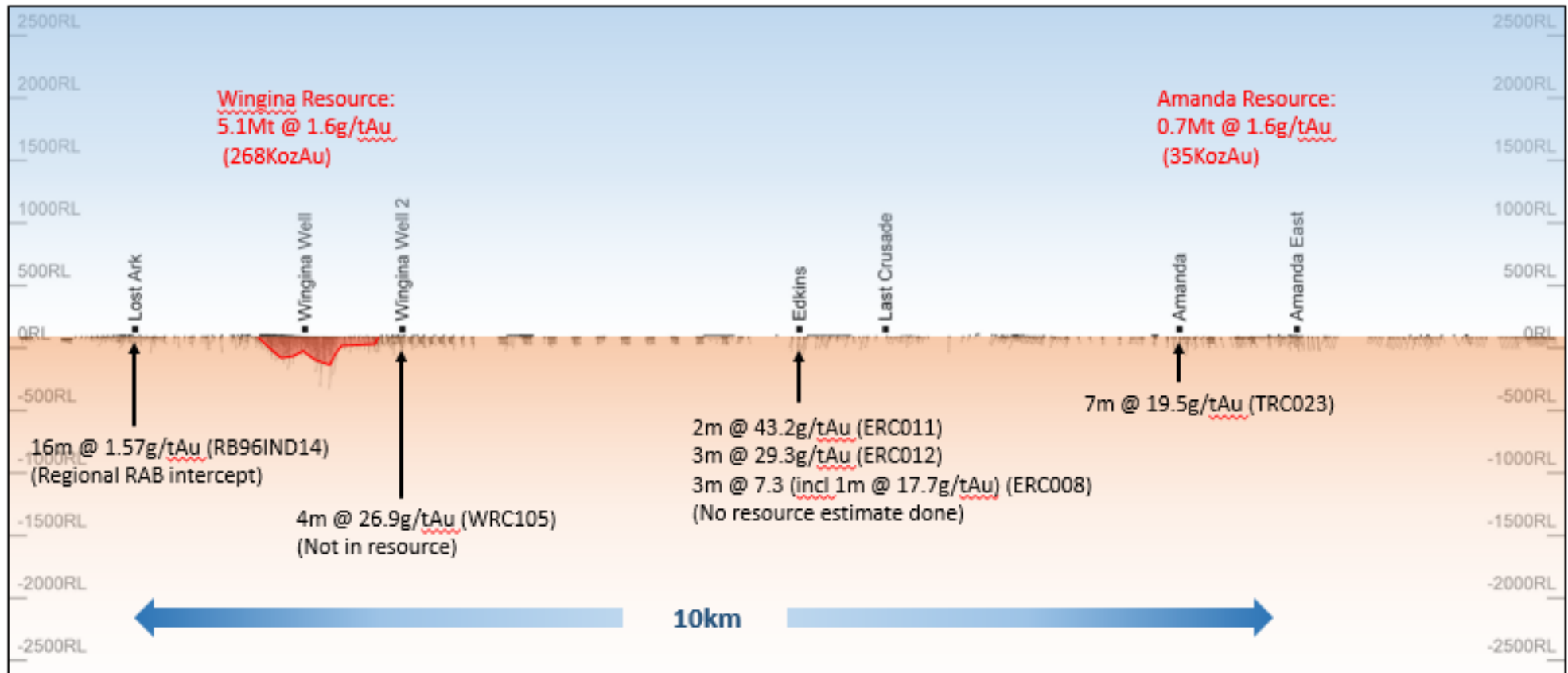
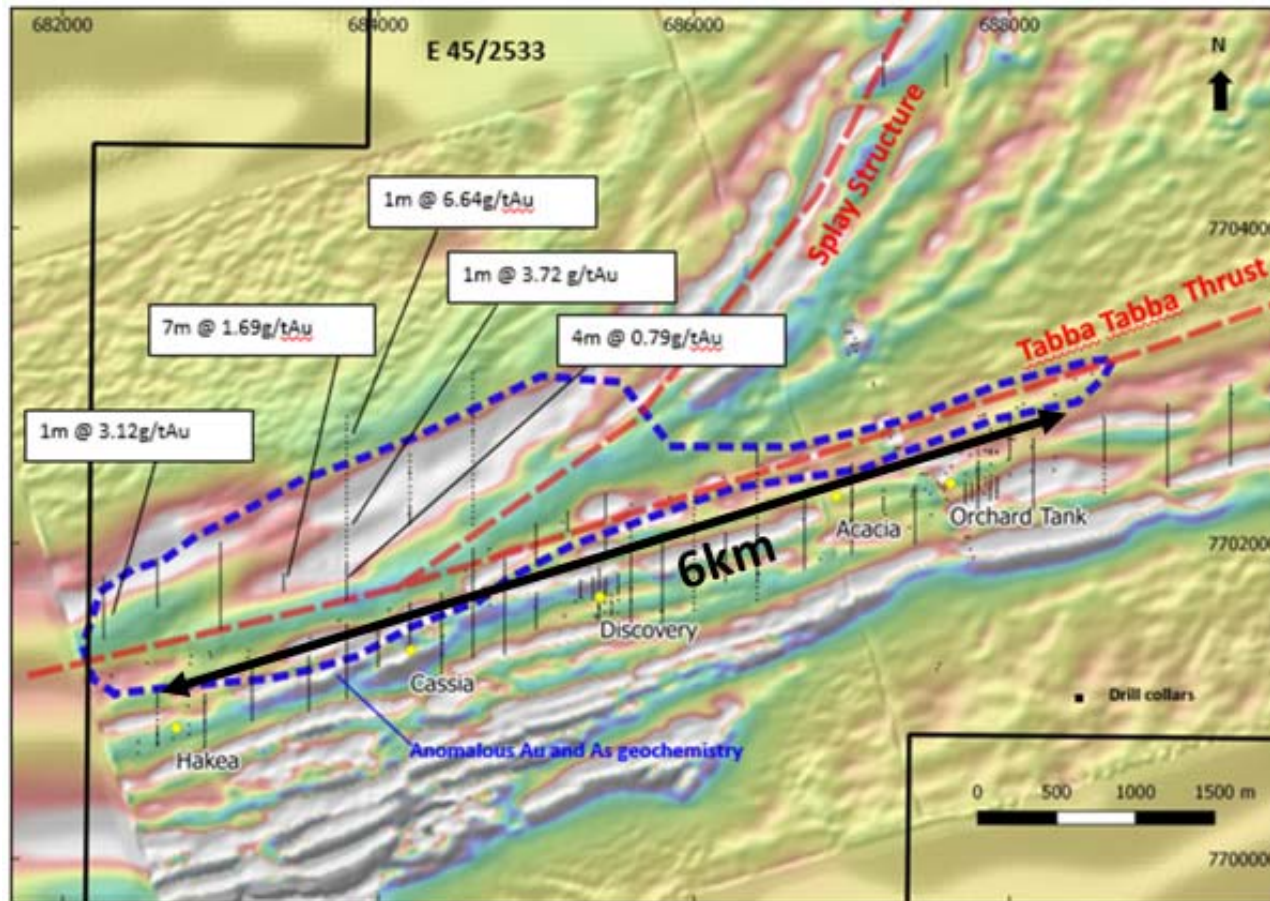


Fig 3 Wallareenya gold-arsenic target along Tabba Tabba Thrust, showing encouraging gold intersection in wide spaced (400-800m) aircore traverses



Nuggets recently found in an area where there is no drilling!

