



ASX Release: 28 October 2011

## September 2011 Quarter

## Report to Shareholders

### Navarre Minerals Limited

ABN 66 125 140 105

#### Corporate Details:

ASX Code: NML

#### Issued capital:

55.8M ord. shares

1.8M unlisted options

#### Substantial Shareholders:

Northgate 5.2M (9.3%)

Board & Management 14.8M (26.5%)

#### Directors:

Non-Executive Chairman

Kevin Wilson

Managing Director:

Geoff McDermott

Non-Executive Directors:

John Dorward

Colin Naylor

#### Contact Details:

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Managing Director or  
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Company Secretary

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### Highlights

- Major \$4.2 million program of drilling and geophysics commences at Tandarra
- Drilling confirms geophysics as our main tool to target quartz reefs below shallow cover at Tandarra with a 90% success rate achieved
- Peak gold assay of 1 metre @ 26.2g Au/t returned from recent scout drilling brings tally to six high-grade gold (> 20g Au/t) hits over a 2 kilometre strike in the centre of the Tandarra dome
- Ten new potential lines of quartz reef detected in first 9.3 kilometre line of geophysics across the Tandarra dome at Bendigo North
- 1 for 3 fully underwritten entitlement offer raised \$3.2 million

### Summary

Navarre's focus during the quarter was to complete a trial geophysical survey over a small area of known gold mineralization at the Company's Tandarra prospect at the Bendigo North Gold Project in Victoria. The purpose of the trial was to determine that geophysics can be a pathfinder to identify buried quartz reefs which are known to be hosts for gold mineralization in the Victorian goldfields. In mid-July, the Company announced that the trial had detected three quartz reefs which it would confirm with a small air-core drill program.

In early September the Company announced that 90% of the 18 holes, drilled as part of this small program, had intersected quartz. The Company further announced, following the end of the quarter, the assay results of the program with the highlight being a peak assay result of 1 metre @ 26.2g Au/t in ACT024.

Navarre's Managing Director, Geoff McDermott, commented "We were delighted with the results of the geophysical trial both in terms of its predictive accuracy for the presence of quartz as well as the confirmed presence of high-grade gold. We are confident of generating further strong results as we ramp up the current 50,000 metre drill program."

### Finance

At 30 September 2011, the Company had available funds of \$5.4 million.

### Outlook

Navarre has commenced a \$4.2 million exploration program at Bendigo North. Geoff McDermott commented "We anticipate running 110 line kilometers of geophysics and up to 50,000 metres of drilling on identified geophysical targets. Drilling will be a combination of air-core (for confirming quartz targets) and reverse circulation and diamond (for gold evaluation). This program is expected to provide information to estimate a mineral resource in the second half of 2012."

At Kingston, the Company is waiting on regulatory approvals before commencing a five hole diamond drill program.

## 1. BACKGROUND

Navarre Minerals Limited (ASX: NML) is an Australian gold and base metals exploration company with four main projects located in central and western Victoria with the potential for large gold and copper-gold-zinc deposits.

## 2. EXPLORATION

### 2.1. BENDIGO NORTH GOLD PROJECT (*Tandarra prospect, EL 4897 & EL 5364*)

The Bendigo North Gold Project is a recent greenfields gold discovery under shallow cover 40 kilometres north of the 22 million ounce Bendigo Goldfield (Figure 1).

In September the Company announced the results of a geophysics trial conducted at the Bendigo North Gold Project and that 90% of the 18 holes drilled as part of this small program had intersected the targeted quartz reefs buried beneath shallow Murray Basin cover sediments. The highlight of this program was a peak assay result of 1 metre @ 26.2g Au/t in ACT024 which follows earlier air-core results of 10 metres @ 34.4g Au/t in ACT015 from 37 metres below surface (ASX announcements 3 June, 2011 and 21 October, 2011 and Table 1 and Figure 2). The gold results returned from the recent drilling programs are considered consistent with an assay distribution typical of quartz reef nuggety gold mineralisation found in the Victorian goldfields. There are now six high-grade gold (> 20g Au/t) hits over a 2 kilometre strike in the centre of the Tandarra dome (Figure 2 and Table 1).

The trial has confirmed that geophysics can be used to detect buried quartz reef targets which will significantly decrease time and cost to discovery.

Navarre has developed a proven and disciplined exploration approach for defining typical Victorian quartz reef hosted gold deposits under cover. This approach involves:

1. Undertake gravity surveys to identify buried basement rises below shallow transported cover of clay and sand with the concept that buried quartz reefs are more resistive to erosion and therefore more likely to form hills (topographic highs such as the Tandarra dome).
2. Target quartz reefs (as the potential hosts for gold mineralization) within these topographic highs through geophysics.
3. Confirm the presence of quartz and anomalous gold mineralization through air-core scout drilling.
4. Follow-up air-core results with reverse circulation and diamond drilling for gold resource evaluation and for geometry and grade modeling.

The recently expanded geophysical survey work at the Bendigo North Gold Project identified ten potential new lines of quartz reef (total now 13) for follow up drilling during the current \$4.2 million campaign which commenced at the end of September.

“Geophysics has been invaluable in providing a fingerprint of where to drill for these shallow north-south trending quartz bodies,” Mr. McDermott said. “As further proof of concept we detected ten new quartz anomalies in our first 9.3 kilometre line of geophysics following the trial program, which is part of a larger 110 line kilometre survey across the entire Tandarra dome (Figure 2). We will test the targets with air-core

drilling and then use reverse circulation and diamond drilling to assess the gold resource,” Mr. McDermott said.

“Tandarra is shaping up as a very exciting project. We have embarked on a major program which will run through-out the summer and we look forward to providing the results of the geophysics and the drilling as they come to hand.”

During the quarter exploration licence EL 5364, adjoining the eastern side of the Bendigo North Gold Project, was granted to strengthen the Company’s land position in this emerging mineral district (Figure 1).

## **2.2. KINGSTON GOLD PROJECT (EL 5280 & ELA 5380)**

The Kingston Gold Project is 30 kilometres northeast of the 5 million ounce Stawell Gold Mine operation in western Victoria (Figure 1). Kingston is a former gold mine and the Company is following-up several WMC Limited’s high-grade gold intercepts.

During the quarter Navarre trialed an electrical geophysics program which detected a 300m wide resistive anomaly beneath the old workings of the Kingston Mine which is interpreted to be either a large quartz body or, alternatively, a potentially mineralised diorite intrusive.

The Company held meetings with regulatory authorities in order to seek approvals for a 5 hole, 1,000 metre diamond drill program.

The Company lodged an application and has been awarded priority for an exploration licence (ELA 5380) covering 185 square kilometres of the prospective Landsborough Fault adjoining the southern end of the Kingston Gold Project (Figure 1).

## **2.3. BLACK RANGES BASE METALS PROJECT (EL 4973, EL 4590 & EL 5164)**

The Black Ranges project is a base metals and gold exploration target in the Grampians – Stavelly region of western Victoria (Figure 1). The project area contains about 60 kilometres of Cambrian age volcanics that show pronounced geological similarities to the Mount Read Volcanics (“MRV”) of northwest Tasmania, which is host to a number of volcanic massive sulphide deposits such as Rosebery, Hellyer and Que River and the large Mt Lyell copper-gold deposit.

The Company has engaged the services of two personnel from the Centre of Excellence in Ore Deposits at the University of Tasmania who are experts in Tasmania’s MRV to undertake an independent review of the geology and exploration to date of the Black Ranges Project.

Planning for a regional soil sampling program on potential epithermal, porphyry copper-gold and Volcanic Massive Sulfides targets on ELs 4973 and 5164 was undertaken.

## **2.4. BALLARAT SOUTH GOLD PROJECT (EL 4996)**

Planning was completed for a gravity survey to map depth to a gravity ridge thought to control mineralisation in the Ballarat Goldfield.

### 3. CORPORATE

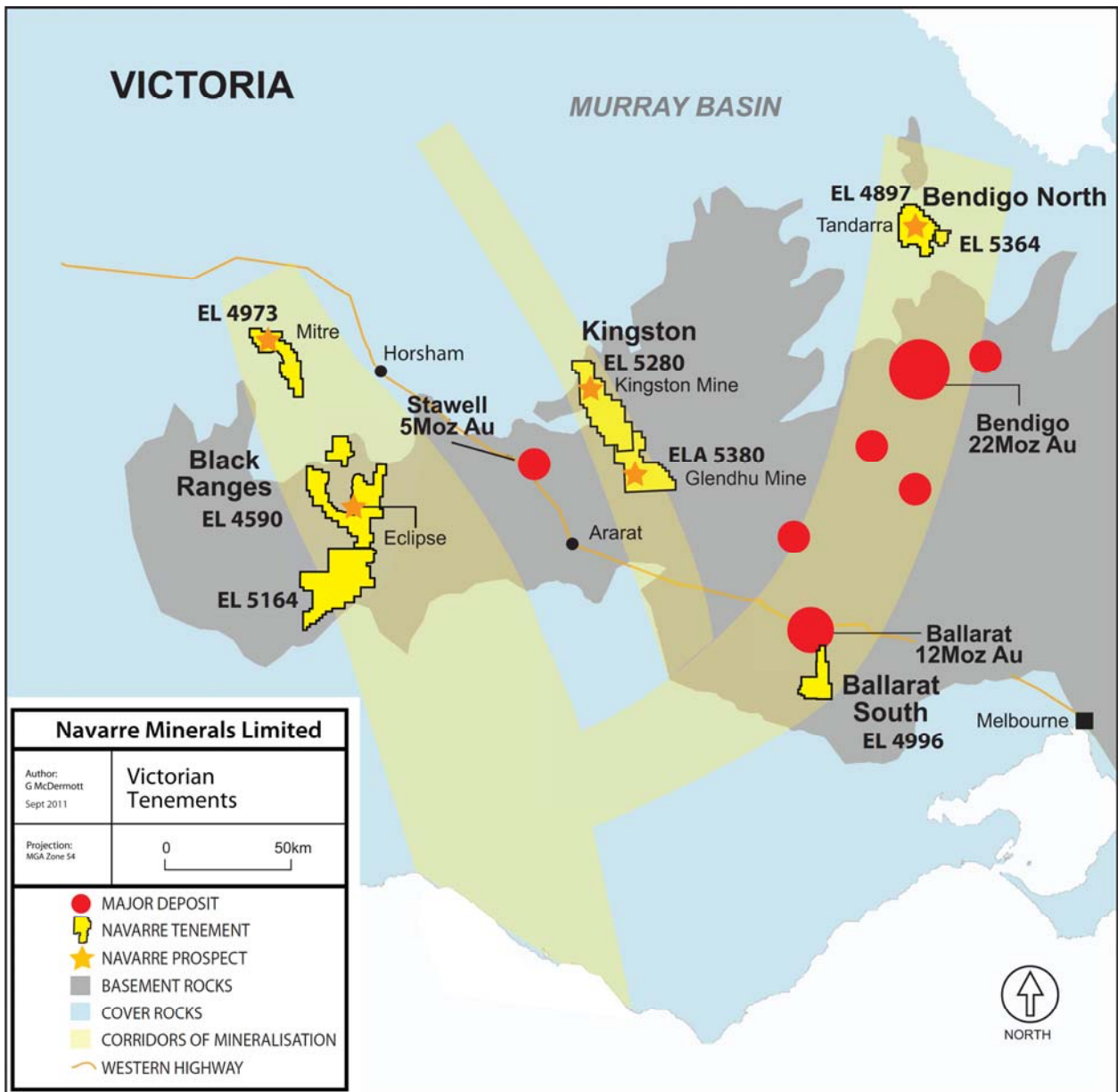
During the quarter the Company completed a fully underwritten 1 for 3 non-renounceable entitlement offer at \$0.23 per share raising \$3.2 million (before costs). The offer was underwritten by Taylor Collison Limited. The funds have been applied to accelerate the Company's exploration program at Tandarra and provide funds to supplement working capital requirements.

Cash on hand at 30 September 2011 was \$5.4 million.

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*The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Geoff McDermott, who is a Member of The Australian Institute of Geoscientists and who is Managing Director of the Company. Mr McDermott has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr McDermott consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*



**Figure 1:** Location of Navarre’s mineral projects, interpreted major mineral corridors, sub-surface exposure of basement rocks and extent of cover rock sequences.

**TABLE 1: Bendigo North Significant Assay Results<sup>5</sup>**

**(a) 2011 Navarre assay results:**

Hole ID <sup>1</sup>	HOLE COLLAR EAST (MGA94)	HOLE COLLAR NORTH (MGA94)	DRILL HOLE INCLINATION	DOWN-HOLE DEPTH FROM	DOWN-HOLE DEPTH TO	DOWN-HOLE INTERVAL	GOLD ASSAY GRADE RANGE <sup>2,3,4</sup>	
							MIN (g Au/t)	MAX (g Au/t)
ACT007	246894	5972796	-90 and	36 46	39 50	3 4	1.1 <sup>C</sup> 1.4 <sup>C</sup>	1.2 <sup>C</sup> 2.2 <sup>C</sup>
ACT015	246898	5972750	-90 includes	37 37	47 39	10 2	17.9 <sup>C</sup> 78.1 <sup>C</sup>	44.3 <sup>C</sup> 211.3 <sup>C</sup>
ACT024	246605	5972930	-90 includes includes	107 107 118	119 108 119	12 1 1	0.3 <sup>C</sup> 0.2 <sup>C</sup> 2.6 <sup>C</sup>	2.8 <sup>C</sup> 6.7 <sup>C</sup> 26.2 <sup>C</sup>
ACT027	246825	5972930	-90	40	42	2	0.9 <sup>C</sup>	1.6 <sup>C</sup>
ACT028	246845	5972930	-90	57	58	1	2.1 <sup>C</sup>	2.1 <sup>C</sup>
ACT036	246450	5973695	-90	42	43	1	1.4 <sup>C</sup>	1.4 <sup>C</sup>
ACT038	246695	5973460	-90	73	74	1	0.0 <sup>C</sup>	3.9 <sup>C</sup>

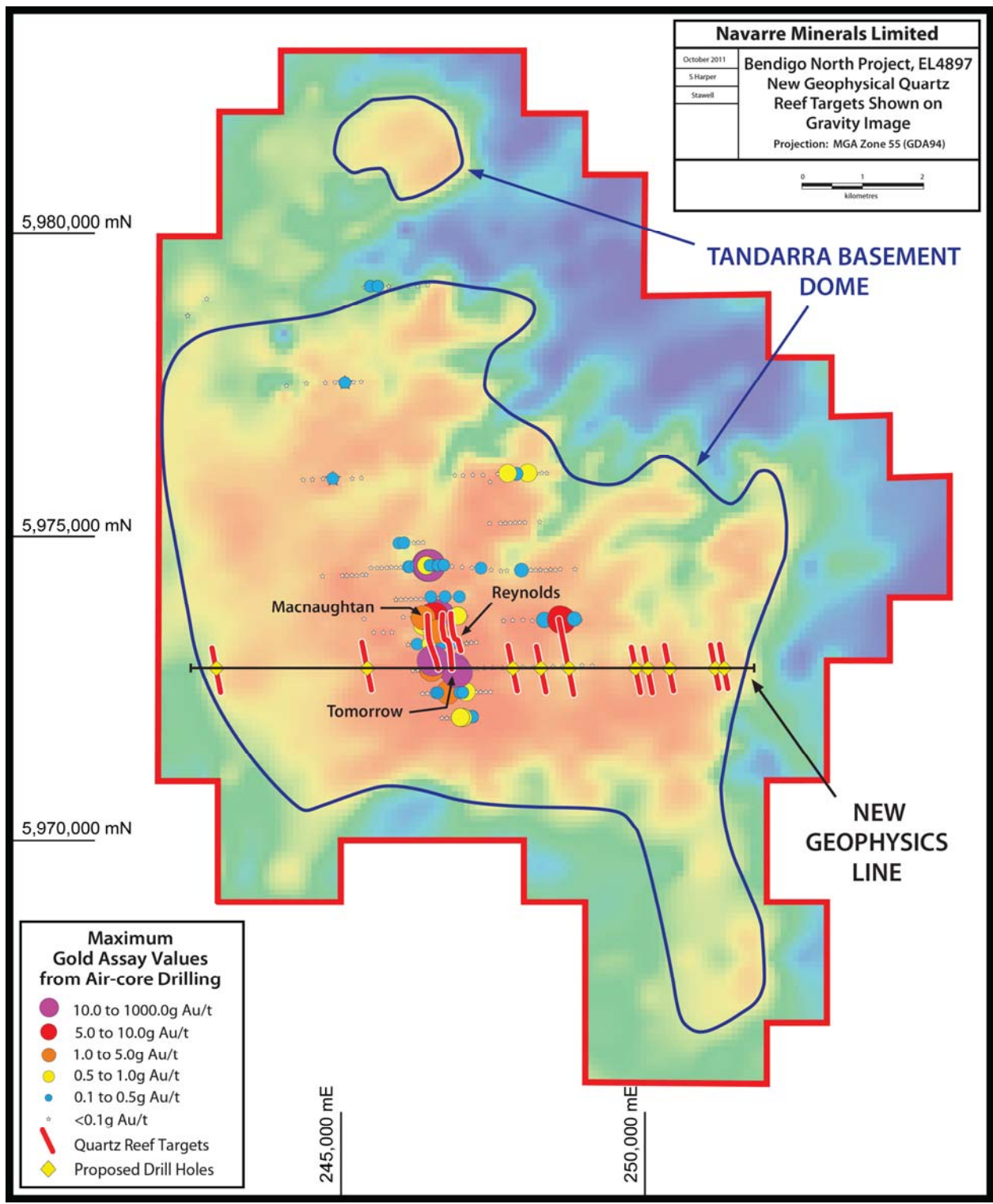
**(b) Historic assay results:**

Hole ID <sup>1</sup>	HOLE COLLAR EAST (MGA94)	HOLE COLLAR NORTH (MGA94)	DRILL HOLE INCLINATION	DOWN-HOLE DEPTH FROM	DOWN-HOLE DEPTH TO	DOWN-HOLE INTERVAL	GOLD ASSAY GRADE RANGE <sup>2,3,4</sup>	
							MIN (g Au/t)	MAX (g Au/t)
TAC102	246437	5974518	-90 includes	74 81	89 82	15 1	0.9 <sup>A</sup> 0.8 <sup>D</sup>	2.6 <sup>A</sup> 12.1 <sup>A</sup>
TAC105	246597	5973698	-90 and	67 70	68 72	1 2	0.4 <sup>A</sup> 0.4 <sup>A</sup>	1.1 <sup>A</sup> 8.0 <sup>A</sup>
TAC125	246441	5974520	-90 includes and includes	81 84 102 104	85 85 105 105	4 1 3 1	6.6 <sup>A</sup> 0.01 <sup>B</sup> 1.9 <sup>A</sup> 3.1 <sup>A</sup>	7.2 <sup>A</sup> 24.7 <sup>A</sup> 87.5 <sup>B</sup> 259.8 <sup>B</sup>
TAC136	246601	5973700	-90 includes includes includes	64 64 75 80	81 65 76 81	17 1 1 1	0.4 <sup>A</sup> 0.9 <sup>A</sup> 2.8 <sup>A</sup> 1.5 <sup>A</sup>	4.8 <sup>A</sup> 36.5 <sup>A</sup> 11.2 <sup>B</sup> 31.9 <sup>B</sup>
TAC146	246855	5972824	-90 includes	42 42	44 43	2 1	4.9 <sup>B</sup> 8.6 <sup>B</sup>	5.7 <sup>A</sup> 10.5 <sup>A</sup>
TAC149	246507	5972812	-90	43	44	1	1.1 <sup>A</sup>	1.3 <sup>B</sup>
TAC152	246754	5972429	-90	101	102	1	0.5 <sup>A</sup>	2.0 <sup>B</sup>
TDD007	246513	5973677	-53.2 includes	79 82.6	83.2 83.2	4.2 0.6	6.8 <sup>A</sup> 8.2 <sup>A</sup>	6.8 <sup>A</sup> 9.2 <sup>A</sup>

Notes:

- Hole IDs with either a "TAC" or "TDD" prefix refer to exploration conducted by the previous tenement holder, Leviathan Resources Limited. Hole IDs with the prefix "ACT" refer to Navarre Minerals Limited 2011 drilling program.
- Assay results have been determined by a number of different techniques: <sup>A</sup> fire assay with AA finish; <sup>B</sup> aqua-regia digest with AA finish; <sup>C</sup> Leachwell<sup>®</sup> (24 hour) cyanide leach 2000g analysis; and <sup>D</sup> screen fire assay with AA finish. A series of external standards and blanks are used to assess laboratory assay quality control.
- All samples, except TDD007, have been taken from variably dry to wet air-core drilling using either spear sampling on regular intervals (Leviathan Resources data) or a cone and quarter method of sub-sampling, composited based on logged geological boundaries (Navarre Minerals data). Samples from diamond hole TDD007 are from NQ sized core which has been logged and ½ core cut using geological boundaries. Intervals are length weighted grade averages.
- Gold Assay Grade Range shows the range of gold assay results returned from re-assay and / or re-sampling of the same depth interval. Marked variations in the assay ranges are believed to reflect the presence of coarse nuggety gold.
- There has been insufficient exploration undertaken on the Tandarra Prospect to define a mineral resource and it is uncertain if further exploration will result in determination of a mineral resource.





**Figure 2:** Map showing location of recently detected geophysical anomalies thought to represent shallow quartz reefs similar in signature to the confirmed Macnaughtan, Tomorrow and Reynolds lines of reef. Yellow diamonds indicate proposed drill targets.