

# SEPTEMBER 2012 QUARTERLY REPORT

# 31 OCTOBER 2012

# **HIGHLIGHTS**

- EL 5430 was granted during the quarter. The most advanced gold targets within EL 5430 are Wandean and Longwood.
- At Wandean, roadside rock chip sampling produced a best gold assay of 2.86 g/t gold from a group of strongly quartz-veined and brecciated sandstones. High antimony (to 1,280 ppm) and arsenic (to 1,210 ppm) were also recorded.
- A 20-hole RC (reverse circulation) percussion drilling program will commence tomorrow, 1 November 2012, at Wandean.
- The Longwood Prospect is on trend with the east-west Nagambie Mine Thrust. Drilling by Newcrest in 2007 intersected 18 metres averaging 1.0 g/t gold from 59 metres depth.
- A 1 for 3 non-underwritten rights issue at 2.0 cents per share during the quarter raised \$747,000, representing an excellent shareholder take up of 66.3%.

### **COMMENTARY ON THE QUARTER**

Nagambie Mining Chairman, Mike Trumbull said: "The success of the rights issue and the granting of EL 5430 during the quarter have set the scene for an exciting phase of exploration for the Company.

"The 'first cab off the rank', Wandean, is now being subjected to the 'truth test' with RC drilling. With the right host rocks, a faulted east-west anticlinal trend similar to that at the Nagambie Mine and very encouraging gold, antimony and arsenic surface assays, Wandean has all the right signatures."

#### NAGAMBIE MINING

Nagambie Mining Limited is an Australian ASX-listed gold company whose principal focus is on the evaluation and development of shallow, open-cut, heap-leachable gold deposits in Victoria.

The Company holds 100% of over 350 km<sup>2</sup> of exploration tenements in central Victoria encompassing historic goldfields at Nagambie, Redcastle and Rushworth. It is testing new structural and mineralisation concepts for gold mineralisation by employing geological, geophysical and geochemical techniques.

Nagambie Mining is also developing construction material opportunities at the Nagambie Mine site, principally for rock and sand products and to ultimately maximise the value of the freehold land owned by the Company at the mine.

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#### ASX CODE: NAG

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#### Board

Mike Trumbull (Chairman) Colin Glazebrook (CEO) Geoff Turner (Exploration Dir.) Kevin Perrin (Finance Dir.) Alfonso Grillo (Company Sec.)

# **EXPLORATION**

### 1. NAGAMBIE REGIONAL GOLD PROJECT

### 1.1 Wandean, Bunganail East and Longwood - EL 5430

EL 5430, covering 102 km<sup>2</sup> of prospective ground to the north west, north east and east of the Nagambie Mine was granted in late August 2012.

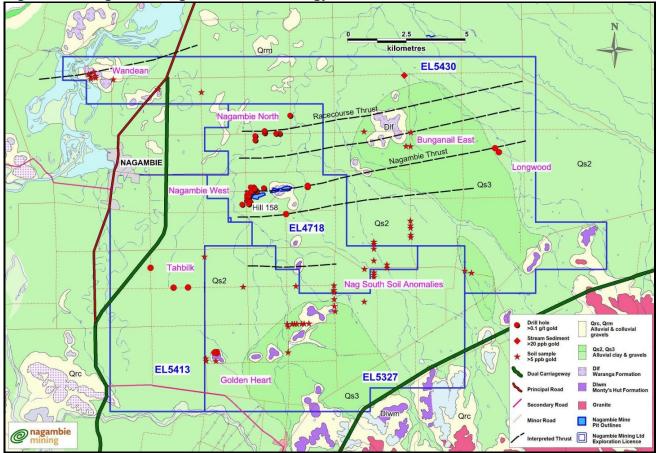


Figure 1 Nagambie Region Surface Geology with Anomalous Gold Results

The Wandean, Bunganail East and Longwood Prospects within EL 5430, in addition to Nagambie South and Nagambie North, are all considered to fit the Company's updated gold model for the region.

Figure 1 summarises all the anomalous gold results recorded in the area in relation to surface geology and Nagambie Mining's interpretation to date of east-west mineralised thrusts.

#### Wandean

Soil sampling by Metex Exploration Ltd at Wandean in 1995 had located two parallel gold-arsenic mineralised trends, 150 to 200 metres apart and up to 550 metres long, with gold values up to 237 ppb (0.24 g/t) and arsenic values up to 266 ppm. Metex did not follow up with more detailed investigations.

Rock chip samples taken by Nagambie Mining during roadside mapping of outcrop at the western end of the Wandean target gave very encouraging results. A best gold assay of 2.86 g/t gold was obtained from a group of strongly quartz-veined and brecciated sandstones over an area of 20 metres by 25 metres.

The 2.86 g/t gold sample also recorded 1,280 ppm antimony. In addition, arsenic values greater than 500 ppm were returned from 3 samples, with a maximum value of 1,210 ppm.

The roadside mapping also showed the presence of a faulted east-west anticline. Together with the anomalous gold, arsenic and antimony values, Wandean has all the structural, rock type and mineralisation characteristics that were present at Hill 158 (refer Figure 1) before it was mined as the East Pit at the Nagambie Mine in the 1990s.

Nagambie Mining is investigating the Wandean soil anomalies with a 20-hole RC (reverse circulation) percussion drilling program. Drilling is commencing on 1 November 2012.

### Longwood

The Longwood Prospect, approximately 9 km east of the Nagambie Mine and on trend with the mapped east-west Nagambie Mine Thrust, was drilled by Newcrest Operations Ltd (total of 17 holes) in 2007. The best drill intersection achieved was 18 metres at 1.0 g/t gold from 59 metres depth, including 3 metres at 3.2 g/t gold. Tertiary cover where Newcrest drilled was around 20 metres in thickness.

Longwood is currently the Company's second most compelling gold target in the region. Planning is in place to upgrade Longwood as quickly as possible, with the initial focus on Newcrest's best wide-spaced drill intersection.

### 1.2 Nagambie South - ELs 5327, 5413 & 4718 (southern part)

No significant work was carried out at Nagambie South during the quarter.

### **1.3** Nagambie North - EL 4718 (northern part)

No significant work was carried out at Nagambie North during the quarter.

#### 1.4 Nagambie Mine - MIN 5412

No significant exploration work was carried out at the Nagambie Mine during the quarter.

### 2. RUSHWORTH - EL 4723

Doctors Gully is the prime target in this licence with detailed costeaning planned. The program is designed to define surface mineralisation, indicated by previous drilling to be grading better than 2.0 g/t gold, which can be bulk sampled and toll-treated at one of the existing gold plants in central Victoria.

### 3. **REDCASTLE - HEATHCOTE**

#### 3.1 Redcastle - EL 3316 (Central) and MIN 4465 (Laura)

Reservoir is the priority target in EL3316 and detailed costeaning on this prospect is planned. As for Doctors Gully at Rushworth, the program is designed to define surface mineralisation grading better than 2.0 g/t gold that can be bulk sampled and toll-treated at one of the existing gold plants in central Victoria.

#### 3.2 Heathcote South - EL 3316 (South)

No significant work was carried out at Heathcote South during the quarter.

## NAGAMBIE MINE REHABILITATION AND SITE UTILISATION

The Company is developing all the non-gold material opportunities on the freehold land at the Nagambie Mine in conjunction with Global Constructions Pty Ltd ("Global").



### Photo 1 Global screening and loading crushed rock at the Eastern Overburden Dump

Global are producing sized gravel products from the Eastern Overburden Dump for supply to local Shires, developers and nurseries. Three sizes of gravel are being stockpiled – minus 40 mm together with plus 25 mm / minus 25 mm and plus 40 mm / minus 100 mm. Wet weather in the region continued to affect demand for gravel during the quarter, but demand is expected to pick up in Spring and Summer.

The proposed Green Organics Recycling Facility of Australian Native Landscapes (ANL) at the Nagambie Mine is still awaiting final Council and EPA approvals.

### TENEMENT CHANGES

EL 5430 (102 km<sup>2</sup>) was granted during the quarter, covering prospective ground to the north west, north east and east of the Nagambie Mine.

### **EXPLORATION TENEMENTS AND DEVELOPMENT OBJECTIVES**

For a summary of Nagambie Mining's exploration tenements, gold targets and its objectives for development and production, refer to pages 6, 7 and 8.

### **CORPORATE**

### CASH POSITION

At 30 September 2012, total cash held by the Company was \$1,401,000.

### **INCOME FROM NON-GOLD ACTIVITIES**

Income from the sale of non-gold materials for the September quarter was \$23,000 (June quarter \$59,000) as further wet weather was experienced.

### **RIGHTS ISSUE**

A 1 for 3 rights issue at 2.0 cents per share closed on 21 September 2012. A total of 37,330,884 new shares were taken up by shareholders under the issue, raising \$746,618. The take up of 66.3% was an excellent result for the non-underwritten issue given the current depressed share market for gold exploration companies.

While the issue was not underwritten, the two largest shareholders in Nagambie Mining, Mr Ralph Russell & Ms Ann Hynes and Cairnglen Investments Pty Ltd, and all four directors of the Company (together representing 42.4% of the shares on issue) had agreed to, and did, take up all of their entitlements under the Rights Issue.

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# **COMPETENT PERSON'S STATEMENT**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Colin Glazebrook, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Glazebrook is a Director of Nagambie Mining Limited and consents to the inclusion in this report information in the form and context in which it appears. Mr Glazebrook 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'.

# FORWARD-LOOKING STATEMENTS

This report contains "forward-looking statements" within the meaning of securities laws of applicable jurisdictions. Forward-looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "believe", "continue", "objectives", "outlook", "guidance" or other similar words, and include statements regarding certain plans, strategies and objectives of management and expected financial performance. These forward-looking statements involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Nagambie Mining and any of its officers, employees, agents or associates. Actual results, performance or achievements may vary materially from any projections and forward-looking statements and the assumptions on which those statements are based. Exploration potential is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Readers are cautioned not to place undue reliance on forward-looking statements and Nagambie assumes no obligation to update such information.

# **EXPLORATION TENEMENTS, TARGETS AND DEVELOPMENT OBJECTIVES**

## NAGAMBIE MINING TENEMENTS

Nagambie Mining holds a 100% interest in six granted Exploration Licences and two Mining Licences in Central Victoria with a total area of 359.1 km<sup>2</sup>. All licences are for gold and associated minerals.

Group Area	Project	Name	Licence Number	Area km²	Interest %		
Exploration Group Areas							
NAGAMBIE	NAGAMBIE NORTH	Nagambie North	EL 4718	33.1	100		
	NAGAMBIE SOUTH	Nagambie South	EL 5327	64.0	100		
	NAGAMBIE WEST	Tahbilk	EL 5413	43.1	100		
	BUNGANAIL	Wandean and Longwood	EL 5430	102.0	100		
RUSHWORTH	RUSHWORTH	Doctors Gully	EL 4723	24.1 100			
REDCASTLE	REDCASTLE	RedcastleEL 331689.1		89.1	100		
	LAURA	Laura Mine	MIN 4465	0.1	100		
Development Group Area							
NAGAMBIE	NAGAMBIE	Nagambie Mine	MIN 5412	3.6	100		
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Total 359.1

# NAGAMBIE MINING PORTFOLIO OF GOLD TARGETS

Location		Gold Targets
Nagambie Mine	1.	West Pit Extension
	2.	Nagambie Footwall Mineralisation
Nagambie Regional	3.	Wandean
	4.	Longwood
	5.	Nagambie South
	6.	Nagambie North
	7.	Bunganail East
Redcastle	8.	Reservoir
	9.	Mullocky
	10.	Laura
	11.	RFZ
	12.	Why Not
	13.	Pioneer
Rushworth	14.	Doctors Gully

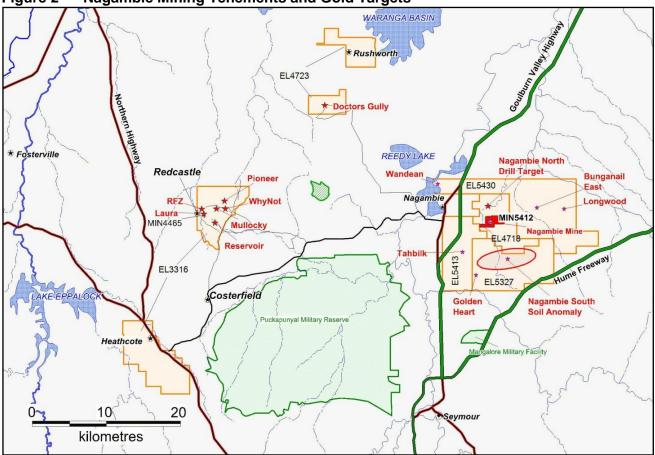


Figure 2 Nagambie Mining Tenements and Gold Targets

# NAGAMBIE MINING OBJECTIVES FOR GOLD DEVELOPMENT AND PRODUCTION

The medium term objective for Nagambie Mining is to produce 10,000 ounces of gold per year at an operating cost of less than A\$1,000 per ounce with a projected mine life of at least 10 years. The Company is evaluating and developing 100%-owned oxide gold prospects on and within economic trucking distance of the Nagambie Mine, targeting a minimum of 100,000 to 200,000 ounces in total of heap-leachable gold mineralisation. The current focus is on the three historical goldfields at Nagambie, Redcastle and Rushworth (refer Figure 2). Redcastle is 40 km west of the Nagambie Mine, 19 km east of the Fosterville Mine and 12 km north of the Costerfield Mine. Doctors Gully at Rushworth is 28 km north west of the Nagambie Mine.

Heap leach operations can be developed quickly and are much lower cost than conventional gold treatment operations, both in terms of total capital cost and operating cost per tonne. The recommencement of heap leach operations at the Nagambie Mine will benefit from the proven technology and successful operations history at the Mine in the 1990s. Recommencement will also benefit from the bitumen public road access to the Mine gate, the Company's freehold land (roughly 200 hectares) and the process water that can be pumped from the East Pit. Other infrastructure remaining on site includes the haulage roads, the pondage civil works, the operations shed, the grid electricity supply and the potable water supply.

When the Nagambie Mine was operated in the 1990s by Perseverance Mining Pty Ltd ("Perseverance"), the average head grade of the 184,000 ounces of gold ore stacked on the heap leach pad was approximately 0.8 g/t gold. Heap leach gold recovery was approximately 80%. Importantly, the gold price averaged around only A\$500 per ounce at that time but is currently trading in a range of A\$1,500 to A\$1,750 per ounce. Costs for contract activities such as open-pit mining, trucking, crushing, agglomerating and conveyor stacking have not increased nearly as much as the A\$ gold price in the intervening years.

The planned West Pit Extension at the Nagambie Mine is targeted to contain 25,000 ounces of gold mineralisation over 200 metres strike length at 0.8 g/t gold. At 80% heap leach recovery, this would give 2 years' life at 10,000 ounces of gold production per year.

The target grade for Nagambie-style oxide mineralisation for other prospects in the region is also 0.8 g/t gold.

Target size for a gold discovery in the Nagambie region is 200,000 ounces given the size of the Nagambie Mine orebody (184,000 ounces of gold mined in the 1990s plus 25,000 ounces targeted in the West Pit Extension). The Company's most advanced Nagambie regional gold targets currently are Wandean and Longwood.

The Company estimates that ore trucking costs from Redcastle and Rushworth to the Nagambie Mine (MIN 5412) would equate to around 0.2 g/t gold head grade equivalent. Hence an average head grade of 1.0 g/t gold or higher for Redcastle and Rushworth ore should produce attractive returns. Nagambie Mining is confident of being able to delineate various open pits at Redcastle and Rushworth containing a significant tonnage of mineralisation averaging 1.0 to 2.0 g/t gold.

Historical production at Redcastle and Rushworth focussed entirely on narrow, high-grade quartz veins hosted by sedimentary rocks, predominantly sandstones and siltstones. Apart from the mineralised quartz veins which occur in fractures associated with local anticlinal folding, lower-grade, disseminated gold has been identified within the sediments, thus presenting as large open-cut style targets. The depth of oxidation is around 60 to 70 metres. Nagambie Mining is planning to mine by open pit the lower-grade disseminated oxide gold, none of which was mined by the historical miners, together with the mineralised quartz veins that remain. These remnant quartz veins would have been either too thin or too low grade for previous underground mining operations, but will lift the average grade of the open-pit mineralisation.

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