

30 April 2012

# **QUARTERLY REPORT**

FOR THE PERIOD ENDING 31 MARCH 2012

## **SUMMARY**

- As previously reported, the first round of soil sampling at Nagambie South gave very encouraging results. 5 gold anomalies were located within a 10 km long, ENE-WSW trending corridor of interest which is 5 km south of the Nagambie Mine. A second round of in-fill soil sampling has now been completed within the corridor of interest to better define the anomalies and laboratory assays are pending. Aircore drilling of the basement gold targets is planned during CY 2012.
- A review of open-file reports by previous explorers in the Nagambie South area was carried out by Nagambie Mining during the quarter. Two explorers drilled SIROTEM geophysical targets, rather than gold-in-soil anomalies, in the general area in 1995-96 and 2003-04. Significant transported (alluvial) gold was indicated at the base of the Tertiary cover at both locations (up to 5m thickness at 1.6 g/t gold) which has likely shed from nearby bedrock gold mineralisation. Target size for a gold discovery under shallow cover at Nagambie South is 200,000 ounces.
- Work plans for detailed costeaning at Doctors Gully (Rushworth) and the Reservoir Prospect (Redcastle) have been submitted to the Department of Primary Industries (DPI) and approvals are awaited. The programs are planned 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.
- Global, as agents for Nagambie Mining, acquired new screening and loading equipment during the quarter and had produced significant stockpiles of sized gravel products (predominantly minus 25mm) by the end of the quarter. The gravel is being marketed to local Shires and developers in the region.
- Nagambie Mining commenced a \$750,000 issue of unsecured convertible notes at the end of the quarter to fund priority exploration work and provide additional working capital. The issue is now close to finalisation.

#### ABOUT NAGAMBIE

Nagambie Mining Limited (ASX Code: NAG) listed on the ASX in 2006 and is an Australian gold company whose principal focus is on the evaluation and development of shallow open cut gold deposits in Victoria.

The Company currently holds 100% of over 240 km<sup>2</sup> of exploration tenements in Central Victoria encompassing several historic goldfields.It is testing new structural and mineralisation concepts through employing geological, geophysical and geochemical techniques over the tenements.

The Company is also looking to fully develop all the construction material opportunities at the Nagambie Mine site, principally for rock & sand products and to ultimately maximise the value of the freehold land owned by the Company at the mine.

> SHARES ON ISSUE Quoted: 168,859,948

> Issued: 168,859,948

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**REGISTERED OFFICE** 

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#### 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 around A\$700 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 1). 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 operated in the 1990s under its previous ownership, 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\$1,800 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 prospective Nagambie-style oxide mineralisation at Nagambie South and Nagambie North is also 0.8 g/t gold. Target size for a gold discovery under shallow cover 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 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, with a total target of at least 100,000 ounces of gold mineralisation.

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.

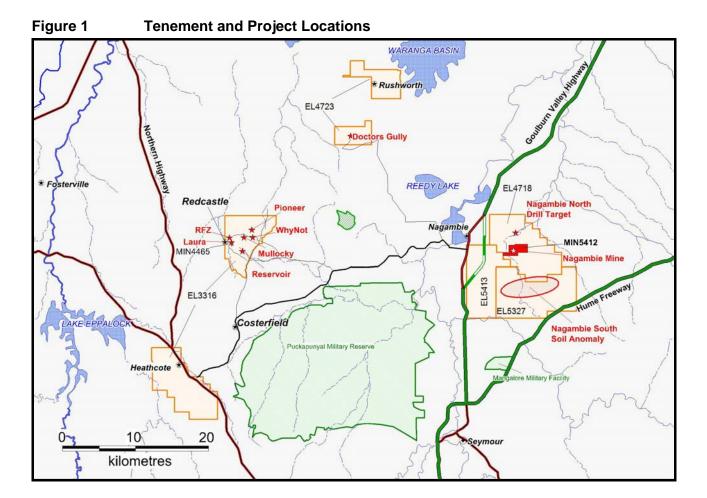


# NAGAMBIE MINING PROJECTS

Nagambie Mining now holds a 100% interest in five granted Exploration Licences and two Mining Licences in Central Victoria, with a total area of 269.4km<sup>2</sup>. All licences are for gold and associated minerals.

			-		
Group Area	Project	Name	Licence Number	Area km²	Interest %
	EXPLC	RATION GROUP ARE	AS		
NAGAMBIE	RUSHWORTH	Rushworth	EL 4723	34.4	100
	NAGAMBIE NORTH	Nagambie North	EL 4718	35.0	100
	NAGAMBIE SOUTH	Nagambie South	EL 5327	64.0	100
	NAGAMBIE SOUTH	Nagambie West	EL 5413	43.1	100
REDCASTLE	REDCASTLE	Redcastle	EL 3316	89.2	100
	LAURA	Laura Mine	MIN 4465	0.1	100
DEVELOPMENT GROUP AREA					
NAGAMBIE	NAGAMBIE	Nagambie Mine	MIN 5412	3.6	100
			TOTAL	269.4	

# Table 1 Nagambie Mining Limited Tenement Holdings







## GOLD TARGETS PORTFOLIO

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

Nagambie Mining's current portfolio of gold targets is as follows:

#### **DEVELOPMENT GROUP AREA**

I. NAGAWDIE WINE - WIN 3412 Area. 3.04 KIII Identined Frojet	1.	NAGAMBIE MINE - MIN 5412	Area: 3.64 km <sup>2</sup>	Identified Projects:
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#### 1.1 MIN 5412 REHABILITATION AND SITE UTILISATION

The Company is developing all the non-gold material opportunities on the freehold land at the Nagambie Mine.

The growth in non-gold income is largely a result of the liaison between Nagambie Mining and Global Contracting Pty Ltd ("Global") since June 2010. Global has a successful civil engineering, contracting and earthmoving business with a large equipment fleet.

Early in the quarter, Global acquired specific new screening and loading equipment and, by the end of the quarter, had produced significant stockpiles of sized gravel products (predominantly minus 25mm) from the Eastern Overburden Dump. The gravel is being marketed to local Shires and developers in the region. Global are planning to take delivery of crushing equipment in the June quarter to further upgrade gravel production.

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

## **EXPLORATION GROUP AREAS**

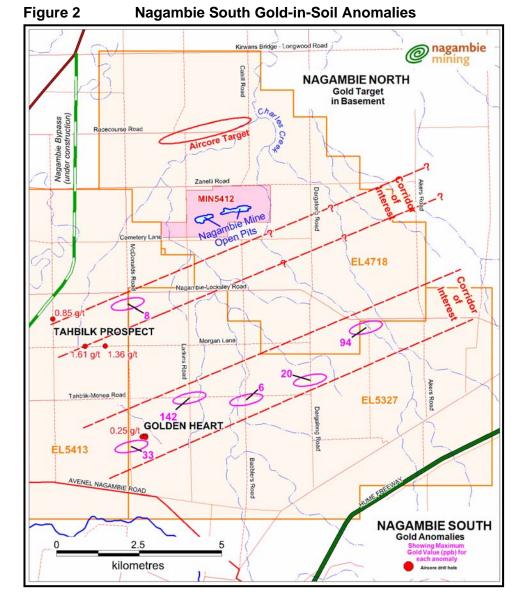
1.	NAGAMBIE GROUP	Area: 176.5 km <sup>2</sup>
	Nagambie South	EL 4718, EL 5327 & EL 5413
	Nagambie North	EL 4718
	Rushworth	EL 4723

Project Areas: 3 Prospects: 7



#### 1.1 NAGAMBIE SOUTH PROJECT – ELs 4718, 5327 & 5413 Area: 107.1 km<sup>2</sup>

As reported last quarter, the first round of soil sampling at Nagambie South gave very encouraging results. 5 gold anomalies were located within the main (most southerly) corridor of interest approximately 5 km south of the Nagambie Mine (refer Figure 2). This corridor of interest is approximately 10 km in length and has the same ENE-WSW trend as the Nagambie Mine gold mineralisation. ENE-WSW trending thrusts (fractures), known to exist at the outcropping Nagambie Mine and interpreted by the Company to exist at Nagambie South, are considered to provide the "plumbing system" necessary for the later emplacement of quartz-sulphide-gold mineralisation.



A second round of in-fill soil sampling has now been completed within the main corridor of interest to better define the anomalies and laboratory assays are pending. Aircore drilling of the basement gold targets is planned during CY 2012.

A review of open-file reports by previous explorers in the Nagambie South area was carried out by Nagambie Mining during the quarter. Two explorers drilled SIROTEM geophysical targets, rather than gold-in-soil anomalies, at Golden Heart and Tahbilk in 1995-96 and 2003-04 respectively (refer Figure 2). Significant transported (alluvial) gold was indicated at the base of



the Tertiary cover at both locations (up to **5m thickness at 1.6 g/t gold**) which has likely shed from nearby bedrock gold mineralisation.

Target size for a gold discovery under shallow cover at Nagambie South 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).

EL 5413 was applied for during the quarter to cover the possible western extension of the anomalous zones at Nagambie South and was granted after the close of the quarter.

#### 1.2 NAGAMBIE NORTH PROJECT – EL 4718 Area: 58.5 km<sup>2</sup>

No significant work was carried out on the project during the quarter.

#### 1.3 RUSHWORTH PROJECT - EL 4723 Area: 35 km<sup>2</sup>

The most advanced prospect at Rushworth is Doctors Gully in the historic Whroo Goldfield. Drilling intersections by a previous explorer in the 1980s included 7 metres at 4.1 g/t gold from 40 metres downhole and 8 metres at 3.2 g/t gold from 40 metres downhole.

A work plan for detailed costeaning (20m spacing along strike) at Doctors Gully was submitted to the DPI during the quarter and approval is awaited. The program is planned 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

The maximum size permitted by the DPI for a bulk sample is 5,000 cubic metres (around 10,000 tonnes). The mineralisation outlined by the detailed costeaning will also allow for better planning and interpretation of future RC drilling.

## 2. REDCASTLE – HEATHCOTE Area: 89 km<sup>2</sup>

Project Areas: 2 Prospects: 7

## 2.1 **REDCASTLE PROJECT – EL 3316 (Central) and MIN 4465 (Laura)**

The Redcastle portion of EL 3316 is 36 km<sup>2</sup> in area and MIN 4465 is 8.6 Ha in area.

A work plan for detailed costeaning (20m spacing along strike) at the Reservoir Prospect was submitted to the DPI during the quarter and approval is awaited. As for the Doctors Gully program, this program is planned 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

At Reservoir, two previous costeans approximately 100m apart resulted in intersections (previously reported) of 6m at 2.3 g/t gold (including 2m at 6.1 g/t) and 6m at 2.8 g/t (including 2m at 8.1 g/t).

#### 2.2 HEATHCOTE SOUTH PROJECT - EL3316 Area: 53 km<sup>2</sup>

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

#### TENEMENT CHANGES

EL 5413, Nagambie West, was applied for during the quarter to cover the possible western extension of the anomalous zones at Nagambie South. It was granted during April.

# CORPORATE

## **CASH POSITION**

At 31 March 2012, total cash held by the Company was \$666,000.

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

Income from non-gold activities for the March quarter was \$58,000 (December quarter \$74,000) as further unexpected activity delays were experienced.

#### PLANNED ISSUE OF CONVERTIBLE NOTES

Nagambie Mining commenced a \$750,000 issue of unsecured convertible notes at the end of the quarter to fund priority exploration work and provide additional working capital. The issue is now close to finalisation.

## ASX ANNOUNCEMENTS DURING THE QUARTER

28/03/2012	Change of Share Registrar
14/03/2012	Half Yearly Accounts
07/03/2012	Update on Nagambie South Project
30/01/2012	Appendix 5B
30/01/2012	December Quarter Activities Report

#### **COMPANY INFORMATION**

#### DIRECTORS

Michael W Trumbull	Non-Executive Chairman
Colin Glazebrook	Executive Director
Geoff Turner	Non-Executive Director - Exploration
Kevin J Perrin	Non-Executive Director - Finance and Deputy Chairman

#### CHIEF EXECUTIVE OFFICER AND EXPLORATION MANAGER

Colin Glazebrook

# **COMPANY SECRETARY**

Alfonso M G Grillo

## **REGISTERED OFFICE, HEAD OFFICE, MINE AND EXPLORATION OFFICE**

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#### **AUDITOR**

William Buck Audit (Vic) Pty Ltd Level 1, 465 Auburn Road Hawthorn East VIC 3123



## SHARE REGISTRY

Advanced Share Registry Level 6, 225 Clarence Street, Sydney NSW 2000 Telephone: (02) 8096 3502

SHARES ON ISSUE ASX CODE: NAG

168.9 Million

## SIGNIFICANT SHAREHOLDERS

- 16.98% Mr Ralph Douglas Russell & Ms Anne-Maree Hynes;
- 13.92% Cairnglen Investments Pty Ltd; and
- 10.22% Mr Michael Ward Trumbull

## **TOP 20**

The Top 20 Shareholders currently hold 74.7% of the shares on issue.

## **CONVERTIBLE NOTES ON ISSUE**

38.75 Million unlisted convertible notes issued at 4.0 cents face value = \$1.55 Million.

- 25.0 Million issued 13 September 2010 and 13.75 Million issued 2 September 2011;
- Interest payable every 6 months at a rate of 10% per annum;
- Convertible 1:1 into fully paid ordinary NAG shares at a conversion price of 4.0 cents per share any time within the maximum 5-year life of the notes at the option of the holder;
- Redeemable in cash in full after 5 years if not converted;
- Unsecured but rank ahead of shareholders; and
- Protected for reorganization events (bonus issues, share consolidations etc).

## **OPTIONS ON ISSUE**

15.9 Million unlisted options issued to employees and directors.

- All have an exercise price of 10.0 cents per share; and
- Expiry dates from 4 September 2013 to 30 November 2016.

For further information regarding the Company and its projects, contact:

## Colin Glazebrook

Chief Executive Officer Phone: (03) 5794 1750 Email: <u>colin@nagambiemining.com.au</u>

## **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'.