

29 July 2011

# **QUARTERLY REPORT**

FOR THE PERIOD ENDING 30 JUNE 2011

### SUMMARY OF THE QUARTER

- Following a review of operational aspects for the previously proposed Pit 3 to the west of the existing West Pit at the Nagambie Mine, it has been decided to revert to a western extension of the West Pit. The previous owners of the Nagambie Mine had flagged such an extension in the 1990s. Nagambie Mining is targeting 25,000 ounces of gold mineralisation in the 200 metre strike extension.
- A second-round, wide-spaced AirCore drilling program at Nagambie North has outlined an anomalous gold zone 2.3 km north of the Nagambie Mine and coincident with the interpreted Racecourse Thrust.
- The outlining of the anomalous gold zone under cover at Nagambie North has enhanced the prospectivity of the structural and gold-in-soil anomalies to the south of the Nagambie Mine. An extensive, in-fill soil sampling program at Nagambie South is under way. It is planned to commence AirCore drilling at Nagambie South following analysis of the soil sampling assays.
- Target size for a gold discovery under cover at Nagambie 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).
- An additional costeaning program at the Redcastle Goldfield, including the recently-acquired Laura Mining Licence, is planned to commence in the September quarter.
- Abigroup, the main contractor for the Nagambie Bypass, continued excavating and trucking undifferentiated rock fill from both the Western and Eastern Overburden Dumps during the quarter.
- Income from sales of non-gold materials for the quarter was a record for the Company at \$91,000. The figure for the 2011 financial year was also a record at \$214,000. Projected income from sales of non-gold materials for the 2012 financial year is over \$500,000.
- The proposed Green Organics Recycling Facility of Australian Native Landscapes ("ANL") at the Nagambie Mine is progressing through the final permitting stages. Nagambie Mining is well placed to provide rock during the construction of ANL's facility and provide sand during the operational phase.

#### 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 260 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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#### NAGAMBIE MINING OBJECTIVES

#### GOLD EXPLORATION AND DEVELOPMENT

The medium term objective for Nagambie Mining is to produce 10,000 ounces of gold per year at an operating profit in the range of \$5 million to \$10 million per year.

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 of heap-leachable gold mineralisation. The initial focus is on the two 100%-owned, complete historical goldfields at Nagambie and at Redcastle. Redcastle is 33 km west of Nagambie, 19 km east of Fosterville and 12 km north of Costerfield.

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 operations history at the Mine, the bitumen public road access to the Mine gate, the Company's freehold land (roughly 500 acres), the process water that can be pumped from the existing East Pit and the infrastructure remaining on site, principally the haulage roads, the pondage civil works, the operations shed, grid electricity supply and 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\$1,400 to A\$1,500 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 North and Nagambie South is also 0.8 g/t gold. Target size for a gold discovery under cover at Nagambie 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 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 ore should produce attractive returns. Nagambie Mining is confident of being able to delineate various open pits at Redcastle 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.

#### NON-GOLD INCOME

The Company is developing all the construction material opportunities on the freehold land at the Nagambie Mine, including the sale of overburden and the commercialisation of sand deposits.

Income for Nagambie Mining from sales of non-gold materials, principally sized crushed rock and undifferentiated rock fill, for the 2011 financial year was \$214,000. Projected income from sales of non-gold materials for the 2012 financial year is over \$500,000.

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 ready access to crushing, screening and washing equipment while its earthmoving fleet includes a large range of excavators, tracked loaders, graders, low loaders and tandem tippers.



# NAGAMBIE MINING PROJECTS

Nagambie Mining holds a 100% interest in four Exploration Licences and two Mining Licences in Central Victoria, with a total area of 264.7 km<sup>2</sup>. All licences are for gold and associated minerals.

Group Area	Project	Name	Licence Number	Area km <sup>2</sup>	Interest %	
EXPLORATION GROUP AREAS						
NAGAMBIE	RUSHWORTH	Rushworth	EL 4723	34	100	
	NAGAMBIE NORTH	Nagambie North	EL 4718	59	100	
	NAGAMBIE SOUTH	Nagambie South	EL 5327	64	100	
REDCASTLE	REDCASTLE	Redcastle	EL 3316	104	100	
	LAURA	Laura Mine	MIN 4465	0.1	100	
DEVELOPMENT GROUP AREA						
NAGAMBIE	NAGAMBIE	Nagambie Mine	MIN 5412	3.6	100	
			TOTAL	264.7		

#### Table 1 Nagambie Mining Limited Tenement Holdings

#### Figure 1 Project Locations





Identified Projects: 4

#### **DEVELOPMENT GROUP AREA**

1. NAGAMBIE MINE - MIN 5412 Area: 3.64 km<sup>2</sup>

#### 1.1 MIN 5412 ADDITIONAL OXIDE GOLD MINERALISATION

Following a review of operational aspects for the previously proposed Pit 3 to the west of the existing West Pit at the Nagambie Mine, it has been decided to revert to a western extension of the West Pit. The previous owners of the Nagambie Mine had flagged such an extension in the 1990s. A Work Plan Variation for the West Pit Extension is now being prepared for submission to the Department of Primary Industries ("DPI").

A total of approximately 184,000 ounces of oxide gold ore at 0.8 g/t gold were mined in the East and West Pits at the Nagambie Mine (refer Figure 2) by the previous owners. The East and West Pits covered a total ore strike length of 1,330 metres. Average ounces mined per 100 metres of strike length was therefore approximately 13,800 ounces. The planned West Pit Extension covers 200 metres of strike length and Nagambie Mining is targeting 25,000 ounces of mineralisation at 0.8 g/t gold in the extension.

# Figure 2 West Pit Extension at the Nagambie Mine (25,000 Ounces of Gold Mineralisation Targeted).





The overburden, which is predominantly free-dig alluvial cover, will be stockpiled on dumps to the north and south of the West Pit.

A new plastic-lined heap leach pad and pregnant pond are planned for the area north of the East Pit and south of the large 1990s heap leach pad. The existing barren pond and overflow pond, immediately to the north of the existing heap leach pad, are planned to be recommissioned after the installation of new plastic liners.

The existing operations shed, which previously housed the 1990s gold room, is also planned to be recommissioned with new gold room equipment and tankage.

Heap leach gold recovery in the previous operation was approximately 80% and Nagambie Mining is planning on the same recovery for the recommissioned operation. The targeted 25,000 ounces of gold mineralisation would therefore result in total gold production (gold bullion) of 20,000 ounces.

The Company is planning to use contractors wherever appropriate, particularly for the open pit mining (Nagambie Mining would retain full geological control of ore mining) and the crushing, agglomerating and conveyor stacking of the ore on the heap leach pad.

#### 1.2 MIN 5412 REHABILITATION AND SITE UTILISATION

Abigroup, the main contractor for the Nagambie Bypass, continued excavating and trucking undifferentiated rock fill from both the Western Overburden Dump and the Eastern Overburden Dump during the quarter.

ANL's proposed Green Organics Recycling Facility, to be constructed on 80 acres of surplus land at the eastern end of the Nagambie Mine, is progressing through the final permitting stages. Nagambie Mining is well placed to provide rock fill and crushed rock to ANL during the construction of ANL's facility and provide sand during the operational phase.

Investigations into the use of the extensive sand deposits that Nagambie Mining has located at the mine are continuing.

#### **EXPLORATION GROUP AREAS**

1. NAGAMBIE GROUP	Area: 157 km <sup>2</sup>
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Project Areas: 3 Prospects: 6

Nagambie NorthEL 4718Nagambie SouthEL 4718 & EL 5327RushworthEL 4723

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

The first round of AirCore drilling at Nagambie North was carried out in the March 2011 quarter. 37 holes tested a large prospective area, roughly 3.6 km west to east and 2.6 km north to south. The most encouraging preliminary result, reported previously, was 3 metres at 1.15 g/t gold at a depth of 32 metres in NNAC 023 (collar coordinates 341,553mE and 5,928,757mN).

A second round of AirCore drilling at Nagambie North was carried out in the June 2011 quarter. 21 holes tested a smaller area around NNAC 023, over a maximum distance of 2.0 km west to east and 1.5 km north to south. The 3-metre composite basement AirCore assays gave a



clustering of results in an anomalous zone, roughly 1.5 km long by 0.3 km wide (shown in green in Figure 3). Of the 13 Aircore holes within this zone, including NNAC 023 which contains the best result to date, 11 holes contain gold assays significantly above background.

The anomalous gold zone outlined is roughly 2.3 km north of the Nagambie Mine and coincident with the interpreted Racecourse Thrust (refer Figure 3).

In order to adequately define RC drilling targets within the anomalous zone, it will be necessary to carry out more detailed Aircore drilling, closing up the spacing to 40 metres across strike and 200 metres along strike – giving approximately four times the current density of holes.



# Figure 3 Nagambie North AirCore Anomaly, Nagambie South Preliminary



#### 1.2 NAGAMBIE SOUTH PROJECT – ELs 4718 & 5327 Area: 64 km2

The outlining of an anomalous gold zone under cover at Nagambie North, coincident with an interpreted thrust, greatly enhances the prospectivity of the preliminary gold-in-soil and structural anomalies to the south of the Nagambie Mine (refer Figure 3). The gold-in-soil anomalies at Nagambie South in Figure 3 are based on historic roadside sampling and infill sampling of the paddocks between roadways is required to provide better definition.

As the southern portion of EL 4718 was too wet to be sampled due to record rains in the December 2010 and March 2011 quarters, it had been decided to wait for the grant of EL 5723 (to the south of EL 4718) to allow for a more extensive soil sampling program in the June quarter. While there was less rainfall in the June quarter, the ground to be tested at Nagambie South continued to be too wet for sampling. The ground finally dried out sufficiently in July and the extensive soil sampling program is now under way.

The two rounds of AirCore drilling at Nagambie North have proved the suitability of the rig for regional exploration at Nagambie. A first round of AirCore drilling at Nagambie South will be designed and carried out when the results from the current soil sampling program become available.

The target size for a repeat of the Nagambie Mine in the Nagambie region is 200,000 ounces of oxide gold mineralisation. This is based on the 184,000 ounces of gold mined at the Nagambie Mine in the 1990s and the remaining target of 25,000 ounces in the Nagambie Mine West Pit Extension.

#### 1.3 RUSHWORTH PROJECT - EL 4723

This Licence is in two parts over the historical Rushworth and Whroo Goldfields, totalling 34.4 km<sup>2</sup>. Two prospects, one in each area, are being modelled ahead of a costeaning program.

Area: 35 km<sup>2</sup>

#### 2. **REDCASTLE – HEATHCOTE**

 Area: 104 km<sup>2</sup>
 Project Areas: 4

 Prospects: 9
 Prospects: 9

 Redcastle (North, Central & South)
 EL 3316

 1
 REDCASTLE COLDELEL D. EL 2216 (Central) and Mill 4465 (Laure)

### 2.1 REDCASTLE GOLDFIELD - EL 3316 (Central) and MIN 4465 (Laura)

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

The Company's Standard Work Program for the excavation of up to 23 additional costeans (trenches) at Redcastle, approved by the DPI, is now scheduled to commence in the September quarter. The total length of costeans is planned to be approximately 2,000 metres. The program is designed to develop additional RC drilling targets and will particularly test the Laura Mining Licence and the historical workings to the north and south of Laura, which together produced the majority of historic gold production at Redcastle.

An Area Work Plan for RC drilling has also been approved by the DPI. A program of 54 holes (4,320 metres) is proposed to test mineralisation in the oxidised zone, which is expected to extend up to 80 metres below surface.

Figure 4



#### **Quarterly Activities Report – June 2011**

The best gold intersections from sporadic, shallow historical drilling at Redcastle (previously reported) include 8m at 5.2 g/t gold, 9m at 2.7 g/t, 8m at 1.9 g/t, 3m at 2.5 g/t, 2m at 10.7 g/t, 2m at 6.3 g/t, 4m at 3.0 g/t, 7m at 1.1 g/t and 2m at 4.5 g/t.

The Company estimates that an average head grade of 1.0 g/t gold or higher for Redcastle mineralisation, mined and trucked to the Nagambie Mine (MIN 5412) for heap leach treatment, would produce attractive returns at current gold prices. Based on the extensive work carried out to date, Nagambie Mining is confident of being able to delineate various open pits at the Redcastle Goldfield 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.



**Redcastle Historical Workings, Structural Interpretation** 



The RC drilling targets developed to date by Nagambie Mining (refer Figure 4) include Native Gully and Mullocky North. Interpreted mineralisation at surface for these two targets, based on costeaning to date and the limited historical drilling carried out, are shown in green in Figures 5 and 6. The mineralisation is predominantly disseminated gold in sediments. With the surface depletion that occurs at Redcastle, the grades encountered in the surface costeans are encouraging.













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

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

#### 2.3 HEATHCOTE NORTH PROJECT- EL 3316 Area: 15 km<sup>2</sup>

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

#### **TENEMENT CHANGES**

No tenement changes occurred during the quarter.

#### CORPORATE

#### SHARE ISSUES

No shares were issued during the quarter.

#### CASH POSITION

At 30 June 2011, total cash held by the Company was \$598,000. Accrued income at 30 June, based on invoices, was \$63,000.

#### **INCOME FROM SALES OF NON-GOLD MATERIALS**

Income from sales of non-gold materials for the quarter was a record for the Company at \$91,000. The figure for the 2011 financial year was also a record at \$214,000.

Projected income from sales of non-gold materials for the 2012 financial year is over \$500,000.

#### **ASX ANNOUNCEMENTS**

The following ASX announcements were released during the quarter:

06/06/2011	Change in Substantial Holding
06/06/2011	Change of Director's Interest Notice
06/05/2011	Change in Substantial Holding
04/05/2011	Change of Director's Interest Notice
02/05/2011	Change of Director's Interest Notice
29/04/2011	Quarterly Activities Report
29/04/2011	Quarterly Cashflow Report
01/04/2011	Change of Director's Interest Notice

#### **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

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#### **WEBSITE**

The Nagambie Mining Limited website is www.nagambiemining.com.au

# SHARES ON ISSUE 168.9 Million

ASX Code: NAG

#### 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 72.2% of the shares on issue.

#### **OPTIONS ON ISSUE**

11.5 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 11 March 2016.



#### **CONVERTIBLE NOTES ON ISSUE**

25.0 Million unlisted convertible notes issued at 4.0 cents face value = \$1.0 Million.

- Issue date of 13 September 2010;
- 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).

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

#### Colin Glazebrook

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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'.