

# Quarterly Report 30 June 2024

## Highlights

- On 20 May 2024, Nagambie Resources announced a maiden JORC Inferred Resource for the highgrade, gold-antimony mineralisation under the West Pit at the Nagambie Mine.
- The maiden JORC Resource of **415,000** tonnes averages **3.6** g/t gold plus **4.3%** antimony for inground metal content of **47,800** ounces of gold plus **17,800** tonnes of antimony. At 4.3% antimony, the Nagambie Mine is the highest grade antimony deposit in Australia and one of the highest grade in the western world.
- The resource stems from a focussed, cost-effective diamond drilling program that has to date intercepted four lode systems (C1, C2, C3, and N1) which remain open along strike and at depth, indicating substantial expansion potential.
- Nagambie completed a strategic review of all its tenements, both granted and under application, prioritising those tenements with outcropping ground, known anomalism and with the highest prospectivity for hosting gold-antimony mineralisation. The lower-quality tenements, most of which had deep unconsolidated Murray Basin cover, have been relinquished, greatly reducing the Company's tenements commitments going forward.

### Commentary

Nagambie Resources' Chairman, Tom Quinn commented:

"The announcement of the Maiden JORC Inferred Resource was a milestone for the Company and comes at a time of rising gold and antimony prices.

"Our focus now is to significantly grow the Resource and we are confident that a recommended follow up drill program of depth and extensional drill will achieve this objective, given the four lode systems intercepted to date are open at depth and along strike.

"The Board and the CEO continue to work hard to put the Company in a position to take the next steps to build on the exciting gold and antimony discovery."

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Executive Director Michael Trumbull

**Non-Executive Directors** Alfonso Grillo Bill Colvin Kevin Perrin **CEO** James Earle

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#### 1. NAGAMBIE MINE HIGH-GRADE GOLD-ANTIMONY DISCOVERY

On 20 May 2024, Nagambie Resources announced the Maiden JORC Inferred Resource for the shallow highgrade gold-antimony mineralisation at the Nagambie Mine, marking a pivotal moment in the Company's journey. The announcement of the discovery comes at a promising time, with gold prices soaring to all-time highs and antimony demand surging due to its crucial role in military applications and cutting-edge solar panel technology.

Key highlights of the maiden Resource are:

- Rich metal content: 415,000 tonnes averaging 3.6 g/t gold (Au) plus 4.3% antimony (Sb) for inground metal content of 47,800 ounces of Au plus 17,800 tonnes of Sb.
- High gold equivalent (AuEq) figures: 153,000 ounces AuEq at a grade of 11.5 g/t AuEq based on conservative projected CY2024 market prices of US\$1,900/ounce for gold and US\$11,000/tonne for antimony. The current prices are US\$2,363/ounce for gold (24% higher) and US\$23,150/tonne for antimony (110% higher).
- High margin: The conservative 11.5 g/t AuEq grade is 2.3 times the mineable cut-off grade of 5.0 g/t AuEq, indicating high-margin mineralisation.
- Cost-effective Discovery: Achieved through a low-cost, focused and economical diamond drilling program by Nagambie.
- Significant expansion potential: The lode systems discovered to date (C1, C2, C3, and N1) remain open along strike and at depth, indicating substantial potential for further resource growth through additional drilling.



Figure 1 Plan View of the Vein Domain Wireframes below the West Pit

The maiden Resource applies only to the sulphide zone that underlies the surface oxide zone in the area of the West Pit at the Nagambie Mine. Here, four lode systems (C1, C2, C3 and N1), with specific vein domains within them, have been intersected to date (their discoveries were progressively announced by Nagambie, in ASX releases of 16 November 2022, 23 January 2023 and 3 July 2023).

The location of all the vein domains considered for the maiden JORC Inferred Resource calculation are shown in plan view, in relation to the overlying West Pit, in Figure 1.



The maiden JORC Resource calculation was independently carried out by Adam Jones Geological Services using Maptek Vulcan (3D Mine Planning & Geological Modelling) software.

Table 1 shows the JORC Inferred Resource calculated for each of the vein domain block models for:

- Vein Domain lower and upper cut-off grades of 5.0 g/t AuEq and 100 g/t AuEq respectively;
- Minimum horizontal widths for the vein domains of 1.2m EHT (estimated horizontal thickness); and
- Blocks estimated within a distance of 50m from at least two drill hole intersections.

Lode System	Vein Domain	Tonnes	AuEq (g/t)	AuEq (oz)	Au (g/t)	Au (oz)	Sb (%)	Sb (t)	BD
	C1 East	27,144	17.2	14,974	3.9	3,445	7.2	1,941	2.87
	C1 Central	42,891	10.4	14,282	3.5	4,894	3.7	1,587	2.81
	C1 West	77,667	13.3	33,291	2.0	4,899	6.2	4,799	2.82
C1	Subtotal	147,702	13.2	62,548	2.8	13,238	5.6	8,328	2.83
	C2 East	35,527	7.1	8,160	1.9	2,140	2.9	1,018	2.78
	C2 West	139,324	11.5	51,466	4.2	18,904	4.0	5,504	2.80
C2	Subtotal	174,850	10.6	59,626	3.7	21,044	3.7	6,522	2.80
C3	C3 East	757	17.0	1,192	0.8	53	8.8	192	2.89
N1	N1	91,835	10.2	30,006	4.6	13,456	3.0	2,798	2.79
Total		415,144	11.5	153,372	3.6	47,791	4.3	17,840	2.80

#### Table 1 JORC Inferred Resource by Vein Domain

BD = Bulk Density

Subject to financing, Nagambie Resources is aiming to commence an extensive follow-up drilling program aimed at expanding the Resource's size and quality. The focus will be on infill and strike-extensional drilling above 270m from surface, and depth-extensional drilling below 270m from surface. The geological similarities to the Costerfield Mine (owned by Mandalay Resources), 45 km to the west of the Nagambie Mine, indicate likely depth continuity of the Nagambie mineralisation given that mining at the Costerfield Mine is now approaching 1,000m below surface.

#### 2. NAGAMBIE RESOURCES' GOLD-ANTIMONY EXPLORATION & MINING TENEMENTS

During the quarter, two exploration licences (ELs) were granted, and six ELs were renewed by the Victorian Earth Resources Regulator (ERR).

The Company also carried out a strategic review of its tenement package, with a focus on holding those tenements with outcropping ground and with the highest prospectivity for hosting gold and antimony mineralisation. As a result of the strategic review, the Company took steps to surrender selected tenements and withdraw a number of new tenement applications and renewal applications.

Table 2 summarises the tenements that were granted, renewed and disposed (surrendered, application withdrawn, or renewal application withdrawn) during the quarter.

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Tenement no.	Project	Status
EL006158	Rushworth	Renewed
EL006212	Reedy Lake	Renewed
EL006352	Miepoll	Renewed
EL006508	Tabilk	Renewed
EL006606	Gowangardie	Renewal application withdrawn
EL006719	Euroa	Renewal application withdrawn
EL006720	Euroa	Surrendered
EL006731	Arcadia	Surrendered
EL007207	Arcadia	Surrendered
EL007211	Shepparton	Surrendered
EL007212	Shepparton North	Surrendered
EL007213 Pederick		Application withdrawn
EL007265	Nagambie Town	Granted

 Table 2
 Summary of Changes to Tenements



EL007594	Miepoll East	Surrendered
EL007595	Miepoll West	Application withdrawn
EL007690	Nagambie South	Granted
EL5430	Bunganail	Renewed
EL5546	Redcastle	Renewed
RL2019	Doctors Gully	Renewal application withdrawn

The location of the disposed tenements is shown in Figure 2.



#### Figure 2 Disposed Tenements

The Company's tenements as at 30 June 2024, totalling 1,036.5 sq km, are listed in Table 3 and their general location in central Victoria is shown in Figure 3. Nagambie holds a 30% interest in the Redcastle JV property.

Nagambie has received notice from ERR regarding a reassessment of the rehabilitation liability for MIN5412. The Company is liaising with ERR on the recalculation. The bond is currently \$500,000.





#### Figure 3 Nagambie's Tenements (in blue) all within the Melbourne Zone (in pink) as at 30 June 2024

#### 3. WHROO OPTION / JV AGREEMENT

In October 2020, Nagambie announced that it has entered into an Option / Joint Venture (JV) agreement (the Agreement) over the 199 sq km Whroo JV Property in the Waranga Domain with Mawson Gold Limited (now Southern Cross Gold [SXG]) (see ASX announcement date 14 October 2020). The Agreement allowed SXG to optionally earn up to 70% interest in the property over a 6-year period by progressively meeting exploration expenditure commitments or by paying fees to Nagambie.

In accordance with the Agreement, in 2020 SXG commenced exploration on the property including undertaking a detailed LiDAR survey and the drilling of two deep diamond holes beneath the Balaclava open pit, one of which intersected high grade gold and antimony. However, SXG's expenditure did not meet the requirements of the Agreement for Year 1, nor did SXG carry out any optional exploration expenditure or pay any annual fees for Years 2 and 3 (through to December 2023). As such, the 2020 Agreement lapsed, without SXG earning any interest in the Whroo JV Property.

After the Agreement lapsed, Nagambie strategically reduced the size and ERR expenditure commitments of the Whroo tenements by relinquishing Retention Licence RL2019. Nagambie retains 100% ownership of all the other Whroo tenements which represent a core asset of the Company.

#### 4. NAGAMBIE MINE GOLD TREATMENT PLANT

Under the Nagambie Joint Venture (NJV), Nagambie Resources and Golden Camel Mining (GCM) are planning for the construction and operation of a 300,000 tonnes per annum toll treatment facility at the Nagambie Mine. GCM is the Manager of the NJV and will, subject to raising the necessary funds, pay 100% of all infrastructure, construction and commissioning costs. After commissioning, all revenues and operating costs are to be shared 50:50. Initial feed for the plant is planned to be trucked from GCM's permitted Golden Camel Mine.

During the quarter, GCM continued to seek the required funding for the treatment plant with external parties.



Table 3 Nagamble Resources Tenements as at 30 June 2024				
Tenement Number	Tenement Name			
MIN 5412	Nagambie Mining Licence			
EL 5430	Bunganail Exploration Licence	160.0		
EL 5511	Nagambie Central Exploration Licence	21.0		
EL 6158	Rushworth Exploration Licence	46.0		
EL 6212	Reedy Lake North Exploration Licence	17.0		
EL 6352	Miepoll Exploration Licence	342.0		
EL 6508	Tabilk Exploration Licence	33.0		
EL 6748	Waranga Exploration Licence	102.0		
EL 6937	Nagambie East Exploration Licence	2.0		
EL 6877	Nagambie Exploration Licence	8.0		
EL 7205	Angustown Exploration Licence	49.0		
EL 7208	Cullens Road Exploration Licence	29.0		
EL 7209	Goulburn West Exploration Licence	34.0		
EL 7210	Locksley Exploration Licence	26.0		
EL 7237	Kirwans North (1) Exploration Licence	20.0		
EL 7238	Kirwans North (2) Exploration Licence	9.0		
EL 7264	Resource Recovery Exploration Licence	1.0		
EL 7265	Nagambie Town Exploration Licence	8.0		
EL 7690	Nagambie South Exploration Licence	4.0		
ELA 8082	Tabilk North Exploration licence Application	7.0		
ELA 8083	Tabilk East Exploration Licence Application	40.0		
	Total Waranga Domain	961.5		
EL 5546	Redcastle Exploration Licence	51.0		
EL 7498	Cornella Exploration Licence	19.0		
EL 7499	Sheoak Exploration Licence	5.0		
Subtotal	Redcastle JV Property with SXG	75.0		
TOTAL	Nagambie Resources Limited Tenements	1,036.5		

Table 3	Nagambie	Resources	Tenements as	at 30 June	2024
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#### 5. CORPORATE

#### Cash

At 30 June 2024, total cash held by the group was \$1,048,000.

#### **Related Party Payments**

In accordance with its obligations under ASX Listing Rule 5.3.5, Nagambie Resources advises that the only payments made to related parties of the Company in the quarter, as set out in item 6.1 of the accompanying Appendix 5B, were in respect of directors' and consulting fees.

By the order of the Board.

James Earle Chief Executive Officer

#### STATEMENT AS TO COMPETENCY

The Exploration Results in this report have been independently compiled by Adam Jones. Adam Jones is not an employee or related party of Nagambie Resources and he works independently for Adam Jones Geological Services. Adam Jones is a Member of the Australian Institute of Geoscientists (MAIG) and 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 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". He consents to the inclusion in this report of these matters based on his information in the form and context in which it appears.



#### 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", "target", "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 Resources 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 Resources assumes no obligation to update such information.

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#### About Nagambie Resources:

www.nagambieresources.com.au

Oriented diamond drilling of structurally-controlled, high-grade antimony-gold underground targets within the Nagambie Mine Mining Licence and elsewhere in the Waranga Domain is being methodically carried out.

Nagambie Resources and Golden Camel Mining (GCM) have received approval for the construction and operation of a CIL gold toll treatment plant at the Nagambie Mine. GCM will pay 100% of all construction and commissioning costs; thereafter net operating cash flow will be shared 50:50. A future antimony recovery circuit is also planned.

Bacterial recovery of residual gold from the 1990s heap leach pad is being investigated.