

## Quarterly Report to 31 December 2024

### HIGHLIGHTS

- An updated antimony-gold **JORC Inferred Resource (or Mineral Resource Estimation (MRE))** for the 100%-owned Nagambie Mine deposit was announced on 15 November 2024. The updated MRE took account of the significantly changed gold-equivalent (AuEq) factor resulting from the relative changes in the prices for gold and antimony. Due to the significant increase in the gold price, a lower cut-off grade of 4.0 g/t AuEq was applied to calculate the updated MRE.
- The **updated MRE is 539,000 tonnes**. It was diluted as required so that all mineralised intersections included in the computer block model had a minimum estimated horizontal thickness (EHT) of 1.2 metres, the expected minimum mining width.
- The average grades for the updated MRE are **3.3 g/t gold and 3.9% antimony, giving in-the-ground contents of 58,000 ounces of gold plus 20,800 tonnes of antimony**. The updated AuEq figures are **322,000 ounces AuEq at 18.6 g/t AuEq (or 0.6 ounces per tonne AuEq)**.
- Diamond drilling of the high-grade gold-antimony orebody recommenced on 19 November 2024 and is ongoing (refer Photo 1). The aim of this new program is to increase the size of, and improve the quality of, the current MRE. Samples of mineralised intersections from the core of the early holes are at the laboratory.
- The western world antimony price surged during the quarter, **rising 54% from A\$40,827 per tonne of antimony metal (Rotterdam Warehouse) to A\$62,747 per tonne** (refer Graph 1). Increasing antimony demand for military uses and solar energy continues to outstrip declining supply due to falling production from deepening mines and Chinese restrictions on exports to the USA and Europe.
- On 25 October 2024, the Company announced that it had **sold its remaining 30% interest in its non-core Redcastle tenements for \$250,000 plus the return of its \$10,000 bond**. Nagambie retains its 100% core interest in its highly-prospective Whroo antimony-gold tenements.
- On 27 November, Nagambie announced that it had entered into a trial arrangement to store PASS (Potential Acid Sulfate Soil) material from the North East Link Project under water in the West Pit at the Nagambie Mine. The trial progressed well and demonstrated the suitability of the Nagamine Mine site as the only Victorian facility that can store PASS under water. The Company is hopeful that the trial could lead to longer-term PASS management arrangements.

**The Company's Chairman, Kevin Perrin, commented:** "The 100%-owned Nagambie Mine virgin, shallow discovery currently contains 20,800 tonnes of antimony (Sb) in-the-ground at 3.9% Sb. The current gold-equivalent average grade of 18.6 g/t AuEq (or 0.6 oz/t AuEq) is very high by industry standards and is approximately 18% attributable to gold (3.3 g/t AuEq) and 82% attributable to antimony (15.3 g/t AuEq). **We consider that the Nagambie discovery is the highest-grade antimony mineralisation in Australia.** Initial assays are expected shortly from the new resource drilling program.

"At Nagambie's AGM on 27 November 2024, I said: 'We are hoping that the next phase of our drilling will be the catalyst to improve our languishing share price. **At a market capitalisation of less than \$20 million, our Company is significantly undervalued**.'"

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**Non-Executive Chairman**  
Kevin Perrin

**Executive Director**  
Mike Trumbull

**Non-Executive Directors**  
Alfonso Grillo  
Bill Colvin

**CEO**  
James Earle

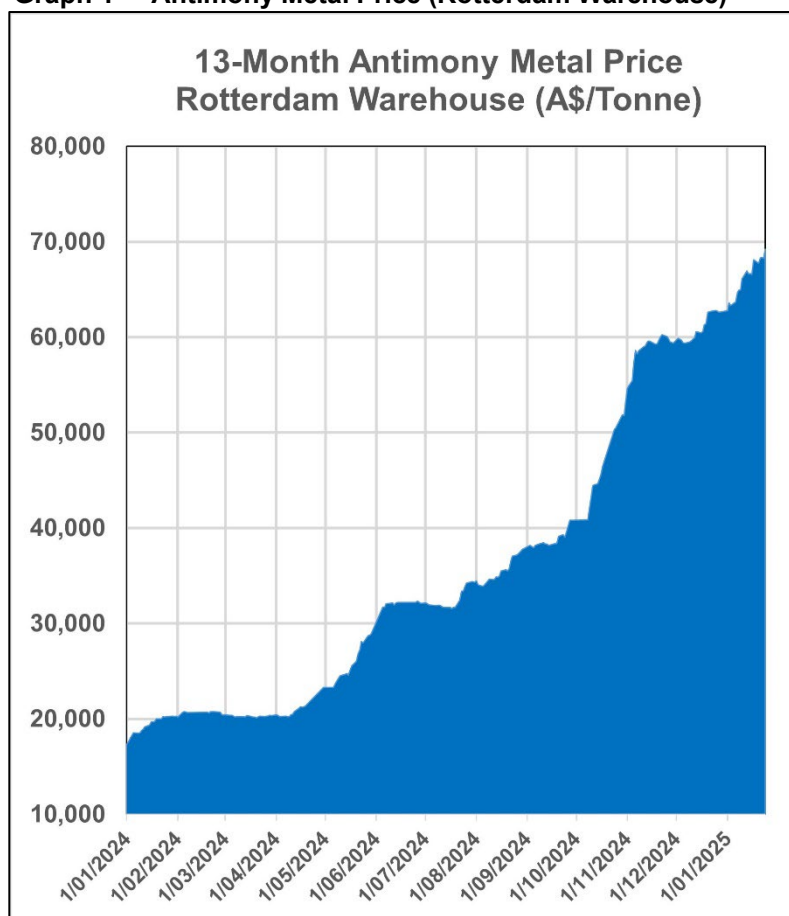
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**Photo 1    GMP Exploration Drilling Rig at the Nagambie Mine -  
Drill Core in the Foreground**



**Graph 1 Antimony Metal Price (Rotterdam Warehouse)**



Source: ise-metal-quotes.com

## UPDATED JORC INFERRED RESOURCE

The updated Mineral Resource Estimate (MRE), announced to the ASX on 15 November 2024, is summarised in Table 1.

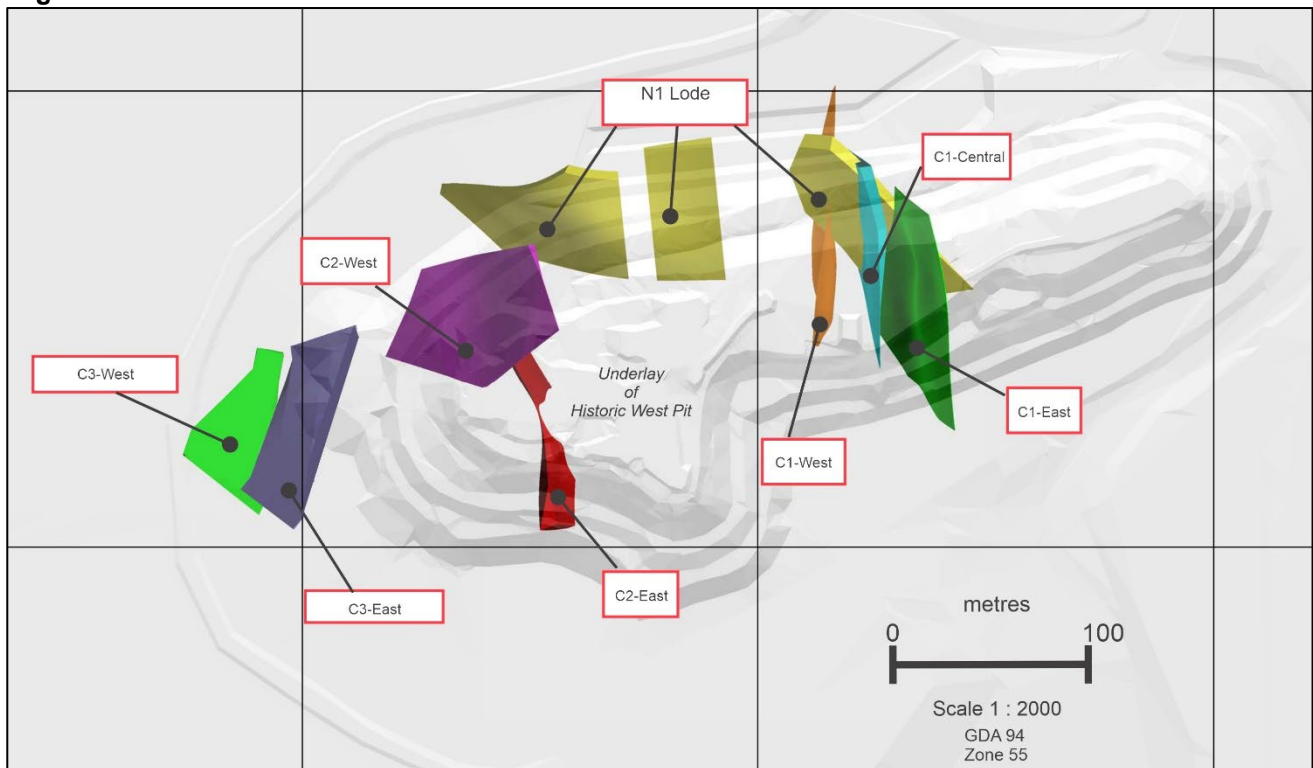
**Table 1 November 2024 JORC Inferred Resource by Vein Domain (refer Figure 1)**

| Lode System  | Vein Domain     | Tonnes         | AuEq (g/t)  | AuEq (oz)      | Au (g/t)   | Au (oz)       | Sb (%)     | Sb (t)        | BD          |
|--------------|-----------------|----------------|-------------|----------------|------------|---------------|------------|---------------|-------------|
|              | C1 East         | 39,452         | 25.3        | 32,111         | 3.2        | 4,092         | 5.6        | 2,212         | 2.84        |
|              | C1 Central      | 50,838         | 17.8        | 29,098         | 3.5        | 5,792         | 3.6        | 1,840         | 2.81        |
|              | C1 West         | 103,307        | 21.9        | 72,635         | 2.2        | 7,300         | 5.0        | 5,158         | 2.81        |
| <b>C1</b>    | <b>Subtotal</b> | <b>193,597</b> | <b>21.5</b> | <b>133,845</b> | <b>2.8</b> | <b>17,184</b> | <b>4.8</b> | <b>9,210</b>  | <b>2.81</b> |
|              | C2 East         | 47,687         | 13.9        | 21,302         | 2.9        | 4,430         | 2.8        | 1,332         | 2.78        |
|              | C2 West         | 148,547        | 19.0        | 90,763         | 4.1        | 19,366        | 3.8        | 5,636         | 2.80        |
| <b>C2</b>    | <b>Subtotal</b> | <b>196,234</b> | <b>17.8</b> | <b>112,065</b> | <b>3.8</b> | <b>23,796</b> | <b>3.6</b> | <b>6,968</b>  | <b>2.80</b> |
|              | C3 East         | 13,633         | 29.6        | 12,971         | 0.9        | 391           | 7.3        | 993           | 2.86        |
|              | C3 West         | 26,291         | 7.8         | 6,565          | 1.7        | 1,442         | 1.5        | 404           | 2.76        |
| <b>C3</b>    | <b>Subtotal</b> | <b>39,924</b>  | <b>15.2</b> | <b>19,536</b>  | <b>1.4</b> | <b>1,833</b>  | <b>3.5</b> | <b>1,398</b>  | <b>2.80</b> |
| <b>N1</b>    | <b>N1</b>       | <b>109,025</b> | <b>16.0</b> | <b>56,250</b>  | <b>4.3</b> | <b>15,200</b> | <b>3.0</b> | <b>3,241</b>  | <b>2.79</b> |
| <b>Total</b> |                 | <b>538,779</b> | <b>18.6</b> | <b>321,696</b> | <b>3.3</b> | <b>58,013</b> | <b>3.9</b> | <b>20,816</b> | <b>2.80</b> |

BD = Bulk Density

The updated MRE applies only to the sulphide zone that underlies the surface oxide zone in the area of the West Pit at the Nagambie Mine. The sulphide zone considered is open to the east, to the west, and at depth. Oxide gold mineralisation was mined in two pits, the East Pit and the West Pit, between 1989 and 1994 by Perseverance Mining Pty Ltd.

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



### Gold Equivalent (AuEq) Figures for the MRE

AuEq assays are calculated from the gold (Au) and antimony (Sb) assays as:

$$\text{AuEq g/t} = \text{Au g/t} + (\text{Sb\%} \times \text{AuEq Factor})$$

The AuEq Factor compares the relative value of 1.0% Sb in-the-ground to 1.0 g/t Au in-the-ground and is calculated as:

$$\text{AuEq factor} = [\text{A\$/tonne Sb price} \times 0.01 \times \% \text{ Sb treatment plant recovery}] / [\text{A\$/ounce Au price} / 31.10348 \text{ grams per ounce} \times \% \text{ Au treatment plant recovery}]$$

Nagambie considers that both Au and Sb will be economically recoverable and sold at the Nagambie Mine. As at the Costerfield Mine, the Sb in the quartz and quartz-carbonate veins occurs in the form of massive stibnite, a sulphide of Sb ( $\text{Sb}_2\text{S}_3$ ). At both Nagambie and Costerfield, finely-disseminated Au occurs within the stibnite, but also occurs to a lesser extent within pyrite and arsenopyrite. Free Au predominately occurs in the quartz and quartz-carbonate veins. The host rocks at Nagambie, which would be mined as waste along with the mineralised veins, are fine grained mudstones/siltstones with minor sandstone units – the same as at Costerfield.

Given the geological and mineralogical similarities, Nagambie considers that the metallurgical treatment processes, successfully optimised and employed at the Costerfield Mine, would be equally applicable in a treatment plant at the Nagambie Mine. In the comprehensive technical report for the Costerfield Mine, dated 25 March 2022,

[https://mandalayresources.com/site/assets/files/3408/mnd\\_costerfield\\_ni-43\\_101\\_technical\\_report\\_2022.pdf](https://mandalayresources.com/site/assets/files/3408/mnd_costerfield_ni-43_101_technical_report_2022.pdf)

treatment plant recoveries for Au and Sb metal respectively are given as 93% and 95%. While confident that future detailed metallurgical testwork on Nagambie Mine representative diamond drill core could replicate the Costerfield Mine metal recoveries, Nagambie has chosen a more conservative Sb recovery of 93% for the JORC Inferred Resource estimate.

For the 31 October 2024 market prices of A\$52,856/t for Sb and A\$4,167/ounce for Au, the AuEq Factor equation becomes:

$$\begin{aligned}
 \text{AuEq factor} &= [\text{A\$}52,856 \times 0.01 \times 0.93] / [\text{A\$}4,167 / 31.10348 \text{ grams per ounce} \times 0.93] \\
 &= [\text{A\$}491.56] / [\text{A\$}124.59] \\
 &= 3.94
 \end{aligned}$$

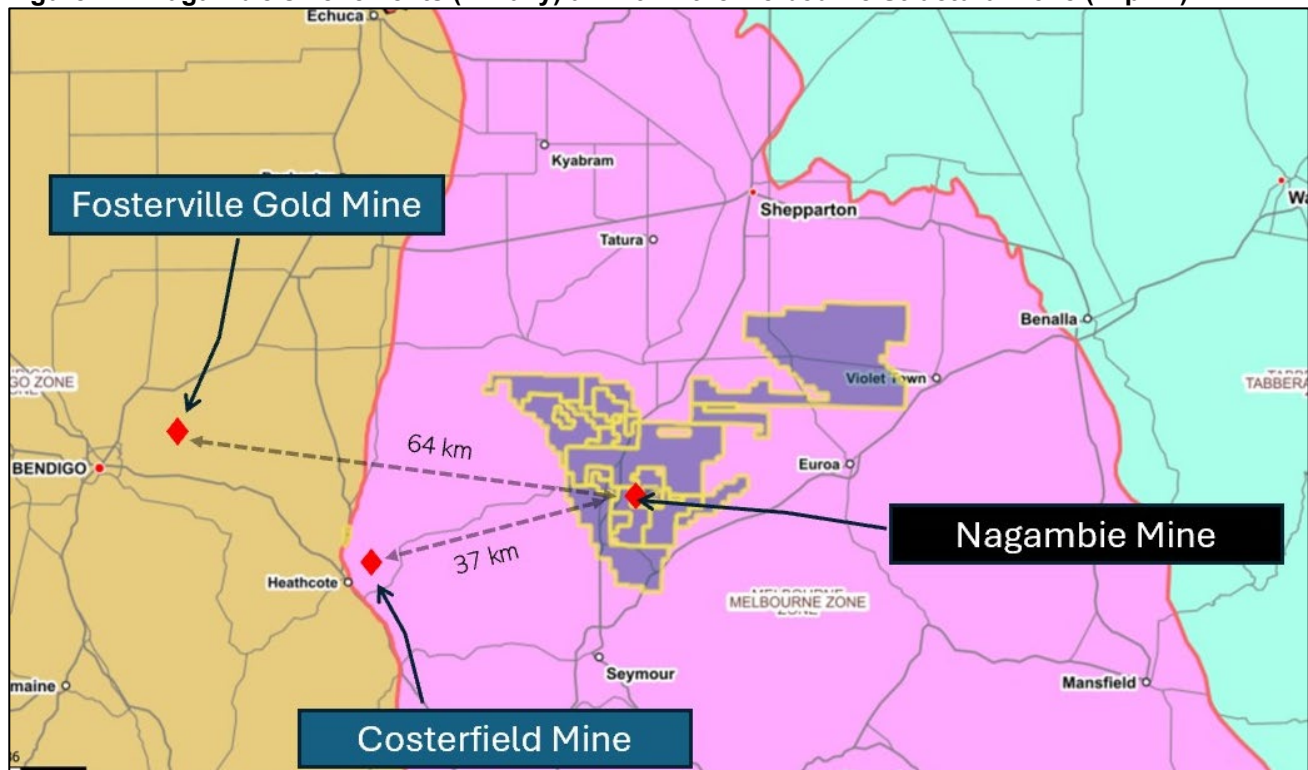
## ANTIMONY-GOLD EXPLORATION & MINING TENEMENTS

The Company's tenements as at 31 December 2024, totalling 914.5 sq km, are listed in Table 2 and their general location in central Victoria is shown in Figure 2.

On 25 October 2024, the Company announced that it had sold its remaining 30% interest in its non-core Redcastle tenements for \$250,000 plus the return of its \$10,000 bond. Nagambie retains its 100% core interest in its highly-prospective Whroo antimony-gold tenements.

Nagambie has received notice from the Victorian Earth Resources Regulator (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 2 Nagambie's Tenements (in navy) all within the Melbourne Structural Zone (in pink)**



## NAGAMBIE MINE GOLD TREATMENT PLANT

Under the Nagambie Joint Venture (NJV), Nagambie Resources and Golden Camel Mining Pty Ltd (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.

## PASS STORAGE AT THE NAGAMBIE MINE

On 27 November 2024, Nagambie announced that it had entered into a trial arrangement to store PASS (Potential Acid Sulfate Soil) material from the North East Link Project under water in the West Pit at the Nagambie Mine. The trial progressed well and demonstrated the suitability of the Nagambie Mine site as the only Victorian facility that can store PASS under water. The Company is hopeful that the trial could lead to longer-term PASS management arrangements.

**Table 2 Nagambie Resources' Tenements as at 31 December 2024**

| Tenement Number | Tenement Name                          | Sq Km |
|-----------------|----------------------------------------|-------|
| MIN 5412        | Nagambie Mining Licence                | 3.5   |
| EL 7205         | Angustown Exploration Licence          | 49.0  |
| EL 5430         | Bunganail Exploration Licence          | 160.0 |
| EL 7208         | Cullens Road Exploration Licence       | 29.0  |
| EL 7209         | Goulburn West Exploration Licence      | 34.0  |
| EL 7237         | Kirwans North 1 Exploration Licence    | 20.0  |
| EL 7238         | Kirwans North 2 Exploration Licence    | 9.0   |
| EL 7210         | Locksley Exploration Licence           | 26.0  |
| EL 6352         | Miepoll Exploration Licence            | 342.0 |
| EL 5511         | Nagambie Central Exploration Licence   | 21.0  |
| EL 6508         | Tabilk Exploration Licence             | 33.0  |
| EL 6877         | Nagambie Exploration Licence           | 8.0   |
| EL 6937         | Nagambie East Exploration Licence      | 2.0   |
| EL 7264         | Resource Recovery Exploration Licence  | 1.0   |
| EL 7265         | Nagambie Town Exploration Licence      | 8.0   |
| EL 7690         | Nagambie South Exploration Licence     | 4.0   |
| EL 6212         | Reedy Lake Exploration Licence         | 17.0  |
| EL 6158         | Rushworth Exploration Licence          | 46.0  |
| EL 6748         | Waranga Exploration Licence            | 102.0 |
| Total           | Nagambie Resources Limited's tenements | 914.5 |

## CORPORATE

### Cash

At 31 December 2024, total cash held by the group was \$837,000.

### 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 secretarial and legal fees to Grillo Higgins Lawyers and directors' fees to two retiring directors.

**By the order of the Board.**



James Earle  
Chief Executive Officer

**For further information, please contact:**

**James Earle (CEO)**

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### **STATEMENT AS TO COMPETENCY**

*The Competent Person for the updated November 2024 JORC Inferred Resource is Adam Jones. Adam Jones is not an employee or related party of Nagambie and he works independently for Adam Jones Geological Services. Results in this report have been compiled by Adam Jones who is a Member of the Australian Institute*

of Geoscientists (MAIG). Adam Jones has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activities undertaken, 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 (The JORC Code)". He consents to the inclusion in this report of the 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.