**ASX ANNOUNCEMENT**
**16 November 2022**

# High-Grade Antimony-Gold Discovery at 100%-owned Nagambie Mine

- **Nagambie Resources (ASX: NAG) is delighted to declare the C1 mineralisation at the Nagambie Mine an antimony-gold, Costerfield-Mine-style discovery following the receipt of the latest assays from the 2022 drilling program.**
- **The first eight waste-diluted intersections within the C1 vein-system mineralisation outlined to date average 7.4% antimony (Sb), 3.0 g/t gold (Au) and 20.5 g/t gold equivalent (AuEq).**
- **The average of 7.4% Sb is extremely encouraging, being two to three times the mined antimony grade of the nearby Costerfield Mine (currently Australia's only and highest-grade antimony mine and Victoria's second-most profitable gold mine).**
- **The average of 20.5 g/t AuEq to date is 6.8 times the estimated mineable cut-off grade (MCOG) of 3.0 g/t AuEq. This indicates potentially very-low operating cost, very-high operating margin mineralisation. The C1 mineralisation commences from the base of oxidation, at around 50m vertical depth, within Nagambie's existing mining licence, MIN5412. Decline access to the mineralisation could commence adjacent to the treatment plant being constructed by Golden Camel Mining (GCM) under a joint venture with Nagambie (GCM to pay 100% of all construction and commissioning costs with net operating cash flow after commissioning shared 50:50).**
- **The C1 mineralisation is currently known to extend, based on diamond core logging, to approximately 230m vertical depth, with drilling at depth and to the north continuing apace.**
- **Four stibnite (antimony sulphide, $Sb_2S_3$) veins are now identified within the C1 vein system. These could be easily stopeable, given their steep dip, as individual or multiple veins, depending on the widths of the uneconomic material between the veins. Estimated horizontal thickness (EHT) for each potential stope is currently between 1.2m and 4.7m. With typically two stopes per level, total C1 stoping thickness per level would be variable, currently up to 5.9m EHT.**

All intersections (potential stopes) of the C1 mineralisation to date that average the MCOG of 3.0 g/t AuEq or greater, have an EHT of 1.2m or greater (after waste dilution is added if required), and that have an Sb grade of 1.0% or greater (indicating significant antimony-gold veining) are summarised in Table 1. Previously reported intersections are indicated as (PR) (refer to ASX announcements of 25 August and 16 September 2022).

**Table 1 All Intersections => 1.2m EHT, => MCOG, and => 1.0% Sb**

| | BD of unmineralised waste: 2.74<br>BD of pure Stibnite: 4.56 | | | | | EHT and BD Weighting | | | |
|---|---|---|---|---|---|---|---|---|---|
| Intersection and potential stope | EHT (m) | Au Assay (g/t) | Sb Assay (Sb %) | AuEq (g/t) | BD based on Sb% | EHT & BD Weighted Au | EHT & BD Weighted Sb | EHT & BD Weighted AuEq | Times MCOG |
| NRP02 (PR) | 2.50 | 4.84 | 7.51 | 22.55 | 2.89 | 5.42 | 9.15 | 27.01 | 9.0 |
| NAD008 E (PR) | 1.20 | 2.24 | 3.23 | 9.85 | 2.79 | 2.29 | 3.46 | 10.45 | 3.5 |
| NAD009 E | 1.20 | 0.02 | 2.47 | 5.85 | 2.78 | 0.02 | 2.66 | 6.30 | 2.1 |
| NAD009 W | 4.70 | 2.62 | 4.30 | 12.78 | 2.82 | 2.64 | 4.90 | 14.21 | 4.7 |
| NAD010 E | 1.20 | 13.18 | 17.08 | 53.49 | 3.08 | 12.48 | 19.76 | 59.10 | 19.7 |
| NAD010 W | 1.20 | 0.13 | 2.81 | 6.77 | 2.79 | 0.14 | 3.05 | 7.34 | 2.4 |
| NAD011 E | 1.20 | 0.10 | 1.48 | 3.60 | 2.77 | 0.11 | 1.62 | 3.94 | 1.3 |
| NAD011W | 2.25 | 0.80 | 11.02 | 24.76 | 2.95 | 0.77 | 13.00 | 31.44 | 10.5 |
| Average to date | 1.93 | | | | 2.86 | 3.03 | 7.39 | 20.48 | 6.8 |

*(PR) Previously reported; BD = bulk density*

533 Zanelli Road
Nagambie Vic 3608
Australia

ASX : NAG
www.nagambieresources.com.au
T : +61 (03) 5794 1750
E : info@nagambiemining.com.au

**Executive Chairman**
Michael Trumbull

**CEO**
James Earle

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

For Enquiries:

James Earle (CEO):
james@nagambieresources.com.au

Sam Jacobs:
sam.jacobs@sdir.com.au

## COMMENTARY

**Nagambie Resources' Executive Chairman, Mike Trumbull,** commented: *"In late February this year, we reviewed the 2006 NRP02 intersection under the West Pit. The principal conclusion at that time was that the high-grade, antimony-gold veining could strike NNW, a direction never tested in the eight follow-up holes that were drilled in 2006/2007. Importantly, it was noted that NNW is a common strike direction for the antimony-gold veins at the Costerfield Mine, 45 km to the west of the Nagambie Mine.*

*"Nagambie started the 2022 antimony-gold veins drilling program in April and seven months later we have solved the NRP02 riddle and announced the discovery of the C1 (as in Costerfield-Mine-style) mineralisation, having already tracked it between 50m and 230m vertical depth.*

*"The average grade for the first eight intersections (potential stopes) indicates that grade in the early years of an operation could be a big multiple of MCOG and the grade-depth profiles at both the epizonal Costerfield and Fosterville Mines indicate that grade could also increase with depth at the epizonal Nagambie Mine. In narrow-vein gold mining, and antimony mining, 'grade is king'.*

*"Another plus in my experience is that mine planning for the virginal C1 vein system, and the other C-vein systems that could be discovered further to the west, won't have to consider any historic underground openings and the pumping and treatment of the water in those openings.*

*"Nagambie has now established the approximate southern limit of the NNW-plunging C1 vein system and will continue to drill down plunge, together with some infill holes, to gain greater definition of the system. Importantly, we are currently expanding the very-high-grade C1 mineralisation at a drilling cost of around only A$10 per ounce gold equivalent versus a potential operating margin of over A$2,000 per ounce (based on a current gold price of around A$2,600 per ounce, an average grade of 20.5 g/t AuEq to date, and a MCOG of 3.0 g/t AuEq).*

*"In the first half of CY2023, it is planned to design an exploration decline and associated underground development to access the C1 mineralisation at around 100m vertical depth and enable strike driving of the antimony-gold veins on multiple levels."*

## NAD009-011 SIGNIFICANT ASSAYS

All significant assays (greater than 1.0 g/t gold or 1.0% antimony) received for diamond drill holes NAD009-011 are summarised in Table 2. Detailed drillhole data for the NAD009-011 holes are set out in the attached JORC Table 1 and the drill traces for the three holes are shown in Figures 1 and 2 (plan and cross-section views).

For samples containing significant antimony, the individual gold and antimony assays were weighted for both sample thickness and bulk density. Consideration was then given to the mineable cut-off grade (MCOG) of 3.0 g/t gold equivalent (AuEq) over at least 1.2m estimated horizontal thickness (EHT).

For full details regarding the calculation of sample bulk density, AuEq calculation, minimum mineable EHT and MCOG, refer to the attached Appendix 1: **Summary of Mining-Method Considerations and Developed Assay-Reporting Criteria**. The relevant equations regarding bulk density and AuEq calculation are also repeated in the attached JORC Table 1.

Intersections of the C1 system veins for the NAD009-011 holes, in relation to the minimum mineable EHT (1.2m) and the MCOG (3.0 g/t AuEq), are:

**NAD009 E Intersection**
0.19m EHT from 173.0m to 173.3m downhole @ 0.11 g/t Au, 16.72% Sb and 39.58 g/t AuEq
within
**1.20m EHT from 172.1m to 174.2m @ 0.02 g/t Au, 2.66% Sb and 6.30 g/t AuEq (2.1 times MCOG)**

**NAD009 W Intersection**
0.19m EHT from 203.4m to 203.7m @ 0.00 g/t Au, 59.63% Sb and 140.72 g/t AuEq
and
0.39m EHT from 206.7m to 207.3m @ 14.18 g/t Au, 10.57% Sb and 39.14 g/t AuEq
within
**4.70m EHT from 200.0m to 207.3m @ 2.64 g/t Au, 4.90% Sb and 14.21 g/t AuEq (4.7 times MCOG)**

**Figure 1 Plan: Diamond drilling of the C1 antimony-gold vein system**

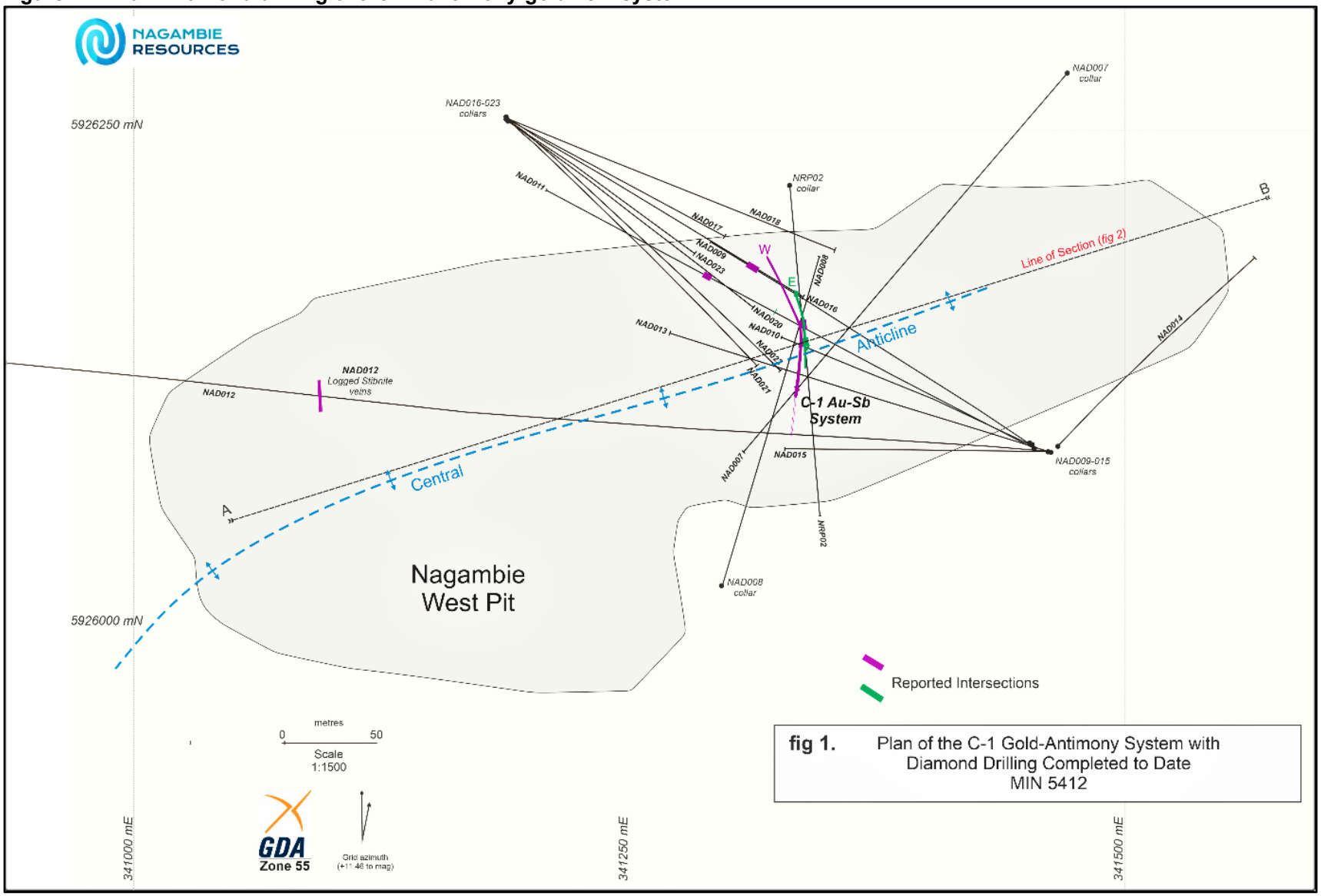


**Figure 2 Cross Section A-B, looking NNW: Showing C1 vein system (E) and C1 vein system (W)**

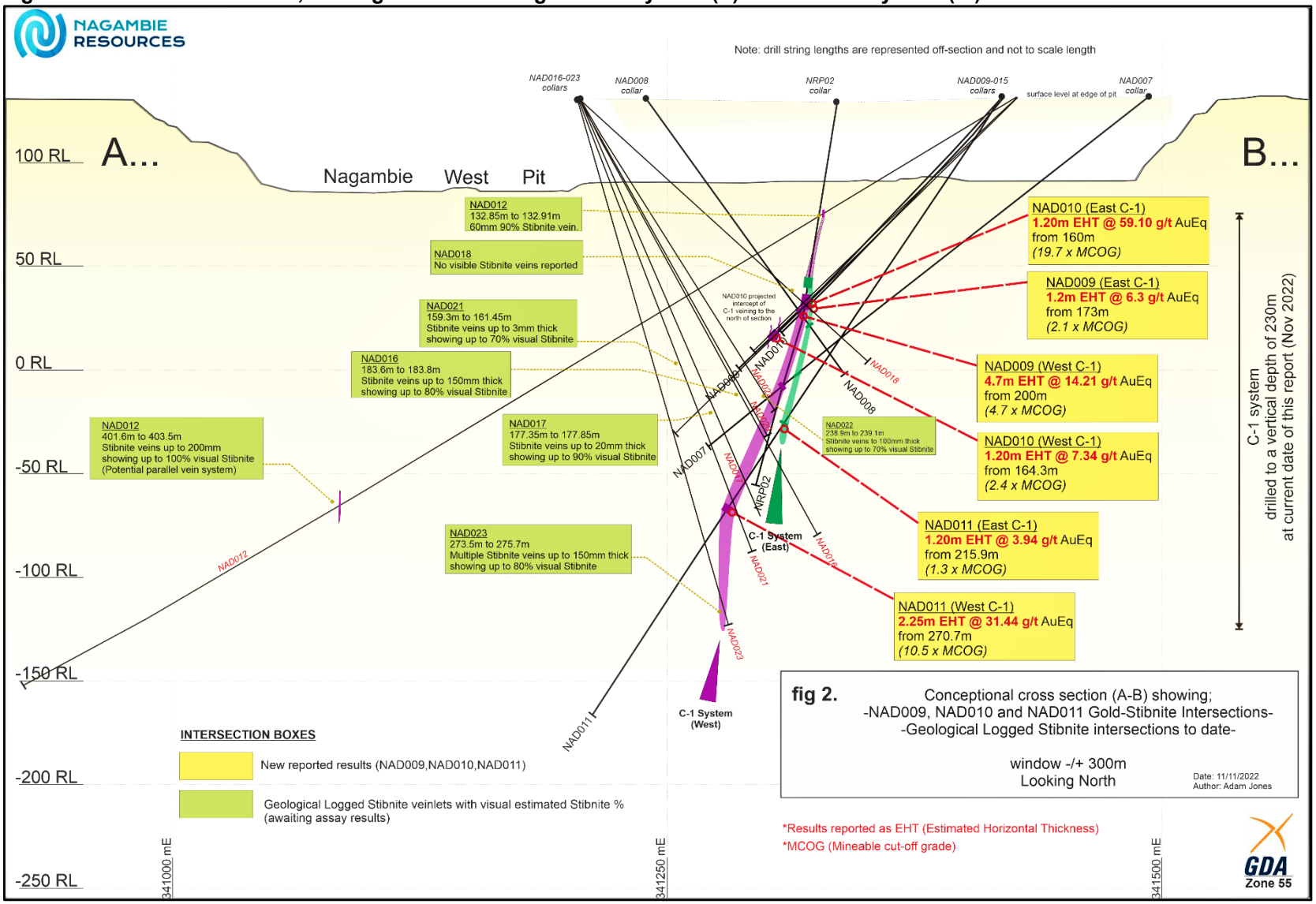


**Table 2 NAD009-011 assays >1.0 g/t Au or >1.0% Sb**

| Hole ID | From (m) | To (m) | Intercept (m) | Au g/t | As ppm | % Sb |
|---|---|---|---|---|---|---|
| NAD009 | 88.00 | 88.30 | 0.30 | **2.29** | 3580 | 0.003 |
| NAD009 | 89.00 | 90.00 | 1.00 | **1.08** | 2020 | 0.003 |
| NAD009 | 90.70 | 90.85 | 0.15 | **1.38** | 9610 | 0.011 |
| NAD009 | 114.60 | 116.00 | 1.40 | **1.55** | 3780 | 0.003 |
| NAD009 | 118.00 | 119.00 | 1.00 | **2.21** | 2960 | 0.004 |
| NAD009 | 119.00 | 120.00 | 1.00 | **1.16** | 4630 | 0.004 |
| NAD009 | 138.00 | 139.20 | 1.20 | **1.04** | 2930 | 0.002 |
| NAD009 | 139.20 | 140.00 | 0.80 | **1.95** | 3670 | 0.006 |
| NAD009 | 140.00 | 141.00 | 1.00 | **2.03** | 2560 | 0.003 |
| NAD009 | 173.00 | 173.30 | 0.30 | 0.097 | 14 | **15.300** |
| NAD009 | 200.00 | 200.70 | 0.70 | **1.45** | 1335 | **5.900** |
| NAD009 | 200.70 | 201.00 | 0.30 | **1.01** | 1605 | **3.910** |
| NAD009 | 203.00 | 203.40 | 0.40 | **2.38** | 2840 | **3.170** |
| NAD009 | 203.40 | 203.70 | 0.30 | 0.001 | 48 | **45.700** |
| NAD009 | 203.70 | 204.00 | 0.30 | **1.51** | 3230 | 0.831 |
| NAD009 | 204.00 | 205.00 | 1.00 | **1.79** | 4060 | 0.668 |
| NAD009 | 205.00 | 205.60 | 0.60 | **3.65** | 1620 | 0.586 |
| NAD009 | 205.60 | 205.90 | 0.30 | **7.34** | 1290 | **7.550** |
| NAD009 | 205.90 | 206.70 | 0.80 | **2.1** | 735 | **1.415** |
| NAD009 | 206.70 | 207.30 | 0.60 | **13.75** | 151 | **10.250** |
| | | | | | | |
| NAD010 | 157.90 | 158.60 | 0.70 | **1.98** | 716 | 0.003 |
| NAD010 | 159.20 | 160.00 | 0.80 | **1.81** | 301 | 0.160 |
| NAD010 | 160.00 | 160.40 | 0.40 | **51.80** | 62 | **10.350** |
| NAD010 | 160.40 | 160.80 | 0.40 | **6.98** | 71 | **14.050** |
| NAD010 | 160.80 | 161.20 | 0.40 | 0.01 | 2 | **51.800** |
| NAD010 | 164.30 | 164.60 | 0.30 | 0.79 | 23 | **16.800** |
| NAD010 | 170.60 | 171.20 | 0.60 | **1.15** | 206 | 0.006 |
| NAD010 | 171.20 | 172.20 | 1.00 | **3.25** | 561 | 0.005 |
| | | | | | | |
| NAD011 | 173.00 | 173.40 | 0.40 | **2.48** | 553 | 0.002 |
| NAD011 | 173.40 | 173.70 | 0.30 | **1.63** | 597 | 0.005 |
| NAD011 | 215.90 | 216.20 | 0.30 | **1.18** | 338 | **17.250** |
| NAD011 | 270.70 | 271.00 | 0.30 | 0.05 | 2 | **44.200** |
| NAD011 | 271.00 | 272.00 | 1.00 | 0.79 | 1040 | **4.140** |
| NAD011 | 272.00 | 272.50 | 0.50 | 0.98 | 1330 | **2.170** |
| NAD011 | 272.50 | 272.80 | 0.30 | **3.39** | 235 | **18.650** |
| NAD011 | 272.80 | 273.20 | 0.40 | **1.60** | 5460 | 0.272 |
| NAD011 | 273.20 | 273.90 | 0.70 | 0.00 | 11 | **45.400** |
| NAD011 | 275.00 | 276.00 | 1.00 | 0.78 | 2150 | **2.300** |

**NAD010 E Intersection**

0.27m EHT from 160.0m to 160.4m @ 46.43 g/t Au, 9.28% Sb and 68.33 g/t AuEq
and
0.27m EHT from 160.4m to 160.8m @ 6.40 g/t Au, 12.88% Sb and 36.78 g/t AuEq
and
0.27m EHT from 160.8m to 161.2m @ 0.01 g/t Au, 61.49% Sb and 145.13 g/t AuEq
within
0.81m EHT from 160.0m to 161.2m @ 17.61 g/t Au, 27.88% Sb and 83.42 g/t AuEq
within
**1.20m EHT from 159.7m to 161.5m @ 12.48 g/t Au, 19.76% Sb and 59.10 g/t AuEq (19.7 times MCOG)**

**NAD010 W Intersection**

0.20m EHT from 164.3m to 164.6m @ 0.87 g/t Au, 18.53% Sb and 44.61 g/t AuEq
within
**1.20m EHT from 163.6m to 165.4m @ 0.14 g/t Au, 3.05% Sb and 7.34 g/t AuEq (2.4 times MCOG)**

**NAD011 E Intersection**

0.10m EHT from 215.9m to 216.2m @ 1.31 g/t Au, 19.08% Sb and 46.34 g/t AuEq
within
**1.20m EHT from 214.3m to 217.8m @ 0.11 g/t Au, 1.62% Sb and 3.94 g/t AuEq (1.3 times MCOG)**

**NAD011 W Intersection**

0.13m EHT from 270.7m to 271.0m @ 0.06 g/t Au, 54.39% Sb and 128.41 g/t AuEq
and
0.13m EHT from 272.5m to 272.8m @ 3.51 g/t Au, 19.31% Sb and 49.07 g/t AuEq
and
0.30m EHT from 273.2m to 273.9m @ 0.00 g/t Au, 56.36% Sb and 133.02 g/t AuEq
within
**2.25m EHT from 270.7m to 276.0m @ 0.77 g.t Au, 13.00% Sb and 31.44 g/t AuEq (10.5 times MCOG)**

**Logged Stibnite Veins (Assays Pending)**

All visually logged stibnite veins that are within the C1 vein system MCOG zone or help define the C1 vein system MCOG zone, and for which assays are pending, are summarised in the following table and in Figure 2. Also summarised is the deeper logged stibnite intersection in NAD012 which could indicate a parallel second vein system approximately 200m west of the C1 vein system (refer Figures 1 and 2).

**Table 3 Logged Stibnite Veins, Assays Pending**

| Diamond Hole | From (m) | To (m) | Downhole Length (m) | Visual Logging Notes |
|---|---|---|---|---|
| **NAD012** | 132.85 | 132.91 | 0.06 | **60mm vein, 90% stibnite** |
| **NAD012** | 401.6 | 403.5 | 1.9 | **stibnite veins up to 200mm thick, up to 100% stibnite** |
| | | | | **- potential parallel vein system** |
| **NAD016** | 183.6 | 183.8 | 0.2 | **stibnite veins up to 150mm thick, up to 80% stibnite** |
| **NAD017** | 177.35 | 177.85 | 0.5 | **stibnite veins up to 20mm thick, up to 90% stibnite** |
| **NAD021** | 159.3 | 161.45 | 2.15 | **stibnite veins up to 3mm thick, up to 70% stibnite** |
| **NAD022** | 238.9 | 239.1 | 0.2 | **stibnite veins up to 100mm thick, up to 70% stibnite** |
| **NAD023** | 273.5 | 275.7 | 2.2 | **multiple stibnite veins up to 150mm thick, up to 80% stibnite** |

**Trends to Date**

The N-S cross-fault C1 veins are associated with the E-W-striking Nagambie Mine Central Anticline and the various E-W-striking thrust faults, all of which dip to the north (due to the N to S compression event at the time of first mineralisation, circa 375 Ma) and are known to continue regionally to kilometres in depth.

With reference to Figure 2, the most northern significant intersection to date, NAD009 W, contains solid massive stibnite and averages 4.7m EHT @ 14.2 g/t AuEq, indicating that the vein system is open to the north. The NAD023 intersection is the deepest intersection to date (approximately 230m vertical depth), based on the visual logging of massive stibnite veining within it. The NAD012 intersection is the shallowest stibnite intersection to date, occurring just below the base of oxidation at around 50m vertical depth.

Based on the above intersections, the strike length and vertical extent of the C1 vein system could be currently around 80m and 200m respectively but could increase substantially, particularly at depth, with further drilling.

By the order of the Board.

James Earle
Chief Executive Officer

***STATEMENT AS TO COMPETENCY***

*The Exploration 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 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 the 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.*

**For further information, please contact:**

**James Earle (CEO)**
**Email:** james@nagambieresources.com.au
**Phone: +61 481 462 642**

**Sam Jacobs**
**Email:** sam.jacobs@sdir.com.au
**Phone: +61 423 755 909**

**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 3,000 sq km of tenements 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 flotation circuit is also planned.

Underwater storage of sulphidic excavation material (PASS) in the two legacy gold pits at the Nagambie Mine is an excellent environmental fit.

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

Mining and screening of sand and gravel deposits at the Nagambie Mine is also planned.

## APPENDIX 1: Summary of Mining-Method Considerations and Developed Assay-Reporting Criteria

Mining Plus, a global mining services provider, reviewed the assay-reporting criteria developed by Nagambie Resources for the antimony-gold veins drilling program at the Nagambie Mine and agreed that the criteria were appropriate and meaningful in terms of reporting to the ASX. The developed criteria draw heavily on the publicly-available information for the antimony-gold Costerfield Mine, 45 km to the west of the Nagambie Mine.

1) The C-veins (Costerfield-Mine-style veins) at the Nagambie Mine are generally striking N to NNW and dipping vertically or sub-vertically to the W (similar to the Costerfield Mine).
2) The C-veins could be mineable from ~50m vertical depth from surface, the depth of the oxidised zone. An appropriate vertical geotechnical pillar under the West Pit would be determined in due course but could be of the order of 10m.
3) The mining method could be up-hole-drill, retreat stoping with ore drill drives 10m vertically apart (as for the Costerfield Mine). Cemented rock fill (using the underground development waste) would allow for future stopes above, below and besides each filled stope (also as for the Costerfield mine).
4) Minimum stoping width could be 1.2m estimated horizontal thickness (EHT) (similar to the Costerfield Mine).
5) For stopes side by side, the waste between them should be at least 1.5m EHT to cover the additional costs for multiple stopes of strike driving, stoping, backfilling and potential ore mining losses.
6) All individual sample assays to be weighted by both EHT and sample bulk density (BD) – using the Costerfield Mine BD formula based on Sb% (see below).
7) Gold equivalent grade (g/t AuEq) to be calculated for each sample by multiplying the Sb% by the AuEq factor and adding that figure to the g/t Au. For the relevant formula, see below.
8) All intersection grades (Au, Sb, AuEq) to be reported for the EHT of the vein and, where the vein EHT is less than 1.2m, for the minimum mineable EHT of 1.2m by adding appropriate waste dilution (similar to the Costerfield Mine).
9) Mineable cut-off grade (MCOG) of 3.0 g/t AuEq over 1.2m EHT or greater (similar to the Costerfield Mine).

### Bulk Density Calculation

BD is calculated for each intercept using the formula that the Costerfield Mine uses for the Augusta, Cuffley and Brunswick orebodies - refer page 191 of the 2022 Technical Report for the Costerfield Mine:

( www.mandalayresources.com/operations/overview/costerfield-mine/mnd_costerfield_ni-43_101_technical )

Formula:

$$BD = ((1.3951*Sb\%)+(100-(1.3951*Sb\%)))/(((1.3951*Sb\%)/4.56)+((100-(1.3951*Sb\%))/2.74))$$

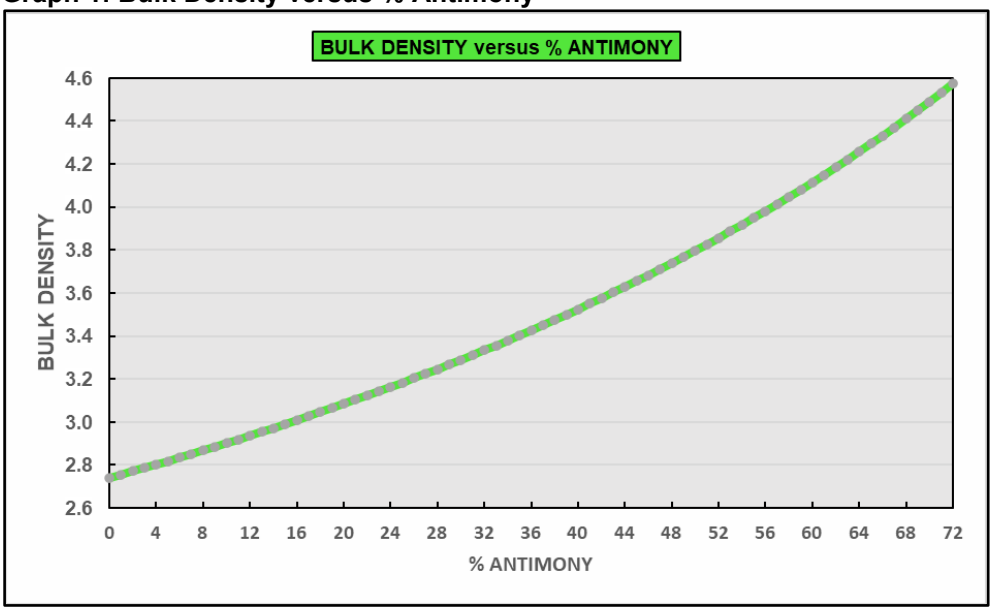
for which:

- Empirical formula of stibnite: $Sb_2S_3$
- Sb%: Antimony assay as a percentage by mass
- Molecular weight of Antimony (Sb): 121.757
- Molecular weight of Sulphur: (S): 32.066
- 1.3951 is a constant calculated by 339.712/243.514 where 339.712 is the molar mass of $Sb_2S_3$, and 243.514 is the molar mass of antimony contained in one mole of pure stibnite
- BD of pure stibnite: 4.56
- BD of unmineralised waste (predominantly sandstones, siltstones, mudstones): 2.74

In time, when a sufficiently representative range of diamond core material is available, Nagambie will need to calculate the BD of the unmineralised waste (predominantly sandstones, siltstones and mudstones) at the Nagambie Mine. However, Nagambie does not consider that it will vary significantly from 2.74.

A graphical representation of the Costerfield BD formula is shown in Graph 1. For 0% Sb, BD = 2.74 and for 71.7% Sb (the maximum possible in stibnite), BD = 4.56 (pure stibnite).

**Graph 1: Bulk Density versus % Antimony**




Nagambie considers that the above bulk density formula, while being appropriate, is a little conservative in that, for both the Costerfield Mine and the Nagambie Mine, the stibnite ($Sb_2S_3$) is known to contain variable amounts of the gold-antimony mineral, aurostibite ($AuSb_2$). While pure stibnite has a BD of 4.56, aurostibite has a BD of 9.98, reflective of its very high gold content – meaning that otherwise pure stibnite containing aurostibite will have a BD greater than 4.56.

**Gold Equivalent Factor**

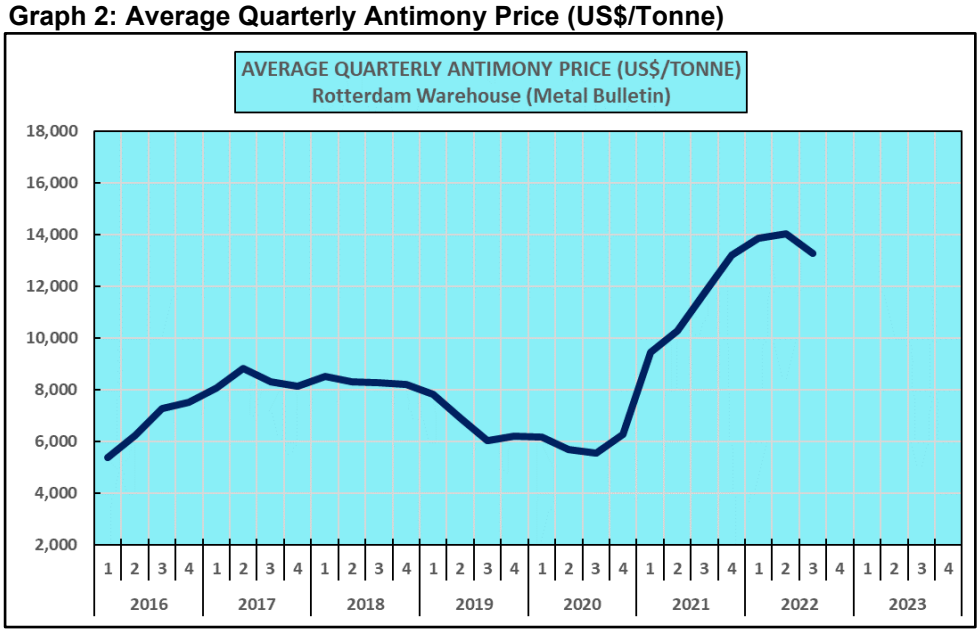
Nagambie considers that both gold and antimony will be economically recoverable at the Nagambie Mine, as they are at the Costerfield Mine which is 45 km to the west of the Nagambie Mine.

The gold-antimony Costerfield Mine currently calculates its gold equivalent (AuEq) factor, the relative value of 1.0% antimony in the mine to 1.0 gram / tonne gold in the mine as:

***AuEq factor = [US$/tonne antimony price x 0.01 x 0.95 antimony recovery] / [US$/ounce gold price / 31.10348 grams per ounce x 0.93 gold recovery]***

The Costerfield Mine is 100% owned by Mandalay Resources Corporation and the latest projections for CY2022 on the Mandalay website adopt average CY2022 prices for gold and antimony of US$1,750/ounce gold and US$13,000/tonne antimony (refer Graph 2). For these prices, the AuEq factor using the above equation is **2.36**.

**Graph 2: Average Quarterly Antimony Price (US$/Tonne)**



# JORC Code, 2012 Edition Nagambie Mine NAD009-011 Holes Table 1

## Section 1 Sampling Techniques and Data

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Sampling techniques*** | • *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.* | • Drilling of NAD009-011 holes from surface was carried out by Starwest using a Boart Longyear LM75 underground diamond core drilling rig. The diamond core (HQ and NQ sizes) are cut in half following logging with the sawed core lengths determined by the company geologist. One half is sent to the laboratory for analysis and the other half retained on site.<br>• Sample lengths will be usually no less than 0.1m or greater than 1.2m.<br>• Samples are submitted to 'ALS' Laboratory, Adelaide.<br>• Samples are pulverised and sub-sampled to produce a 30g charge for fire assay. Samples are analysed using technique Au-TL43 plus ME-ICP41 (As,Sb,Ag,Cu,Pb,Zn,S). All Au analysis using TL43 that are greater than 1 ppm are further analysed for ore grade Au-ORE (>1ppm). |
| ***Drilling techniques*** | • *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).* | • Diamond drill core is standard 'HQ' and 'NQ'.<br>• Core is digitally oriented.<br>• Down-hole surveys are carried out every 30m down hole to EOH. |
| ***Drill sample recovery*** | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | • Hard-copy details exist for any recorded drilled core loss. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Logging*** | • *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • Logging is being progressively carried out.<br>• Qualitative data regarding core loss and drill core recovery is being noted within logging. |
| ***Sub-sampling techniques and sample preparation*** | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • Sampling is done using industry standards. Diamond core samples will be one half of cut HQ and NQ sized core. |
| ***Quality of assay data and laboratory tests*** | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.* | • Assaying carried out by 'ALS' Laboratory, Adelaide.<br>• Samples pulverised and sub-sampled to produce a 30g charge for fire assay. Samples analysed using technique Au-TL43 plus ME-ICP41 (As,Sb,Ag,Cu,Pb,Zn,S). All Au analysis using TL43 that are greater than 1 ppm are further analysed for ore grade Au-ORE (>1ppm). |
| ***Verification of sampling*** | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data* | • Data includes a digital historic drilling database compiled by company geologists. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***and assaying*** | *verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | |
| ***Location of data points*** | • *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • Collars are picked up with Trimble DA1 DGPS with horizontal accuracy of 10cm.<br>• Topographical control in vertical RL has been verified against inhouse mine survey control from previous mining of the open pit in 1993.<br>• Grid is reported in GDA 94, Zone 55. |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.*<br>• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>• *Whether sample compositing has been applied.* | • Diamond drilling is sampled to geological contacts. |
| ***Orientation of data in relation to geological structure*** | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | • Yet to be carried out. |
| ***Sample security*** | • *The measures taken to ensure sample security.* | • The Nagambie Resources core shed is locked at night. |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | • Audits of the data generated will be undertaken. |

## Section 2 Reporting of Exploration Results

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Mineral tenement and land tenure status*** | • *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental* | • NAD009-011 drilled on MIN 5412.<br>• MIN5412 is 100% owned by Nagambie Resources Limited. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *settings.*<br>• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | |
| ***Exploration done by other parties*** | • *Acknowledgment and appraisal of exploration by other parties.* | • Not applicable. |
| ***Geology*** | • *Deposit type, geological setting and style of mineralisation.* | • Style of mineralisation is considered to be "Costerfield-Mine-style, antimony-gold veining". |
| ***Drill hole Information*** | • *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>  ○ *easting and northing of the drill hole collar*<br>  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>  ○ *dip and azimuth of the hole*<br>  ○ *down hole length and interception depth*<br>  ○ *hole length.*<br>• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.* | • Summary of NAD009:<br>Easting: 341454.18<br>Northing: 5926090.26<br>RL: 131.21m<br>Collar dip: -35°<br>Collar magnetic azimuth: 294°<br>Collar azimuth (true): 305°<br>Interception depth down hole: approximately 203.4m<br>Total depth down hole: 232.7m<br>• Summary of NAD010:<br>Easting: 341454.18<br>Northing: 5926090.26<br>RL: 131.21m<br>Collar dip: -38.5°<br>Collar magnetic azimuth: 290°<br>Collar azimuth (true): 301°<br>Interception depth down hole: approximately 160.8m Total depth down hole: 178.0m<br>• Summary of NAD011:<br>Easting: 341455.22<br>Northing: 5926089.00<br>RL: 130.92m<br>Collar dip: -46.8°<br>Collar magnetic azimuth: 290°<br>Collar azimuth (true): 301°<br>Interception depth down hole: approximately 204m<br>Total depth down hole: 407.9m |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Data aggregation methods*** | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>• *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*<br>• *The assumptions used for any reporting of metal equivalent values*<br>• *should be clearly stated.* | • For each sampled interval, gold assays are reported as g/t Au and antimony assays as Sb%.<br><br>• **Gold equivalent assays** are calculated as:<br><br>**AuEq g/t = Au g/t + (Sb% x 2.36)**<br><br>The gold equivalent factor of 2.36 is calculated using a formula applied at the Costerfield gold-antimony mine, 45 km west of the Nagambie Mine.<br><br>The Costerfield Mine currently calculates its gold equivalent (AuEq) factor, the relative value of 1.0% antimony (Sb) in the mine to 1.0 gram / tonne gold (Au) in the mine as:<br><br>***AuEq factor = [US$/tonne antimony price x 0.01 x 0.95 antimony recovery] / [US$/ounce gold price / 31.10348 grams per ounce x 0.93 gold recovery]***<br><br>The Costerfield Mine is 100% owned by Mandalay Resources Corporation and the latest projections for CY2022 on the Mandalay website adopt average CY2022 prices for gold and antimony of US$1,750/ounce gold and US$13,000/tonne antimony. For these prices, the AuEq factor using the above equation is **2.36.**<br><br>• **Bulk density (BD) used to weight each sample assay** in addition to weighting for sample width.<br><br>BD is calculated for each intercept using the formula that the Costerfield Mine uses for the Augusta, Cuffley and Brunswick orebodies - refer page 191 of the 2022 Technical Report for the Costerfield Mine:<br><br>( www.mandalayresources.com/operations/overview/costerfield-mine/mnd_costerfield_ni-43_101_technical ) |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | **$BD$ = ((1.3951∗$Sb$%)+(100−(1.3951∗$Sb$%)))/(((1.3951∗$Sb$%)/4.56)+((100−(1.3951∗$Sb$%))/2.74))**<br><br>for which:<br>• Empirical formula of stibnite: Sb2S3<br>• Sb%: Antimony assay as a percentage by mass<br>• Molecular weight of Antimony (Sb): 121.757<br>• Molecular weight of Sulphur: (S): 32.066<br>• 1.3951 is a constant calculated by 339.712/243.514 where 339.712 is the molar mass of Sb2S3, and 243.514 is the molar mass of antimony contained in one mole of pure stibnite<br>• BD of pure stibnite: 4.56<br>• BD of unmineralised waste (predominantly sandstones, siltstones, mudstones): 2.74<br><br>In time, when a sufficiently representative range of diamond core material is available, Nagambie Resources Limited will need to calculate the BD of the unmineralised waste (predominantly sandstones, siltstones and mudstones) at the Nagambie Mine. However, NRL does not consider that it will vary significantly from 2.74. |
| ***Relationship between mineralisation widths and intercept lengths*** | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').* | • Both down-hole sample length and sample estimated horizontal thickness (EHT) have been reported for each assay sample in NAD009-011. |
| ***Diagrams*** | • *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.* | • Drillhole locations have been geo-referenced in diagrams and maps to existing physical features and adjacent drillholes. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Balanced reporting*** | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | • No other data to report |
| ***Other substantive exploration data*** | • *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | • No data to report |
| ***Further work*** | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Further drillholes, NAD012-015, have been drilled from the south side of the West Pit and NAD016 onwards are being drilled from the north side of the West Pit. Assays are pending for NAD012 onwards. |