

# **Antimony-Gold Mineable Intersections Increased to 22**

New assays up to 60.8% antimony – highest to date at the Nagambie Mine

# Highlights

- Following the receipt of assays for NAD018, NAD020, NAD022-023 and NAD029, the C1 & C2 vein systems now contain a further four MCOG (mineable cut-off grade) intersections after allowing for potential mining dilution:
  - 1.2m EHT (estimated horizontal thickness) at 27.9 g/t AuEq (gold equivalent) in NAD023 C1 West;
  - 1.2m EHT at 25.7 g/t AuEq in NAD029 C2 West;
  - o 1.2m EHT at 22.0 g/t AuEq in NAD022 C1 East; and
  - 1.2m EHT at 10.9 g/t AuEq in NAD020 C1 E-W Connecting (Link) Vein.
- All 22 diluted intersections to date within the MCOG zones of the C1 & C2 vein systems average <u>16.3 g/t AuEq (6.1% antimony (Sb) plus 4.8 g/t gold (Au))</u>.
- 1 for 5 shareholder renounceable rights issue to raise up to \$5.4 million (before costs) announced on 16 March 2022 to:
  - o contract a second rig for the antimony-gold resource drilling program;
  - accelerate the engineering and permitting of the proposed exploration decline and associated underground development in order to strike drive selected C1 & C2 veins;
  - conduct detailed metallurgical testwork and carry out detailed design and costing of an antimony-gold flotation circuit;
  - o cover the costs of the rights issue; and add to working capital.

#### COMMENTARY

**Nagambie Resources' Executive Chairman, Mike Trumbull,** commented: "The NAD023 mineable intersection of C1 W - 1.2m EHT at 27.9 g/t AuEq - is particularly pleasing as it is the deepest intersection to date in the program at approximately 230m vertically below surface. Within this NAD023 intersection was a sample assaying 60.8% Sb, the highest antimony assay to date at the Nagambie Mine.

*"It is planned to drill test both the C1 & C2 vein systems to around 400m vertical depth in coming months, as well as drilling the C3 & C4 vein-system targets to the south west of the West Pit.* 

"Averaging circa 6% antimony plus 5 g/t gold from 22 mineable intersections in 13 holes out of 17 holes assayed to date is a remarkable hit rate, given that it has come from one drill rig, five day shifts per week, commencing in the June quarter 2022. Establishing that N-striking, high-grade antimony-gold veins occur below the E-W-striking, low-grade gold mineralisation in the West Pit, mined in 1992-1994, represents a very significant Victorian discovery. The antimony grade of 6% Sb is exciting in comparison to the Costerfield Mine, 45 km to the west of the Nagambie Mine and Australia's only current antimony-gold mine. Total Measured and Indicated Resources at Costerfield, as of 31 December 2021, averaged 2.8% Sb and Inferred Resources averaged 1.3% Sb."

(source: page 6, <u>https://mandalayresources.com/site/assets/files/3408/mnd\_costerfield\_ni-</u>

<u>43\_101\_technical\_report\_2022.pdf</u>)

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				BD of unmineralised waste: 2.74			EHT and BD Weighting					
				BD of pu	re Stibnit	te: 4.56						
Mineable Intersection	From (m)	To (m)	Downhole	EHT	Au	Sb	AuEq	BD	EHT & BD	EHT & BD	EHT & BD	AuEq
(Potential Stope)			Length	(m)	Assay	Assay	(g/t)	based	Weighted	Weighted	Weighted	Times
			L (m)		(g/t)	(Sb %)		on Sb%	Au	Sb	AuEq	MCOG
NRP002 C1 E&W (PR)	109.00	136.10	27.10	2.50	4.84	7.51	19.18	2.89	5.42	9.15	22.90	7.6
NAD008 C1 E (PR)	178.20	180.00	1.80	1.20	3.51	3.05	9.34	2.79	3.55	3.26	9.77	3.3
NAD009 C1 E (PR)	172.34	174.20	1.86	1.20	0.08	2.36	4.59	2.78	0.08	2.52	4.89	1.6
NAD009 C1 W (PR)	200.00	207.30	7.30	4.70	4.86	4.20	12.88	2.81	5.32	4.74	14.37	4.8
NAD010 C1 E (PR)	160.00	161.78	1.78	1.20	13.38	16.14	44.21	3.05	13.56	18.44	48.79	16.3
NAD010 C1 W (PR)	163.56	165.35	1.79	1.20	0.19	2.81	5.56	2.79	0.21	3.05	6.03	2.0
NAD011 C1 E (PR)	214.30	217.80	3.50	1.20	0.10	1.47	2.91	2.77	0.10	1.61	3.18	1.1
NAD011 C1 W (PR)	270,7	276.00	5.30	2.25	1.46	10.38	21.29	2.94	1.52	12.01	24.45	8.2
NAD012 C1 W (PR)	130.86	132.20	1.34	1.20	1.67	1.66	4.84	2.77	1.75	1.83	5.24	1.7
NAD012 C2 E (PR)	401.40	404.80	3.40	2.62	6.72	2.54	11.57	2.78	6.68	2.57	11.59	3.9
NAD012 C2 M (PR)	416.00	420.00	4.00	1.98	6.27	3.78	13.50	2.80	6.30	3.89	13.72	4.6
NAD012 C2 W (PR)	423.00	428.00	5.00	2.42	8.70	5.49	19.19	2.84	9.30	6.17	21.08	7.0
NAD013 C1 E (PR)	167.30	171.10	3.80	2.70	3.61	10.02	22.74	2.93	4.32	11.75	26.77	8.9
NAD013 C1 W (PR)	238.00	240.30	2.30	1.40	7.13	0.05	7.23	2.74	7.13	0.05	7.23	2.4
NAD016 C1 W/HW (PR)	180.50	188.00	7.50	2.36	3.12	2.37	7.64	2.78	3.12	2.69	8.26	2.8
NAD016 C1 W/HW (PR)	174.50	177.00	2.50	1.27	9.37	1.67	12.55	2.77	9.32	1.69	12.56	4.2
NAD016 C1 W/HW (PR)	170.00	171.40	1.41	1.20	5.00	0.32	5.61	2.74	5.00	0.32	5.61	1.9
NAD017 C1 W (PR)	217.00	219.48	2.48	1.20	5.92	1.77	9.30	2.77	5.90	1.78	9.30	3.1
NAD020 C1 E-W Link	214.28	216.60	2.32	1.20	0.75	3.93	8.25	2.82	0.75	5.34	10.94	3.6
NAD022 C1 E	238.00	239.55	1.55	1.20	3.46	7.70	18.16	2.89	3.96	9.42	21.96	7.3
NAD023 C1 W	272.16	276.00	3.84	1.20	0.69	11.98	23.57	2.98	0.68	14.23	27.87	9.3
NAD029 C2 W	285.50	286.75	1.25	1.20	4.59	9.02	21.82	2.92	4.72	10.99	25.72	8.6
Average to Date				1.75				2.84	4.77	6.06	16.34	5.4

#### Table 1 All 22 waste-diluted MCOG Intersections to date: EHT => 1.2m and AuEq => 3.0 g/t

(PR) = previously reported on 10 March 2023; AuEq (g/t) = Au (g/t) + (Sb% x 1.91); BD = bulk density

#### SIGNIFICANT DOWNHOLE ASSAYS FOR NAD018, NAD020, NAD022-023 and NAD029

The previous batch of assay results received from the On Site laboratory in Bendigo for NAD013-017 were reported to the ASX on 10 March 2023. Downhole sample assays for NAD018, NAD020, NAD022-023 and NAD029 have now been received.

All new significant assays (greater than 1.0 g/t Au or 1.0% Sb) received are summarised in Table 2. The <u>highest</u> <u>new antimony assay of 60.8% Sb occurred over 0.3m in NAD023 (275.1m to 275.4m)</u>. The <u>highest new gold</u> <u>assay of 15.3 g/t Au occurred over 0.2m in NAD022 (238.9m to 239.1m)</u>

<u>Detailed drillhole data for the NAD018, NAD020, NAD022-023 and NAD029 holes are set out in the attached</u> <u>JORC Table 1</u> and all drill holes in the antimony-gold resource drilling program to date are shown in Figures 1 and 2 (plan and section views).

Assays are pending for NAD021, NAD024-028 and NAD030-035 (NAD019 has not been drilled yet) – a total of 12 holes.

#### MINEABLE INTERSECTIONS (OR POTENTIAL STOPES)

For samples containing significant antimony, the individual Au and Sb assays were weighted for both sample thickness and bulk density. Consideration was then given to the MCOG of 3.0 g/t AuEq over at least 1.2m EHT.

For full details regarding the calculation of sample bulk density, AuEq calculation, minimum mineable EHT and MCOG, refer to the attached <u>Appendix 1: Summary of Mining-Method Considerations and Developed</u> <u>Assay-Reporting Criteria</u> on pages 8-10. The relevant equations regarding bulk density and AuEq calculation are also repeated in the attached JORC Table 1.



Nagambie calculates AuEq grades by applying a Costerfield Mine AuEq factor, the relative value of 1.0% Sb in the mine to 1.0 g/t Au in the mine. In CY2022, the AuEq factor was 2.36 based on Mandalay Resources' (owner of the Costerfield Mine) annual guidance in January 2022 of US\$1,750 / oz Au and US\$13,000 / tonne Sb. The Mandalay guidance for CY2023 is US\$1,797 / oz Au and US\$10,805 / tonne Sb. The <u>CY2023 AuEq factor</u> applied is 1.91 as a result.

All mineable intersections (potential stopes) within the MCOG zones for the C1 & C2 vein systems to date are summarised in Table 1. Those that were previously reported on 10 March 2023 are signified as (PR).

The 22 waste-diluted mineable intersections within the MCOG zones for the C1 & C2 vein systems to date average 16.3 g/t AuEq (6.1% Sb plus 4.8 g/t Au) and have an average potential stope width of 1.75m EHT. The average of 16.3 g/t AuEq is 5.4 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.

#### Trends to Date

The epizonal N-striking C1 and C2 vein systems are associated with the EW-striking Nagambie Mine Central Anticline and the various EW-striking thrust faults which dip to the north (due to the N to S compression event at the time of first mineralisation, circa 375 million years ago) and are known to continue regionally to kilometres in depth. With the C-veins generally dipping sub-vertically to the west and the E-W structures dipping sub-vertically to the north, the C-vein antimony-gold mineralisation is plunging to the north west.

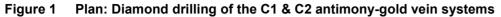
The strike length of the C1 vein system is currently around 100m. The vertical extent of the C1 vein system is currently around 200m but could increase substantially with extensive further drilling – initially from surface and later from underground. The Fosterville<sup>1</sup> epizonal mineralisation extends to more than 1,000m vertical depth and the Costerfield<sup>2</sup> epizonal mineralisation is approaching 1,000m vertical depth.

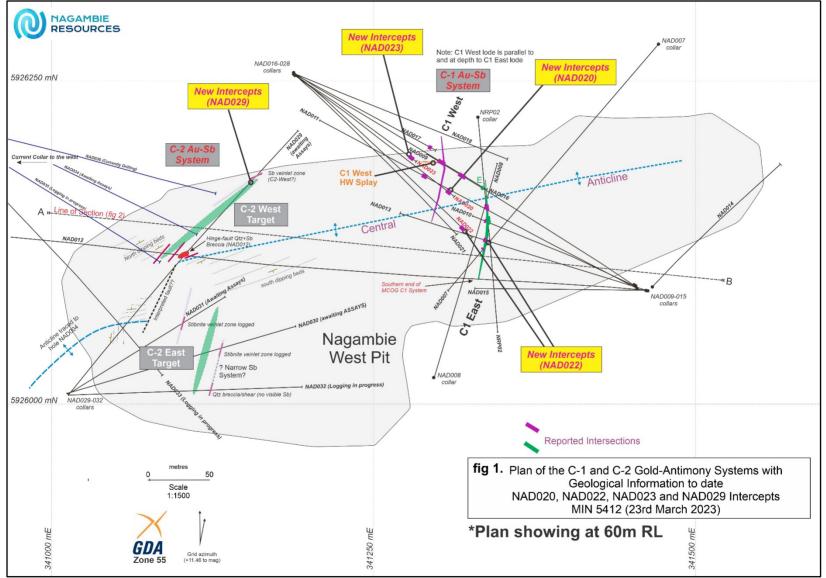
A C1 E-W connecting (or link) vein has been intersected in NAD020 - 1.2m diluted EHT at 10.9 g/t AuEq. Such link veins are mined at the Costerfield Mine provided their stopeable grade exceeds 3.0 g/t AuEq.

<sup>1</sup> The Fosterville Mine is 100%-owned by Agnico Eagle Mines Limited.

<sup>&</sup>lt;sup>2</sup> The Costerfield Mine is 100%-0wned by Mandalay Resources Corporation.

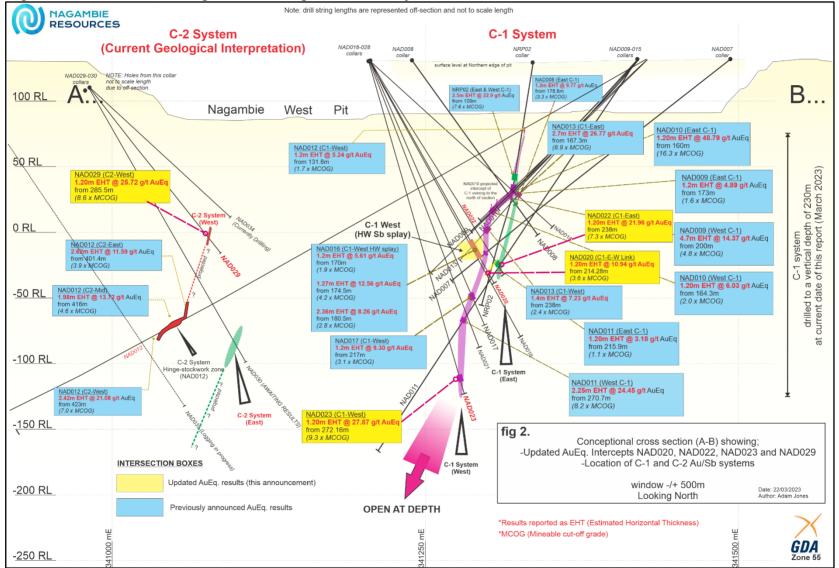














Hole ID	From (m)	To (m)		Au (g/t)		As (ppm)
NAD018	189.70	189.90	0.20	3.45	0.01	592
NAD020	214.65	214.80	0.15	0.83	55.00	201
NAD020	214.80	215.20	0.40	1.09	1.63	1020
NAD020	215.20	216.10	0.90	1.09	0.10	1130
NAD022	203.50	204.50	1.00	2.17	0.04	2250
NAD022	204.50	205.10	0.60	7.05	0.02	8620
NAD022	238.00	238.60	0.60	1.70	0.00	966
NAD022	238.60	238.75	0.15	2.60	11.00	575
NAD022	238.75	238.90	0.15	3.00	4.35	439
NAD022	238.90	239.10	0.20	15.30	47.20	3370
NAD022	239.10	240.00	0.90	1.00	0.49	275
NAD022	234.40	235.00	0.60	1.84	0.01	550
NAD023	273.00	273.50	0.50	1.20	0.20	461
NAD023	273.50	273.80	0.30	0.60	26.50	126
NAD023	273.80	274.50	0.70	0.77	0.54	171
NAD023	274.50	275.10	0.60	0.27	23.70	47.6
NAD023	275.10	275.40	0.30	0.57	60.80	228
NAD023	275.40	275.70	0.30	1.07	34.90	651
NAD023	275.70	276.00	0.30	1.43	2.05	953
NAD023	282.00	282.20	0.20	1.06	1.00	489
NAD029	76.85	77.10	0.25	1.18	0.01	98
NAD029	90.25	90.60	0.35	1.10	0.01	262
NAD029	90.23	90.00	0.33	5.94	0.00	367
NAD029	91.10	91.80	0.70	1.38	0.03	562
NAD029	91.00	100.00	0.50	1.30	0.10	440
		100.00	1.00		0.10	440
NAD029 NAD029	100.00 123.00	124.00	1.00	1.10 <b>3.58</b>	0.10	836
			1.00			297
NAD029 NAD029	125.00 126.00	126.00 127.00	1.00	1.19 2.02	0.10 0.10	368
NAD029	127.00	128.00	1.00	1.08	0.10	272
NAD029 NAD029	136.10 230.70	137.00 230.90	0.90	1.16	0.10 0.01	450 1840
			0.20	5.55		
NAD029	242.90	243.40	0.50	3.65	0.10	2130
NAD029	244.00	244.90	0.90	0.08	1.49	75
NAD029	244.90	245.10	0.20	0.05	4.14	31
NAD029	245.50	245.80	0.30	1.69	0.03	1190
NAD029	249.40	249.90	0.50	7.78	0.13	5130
NAD029	250.40	250.50	0.10	0.23	7.48	154
NAD029	285.50	285.90	0.40	9.02	1.93	19300
NAD029	285.90	286.15	0.25	6.54	43.60	5510

### Table 2 NAD018, NAD020, NAD022-023 and NAD029 assays =>1.0 g/t Au or =>1.0% Sb

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.

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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. <u>The developed criteria draw heavily on the publicly-available information for the Costerfield Mine, 45 km to the west of the Nagambie Mine and currently Australia's only operating antimony-gold mine.</u>

 The C-veins (Costerfield-Mine-style veins) at Nagambie's 100%-owned Nagambie Mine are generally striking N and dipping vertically or sub-vertically to the W or E. The Nagambie C-vein systems are geologically very similar to the antimony-gold vein systems at the Costerfield Mine, 100%-owned by Mandalay Resources Corporation, a Canadian company. The latest publicly-available comprehensive technical report for Costerfield ("Costerfield Report") is dated 25 March 2022:

#### https://mandalayresources.com/site/assets/files/3408/mnd\_costerfield\_ni-43\_101\_technical\_report\_2022.pdf

- 2) The Nagambie C-veins could be mineable from ~60m 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) Like the Costerfield veins, the Nagambie veins to date are sub-vertical (45 degrees to 90 degrees (vertical)) and have good continuity both vertically and horizontally. As such, they are amenable to mechanised mining methods. Long-hole CRF stoping (where CRF stands for cemented rock fill) is the preferred mining method employed at the Costerfield Mine (p254, Costerfield Report). Another description of this method at Costerfield is Up-Hole-Retreat (UHR) stoping with the stope drill drives being 10m vertically apart and these drives being typically 3m high, so that the up-hole blast holes would be typically 7.0m in vertical height. Using cemented rock fill (utilising the underground development waste) would allow for future stopes above, below and besides each filled stope (also as for the Costerfield mine). For an example of a typical Costerfield stope drill drive, from which the up-hole blast holes are drilled, refer p75 of the Costerfield Report.
- 4) Conceptual mine planning for a Nagambie underground mine already indicates that, mining only the C1 & C2 vein systems, sufficient stopes could be developed to effectively schedule stoping operations and optimise the antimony and gold grades delivered to the treatment plant. Nagambie remains very confident of discovering additional C-vein systems to the south west of The West Pit.
- 5) Minimum stoping width could be 1.2m estimated horizontal thickness (EHT) (similar to the Costerfield Mine).
- 6) 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.
- 7) 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).
- 8) 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.
- 9) 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).
- 10) 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 Costerfield Report.

#### 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<sub>2</sub>S<sub>3</sub>
- Sb%: Antimony assay as a percentage by mass
- Molecular weight of Antimony (Sb): 121.757
- Molecular weight of Sulphur: (S): 32.066

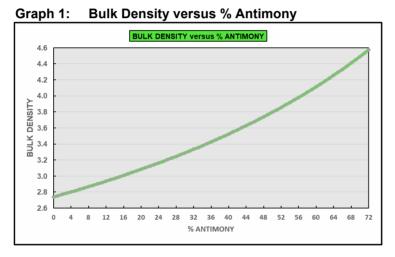


- 1.3951 is a constant calculated by 339.712/243.514 where 339.712 is the molar mass of  $Sb_2S_3$ , and 243.514 is the molar mass of antimony contained in one mole of pure stibnite
- BD of pure stibnite: 4.56
- BD of unmineralised waste (predominantly sandstones, siltstones, mudstones): 2.74

In time, when a sufficiently representative range of 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).

Nagambie considers that the Costerfield BD 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<sub>2</sub>). 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.

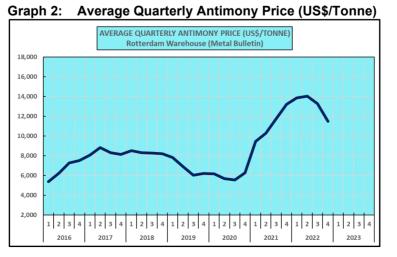


#### Gold Equivalent Factor

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 projections for CY2023 on the <u>Mandalay website</u> adopt average CY2023 prices for gold and antimony of US\$1,797 / ounce gold and US\$10,805 / tonne antimony (refer Graph 2). For these prices, the AuEq factor using the above equation is <u>1.91</u>.





# JORC Code, 2012 Edition Nagambie Mine NAD018, NAD020, NAD022-023 and NAD029 Holes Table 1

## **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Drilling of holes NAD018, NAD020, NAD022-023 and NAD029 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.</li> <li>Sample lengths will be usually no less than 0.1m or greater than 1.2m.</li> <li>Samples are submitted to On Site Laboratory Services, Bendigo. <ul> <li>Samples are submitted to On Site Laboratory Services, Bendigo.</li> <li>Samples are pulverised and sub-sampled to produce a 30g charge for fire assay. Samples are analysed using technique Au-PE01 (ppm) plus ME-ICP (As, Sb, Ag, Cu, Pb, Zn, Bi, S) method BM011. All Sb analysis using BM011 that are greater than 4000 ppm are further analysed for ore grade using method B050 (% Sb).</li> </ul></li></ul>
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).	<ul> <li>Diamond drill core is standard 'HQ' and 'NQ'.</li> <li>Core is digitally oriented.</li> <li>Down-hole surveys are carried out every 30m or 40m down hole to EOH.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	Hard-copy details exist for any recorded drilled core loss.



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Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Logging is being progressively carried out.</li> <li>Qualitative data regarding core loss and drill core recovery is being noted within logging.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Sampling is done using industry standards. Diamond core samples will be one half of cut HQ and NQ sized core.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Assaying carried out by On Site Laboratory Services, Bendigo.</li> <li>Samples are pulverised and sub-sampled to produce a 30g charge for fire assay. Samples are analysed using technique Au-PE01 (ppm) plus ME-ICP (As, Sb, Ag, Cu, Pb, Zn, Bi, S) method BM011. All Sb analysis using BM011 that are greater than 4000 ppm are further analysed for ore grade using method B050 (% Sb).</li> </ul>
Verification of sampling	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul> <li>Data includes a digital historic drilling database compiled by company geologists.</li> </ul>



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and assaying	<ul> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Collars are picked up with Trimble DA1 DGPS with horizontal accuracy of 10cm.</li> <li>Topographical control in vertical RL has been verified against inhouse mine survey control from previous mining of the open pit in 1993.</li> <li>Grid is reported in GDA 94, Zone 55.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	Diamond drilling is sampled to geological contacts.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	• 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	• Type, reference name/number, location and ownership including	NAD018, NAD020, NAD022-023 and NAD029 all drilled on MIN
tenement	agreements or material issues with third parties such as joint	5412.



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and land tenure status	<ul> <li>ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>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.</li> </ul>	<ul> <li>MIN 5412 is 100% owned by Nagambie Resources Limited.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	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	<ul> <li>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: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	Summary of NAD018 Easting: 341189.81 Northing: 5926256.94 RL: 130.7m Collar dip: -36.5° Collar magnetic azimuth: 102° Collar azimuth (true): 113.46° Interception depth down hole: approximately 190m Total depth down hole: 218.8m Summary of NAD020: Easting: 341189.42 Northing: 5926256.60 RL: 130.01m Collar dip: -47.5° Collar magnetic azimuth: 114° Collar aginetic azimuth: 114° Collar azimuth (true): 125.46° Interception depth down hole: approximately 215m Total depth down hole: 225.3m Summary of NAD022: Easting: 341188.63 Northing: 5926256.92 RL: 129.63m Collar dip: -63° Collar magnetic azimuth: 120°



Criteria	JORC Code explanation	Commentary
		<ul> <li>Collar azimuth (true): 131.46°</li> <li>Interception depth down hole: approximately 238m</li> <li>Total depth down hole: 262.5m</li> <li>Summary of NAD023:</li> <li>Easting: 341188.23</li> <li>Northing: 5926256.76</li> <li>RL: 129.13m</li> <li>Collar dip: -63°</li> <li>Collar magnetic azimuth: 120°</li> <li>Collar azimuth (true): 131.46°</li> <li>Interception depth down hole: approximately 275m</li> <li>Total depth down hole: 302.7m</li> <li>Summary of NAD029:</li> <li>Easting: 341012.97</li> <li>Northing: 5926005.36</li> <li>RL: 129.90m</li> <li>Collar dip: -39.5°</li> <li>Collar magnetic azimuth: 026°</li> <li>Collar azimuth (true): 037.46°</li> <li>Interception depth down hole: approximately 230m</li> <li>Total depth down hole: 339m</li> </ul>
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values</li> <li>should be clearly stated.</li> </ul>	<ul> <li>For each sampled interval, gold assays are reported as g/t Au and antimony assays as Sb%.</li> <li><u>Gold equivalent assays</u> are calculated as: AuEq g/t = Au g/t + (Sb% x 1.91) The gold equivalent factor of 1.91 is calculated using a formula applied at the Costerfield gold-antimony mine, 45 km west of the Nagambie Mine. The Costerfield Mine currently calculates its gold equivalent (AuEq)</li> </ul>
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Criteria	JORC Code explanation	Commentary
		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 projections for CY2023 on the <u>Mandalay website</u> adopt average CY2023 prices for gold and antimony of US\$1,797/ounce gold and US\$10,805/tonne antimony. For these prices, the AuEq factor using the above equation is <u>1.91.</u>
		<ul> <li><u>Bulk density (BD) used to weight each sample assay</u> in addition to weighting for sample width.</li> </ul>
		BD is calculated for each sample 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)
		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: Sb2S3
		<ul> <li>Sb%: Antimony assay as a percentage by mass</li> <li>Molecular weight of Antimony (Sb): 121.757</li> <li>Molecular weight of Sulphur: (S): 32.066</li> </ul>
		<ul> <li>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</li> </ul>

- BD of pure stibnite: 4.56
- BD of unmineralised waste (predominantly sandstones, siltstones,



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		mudstones): 2.74
		In time, when a sufficiently representative range of 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 mineralisatio n widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>Down-hole sample length has been reported for each significant assay sample in NAD018, NAD020, NAD022-023 and NAD029.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Drillhole locations have been geo-referenced in diagrams and maps to existing physical features and adjacent drillholes.</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	No other data to report
Other substantive exploration data	<ul> <li>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.</li> </ul>	No data to report
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further drillholes, NAD021, NAD024-NAD028, and NAD030-NAD035, have been drilled. Assays are pending for NAD021 onwards.</li> </ul>