## ASX ANNOUNCEMENT 22 May 2023



## **Antimony-Gold Mineable Intersections Increased to 29**

Potential Discovery of Third Sb-Au Vein System, C3, at the Nagambie Mine

## **Highlights**

- Following the receipt of assays for NAD021, NAD024, NAD030-031 and NAD034, the C1 & C2 vein systems now contain a further seven MCOG (mineable cut-off grade) intersections:
  - 2.91m EHT (estimated horizontal thickness) at 14.5 g/t AuEq (gold equivalent) in NAD024 C1 West;
  - 1.2m EHT at 14.0 g/t AuEq in NAD034 C2 West (Hinge);
  - 1.2m EHT at 9.3 g/t AuEq in NAD030 C2 East;
  - o 1.2m EHT at 9.3 g/t AuEq in NAD031 C2 East;
  - 1.2m EHT at 4.7 g/t AuEq in NAD030 C2 East;
  - o 1.2m EHT at 4.2 g/t AuEq in NAD034 C2 West (Hinge); and
  - 1.36m EHT at 4.1 g/t AuEq in NAD030 C2 East.
- All 29 diluted intersections to date within the MCOG zones of the C1 & C2 vein systems average 14.9 g/t AuEq (5.6% antimony (Sb) plus 4.1 g/t gold (Au)).
- Preliminary logging of a significant stibnite zone in hole NAD040, just completed, appears to indicate the discovery of the predicted C3 Sb-Au vein system.
- A second diamond rig commenced drilling at the Nagambie Mine on 10 May 2023 and its first task is to drill a series of holes to test the depth extent of the C1 vein system. The initial rig has commenced drilling a series of holes targeting the predicted C3, C4, C5 etc vein systems.

#### Commentary

Nagambie Resources' Executive Chairman, Mike Trumbull, commented: "The seven new mineable intersections have added significantly to the volume of Sb-Au mineralisation being systematically drilled out around a 25% increase in volume using total EHTs (estimated horizontal thickness) as a proxy.

"The most exciting news though is clearly the potential confirmation of the predicted C3 Sb-Au vein system – assays pending. The NAD040 intersection is very impressive visually for such an early test of the C3 target. If the assays confirm C3, we will be in a position to announce a major Sb-Au orebody (C1, C2, C3 with more C-vein systems indicated) at the 100%-owned Nagambie Mine – major news for Nagambie shareholders, the Nagambie region, Victoria and Australia. The western world strategically needs a new high-grade deposit of clean antimony, one of the most critical of the future-facing metals required for the generation of renewable energy, particularly solar energy, and the decarbonisation of the world.

"A primary use of the funds raised in the recent renounceable entitlement issue was the contracting of a second diamond rig to accelerate the drill-out of the Nagambie Sb-Au orebody and, as a result, bring forward Nagambie's maiden JORC Resource. A JORC Inferred Resource above 250m vertical depth plus a JORC Exploration Target below 250m are planned to be calculated."

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Table 1 All 29 waste-diluted MCOG Intersections to date: EHT => 1.2m and AuEq => 3.0 g/t

Table I All 25	Waste C	matea					1 -> 1.2111 and AdEq -> 5.0 gr						
				BD of unmineralised waste: 2.74			EHT and B	D Weightin	g				
				BD of pu	ire Stibni	te: 4.56							
Mineable Intersection	From (m)	To (m)	Downhole	EHT	Au	Sb	AuEq	BD	EHT & BD	EHT & BD	EHT & BD	AuEq	AuEq
(Potential Stope)			Length	(m)	Assay	Assay	(g/t)	based	Weighted	Weighted	Weighted	x EHT	хL
			L (m)		(g/t)	(Sb %)		on Sb%	Au	Sb	AuEq	(g/t x m)	(g/t x m)
NRP002 C1 E&W	109.00	136.10	27.10	2.50	4.84	7.51	19.18	2.89	5.42	9.15	22.90	57.3	621
NAD008 C1 E	178.20	180.00	1.80	1.20	3.51	3.05	9.34	2.79	3.55	3.26	9.77	11.7	18
NAD009 C1 E	172.34	174.20	1.86	1.20	0.08	2.36	4.59	2.78	0.08	2.52	4.89	5.9	9
NAD009 C1 W	200.00	207.30	7.30	4.70	4.86	4.20	12.88	2.81	5.32	4.74	14.37	67.5	105
NAD010 C1 E	160.00	161.78	1.78	1.20	13.38	16.14	44.21	3.05	13.56	18.44	48.79	58.5	87
NAD010 C1 W	163.56	165.35	1.79	1.20	0.19	2.81	5.56	2.79	0.21	3.05	6.03	7.2	11
NAD011 C1 E	214.30	217.80	3.50	1.20	0.10	1.47	2.91	2.77	0.10	1.61	3.18	3.8	11
NAD011 C1 W	270,7	276.00	5.30	2.25	1.46	10.38	21.29	2.94	1.52	12.01	24.45	55.0	130
NAD012 C1 W	130.86	132.20	1.34	1.20	1.67	1.66	4.84	2.77	1.75	1.83	5.24	6.3	7
NAD012 C2 E	401.40	404.80	3.40	2.62	6.72	2.54	11.57	2.78	6.68	2.57	11.59	30.3	39
NAD012 C2 W (Hinge)	416.00	420.00	4.00	1.98	6.27	3.78	13.50	2.80	6.30	3.89	13.72	27.2	55
NAD012 C2 W	423.00	428.00	5.00	2.42	8.70	5.49	19.19	2.84	9.30	6.17	21.08	51.0	105
NAD013 C1 E	167.30	171.10	3.80	2.70	3.61	10.02	22.74	2.93	4.32	11.75	26.77	72.2	102
NAD013 C1 W	238.00	240.30	2.30	1.40	7.13	0.05	7.23	2.74	7.13	0.05	7.23	10.1	17
NAD016 C1 W/HW	180.50	188.00	7.50	2.36	3.12	2.37	7.64	2.78	3.12	2.69	8.26	19.5	62
NAD016 C1 W/HW	174.50	177.00	2.50	1.27	9.37	1.67	12.55	2.77	9.32	1.69	12.56	16.0	31
NAD016 C1 W/HW	170.00	171.40	1.41	1.20	5.00	0.32	5.61	2.74	5.00	0.32	5.61	6.7	8
NAD017 C1 W	217.00	219.48	2.48	1.20	5.92	1.77	9.30	2.77	5.90	1.78	9.30	11.1	23
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	13.1	25
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	26.3	34
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	33.5	107
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	30.8	32
Subtotal EHTs **				38.59									
NAD024 C1 W	250.60	258.20	7.60	2.91	2.70	5.74	13.67	2.84	2.68	6.19	14.51	42.2	110
NAD030 C2 E	206.70	208.30	1.60	1.36	1.55	1.34	4.11	2.76	1.56	1.35	4.14	5.6	7
NAD030 C2 E	202.50	203.90	1.40	1.20	0.90	3.92	8.40	2.81	0.92	4.39	9.30	11.2	13
NAD030 C2 E	198.20	199.90	1.70	1.20	1.33	1.71	4.60	2.77	1.33	1.76	4.69	5.6	8
NAD031 C2 E			2.81	1.17	4.23	9.25	11.1	22					
NAD034 C2 W (Hinge)	(Hinge) 284.50 286.50 2.00 1.20 1.53 1.31 4.04		2.76	1.56	1.38	4.19	5.0	8					
NAD034 C2 W (Hinge)	275.40	276.90	1.50	1.20	1.64	5.58	12.30	2.84	1.69	6.45	14.00	16.8	21
Total Ls and EHTs **			111.28	48.86									
Averages to Date			3.84	1.68				2.83	4.14	5.65	14.93	25.1	57
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New intersections (highlighted in yellow) = since last report on 23 March 2023; AuEq (g/t) = Au (g/t) + (Sb% x 1.91); BD = bulk density; EHT = estimated horizontal thickness.

#### NAD040 INTERSECTION INDICATES NEW C3 ANTIMONY-GOLD VEIN SYSTEM

Preliminary logging of a stibnite intersection, from 254.0m downhole, in the just-completed diamond hole NAD040, appears to indicate the discovery of the C3 Sb-Au vein system, as predicted by Nagambie's Sb-Au structural model. The intersection occurs at approximately 120m vertically below surface and approximately 100m to the west of C2. It represents the first ever significant stibnite discovered to the west of the West Pit. If C3 is confirmed by assays, the total potential size of the Sb-Au discovery at the Nagambie Mine could increase dramatically.

Detailed logging and assaying of the intersection is being prioritised. Visually, NAD040 C3 could be one of the better-grade intersections since the drilling program commenced in the June quarter 2022.

The only mineral observed in the intersection is stibnite  $(Sb_2S_3)$  – recorded as follows. The hole details for NAD040 are set out in the attached JORC Table 1 and the location of the intersection is shown in Figures 1 and 2.

Hole ID	From (m)	To (m)	Length (m)	Mineral	% of Stibnite
NAD040	254	257	3	Stibnite	30

<sup>\*\*</sup> New intersections have increased total EHTs by approx. 26%. EHT is used to calculate the volume of mineable stopes.



#### SIGNIFICANT DOWNHOLE ASSAYS

The previous batch of assay results received from the On-Site laboratory in Bendigo were reported to the ASX on 23 March 2023. Downhole sample assays for NAD021, NAD024, NAD030-031 and NAD034 have now been received.

All new significant assays (greater than 1.0 g/t Au or 1.0% Sb) received are summarised in Tables 2-5.

<u>Detailed drillhole data for the NAD021, NAD024, NAD030-031 and NAD034 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 NAD025-028, NAD032-033 and NAD035-040 (NAD019 has not been drilled yet) – a total of 12 holes. The turnaround of laboratory assays is taking significantly longer than it used to, with the issue appearing to be currently industry wide in Victoria.

#### **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 **Appendix 1: Summary of Mining-Method Considerations and Developed Assay-Reporting Criteria** on pages 11-13. 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 CY2023 AuEq factor 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. All new intersections since those reported on 23 March 2023 are highlighted in yellow.

The 29 waste-diluted mineable intersections within the MCOG zones for the C1 & C2 vein systems to date average 14.9 g/t AuEq (5.6% Sb plus 4.1 g/t Au) and have an average potential stope width of 1.68m EHT. The average of 14.9 g/t AuEq is 5.0 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.

#### **Geological Trends to Date**

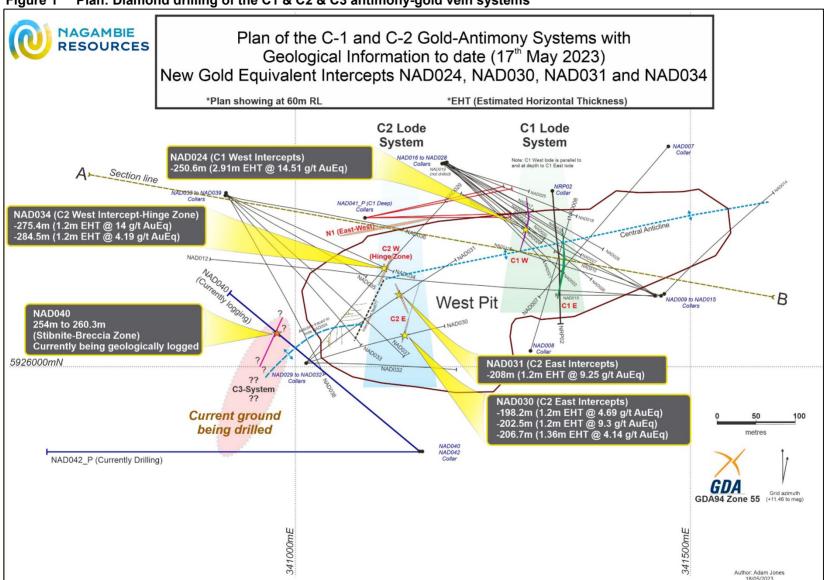
The epizonal generally N-striking C1, C2 and C3 vein systems are associated with the EW-striking Nagambie Mine Central Anticline and the various EW-striking thrust faults which dip to the north (due to the N to S compression event at the time of first mineralisation, circa 375 million years ago) and 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 generally plunging to the north west.

The strike length of the C1 vein system is currently around 100m. The strike length of the C2 vein system could be longer than that for C1, but is not yet determinable. The vertical extent of the C1 stibnite vein system is currently around 200m but could increase substantially with extensive further drilling – initially from surface and later from underground. The Fosterville epizonal mineralisation extends to more than 1,000m vertical depth and the Costerfield epizonal mineralisation is approaching 1,000m vertical depth.

The C2 vein system is approximately 200m west of the C1 vein system and the geologically-indicated C3 vein system is approximately 100m west of the C2 vein system. This is in keeping with Nagambie's Sb-Au structural model that predicts that the C-vein systems will become closer together, in an E-W sense, as they progress westwards (and southwards).



Figure 1 Plan: Diamond drilling of the C1 & C2 & C3 antimony-gold vein systems





Section A-B, looking NNE: Showing C1 & C2 & C3 vein systems

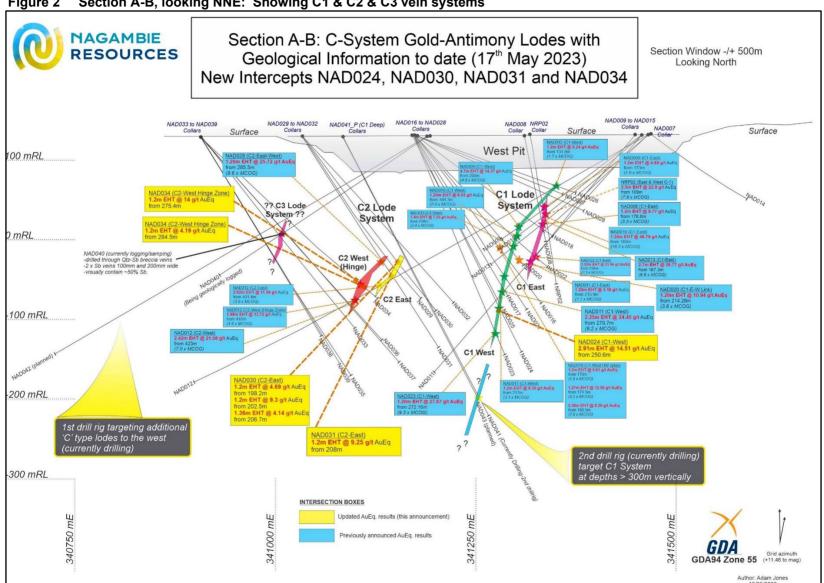




Table 2 NAD021 & NAD024 assays =>1.0 g/t Au or =>1.0% Sb

HoleID	From (m)	To (m)	Length (m)	Au (g/t)	% Sb	As (ppm)
NAD021	228.70	229.20	0.50	1.24	8.69	2210
NAD021	268.50	269.00	0.50	1.07	0.00	2190
NAD021	273.80	274.30	0.50	2.08	0.00	288
NAD024	216.50	216.80	0.30	0.02	7.27	59.8
NAD024	242.00	242.30	0.30	0.33	1.11	641
NAD024	244.40	245.30	0.90	4.47	0.01	1600
NAD024	246.00	247.00	1.00	1.09	0.01	405
NAD024	248.10	248.40	0.30	1.33	0.01	993
NAD024	250.60	251.20	0.60	1.45	18.1	912
NAD024	251.20	251.65	0.45	1.34	3.06	1820
NAD024	251.65	252.00	0.35	2.01	14.7	3480
NAD024	252.00	252.80	0.80	0.98	1.23	1480
NAD024	252.80	253.30	0.50	2.44	28.7	3390
NAD024	253.30	253.60	0.30	5.71	0.12	5470
NAD024	253.60	254.10	0.50	8.69	0.46	14700
NAD024	254.10	254.50	0.40	1.71	1.51	6400
NAD024	254.50	255.00	0.50	1	6.91	2640
NAD024	255.50	255.70	0.20	0.39	2.61	267
NAD024	256.30	257.20	0.90	1.96	5.02	2680
NAD024	257.20	257.50	0.30	4.65	0.08	3110
NAD024	257.50	258.20	0.70	6.19	0.02	4280
NAD024	258.20	259.00	0.80	2.7	0.01	815
NAD024	281.00	281.30	0.30	1.26	0.01	3900
NAD024	285.00	286.00	1.00	1.04	0.01	1970
NAD024	287.00	288.00	1.00	2.29	0.01	1360
NAD024	289.00	290.00	1.00	1.59	0.01	1480



Table 3 NAD030 assays =>1.0 g/t Au or =>1.0% Sb

HoleID	From (m)	To (m)	Length (m)	Au g/t	Sb%	As nnm
-	71.4	` '				As ppm
NAD030		71.8	0.4	1.04	0.01	418
NAD030	82.4	82.7	0.3	1.75	0.01	272
NAD030	82.7	82.9	0.2	1.17	0.01	371
NAD030	101	101.3	0.3	1.03	0.01	448
NAD030	101.3	101.8	0.5	2.8	0.01	1200
NAD030	101.8	102	0.2	4.46	0.01	1800
NAD030	102	103	1	2	0.01	532
NAD030	106	106.4	0.4	2.25	0.01	406
NAD030	115.75	115.9	0.15	0.3	11.3	55.9
NAD030	186.3	186.8	0.5	5.13	0.01	2700
NAD030	186.8	187	0.2	6.73	0.01	3560
NAD030	187	187.4	0.4	2.4	0.01	2380
NAD030	187.4	188	0.6	2.63	0.01	2910
NAD030	188	188.4	0.4	5.5	0.03	3790
NAD030	188.4	188.9	0.5	21	0.1	9140
NAD030	188.9	189.5	0.6	5.39	0.08	3200
NAD030	189.5	190	0.5	7.53	0.08	4530
NAD030	190	190.4	0.4	3.01	0.01	1020
NAD030	196.9	197.1	0.2	0.49	1.35	213
NAD030	197.1	198	0.9	1.11	0.81	462
NAD030	198	198.4	0.4	1.74	0.54	1160
NAD030	198.4	198.7	0.3	1.5	1.38	804
NAD030	198.7	198.9	0.2	0.41	1.63	344
NAD030	198.9	199.7	0.8	1.43	0.24	952
NAD030	199.7	199.9	0.2	1.2	9.33	557
NAD030	202	202.5	0.5	1.11	0.05	401
NAD030	202.5	202.75	0.25	1.69	28	753
NAD030	202.75	202.95	0.2	0.74	5.78	280
NAD030	202.95	203.5	0.55	1.05	0.15	400
NAD030	204.1	204.3	0.2	0.99	2.21	328
NAD030	206	206.7	0.7	1.05	0.24	649
NAD030	206.7	206.9	0.2	1.78	2.67	632
NAD030	207.4	207.7	0.3	2.03	3.95	1280
NAD030	208.1	208.3	0.2	4.26	1.64	3420
NAD030	210.8	211.4	0.6	1.47	1.36	259
NAD030	212	212.5	0.5	3.16	1.05	511
NAD030	220.55	220.75	0.2	1.78	0.49	604
NAD030	226	226.25	0.25	2.65	0.11	1070
NAD030	240.45	241.1	0.65	3.47	0.01	2260
NAD030	281.7	282.1	0.4	2.08	0.01	1380



Table 4 NAD031 assays =>1.0 g/t Au or =>1.0% Sb

l able 4	NADU31	assa	ys ->1.0	g/t Au o	r =>1.0%	Su
HoleID	From (m)	To (m)	Length (m)	Au g/t	Sb%	As ppm
NAD031	103.3	103.8	0.5	1.74	0.01	513
NAD031	103.8	104.2	0.4	3.14	0.01	381
NAD031	104.2	104.8	0.6	1.97	0.01	451
NAD031	104.8	105	0.2	7.1	0.01	552
NAD031	112	112.5	0.5	1.57	0.01	460
NAD031	116.75	117	0.25	0.51	4.45	626
NAD031	121.2	122.25	1.05	1.41	0.01	883
NAD031	122.25	122.6	0.35	2.53	0.01	590
NAD031	123.05	124.1	1.05	2.58	0.01	1820
NAD031	126.1	127.1	1	3.13	0.01	1400
NAD031	128.1	129	0.9	1.06	0.01	535
NAD031	129	129.3	0.3	1.77	0.02	753
NAD031	130	131	1	1.65	0.01	969
NAD031	131	132	1	3.07	0.01	1530
NAD031	132	132.4	0.4	19.6	0.01	1590
NAD031	132.8	133.6	0.8	1.6	0.01	769
NAD031	133.6	134	0.4	1.39	0.01	741
NAD031	134	134.4	0.4	1.22	0.01	740
NAD031	134.4	134.6	0.2	1.43	0.01	373
NAD031	134.6	135	0.4	1.83	0.01	1330
NAD031	153.7	154.3	0.6	1.5	0.01	625
NAD031	160.5	160.7	0.2	1.19	0.01	554
NAD031	161.6	161.9	0.3	1.65	0.01	590
NAD031	190	190.7	0.7	1.17	0.01	730
NAD031	203	204	1	1.34	0.01	485
NAD031	204	205	1	2.18	0.01	896
NAD031	206	207	1	1.03	0.07	437
NAD031	208	208.5	0.5	1.52	0.1	657
NAD031	208.5	208.7	0.2	0.44	1.54	280
NAD031	208.7	209	0.3	0.71	26.3	374
NAD031	209	209.2	0.2	1.47	12.4	518
NAD031	209.2	209.6	0.4	0.51	3.55	207
NAD031	209.6	210	0.4	1.34	0.12	497
NAD031	210	211	1	1.65	0.08	639
NAD031 NAD031	211	211.1	0.1	1.21	0.03	881
NAD031	211.1	211.8	0.7	2.62	0.1	1090 523
NAD031	211.8	213	1	1.91	0.08	974
NAD031	212	214	1	2.02	2.45	
NAD031	213	215	1	1.39	0.45 <b>1.46</b>	1050
NAD031	216	217	1	1.18	0.36	723
NAD031	217	218	1	1.68	0.09	1090
NAD031	218	219	1	2.18	0.01	1470
NAD031	222	223	1	1.04	0.02	567
NAD031	229	230	1	1.13	0.01	572
NAD031	231	231.4	0.4	2.15	0.01	1070
NAD031	231.4	231.9	0.5	8.5	0.03	9290
NAD031	264	264.2	0.2	1.28	0.01	1660
NAD031	281.8	282	0.2	5.25	0.01	3180
NAD031	290	290.5	0.5	2	0.02	3200
NAD031	290.5	290.7	0.2	1.82	16.1	2530
NAD031	291.7	291.9	0.2	2.76	0.01	606
NAD031	293	294	1	1.15	0.01	358
NAD031	299.3	299.7	0.4	1.97	0.01	2660
NAD031	300.6	301.1	0.5	1.22	0.01	1490
NAD031	319.2	319.7	0.5	9.53	0.01	3890
NAD031	324	325	1	3.43	0.01	3380
NAD031	325	325.3	0.3	4.32	0.01	3860
NAD031	325.3	325.5	0.2	2	0.01	2610
NAD031	325.5	326	0.5	1.61	0.01	1780
	326.4	326.7	0.3	1.05	0.01	724



Table 5 NAD034 assays =>1.0 g/t Au or =>1.0% Sb

HoleID	From (m)	To (m)	Length (m)	Au (g/t)	% Sb	As (ppm)
NAD034	274.8	275	0.2	1.23	0.01	848
NAD034	275.4	275.7	0.3	1.82	0.37	2070
NAD034	275.7	275.9	0.2	3.48	34.1	3460
NAD034	275.9	276.2	0.3	2.04	2.37	854
NAD034	277.25	277.35	0.1	1.61	0.04	1980
NAD034	277.85	278.2	0.35	1.83	0.6	3040
NAD034	278.2	278.3	0.1	2.86	1.76	4490
NAD034	280	281	1	1.57	0.01	906
NAD034	281	282	1	1.49	0.01	922
NAD034	282	283	1	1.11	0.01	1310
NAD034	283	284	1	1.2	0.01	2820
NAD034	284	284.9	0.9	2.15	0.14	4320
NAD034	284.9	285	0.1	7.41	15.1	4070
NAD034	285.5	286.1	0.6	1.16	0.04	3520
NAD034	286.1	286.5	0.4	0.73	1.97	907
NAD034	286.5	287.5	1	1.15	0.02	2180
NAD034	288.2	288.5	0.3	1.2	0.3	1040
NAD034	288.9	289.45	0.55	2.49	0.76	1980
NAD034	289.65	290	0.35	3.1	0.58	3920
NAD034	296.3	296.6	0.3	2.12	0.08	2250
NAD034	297.7	298.2	0.5	1.51	0.35	1340
NAD034	299	299.4	0.4	9.22	0.06	6920
NAD034	299.4	300	0.6	1.43	0.03	2290
NAD034	300	300.3	0.3	10.8	0.63	6940
NAD034	300.3	301	0.7	2.65	0.01	2810
NAD034	301	301.8	0.8	1.56	0.01	2700
NAD034	304.1	305	0.9	1.1	0.01	680

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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#### **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 Costerfield Mine, 45 km to the west of the Nagambie Mine and currently Australia's only operating antimony-gold mine.

1) 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 Sb-Au 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

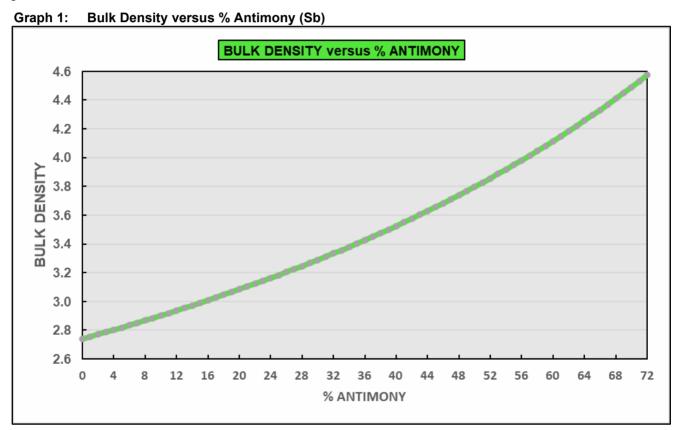


- 1.3951 is a constant calculated by 339.712/243.514 where 339.712 is the molar mass of Sb<sub>2</sub>S<sub>3</sub>, and 243.514 is the molar mass of antimony contained in one mole of pure stibnite
- BD of pure stibnite: 4.56
- BD of unmineralised waste (predominantly sandstones, siltstones, mudstones): 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  $(AuSb_2)$ . 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.



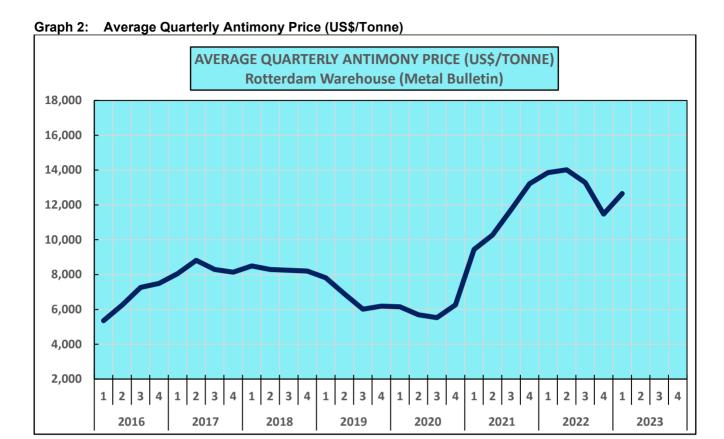
#### **Gold Equivalent Factor**

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 projections for CY2023 on the Mandalay website 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 **1.91**.







# JORC Code, 2012 Edition Nagambie Mine NAD021, NAD024, NAD030-031 and NAD034 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 NAD021, NAD024, NAD030-031 and NAD034 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 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	<ul> <li>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).</li> </ul>	<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.
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>	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	<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 and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <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>	Data includes a digital historic drilling database compiled by company geologists.
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	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  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	<ul> <li>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 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>NAD021, NAD024, NAD030-031 and NAD034 all drilled on MIN 5412.</li> <li>MIN 5412 is 100% owned by Nagambie Resources Limited.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Not applicable.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Style of mineralisation is considered to be "Costerfield-Mine-style, antimony-gold veining".</li> </ul>



- 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:
  - o easting and northing of the drill hole collar
  - elevation or RL (Reduced Level elevation above sea level in metres) of the drill hole collar
  - o dip and azimuth of the hole
  - o down hole length and interception depth
  - o hole length.
- 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.

#### NAD021:

E: 341188.45 N: 5926256.72 RI: 130.45 Dip: -52.5

Grid Azi: 131.46 Total Depth: 280.3m

Target: 233m

#### NAD024:

E: 341185.6 N: 5926256

RI: 131 Dip: -58.5

Grid Azi: 127.46 Total Depth: 315.4m

Target: 290m

#### NAD030:

E: 341013.46 N: 5926005 RI: 129.66 Dip: -49

Grid Azi: 073.46 Total Depth: 284.15m

Target: 242m

#### NAD031:

E: 341013.36 N: 5926005.32 RI: 129.66 Dip: -45.5

Grid Azi: 051.96 Total Depth: 350.8m

Target: 280m



#### NAD034:

E: 340912.14 N: 5926217.52 RI: 128.86

Dip: -41

Grid Azi: 114.46 Total Depth: 308.6m

Target: 288m

#### NAD040:

E: 341161 N: 5925892 RL: 130m Dip: -29 Mag Azi: 298.5

Mag Azi: 298. EOH: 356m Target: 278m



#### 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.
- 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.
- The assumptions used for any reporting of metal equivalent values
- should be clearly stated.

- For each sampled interval, gold assays are reported as g/t Au and antimony assays as Sb%.
- Gold equivalent assays 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) factor, the relative value of 1.0% antimony (Sb) in the mine to 1.0 gram / tonne gold (Au) 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. For these prices, the AuEq factor using the above equation is <u>1.91</u>.

• <u>Bulk density (BD) used to weight each sample assay</u> in addition to weighting for sample width.

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  • 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 Sb2S3, 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 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 NAD021, NAD024, NAD030-031 and NAD034.</li> </ul>
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.	<ul> <li>Drillhole locations have been geo-referenced in diagrams and maps to existing physical features and adjacent drillholes.</li> </ul>
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	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	No data to report



exploration data		method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.		
Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).  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, NAD025-028, NAD032-033 and NAD035-040 have been drilled (a total of 12 holes). Assays are pending for these holes.