

## **HIGHLIGHTS**

- ❖ Mawson Gold Limited ("Mawson") commenced extensive geophysical surveys and diamond drilling of the principal historic mines at Redcastle during the September quarter. Results will become progressively available during the December quarter.
- ❖ Mawson also commenced field work on the Doctors Gully option / joint venture (JV). During the quarter, negotiations were conducted on expanding the JV from 4 sq km to 199 sq km, including the numerous historic mines at Whroo and White Hills, on improved terms and renaming it the Whroo JV. In mid October, Nagambie and Mawson announced the signing of the expanded JV agreement. The expanded JV is subject to approval of Nagambie's shareholders, which will be sought at the upcoming Annual General Meeting.
- ❖ Drilling of RAD002, the first diamond hole into the Racecourse target, was completed at 1,090m depth. Several laminated quartz veins have been sampled and gold assays are awaited but no significant sulphides were associated with the quartz veining. Bedding strike varied greatly throughout RAD002, from north-south to north-east to south-east, and was never in the preferred east-west direction for sulphide-gold mineralisation. The lack of sulphides does not correlate with the strong IP anomaly, which is now thought to be reflective of sulphides occurring to the west, closer to the intersection of the Wandean Crustal Fault and the Racecourse Thrust Fault.
- ❖ Additional lines of IP to the west of RAD002 by Zonge have been held up for over four months because of the Covid-19 closure of the border between South Australia and Victoria. When that survey is completed, the design of RAD003 to the west of RAD002 can be finalised.
- ❖ Drilling of NWD001, the first hole to the west of the Nagambie Mine designed to intersect both the Nagambie Mine Thrust Fault and the Wandean Crustal Fault, commenced late in the quarter. The nominally 1,100m deep diamond hole is expected to be completed in November.
- ❖ The Company continued to investigate the recovery of residual gold from the 1989-1997 Nagambie Mine heap leach pad using naturally-occurring bacteria and which laboratories are best equipped to carry out the bacterial speciation testwork required at an acceptable cost. Nagambie Resources is looking to commence laboratory work early in 2021.
- ❖ The North East Link Project (NELP) tender closed as scheduled in May, with Nagambie asked to provide pricing for "Underwater Storage" PASS Management, but Covid-19 delays mean that the winning tenderer for the construction of NELP may not be announced until early 2021.

## **COMMENTARY**

Nagambie Resources' Chairman, Mike Trumbull said: "Our strategic partner Mawson Gold has hit the ground running in the hunt for the next Fosterville. They are spending serious money on the Redcastle JV and are preparing to spend even more on the Whroo JV in early 2021.

"For the Redcastle and Whroo JVs combined, Mawson can spend up to \$3.75M or \$5.25M before Nagambie needs to contribute to further JV expenditure. The use of multiple drilling rigs instead of one on our tenements greatly improves the chances of exploration success for shareholders."

## **NAGAMBIE RESOURCES**

*Exploration for Fosterville-style, structural-controlled, high grade sulphide-gold underground deposits within 3,600 sq km of Waranga Domain tenements is being methodically carried out using geophysical targeting techniques, diamond drilling and analysis for hydrothermal alteration of the sediments.*

*Underwater storage of sulphidic excavation material (WASS / PASS) in the two legacy gold pits at the Nagambie Mine is an excellent environmental fit with a major infrastructure project for Melbourne such as the North-East Link.*

*Recycling of the tailings and overburden dumps can produce aggregates for concrete and gravel products respectively.*

*Quarrying and screening of sand deposits at the mine to produce various sand and quartz aggregate products is also planned.*

*The first landfill site is planned to ultimately take advantage of the 17 Ha of engineered black plastic under the mine heap leach pad.*

## **SHARES ON ISSUE**

499,932,346

## **ASX CODE: NAG**

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## **Board**

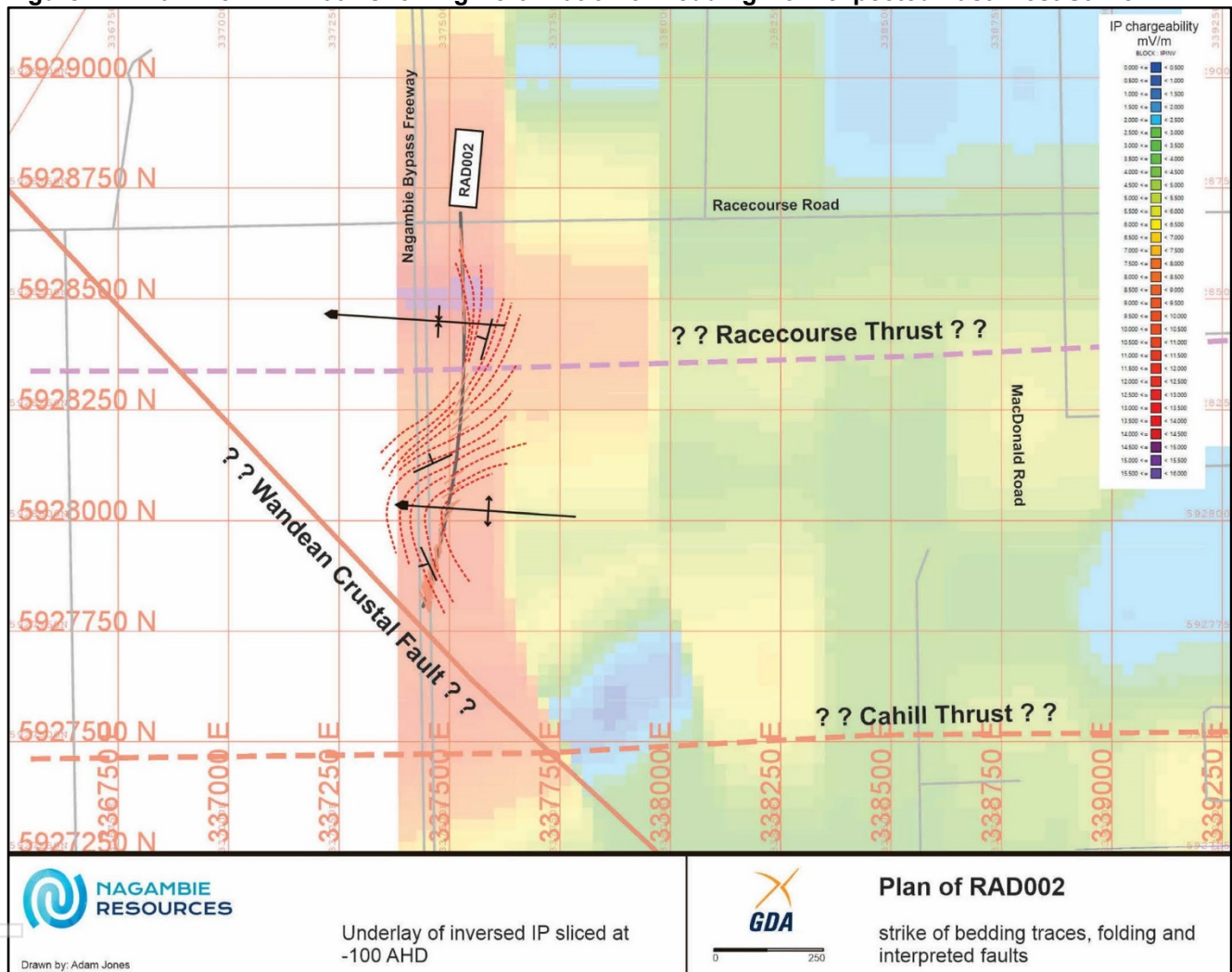
Mike Trumbull (Exec Chairman)  
Gary Davison (Director)  
Alfonso Grillo (Dir/Company Sec)

James Earle CEO

**GOLD EXPLORATION****RAD002 Diamond Drill Hole**

Drilling of the first diamond hole into the Racecourse sulphide-gold target, RAD002, was completed during the quarter at 1,090m depth down hole. Drilled north to south, the hole was collared immediately to the east of the Nagambie Bypass Freeway and east of the intersection of the Racecourse Thrust Fault with the Wandean Crustal Fault (refer Figure 1). RAD002 veered slightly to the west midway down the hole.

**Figure 1 Plan View: RAD002 showing Deformation of Bedding from expected East-West Strike**



Detailed logging of the hole has been completed. Several laminated quartz veins have been sampled and gold assays are awaited but no significant sulphides were associated with the quartz veining. Samples throughout the hole have been sent for analysis to ascertain the extent of hydrothermal alteration of the sandstone and siltstone beds.

Disseminated gold at both the Nagambie Mine and the Wandean Prospect occurs preferentially in east-west-striking, marine-formation, sandstone-rich brittle beds in the footwall (to the south) of east-west-striking, steeply-north-dipping thrust faults. The widespread folding of the beds due to the north-south compression event that occurred in the Waranga Domain at the time of mineralisation (circa 475 Ma) resulted in the fracturing of the sandstone-rich beds at and near to east-west-striking anticlinal folds.

The bedding strike varied greatly throughout RAD002 (refer Figure 1) and was never in the preferred east-west direction. The bedding changed from north-south at the top of the hole, to north-east, and finally to south-east at the bottom of the hole. The change from north-east to south-east strike occurred at a nose confirmed by the detailed logging of the bedding facies changes.

The lack of any significant sulphides throughout RAD002 does not correlate with the strong dipole-dipole induced

polarisation (IP) anomaly picked up immediately to the east of the Nagambie Bypass Freeway (refer Figures 1 and 2). The signal at that point is therefore now thought to be reflective of sulphides occurring to the west of the Bypass, closer to the intersection of the Wandean Crustal Fault and the Racecourse Thrust Fault.

### IP Survey to the West of RAD002

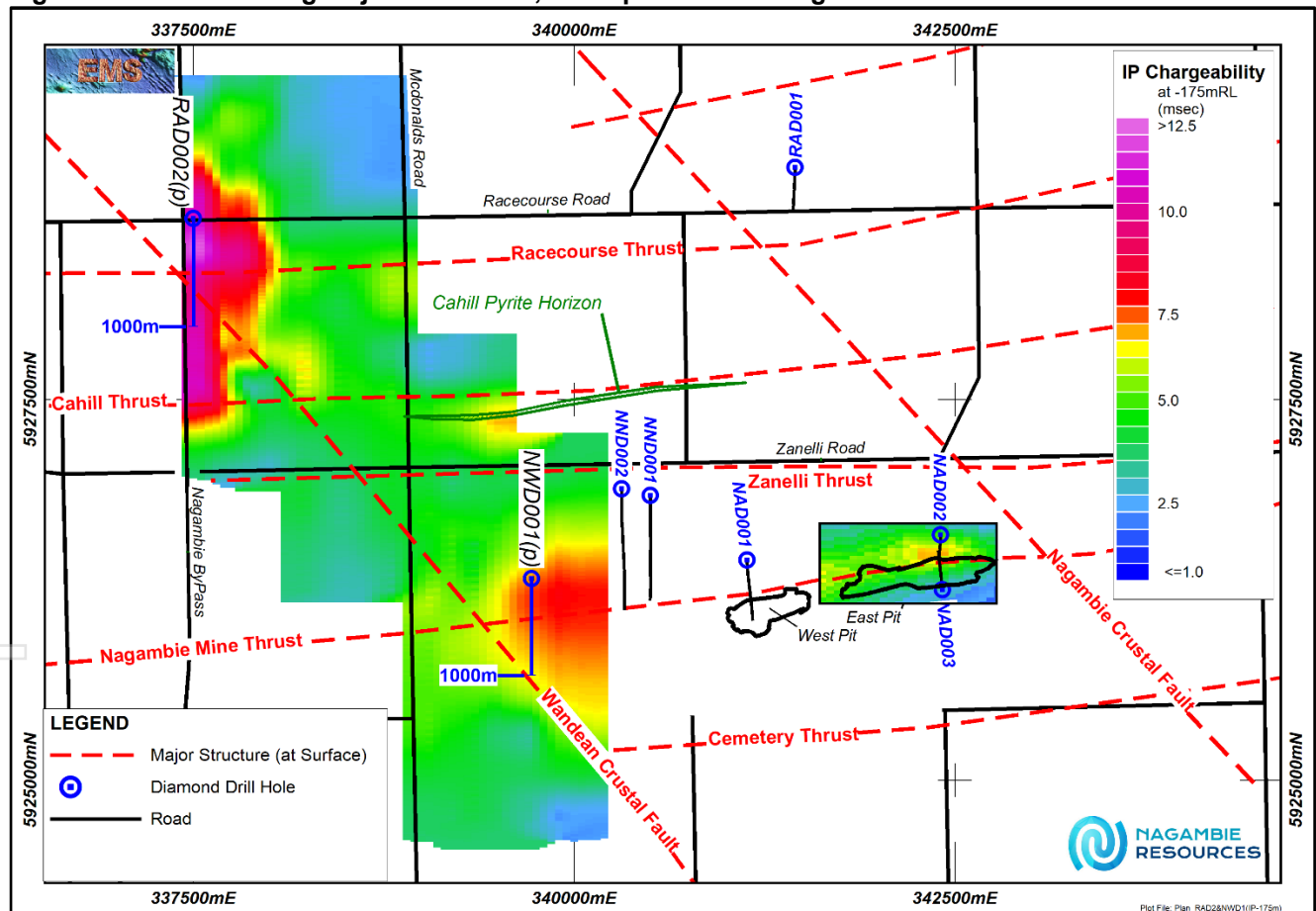
Two additional lines of IP to the west of the Nagambie Bypass had been planned to be carried out late in the June quarter. However, Nagambie Resources' preferred contractor, Adelaide-based-Zonge, who has carried out all the major IP surveys in the Nagambie region, has been unable to conduct the work for over four months because of the Covid-19 closure of the border between South Australia and Victoria.

The design of RAD003 to the west of the Bypass to drill into the Racecourse West target can't be finalised until this Zonge IP survey is carried out and analysed.

### NWD001 Diamond Drill Hole

Drilling of NWD001, the first hole to the west of the Nagambie Mine designed to intersect both the Nagambie Mine Thrust Fault and the Wandean Crustal Fault (refer Figure 2), commenced late in the quarter following significant winter rain in the area. Drilling of the nominally 1,100m deep hole is now expected to be completed in November.

**Figure 2 Plan showing Major Structures, IP Sulphide-Gold Targets and DDHs RAD002 & NWD001**



### Redcastle Joint Venture (Nagambie Resources currently 100%)

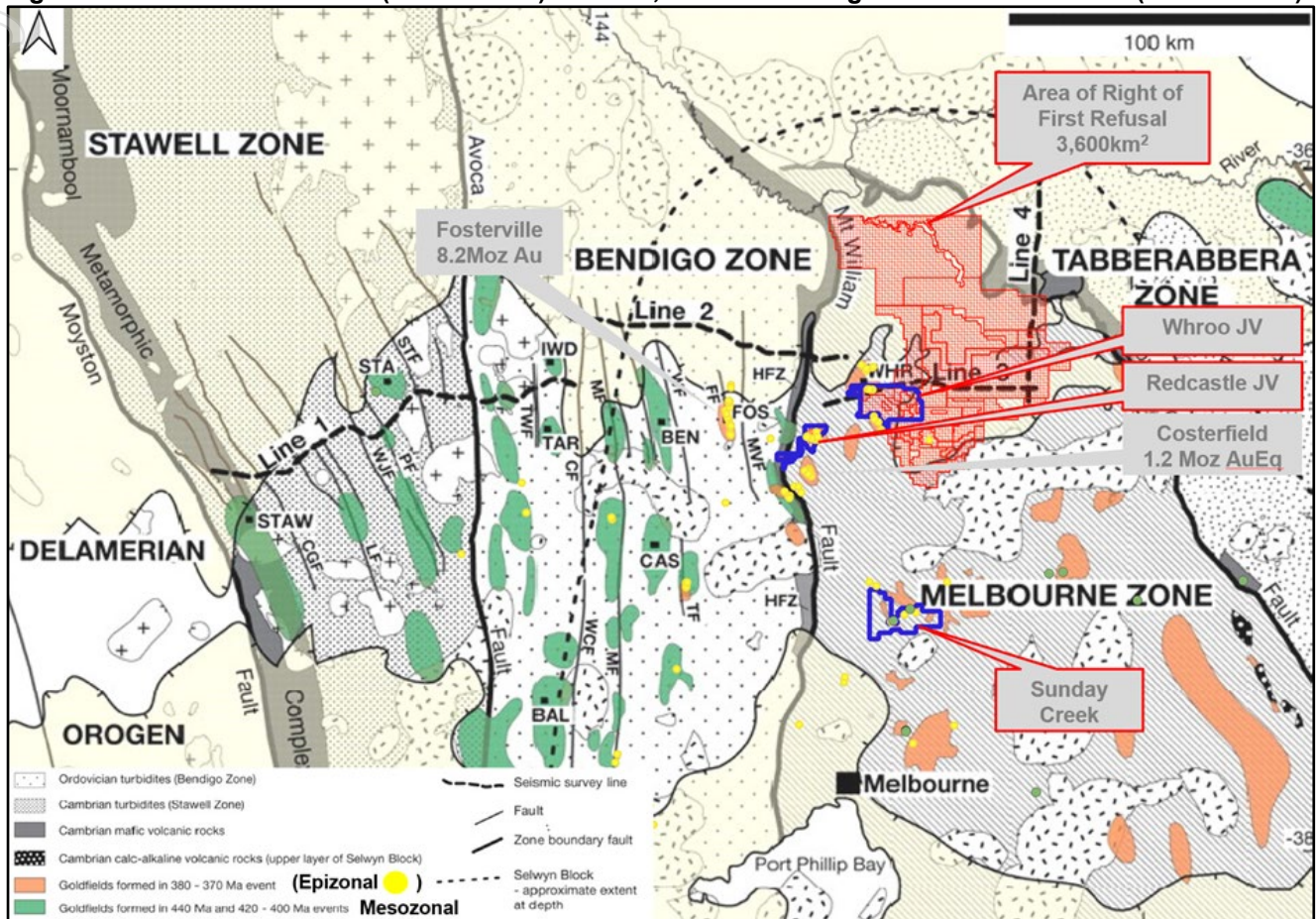
Mawson Gold Limited (TSX: MAW) has the option to spend the next \$1.0 million to earn a 70% interest in the Redcastle JV Property (refer Figures 3 and 4).

Mawson commenced extensive geophysical surveys and diamond drilling at Redcastle during the September quarter. The surveys being carried out include aerial LiDAR (Light Detection and Ranging), gradient-array Induced Polarisation (IP), dipole-dipole IP, ground magnetics and ground gravity.



The principal historical mines are being diamond drilled for the first time ever to establish the major structural controls on gold mineralisation. Subsequent drilling by Mawson Gold will target anomalies outlined from the various geophysical surveys as they are completed.

**Figure 3 199 km<sup>2</sup> Whroo JV (blue outline) within 3,600 km<sup>2</sup> Waranga Domain Tenements (red hatched)**



Note: Mawson Figure, modified from Willman et. al, 2010: *Economic Geology* (2010) 105 (5): 895–915

#### **Doctors Gully Joint Venture / Whroo Joint Venture** (Nagambie Resources currently 100%)

Mawson Gold had the option to spend the next \$1.0 million to earn a 70% interest in the 4 sq km Doctors Gully tenement (RL 2019) and commenced field work at the property during the September quarter.

Negotiations to expand the option / joint venture (JV) from 4 sq km to 199 sq km on improved terms, and rename it the Whroo JV, were carried out during the quarter. On 14 October 2020, Nagambie and Mawson announced the signing of the expanded JV agreement. The expanded JV is subject to approval of Nagambie's shareholders, which will be sought at Nagambie's upcoming Annual General Meeting.

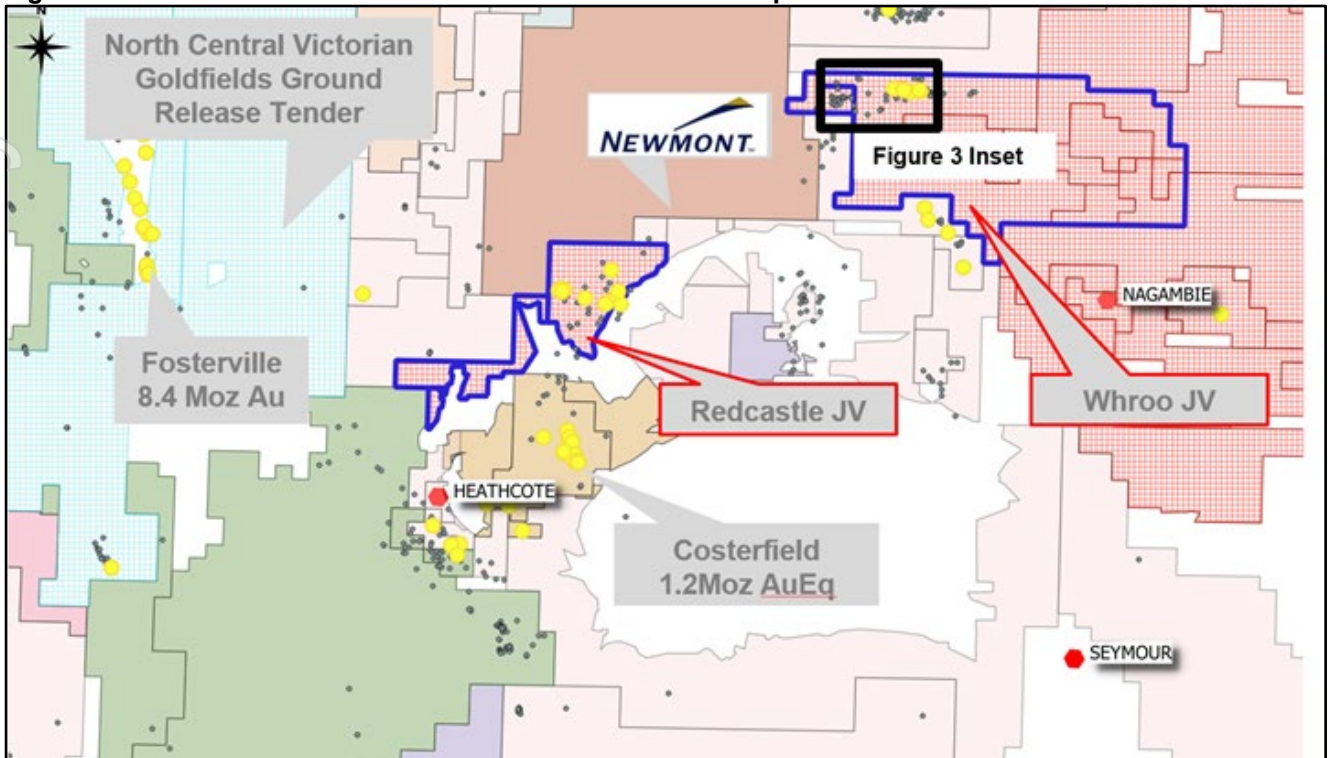
The Whroo JV covers the following 100%-owned contiguous Nagambie gold tenements (refer Figures 3 and 4) in the Waranga Domain, the northern portion of the greatly underexplored Melbourne Zone in Victoria:

- ❖ Four granted exploration licences - EL6158 (Rushworth, 46 sq km), EL6212 (Reedy Lake, 17 sq km), EL7205 (Angustown, 69 sq km) and EL7209 (Goulburn West, 34 sq km);
- ❖ Two exploration licence applications - ELA7237 (Kirwans North 1, 20 sq km) and ELA7238 (Kirwans North 2, 9 sq km); and
- ❖ One granted retention licence - RL2019 (Doctors Gully, 4 sq km).

The Whroo JV Property starts to the north of the Wandean oxide-gold mineralisation and runs northwards to the historic gold mines at Whroo (including the Balaclava Mine) and White Hills (including Doctors Gully). These northern mines are located in a roughly-east-west trend of several Whroo anticlines and thrust faults (refer historical Figure 5). The northern Balaclava and Doctors Gully Thrust Faults can be compared to the east-west-striking Nagambie Mine, Racecourse, Wandean and Wandean North Thrust Faults to the south.

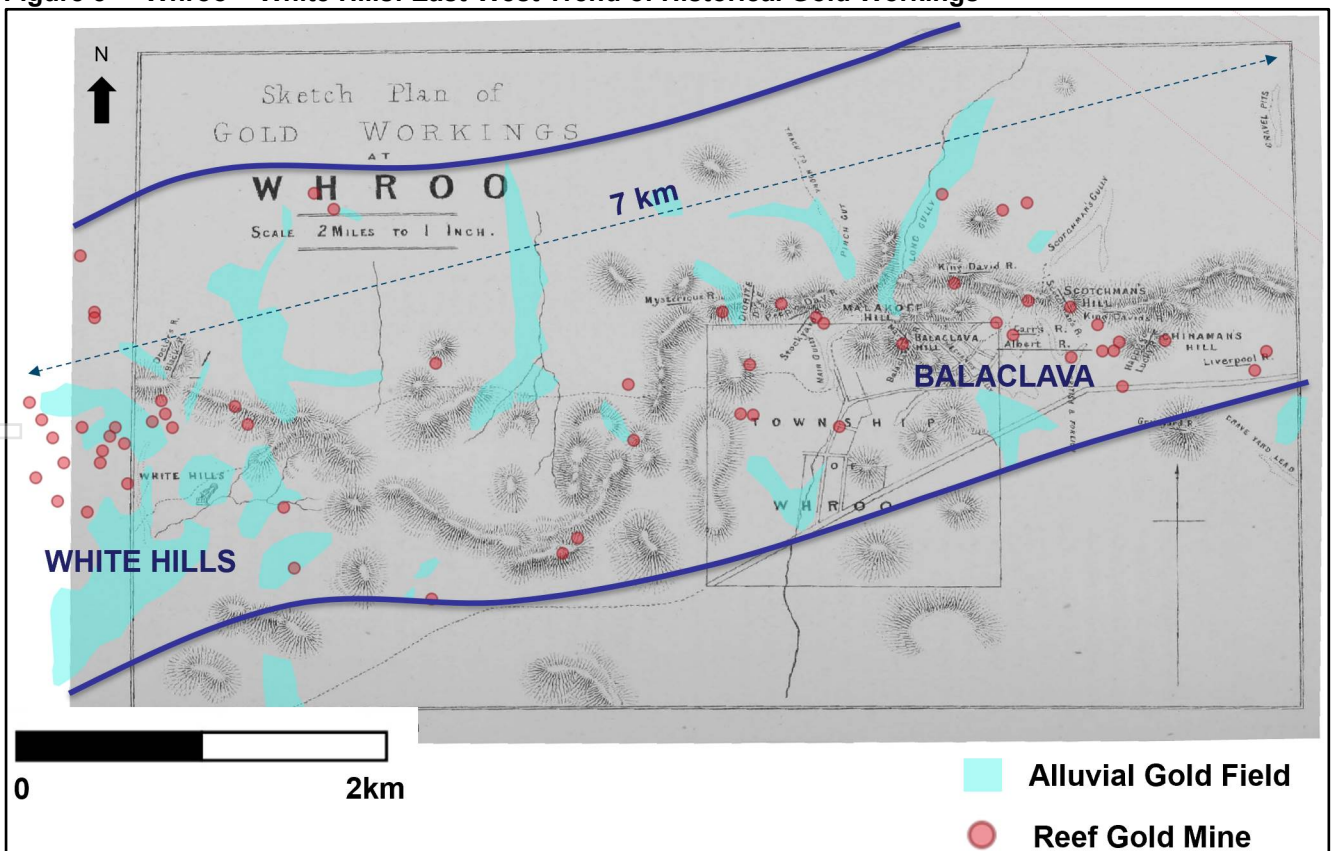


Figure 4 NRL 100%-owned Whroo JV and Redcastle JV Properties



Note: Adapted from Mawson Figure.

Figure 5 Whroo – White Hills: East-West Trend of Historical Gold Workings



Note: Mawson Figure, based on Plan of Whroo Gold Workings (from Bradley 1869).

Mawson is paying \$100,000 cash to Nagambie upon approval of the JV at Nagambie's 2020 AGM and committing to spend an additional \$400,000 in the first year to earn no interest in the Whroo JV Property.

Mawson then has the option to spend a cumulative \$2.75M (JV expenditure plus cash to Nagambie) to earn a 60% interest in the Whroo JV Property. When Mawson has earned that 60% interest, Nagambie has the option to call for the formation of a 60:40 Mawson:Nagambie JV. If Nagambie does not exercise that 60:40 option, Mawson then has two options: (1) to call for the formation of a 60:40 JV; or (2) to spend an additional \$1.5M (cumulative \$4.25M of JV expenditure and cash to Nagambie) to earn a 70% interest in the Whroo JV Property, leading to the formation of a 70:30 Mawson:Nagambie JV.

### **Gold Tenements and Changes**

The Company's tenements as at 30 September 2020, totalling 3,694.6 sq km, are listed in Table 1.

**Table 1 Nagambie Resources Group Tenements as at 30 September 2020**

<b>Tenement Number</b>	<b>Tenement Name</b>	<b>sq km</b>
<b>MIN 5412</b>	<b>Nagambie Mining Licence</b>	<b>3.6</b>
EL 5430	Bunganail Exploration Licence	160.0
EL 5511	Nagambie Central Exploration Licence	24.0
EL 6158	Rushworth Exploration Licence	46.0
EL 6212	Reedy Lake North Exploration Licence	17.0
EL 6352	Miepoll Exploration Licence	414.0
EL 6421	Pranjip Exploration Licence	94.0
EL 6508	Tabilk Exploration Licence	63.0
EL 6606	Gowangardie Exploration Licence	120.0
EL 6719	Euroa Exploration Licence	81.0
EL 6720	Tatura Exploration Licence	199.0
EL 6731	Arcadia Exploration Licence	386.0
EL 6748	Waranga Exploration Licence	136.0
EL 6937	Nagambie East Exploration Licence	10.0
ELA 6877	Nagambie Exploration Licence Application	8.0
ELA 7205	Angustown Exploration Licence Application	69.0
ELA 7207	Arcadia Exploration Licence Application	156.0
ELA 7208	Cullens Road Exploration Licence Application	29.0
ELA 7209	Goulburn West Exploration Licence Application	34.0
ELA 7210	Locksley Exploration Licence Application	26.0
EL 7211	Shepparton Exploration Licence	498.0
ELA 7212	Shepparton North Exploration Licence Application	321.0
ELA 7213	Pederick Exploration Licence Application	683.0
ELA 7237	Kirwans North (1) Exploration Licence Application	20.0
ELA 7238	Kirwans North (2) Exploration Licence Application	9.0
ELA 7264	Resource Recovery Exploration Licence Application	1.0
ELA 7265	Nagambie Town Exploration Licence Application	8.0
RL 2019	Doctors Gully Retention Licence	4.0
<b>Total Waranga Domain</b>		<b>3,619.6</b>
EL 5546	Redcastle Exploration Licence	51.0
ELA 7498	Cornella Exploration Licence Application	19.0
ELA 7499	Sheoak Exploration Licence Application	5.0
<b>Total</b>		<b>3,694.6</b>

During the quarter, Nagambie Resources pegged ELA 7498 Cornella of 19 sq km and ELA 7499 Sheoak of 5 sq km, both adjacent to EL5546 Redcastle of 51 sq km. ELs 7498 and 7499, when granted, will become part of the Redcastle JV Property. EL 7211 Shepparton of 498 sq km was granted.

### **POTENTIAL BACTERIAL RECOVERY OF GOLD IN HISTORIC HEAP LEACH PAD**

Total recorded gold production from the Nagambie Mine cyanide heap between 1989 and 1997 was 134,000 ounces and Nagambie Resources considers that a significant amount of gold remains in the heap. In 1997, the average price of gold was around A\$450 per ounce. Currently, the price of gold is around A\$2,600 per ounce, over five times the price in 1997. In the USA, the use of naturally-occurring bacteria in solution has been shown to get significant recovery of residual gold in cyanide heap leach pads.

During the quarter, the Company continued to investigate the ways it could recover residual gold from the heap using naturally-occurring bacteria and to establish which laboratories are best equipped to carry out the bacterial speciation testwork required at an acceptable cost.

Nagambie Resources is looking to commence laboratory work early in 2021.

### **PASS PROJECT**

The North East Link Project (NELP) tender closed as scheduled in May this year, with Nagambie asked to provide pricing for “Underwater Storage” PASS Management at the Nagambie Mine. NELP will be the biggest-ever road infrastructure project in Victoria and will require the management of around 5.4 million tonnes of PASS rock plus 1.2 million tonnes of PASS soil which will be excavated 24x7 by large tunnel boring machines.

Normal Victorian Government business has been significantly delayed by Covid-19. The State budget is usually delivered in May but the 2020/21 budget is now expected to be delivered in November. As a result, the winning tenderer for the construction of NELP may not be announced until early 2021.

### **CORPORATE**

#### **Cash**

At 30 September 2020, total cash held by the group was \$730,000.

#### **Mawson Gold Limited Shares (TSX: MAW)**

At 30 June 2020, Nagambie held 9.5 million MAW shares which had a total market value of \$3,954,000.

During the September quarter, Nagambie sold 0.5 million MAW shares, raising net proceeds of \$222,000. At 30 September 2020, the remaining 9.0 million MAW shares had a market value of \$3,677,000.

Under the agreements with Mawson, Nagambie could sell up to 1.875 million MAW shares during the December quarter which, as at 30 September 2020, had a market value of \$766,000.



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.*