

Annual General Meeting CEO Presentation 29 November 2019

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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 Mining 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.

STATEMENT AS TO COMPETENCY

The Exploration Results in this report have been compiled by Dr Rod Boucher and Mr Geoff Turner. Rod Boucher has a PhD in Geology, is a Member and RPGeo of the Australian Institute of Geoscientists and is a Member of the Australian Institute of Mining and Metallurgy. Geoff Turner is a Fellow of the Australian Institute of Geoscientists. Both Rod Boucher and Geoff Turner have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which they are undertaking, to qualify as Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Both consent to the inclusion in this report of these matters based on the information in the form and context in which it appears. 29 November 2019

Strategy overview





Gold Model



Gold model for discovery of Fosterville-style high-grade underground sulphide-gold deposits in the Waranga Province

- Waranga Geological Model
- Waranga Mineralisation Model





- The first two areas to be considered are Nagambie Mine West (NMW) and Wandean
- Gold targeting was advanced significantly during the year:
 - Diamond drilling
 - Induced Polarisation (IP) surveys
 - Radial DTH IP survey
 - Soil sampling

Waranga Geological Model



- Crustal Faults (circa 40 km deep) Striking North West
 - Hot hydrothermal gold-rich sulphidic fluids rose under pressure up deep crustal faults circa 377 million years ago.
- Near-Surface Thrust Faults (circa 6 km deep) Striking East West
 - The surface thrusts (faults) in the Waranga Province resulted from regional north-south compression that cracked, at irregular intervals, the thick sequence of sandstones and siltstones.
- Intersections of Crustal and Near-Surface Thrust Faults
 - At the intersections, the crustal fluids travelled under pressure along the surface faults to iron-rich sandstones and siltstones favourable to the deposition of gold with arsenopyrite and stibnite.



Waranga Mineralisation Model



- When the temperature and pressure conditions at formation fell to conducive levels, precipitation of quartz, various carbonates (principally calcium carbonate, calcite), pyrite (iron sulphide), arsenopyrite (arsenic-iron sulphide), stibnite (antimony sulphide) and gold from the hydrothermal fluids took place
- Gold grades correlate well with both % pyrite and % arsenopyrite;
- Sulphide gold mineralisation will occur in folded and fractured siltstone-rich zones, but more intense mineralisation will occur in the brittle sandstone-rich zones
- At NMW, it appears the intensity or grade of sulphide mineralisation increases closer to the Wandean Crustal Fault, indicating the pathway for gold at the Nagambie Mine is from this fault.

Waranga Mineralisation model





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Gold Model





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Nagambie Mine

NAD002 and NAD003

- Drilling intersected 'centre' of IP chargeability high
- Here, highest pyrite and quartz concentrations were intersected

IP anomaly accurately delineated the quartz-sulphide-gold hydrothermal mineralisation under the East Pit to 400m depth below surface





Nagambie Mine West



NND001



Quartz and pyrite appear to be associated with thrusts and roughly delineated by IP chargeability high.

Nagambie Mine West



• NND002



Radial (DTH) IP in NND002



- Trialled Radial DTH IP as a tool to indicate anomalous sulphide zones at depths greater than 400m below surface, as a way of guiding future drilling in each area
- 12 radial survey lines up to 1 km in length and probe at 400m depth
- A chargeability high was indicated south west of the West Pit
- This target is supported by surface IP survey, the intersection of the NMT by NND001.

Radial-DTH) IP in NND002





Gold-in-soil sampling



- Total gold, arsenic and antimony assays
- Anomaly south west of the West Pit is supported by Radial-DTH IP



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Lithogeochemical Analysis



- Hydrothermal alteration of sediments
- Undertaken by Dr Denis Arne a preeminent consulting geochemist in Victoria
- All the Nagambie Mine and Nagambie Mine West holes and WTD001 at Wandean exhibited significant Fosterville-style hydrothermal alteration of the sediments. The sediments in the two Nagambie Mine West holes also showed increasing evidence of arsenic towards the bottom of the holes, indicating a more prospective mineralising structure to the south.

Nagambie Mine West



- IP survey anomalies appear to delineate pyrite and quartz mineralisation with increasing concentrations towards WCF
- Evidence of Fosterville –style hydrothermal alternation in NND001 and NND002 may indicate alteration is increasing toward WCF
- Radial-DTH IP and soil sampling appear to delineate prospective mineralisation to the west of the West Pit closer to the WCF



Nagambie Mine West



Planned exploration

 IP survey over the WCF and intersections with Nagambie Mine and Zanelli Thrusts



Wandean



- Drill hole WTD001 and WTD002
- IP survey (6 lines over previously discovered oxidegold)
- Designed to test for potential sulphide-gold zones in the unoxidized sedimentary rocks beneath both the 2014 oxide gold discovery and a northern gold-in-soil anomaly

Wandean IP survey





Wandean drill holes





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WTD002



- Significant fault zones were noted during drilling but only minor disseminated sulphides were intersected, not enough to explain the strong Induced Polarisation (IP) chargeability anomaly.
- The drilled hole traversed around 15 metres below this chargeability high and geological reconstruction post-logging will check if faulting may vector to mineralisation above.
- Planning for follow-up drilling at Wandean will await the detailed logging of WTD002 and full geological reconstruction of the stratigraphy, faulting and folding with that for the underlying WTD001.
- In addition, samples of the sediments in WTD002 will be analysed for hydrothermal alteration.
- Carbonates were noted in WTD002 close to the chargeability target zone and establishing the position of maximum hydrothermal alteration of the sediments could provide an important vector for subsequent drilling.





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Future exploration









Nagambie Resources has an EPA-approved Environment Management Plan to store PASS in the legacy water-filled pits at the Nagambie Mine as part of the proposed rehabilitation of those pits. PASS capacity of the pits is around 5.0 million tonnes.



- Release of the North East Link Project EES
 - 6.6 Mt of WASS
 - Required to manage excavated spoil in accordance with the waste hierarchy and relevant <u>best practice principles</u>
- EPA confirmed WASS disposal to landfill will attract the \$65.90 per tonne landfill levy, meaning landfill disposal is an uneconomic approach compared to liming and underwater storage



Quantity of WASS that will be generated in the next 8 years

Waste Acid Sulfate Soil and Rock (WASS)													
m ³ ex-situ = m ³ in-situ x 1.3 bulking factor			Soil and Rock splits for West Gate, Metro Rail and North East Link based on EES Data										
	Soil	Rock	Soil	Rock	Total	Total	SG Soil	SG Soil	SG Rock	SG Rock	Soil	Rock	Total
	m³ in-situ	m³ in-situ	m³ ex-situ	m³ ex-situ	m³ in-situ	m³ ex-situ	in-situ	ex-situ	in-situ	ex-situ	tonnes	tonnes	tonnes
West Gate Tunnel	85,000	0	110,500	0	85,000	110,500	2.00	1.54	2.65	2.04	170,000	0	170,000
Metro Rail	37,000	514,000	48,100	668,200	551,000	716,300	2.00	1.54	2.65	2.04	74,000	1,362,100	1,436,100
North East Link	594,000	2,036,000	772,200	2,646,800	2,630,000	3,419,000	2.00	1.54	2.65	2.04	1,188,000	5,395,400	6,583,400
2 x Road/Rail Crossings	39,900	0	51,870	0	39,900	51,870	2.00	1.54	2.65	2.04	79,800	0	79,800
Total WASS	755,900	2,550,000	982,670	3,315,000	3,305,900	4,297,670	2.00	1.54	2.65	2.04	1,511,80	6,757,500	8,269,300

7 Mt WASS rock









- Representations to Government in 2019
 - North East Link Project Inquiry and Assessment Committee
 - Infrastructure Victoria Advice on Recycling and Resource Recovery
 - Sustainability Victoria A Circular Economy for Victoria Creating more value and less waste
 - Department of Environment, Land, Water and Planning Climate change: Reducing Victoria's greenhouse gas emissions
- Currently working with key stakeholders to develop a comprehensive development plan, with the PASS Project at its centre, which would bring broader economic benefits to the region
- Further representations to key high-level government stakeholders in early 2020
- 3 x NELP consortia

Quarrying

CONCRETE AGGREGATES

Competitive advantages:

- 3,000,000 tonnes of material available
- Rock is already crushed
- Aggregates are suitably angular (less cement is needed)
- Aggregates are a 'recycled product'

Developments

- Currently negotiating a commercial arrangement with a large producer and supplier of concrete aggregates and gravel products in Victoria
- Hire of Aztec 205MF screen







Re-processing 'fines' for gold

- Based on historic data, heap leach material could average 0.2 g/t of gold*
- Potentially 19,000+ ounces of Gold in the 'fines'
- Potential value of gold in fines before recovery ≈ \$38m (at \$2,000 / ounce)

* 0.2 g/t of gold based on historically reported head grade of 1.0 g/t and reported gold recovery of 80%. The estimation provided is historical in nature and not reported in accordance with the JORC 2012 Code. A competent person has not done sufficient work to classify the historical estimates as mineral resources or ore reserves in accordance with the JORC 2012 Code. It is uncertain that following evaluation and/or further exploration work that the historical estimates or ore reserves in accordance with the JORC 2012 Code. It is uncertain that following evaluation and/or further exploration work that the historical estimates will be able to be reported as mineral resources or ore reserves in accordance with the JORC 2012 Code.

Sand and clay quarry

- Business case favours a risk sharing approach (production partner) at this stage
- Board made decision to focus available resources on exploration
- Discussions with interested parties will continue this year











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