

JUNE 2019 QUARTERLY REPORT

HIGHLIGHTS

- Compelling sulphide-gold drill target delineated at Wandean, 300m north of the 2014 surface oxide-gold discovery. Open to the east and west, the target zone is supported by:
 - ✓ high IP chargeability over the full 500m surveyed by Ground IP;
 - ✓ coincident gold-in-soil anomaly;
 - ✓ coincident thrust fault logged in diamond hole WTD001; and
 - ✓ significant hydrothermal alteration in WTD001.
- Promising sulphide-gold drill target indicated immediately south west of the oxide-gold West Pit at the Nagambie Mine. The target is supported by:
 - ✓ high IP chargeability anomaly from Radial-DTH IP;
 - ✓ coincident gold-in-soil anomaly; and
 - ✓ significant hydrothermal alteration and increasing arsenic at depth in diamond holes NND001 and NND002, consistent with a mineralising thrust fault further to the south of the Nagambie Mine Thrust.
- Additional sulphide-gold drill target indicated by Radial-DTH IP adjacent to the NAD001 hole (also indicated by previous Ground IP). Drilling of a further Radial-DTH IP target commencing 750m west of NND002 will await the results of additional Ground IP being planned to cover the area to the west.
- A leading environmental engineering firm, GHD's independent review of WASS (waste acid sulfate soil and rock) in committed infrastructure projects at present indicates 4.3 million m³ ex-situ or approximately 8.3 million tonnes require environmentally appropriate management.
- Documented EPA policy discourages disposal of WASS to landfill and encourages its management at facilities with an EPA-approved Environment Management Plan (EMP). In practical terms, underwater storage (prevent oxidation) ranks ahead of "liming" (reduce / neutralise acidity) while landfilling is worst practice in terms of the environment and sustainability.

COMMENTARY

Nagambie Resources' Chairman, Mike Trumbull said: "The Fostervillestyle sulphide-gold drill target at Wandean shapes as our best target to date given the number of coincident anomalies supporting it. The recent exploration work at Wandean has benefited from our experience of diamond drilling IP anomalies near the Nagambie Mine.

"Radial-DTH IP and lithogeochemical testing for hydrothermal alteration of sediments have quickly shown to be valuable tools, generating more specific drill targets and vectoring prospective zones respectively.

"Total WASS requiring management over the next 10 to 15 years will probably exceed 20 million tonnes. This is a very big number given all the other waste handling issues besetting a growing Melbourne, as evidenced by the current IV Waste Review for the Victorian Government. Nagambie Resources is convinced more than ever that its 'best practice' underwater storage facility for WASS, the largest such site in Victoria, is a valuable asset."

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NAGAMBIE RESOURCES

Exploration for Fostervillestyle, structural-controlled, high grade sulphide-gold underground deposits within 2,000 sq km of Waranga Province tenements is being methodically carried out using geophysical targeting techniques and oriented diamond drilling.

Underwater storage of sulphidic excavation material (PASS) in the two legacy gold pits at the Nagambie Mine is an excellent environmental fit with major infrastructure projects for Melbourne such as Metro Rail, West Gate Tunnel and 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 planned.

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

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Board

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

James Earle CEO

GOLD EXPLORATION

Waranga Geological Model (WaGM)

Nagambie Resources continued to improve and refine the WaGM for Fosterville-style underground gold mineralisation in the Waranga Domain during the quarter. Two new exploration techniques were trialled, both with encouraging results. The first was lithogeochemical testing of diamond drill core for hydrothermal alteration of the unoxidised sedimentary rocks. The second technique was radial-down-the-hole induced polarisation (radial-DTH IP).

Together with the previously utilised geophysical methods (aeromagnetics, gravity and ground IP), geochemistry (proprietary soil sampling), field mapping and drilling (aircore, reverse circulation (RC) and diamond core), the new techniques further improve the ability of Nagambie Resources to establish coincident anomalies in prospective areas. Relevant anomalies in the Waranga Domain can reflect structure (particularly thrust faulting), geochemistry (gold, arsenic and antimony), high IP chargeability (the presence of sulphides) and hydrothermal alteration (sulphide-gold mineralisation results from the upward movement of hydrothermal fluids from the Earth's crust).

A target based on a singular anomaly is high risk. Two coincident anomalies developed using different methodologies will greatly improve the likelihood of exploration success. Targets with three or more separately-established anomalies can be considered relatively low risk by comparison.

Lithogeochemical Analysis to Establish Extent of Hydrothermal Alteration

Dr Dennis Arne, a preeminent consulting geochemist in Victoria, was commissioned by Nagambie Resources during the quarter to advise on the alteration of the sediments intersected in the diamond drilling program. He was asked to obtain new diamond-core geochemical and hyperspectral data from beneath the Nagambie open pits to characterise the known Nagambie hydrothermal system (holes NAD001 and NAD002) and extend this understanding to regional holes NND001 and NND002 (Nagambie Mine West), CAD002 (Cahill), RAD001 (Racecourse) and WTD001 (Wandean).

He was also commissioned to compare the results obtained to known hydrothermal alteration at the Fosterville gold mine and other mines using published data. His working hypothesis is that the hydrothermal alteration in the Waranga Domain is similar to that observed at Fosterville and that it can be used to vector towards and/or prioritise structures.

Dr Arne supervised the preparation of half-core and quarter-core samples at least every 50m downhole in the unoxidised portions of the seven diamond holes chosen (only CAD002 was not chosen) and their subsequent geochemical and hyperspectral laboratory analysis.

The results from Dr Arne's work for Nagambie Resources have proved to be very useful and lithogeochemical analysis of selected diamond holes will be carried out in the future.

No significant hydrothermal alteration of the sediments was found in the Cahill and Racecourse holes. The result for the Cahill hole was expected, given that the only significant sulphide intersected was stratiform syngenetic pyrite and not hydrothermal in nature. The result for the Racecourse hole was not expected and is valuable in that it downgrades that area such that Nagambie Resources will avoid the cost, otherwise, of follow up drilling.

All the Nagambie Mine and Nagambie Mine West holes exhibited significant Fosterville-style hydrothermal alteration of the sediments. The sediments in the two Nagambie Mine West holes, both drilled north to south, also showed increasing evidence of arsenic towards the bottom of the holes, indicating a more prospective mineralising structure to the south.

The unoxidised sediments in WTD001 also exhibited significant Fosterville-style hydrothermal alteration, consistent with a prospective structure (or structures) to the north. This finding also adds to the evidence supporting the northern IP sulphide-gold target.

Radial-DTH IP Indicates Sulphide-Gold Targets adjacent to the Nagambie Mine

Zonge Engineering and Research Organisation ("Zonge") carried out the first trial of Radial-DTH IP on diamond hole NND002.

12 radial survey lines, up to 1,000m in length (refer Figure 1), were established with the down-hole probe set at 400m depth in temporary PVC casing in NND002.

The results achieved were very encouraging. The sulphide-gold targets established are summarised in the second and third dot points in Highlights on page 1. A detailed report was released to the ASX on 29 July 2019.



Figure 1 Radial-DTH IP Chargeability on Diamond Hole NND002

Wandean Sulphide-Gold Target Delineated

A significant Fosterville-style underground sulphide-gold target zone has been delineated at Wandean. The first dot point in Highlights on page 1 summarises the compelling drill target which is based on coincident Ground IP and gold-in-soil anomalies together with a northern thrust fault logged in diamond hole WTD001 and the existence of significant hydrothermal alteration of the sediments in WTD001.

A detailed report was released to the ASX on 24 July 2019. A plan of the 500m east-west drill target zone is shown in Figure 2. A section showing the WTD001 drill trace and the IP chargeability high at 334750E is shown on Figure 3.

Gold Tenements and Changes

Nagambie Resources group tenements as at 30 June 2019 are listed in detail in Appendix 1 (plan and table).

EL 6720 "Tatura" 214 sq km, EL 6731 "Arcadia" 493 sq km, EL 6748 "Waranga" 136 sq km and EL 6937 "Nagambie East" were all granted during the quarter.



Figure 2 Wandean Plan showing High-IP-Chargeability Sulphide-Gold Drill Target Zone



Figure 3 Wandean Section (looking West) showing WTD001 and IP Sulphide-Gold Target

EL 5536 "Wandean North" was reduced in size to 27 sq km, EL 5546 "Redcastle" to 51 sq km, EL 6158 "Rushworth" to 46 sq km, EL 6212 "Reedy Lake" to 17 sq km, EL 6352 "Miepoll" to 414 sq km, EL 6421 "Pranjip" to 94 sq km and EL 6719 "Euroa" to 132 sq km.

PASS MANAGEMENT PROJECT

Nagambie Resources has an EPA-approved Environment Management Plan (EMP) to store PASS (potential acid sulfate soil and rock) in the legacy water-filled pits at the Nagambie Mine as part of the rehabilitation of those pits. PASS capacity is around 5.0 million tonnes.

WASS (waste acid sulfate soil and rock) includes both PASS and AASS (actual acid sulfate soil and rock).

WASS Policy and Landfill Policy

What encouraged Nagambie Resources to set up to store PASS / WASS underwater at the Nagambie Mine and continues to encourage the Company can be summarised as follows.

The Victorian Government's WASS policy requires WASS to be handled in accordance with best practice or EPA's best practice guidelines, which provide for the following hierarchy of WASS management approaches:

- 1) Avoid disturbance
- 2) Minimise disturbance
- 3) Prevent oxidation
- 4) Treat to reduce or neutralise acidity
- 5) Offsite reuse or disposal

The EPA Policy Impact Assessment (PIA) of the WASS policy states in particular:

"EPA aims to work with industry to promote and encourage reuse options rather than disposal of acid sulfate soils to landfill. In particular, EPA will encourage the diversion of this material to unlicensed premises who have an EMP approved under the Policy setting out reuse proposals, in preference to disposal at landfill."

EPA WASS policy therefore can be summarised as discouraging disposal to landfill and encouraging its management at facilities with an approved EMP, with a preference for those facilities that implement a management approach higher up the management hierarchy. In practical terms, underwater storage (prevent oxidation) ranks ahead of "liming" (reduce or neutralise acidity) while landfilling is worst practice in terms of the environment and sustainability.

The EPA Landfill Policy (Siting, design, operation and rehabilitation of landfills) document:

- ✓ encourages "waste avoidance and recycling rather than filling up our landfills [as] an important way
 of contributing to a more sustainable Victoria";
- ✓ encourages "use of landfills [as] a last resort";
- ✓ encourages use of "management options higher up the wastes hierarchy. In particular, the policy reinforces that landfills are the least preferred waste management option and therefore their development and use should be kept to a minimum"; and
- ✓ states "the construction of a landfill comes at a cost and decreasing the amount of waste disposed to landfill will conserve valuable landfill space and extend the life of a landfill's capacity".

The most recent (12 July 2019) independent summary of WASS management requirements for the major committed Melbourne infrastructure projects was prepared by consultant GHD as input for the public hearings being conducted into the Environment Effects Statement (EES) for the North East Link Project by the Inquiry and Advisory Committee (IAC). The link to the GHD report, tabled document 24x is https://engage.vic.gov.au/north-east-link-project/north-east-link-project-tabled-documents.

GHD considered bulked (ex-situ) m³ volume figures (ex-situ m³ = in-situ m³ x 1.3 bulking factor) in their analysis of WASS management requirements. Nagambie Resources has taken GHD's total figures and applied the WASS soil and WASS rock splits from the relevant EES reports to prepare the summary WASS

figures in Table 1.

The total GHD committed-to-date WASS ex-situ m³ figure of 4.3 million m³ equates to approximately 8.3 million tonnes (overall average ex-situ SG of 1.92 and average in-situ SG of 2.50) based on specific gravity (SG) range figures in <u>http://www.edumine.com/xtoolkit/tables/sgtables.htm</u>. Overall, WASS soil and WASS rock represent approximately 18.3% and 81.7% respectively of the total WASS.

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 Tunnel	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	1,511,800	6,757,500	8,269,300

 Table 1
 WASS Summary for Major Melbourne Infrastructure Projects Committed to Date

With future projects under consideration such as the very large Suburban Rail Loop, Metro Rail 2 and a variation on the original East-West Link, total WASS requiring management over the next 10 to 15 years may exceed 20.0 million tonnes.

Nagambie Resources responded to the call for submissions on the North East Link Project EES to the IAC by the closing date of 7 June 2019 (submissions no. 383 and 383A of 874 in total) and the link to the public submissions is https://engage.vic.gov.au/north-east-link-project/submissions . The Nagambie Resources' submissions focused on the environmental issues involved in the management of WASS and emphasised the need to discourage disposal to landfill and encourage its management / reuse at facilities that implement a management approach higher up the waste management hierarchy – being underwater storage (prevent oxidation) and "liming" (reduce / neutralise acidity).

Nagambie Resources also responded by the closing date of 28 June 2019 to the call for submissions to the current Waste Review by Infrastructure Victoria (IV). IV's interim recommendations to the Victorian Government are due by October 2019 with the final report due in February 2020.

The CEO for IV, Michel Masson, discussing the review in a The Age article "Waste crisis is a chance to get it right", said: "Developing a sustainable approach for how, when and where we send waste to landfill is just one part of the equation". While the IV mandate goes well beyond just landfill policy, what goes to landfill and why is a critical element that Nagambie Resources addressed in its submission, with particular emphasis on WASS. The IV submission included all the environmental and sustainability issues addressed in Nagambie Resources' NELP submission. In addition, the IV submission addressed the need to consistently charge the EPA Landfill Levy on all wastes being disposed to landfill, to ensure a level playing field for all businesses involved in waste management.

In July 2019, Nagambie Resources also provided written submissions to the Government's call for input into Shifting Victoria to a Circular Economy and Climate Change: Reducing Victoria's greenhouse gas emissions. The submissions focused on how the storage of WASS beneath water contributes to a circular economy (by reusing the WASS for land rehabilitation) without the need to undertake greenhouse gas intensive liming treatment.

Constantly-generated (24/7), large quantities of WASS are yet to be produced for the Metro Tunnel and West Gate Tunnel Projects as none of the six large tunnel boring machines (TBMs) for these projects have commenced tunnelling.

Nagambie Resources will continue to encourage the Victorian Government to ensure all WASS is managed in accordance with the intent of the State's various waste management policies.

QUARRYING

Nagambie Resources is currently negotiating a commercial arrangement with a large producer and supplier of concrete aggregates and gravel products in Victoria.

CORPORATE

Cash

At 30 June 2019, total cash held by the group was \$810,000 and the \$1,000,000 Unsecured Loan Facility was undrawn. An R&D cash rebate of approximately \$700,000 is expected to be received during the September 2019 quarter.

Unlisted Options Issued to Directors, Consultants and Employees

No options were issued, exercised or expired during the quarter.

Board

Gary Davison was appointed on 15 May as a Non-Executive Director to replace Kevin Perrin who retired on 30 June.

Gary is Managing Director / Principal Mining Engineer of Mining One Pty Ltd. He helped establish Mining One in August 2005, an employee-owned, independent group which now has over 60 technical consultants. Mining One provides expertise in Australia and internationally in resource geology, mine planning, geotechnical engineering, conceptual studies, feasibility studies and corporate strategic advice.

Gary Davison has over 38 years' experience in the mining industry in Australia and overseas. His career began at Renison, Tasmania, in 1978 and he has worked at senior mine management levels in Tasmania, Western Australia, Victoria and New South Wales - covering principally underground, but also surface, mines. In the early 1990s, Gary managed the Nagambie Mine open pit and heap leach treatment operations for Perseverance.

Gary has previously been a Non-Executive Director of Unity Mining Limited, Kasbah Resources Limited and Lightning Nickel Pty Ltd.

Kevin Perrin, a very experienced CPA accountant, auditor and financial adviser, has agreed to continue as a consultant to the Company. Kevin is a committed, long-term significant shareholder in Nagambie Resources and very interested in its future growth but looks forward to spending more time travelling overseas.

Fine for Storing Waste

On 5 July 2019, the Company was fined \$20,000 in the Seymour Magistrates Court for storing industrial waste at the Nagambie Mine without a licence from EPA Victoria and ordered to pay \$11,000 in costs to the EPA.

The Magistrate ruled that the company had cooperated fully with the EPA and did not impose a conviction.

No environmental damage occurred as a result of the storage and appropriate procedures were established in 2017 to ensure that no further non-compliant storage could take place.

The company admitted allowing electronic waste (crushed TV sets) and spent bleaching earth (a by-product from producing vegetable oil) to be stored on site during periods in 2014 and 2015. The EPA had issued clean up notices for the treatment of the spent bleaching earth and the removal of all the electronic waste by the end of 2020. Treatment of the spent bleaching earth to produce organic compost to be used at the mine has been carried out, satisfying the first clean up notice. Removal of the electronic waste is being progressively carried out and will be completed by end 2020.

James Earle Chief Executive Officer

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.

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.

APPENDIX 1



Nagambie Resources Group Tenements as at 30 June 2019

Nagambie Resources Group Tenements as at 30 June 2019

Tenement Number	Tenement Name	sq km					
MIN 5412	Nagambie Mining Licence	3.6					
EL 5430	Bunganail Exploration Licence	181.0					
EL 5511	Nagambie Exploration Licence	24.0					
EL 5536	Wandean North Exploration Licence	27.0					
EL 6212	Reedy Lake North Exploration Licence	17.0					
EL 6158	Rushworth Exploration Licence	46.0					
RL 2019	Doctors Gully Retention Licence	4.0					
EL 6352	Miepoll Exploration Licence	414.0					
EL 6421	Pranjip Exploration Licence	94.0					
EL 6508	Tabilk Exploration Licence	84.0					
EL 6606	Gowangardie Exploration Licence	120.0					
EL 6719	Euroa Exploration Licence	132.0					
EL 6720	Tatura Exploration Licence	214.0					
EL 6731	Arcadia Exploration Licence	493.0					
EL 6748	Waranga Exploration Licence	136.0					
ELA 6877	Nagambie Exploration Licence Application	8.0					
EL 6937	Nagambie East Exploration Licence	10.0					
Subtotal Waranga Domain							
EL 6163	Clonbinane South Exploration Licence	79.0					
RL 6040	Clonbinane Retention Licence	3.0					
EL 5546	Redcastle Exploration Licence	51.0					
Total							