



31 October 2019

## **ACTIVITIES REPORT FOR QUARTER ENDED 30 SEPTEMBER 2019**

### **Highlights:**

- **A near-surface 65,500 ounce gold resource was modelled from the historic Bulgera reverse circulation (RC) drill hole database**
- **The new Bulgera gold resource includes 1.6 million tonnes grading 1.03 g/t gold hosted in softer near surface oxide and transitional rock**
- **Near-term mining and processing of the Bulgera gold resource is currently undergoing economic evaluation studies**
- **An 8,700 metre RC drilling programme to extend the Bulgera gold lodes beyond the historical drilling limits will commence early November**
- **At Arunta West, a 12,000 metre RC drilling programme to test the large North Dovers anomaly for iron-oxide-copper-gold (IOCG) mineralisation is underway**
- **A fully subscribed 1 for 3 Entitlement Offer has raised \$3.144 million**
- **Norwest is debt-free and currently holds cash reserves of ~\$5.5 million<sup>1</sup>**

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<sup>1</sup> Includes funds of \$3.144m received 2 October 2019, post period end, from the Company's fully subscribed Rights Issue.

## Norwest Minerals Limited Quarterly Activities Report to 30 September 2019

**Norwest Minerals Limited** (“Norwest” or “the Company”) (Australia ASX: NWM) is pleased to present its Quarterly Report for the period ending 30 September 2019.

During the period, Norwest announced a maiden gold resource of **2.0 million tonnes grading 1.03 g/t gold totaling 65,500 ounces** for its 100% owned Bulgera Gold Project (“Bulgera”). The Bulgera Gold Project is part of the gold-rich Plutonic Well Greenstone belt located 200 kilometres north of Meekatharra near the large Plutonic Gold operation. The Bulgera gold resource was estimated using a 0.7g/t gold lower cut-off. The majority of the gold mineralization is hosted by softer near-surface oxide and transitional material that is currently being assessed to determine the economic potential of near-term mining. Importantly, Norwest has finalised all statutory and land access agreements and will soon commence an 8,700 metre RC drilling programme aimed at extending the multiple gold lodes modelled immediately below and adjacent to the shallow open cuts where mining ceased in 2004.

At Arunta West, a 12,000 metre RC drilling programme to test the large North Dovers 8 x 4 kilometre magnetic-gravity anomaly for iron-oxide-copper-gold (**IOCG**) style mineralisation commenced in September. The RC drilling follows on from the Company’s maiden North Dovers diamond drilling program undertaken in May-June 2019. This drilling successfully intersected thick sequences of favourable **IOCG** geology and alteration plus minor occurrences of chalcopyrite (primary copper mineralization), pyrite (iron sulphide) and sphalerite (primary zinc mineralization)<sup>2</sup>. The Proterozoic basement at North Dovers was found to occur relatively close to surface thus allowing exploration drilling for an **IOCG** system to be conducted using cost effective reverse circulation (RC) rigs.

On 30 September Norwest announced it had raised \$3.144 million via a fully subscribed Entitlement Offer. The funds will be used to continue aggressive exploration drilling of the North Dovers IOCG anomaly and to commence resource extension drilling at the Company’s Bulgera Gold Project acquired in July of this year.

### **Bulgera Resource Estimation**

The new Bulgera gold resource modelling was undertaken by independent resource experts Hyland Geological and Mining Consultants (“HGMC”) using Bulgera’s extensive historical exploration, development and mining database. MineSight software was utilised to construct the block models and run geostatistical and variography calculations. Kriging algorithms were applied to determine block gold grades. Various lower cut-off grades were compiled however the Bulgera resource is reported using a 0.7 gram per tonne lower cut-off gold grade.

Details of the gold resource modelling and calculations are included in the JORC Tables set out in the Company’s 11 September 2019 ASX Announcement<sup>3</sup>.

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<sup>2</sup> ASX Announcement NWM 18 June 2019: “Drilling reaffirms Arunta West Project’s iron-oxide-copper-gold (IOCG) potential”

<sup>3</sup> ASX Announcement NWM 11 September 2019: “Norwest completes Bulgera database review – announces maiden Gold Resource”

## Norwest Minerals Limited Quarterly Activities Report to 30 September 2019

As at 11 September 2019, the Mineral Resource for the Bulger Gold project applying a 0.7g/t gold lower cut-off stands at:

Indicated Resources			Inferred Resources			Total Resources		
Mt	Au (g/t)	Au Ozs	Mt	Au (g/t)	Au Ozs	Mt	Au (g/t)	Au Ozs
1.23	1.04	41,100	0.76	1.0	24,400	<b>2.0</b>	<b>1.03</b>	<b>65,500</b>

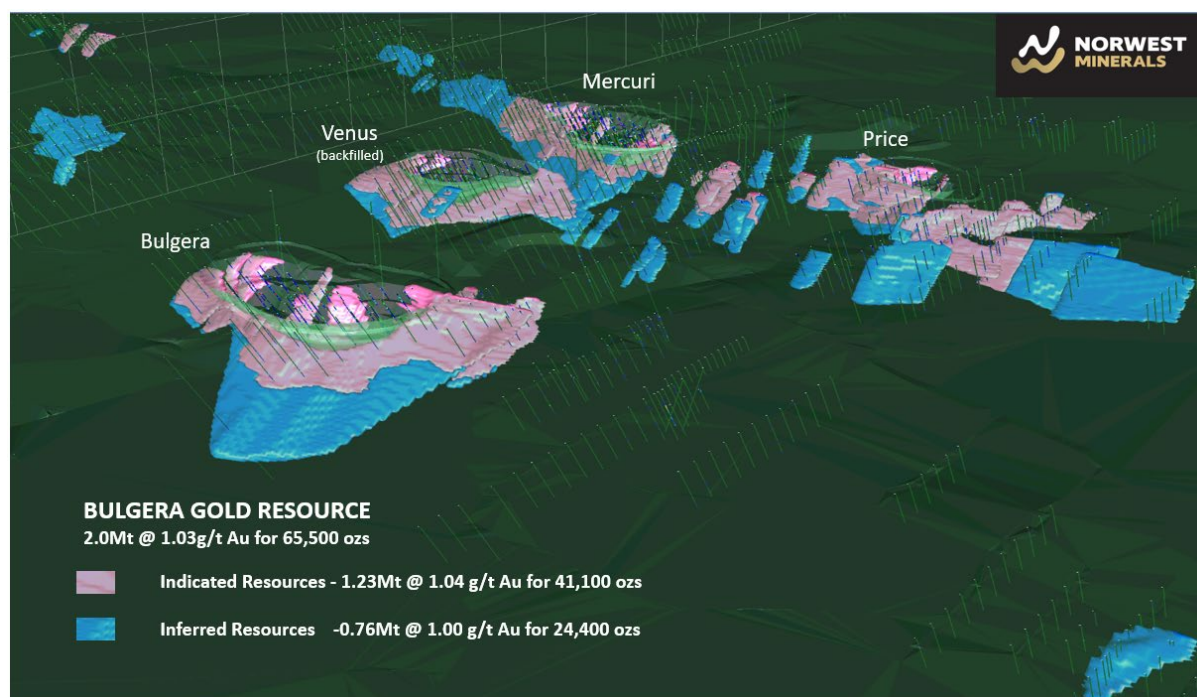


Figure 1 – Bulgera Gold resource models displaying indicated and inferred gold resource category locations.

The new resource includes **1.6 million tonnes @ 1.03 g/t gold** hosted in the softer near-surface oxide and partly-oxidized transition rock. The softer oxidized rock has cost saving potential via simple near surface mining and low-cost crushing and processing. Norwest has contracted mining experts Orelogy Pty Ltd to conduct preliminary pit optimization work and evaluate all low-cost gold processing options including mine-gate sales, heap leach processing and/or the use of a portable processing plant.

### The Oxide/Transitional and Fresh Rock Mineral Resource for the Bulgera Gold project:

Indicated Oxide / Transition			Inferred Oxide / Transition			Total Oxide / Transition		
Mt	Au (g/t)	Au Ozs	Mt	Au (g/t)	Au Ozs	Mt	Au (g/t)	Au Ozs
1.15	1.04	38,200	0.43	1.02	14,100	<b>1.58</b>	<b>1.03</b>	<b>52,300</b>
Indicated Fresh Rock			Inferred Fresh Rock			Total Fresh Rock		
Mt	Au (g/t)	Au Ozs	Mt	Au (g/t)	Au Ozs	Mt	Au (g/t)	Au Ozs
0.07	1.1	2,600	0.30	1.0	9,400	<b>0.37</b>	<b>1.0</b>	<b>12,000</b>

(Note: small numerical rounding differences occur when reporting the various gold mineral resource categories)

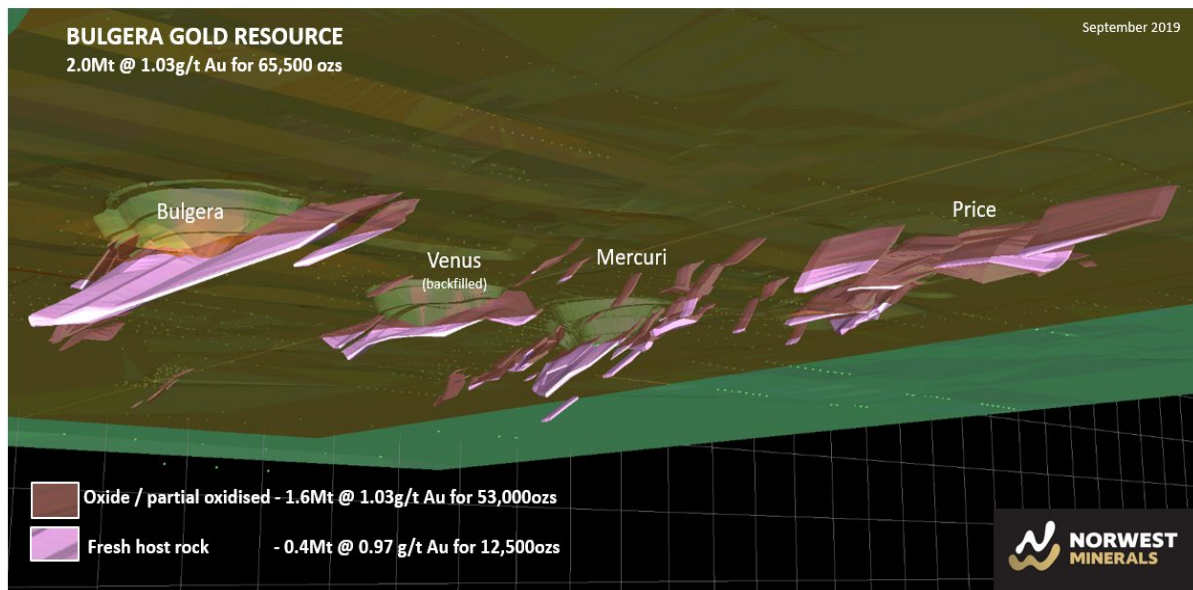


Figure 2 – Bulgera gold resource models displaying the boundary between the oxide/transition & fresh rock mineralisation.

### Bulgera Gold Exploration

The Bulgera project area has been interpreted as a faulted extension of the K1 mine sequence at Marymia defined by a system of curved thrusts where the mine sequence is offset. This is supported by the similarity in lithologies between the deposits and the magnetics which show the drag of the Bulgera trends into the interpreted fault structures<sup>4</sup>. Below, figure 3 shows the many historical Marymia gold mines and current gold deposits and prospects hosted within the main mafic/ultramafic Marymia mine sequence now held by Vango Mining Limited. These gold occurrences are located immediately west of where the host sequence is offset to the southeast and continues east as the Bulgera gold project.

Since acquiring the Marymia tenements in August 2016, Vango Mining's ongoing drilling success is primarily the result of targeting the mafic/ultramafic mine sequence below 100 vertical metres where the majority of their high-grade gold intercepts are reported. This includes Vango's flagship deposit, Trident (1.59Mt grading 8g/t gold for 410,000 ounces), as well as their more recent drill campaigns at the Marwest and Triple-P gold prospects<sup>5</sup>.

The new Bulgera resource modelling clearly shows excellent potential for Norwest to significantly increase its gold resources by drilling locations beyond where the modelled gold lodes are limited by the coverage of the historical RC drilling. Importantly, of the 422 historical RC holes drilled at Bulgera, just 140 holes extend below 50 vertical meters and only 8 RC holes penetrate below the 100 vertical metre level as displayed in figure 4 below.

Norwest has an approved program of works (POW) with the Department of Mines, Industry Regulation and Safety (DMIRS) and a new Land Access and Mineral Exploration Agreement

<sup>4</sup> Richards, R., May 2016. Information Memorandum, Bulgera Gold Project, Plutonic Well Greenstone Belt, WA

<sup>5</sup> ASX:VAN Investor Presentation, September 2019, Vango Mining Ltd., An Emerging High-Grade Gold Company



## Norwest Minerals Limited Quarterly Activities Report to 30 September 2019

with the area's traditional owners. An 8,700 metre RC drilling programme is designed to test potential gold lode extensions adjacent to and below the shallow pits and is scheduled to commence prior to the end of 2019. Norwest has submitted a second POW to test key structural targets away from the Bulgera mining centre where thick transported cover appears to have masked results from previous surface sample work. Aircore (AC) drilling will be employed to penetrate any cover material and sample the bedrock for gold mineralisation. The AC work is scheduled to commence early in the new 2020 calendar year.

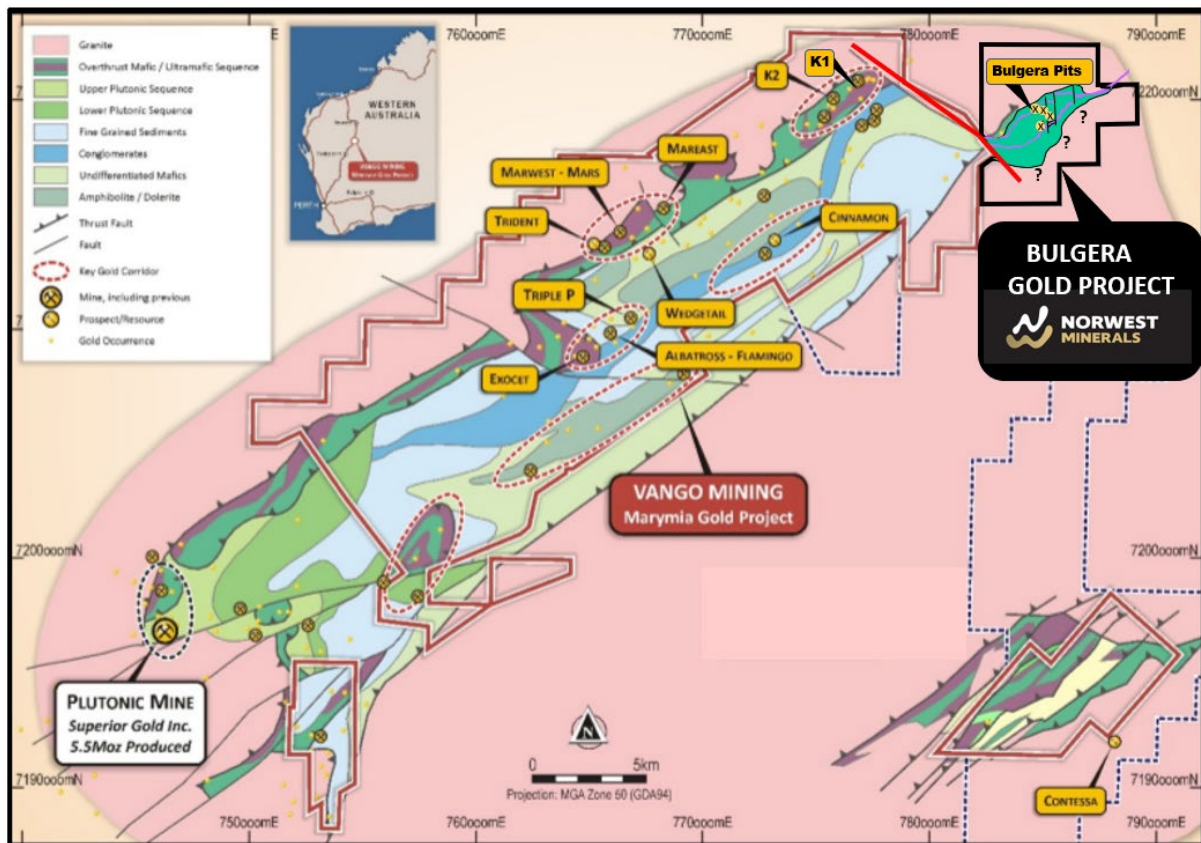


Figure 3 – Plutonic Well Greenstone Belt showing numerous Marymia gold prospects in the mafic/ultramafic sequence and where this unit is offset southeast and continues as the Bulgera gold project.

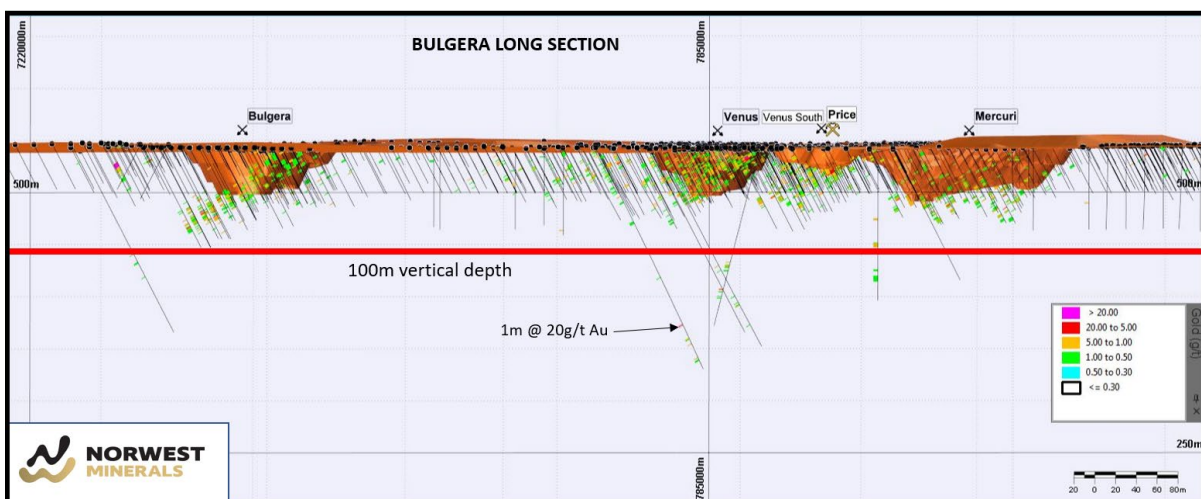


Figure 4 – Long section showing Bulgera drill hole traces and the lack of drill testing below 100 metres depth.

## Norwest Minerals Limited Quarterly Activities Report to 30 September 2019

Historical mining at Bulgera ceased in 2004. A total of **441,000 tonnes grading 1.65g/t gold** was mined and hauled to processing facilities at Marymia Mining Centre from 1996-98 and to the Plutonic Gold Mine from 2003-04<sup>6</sup>. It is apparent the shallow ore grading 1.65g/t gold was economic during the two mining phases when the gold price was < 20 AUD per gram. With today's > 70 AUD per gram gold price the Company is confident that economic mining studies of the near-surface resources will deliver a positive outcome. Further background on the Bulgera Gold project is set out in Appendix 1.

### Reverse circulation drilling of the North Dovers anomaly underway

In May of this year, three diamond holes totaling 1,524 metres were drilled into the North Dovers IOCG target. The HQ and NQ drill core shows encouraging signs of IOCG potential including hematite altered granite located adjacent to highly magnetic diorite units plus minor amounts of chalcopyrite (primary copper mineralisation), sphalerite (primary zinc mineralisation), and pyrite (iron sulphide)<sup>7</sup>.

The Proterozoic basement was encountered near surface with holes NDD1901 and NDD1902 collared into a unit of magnetic diorite prior to intersecting hematite altered granites up to 80 metres wide and ending in a syenogranite. Early structural data indicates the units dip moderately to steeply south.

With the Proterozoic bedrock close to surface, Norwest made the decision to follow-up the North Dovers diamond drilling with RC drilling which would allow full coverage across the North Dovers target zone using a 1000m x 500m grid pattern. In September, Norwest commenced a 12,000 metre RC drilling program with 80 holes averaging 150m in depth planned. The first drill assay results are expected in late October or early November.

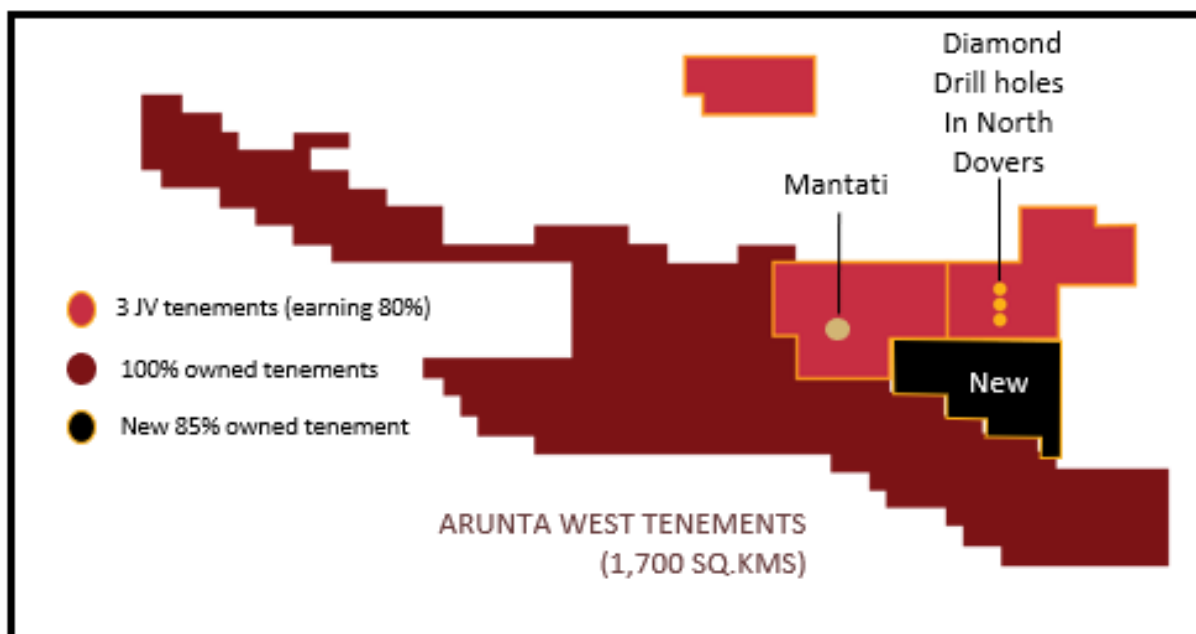


Figure 5 – Norwest's Arunta belt tenement holdings as at 30 September, 2019

<sup>6</sup> Accelerate Resources Limited Prospectus lodged with ASIC 30 November 2017

<sup>7</sup> ASX Announcement NWM 18 June 2019: "Drilling reaffirms Arunta West Project's iron-oxide-copper-gold (IOGC) potential"

## Norwest Minerals Limited Quarterly Activities Report to 30 September 2019

The Arunta West project includes a joint venture with Jervois Mining Limited (ASX:JRV 49%) (ASX:NWM 51%-manager, earning 80%), and takes in three tenements covering 345 km<sup>2</sup> of the prospective Lake Mackay district of Western Australia. Norwest also holds 100% interest in two tenements adjoining the Arunta West JV area covering an additional 1,100 square kilometres. Norwest has recently acquired 85% of a 250km<sup>2</sup> tenement located immediately south of the North Dovers anomaly as displayed in figure 5 above.

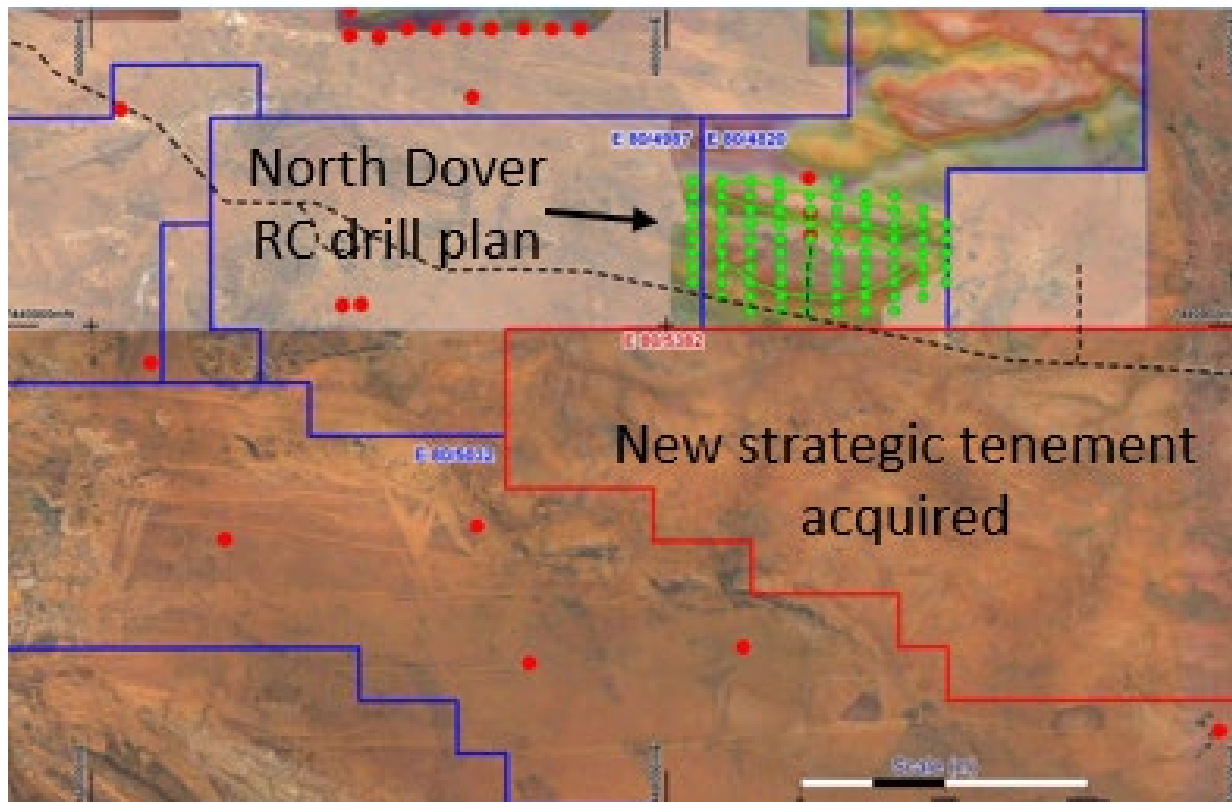


Figure 6 – The 1000 x 500 metre RC drilling pattern over the 8 x 4 kilometre North Dover magnetic- gravity anomaly.

Independence Group (IGO) along with their smaller joint venture partners hold a 19,000km<sup>2</sup> ground position immediately east of Norwest's Arunta West project with their western tenements surrounding the North Dover IOCG anomaly. The IGO joint venture has reported multiple strikes of gold (Au), copper (Cu), lead (Pb) and zinc (Zn) as well as nickel (Ni)-cobalt (Co) at prospects east along strike of Norwest's Arunta West project tenements<sup>8</sup>. IOG has committed \$4.4 million to explore their Arunta ground holdings in the 2019 financial year which included a recently completed 9,600 metre RC drilling programme.

<sup>8</sup> ASX:PRX - Quarterly Report for the 3 months ended 30 June 2019

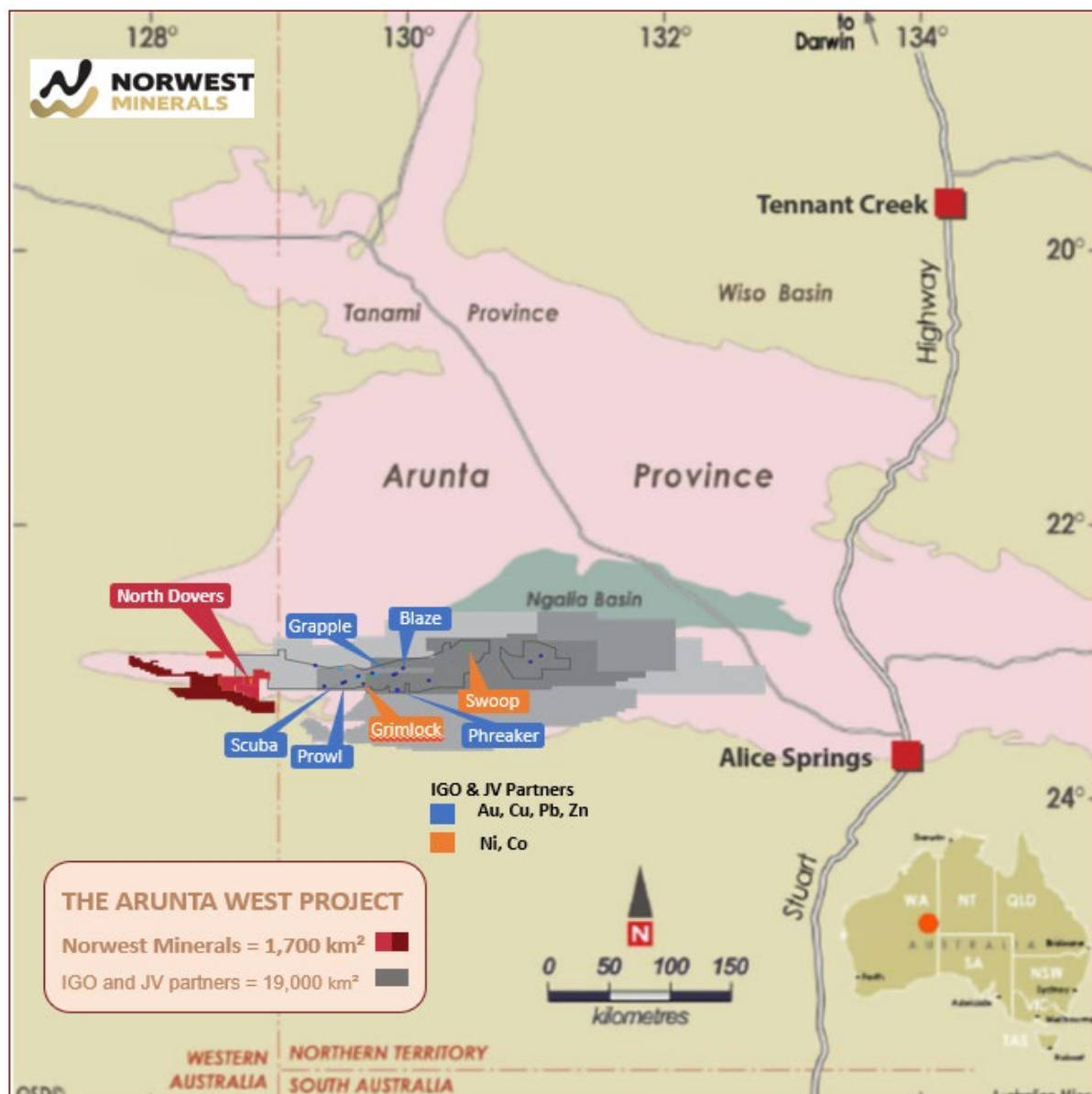


Figure 7 – Tenement holding of Norwest vs Independence Group and their joint venture partners.

### Warriedar Project (100%)

A small surface sample program included the collection of 20 rock chip samples around historical workings, outcrops, exposed quartz veins and float. Several anomalous gold results were returned including one grading 78.3g/t Au from isolated quartz float. Follow-up work is being planned.

### Marymia Project (81%)

No work has been undertaken on the Ninghan project tenements during the September 2019 quarter.

### Ninghan Project (100%)

No work has been undertaken on the Ninghan project tenements during the September 2019 quarter.



## **Norwest Minerals Limited Quarterly Activities Report to 30 September 2019**

### **Bali Project (100%)**

No work has been undertaken on the Bali project tenement during the September 2019 quarter.

### **Marriotts Nickel Project (100%)**

No work has been undertaken on the Marriotts project during the September 2019 quarter. Remodeling of the project in October is expected to redefine the resource categories of the small nickel deposit where currently all mineralization is classified as inferred.

### **Norwest Entitlement Offer**

On the 28th of August, Norwest announced it was conducting a pro rata non-renounceable rights issue on the basis of one new 15 cent share for every three shares held to raise a total of \$3.144 million<sup>9</sup>. The purpose of the capital raising is to fund exploration activities at the Company's Arunta West Project located 600 kilometres west of Alice Springs where RC drilling of the North Dovers IOGC anomaly is now underway. Funds are also earmarked for RC and aircore drilling of the Company's newly acquired Bulgera Gold project located in the Plutonic Well greenstone belt near the large Plutonic Gold Mine. On 30 September 2019 Norwest announced the Entitlement Offer was fully subscribed thus successfully raising the full offer amount<sup>10</sup>.

## **COMPETENT PERSON'S STATEMENTS**

### **Mineral Resource Estimate**

The information in this report that relates to mineral resource estimation is based on work completed by Mr. Stephen Hyland, a Competent Person and Fellow of the AusIMM. Mr. Hyland is Principal Consultant Geologist with Hyland Geological and Mining Consultants (HGMC) and holds relevant qualifications and experience as a qualified person for public reporting according to the JORC Code in Australia. Mr Hyland is also a Qualified Person under the rules and requirements of the Canadian Reporting Instrument NI 43-101 Mr Hyland consents to the inclusion in this report of the information in the form and context in which it appears.

### **Exploration**

The information in this report that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared by Charles Schaus (CEO of Norwest Minerals Pty Ltd). Mr. Schaus is a member of the Australian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to its activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Schaus consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

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<sup>9</sup> ASX Announcement NWM 28 August 2019: "Norwest to Conduct a Rights Issue"

<sup>10</sup> ASX Announcement NWM 30 September 2019: "Rights Issue Fully Subscribed"

## Norwest Minerals Limited Quarterly Activities Report to 30 September 2019

### Tenement Information (Listing Rule 5.3.3)

Country	Location	Project	Tenement	Change in Holding (%)	Current Holding (%)
Australia	WA	Arunta West 1	E80/4820	0	51
Australia	WA	Arunta West 1	E80/4986	0	51
Australia	WA	Arunta West 1	E80/4987	0	51
Australia	WA	Arunta West	E80/5031	0	100
Australia	WA	Arunta West	E80/5032	0	100
Australia	WA	Arunta West 4	E80/5382	85	85
Australia	WA	Bali 2	E08/2894	0	100
Australia	WA	Warriedar	E59/1696	0	100
Australia	WA	Warriedar	E59/1723	0	100
Australia	WA	Warriedar	E59/1966	0	100
Australia	WA	Warriedar	E59/2104	0	100
Australia	WA	Warriedar	M59/755	0	100
Australia	WA	Warriedar	P59/2070	0	100
Australia	WA	Ninghan	E59/1692	0	100
Australia	WA	Ninghan	E59/2080	0	100
Australia	WA	Ninghan	E59/2103	0	100
Australia	WA	Ninghan	P59/2060	0	100
Australia	WA	Marymia 3	E52/2394	0	81.07
Australia	WA	Marymia 3	E52/2395	0	81.07
Australia	WA	Bulgera 5	E52/3316	100	100
Australia	WA	Bulgera 5	E52/3276	100	100
Australia	WA	Marriotts	M37/96	0	100

1. JV with Jervios Mining Limited (49%) - transfer of 51% tenement interest from Australian Mines Limited to Norwest Minerals awaiting Office of State Revenue assessment.

2. Transfer of tenement interest (100%) from TasEx Pty Ltd to Norwest Minerals in progress following the Bali purchase in late November 2018, assessment with OSR.

3. JV with Riedel Mining Limited and owns 100% of Audax - transfer of tenement interest (81.07%) from Australian Mines Limited to Norwest Minerals awaiting Office of State Revenue assessment.

4. Newly acquired Arunta West tenement – transfer in progress

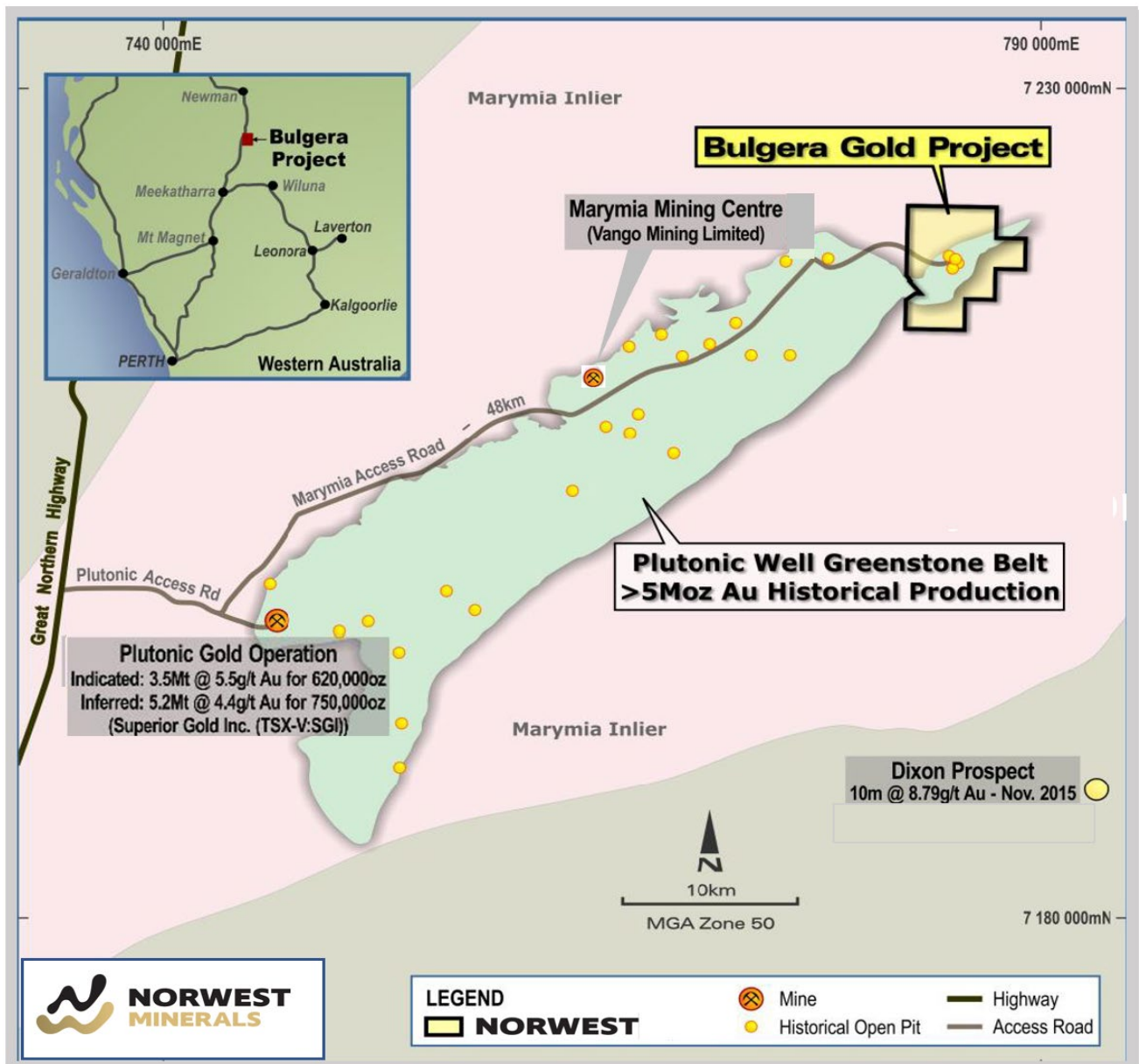
5. Newly acquired Bulgera tenements - transfers in progress

All tenement purchase costs are complete and all DMIRS fees, rents and expenditure obligations current.

# APPENDIX 1

## About the Bulgera Gold Project

The Bulgera Gold Project comprises two granted exploration licences, E52/3316 and E52/3276, covering 36.8km<sup>2</sup> over the northeast end of the Plutonic Well Greenstone Belt, 200km northeast of Meekatharra. The project is located 20km northeast of the Marymia mining centre and 48km via road from the operating Plutonic gold mine which has produced over 5 million ounces of gold since 1990. The Plutonic mine was recently purchased by Toronto listed Superior Gold Inc. (TSX-V:SGI).



Bulgera Gold Project location map

The Bulgera gold project contains four shallow open pits that have undergone two phases of mining between 1996 and 1998 and again between 2003 and 2004. Mining of the four pits being Bulgera, Mercuri, Venus and Price produced a reported 440,799 tonnes of ore @ 1.65 g/t Au for 23,398 ounces. The ore was treated at the Marymia mining centre during the first phase and the Plutonic processing facility during the second phase.

*Vango Mining Ltd (ASX: VAN) is aggressively exploring the Marymia tenements along the mafic-ultramafic mine sequence where they have made a number of high-grade gold discoveries include the high-grade Trident deposit being 1.59Mt @ 8g/t gold for 410,000 ounces.*

*Bulgera is located at the north eastern end of the Plutonic Well Greenstone Belt, which is approximately 50km long and 10km wide and hosts the numerous Plutonic and Marymia gold deposits. The greenstone belt comprises mafic and ultramafic volcanic rocks, fine to coarse clastic sediments, and felsic to intermediate volcanic rocks, which generally dip to the north west at shallow to locally steep dips. Multiple suites of felsic to intermediate porphyries intrude the greenstone sequence and swarms of dolerite dykes locally crosscut the strata.*

*The gold mineralisation at both Mercuri and Bulgera occurs within a broad shear zone which is about 45m thick. The shear zone contains multiple lodes which can be up to 140m long down dip. The gold mineralisation is associated with silica-biotite alteration of the host rock, and occurs in quartz veins.*

*The Bulgera Gold Project location is endowed with infrastructure including the large Plutonic Gold Mine operating nearby, 2 x gas-fired power stations, overhead transmission power lines, bore fields, airstrip and camp facilities.*

*Norwest acquired the Bulgera Gold Project in July 2019.*