



**NORWEST**  
**MINERALS**

ASX ANNOUNCEMENT

30 July 2019

ASX: NWM

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

### **Highlights:**

- **Diamond drilling intersects favourable iron-oxide-copper-gold (IOCG) geology, alteration and trace mineralisation at Norwest's large North Dovers anomaly**
- **A 12,000m follow-up reverse circulation (RC) drilling programme across the North Dovers IOCG target scheduled for early September**
- **Norwest acquires the Bulgera gold project located within the +5 million ounce Plutonic Well greenstone belt**
- **Numerous walk-up drill targets at Bulgera set to test multi-lode gold mineralisation below four shallow open cuts and along the 5-kilometre strike of the sheared greenstone package.**
- **Assays received for RC drilling at the Company's Marymia - Jenkins prospect reveal wide, highly anomalous zinc and lead intercepts along a ~1 km strike length**
- **Assays received for RC drilling at the Company's Warriedar – Mount Laws prospect confirm gold mineralisation continues and remains open down dip**

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

During the June period Norwest announced that its maiden drilling program at the Company’s North Dovers prospect in central Australia had 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) was also encountered<sup>1</sup>.

The Proterozoic basement at North Dovers was found to occur relatively close to surface thus allowing future exploration drilling for an **IOCG** system to be conducted using cost effective reverse circulation (RC) rigs. Norwest will commence an extensive RC drill programme in September totaling 12,000 metres of drilling, which is designed to test the majority of the 4 x 8-kilometre long North Dovers anomaly.

During the quarter, the Company acquired 100% interest in the Bulgera Gold project, which is hosted within the highly prospective and underexplored +5 million ounce Plutonic Well greenstone belt<sup>2</sup>. Excellent potential exists to extend the multi-lode gold mineralization below the 4 historic shallow open-pits and along the 5-kilometre strike of the sheared Bulgera greenstone package.

Assays from RC drilling undertaken at the company’s Marymia and Warriedar projects during the March 2019 period were received this period. At the Marymia - Jenkin’s prospect the RC drilling identified a 1- kilometre strike of highly anomalous zinc-lead mineralisation. At Warriedar, RC drilling confirmed the down dip extension of gold mineralisation at the Mount Laws prospect which remains open at depth.

### **The Arunta West project (51% earning 80%)**

The Arunta West Project is located in Western Australia, 600 kilometres west of Alice Springs. The area is becoming known as the next major Australian copper province with ground along the Arunta belt being rapidly accumulated by companies such as the Independence Group (ASX:IGO) and their JV partners.

The primary target at Arunta West is the North Dovers prospect defined by a 4 x 8-kilometre long coincident magnetic-gravity anomaly and associated with geological features in the area analogous to world class **IOCG** deposits such as those hosting Olympic Dam and Ernest Henry<sup>3</sup>.

North Dovers was identified by BHP in 1999 as the area’s primary **IOCG** target but due to strict access regulations at the time no exploration drilling was completed.

The commencement of diamond drilling has established Norwest Minerals as the first company to drill into this very large IOCG target since its identification 20 years ago.

Based on the encouraging results from the diamond drilling programme at North Dovers (discussed below), Norwest increased its ground position with the acquisition of a 250km<sup>2</sup> tenement strategically located immediately south of the North Dovers anomaly increasing the Company’s total Arunta West ground holding to 1,700km<sup>2</sup>.

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<sup>1</sup> ASX Announcement NWM 18 June 2019: “Drilling reaffirms Arunta West Project’s iron-oxide-copper-gold (IOCG) potential”

<sup>2</sup> Accelerate Resources Limited Prospectus lodged with ASIC 30 November 2017

<sup>3</sup> Ashburton Minerals Limited, Mt Webb Project Annual Report, 2010

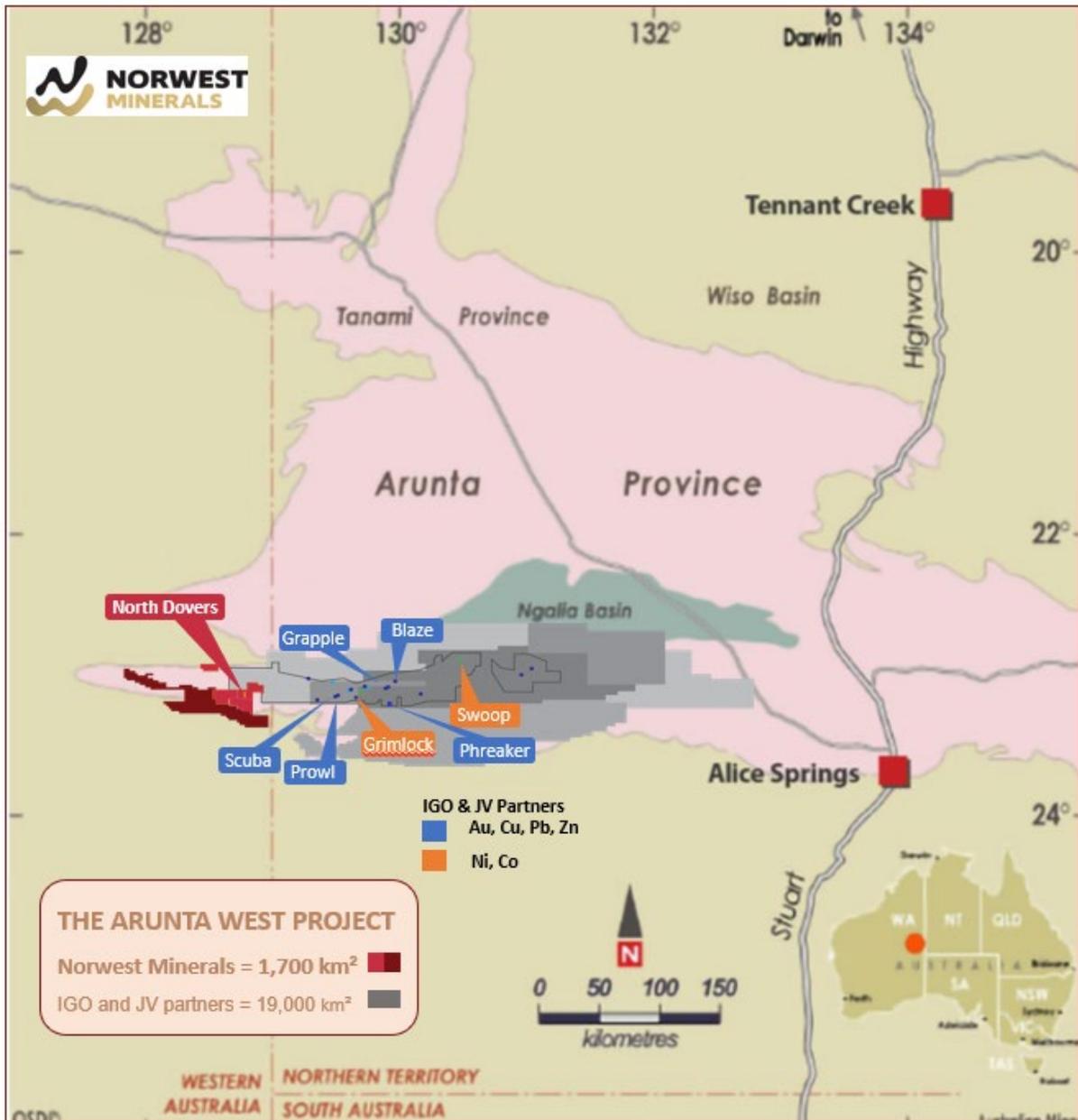


Figure 1 – The Arunta West project is strategically located west along strike of Independence Group’s large Lake MacKay project hosting a number of new copper (Cu), gold (Au), lead (Pb), zinc (Zn) and nickel (Ni)-cobalt (Co) prospect discoveries.

### Diamond Drilling of the North Dovers anomaly

At Arunta West, 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). Drill hole collar locations summarized in Appendix 1, Table 1.

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<sup>4</sup>.

<sup>4</sup> Norwest Minerals internal report. Apex Geological Consultant 30 May 2019; Summary of North Dovers Project, Mizen, D.



Figure 2 – Hematite alteration in granitic rock

Two main sedimentary sub-units were also encountered including: 1) a graphitic shale (NDD1902) with abundant pyrite and minor chalcopyrite and 2) a quartzite (metasandstone/siltstone) interbedded with patchy hematite alteration.



Figure 3 – Graphitic shale – pyrite and chalcopyrite present

The diamond core has been transported from site to Perth (via Alice Springs) and is being cut, sampled and multi-element assayed. Half of the core will be delivered to the Department of Mines, Industry Regulation and Safety as per the State Government's Exploration Incentive Scheme<sup>5</sup>. Thus far the Department has contributed \$130,000 toward the North Dovers diamond drilling with approximately \$20,000 to be paid when all the half-core is delivered<sup>6</sup>. The half-core retained by Norwest will be cut again with ¼ core sent in for assaying and the other ¼ core held for reference. The core's delayed delivery time from site to Perth has pushed back the assaying and reporting of the results to August.

With the Proterozoic bedrock close to surface, Norwest is confident the North Dovers area can be effectively drilled using RC drill rigs. This will allow greater drill coverage across the North Dovers target zone with considerable cost and time savings.

Norwest has planned a 12,000 metre drilling program using RC rigs to test the North Dovers anomaly on a 1000 by 500 metre grid pattern. The Company expects to remobilise to site in September following the completion of Heritage Study work.

<sup>5</sup> [http://www.dmp.wa.gov.au/Documents/Geological-Survey/R14\\_Successful\\_List.pdf](http://www.dmp.wa.gov.au/Documents/Geological-Survey/R14_Successful_List.pdf)

<sup>6</sup> The incentive scheme agreement pays up to \$200,000 drill costs for a single \$400,000 hole or up to \$150,000 for multiple holes costing \$300,000.

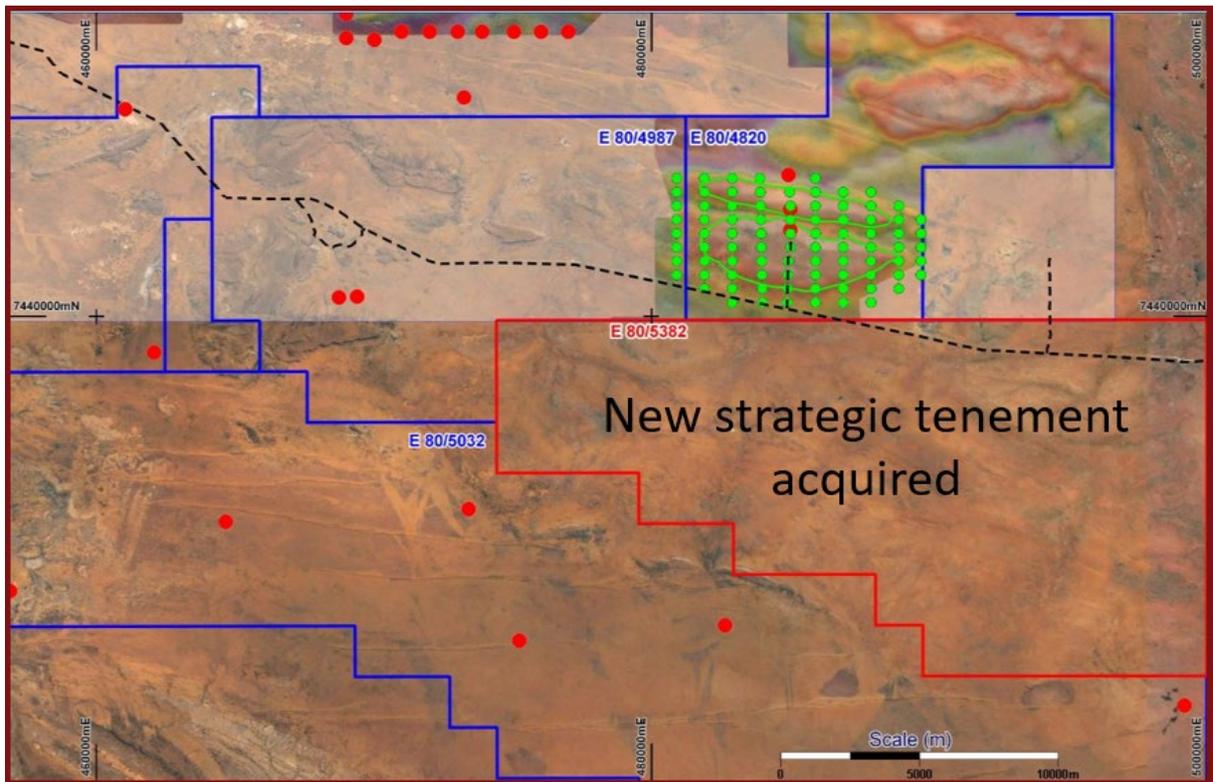


Figure 4 – Norwest’s proposed RC drill coverage over the North Dovers target anomaly (shown as green circles in this image) and the new strategic tenement located immediately to the south (outlined in red).

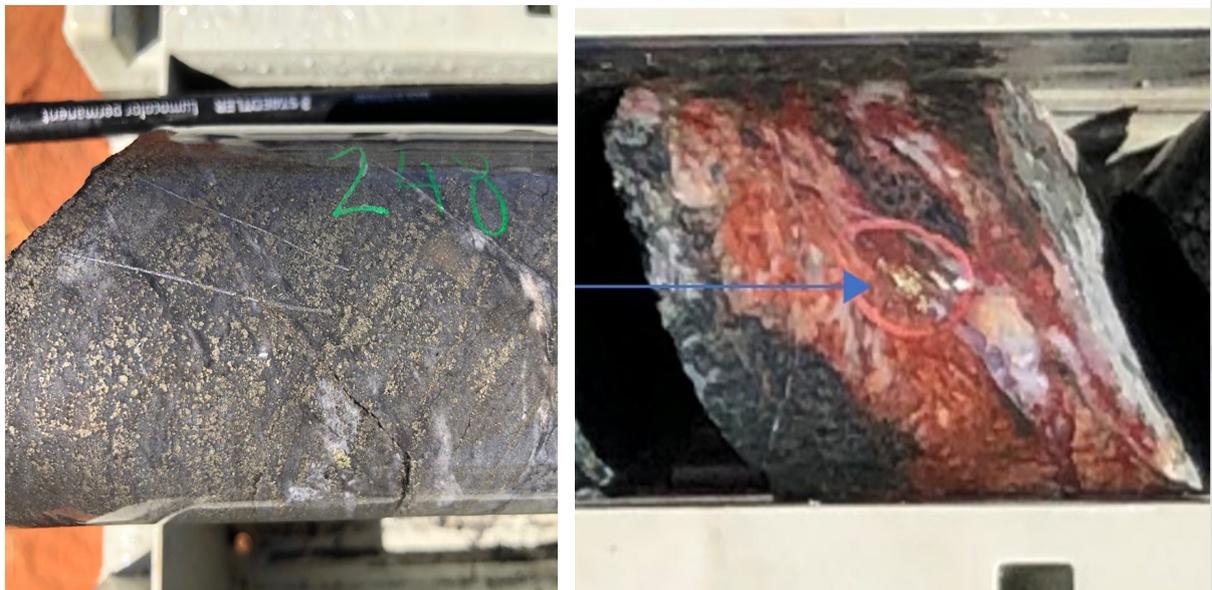


Figure 5 – left photo is graphitic shale with pyrite (5%) and chalcopyrite or primary copper mineralization (1%) and right photo is pyrite / chalcopyrite hematite altered vein

The Arunta West project is 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 4 above.

## The Bulgera Gold Project (100%)

Norwest has acquired 100% of the Bulgera Gold Project (“Bulgera”) located 200 kilometres north of Meekatharra with an existing haul road to the Plutonic Gold operation<sup>7</sup>.

Bulgera’s historic exploration, development and mining database shows multiple gold lodes extending below the shallow open cut pits and along the 5-kilometre strike of the sheared greenstone package<sup>8</sup>.

Historical mining at Bulgera totals 441,000 tonnes grading 1.65g/t Au producing 23,400 ounces of gold<sup>9</sup>. Extraction, haulage and processing occurred when gold was selling at or below A\$570 per ounce. With the gold price now exceeding A\$2,000 per ounce of gold Norwest believes further resource definition and exploration work at Bulgera will add significant value to this asset.

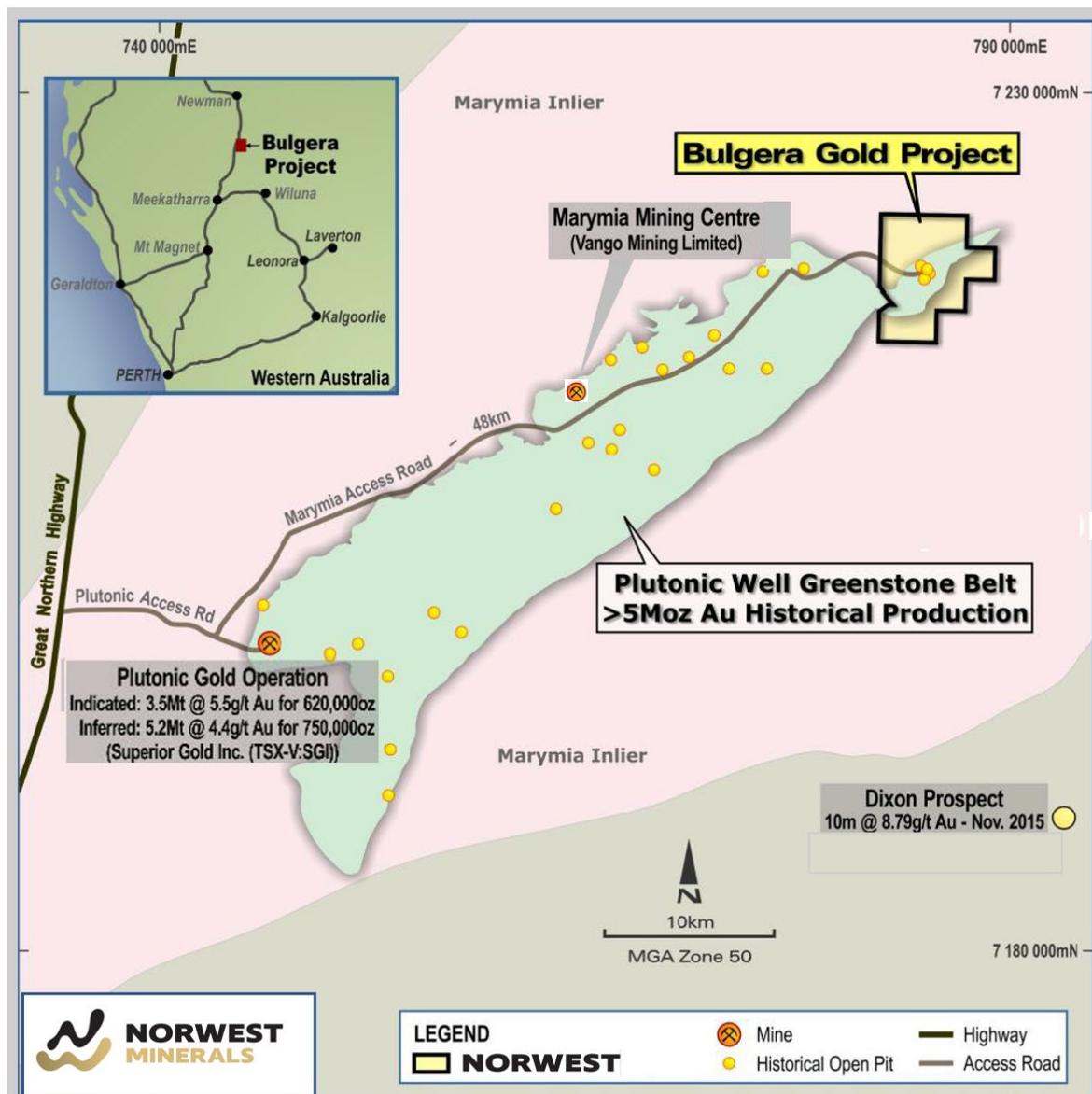


Figure 6 – Bulgera Gold Project location comprises two tenements with a combined area of 36.8km<sup>2</sup>.

<sup>7</sup> ASX Announcement NWM 9 July 2019: Acquires advanced WA Gold Project

<sup>8</sup> Accelerate Resources Limited Prospectus lodged with ASIC 30 November 2017

<sup>9</sup> Accelerate Resources Limited Prospectus lodged with ASIC 30 November 2017

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.

A programme of works has been approved by the DMIRS for RC drilling along strike and below the small open cuts at Bulgera with work to commence as soon as the statutory approvals are in place.

### Background<sup>10</sup>

The Bulgera 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, 200 kilometres northeast of Meekatharra.

The project is located 20 kilometres northeast of the Marymia mining centre and 48 kilometres 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:SGL).



Figure 7 – Shallow open cut mining up until 2004 from Bulgera Gold project (Venus pit backfilled). These assets are contained within the Norwest Bulgera project, which it required during the quarter.

The 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 Bulgera, Mercuri, Venus and Price produced a reported 440,799 tonnes of ore @ 1.65 g/t Au for 23,398 ounces of gold. 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 in the process of re-developing the K2 underground mine at the Marymia mining centre.

<sup>10</sup> All information included in the 'Background' section of this report was extracted from the Accelerate Resource Limited Prospectus lodged with ASIC 30 November 2017

Bulgera is located at the north eastern end of the Plutonic Well Greenstone Belt, which is approximately 50 kilometres long and 10 kilometres 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 Bulgera deposit consists of a shallow dipping sequence of amphibolites with narrow intercalated layers of ultramafic schist and metasediment. Gold mineralisation has been developed mainly in the amphibolites. Whereas at Mercuri a similarly dipping sequence of interlayered felsic volcanics, mafic volcanics, mafic sediments and minor felsic sediments is underlain by an ultramafic unit.

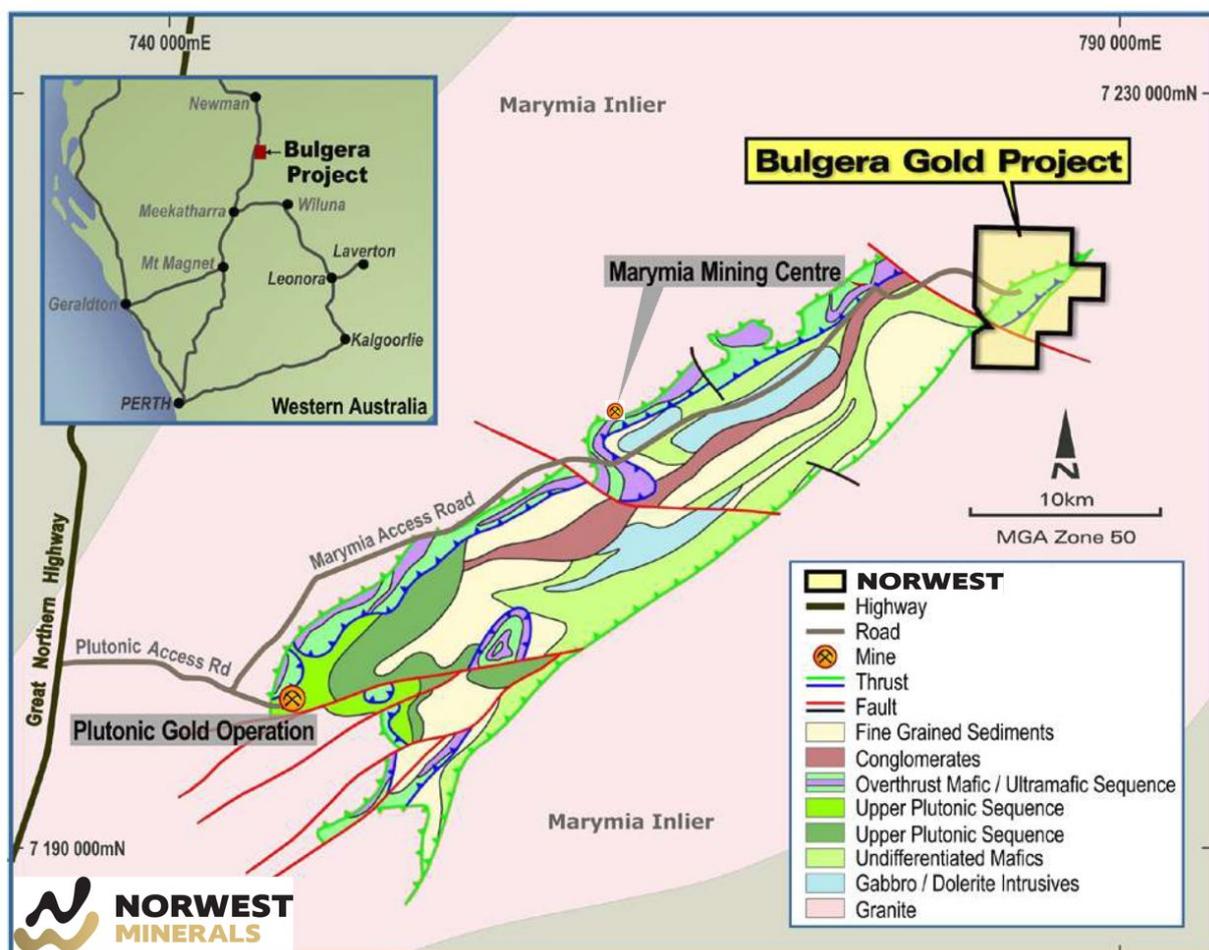


Figure 8 – Greenstone geology of the Plutonic Well belt

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

### Exploration Potential and Planned Work

The fieldwork to be undertaken by Norwest will comprise RC drilling of the strike and depth extensions of the Mercuri and Bulgera pits, and regional targets along the western Bulgera trend. In short, Norwest will be targeting extensions to existing well-defined mined structures, and subsequently applying the understanding from known structures to regional targets. The

figures below show the Bulgera targets and the interpreted potential extensions that will underpin the development of Norwest's gold exploration/expansion going forward<sup>11</sup>.

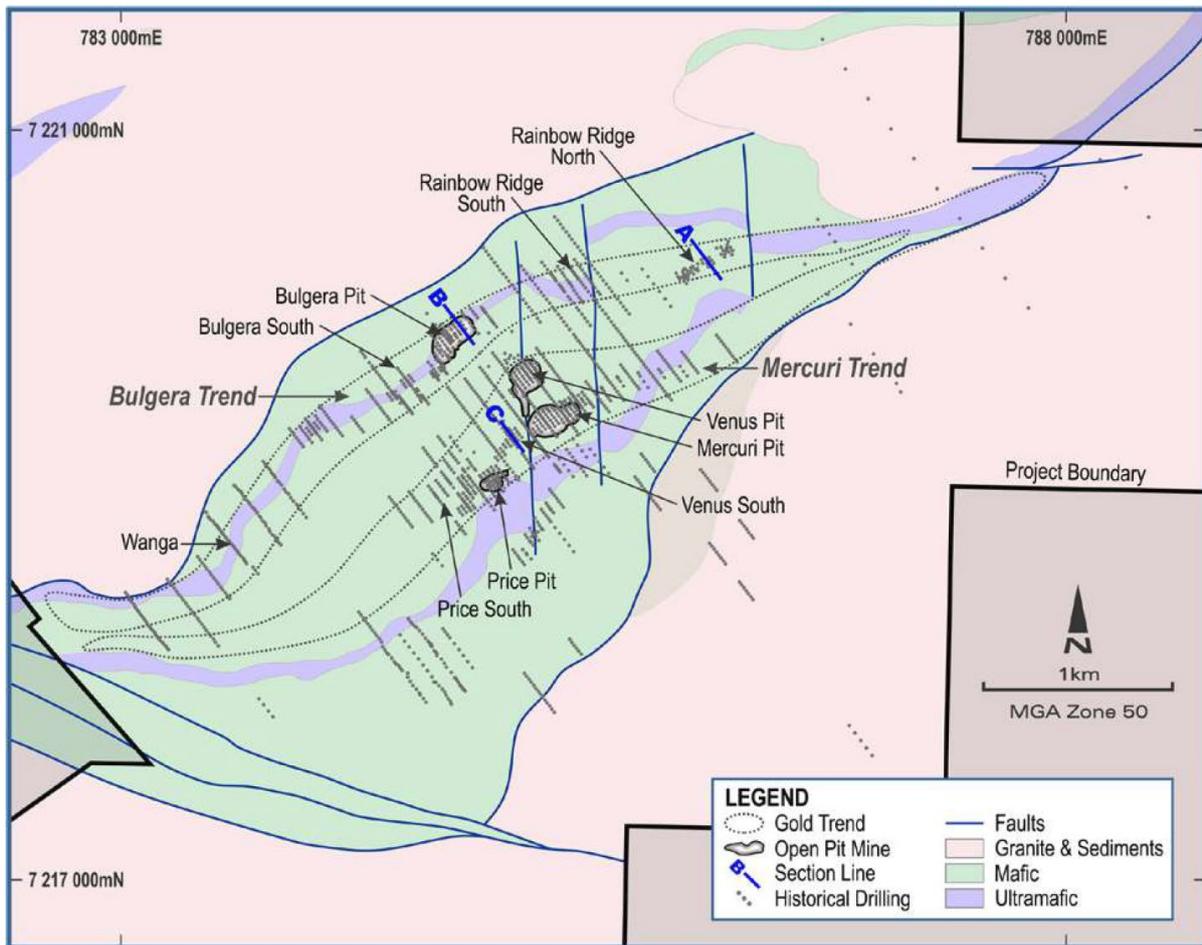


Figure 9 – Plan of Bulgera target area

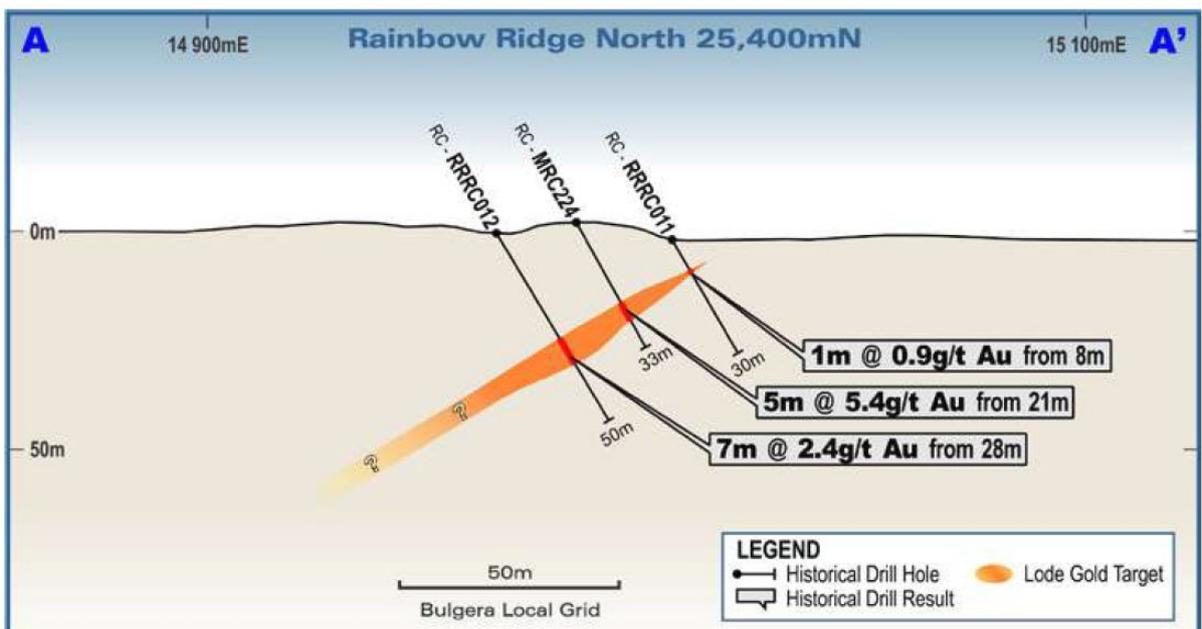


Figure 10 – Bulgera gold project target cross section A (see plan figure 9)

<sup>11</sup> Accelerate Resources Limited Prospectus lodged with ASIC 30 November 2017

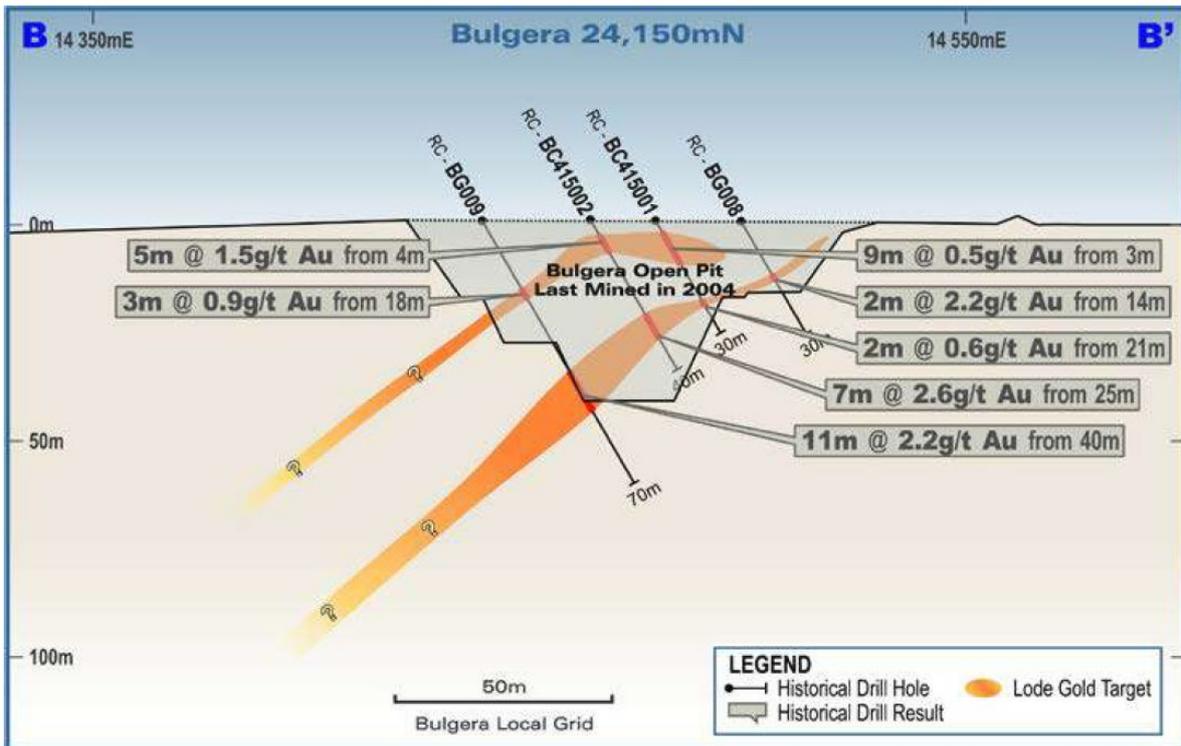


Figure 11 – Bulgera gold project target cross section B (see plan figure 9)

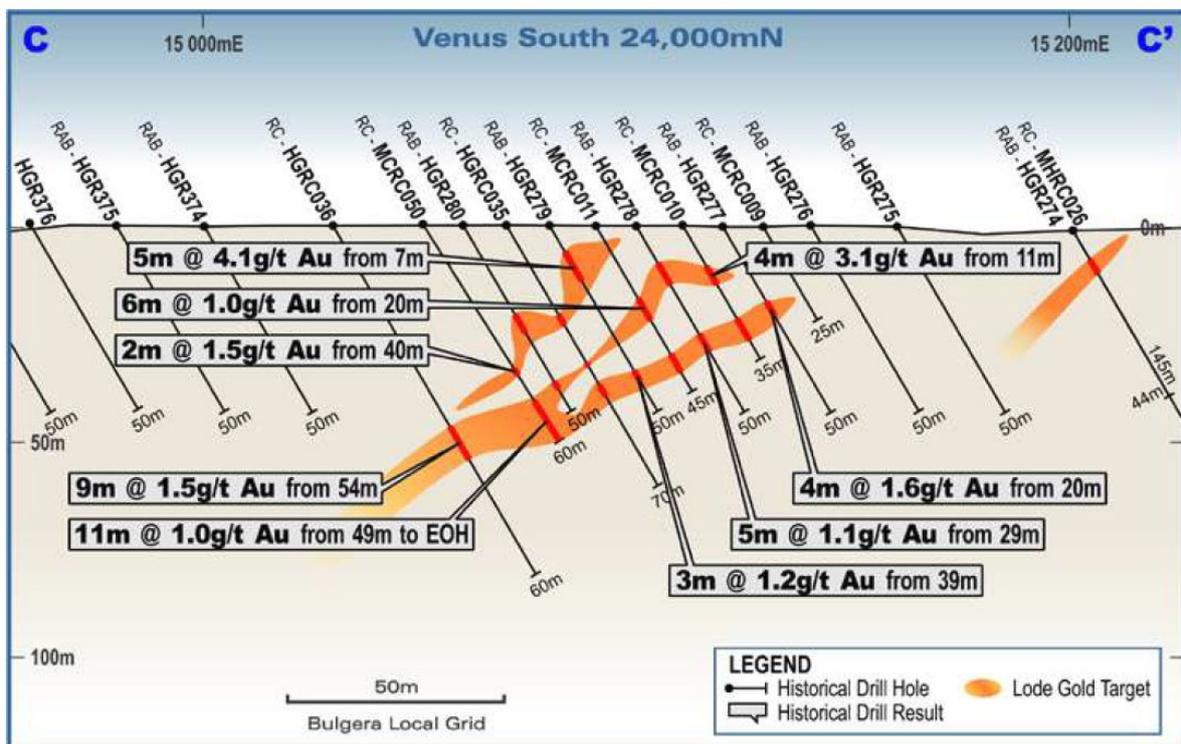


Figure 12 – Bulgera gold project target cross section C (see plan figure 9)

### The Bulgera Gold Project Purchase Agreement

Norwest has paid the vendor, Accelerate Resources Limited, AUD\$220,000 cash (inclusive of GST) for a 100% interest in the Bulgera Gold project.

A 1% Net Smelter Return Royalty is payable to Gibb River Diamonds Limited (formerly POZ Minerals Limited)

## Marymia Project (81%)

### Jenkins Prospect RC drill assay results

The Marymia RC drilling assays have returned several significant intersections with anomalous +0.1% lead (Pb) and zinc (Zn) results. The drilling intersected the Juderina and Johnsons shale sequence which are intruded by an ultramafic. The ultramafic has a chlorite schist upper component, a Talc Chlorite phase and a Peridotite phase.

The drilling tested the hangingwall and footwall Juderina and Johnsons shale positions, as well as the ultramafic unit itself with the sequence appearing to dip to the north at around 60 degrees.

The mineralisation zone is in the hangingwall position of the Juderina and Johnsons shale (MMRC19007, MMRC19005 and Australian Mines Ltd hole MMRC003). This mineralisation is primarily Zinc rich with intersections including 3m @ 0.55% Zn in MMRC19005 and 9m @ 0.28% Zn in MMRC19007<sup>12</sup>. Below the zinc mineralisation there appears to be a zone of Pb mineralisation in the ultramafic which includes intersections of 25m @ 0.34% Pb in MMRC19009 (inc. 2m @ 1.2% P)<sup>13</sup>. The continuity of the anomalous Zn/Pb mineralisation extends over 1km along strike. Follow-up drilling along the Zn-Pb anomaly is being planned.

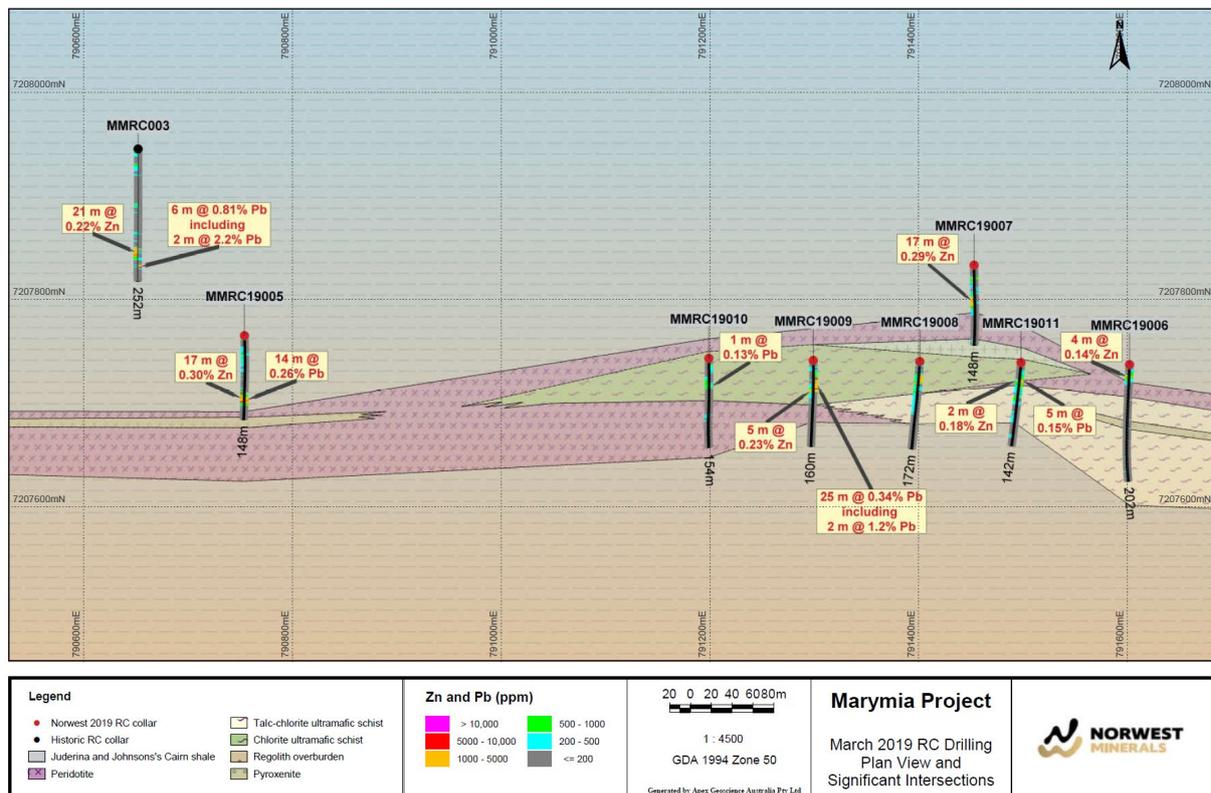


Figure 13 – Plan view showing surface projections of Jenkins zinc (Zn) – lead (Pb) intersection

Significant intercepts reported in Appendix I, Table 2.

<sup>12</sup> Norwest Minerals internal report. Apex Geological Consultant April 2019: Summary of reverse circulation drilling at Marymia Project – Jenkins prospect, Mizen, D.

<sup>13</sup> Norwest Minerals internal report. Apex Geological Consultant April 2019: Summary of reverse circulation drilling at Marymia Project – Jenkins prospect, Mizen, D.

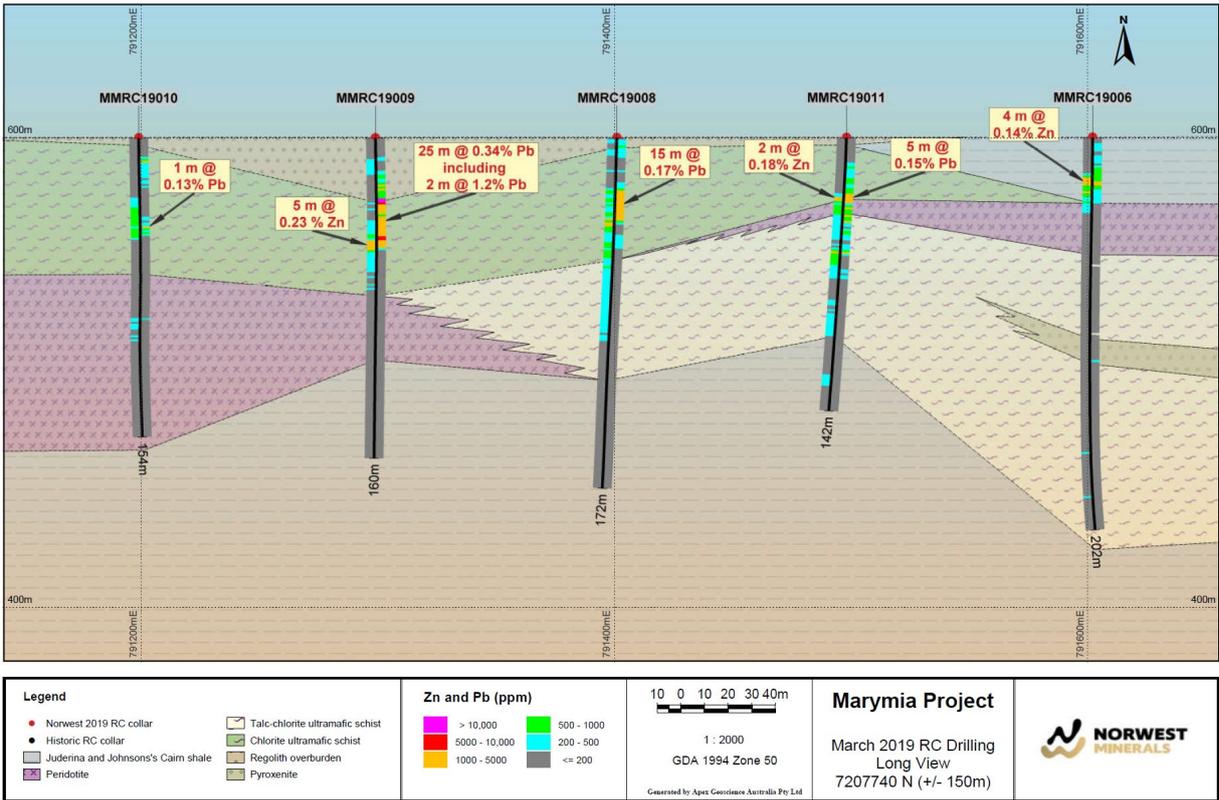


Figure 14 – Long section showing Jenkins zinc (Zn) – lead (Pb) intersections

It is important to note that the Bulgera gold project is located within 10 kms of Norwest's Marymia project tenements which include the Jenkins and Dixon prospects. This provides the option to combine exploration programmes and benefit from the associated time/cost savings on rig and personnel use, mobilisation, accommodation and materials transport.

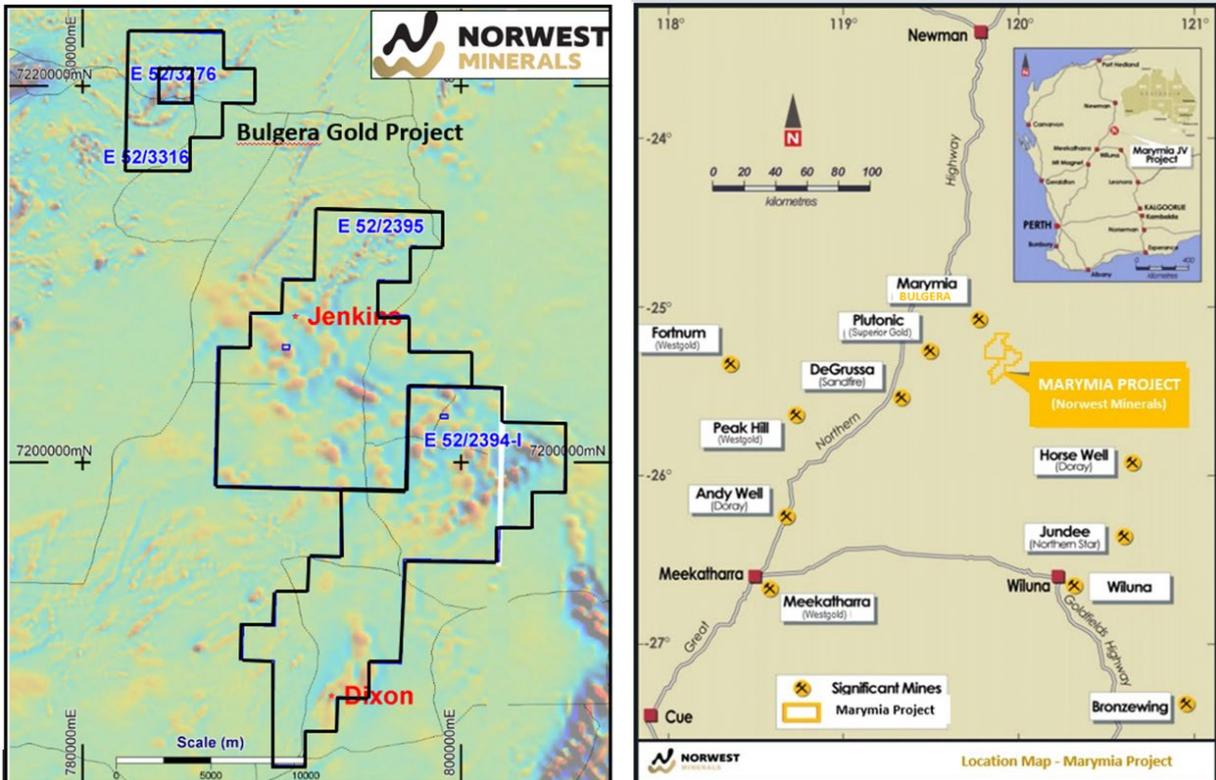


Figure 15 – Map showing locations of Norwest's Marymia and Bulgera projects and tenements.

### Dixon North RC drill results

Dixon North is a 400 metre by 200 metre magnetic anomaly located within the same geological setting and less than 1 kilometre north of the aircore drilling conducted at the Dixon gold zone in mid-2018. Dixon North has a similar magnetic intensity as the Dixon prospect and is potentially coincident with the mineralised mafic-felsic volcanoclastic contact mapped from 2018 air-core work progressing north from Dixon. Due to the thick transported cover in the area, Norwest drilled 4 holes utilising an RC drill rig to test this anomaly (Figure 16).

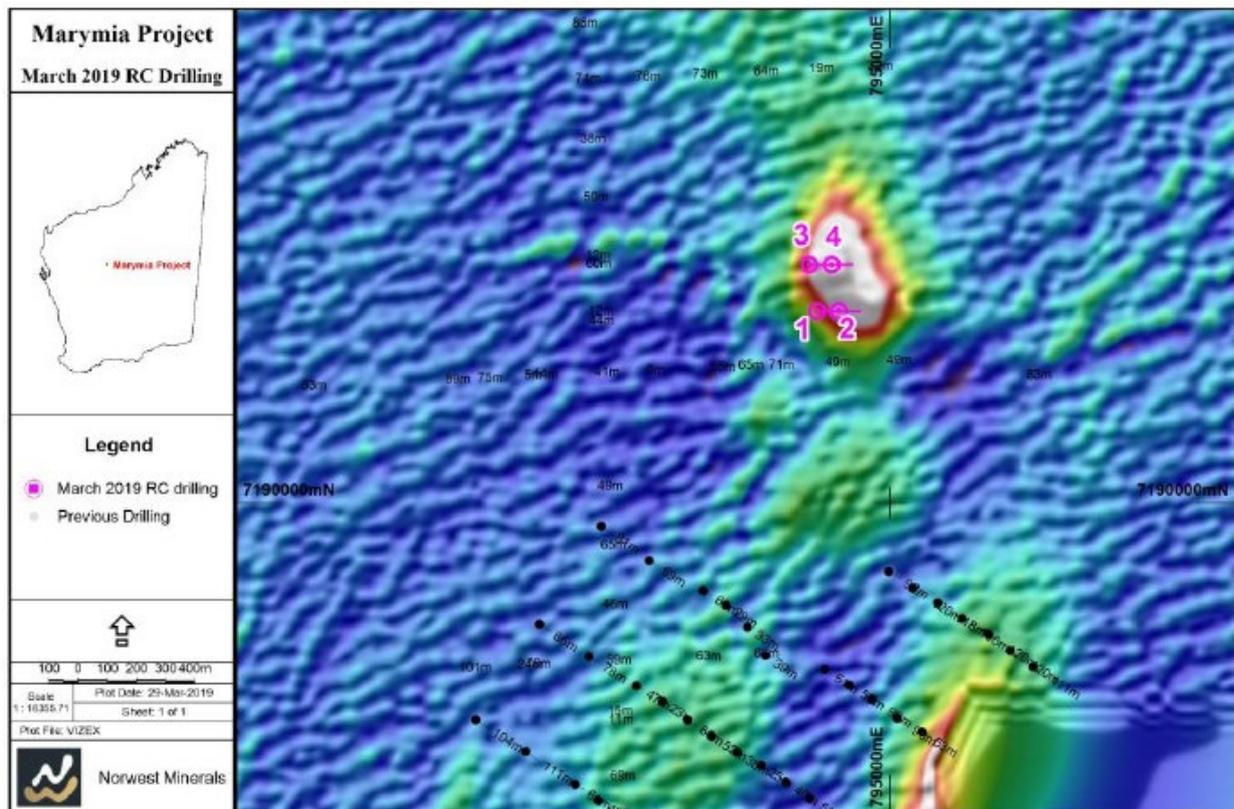


Figure 16: Location of the 4 RC holes drilled into the Dixon North magnetic anomaly.

The RC drilling was designed to penetrate the Proterozoic cover and test the contact between the hanging wall magnetic dolerite and non-magnetic footwall volcanoclastic rocks or basalt where gold mineralisation was intercepted at Dixon in 2018.

All holes intercepted this contact target with the exception of the first RC hole which penetrated a 30 metres quartz-rich, highly altered clay shear zone within a felsic unit before ending in basalt. The hole did not intersect the magnetic dolerite target.

The 4 RC hole drilling programme was completed for a total of 729 metres. No significant gold assay results were reported.

## Warriedar Project (100%) – RC drilling results

A 9-hole, 984 metre follow-up RC drilling programme was undertaken at several of the Warriedar prospects which included Mount Laws, Lang’s Find and Reid’s Ridge during the March 2019 quarter<sup>14</sup>. The gold assay results were received early in the June 2019 period and are discussed below.

### Mount Laws

Assay results have now been received for the 4 RC holes drilled in the March 2019 period to test the down dip extensions to gold intercepts encountered in Norwest’s November 2018 RC drilling programme.

Mineralisation at Mount Laws is associated with a contact between a thin BIF unit and the surrounding dolerite. At depth the coeval stratigraphy of the BIF unit is a black graphitic shale. The contact between the BIF unit and the dolerite hosts quartz veining and minor amounts of sulphides.

Drilling underneath intercepts from the 2018 RC drilling intersected the mineralised unit, which is located at the upper contact of the graphitic shale with the encompassing dolerite. The mineralized intersections are of a similar width, or slightly thinner than the 2018 intercepts. The best intersection from 2019 drilling at Mount Laws was 3m @ 2.77 g/t Au from 121m in hole WRC1905. Significant intercepts reported in Appendix I, Table 3.

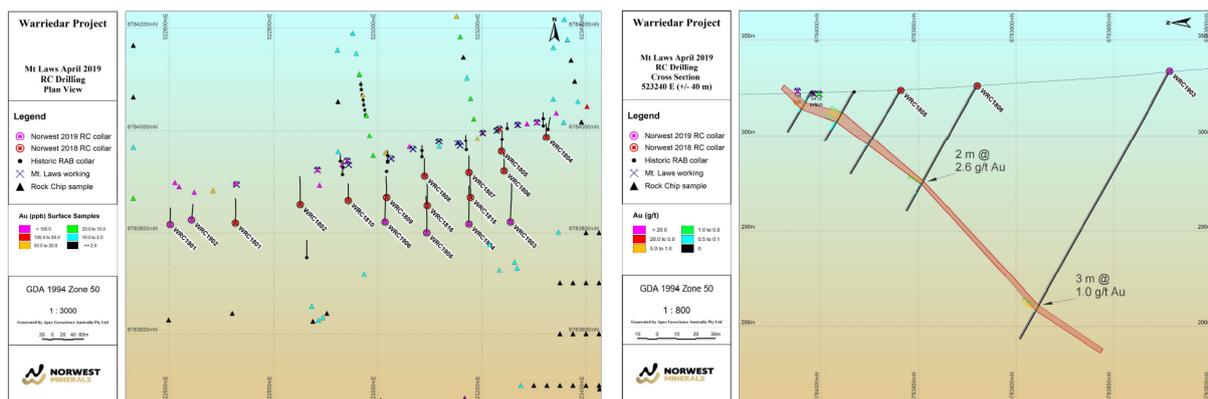


Figure 17: Plan of Mount Laws RC hole drill collars and cross section 523240E showing RC Hole WRC 1903.

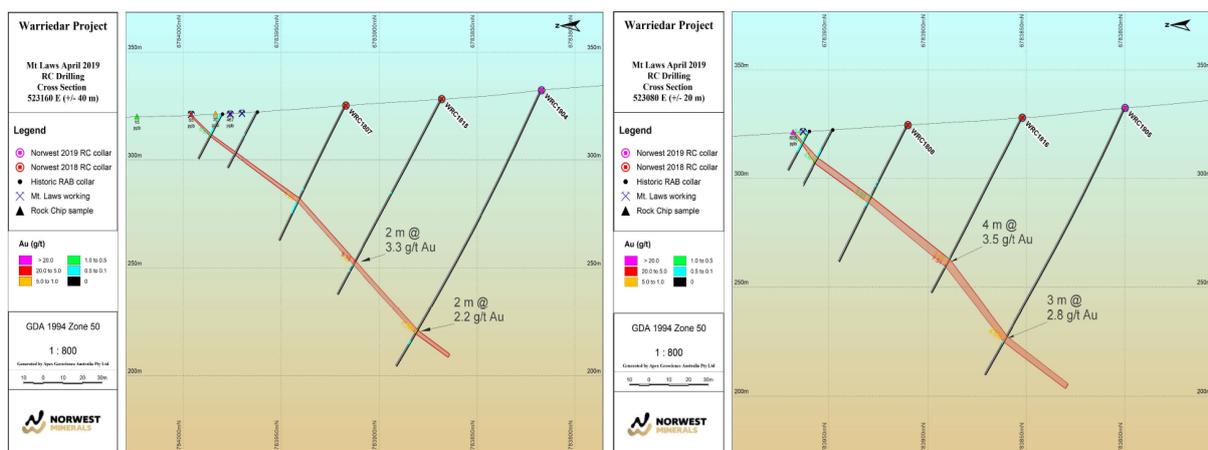


Figure 18: Mount Laws cross sections 523160E and 523080 showing RC holes WRC 1904 WRC1905.

<sup>14</sup> ASX Announcement NWM 26 April 2019: Quarterly Activities Report period ending 31 March 2019

A long-section view of the Mount Laws mineralization reveals a shallow west-dipping plunge along the plane of mineralization with potentially open areas at depth. This long section interpretation utilizes historic drill data available for the Mount Laws mineralization and incorporates the recent drilling completed by Norwest in 2018 and 2019<sup>15</sup>.

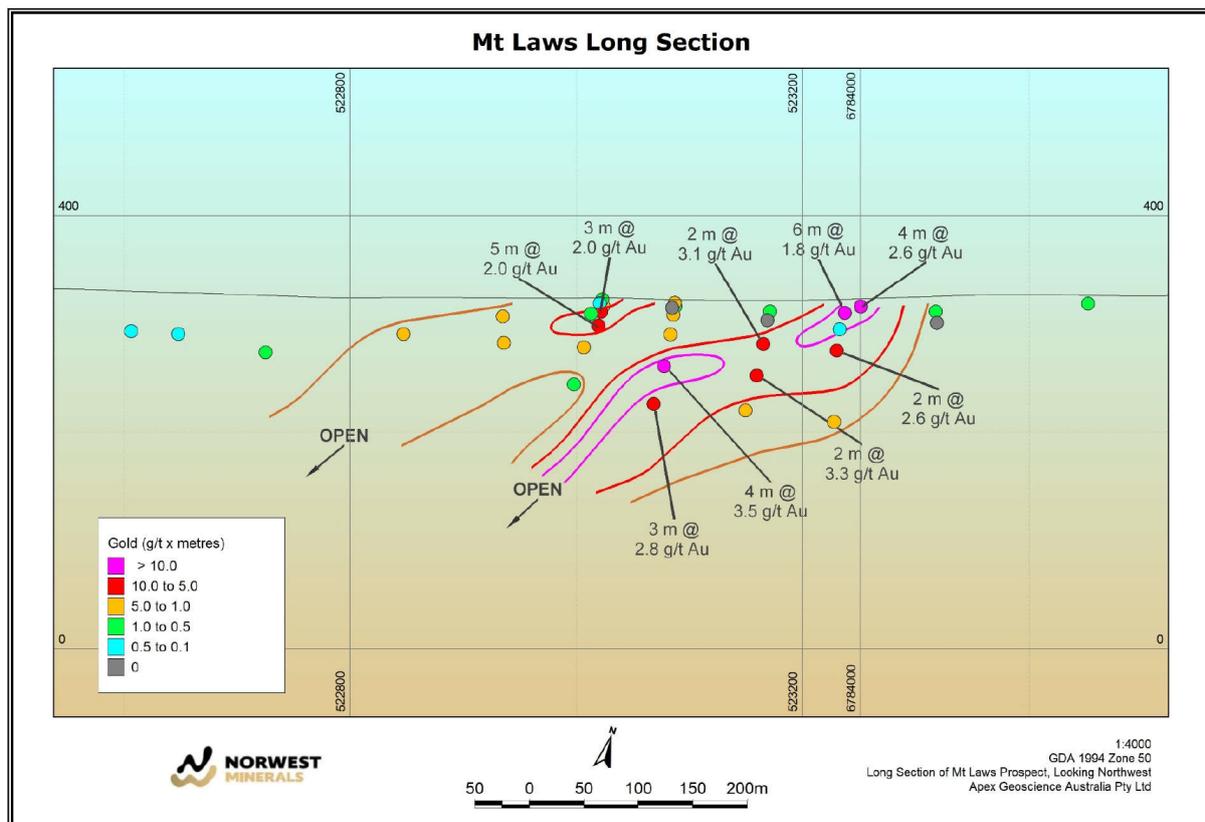


Figure 19 – Long section showing Mount Laws drill intercepts and mineralization gram-metre contours

Additional drilling at Mount Laws included two holes to the west of the main Mount Laws area. These holes tested along-strike extensions to mineralization, as potentially indicated by anomalous rock chips from 2018 surface sampling programs. No significant assays were encountered.

### Reid’s Ridge North Drilling

Historical review of data in the area of the Reid’s Ridge revealed a surface sample anomaly with no follow-up drilling located to the northwest of Reid’s Ridge. Ground reconnaissance and surface sampling on the site during the December 2018 field program confirmed the anomalous gold values in quartz veins within a massive granodiorite. Drill holes were planned based on the orientation of historic trenches and workings at the site.

The drill holes at the Reid’s Ridge north soil anomaly returned multiple thin zones of mineralization inconsistently located in quartz veins, in the granodiorite, or in thin units of potentially dolerite dykes. The holes additionally encountered minor base metal anomalism in conjunction with gold anomalism (2 m @ 0.31% Zn in hole WRC1909; 1 m @ 0.29% Cu in hole WRC1908). Significant intersections, >0.5 g/t Au, are reported in Appendix I, Table 2.

<sup>15</sup> Historical intersections shown in Norwest Minerals Limited Prospectus lodged with ASIC 18 September 2018. Intersections drilled by Norwest in late November 2018 in ASX Announcement NWM 30 January 2019: "Positive Results from Drilling and Surface Sampling at Warriedar and Ninghan Gold Projects"

### **Lang's Find Drilling**

One drill hole at Lang's Find (WRC1907) to test for possible down dip extension of mineralization from surface sampling. The hole encountered several zones of quartz veining, including one within the expected BIF unit with moderate sulphide mineralization. Assays from this hole returned no significant intersections (> 0.5 g/t Au).

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

The Bali Project, which is located approximately 75 kilometres west of Paraburdoo in Western Australia, hosts the Bali shear being a major faulted zone proven to host copper, lead, zinc and silver mineralisation<sup>16</sup>.

A high-resolution airborne electromagnetic (AEM) and magnetic survey totaling 441 line-kilometres was flown late last year across Norwest's Bali Project. The survey was designed to highlight conductors representing potential primary copper mineralisation that may be present within the project area<sup>17</sup>.

Processing of the data to date has not revealed strong, discrete EM anomalies that present as walk-up drill targets. Strike-extensive structures that host the known copper mineralisation are evident in both the EM (as an IP effect) and magnetic datasets. Overall, however the Bali mineralisation doesn't have a conductive AEM response. Drill targeting will be driven by the known geology and drilling at this stage, with the geophysics to map out the host structures.

Future exploration work will include:

1. a structural and lithological interpretation of the magnetic and EM data to build a project-wide framework to develop a set of targets based on integrating the interpretation results with all available geological data.
2. Characterise the physical properties of the known mineralisation to more accurately assess what geophysical methods may directly detect mineralisation. Ideally this is done on fresh drill core and hand samples if suitable.
3. Ground geophysical surveys which will require careful considered given the difficult access and terrain.
4. Test Down Hole EM could be carried out if drilling proceeds, to assess potential mineralization in closer proximity.

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

No work has been completed on the Marriotts project during the June 2019 period. Remodelling of the nickel resource is scheduled for later this year.

### **Cash position**

As at the end of the June 2019 Quarter, the Company has approximately **\$3.3** million in cash comprising cash in the bank and term deposit balances.

\*\*\*ENDS\*\*\*

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<sup>16</sup> Norwest Minerals Limited Prospectus, Independent Geologist's Report, Section 3.3.1

<sup>17</sup> Norwest Minerals Limited Quarterly Report for period ending 31 December 2018

**For further information:**

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**Competent Person's Statement**

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.



**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	Marymia 5	E52/3316	100	100
Australia	WA	Marymia 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
5. Newly acquired Marymia/Bulgera tenements - transfers in progress

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

**APPENDIX 1**

**Table 1 - Diamond Drilling Hole Location Details  
Arunta West – North Dovers Prospect  
(Assays pending)**

Hole Id	Type	Easting (GDA94z52)	Northing (GDA94z52)	Elevation (m)	Maximum Depth (m)	Dip (°)	Azimuth (°)
NDVRC01	Water bore	484933	7445116	450	110	-90	0
NDD1901	Diamond	485001	7443092	466	695	-80	180
NDD1902	Diamond	485008	7443115	466	624.4	-55	360
NDD1903	Diamond	484996	7443887	460	204.4	-80	360



**Table 2 - Reverse Circulation Drilling Summary  
Significant intersections (>0.1% Zn & Pb)  
Marymia Project - Jenkins Prospect**

Hole Id.	Easting (GDA94z50)	Northing (GDA94z50)	Elev (m)	Max. Depth (m)	Dip (Deg)	Azim (Deg)	From Depth (m)	To Depth (m)	Width (m)	Zn (%)	Pb (%)							
MMRC19005	790754	7207765	600.4	148	-60	180	104	107	3	0.55								
							104	106			0.28							
							109	121	12	0.27								
							110	121	11		0.31							
							123	124	1									
MMRC19006	791602	7207737	600.3	202	-60	180	20	24	4	0.14								
							22	24	2		0.15							
							27	28	1	0.14								
MMRC19007	791450	7207833	600.2	148	-60	180	25	26	1	0.31	0.13							
							59	68	9	0.28								
							69	76	7	0.34								
MMRC19008	791401	7207740	600.14	172	-60	180	26	41	15		0.17							
							40	41	1	0.11								
							42	44	2	0.14								
MMRC19009	791299	7207741	600.1	160	-55	180	24	25	1		0.12							
							26	27	1		0.10							
							31	39	8		0.52							
							31	33	2		1.20							
							40	57	17		0.26							
MMRC19010	79119900	7207743	600.0	154	-55	180	12	13	1		0.10							
							46	47	1		0.13							
							MMRC19011	791500	7207740	600.2	142	-55	180	29	34	5		0.15
														31	33	2	0.18	
														36	37	1		0.10
							40	41	1		0.12							
							43	44	1		0.10							
							59	60	1	0.12	0.12							



**Table 3 - Reverse Circulation Drilling Summary**  
**Significant intersections (>0.5 g/t Au)**  
**Warriedar Project**

Hole Id.	Prospect	Easting (GDA94z50)	Northing (GDA94z50)	Elev (m)	Max. Depth (m)	Dip (Deg)	Azim (Deg)	From Depth (m)	To Depth (m)	Width (m)	Au (ppm)
WRC1901	Mount Laws	522601	6783816	330.0	64	-60	0	No significant			
WRC1902	Mount Laws	522642	6783825	328.8	64	-60	5	No significant			
WRC1903	Mount Laws	523255	6783821	333.7	160	-62	0	140	143	3	1.02
WRC1904	Mount Laws	523175	6783817	332.3	148	-62	0	128	130	2	2.21
WRC1905	Mount Laws	523094	6783800	332.5	142	-63	0	121	124	3	2.77
WRC1906	Mount Laws	523014	6783821	329.8	112	-61	0	No significant			
WRC1907	Lang's Find	516745	6781825	341.6	94	-55	40	No significant			
WRC1908	Reids Ridge	514921	6783919	355.4	100	-60	245	18	19	1	1.00
WRC1908	Reids Ridge							41	42	1	0.65
WRC1908	Reids Ridge							53	54	1	3.21
WRC1909	Reids Ridge	514976	6783800	354.8	100	-60	245	49	50	1	1.52
WRC1909	Reids Ridge							58	59	1	0.90
WRC1909	Reids Ridge							73	74	1	2.74
WRC1909	Reids Ridge							78	80	2	0.99

## Diamond Drilling– June 2019

### Arunta West Project / North Dovers Prospect

#### Appendix 1: JORC Code, 2012 Edition - Table 1

#### JORC Code, 2012 Edition – Table 1 report

#### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralization that are Material to the Public Report.</i></li> <li><i>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 mineralization types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drilling was conducted on the North Dovers prospect within the Arunta Project, WA. Drilling was supervised and samples collected by geologists from Apex Geoscience Australia Pty Ltd which is an independent geological consultancy.</li> <li>All drilling was completed along the 485000 mE section and spaced between 25 and 770m separation.</li> <li>Drill holes on the project included 3 diamond (DD) holes for 1524m of HQ3/NQ2 diameter drilling.</li> <li>There was previously no drilling completed over the North Dovers prospect.</li> <li>Drill holes ranged in Dip from -80° to -55°. Holes were drilled both north and south.</li> <li>The drill hole collar locations were pick up with a hand held GPS and the down hole positions were surveyed using a Reflex EZ-trac device and a camera shot was taken every 30 to 50m depth.</li> <li>The diamond core has yet to be sampled as it is still in transit from the field, but it is anticipated that the majority of the core will be sampled at 1 m intervals and selective niche samples will be chosen which will be based has been lithological, mineralisation and structural logging.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diametre, 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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drilling was conducted by Terra Drilling of Boulder, using a Boart Longyear KWL 1600H diamond drill rig. A combination of HQ3 and NQ2 was utilised. Holes were triple tubed from surface.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sample recovery and sample condition was recorded for all drilling. There were zones of poor recovery but overall the recovery for the three holes is considered to be good (&gt;95%).</li> <li>• As no samples have been submitted to the laboratory there is no known relationship between grade and sample size.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diamond drill holes were logged for various geological attributes, including colour, lithology, oxidation, alteration, mineralization and veining. The holes were also structurally logged and had regular magnet susceptibility and density recordings collected down the hole. All holes were logged in full by geologists from Apex Geoscience Australia Pty Ltd.</li> <li>• All of the core was photographed.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drill core will be ½ cut and then ¼ cut. ¼ of the core will be sampled and submitted for analysis. The same side of the ¼ core will be sampled.</li> <li>• Samples will generally be collected at 1m intervals.</li> <li>• Samples will be submitted to Intertek Genalysis Perth for analysis.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>A number of certified reference material (CRM) will be inserted into the sample stream. These will include standards and blanks.</li> <li>A portable XRF Bruker with a geo exploration calibration was used to periodically test mineral concentrations down the hole as they were being drilled. A standard was used to check the calibration of the device.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Consultant geologists, from Apex Geoscience, were involved in the logging of the Diamond drilling. Apex will be involved in the whole process from drill hole supervision, diamond cutting and sampling. Samples will be dropped to the laboratory for analysis by Apex personal. The entire chain of custody of this recent drilling was supervised by Apex.</li> <li>Apex collected the geological data via paper logs and then transferred them into excel before being loaded into an SQL database.</li> <li>As these were the first three drill holes at North Dovers prospect, twin holes have not been completed.</li> <li>As there has been no analysis completed on the diamond core there is no results available for potential adjustment or calibration.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>Diamond drill hole locations were picked up using a handheld Garmin GPS, considered to be accurate to <math>\pm 5</math> m.</li> <li>Downhole surveys have been completed at 30m to 50m stations (and start and end of hole) using a downhole Reflex EZ-Trac survey tool (REFLEX). Examination of the downhole surveys show the maximum azimuth deviation in drilling to have been 2.9° over 30 m. The drill holes experienced minimal dip variation (most significant deviation 0.5° over 30 m), with an average maximum hole dip deviation of 0.1°.</li> <li>All coordinates were recorded in MGA Zone 50 datum GDA94.</li> <li>Topographic control is provided by a Digital Terrain Model based on the 30 m Shuttle Radar Topographic Mission data.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All drilling was completed along the 485000 mE section and spaced between 25 and 770m separation.</li> <li>• To date there is insufficient geological and grade continuity to support the definition of a mineral resource, and the classifications applied under the 2012 JORC code.</li> <li>• No compositing has been conducted.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes at the North Dovers prospect were angled both to the north and south. Stratigraphy dips moderately to the south so the second hole was drilled perpendicular to any potential mineralisation. The other two holes which tested geophysical anomalies were sub parallel to mineralisation. This was only known at the completion of the holes and the collection of the structural orientations.</li> <li>• There have been no assays completed to date so no orientation bias has been identified.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The sample security consisted for the Mount Laws drilling is considered good. The drilling was directly supervised by Apex Geoscience, who are independent geologists. After the core was logged it was palleted and strapped by APEX. It was then transported by Gully transport to Alice Springs before being trucked to Perth. From there Apex will take ownership back and the core can be cut and sampled. Besides the transportation the core was under direct control by Apex Geoscience personnel.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No formal audits or reviews have been performed on the project, to date.</li> <li>• The work was carried out by reputable companies and laboratories using industry best practice.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The current exploration is located within Exploration Licences 80/4820 held by Jervois Mining Limited (Jervois). Norwest Minerals Limited are the controlling company (51%) of a joint venture arrangement with Jervois.</li> <li>The tenement E 80/4820 was granted on 14/11/2014 and is set to expire on 13/11/2019. This is the first term and is available for a four-year renewal period. Together with E 80/4987, these tenements make up the Arunta Project combined reporting group C 152/2018.</li> <li>Tenement E 80/4820 is situated on the Tjamu Tjamu land. A mineral exploration and land access deed of agreement has been compiled and signed with Norwest Minerals Limited. There is one heritage place of interest in the south eastern corner of the tenement. This is 3.5km from the drilling.</li> <li>The tenements are in good standing.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>There has been little drilling in the area. BHP between 1996 to 2000 identified the area as having IOCG potential with the identification of a co incident magnetic and gravity anomaly. Additionally, a strong potassium-thorium ratio anomaly, which spans the majority of target area, suggests there is coincident intrusive and/or dense alteration-related mineralisation zone located above the North Dovers target body. BHP completed on hole 2km to the North Dovers anomaly. This hole was terminated early due to excess water.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralization.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Arunta Project lies within a geologically complex region, where it straddles the Central Australian Suture (CAS). The CAS is a major structural zone that marks where the east-west-trending Warumpi Province (interpreted as an exotic terrane) was accreted to the North Australian Craton (NAC) along the southern margin of the older</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>Arunta Region (Aileron Province) ca 1640 Ma during the Liebig Orogeny. The suture itself is strongly re-worked, defined by a series of faults and thrusts that include the Desert Bore Shear Zone, Redbank Thrust and Charles River Thrust in the Northern Territory, and the Mt Webb Shear Zone in Western Australia.</p> <ul style="list-style-type: none"> <li>The drilling collared into up to 2m of quaternary sand cover before drilling into a variably magnetic diorite unit with varying grainsize, texture and mafic mineral composition. Deeper into the sequence drilling intersected a sharp contact with a monzo to syeno granite which transitioned into a biotite syeno granite. These units were variably altered to magnetite-chlorite and hematite-sericite-chlorite varying relative to structural features. Alteration is generally stronger but more localised in the diorite and more pervasive and diffuse in the granite. Trace to low levels of disseminated/vein salvage chalcopyrite and pyrite were noted. Within the second hole a sedimentary sequence of quartzite, meta-sandstone, meta-siltstone, meta shale and graphitic shale was intersected. The graphitic shale contains extensive pyrite and minor disseminated chalcopyrite.</li> </ul>
<p><b>Drill hole Information</b></p>	<ul style="list-style-type: none"> <li>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:             <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All drill holes details have been included in Appendix 1, Table 1 of the release.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>No samples have been submitted for analysis yet.</li> <li>No high cuts have been applied.</li> <li>Metal equivalent values are not being reported.</li> </ul>
<b>Relationship between mineralization widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>No samples have been submitted for analysis as yet.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>An appropriate exploration map has been included in the release.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>No samples have been submitted for analysis as yet.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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 method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>An exploration plan from the diamond drilling has been included in the Quarterly Report release.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Further work</i>	<ul style="list-style-type: none"><li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li><li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li></ul>	<ul style="list-style-type: none"><li>Future work is envisioned to comprise further RC drilling over the North Dovers anomaly's testing for IOCG mineralisation.</li></ul>

## Reverse Circulation Drilling – March 2019 Marymia Project

### Appendix 1: JORC Code, 2012 Edition - Table 1

#### JORC Code, 2012 Edition – Table 1 report template

#### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralization that are Material to the Public Report.</i></li> <li>• <i>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 mineralization types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling was conducted on the Marymia and Marymia South Projects, WA. Drilling was supervised and samples collected by geologists from Apex Geoscience Australia Pty Ltd which is an independent geological consultancy.</li> <li>• Drill holes on the project included 11 reverse circulation (RC) holes. Samples were collected in one-metre intervals from a rig-mounted cone splitter. The sample weights were approximately 3 kg in size and visually compared for size differences.</li> <li>• Samples from drilling were submitted to Intertek Genalysis in Perth, WA for sample preparation and analysis.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drilling was conducted by an AusDrill NW, Schramm T685 RC drill rig with auxiliary compressor. This drill uses a modern face sampling hammer with inner-tube and sample hose delivery to cyclone-cone splitter sample assembly. RC drilling used a 5 ½ inch</li> </ul>



Criteria	JORC Code explanation	Commentary
		face sampling hammer.
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Sample recovery and sample condition was recorded for all drilling. Sample recovery was good for all drill holes. MMRC19001 to MMRC19004 had approximately 20% wet sample (potential fines loss) due to ground conditions (water injected at cyclone to improve split efficiency in puggy clays).</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>RC drill holes were logged for various geological attributes, including colour, lithology, oxidation, alteration, mineralization and veining. All holes were logged in full by geologists from Apex Geoscience Australia Pty Ltd.</li> <li>Chip trays were photographed to maintain a digital record of geological logs.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The drill samples were collected at 1m intervals through a cone splitter mounted to a vertical cyclone. The samples were collected as approximately 3 kg sub-sample splits.</li> <li>The sample sizes and analysis size are considered appropriate to correctly represent the mineralization based on the style of mineralization, sampling methodology and assay value ranges for the commodities of interest.</li> <li>Quality Control on the RC drill rig included insertion of duplicate samples (2%) to test split efficiency, insertion of standards (2%) to verify lab assay accuracy and cleaning and inspection of sample assembly.</li> <li>Samples were submitted to Intertek Genalysis Perth for analysis.</li> </ul>
<b>Quality of assay data and</b>	<ul style="list-style-type: none"> <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,</li> </ul>	<ul style="list-style-type: none"> <li>The RC drilling samples were crushed and pulverised before undergoing an Aqua Regia digestion for inductively coupled plasma mass spectrometry (ICP-MS) finish.</li> <li>The assay method and laboratory procedures were appropriate for</li> </ul>



Criteria	JORC Code explanation	Commentary
laboratory tests	<p><i>the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<p>this style of mineralization. The Aqua Regia and ICP-MS techniques were designed to measure multi-element concentrations (for base metal mineralisation) in the samples.</p> <ul style="list-style-type: none"> <li>• For drill holes MMRC19001-19004 (4 drill holes) targeting precious metals, an additional assay step of a 50g fire assay (on pulps) was used to determine the precious metal concentration of samples.</li> <li>• The Intertek Genalysis lab inserts its own standards and blanks at set frequencies and monitors the precision of the analyses. As well, the lab performs repeat analyses at random intervals, which return acceptably similar values to the original samples.</li> <li>• Laboratory procedures are within industry standards and are appropriate for the commodities of interest.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Industry certified Gannet standards were inserted in the RC chip sample streams every 50 samples, and field duplicates were collected every 50 samples. The industry standards ranged from 0.8 g/t Au up to 4.82 g/t Au, 243 ppm Ni, 1704 ppm Cu, 8742 ppm Zn, 1335 ppm Pb, 770 ppm As, 43 ppm Co and 28.6 ppm Ag. All standards were scrutinized to ensure they fell within acceptable tolerances.</li> <li>• Consultant geologists, from Apex Geoscience, were involved in the logging of the RC drilling. Apex was involved in the whole process including drill hole supervision, chip sample collection and importing of the completed assay results. Drill hole logs were inspected to verify the correlation of mineralized zones between assay results and lithology/alteration/mineralization. The entire chain of data custody of this recent drilling was supervised by Apex. Digital data is backed up via offsite storage.</li> <li>• The sample sizes are considered to be appropriate for the type, style and consistency of mineralization encountered.</li> <li>• The assay results of RC chips are comparable with the observed mineralogy.</li> <li>• The assay method and laboratory procedures were appropriate for this style of mineralization.</li> <li>• Data was reported by the laboratory and no adjustment of data was</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>undertaken.</p> <ul style="list-style-type: none"> <li>All assay results were verified by alternative company personnel and the Qualified Person before release.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>RC drill hole locations were picked up using a handheld Garmin GPS, considered to be accurate to <math>\pm 5</math> m.</li> <li>Downhole surveys have been completed at 30m stations (and start and end of hole) using a downhole gyroscopic survey tool (REFLEX). Examination of the downhole surveys show the maximum azimuth deviation in drilling to have been 20.5° over 150 m. The drill holes experienced dip variation (most significant deviation 6.2° over 60 m), with an average maximum hole dip deviation of 3.7°.</li> <li>All coordinates were recorded in MGA Zone 50 datum GDA94.</li> <li>Topographic control is provided by a Digital Terrain Model based on the 30 m Shuttle Radar Topographic Mission data.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The drilling targeted several areas with anomalous surface sampling and historic drill intersections, and thus, the drill spacing was irregular. However, drill spacing, where consistent was 80x160 m at Marymia South, and 100x100 m at Marymia.</li> <li>To date there is insufficient geological and grade continuity to support the definition of a mineral resource, and the classifications applied under the 2012 JORC code.</li> <li>No compositing has been conducted.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes (sampling direction) are designed to intersect close to perpendicular with interpreted stratigraphic boundaries and interpreted structures.</li> <li>Structural orientations have a high degree of uncertainty at this stage.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>The sample security consisted of the RC chip samples being collected from the field into pre-numbered calico bags and loaded into polyweave and bulka bags for transport to the laboratory. The bulka bags containing the drill samples were transported by TollExpress</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>trucks to the laboratory. Checks were conducted to verify that all samples were received by the laboratory.</p> <ul style="list-style-type: none"> <li>The sample submission was submitted by email to the lab, where the sample counts and numbers were checked by laboratory staff.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No formal audits or reviews have been performed on the project, to date.</li> <li>The work was carried out by reputable companies and laboratories using industry best practice.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The current exploration is located within Exploration Licences 52/2394-I and 52/2395 held by Audax Minerals Pty Ltd and Australian Mines Ltd.</li> <li>The tenement E 52/2394-I was granted on 16/06/2010 and is set to expire on 15/06/2020. The tenement E 52/2395 was granted on 31/08/2010 and is set to expire on 30/08/2020. These tenements make up the C144/2010 combined reporting group.</li> <li>The tenements are in good standing.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Riedel resources conducted a soil sampling program over the area on a 200x400m grid (2012). Australian Mines (2015) drilled one hole (MMRC003) in the general area of the Marymia base metal target. Australian Mines (2015-2017) have drilled numerous holes 1 to 4km south (Marymia South) of the gold targeted drilling (MMRC19001-004).</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralization.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Marymia south (MMRC19001-004); Mineralisation at Marymia south is associated with structures that intersect near the margin of a magnetite rich dolerite and an overlying mafic-intermediate extrusive sequence. This is interpreted as Archaean orogenic gold mineralisation.</li> <li>• Marymia (MMRC19005-011); Mineralisation at Marymia occurs within Proterozoic mafic-ultramafic sills intruding Juderina formation sediments near the cratonic margin with Archaean greenstones of the Marymia inlier. Mineralisation is interpreted as orthomagmatic mafic intrusive associated base metal enrichment.</li> <li>• The area is prospective for gold and base metals.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All drill holes and their significant intersections have been included in Appendix 1, Table 2 of the release.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values</i></li> </ul>	<ul style="list-style-type: none"> <li>• Length weighted intersections have been reported in the above-mentioned Table of the release.</li> <li>• No high cuts have been applied.</li> <li>• Metal equivalent values are not being reported.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>should be clearly stated.</i>	
<b>Relationship between mineralization widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>• Due to the limited amount of drilling completed to date over prospects at Marymia there is a high uncertainty of the geometry and continuity of mineralisation. As such reported intersections are unlikely to be true width intersections.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• An appropriate exploration map has been included in the release.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A table containing anomalous RC chip results to date has been included in the release. All locations are shown on the attached plans.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <i>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 method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• An exploration plan from the RC drilling has been included in the release.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Future work will depend on assay results (to be received). Geological and geophysical techniques will be employed to investigate morphology and distribution of mineralisation identified and controlling geological factors.</li> </ul>

## Reverse Circulation Drilling – April 2019 Warriedar Project

### Appendix 1: JORC Code, 2012 Edition - Table 1

#### JORC Code, 2012 Edition – Table 1 report template

#### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralization that are Material to the Public Report.</i></li> <li>• <i>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 mineralization types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling was conducted on the Warriedar Project, WA. Drilling was supervised and samples collected by geologists from Apex Geoscience Australia Pty Ltd which is an independent geological consultancy.</li> <li>• Drill holes on the project included 9 reverse circulation (RC) holes. Samples were collected in one-metre intervals from a rig-mounted cone splitter. The sample weights were approximately 3 kg in size.</li> <li>• Samples from drilling were submitted to Intertek Genalysis in Perth, WA for sample preparation and analysis.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drilling was conducted by an AusDrill NW, Schramm T685 RC drill rig with auxiliary compressor. This drill uses a modern face sampling hammer with inner-tube and sample hose delivery to cyclone-cone splitter sample assembly. RC drilling used a 5 ½ inch face sampling hammer.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sample recovery and sample condition was recorded for all drilling. Sample recovery was good for all drill holes.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC drill holes were logged for various geological attributes, including colour, lithology, oxidation, alteration, mineralization and veining. All holes were logged in full by geologists from Apex Geoscience Australia Pty Ltd.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drill samples were collected at 1m intervals through a cone splitter mounted to a vertical cyclone. The samples were collected as approximately 3 kg sub-sample splits.</li> <li>• The sample sizes and analysis size are considered appropriate to correctly represent the mineralization based on the style of mineralization, sampling methodology and assay value ranges for the commodities of interest.</li> <li>• Quality Control on the RC drill rig included insertion of duplicate samples (2%) to test split efficiency, insertion of standards (2%) to verify lab assay accuracy and cleaning and inspection of sample assembly.</li> <li>• Samples were submitted to Intertek Genalysis Perth for analysis.</li> </ul>



Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The prepared RC chip samples underwent 50 g lead collection fire assay for inductively coupled plasma optical emission spectroscopy (ICP-OES).</li> <li>RC chips from holes WRC1908 and WRC1909 additionally underwent Aqua Regia digestion for ICP- mass spectrometry finish (ICP-MS). This was for multi element analysis (33 element sweet).</li> <li>The assay method and laboratory procedures were appropriate for this style of mineralization. The fire assay and ICP-OES techniques for the RC chips were designed to return precise precious metal recoveries. The Aqua Regia and ICP-MS techniques were designed to measure multi-element concentrations (for base metal mineralization) in the samples.</li> <li>The Intertek Genalysis lab inserts its own standards and blanks at set frequencies and monitors the precision of the analyses. As well, the lab performs repeat analyses at random intervals, which return acceptably similar values to the original samples.</li> <li>Laboratory procedures are within industry standards and are appropriate for the commodities of interest.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Industry certified Gannet standards were inserted in the RC chip sample streams every 50 samples, and field duplicates were collected every 50 samples. The industry standards ranged from 0.8 g/t Au up to 4.82 g/t Au. All standards were scrutinized to ensure they fell within acceptable tolerances.</li> <li>Consultant geologists, from Apex Geoscience, were involved in the logging of the RC drilling. Apex was involved in the whole process including drill hole supervision, chip sample collection and importing of the completed assay results. Drill hole logs were inspected to verify the correlation of mineralized zones between assay results and lithology/alteration/mineralization. The entire chain of custody of this recent drilling was supervised by Apex.</li> <li>The sample sizes are considered to be appropriate for the type, style and consistency of mineralization encountered.</li> <li>The assay results of RC chips are comparable with the observed mineralogy.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The assay method and laboratory procedures were appropriate for this style of mineralization.</li> <li>Data was reported by the laboratory and no adjustment of data was undertaken.</li> <li>All assay results were verified by alternative company personnel and the Qualified Person before release.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>RC drill hole locations were picked up using a handheld Garmin GPS, considered to be accurate to <math>\pm 5</math> m.</li> <li>Downhole surveys have been completed at 30m stations (and start and end of hole) using a downhole gyroscopic survey tool (REFLEX). 88% of the drill holes were less than 150 m in depth, so the amount of downhole deviation is thought to be minimal. Examination of the downhole surveys show the maximum azimuth deviation in drilling to have been 6.6° over 60 m. The drill holes experienced dip variation (most significant deviation 4.35° over 60 m), with an average maximum hole dip deviation of 3.3°.</li> <li>All coordinates were recorded in MGA Zone 50 datum GDA94.</li> <li>Topographic control is provided by a Digital Terrain Model based on the 30 m Shuttle Radar Topographic Mission data.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The drilling targeted several areas with anomalous surface sampling and historic drill intersections, and thus, the drill spacing was irregular. However, the holes behind historic drill intercepts were spaced 80 m apart.</li> <li>To date there is insufficient geological and grade continuity to support the definition of a mineral resource, and the classifications applied under the 2012 JORC code.</li> <li>No compositing has been conducted.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"><li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li><li>• <i>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.</i></li></ul>	<ul style="list-style-type: none"><li>• Drill holes at the Mt Laws prospect were angled to the north, which is roughly across strike of the mineralization and is generally considered the optimal drill orientation for this deposit. No orientation bias has been identified in the Mt Laws data.</li><li>• Drill holes targeting anomalous surface samples were angled according to the apparent dip of lithostratigraphy at surface. Structural orientations have a high degree of uncertainty in these areas, at this stage of exploration.</li></ul>
<i>Sample security</i>	<ul style="list-style-type: none"><li>• <i>The measures taken to ensure sample security.</i></li></ul>	<ul style="list-style-type: none"><li>• The sample security consisted of the RC chip samples being collected from the field into pre-numbered calico bags and loaded into polyweave bags for transport to the laboratory. The chain of custody for samples from collection to delivery at the laboratory was handled by Apex Geoscience Australia personnel.</li><li>• The sample submission was submitted by email to the lab, where the sample counts and numbers were checked by laboratory staff.</li></ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"><li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li></ul>	<ul style="list-style-type: none"><li>• No formal audits or reviews have been performed on the project, to date.</li><li>• The work was carried out by reputable companies and laboratories using industry best practice.</li></ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The current exploration is located within Exploration Licences 59/1966, 59/1696 and 59/1723, and Mining Licence 59/755 held by Norwest Minerals Limited.</li> <li>The tenement E 59/1966 was granted on 21/02/2014 and is set to expire on 20/02/2019. The tenement E 59/1696 was granted on 05/07/2011 and is set to expire on 04/07/2021. The tenement E 59/1723 was granted on 13/12/2012 and is set to expire on 12/12/2022. The tenement M 59/755 was granted on 11/09/2015 and is set to expire on 10/09/2036. Together with two other tenements, these tenements make up the Warriedar Project combined reporting group.</li> <li>One Registered Heritage Site resides in the south eastern portion of tenements E 59/1723 and E 59/1966, this being Monger's Lake.</li> <li>The tenements reside in the Karara Rangeland Park.</li> <li>The tenements are in good standing.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Significant historic work has been completed over the tenements in question, including mining operations, drilling, geophysical surveys and abundant surface sampling. Previous operators of the tenement areas include Homestake Gold of Australia Ltd (1980-1982), Noble Mining (1982), Aztec (1983-1986), Epoch Minerals (1985-1986), Kulim Ltd (1987), Gold Partners NL (1983-1990), Samantha Gold (1991), Resource Exploration NL (1996-2000), Prosperity Resources Ltd (2006-2010), West Peak Iron (2010-2013) and Aphex Minerals Pty Ltd (2013-2017).</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralization.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Warriedar Project covers a region in the south of the Archean Warriedar Fold Belt, over a sequence of mafic volcanic and sill rocks</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>with interlayered banded iron formations (BIF's). Epigenetic gold is associated with pyritic alteration of BIF's with quartz or quartz-tourmaline veining and stockworks.</p> <ul style="list-style-type: none"> <li>The area is prospective for BIF hosted epigenetic gold, as well as for gold hosted in narrow quartz-vein bearing structures which trend northeast throughout the area.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>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:               <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All drill holes and their significant intersections have been included in Appendix 1, Table 3 of the release.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Length weighted intersections have been reported in the above-mentioned Table of the release.</li> <li>No high cuts have been applied.</li> <li>Metal equivalent values are not being reported.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Relationship between mineralization widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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’).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes at Mt Laws are angled at 60° or 55° and to the north, corresponding to roughly perpendicular to the orientation of the mineralized strike, which dips at approximately 35° to the south-southeast.</li> <li>• Drilling at Lang’s Find was angled at 55° and to the northeast, corresponding to intersect the orientation of the mineralized strike, which dips at approximately 80° to the southwest.</li> <li>• Due to the limited amount of drilling completed to date over the soil anomaly at Reid’s Ridge, there is a high uncertainty of the geometry and continuity of mineralisation. As such reported intersections are unlikely to be true width intersections.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• An appropriate exploration map has been included in the release.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A table containing anomalous RC chip results to date has been included in the release. All locations are shown on the attached plans.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>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 method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• An exploration plan from the RC drilling has been included in the release.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Planned work is planned to infill the upper extensions to Mount Laws mineralisation with the aim to convert portions to an inferred resource.</li> </ul>