

## Quarterly Activities Report Period ending 31 December 2018

### Highlights

- Further work at Myall has identified a cluster of porphyry Copper Gold targets which has chalcopyrite-pyrite-bornite-molybdenite sulphide mineralisation hosted in potassic altered, magmatic-hydrothermal breccias, quartz stockwork vein arrays, and sheeted and massive magnetite vein systems and intercepts including:
  - 121m at 0.4% Cu, 0.09 g/t Au, including 70m at 0.54 Cu, 0.15 g/t Au, at Kingswood.
- DD drilling at Buryan porphyry Copper Gold target completed with results to be released next quarter
- RC drilling completed at Parkes JV Project IP survey at a coincident magnetic, geochemical and chargeability anomaly. Results next quarter
- Magmatic completed Yamarna tenement acquisition adding 61sqkm to our Yamarna project, 15km from Gruyere 5.88Moz gold mine currently under construction
- A field reconnaissance at the Mt Venn Copper Nickel Cobalt project identified undrilled EM targets along strike from Great Boulder's (GBR) recent Mt Venn Copper Nickel Cobalt discovery
- Corporately, Magmatic negotiated the purchase of the Net Smelter Royalties (NSR) over all of its East Lachlan Copper Gold projects which we believe will assist with future discussions regarding our projects

Magmatic Resources Limited ("Magmatic" or the "Company") (ASX: MAG) is pleased to provide its Quarterly Activities Report for the period ending 31 December 2018.

### Corporate Update

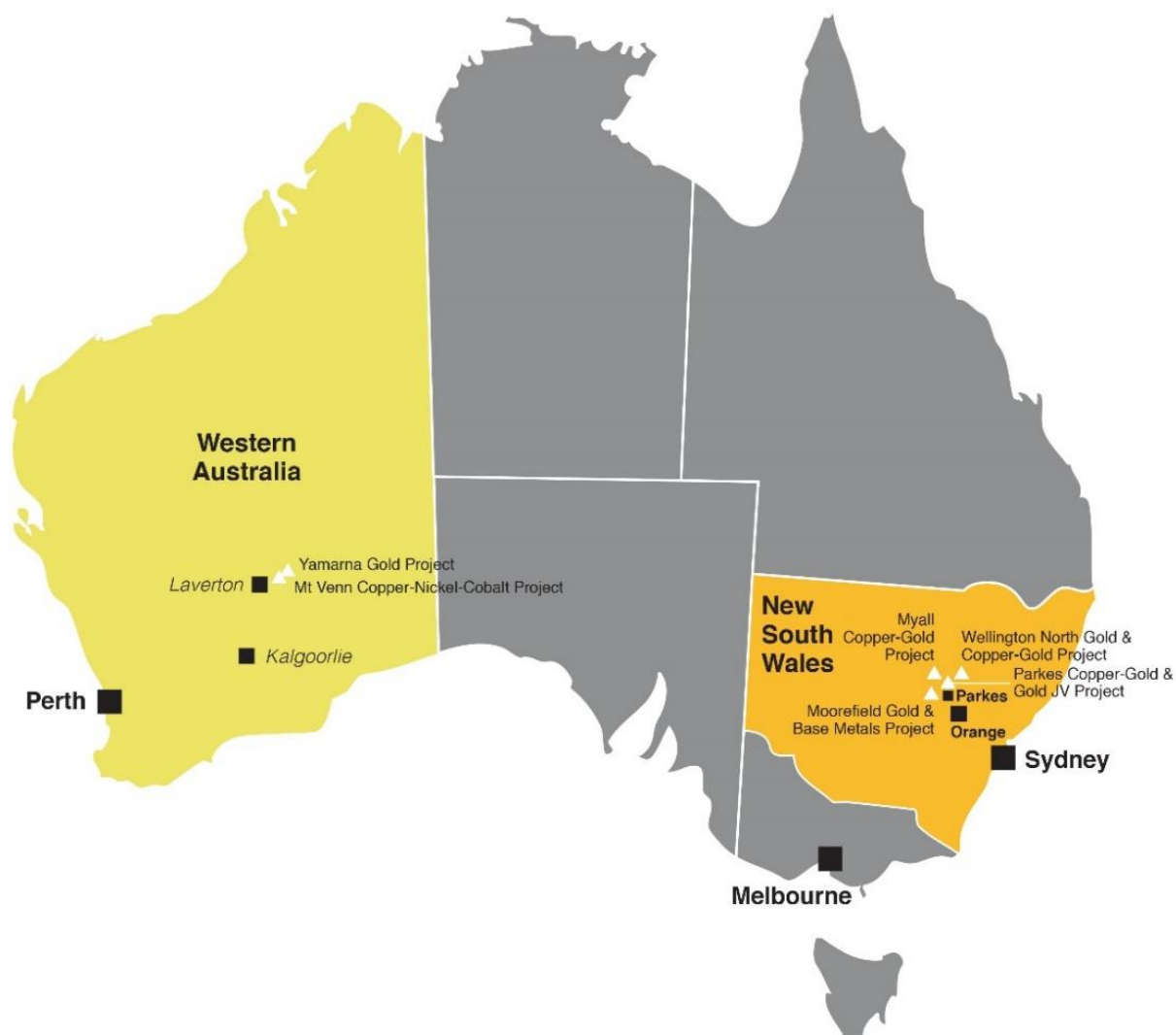
- Magmatic negotiated the purchase of the Net Smelter Royalties (NSR) over all of its East Lachlan Copper Gold projects. These NSR's covered the 4 projects MAG purchased from Gold Fields and were owed to Clancy Exploration (the original tenement owners).
- Eliminating the NSR on each project, gives MAG added flexibility with future discussions with potential joint venture partners, and leaves all tenements unencumbered and 100% owned by Magmatic.

Magmatic continued to progress negotiations with potential joint venture partners during the December quarter in relation to the Company's larger porphyry gold-copper and base metals targets within its advanced exploration portfolio in New South Wales' East Lachlan region.

Projects including the Myall Gold-Copper Project, Moorefield Gold & Base Metals Project and areas within the Wellington North Gold & Gold-Copper Project contain significant mineralised systems and targets that have attracted the attention of several potential partners to assist exploration programs across these tenements.



Magmatic expanded the company's Yamarna Gold Project by completing the acquisition of Landslide Investments Pty Ltd<sup>1</sup>, holder of Exploration Licence E38/2918, which is within Australia's newest emerging approximately gold production belt, where Gold Roads 5.88Moz Gruyere gold mine development is located just 15km to the east. The transaction was first announced on 11 April 2018. Magmatic also has the adjoining Exploration Licence E38/3312 under application, which, when granted, will grow the strategic Yamarna land position to 355km<sup>2</sup>.



**Figure 1: Magmatic Resources Project Location Plan**

<sup>1</sup> Please refer to MAG ASX release dated 9 October 2018



## Exploration Overview

Magmatic continued its on-the-ground exploration activities during the period within its East Lachlan project portfolio as well as its WA portfolio. Exploration during the quarter focussed on the Parkes JOGMEC JV where the company completed two drilling programs (Blackridge IP target and Buryan porphyry Copper Gold target), as well as the WA Mt Venn Project where the company completed its first field trip.

The Company was pleased to announce the progress on its Parkes JOGMEC JV. The Company completed diamond drilling at its Buryan porphyry Copper Gold prospect, with results to be released next quarter and further drilling is already being planned. The Company also progressed its newly identified coincident IP chargeability and aeromagnetic target with RC drilling completed at the Blackridge Prospect. The RC drilling was completed and results are expected next quarter (ASX release: 20/12/2018).

The Company was also pleased to announce results from its first field trip to Mt Venn Copper Nickel Cobalt this quarter with data recovery identifying undrilled EM conductors and drill targets identified. Great Boulder (GBR) are using EM, and particularly down-hole EM to successfully target mineralisation. Previous drilling at Mt Venn included intercepts such as 13.1m at 0.49% Cu. Magmatic's first field trip also returned rock chip results up to 0.51% Cu and 0.14% Ni in weathered gabbro with minor malachite. Magmatic also applied for another tenement (application E38/3351) immediately north of Mt Venn which has an undrilled EM anomaly (ASX release: 5/12/2018).

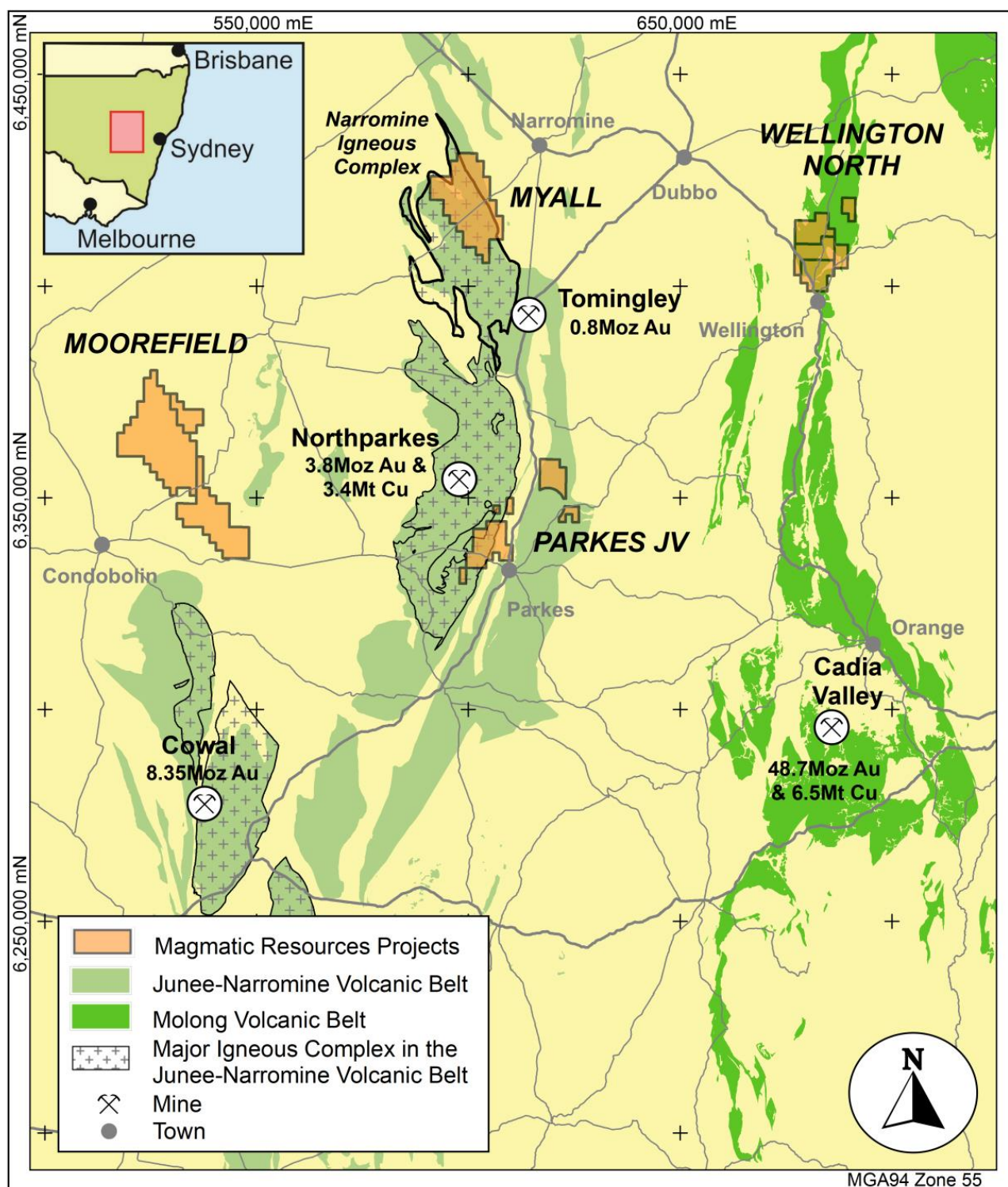
Magmatic's latest work at Myall is demonstrating that this project contains a cluster of porphyry Copper Gold targets within Australia's largest porphyry Copper Gold belt. Previous explorer's intercepts include:

- 121m at 0.4% Cu, 0.09 g/t Au from 103m, including 70m at 0.54% Cu, 0.15 g/t Au at the Kingswood prospect

Magmatic (ASX release: 17/12/2018) believe that the Myall project has the geological features and unexplored space available to identify a Northparkes style porphyry Copper Gold deposit. The following work is planned next quarter for Myall to assist with drill targeting:

- Re-modelling of the 50m line-spaced aeromagnetic data, including 3D inversion
- Geochemical modelling including lithochemical and porphyry pathfinder element modelling of the current multielement datasets
- Geological targeting including exploration target size modelling and detailed analogy comparison
- This work is expected to assist in identifying areas for drilling.





**Figure 2: Location of Magmatic's projects in the East Lachlan, NSW showing mines and advanced projects with selected metal endowments<sup>2</sup>**

<sup>2</sup> Metal endowment from: Phillips, G N (Ed), 2017. Australian Ore Deposits (The Australasian Institute of Mining and Metallurgy: Melbourne)



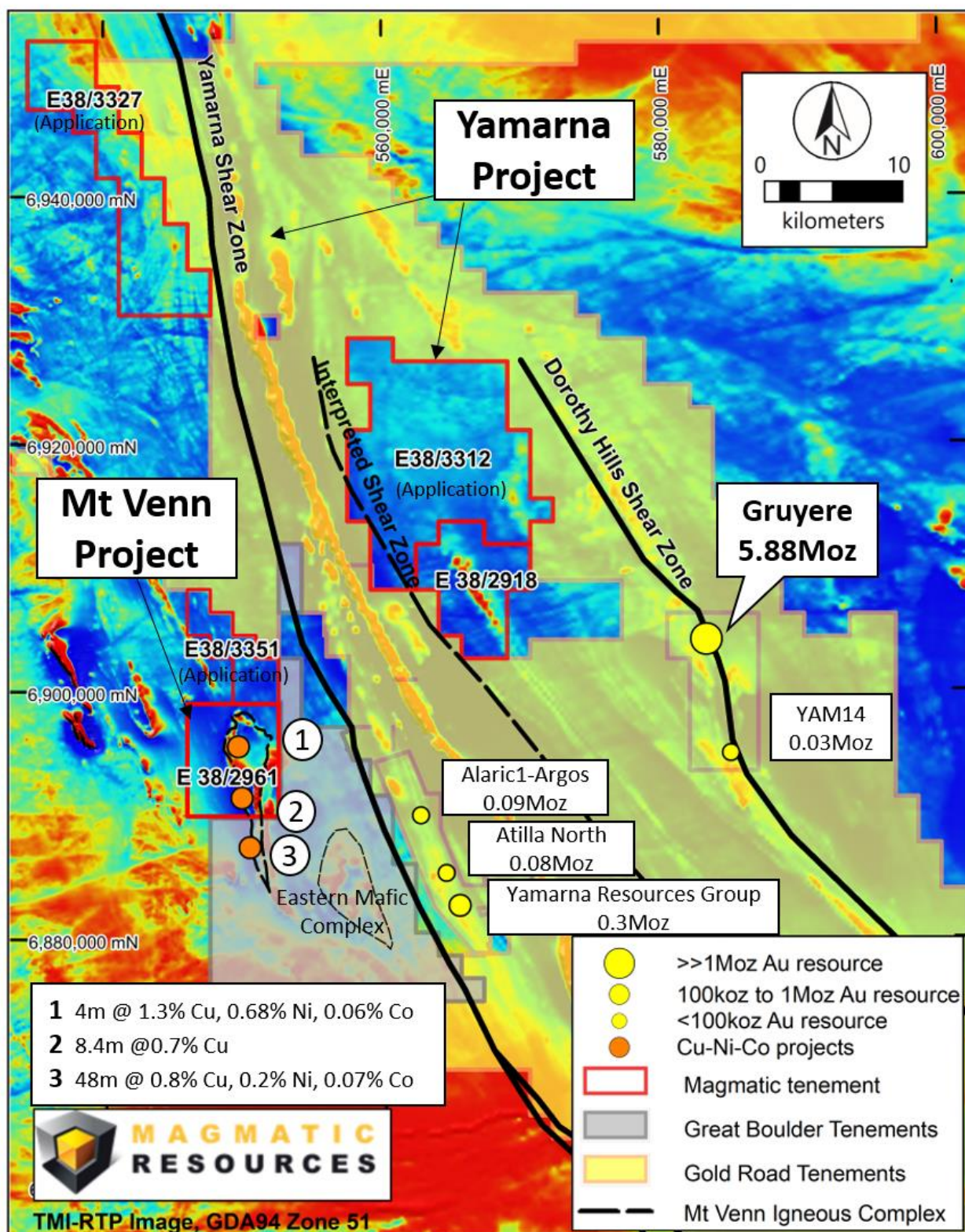


Figure 3: Magmatic's Yamarna and Mt Venn projects in Western Australia highlighting regional geology, aeromagnetic data and location plan.



## Parkes Copper-Gold & Gold Project (MAG 100%, JOGMEC earning 51%)

### Porphyry copper-gold targets:

- Buryan,
- 9 new aeromagnetic targets

### Gold targets:

- MacGregors and MacGregors South (e.g. 10m at 1.25g/t Au, from 146m<sup>3</sup>)

Magmatic completed diamond drilling at the Buryan copper-gold porphyry target during the quarter and results of this drilling will be released in the March quarter. Further diamond drilling has been designed and drilling is planned to start as soon as possible.

The Company has previously identified 3 new Gold and 9 new Copper Gold targets through a combination of aeromagnetic surveying and field verification of areas interpreted to have shallow cover (less than 5-10m) and no previous drilling. One, Blackridge, has had an IP survey completed with results showing a 200x400m chargeability anomaly coincident with a gravity and magnetic anomaly. Three RC holes were completed at this target with results expected next quarter.

## Myall Gold-Copper Project (MAG 100%)

### Porphyry copper-gold targets:

- Kingswood (e.g. 52m at 0.67% Cu and 0.20g/t Au, from 144m<sup>4</sup>),
- SLR (e.g. 1m at 0.16% Cu and 0.62g/t Au, from 161m eoh<sup>5</sup>)

### Epithermal gold targets:

- Barina (e.g. 0.5m at 204g/t Au, from 221.9m<sup>4</sup>)

Myall Gold-Copper Project is located within a very large volcano-intrusive complex within Australia's largest porphyry Copper Gold belt which hosts Cadia Valley and Northparkes. The intrusive complex is interpreted to be a similar age as the Cadia Valley and Northparkes porphyry systems. Magmatic has completed a porphyry Copper Gold analysis of the project and has two drill-ready targets at Kingswood and SLR. The porphyry copper-gold system at Kingswood has chalcopyrite-pyrite-bornite-molybdenite sulphide mineralisation hosted in potassic altered, magmatic-hydrothermal breccias, quartz stockwork vein arrays and sheeted and massive magnetite vein systems.

Magmatic has continued discussions with potential joint venture partners during the period, including inviting several parties into its data room, with the joint venture path being the preferred strategy for drill testing the porphyry potential of the Myall Project. Magmatic believe the purchase of existing NSR on its East Lachlan projects this quarter has removed the significant encumbrance that the NSRs represented and will significantly assist with further discussions.

<sup>3</sup> Please refer to MAG ASX release dated 20 March 2018

<sup>4</sup> Please refer to MAG Prospectus release dated 17 May 2017

<sup>5</sup> Please refer to MAG ASX release dated 20 June 2018



## Wellington North Gold & Copper-Gold Project (MAG 100%)

Porphyry copper-gold targets:

- Rose Hill (e.g. 71m at 0.43% Cu and 0.30g/t Au, from surface<sup>6</sup>),
- Lady Ilse (e.g. 22m at 0.54g/t Au, from 18m<sup>7</sup>)

Gold targets:

- Bodangora (historical production 230,000oz at 26g/t Au<sup>6</sup>)

Magmatic has continued discussions with potential joint venture partners during the period, including inviting several parties into its data room, with the joint venture path being the preferred strategy for drill testing the Rose Hill and Lady Ilse porphyry-copper gold targets. Magmatic believe the purchase of existing NSR on its East Lachlan projects this quarter has removed the significant encumbrance that the NSRs represented and will significantly assist with further discussions.

## Moorefield Gold & Base Metals Project (MAG 100%)

Gold targets:

- Boxdale to Carlisle Reefs 15km gold trend
  - ✓ Carlisle Reefs target (e.g. 30m at 1.60g/t Au, from 80m<sup>8</sup>)
  - ✓ Boxdale target (e.g. 19m at 1.28 g/t Au<sup>6</sup>)

Base metal targets: Pattons, Moorefield

Magmatic has completed the interpretation of the aeromagnetic survey completed in the July quarter and is planning on field verifying targets with shallow cover in the next quarter.

## Mt Venn Project: Copper-Nickel-Cobalt (MAG 100%)

Targets: Mt Venn-style copper-nickel-cobalt mineralisation.

Magmatic completed a reconnaissance field program at the Mt Venn Copper-Nickel-Cobalt Project, completing initial soil and rock chip sampling and confirmed EM anomalies under shallow cover.

Magmatic identified undrilled EM conductors at its Mt Venn Copper Nickel Cobalt Project following the acquisition of previous VTEM and ground EM datasets. One of the larger conductors, MVVA2, is along strike from a previous drilling intercept which may indicate a repeat of GBR's Mt Venn mineralisation on Magmatic's tenement.

The Project is along strike from Great Boulder Resources' copper-nickel-cobalt sulphide discovery on the Mt Venn Igneous Complex, of which Magmatic's land holding covers 60% of the complex. An additional exploration licence application (E38/3351) was made immediately north of Mt Venn E38/2961 during the quarter.

<sup>6</sup> Please refer to MAG Prospectus release dated 17 May 2017

<sup>7</sup> Please refer to MAG ASX release dated 19 February 2018

<sup>8</sup> Please refer to MAG ASX release dated 17 October 2017



## Yamarna Gold Project (MAG 100%)

Target: Gruyere-style gold mineralisation

Magmatic completed the acquisition of Landslide Investments Pty Ltd<sup>9</sup>, holder of Exploration Licence E38/2918, which forms part of the Company's Yamarna Gold Project. The transaction was first announced on 11 April 2018<sup>10</sup>.

Magmatic also has the adjoining Exploration Licence E38/3312 under application, which when granted will grow the strategic Yamarna land position to 252km<sup>2</sup> within Australia's newest emerging gold production belt, where the 5.88Moz Gruyere gold mine development located just 15km to the east of Magmatic's project is due to come into production in mid-2019.

Major international gold producer Gold Fields has recognised the potential of the Yamarna greenstone belt as being a long term, high margin production opportunity for its portfolio, opting to participate in a 50% joint venture partnership with Australian explorer Gold Road Resources to develop the Gruyere mine and continue to explore the associated tenements. Gold Fields has also invested in a strategic 10% corporate shareholding of Gold Road. Magmatic acquired its advanced New South Wales project portfolio from Gold Fields prior to listing in May 2017 and Gold Fields also continues to maintain a strategic 15% shareholding in Magmatic.

## Key Announcements in Period

Magmatic completed Yamarna tenement acquisition; field work to commence on Yamarna gold project and Mt Venn copper-nickel cobalt project (9/10/2018 ASX release)

Undrilled EM conductors and drill targets identified at Magmatic's Mt Venn Copper Nickel Cobalt project. (5/12/2018 ASX release).

Purchase of existing Net Smelter Royalties on 4 East Lachlan Copper-Gold projects (14/12/2018 ASX release)

Large Porphyry Copper-Gold Target defined at Myall Project (17/12/2018 ASX release)

Parkes JV Project IP survey identifies coincident magnetic, geochemical and chargeability anomaly (20/12/2018 ASX release)

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<sup>9</sup> Please refer to MAG ASX release dated 9 October 2018

<sup>10</sup> Please refer to MAG ASX release dated 11 April 2018



## Magmatic Tenement Listing<sup>11</sup>

(As at 31 December 2018)

State	Project	Lease No	Status	JV Project	Manager	Magmatic interest <sup>11</sup>	Area (km2)	Note
NSW	Moorefield	EL7675	Renewed	No	Magmatic	100%	284.6	
NSW	Moorefield	EL8669	Granted	No	Magmatic	100%	193.0	
NSW	Myall	EL6913	Renewed	No	Magmatic	100%	243.7	
NSW	Parkes	EL7424	Renewed	Yes	Magmatic	100%	56.0	JOGMEC JV
NSW	Parkes	EL7676	Renewed	Yes	Magmatic	100%	95.0	JOGMEC JV
NSW	Wellington North	EL6178	Renewed	No	Magmatic	100%	113.0	
NSW	Wellington North	EL7440	Renewed	No	Magmatic	100%	17.4	
NSW	Wellington North	EL8357	Granted	No	Magmatic	100%	46.4	
WA	Mt Venn	E38/2961	Granted	No	Magmatic	100%	59.6	Transferring from E25
WA	Yamarna	E38/2918	Granted	No	Magmatic	100%	60.68	
WA	Yamarna	E38/3312	Pending	No	Magmatic	100%	191.3	
WA	Yamarna	E38/3327	Pending	No	Magmatic	100%	103.4	
WA	Mt Venn	E38/3351	Pending	No	Magmatic	100%	27.3	

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## Competent Persons Statement

The information in this document that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Steven Oxenburgh who is a Member of the AusIMM (CP) and a Member of the Australian Institute of Geoscientists. Mr Oxenburgh is a full-time employee of Magmatic Resources Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Oxenburgh consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Additionally, Mr Oxenburgh confirms that the entity is not aware of any new information or data that materially affects the information contained in the ASX releases referred to in this report.

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<sup>11</sup> All tenements are held by Modeling Resources Pty Ltd which is a 100% owned subsidiary of Magmatic Resources Ltd



## About Magmatic's Project Portfolio

Magmatic Resources is a multi-commodity exploration company that listed on the ASX in May 2017 with four projects in the East Lachlan, New South Wales; a focused portfolio of gold, copper and other base metals. Magmatic has recently acquired two Western Australian projects: Yamarna (gold) and Mt Venn (copper-nickel-cobalt) in Australia's newest goldfield, the Yamarna Belt, 200 kilometres east of Laverton in Western Australia.

### New South Wales – East Lachlan

The Company has four 100% owned projects – Myall, Moorefield, Wellington North and Parkes (joint venture with JOGMEC) – comprising eight tenements (1049km<sup>2</sup>) in the East Lachlan Fold Belt in central NSW. This province is host to major gold and copper mining operations within the Ordovician Macquarie Arc, with significant metal endowments<sup>12</sup> such as Newcrest's Cadia Valley (48.7Moz Au and 6.5Mt Cu), Evolution's Cowal (8.35Moz Au) and China Moly – Sumitomo's Northparkes (3.8Moz Au and 3.4Mt Cu). Other mines and advanced projects in the region include Regis' McPhillamys (2.2Moz Au), Sandfire's Temora (2.1Moz Au and 0.8Mt Cu), and Alkane's Tomingley (0.8Moz Au).

The NSW portfolio was acquired from Gold Fields (world's 7th largest gold miner) in 2016 and is prospective for porphyry gold-copper, epithermal and orogenic gold deposits and skarn and VHMS base metals ± gold deposits. Gold Fields spent more than \$13.5m exploring the projects and identified more than 40 prospects and retains a 20% shareholding in Magmatic. The Company is focused on advancing priority, near surface gold prospects, while joint venturing its larger gold-copper porphyry projects.

### Western Australia – Yamarna and Mt Venn

Magmatic's Yamarna gold project is in the central part of the Yamarna greenstone belt and 15km from Gold Road Resources and Gold Field's 5.88Moz<sup>13</sup> Au Gruyere deposit. Gold Road announced a \$23M (163,500m) 2018 greenfield exploration budget on its nearby Yamarna tenements.

The Company purchased the Mt Venn copper-nickel-cobalt project in March 2018 (ASX: MAG 11/04/2018), where exploration licence E38/2961 covers 60% of the Mt Venn Igneous Complex and is immediately along strike from the recent copper-nickel-cobalt sulphide discovery of the same name by Great Boulder Resources.

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<sup>12</sup> Metal endowment from: Phillips, G N (Ed), 2017. Australian Ore Deposits (The Australasian Institute of Mining and Metallurgy: Melbourne)

<sup>13</sup> ASX: GOR 27/03/2018

