

ASX / Media Release

11 October 2019

Parkes Porphyry Copper Gold and Gold JV with JOGMEC finalised.

Highlights

Magmatic Resources Limited (“**Magmatic**” or the “**Company**”) (ASX: **MAG**) would like to update the market about its Parkes Project Joint Venture (“JV”) with Japan Oils and Gas Metals National Corporation (JOGMEC). JOGMEC have spent approximately \$2.7m on the project which is in its 3rd year. JOGMEC and Magmatic have agreed to discontinue the JV, and 100% of the project and the two licences (Alectown and Parkes East) remain with Magmatic.

Managing Director David Richardson said: “We would like to thank JOGMEC for their valuable contribution to the Parkes JV, and are very excited about the upside potential the project offers. The ~\$2.7m spent on exploration advanced several key targets, particularly diamond drilling at the Buryan Copper-Gold porphyry target, which is ~ 20km from China Molybdenum and Sumitomo’s Northparkes Copper-Gold Porphyry Mine. The JV also completed an Aeromagnetic Survey at the Parkes East tenement which identified nine (9) new porphyry targets and three (3) new orogenic gold targets.

Alkane Resources Limited’s (“**Alkane**”) recent Boda copper-gold porphyry discovery (~2km from Magmatic’s Wellington North Project) and recent orogenic gold discoveries south of their Tomingley mine (~50km North of Magmatic’s Parkes Project) (See Figure 1 and MAG ASX 10/9/2019) also highlight the great potential of the East Lachlan region for further major discoveries.”

Parkes JV Activity

The JV spent ~\$2.7m on exploration across both licences EL7676 Parkes East and EL7424 Alectown. Both tenements are located immediately east of the Northparkes Porphyry Copper Gold Mine, and ~ 50km South and along strike from Alkane’s Tomingley mine.

JOGMEC’s priority at the JV was copper targets and as such Magmatic was unable to advance two significant gold targets MacGregors and Stockman’s during the JV. The company believes that these targets have been significantly re-rated by Alkane’s success to the north along the Parkes Fault Zone.

During the joint venture Magmatic have:

- Identified a 2km gold trend through MacGregors and MacGregors South including intercepts such as 10m at 1.25 g/t Au (from 146m) (ASX 20/3/2018)
- Completed a detailed aeromagnetic survey on EL7676 which identified new Gold and porphyry Copper Gold targets (ASX 28/5/2018)
- Tested two of the copper targets with AC and RC drilling*. Further gold targets remain untested
- Re-assessed and tested the Buryan porphyry Copper gold target* (EL7424) following up on previous results of 135m at 0.29% Cu, 0.17 g/t Au, including 28m at 0.50% Cu. 0.28 g/t Au** (ASX 29/1/2019).

Buryan has the following mineralised porphyry Copper Gold indicators:

- ✓ Laminated magnetite-pyrite bearing veins
- ✓ Quartz-carbonate-pyrite±chalcopyrite veins
- ✓ Multiple mineralisation events recorded in structural features
- ✓ 22 holes have greater than 20m at 0.15% Cu (USGS criteria)



MAGMATIC RESOURCES LTD
magmaticresources.com

T: +61 8 9322 6009
E: info@magmaticresources.com

Head Office: Suite 8, 1297 Hay Street
West Perth WA 6005
ABN 32 615 598 322

- ✓ Broadly follows typical metal and alteration assemblage zonation with an outer carbonate-base-metal-gold veins on periphery (propylitic alteration), becoming more pyritic (phyllic alteration), and pyritic-chalcopryite rich in the central mineralised section (potassic alteration)

*MAG quarterly activities report (ASX 31/7/2019)

**The high-grade zone is of similar grade to the China Molybdenum Company Limited “CMOC” / Sumitomo Group “Sumitomo” Northparkes Copper-Gold mine (3.4Mt Cu and 3.8M oz Au) published¹ resource grade of 0.56% Cu and 0.18g/t Au

A summary of the physical exploration work completed under the JV is shown below:

Work completed	EL7424 Alectown	EL7676 Parkes East
AC drilling (holes/m)	–	9/359m
RC drilling (holes/m)	–	27/2596m
DD drilling (holes/m)	4/2913m	2/956.6m
Aeromagnetic surveys	–	1976 line-km
IP surveys	–	3 lines
Surface geochemistry	–	960 samples sites

2019 work on Buryan porphyry Copper Gold prospect

- Magmatic successfully completed a 930.05m diamond hole at Buryan in May within the altered and mineralised Buryan porphyry Copper Gold system, 20km north of Parkes, NSW
- Drillhole 19ATDD013 indicates a mineralised porphyry Copper Gold system over an area of about 1,000m by 500m. This hole extended the depth of the mineralisation at Buryan and confirms a sizable porphyry Copper Gold system
- Drillhole 19ATDD013 intersected continuous porphyry Copper Gold mineralisation with best results of:
 - ✓ 10m at 0.49 g/t Au (from 448m), incl. 2m at 1.67 g/t Au (from 456m)
 - ✓ 79m at 0.11% Cu, 0.06 g/t Au (from 545m), and
 - ✓ 57m at 0.17% Cu, 0.11 g/t Au (from 822m)
- The mineralisation is open in all directions and at depth
- Magmatic plans further geological analysis to identify the core of the system
- Exploration results are in the attached tables.

Future work will focus on identifying the core to this porphyry system, where higher grades are expected, and will include reprocessing of the previous high-resolution (50m line spacing) aeromagnetic data over the local area (~3km by 3km area), and possibly completing a close-spaced ground magnetic survey, reviewing pathfinder and lithogeochemistry, as well as relogging of previous diamond and aircore holes.

19ATDD013 was drilled through the sequence of Ordovician volcanics intruded by multiple diorite bodies. The dominant rock types intersected were:

- Diorite; medium- to fine -grained, equigranular crystalline to porphyritic texture;
- Mafic volcanic breccia, polymictic, with clast to matrix supported textures; and
- Reworked volcanics (volcanic sandstone and tuffs).

¹ Phillips, G N (Ed), 2017. Australian Ore Deposits (The Australasian Institute of Mining and Metallurgy: Melbourne)



Dominant alteration is chlorite-sericite-carbonate +/- quartz, +/- albite +/-pyrite (propylitic assemblage) ranging from weak to strong intensity. Alteration occurs as pervasive or in the form of thin veins and vein selvages.

Mineralisation occurs (Figure 4) in the form of 'A' veins (pyrite dominated), 'D' veins (pyrite-quartz-carbonate) and 'B' veins (quartz-chalcopyrite). Locally, veins and disseminated magnetite are observed. There are traces of chalcopyrite which occurs as centreline in veins, fine veins, and small to plus 10mm blebs.

East Lachlan discovery successes

Both Cadia Valley (Ridgeway, Cadia and Cadia East) **48.7Moz Gold and 6.5Mt Copper**¹ and the Northparkes **4Moz Gold and 3.7Mt**¹ mining complexes are great discovery stories.

The pre-discovery intersection at **Ridgeway was 118m at 0.10% Cu** (NC371, from 396m) and then the extension of this hole intercepted 102m at **0.40% Cu and 0.13 g/t Au from 610m**. The discovery hole NC498 intersected was **145m @ 4.3 g/t Au, 1.20% Cu from 598m** and was drilled in November 1996².

Initial drill logs for Northparkes describe 'patches and disseminations of bornite and chalcocite' in an odd fragmental rock'. Follow-up core drilling intersected **203m at 0.66% Cu and 0.77 g/t Au**.³

Magmatic believe that the system at Buryan is a fertile porphyry Copper Gold system and systematic exploration will identify the potassic-altered core associated with a porphyry Copper Gold mineralised system.

About the Buryan Prospect

At a regional scale Buryan is associated with a magnetic low which is broadly interpreted as being related to a structure parallel to the approximate east-west Lachlan Transverse Zone with this structure interpreted to transect Northparkes, Buryan and Copper Hill. The magnetic low is also at a subtle regional stratigraphy flexure which Magmatic believe may be an important feature for localising regional stresses and porphyry-related mineralisation emplacement.

Buryan (see photos) has indicators of being in a mineralised porphyry Copper Gold system:

- Laminated magnetite-pyrite bearing veins
- Quartz-carbonate-pyrite±chalcopyrite veins
- Multiple mineralisation events recorded in structural features
- Extensive disseminated and fine veins of pyrite±chalcopyrite, with pyrite percentages from 2-5%, and locally up to up 20%, and chalcopyrite percentage is estimated to range from trace to locally 1-2%.
- Host rocks are Goobang Volcanics, which are interpreted as being equivalent to the Goonumbla Volcanics (one of Northparkes host units), a polymictic volcanic breccia (occasionally conglomeratic), intruded by diorite and porphyritic diorite. Phenocrysts in the porphyritic diorite are fine (~1mm) feldspar and coarser (~4mm) hornblende phenocrysts.
- Additionally, Gold Fields Limited ("**Gold Fields**") intersected visible gold in their 2011 drilling program (MAG ASX release 29/1/2019).

Previous interpretations have resulted in a moderate east dip to mineralisation but results from our drilling and structural work, and other porphyry mineralisation in the area support a steep dip. As shown in the cross section, 19ATDD013 appears to have confirmed mineralisation to be vertical which leaves substantial space for a large porphyry Cu-Au deposit.

² Holliday, McMillan, and Tedder, *Discovery of the Cadia-Ridgeway Gold-Copper porphyry deposit, in New Generation Gold Mines, 1999*

³ Owens et al., 2017, *Northparkes copper-gold deposits in* Phillips, G N (Ed), 2017. *Australian Ore Deposits (The Australasian Institute of Mining and Metallurgy: Melbourne)*



About Parkes

Parkes is prospective for porphyry Cu-Au deposits and orogenic gold. Two licences cover 151 km²; which are ~15-20km from (CMOC / Sumitomo) Northparkes Cu-Au mine. Magmatic completed a detailed aeromagnetic survey in 2018 which identified multiple Cu-Au porphyry and gold targets, and previous drilling results include:

- Alectown (EL7424) Buryan; 135m at 0.29% Cu, 0.17 g/t Au, including **28m at 0.50% Cu and 0.28g/t Au (porphyry Copper Gold target)**
- Parkes East (EL7676) MacGregors and MacGregors South; **10m at 1.25 g/t Au (near surface orogenic gold targets)**

Please direct all enquiries to:

David Richardson
Managing Director
Phone: +61 430 353 343
Email: info@magmaticresources.com

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.



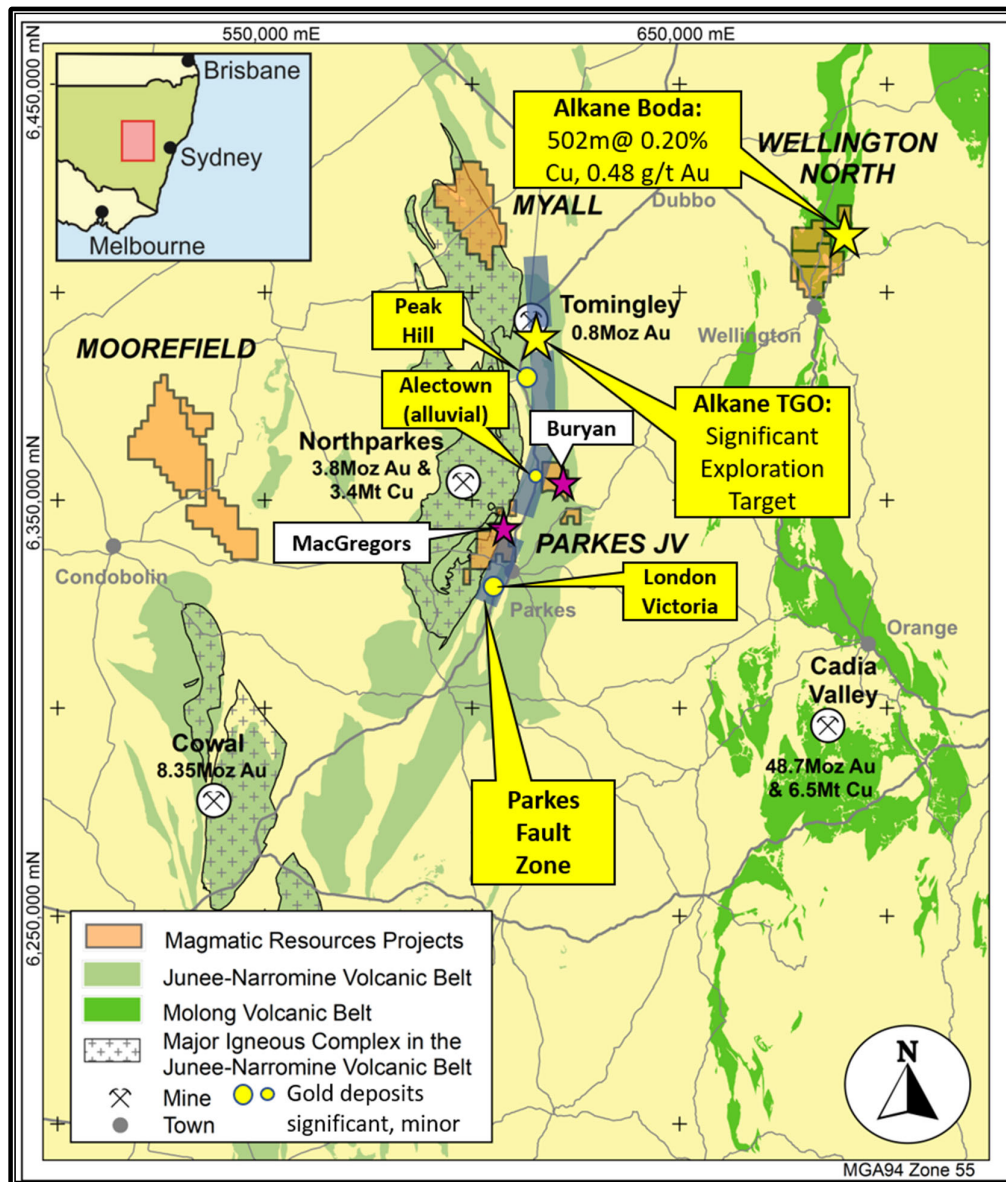


Figure 1: Location of Alkane's discoveries relative to Magmatic's licences



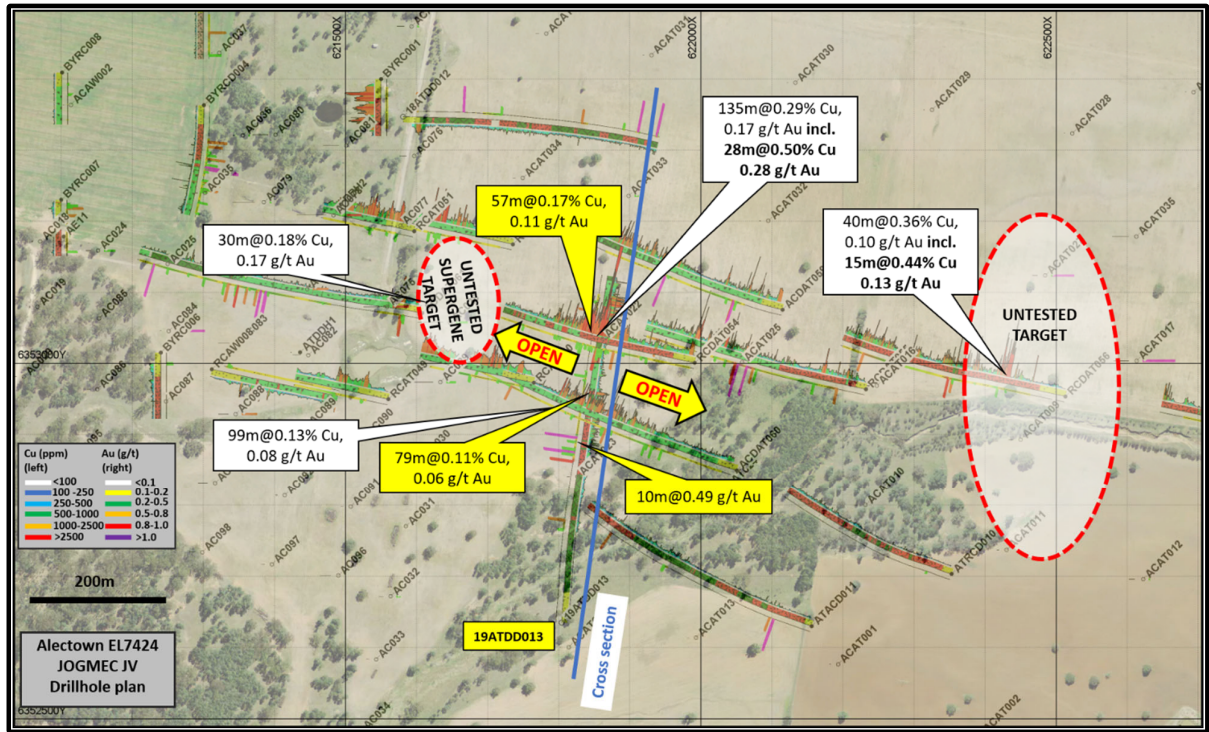


Figure 2: Buryan drill plan on satellite image (yellow; results this release, white; MAG ASX release 29/1/2019)

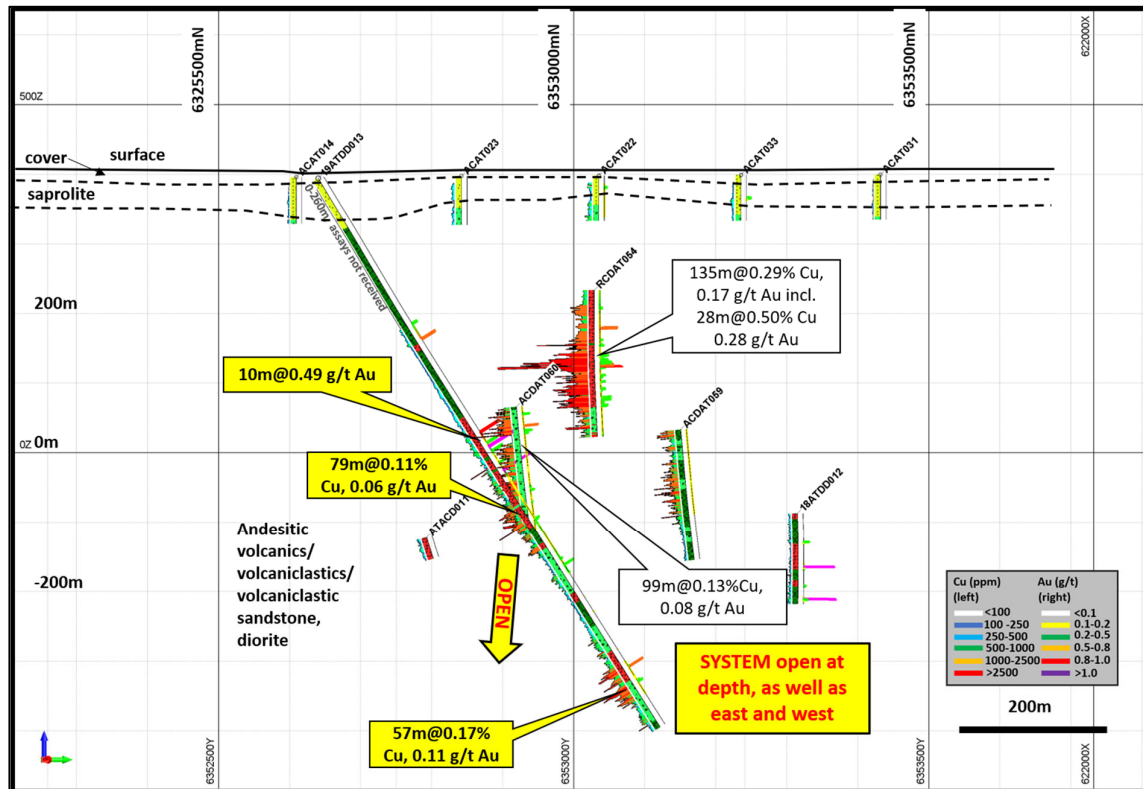


Figure 3: Buryan cross section 19ATDD013, looking west (yellow; results; this release, white; MAG ASX release 29/1/2019)



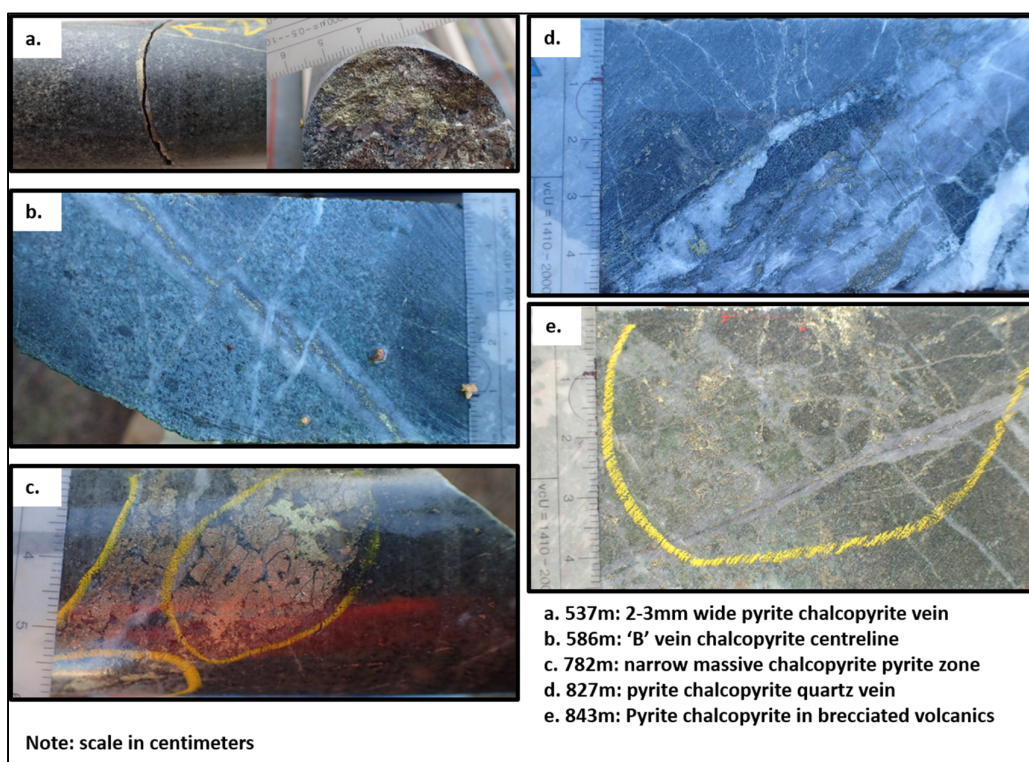


Figure 4: Examples of chalcopyrite mineralisation in 19ATDD013

The following data is appended to this report:

Table 1: 19ATDD013 Collar Table	7
Table 2: 19ATDD013 assay results, best intercepts (>0.1g/t Au).....	8
Table 3: 19ATDD013 assay results, best intercepts (>0.25g/t Au).....	8
Table 4: 19ATDD013 assay results, best intercepts (>1000ppm Cu)	9
Table 5: 19ATDD013 assay results, best intercepts (>2500ppm Cu)	9

Table 1: 19ATDD013 Collar Table

19ATDD013 Collar Table								
Hole ID	Hole Type	Precollar Depth	Max Depth	E (GDA94 Z55)	N (GDA94 Z55)	RL	Dip	Collar azimuth
19ATDD013	DD	0	930.05	621804	6352635	394	-58	003



Table 2: 19ATDD013 assay results, best intercepts (>0.1g/t Au)

From (m)	Interval	Au (g/t)	Cu (ppm)
248	2	0.29	267
274	2	0.61	353
432	2	0.98	624
448	10	0.49	580.8
464	2	0.47	211
473	1	0.15	390
483	2	0.25	1718.5
491	1	0.1	565
496	1	1.8	921
505	3	0.12	911
553	3	0.11	1993.33
559	2	0.14	1830
572	1	0.14	1740
576	5	0.14	2290
619	3	0.11	1683.33
649	1	0.23	267
653	2	0.15	288.5
659	1	0.43	356
672	3	0.14	424
713	1	0.12	434
738	2	0.11	497
802	1	0.11	701
822	12	0.16	1891.08
840	6	0.12	1887.17
854	7	0.19	2639.29
864	15	0.12	1716.4

Table 3: 19ATDD013 assay results, best intercepts (>0.25g/t Au)

From (m)	Interval	Au(g/t)	Cu (ppm)
248	2	0.29	267
274	2	0.61	353
432	2	0.98	624
450	2	0.45	440
456	2	1.67	807
464	2	0.47	211
484	1	0.35	477
496	1	1.8	921
580	1	0.28	4180
659	1	0.43	356
832	1	0.65	1610
857	1	0.29	3990



Table 4: 19ATDD013 assay results, best intercepts (>1000ppm Cu)

From (m)	Interval	Cu (ppm)	Au (g/t)
483	1	2960	0.16
488	1	1450	0.06
506	1	1210	0.05
512	1	1030	0.03
518	4	1009	0.04
527	1	1290	0.08
545	16	1338	0.08
571	16	1519	0.09
595	9	1046	0.05
617	7	1444	0.09
670	1	1030	0.05
776	1	1500	0.07
795	2	1155	0.05
800	1	1180	0.02
822	13	1843	0.15
839	7	1798	0.11
852	27	1890	0.13
885	1	1070	0.03
909	1	1050	0.03
913	1	1070	0.06
918	1	1840	0.04

Table 5: 19ATDD013 assay results, best intercepts (>2500ppm Cu)

From (m)	Interval	Cu (ppm)	Au (g/t)
483	1	2960	0.16
555	1	2690	0.1
580	1	4180	0.28
827	5	2432	0.13
844	1	3150	0.14
855	4	3277.5	0.23
864	1	2500	0.1
872	1	2600	0.2



Appendix I – JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data: Alectown EL7424, Buryan prospect

Criteria	JORC Code explanation	Commentary
Sampling techniques	<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>	The Hole 19ATDD013 at Buryan prospect was sampled with diamond drilling of diameter size 85 mm (PQ) to 104.95m, 63.5mm (HQ) to 511.05 m and diameter size 47.6 mm (NQ) to the final depth of 930.05 m. Diamond drill core provide a high-quality sample that is logged for lithological, structural, geotechnical, and other attributes. Sampling is carried out under QAQC procedures as per industry best practice. Drill samples from previous drilling were collected via RC, AC and DD drilling technique. The nature and quality of sampling was not recorded in details, but it is assumed to be industry standard for the period. Previous explorers activities at Buryan prospect: - Metallic Resources/Compass (1994) – AC drilling; - Compass Resources/Newcrest – RC, AC, and DD drilling; - Gold Fields – RC drilling, DD drilling; - Magmatic Resources - DD drilling.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	The hole 19ATDD013 was drilled at a -58° dip and an azimuth of 003°. The drill collar location is recorded using a registered surveyor, which has an accuracy of +/-0.1 m. The HQ and NQ drill core was orientated using an Ori Tool by DrillIt Consulting Pty Ltd's (Drillit) drilling crew with Magmatic Resources staff supervision. These orientations are extended onto the remainder of the core and meter marked for logging. The visible structural features (veins, bedding, foliation, faults) are measured against the core orientation marks. The whole interval of drill core (except cover sequence from 0 m – 12 m) was cut in half and sampled at a certified assay laboratory, ALS Laboratories, in Orange. Core is prepared for analysis by cutting along the longitudinal line and then samples are numbered as per the pre-designed cut-sheet. The sample stream represents continuous sampling down the drill string at 1m nominal intervals (470 to 930.05m), and in-lab volumetric 2m composites (12-470m). Where core was incompetent due to being transported cover or weathered rock, representative samples were collected along the axis of the core. This information is recorded in the cut-sheet and loaded into database. Sampling conducted by previous explorers is assumed to be of industry standard for the time being.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <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</i>	The drill core was cut in Parkes by Magmatic staff and collected samples were transported to ALS Laboratory in Orange for assaying. Samples are crushed to 6mm and then pulverized to 75 microns. A 25g split of the sample was fired assayed for gold. The lower detection limit for gold is 0.01 ppm, which is believed to be an appropriate detection level. All other elements including

Criteria	JORC Code explanation	Commentary
	<i>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 mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i>	copper and base metals (total 35 element suite) are analysed using an acid digest and an ICP finish (ALS code: ME-ICP61 + AU-AA25). Assay standards, blanks and duplicates were analysed as part of the standard laboratory analytical procedures. Company standards were also introduced into the sampling stream at a nominal ratio of 1 standard for every 50 samples. Sampling conducted by previous explorers is assumed to be industry standard for the period. Sample lengths: 12-470m, 2m composites with compositing completed at the lab after preparation of drill core. 1m pulps of all 2m composites have been retained by Magmatic. 470m to end of hole. 1m sample lengths except for minor changes at end of HQ (1.05m) and beginning of NQ (0.95m) and end of hole sample (1.05m).
<i>Drilling techniques</i>	<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>	Diamond drilling using "Universal" drill rig: drill core of diameter size 85 mm (PQ) to 104.25m, 63.5mm (HQ) to 511.05 m and diameter size 47.6 mm (NQ) to the final depth of 930.05m. Previous explorers used various industry standard drilling techniques: - Metallic Resources/ Compass (1994) - AC drilling. - Compass Resources/Newcrest (2001-2008) – RC drilling, AC drilling and DD drilling; - Gold Fields (2011) – RC drilling and DD drilling and - Magmatic Resources (2018-19) - DD drilling.
<i>Drill sample recovery</i>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Diamond drill core recoveries were recorded during drilling and reconciled during the core processing and geological logging. There was a consistent competency encountered in the rocks during drilling and no significant drill core lost occurred during drilling.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Diamond drill core is measured and marked after each drill run using wooden blocks calibrating depth. Adjusting rig procedures as necessary including drilling rate, run length and fluid pressure to maintain sample integrity. Sample recovery data is not always recorded by previous explorers; however, it is assumed to be of industry standard for the time.
	<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>	To date, no detailed analysis to determine relationship between sample recovery and gold or base metals grade has been undertaken for this diamond drilling.
<i>Logging</i>	<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>	Geological logging recorded lithology, alteration, mineralisation, veining and structures (faults and foliation). Geological log data recorded by previous explorers is assumed to be of industry standard for the time being.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Drill core is logged as both qualitative (discretionary) and quantitative (volume percent). Core is photographed dry and wet.
	<i>The total length and percentage of the relevant intersections logged.</i>	The entire hole is all geologically and geotechnically logged (100%). Selected holes (AC and DD) drilled by previous explorers have been geologically inspected. Original drill hole data is stored in an industry-standard database. That data is assumed to be of industry standard for the time.

Criteria	JORC Code explanation	Commentary
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	The PQ, HQ and NQ core is cut in half using brick diamond saw. All samples are collected from the same side of drill core. The full interval of half-core sample is submitted for assay analysis (except cover sequence – 0 m – 12m). Where core was incompetent due to being transported cover or weathered rock, representative samples were collected along the axis of the core. This information is recorded in the cut-sheet and loaded into database. Work conducted by previous explorers is assumed to be of industry standard for the time.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	The diamond core up to 12m depth was restricted to the transported soil and sample is not taken from this interval.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Drill core is cut in half along the length and the total half core submitted as the sample. This procedure meets industry standards where 50% of the total sample taken from the diamond core is submitted. All intervals (12m to 930.05m) were submitted for assaying. Work conducted by previous explorers is assumed to be of industry standard for the time.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Drill core is cut in half along the length and the total half core submitted as the sample. This procedure meets industry standards where 50% of the total sample taken from the diamond core is submitted. Whole length of drill core was submitted for assaying. Work conducted by previous explorers is assumed to be of industry standard for the time being.
	<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>	The retention of the remaining half-core is an important control, it allows assay values to be viewed against the actual geology; and where required a quarter core samples may be submitted for quality assurance. No resampling of quarter core or duplicated has been done at this stage at the project. Work conducted by previous explorers is assumed to be of industry standard for the time.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes are appropriate to correctly represent the mineralization at Buryan project based on style of mineralisation and consistency of the intersections and the sampling methodology. Work conducted by previous explorers is assumed to be of industry standard for the time.
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Samples are crushed to 6mm and then pulverized to 75 microns. A 25g split of the sample is fired assayed for gold. The lower detection limit for gold is 0.01 ppm, which is believed to be an appropriate detection level. All other elements including silver and base metals will be analysed using an acid digest and an ICP finish. Sampling conducted by previous explorers is assumed to be industry standard for the period. The drill samples were assayed for Au by fire assay and for base metals and other pathfinder elements by acid digest and an ICP finish at ALS Orange. ALS code: ME-ICP61 + AU-AA25.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make</i>	No geophysical tools or other handheld XRF instruments were used to determine grade. Magnetic susceptibility was taken for every metre using a Terraplus KT-10 magnetic

Criteria	JORC Code explanation	Commentary
	<i>and model, reading times, calibrations factors applied and their derivation, etc.</i>	susceptibility meter. Data is stored in database.
	<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>	Laboratory QAQC involves use of internal Lab standards using certified reference material, blanks, splits and replicates as part of in-house procedures. Magmatic Resources submitted an independent suite standard. Historical data are assumed to be industry standard for the period.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	The raw assay data and intercepts were reviewed by company geologists, and cross checked.
	<i>The use of twinned holes.</i>	N/A
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Standard Industry Practice – drill core samples logged in yard in Parkes with resulting data digitally entered upon return to site office, subsequently loaded into project database and verified. Multiple data backups (both hard and soft copy) are employed both on and off site. Work conducted by previous explorers is assumed to be of industry standard for the time being. All data is stored on an off-site industry standard database. Full exports are held onsite and backed up.
	<i>Discuss any adjustment to assay data.</i>	No adjustment or calibration is made on any primary assay data collected for purposes of reporting assay grade and mineralised intervals. No known adjustment or calibration is made by previous explorers.
Location of data points	<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>	Drill hole collar was located using registered surveyor to $\pm 0.1\text{m}$ precision. Down hole surveys were collected every 18-30m down the drill hole during drilling and 6m on completion of hole using Reflex System and every 10m using NS GYRO #247 by Well Search contractor. Previous explorers drilled vertical AC holes (Metallic/Compass). Newcrest in angled holes and collected down hole surveys (dip and azimuth) using a single shot electronic camera every 50m to detect deviation of the hole from the planned dip and azimuth. Gold Fields (2011) and Magmatic Resources (2018) used Reflex System: every 50m for RC hole every 6m DD hole.
	<i>Specification of the grid system used.</i>	Collar coordinates are based on Map Grid of Australia 1994 Zone 55 (MGA94_55). Data from previous explorers which were recorded in AGD66_55 were transformed into MGA94_55.
	<i>Quality and adequacy of topographic control.</i>	Topographic control is maintained by use of widely available government datasets. Ground is flat and a nominal approximate RL is used if hole not surveyed by surveyor..
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Drill hole was preferentially located in prospective areas targeting a mineralised porphyry Copper Gold system.
	<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>	The mineralised intervals are yet to demonstrate sufficient grade or continuity to support the definition of a Mineral Resource and the classifications applied under the 2012 JORC code.

Criteria	JORC Code explanation	Commentary
	<i>Whether sample compositing has been applied.</i>	See previous section. Laboratory volumetric sampling every 2m (12-470m), and 1m from 470m to eoh. For composite samples 1m pulps and bulks are retained if checks are required.
<i>Orientation of data in relation to geological structure</i>	<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>	The Hole 19ATDD013 was drilled perpendicular to previous drilling which is ~parallel to geological strike. Mineralization occurs in a sub-vertical stockwork zone with no preferred orientation. Previous angled drill holes were drilled perpendicular to the trend of the volcanic stratigraphy. The nature of porphyry deposits means that this may not be the best orientation and other orientations may be required.
	<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>	No orientation-based sampling bias has been identified in the data. Further structural work would be required to determine any sampling bias due to hole orientation.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Standard industry practice – each sample contained within a calico bag with calicos sealed in a polyweave sack. These are stored in a secure yard and delivered directly to secure lab by Magmatic staff. Work conducted by previous explorers is assumed to be of industry standard for the time.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Quality assurance and quality control protocols have been adequately employed. Sampling techniques and procedures are regularly reviewed internally, as is data. No independent audits have been conducted.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary												
<i>Mineral tenement and land tenure status</i>	<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> <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>	EL7424, Alectown, consists of 22 graticular units and is located 20km north of Parkes, NSW. It is bordered on its southern edge by the exploration exclusion zone surrounding the Parkes Observatory (Parkes Radiotelescope ('The Dish')). The area is considered prospective for Cu-Au porphyry, epithermal and orogenic Au style mineralisation. The terrain is mostly flat to undulating with access via gazetted sealed and unsealed roads. The majority of the area consists of cropping paddocks with sporadic areas of grazing land.												
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	No other parties where involved in the planning and execution of the drilling program. Work of previous explorers has been acknowledged as appropriate: <table><tr><th>Year</th><th>Company / Author</th><th>EL</th><th>Activity</th></tr><tr><td>1985-1986</td><td>Goldfields Exploration P/L</td><td>EL2394</td><td>Mapping, Rock chips over the Glenroy Prospect, 4 RC holes over Glenroy,</td></tr><tr><td>1994-2007</td><td>Metallic Resources / Compass</td><td>EL4752</td><td>Discovery of the Buryan prospect under cover. High resolution Gravity survey, 104 Aircore holes around the Buryan and Glenroy prospects, petrology and soil sampling</td></tr></table>	Year	Company / Author	EL	Activity	1985-1986	Goldfields Exploration P/L	EL2394	Mapping, Rock chips over the Glenroy Prospect, 4 RC holes over Glenroy,	1994-2007	Metallic Resources / Compass	EL4752	Discovery of the Buryan prospect under cover. High resolution Gravity survey, 104 Aircore holes around the Buryan and Glenroy prospects, petrology and soil sampling
Year	Company / Author	EL	Activity											
1985-1986	Goldfields Exploration P/L	EL2394	Mapping, Rock chips over the Glenroy Prospect, 4 RC holes over Glenroy,											
1994-2007	Metallic Resources / Compass	EL4752	Discovery of the Buryan prospect under cover. High resolution Gravity survey, 104 Aircore holes around the Buryan and Glenroy prospects, petrology and soil sampling											

Criteria	JORC Code explanation	Commentary			
		1999-2007	Compass Resources / Newcrest	EL5563	RC drilling, AC drilling, DD drilling, sulphur isotope study, petrology, gravity survey
		2009 - 2016	Gold Fields	EL7424	High resolution airborne magnetics; gravity survey (507 station) RC and DD drilling.
		2017 -2018	Magmatic Resources	EL7424	DD drilling
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	EL7424 is located within the Junee-Narromine Belt of the Ordovician volcanic arc in Eastern Australia. The Junee-Narromine Volcanic Belt is predominantly covered by transported Quaternary and Cainozoic cover. The surface geology in the vicinity of EL7424 licence consists of a thin veneer of colluvial sheetwash and scree slopes, with scattered occurrences of Middle Ordovician Goonumbla Volcanics on the faulted eastern limb of the N-S striking Forbes Anticline. The Goonumbla Volcanic group consists of a series of folded trachyandesitic/andesitic volcanics (lavas and breccias) and volcanoclastic sediments (volcanoclastic sandstone and conglomerate). The shoshonitic trend of rocks that dominates Junee-Narromine Belt to the west of the project area is known to host world class Northparkes porphyry Cu-Au deposits as well as the epithermal Au deposits (Lake Cowal Gold Mine, Peak Hill and Gidgingbung). The licence area is prospective to host porphyry Copper Gold and epithermal Gold deposits.			
Drill hole Information	<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> • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length.	See tables in main body of announcement for pertinent drilling data.			
	<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>	Non-significant assay values were not individually reported. Lower cutoffs are shown in the tables.			
Data aggregation methods	<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>	Gold and copper intersections, with minimum cut-offs, have been calculated and are reported in the body of the report. No maximum cutoffs have been applied			
	<i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such</i>	N/A			

Criteria	JORC Code explanation	Commentary
	<i>aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i>	
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalences are quoted.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Down-hole lengths are reported.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Geometry of mineralisation is interpreted to be stockwork nature in a vertical pipe like zone.
	<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>	All down-hole lengths reported, true widths are not known.
<i>Diagrams</i>	<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>	See figures in body of report for drill hole plans and sections.
<i>Balanced reporting</i>	<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>	All drilling results have been reported at cutoff as shown in Tables.
<i>Other substantive exploration data</i>	<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>	See body of report.
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	See body of report.
	<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>	See figures in body of report.