# **ASX ANNOUNCEMENT**



16 MARCH 2020

# LADY ILSE GOLD-COPPER PORPHYRY TARGET ZONE NOW INTERPRETED TO BE >1.8km x 1km

- 20-line kilometre MIMDAS geophysics survey completed, resulting in a significantly expanded gold-copper porphyry target zone now defined as the Lady Ilse District
- The porphyry target zone is now interpreted to be >1.8km x 1km and open to the north and south
- New targets have been identified at Lady Ilse North and Lady Ilse South, which combined with the original Lady Ilse target define the Lady Ilse District
- Porphyry target size is comparable to dimensions of Cadia East footprint 2km x 500m
- Diamond drilling to commence this week

Magmatic Resources ('MAG' or 'The Company') is pleased to advise that a completed 20-line kilometre MIMDAS geophysical survey has identified two new targets and interpreted a significantly expanded porphyry target zone >1.8km x 1km open north and south. The new targets at Lady Ilse South and Lady Ilse North combined with the original Lady Ilse target are now defined as the Lady Ilse District within the Wellington North Project (100% MAG).

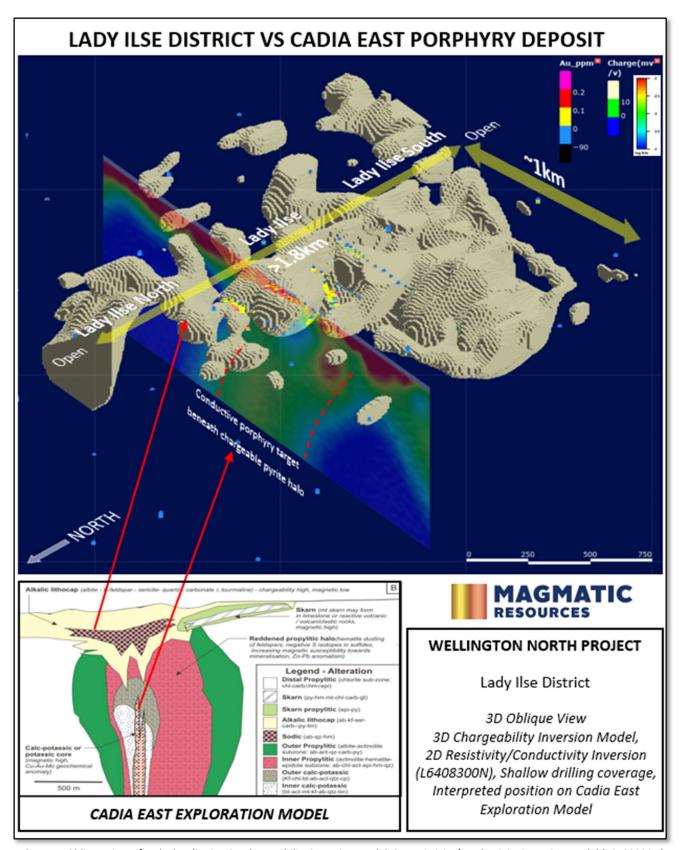
The Company has applied the 'Cadia East Exploration Model' and descriptions from Alkane's nearby Boda porphyry discovery to guide its exploration in the Lady Ilse District. Key features of both Cadia East and Boda include the presence of a pyrite halo (alkalic lithocap) sitting above a porphyry deposit.

The Lady Ilse District MIMDAS chargeability results, in combination with the wide zone of gold and porphyry pathfinder anomalism (Te-Bi-As) associated with pyrite-rich porphyry alteration defined in shallow drilling, suggest the existence of an extensive porphyry pyrite halo (alkalic lithocap) overlying a fertile gold-copper porphyry system.

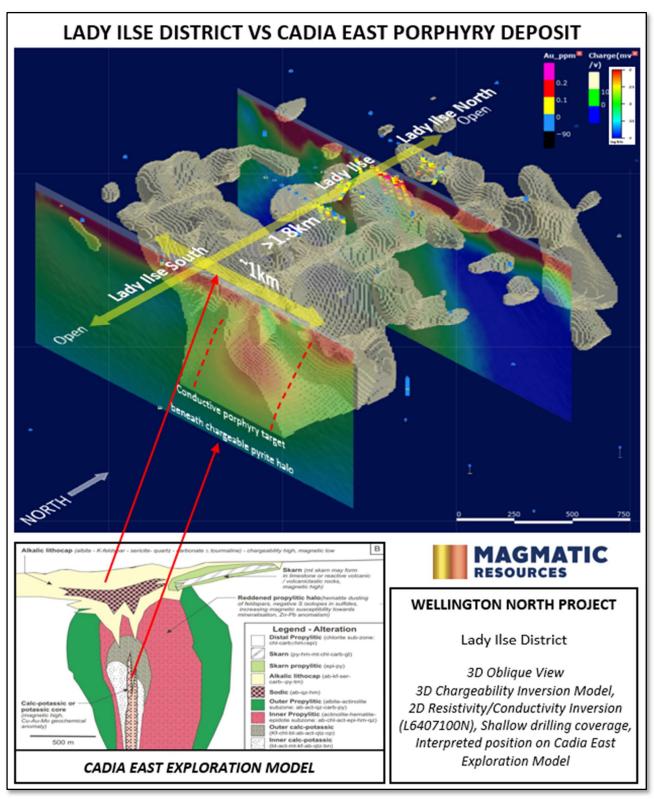
Lady Ilse District gold-copper porphyry targets exhibit the same characteristics at the equivalent stage of exploration as the Boda porphyry discovery (ALK ASX 13 February 2020), which is only 6km to the east.

MAG considers that the scale of the pyrite halo (alkalic lithocap) alteration suggested by the datasets at the Lady Ilse District (Figures 1, 2, 3) highlight a much larger scale opportunity than Boda, with the potential for preservation of a Cadia East scale gold-copper porphyry system.

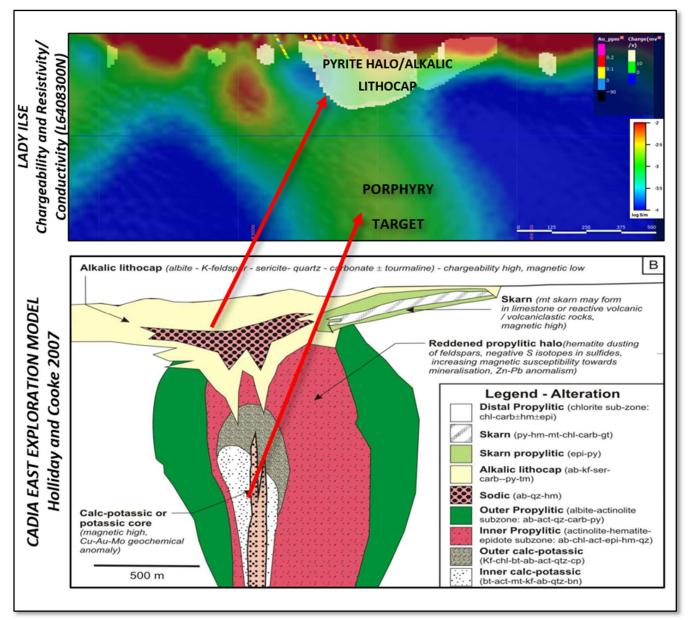
The MIMDAS geophysical data provides robust target definition for the upcoming drilling program that is planned to commence later this week.



**Figure 1:** Oblique view of Lady Ilse district, 3D chargeability inversion model, 2D resistivity/conductivity inversion model (L6408300N), shallow drilling and interpretation relative to the Cadia East exploration model (Holliday and Cooke 2007) (looking down towards the southeast)



**Figure 2:** Oblique view of Lady Ilse district, 3D chargeability inversion model, 2D resistivity/conductivity inversion model (L6407100N), shallow drilling and interpretation relative to the Cadia East exploration model (Holliday and Cooke 2007) (looking down towards the southeast)



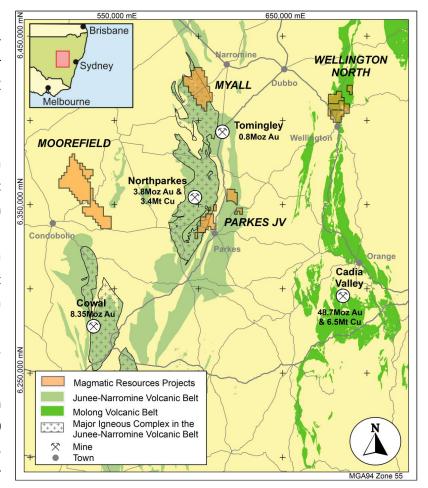
**Figure 3:** Lady Ilse, 2D chargeability and resistivity/conductivity inversion data (L6408300N), shallow drilling and interpretation relative to the Cadia East exploration model (Holliday and Cooke 2007)

#### **About Magmatic Resources (ASX:MAG)**

Magmatic Resources Ltd (ASX: MAG) is a New South Walesfocused gold and copper explorer that listed on the ASX in May 2017.

In 2014, Magmatic completed the acquisition of an advanced gold-copper target portfolio in the East Lachlan from Gold Fields Limited. Gold Fields had completed a major phase of target generation across four main projects (Wellington North, Parkes, Myall, Moorefield), identifying over 60 targets.

The East Lachlan has an endowment of more than 80 million ounces of gold and 13 million tonnes of copper



(Phillips 2017). It is most famous for Newcrest's world class porphyry gold-copper cluster at Cadia Valley District, where currently the Cadia East Mine represents Australia's largest gold mine and one of the world's most profitable gold producers (Newcrest 2019). In addition, the Northparkes coppergold porphyry cluster (China Molybdenum/Sumitomo, CMOC 2018) and Cowal Epithermal Deposit (Evolution Mining, Evolution 2018) represent other significant long-life mining operations.

The recent Boda gold-copper porphyry discovery by Alkane Resources Ltd (ASX ALK 9 September 2019) has highlighted the value of Magmatic's dominant surrounding tenure position in the northern Molong Belt, in what is emerging as a significant gold porphyry discovery hotspot along strike from Cadia Valley. The Boda discovery has also highlighted the surface exploration signature and has had an immediate impact on the ranking of Magmatic's porphyry targets, with several being upgraded for Boda-style and Cadia East-style porphyry gold-copper mineralisation, e.g. Lady Ilse, Rose Hill, Ninety and Mayhurst.

The Company also holds a strategic position in the Parkes Fault Zone (Parkes Project), immediately south from Alkane's Tomingley Gold Operations and recent Roswell and San Antonio discoveries, providing further opportunity to add significant value via near term exploration success.

#### References

CMOC 2019., China Molybdenum Company Limited, <a href="http://www.cmocinternational.com/australia/">http://www.cmocinternational.com/australia/</a>

Evolution., 2018, https://evolutionmining.com.au/reservesresources/

Holliday, J.R., Cooke, D., 2007, Advances in Geological Models and Exploration Methods, Ore Deposits and Exploration Technology, Fifth International Conference on Mineral Exploration

Newcrest., 2019, Newcrest Investor and Analyst Presentation, ASX Announcement, 18 November 2019

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

#### Authorised for release by: Peter Duerden, Managing Director

Please direct all shareholder and investor enquiries to:

Peter Duerden
Managing Director
Phone: +61 447 614 093

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 Peter Duerden who is a Registered Professional Geoscientist (RPGeo) and member of the Australian Institute of Geoscientists. Mr Duerden is a full-time employee of, and has associated shareholdings in, 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 Duerden consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

Additionally, Mr Duerden 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.

Geophysical information in this report is based on exploration data compiled by Mr Terry Hoschke who is employed as a Consultant to the Company through the geophysical consultancy Alterrex Pty Ltd. Mr Hoschke is a member of the Australian Society of Exploration Geophysicists and the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and activities undertaken, 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 Hoschke consents to the inclusion in the report of the matters based on information in the form and context in which it appears.

#### **Previously Reported Information**

The information in this report that references previously reported exploration results is extracted from the Company's ASX market announcements released on the date noted in the body of the text where that reference appears. The previous market announcements are available to view on the Company's website or on the ASX website (www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

#### **Disclaimer**

This report contains certain forward-looking statements and forecasts, including possible or assumed reserves and resources, production levels and rates, costs, prices, future performance or potential growth of Magmatic Resources Ltd, industry growth or other trend projections. Such statements are not a guarantee of future performance and involve unknown risks and uncertainties, as well as other factors which are beyond the control of Magmatic Resources Ltd. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors. Nothing in this report should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities.

This document has been prepared in accordance with the requirements of Australian securities laws, which may differ from the requirements of United States and other country securities laws. Unless otherwise indicated, all ore reserve and mineral resource estimates included or incorporated by reference in this document have been, and will be, prepared in accordance with the JORC classification system of the Australasian Institute of Mining, and Metallurgy and Australian Institute of Geoscientists.

### Appendix I – JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data: Wellington North Project, Lady Ilse prospect

Criteria	JORC Code explanation	Commentary
Sampling	Nature and quality of sampling (eg cut channels, random chips, or specific	Not applicable: Ground geophysical survey
techniques	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.	
	Include reference to measures taken to ensure sample representivity and	Not applicable: Ground geophysical survey
	the appropriate calibration of any measurement tools or systems used.	
1	Aspects of the determination of mineralisation that are Material to the	Not applicable: Ground geophysical survey
	Public Report.	
	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 mineralisation types (eg submarine nodules) may warrant	
	disclosure of detailed information.	
Drilling	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast,	Not applicable: Ground geophysical survey
techniques	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).	
Drill sample	Method of recording and assessing core and chip sample recoveries and	Not applicable: Ground geophysical survey
recovery	results assessed.	

Criteria	JORC Code explanation	Commentary
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not applicable: Ground geophysical survey
	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.	Not applicable: Ground geophysical survey
Logging	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.	Not applicable: Ground geophysical survey
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Not applicable: Ground geophysical survey
	The total length and percentage of the relevant intersections logged.	Not applicable: Ground geophysical survey
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable: Ground geophysical survey
sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Not applicable: Ground geophysical survey
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Not applicable: Ground geophysical survey
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Not applicable: Ground geophysical survey
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/secondhalf sampling.	Not applicable: Ground geophysical survey
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Not applicable: Ground geophysical survey

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Not applicable: Ground geophysical survey
	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.	Not applicable: Ground geophysical survey
	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.	Not applicable: Ground geophysical survey
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	Not applicable: Ground geophysical survey
assaying	The use of twinned holes.	Not applicable: Ground geophysical survey
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Not applicable: Ground geophysical survey
	Discuss any adjustment to assay data.	Not applicable: Ground geophysical survey
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Not applicable: Ground geophysical survey
	Specification of the grid system used.	All coordinates are based on Map Grid of Australia 1994 Zone 55.
	Quality and adequacy of topographic control.	Not applicable: Ground geophysical survey
	Data spacing for reporting of Exploration Results.	Not applicable: Ground geophysical survey

Criteria	JORC Code explanation	Commentary
Data spacing	Whether the data spacing and distribution is sufficient to establish the	Not applicable: Ground geophysical survey
and distribution	degree of geological and grade continuity appropriate for the Mineral	
	Resource and Ore Reserve estimation procedure(s) and classifications	
	applied.	
	Whether sample compositing has been applied.	Not applicable: Ground geophysical survey
Orientation of	Whether the orientation of sampling achieves unbiased sampling of	Not applicable: Ground geophysical survey
data in relation	possible structures and the extent to which this is known, considering the	
to geological	deposit type.	
structure	If the relationship between the drilling orientation and the orientation of	Not applicable: Ground geophysical survey
	key mineralised structures is considered to have introduced a sampling bias,	
	this should be assessed and reported if material.	
Sample security	The measures taken to ensure sample security.	Not applicable: Ground geophysical survey
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Not applicable: Ground geophysical survey

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	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.  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.	EL8357 Combo is located 12km north of Wellington NSW. The tenement is held by Modeling Resources Pty Ltd; a fully owned subsidiary of Magmatic Resources Ltd. Ground activity and security of tenure are governed by the NSW State government via the Mining Act 1992.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The ground geophysical survey was planned by Magmatic Resources exploration staff in consultation with our geophysical contractor, Geophysical Resources and Services Pty Ltd ('GRS'). GRS completed processing of the data with 2D and 3D images produced by Alterrex Pty Ltd.
Geology	Deposit type, geological setting and style of mineralisation.	The target mineral system at the Lady Ilse prospect is considered to be of a gold copper porphyry-epithermal system within the northern Molong Volcanic belt (Cadia ~100km south) within the Ordovician Macquarie Arc. Gold mineralisation identified is hosted in pyritemagnetite-altered intrusive and volcanic rocks.
Drill hole Information	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:  • 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.	Not applicable: Ground geophysical survey
	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	Not applicable: Ground geophysical survey

Criteria	JORC Code explanation	Commentary
	understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	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.	Not applicable: Ground geophysical survey
	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.	Not applicable: Ground geophysical survey
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable: Ground geophysical survey
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	Not applicable: Ground geophysical survey
mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Not applicable: Ground geophysical survey
	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').	Not applicable: Ground geophysical survey
Diagrams	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.	See figures in body of report for survey station locations relative to mineralisation
Balanced reporting	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.	Not applicable: Ground geophysical survey

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	Intentionally blank  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.	MIMDAS ground geophysical survey MIMDAS is an advanced electrical geophysical acquisition technique capable of acquisition of DC resistivity and magnetotelluric (MT) resistivity and IP chargeability data. The technique is capable of acquiring a variety of electrical signals including resistivity, IP, MT data.  Geophysical Resources and Services Pty Ltd (GRS) conducted the survey with MIMDAS receivers at 100m along 200m spaced lines and data modelled using UBC software.  Alterrex Pty Ltd provided geophysical consulting services, producing 2D and 3D images for interpretation.  The survey results are discussed in the body of the report.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	See body of report.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	See figures in body of report.