# **ASX ANNOUNCEMENT**



**10 FEBRUARY 2021** 

# DRILLING COMPLETED AT COPPER-GOLD PORPHYRY TARGETS

- Diamond drilling of copper-gold porphyry targets at the Myall Project has been completed, totaling two holes for 880.6m
- Drilling targeted mineralisation downdip from existing copper-gold porphyry mineralisation at Kingswood and aircore copper anomalism at SLR
- Core processing is nearing completion with assay results expected in March
- Drilling activity to recommence in late February 2021, with aircore and diamond drill rigs operating across three Wellington North target areas

Magmatic Resources ('MAG' or 'The Company') is pleased to advise that diamond drilling activity has been completed at the Myall Project (100% MAG) (Figure 1).

#### Kingswood – interpreted top of a Northparkes style copper-gold porphyry system

Leveraging the ongoing encouraging work conducted by Magmatic's exploration team (MAG ASX 31 January 2019), recent 3D modelling and comparisons with the Northparkes Porphyry Mining District highlights a priority copper-gold porphyry discovery opportunity at the Kingswood target.

Review of the Myall datasets indicates that the Kingswood target shows the dimensions, alteration, host rocks and intrusive margin setting consistent with the Northparkes E26 Porphyry Mine (China Molybdenum/Sumitomo) with an existing open zone of porphyry mineralisation providing a compelling drill target (Figure 2).

The recently completed diamond drillhole at Kingswood (21MYDD412) intersected similar rocktypes, alteration and mineralisation to that present in overlying drillhole MYACD001 (inc. 70m @ 0.54% Cu, 0.15g/t Au from 141m, ASX MAG 24 March 2017, Figure 2). Multiple porphyritic intrusives were encountered, hosted within a package of volcaniclastic and volcanic breccias and variably developed pyrite-chalcopyrite mineralisation associated with potassic-style porphyry alteration.



Figure 1: Photo of rig setup at Kingswood, Myall Project

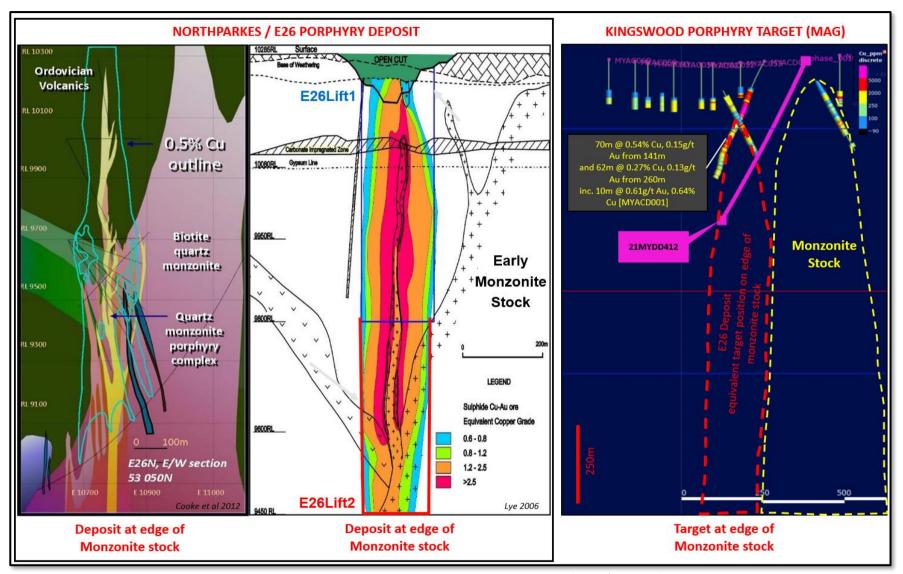


Figure 2: Comparison between Kingswood Target, Myall Project and Northparkes E26 Porphyry Deposit (CMOC/Sumitomo), showing similar porphyry setting at margin of main monzonite complex (Northparkes, E26 -Cooke et al 2012, Lye 2006), 150m section window, completed DDH 21 MYDD412

The recently completed diamond drillhole at SLR (21MYDD413) was designed to test under aircore copper anomalism and intersected coarse-grained monzodiorite with variably developed pyrite-chalcopyrite mineralisation associated with potassic-style porphyry alteration. Follow-up exploration activity to be designed following receipt of assay results anticipated in late March.

Hole ID	Hole	Prospect	Easting	Northing	RL	Dip	Azimuth	Total	Comments
	Туре		(MGA)	(MGA)	(m)		(MGA)	Depth	
								(m)	
21MYDD412	MR/DD	Kingswood	597828	6418691	200	-65	210	531.9	Mud Rotary Precollar 150.5m,
									Completed / Results pending
21MYDD413	MR/DD	SLR	683365	6408580	368	-55	165	348.7	Mud Rotary Precollar 177.8m,
									Completed / Results pending

Table 1: Collar summary for drill holes reported in this release

## **Myall Project (Copper-Gold)**

Magmatic's 100%-owned Myall Project (EL6913) covers 244km<sup>2</sup> of the northern portion of the Junee-Narromine Belt, within the East Lachlan.

The area is considered highly prospective for Northparkes style copper-gold porphyry and epithermal gold mineralisation.

Ongoing exploration activity indicates strong geological, geochemical and geophysical similarities between the Myall District and the China Molybdenum/Sumitomo Northparkes copper-gold mining district, located 60km south (CMOC 2019) (MAG ASX 31 January 2019) (Figures 3, 4).

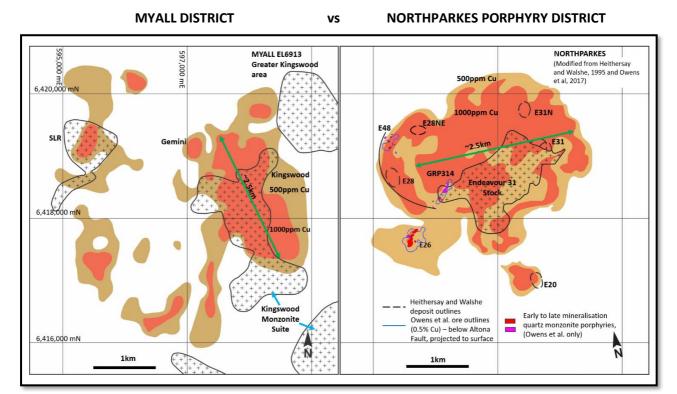
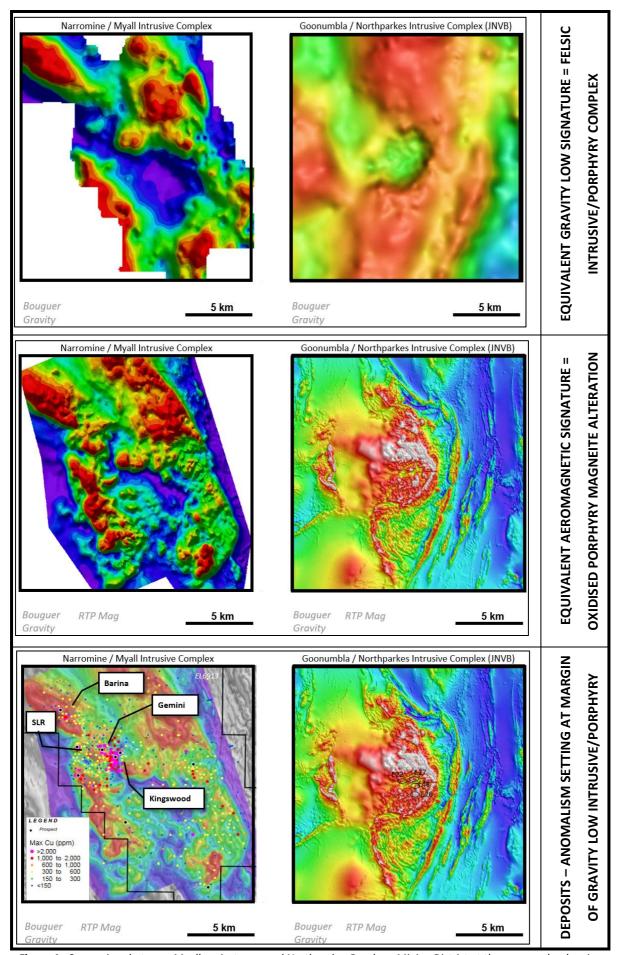


Figure 3: Comparison between Myall project area and Northparkes Porphyry Mining District at the same scale, showing copper anomalism at 500ppm Cu and 1000ppm Cu (MAG ASX 31 January 2019), Northparkes from Heithersay and Walshe, (1995), Phillips, G N (2017)



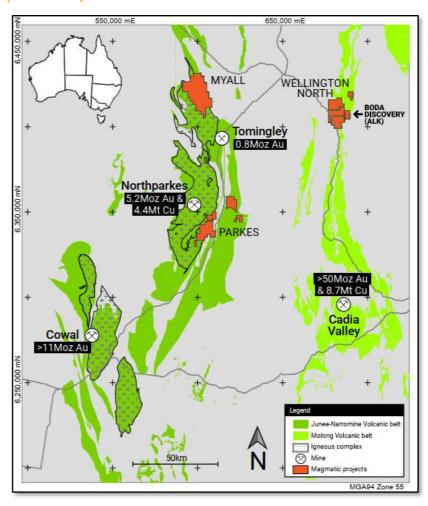
**Figure 4:** Comparison between Myall project area and Northparkes Porphyry Mining District at the same scale, showing aeromagnetic, gravity imagery (Geological Survey of NSW)

#### **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 Mining's world class gold-copper porphyry cluster at Cadia Valley District, when



MAG East Lachlan Project Location Map (Resources from Phillips 2017)

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 copper-gold porphyry cluster (China Molybdenum/Sumitomo, CMOC 2019) and Cowal Epithermal Deposit (Evolution Mining, Evolution 2018) represent other significant long-life mining operations.

The recent Boda 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 (Figure 3). The Boda discovery has highlighted the surface signature of porphyry mineralisation in the area and has significantly upgraded Magmatic's target portfolio for Boda-style and Cadia East-style porphyry gold-copper mineralisation.

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.

The company holds a major shareholding in ASX listed central Lachlan gold-copper explorer Australian Gold and Copper Limited (ASX:AGC).

#### References

CMOC 2019., China Molybdenum Company Limited, http://www.cmocinternational.com/australia/

Cooke , D., Wilson, Masterman, Zukowski, Green, Holliday., 2012, Porphyry, epithermal and skarn deposits of the Macquarie Arc, NSW, Ore Deposit Models and Exploration Strategies, Course, University of Tasmania Evolution., 2018, <a href="https://evolutionmining.com.au/reservesresources/">https://evolutionmining.com.au/reservesresources/</a>

Lye 2006, The Discovery History of the Northparkes Deposits, Mines and Wines 2006

Heithersay P S and Walshe J L, 1995, Endeavour 26 North: A porphyry Copper-Gold Deposit in the Late Ordovician, Shoshonitic Goonumbla Volcanic Complex, New South Wales, Economic Geology v90

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 the board of directors of Magmatic Resources Limited**

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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 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.

### **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: Myall Project**

Criteria	JORC Code explanation	Commentary
Sampling techniques	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.	Not reporting on assaying or sampling – not required.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Not reporting on assaying or sampling – not required.
	Aspects of the determination of mineralisation that are Material to the Public Report.	Not reporting on assaying or sampling – not required.
	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 techniques	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).	Diamond Drilling (DD) completed using rotary mud to refusal and then HQ core. A reputable contractor was used.  Core orientation completed using a REFLEX tool.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Not reporting on assaying or sampling – not required.

Criteria	JORC Code explanation	Commentary
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not reporting on assaying or sampling – not required.
	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 reporting on assaying or sampling – not required.
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.	<ul> <li>Systematic geological and geotechnical logging was undertaken. Data collected includes:</li> <li>Nature and extent of lithologies.</li> <li>Relationship between lithologies.</li> <li>Amount and mode of occurrence of ore minerals.</li> <li>Location, extent and nature of structures such as bedding, cleavage, veins, faults etc. Structural data (alpha &amp; beta) are recorded for orientated core.</li> <li>Geotechnical data such as recovery, RQD, fracture frequency, qualitative IRS, microfractures, veinlets and number of defect sets.</li> <li>Bulk density by Archimedes principle at regular intervals if required.</li> <li>Magnetic susceptibility recorded at 1m intervals</li> </ul>
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Not reporting on assaying or sampling – not required.
	The total length and percentage of the relevant intersections logged.	All diamond drill core was geologically logged. The mud rotary precollar was not logged.
Sub-sampling	If core, whether cut or sawn and whether quarter, half or all core taken.	Not reporting on assaying or sampling – not required.
techniques and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Not applicable – core drilling
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Not reporting on assaying or sampling – not required.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Not reporting on assaying or sampling – not required.

Criteria	JORC Code explanation	Commentary
	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 reporting on assaying or sampling – not required.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Not reporting on assaying or sampling – not required.
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 reporting on assaying or sampling – not required.
	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 reporting on assaying or sampling – not required.
	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 reporting on assaying or sampling – not required.
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	Not reporting on assaying or sampling – not required.
assaying	The use of twinned holes.	Not reporting on assaying or sampling – not required.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Geological and sample data was recorded on a standard ledgers and transferred to digital format. Digital sample ledgers were emailed and transferred to secure servers. Data was plotted using Micromine software against detailed aerial photography to ensure accuracy of the survey data. Data was verified by the site geologist.
	Discuss any adjustment to assay data.	Not reporting on assaying or sampling – not required.

Criteria	JORC Code explanation	Commentary
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.	Drill hole collars were located using hand held GPS (accuracy ± 2m). Holes collars are surveyed using a licenced surveyor as soon as possible after hole is completed.
	Specification of the grid system used.	All coordinates are based on Map Grid Australia Zone 55H, Geodetic Datum of Australia 1994
	Quality and adequacy of topographic control.	Topographic control is maintained by use of widely available government datasets. Ground is relatively flat.
Data spacing	Data spacing for reporting of Exploration Results.	Drill holes are preferentially located in prospective areas.
and distribution	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.	The mineralised areas 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.
	Whether sample compositing has been applied.	Not reporting on assaying or sampling – not required.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The angled drill holes were directed as best as reasonably possible directly across the known lithological and interpreted mineralisation orientation.
	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.	Not reporting on assaying or sampling – not required.
Sample security	The measures taken to ensure sample security.	Core was returned to secured storage regularly.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been conducted at this stage.

# **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.	EL6913 Myall is located 20km southwest of Narromine, NSW, and is held by Modeling Resources Pty Ltd, a wholly-owned subsidiary of Magmatic Resources Ltd. The licence was granted on 18/10/2007 and has been subsequently renewed to 18/10/2020. A further renewal application is in progress.  The licence covers 84 graticular units with an area of 243.7 km². A number of gazetted sealed and unsealed roads traverse the authority. The land use is mainly cropping with minor grazing.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	RGC, Newcrest, Clancy Exploration and Gold Fields completed exploration activity across the area contributing greatly to the geological knowledge of the project and the development of extensive geological, geochemical and geophysical datasets.
Geology	Deposit type, geological setting and style of mineralisation.	Exploration is for gold-copper porphyry-style deposits in the northern part of the Junee- Narromine Belt within the Macquarie Arc, East Lachlan region
Drill hole	A summary of all information material to the understanding of the	See body of announcement.
Information	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.	
	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.	Not reporting on assaying or sampling – not required.
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 reporting on assaying or sampling – not required.

Criteria	JORC Code explanation	Commentary
	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 reporting on assaying or sampling – not required.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not reporting on assaying or sampling – not required.
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	Orientated drill core used to determination of orientation of structures and mineralisation.
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 reporting on assaying or sampling – not required.
	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 reporting on assaying or sampling – not required.
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 drill hole locations.
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 reporting on assaying or sampling – not required.
Other substantive exploration data	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.	See body of report.

Criteria	JORC Code explanation	Commentary
Further work	The nature and scale of planned further work (e.g. 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.