Ardea Resources Limited

Yeoval Copper-Gold Resource Update

ASX & Media Release

15 August 2019

ASX Symbol

ARL

Ardea Resources Limited

Suite 2 / 45 Ord St
West Perth WA 6005

PO Box 1433
West Perth WA 6872

Telephone

+61 8 6244 5136

Email

ardea@ardearesources.com.au

Website

www.ardearesources.com.au

Directors

Katina Law
Executive Chair

Ian Buchhorn
Technical Executive Director

Wayne Bramwell
Non-Executive Director

Issued Capital

Fully Paid Ordinary Shares
109,506,842

Unlisted options exercisable at $0.25
7,793,593

Directors/Employee Performance Rights
5,161,000

ABN 30 614 289 342

- JORC 2012 Inferred Mineral Resource of **12.8 Mt at 0.38% copper, 0.14 g/t gold, 2.2 g/t silver** and **120 ppm molybdenum** (0.2% Cu cut off).
  - The Resource is estimated to contain approximately **48,500 t copper, 58,000 oz gold, 911,000 oz silver** and **1,500 t molybdenum metal** (0.2% Cu cut off).
  - Higher grade zone of **2.5 Mt at 0.65% copper, 0.22 g/t gold, 3.8 g/t silver and 192 ppm molybdenum** (0.5% Cu cut off).
- Significant potential for tonnage increase – mineralisation open in multiple directions.
  - Mineralised drill holes outside of the resource area require follow up and inclusion within a future resource estimate.
  - IP chargeability anomalies associated with mineralisation indicate significant scope to increase resource size.
- Shallow mineralisation commences within 15 m of surface.

Ardea Resources Limited (Ardea or the Company) is pleased to announce a JORC 2012 Inferred Mineral Resource estimate for its Yeoval porphyry copper-gold deposit in the Lachlan Fold Belt, central New South Wales. A summary of the Mineral Resource estimate at Yeoval is:

Table 1: JORC Inferred Mineral Resource estimate for the Yeoval deposit (0.2% Cu cut-off). All figures rounded to appropriate significant figures reflecting certainty of data.

Resource category	Tonnes (Mt)	Copper (%)	Gold (g/t)	Silver (g/t)	Molybdenum (g/t)
Inferred	**12.8**	**0.38**	**0.14**	**2.20**	**120**

Ardea CEO, Andrew Penkethman commented:

"Yeoval is part of Ardea's Godolphin Resources ASX spinout, scheduled for listing in Q4 2019. The Yeoval Inferred Mineral Resource represents a walk-up drill target where mineralisation is open in several directions. On listing, Godolphin Resources will have the benefits of being a well-funded NSW exploration Company with an Orange-based exploration team. These assets and advances in exploration technologies, provide the Company with an ideal platform to leverage the potential of this highly prospective suite of NSW gold and copper projects."

Yeoval Mineral Resource Summary

Yeoval is a historic copper-gold (Cu-Au) mining area in central western NSW. Work by Ardea has provided confidence around new and historic data to enable estimation of an inferred resource that is expected to serve as the platform from which future exploration by spinout Godolphin Resources will build.

This is the first in a series of announcements that will be made over the coming weeks, concluding Ardea's extensive work programs on selected NSW projects in preparation for the Godolphin Resources IPO planned for Q4, 2019. These announcements will provide clarity to investors regarding the NSW portfolio and highlight the potential it holds.

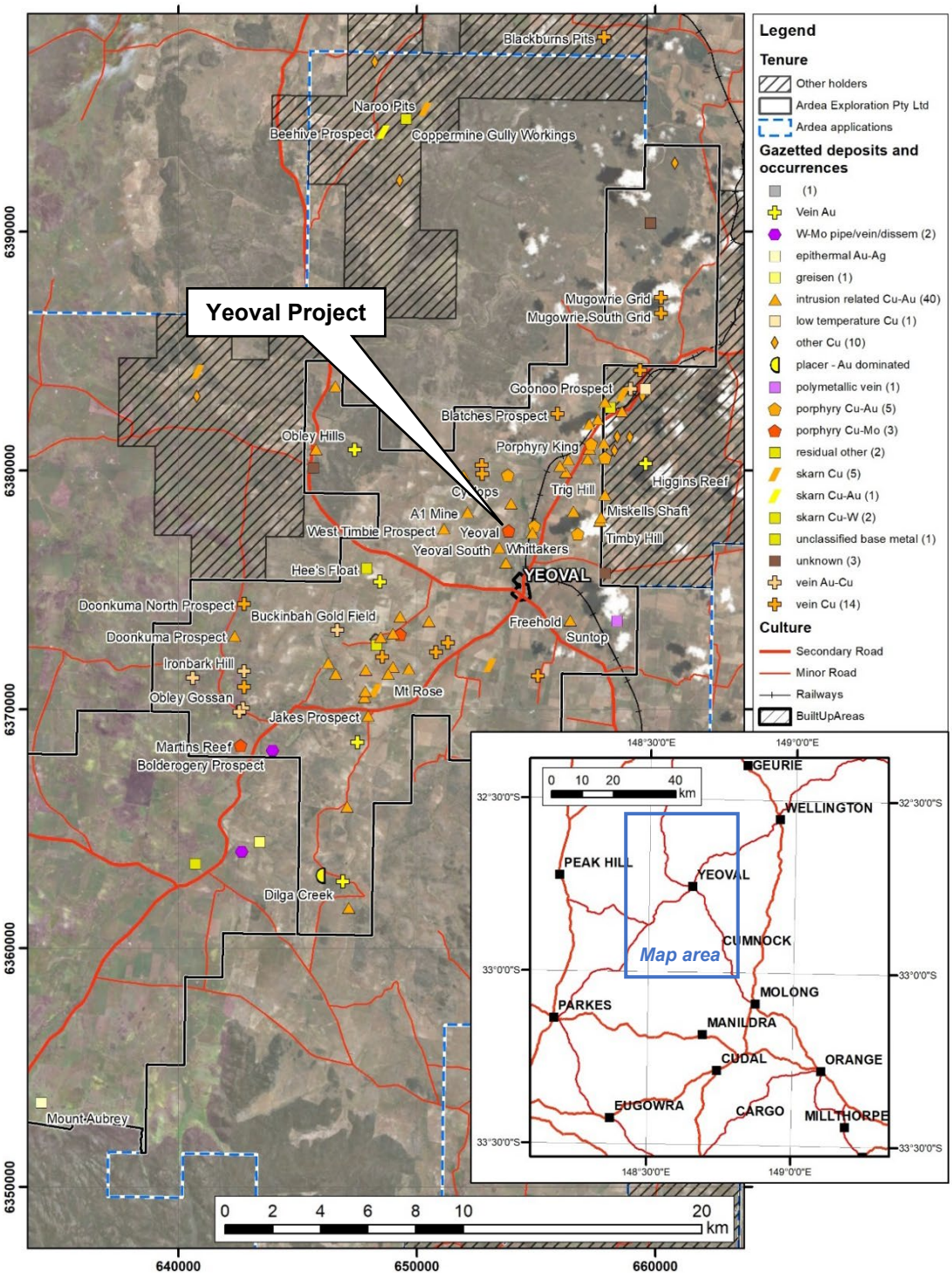


Figure 1: Yeoval project location plan in central western NSW.

Project Location

The Yeoval project is centred around the township of Yeoval in Central NSW about 33 km southwest of Wellington (Figure 1). It is located within the Lachlan Fold Belt which is Australia's premier domain for porphyry and epithermal gold and base metal deposits. The resource area is located about 3.5 km north of the small township of Yeoval and is readily accessible by well-maintained sealed and unsealed roads. The project area is adjacent to the Molong-Dubbo railway infrastructure and within easy reach of the Mitchell and Newell Highways.

Geology and Geological Interpretation

The regional and project geology is dominated by north-trending Devonian granites and granodiorite rocks of the Yeoval Batholith. The resource area is located at the northern margin of the WNW-trending Lachlan Transverse Zone which is recognised as having a strong association with a number of other significant mineral deposits in Central NSW, such as the world class Cadia Ridgeway and Northparkes copper-gold mining operations.

The Yeoval Batholith consists of a suite of calc-alkaline granite and adamellite, intermediate and basic intrusive rocks with associated andesitic volcanic rocks. The eastern margin of the batholith adjacent to the township of Yeoval exhibits a complex of more dioritic rocks ranging from granodiorite to gabbro and pyroxenite.

This Yeoval intrusive complex formed during a Late Silurian to Early Devonian melting and rifting event that split the Ordovician to Early Silurian Macquarie Arc. Its chemistry is shoshonitic, in common with the Ordovician volcanic rocks that host the Cadia and Northparkes porphyry copper-gold deposits, and a similar mantle source and mineral potential is inferred.

Mineralisation Style

The mineralisation at Yeoval is of a porphyry copper-gold style and consists of chalcopyrite, bornite and molybdenite veined and stockwork porphyritic granodirorite or monzonitic rocks. Mineralisation is pervasive and significant mineralised envelopes have been interpreted above a nominal lower cut-off of 1000 ppm copper. Three main mineralised zones have been interpreted within the project area and extend from the oxide surface some 5–15 metres below the topography to approximately 260 metres below surface. The mineralised domains are open in most directions and contain higher grade zones that are not yet able to be fully defined given the current low drilling density.

Sampling and Sub-Sampling Techniques

Historic RC drilling prior to Ardea acquiring tenure was used to obtain 1 m samples from eight holes for 793 metres. The dry rock chips from the RC holes were riffle split to ensure representativeness of the in-situ material. The quality of the split sample is considered appropriate and is used throughout the industry. These samples were then pulverised and assayed as below:

- Cu – Assayed via Atomic Absorption Spectrometry (AAS)
- Mo – Assayed via Aqua Regia soluble and AAS
- Au-Ag – Assayed via Acid Digest and AAS

Historic diamond drilling prior to Ardea acquiring tenure comprised 37 holes for 7,319 metres. The core was cut in two equal halves with one half sent to the assay laboratory for analysis. Half cut core samples are considered appropriate and used throughout the industry.

Drilling and logging procedures ensured accurate depth measurements which produced samples representative of the in-situ material it was taken form.

Some holes were resampled in 2009 and were quarter cut from the half core that remained form the original Yeoval sampling in 1972-1974.

Altered drill core that had the potential to be mineralised was sampled in accordance with its individual length. The sample lengths varied from 0.5m -1m. Zones thought to be un-mineralised, based on visual assessment, were sampled at 1.5m or 1m lengths.

The samples were pulverised and assayed as below:

- Cu – Assayed via AAS
- Mo – Assayed via aqua regia soluble and AAS
- Au, Ag, Pb, Zn, Ni, Co – Assayed via acid digest and AAS

Previous drilling completed by Hastings (Y1 – Y15 in 1972) and North Broken Hill (Y16 – Y24 in 1975) was compiled into a database and some sections were re-assayed for Cu, Au, Ag and Mo for confirmation purposes.

Historical sampling was not exhaustive with some sections of core thought to be unmineralised, based on visual observation, and were not sampled. These zones tended to be in core logged as post mineralisation intrusive and or well outside of the mineralised domains.

The data set is also not complete for Au, Ag and Mo as small sections of the older drilling have not been completely assayed for these elements.

Drilling Techniques

The database used for the resource estimate consisted of 45 drill holes comprising eight RC drill holes for 793 metres and 37 diamond drill holes for 7,319 metres. Diamond drill holes consisted of BQ, NQ and HQ sized core. Standard core barrels were used with no downhole core orientation undertaken.

Drill holes were completed on a grid of approximately 50 to 70 metre centres drilled predominately east west throughout the main project area. All drill holes were geologically logged.

RC chips were geologically logged at 1m intervals. The logging intervals correspond with the assay sample intervals. The data collected produced enough detail to support a mineral resource estimate.

The diamond drill core was geologically logged with the logging intervals determined by the geology in the core. The assay intervals do not straddle geological intervals and thus the assay represents the grade within the geological unit. The data collected produced enough detail to support a mineral resource estimate.

The holes were drilled with an average -60˚ declination. Downhole surveys were completed at the time of diamond drilling using Eastman style surveys to help track deviation.

Drill collars were picked up by a surveyor or using a handheld GPS. A plan of the drilling and mineralised wire frames follows.

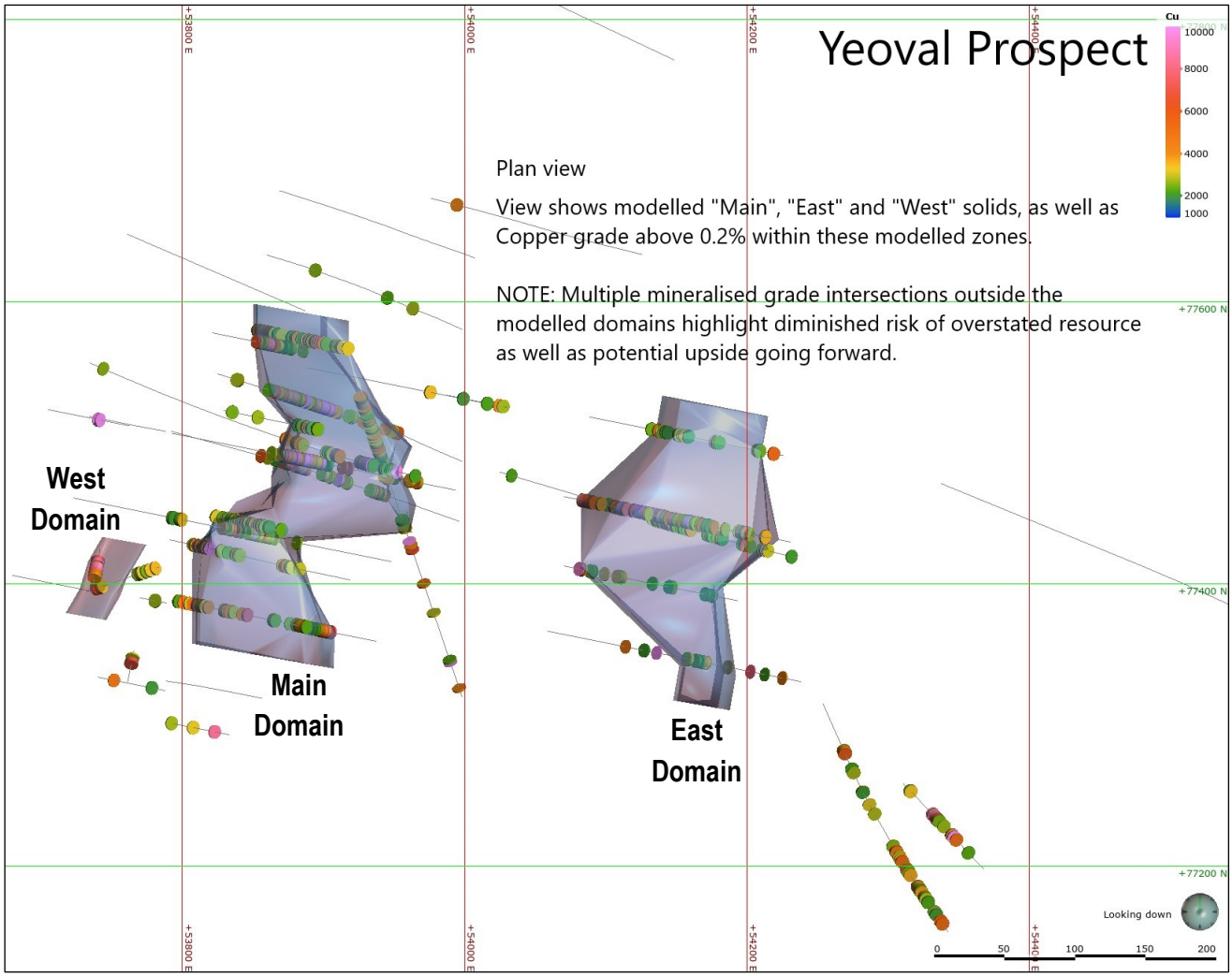


Figure 2: Yeoval resource area location plan showing the mineralised domains and drilling colour coded above 0.2% Cu. Projection GDA 1994 MGA Zone 55, but with the grid truncated by subtracting 6,300,000m from the Northing and 600,000m from the Easting.

Resource Classification

The Yeoval deposit has been classified as an Inferred Mineral Resource according to the definition outlined in the 2012 Edition of the JORC Code. The defined Inferred Mineral Resource, based on various copper cut-off grades, is shown below.

Table 2: Inferred resource estimate and cut-off sensitivity for the Yeoval deposit, reported above different Cu cut-off values. The base case estimate uses a 0.2% Cu cut-off. The tonnage figures have been rounded down to the nearest one hundred thousand. Cu, Au and Ag grades rounded to the nearest second decimal and Mo has been rounded to the nearest g/t.

Cut-off Cu%	Tonnes	Cu%	Au g/t	Ag g/t	Mo g/t
0.1	15,900,000	0.34	0.13	1.97	115
0.2	**12,800,000**	**0.38**	**0.14**	**2.20**	**120**
0.3	7,300,000	0.48	0.17	2.75	141
0.4	4,500,000	0.56	0.19	3.26	162
0.5	2,500,000	0.65	0.22	3.83	192

In making this classification, the following factors have been considered:

- The data is of sufficient quantity and quality for an Inferred Mineral Resource classification according to the guidelines in the 2012 Edition of the JORC Code.
- Collar survey methods and down hole surveys are sufficient for the spatial location of the drill holes.
- The continuity of grades >0.1 % Cu is generally very good.
- The domains (see Figure 2, 3 and 4) that have been constructed seem appropriate in relation to the information available and currently understood model of formation of the copper-gold mineralisation.
- The estimate of all elements has been limited to blocks that have first informing composites less than 50 metres from the block centre (a review of the model shows for the domains interpreted that the mean distance to the nearest composite is 28 meters). This is a reasonable limit to prevent kriging of grades into areas not adequately supported by drilling and is consistent with the resource classification applied.

The result of this estimation does reflect the competent person's view of the deposit based on the information available. The domains are constrained by geology and do not extend far beyond data limits. The model grades also reflect the raw drill hole composite grades and are not considered to be over-estimating the grade in the deposit. The mineralised domains have been intruded by a number of NNE-trending, steeply dipping, post-mineralisation dolerite and felsic dykes. Interpretations of these barren lithologies have been completed and the volume removed from the Mineral Resource estimate. In addition, a base of weathering surface variably extending to 15 metres from the topographic surface has been created and this material also excluded from the Mineral Resource estimate.

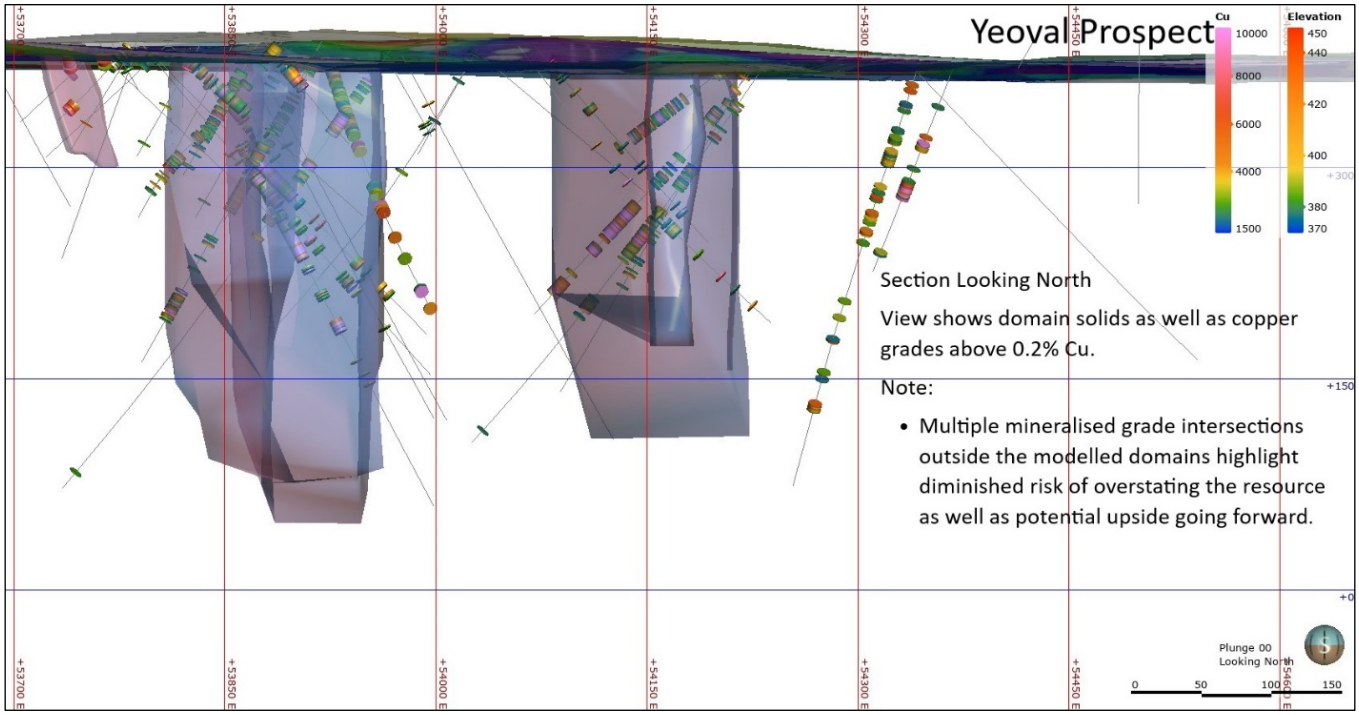


Figure 3: Yeoval resource area section looking North showing the mineralised domains and drilling colour coded above 0.2% Cu.

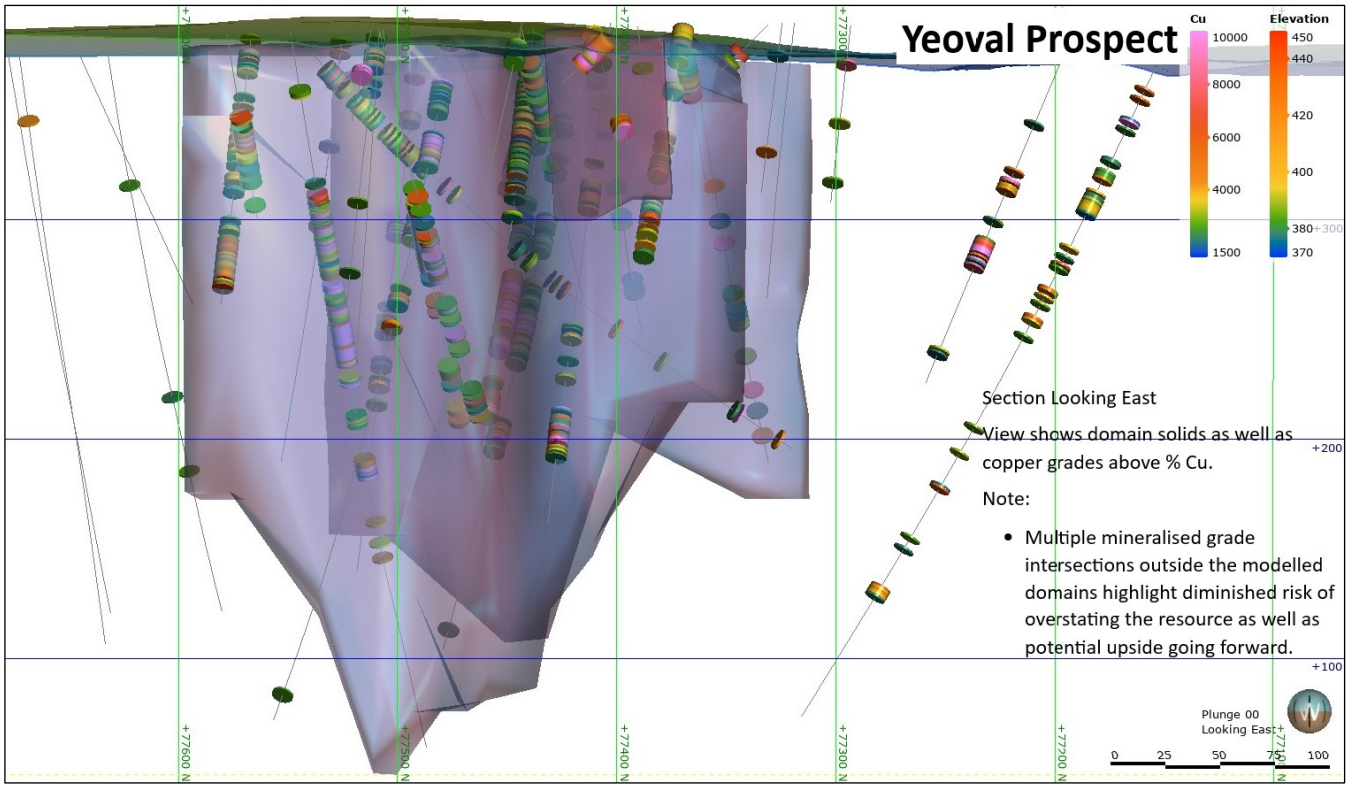


Figure 4: Yeoval resource area section looking East showing the mineralised domains and drilling colour coded above 0.2% Cu.

Sample Analysis Method

Resource modelling of the Yeoval Project deposit is based on estimating grades for Cu, Ag, Au and Mo by ordinary kriging. To complete the estimate, the primary consideration was to define the main estimation domains and zones impacting barren or post-mineralising lithologies.

The distribution of copper was reviewed for the project area. Mineralised domains were defined based on a 0.1% copper threshold (see Figure 2 and 3).

The barren intrusive bodies were modelled so that the volume is excluded from the resource estimate. This is considered an important undertaking as, in general, these rocks have not been systematically or comprehensively assayed and it is therefore not valid to include this volume in the estimate.

A summary of the estimation is shown in more detail in Appendix 1, Table 1.

Estimation Methodology

Grade estimation domain wireframes were created by digitising copper grades greater or equal to 0.1% on cross sections oriented parallel to the orientation of the drilling on 25 m spaced cross sections. Using this method, wireframes were created for the East Zone, Main Zone and West Zone (see Figure 2, 3 and 4).

Separate estimation domains for the other elements were not created.

A low grade or barren internal domain contained within the Main Zone domain was interpreted and modelled separately.

Compositing was applied to the assay data with a composite length of 2 m.

An ordinary kriged resource estimate was completed with grade assigned from 2 m composite samples into a block model with individual dimensions of 10 m x 20 m x 10 m. The arithmetic average of 23 historic bulk density values, 2.7 t/m^3, was used to report tonnages from the block model in fresh material (see Table 2). A density of 2.7 t/m^3 is consistent with porphyry systems elsewhere within the province.

Cut-off Grade

There are presently no extreme outlier values in the Yeoval dataset, with the maximum copper grade of 5.65% Cu for example. Therefore, for the Yeoval resource estimate, it is considered that at this stage no top cuts have been applied to the data for any of the elements estimated in this study

The resource wireframes were based on digitising sectional outlines on a 0.1% Cu basis. The resource was reported using a cut-off grade of 0.2% Cu. Cut-off grade values have also be reported for 0.1, 0.3, 0.4 and 0.5% Cu (see Table 2).

Mining and Metallurgical Methods and Parameters and Other Modifying Factors

There have been no geotechnical or metallurgical studies completed on drill samples from the Yeoval project area. However, given the similarities in mineralisation styles (disseminated and veined chalcopyrite and bornite) to other central NSW porphyry deposits and that fresh rock is generally within 20m of surface, it has been assumed that the mineralisation would be amenable to conventional open pit mining and mineral processing using flotation techniques.

Additional information on the Yeoval resource estimate is contained in Appendix 1 and Table 1.

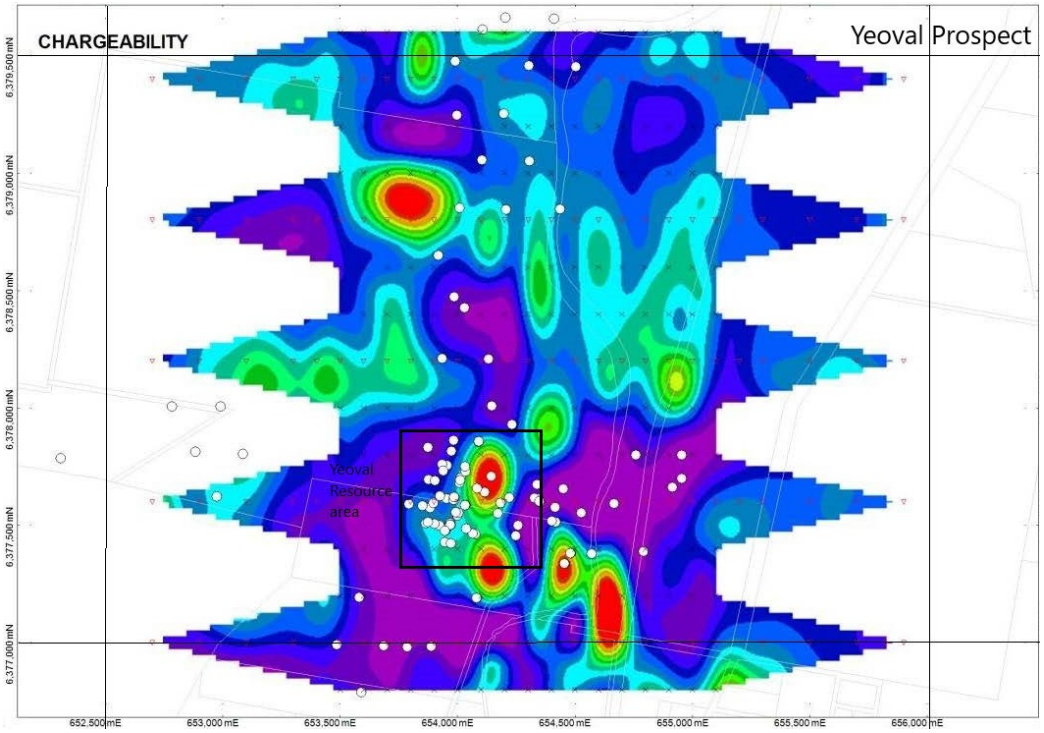


Figure 5: Yeoval area IP chargeability plan with the Yeoval resource area highlighted by the black square and drill hole collars shown as white circles.

Project Potential and Work Planned

An Induced Polarisation (IP) study was completed in 2011 by previous tenement holder, Augur Resources Limited, identifying positive chargeability anomalies that correspond well with the known porphyry-hosted

copper-gold mineralisation at the Yeoval resource area (see Figures 5 and 6). The IP chargeability anomalies have not been followed up by systematic drilling and present future compelling targets for Godolphin Resources.

Figure 6 shows the IP survey area zoomed in around the Yeoval resource area. This information indicates that there is ample scope to extend the known extents of mineralisation at Yeoval as the limited drilling completed to date has not closed off the porphyry mineralisation which is open in every direction. Further, high grade zones have not been followed up sufficiently to define their extents and remain open (see Figure 6).

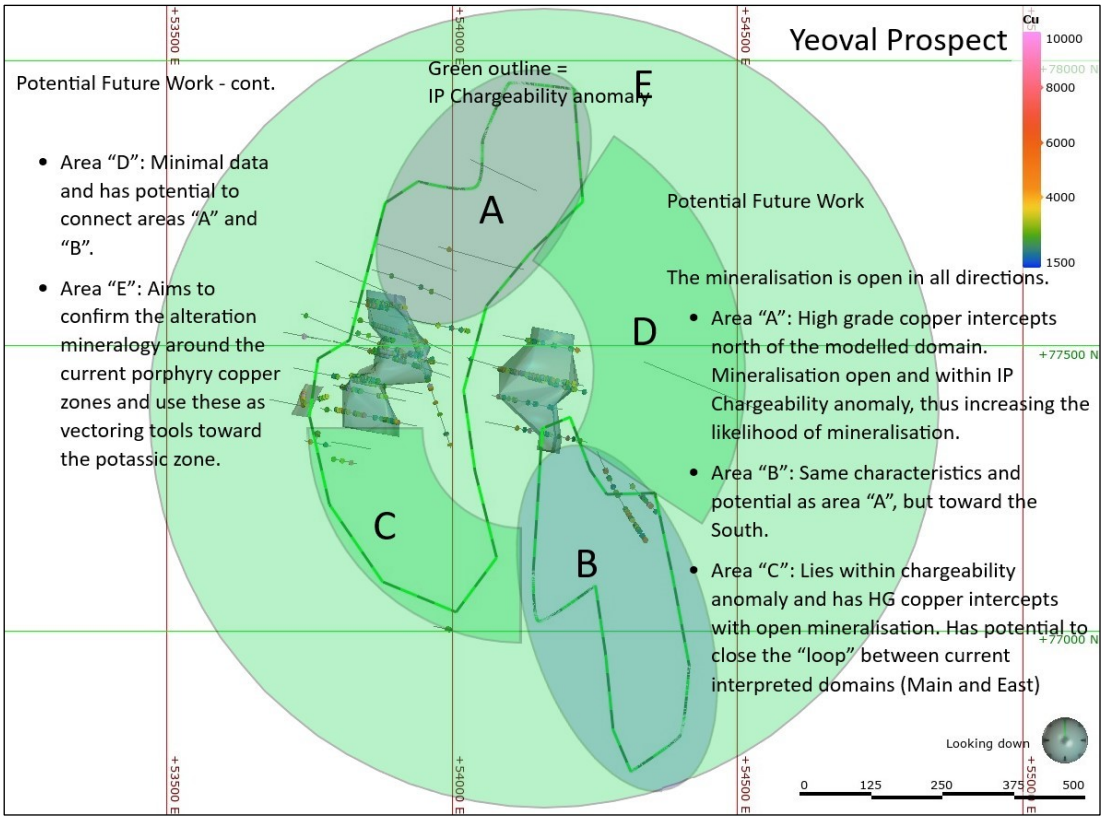


Figure 6: Yeoval resource area and IP chargeability targets.

The above figure (Figure 6) highlights significant potential to increase the known extents of porphyry mineralisation and also define new areas with highlights including:

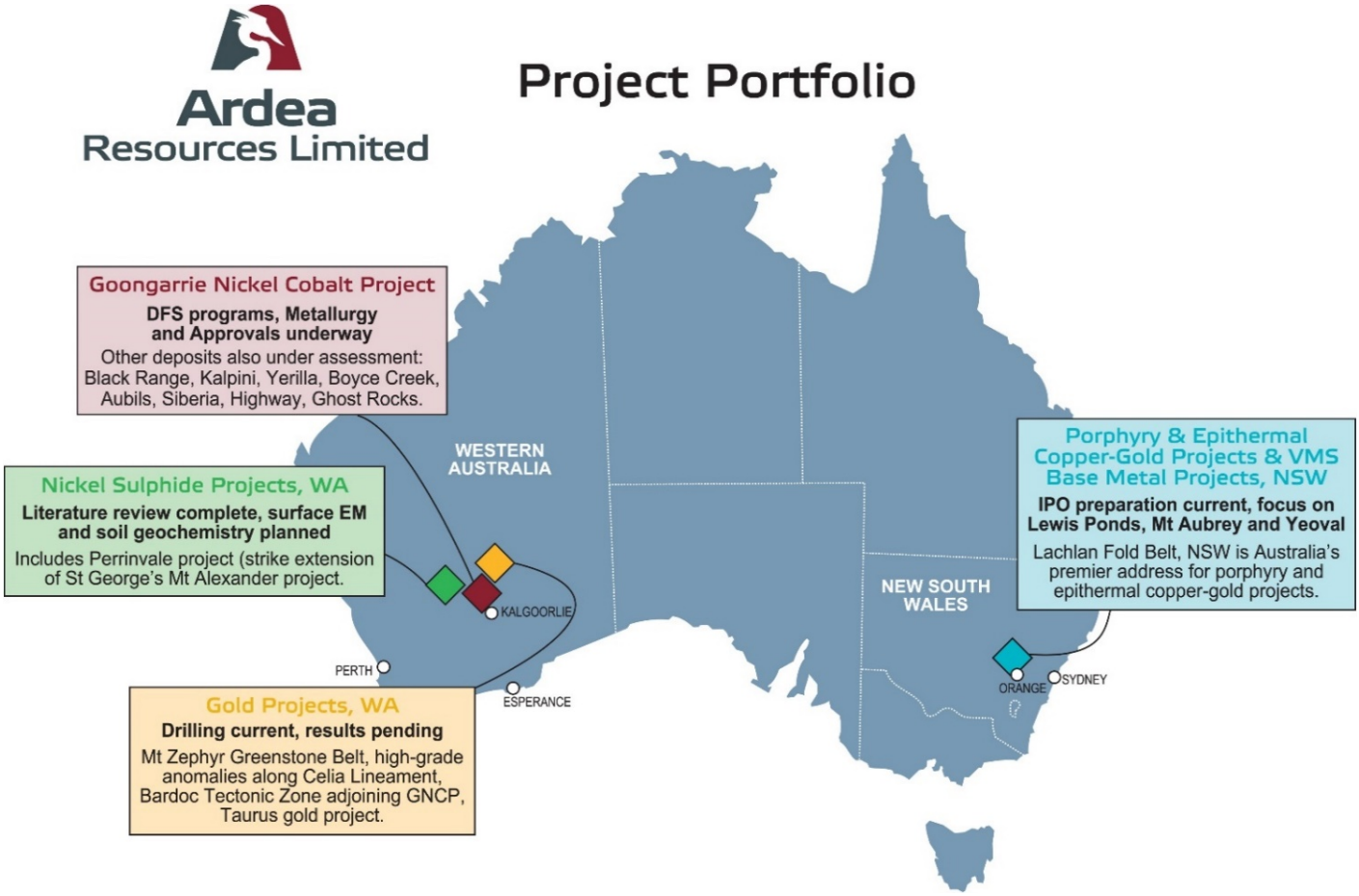
- Area "A": High grade copper intercepts north of the modelled domain. Mineralisation is open and within the IP Chargeability anomaly, thus increasing the likelihood of additional mineralisation.
- Area "B": Same characteristics and potential as area "A", but towards the south.
- Area "C": Located within chargeability anomaly and has high grade copper intercepts not closed off by drilling. Has potential to close the "loop" between current interpreted domains (Main and East).
- Area "D": Minimal data and has potential to connect areas "A" and "B".
- Area "E": Outer extents of mineralisation and definition of alteration mineralogy vectors to zero in on potassic zone mineralisation (if present).

Yeoval represents another compelling exploration opportunity for Godolphin Resources to follow up post ASX listing.

About Ardea Resources

Ardea Resources ("Ardea" – ASX:ARL) is an ASX listed resources company, with 100% controlled Australian-based projects, prioritising a three-pronged value creation strategy which is:

- development of the Goongarrie Nickel Cobalt Project, which is part of the Kalgoorlie Nickel Project, a globally significant series of nickel-cobalt deposits which host the largest nickel-cobalt resource in the developed world, coincidentally located as a cover sequence overlying fertile orogenic gold targets;
- advanced-stage exploration at WA gold and nickel sulphide targets within the Eastern Goldfields world-class nickel-gold province; and
- the Godolphin Resources Limited demerger of the NSW gold and base metal assets with planned in-specie share distribution, with all projects located within the Lachlan Fold Belt world-class gold-copper province, specifically within the Lachlan Transverse Zone (hosts McPhillamy's gold and Cadia and Northparkes copper-gold) and splay fault of the Gilmore Suture (hosts Cowal gold).



For further information regarding Ardea, please visit www.ardearesources.com.au or contact:

Ardea Resources:
Andrew Penkethman
Chief Executive Officer, Ardea Resources Limited
Tel +61 8 6244 5136

CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This news release contains forward-looking statements and forward-looking information within the meaning of applicable Australian securities laws, which are based on expectations, estimates and projections as of the date of this news release.

This forward-looking information includes, or may be based upon, without limitation, estimates, forecasts and statements as to management's expectations with respect to, among other things, the timing and ability to complete the Ardea spin-out of Godolphin Resources Limited, the timing and amount of funding required to execute the Company's exploration, development and business plans, capital and exploration expenditures, the effect on the Company of any changes to existing legislation or policy, government regulation of mining operations, the length of time required to obtain permits, certifications and approvals, the success of exploration, development and mining activities, the geology of the Company's properties, environmental risks, the availability of labour, the focus of the Company in the future, demand and market outlook for precious metals and the prices thereof, progress in development of mineral properties, the Company's ability to raise funding privately or on a public market in the future, the Company's future growth, results of operations, performance, and business prospects and opportunities. Wherever possible, words such as "anticipate", "believe", "expect", "intend", "may" and similar expressions have been used to identify such forward-looking information. Forward-looking information is based on the opinions and estimates of management at the date the information is given, and on information available to management at such time.

Forward-looking information involves significant risks, uncertainties, assumptions and other factors that could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking information. These factors, including, but not limited to, the ability to complete the Ardea spin-out of Godolphin Resources Limited on the basis of the proposed terms and timing or at all, fluctuations in currency markets, fluctuations in commodity prices, the ability of the Company to access sufficient capital on favourable terms or at all, changes in national and local government legislation, taxation, controls, regulations, political or economic developments in Australia or other countries in which the Company does business or may carry on business in the future, operational or technical difficulties in connection with exploration or development activities, employee relations, the speculative nature of mineral exploration and development, obtaining necessary licenses and permits, diminishing quantities and grades of mineral reserves, contests over title to properties, especially title to undeveloped properties, the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drill results and other geological data, environmental hazards, industrial accidents, unusual or unexpected formations, pressures, cave-ins and flooding, limitations of insurance coverage and the possibility of project cost overruns or unanticipated costs and expenses, and should be considered carefully. Many of these uncertainties and contingencies can affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. Prospective investors should not place undue reliance on any forward-looking information.

Although the forward-looking information contained in this news release is based upon what management believes, or believed at the time, to be reasonable assumptions, the Company cannot assure prospective purchasers that actual results will be consistent with such forward-looking information, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither the Company nor any other person assumes responsibility for the accuracy and completeness of any such forward-looking information. The Company does not undertake, and assumes no obligation, to update or revise any such forward-looking statements or forward-looking information contained herein to reflect new events or circumstances, except as may be required by law.

No stock exchange, regulation services provider, securities commission or other regulatory authority has approved or disapproved the information contained in this news release.

Competent Person Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled or reviewed by Johan Lambrechts, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Lambrechts is a full-time employee of Ardea Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being 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 Lambrechts consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Ardea Resources Limited

JORC Code, 2012 Edition – Table 1 report for the Yeoval Resource in central NSW

Section 1 Sampling Techniques and Data

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

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.*
	• *Include reference* ***to measures taken to ensure sample representivity*** *and the appropriate calibration of any measurement tools or systems used.*
	• ***Aspects of the determination of mineralisation*** *that are Material to the 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.*
		• ***Reverse Circulation Drilling***
		  ○ Previous drilling completed by Hastings in 1972 (DHID = Y2) was collated by geologists from Augur Resources in 2009 and carefully compiled into a database. The work included:
		  ○ Converting assay and geological data from feet to meters.
		  ○ All assay and geological abbreviated lithology were entered into a geological database.
		  ○ Data validation was completed by plotting and physical checking.
		  ○ A significant proportion of the drill hole collars had been located and surveyed for spatial location by registered surveyors of hand-held GPS.
		  ○ *RC drilling was used to obtain 1 m samples from 8 holes. These samples were then pulverised and assayed as below:*
		  ▪ Cu – Assayed via Atomic Absorption Spectrometry (AAS)
		  ▪ Mo – Assayed via Aqua Regia soluble and AAS
		  ▪ Au-Ag – Assayed via Acid Digest and AAS
		• **Diamond Drilling**
		  ○ Previous drilling completed by Hastings in 1972 (DHID = Y1-Y15) and North Broken Hill in 1973 and 1973 (DHID = Y16-Y24) was collated by geologists from Augur Resources in 2009 and carefully compiled into a database. The work included:
		  ○ Converting assay and geological data from feet to meters.
		  ○ All assay and geological abbreviated lithology were entered into a geological database.
		  ○ Data validation was completed by plotting and physical checking.
		  ○ A significant proportion of the drill hole collars had been located and surveyed for spatial location by registered surveyors of hand-held GPS.
		  ○ Significant sections of the historic drill core have been re-assayed for Cu, Au, Ag and Mo, and this data was incorporated into the data set.
		• *Diamond drilling was used to obtain samples from 37 holes in accordance with their host lithology.*
		  ○ *E.g.:*
		  ▪ Un-mineralised intervals were sampled at 1.5m or 1m lengths.
		  ▪ Mineralised core was sampled in accordance with its individual length and thus the sample lengths varied from 0.5m -1m.
		  ○ *The samples were pulverised and assayed as below:*
		  ▪ Cu – Assayed via AAS
		  ▪ Mo – Assayed via Aqua Regia soluble and AAS
		  ▪ Au, Ag, Pb, Zn, Ni, Co – Assayed via Acid Digest and AAS

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).*	• Reverse Circulation Drilling
		• Diamond Drilling
		  ○ BQ, HQ and NQ core drilled from surface.
		  ○ Standard tube was used with no core orientation done.

Criteria	JORC Code explanation	Commentary

Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*
	• *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.*
		• 1970s
		  ○ 25 diamond drill holes were drilled between 1972 and 1974. Standard procedures were used during the drilling process with "stick-up" measured at the end of each run and core blocks with written record of run length and core loss (if any) indicated of each block. Core loss was calculated using the run length (based on the "stick up") and the physical core in the tray.
		  ○ The geologist logging the core would also measure the core and placing meter marks on the core. These meter marks are compared to the values on the core blocks to ensure accuracy.
		• 2008
		  ○ 12 Diamond drill holes were drilled by Augur Resources on the Yeoval prospect.
		  ○ The same industry standard practices as described above were employed to ensure accurate sample recovery measurement and reporting.

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.*
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*
	• *The total length and percentage of the relevant intersections logged.*
		• RC Chips
		  ○ The RC chips were geologically logged at 1m intervals. The logging intervals correspond with the assay sample intervals. The data collected produced enough detail to support a mineral resource estimate.
		  ○ 100% of the chip intervals were logged.
		• Diamond Drill Core
		  ○ The diamond drill core was geologically logged with the logging intervals being determined by the geology in the core. The assay intervals do not straddle geological intervals and thus the assay represents the grade within the geological unit. The data collected produced enough detail to support a mineral resource estimate.
		  ○ 100% of the drill core was logged.

Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*
	• *For all sample types, the* ***nature, quality and appropriateness of the sample preparation technique.***
	• ***Quality control procedures*** *adopted for all sub-sampling stages to maximise representivity of samples.*
	• *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.*
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*
		• RC Chips
		  ○ The dry rock chips from the RC holes were riffle split at the rig with the sample bagged for transport to the analytical laboratory.
		  ○ The quality of the split sample is considered appropriate and is used throughout the industry.
		  ○ The complete sample interval was split as mentioned above to ensure representativeness of the in situ material.
		• Diamond Core
		  ○ Diamond core was taken from the tube and placed in core trays at the rig.
		  ○ Prior to sampling the core was cut in two equal halves with one halve being sent for sampling.
		  ○ The cut half core sample is considered appropriate and is used throughout the industry.
		  ○ The combination of drill procedures ensuring accurate depth measurements and knowledge of core loss with the geological log prior to cutting the sample ensures the sample being representative of the in situ material it was taken from.
		• The holes resampled in 2009 were quarter cut from the half core that remained form the original sampling in 1972-1974.

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.*
	• *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.*
	• *Nature of quality control procedures adopted*
		• 1972 data:
		  • Cu – Assayed via Atomic Absorption Spectrometry (AAS)
		  • Mo – Assayed via Aqua Regia soluble and AAS
		  • Au-Ag – not routinely assayed for this data set.
		  • 1973-1974 data:
		  • Sample preparation and assaying was conducted by NBH Laboratories, Moonta, SA.
		  • Cu, Pb, Zn, Ag, Ni, Co, Mo and Au were determined by Acid digest and Atomic Absorption Spectrometry.
		  • No specific data was found regarding the QAQC of the data included in the resource, but the competent person that completed the 2009 resource stated in his report that the data quality control was to a sufficient standard to warrant resource estimation.

Criteria	JORC Code explanation	Commentary
	(eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• There is no record of peer review performed on the data sets from either the 1970s or the drill program leading to the resource estimation in 2008. • The Resource report form 2009 mentions a team of geologists ensuring appropriate QAQC standards.

Location of data points	• *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.*
	• *Specification of the grid system used.*
	• *Quality and adequacy of topographic control.*
		• Survey
		  ○ The 2009 resource report mentions that a significant number of the holes used for the estimate were surveyed by registered surveyors or via hand held GPS.
		• DH survey
		  ○ DH surveys for the estimate were validated by geologists from Augur Resources as well as the competent person of the resource estimate.
		  ○ The collars and drill traces have also been validated by Ardea Resources during 2019.
		• Grid system
		  ○ The drill collars were surveyed into GDA_1994_MGA_Zone_55
		  ○ The resource modeling was done in a local grid with transformation as below:
		  ▪ Northing – Minus 6,300,000m
		  ▪ Easting – Minus 600,000m
		• Topography
		  ○ Topography for the resource was created using the elevations of the drill collars used for the estimation.

Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• The drill spacing for the estimated resource is about 50m x 70m with holes drilled predominantly near east-west azimuth. • The data spacing is considered adequate to estimate a “bulk-tonnage” porphyry type resource considering its inherent general grade continuity. • Compositing was applied to the assay data with a composite length of 2m.

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.*
	• *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.*
		• Sample Orientation
		  ○ The drilling was conducted around the East-West direction. The mineralised zones trend along the North-South direction and predominantly dip sub-vertically.
		  ▪ The sampling is done at right angles to the mineralisation and is not believed to create sampling bias.

Sample security	• *The measures taken to ensure sample security.*	• The samples and Resource estimate are of historic nature. The digital data was supplied by Augur Resources and thus there is no third party to potentially corrupt data.

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No Audits have been conducted to our knowledge.

Section 2 Reporting of Exploration Results

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

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.*	• The Yeoval prospect, on which this resource was calculated lies on Exploration License number 8538 and is held by Ardea Exploration Pty Ltd. • The land is owned by Private land holders north of the township of Yeoval. • There is no Joint venture or any other arrangements pertaining to this project, and also no native title claims over the area. • The security deposit payed by Ardea Resources for EL8538 in March 2017 is $10,000.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	EL8538 was granted to Ardea Resources Ltd on 19th March 2017 as a 100-block tenement for a period of 3 years. Small scale historical workings consisting of shallow pits and shafts looking for copper and gold are readily observed in the Yeoval mineral field. More recently, 19 companies have undertaken exploration in the area (Table 1), predominantly for gold, base metals and Rare Earth Elements (REE). Work undertaken by previous companies include geological mapping, stream sediment, soil and rock-chip sampling, ground based geophysical surveys and RAB/RC & Diamond drilling.

Table 1: Previous exploration over EL 8538

Tenement	Company	Start date	End date	Elements	Units
EL1131	BHP Ltd	1/08/1979	1/01/1980	Cu Pb Zn Ag Au	144
EL1441	Noranda Australia Ltd	1/01/1979	1/01/1980	Cu	261
EL1910	Noranda Australia Ltd	1/07/1981	1/07/1984	Au Cu Ag	189
EL1911	Noranda Australia Ltd	1/07/1982	1/07/1983	Cu Au	231
EL2464	International Mining Corporation NL	1/08/1985	1/08/1988	Au Cu Hg	287
EL2635	Cyprus Gold Australia Corporation	1/08/1986	1/08/1988	Au, Ag	25
EL3133	Cyprus Gold Australia Corporation	1/07/1988	1/01/1989	Cu Au	25
EL3134	Cyprus Gold Australia Corporation	1/07/1988	1/01/1989	Cu Au	65
EL3677	Homestake Gold of Australia Ltd	13/11/1990	19/07/1991	Au Cu	71
EL3857	Peko Wallsend Operations Ltd	1/05/1991	1/05/1992	Au Cu Bi W	32
EL4024	CRA Exploration Pty Ltd	14/08/1991	13/08/1995	Au Cu	81
EL4117	CRA Exploration Pty Ltd	11/11/1991	10/11/1993	Au Cu	95
EL4235	CRA Exploration Pty Ltd	1/04/1992	31/03/1994	Au Cu	98
EL5128	Woodham, SW.	1/10/1996	1/10/1998	Au Cu	52
EL5503	Malachite Resources NL	7/08/1998	6/08/2000	Au Cu	12
EL6311	Augur Resources Ltd	27/09/2004	26/09/2016	Au Cu	24
EL7036	Crystal Minerals Pty Ltd	24/01/2008	22/10/2014	Cu Au Pb Zn Ag	134
EL7108	Greystoke Mines Pty Ltd	25/08/2008	25/03/2014	Cu Au REE	115
EL7588	Minotaur Operations Pty Ltd	4/08/2010	7/06/2015	Au Cu Mo REE	51

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	EL 8538 covers a large portion of the Early Devonian Yeoval Batholith including felsic to mafic intrusives of the Yeoval Intrusive Complex. The Yeoval Complex is strongly fractionated and comprised of various intermediate intrusive lithologies – granite, quartz monzodiorite, quartz diorite, microgranodiorite, granodiorite, diorite and gabbro (Pogson et al 1998). The more fractioned intermediate phases are highly prospective for porphyry copper - molybdenum ± gold mineralisation. This Yeoval intrusive complex formed during a Late Silurian to Early Devonian melting and rifting event that split the Ordovician to Early Silurian Macquarie Arc. Its chemistry is shoshonitic, in common with the Ordovician volcanic rocks that host the Cadia and Northparkes porphyry copper-gold deposits, and a similar mantle source and mineral potential is inferred. The south-eastern portion of the licence area hosts the Silurian aged Canowindra Volcanics - garnetiferous quartz-feldspar-cordierite tuffs, ashstone and breccias. A core of Ordovician sandstone, siltstone and minor limestone from the Kabadah Formation found within the Silurian sediments and volcanics. This area is considered prospective for low sulphidation Au-Ag mineralisation similar in style to the Ardea Mt Aubrey gold deposit to the south-west of the area. Emplacement of intrusives and extrusives in the Early Devonian which are related to the Boggy Plain Supersuite have given rise to intrusive related mineralisation. Numerous copper-gold occurrences are known in the Yeoval Complex. Mineralisation ranges from disseminated chalcopyrite-gold within altered granodiorite (Yeoval, Yeoval South) to quartz-magnetite-chalcopyrite veining within structures inferred within the granodiorite, at the Goodrich Mine. The style of the mineral occurrences is indicative of a porphyry copper-gold setting. Minor occurrences of copper ± gold mineralisation is present within the microgranite and granite of the Yeoval Complex. Minor molybdenum is reported at the Martins Reef Prospect in the south-west of the licence area. Scattered copper-gold prospects also occur within the Silurian and Devonian sequences east of the Yeoval Batholith. Mineralisation hosted within the Yeoval complex is centred in and around quartz monzonite porphyry complexes which intruded the volcanic centres, composing of pipes, dykes and stocks.

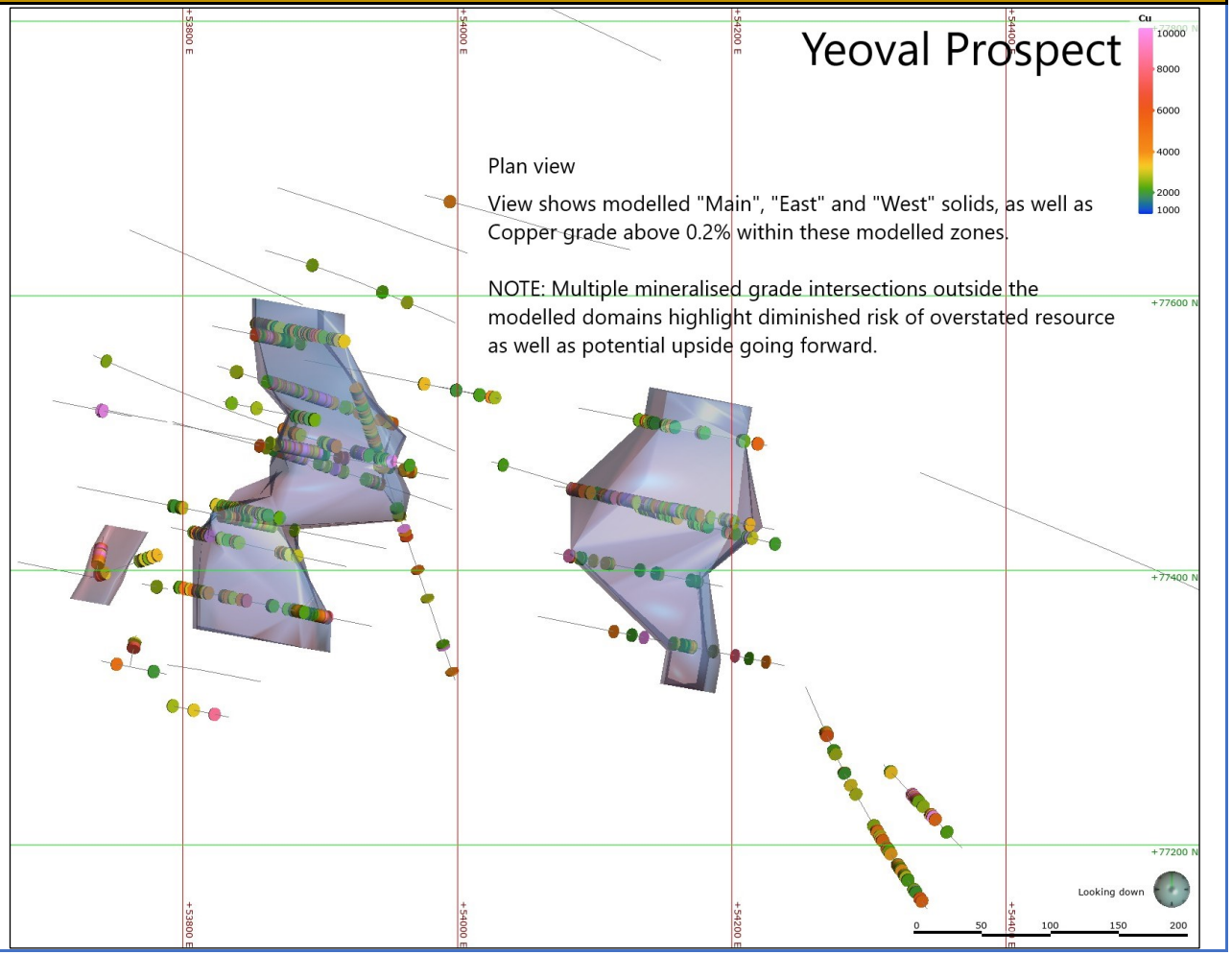
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *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.*
		• The holes used for the estimation of this resource is tabulated below. The holes were logged geologically and assayed as per the descriptions in section 1 of this table 1 report.

Criteria	JORC Code explanation	Commentary

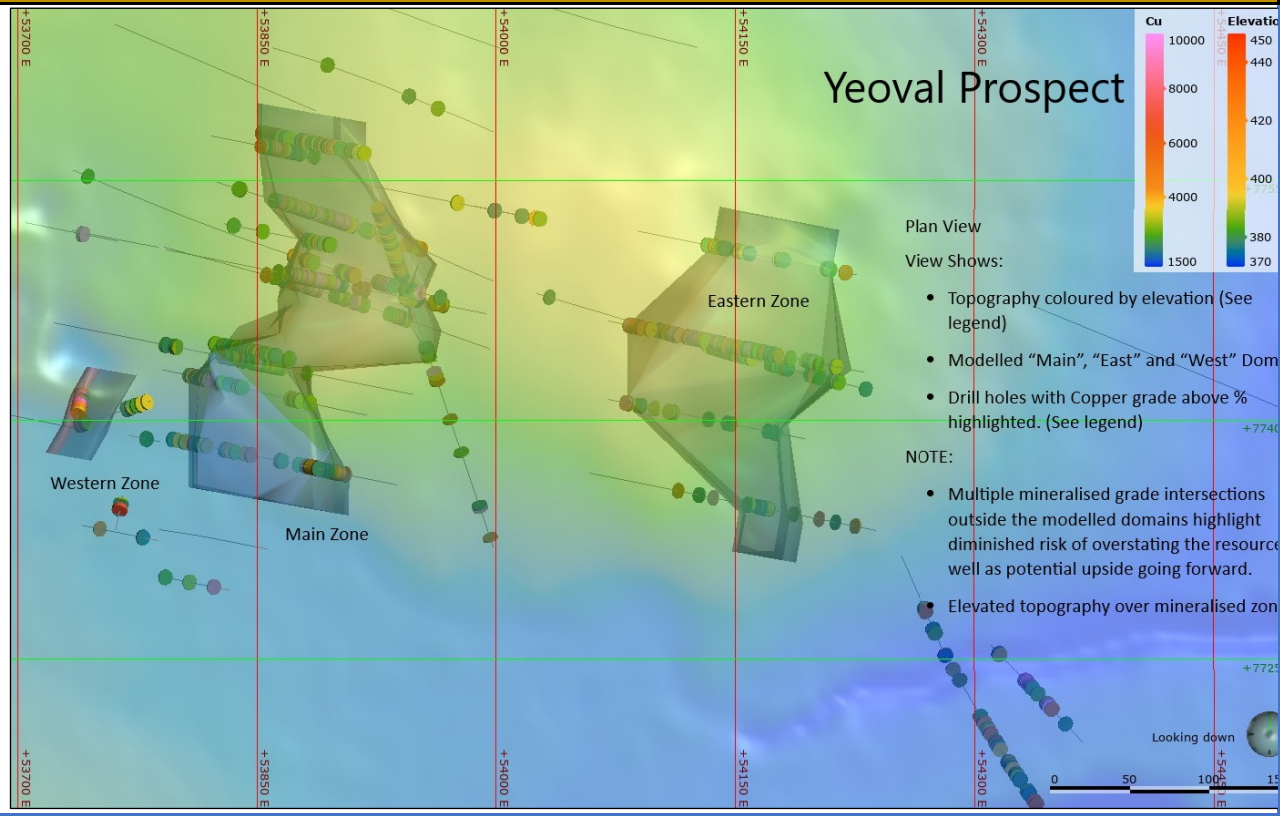
HOLE_ID	EASTING	NORTHING	RL	EOH	AZIMUTH	DIP
Y1	653679.5	6377406.1	383.0	127.1	101.3	-60
Y10	654029.9	6377525.3	385.0	87.8	281.3	-60
Y10B	654029.9	6377525.0	385.0	243.8	281.3	-60
Y11	654230.9	6377429.8	376.2	243.8	281.3	-55
Y12	654058.6	6377366.6	386.5	269.7	101.3	-50
Y13	653921.7	6377545.9	383.4	304.8	161.3	-45
Y14	653890.3	6377369.1	389.3	144.2	281.3	-50
Y15	653787.7	6377324.5	389.8	91.1	281.3	-60
Y16	654337.1	6377471.3	373.0	305.1	101.3	-50
Y17	653792.6	6377506.7	386.4	290.2	101.3	-50
Y18	653811.3	6377443.2	386.9	185.0	101.3	-50
Y19	654070.2	6377412.8	386.2	188.1	101.3	-50
Y2	653769.8	6377390.3	388.2	39.6	101.3	-60
Y20	653821.5	6377577.9	384.8	110.0	101.3	-50
Y21	653878.3	6377371.2	389.2	94.5	101.3	-50
Y22	653761.0	6377647.8	381.0	182.0	101.3	-45
Y23	654032.7	6377826.0	379.0	160.6	101.3	-45
Y3	653736.9	6377400.6	385.4	34.0	11.3	-43
Y4	653761.3	6377330.9	389.0	30.9	11.3	-45
Y5	653783.4	6377412.0	387.7	76.8	251.3	-45
Y6	653811.3	6377443.2	389.9	122.7	281.3	-45
Y7	653762.5	6377512.0	386.5	80.2	281.3	-43
Y8	654212.8	6377432.9	376.2	107.3	281.3	-38
Y9	654225.7	6377490.9	376.2	274.3	281.3	-60
YA001	653897.4	6377509.3	385.2	140.0	281.3	-60
YA002	653917.7	6377566.9	382.8	140.0	281.3	-60
YA003	653873.1	6377437.8	387.7	108.0	281.3	-60
YA004	653967.9	6377008.2	373.2	59.0	101.3	-60
YA005	653833.0	6377293.2	388.5	93.0	281.3	-60
YA006	654747.0	6371795.0	388.5	100.0	318.3	-60
YA006A	654424.0	6371935.0	388.5	21.0	269.3	-60
YA007	654500.0	6372248.0	388.5	132.0	359.3	-60
YA008	654235.9	6377418.3	376.2	350.0	282.3	-55
YA009	653792.0	6377508.2	386.2	316.9	101.3	-50
YA010	653969.4	6377475.5	385.9	401.3	282.8	-55
YA011	653824.9	6377548.9	385.2	374.6	101.3	-60
YA012	653788.1	6377508.2	386.7	161.3	281.3	-70
YA013	653859.6	6377633.2	381.9	300.0	103.3	-60
YA014	653976.0	6377673.3	379.6	314.4	101.3	-60
YA015	653868.8	6377678.7	380.7	298.7	101.3	-60
YA016	653918.7	6377402.9	389.7	263.4	281.3	-60
YA017	654342.3	6377153.6	370.6	350.0	326.3	-60
YA018	653856.7	6377318.9	389.6	143.0	281.3	-60
YA019	654367.7	6377198.0	370.5	167.3	319.3	-60

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high*	• The estimation technique used on this data is Ordinary Kriging • No top cuts were not applied during this estimate • No Aggregate intercepts were created.

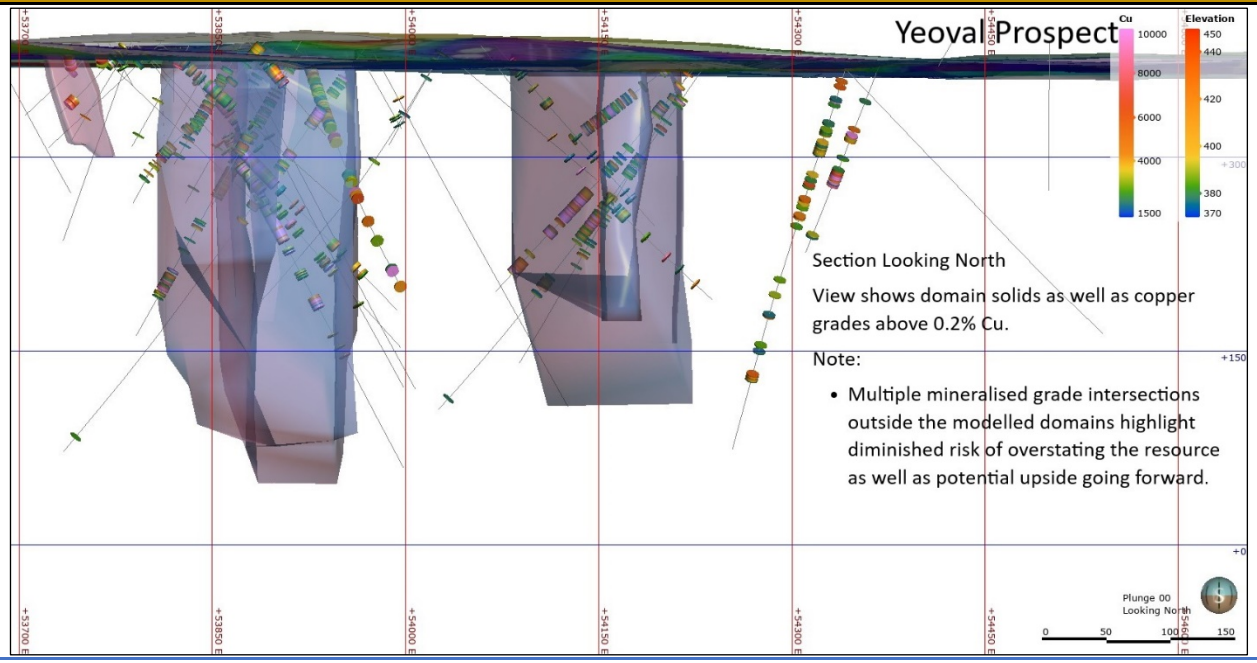
Criteria	JORC Code explanation	Commentary
	grades) and cut-off grades are usually Material and should be stated. • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No metal equivalent was used for reporting
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• The holes were drilled at an average of -60˚ declination. • The mineralisation is modeled as being near vertical. • NOTE: The mineralisation is not being stated as a grade per meter statement, but rather as an interpolated resource block model which alleviates the risk of misrepresenting the mineralisation due to acute intersection angles between the drill hole and the mineralised unit resulting in exaggerated intersection lengths.

Criteria	JORC Code explanation	Commentary
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.*	

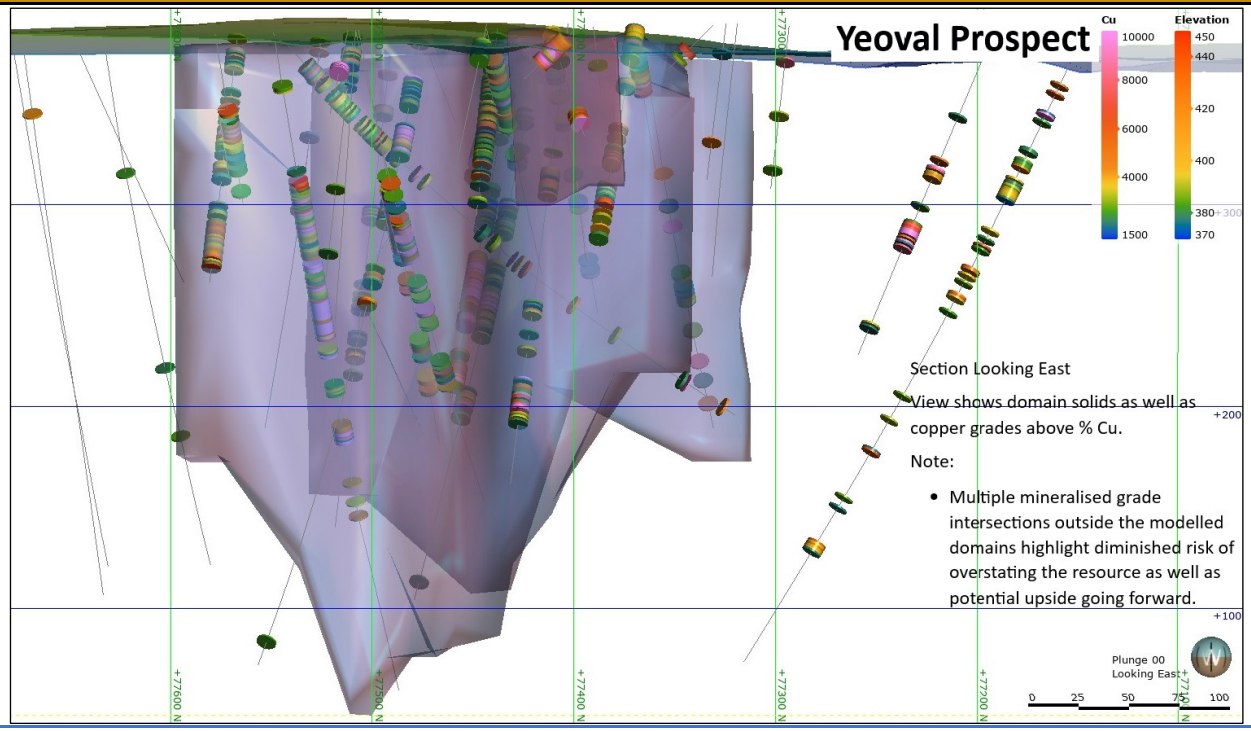
Criteria	JORC Code explanation	Commentary



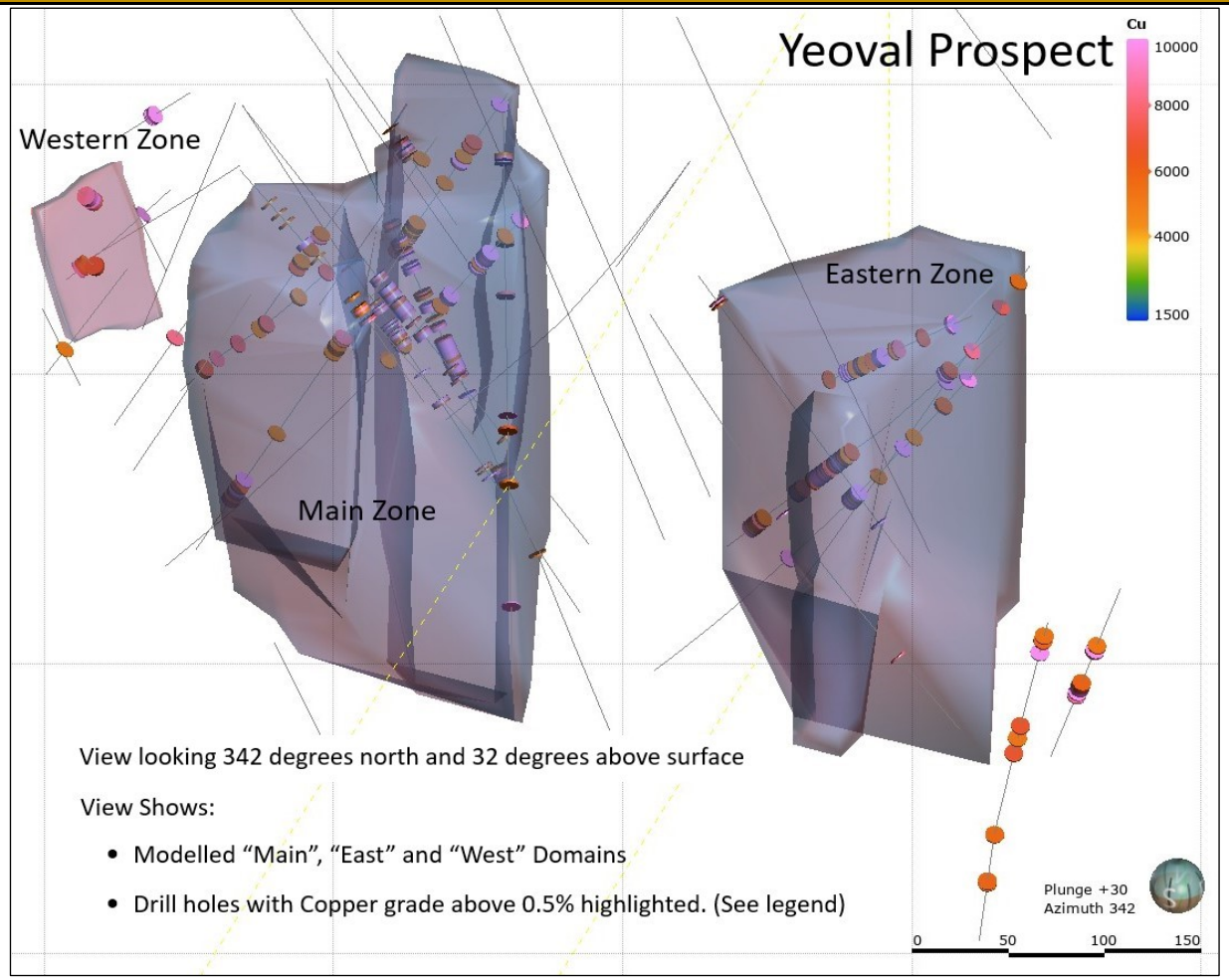
Criteria	JORC Code explanation	Commentary

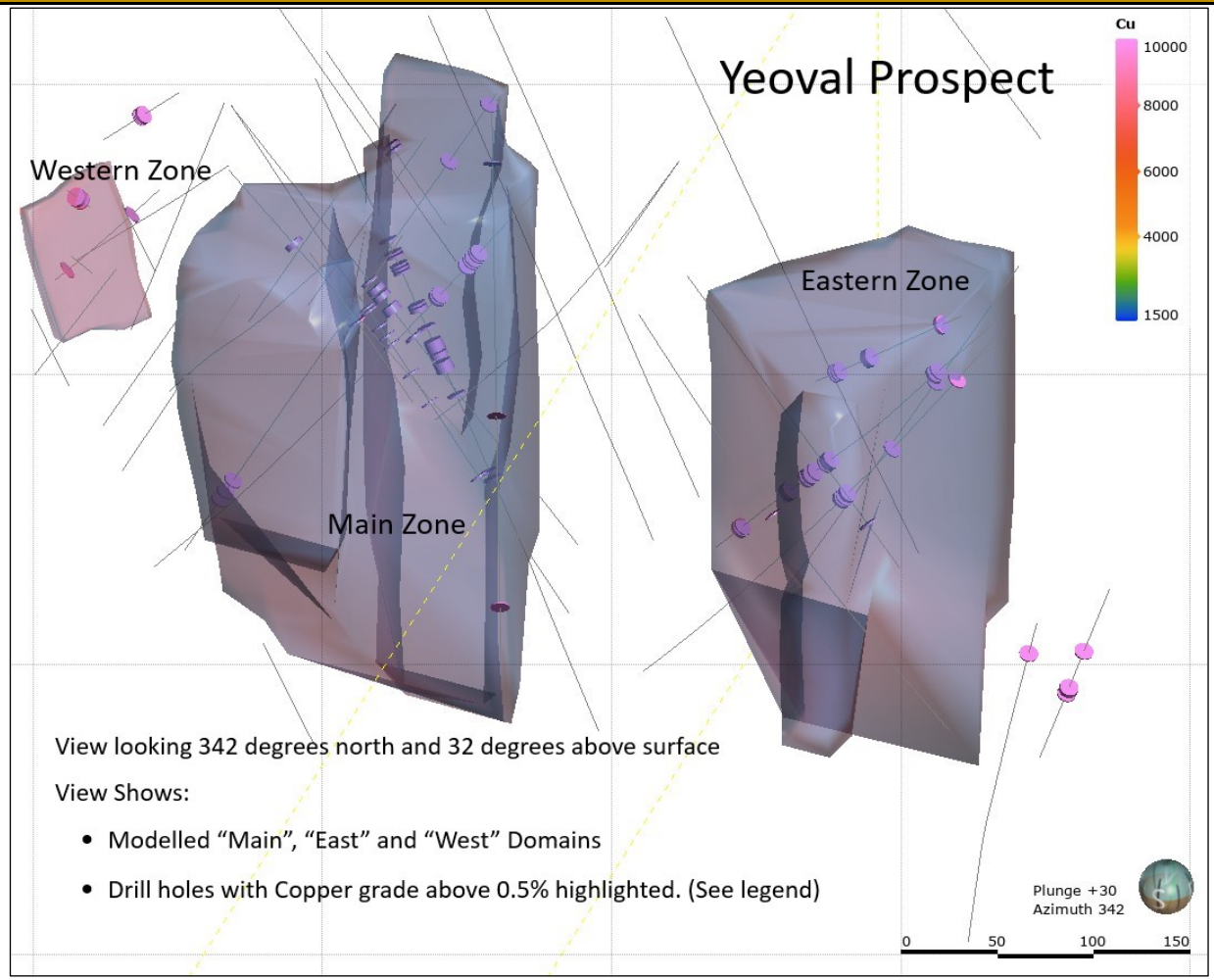


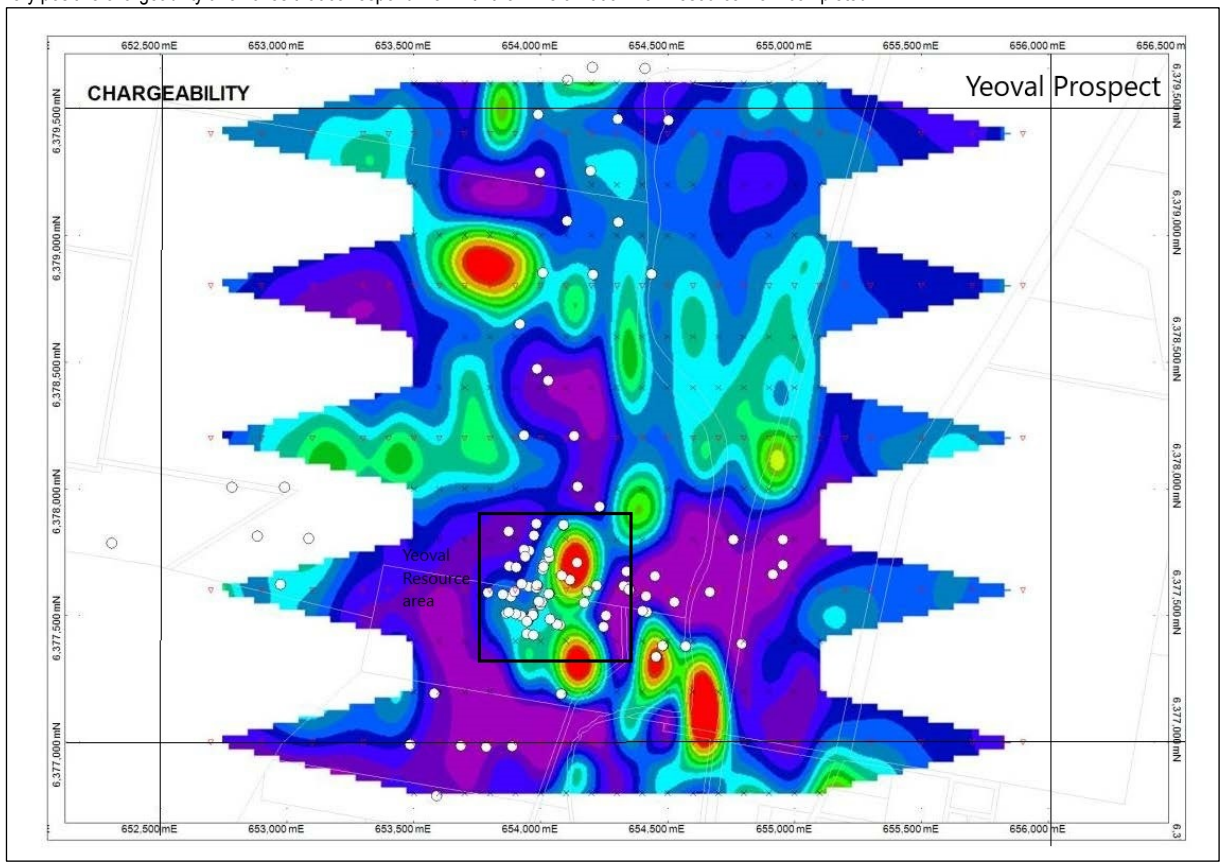
Criteria	JORC Code explanation	Commentary

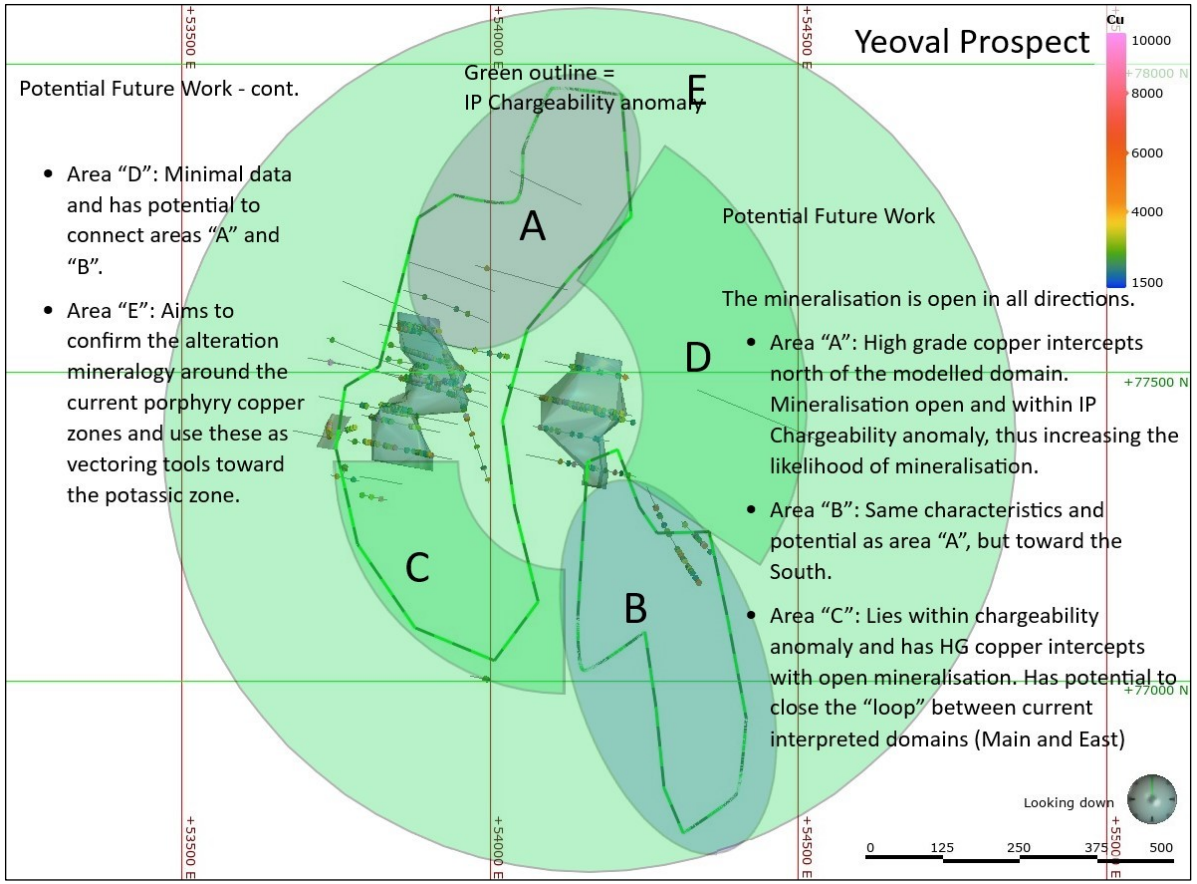


Criteria	JORC Code explanation	Commentary



Criteria	JORC Code explanation	Commentary
		
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*	• The Reporting of this resource is considered balanced since ○ Sample results were composited to 2 m intervals/composites. ○ Ordinary Kriging was used. ○ No top cuts were used.

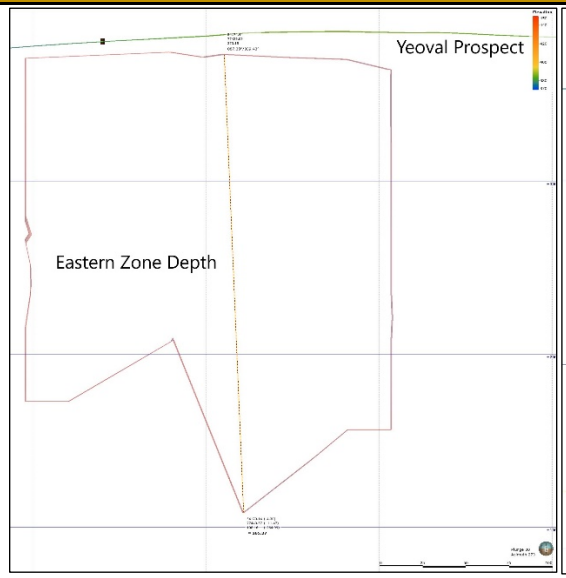
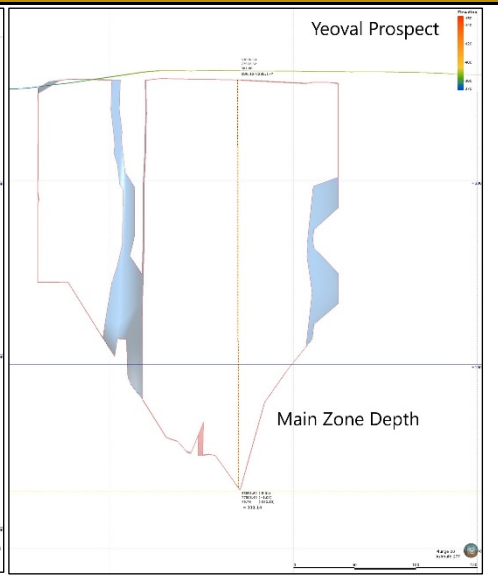
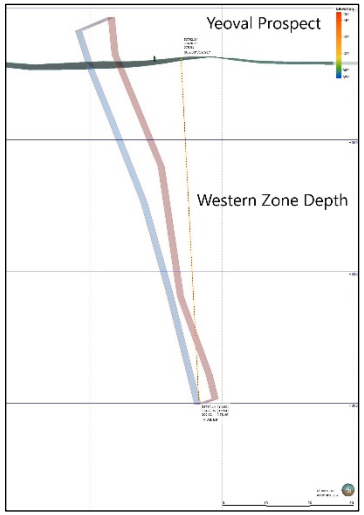
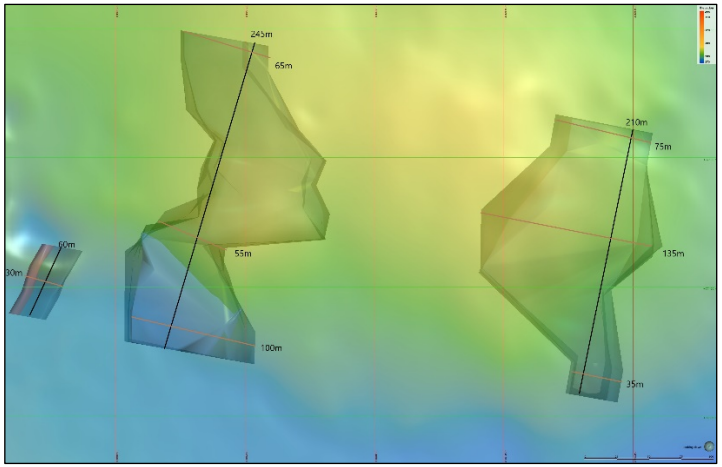
Criteria	JORC Code explanation	Commentary
	Results.	
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Multiple companies have held exploration licenses over Yeoval over the years and extensive work has been done. An IP study was completed in 2011 identifying very positive chargeability anomalies that correspond well with the mineralization from resource work completed.  •
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main*	The mineralisation is open in all directions and exploration efforts for the near future would include: Soil sampling: See image below.

Criteria	JORC Code explanation	Commentary
	geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Area "E" aims to confirm the alteration mineralogy around the current porphyry copper zones identified with the aim of vectoring toward the gold-enriched Potassic Zone. Drilling: See image below. • Area "A": High grade copper intercepts north of the modelled domain. Mineralisation open and within IP Chargeability anomaly, thus increasing the likelihood of mineralisation. • Area "B": Same characteristics and potential as area "A", but toward the South. • Area "C": Lies within chargeability anomaly and has HG copper intercepts with open mineralisation. Has potential to close the "loop" between current interpreted domains (Main and East). • Area "D": Minimal data and has potential to connect areas "A" and "B". • 

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The data supplied for this resource was compiled by personnel of Augur Resources and supplied to Fredericksen Geological Solutions Pty Ltd. • Fredericksen Geological Solutions Pty Ltd state in the 2009 resource report that *"Augur Resources geologists have maintained quality control and quality assurance processes during the compilation of the historical drilling information and also during the sampling and re-assaying of the available historical drill core and the recent drilling data set and warrant that the combined dataset is of sufficient standard for reporting the current Mineral Resource estimate."* • Fredericksen Geological Solutions Pty Ltd also state in the 2009 resource report that: • "Data integrity" o *"This work as stated by Augur Resource personnel who will be co signing this Mineral Resource estimate is of sufficient quantity and quality for an Inferred Mineral Resource classification."* o *"Collar survey methods and down hole surveys are sufficient for the spatial location of the drillholes."*
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The resource report produced by Fredericksen Geological Solutions Pty Ltd does not state any site visits by Mr. Fredericksen. The data supplied was guaranteed by Augur Resources and discussions with senior personnel from Augur Resources formed the basis of the geological information that would otherwise have been obtained by a site visit. • The Competent Person for this resource, Johan Lambrechts, has spent considerable time visiting the Yeoval resource site and surrounding district, as he is based in the nearby regional city of Orange. He has a strong understanding of the local and regional geology.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The confidence in the geological interpretation is moderately high. The estimation domain wireframes were created by contouring of grades on cross sections oriented parallel to the orientation of the drilling. A series of 25m spaced cross sections were created and the resulting overall wireframes constructed for the East Zone, Main Zone and West Zone. • The data used for the interpretation was the drill assay results. • The estimation was carried out on a horizontally adjusted axes of 10° from true north about a single point 53600mE and 77200mN to align the blocks with the approximate strike of the mineralisation. • The understanding of continuity of mineralisation in this resource is currently limited by the amount of information available. With more drill intersections will come an increased understanding of the continuity of the mineralisation of the Yeoval deposit.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Western Zone: o Strike: 60m o Width: 30m o Depth: 80m • Main Zone: o Strike: 245m o Width: Max = 100m; Min = 60m o Depth: 330m • Eastern Zone: o Strike: 210m o Width: Max = 120m; Min = 35m o Depth: 265m

Criteria	JORC Code explanation	Commentary
		○    
Estimation and modelling techniques	• *The nature and appropriateness of the **estimation technique(s) applied** and **key assumptions**, including **treatment of extreme grade values**, **domaining**,*	• Estimation Technique: ○ Ordinary Kriging • Extreme grades:

Criteria	JORC Code explanation	Commentary

interpolation parameters *and* ***maximum distance of extrapolation from data points****. If a computer assisted estimation method was chosen include a description of* ***computer software and parameters used.***

- *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*
- *The assumptions made regarding recovery of by-products.*
- *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*
- *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
- *Any assumptions behind modelling of selective mining units.*
- *Any assumptions about correlation between variables.*
- *Description of how the geological interpretation was used to control the resource estimates.*
- *Discussion of basis for using or not using grade cutting or capping.*
- *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*

- No grade capping was employed during this estimation.
- See table compiling domain statistics below.

Domain	Zone Code	# of Comps	Raw Cu% Min, Max, Mean			CV	Mean Grade Declustered Cells - 20X20X20
Main Zone	101	579	0.006	4.59	0.349	1.29	0.332
West Zone	102	16	0.105	3.66	0.827	1.15	0.736
East Zone	103	287	0.001	2.79	0.321	1.28	0.309
Barren Zone	100	33	0.001	0.118	0.035	0.84	0.037
Domain	**Zone Code**	**# of Comps**	**Raw Au g/t Min, Max, Mean**			**CV**	**Mean Grade Declustered Cells - 20X20X20**
Main Zone	101	398	0.005	1.07	0.05	2.15	0.05
West Zone	102	16	0.005	1.06	0.14	2.15	0.08
East Zone	103	201	0.005	2.65	0.27	1.54	0.25
Barren Zone	100	33	0.005	0.02	0.01	0.41	0.01
Domain	**Zone Code**	**# of Comps**	**Raw Ag g/t Min, Max, Mean**			**CV**	**Mean Grade Declustered Cells - 20X20X20**
Main Zone	101	488	0.10	35.2	1.18	2.95	1.26
West Zone	102	16	0.40	48.3	9.26	1.34	7.55
East Zone	103	234	0.10	26.9	2.76	1.61	2.55
Barren Zone	100	28	0.10	1.35	0.14	1.63	0.12
Domain	**Zone Code**	**# of Comps**	**Raw Mo ppm Grade Min, Max, Mean**			**CV**	**Mean Grade Declustered Cells - 20X20X20**
Main Zone	101	579	0.5	2810	92.7	2.44	100.0
West Zone	102	16	6	2660	722	0.93	525.0
East Zone	103	287	0.5	1840	126	1.93	115
Barren Zone	100	33	3.5	480	85.5	1.60	94.8

- Domaining:
  - The estimation domain wireframes were created by contouring of grades on cross sections oriented parallel to the orientation of the drilling. A series of 25m spaced cross sections were created and the resulting overall wireframes constructed for the East Zone, Main Zone and West Zone. A low grade or barren internal domain contained within the Main domain was interpreted and modelled separately.

- Interpolation parameters:

	Cu – All domains	Mo all Domains
Min # Composites	10	**10**

Criteria	JORC Code explanation	Commentary

Max # composites	25	**30**
Search Type	All	**All**
Max # Per Quadrant/Octant	NA	**NA**
Max # per hole	**8**	**8**

- Software:
  - Minesight.
- Previous estimates:

  No JORC 2012 estimates have been previously completed for the Yeoval Project although a previous JORC 2004 estimate of 12.9Mt @ 0.38% Cu, 0.14g/t Au, 120.1g/t Mo and 2.20g/t Ag, above a 0.2% Cu cut-off, was reported by Augur Resources to the ASX on 23 March 2009. Non-JORC compliant estimates of 37Mt at 0.3% copper, 3Mt at 0.7 to 1% copper equivalent and 20Mt at 0.2% copper appear in literature.

- Recovery of byproducts: None
- Estimation of deleterious elements: None
  - All estimation parameters are supplied for all elements interpolated.
- Block size vs. average sample spacing
  - Block size - 10m x 20m x 10m
  - Drill spacing – 25m
- Search parameters:

Domain				Major	Minor	Vertical
Cu GEOCD = 101	C0	0.078				
RotN/DipN/DipE	C1	0.042	Range 1	53	53	9
345/0/0	C2	0.088	Range 2	22	122	57
Cu GEOCD = 102	C0	0.078				
RotN/DipN/DipE	C1	0.042	Range 1	53	53	9
30/-75/0	C2	0.088	Range 2	122	122	57
Cu GEOCD = 103	C0	0.078				
RotN/DipN/DipE	C1	0.042	Range 1	53	53	9
10/-75/0	C2	0.088	Range 2	122	122	57
Cu GEOCD = 100	C0	0.078				
RotN/DipN/DipE	C1	0.042	Range 1	53	53	9
42/-75/0	C2	0.088	Range 2	122	122	57
Au GEOCD = 100,101	C0	0.6				
RotN/DipN/DipE	C1	1.0	Range 1	75	75	40
345/-75/0						
Au GEOCD = 102	C0	0.6				
RotN/DipN/DipE	C1	1.0	Range 1	75	75	40
30/-75/0						
Au GEOCD = 103	C0	0.6				
RotN/DipN/DipE	C1	1.0	Range 1	75	75	40
10/-75/0						
Ag GEOCD = 100,101	C0	8.6				
RotN/DipN/DipE	C1	5.8	Range 1	70	13	70
345/-75/0	C2	4.8	Range 2	110	63	110

Criteria	JORC Code explanation	Commentary

Ag GEOCD = 102	C0	8.6				
RotN/DipN/DipE	C1	5.8	Range 1	70	13	70
30/-75/0	C2	4.8	Range 2	110	63	110
Ag GEOCD = 103	C0	8.6				
RotN/DipN/DipE	C1	5.8	Range 1	70	13	70
10/-75/0	C2	4.8	Range 2	110	63	110
Mo GEOCD = 101	C0	32				
RotN/DipN/DipE	C1	13	Range 1	43	10	43
345/-75/0	C2	22	Range 2	100	45	100
Mo GEOCD = 102	C0	32				
RotN/DipN/DipE	C1	13	Range 1	43	10	43
10/-75/0	C2	22	Range 2	100	45	100
Mo GEOCD = 103	C0	32				
RotN/DipN/DipE	C1	13	Range 1	43	10	43
10/-75/0	C2	22	Range 2	100	45	100
Mo GEOCD = 100	C0	32				
RotN/DipN/DipE	C1	13	Range 1	43	10	43
10/-75/0	C2	22	Range 2	100	45	100

- Description of how the geological interpretation was used to control the resource estimates.
- Grade capping:
  - No grade capping was employed during this estimation.
- Validation:
  - The primary validation tools used were domain statistics. The mean estimated grades generally compare favorably with the de-clustered mean grade of the composites for each domain.
  - In addition “on screen” checks were completed to compare estimated block grades with the 2.0m composite Au grades. There were no issues identified during this review process.

Criteria	JORC Code explanation	Commentary

Domain	Zone Code	Mean Declustered Composite Grade	Model Grade
Cu %	100	0.037	0.035
Cu %	101	0.332	0.333
Cu %	102	0.736	0.844
Cu %	103	0.309	0.322
Au g/t	100	0.01	0.02
Au g/t	101	0.05	0.05
Au g/t	102	0.08	0.11
Au g/t	103	0.25	0.22
Ag g/t	100	0.12	0.26
Ag g/t	101	1.26	1.4
Ag g/t	102	7.55	7.56
Ag g/t	103	2.55	2.56
Mo ppm	100	94.8	100
Mo ppm	101	100	109
Mo ppm	102	525	593
Mo ppm	103	115	119

Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The tonnage was estimated on a dry tonnage basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Cut-off grades of 0.2 % Cu have been used to constrain the Mineral Resources reported. • At this stage no detailed mining studies and economic evaluations have been completed so it is not possible to provide detailed supporting information for the cut-off grades that have been used.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and*	• No detailed mining studies have been completed. However, given that fresh rock is present within a depth of 20m below surface and the drill core indicates this material competent, it is reasonably assumed that the mineralisation would be amenable to conventional open pit mining.

Criteria	JORC Code explanation	Commentary
	parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• There have been no metallurgical studies completed on this project although given the similarities in mineralisation styles (disseminated and veined chalcopyrite and bornite) to other central NSW porphyry deposits and would be amenable to flotation methodologies.
Environmen-tal factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• There have been no studies or assumptions made regarding environmental factors.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Augur Resources collected 23 samples 10–20cm in length from two diamond drill holes for determination of Bulk Densities. All of these samples are from fresh mineralisation and from a variety of lithological and grade distributions. • These determinations have not been located spatially and the sample set too small to inform a block model or determine suitable density domains. As such the simple arithmetic average of these determinations 2.7 t/m^3 has been applied to the block model in the fresh material.

Criteria	JORC Code explanation	Commentary

Bulk density determination on Yeoval Project samples

SAMPLE DESCRIPTION	S.G. Unity	Hole	From	To	Length cm	Comments
12336	2.7	YA011	24.6	24.75	0.15	Moderately altered granodiorite (GRD)
12337	2.73	YA011	30.8	31	0.2	Strongly altered GRD dacite porphyry
12338	2.69	YA011	71.6	71.75	0.15	GRD GRD
12339	2.68	YA011	94	94.2	0.2	CP mineralised GRD Sheeted CP veinlets in GRD Dolerite
12340	2.69	YA011	116.7	116.85	0.15	BN + CP mineralised GRD Banded Rhyolite
12341	2.75	YA011	144.3	144.5	0.2	CP mineralised GRD Quartz Feldspar Porphyry
12342	2.74	YA011	158	158.15	0.15	Brecciated + carbonate veined GRD CP + Sheeted veined GRD
12343	2.8	YA011	161.8	162	0.2	QTZ + Carb veined GRD GP
12344	2.87	YA011	167.2	167.35	0.15	Sericite altered + CHL veined GP CHL altered GP
12345	2.61	YA011	178.6	178.8	0.2	CP veined GP
12346	2.7	YA011	182.7	182.9	0.2	CP mineralised, SIL CHL altered GP GP
12347	2.67	YA011	185.3	185.5	0.2	Crowded quartz feldspar porphyry
12348	2.68	YA011	203.8	204	0.2	
12349	2.72	YA011	227.8	228	0.2	
12350	2.71	YA011	146.7	146.9	0.2	
12351	2.68	YA008	43.7	43.9	0.2	
12352	2.67	YA008	96.4	96.6	0.2	
12353	2.69	YA008	105.7	105.9	0.2	
12354	2.7	YA008	133.2	133.4	0.2	
12355	2.68	YA008	159.8	160	0.2	
12356	2.66	YA008	218.4	218.6	0.2	
12357	2.65	YA008	265.6	265.8	0.2	
Average	**2.7**					
						Oxidised porphyrytic granodiorite (GP)
12358	2.56	YA008	21.2	21.3	0.1	Not Used

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*
	• *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*
		• The entire estimated Yeoval Project deposit has been classified as an Inferred Mineral Resources.
		• In making this classification, the following factors have been considered.
		• Data integrity
		  ○ The data is of sufficient quantity and quality for an Inferred Mineral Resource classification as stated by the CP for the estimation in 2009 and also as validated by our own inspections of the data in the model folder.
		  ○ Collar survey methods and down hole surveys are sufficient for the spatial location of the drill holes
		• Geological modelling and grade continuity:

Criteria	JORC Code explanation	Commentary
		○ The continuity of grades >0.1 % Cu is generally good. ○ The estimation domains that have been constructed seem appropriate in relation to the currently understood model of formation of the mineralisation. ○ The estimate of all elements has been limited to blocks that have first informing composites less than 50 m from the block center (A review of the model shows for the domains interpreted that the mean distance to the nearest composite is 28 meters). This is a reasonable limit to prevent kriging of grades into areas not adequately supported by drilling and is consistent with the resource classifications applied. • The result of this estimation does reflect the competent person's view of the deposit. The domains are constrained by geology and do not extend far beyond data limits. The model grades also reflect the raw composite grades and is not over-estimating the grade in the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No audits have been performed on this resource.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the **application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits**, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global **or local estimates**, and, if local, state the **relevant tonnages, which should be relevant to technical and economic evaluation**. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Yeoval resource is considered accurate and appropriate to represent the inferred category of resource estimates. The data integrity has been validated by the geological team that collected it. Historic data was validated by the same team using the same methods and historical assay data was bolstered by re-sampling holes by means of a multi element suite and more modern equipment. The geological interpretation is also considered appropriate as it considers the geological data collected from the drill programs and does not extend long distances away from the data points, thus mitigating the possibility of overestimating the volume of the deposit. The search criteria and variography for the estimation were determined by statistical methods using the data associated with the deposit and is considered relevant. The estimated block model grades correlate well with the de-clustered raw composite data indicating that it reflects the raw data and is thus considered accurate relative to the inferred classification thereof. The resource estimate is considered global and is based on the data associated with the Yeoval resource. The Yeoval resource has never been mined, apart from desultory small-scale prospector activity.