AGC
ASX ANNOUNCEMENT
6 October 2021
Australian Gold and Copper Ltd
ACN 633 936 526

CARGELLIGO COPPER-GOLD-LEAD-ZINC PROJECT DIAMOND DRILLING UPDATE

ACHILLES: COPPER-GOLD-LEAD-ZINC TARGET

- **Drilling is currently halfway through the planned 500m diamond hole**
- **Drilling under copper intercept 85m at 0.13% Cu from 165m (A3RC014) to pierce aerial EM anomaly**
- **Main copper target zone interpretated to be at 350-500m downhole**
- **Lead zinc copper mineralisation already observed over 20m from 110m**
- **Remaining RC assays returned broad zones of anomalous copper**

Australian Gold and Copper Ltd (**ASX: AGC**) (**"AGC" or the "Company"**) is pleased to provide an update on exploration activities at the Achilles Copper-Gold-Lead-Zinc target near Lake Cargelligo NSW.

CARGELLIGO PROJECT: COPPER-GOLD-LEAD-ZINC (EL8968, AGC 100%)

AGC is searching for large, high-grade Cobar-style copper-gold and base-metals deposits. The Hera gold/base-metals mine and recent Federation discovery are examples of recent Cobar style deposits discovered using lead pathfinders in pre discovery holes under lead in soils, (Cooper, 2017; McKinnon and Munroe 2019). The Achilles target phase one and phase two RC drill results are highly encouraging in comparison.

ACHILLES TARGET – DIAMOND DRILLING

Drilling is currently halfway through the planned 500m diamond hole. Patches of moderate lead, zinc and copper mineralisation have already been observed, see figures 1 and 2.

The target zone for the best copper mineralisation is 350-500m downhole, so mineralisation this early in the hole is encouraging and demonstrates the system is still open in all directions.

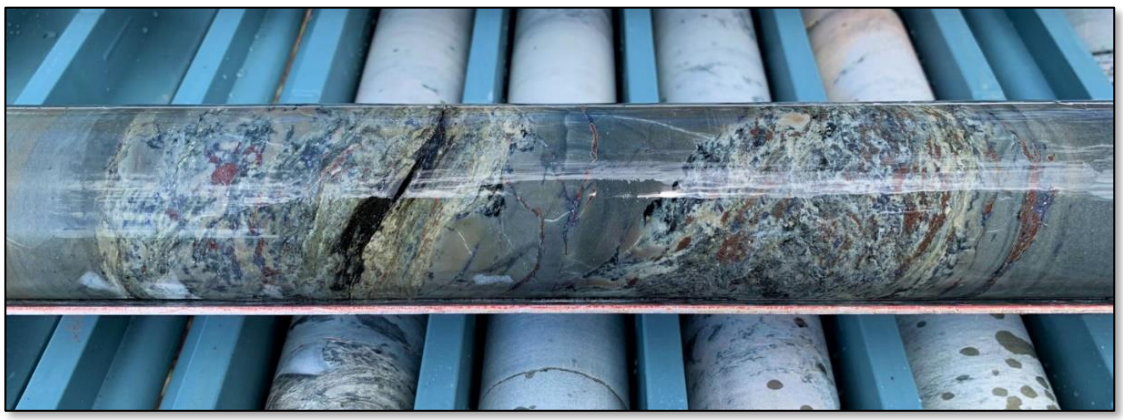

Figure 1: *40cm long drill core (124m downhole) showing bands and veins of blue-grey galena (lead) and maroon-brown sphalerite (zinc) mineralisation.*

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The diamond hole has been designed to test:

1. underneath the broadest copper intercept 85m at 0.13% Cu from 165m in RC hole A3RC014 which is strengthening with depth towards the aerial EM (AEM) anomaly.
2. the AEM anomaly for significant copper mineralisation.
3. multiple mineralised horizons, and
4. gain knowledge on the structural complexity for follow up drill targeting and help design future exploration as mineralisation is open undercover to the north, south and east.

Figure 2: *Drill core photos of various mineralisation styles, approx. 110m (left) and 127m (right) downhole.*

Figure 3*: Drone photo looking north at the diamond drill rigs location relative to previous RC holes.*

The diamond hole is drilling under previously reported intercepts, see ASX AGC 15 September:

Encouraging copper (Cu) results from A3RC013:

- 18m at 0.10% Cu from 80m
- 3m at 0.17% Cu from 159m
- 12m at 0.10% Cu from 167m

Drilling directly below A3RC013, returned broader results in A3RC014:

- 85m at 0.13% Cu from 165m, including:
  - 1m at 0.59% Cu from 167m
  - 25m at 0.20% Cu from 206m
  - 1m at 0.53% Cu from 215m
- 5m at 0.3% Cu from 241m

The broad copper zone in A3RC014, strengthening with depth from A3RC013, above an aerial EM anomaly poses as a significant drill target and is interpreted to be 350-500m downhole, see figure 4 and 5.

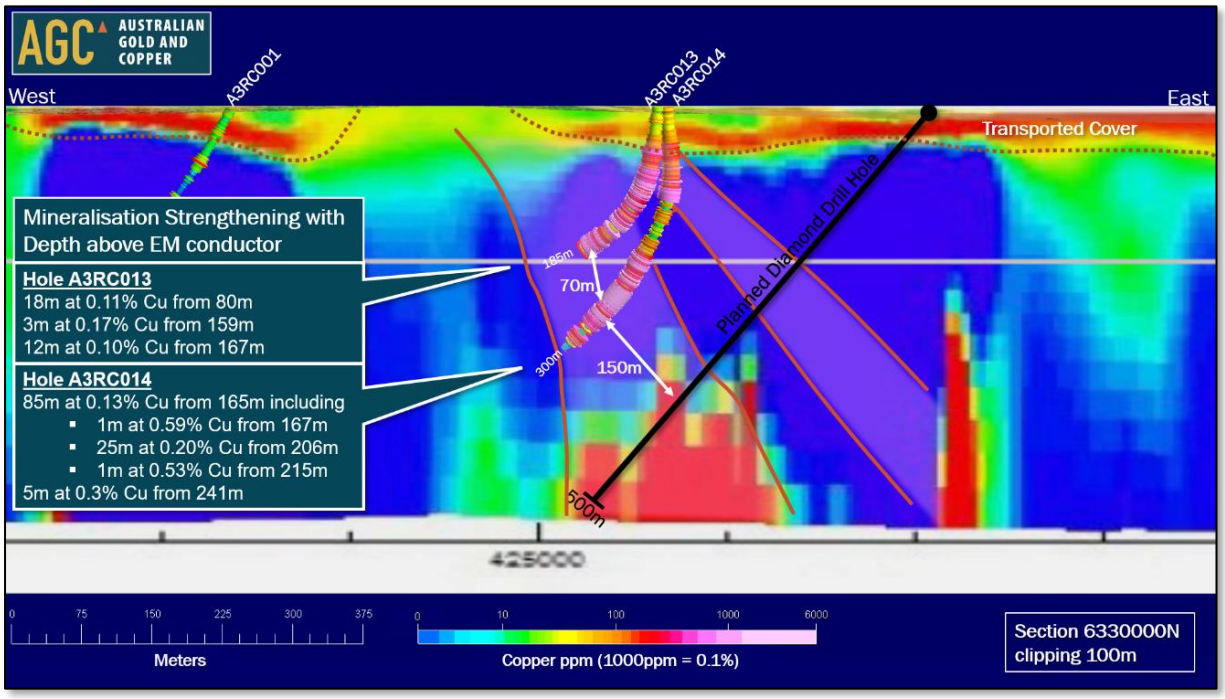

***Figure 4**: Cross section (6330000N) through A3RC013 and A3RC014 with designed diamond drill hole.*

ACHILLES TARGET RC DRILLING ASSAY RESULTS

Previous soil sampling confirmed Achilles as a 3km long base metal target. AGC's phase one (7 holes) and phase two (12 holes) RC drill programs, have advanced the prospectivity of the target, testing 700m of the 3km.

Assays for the last two holes of the phase two program have now been received. These holes were drilled on 150m step outs on either side of holes A3RC013 and A3RC014 and both returned long zones of anomalous copper.

A3RC018 returned 43m at 669ppm copper from 77m with max 0.26% Cu at 85m.

A3RC019 returned 81m at 567ppm copper from 48m also with max 0.26% Cu at 68m.

Diamond tails were planned for several of the RC holes, however due to ground conditions these holes were unfortunately blocked and could not be drilled further. Despite this, the current diamond hole is considered sufficient for a first diamond program at Achilles.

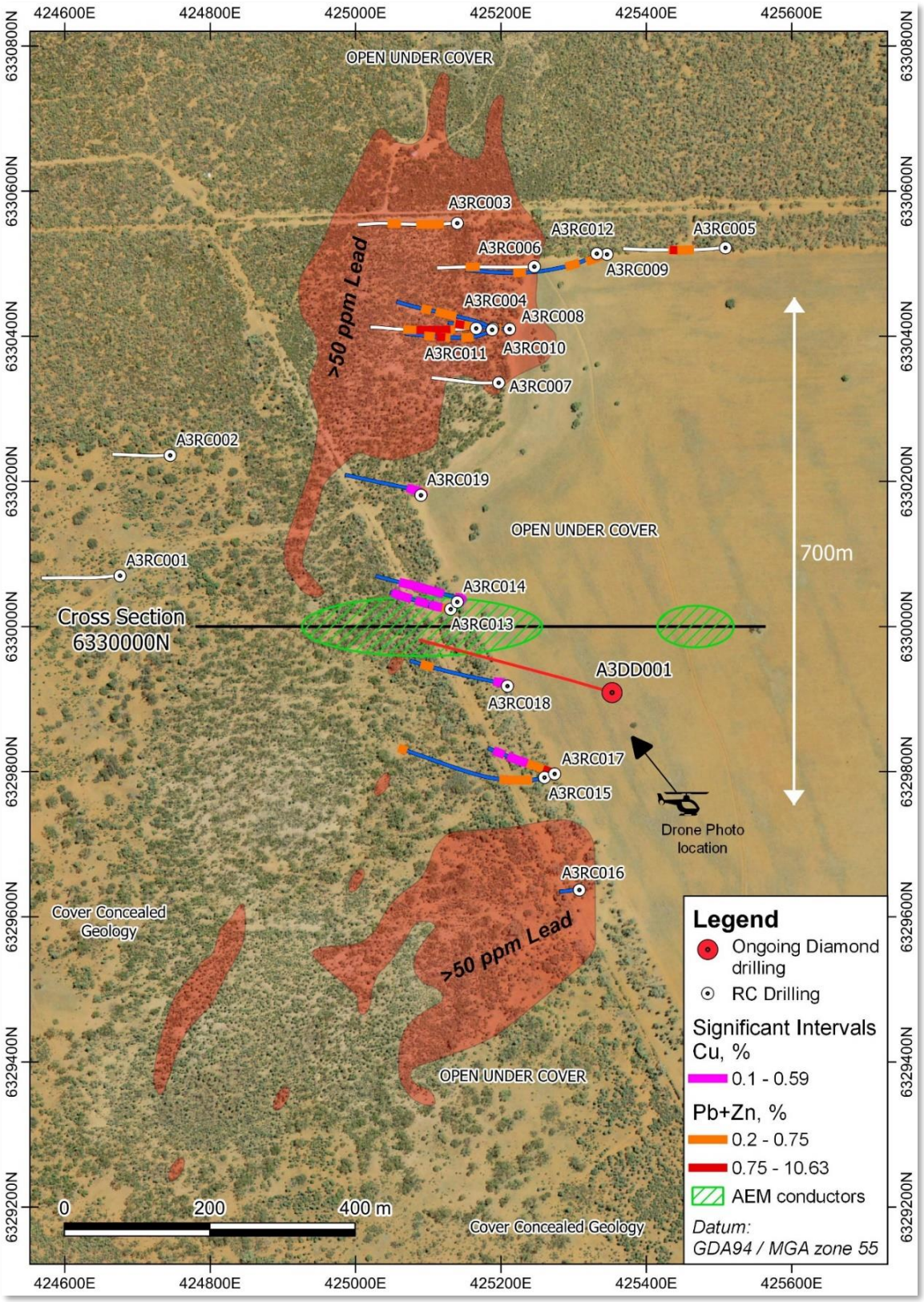

Figure 5: *Achilles map showing drill locations.*

Table 1: Achilles RC drill collar details for A3RC008-A3RC019 and A3DD001 (GDA94)

Hole ID	Type	End of Hole (m)	East	North	RL	Dip	Az
A3RC008	RC	147	425212	6330410	163	-70°	270°
A3RC009	RC	49	425346	6330513	158	-60°	250°
A3RC010	RC	200	425189	6330411	171	-60°	300°
A3RC011	RC	180	425188	6330409	171	-60°	240°
A3RC012	RC	312	425332	6330514	158	-60°	240°
A3RC013	RC	186	425131	6330024	169	-84°	277°
A3RC014	RC	300	425140	6330034	168	-84°	78°
A3RC015	RC	300	425260	6329792	167	-85°	280°
A3RC016	RC	248	425308	6329637	164	-86°	281°
A3RC017	RC	300	425274	6329797	171	-89°	57°
A3RC018	RC	300	425209	6329918	171	-85°	90°
A3RC019	RC	300	425090	6330181	165	-85°	90°
A3DD001	DD	Current hole	425353	6329909	165	-65°	90°

Table 2: Achilles significant Intersections (down hole widths, true widths not calculated).

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)	Cu ppm
A3RC018	77	120	43		669
A3RC019	48	129	81		567
A3RC019	157	160	3	0.43	

REFERENCES

03/05/2021 Base-metal sulphides overlying EM conductor at Achilles
09/06/2021 Achilles copper/base metals targets zone extended to 3km
22/06/2021 Drilling defines three base-metals zones at Mount B
30/06/2021 Phase 2 drilling commenced at Achilles
15/09/2021 Exploration Update
AGC ASX prospectus lodged 18th November 2020
Cooper I., 2017, Finding Hera, Looking for the rest of the family, CWEDG. https://www.smedg.org.au/pdf/CWEDGAug2017FindingHera.pdf

McKinnon A. and Munroe S., 2019, The Dominion and Federation discoveries at Nymagee, NSW: an evolving exploration story, Aurelia Metals Ltd. Mines and Wines Conference 2019: Discoveries in the Tasmanides.
https://smedg.org.au/wp-content/uploads/2019/11/McKinnon-Dominion-and-Federation.pdf

AGC Projects Overview

AGC's portfolio located in the Central Lachlan Fold Belt of NSW includes the Moorefield gold project exploring for multi-million ounce orogenic gold deposits, the Cargelligo copper-gold/base-metal project in the southern Cobar Super-Basin exploring for Hera and Federation style deposits, and the Gundagai gold project, exploring for multi-million ounce McPhillamy's type gold deposits.

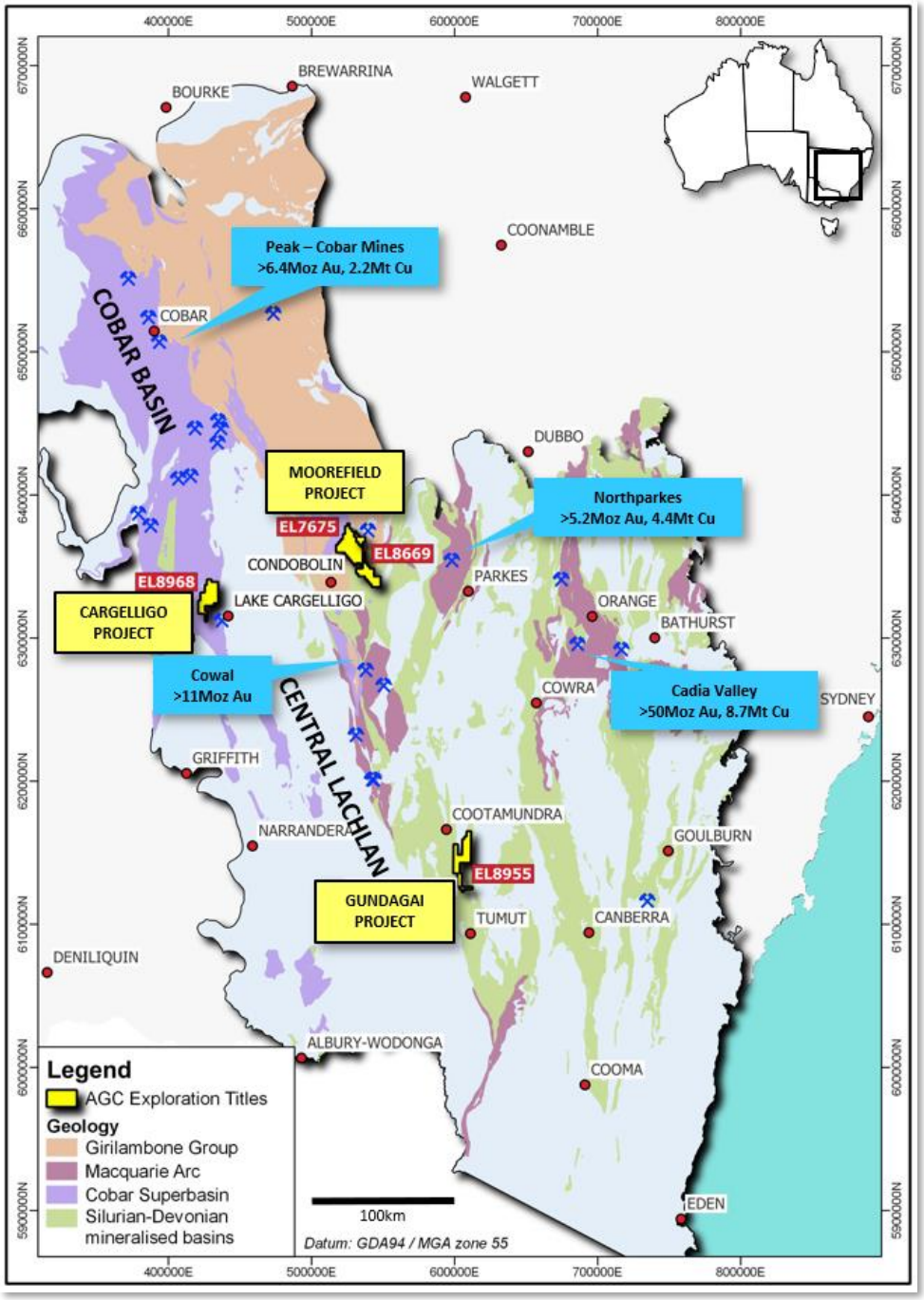

Figure 6 Location of the Cargelligo, Moorefield and Gundagai Projects in relation to major mines and deposits within the Lachlan Fold Belt., see p100 AGC ASX prospectus lodged 18th November 2020.

This announcement has been approved for release by the Board of AGC.

ENDS

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Forward-Looking Statements

This announcement contains "forward-looking statements." All statements other than those of historical facts included in this announcement are forward-looking statements. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and based upon information currently available to the company and believed to have a reasonable basis. Although the company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and no assurance can be given that these expectations will prove to be correct as actual results or developments may differ materially from those projected in the forward-looking statements. Forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, copper, gold, and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. Readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof. The forward-looking statements contain in this press release are made as of the date of this press release and except as may otherwise be required pursuant to applicable laws, the Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement".

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 Glen Diemar who is a member of the Australian Institute of Geoscientists. Mr Diemar is a full-time employee of Australian Gold and Copper Limited, and is a shareholder, however Mr Diemar believes this shareholding does not create a conflict of interest, and Mr Diemar 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 Diemar consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

Previously Reported Information

The information in this report that references previously reported exploration results is extracted from the Company's ASX IPO Prospectus released on the date noted in the body of the text where that reference appears. The ASX IPO Prospectus is 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.

Appendix 1 – JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data: **Cargelligo** Project**, Achilles RC Drilling**

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.*	RC drilling and sampling was undertaken by Durock Drilling Pty Ltd. 1m samples were collected via reverse circulation (RC) drilling using a cyclone splitter. Samples were mostly dry and sample loss was minimal. Sample weights were recorded on site using digital scales for each calico sample. Reference chips for each meter were stored in chip trays. Magnetic susceptibility was recorded from the calico bag for each meter by a KT-10 mag sus meter.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Sampling and QAQC procedures were developed and caried out by AGC staff. Standards and duplicates were inserted every 50 meters Drilling is angled perpendicular to strike of mineralisation as much as possible to ensure a representative sampling.
	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.*	Mineralisation in drill chips were geologically logged, magnetic susceptibility was recorded from the calico bag for each meter by a KT-10 mag sus meter. Reverse circulation drilling was used to obtain 1 m samples from which 1-5kg was pulverised to produce a 30 g charge for fire assay by ALS Orange Laboratory and four acid ICP analysis, ME-MS61 by ALS Brisbane or other ALS lab.
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 (RC) drilling, using a truck mounted UDR1000
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Sample weights were recorded on site using digital scales for each calico sample. Recoveries were generally good however wet recorded poorer recoveries.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Sample sizes were monitored and the cyclone was regularly agitated to reduce the potential for sample contamination

Criteria	JORC Code explanation	Commentary
	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.	The relationship between sample grade and recovery has not been assessed.
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.*	Chip samples were geologically logged for lithology, mineralisation, veining and alteration. Structure could not be logged.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging was generally qualitative except for % sulphides. Photographs taken of chip trays and stored for future reference.
	The total length and percentage of the relevant intersections logged.	All samples were logged
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Not applicable
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were separated and collected via a cyclone splitter on the rig.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Mag sus was recorded on site directly on the calico sample bag as this was the most homogenous sample.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Duplicates and certified standard reference materials by OREAS were sampled approximately every 50m. ALS also conduct internal checks every 20m.
	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.	Duplicates were sampled approximately every 50m and this is considered appropriate for greenfields drilling. Vanta VMW pXRF also used as a first pass test and these results are compared with lab results.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The samples sizes of averages 3kg per meter and are considered appropriate for the fine grain nature of the volcanic and sedimentary material being sampled.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Not applicable: Lab data not being reported

Criteria	JORC Code explanation	Commentary
	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.	Magnetic susceptibility was recorded from the calico bag for each meter by a Terraplus KT-10 magnetic susceptibility meter. Vanta VMW pXRF also used as a first pass test and these results are compared with lab results.
	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.	Appropriate standards and duplicates were inserted into the sample stream. Magnetic susceptibility readings were taken in isolation away from any other material. Acceptable levels of accuracy for the magsus readings were established and readings were consistent or repeated if not.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	The significant intersections reviewed by numerous company personal
	The use of twinned holes.	Twinned holes were not completed.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Magsus was recorded onto a hand held device and downloaded into a field laptop. Logging and weights data was completed directly into a field computer on the rig. Visual validation as well as numerical validation was completed by two or more geologists.
	Discuss any adjustment to assay data.	No adjustments made
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.*	A handheld Garmin GPSmap was used to pick up collars with an averaged waypoint accuracy of 1m.
	Specification of the grid system used.	Coordinates picked up using WGS84 and transformed into Map Grid of Australia 1994 Zone 55.
	Quality and adequacy of topographic control.	Using government data topography and 2017 DTM data
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Drill holes were preferentially located to most prospective areas.
	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.	Not applicable
	Whether sample compositing has been applied.	No

Criteria	JORC Code explanation	Commentary
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 orientation of sampling was designed perpendicular to strike and dip as much as possible to achieve relatively unbiased sampling
	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.	Drilling dipped at 60° towards 270° and the targeted horizon dips at around 60° to the east. Holes were designed to intercept perpendicular to mineralisation to best gain near true widths.
Sample security	*The measures taken to ensure sample security.*	Calicos were weighed on site during the logging and sampling process. This weight will be compared with the laboratory weights as a method to check sample security and integrity. Five calicos were placed into each polyweave bag and zip tied. Samples were driven to the lab by field staff.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits or review are warranted 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.*	EL8968 Cargelligo licence is located 20km north of Lake Cargelligo NSW. The tenement is held by Australian Gold and Copper Ltd. Ground activity and security of tenure are governed by the NSW State government via the Mining Act 1992. Land access was granted.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	The RC drilling was planned by Australian Gold and Copper exploration staff in consultation with our geophysical Consultant Peter Gidley of Eureka Geophysics Pty Ltd, Kate Hine of Mitre Geophysics and drilling contractor Durock Drilling. Previous to AGC, private explorer New South Resources developed the concepts of the targets and ground truthed by compiling quality work completed by previous explorers Thomson Resources and WPG Resources, Santa Fe Mining and EZ.
Geology	*Deposit type, geological setting and style of mineralisation.*	See body of report.
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:*	See table 1 in the body of the article

Criteria	JORC Code explanation	Commentary
	• *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 applicable
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.*	Reported intervals were Au > 0.1ppm and/or Pb+Zn > 1000ppm with Internal dilution calculated by total number of meters <1000ppm Pb+Zn in the quoted interval, intervals were cut by having no more than 2m<1000ppm Pb+Zn consecutively.
	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.	High grade intervals are only reported where they differ significantly to the overall interval. Reporting of the shorter intercepts allows a more thorough understanding of the overall grade distribution.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents were reported.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	Geological mapping suggests a dip of 60 degrees to the east. Drilling dipped at 60^{o} towards 270^{o} and the targeted horizon dips at around 60^{o} to the east. Holes were designed to intercept perpendicular to mineralisation to best gain near true widths.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Drilling dipped at 60^{o} towards 210^{o} and the targeted horizon dips at 60^{o} to the north east. True width approximately 80% of intercept width however true widths are not reported given the low density of drilling to date.
	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').	Table 2 in body of report states down hole widths, true widths not calculated.
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

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 Results.*	See body of report
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.*	Eureka Consulting Pty Ltd provided geophysical consulting services, producing 2D and 3D images for interpretation. The geological results are discussed in the body of the report.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	See body of report.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	See figures and text in body of report.