

ASX ANNOUNCEMENT

28 October 2021

Australian Gold and Copper Ltd ACN 633 936 526



ACHILLES DIAMOND DRILLING UPDATE

ACHILLES: COPPER-GOLD-LEAD-ZINC TARGET

- First diamond hole successfully completed to 546m; assays expected in December
- Copper lead zinc mineralisation observed at numerous zones throughout hole and demonstrates the potential of Achilles
- Down hole EM planned to commence next week

BOXDALE-CARLISLE REEF: GOLD TARGET

RC drilling at Moorefield's Boxdale target to start mid-November

Australian Gold and Copper Ltd (ASX: AGC) ("AGC" or the "Company") is pleased to provide an exploration update. Cargelligo Project's first diamond drill hole at the Achilles target completed to 546m, with multiple zones observed hosting chalcopyrite (copper), galena (lead) and sphalerite (zinc) mineralisation.

A 5m interval of semi-massive pyrite at 220m indicates that massive copper sulfides could be in the vicinity. These massive copper sulfides are often conductive, so down hole EM will commence next week.

Zones of disseminated chalcopyrite and broad intense silica flooding alteration was logged through the second half of the hole where the AEM anomaly was positioned. This demonstrates that a large hydrothermal system has been the driver of metals at Achilles.



The geological setting, intensity of alteration and mineralisation intersected to date gives the 'AGC Exploration Team' confidence the Achilles target boasts potential to host significant mineralisation.

The core is currently being cut and sampled and assays expected in December.

RC drilling to commence in November at the 15km Boxdale – Carlisle Reefs Gold Trend within the Moorefield Project, 75km north of the Cowal gold mine. RC holes will step out from the significant intercepts identified from previous drilling by Gold Fields Ltd and Magmatic Resources.

Figure 1: Quartz flooding with stringers of chalcopyrite (copper), 440m downhole. A common feature observed in this hole.



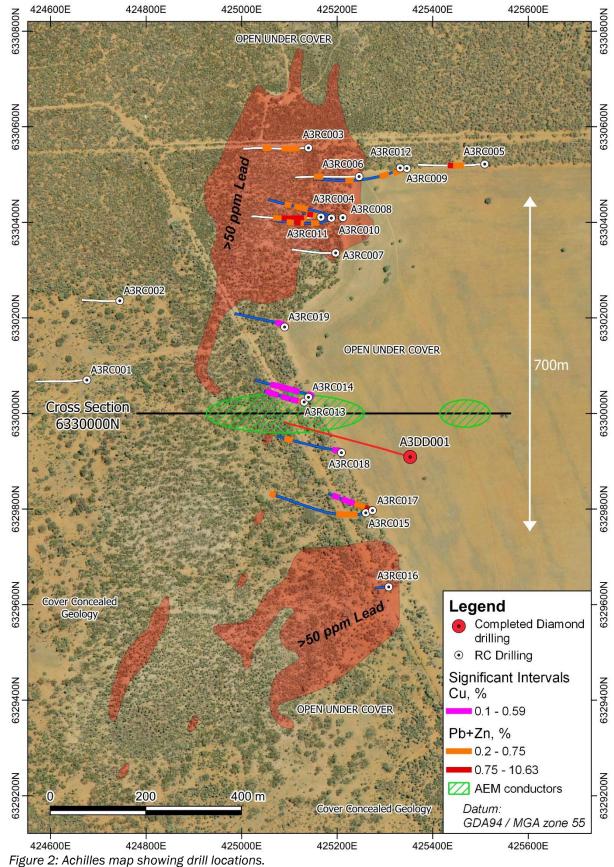




Table 1: Achilles RC drill collar details for A3DD001 (GDA94)

Hole ID	Туре	End of Hole (m)	East	North	RL	Dip	Az
A3DD001	DD	546	425353	6329909	165	-65 °	90°

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 coppergold/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.

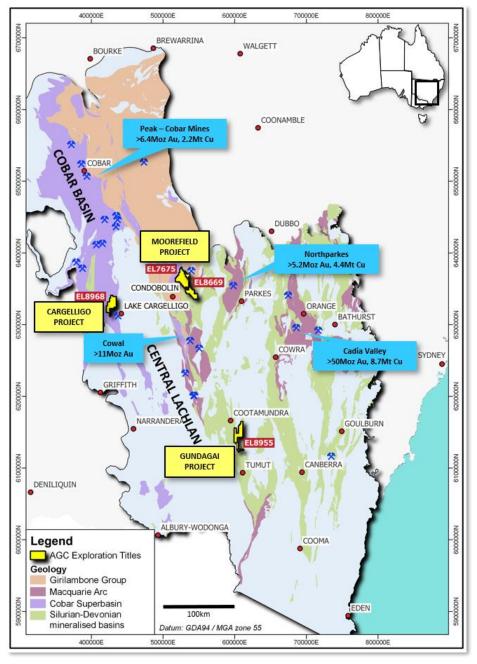


Figure 3. Location of the Cargelligo, Moorefield and Gundagai Projects in relation to major mines and deposits within the Lachlan Fold Belt., see p100 AGC ASX prospectus lodged 18th November 2020.



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 forwardlooking 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 I – JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data: Cargelligo Project, Diamond Drilling, reporting drilling only, no assays.

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.	Achilles was drilled with diamond drilling techniques. Core sizes were PQ core (diameter: 85 mm) to fresh rock and then HQ core (diameter: 63.5mm) to end of hole (EOH). AGC used a reputable drilling contractor; Brock Dunlop Drilling ('Durock') with a suitable rig. Diamond drill core provide a high-quality sample that are logged for lithological, structural, geotechnical, and other attributes. Sub-sampling of the core is carried out as per industry best practice.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	The drill collar location was recorded using a waypoint average on a handheld GPS, which has an accuracy of ± 1.0 m.
		The HQ drill core was orientated using suitable core orientation tool by the drilling contractor with AGC staff supervision. These orientations are extended onto the remainder of the core and meter marks for logging. The visible structural features (veins, bedding, foliation, faults) are measured against the core orientation marks. More comments around assaying will be provided once assays are received
	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 has not yet been determined by laboratory analysis. However, the holes were geologically logged in detail and the magnetic susceptibility was recorded for each meter by a KT-10 mag sus meter.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Diamond drilling using industry standard techniques.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Diamond drill core recoveries were recorded during drilling and reconciled during the core processing and geological logging. Core was generally competent with some zones of broken core. There was no significant drill core lost during drilling.

Criteria	JORC Code explanation	Commentary
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Diamond drill core is measured and marked after each drill run using wooden blocks calibrating depth. Adjusting rig procedures as necessary including drilling rate, run length and fluid pressure to maintain sample integrity.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Not applicable: Lab assays not yet reported however core loss was minimal
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.	 Systematic geological and geotechnical logging was undertaken. Data collected includes: Nature and extent of lithologies and alteration. Relationship between lithologies. Amount and mode of occurrence of minerals such as pyrite and chalcopyrite. Location, extent and nature of structures such as bedding, cleavage, veins, faults etc. Structural data (alpha & beta) are recorded for orientated core. Geotechnical data such as recovery, RQD, fracture frequency, qualitative IRS, microfractures, veinlets and number of defect sets. Magnetic susceptibility recorded at 1m intervals
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Depending on the input being logged, drill core is logged as both qualitative (discretional) and quantitative (volume percent). Core is photographed dry and wet.
	The total length and percentage of the relevant intersections logged.	The entire hole is all geologically logged (100%).
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Core was cut using an Almonte automatic core saw. All samples are collected from the same side of drill core. The full interval of half-core sample is submitted for assay analysis, except PQ where ¼ core was taken. Where core was incompetent due to being transported cover or weathered or broken rock, representative samples were collected along the axis of the core. This information is recorded in the cut-sheet and stored in the database.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Not applicable – core drilling
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Drill core is cut in half (or quarter for PQ) along the length and the total half (or quarter) core submitted as the sample. This procedure meets industry standards where 50% (or 25%) of the total sample taken from the diamond core is submitted. All intervals were submitted for assaying. Sample weights are recorded by the lab.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	No sub-sampling is completed by AGC. All sub-sampling of the prepared core is completed by the laboratory.

Criteria	JORC Code explanation	Commentary
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	The retention of the remaining half-core is an important control as it allows assay values to be viewed against the actual geology; and, where required, further samples may be submitted for quality assurance or petrography. No resampling of quarter core or duplicated samples have been completed at the project.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are appropriate to correctly represent the mineralization based on style of mineralisation.
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
	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 on the core for each meter by a Terraplus KT-10 magnetic susceptibility meter.
	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. Assays not reported here
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	NA – Lab assays not reported
assaying	The use of twinned holes.	Nil
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All data and logging was recorded directly into field laptops. 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 downhole 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 measurement: 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

Criteria	JORC Code explanation	Commentary
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: Mineralisation yet to be determined
	Whether sample compositing has been applied.	No
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The angled drill hole was directed as best as reasonably possible directly across the known lithological and interpreted mineralisation orientation. The orientation of drilling was designed 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 Az west 260-280° and the targeted horizon dips at 60° to the east. Holes were designed to intercept perpendicular to geological units and mineralisation to best gain near true widths.
Sample security	The measures taken to ensure sample security.	Core is held at remote location or when being processed, is stored in secure storage.
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 is located 20km north west 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 is Freehold and 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 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.

Criteria	JORC Code explanation	Commentary	
Geology	Deposit type, geological setting and style of mineralisation.	Pb Zn Cu Ag Au mineralisation is hosted in felsic to intermediate volcaniclastics, sandstones and siltstones.	
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	
	 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.	Not applicable due to no laboratory assays announced.	
	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Not applicable, no laboratory assays announced	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable, no laboratory assays announced	
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	Not applicable, no laboratory assays announced	
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Drilling Az west 260-280° and the targeted horizon dips at 60° to the east. Holes were designed to intercept perpendicular to mineralisation to best gain near true widths.	
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Not applicable, no laboratory assays announced	
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These	See figure 1 in body of report	

Criteria	JORC Code explanation	Commentary
	should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Not applicable, no laboratory assays announced
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.	Other exploration data are discussed in the body of the report and are not reporting grade.
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.	Not applicable, no laboratory assays announced