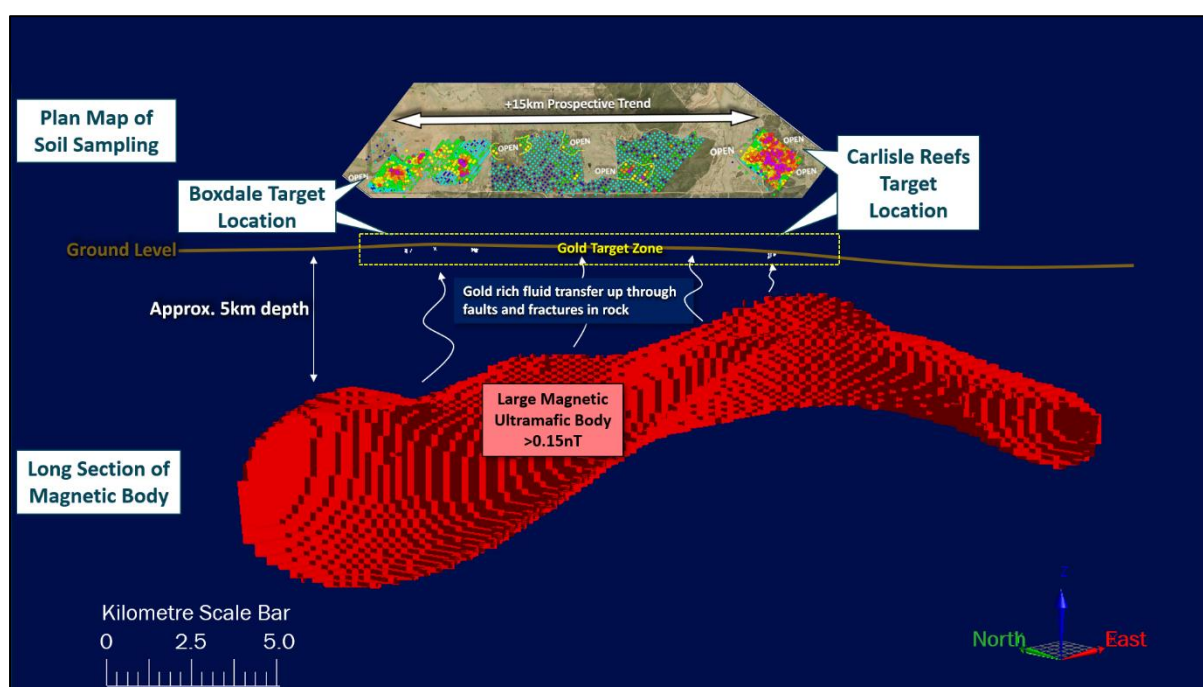


# Boxdale-Carlisle Gold Trend above Large Ultramafic Intrusive

## BOXDALE-CARLISLE REEFS: GOLD TARGET

- New 3D magnetic interpretation highlights 20km long, elongate magnetic ultramafic body underneath the Boxdale – Carlisle Reefs gold trend
- Magnetic feature interpreted to be the source feeder to gold mineralisation in the overlying deformed sedimentary rocks
- The large size of the magnetic body provides scope for a sizeable gold system
- RC drilling at Boxdale has been completed with 23 holes for 2,370m and gold assays (3,440) pending results from drilling at Boxdale and Carlisle Reefs



**Figure 1:** Schematic long section of the Boxdale (NW) – Carlisle Reefs (SE) gold zone showing a 20km long elongate ultramafic magnetic body below the recent soil sampling areas where drilling has returned shallow gold.

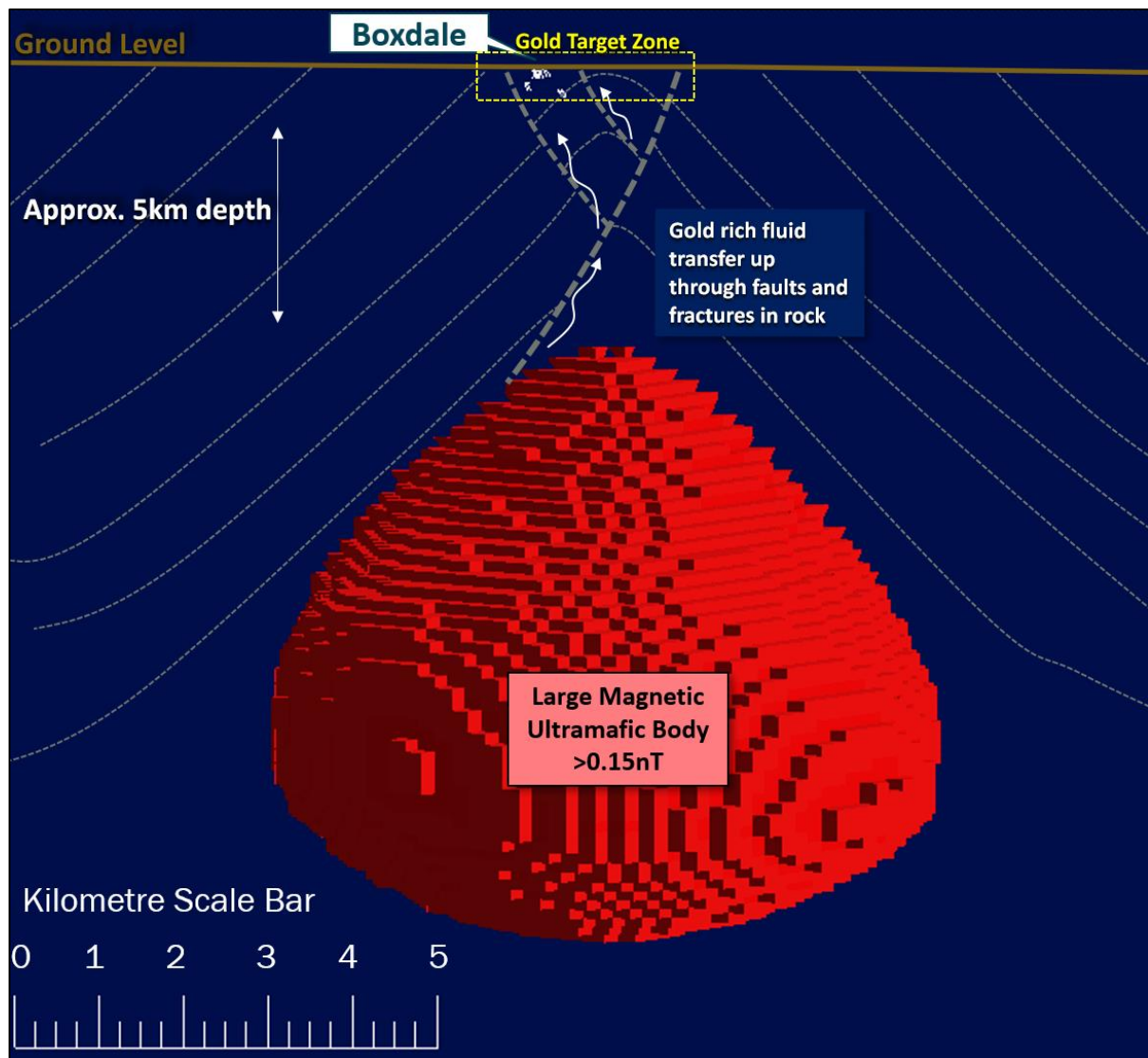
New 3D magnetic inversion modelling of detailed 50m spaced arial magnetics demonstrates evidence for a 20km long, elongate, magnetic, ultramafic rock (gabbro) underneath the Boxdale-Carlisle Reefs gold trend.

The gabbro was a possible heat source driver and/or fluid conduit for the gold mineralisation and the size of the gabbro provides scope for a large hydrothermal gold system. Recent drill intercepts are encouraging such as 5m at 4.16g/t from 24m within 33m at 1.10g/t Au from 3m (ASX AGC 2<sup>nd</sup> March 2022).

Southeast along trend, the ultramafic rock outcrops as a large hill called Mount Derriwong, as an altered gabbro (hornblendite and hornblende diorite with pyroxenite xenoliths,) which is magnetic and importantly, late Ordovician in age (458-443 million years (NSW Geological Survey, Seamless Geology, Minview). This rock age is an important period for mineralisation across the NSW Lachlan Fold Belt.

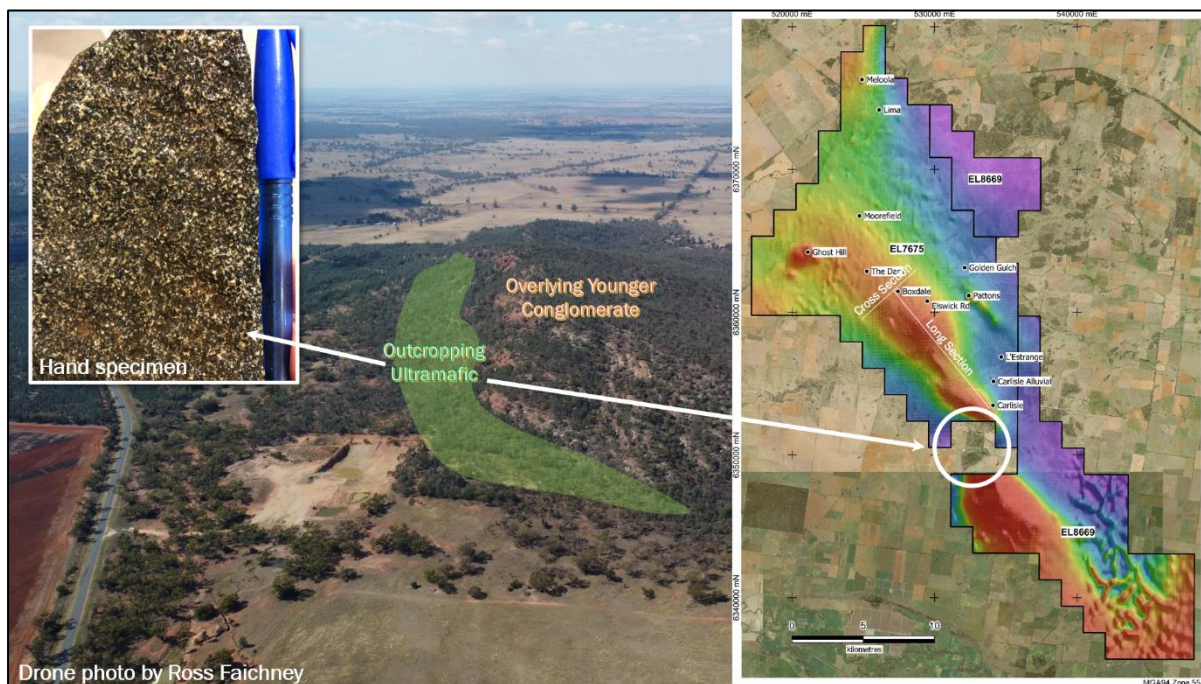
The overlying sediments hosting the gold have been strongly deformed (folded, faulted and chemically altered by hot fluids carrying gold) and the gold mineralisation is interpreted to have been sourced from the gabbro.

RC drilling at Boxdale has been completed with 23 holes for 2,370m and gold assays (3,440) pending results from drilling at Boxdale and Carlisle Reefs.

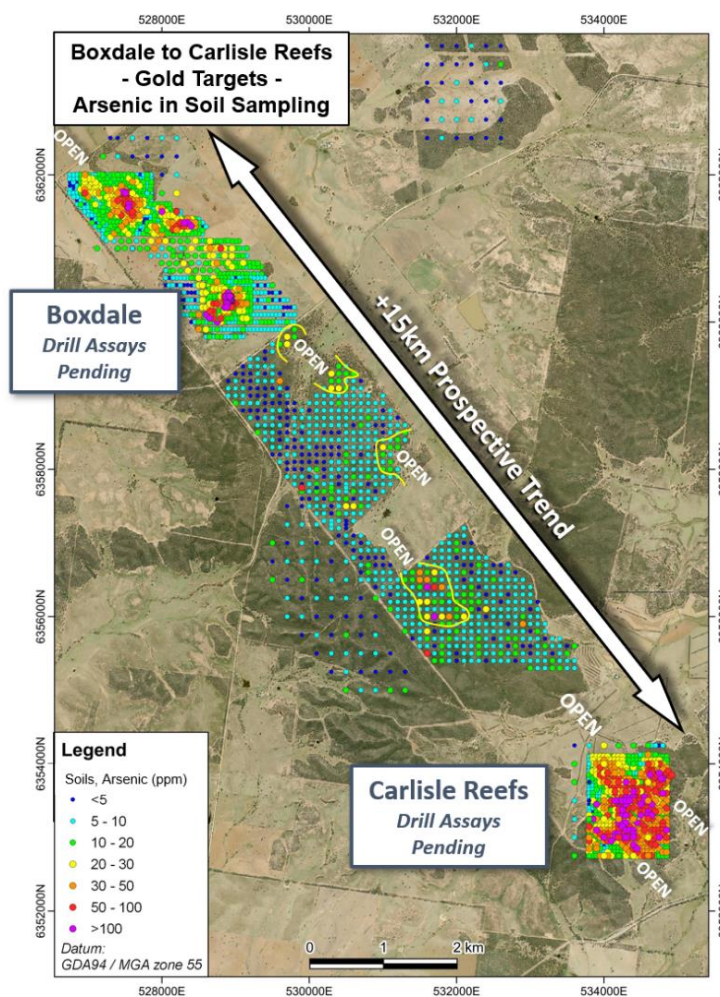


**Figure 2:** Schematic cross section (looking south east) of the Boxdale gold zone showing relative position of the ultramafic magnetic body and faults propagating above it focusing gold rich fluids.





**Figure 3:** Recent drone photo (looking north east) of outcropping ultramafic magnetic body.



**Figure 4:** The prospective trend from Boxdale to Carlisle Reefs above the ultramafic magnetic body.

## References

AGC ASX prospectus lodged 18<sup>th</sup> November 2020

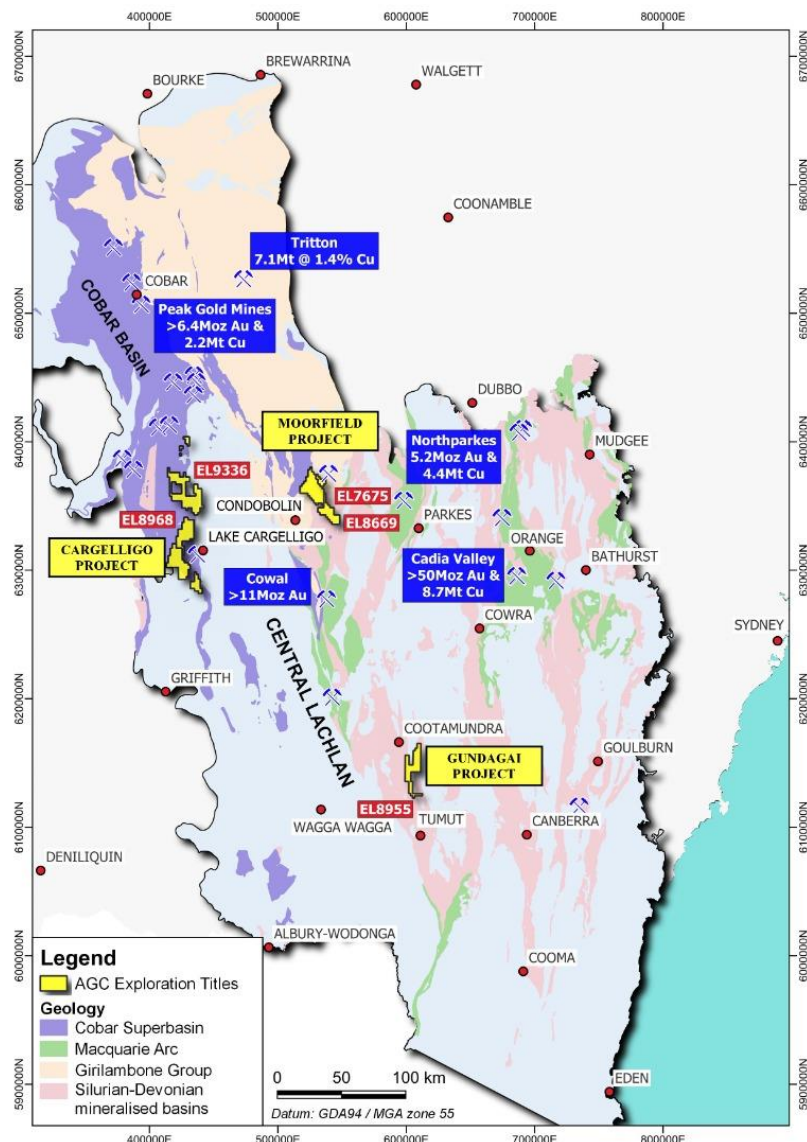
[AGC ASX 15 December 2021 Boxdale Gold Target Review Highlights and Drilling Underway](#)

[AGC ASX 2 March 2022 Near Surface gold intersected along Boxdale–Carlisle trend](#)

NSW Geological Survey, Seamless Geology, [MinView](#)

## 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 5.** 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 18<sup>th</sup> 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 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](http://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: Moorefield Project, magnetics inversion modelling

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>  <i>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.</i>	<b>Not applicable: magnetic inversion modelling only</b>
Drilling techniques	<i>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).</i>	<b>Not applicable: magnetic inversion modelling only</b>
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	<b>Not applicable: magnetic inversion modelling only</b>

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

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>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.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>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.</i>	<b>Not applicable: magnetic inversion modelling only</b>
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>The use of twinned holes.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>Discuss any adjustment to assay data.</i>	<b>Not applicable: magnetic inversion modelling only</b>
Location of data points	<i>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.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>Specification of the grid system used.</i>	All coordinates are based on Map Grid of Australia 1994 Zone 55.
	<i>Quality and adequacy of topographic control.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>Data spacing for reporting of Exploration Results.</i>	<b>Not applicable: magnetic inversion modelling only</b>



Criteria	JORC Code explanation	Commentary
<i>Data spacing and distribution</i>	<i>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.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>Whether sample compositing has been applied.</i>	<b>Not applicable: magnetic inversion modelling only</b>
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>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.</i>	<b>Not applicable: magnetic inversion modelling only</b>
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	<b>Not applicable: magnetic inversion modelling only</b>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<b>Not applicable: magnetic inversion modelling only</b>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<p><i>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.</i></p> <p><i>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.</i></p>	EL7675 Moorefield is located 20km north of Condobolin 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.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	The geophysical survey was flown and completed in 2018, contracted by the previous owner, Magmatic Resources Ltd and Mitre Geophysics completed the recent magnetic inversion model.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	The Moorefield target is hosted Ordovician Girilambone quartz-muscovite schists.
<i>Drill hole Information</i>	<p><i>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:</i></p> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>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.</i>	<b>Not applicable: magnetic inversion modelling only</b>

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<i>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.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>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.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	<b>Not applicable: magnetic inversion modelling only</b>
Relationship between mineralisation widths and intercept lengths	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>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').</i>	<b>Not applicable: magnetic inversion modelling only</b>
Diagrams	<i>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.</i>	See figures in body of report for locations relative to targets
Balanced reporting	<i>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.</i>	<b>Not applicable: magnetic inversion modelling only</b>
	<i>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</i>	<b>magnetics geophysical survey</b>

Criteria	JORC Code explanation	Commentary
<i>Other substantive exploration data</i>	<i>treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	<p>UTS Geophysics conducted the survey in March 2018 utilising a fixed wing plane with magnetic gradiometer and gamma ray spectrometry devices.</p> <p>Mitre Geophysics Pty Ltd provided geophysical consulting services, producing the unconstrained 3D magnetic model to “reinterpret and model” the result into 3D.</p>
<i>Further work</i>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	See body of report.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	See figures in body of report.