

28 July 2021

# Drilling and Exploration Update – Gold and Base Metal Projects in Central NSW

Exploration activities continuing to ramp-up on several fronts

#### **Highlights:**

- Completion of a 13-hole/2,424m RC percussion drill program at the **Cumbine Gold Prospect**.
- Drilling has intersected felsic to intermediate volcanic and fine grained sedimentary lithologies. Several holes intersected sericite-silica alteration, quartz veining and disseminated pyrite.
- All drill samples from the Cumbine program have now been submitted to the ALS Chemex laboratory in Orange NSW. Assay turnaround times are currently longer than usual due to the laboratory experiencing very high input of samples from numerous exploration companies operating in NSW.
- Drilling now underway on a 9-hole/2,000m RC percussion drill program at the Noisy Ned Copper Prospect.
- Drilling application submitted for approval to the NSW Resource Regulator for a 20-hole RC percussion drill program (~3,200m) at the **Carpina North Gold Prospect.**
- COVID-19 protocols in place and operational (including testing regime) with Talisman's locally based exploration team, allowing drilling to continue during current NSW COVID-19 outbreak.

Further to its ASX announcement of 15 June 2021, Talisman Mining Ltd (ASX: TLM, **Talisman**) is pleased to advise that exploration activities are continuing to ramp-up across its highly prospective gold and copper-gold portfolio in the world-class Lachlan Fold Belt of NSW.

The Company has now completed a 13-hole (2,424m) Reverse Circulation percussion (**RC**) drilling program targeting the extensive **gold-in-soil anomaly** at the **Cumbine Prospect** (**Cumbine**) (refer Appendix 1). RC percussion drilling has also now commenced at the **Noisy Ned base metal prospect**, where approval has been received from the NSW Resource Regulator for a 9-hole program. Both prospects are located with Talisman's Lachlan Copper-Gold Project (**Lachlan Project**).





#### Cumbine Gold Prospect (EL8414 – TLM 80%)

Cumbine is located within the central portion of the Lachlan Project and forms part of Talisman's joint venture with Peel Mining Limited (ASX: PEX, **Peel**) (refer *Appendix 2*). The 650m-long soil anomaly at Cumbine was delineated from assay results received from a soil sampling program completed in early March 2021<sup>1</sup>.

A total of 13 RC holes have been completed for 2,424m (see Figure 1 and Appendix 1), with drilling intersecting felsic volcanic and sedimentary lithologies as well as sericite-silica alteration, quartz veining and disseminated pyrite in several holes (see Figure 2). This style of alteration is indicative of mineralising hydrothermal fluids moving through the rock mass.

All samples have been submitted to the ALS Chemex laboratory in Orange NSW and assays are pending. Turnaround time for assay results is currently much longer than normal due to very high input of samples from a significant number of exploration companies operating in NSW. Talisman will update the market further as soon as assay result become available.

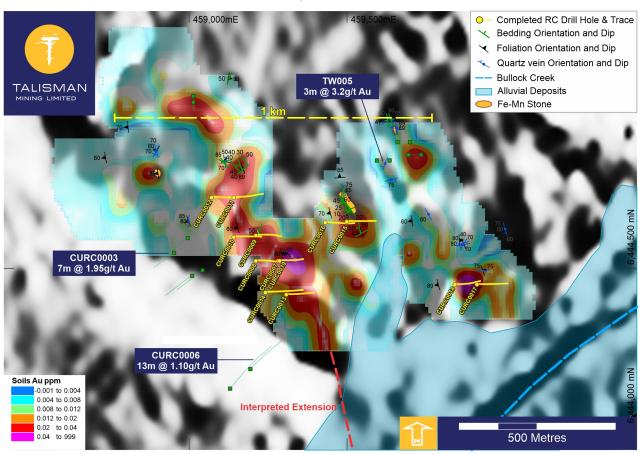


Figure 1: Cumbine Gold Prospect showing gold-in-soil anomaly over 1VD magnetic image, historic drilling<sup>2</sup> and completed RC drilling.

<sup>&</sup>lt;sup>2</sup> Refer NSW DIGS report R00030150 and Talisman ASX announcement dated 30 November 2018 for full details including JORC tables.



<sup>&</sup>lt;sup>1</sup> Refer Talisman ASX announcement dated 19 April 2021 for full details including JORC tables.





**Figure 2:** Cumbine Gold Prospect drill hole CURC0010 RC chips 170m - 176m showing medium grained intermediate volcanic with quartz plus pyrite veining.

#### Noisy Ned Copper Prospect (EL8677 - TLM 100%)

Previous exploration by Talisman identified a strong base metal anomaly at the Noisy Ned prospect from auger sampling as well as copper, lead and zinc mineralisation in bedrock from previous RC percussion drilling<sup>3</sup> (see Figure 3). The best intersections from this previous drilling include:

- NNRC0003 3m at 1.19% Zn from 106m
- NNRC0004 1m at 1.51% Zn from 153m
- NNRC0006 9m at 0.87% Zn from 59m and 1m at 2.51% Zn from 160m
- NNRC0010 1m at 2.34% Zn from 55m

 $<sup>^{\</sup>rm 3}$  Refer Talisman ASX announcement dated 30 November 2018 for full details including JORC tables.





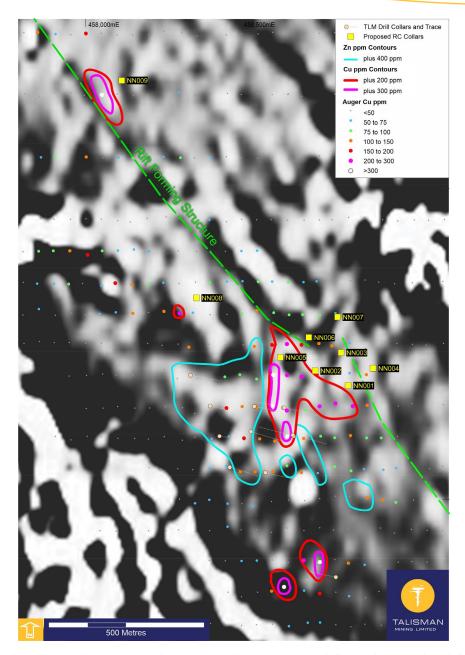


Figure 3: Noisy Ned Cu prospect showing zinc and copper anomalism, previous RC drilling and proposed RC drill-hole locations.

Talisman has received approval from the NSW Resource Regulator for a 9-hole RC percussion drilling programme targeting the strongest part of the copper anomalism and bedrock mineralisation. The drill rig was mobilised to Noisy Ned as soon as drilling was completed and Cumbine and drilling of the first hole is now underway.

#### Carpina North Gold Prospect (EL8571 – TLM 100%)

Soil sampling completed by Talisman during 2020 and 2021 identified a broad zone of gold anomalism at the Carpina North Prospect covering a total area of 1km x1.5km<sup>4</sup>. It is interpreted that the mineralisation is controlled by a number of NNW trending structures.

<sup>&</sup>lt;sup>4</sup> Refer Talisman ASX announcement dated 6 May 2021 for full details including JORC tables





Mapping undertaken by previous explorers at the Carpina North Gold Prospect identified silica alteration bands trending in a north-south orientation. Such silica alteration is commonly associated with gold bearing hydrothermal fluids. The identified gold-in-soil anomaly and potential gold mineralisation is hosted within a folded sequence of Ordovician sedimentary lithologies. No previous drilling has been undertaken over the gold-in-soil anomaly to date.

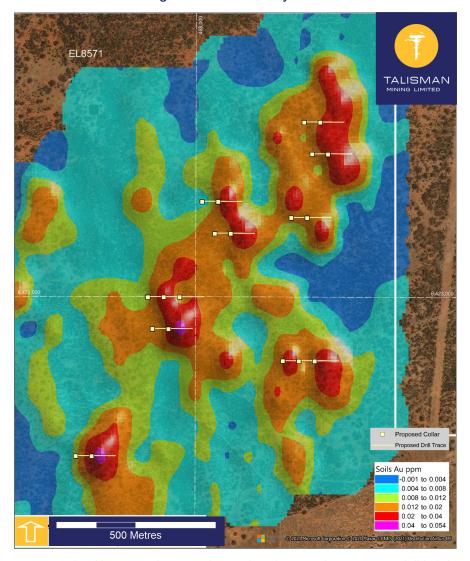


Figure 4: Carpina North gold prospect showing soil anomaly and proposed RC percussion drill-hole locations.

A drilling application has been submitted to the NSW Resource Regulator for a 20-hole RC drill program totaling 3,200 metres with drilling to commence as soon as approval is granted.

#### **Management Comment**

Commenting on progress, Talisman's CEO, Shaun Vokes, said: "We continue to apply a systematic approach to our exploration targets in NSW and the results being generated are encouraging. It is a credit to all our exploration staff and contractors that we are able to continue to operate safely and in strict compliance with COVID protocols during the current COVID-19 situation in NSW in what is a challenging time for all NSW communities."





#### **Ends**

For further information, please contact:

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This release has been authorised by the Board of Talisman Mining Limited.

#### **About Talisman Mining**

Talisman Mining Limited (ASX:TLM) is an Australian mineral development and exploration company. The Company's aim is to maximise shareholder value through exploration, discovery and development of complementary opportunities in base and precious metals.

Talisman has secured tenements in the Cobar/Mineral Hill region in Central NSW through the grant of its own Exploration Licenses and through a joint venture agreement. The Cobar/Mineral Hill region is a richly mineralised district that hosts several base and precious metal mines including the CSA, Tritton, and Hera/ Nymagee mines. This region contains highly prospective geology that has produced many long-life, high-grade mineral discoveries. Talisman has identified a number of areas within its Lachlan Cu-Au Project tenements that show evidence of base and precious metals endowment which have had very little modern systematic exploration completed to date. Talisman believes there is significant potential for the discovery of substantial base metals and gold mineralisation within this land package and is undertaking active exploration to test a number of these targets.

Talisman also has a majority participating interest in a joint venture with privately-owned Lucknow Gold Limited in relation to the Lucknow Gold Project (EL6455) in New South Wales. The Lucknow Goldfield was discovered in 1851 and was one of the earliest goldfields to be mined commercially in Australia. Historic production records at the Project are incomplete, however in excess of 400,000 ounces of gold has reportedly been produced at grades of 100 to 200 g/t gold<sup>5</sup>. Very little modern exploration has been completed outside of the existing mine workings and Talisman intends to undertake a program of geochemical surface sampling and mapping at the Project ahead of a drilling program to test for potential down plunge extensions of the high-grade gold ore shoots and repeat structures throughout the Project area.

### **Competent Person's Statement**

Information in this announcement that relates to Exploration Results and Exploration Targets is based on, and fairly represents information and supporting documentation complied by Mr Donald Huntly, who is a member of the Australasian Institute of Geoscientists. Mr Huntly is a full-time employee of Talisman Mining Ltd and has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activities 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 Huntly has reviewed the contents of this announcement and consents to the inclusion in this announcement of all technical statements based on his information in the form and context in which they appear.

#### **Forward-Looking Statements**

This ASX release may include forward-looking statements. These forward-looking statements are not historical facts but rather are based on Talisman Mining Ltd.'s current expectations, estimates and assumptions about the industry in which Talisman Mining Ltd operates, and beliefs and assumptions regarding Talisman Mining Ltd.'s future performance. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates", "potential" and similar expressions are intended to identify forward-looking statements. Forward-looking statements are only predictions and are not guaranteed, and they are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of Talisman Mining Ltd. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. Actual values, results or events may be materially different to those expressed or implied in this presentation. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Talisman Mining Ltd does not undertake any obligation to update or revise any information or any of the forward looking statements in this announcement or any changes in events, conditions or circumstances on which any such forward looking statement is based.

<sup>&</sup>lt;sup>5</sup> NSW DIGS report, First Annual Exploration Report EL5770, 2001 -R00030162





# Appendix 1 Cumbine Gold Prospect RC Percussion Details

Project	Prospect	HoleD	Easting	Northing	Dip	Azimuth	Depth
LACHLAN	Cumbine	CURC0007	459280	6444525	-60	090	180
LACHLAN	Cumbine	CURC0008	459210	6444525	-60	090	156
LACHLAN	Cumbine	CURC0009	459210	6444605	-60	090	204
LACHLAN	Cumbine	CURC0010	459140	6444600	-60	090	198
LACHLAN	Cumbine	CURC0011	459140	6444725	-60	090	210
LACHLAN	Cumbine	CURC0012	459070	6444725	-60	090	180
LACHLAN	Cumbine	CURC0013	459306	6444418	-60	090	180
LACHLAN	Cumbine	CURC0014	459240	6444425	-60	090	210
LACHLAN	Cumbine	CURC0015	459498	6444649	-60	090	186
LACHLAN	Cumbine	CURC0016	459430	6444646	-60	090	180
LACHLAN	Cumbine	CURC0017	459910	6444450	-60	090	180
LACHLAN	Cumbine	CURC0018	459840	6444450	-60	090	180
LACHLAN	Cumbine	CURC0019	459285	6444525	-60	090	180



# Appendix 2 Lachlan Copper- Gold Project Tenure

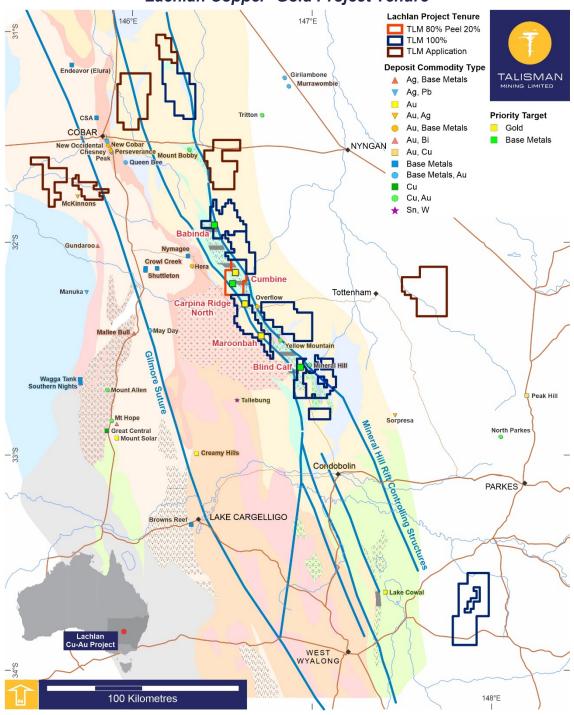


Figure 5: Talisman's Lachlan Cu-Au Project, showing key tenements, nearby mines and prospects and underlying geology.



Appendix 3
JORC Tables Section 1 & 2

#### **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3kg 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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Drilling cited in this report was completed by Haverford Holdings Pty Ltd, a wholly owned subsidiary of Talisman Mining Limited.</li> <li>Sampling techniques employed at the Lachlan Copper-Gold Project include         <ul> <li>Reverse Circulation (RC) drilling samples collected by a cone splitter for single metre samples or sampling scoop for composite samples</li> </ul> </li> <li>Sampling is controlled by Talisman protocols and QAQC procedures as per industry standard</li> <li>RC samples were dried, crushed (where required), split and pulverised (total prep) to produce a sub sample for base metal analysis by four acid digest with an ICP/AES and a 50g sub sample for gold analysis by fire assay</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).	RC drilling is completed with a face sampling hammer of nominal 140mm size
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>RC drill sample recovery is generally high with sample recoveries and quality recorded in the database.</li> <li>No known relationship exists between recovery and grade and no known bias exists.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>RC logging records lithology, mineralogy, mineralisation, alteration, structure, weathering, colour and other primary features of the rock samples and is considered to be representative across the intercepted geological units.</li> <li>RC logging is both qualitative and quantitative depending on the field being logged.</li> <li>All RC drill-holes are logged in full to end of hole.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> </ul>	<ul> <li>RC chip samples are analyses using a portable XRF machine to help identify base metal mineralisation.</li> <li>RC samples were dried, crushed (where required), split and pulverised (total prep) to produce a sub sample for</li> </ul>



Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted</li> </ul>	base metal analysis by using a 50g sub sample for gold analysis by fire assay and base metal analysis using ICP-MS.  QAQC protocols for all auger sampling involved the use of Certified Reference Material (CRM) as assay standards.  All QAQC controls and measures were routinely reviewed.  Sample size is considered appropriate for low-level geochemical sample for base-metal and gold mineralisation.  All assays are required to conform to the procedural QAQC guidelines as well as routine laboratory QAQC guidelines.  All QAQC controls and measures were routinely reviewed.  Laboratory checks (repeats) occurred at a frequency of 1 in 25.  Portable XRF instrument Bruker is used for qualitative and semi-quantitative field analysis of base-metals in RC chip samples.
Verification of	<ul> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> <li>The verification of significant intersections by</li> </ul>	The pXRF instrument is routinely calibrated using a calibration standard. CRM samples are included at a frequency of 1:50 and field duplicate samples are included at a frequency of 1:50. No pXRF results are reported  • Significant intercepts have been verified by alternate
sampling and assaying	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.	<ul> <li>company personnel.</li> <li>Logging and sampling data is captured and imported using Ocris software.</li> <li>Assay data is downloaded directly from the pXRF machine, or uploaded directly from the CSV filed provided by the laboratory.</li> <li>Primary laboratory assay data is always kept and is not replaced by any adjusted or interpreted data.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Talisman RC drill collar locations are pegged using a hand-held GPS. With final collar location surveys with sub-meter DGPS</li> <li>The coordinate system used is the Geocentric Datum of Australia (GDA) 1994. Coordinates are in the Map Grid of Australia zone 55 (MGA).</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill spacing at the Lachlan Copper-Gold Project varies depending on requirements</li> <li>No mineral resource is being reported for the Lachlan Copper-Gold Project.</li> <li>No sample compositing has been applied.</li> </ul>
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.	Samples were taken according to observations at the time in the field.





Criteria	JORC Code explanation	Commentary		
	<ul> <li>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.</li> </ul>			
Sample security	The measures taken to ensure sample security.	RC samples were stored on site at the Lachlan Copper- Gold Project prior to submission under the supervision of the Senior Project Geologist. Samples were transported to ALS Chemex Laboratories Orange by an accredited courier service.		
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No external audits or reviews of the sampling techniques and data have been completed.		



#### **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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Lachlan Copper Gold Project currently comprises 9 granted exploration licences:</li> <li>EL8547, EL8571, EL8658 and EL8680 currently held jointly by Haverford Holdings Pty Ltd ("Haverford"), a wholly owned subsidiary of Talisman Mining Limited ("Talisman") and Bacchus Resources P/L ("Bacchus"). Talisman has purchased Bacchus' share of these tenements and is currently processing transfer of ownership (Refer Talisman ASX announcement 30 April 2021 for full details);</li> <li>EL8414 held in joint venture by Haverford (80% participating interest) and Peel Mining Limited (20% participating interest) (Refer Talisman ASX announcement 20 October 2020 for full details); and</li> <li>EL8615, EL8659, EL8677 and EL8719 held 100% by Haverford.</li> <li>There are no known Native Title Claims over the Lachlan Copper-Gold Project.</li> <li>All tenements are in good standing and there are no existing known impediments to exploration or mining.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Lachlan Copper-Gold Project has been subject to exploration by numerous previous explorers.  Exploration work on has included diamond, RC and Air Core drilling, ground and down-hole EM surveys, soil sampling, geological interpretation and other geophysics (magnetics, gravity).
Geology	Deposit type, geological setting and style of mineralisation.	The Lachlan Copper-Gold Project lies within the Central Lachlan Fold belt in NSW.  The Lachlan Copper-Gold Project is considered prospective for epithermal style base-metal and precious metal mineralisation, orogenic mineralisation, and Cobar style base-metal mineralisation.
Drill-hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill-hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill-hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	Historical drilling intercepts have been appropriately referenced to source information.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or	Significant intersections reported from the Lachlan Copper-Gold Project are based on greater than 0.5%



Criteria	JORC Code explanation	Commentary		
Official	minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually material and should be stated.	Cu and/or 0.5g/t Au and may include up to 3m of internal dilution, with a minimum composite grade of 0.5% Cu and or 0.5g/t Au.		
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure	Cu and Au grades used for calculating significant intersections are uncut.		
	used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	<ul> <li>All results reported in this document have been derived from 1m split samples.</li> </ul>		
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Length weighted intercepts are reported for mineralised intersections.		
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	Drill-holes relating to the Lachlan Copper-Gold Project are reported as down hole intersections. True widths of reported mineralisation are not known at this time.		
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.	Appropriate maps with scale are included within the body of the accompanying document.		
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.	<ul> <li>Contouring of geochemical pXRF data provides an appropriate representation of the results</li> <li>The accompanying document is considered to represent a balanced report.</li> </ul>		
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.	All meaningful and material information is reported.		
Further work	<ul> <li>The nature and scale of planned further work         (e.g. tests for lateral extensions or depth         extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of         possible extensions, including the main         geological interpretations and future drilling         areas, provided this information is not         commercially sensitive.</li> </ul>	Planned future work at the Lachlan Copper-Gold Project includes soil sampling, RC/ diamond drilling and geophysical surveys.		

