

1 DECEMBER 2021 ASX/MEDIA RELEASE

### **BUDGERYGAR MINERAL RESOURCE UPDATE**

- The Budgerygar deposit is one of three new ore sources being developed at the Tritton Copper Operations in FY22:
  - Budgerygar deposit starts 70m below surface and extends 750m down-plunge
  - The deposit remains open down plunge
  - Located ~600m north of the Tritton underground mine and accessed via Tritton mine infrastructure
- Updated Mineral Resource estimate completed for the Budgerygar deposit:
  - Total tonnes increased 15% to 2,600kt including:
    - 720kt @ 1.7% Cu in Indicated Mineral Resource
  - Total contained copper metal also increased 15% to 39kt
  - Updated Mineral Resource estimate focused on upper third of the known deposit
- Resource definition drilling is ongoing, testing deeper mineralisation within the Inferred Mineral Resource
- First development ore targeted March quarter FY22 and first ore from stoping targeted in June quarter FY22



**Established Australian copper-gold producer and explorer**, Aeris Resources Limited (ASX: AIS) (Aeris or the Company) is pleased to provide an updated Mineral Resource estimate for the Budgerygar deposit, located within the Company's 100% owned Tritton tenement package in New South Wales.

The updated Mineral Resource estimate of 2.6 million tonnes at 1.48 percent copper, for 38,700 tonnes of copper metal (see Table 1), represents a 15% increase in both tonnage and copper metal compared to the previously reported Mineral Resource estimate in June 2021 (see Table 2), and is based on an underground resource definition drill campaign targeting the conversion of Inferred Mineral Resource to an Indicated Mineral Resource status. The underground resource definition drill program has to date targeted the upper third of the known Budgerygar deposit. The resource definition drill program is ongoing and is now targeting the deeper extents of the Inferred Mineral Resource.

Aeris' Executive Chairman, Andre Labuschagne, said "The Budgerygar deposit is one of three life-of-mine extension projects, along with Avoca Tank underground mine and Murrawombie Pit cut-back, that we are developing at the Tritton Copper Operations in FY22. With the Budgerygar deposit being only 600m from the Tritton underground mine infrastructure and commencing from 70m below surface, the cost and time to bring into production are significantly lower compared to a new stand-alone mine."

"The drilling program to date has focused on the upper third of the known deposit, enabling a large portion of this section of the deposit to be upgraded to the Indicated Mineral Resource category. Interestingly, the copper and gold grades for the Indicated Resource are higher than those reported in the Inferred category. This uplift in grade as drill density increases is similar to what we saw in the upper sections of the Tritton deposit."

"Our immediate focus is to continue the resource drilling program over the remainder of the Inferred Mineral Resource. However, the deposit remains open at depth and in FY23 we intend to drill a couple of deeper holes to get a better understanding of potential continuity of the deposit at depth."

### **Budgerygar Deposit**

Copper mineralisation at the Budgerygar deposit (Budgerygar) is similar to other copper deposits discovered within the Tritton tenement package, including the Tritton deposit located 600 metres south from Budgerygar.

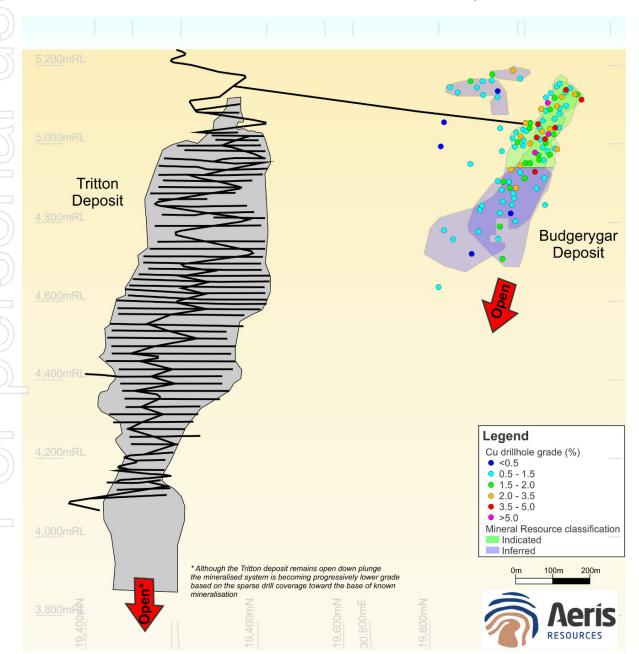
Copper mineralisation at Budgerygar is hosted within pyrite dominant with lesser chalcopyrite (copper bearing mineral) sulphide lenses. Sulphide textures vary from massive, banded, stringer to disseminated. Pyrite is the dominant sulphide, forming several broad horizons over several hundred metres of strike. High grade copper mineralisation forms multiple stacked lodes within an elongated corridor less than 150 metres along strike and 750 metres down plunge.



The elongated geometry of the high-grade copper mineralisation and long down plunge dimension is a characteristic shared with all known copper deposits discovered within the Tritton tenement package. The most notable being the Tritton deposit, which has been traced over 2 kilometres down plunge, while the Constellation and Murrawombie deposits have been traced 1 kilometre down plunge. The Tritton, Murrawombie and Constellation deposits all remain open down plunge.

Drilling at the Budgerygar deposit has traced the mineralised system 750 metres down plunge to date and remains open down plunge.

Figure 1 – Long section view looking west showing the Indicated and Inferred Budgerygar Mineral Resource outline. Includes drill hole intersections which informed the updated Mineral Resource.





### **Budgerygar December 2021 Mineral Resource**

The updated Budgerygar Mineral Resource (Table 1) is reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC Code). The updated Mineral Resource is based on a resource definition drill program which targeted mineralisation within the upper 250 metres of the known mineralised system (5,200mRL to 4,950mRL). A total of 76 resource definition drill holes have been used to update the geological interpretation and increase the confidence in the resource model. The updated Mineral Resource represents a 15% increase in both tonnage and contained copper metal at the reported cut-off grade (0.8% Cu).

Table 1: December 2021 Budgerygar Mineral Resource<sup>1,2</sup>.

	December 2021 Budgerygar Mineral Resource							
Resourc	e Category	Tonnage (kt)	Cu (%)	Cu metal (kt)	Au (g/t)	Au metal (koz)	Ag (g/t)	Ag metal (koz)
Med	asured	-	-	-	-	-	-	-
Ind	icated	720	1.7	12	0.4	10	10.3	240
Inf	erred	1,900	1.4	27	0.1	6	5.3	320
T.	OTAL	0.400	1.5	20	0.0	1.5	, 7	5/0
10	OTAL	2,600	1.5	39	0.2	15	6.7	560

Table 2: June 2021 Budgerygar Mineral Resource<sup>1,2</sup>.

	June 2021 Budgerygar Mineral Resource						
Resource Category	Tonnage (kt)	Cu (%)	Cu metal (kt)	Au (g/t)	Au metal (koz)	Ag (g/t)	Ag metal (koz)
Measured	-	-	-	-	-	-	-
Indicated	-	-	-	-	-	-	-
Inferred	2,300	1.5	34	0.2	15	5.2	380
TOTAL	2,300	1.5	34	0.2	15	5.2	380

The resource classification was based primarily on drill density with some consideration given to the confidence of the geological interpretation. The resource model has been classified as Indicated and Inferred Mineral Resource. Indicated Mineral Resource is reported from areas with a drill density up to 40 metres x 40 metres, with Inferred Mineral Resources classified from wider spaced drilling up to a nominal 80 metres x 80 metres.

<sup>&</sup>lt;sup>1</sup> Discrepancy in summation may occur due to rounding.

<sup>&</sup>lt;sup>2</sup> Mineral Resource is reported at a 0.8% copper cut-off grade.



Figure 2 – Tonnage changes between the December 2021 and June 2021 Budgerygar reported Mineral Resource figures.

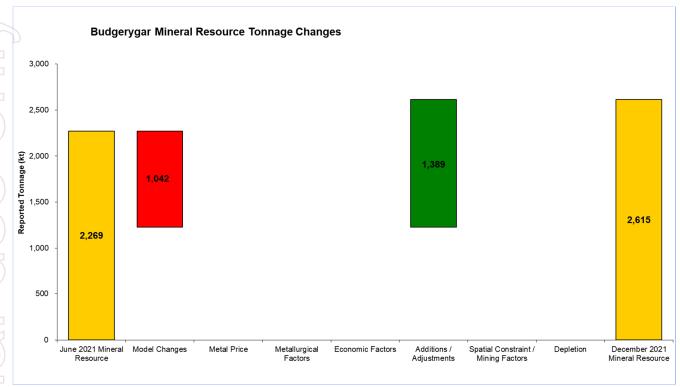
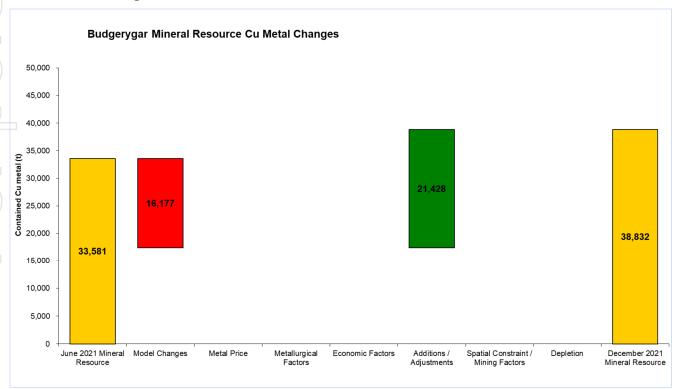


Figure 3 – Copper metal changes between the December 2021 and June 2021 Budgerygar reported Mineral Resource figures.





#### MINERAL RESOURCE STATEMENT OVERVIEW

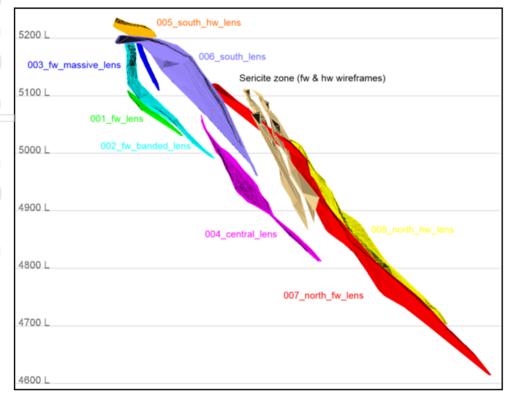
### **Geology and Geological Interpretation**

The Budgerygar deposit is hosted within Ordovician turbidite sediments from the Girilambone basin. Lithologies vary from mudstones, siltstones, fine grained sandstone and rare medium to coarse grained sandstones. Occasional basaltic sills intrude the turbidites peripheral to the Budgerygar deposit. Several regional deformation events are evident throughout the Girilambone Group sediments within the Tritton tenement package. Sulphides (pyrite and lesser chalcopyrite) occur along sites of dilation associated with later ductile deformational events and copper mineralisation is interpreted to occur late in the deformation history.

The long down plunge continuity is thought to occur along a late (D3 or D4) structural fabric. High grade copper mineralisation is typically associated with massive and banded sulphide textures dominated by pyrite and lower grade copper mineralisation is generally associated with stringer and disseminated textures.

In total eight sulphide lodes have been interpreted, forming the Budgerygar deposit. Each sulphide lode is identified using sulphide textures and alteration assemblages to interpret different mineralised lodes within nominal 0.5% copper grade shells. A 0.5% copper grade was selected based on statistical analysis of the copper distribution within and surrounding the Budgerygar mineralised system and reviewing assay data plotted along drill holes in 3D mining software.

Figure 4 – Cross section view looking north showing each copper sulphide estimation domain used within the December 2021 grade estimate.





### Drilling and sampling techniques

All drill hole data intersecting the modelled Budgerygar copper sulphide domains was collected via diamond drilling from both surface and underground drill programs. Sample intervals are generally selected at 1.0 metre intervals. At geological boundaries (based on lithology, sulphide textures and visual chalcopyrite content) the sample length can vary between a minimum of 0.5 metres and a maximum 1.4 metres.

All diamond drill core was halved with a core saw, with one half dispatched for analysis and the other half retained. Half core samples were sent to a certified sample preparation and assay laboratory. Upon arrival at the laboratory each sample was weighed and recorded. Samples greater than 3 kilograms are crushed via a Boyd crusher (90% passing 2 millimetres) and rotary split to a sub-sample between 2 to 3 kilograms. The sub-sample was pulverised via a LM5 to 80% passing 75µm. A 300g sample was taken from the pulverised material for assaying. Samples less than 3 kilograms are crushed via a jaw crusher to 70% passing 6 millimetres and the whole sub-sample is pulverised in a LM5 with a 300g sub-sample taken for assaying.

Sample blanks and industry standards are routinely submitted at a frequency of 1:20. Duplicates and pulps are retained and re-submitted periodically to test assay reproducibility.

# **Estimation parameters**

Ordinary kriging using 1m composite data was used to estimate copper, gold and silver into a block model with a parent block size of 10.0m (east) x 10.0m (north) x 10.0m (RL). A total of eight pyrite-chalcopyrite sulphide lodes have been created. Each sulphide lode represents an estimation domain for which copper, gold and silver variables are estimated within. The estimation domain boundaries are treated as hard boundaries. A variety of different search parameters and variogram models were used as deemed appropriate for the specifics of each estimation domain. Copper, gold and silver composites were capped prior to estimation. The resource model was validated via visual and statistical methods.

#### Mineral Resource Classification

Resource classification was based primarily on drill density with some consideration given to the confidence of the geological interpretation.

The resource model has been classified as Indicated and Inferred Mineral Resource. Indicated Mineral Resource is reported from areas with a drill density up to 40 metres x 40 metres. Inferred Mineral Resource is classified within areas with a wider spaced drill spacing up to 80 metres x 80 metres.



### Cut-off grade / reporting criteria

The Mineral Resource is reported at a 0.8% copper cut-off grade from within each of the eight mineralised lodes. Application of this cut-off grade excludes blocks below 0.8% copper that exist within each mineralised lode.

# This announcement is authorised for lodgement by:

Andre Labuschagne Executive Chairman

#### **FNDS**

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#### **About Aeris**

Aeris Resources Limited (ASX: AIS) is a diversified mining and exploration company headquartered in Brisbane. The Company has a growing portfolio of copper and gold operations, development projects and exploration prospects. Aeris has a clear vision to become a mid-tier mining company with a focus on gold and base metals, delivering shareholder value.

Aeris' Board and management team bring decades of corporate and technical expertise in a lean corporate structure. Its leadership has a shared, and highly disciplined focus on operational excellence, and an enduring commitment to building strong partnerships with the Company's workforces and key stakeholders.

Aeris is forecasting to produce between 21,000 and 22,000 tonnes of copper from its Tritton Copper Operation in New South Wales, and between 67,000 and 71,000 ounces of gold from its Cracow Gold Operation in Queensland.



#### **Previous Information**

The information in this announcement that relates to previously reported exploration results for the Constellation deposit is extracted from ASX announcements all of which are available on the company's website at <a href="https://www.aerisresources.com.au">www.aerisresources.com.au</a>. The company confirms that it is not aware of any new information or data that materially affects the exploration results included in the relevant original market announcements. The Company confirms that the form and context in which the Competent Person and Qualified Person's findings are presented have not been materially modified from the relevant original market announcements.

# **Competent Persons Statement – Exploration Results**

Mr Cox confirms that he is the Competent Person for all Exploration Results summarised in this Report and he has read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition). Mr Cox is a Competent Person as defined by the JORC Code, 2012 Edition, having relevant experience to the style of mineralisation and type of deposit described in the Report and to the activity for which he is accepting responsibility. Mr Cox is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM No. 220544). Mr Cox has reviewed the Report to which this Consent Statement applies and consents to the inclusion in the Report of the matters based on his information in the form and context in which it appears. Mr Cox is a full time employee of Aeris Resources Limited.

Mr Cox has disclosed to the reporting company the full nature of the relationship between himself and the company, including any issue that could be perceived by investors as a conflict of interest. Specifically, Mr Cox is entitled to 2,578,921 Performance Rights issued under the Company's equity incentive plan (details of which were contained in the Notice of Annual General Meeting dated 20 October 2020). The vesting of these Performance Rights is subject to certain performance and employment criteria being met.



# **APPENDIX A:**

JORC Code, 2012 Edition – Table 1
Section 1 Sampling Techniques and Data
Budgerygar Mineral Resource

Criteria	Commentary
Sampling techniques	<ol> <li>All diamond core is aligned, measured and metre marked.</li> <li>During all drill programs at the Budgerygar deposit, Aeris Resources have ensured drill contractors completing the works maintain a high industry standard. Diamond drill sample lengths are generally taken at 1.0 metre intervals. At geological boundaries (based on mineralisation textural differences or material changes in chalcopyrite content) the sample length can vary between a minimum of 0.5 metres and maximum of 1.4 metres. Sampling is extended up to a nominal 10 metres beyond the mineralised system. Exploration and resource definition diamond core which intersected the mineralised Budgerygar deposit are predominantly NQ2 in size. All Exploration holes sampled by Aeris Resources for the Budgerygar Mineral Resource are analysed by a 35 element three stage Aqua Regia digestion with an ICP finish (ME-ICP41) suitable for Cu concentrations between 1 ppm to 10,000 ppm. All Cu samples greater than or equal to 1.0% Cu were re-submitted for an ore digest to determine Cu concentrations greater than 1.0% (ME-OG46). Au assays were completed via fire assay fusion with an AAS finish using a 30g charge (Au-AA22) suitable for Au grade ranges between 0.01 g/t – 100 g/t. All Au samples greater than or equal to 1.0 g/t Au were re-submitted for an ore grade 30g fire assay charge to determine Au concentrations greater than 1.0 g/t Au (Au-AA25). All resource definition diamond drill holes are assayed using the ore grade digest method (ME-OG46) for Cu, Fe, Ag, Zn, Pb and S. Au assays are completed via Au-AA25. Sample preparation and assaying are completed at the ALS laboratory in Orange NSW.</li> </ol>
Drilling techniques	All drilling data intersecting the modelled Budgerygar copper sulphide domains was completed via diamond drilling.
Drill sample recovery	<ol> <li>All diamond core recoveries are measured and recorded by Aeris Resources field technicians or geologists. Initial drill holes completed by NORD targeting the Budgerygar deposit did not have RQD routinely recorded. RC pre-collar sample recoveries were not recorded nor required to be recorded as all material estimated for the Budgerygar mineralisation is defined by diamond drill core. RQD measurements are taken on all core prior to all sampling. This procedure has been part of the standard drill core processing procedure since 2005.</li> <li>Rock competency is very good through the Budgerygar mineralised system and adjoining country rock. Faults intersected are generally sub metre in thickness and contain minor amounts of clay which are susceptible to core loss. Industry standard drilling practices are maintained to ensure sample recoveries and core presentation remains at a high level.</li> </ol>



	Criteria	Commentary
		<ol> <li>No significant relationship appears to exist between recovery and grade.</li> </ol>
	Logging	<ol> <li>All diamond drill core has been geologically logged by company geologists. All drill holes have been geotechnically logged. All logging is to the level of detail to support the Budgerygar style of mineralisation.</li> <li>Logging of diamond drill core records lithology, alteration, mineralisation, degree of oxidation, structure, RQD and recovery. All drill core was photographed in both dry and wet form. Core is stored in core trays and labelled similarly.</li> <li>All diamond drill core samples are logged in full.</li> </ol>
BSN IBUOSIE	Sub-sampling techniques and sample preparation	<ol> <li>Diamond core samples are cut using an Almonte automatic core saw. Half core samples are collected on average at 1.0 metre intervals and can vary between 0.5 metres to 1.4 metres. Sample intervals not equal to 1.0 metre generally occur at mineralisation/geology contacts.</li> <li>Samples taken are appropriate for the Budgerygar mineralisation style. Half core drill core samples are sent to ALS laboratory in Orange NSW for sample preparation and assaying. Upon arrival at the laboratory sample weights are recorded. Samples greater than 3kg are crushed via a Boyd crusher (90% passing 2 millimetres) and rotary split to a sub sample between 2kg to 3kg. The sub sample is pulverised via a LM5 to 85% passing 75µm. A 300g sample is taken from the pulverised material for assaying. Samples less thank 3kg are crushed via a jaw crusher to 70% passing 6 millimetres and the whole sample is pulverised in a LM5 with a 300g sub sample taken for assaying.</li> <li>Sample blanks and industry standards are routinely submitted at a frequency of 1:20. Duplicates and pulps are retained and resubmitted periodically to test assay reproducibility.</li> <li>The sample sizes are considered appropriate to the grain size of the material being sampled.</li> </ol>
	Quality of assay data and laboratory tests	<ol> <li>Mineralisation at the Budgerygar deposit is associated with primary sulphides. Copper mineralisation is primarily associated with chalcopyrite. Copper mineralisation is largely interpreted to be remobilised and varies in nature from fine disseminated spots to zones of erratic +10cm scale stock work textures. The assay methods described previously are considered appropriate for the style of mineralisation. Sample preparation methods are also considered appropriate for the style of mineralisation. Review of sample duplicates indicates the assay repeatability is very good.</li> <li>Information regarding assay techniques used for samples taken pre 2005 cannot be confirmed. However, drill holes completed up to this period are spatially distributed amongst more recent drilling which the assay methodology/techniques are known. Aeris Resources are confident the assay methods used would meet industry standards based on the geological protocols in place at the time.</li> <li>No other methods were used to derive assay values for resource estimation.</li> <li>Laboratory QA/QC samples included the use of blanks, duplicates,</li> </ol>



Criteria	Commentary
	standards (commercial certified reference materials) and repeats.
Verification of sampling and assaying	<ol> <li>Significant mineralised intersections are reviewed by the logging geologist. QAQC results are reviewed on a batch by batch and monthly basis. Deviations from precision tolerances are investigated on a batch by batch basis. If grade bias is observed then follow up with the laboratory typically occurs on a monthly basis.</li> <li>No twinned holes were conducted.</li> <li>All Aeris Resources geological data is logged directly to a Panasonic tough book laptop at the core yard using company logging codes. Data is logged directly to Acquire (offline) which is then uploaded to the Acquire network database once the computer is docked to the office workstation. In built Acquire validation occurs at the time of data entry. Assay results are returned electronically on a batch by batch basis from the ALS laboratory via the webtrieve portal. Returned assay batches are reviewed prior to upload to the Acquire database. If a batch fails QAQC procedures, then follow up and potential reassaying from the laboratory is required. Assay data are not uploaded to the Acquire database until a batch passes all QAQC tests.</li> <li>No adjustments to assay data are made.</li> </ol>
Location of data points	<ol> <li>All surface drill holes completed from 2005 onwards have collar locations surveyed by using a DGPS by either a contractor or staff surveyor. All pre 2005 drill holes were surveyed by either staff surveyor(s) or contractors using a theodolite.</li> <li>Surveyed collar co-ordinates are entered and stored within Aeris Resources Acquire database.</li> <li>Geology interpretations and grade estimates are based on a local Tritton Mine Grid (TMG). The TMG is rotated 8.423° to the west from AGD 66 true north.</li> <li>Quality and accuracy of the drill collars are suitable for geological interpretation and resource estimation.</li> </ol>
Data spacing and distribution	<ol> <li>Drill spacing across the Budgerygar deposit vary from approximately 100 metres (N) x 100 metres (RL) to 40 metres (N) x 40 metres (RL).</li> <li>As a general rule Measured Mineral Resource is defined from a 20 metres x 20 metres drill spacing. Indicated Mineral Resource is defined from a 40 metre x 40 metre drill spacing. Inferred Mineral Resource is defined from drill spacings up to 80 metres x 80 metres. Based on the observed geological continuity the drill spacing is appropriate to classify as Indicated and Inferred Mineral Resource.</li> <li>The Budgerygar mineralisation is defined sufficiently to define both geology and grade continuity for an Indicated and Inferred Mineral Resource classification.</li> <li>Samples are composited to 1.0 metre intervals. A majority of the assay data are 1.0 metres in length. Within an estimation domain composite lengths are created at 1.0 metre intervals from HW to FW. In some instances the FW sample may be less than 1.0 metre in length. Samples greater than or equal to 0.5 metres are retained for estimation and those less than 0.5 metres are not used for estimation</li> </ol>



Criteria	Commentary
Orientation of data in relation to geological structure	<ol> <li>Drillholes intersect the deposit at high angles to the mineralised system i.e. approaching a perpendicular angle.</li> <li>There is a negligible chance of potential grade bias based on drill orientation/intersection angles.</li> <li>No material issues due to sampling bias have been identified.</li> </ol>
Sample security	<ol> <li>Chain of Custody is managed by the Company. Samples post 2005 were stored on site in polyweave bags containing approximately 5 samples. These bags are securely tied, then loaded and wrapped onto a pallet for dispatch to the laboratory. The samples are freighted directly to the laboratory with appropriate documentation listing sample numbers and analytical methods requested. Samples are immediately receipted by a laboratory staff member on arrival, with a notification to Aeris Resources of the number of samples that have arrived.</li> </ol>
Audits or reviews	<ol> <li>Data is validated when uploading into the Company's AcQuire database.</li> <li>No formal audit has been conducted.</li> </ol>

# Section 3 Estimation and Reporting of Mineral Resources Budgerygar Mineral Resource

Criteria	Commentary
Database integrity	<ol> <li>All assay results are logged against unique sample numbers. A sampling sheet detailing sample numbers and core / RC intervals is completed prior to sample collection. During the sampling process each sample interval is cross-referenced to the sample number and checked off against the sampling sheet. Pre-numbered bags are used to minimize errors. Assay data is received via email in a common electronic format and verified against the AcQuire database.</li> </ol>
	2. Data validation and QAQC procedures are completed by staff geologists. Geology logs are validated by the core logging geologist. Assay data is not uploaded to the corporate Acquire database until all QAQC procedures have been satisfied.
Site visits	<ol> <li>Brad Cox (Aeris Resources – General Manager Geology) has made numerous site visits. The visits included underground inspections focused on geological mapping, drill core inspection and reviewing geologic interpretations.</li> </ol>
Geological interpretation	<ol> <li>The confidence in the Budgerygar geology model is relatively high.         Many geological similarities observed from the Budgerygar drill core are similar to observations made at the Tritton and Murrawombie deposits. There appears to be a strong structural/deformational control to mineralisation at Budgerygar, particularly along the interpreted F4 fold corridor. F4 fold corridors have been hypothesised to control mineralisation at Tritton.     </li> <li>Data used for the geological interpretation includes drill hole data. There are not significant assumptions made other than the mineralised system extends between drill holes along the</li> </ol>



Criteria	Commentary
	<ul> <li>interpreted orientation. Mineralisation is easily visible from the host turbidite sequences. The geometry of the mineralised system is understood at drill spacings up to 80 metre x 80 metre.</li> <li>3. Estimation domains used for the latest resource estimate are based on interpreted geology defined from drill core. Cu estimates are constrained within a series of 0.5% Cu grade shells.</li> <li>4. Mineralisation is still open at depth below the modelled wireframe solids.</li> </ul>
Dimensions	<ol> <li>The Budgerygar mineralised system is tabular in nature with an overall down dip length of 750 metres with mineralisation still open at depth. Mineralisation begins at approximately 70m below surface (5,200mRL). The mineralised lodes vary in thickness averaging 6-10 metres and dip between 35° - 45° east. Strike extents vary from 50m to 150m.</li> </ol>
Estimation and modelling techniques	<ol> <li>Ordinary kriging was used to estimate all variables. Ordinary kriging is an appropriate for this style of mineralisation. Vulcan software was used to create 3D geology/estimation domain wireframes, generate descriptive statistics and grade estimation. Isatis software was used to report descriptive statistics and model variograms. Metal per composite analysis and review of descriptive statistics were used to determine appropriate top cut values. Estimation was either performed in 2 passes or 3 depending on the search size and dimensions of the estimation domain. Estimation pass 1 was generally set at 70% of the variogram range, estimation pass 2 set at 140% of variogram range and estimation pass 3 was designed to populate all remaining blocks within the estimation domain.</li> <li>All estimates within each estimation domain are validated against declustered composites. Mean grade estimates that fall within 5% of the declustered composite mean grade are considered acceptable. If the difference is outside a 5% tolerance then the estimation and/or decluster cell size is reviewed and changes made if necessary.</li> <li>No assumptions have been made for the recovery of gold and silver by-products.</li> <li>Other variables estimated included Au, Ag, Fe, S, Zn and bulk density.</li> </ol>
	<ol> <li>The parent block sized used for the updated estimate was 10 metres (E) x 10 metres (N) x 10 metres (RL) with sub celling down to 1 metre (E) x 1 metre (N) x 1 metre (RL). The cell size takes into consideration drill spacing and grade variability in different orientations.</li> <li>No assumptions have been applied to the model for selective mining unit.</li> <li>No correlation has been made between variables.</li> <li>The distinction between background Cu and Cu associated with mineralisation was defined from a combination of geology/textural logging and population distributions associated with log probability plots. From this a 0.5% Cu cut-off was selected to define the bounding Cu estimation domain. Geological domains were modelled and tested against each other (geological interpretation description statistics and contract plots) to</li> </ol>

interpretation, descriptive statistics, QQ plots and contact plots) to determine whether they could be incorporated into one domain or separated. This approach was used for each variable estimated.



Criteria	Comr	nentary
		Domain boundaries were treated as hard domains whereby only composite data associated with an estimation domain is used for estimation.  Drillhole data from each variable was reviewed within each estimation domain to determine whether top cuts are required. Top cuts were applied based on metal per composite analysis, histogram distributions and spatial location of composite data. Top cuts were applied if too much metal was assigned to particular composites (metal per composite) and/or clear disconnect from histogram distribution and spatially where the anomalous composites occur in relation to other samples.  All estimates within each estimation domain are validated against declustered composites. Mean grade estimates that fall within 5% of the declustered composite mean grade are considered acceptable. If the difference is outside a 5% tolerance then the estimation and/or decluster cell size is reviewed and changes made if necessary. Estimates were also validated visually in Vulcan displaying block estimates and composite data. Swath plots on 20 metre levels were also created showing block estimates and declustered composite data in the X, Y and Z directions for each
Moisture	1.	variable estimated. Tonnages are estimated on a dry basis.
Cut-off parameters	1. 2.	A 0.5% Cu cut-off was used for domaining mineralised Cu. The selection of an appropriate cut-off grade was based on geology (ore textures and lithology) and log probability plot distributions. Reporting the Mineral Resource is at a 0.8% Cu cut-off within the mineralised lenses. Only individual blocks at or above a 0.8% Cu cut-off grade are reported.
Mining factors or assumptions	1.	Not applicable.
Metallurgical factors or assumptions	1.	Not applicable.
Environmental factors or assumptions	1.	Tailing waste from the Tritton ore processing plant is disposed at the current tailings storage facility within ML1544 (or utilised as paste fill). Waste from underground development is stored on site for future rehabilitation of the Tailing Storage Facility. Any potentially acid forming waste is used for stope backfill underground. No significant environmental impacts have been identified from the Tritton Copper Operations. The same process/methodology would follow for any future mining activities at Budgerygar.
Bulk density	2.	Bulk density has been estimated via ordinary kriging within all estimation domains. For the background estimation domain outside of the mineralised system a default value of 2.70 was applied (average density of unmineralised turbidite sediments). Bulk density values were measured using the Archimedes Principle Method' (weight in air v's weight in water). Varying forms of silicification is present throughout the mineralised system and porosity associated with the turbidite host sediments is negligible. Vugs have been noticed within the drill core on rare occasions. Technically the bulk density determination method does not



Criteria	Comi	mentary
	3.	consider for the presence of vugs. Given they have only been observed on the rare occasion and are not correlatable to specific zones they are not considered to represent a material problem with current bulk density determinations.  Bulk density has been estimated from the bulk density measurements. For material outside the mineralised domains an average density value for the host material has been assigned based on the density of unmineralised turbidite sediments i.e. 2.70.
Classification	1.	Classification of the resource estimate has been guided by confidence in the geological interpretation and drill density. The Budgerygar Mineral Resource has been classified as Indicated and Inferred.
	2.	The drill and input data density is reasonable in its coverage for this style of mineralisation and estimation techniques to allow confidence for the tonnage and grade distribution to the levels of Indicated and Inferred.
	3.	The updated Budgerygar geology interpretation/model and resource estimate appropriately reflects the competent persons understanding of the geological and grade distributions.
Audits or reviews	1.	External reviews and audits have not been conducted on the Budgerygar Mineral Resource model. The current geological interpretation, estimation domain assumptions and grade estimates have been reviewed internally by the geology team. No fatal flaws or significant issues were identified.
Discussion of relative accuracy/confidence	1.	The models have been validated visually against drilling and statistically against input data sets for each estimation domain. The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC code.
	2.	The Indicated Mineral Resource is appropriate for mine level evaluation. The Inferred Mineral Resource is appropriate for an understanding of the global estimate and broad grade trends beyond mine level scale.
	3.	Geological modelling and estimation protocols used for the 2021 Budgerygar Mineral Resource are consistent with protocols used at Tritton and Murrawombie. Annual mine to mill reconciliations from Tritton and Murrawombie have shown that Ore Reserves reconcile
		within 1% of tonnes and 5% of Cu grade providing a minimal variance for metal. Tritton resource has been mined since 2005 and Murrawombie underground since 2016. Mine to mill reconciliations from Tritton and Murrawombie demonstrate the current models are performing in-line with expectations. The updated Budgerygar model uses similar modelling and estimation methods as those applied at Tritton and Murrawombie.