

# Annexure A – 29Metals Ore Reserves and Mineral Resources – JORC Table 1 Disclosures

#### **Golden Grove Mineral Resources Estimate**

# Mineral Resource JORC (2012) Assessment and Reporting Criteria

The following information complies with the 2012 JORC Code requirements specified by "Table-1 Sections 1–3" of the Code.

# Table 1: JORC 2012 Code Table 1 Assessment and Reporting Criteria for Golden Grove Underground and Open Pit Mineral Resource 2020

#### Section 1 Sampling Techniques and Data

Criteria	Status
Sampling techniques	Samples have been collected by reverse circulation (RC), Aircore and diamond drilling (DD), both from surface and underground.
	<ul> <li>Sample length is preferentially set to 1m and ranges from 0.5m to 1.0m of half core. Sample intervals do not cross geological boundaries; this ensures samples were representative of the lithological unit without mixing of grade at lithological boundaries. There is no limit for shortest sample interval in the database controls currently, though Geologists are recommended to not sample intervals shorter than 0.5m.</li> </ul>
	<ul> <li>Entire half core samples are crushed and pulverised to 85% passing 75µm.</li> </ul>
	<ul> <li>Historical underground drill sampling practices are comparable with the current practice, the only difference being primary core diameter for the underground drilling. The current diamond hole diameter is NQ2 (47.6mm) or LTK60 (44.0mm) whereas historically a diameter of LK48 (35.3mm) was used.</li> </ul>
	<ul> <li>During surface Aircore and RC drilling before 1994, samples were captured in a bag attached to the cyclone. These samples were then split using a 40mm or 50mm PVC pipe spear.</li> </ul>
	<ul> <li>Post 1994 surface RC samples were captured in a bag attached to the cyclone and subsequently split using a triple stage riffle splitter.</li> </ul>
	<ul> <li>Measures taken to ensure sample representativity include the collection, and analysis of field and coarse crush duplicates.</li> </ul>
Drilling techniques	<ul> <li>Diamond Drill core and minor Reverse Circulation data was used in the Mineral Resource estimation for Gossan Hill, Scuddles and Gossan Valley deposits.</li> </ul>
	<ul> <li>Current DD diameter drilled is NQ2 (47.6mm) or LTK60 (44.0mm)</li> </ul>
	<ul> <li>Historic DD hole diameter was LK48 (35.3mm)</li> </ul>
	<ul> <li>9,094 drillholes used in the Gossan Hill Mineral Resource model.</li> </ul>
	<ul> <li>4,200 drillholes used in the Scuddles Mineral Resource model.</li> </ul>
	<ul> <li>527 drillholes used in the Gossan Valley Mineral Resource model.</li> </ul>
	<ul> <li>Over 905,000 samples across all deposits.</li> </ul>
	<ul> <li>1,645 drillholes were used in the Open Pit Mineral Resources (comprised of 77 Aircore, 162 Diamond Core and 1406 RC holes).</li> </ul>
	<ul> <li>The Reflex Act II<sup>™</sup> tool is used for core orientation marks on selected DD holes.</li> </ul>
Drill sample recovery	<ul> <li>Surface and underground recoveries of DD core are recorded as percentages calculated from measured core versus drilled metres. The intervals are logged and recorded in the database.</li> </ul>
	<ul> <li>The rocks are very competent, and recoveries are very high with average core recovery greater than 99.5% for both mineralised and non-mineralized material.</li> </ul>
	<ul> <li>Drilling process was controlled by the drill crew and geological supervision provides a means for maximising sample recovery and ensures suitable core presentation. Drilled core is reconstructed into a continuous run on an angled iron cradle for orientation marking. Depth is checked against depth provided on core blocks. No other measures are taken to maximise core recovery.</li> </ul>
	<ul> <li>No RC drillholes drilled before 2000 have recovery data recorded except for the 1994 RC program. Recovery data is not used in the Mineral Resource estimation.</li> </ul>
	<ul> <li>Preferential loss/gains of fine or coarse materials are not considered significant.</li> </ul>
	<ul> <li>There is no known relationship bias between recovery and grades.</li> </ul>

Criteria	Status
Logging	<ul> <li>All (100%) drill core and chips are logged geologically using codes set up for direct computer input into the Micromine Geobank<sup>™</sup> database software package.</li> <li>All (100%) DD cores are geotechnically logged to record recovery, RQD, roughness, fill material. Structural logging is recorded for all oriented core. DD cores are photographed wet.</li> <li>Logging is both qualitative and quantitative (percentage of sulphide minerals present).</li> <li>All (100%) drillholes are logged in full detail from start to finish using laptop computers directly into the drillhole (Geobank) database.</li> <li>Standard mineralised rock codes used. Standard weathering, alteration and appropriate geological</li> </ul>
	comments entered.
Sub-sampling techniques and sample preparation	<ul> <li>All DD core is half-cut onsite using an automatic core saw with samples always taken from the same side. Half core is used for routine sampling and quarter core for field duplicates. Current sample length ranges between 0.5 and 1m (historically ranges were from 0.2m to 1.5m) and is adjusted to geological boundaries. Historic DD core has been sampled using whole, half, quarter and third core.</li> <li>RC drilled samples have been cone split and dry sampled. Wet sampling only conducted when drillholes intersected the water table.</li> <li>All routine and duplicate RC drilled samples were 1m composites.</li> <li>Historical RAB, AC and RC drilling has been sampled using spear, grab, riffle and other unknown methods but none of these were used in the Mineral Resource estimation.</li> <li>The sample preparation of RC chips and DD core adheres to industry best practice. A commercial laboratory is used which involves: <ul> <li>Weighing</li> <li>Oven drying at 90° C</li> <li>Coarse crushing to 6mm</li> <li>Samples &gt; 3kg crushed to 2mm and split using a rotary splitter (this represents &lt; 0.01% of total sample used for Mineral Resource estimation).</li> <li>Pulverising in an LM5 to a grind size of 85% passing 75µm.</li> <li>Collection of 400g pulp from each sample; rejects kept or discarded depending on drilling programme.</li> </ul> </li> <li>It is assumed best practice was also followed at the time of historic sampling. RC field duplicate sampling is carried out at a rate of 1:50 taken directly from the on-board cone splitter at the same time as the routine sample. These are subject to the same assay process as the routine samples and the laboratory is unaware of such submissions.</li> <li>Duplicate DD core samples are no longer taken. This practiced ceased in July 2014. Historically duplicate DD were taken from core at a rate of 1:50 and the half core was cut into quarter core. Instead, duplicates are taken after coarse crushing and pulverisation at a rate of 1:20 alternating between the two. These are subject</li></ul>

Criteria	Status
Quality of assay data and laboratory tests	<ul> <li>A four acid "near-total" digestion is used to determine concentrations for silver, copper, iron, lead, sulphur and zinc. Following extensive test work this method underwent a change in October 2014 to make it consistent with other MMG projects. Previously it used a 0.4g sample in a HF-HNO3-HCIO4 digestion, with HCI leach and finished using ICP-AES. Since October 2014, the sample charge weight is 0.2g in the same acid digestion maintaining the sample/solution ratio as the previous method. There is no material impact as a result of this change and is an ore grade method suitable for use in VHMS deposits.</li> <li>Prior to October 2014 a 30g fire assay with AAS finish was used to determine the gold concentration for RC chips and DD core samples. This method was considered most suitable for determining gold concentrations in rock with sulphide rich material and is a total digest method. However, the precision of AAS was limited to 20 times detection limit which coincided with the value at which gold was deemed significant. Therefore, while the charge weight remains the same the determination in now by ICP-AES. Grades above 10g/t are then determine using AAS.</li> <li>Gold and silver assay method: fire assay, AAS FA-AAS.</li> <li>Historic analysis includes fire assay, quar egia, four acid digest and AAS or ICP.</li> <li>No geophysical tools, spectrometers or handheld XRF instruments have been used in the analysis of samples external to the laboratory for the estimation of Mineral Resources.</li> <li>Matrix-matched certified reference materials (sourced from Golden Grove and prepared by Ore Research Pty. Ltd.) with a wide range of values are inserted at a rate of 1:20 into every RC and DD to assess laboratory accuracy, precision and possible contamination. A certified blank is inserted at a rate of 1:50. Five Quartz flushe are inserted at the end of any significant ore horizon.</li> <li>QAQC data returned are checked against pass/fail limits once the results have been loaded into</li></ul>
Verification of sampling and assaying	<ul> <li>Acceptable levels of accuracy and precision have been established.</li> <li>Significant intersections are reviewed by a senior geologist and other site geologists. Where there is a significant intersection in the oxide zones holes have either been twinned or scissored.</li> <li>A program of twinned holes was drilled for the Gossan Hill Copper Oxide deposit to check correlation with historic data. Good correlation was established. A full report of these twinned holes was written.</li> <li>No specific twinned holes have been drilled at the Golden Grove underground sulphide deposits. However nearby and scissor drillholes show compatible geology and results.</li> <li>Underground DD logging is recorded directly in a secure Geobank Database which has inbuilt validation functions plus additional triggers to prevent incorrect data capture and importation.</li> <li>Selected Exploration and Delineation DD are graphically logged on paper before entry into the database. All paper logs are scanned to pdf and hardcopies kept in labelled folders. Periodic review is undertaken to ensur data has been correctly transcribed.</li> <li>Assay data is retained in text files (.SIF) and stored once loaded into the database.</li> <li>Samples of RC drillholes are retained in chip trays and the remaining drill core is stored in core trays at the core yard.</li> <li>The database has grown as each previous owner added data to it. During the 1990's the database was in Explorer III, a Microsoft Access<sup>™</sup>-based application. In 2008 the data was migrated to a Micromine Geobank<sup>™</sup> database. Validation of data has been performed during each migration and is periodically reviewed against hardcopy records.</li> <li>An additional field in the results table is used to ensure all data is displayed in the appropriate units. This allows comparison of the data in standard units and aids in calculating Mineral Resource models.</li> <li>All re-assayed data will replace original results that failed QAQC; both results are retained in the database,</li></ul>

Criteria	Status				
Location of data points	<ul> <li>All underground of expected accurace Trimble RTK R8 C</li> <li>Before 2016 all d and Boart Longye off the rod string 30m using an Eas</li> <li>Since 2016 the C surveying. Holes inside +/- 20 degr then at end of ho</li> <li>The accuracy and</li> <li>A local grid system conversion is as for</li> </ul>	Irillhole collars are picked u y of 10mm. Surface exploi PS with an expected accu rillholes were down hole si arl) once each drillhole wa by our onsite survey depai tman single shot camera w namp and Reflex north see outside of 20 degrees dip ees are surveyed using the e every 10m. quality of historic surveys n (GGMINE) is used. It is no ollows:	up by EMR surveyors usin, ration drillhole collars are p racy of 40mm. urveyed gyroscopically by is completed. This was tied rtment while the rig was d /hile the hole is in progress eking tools have been utilis are surveyed every 12m u e gyroscopic components is generally unknown. otated 52.4 degrees west	g a Leica TS-15 (total s picked up by companies d into a starting azimur rilling. Surveys were a s in order to track devi sed for both our rig alig sing the north seeking of the tool every 30m of MGA94 zone 50. T	tation) with an surveyor using a (currently DDH1 th and dip picked up lso carried out every iation. gnment and function while holes while drilling and he two point
	Mine Grid to MGA	94 Two-Point Conversi	ON COMUNE North	MGA Foot	MGA North
	1	2644 47	10109.12	502002 5	6810260 7
	1	0242.2	20142.02	400490.1	6010200.7
	Drill spacing class     Ore Type	Drill spacing classification by ore type			
			Measured	Indicated	Inferred
	Primary Sulphide		20	40	60
	Partial Oxide Zind		20	40	60
	Oxide Copper		20	40	60
	<ul> <li>Data spacing is sufficient to establish geological and grade continuity for the appropriate classification of the Mineral Resources.</li> <li>Drillholes greater than 60m x 60m may not necessarily be classified as Mineral Resources. This will be dependent on the geometry of the drillholes and the ore body under study.</li> <li>DD samples are not composited prior to being sent to the laboratory however the sample lengths taken by Geologists currently range from 0.5m to 1.0m.</li> <li>Current gold pit RC grade control drilling is sampled on 1m intervals. Past RC samples (gold and copper) up to 5m has occurred.</li> <li>Underground drive mapping below the surface deposits supports understanding of geological structure and strike continuity and this data is incorporated into the wireframes and domains modelled.</li> </ul>				
Orientation of data in relation to geological structure	<ul> <li>Drilling has mostl frequently overlap</li> <li>No significant same</li> </ul>	y been oriented on section and are scissored as drilli pling bias has been recogni	ns that are orthogonal to t ng is oriented from both f sed due to orientation of tl	ne strike of mineralisat ootwall and hanging-v ne drilling in regard to r	tion. Drillholes vall directions. nineralised structures.

Criteria	Status		
Sample security	Measures to provide sample security included:		
	<ul> <li>Adequately trained and supervised sampling personnel.</li> </ul>		
	<ul> <li>Half-core samples placed in a numbered and tied calico sample bags.</li> </ul>		
	<ul> <li>Bag and sample numbers are entered into Geobank database.</li> </ul>		
	- Samples are couriered to assay laboratory via truck in plastic bulker containers.		
	<ul> <li>Assay laboratory checks off sample dispatch numbers against submission documents and reports any inconsistencies.</li> </ul>		
	- Remaining DD core is stored within the Golden Grove core yard.		
Audits or Reviews	• The most recent laboratory audit was conducted on the 8th of May 2018, while the previous one was conducted on 1st February 2016. No major concerns were raised.		
	<ul> <li>External Competent Person (CP) and peer review processes carried out.</li> </ul>		
	<ul> <li>An internal review of RC and DD core sampling procedures were completed in 2014. The sampling procedures were found to meet industry standards.</li> </ul>		
	• In 2012 Paul Blackney and David Gray of Optiro completed a review of the Gossan Hill Gold Oxide data. The		

review found there was no historic QAQC data (1990 to 2000) around Gossan Hill. This has now been rectified.

#### Section 2 Reporting of Exploration Results

Criteria	Status					
Mineral tenement and land tenure	The mineral tenem	nent and land tenure stat	tus of the Golden Gro	ve operations are listed	d in the below table.	
	Mineral tenement and land tenure status for Golden Grove operations					
status	Tenement No.	Prospect Name	Date Expires	Term Years	Date Granted	
	M59/03	Scuddles	08/12/2025	21	28/01/2005*	
	M59/88	Chellews	18/05/2030	21	20/04/2009*	
	M59/89	Coorinja	18/05/2030	21	20/04/2009*	
	M59/90	Cattle Well	18/05/2030	21	20/04/2009*	
	M59/91	Cullens	18/05/2030	21	20/04/2009*	
	M59/92	Felix	18/05/2030	21	20/04/2009*	
	M59/93	Flying Hi	18/05/2030	21	20/04/2009*	
	M59/94	Bassendean	18/05/2030	21	20/04/2009*	
	M59/95	Thundelarra	18/05/2030	21	20/04/2009*	
	M59/143	Bassendean	09/05/2031	21	21/04/2009*	
	M59/195	Gossan Hill	17/05/2032	21	17/06/2011*	
	M59/227	Crescent	07/05/2033	21	08/05/2012*	
	M59/361	Badja	01/03/2037	21	01/03/2016*	
	M59/362	Badja	01/03/2037	21	01/03/2016*	
	M59/363	Badja	01/03/2037	21	01/03/2016*	
	M59/543	Walgardy	04/02/2023	21	05/02/2002	
	M59/480	Marloo	01/07/2029	21	02/07/2008	

\* Renewal date

• There are no known impediments to operating in the area, but the operation is subjected to environmental conditions pertaining to land and water management, as well as adherence to cultural sensitivity pertaining to the local indigenous people.

• All tenements are 100% owned by EMR-Golden Grove.

Criteria	Status			
Exploration done by other parties	<ul> <li>Original definition and exploration drilling were performed by Joshua Pitt, of Aztec Exploration, in 1971.</li> <li>From 1971 until 1992 multiple joint ventures continued the definition of the Mineral Resource, with highlights being the Scuddles, A Panel Zn, B Panel Zn, C Panel Zn and Cu discoveries. Parties involved include Amax Exploration, Esso Exploration, Australian Consolidated Minerals and Exxon.</li> <li>Newmont, Normandy, Oxiana, OZ Minerals, MMG and EMR have all been involved with the drilling and exploration of the Golden Grove leases since 1991.</li> </ul>			
	<ul> <li>The exploration and resource geology gloups remained diremanded throughout the O2 Minerals, which and Erok takeovers; hence the exploration management and methods have effectively remained constant since Oxiana acquired the project in 2005.</li> <li>Exploration on the Northern and Southern Leases around the Golden Grove Tenements is ongoing and being conducted by EMR.</li> </ul>			
Geology	<ul> <li>The mineralisation style is volcanogenic hosted massive sulphide (VHMS) which occurs as sub-vertical lenses within layered sediments and volcanics.</li> <li>The Golden Grove deposits are located in the Murchison Province in the North-Western part of the Achaean Yilgarn Craton in Western Australia within the Yalgoo Greenstone Belt. Mineralisation occurs at the base of the Warriedar Fold Belt ("WFB") within a sequence of felsic to intermediate volcaniclastic sediments, lavas and associated autoclastic breccias.</li> <li>The Golden Grove Domain that hosts the Gossan Hill and Scuddles deposits lies along the northeast flank of the WFB. The Mougooderra Fault (west), recrystallised monzogranite (east) and post folding granites (north and south) bound the domain. The current interpretation of the structure places the Golden Grove Domain on the eastern limb of a syncline. The stratigraphy has a westerly younging direction and dips steeply west.</li> </ul>			
Drillhole information	• Over 27,500 drillholes and associated data are held in the database. This is a Mineral Resource Statement and is not a report on Exploration Results hence no additional information is provided for this section.			
Data aggregation methods	<ul> <li>This is a Mineral Resource Statement and is not a report on Exploration Results hence no additional information is provided for this section.</li> <li>No metal equivalents were used in the Mineral Resource estimation</li> </ul>			
Relationship between mineralisation widths and intercept lengths	<ul> <li>Drilling has been targeted to achieve intersections as close to the true thickness as possible, however large differences between intercept and true widths occur. The impact of this is minimised as intercepts are modelled in three-dimensions for Mineral Resource estimation.</li> </ul>			
Diagrams Long-projection of the Golden Grove deposits				
	пуing Hi Grassi Gossan Valley Гelix. Gossan Hill Mine Scuddles Mine			
	0002 2.5km 5002			
Balanced reporting	This is a Mineral Resource Statement and is not a report on Exploration Results hence no additional information     is provided for this section.			
Other substantive exploration data	• This is a Mineral Resource Statement and is not a report on Exploration Results hence no additional information is provided for this section.			
Further work	<ul> <li>Exploration and delineation drilling will continue underground, and the results will be modelled and reported in subsequent Mineral Resource estimates.</li> <li>Surface exploration activities including RC and DD drilling will continue on the mining leases.</li> </ul>			

Criteria	Status				
Database Integrity	<ul> <li>The following measures are in place to ensure database integrity: <ul> <li>Golden Grove uses an SQL database system.</li> </ul> </li> <li>Data is logged directly into Micromine Geobank™ (front-end software) using wireless transfer protocols on Panasonic Toughbook™ portable computers. A limited number of primary tables have read/write privileges to the geologist and geotechnicians. User profiles restrict the data that any individual can access and alter.</li> <li>Data validation in Microsoft Excel to check survey and collar coordinate records, data overlaps, extreme values (outliers), blank or misallocated data and below detection limit assay results - effectively a date stamped audit trail.</li> <li>The database is fully backed up each night with hourly log backups during the day. Data backups from the previous seven days are stored on the database server. Data older than seven days is backed up onto tape and stored securely.</li> <li>Assays are imported electronically from files (.sif) received from the laboratory</li> <li>Drillholes are checked and locked from users modifying data whenever assays are received.</li> <li>The measures described above ensure transcription or data entry errors are minimised.</li> <li>Data is validated on-entry using library of codes and key fields which ensure intervals cannot duplicate or overlap.</li> <li>Collar co-ordinates and drilling direction (azimuth and dip) are validated via comparison of planned data to surveyed data.</li> <li>Deviations of more than 1 degree over 30m of drillhole depth are flagged and evaluated for redrilling. All data attributed to a given drillhole undergoes final validation and sign-off procedure. Any errors found are rectified prior to releasing the data for Mineral Resource estimation.</li> <li>Data validation in Microsoft Excel to check survey and collar coordinate records, data overlaps, extreme values (outliers), blank or misallocated data and below detection limit assay results - effectively a date stamped audit trail.</li> </ul>				
Site Visits	<ul> <li>The Competent Person is employed full-time at Golden Grove and is satisfied with the standard of the procedures instituted by the site.</li> <li>The Resource third party reviewer of the resources has visited site on several occasions with the most recent being in mid-2019. No material issues affecting the resource estimates were identified during that visit</li> </ul>				

### Section 3 Estimating and Reporting of Mineral Resources

Criteria	Status				
Geological interpretation	<ul> <li>Confidence in geological interpretation of the mineral deposits and associated lithologies is considered to be moderate to high.</li> <li>Data used for the interpretation included geological mapping of development drives, assay results and geological logging of all DD holes.</li> <li>Alternate structural and geological interpretations are routinely considered and tested with diamond drilling.</li> <li>Geological interpretation was totally reviewed in every drill hole in order to get a consistent geological interpretation in the whole area.</li> <li>Geological, which have been used to construct block models and to control grade estimation as hard boundaries.</li> <li>Primary sulphide interpretation:         <ul> <li>Zinc-rich mineralisation occurs as massive to semi-massive sulphide lenses. These lenses also contain moderate copper, lead, silver and gold mineralisation.</li> <li>Copper-rich mineralised lenses are composed of zones of chalcopyrite-rich stringers within quartz-rich domains. These domains can have moderate grades of gold and silver but are weakly mineralised with zinc and lead.</li> <li>Zinc and copper lenses are each surrounded by low-grade mineralisation haloes. Low-grade domains have been constructed for some of the deposits.</li> <li>Intrusive rocks and faults have been interpreted that cut across and displace mineralisation and stratigraphy.</li> <li>These domains were derived from the geology of the area. Lithological codes obtained from the logging of drillholes intersections on 10m spaced plan sections, though these sections are shortened or lengthened appropriately with clustering of data. Interpretations account for minplicit modelling in Leapfrog software. Other barnes and used to populate a matrix of indicator Kriging (CIK). Lithological information.</li> <li>Primary subplide domains are estable by populate a matrix of indicators in the database. This provides the indicator data to p</li></ul></li></ul>				
Dimensions	<ul> <li>The primary sulphide mineralisation at Gossan Hill and Scuddles comprises multiple steeply dipping zones. Each zone varies from 200m to 400m along strike, 200m to 700m down-dip and 3m to 20m in thickness. The current Mineral Resource is located from 200m to 1,900m below surface.</li> <li>Gossan Valley mineralisation is hosted in Golden Grove Member 4 (GG4) of the Golden Grove Formation. The nature of mineralisation is considered to be stratabound. The style of mineralisation at Gossan Valley is similar in nature to that of Gossan Hill and comprises multiple steeply dipping zones. Each zone varies from 50m to 450m along strike, 40m to 400m down-dip and 3m to 10m in thickness</li> <li>Oxide Copper is reported above the weathering profile. It is about 300m long, 80m deep and 20m to 30m in thickness.</li> <li>Partial Oxide Zinc mineralisation is approximately 450m long and was reported above the weathering profile.</li> <li>Partial Oxide Gold is reported mostly above the weathering profile and just below the surface. It is 120m long, 20m does and 10m to 20m in thicknes.</li> </ul>				

Criteria	Status
Estimation	Primary Sulphide
and modelling techniques	<ul> <li>Mineral Resource estimation for the primary sulphide Mineral Resource has been undertaken in Vulcan™ (Maptek) mining software using either Categorical Indicator Kriging (CIK) where data density and geological confidence permits, or conventional interpretation and wireframing where data density is low.</li> <li>For all deposits other than Gossan Valley, Felix, Flying High and D Zinc Extended, Categorical Indicator Kriging (CIK) has been used to estimate lithological domains in the block model. This uses the lithological logging data collected by Geologists to populate indicator fields in the drilling database. Variogram analysis is then performed on the indicators and a lithological domain model is produced.</li> </ul>
	<ul> <li>The Gossan Valley, Grassi and Felix mineralised domains were modelled using the conventional wireframing approach. The cut offs for the wireframes were 0.4% for copper and 2% for zinc.</li> </ul>
	- Copper, Zinc, Magnetite and barren sediment domains were modelled using the CIK method as described above
	<ul> <li>Cross-cutting intrusive dykes are barren and have been modelled as such, using 3D wireframes snapped to drilling data.</li> </ul>
	<ul> <li>Data compositing for estimation was set to 1m, which matches the majority of drillhole sample lengths underground and provides good definition across interpreted domains.</li> </ul>
	<ul> <li>Variogram analysis was reviewed and updated for all areas of the mine. This involved variography for both the Lithological Indicators and the sample grade data. Variogram analysis was undertaken in Supervisor (Snowder software, Isatis software and Vulcan™ (Maptek) software.</li> </ul>
	<ul> <li>Ordinary Kriging interpolation has been applied for the estimation of Cu, Zn, Pb, Ag, Au, Fe and density after lithology-domaining by CIK.</li> </ul>
	- The estimation method is considered appropriate for the estimation of Mineral Resources at Golden Grove.
	<ul> <li>Interpolation was undertaken in up to five passes.</li> </ul>
	<ul> <li>Discretisation was set to 4 x 4 x 4.</li> </ul>
	<ul> <li>Block model results are comparable with previous Mineral Resource estimations after depletion, additions due to drilling and re-modelling of the site.</li> </ul>
	<ul> <li>Assumptions about the recovery of by-products is accounted in the net-smelter return after royalty (NSRAR) calculation which includes the recovery of Cu, Zn, Pb, Ag and Au along with the standard payable terms.</li> <li>Iron has been estimated as it is related to the recovery of payable elements. Sulphur is also estimated in the</li> </ul>
	underground Mineral Resources. Underground waste material is used to back fill mined stopes or treated aspotential acid forming (PAF)material when moved to the surface
	<ul> <li>The block size ranges from 20 m (x) x 50 m (y) x 50 m (z) in the waste domains down to 2 m (x) x 10 m (y) x 10 m (z) (with 1 m (x) x 5 m (y) x 5 m (z) sub-cells) in well drilled areas where drilling has been undertaken on a 10 m x 10 m pattern with samples taken on 1 m intervals.</li> </ul>
	• No assumptions have been made about the correlation between variables. All variables are comparably informed and independently estimated.
	<ul> <li>Non-sampled intervals in drillholes have been flagged with values of -99 in the primary database, which are then assigned detection limit values for grade interpolation in waste areas. This is undertaken to ensure that any sampled and mineralised grades in these domains are not over-represented in the estimate.</li> </ul>
	<ul> <li>Extreme grade values were managed by upper grade capping based on statistical assessment evaluated for all variables and domains. Consideration was also given to the metal content above the top cap value.</li> <li>Mining voids are 'stamped' onto the block model to ensure depleted material is excluded from the Mineral</li> </ul>
	Resource report. As well, mined stope voids are translated 3m east and west to ensure material in the "skins" of stopes (not able to be mined) are also excluded from the Mineral Resource report.
	<ul> <li>The estimation validation process included the following steps:</li> </ul>
	<ul> <li>Visual checking of block model estimated grades against the input drilling data.</li> </ul>
	- Comparison of block model and sample statistics.
	<ul> <li>Drift plots comparing block model against input samples by easting, northing and RL.</li> <li>Grade/Tonnes curves as well as comparison of the existing and updated models' tonnes, grade and metal content by elevation.</li> </ul>

Criteria	Status				
	Oxide and Partial Oxide				
	<ul> <li>The current block modelling for the oxide Mineral Resource covers the Tryall area and the ABCD Zinc models and includes all the material above the weathering surface.</li> </ul>				
	<ul> <li>Block modelling for the copper oxide, oxide gold and partial oxide zinc Mineral Resources is undertaken in Maptek Vulcan software with the following key assumptions and parameters:</li> </ul>				
	<ul> <li>Ordinary Kriging interpolation has been applied for the estimation of Cu, Zn, Pb, Ag and Au in the ABCD model. Inverse distance estimation method was applied in the Tryall Copper oxide deposit.</li> </ul>				
	<ul> <li>Data compositing for estimation was set to match the majority of drillhole sample lengths and provides good definition across interpreted domains.</li> </ul>				
	<ul> <li>Variogram analysis was reviewed and updated for new interpretations and for existing domains materially affected by new drill data.</li> </ul>				
	<ul> <li>There have been no assumptions made regarding the recovery of by-products.</li> </ul>				
	<ul> <li>For the gold oxide material, copper has been identified as deleterious for Carbon in Pulp (CIP) gold extraction. Material with more than 0.2% Cu is separately stockpiled.</li> </ul>				
	<ul> <li>Iron has been estimated as it is related to the recovery of payable elements.</li> </ul>				
	<ul> <li>Sulphur was estimated within Au, Ag and Cu domains for the oxide material for environmental considerations.</li> <li>Sulphur within the Zn domain was estimated in the partial oxide material. No other deleterious or ancillary elements have been modelled.</li> </ul>				
	• No assumptions have been made about the correlation between variables. All variables are comparably informed and independently estimated.				
	<ul> <li>Extreme grade values were managed by upper grade capping based on statistical assessment evaluated for all variables and domains. Consideration was also given to the metal content above the top cap value.</li> </ul>				
	<ul> <li>The block models and estimate has been validated in the following ways:</li> </ul>				
	<ul> <li>Visual checking of block model estimated grades against the input drilling data</li> </ul>				
	<ul> <li>Comparison of block model statistics against sample statistics</li> </ul>				
	- Swath plots comparing average block model estimated grades against input samples by easting, northing and RL.				
Moisture	All tonnages have been estimated on a dry basis.				

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#### Criteria

parameters

Cut-off

Status

Primary sulphide Mineral Resources were reported above a cut-off Net Smelter Return (NSR) dollar value.

• The Golden Grove Mineral Resources were reported based on specific cut-off values by mine area as the ore transport costs to surface vary within the mine. These are summarised in the table below.

Resource Model	2019 NSR Cut-off (AUD \$/t)	2020 NSR Cut-off (AUD \$/t)
ABCD	123.00	121.83
ABCD Oxide	123.00	121.83
Amity	132.00	129.55
Camberwarra	129.00	125.02
D Zinc	128.00	124.69
Tryall	128.00	122.95
Tryall Cu-Au Oxide	123.00	122.95
Ethel/Catalpa	130.00	126.47
Hougoumont Main and Hangingwall	132.00	129.55
Hougoumont Extended	-	136.87
Upper Xantho	134.00	130.95
Xantho Extended	134.00	137.43
Oizon	134.00	136.26
GG4	124.00	124.69
Scuddles – Zinc	126.00	126.13
Scuddles – Copper	126.00	126.13
Scuddles Oxide	-	122.95
Cervantes – Zinc	128.00	133.57
Cervantes – Copper	128.00	133.57
Gossan Valley	140.00	135
Grassi	140.00	135
Felix	140.00	135
Flying Hi	145.00	145

• Metal Price and exchange rate assumptions as shown in the table below.

Commodity	2019	2020
Cu (USD/t)	7716	7716
Pb (USD/t)	2866	2425
Zn (USD/t)	3306	3306
Au (USD/oz)	1500	1600
Ag (USD/oz)	23	23
Ex-rate (AUD: USD)	0.75	0.75

• A minimum width of mineralisation of approximately 2m is applied to ensure narrow mineralised zones which have very low potential of eventual economic extraction have been excluded from the report.

• Partial oxide gold and oxide gold Mineral Resources were reported at a cut-off grade of 1.1g/t Au for the Gossan Hill gold Mineral Resource.

• The reporting cut-off grades are in line with EMR's policy on reporting of Mineral Resources which have reasonable prospects of eventual economic extraction.

Criteria	Status
Mining factors or assumptions	<ul> <li>Underground mining at Golden Grove comprises long-hole open stoping and ore is hauled or hoisted to the surface. The minimum mining width is 3m, which is based on the minimum spacing for a dice five production drill-hole pattern. This applies to the copper sulphide, zinc sulphide and partial oxide zinc.</li> <li>Any blocks within three metres of the Hangingwall or footwall of a mined void is deemed non-recoverable and is not reported.</li> <li>Surface mining is applied to the oxide copper mineralisation and involves the open pit mining method.</li> <li>No mining factors and assumptions have been proposed for the oxide copper</li> </ul>
Metallurgical factors or assumptions	<ul> <li>The EMR Golden Grove metallurgical model has been updated to enable triple sequential flotation processing system. This processing system increases flotation and downstream capacity carrying out a 3-stage sequential flotation process for Cu concentrate, Pb concentrate and Zn concentrate in one flow without having to do campaign processing. This metallurgical model has been incorporated into the 2020 block models through the NSR value calculations.</li> <li>Traditionally metallurgical processing of ore at EMR Golden Grove involves campaign crushing, grinding, sequential froth flotation followed by filtration before being transported to market as concentrates of copper, zinc and lead (including high-precious metals). This campaign processing will be replaced by the triple sequential flotation system with improved recoveries and reduced downtimes for campaign change overs.</li> <li>Primary sulphide material: <ul> <li>Metallurgical factors are incorporated into block model values via the calculation of the NSR value.</li> <li>Maximum recovery is at 96%. However, recovery of payable minerals is dependent on iron ratios. Lower iron mineralisation is more amenable to copper and zinc recovery.</li> <li>Higher grade zinc mineralisation is amenable to better precious metal (which is projected to be about 66%) recoveries.</li> </ul> </li> <li>Au and partial oxide gold material: <ul> <li>The gold and silver in the oxide material will be recovered at approximately 90% through a carbon in pulp (CIP) circuit. In the CIP process, copper is considered to be a deleterious element. Currently the model only contains ore grade assays for copper, no acid or cyanide soluble assays have been performed.</li> <li>The partial oxide zinc and oxide copper material can cause issues as it contains a mixture of oxides and</li> </ul> </li> </ul>
Environmental factors or assumptions	<ul> <li>primary sulphides. This can be mitigated through a blending strategy with traditional sulphide.</li> <li>Material from underground and the open pit is sent to a designated stockpile based on material classification of either potentially acid forming (PAF) or non-acid forming (NAF) material. Waste material with less than 0.2% sulphur is classified NAF while material with 0.2% sulphur or more is classified PAF. PAF/NAF classification is based on recommendation from Coffey Environment after their test work on-site in 2012.</li> </ul>
Bulk Density	<ul> <li>All core samples are measured for bulk density in the on-site core processing facility. The bulk density method used is the Archimedes' principle (weight in air and weight in water). The core is air dried and generally has low permeability and so the results are considered suitable for Golden Grove.</li> <li>No wax coating or sealing of core is applied. Density values in the Mineral Resource models are estimated using Ordinary Kriging within the mineralised domain shapes.</li> <li>Density data for the oxidized areas of the mine (Gossan Hill Cu/Au) is considered sparse. For this reason, bulk density is not estimated for these areas, but a sub-domained mean value is assigned for each of the fresh/transitional/oxide ore/waste domains</li> </ul>

# Criteria Status Classification • Primary Sulphide Mineral Resources:

 The Resource has been classified primarily on data spacing with consideration for geological risk and uncertainty in some underlying parameters. Measured Mineral Resources was considered appropriate with a drillhole grid spacing of 20m. Indicated Mineral Resources was considered appropriate with a drillhole grid spacing of 40m and Inferred Mineral Resources was considered appropriate with a drillhole grid spacing of 60m. Details are in the table below.

#### **Quantitative Mineral Resource Classification Criteria**

	Ellips	e Orientation	n Ellij		llipse Axes		Samples Per Estimate		
Classification	Bearing (Z)	Plunge (Y)	Dip (X)	Major	Semi- Major	Minor	Minimum	Maximum	Min No. Holes
Measured	0	0	90	20	20	10	10	24	5
Indicated	0	0	90	40	40	20	6	24	3
Inferred	0	0	90	60	60	20	4	24	2

 A Kriging estimation run was used to record data density metrics including the number of samples and drill holes, and sample distance.

 Wireframes were then constructed to form classification solid shapes around contiguous blocks of like classification. This method produces continuous volumes of classified mineral resources and avoids patchy classification. The material misallocation and smoothing are negligible (less than 1%).

- The Resource includes the classifications, Measured, Indicated and Inferred with some other material set as unclassified.
- Oxide Copper and Partial Oxide Zinc Mineral Resources:
  - Classification of the Mineral Resource was primarily based on confidence in the assayed grade and geological continuity.
  - Geological confidence is supported by nearby underground exposures including geological mapping and drillhole data, which in turn reinforces drillhole sample results and domain volumes. Confidence in the Kriged estimate is associated with drillhole coverage and analytical data integrity.
  - Measured Mineral Resources was considered appropriate with a drillhole grid spacing of 20m.
  - Indicated Mineral Resources was considered appropriate with a drillhole grid spacing of 40m.
  - Inferred Mineral Resource was considered appropriate with a drillhole grid spacing of 60m and within the mineralisation domain.
- The Competent Person is satisfied that the stated Mineral Resource classification reflects the geological domains interpreted and the estimation constraints of the deposits. The Resource classification applied is consistent with the understanding of the geological controls interpreted and the estimation constraints and reflects the Competent Person's view of the deposits.

Audits or reviews • The Block modelling, estimation, validation and Mineral Resource tabulations were peer reviewed by an external third-party Stuart Masters BSc (Geol/Geoph), CFSG FAusIMM, MAIG, with over 34 years' experience.

- Stuart noted the 2020 Golden Grove Resources are robust and classified appropriately
- The estimates are supported by:
  - High quality data
  - A good understanding of the local geology gained over the operating history
  - Modelling and estimation methods and parameters that yield results concordant with the Reconciliation data
- All stages of the Resource estimation have undergone an internal peer review process, which has documented all phases of the process.
- Further review of all resources was undertaken internally by EMR Golden Grove geologists through a peer review process.
- No material issues with the Mineral Resource estimates were identified.

	Status								
Discussion of relative accuracy/ confidence	<ul> <li>The Mineral Resource data collection, data analysis and estimation techniques used for the Golden Grove deposits are consistent with the currently mining areas both underground and open cut and there has not been any known major discrepancies between the mined grades and the milled grades.</li> <li>Confidence limits of grade and tonnage have not been calculated as reconciliation data confirm the models are performing is line with expectations as implied by their classification.</li> <li>These estimates relate to the lens (deposit) scale i.e. in the order of millions of tonnes.</li> <li>Reconciliation of block model against mill production for zinc and copper stoped volumes, tonnes and grade for the period June 2019 to June 2020 is shown in the table below. Block models performed very well over that period. Tonnes reconcile less than 1% while grades have been similar for copper and over estimated by 2% for zinc.</li> </ul>								
	Reconciliation of zinc and copp	per July 2019	to June 20	20					
	Reconciliation of the mine claimed comparison of all available measur through the mining process.	Reconciliation of the mine claimed grade against to milled actual grade occurs monthly. The process involves a comparison of all available measurements nodes relating to the tonnes and grade of the process at various stages through the mining process.							
	The reconciled mined grades are then evaluated against the block model reported grades for the CMS (cavity monitoring system) stope voids, in order to evaluate block model performance without the influence of mine call factors.								
	of mine call factors.						. the initiaen	ce	
	of mine call factors. Source	Tonnes	Cu (%)	Zn (%)	Pb (%)	Fe (%)	AG (g/t)	ce Au (g/t)	
	of mine call factors. Source Reconciled Mined Grade Zn Ore	<b>Tonnes</b> 832581	<b>Cu (%)</b> 1.3	<b>Zn (%)</b> 7.6	<b>Pb (%)</b> 0.9	<b>Fe (%)</b> 15.0	AG (g/t) 62.1	ce Au (g/t) 2.4	
	of mine call factors. Source Reconciled Mined Grade Zn Ore Reconciled Mined Grade Cu Ore	<b>Tonnes</b> 832581 534085	<b>Cu (%)</b> 1.3 2.7	<b>Zn (%)</b> 7.6 0.4	<b>Pb (%)</b> 0.9 0.1	<b>Fe (%)</b> 15.0 24.9	AG (g/t) 62.1 18.5	<b>Au (g/t)</b> 2.4 0.7	
	of mine call factors. Source Reconciled Mined Grade Zn Ore Reconciled Mined Grade Cu Ore Total	Tonnes           832581           534085           1,366,666	Cu (%) 1.3 2.7 1.8	<b>Zn (%)</b> 7.6 0.4 4.8	Pb (%) 0.9 0.1 0.6	<b>Fe (%)</b> 15.0 24.9 <b>18.9</b>	AG (g/t) 62.1 18.5 45.1	Au (g/t) 2.4 0.7 1.7	
	of mine call factors. Source Reconciled Mined Grade Zn Ore Reconciled Mined Grade Cu Ore Total Source	Tonnes           832581           534085           1,366,666           Tonnes	Cu (%) 1.3 2.7 1.8 Cu (%)	Zn (%) 7.6 0.4 4.8 Zn (%)	Pb (%) 0.9 0.1 0.6 Pb (%)	Fe (%) 15.0 24.9 18.9 Fe (%)	AG (g/t) 62.1 18.5 45.1 AG (g/t)	Au (g/t) 2.4 0.7 1.7 Au (g/t)	
	of mine call factors. Source Reconciled Mined Grade Zn Ore Reconciled Mined Grade Cu Ore Total Source Modelled Grade Zn Ore	Tonnes           832581           534085           1,366,666           Tonnes           832581	Cu (%) 1.3 2.7 1.8 Cu (%) 1.3	Zn (%) 7.6 0.4 4.8 Zn (%) 7.9	Pb (%) 0.9 0.1 0.6 Pb (%) 0.8	Fe (%) 15.0 24.9 18.9 Fe (%) 13.2	AG (g/t) 62.1 18.5 45.1 AG (g/t) 58.1	Au (g/t) 2.4 0.7 1.7 Au (g/t) 2.4	
	of mine call factors. Source Reconciled Mined Grade Zn Ore Reconciled Mined Grade Cu Ore Total Source Modelled Grade Zn Ore Modelled Grade Cu Ore	Tonnes         832581         534085         1,366,666         Tonnes         832581         533262	Cu (%) 1.3 2.7 1.8 Cu (%) 1.3 2.7	Zn (%) 7.6 0.4 4.8 Zn (%) 7.9 0.2	Pb (%) 0.9 0.1 0.6 Pb (%) 0.8 0.0	Fe (%) 15.0 24.9 18.9 Fe (%) 13.2 24.3	AG (g/t) 62.1 18.5 45.1 AG (g/t) 58.1 12.5	Au (g/t) 2.4 0.7 1.7 Au (g/t) 2.4 0.4	

• The Competent Person is satisfied with the accuracy and the confidence of the Mineral Resource estimates.

# **Golden Grove Ore Reserves Estimate**

### Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul> <li>The Mineral Resource is based on geological block model provided by EMR Golden Grove Geology department. These models were depleted as of 30 June 2020. The Vulcan block models were converted to a Datamine block models to be used for interrogation.</li> <li>This Ore Reserve is reported for the Golden Grove operation, and only includes material with a suitable classification and appropriate modifying factors. The Mineral resources are stated inclusive of this Ore Reserve</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	• The Competent Person is a full-time employee of the site on a FIFO roster rotation.
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<ul> <li>The Ore Reserves have been designed based on the current operating practices and procedures at the mine. All Ore Reserves were estimated by construction of three-dimensional mine designs using DESWIK software and reported against the updated Mineral Resource block model. After modifying factors are applied, all physicals (tonnes, grade, metal, development and stoping requirements etc.) were compared back to the area cut-off value, where each stope was economically evaluated and the total Ore Reserve was evaluated to assess its economic viability</li> <li>Previous mine performance has demonstrated that the current mining methods are technically achievable and economically viable. The modifying factors are based on historical data utilising a similar mining method.</li> </ul>

Criteria	JORC Code explanation	Commentary
Cut-off parameters	<ul> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>An NSR cut off was calculated for each orebody, varied by haulage costs which were calculated based on average haul distance. A minimum mining width of 3m was used to identify the mineable envelope that formed the basis of the mine design.</li> <li>A marginal cut-off grade of NSR A\$53.7/tonne for development material was used to classify material contained within the mine design as Ore or Waste.</li> <li>The NSR cut off grades were derived from recent actual costs and budget cost models along with the following metal price and exchange rate assumptions <ul> <li>Copper Price US\$ 6,613.86/t.</li> <li>Zinc Price US\$ 21/oz.</li> <li>Gold Price US\$ 21/oz.</li> <li>Gold Price US\$ 2,094.39/t.</li> <li>AUD/USD 0.73</li> </ul> </li> <li>The following formula was used to calculate Copper Equivalent grade:</li> <li>CuEq (%) = Cu % + [ (Pb % x Pb Rec x 0.317) + (Zn % x Zn Rec x 0.367) + (Ag g/t x Ag Rec x 0.0001) + (Au g/t x Au Rec x 0.0068) ] / Cu Rec</li> <li>The following formula was used to calculate Zinc Equivalent grade:</li> <li>ZnEq (%) = Zn % + [ (Cu % x Cu Rec x 2.727) + (Pb % x Pb Rec x 0.864) + (Ag g/t x Ag Rec x 0.0003) + (Au g/t x Au Rec x 0.0186) ] / Zn Rec</li> <li>The weighted average recoveries for each metal to a saleable product at was determined to be 89% for Cu, 71% for Pb, 89%</li> </ul>
Mining factors or assumptions	<ul> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e., either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> </ul>	<ul> <li>A detailed mine design was carried out in Deswik CAD and based on known information about the orebody's physical characteristics and the geotechnical environment. The designs are consistent with what has been in practice on site. Modifying factors are applied to Measured and Indicated resources such that Measured Resources convert to Proved or Probable Reserves and Indicated Resources convert to Probable reserves.</li> <li>The selected mining methods are determined on an orebody-by-orebody basis. The mining method employed is longitudinal long hole open stoping, which is appropriate for the size and scale of the mineralisation and ground conditions. It is a pillar-less design (other than areas of sub-economic grade), and stopes will be filled with unconsolidated rock fill or Cemented Hydraulic Fill (CHF). In certain areas of Xantho Extended, transverse long hole open stoping was selected where the width of the deposit and ground conditions were not appropriate for longitudinal long hole open stoping for backfill option from July 2021 onward.</li> </ul>

Criteria	JORC Code explanation	Commentary		
Mining factors or assumptions continued	<ul> <li>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource</li> </ul>	<ul> <li>Based on geotechnical parameters including the rock mass rating, tunnelling quality index, unconfined compressive strength, the hydraulic radius (HR) was determined. The HR i used to determine the stope design dimensions.</li> </ul>		
	<ul> <li>model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are used in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected</li> </ul>	<ul> <li>Major assumptions for stope design are as follows:</li> <li>Sub-Level Spacing Nominally 30 metres and double li of 60 metres when allowed. Pre-developed levels dic level intervals in those areas</li> </ul>		
		<ul> <li>Mining dilution: New mining areas (Hougoumont Extende Oizon, Xantho Extended) had dilution skins applied to design shapes, with the associated tonnes grade reported from the resource model. Remnant stope shapes have 109 applied. Development dilution was as the following table:</li> </ul>		
	mining methods.	Item Value Comment		

- - d, 6

Item	Value	Comment
Mine Dilution – Dev Lat Ore	1	Dilution for ore tasks where insitu NSR >= COV NSR – Dev
Mine Dilution – Dev Lat Waste GH	1.07	Dilution for GH waste tasks where insitu NSR < COV NSR – Dev
Mine Dilution – Dev Lat Waste SCU	1.1	Dilution for SCU waste tasks where insitu NSR < COV NSR – Dev
Mine Dilution – Dev Vert	1	Dilution for all vertical development

Mining recovery factors for discrete orebodies as per the following table:

Mining Recovery	Orebody
88%	GET
90%	GCW, GDZ., GOZ, GTR
93%	GAC
94%	GAM, GH6, GHW
95%	GAB, GCT, GQC, GXE, GXT, GXU, SCU, SCV
97%	GCC

- Minimum mining width: 3 metres

- This Ore Reserve Estimate is for the underground ore derived from Measured and Indicated Mineral Resources, inclusive of dilution. The dilution was estimated from the Resource Models using either designed skins or a manual dilution factor. As such, some Inferred and Unclassified Resources were included into the Estimate. The total Inferred and Unclassified material included in the Ore Reserve Estimate is approximately 688kt (<5% of the total Ore Reserve).
- Sufficient infrastructure is already in place to allow for the mine to operate. Additional underground infrastructure includes, but is not limited to, declines, raises, dewatering and ventilation infrastructure.

#### 13.0 Annexures Anne

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleteriouselements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<ul> <li>Processing of ores is by conventional rougher-cleaner flotation of ore ground to p80 of 106um. Coarse gold is recovered via gravity concentration prior to flotation. Mineralisation is relatively coarse and recoverable without fine grinding.</li> <li>Flowsheet at Golden Grove is relatively simple and common throughout the world for coarse grained VMS deposits. The process has been employed for 30 years.</li> <li>A four product (3 x concentrates 1 x tail) sequential flowsheet is being implemented in 2021. This has undergone extensive laboratory and plant scale validation work, third party technical review and is based on a similar flowsheet employed at Myra Falls in Canada. This will also be able to revert to current flowsheet configuration as required.</li> <li>Golden Grove does not have an active geo-metallurgical program. Ores are characterized based on elemental assays and ratios to infer mineralogy and determine expected metal recoveries and grades. These are used as benchmarks with any future ore test work programs for validation as to whether ore performs differently to historical feed.</li> <li>No assumptions or allowances have been made for deleterious elements. Typical deleterious elements (and minerals) for Golden Grove ores are Fluorine and Talc however metallurgical testing has shown that these will be well below concentrate specification limits.</li> <li>Given the mature operating and processing nature of Golden Grove, no bulk sampling or pilot scale test work was completed.</li> <li>Not applicable, there is no specification defined minerals at Golden Grove.</li> </ul>
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	<ul> <li>Golden Grove is a mature operating mine site and has conducted all environmental studies and have the necessary environmental permits and management plans in place to continue mining.</li> <li>The Gossan Hill and Scuddles underground mines operate under license L8593/2011/2 issued by the Western Australian Department of Water and Environmental Regulation (DWER) as required by the Environmental Protection Act 1986. This licence was issued 11 September 2014 and expires on 15 September 2024.</li> <li>Golden Grove has a working Closure Plan that is reviewed annually. The calculated closure costs for Golden Grove at 2019 are based on the latest Life of Asset review. The calculated total raw closure cost is \$69M.</li> </ul>
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	• The site is already established, having been continually operated for over 25 years. As such, all necessary infrastructure such as accommodation, communications, tailings storage, access, water supply offices and workshops are already in place.

Criteria	JORC Code explanation	Commentary
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul> <li>The capital costs for the project were derived from recent actual costs, quotes, budget estimates, and current underground contract mining rates.</li> <li>The operating costs for the study were derived from a combination of first principles build up, using current costs derived from the Golden Grove 2020 Q3 Forecast adjusted for abnormal costs (COVID related issues). The Q3 forecast is actuals for January – July and forecast for August – December 2020. This period was chosen as it best reflects the current operating strategy and philosophy for 2021 and beyond, along with current mining contract rates.</li> <li>The presence and impact of any deleterious elements are well understood and incorporated into actual operating costs for the operation.</li> <li>The metal prices used were: <ul> <li>Copper US\$ 6,613.86/t</li> <li>Zinc US\$ 21/oz.</li> <li>Gold US\$ 1,400/oz.</li> <li>Lead US\$ 2,094.39/t</li> </ul> </li> <li>The exchange rate used was A\$/US\$ 0.73.</li> <li>Transportation charges were based on agreements with transport contractors.</li> <li>Toll treatment charges were based on negotiations with the relevant companies.</li> </ul>
Revenue factors	<ul> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<ul> <li>The cut-off grade calculation was completed as a Net Smelter Return (NSR), and as such, considered set commodity prices, processing recoveries, transportation charges, treatment and refining charges, penalties, smelter payables and royalties</li> <li>Metal prices and currency exchange rates provided by EMR Corporate guidance</li> </ul>

#### 13.0 Annexures Ann

Criteria	JORC Code explanation	Commentary	
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product</li> </ul>	<ul> <li>Golden Grove has been in continuous operation for 28 years. The mine produces three concentrates comprising zinc, copper and HPM.</li> <li>The concentrates produced at Golden Grove are sold either direct to smelters or to trading companies.</li> <li>Zinc concentrate is sold under long-term contract.</li> </ul>	
	<ul> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	The level of deleterious element in the product is low and thus attractive from a marketing and demand perspective.	
		<b>Low precious metal copper concentrate</b> this is a relatively low-grade copper concentrate with gold and silver. The concentrate does not have any deleterious elements at levels that would incur a penalty.	
		<b>High precious metal concentrate</b> This is sold on a shipment by shipment based on the concentrate specifications and to maximise the value of the contained metals.	
		Pricing is based on the value of contained metals and by-product credits.	
		The prices for the metals contained are set based predominantly on LME pricing which is a mature, well established and publicly traded exchange.	
		Golden Grove produces concentrates that are reasonably clean with limited penalties applied which assists in the marketing and pricing achieved, with the majority of these concentrates sold to traders who then on-sell to various custom smelters, mainly in China, South Korea and Malaysia.	
		Golden Grove relies upon independent expert publications and other sources in forming a view about future demand and supply and the likely effects of these factors on metal prices and treatment charges.	
		The majority of Zinc and Copper concentrates are sold under contract expiring in 2025. HPM concentrate is also sold under a long-term offtake arrangement whereby the buyer has the right of first offer allowing Golden Grove to market each shipment on an individual basis.	
		Commodity prices and exchange rates have been provided by EMR Capital based on the 75th percentile of the consensus range taking the weighted average of forecasts from 2022 – 2024 and longer term from 10 global investment banks. Shorter term is based on the median price of a group of 11 forecasters.	
		Not applicable	

Criteria	JORC Code explanation	Commentary	
Economic	<ul> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs</li> </ul>	<ul> <li>The Ore Reserves underpin site operating budgets and operating schedules which undergo revisions on a monthly basis. Site operating and capital costs are well understood. Pre-tax NPV cashflow analysis indicated that the Ore Reserves are economic at the assumed revenue and cost inputs using an 8% discount rate.</li> <li>Sensitivities to the major costs (mining &amp; processing) and to NSR revenue were tested across a range of ±20%, as shown:</li> </ul>	
		600 400 200 -20% -15% -10% -5% 0% 5% 10% 15% 20% -400 -600 Mining Costs NSR Revenue Proc, Maint G&A	
Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	<ul> <li>The site is already established, having been continually operated for many years. As such, all social licences to operate are already in place.</li> </ul>	
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>As such, any naturally occurring risks to the site are considered unlikely.</li> <li>Marketing contracts with smelters are already in place</li> <li>All government approvals are currently in place</li> </ul>	

Criteria	JORC Code explanation	Commentary
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<ul> <li>Ore Reserves are based on geological and mining confidence and categorised as either Proved or Probable. Modifying factors are applied to Measured and Indicated Resources such that Measured Resources convert to Proved or Probable Reserves and Indicated Resources convert to Probable reserves</li> <li>This result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources is less than 10% of the total Probable Ore Reserve.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<ul> <li>The project parameters, Mineral Resources and outcomes have been prepared and reviews by EMR Golden Grove.</li> <li>AMC Conducted a Technical report for LOM and reserve 2019</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The modifying factors are applied in this study are those that have been in use at Golden grove for many years. Ongoing reconciliation has demonstrated that they are appropriate and are in line with the relative accuracy expected at a pre-feasibility study level or better. The approach applied has been deemed appropriate by the Competent Person.</li> <li>Confidence in the mine design and schedule are high as mining rates and modifying factors are based on actual site performance. Mine design is consistent with what has been effective previously.</li> </ul>

#### **Capricorn Copper Mineral Resources Estimate**

# Mineral Resource JORC (2012) Assessment and Reporting Criteria

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 downhole 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.</li> <li>In cases where 'industry standard' work has been done, this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain</li> <li>1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other</li> </ul>	<b>Pre-2016</b> – The pre-2016 DD core was of variable diameter (PQ, HQ and NQ for surface holes and NQ for underground holes). The preparation and analysis was undertaken at accredited commercial laboratories and from 2007 at Aditya Birla on-site laboratory.
		The entire sample was dried and crushed to 2 mm and then split and a portion pulverised to 80% passing 100 $\mu$ m. The analysis was by routine aqua regia digest with ICPES determination and over range values re-analysed by four-acid digest with AAS finish. Gold was assayed by fire assay with either AAS or gravimetric determination.
		No information has been provided concerning the RC drill hole analysis.
		<ul> <li>Post-2016 - CC has drilled and sampled orientated DD core from surface and underground since 2016. Holes were drilled on variable spacing within the deposits dependent on the purpose of the hole, however all holes were drilled as near orthogonal to the strike of mineralisation as possible for the available collar locations.</li> <li>The use of diamond coring with high core recovery provides adequate sample representivity. In order to increase sample recovery (and therefore representivity), triple tube coring has typically been used where possible (the exception being BQ and conventionally drilled core). Recoveries for all holes targeting the ore bodies for CC since 2016 have averaged 96.9%. CC's diamond core holes are of PQ3 and HQ3, NQ3,</li> </ul>
		BQ and LTK60 core diameter. A total of 2% of CC samples were of PQ3 size, 56% of HQ3, 34% of NQ3, 1% of BQ3, and 7% of LTK60 size.
		Prior to sampling, a cut sheet was developed by the site Geologist to ensure that sample intervals reflected the geology and recoveries of the drill hole. Samples typically averaged 1m in length, however adjustments to sample length were made at the Geologist's discretion based on lithological or mineralogical boundaries, to omit areas of core loss, and at core diameter boundaries (e.g. change from HQ to NQ). These adjustments were confined to a limit of 0.5m to 1.5m, in order to

loss, and at core diameter boundaries (e.g. change from HQ to NQ). These adjustments were confined to a limit of 0.5m to 1.5m, in order to provide a representative sample weight. Areas of core loss were typically omitted where possible, but in runs of core <0.5m in length with multiple core loss either side, some core loss had to be included in the sample length. These were then noted in the cut sheet and sample register. The cut sheet also includes the location of QAQC samples. The sheet is then validated by the Field Technician and sample numbers are written on the core trays for ease of reference while sampling. The sample bags are collected and QAQC samples are entered into the sample stream prior to sampling of the drill core.

The drill core is then sampled. Core of HQ and NQ size was cut in ½ (or less commonly in ¼) longitudinally using an Almonte automated core saw or, for PQ core, using a Clipper drop core saw. LTK60 and BQ-sized core was full core sampled to provide a sufficient sample weight. The sample is taken consistently from the right-hand side (RHS) half (looking down-hole) and placed into a calico bag marked with the corresponding sample ID number. Ten samples sets are then placed into polyweave bags marked with the sample range and palletised for transport to Mt Isa. Samples are delivered to Mt Isa by Light Vehicle (CC) or by an external contractor freight truck.

Criteria

Sampling

**JORC Code explanation** 

#### techniaues ALS (Townsville or Brisbane). Samples are weighed upon arrival and continued the entire 1.5 – 3 kg ½ core or 1.0 – 1.5 kg ¼ core was crushed and pulverized to 85% passing 75 µm to produce 500 g pulps. A 1g charge was taken for analysis of 12 elements (As, Ag, Bi, Co, Cu, Fe, Mg, Mo, Ni, Pb, S, Zn) utilising a four-acid digest with an ICP-AES determination. Any over range Cu (>10,000 ppm), Ag (>100 g/t), As was re-analysed using standard Ore Grade method utilising a four-acid digest producing a volumetrically precise digest, again analysed with an ICP-AES finish for high detection limits. Between 2016 and early 2020, 1 in 20 samples were assayed for gold using with a 30 g charge used for fire assay with an AAS determination, and for a 48-element suite using ICP-MS. These 1 in 20 samples were used as an exploratory check for additional elements of interest, however this process was discontinued in early 2020 due to the relatively well known characteristics of the drilled ore bodies. ESS: Drill core sampling was based on visual identification of the contact of the Eastern Creek Volcanic (ECV) with the host Esperanza Formation sediments (ES). Sampling typically accounts for 10m of ECV material and full sampling within the ES host. In some UG holes which drilled from east to west (opposite to most surface holes), the holes collared in Paradise Creek Formation siltstones (PCF). The PCF was again only partially sampled approximately 10 - 20m before the footwall. GST: Drill-core sampling was based on visual identification of mineralisation and identification of the Mammoth Extended Fault, which commonly occurs at the contact between the Whitworth Quartzite on the north side and the Bortala Formation (siltstone) on the south side. The fault zone is also interpreted to splay along the unconformable contact between the Surprise Creek Formation and Whitworth Quartzite. Sampling typically initiated 10 - 20m either side of the Whitworth Quartzite with full sampling within the quartzite body itself. PTO: The orebody is hosted within the Paradise Creek Formation siltstones (PCF). Drill core sampling was based on visual identification of mineralised intervals and interpretation of the ES and Paradise Creek Formation contact zones which host the deposit. Sampling typically started 20 m before the first significant oxidized (hematite-bearing) zone below the base of complete oxidation through to the end of hole. Metallic screen fire assay was used for 58 coarse reject samples from PTO to check against the ICP-AES method where native copper was observed. The metallic screen fire results confirmed the precision of the ICP-AES copper analysis. MAM and ESP: Core drilled at MAM and ESP by CC was sampled in its entirety.

Commentary

Sample preparation was completed at ALS (Mount Isa) and analysis at

Criteria	JORC Code explanation	Commentary	
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core</li> </ul>	<b>Pre-2016:</b> The deposit has historically been drilled and sampled by previous operators. Aditya Birla (2003 – 2015) compiled and validated all this data as below:	
	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.).	<b>ESS:</b> A total of 109 (PQ, HQ and NQ) DD holes and 8 RC drill holes (in excess of 25,000 m).	
		<b>GST:</b> A total of 40 (PQ, HQ and NQ) DD holes were drilled, (in excess of 21,729 m).	
		<b>PTO:</b> A total of 98 (PQ, HQ and NQ) surface and underground DD holes and 1 RC drill hole (in excess of 23,000 m).	
		MAM: A total of 1,557 (HQ and NQ) DD holes (in excess of 359,000m)	
		<b>ESP:</b> A total of 256 DD holes (HQ and NQ), 6 percussion holes and 44 where drill type is not recorded.	
		<b>Post-2016:</b> Surface holes were collared with PQ3 in either standard or chrome barrel with triple tube from surface until competent, unbroken ground where casing was set. Following this, the holes were drilled on with HQ3 (triple tube) chrome or standard barrel to the end of hole. The chrome barrel assembly was used to minimize or arrest swing and lift of the drill hole, particularly on deep drill holes or in holes which were experiencing movement. In rare cases, poor ground conditions resulted in further casing off to NQ3 (triple tube) size to complete the hole.	
		Underground drill holes were typically drilled as NQ3 with a chrome or standard barrel for horizontal or down-dip holes, or LTK60 or BQ for up-dip holes. In few instances, the NQ3 holes were collared in HQ sized core.	
		No PQ, BQ or LTK60 core was orientated. All HQ3 and NQ3 was orientated using a REFLEX™ ACT III orientation tool, although frequency of the subsequent successful core orientation by the Field Technicians varied due to the core and orientation mark quality.	
		All holes were surveyed at 15 m, at 30 m and every 30 m thereafter, and at the end of the hole using an industry standard REFLEX <sup>™</sup> EZ-TRAC single/multishot survey tool or by a REFLEX <sup>™</sup> EZ-GYRO gyroscopic survey tool. The gyroscopic tool was utilised predominantly in ESS drill holes drilled deep from surface to negate any magnetic effects from the hangingwall basalt. Approximately 80.6% of drill holes were surveyed using the EZ-TRAC, the remainder with the gyroscopic tool.	
		The majority of drill holes were fully grouted upon completion due to mine requirements.	

Criteria	JORC Code explanation	Commentary
Drilling		Drill totals for each deposit are as follows:
techniques continued		<b>ESS:</b> Twenty DD holes were drilled in 2016 (consisting of 1,211.6 m PQ3 and 6,309 m HQ3). Another 21 DD holes were drilled in 2017 totalling of 9,537.12m, including two wedges off a parent drill hole and three abandoned holes. The holes consisted of 1346.02m PQ3, 8043.70m HQ3 and 147.4m NQ3 sized core. In 2018, a further 21 holes were drilled including three at the northern limits of ESS (known as Sabre) and four abandoned holes, for a total of 6,669.32m (of 1,133.57m PQ3, 5233.65m HQ3 and 302.1m RC). The three RC holes and seven of the core holes were drilled for geotechnical purposes. In 2019, 16 holes were drilled including three abandoned holes for 4,856.26m (of 760.38 PQ3 and 4,095.88m HQ3). All holes but one were drilled for resource purposes, with the final hole drilled for Geotechnical purposes. In 2020, up to end July, a further 21 underground drill holes had been drilled totalling 2,840.34m (of 255.35m HQ3, 2,326.44m NQ3 and 258.55m LTK60). The four holes which were partially drilled HQ3 were for both resource and survey monitoring purposes.
		<b>GST:</b> In 2016, three surface diamond core holes were drilled for 1,420.74m (consisting of 350.3m PQ3, 799.44m HQ3 and 271m NQ3). In 2017, a total of 18 diamond core holes were completed from surface for 8,088.31m (of 2271.86m PQ3, 5,351.23m HQ3 and 465.22m NQ3). In 2018, a total of seventy-two holes were drilled from underground, totalling 4,860.07m (of 2,689.59m NQ3 and 2,290.23m conventional LTK60). One DD hole was drilled from surface in 2019 for geotechnical purposes for 304.75m (of 81.2m PQ3 and 223.55m HQ3). This hole was not assayed as core was required for geotechnical review. To end July 2020, nine holes were drilled from UG totalling 932.66m (all NQ3 size).
		<b>PTO:</b> One diamond hole targeted Pluto in 2016 for 264.3m (74.6 m PQ3 and 189.7 m HQ3). Seventeen DD holes were drilled from surface in 2017, including 3 abandoned holes, for 9,667.36m (1,565.7m PQ3, 8,032.36m HQ3, and 69.3 NQ3). Three holes were drilled in 2018 for a total of 1,236.77m (268.6m PQ3 and 486.96m HQ3), including one abandoned hole. One hole was reduced to NQ3 size due to ground conditions. No holes have been drilled into Pluto since 2018.
		MAM: In 2016, a total of 30 holes were drilled at Mammoth (including Mammoth North area) for a total of 9,969m, of which 627.26m was drilled from surface (218.4m PQ3 and 408.86m HQ3) and 9,341.74m from underground (61m HQ3, 9,187.33m NQ3 and 93.41m BQ). Size. No Mammoth drilling was completed in 2017, however in 2018 a further 16 holes were drilled for 3,320.23m including one hole from surface (geotechnical) for 661.02m (all PQ3) and 2,569.21m from underground (of 541.55m HQ3, 562.3m NQ3, and 1,465.36m LTK60). No further holes have been drilled to date.
		<b>ESP:</b> Five surface holes have been completed by CC, consisting of three in 2016 for 1,367.7m (262.2m PQ3 and 1105.5m HQ3) and two in 2018 for 742.35m (96.4m PQ3 and 645.95m HQ3).

#### Criteria

JORC Code explanation

Drilling techniques continued

#### Commentary

A summary of the drill type and metres completed before CC and by CC (2016–2020) is provided in the table below:

		Pre	-2016	2016	6-2020
Deposit	Hole Type	Count	Metres	Count	Metres
ESS	RC	10	1,150	3	302
ESS	DD	109	27,466	98	32,438
Esperanza South	Total	119	28,616	101	32,740
Greenstone	Total	48	17,151	104	15,726
РТО	RC	1	42	0	0
РТО	DD	31	15,229	21	11,168
Pluto	Total	32	15,271	21	11,168
MAM	Not Recorded	10	3,407	0	0
MAM	Percussion/RC	63	2,339	0	0
MAM	DD	1,502	251,587	46	13,199
Mammoth	Total	1,575	257,333	46	13,199
ESP	Not Recorded	44	1,676	0	0
ESP	Percussion/RC	6	235	0	0
ESP	DD	206	38,524	5	2,110
Esperanza	Total	256	40,435	5	2,110
Total		2,030	358,806	277	74,943

Figure 2-1 (in section 2.1) shows drill collars over mining leases attributed by Mineral Resource area.

Criteria	JORC Code explanation	Commentary
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</li> </ul>	<b>Pre-2016:</b> Reported historical core recovery averaged 94% in the Aditya Birla 2013 resource estimation. For the historical drilling there is no supporting documentation detailing drilling measures taken to maximise sample recovery.
	<ul> <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>sample recovery.</li> <li>Post-2016: CC drill hole recoveries have been high across the multiple programs and drill locations. When delivered to the core shed, drill core was reviewed by the site Field Technicians for any initial discrepancies between the reported hole depth, the driller run sheet and blocks, and any perceived core loss identified by the driller. These zones of perceived core loss were marked in the tray by placing a core block stating the core loss and the estimated length. The drill core was then jigsawed together for orientation (if possible) using an angle line or simply in the tray (if unable to orientate) to ensure the zones of core loss were accurately located. The drill depth and therefore recoveries were then measured either in the angle line or tray by the Field Technician using a marker and measuring tape. It is natural that recovery percentages can vary between runs due to core being left down the hole or picked up on subsequent runs, so multiple runs are reviewed prior to finalising the recovery for any particular run. The final recovery of a particular run is then documented on a Geotechnical log sheet along with a "From and To" of any core loss zones.</li> <li>At ESS, CC drill core has averaged 98.4% recovery; an average recovery at Esperanza. Recoveries are slightly lower in the Pluto drilling compared to other deposits for two primary reasons – almost all holes collared within the Esperanz Waste Dump material and as such recoveries were lower in the upper PQ3 part of the hole as it drilled through the loose waste fill, which in some places exceeded 70m in length; and the second reason being the highly oxidised and leached nature of ore body resulting in a softer and looser rock type to drill. CC has drilled the vast majority of metres as triple tube in order to maximise recoveries</li> </ul>
		recoveries in MAM, GST or ESP. It can be suggested that the mineralised zones are, at times, more prone to lower recoveries in the ore zones for ESS and PTO due to localised oxidation and leaching.
		In rare cases where significant core loss occurred in mineralised zones, either a second hole was drilled or a wedge was emplaced to re-drill through the mineralised zone adjacent to the original hole, with further

care taken by the driller to maximise recovery.

Criteria	JORC Code explanation	Commentary
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>	The entire length of drill core and RC chips have been logged for lithology, mineralisation, veining, alteration, weathering and structure as is appropriate for this style of deposit. The RC drill holes were also logged from below the casing to the end of hole.
		<b>Pre-2016:</b> logging is both qualitative and quantitative. Lithology, mineralisation type, sulphide content, RQD, core recovery and structure $\alpha$ angles to core axis is recorded. For most DD holes, core has been photographed wet and dry.
		<b>Post-2016:</b> During late 2015 to end 2016, CC undertook a selective re-logging program of the historical drill core to validate the older logging and developed a structural domaining log which was utilised in the initial revision of the geological models and Mineral Resource estimates.
		Total holes re-logged are:
		<ul> <li>MAM - 253 holes for 22,979m</li> <li>ESS - 74 holes for 11,640.2 m</li> <li>GST - 11 holes for 2,075.5 m</li> <li>PTO - 9 holes for 1,149.7 m</li> </ul> Since CC's drilling commenced in 2016, full qualitative and quantitative geological and geotechnical logging has been undertaken. Geological logging includes detailed lithology, alteration, mineralisation and weathering type, intensity and style mapping, total sulphide content, vein intensity and composition, and structural information including type, width and α and β angles when orientations allow. Geotechnical logging is also undertaken on all core and includes core recovery, including documented core loss areas and RQD, as well as parameters such as UCS, LUP, fracture count, and joint set data. Specific gravity and bulk density measurements are also taken prior to sampling and are documented as part of the logging process. The final stage in the logging procedure is to photograph all drill core in dry and wet modes
		The detail and coverage of this logging has provided CC with an appreciable understanding of each ore body to a level which is able to support geological modelling and mineral resource estimation and therefore subsequent mining and metallurgical studies. Further metallurgical test work has been completed on ore types across all of

the deposits.

Criteria	JORC Code explanation	Commentary
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> <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> </ul>	<b>Pre-2016:</b> Core was sawn by automated core saw for analysis. There is no record of whether the core was consistently sampled on one side or how RC samples and sub-samples were collected. The percussion and RC drill hole data has been used for the resource estimate, however these holes are a relatively small part of the inventory and the areas where they have been drilled are predominantly mined out currently.
		<b>Post-2016:</b> As detailed previously, upon completion of drill hole processing a sample cut sheet was designed by the site Geologist. This designates each sample interval a unique ID number with sample boundaries typically every metre, but adjusted for geological boundaries, areas of core loss or core size changes. Every effort is made by the Geologist to not include an interval of core loss within the sample interval, however in rare occasions when core loss is high this may be unavoidable in order to obtain a representative sample weight. During this cut sheet preparation, QAQC samples are also designated a location within the sample stream at a minimum rate of one QAQC sample to ten original samples. This increases at the Geologist's discretion, typically in areas of mineralisation, where further QAQC samples are added. The cut sheet is then validated by the Field Technician and sample ID numbers are written on the core trays prior to sampling. This provides a visual marker for the samplers during the sampling process.
		The sample bags are then collected and QAQC samples are introduced into the sample stream prior to core being sampled. This provides security during the core sampling process that the QAQC samples are already accounted for and minimises any core being placed into a QAQC sample bag by accident. CC uses blank material, certified standards (CRMs) and duplicates to form their QAQC procedure. The blanks and CRMs are added physically at this point. CC uses coarse crush split duplicates which are collected at the rotary split stage at the laboratory and as such on the empty duplicate bags are added into the original sample bags here. A list of duplicates is provided to the laboratory which

Following the QAQC sampling, the core is cut sequentially from start to finish typically as ½ core samples (for PQ3, HQ3 and NQ3 core) or full core (for BQ core or conventional LTK60). Eight holes were sampled as ¼ core in 2016 in order for the remaining ¼ of the half to be sent for metallurgical test work. CC revised this procedure in 2017 however, where ½ core is sent to the laboratory as a minimum and further metallurgical test work samples are taken either as the remaining ½ or ¼ (at the metallurgist's discretion). The sample sizes are deemed appropriate for the host rock and the style of mineralisation of the deposits.

is then used when collecting the coarse splits.

The core samples were consistently taken from the right-hand side of the core (RHS) and were then placed into their designated calico sample bag. The calico sample bags are pre-stamped and ticketed with a unique ID to the CCM's drilling programs. When ten calico bags are collected, they are put into a polyweave bag which is then numbered with a from and to sample ID designation. These are then palletised and are shrink wrapped when ready for transport to the laboratory. A sample submission form stating the sample ID numbers, sample preparation and analysis techniques and instructions for subsequent handling of coarse rejects and pulps is provided in hard copy and digital copy to the laboratory.

At the laboratory, the samples were dried between 90 and 105°C until an acceptable moisture content of <0.5% is achieved. The samples are crushed using a terminator crusher so that 70% passes 2mm and then rotary split to form a nominal 1kg sub-sample and coarse reject. The duplicates are collected from the coarse reject. The sub-sample is then pulverised using a ring mill so that 85% passes 75 $\mu$ m. A representative 20 – 60g pulp is then shipped to the analysis laboratory in Brisbane (or Townsville). The coarse rejects and unused pulps (upon completion of the analysis) are returned to the CC mine site and stored at the core shed facility.

No CC RC drill holes were sampled and do not form part of the resource estimates.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul> <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, 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.</li> <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> </ul>	<ul> <li>Pre-2016: Assay was by aqua regia digest and ICP-ES analysis with over-range values determined by four-acid digest and atomic absorption analysis. Down hole EM was occasionally used as a semi-quantitative method to detect sulphide presence with only minor success. A review of the Aditya Birla QAQC by CC concluded that adequate procedures were emplaced and performed to industry standard. Two external laboratories were used since 1997 (Analabs, Townsville, 1998–2005 and SGS, Townsville, 1998–2012). The on-site laboratory at the Mine was used for the preparation of coarse and pulp blank reference material only.</li> <li>Aditya Birla report using random use of standard, blank and duplicate samples. Site specific, matrix matched standard material prepared and certified by Ore Research &amp; Exploration Services Pty Ltd was used. Blank material used was uncertified, sourced locally and prepped in the on-site laboratory. Duplicates are included in the Aditya Birla database but have no supporting documentation on the procedure for sampling.</li> </ul>
		Aditya Birla regularly used ALS in Townsville as an umpire laboratory. The laboratories performed well with no significant bias identified.
		Pre-2016 drill hole assay data has been compared to more recent data for the same domains in the same deposits. CC concluded that QQ plots show similar distributions which supports combining the old and new data sets. SRK notes some potential conditional bias between the data sets which may be due to sample volumes or spatial occurrence of the two data sets. The two data sets are similar enough that they can be combined into one data set for the purposes of the resource estimate

#### Post 2016:

Upon arrival at the analysis laboratory, a 0.5g sample charge undergoes a four-acid near-total digest followed by ICP-AES determination for twelve elements - Cu, As, Ag, Bi, Co, Fe, Mg, Mo, Ni, S, Pb and Zn. Overrange analysis is undertaken on primarily on Cu, As, Ag, Co and S, which exceed initial upper limits (including 1% for Cu, Co and As, 10% for S, and 100g/t for Ag) by using a further four-acid digest and ICP-AES analysis. The assay results are finalised by the laboratory upon completion of the analyses and review of the internal QAQC processes and are delivered to CC in digital spreadsheet and PDF formats. Any abnormalities, such as possible contamination, are flagged by the laboratory prior to delivery of the results and assays are re-run on areas identified to be affected. Between 2016 and early 2020, CC also analysed one in twenty samples for 48 elements using ICP-MS as an exploratory tool for other elements of interest. This was discontinued shortly after commencement of drilling 2020 as a considerable dataset of these additional elements has been collated and elements of interest across the five deposits are known.

CC has implemented a rigorous, systematic QAQC program throughout all drilling campaigns through the use of certified reference material (CRMs), blank material and duplicate samples assigned with unique sample numbers and placed into the sample stream.

#### Criteria JORC Code explanation

Quality of assay data and laboratory tests continued

#### Commentary

In 2016 through to 2018, CC utilised a variety of CRMs sourced from both Geostats Pty Ltd, OREAS Pty Ltd and a variety of internal CRMs tailored for the CC projects sourced by Aditya Birla and prepared and certified externally by OREAS Pty Ltd. Prior to the use of these tailored CRMs in 2016, CC dispatched a test batch for analysis to verify the certified values. All the standards returned assay values within acceptable tolerance. The majority of these supplies were used by 2018 and following drilling programs have utilised solely externally sourced certified CRMs. Initially in 2016, blank material was sourced from the blank material utilised by Aditya Birla, however early in the 2016 program a second source of blank quartz sand material was subsequently substituted for the Aditya Birla blank material. This was sourced from a local hardware store and, similarly to the CRM standard, check testing of the new blank material was undertaken prior to use which showed reliably minimal assays for the required elements. The duplicate process has varied slightly during the CC tenure. In the initial eight holes, field core duplicates were taken as ¼ core samples. Variability in the results due to the brecciated nature of the ore body meant the duplicate testing here was not representative of the repeatability of the analyses. Following this, between 2016 and 2018, CC utilised pulp replicate samples as duplicates in which a second 0.5g sample charge was taken from the sample pulp and analysed separately. In 2019, this procedure was modified so that the duplicate sample was taken from the coarse reject, prior to pulverisation, rather than from the pulverised pulp. This provides more information on the repeatability of the analyses through the sub-sampling stage also.

QAQC analyses are monitored continuously throughout a drilling program and a typically compiled into a report following conclusion of the program.

QAQC samples are added to the sample stream at a baseline rate of one in ten samples, which is increased in areas of mineralisation at the Geologist's discretion. To end of July 2020, the 2020 program has utilised 420 QAQC samples from a total of 3,847 samples which accounts for 10.9% of all samples. A total of five CRMs have been used in the program to date, all sourced from Geostats Pty Ltd, and were selected to provide a range of Cu values from near zero (GBM 396-8 at 0.025% Cu) through to high grade (GBM 908-16 at 7.018% Cu). The standards used are also certified for Ag and As. Out of 143 CRM samples only three assayed outside of two standard deviations (2o), which accounts for 2.1% of the CRM data. None of these anomalies were consecutive, implying that any calibration issues were resolved within acceptable time limits. A total of 121 duplicate samples (coarse splits) have been taken and show excellent repeatability with over 90% of samples returning assays within 10% repeatability. Blank material has shown isolated events where, when placed within high grade Cu intervals, there is possible low order "carry over" between samples. Whilst the magnitude of these anomalies is not considered enough to invalidate the Cu grade of the original samples in this area, further laboratory protocols have since been introduced to prevent contamination. This includes flagging high-grade zones to the lab and the introduction of guartz flushes between HG samples. Pre-2020 QAQC results are documented in internal reports and no significant issues have been identified or remain unaddressed.

Quality of assay data and laboratory tests continued	QAQC is also conducted on specific gravity samples in two formats. Firstly, an internal "bulk density" measurement is taken as a full, dry weight of a specific core tray (ideally one with a specific gravity sample within). Whilst this is not a direct comparison, it provides a useful rough evaluation to the SG sample. The 2020 program has noted some understandable variability due to the inherent difference in the methods used, however the only notable outliers showed that core loss was accidentally included in two bulk density measurements leading to lower BDs here than there should have been. Once reviewed and omitted, the results are within acceptable limits of repeatability. The second method of validation is a robust umpire sampling program, where a select number of specific gravity samples are submitted to a laboratory for external measuring. In 2020 to date, 6% of SG samples were sent to an external laboratory for umpire comparison. The umpire samples showed excellent repeatability against the CC originals with all but one within a 5% repeatability, and as such are deemed accurate.
	Umpire sampling is also undertaken for geochemical assay. Results for the 2020 program to date are currently pending, however previous programs have shown good repeatability between ALS and the umpire labs (SGS Townsville (2016 – 2018) and Intertek Townsville (2019 – 2020), with no issues detected in the Cu grade analyses. Furthermore, in 2018 metallic screen fire assays of drill core coarse rejects were done at SGS Laboratory in Townsville to check against the results of the ICP-AES analyses where there was significant native copper observed in the Pluto drill core. Fifty-eight coarse rejects were re-submitted for assay by metallic screen method. The results from the two methods correlated well. ICP-AES returned an average of 0.96% Cu with a standard deviation of 1.02% and metallic screen method returned an average of 0.95% Cu and standard deviation of 1.06% with an R2 correlation of 94.1%. The results provide confidence in the ICP-AES method to determine total copper where native copper occurs in the sample.

Commentary

Criteria

JORC Code explanation

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Criteria	JORC Code explanation	Commentary
<ul> <li>Verification of sampling and assaying</li> <li>The verificat by either inc company pe</li> <li>The use of t</li> <li>Documentat procedures, (physical and</li> <li>Discuss any</li> </ul>	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	Significant intersections were compiled by the Senior Geologists or Exploration Manager, namely at Cu cut-offs of 0.5% Cu and 1.5% Cu, without consideration of other elements. The intersection results however are not made publicly available and were for internal notification only.
		No twin drilling programs have been undertaken. Some close-spaced drill holes are observed to have results which are comparable and supportive of previous assay results.
		Data documentation has been undertaken in the following stages:
		<ul> <li>Pre-2016: Aditya Birla and earlier drill hole and assay data was stored in a SQL server database (Datashed) which was validated by a database manager. Hard copies of drill logging data remains for some drill holes.</li> <li>Post 2016: Geological and geotechnical logging is recorded on paper logs and entered into spreadsheets during the program. The spreadsheets are restricted to ensure the correct data type is entered and to minimise errors. The spreadsheets are then visually validated by a second Geologist who reviews the collar, survey, geological and geotechnical information to ensure its integrity prior to upload to the database. Any issues with data entry are then referred back to the paper logs. Up until June 2020, the data was then provided in spreadsheet format to external database consultants who uploaded the data into an SQL server database (Datashed). This database was then subsequently exported weekly into Microsoft Access format for use by the Geology team. The database is currently in a transition period to a site-managed database system using Geobank data management software. During this transition, the validated spreadsheet data is uploaded directly to the Microsoft Access database by the site Resource Geologist. Any further validation flags are then reviewed in Access or upon importation into the modelling software and resolved on site. Prior to the transition, assay data was directly, electronically delivered to the external consultants for import into the database. This has now also become the role of the Resource Geologist during the transition to site managed system.</li> <li>All electronic data is stored on the company's main server in Brisbane with multiple backups created to ensure data security. A local backup is also made daily on site using external hard drives which are synchronised to the main server.</li> </ul>

No adjustments have been made to the received assay data, with all drill assay data stored and used in the estimates as per the original values received.

Criteria	JORC Code explanation	Commentary
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>Pre 2016: Historical drill holes were either surveyed in or converted to the local grid around the time of drilling. Where older drill collars have been able to be located by CC, they have been resurveyed using DGPS, compared and updated to ensure that the most recent data is that which is used, as positioning accuracies have improved over time. Furthermore, electronic and hard copy data has been made available for other historical holes is as accurate in the current database with the data that is available. Downhole surveys recorded in the database have been compared to known hard copy data to ensure the reliability of the data.</li> <li>Post 2016: CC drill collar positions were initially placed by handheld GPS if on surface, or by underground surveying for subsurface holes. Surface drill rigs were aligned at the collar prior to drilling using a line of sight Suunto compass and clinometer by the site Geologist. Underground holes were aligned using a string line connecting foresight and backsight marker placed by the UG Surveyor for azimuth and a clinometer for dip. CC has undertaken detailed downhole surveying during drilling. Surveys measuring hole azimuth and dip were taken at 15m, 30m, and 30m thereafter through to end of hole. A final survey was taken at end of hole. In a few rare circumstances, a full length multishot was undertaken. The surveys were taken using either a REFLEX<sup>™</sup> EZ-TRAC single/multishot or REFLEX<sup>™</sup> gyroscopic survey tool. Upon completion of surface drill holes, the holes were picked up by DGPS to industry best standards to an accuracy of +/- 0.02m. In rare occasions where multiple holes were drilled at the same location, the hole collar may not have been located upon completion and as such the original collar coordinate is used. This is the case for twelve surface holes and twenty-one underground holes, which accounts for 7% of the CC drill holes. Collar preservation techniques have been improved in 2020 where holes are marked and surveyed immediately as closed to comp</li></ul>
Criteria	JORC Code explanation	Commentary
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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>	Due to the steep terrain and existing infrastructure at surface in many locations, drill hole orientation and spacing is dependent on accessibility of drilling sites. Drill hole spacing varies from 10 m to 35 m centres in more well-defined parts of the orebodies, increasing out and at depth to between 30 m to 90 m spacing. Both historical and CC drilling has occasionally used drill fans with multiple holes collared from a single drill pad with no regular gridding due to collar site limitations.
		Infill drilling undertaken between 2018 – 2020 has aimed to reduce drill spacing of the ESS, GST and MAM ore bodies to between 25 – 30m for ESS, 10 – 20m for GST, and 15 – 25m for MAM. For the majority of drill holes, the drilling has intersected at least some grade in the targeted locations. This is supportive of a high degree of confidence in the geological continuity and understanding of the orebody. Sampling has been undertaken to reflect the variability in the geological conditions and to meet the precision required for resource models and mine planning. The data spacing, particularly when coupled with grade control data, is sufficient to establish geological domains and is appropriate for the style of mineralisation.
		For mineral resource estimation, samples were composited to 2 m for all deposits except Pluto where samples were composited to 5 m due to the lower drilling intercept angles.
Orientation of data in	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <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>	Drilling has been conducted at the most optimal angle for the interpreted orebody orientation as possible with the collar locations available.
relation to geological structure		At ESS, most drill holes intersect the orebody optimal to dip and strike of the orebody, with the majority of holes drilled from west to east to intersect the westerly dipping orebody as orthogonal possible. A few exceptions are those drilled at steep dips (>80°) from surface. The 2020 underground drill holes drill from the eastern (footwall) side back to the west (hangingwall) with the natural dip (roughly 75°W), but all holes are designed to dip much shallower than the orebody and so intersect the it at an angle which is appropriate for reliable modelling.
		At GST, surface holes were highly limited by the availability of drill sites and as such most drill from the northwest to the southeast, which intersected the orebody at a suitable angle. Underground drilling since 2018 has allowed optimal targeting from the sub-surface, which is more suited to the deeper parts of the orebody which appears to have a plunging nature as opposed to the sub-vertical upper section as defined by the surface holes.
		Drilling at Mammoth has been undertaken at a large variety of orientations and is based on the specific orientation of the local lenses and underground drill sites and are deemed appropriate for the areas in which they were targeting.
		At Pluto and Esperanza, the drill holes intersect many of the steeply dipping mineralised domains at relatively low angles (less than 30°) which can introduce larger errors in the location of the domain boundaries and samples than for holes that intersect domains at higher angles. Down-hole surveys have been done as carefully as possible to mitigate this risk. Future drilling at Pluto is recommended from underground.

Criteria	JORC Code explanation	Commentary
Sample security	<ul> <li>The measures taken to ensure sample security.</li> </ul>	<b>Pre-2016:</b> Samples were bagged and sent to the laboratory in Townsville or Brisbane via Mt Isa.
		<b>Post 2016:</b> The chain of custody adopted by the company is secured and maintained from site directly to the sample preparation laboratory in Mt Isa. Samples are collected into numbered calico, double bagged, palletised and shrink wrapped at the core shed before dispatch by road either by freight truck or by the site Field Technician. The samples are receipted in upon arrival at the laboratory to ensure all samples are accounted for. Samples are only identifiable by a unique sample ID and QAQC sample details, such as CRM types, are only known by CC. Prepared samples are transported from the preparation laboratory in numbered paper packets packed into numbered boxes which are scanned, logged and tracked in the laboratory system. Transport from the sample preparation laboratory in Mt Isa to the Assay laboratory (Brisbane or Townsville) is by road and is organised by the laboratory.
		Coarse reject samples are stored at the sample preparation laboratory until final assays have been received, checked against standards, blanks and duplicates and passed. After 60 days, coarse reject and pulp material is then transported back to the mine site for longer term storage or for use in umpire testing.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	Internal auditing procedures and reviews were regularly undertaken on standard operating procedures and laboratory processes. Data and technical reviews are triggered when QAQC protocols identified imprecise or inaccurate sample assay results. In 2016, new sourcing of blank reference material was implemented due to minor variability identified in historic blank material. New blank reference material has performed well.
		External reviews/audits have been conducted by SRK Consulting. Mr Mark Noppé has reviewed logging, QAQC and data management procedures. He also reviewed the ALS Laboratory in Mt Isa in 2017 and again in October 2018 to review sample preparation techniques. The Laboratory procedures for receipt of samples and sample preparation are as per industry best practice. The ALS Laboratory QAQC results and performance such as pulp duplicates, round robin performance and performance against standards are also supplied to CC. Mr Stuart Munroe and Mr Benn Jupp from SRK Consulting have reviewed the sample receipt and assay procedure for fire assay and four-acid digest with ICP-AES determination at the ALS Laboratory in Townsville in January 2019

# 13.4. Section 2. Reporting of Exploration Results

(Criteria listed in section 1 also apply to this section.)

### Table A. List of active Mining Leases at the CC Mine<sup>1</sup>

	<b></b>				Native Title	<b>NA:</b> 1 (1)	8 (II )	
Permit	Status	Grant	Expiry	Authorised Holder	Status	Minerals/Use	Area (Ha)	Resource
ML 5407	Granted	2/11/1972	31/03/2030	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	4.1	
ML 5412	Granted	7/03/1974	31/03/2028	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	2.02	
ML 5413	Granted	7/03/1974	31/03/2027	Capricorn Copper Pty Ltd	Pre 1996 Grant	Cu, U	4.05	MAM
ML 5418	Granted	7/03/1974	31/03/2027	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	8.09	MAM
ML 5419	Granted	7/03/1974	31/03/2027	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	36.03	MAM
ML 5420	Granted	7/03/1974	31/03/2027	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	6.22	MAM
ML 5429	Granted	7/03/1974	31/03/2032	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	5.67	
ML 5430	Granted	7/03/1974	31/03/2030	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	9.17	ESP, PTO
ML 5441	Granted	7/03/1974	31/03/2030	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu, Mo, Pb, Zn, Ag	32.42	ESS
ML 5442	Granted	7/03/1974	31/03/2030	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu, Mo, Pb, Zn, Ag	32.39	ESS
ML 5443	Granted	7/03/1974	31/03/2030	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu, Mo, Pb, Zn, Ag	14.4	ESP
ML 5444	Granted	7/03/1974	31/03/2030	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	20.64	GST
ML 5451	Granted	7/03/1974	31/03/2030	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	15.68	MAM
ML 5454	Granted	7/03/1974	31/03/2028	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	3.97	
ML 5457	Granted	7/03/1974	31/03/2028	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu, Mo, Pb, Zn, Ag	11.5	
ML 5459	Granted	7/03/1974	31/03/2028	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu, Mo, Pb, Zn, Ag	8.09	
ML 5467	Granted	7/03/1974	31/03/2028	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	40.45	
ML 5485	Granted	########	31/03/2026	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	9.7	
ML 5486	Granted	########	31/03/2027	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	76.9	PTO
ML 5500	Granted	########	31/03/2026	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	6.1	MAM
ML 5549	Granted	########	31/03/2029	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	0.01	
ML 5548	Renewal Pending	########	30/06/2017	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	110.5	GST, MAM
ML 5550	Renewal Pending	########	28/02/2017	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	108	
ML 5563	Granted	########	31/01/2024	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu, Mo, Pb, Zn, Ag	4.25	PTO
ML 5562	Granted	8/10/1981	31/10/2023	Capricorn Copper Pty Ltd	Pre 1996 Grant	TAILDM	60.5	
ML 5489	Granted	########	31/03/2026	Capricorn Copper Pty Ltd	Pre 1996 Grant	LIVQTR, TAILDM, TRANSP	47.7	
ML 90178	Granted	9/08/2007	31/08/2028	CST Minerals Lady Annie Pty Limited	Infrastructure	PIPWAO, POWERL	354	
ML 90180	Granted	5/01/2018	31/01/2033	Capricorn Copper Pty Ltd	RTN	STKPIL, TAILDM	49.92	
ML 90181	Granted	5/01/2018	31/01/2033	Capricorn Copper Pty Ltd	RTN	STKPIL, TAILDM	49.96	
ML 90182	Granted	5/01/2018	31/01/2033	Capricorn Copper Pty Ltd	RTN	STKPIL, TAILDM	49.95	
ML 90184	Granted	########	31/07/2029	CST Minerals Lady Annie Pty Limited	Infrastructure	PIPWAO, POWERL	9	

1 Data from Queensland Government MinesOnineMaps (https://minesonlinemaps.business.qld.gov.au), accessed 24 June 2019.

Mining Lease are surrounded by EPM 26421, granted 12 August 2017, expires 17 July 2022. RTN: Right to negotiate

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>Capricorn Copper Pty Ltd (CC) was formed as a joint venture between EMR Capital and Lighthouse Minerals to acquire the project in October 2015, with EMR Capital taking 100% ownership in 2017. Table A (above) lists the Mining Leases at the mining operations which cover a total area of 1,082.5 hectares (10.8 km<sup>2</sup>). The resources are confined to eight of the MLs as indicated in Table A. The MLs are surrounded by EPM 26421 which was granted to CC on 12 August 2017 and expires on 12 July 2022. The ML's and EPM and are in good standing with appropriate native title and environmental agreements.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Mineralisation was found at Mt Gordon in 1882. The Mammoth deposit was found by the Shah brothers in 1927 and open cut mining soon followed. The deposit was intermittently mined by various small- to large-scale producers until 2013 with companies including Surveys and Mining Ltd (1969-1971), Gunpowder Copper Ltd (JV between Consolidated Gold Fields Australia Ltd and Mitsubishi (1971-1977)), Renison Goldfield Consolidated Ltd (1979-1982), Trammelling Pty Ltd (1988-1989), Adelaide Brighton Cement Holdings Ltd (1989-1996), Aberfoyle Resources Ltd/Western Metals (1996-2003) and Aditya Birla Minerals (2003-2015).</li> <li>Exploration activities have been completed by multiple operators since the 1970's. Work completed includes geological mapping, geochemical sampling, geophysical surveys (including magnetics, EM, IP, gravity) and drilling. These activities have been successful in identifying mineralisation, with drilling results providing the most valuable tool for delineating mineralisation.</li> </ul>

Criteria	JORC Code explanation	Commentary
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The CC deposits are structurally-controlled, sediment-hosted copper deposits located within the Western Fold Belt of the Mount Isa Inlier.</li> <li>ESS: Hosted by carbonaceous and siliceous siltstone to shale breccia of the Esperanza Formation. This formation is a sequence of well bedded to locally massive, black carbonaceous to locally grey or grey-green, weakly dolomitic siltstones, stromatolitic siltstones and pyritic shale. Carbonaceous, stromatolitic and siliceous rocks are dominant, especially in the vicinity of mineralisation.</li> </ul>
		<ul> <li>Esperanza South is a steeply plunging breccia located between the NNE-SSW-striking hangingwall and footwall margins of the Esperanza Fault zone The fault brings Eastern Creek Volcanics rocks into contact with the Esperanza Formation sediments, with this contact marking the hangingwall of the orebody. The footwall is defined by the easternmost shear within the Esperanza Formation. The fault zone envelope is approximately 50 – 70m wide.</li> </ul>
		<ul> <li>approximately 50 - 70m wide.</li> <li>Mineralisation dips sub-parallel to the hangingwall at around -75° to the west, with a SSW plunge which steepens at depth from around -50° to -75°. The hypogene mineralisation at depth consists of chalcopyrite and pyrite exhibited as fracture fill, breccia matrix and massive forms. Supergene enrichment processes play a significant part of localising mineralisation at ESS, particularly in the upper 500m of the orebody. This weathering profile is represented by a broad weathering cap to the base of oxidation under which structural pathways have promoted downward percolation of meteoric fluids. These pathways have created supergene enrichment pathways which broadly run sub-parallel to the main structural envelope and in the most well developed zones consist of a barren, massive earthy haematite core (the centre of the structural zone), peripheral haematite and chalcocite (-chalcocite group" minerals), grading outwards to chalcocite-pyrite and eventually chalcopyrite-pyrite. Development of these enrichment zones varies on a local scale dependent on the structural permeability, availability of hypogene ore, and intensity of weathering. The effects of these zones lessens with depth but remains present in variable amounts to the deeper portions of the orebody, where the primary chalcopyrite-pyrite assemblage becomes more dominant.</li> <li>GST: The orebody is located within a wedge of Whitworth Quartzite constrained by the Mammoth Extended Fault. Here, the fault strikes roughly ENE and dilates sinusoidally in the vicinity of the GST orebody, with apparent dextral movement. This has brought a fault bounded block of Whitworth Quartzite into contact with Surprise Creek Formation sediments in the north (referred to as the hangingwall side), and Bortala Formation and Alsace Quartzite sediments to the south (footwall side). At the eastern and western extremities, the zone is highly fractured likely due to the convergence of the dilatant zone. The orebody is within the core of t</li></ul>

Criteria	JORC Code explanation	Commentary
<b>Criteria</b> Geology continued	JORC Code explanation	<ul> <li>PTO: Hosted within strongly oxidised siltstones and breccia of the Paradise Creek Formation. The formation is a sequence of light to dark grey rhythmically bedded dolomitic and carbonaceous siltstones and lesser stromatolites. The Pluto deposit is centred around the Mammoth Extended Fault and bounded by the localised Fosch's Fault. Interse leaching and oxidation occur within the structural core, with mineralisation occuring peripheral interpreted at a reaction front with the surrounding Paradise Creek Formation sediments. Bedding dip and strike of favourable stratigraphic units coupled with bedding parallel faulting plays an additional role in localising mineralisation. Copper is typically presented as supergene chalcocite and as cuprite and native copper in the more highly leached and oxidized zones. Gangue minerals included pyrite, hematite and kaolinite. Ore contacts are typically sharp along with the oxidation fronts. Minor cobalt is also noted as a significant mineralisation type at Pluto and is typically seen within cobalitie and/or cobaliferous pyrite as a halo around the more locally confined Cu mineralisation. The oxidation zone is approximately 200 m long by 20 - 30 m wide.</li> <li>MAM: The Mammoth orebodies occur within the Whitworth Quartzite of the Myally Sub-Group. The sequence strikes North-northeast dipping 65-85°W and is dominated by massive pink to grey felspathic, medium to coarse grained, poorly bedded and homogenous quartzite. Localised siltstones are present within the unit. Three major faults are important in localizing mineralisation at the Mammoth Mine - the Mammoth Fault, the Portal Fault and the Mammoth Extended Fault. The Mammoth fault the Portal Fault and the Mammoth fault heory and is dominan plunges roughly at 65° to the SW. Mineralisation at Mammoth homin plunges roughly at 65° to the SW. Mineralisation at Mammoth fault the Portal Fault scat as a hard boundary on the east and controls the plunge of the mineralisation. The overall Mammoth fault heorits the magin</li></ul>
		is recorded as chalcopyrite and pyrite veining with locally massive zones. Supergene mineralisation is typically located in the upper and northern parts of the orebody (largely mined) under the silica cap and is characterised as massive, vein and disseminated chalcocite, native copper and reported digenite-djurleite-covellite.

Criteria	JORC Code explanation	Commentary
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:</li> <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>downhole length and interception depth</li> <li>hole length.</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>	<ul> <li>The collar locations, drill hole orientation and significant intercepts for each hole in the resource areas are not included since the drill results are not considered or reported as exploration results, but as resource definition drilling. The resource definition drilling has been included in previously reported resource estimates and well as this resource estimate.</li> <li>A summary of the drill type, number of holes and total metres drilled is provided in a summary table in Section 1 of this report. A map showing the location of the drill hole collars and Mining Leases is shown in a plan in section 2.1 of this report.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Assay samples were taken at 1 m to 1.5 m intervals for historical drilling and at 0.5 m to 1.5 m intervals (typically 1 m) for drilling since 2016.</li> <li>Significant intersections are not reported publicly.</li> <li>No metal equivalent values have been used in developing geological models for the resource estimate.</li> </ul>

Criteria	JORC Code explanation	Commentary
Relationship between mineralisa- tion 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 downhole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>ESS: Esperanza South is a steeply plunging breccia located between the North - South trending footwall and hanging wall margins of the Esperanza Fault zone. This fault zone dips -75° towards the west, with a mineralisation plunging SSW at 50° to 75°. Pre-2020 drilling was typically undertaken from west to east at inclinations of -50° to -80° to best optimise the angle against mineralisation. Drilling in 2020 has drilled from east to west, but at much shallower angles (±17° to -40°) to ensure the mineralised zone is intersected as orthogonal as possible.</li> <li>GST: Greenstone consists of irregular breccia and vein zones located within the Mammoth Extended Fault striking to the NE, with the upper core of the orebody oriented sub-vertical and the northern, deeper portion of the orebody dipping roughly -50° toward the south. Surface drill holes which largely targeted the upper core drilled for NW to SE, orthogonal to the strike of the fault zone and were inclined at -50° to -80° to intersect the deposit at the highest possible angle to the mineralisation. Underground drilling from 2018 and 2020 has drilled the orebody from both the northern and southern sides at angles orthogonal to the interpreted mineralisation trends.</li> <li>PTO: Pluto consists of multiple steeply plunging zones of breccia and veining that strike NE–SW and dip steeply (approximately 80°) to the SE. The mineralisation has an overall plunge to the SW at around 70°. The majority of drilling has been east directed at dips of -50° to -80°. Due to the difficulties in locating drill pads in locally steep terrain and with surface infrastructure, some historic drill holes, and one CC hole, have drilled toward the west at similar inclinations. Many holes have intersected the mineralisation at low angles due to these limitations. It is recommended that future drilling be undertaken from underground.</li> <li>MAM: Mineralisation is hosted within breccia associated with the Mammoth Fault (dipping 80–85° towards the enorth-west)</li></ul>
Diagrams	<ul> <li>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.</li> </ul>	• Diagrams for each deposit are shown in the body of the report that accompanies this Table 1

Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul> <li>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.</li> </ul>	• Mineral Resources are detailed in this report. Specific Exploration Results are not disclosed.
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>Surface and underground geological mapping has been completed at various degrees of detail both historically and during the CC tenure. Mapped underground trends have assisted in determining localised trends, particularly at Greenstone and the G-Lens area of Mammoth.</li> <li>Since 2016, geotechnical information is taken routinely across every drill hole for fracture sets and joint characterisation. More detailed work has been undertaken on selected holes across all deposits, primarily Point Load Test (PLT) measurements.</li> <li>Metallurgical test work has been undertaken across all deposits during the CC tenure. Since 2016, bulk metallurgical samples have been taken in twenty-three holes from ESS for over 870m; six holes from GST for over 740m; six holes from MAM for over 440m; four holes from PTO for over 795m; and three holes from ESP for over 250m.</li> <li>Bulk density (Specific Gravity) are taken routinely across all drill holes at a maximum spacing of one every 10m and provide a detailed database of density measurements across all orebodies. The SG measurements are in turn verified by an external umpire sampling program as discussed in Section 1.</li> <li>The resource estimate uses cut-off grades that are guided by the mining and processing experience.</li> </ul>

### Criteria JORC Code explanation

- Further work The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).
  - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.

The deposits form the currently operational Capricorn Copper Mine and as such ongoing mining activities will continue to further delineate the in-situ resources. The 2020 infill diamond drilling program is expected to continue until the end of the year, with further infill drilling planned for 2021. Grade control processes are undertaken continuously at the mine site and will continue to assist the local definition and interpretation of the orebodies. Further extensional drilling is likely and may extend the current Mineral Resources and provide sample coverage in the deeper and more poorly defined portions of the Resource area.

• Possible extensions to known mineralisation are shown in the diagrams below:

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Commentary









## Section 3. Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Data entry spreadsheets are restricted so that only allowable values can be entered into a number of fields.</li> <li>Drill hole data entry is validated by at least one geologist (other than the person who entered the data) prior to it being sent to the Database Administrator for uploading.</li> <li>Validation at this stage is undertaken visually by the Geologist and is named and dated once complete.</li> <li>A number of checks were in place during import into the Datashed database to ensure the data is assigned correctly – for example ensuring drill hole IDs match across the data entry for any specific hole, ensure no intervals were duplicated or overlapping, and that no Sample IDs were duplicated. This will also be the case for the future site-based Geobank system.</li> <li>Structural integrity of the database was checked during the export from Access and Import to Leapfrog Geo<sup>™</sup> and Micromine software with checks on: <ul> <li>Downhole survey anomalies</li> <li>Overlapping intervals</li> <li>Missing intervals</li> <li>Near duplicate positions</li> <li>Blank, negative, zero and missing assay values</li> <li>Wedge holes</li> <li>Anomalous collar co-ordinates</li> </ul> </li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>Mr Mark Noppé (SRK Consulting) has visited site in March 2016, May 2016, September 2016, November 2017 and October 2018 to review various aspects of the resource drilling, logging and sampling, data management and geological and grade modelling.</li> <li>Mr Stuart Munroe and Mr Ben Jupp (both SRK Consulting) visited site to review core and meet with the exploration and mine geologists in January 2019.</li> </ul>

Criteria	JORC Code explanation	Commentary
Geological interpreta- tion	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	The local geology of the Capricorn area is well known having been developed over many years of tenure. All deposits modelled here occur within broad structural corridors with the interplay of these major faults with more localised structures being a primary localising factor. Mammoth and Greenstone orebodies are hosted within Whitworth Quartzite, whereas the Esperanza, Pluto and ESS orebodies are hosted within McNamara Group siltstones. These lithological controls are critical in defining mineralisation boundaries. The degree of brecciation and fracturing, as well as oxidation and leaching intensities also play a significant role in determining spatial distribution of grade across all deposits to variable extents. These lithological, structural and weathering parameters all play a vital role in the distribution and continuity of grade across any deposit. Geological information from drill hole logging and structural interpretation has been critical in controlling the Mineral Resource estimations.
	For each model, Le throughout and we exception of Pluto, Copper and Cobalt In most cases the t Trend models them "strength" and "ran are used together. to squeeze or fatte created by the Indi suitable volume mo are checked for sta sulphur and arsenie from the copper ar controlled by clipp markers, weatherir not cross these know The approach to th to more tightly con better reflect the u control, including r mineralised domair resulted in a signifi in grade with an ov	For each model, Leapfrog Geo <sup>™</sup> generated estimation domains were used throughout and were driven by both grade and geological inputs. With the exception of Pluto, all of the estimation domain boundary models utilise Copper and Cobalt Indicator grade shells locally oriented by trend models. In most cases the trends are defined by the fault wireframe models. Trend models themselves have a number of settings the control the "strength" and "range" as well as the interaction when multiple structures are used together. Trial and error iteration with these parameters is used to squeeze or fatten, lengthen or shorten, limit or extend the volumes created by the Indicator radial basis function (RBF) interpolant until a suitable volume model is acceptable or rejected completely. Trial domains are checked for statistical distributions of copper, cobalt, silver, iron sulphur and arsenic with the aim of eliminating multi modal population from the copper and cobalt wherever possible. These domains are further controlled by clipping against hard boundaries, such as faults, lithological markers, weathering surfaces or defined trends, to ensure the domains do not cross these known mineralogical confines.
		The approach to the modelling of the estimation domain volumes is to more tightly constrain the mineralisation to volumes considered to better reflect the understanding of the deposits and their mineralisation control, including reducing the inclusion of internal low grade or poorly mineralised domains within the grade domains. This has in general resulted in a significant reduction of volume (tonnage) and slight increase in grade with an overall reduction of estimated contained metal compared

to pre-2019 interpretations.

data if available.

Criteria	JORC Code explanation	Commentary
Dimensions	<ul> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul> <li>ESS: strikes approximately 25 degrees NNE, 50 m below surface extending to 950 m below surface, 1,000 m long and up to 70 m wide. Copper mineralisation width within the corridor varies greatly from several metres to full corridor width and is continuous down dip.</li> <li>GST: strikes approximately 65 degrees NE; The top of the orebody is 150 m below surface extending to date to 400 m below surface, 300 m long and 150 m wide. Copper mineralisation currently presents as an upper, sub-vertical core, and a deeper southerly dipping lode which is offset to the north.</li> <li>MAM: A very extensive complex multi fault-controlled mineralisation complex with multiple lodes and orientations extending from surface to approximately 1,200 m below surface and open at depth. Mineralisation widths vary from several metres to several hundred metres with mineralisation continuous down dip. Overall strike is approximately 1,400 m.</li> <li>PTO: strikes approximately 45 degrees NE, 100 m below surface extending to 700 m below surface, 500 m long and 100 m wide, as discrete, thin (5 - 25 m) mineralised lodes.</li> <li>ESP: strikes approximately between 45 degrees (NE) on the eastern side to 70 degrees (ENE) on the western side. The orebody commences between 20 m to 150 m below natural surface (now mined out) and extending to 400 m below natural surface, 700m along strike and 20 m to 80 m wide tapering at depth.</li> </ul>
<ul> <li>extending to 700 m below as discrete, thin (5 – 25 m estimation and modelling textment is techniques</li> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment distance of extrapolation from data points. If a computer assisted estimation method was chosen, include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process used, the comparison of model data</li> </ul>	<ul> <li>Estimates are by Co-kriging in two sets (typically Cu with Ag then Co, S, Fe and As together) utilising Isatis<sup>™</sup> software, for MAM, PTO and ESP. Ordinary kriging using Micromine<sup>™</sup> software was used for ESS and GST.</li> <li>In cases where the minor elements were not well informed in the assays regressions are utilised at block scale to inform blocks. This is typically utilising Fe regressions to inform S.</li> <li>Previous estimates are available for comparison. No check estimates with alternate grade or density interpolators were run.</li> <li>Cu and Ag are recoverable and payable. Co may be payable in the future.</li> <li>Sulphur Iron and Arsenic are estimated where sufficient assay data is available and defaulted where it is not.</li> <li>Block sizes vary between deposits</li> <li>Block models are estimated into parent cells (except for GST) with volumes from sub cells at a scale appropriate to the geological controls of each deposit. For mine planning all models are regularised to 5m by 5m by 5m which incorporates geological dilution at domain boundaries.</li> <li>Correlations are accounted for by co-kriging for MAM, PTO and ESP.</li> <li>All Cu domains, except for GST, utilise hard boundaries at the 0.5% Cu threshold or Co 200 pm threshold. GST considered a 0.25% Cu threshold. Variography and search parameters are typically oriented along the structural control orientations.</li> <li>All variables are assessed for top capping for all domains. The major variables (Cu and Co) utilise range of influence restrictions with uncapped composite data. All other variables use capped composite grades for estimation.</li> <li>Validation is done via average grade checks at zero cut off between block grades and de-clustered composite grades for all domains. Any final variation greater than 10% is justified and explained. Swath plots in three directions and along strike are also reviewed. Comparisons to previous resources are also examined with the relative strengths and weaknesses of previous estimated kept</li></ul>	

checks on grade and tonnage curves are also performed.

Criteria	JORC Code explanation	Commentary
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	Dry density is used.
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>Cut offs are on Cu only and are applied at a level somewhat lower than the current economic Reserve cut offs and are specific to each deposit/ mining method. Esperanza South utilises a cut off of 0.8% Cu due to sub-level caving methodology, while all other deposits utilise a 1.0% Cu cut off due to long-hole stoping methodology.</li> </ul>
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul> <li>See above</li> <li>All deposits were depleted for all open pit, stope and access development material mined to date.</li> <li>For Mammoth only a 10m skin around the larger historic caved stopes was also excluded from the resource on that basis that this material does not have reasonable prospects of eventual economic extraction. In addition, material between surface and the uppermost cave stope at Mammoth has also been excluded as unrecoverable. Material around the smaller Mammoth stopes has been included in the resource with the assumption that the stopes will be paste filled and remnants will be 100% recoverable with mining dilution incorporated at the Reserve estimation stage.</li> <li>Esperanza South Mineral Resource tonnage reporting excludes broken stock within the current cave volume.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical</li> <li>methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul> <li>Cu and Ag are currently recoverable and payable. Co may become recoverable and payable in the future but is not currently considered as a revenue element. Fe, S and As are estimated to assist with metallurgical classification and recovery prediction.</li> <li>Esperanza South, Mammoth and Greenstone modelling includes defined metallurgical domains derived from lithology and alteration logging and geochemical data.</li> </ul>
Environmen- tal factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul> <li>Cu, Ag, Co, Fe, S and As are all estimated in the models to assist with waste management planning. No new environmental impacts have been identified from this estimation process. Mining leases are granted and current over the Mineral Resource estimation areas.</li> </ul>

Criteria	JORC Code explanation	Commentary
Bulk density	Whether assumed or determined. If	Bulk density has been estimated from the sample data determined using:
	assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	<ul> <li>A weight in water and weight in air (referred to by CC as specific gravity) technique for individual samples of core (typically 0.1 – 0.5 m in length) which are deemed representative of the overall rock mass drilled. The samples are taken at intervals of a minimum once every ten metres, closing in to once every two to five metres in the ore zone.</li> </ul>
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences	• By weighing whole trays of core in air and estimating the rock volume from the dimensions of diameter of the core and length recovered (referred to by CC as bulk density).
	between rock and alteration zones within the deposit.	This second method was used only as a validation check against the primary "Specific Gravity" method.
	<ul> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	Bulk density is estimated into the models using the specific gravity data where sufficient sampling exists or defaulted per domain where it does not. No adjustments are made to the sample data for bulk rock mass characteristics since the porosity of the rock is considered very low and the core tray validation work shows no consistent trends to support any such adjustments. Bulk density is estimated via Ordinary Kriging where sufficient samples are available. In some cases where sufficient samples are not available density is assigned by regression from estimated iron, in other cases average density values for a domain are applied to un-estimated density.
Classification	• The basis for the classification of the	For MAM, PTO and ESP:
	<ul> <li>Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>Classification is initially based on copper grade estimation quality, via the Cu kriging slope of regression. Any adjustments for data quality, drilling orientation (in the case of Pluto), geological uncertainty, historic void uncertainty/access considerations (in the case of Mammoth) or other uncertainties are then considered. The lastly estimation quality, drill spacing, data and geological considerations are examined visually and pragmatic, contiguous volumes are modelled to reflect practical mineable areas by each classification level.</li> <li>Although even drill spacing is difficult to maintain with fan drilling from underground platforms, approximate drill spacing from the applied classification levels for each deposit are given below. Where a measured classification was not allocated to a Resource an estimate of the likely drill spacing required is given.</li> <li>Esperanza sub-pit: measured 10m, indicated 20m, inferred 50m</li> <li>Pluto: measured 15m, indicated 40m, inferred 80m</li> <li>Mammoth: measured 10–15m, indicated 30–40m, inferred 50–100m (Ranges are given due to the extensive nature and different controls within Mammoth.</li> <li>For GST and ESS:</li> <li>Classification considers both the quality of the copper grade estimation and the Cu domain uncertainty. This is achieved by</li> </ul>
		performing an indicator kriging The Co, Ag, As, Fe and S grades are not necessarily estimated to the same level of confidence as classified for the Cu grade Mineral Resources and are reported within the Mineral Resource estimates for transparency of these attributes.
		The result appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	<ul> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul> <li>The Resource models have been internally peer reviewed by SRK and also reviewed by CCM staff on site. The models have also been subject to external overview and review by EMR appointed external experts in 2018 (Mr D. Hackman), 2019 (Mr Colin Moorehead) and 2020 (Mr Scott Dunham).</li> </ul>

Citteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	<ul> <li>where appropriate, a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to mages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>Connence in the estimates has been assessed and is in accordance with the guidelines outlined in the JORC Code relating to the definition and reporting of Measured, Indicated and Inferred Resources and as outlined in each of the points in this Table.</li> <li>No additional quantification of relative uncertainty has been completed. Classifications categories are reduced in circumstances such as, poor drilling orientation (in the case of Pluto), geological uncertainty, historic void uncertainty/access considerations (in the case of Mammoth).</li> <li>Although production data is available the current models have not yet been reconciled against production.</li> <li>For Ordinary Kriging block estimation, there is no single factor that defines the smoothing, Loosely speaking, allowing more samples in the search improves the estimation quality, but also increases smoothing. Where drill spacing is relatively widely spaced at an exploration level, the better the global (i.e. grade-tonnage curve) estimate accuracy is, the worse the local block accuracy is. Conversely, the better the local block accuracy, albeit on a larger selectivity volume. The combination of sample numbers used and block size chosen leads to the classic Kriging paradox – a trade-off between local and global accuracy.</li> <li>For example, at Esperanza South, where drilling is closer than around 10 m, there is minimal difference in block estimation regardless of sample numbers chosen for the search neighbourhood. However, where spacing is out to say 80 m or more, the difference between estimates with a few or a lot of sample si barge. At the resource model scale, it is usually more important to get have the grade-tonnage curve correct than the local block accuracy. Local block accuracy is typically defined at the grade control model stage where close-spaced drilling and or mapping or grade control drilling is also available. The block size used also plays a part; ideally a block size that matches a suitable selective mining</li></ul>

# Capricorn Copper Ore Reserves Estimate

# JORC Code, 2012 Edition – Table 1

## Section 4 – Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Comment
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul> <li>The Ore Reserve Estimate uses the 2020 Mineral Resource Estimate (MRE) updated by Capricorn from the initial MRE prepared by SRK Consulting (Australasia) Pty Ltd in 2019. The MRE is as at 31 May 2020.</li> <li>For the initial MRE Capricorn supplied the resource drill hole database, geological interpretation, domain wireframes and density measurement data for the different material types. SRK undertook all other aspects of the resource modelling work for the initial MRE. The Mammoth MRE was updated for depletion of areas mined up to 31 May 2020. Esperanza and Pluto have not been mined and their MREs have not changed from the 2019 MREs. Capricorn updated the Esperanza South and Greenstone MRE with additional sampling and geological information gathered during 2019 and 2020, as outlined below.</li> <li>New Esperanza South estimate:-</li> </ul>
		<ul> <li>In 2020 Capricorn completed a grade control diamond drilling program at Esperanza South. This along with an increase in grade control sampling and mapping significantly increased the understanding of the Esperanza South southern cave area. In addition, the classification criteria were modified in order to reflect more appropriately the variability and drilling spacing of the deposit. The Esperanza South model was completed internally in 2020 by CMM, and it was peer-reviewed by SRK and audited by SD2.</li> <li>New Greenstone estimate:-</li> </ul>
		<ul> <li>The Greenstone mineralisation is difficult to model as it is made up of multiple trends and there is no correlation between samples further than 10m away from each other. In 2020 Capricorn completed significant work to better define these mineralisation trends and this work is included in the 2020 resource. Capricorn has determined that the new resource comes within 6% of the reconciled grade.</li> </ul>
		<ul> <li>The resource models were created in the Mammoth Mine Grid, an approximately truncated version of the regional UTM datum AMG84 Zone 54 in which 7,800,000 m is subtracted from the Northing and 300,000 m is subtracted from the easting). 5,000 m is also added to the AHD to produce Mine elevations (RL)</li> </ul>
		<ul> <li>The MRE grades were interpolated by Co-kriging in two sets; typically, Cu with Ag then Co, S, Fe and As together. Regressions were applied at block scale to inform blocks where the minor elements were not well informed in the assays; typically using Fe regressions to inform S.</li> <li>Grades were estimated into parent cells with volumes from sub cells at a scale appropriate to the geological controls of each deposit. For mine planning all models were regularised to 5m by 5m by 5m which incorporates geological dilution at domain boundaries. No additional dilution adjustment was applied to the MRE.</li> </ul>
		<ul> <li>All Cu domains except for Greenstone use hard boundaries at the 0.5% Cu threshold or 200 ppm Co threshold. Greenstone considered a 0.25% Cu threshold. Variography and search parameters are typically oriented along the structural control orientations.</li> </ul>

Criteria	JORC Code explanation	Comment
Mineral Resource estimate for conversion to Ore Reserves continued		<ul> <li>Bulk density has been estimated by ordinary kriging using the specific gravity data where sufficient samples exist. Where insufficient samples are available density is assigned by regression from estimated iron or average density values for a domain are applied.</li> <li>The MRE includes Measured, Indicated and Inferred categories. For Mammoth, Pluto and Esperanza the resource classification is initially based on copper grade estimation quality, via the copper kriging slope of regression. Adjustments are then made considering data quality, drilling orientation (in the case of Pluto), geological uncertainty, historic void uncertainty/access considerations (in the case of Mammoth) and other uncertainties. Pragmatic, contiguous volumes are then modelled to reflect practical mineable areas. The classification approach results in the following notional drill spacing:-</li> <li>Esperanza sub-pit: measured 10m, indicated 20m, inferred 50m</li> <li>Pluto: measured 15m, indicated 40m, inferred 80m</li> <li>Mammoth: measured 10-15m, indicated 30-40m, inferred 50-100m.</li> <li>For Greenstone and Esperanza South the resource classification considers quality of copper grade estimation and copper domain uncertainty and is determined by indicator kriging.</li> <li>The unmined portion of the Ore Reserve is a subset of the unmined portion of the MRE. Resource cut offs applied to copper only are somewhat lower than the current economic Reserve cut offs. A cut off of 0.8% Cu was applied to the Esperanza South Resource, for extraction by sub level caving. A 1.0% copper Resource cut off was applied to all other deposits based on long hole open stoping.</li> <li>Although production data were available for Esperanza South, Greenstone and Mammoth at the time the MRE was prepared, the MRE does not take production data into account.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> </ul>	Chris Desoe, Competent Person for overall Ore Reserves sign-off, undertook a site visit at Capricorn Copper Mine on 20–21 June 2018, including the following inspections:
	<ul> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>Underground areas <ul> <li>Esperanza South</li> <li>Mammoth Deeps</li> <li>Esperanza</li> <li>Pluto</li> <li>Decline turnoff to Greenstone</li> </ul> </li> <li>Open cut and waste rock dump areas</li> <li>Ore stockpiles</li> <li>Core yard</li> <li>Surface infrastructure</li> </ul>

Criteria	JORC Code explanation	Comment
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<ul> <li>The Project is an operating mine with a lengthy operational history. It was placed under care and maintenance by the previous owner in 2013 and was re-started in early 2017 as a joint venture between EMR Capital and Lighthouse Minerals. The overall technical feasibility of the current project is supported by the Capricorn Copper Definitive Feasibility Study, 1 Dec 2016.</li> <li>Ore reserves have previously been reported for CCM including historical estimates under previous ownership. Under Capricorn's ownership ore reserves were previously reported in the Dec 2016 Definitive Feasibility Study. The current Ore Reserves Statement relates to the second ore reserves estimate under Capricorn's ownership. It is based on <ul> <li>depletion since restart of mining in early 2017</li> <li>a revised MRE, and</li> <li>revision to the mine plan</li> </ul> </li> <li>The mine plan is underpinned by the Mining chapter of the December 2016 Feasibility Study report as well as the Nov 2016 Feasibility Study by Mining Plus, <i>MP</i>-4173-FSDR-Capricorn Copper-r3 161116.pdf, covering development of and production from the following deposits:- <ul> <li>Esperanza</li> <li>Pluto</li> <li>Greenstone</li> </ul> </li> <li>Additional studies have been completed into various aspects of the operation since the 2017 re-start. Documentation for these studies is referenced below where appropriate, under the items dealing with relevant modifying factors. The recent document <i>CCM Reserve Input Summary.pdf</i> summarises the key inputs and method for the current mine plan on which the reserves are based.</li> </ul>

0.57

n/a

Criteria	JORC Code explanation	Comment		
Cut-off parameters	<ul> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	Ore is selected by applying a different copperate area as summarised in the table below. The are contained in the spreadsheet 202005_C take into account the following factors define financial model:	er cutoff grade final cutoff grac oG Update v01 ied in a prelimir	for each mining le calculations xlsx. They lary project
		<ul> <li>Average of life of mine metallurgical recorrections and recovery relationship</li> <li>2019 mining operating costs</li> <li>2020 Budget ore processing operating costs</li> <li>2020 Budget general and refining costs</li> <li>2020 Budget general and administrative of Royalties</li> <li>US\$3.00/lb copper price</li> <li>0.73 USD/AUD exchange rate</li> </ul>	veries, based or ost ; operating costs	n currently
		These are simple cutoffs that ignore contrib of arsenic, variable recovery, and variable ha Additionally:-	ution of silver, in Julage cost with	mpact depth.
		<ul> <li>the cutoffs were calculated as head grade applied to the insitu resource model bloc</li> <li>An initial set of cutoff grades was applied the MSO program. These MSO cutoff gra below, were slightly lower than the final of Pluto and Esperanza.</li> </ul>	e cutoffs but ha ks, ignoring dilu to create stope ades, shown in f utoff grades fo	ve been Ition. e shapes using :he table r Greenstone,
		These two factors may result in some addition included in the reserves that are sub-econom and processing assumptions. Although in the cutoff grades has been sub-optimal, the impa copper price remains higher than the US\$3.0 grades. The cutoff grade calculation and app future mine plans and reserve estimates.	nal resource blo iic for the nomir se respects the ict would be par O/lb assumed fo plication will be	ocks being nated economic application of 'tly offset if the or the cutoff refined in
		The final cutoff grades were applied as a check, to exclude any stopes for		
		which the overall stope grade was not great	er than the cuto	oπ. ade %Cu
		Area	MSO	Final/check
		Esperanza South Total	n/a	1.22
		Esperanza South Shutoff	n/a	1.02
		Esperanza South Development	n/a	0.63
		Greenstone	1.18	1.22
		Greenstone Development	n/a	0.57
		Mammoth (Remnants and Deeps)	1.42	1.41
		Mammoth Development	n/a	0.58
		Pluto	1.38	1.46
		Pluto Development	n/a	0.57
		Esperanza	1 23	1 28

Esperanza Development

Criteria	JORC Code explanation	
Mining factors or assumptions	<ul> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> </ul>	The Nov Plus mine Defi
	<ul> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated</li> </ul>	Area Espe
	<ul> <li>design issues such as pre-strip, access, etc.</li> <li>The assumptions made regarding geotechnical parameters (eg pit slopes, stope</li> </ul>	Gree
	sizes, etc), grade control and pre-production drilling.	Man Plute
	The major assumptions made and Mineral Resource model used for pit and stope	Espe
	<ul> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> </ul>	The geor the
	<ul> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their</li> </ul>	Esp Pow

- and the sensitivity of the outcome to their inclusion.
- The infrastructure requirements of the selected mining methods.

#### Comment

The table below lists the mining methods used for each area. The November 2016 Capricorn Copper Project Feasibility Study by Mining Plus is an overall supporting document for the mining method and general mine plan aspects, along with the Mining chapter of the Capricorn Copper Definitive Feasibility Study 1 Dec 2016.

Area	Mining Method	
Esperanza South	Transverse and Longitudinal Sub-level Caving (SLC)	
Greenstone	Long Hole Open Stoping with waste rockfill	
Mammoth (Remnants and Deeps)		
Pluto	Long Hole Open Stoping	
Esperanza	with rasterin	

These methods are considered to be appropriate to the orebody geometries, grades and ground conditions. Key mining assumptions for the different areas are outlined below.

### Esperanza South (ESS) SLC

Power Geotechnical prepared the original 2016 ESS plan and 2018 update using its PGCA cave flow modelling software. The ESS SLC plan is now updated by CCM Mining and Geotechnical Engineer Alonso Gonzales. The latest update uses the September 2020 resource block model. The current SLC mine plan is supported by Section 5.1 of the CCM Cave Management Plan (*CCPL-MINE-MGP-0002\_CCM SLC Management Plan\_Update.pdf*) and in general by the following documents:-

- Power Geotechnical PGCA documents
  - Esperanza South PGCA Modelling Report, Jan 2017 Esperanza South PGCA Modelling Report.docx.
  - Updated Footprint Modelling Report, July 2018 Updated Footprint Modelling Report.pdf
- Itasca June 2020 Esperanza South Cavability Assessment draft report
  - 20005\_Capricorn\_Caveability\_Draft02.pdf
- CCM documents
  - Analysis-of-Cavability-4990L-Stope-Lower-South-Cave-Case-C2B\_ rf.pdf
  - Stress-Modelling-in-ESS-Lower-Cave\_rev1.pdf

Key SLC parameters include 25m level spacing and 15m centre-to-centre spacing of  $5.0m \times 5.0m$  ore drives.

Prior to the PGCA modelling, Deswik software was used to determine the economic mining footprint shapes for each level, based on the 1.22%Cu cutoff grade. The boundary between Indicated and Inferred Resource was applied to constrain the footprints. The mining footprints were then used to create the SLC designs for the PGCA modelling and mine schedule, for which the 1.02%Cu shutoff grade was applied.

Criteria	JORC Code explanation	Comment
Mining factors or		It is important to note the following points in relation to the estimated SLC tonnes and grade:-
assumptions continued		<ul> <li>Although the SLC design targets Measured and Indicated Resources some Inferred Resource is included within the SLC envelope and Reserve tonnes as unavoidable dilution. However, the grade of the Inferred component has been derated by 50% to provide the estimated grade of this mineralised dilution.</li> </ul>
		<ul> <li>The estimated SLC production tonnes are 17% lower than the insitu tonnes within the extraction shape. Without derating the grade of the ESS Inferred component, the estimated SLC production grade is 3% higher than the average grade within the extraction shape. This is not typical for SLC production for which it is more common that the production tonnes are higher and the grade lower than those within the extraction shape. The SLC production modelled using the PGCA program effectively applies a considerable degree of selectivity by application of the 1.02% shutoff grade. This will result in a significant tonnage of blasted material below this shutoff grade being left within the cave. In practice, disciplined SLC monitoring, grade control and draw control will be essential in order to achieve the SLC Ore Reserve.</li> <li>After derating the grade of the ESS Inferred component, the estimated SLC production grade is 4% lower than the average grade within the extraction shape estimated with all Resource components.</li> </ul>
		Greenstone, Mammoth, Pluto and Esperanza
		The longhole open stope designs for these deposits are generally supported by the following documents, which provide design basis including maximum spans for walls and backs as well as estimated equivalent linear overbreak/sloughing (ELOS)*:-
		<ul> <li>Pluto - 2020 -014 Rev 2 Pluto Geotechnical Parameters for MSO.pdf</li> <li>Mammoth - 2020 -016 Mammoth Geotechnical Parameters for MSO.pdf</li> <li>Greenstone - 2020 -018 Greenstone Geotechnical Parameters for MSO.pdf</li> <li>Esperanza** - 2020 -015 Esperanza LHOS underpit Geotechnical Parameters for MSO.pdf</li> <li>General - CCPL-MINE-SLIM-0014 Geotechnical Information Summary</li> </ul>
		Update.pdf
		The main set of stope designs was prepared by consultant Mining Plus using Datamine Studio MSO software, supervised by Capricorn mine planning personnel. MSO was applied to the depleted July 2019 resource block models for Mammoth, Esperanza and Pluto, and the August 2020 resource model for Greenstone, to generate optimised stope shapes consistent with the nominated design parameters <sup>‡</sup> . Stopes target Measured and Indicated Resources but may include Inferred Resources as internal dilution within the stope shapes. Stopes that included more than 30% of Inferred Resources were excluded from the Reserves. Although stopes may include Inferred resources as planned dilution, the grades of the Inferred component have been derated by 50% to provide the estimated grade of this mineralised dilution

<sup>\*</sup> The CCM geotechnical memoranda explain that stope footwalls were not included in stability analyses and are generally stable. The geotechnical memoranda provide estimates of expected hangingwall ELOS for each deposit. However, the MSO stope designs did not incorporate these different ELOS estimates and instead applied a blanket dilution skin of 0.5m on the footwall and 0.5m on the hangingwall. This may underestimate overbreak and dilution for some deposits and CCM has therefore continued to apply adjustment to the estimated tonnes and grades with the dilution factor derived from production reconciliation data.

<sup>\*\*</sup> Esperanza Stope sizes have been estimated using the data for the Pluto assessment due to proximity of these two orebodies. Parameters from the memo by Richard Fry titled Pluto Geotechnical Assessment have been used to define stope sizes and ELOS for the Esperanza LHOS.

As part of the MSO design process, Mining Plus prepared several different stope sets using alternative settings. For the nominated cutoff grades, the "six point" stope shapes resulted in the greatest metal production and were selected by CCM for the Ore Reserves estimation. This MSO mode forms stopes with six points on each cross section, increasing the theoretical selectivity of the excavation. However, for a significant number of these stopes this resulted in excessive inflections in the stope walls and backs and the stopes were considered to be unrealistic. Those stopes were replaced by the more regular four-point stopes except for Mammoth Remnants for which AMDAD revised the stope designs manually.

Criteria	JORC Code explanation	Comment
Mining		Ground Control Management Plan
factors or assumptions continued		CCM has prepared a comprehensive Ground Control Management Plan (GCMP), CCPL_MINE-MCP-001_CCM Ground Control Management Plan.pdf, which identifies and addresses geotechnical hazards and requirements including identifying the responsibilities, systems, processes and procedures used to manage all aspects of ground control design, implementation and monitoring.
		<b>Hydrogeological</b> aspects have been addressed by various studies including 2011 by Dempers and Seymour cited in the 2016 FS and DFS reports, and in the CCM Summary of Geotechnical Information, 181123_CCM_Geotechnical_Information_Summary_Update.pdf, which is also a key reference for the GCMP.
		Major geotechnical and hydrogeological risks:-
		Major geotechnical and hydrogeological risks identified and addressed in the GCMP are listed below:
		<ul> <li>Previous open pit workings - Mammoth open pit, combined with the No1 Orebody underground workings, both now filled with waste and partly leached ore, and Esperanza open pit, currently partially filled with water and tailings; some sections of the walls have failed</li> <li>Existing major unfilled/partially filled underground voids with potential to cave through to surface or potential for uncontrolled pillar failure         <ul> <li>For Mammoth Remnants, with a considerable proportion of ore reserves in proximity to old workings, CCM has a high level of confidence that with current technology and paste fill the ore reserves can be extracted inline with the modifying factors. The cost of filling the remnant voids is allowed for in the schedule and financial model.</li> </ul> </li> <li>Potential for mining induced fault movement/seismicity</li> <li>Water ingress         <ul> <li>Inflow of surface run-off from potential subsidence zones associated with B Stope and 2 Lens SLC</li> <li>Inflows from Esperanza Fault zone to Esperanza South SLC workings</li> <li>Flows from Esperanza Pit along major fault structures to adjacent workings</li> <li>Inflow of surface rainfall and run-off to Esperanza South SLC crater and subsidence zone</li> </ul> </li></ul>
		- Inflows of surface runoff and groundwater via HS1 Shaft
		CCM has developed Hazard Management Plans and Trigger Action Response Plans (TARP) to manage these hazards to acceptable levels of risk.

Criteria	JORC Code explanation	Comment
Mining		Production reconciliation
factors or assumptions continued		Production since the 2017 restart has been from Esperanza South, Mammoth and Greenstone.
		CCM prepares two sets of reconciliation. The first set comprises stope reconciliations, which provide tonnes and grade comparisons between the mine plan stages; from 2019 Ore Reserve designs with resource block model, to Grade Control Design with grade control model, to actual production as reconciled by the mill. These data span the 12 months from September 2019 to August 2020. The following points are made in relation to these reconciliation data:-
		Greenstone GST Reserve Reconciliation Cu.xlsm
		Overall, the comparison of final Grade Control Design versus CMS ("Actual") suggests good mining practices, although this does vary level by level. Overall the CMS tonnes were 5% higher and the grade only 1% lower than designed. These data could even suggest that some stopes have broken more closely to the ore boundary than modelled by the design.
		There are however large differences between the Reserve numbers and actual, and also large differences between the grade estimated by the Grade Control Model and the reconciled grade. These differences highlight the difficulty in modelling GST as it is made up of multiple trends and there is no correlation between samples further than 10m away from each other. Significant work has been completed and is included in the 2020 resource model to better define these trends, including increased drilling density and additional mapping. Although not reflected in the stope reconciliation spreadsheet, CCM has confirmed that it has completed further reconciliations on GST using the 2020 MRE and these results show the 2020 MRE estimating within 6% of actual reconciled grade.
		Mammoth MAM Reserve Reconciliation Cu.xlsm
		The Mammoth comparisons are complicated by three factors; 1) mining of inferred and unclassified material that was not included in Reserve shapes, 2) a spatial change in stopes mined from those planned, due to the pastefill system being out of operation for much of the year and inability to fill stopes as planned, and 3) additional production from historically broken ore in and adjacent to old stopes. Due to these factors, a more detailed reconciliation analysis would be required in order to draw meaningful conclusions regarding the accuracy of the resource model and mine plan parameters.

Criteria	JORC Code explanation	Comment		
Mining		ESS ESS Reserve Reconciliation	on Cu.xlsm	
factors or assumptions continued		The ESS reconciliation data actual SLC production grade the 2019 Reserve model. Co was predominantly at the to lack of grade control drilling MRE grade is 9% lower with for the 2019 MRE within th the September 2020 MRE is improvement in its daily and actual grade as measured by	suggest that for e was 16% lowe CM considers t op of the southe s. For the same hin the revised he Reserve enve s a better estim d monthly grade y the mill.	or the 12 month period the er than the grade estimated by hat the grade overestimation ern cave and was due to a levels the September 2020 SLC envelope than the grade elope. This suggests that hate and CCM has seen an e forecast compared to the
		The second reconciliation p mine production recorded b and grade measured by the tonnes are determined using measurements for trucks. A mill-reckoned tonnes reasor evaluating the production to the mined grades are report designed final stope shapes can provide a good assessm estimated by the mine plan. to November this reconcilia factor of 0.952 for Mammot as summarised in the table b grades reported for the MS 0.5m dilution skins incorpor CCM has also applied a reco	The second reconciliation provides a comparison of monthly and YTD mine production recorded by the mine against the production tonnes and grade measured by the processing plant. The mine production tonnes are determined using load cells on loaders and weighbridge measurements for trucks. Although the mined tonnes tend to match the mill-reckoned tonnes reasonably well this comparison is not useful for evaluating the production tonnes estimated by the mine plan. However, the mined grades are reported from the resource model within the designed final stope shapes. Comparison against mill-reconciled grade can provide a good assessment of the reliability of the production grade estimated by the mine plan. For the 2020 year-to-date from January to November this reconciliation has determined an average grade factor of 0.952 for Mammoth and Greenstone long hole open stoping, as summarised in the table below. CCM has applied this factor to the grades reported for the MSO stope shapes. This is in addition to the 0.5m dilution skins incorporated in the MSO shapes.	
		the stope reconciliations, du considered reasonable for t	ue to the ambig he proposed lo	uity of those data, but is ng hole stoping method.
		Factor	Value Used	Description
		Stope Recovery (Tonnes)	0.900	Applied to stope only
		Stope Dilution (Grade)	0.952	Based on Mine Reconciliation November 2020 V2.xlsx spreadsheet
		For Esperanza South SLC th generated by the PGCA cav was updated with grade cor indicate that the modelled g measured by the processing	te production g /e flow program trol data in Ma grade is only 1.8 g plant. This diff	rade recorded by the mine is a. Since the resource model by 2020 the reconciliation data 3% higher than the actual grade rerence is sufficiently small that

#### Check report

 AMDAD has completed check reporting of estimated production tonnes and grades within the resource block models using the design shapes. The check reporting matches the Reserves closely for the longhole open stope production. For Esperanza South the difference between the insitu tonnes and grade and the SLC Reserve is considered to represent an atypical degree of selectivity for SLC. The estimated SLC Reserve would only be achieved by carefully managed draw, including draw of swell-only for sub-economic rings strict application of the shutoff grade.

adjustment of the production tonnes and grade generated by PGCA with

the new resource model is considered to be not warranted.

Criteria	JORC Code explanation	Comment
Mining		Mine Infrastructure, Other
factors or assumptions continued		<ul> <li>Mining operations are undertaken by a major specialist underground contractor, Byrnecut Australia, using industry-standard fleet. The fleet comprises diesel-electric underground drill rigs for development and production and diesel-powered underground loaders and trucks for haulage of ore and waste rock.</li> </ul>
		<ul> <li>Required mine infrastructure already exists including a pastefill plant and reticulation system, primary ventilation fans, dewatering system, electrical infrastructure and contractor fleet maintenance facilities.</li> </ul>
		<ul> <li>The pastefill system was inoperative during much of 2020 due to failures of the lining in the main fill delivery borehole. The borehole problems were investigated by Outotec, which has recommended a change to the fill system downstream from the borehole. This involves installation of an additional friction pipe loop at or near the bottom of the borehole, to control and reduce the amount of fill free-fall within the borehole. This will reduce the borehole liner wear.</li> <li>A ventilation review by Ozvent in October 2020 made recommendations regarding additional ventilation and cooling infrastructure. CCM is working through the recommendations and is also seeking clarification regarding the long term ventilation strategy:-</li> </ul>
		<ul> <li>The Greenstone primary fan pitch change plates are onsite awaiting a new soft starter prior to changing and will be completed very soon.</li> </ul>
		<ul> <li>The Mammoth Deeps Overcast system has been completed and temperatures are acceptable.</li> </ul>
		<ul> <li>Upgrading HR1 exhaust system has been added to the LOM Plan</li> <li>CCM is also seeking clarification regarding the long term ventilation strategy – Ozvent used an un-levelled schedule to assess the ventilation requirements. The actual number of operational fronts is likely to be far less than the assessment Ozvent made. Ozvent is completing an Addendum to its report.</li> </ul>

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Criteria	JORC Code explanation	Comment
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken,</li> </ul>	Under the previous ownership the existing processing plant had a historically demonstrated capacity to treat approximately 1.4 Mtpa of copper sulphide ores from Mammoth and Esperanza. The processing method involves crushing, milling and flotation to produce copper concentrate. The metallurgical process is conventional, well understood and has many years of operational experience to support the flotation response of the CCM ore types.
	<ul> <li>the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	Prior to the 2017 restart of operations the CCM plant was refurbished including minor modifications to the flowsheet. After restart, the existing tertiary milling circuit was replaced with an Outotec HIG Mill to allow for fine grinding of rougher scavenger concentrates to improve copper liberation. Over the three years of operation since the restart the plant has been debottlenecked to such an extent that it is currently operating at 1.9 Mtpa, the plant still has significant capacity to improve throughputs further.
		Metallurgical test-work has been undertaken on drill core samples from all ore sources included in the Ore Reserve estimate and appropriate recoveries and concentrate grades applied. The plant utilises a multilinear regression model to determine expected copper recovery per shift based on a number of conditions such as feed and concentrate assays. This model is then used day to day to monitor plant performance and to determine future expected plant performance including for project financial modelling. The data used to create the model is based on 24 months of operating data and is an accurate method to predict future performance.
		Although the financial model applies variable metallurgical recoveries, as described above, the cutoff grade for a particular deposit in the mine plan was calculated from the average of the recoveries for that deposit over the remaining life of mine. These were preliminary recovery estimates based on an initial recovery model developed at the time the cutoff grades were determined. The recovery model has since been refined to the model in the current financial model.
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and	CCM is an existing fully permitted mine with established closure costs and Environmental Authority (EA). The main environmental aspects are surface and underground water management, including water courses, dams, drains, sumps and pits, management of tailings, rehabilitation of the old heap leach pads, tailings storage facilities and old waste rock dumps, and management of old open cut voids and new cave void above Esperanza South.
	waste dumps should be reported.	Capricorn has confirmed that there are no environmental issues or factors that will impact on the ability of the mine to produce the estimated reserves.

Criteria	JORC Code explanation	Comment
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	CCM is an existing operation with all necessary major infrastructure in place and operational, including the following:-
		<ul> <li>road access by sealed Barkly Highway then 85km of unsealed road</li> <li>processing plant (consisting of a crushing, milling and conventional sulphide flotation circuit)</li> </ul>
		<ul> <li>portal and underground development at the Mammoth deposit and the Esperanza South deposit</li> </ul>
		<ul> <li>paste backfill plant</li> </ul>
		<ul> <li>tailings storage facility</li> </ul>
		<ul> <li>mine ventilation, electrical and dewatering systems</li> </ul>
		<ul> <li>workshops and stores</li> </ul>
		concentrate storage shed
		<ul> <li>fuel farm and wash down bay</li> </ul>
		<ul> <li>administration and other offices</li> </ul>
		<ul> <li>power provided by a 220kV high voltage power line with power supplied from the grid</li> </ul>
		<ul> <li>water licences and supply from Lake Waggaboonya and water treatment plant,</li> </ul>
		<ul> <li>accommodation camp, located 5km from the mining operation,</li> </ul>
		<ul> <li>sewerage, water and electricity utilities as well as information and communication systems at the mine and in the camp</li> </ul>
		<ul> <li>sealed, all-weather airstrip, located 8km south of Capricorn Copper Mine.</li> </ul>
		Capricorn has confirmed that the existing surface infrastructure is adequate to service the production levels contemplated in the LOM plan. This flows onto the achievability of the cost structure that underpins costs assumed in the financial models and cut-off grades applied.
		Costs assumed are reflective of historical costs and all additional capital costs to establish future infrastructure are also captured in the LOM

financial model.

Criteria	JORC Code explanation	Comment
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> </ul>	Costs are contained in the project financial model, which includes forecasts for operating costs and on-going capital expenditure. The latter includes sustaining capital as well as "growth" items.
	<ul> <li>The methodology used to estimate operating costs</li> </ul>	Significant capital cost items include:-
	<ul> <li>operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul> <li>Significant capital cost items include:-</li> <li>Capitalised underground mine development</li> <li>Ventilation upgrade: - All lateral development is included in the cost model based on design lengths, vertical development and Primary Fans are included in Capital, and Cooling has been added as an operating cost to the cost model based on a leased Cooling Plant.</li> <li>Ladderway extensions and replacement and extension of the fill reticulation system</li> <li>Processing plant expenditure for sodium hydrosulphide reagent facilities and gravity circuit</li> <li>Expansion of tailings storage facility capacity over the life of mine.</li> <li>Rehabilitation costs</li> </ul> Mine operating costs are based on:- <ul> <li>unit costs for the current mining contract schedule of rates applied to scheduled mining quantities as well as fixed monthly contract charges, and</li> <li>paste fill costs based on current budget levels for personnel, consumbles consumption, power and fuel consumption, equipment maintenance, repair and hire, travel and accommodation, training, licensing, contract costs, legal and consultant fees. Processing costs for chemicals and grinding media are based on consumption and process performance data to-date, consistent with forecast recoveries. </li> </ul>
		based on current terms. The realisation costs assume a near term (three year) concentrate grade
		of 26% copper, increasing to 28% over the remainder of the life of mine.
		The USD/AUD exchange rate is based on forecasts by EMR Capital of 0.75 for the remaining life of mine.
		Transport charges are from analysis by Capricorn.
		The allowance for copper and silver royalty payments to the Queensland government are based on current royalty rates.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head	Capricorn assumes the following metal prices for its financial modelling based on forecasts provided by EMR Capital:-
	grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	<ul> <li>Copper price of A\$4.53/lb for 2021 then A\$4.40 for 2022 onwards.</li> <li>Silver price of A\$34.67/oz for 2021 then A\$26.67/oz for 2022 onwards.</li> </ul>

• The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.

Assumptions for the exchange rate and realisation costs are outlined in the preceding section.

Criteria	JORC Code explanation	Comment
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	Capricorn has previously advised that its concentrate is readily saleable. It is producing concentrate that is clean and has been well received by the multiple smelters it has been delivered to. Capricorn sells its concentrates to traders who are then on-selling to various custom smelters, but mainly smelters in China.
Economic	<ul> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul> <li>Capricorn has prepared a spreadsheet financial model with cost, revenue and physical inputs as outlined in the Cost and Revenue sections above. It is a real model where it is assumed that the costs are constant, without adjustment for inflation.</li> <li>For internal purposes, Capricorn uses a financial model based on a life of mine schedule that includes Inferred Resources. However, a separate version of the financial model was prepared for economic analysis of a mine schedule based only on the estimated Ore Reserves. Any Inferred dilution within the Ore Reserves had its grade derated by 50%. This model, <i>20210401 2020 LoM Reserves.xlsx</i>, gives a positive PV<sub>8%</sub> of A\$74.9 million for Cash Flow Available for Debt Service, demonstrating the economic viability of the Ore Reserves.</li> <li>Sensitivity analysis was run for this financial model, with the grade of the diluting Inferred Resources set to zero. This still gave positive PV<sub>8%</sub> of A\$14.8 million for Cash Flow Available for Debt Service.</li> <li>In line with current practice, CCM is assuming domestic sales of 2,500 tonnes per month through to March 2023, when the Trafigura offtake agreement ends. Following this, CCM is assuming that 50% of</li> </ul>
Social	<ul> <li>The status of agreements with key stakeholders and matters leading to social license to operate.</li> </ul>	Capricorn confirms by the Contributor's consent letter that all stakeholder, landholder and native title agreements are in place and there is no material risk to the social license to operate associated with the current agreements.
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that</li> </ul>	Capricorn has confirmed that there are no other material issues that impact the project and/or the estimation and classification of the Ore Reserves.

is dependent on a third party on which extraction of the reserve is contingent.

Criteria	JORC Code explanation	Comment
Classification	• The basis for the classification of the Ore	The Proved Ore Reserve is a sub-set of Measured Mineral Resource.
	<ul> <li>Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	The Probable Ore Reserve is derived from the Indicated Mineral Resource and for some of Esperanza South it is also derived from part of the Measured Mineral Resource. For Esperanza South, only the Measured Resource mined by the ore drives and Primary Draw is classified as Proved Ore Reserve. The remainder of the Esperanza South Ore Reserve is classified as Probable due to the lower level of confidence in ore tonnes and grade associated with cave draw. This downgrading represents 1.2% of the overall Probable Ore Reserve.
		The other Modifying Factors are generally considered to be at the high level of confidence commensurate with Proved Reserves. The exception is Esperanza, explained below. However, Esperanza has no Measured Resources, so there is no downgrading involved.
		At Esperanza, the stope design is not at the highest level of confidence due to lack of geotechnical data and the requirement for further work to address the risks associated with mining underneath the Esperanza Pit. This limits the confidence level to a Probable Classification.
		As noted under Mining factors or assumptions, some Inferred Resource has been included in the estimated Ore Reserves as dilution within the extraction designs that target Measured and Indicated Resources. This diluting Inferred Resource and unclassified material represents 12% of the overall Reserves. Although the grade of the Inferred component has been halved, as part of the economic analysis, the financial model was re-evaluated with the grade of the Inferred component set to zero to approximate the impact should all of the diluting Inferred material carry no grade at all, and the NPV remains positive.
Audits or reviews	<ul> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<ul> <li>The current Ore Reserve estimate has not been externally audited or reviewed.</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Accuracy and confidence discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence.</li> </ul>	The resource models prepared for the Ore Reserve estimate do not include measures of relative accuracy other than what is implied by the resource classifications. No simulations or probabilistic modelling have been undertaken on the Ore Reserves that would provide a meaningful measure of relative accuracy. Apart from the exceptions described in the Classification section above, the Modifying Factors are generally considered to be at a high level of confidence as most are supported by feasibility level assessments and current operational data. Therefore, it is considered appropriate that the Measured and Indicated Resource classifications translate to Proved and Probable Ore Reserve classifications, apart from Esperanza South. Of the six deposits/areas contributing to the Reserves, the largest contributor is Esperanza South. Due to the nature of cave flow, the estimated production tonnes and grade for Esperanza South are considered to have significant uncertainty. The Ore Reserve estimate for Esperanza South is expected to be consistent with the overall tonnes and grade to be extracted over the life of this deposit, within the notional level of accuracy implied by the reserve categories. However, it is also expected that monthly production tonnes and grade could vary significantly from forecasts.

of the estimate should be compared with production data, where available.

## **Redhill Mineral Resources Estimate**

# JORC Table 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	<ul> <li>Nature and Quality of sampling (e.g. cut channels, random chips or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or hand held XRF instruments etc).</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 1m samples from which 3kg was pulverized to produce 30g 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 sampling types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The Cutters Cove Project has been sampled through 2 recent short diamond drilling campaigns and surface cut channel sampling campaigns in 2013 to 2014.</li> <li>17 diamond drill holes for 2,339.45m.</li> <li>Approximately 0.5 - 1m samples of 2-3kg were taken from diamond saw cut drill core whilst respecting geological boundaries.</li> <li>Approximately 2-3kg samples derived from diamond saw cut core trench samples perpendicular to vein strikes and respecting geological boundaries.</li> <li>181 Backs channel samples taken during 1970's mining operations. Width and grade recorded on Historic Plans.</li> <li>Historic backs samples consist of 15cm by 2-3cm deep chipped channel samples traversing the vein suggesting sample weights of approximately 10-12kg.</li> </ul>
Drilling Techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open hole 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, where core is oriented and if so by what method.</li> </ul>	<ul><li>17 diamond HQ, NQ diamond core for 2,339.45m.</li><li>Core not oriented.</li></ul>
Sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximize 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.</li> </ul>	<ul> <li>Core reconstituted, marked up and measured in all drilling campaigns.</li> <li>Generally excellent (95-100%)</li> <li>No relationship between recovery and grade was observed</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 of quantitative in nature. Core (or costean, channel etc) photography.</li> </ul>	<ul> <li>Core geologically logged by experienced geologists over 2 campaigns.</li> <li>Standard lithology codes used for interpretation.</li> <li>RQD and recoveries logged.</li> <li>Logs loaded into excel spreadsheets and uploaded into access database.</li> </ul>
Sub-Sample techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter of half taken.</li> <li>If non core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry</li> <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 maximize representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results of field duplicate/second half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled</li> </ul>	<ul> <li>No record of historic sample preparation</li> <li>Half core split by diamond saw on 0.5 - 1.0m samples while respecting geological contacts.</li> <li>Bagged core delivered to ACME Laboratories in Santiago</li> <li>Whole core crushed to 80% passing 2mm.</li> <li>Crushed sample quartered to 500g and pulverized to pass 75 micron.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Quality of assay data and laboratory tests	<ul> <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 geophysics tools, spectrometers, hand held XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation etc.</li> <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> </ul>	<ul> <li>No record of laboratory tests for historic backs samples</li> <li>No record of QAQC procedures were available for historic sampling.</li> <li>Recent samples Cu Pb, Zn and Ag analysed by AAS after aqua regia digestion at ACME laboratories Santiago.</li> <li>Au by fire assay with AAS finish by ACME laboratories Santiago.</li> <li>32 element analysis by ICP_ES after Aqua Regia digestion.</li> <li>QAQC analysis with Certified Reference material inserted every 20th sample.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel</li> <li>The use of twinned holes</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols</li> <li>Discuss any adjustment to assay data</li> </ul>	<ul> <li>No independent laboratory analyses completed.</li> <li>Minor verification of historic samples with recent channel samples.</li> <li>No twinned holes were completed.</li> <li>Primary assay data was received electronically and stored by consultant geologist.</li> <li>All electronic data uploaded to access database.</li> <li>Historic data loaded onto spreadsheets and uploaded to Access database.</li> <li>Data validation with Surpac software, basic statistical analysis and comparison with historic plans and sections.</li> <li>Negative results for below detection limit assay data have been entered as detection limit.</li> </ul>
Location of data points	<ul> <li>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</li> <li>Specification of grid system used</li> <li>Quality and accuracy of topographic control</li> </ul>	<ul> <li>All hole collar surveys by licensed surveyor.</li> <li>All coordinates in WGS94</li> <li>RL's as MSL</li> <li>Down hole surveys by downhole camera</li> <li>Underground samples located from registered plans and sections (+/-2m)</li> <li>Topographic dtm created from lands department 10m contour maps adjusted for known survey points (e.g. drill collars).</li> </ul>
Data Spacing and distribution	<ul> <li>Data spacing for exploration results</li> <li>Whether data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource and Ore Reserve estimation procedures and classifications applied.</li> <li>Whether sample compositing has been applied</li> </ul>	<ul> <li>Sample spacing approximately 5 x 10m around mine openings.</li> <li>Drill spacing approximately 100 x 100m or worse below mine development.</li> <li>Sample spacing is clustered around mine levels.</li> <li>Drill spacing is considered to be appropriate for the estimation of Indicated to Inferred Mineral resources.</li> <li>Samples have been composited on vein intercepts for the resource estimation.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between drilling orientation and the orientation of key mineralised structures is considered to have introduced sampling bias, this should be assessed and reported if material</li> </ul>	<ul> <li>The majority of DDH have been drilled east-west sub- perpendicular to vein strike.</li> <li>Channel samples have been taken sub-perpendicular to the vein strike</li> <li>Drill hole orientation is not considered to have introduced any material sampling bias.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Sample Security	• The measures taken to ensure sample security	<ul> <li>Samples ticketed and bagged on site.</li> <li>Delivered by courier to ACME laboratories in Santiago.</li> <li>All historic data captured and stored in customised access database</li> <li>Data integrity validated with Surpac Software for EOH depth and sample overlaps.</li> <li>Manual check by reviewing cross sections with the historic drafted sections and plans.</li> <li>Basic statistical analysis supports data validation</li> </ul>
Audits or Reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data</li> </ul>	<ul> <li>No audits or reviews of sampling data and techniques completed.</li> </ul>

## Section 2. Reporting of Exploration Results

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 tenure held at the time of reporting along with known impediments to obtaining a license to operate the area</li> </ul>	• RHM hold 65 exploration concessions in the Magellanes district of Chile.
Exploration done by other parties	<ul> <li>Acknowledgement and appraisal of exploration by other parties</li> </ul>	<ul> <li>Cutters Cove is a historic mining centre that operated from the early 1900's to the 1970's.</li> <li>The majority of the mining occurred on the site in the early 1970's until closure in 1975.</li> <li>operations consisted of a 50tpa crushing plant supplying two 8tph ball mills and a 400tpd flotation plant.</li> <li>Over the 2 years of operations, 211,754 tonnes of ore were extracted grading 1.72% Cu from a reserve of 237,654 @ 3.24% Cu.</li> <li>No previous modern exploration in the district apart from reconnaissance work.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation	<ul> <li>Geology dominated by 2 allochthonous thrust slices striking NNW and dipping approximately 45o SSW.</li> <li>Older Paleozoic sediments thrust over Jurassic rhyolitic volcaniclastics.</li> <li>Mineralisation consists of late stage mesothermal and epithermal quartz-basemetal-precious metal veins with associated sheeted veining and disseminated basemetal sulphides.</li> </ul>
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</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>downhole length and interception depth</li> <li>hole length</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>	<ul> <li>Not applicable. This announcement refers to the Resource Estimation is not a report on Exploration Results.</li> </ul>
Criteria	JORC Code Explanation	Commentary
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Data aggregation methods	<ul> <li>In reporting of Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cutoff grades are usually material and should be stated.</li> <li>Where aggregate intercepts include short lengths of high grade results and longer lengths of low grade results, the procedure used for aggregation should be stated and some examples of such aggregations should be shown in detail</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Diamond drill intercepts were cut on 1m basis while respecting geological contacts.</li> <li>Mineralized domains are delineated from geological logs and assay data with generally hard boundaries.</li> <li>Mineralised zones were reported as length weighted intercepts.</li> <li>No metal equivalents were used.</li> </ul>
Relationship between miner- alisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. down hole length, true width not known).</li> </ul>	<ul> <li>Most drill holes have been drilled to intercept the deposit at high angles to best represent true widths of the mineralisation.</li> <li>Channel samples were taken perpendicular to the strike of the deposit.</li> </ul>
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulated intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill collar locations and appropriate sectional views.</li> </ul>	• See the body of this report for plan, long projections and section of the Cutters and Christina Veins.
Balanced reporting	<ul> <li>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</li> </ul>	<ul> <li>Not applicable. This report is a Mineral Resource Estimation and does not contain any exploration Results.</li> </ul>
Other substantive exploration data	<ul> <li>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 results, bulk density, groundwater, geochemical and rock characteristics, potential deleterious or contaminating substances.</li> </ul>	<ul> <li>No bulk samples or diamond drill core have been selected for metallurgical test work.</li> <li>Historic operation utilised standard sulphide flotation.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. test 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>	<ul> <li>Further resource extension and infill drilling is required to improve resource model and classification.</li> <li>Further local regional exploration is required to increase the resource base.</li> </ul>

# Section 3, Reporting of Mineral Resource Estimations

Criteria	JORC Code Explanation	Commentary
Database Integrity	<ul> <li>Measures to ensure the data has not been corrupted by, for example transcription or keying errors, between its initial collection and its use for Mineral Resource estimation.</li> <li>Data Validation and procedures used.</li> </ul>	<ul> <li>All data captured and stored in customised Access database by Red Hill.</li> <li>Drop down menu validation in Access.</li> <li>Digital data uploaded from laboratory reports to Access database.</li> <li>Data integrity validated with Surpac Software for EOH depth and sample overlaps and transcription errors.</li> <li>Data validated against historic plans and sections.</li> <li>Numerous errors in data location, particularly underground plans and samples fixed in data base.</li> <li>Negatives in database converted to half the detection limit.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Site Visits	<ul><li>Comment on any site visits by the competent person and the outcome of any of those visits.</li><li>If no site visits have been undertaken indicate why this is the case.</li></ul>	<ul> <li>Site visit conducted from 29th January to 5th February 2014 to validate location, collars, drill core, Core processing facilities, historic workings, sampling methods, mineralisation styles and exploration potential.</li> </ul>
Geological Interpretation	<ul> <li>Confidence in (or conversely the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and any assumptions made.</li> <li>The effect if any of alternative interpretations on Mineral Resource estimation</li> <li>The use of geology in guiding and controlling the Mineral Resource estimation</li> <li>The factors effecting continuity of both grade and geology.</li> </ul>	<ul> <li>High confidence in the simple geological model. Minor disruption by brittle faulting and low grade zones in mineralised structures will be difficult to predict away from detailed maps and sampling.</li> <li>Historic backs maps and channel samples used for geological domaining.</li> <li>No alternative geological interpretations were attempted.</li> <li>Geology model used for mineralised domain modeling.</li> <li>Brittle faulting and low grade quartz zones effect grade and location of mineralisation.</li> </ul>
Dimensions	• The extent and variability of the mineral resource expressed as length (along strike or otherwise) plan width and depth below surface to the upper and lower limits of the Resource	<ul> <li>Cristina 1.3km by 200m with a NNW strike and steep west dip (80°). Vein width average 2.5m.</li> <li>Cutter 400m strike by 200m depth with a NNW and 45° west dip. Vein width averages 1.8m.</li> <li>Gorda 500m NW strike, 80m depth with 5m avg width.</li> </ul>
Estimation and Modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by products</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).</li> <li>In the case of blockmodel interpolation the block size in relation to the average sample spacing and search employed.</li> <li>Any assumptions about correlation between variables</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of the basis for using or not using grade cutting or capping</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and the use of reconciliation data if available.</li> </ul>	<ul> <li>Block modeled estimation completed with Surpac<sup>™</sup> software licensed to Tim Callaghan.</li> <li>Wire-framed solid models created from level plans, backs maps and vein width composited sample data</li> <li>Solid models snapped to drill holes</li> <li>No Minimum mining width</li> <li>Internal dilution not restricted</li> <li>Data composited on vein widths including Cu, Au, and Ag</li> <li>Top cutting based on CV and grade histograms. Au cut to 1.46g/t for the Cristina Vein and Cu cut to 2.3%, Au cut to 8.3g/t for Gorda vein</li> <li>Excellent correlation between Cu and Au grades</li> <li>Cristina Block Model extent of 4085150N to 4086700N, 669900E to 670750E, -100mRL to 100mRL. Block dimensions of 10mN x 10mE x 10mRL block size with sub-celling to 2.5m in the y and z 1.25m in the x directions.</li> <li>Cutter Block Model extents 4084700N to 4085300n, 669900E to 670750E, -100 to 100mRL. Block dimensions of 10mN x 10mE x 10mRL block size with sub-celling to 2.5m in the y and z 1.25m in the x directions.</li> <li>Variogram models constructed in y direction only due to sparse and poorly located data. Well constructed models with moderate to low nugget effect and long range of 35 to 60m to sill of the Cristina and Cutters Veins respectively</li> <li>Search ellipse set at 200m spherical range to ensure all blocks populated with no anisotropy</li> <li>Inverse distance squared estimated model constrained by geology solid model</li> <li>Block grades validated visually against input data</li> <li>Good correlation with previous polygonal estimations</li> <li>Acceptable correlation of depleted model with bittoris production</li> </ul>

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Criteria	JORC Code Explanation	Commentary
Moisture	<ul> <li>Whether the tonnages were estimated on a dry basis or with natural moisture, and the method of determination of moisture content.</li> </ul>	• The estimate based on a dry tonnage basis
Cut-off Parameters	<ul> <li>The basis of the adopted cutoff grades or cutoff parameters</li> </ul>	<ul> <li>No cutoff parameters applied for this estimation. Results are reported on the whole vein.</li> </ul>
Mining Assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or if applicable external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters made when estimating Mineral Resources may not always be rigorous. When this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul> <li>Underground mining will involve conventional decline accessed 2-300ktpa operation.</li> <li>Underground long hole stoping, Avoca method, cut and fill or shrink stopes</li> </ul>
Metallurgical assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions made regarding metallurgical treatment processes and parameters made when estimating Mineral Resources may not always be rigorous. When this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>A standard crushing grinding circuit followed by sulphide floatation is likely given historic processing records.</li> <li>Historic production suggests an 11 to 1 upgrade to produce a 25% Cu concentrate.</li> <li>Historic recoveries not cited but typical sulphide float of 80% assumed.</li> </ul>
Environmental assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status for early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul> <li>No formal environmental studies have been conducted at this stage. Historic mining activities have left minor environmental legacies including minor areas of acid rock drainage. Tailings storage facilities, reagent storage and waste rock storage facilities will need to be addressed.</li> </ul>
Bulk Density	<ul> <li>Whether assumed or determined. If assumed the basis for the assumptions. If determined the methods used, whether wet or dry, the frequency of measurements, the nature size and representativeness of the samples.</li> <li>The bulk density for bulk materials must have been measured by methods that adequately account for void spaces (vughs, porosity etc.), moisture and difference between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>49 Bulk density determinations by ACME laboratories in Phase 1 program by unspecified methods.</li> <li>Systematic Bulk Density measurements were made on site during the second phase of drilling. A total of 141 samples were measured using the Archimedes method using calibrated digital scales.</li> <li>Determinations made of un-weathered core with no appreciable voids or porosity.</li> <li>Mean SG of 2.8 assigned to Cristina from 7 determinations, Mean SG of 2.7 assigned to Cutter Vein from determinations, mean SG of 2.9 assigned to Gorda Vein from 22 determinations, mean SG of 2.7 assigned to waste areas from 113 determinations</li> </ul>

Criteria	JORC Code Explanation	Commentary
Classification	<ul> <li>The basis for the classification of the Mineral Resource into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in continuity of Geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Persons view of the deposit.</li> </ul>	<ul> <li>Confidence in the geological model and data quality is considered to be sufficient for Mineral Resource located within 60m of sample data to be classified as Indicated Resource.</li> <li>Mineral Resource located further than 60m from sample data or Sill levels is classified as Inferred Resource as there is insufficient data to support the geological model and grade to ensure reserve definition.</li> <li>The resource estimate appropriately reflects the views of the Competent Person</li> </ul>
Audits or Reviews	<ul> <li>The results of any Audits or Reviews of the Mineral Resource estimates.</li> </ul>	<ul> <li>No audits or reviews have been completed for this estimation</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource Estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy of the estimate.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The geological model and data quality within 30-60m of the sill drives is well understood and modeled. The effects of localised brittle faulting and mineralised shoot development is difficult to predict beyond detailed mapped areas but is expected to be similar to that observed in Sill drives.</li> <li>There is reasonable confidence in the global tonnage estimation as the geology is reasonable well constrained and simple.</li> <li>Although grade estimation is based on a limited number of composites clustered along sill drives, the variogram models suggest mineralisation is relatively continuous providing confidence in the grade interpolation of Cu.</li> </ul>

# JORC Table 1

# Section 1. Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	<ul> <li>Nature and Quality of sampling (e.g. cut channels, random chips or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or hand held XRF instruments etc).</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 1m samples from which 3kg was pulverized to produce 30g 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 sampling types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The Angelica and Franceses deposits of the Cutters Cove Project have been sampled through a diamond drilling campaign and surface cut channel sampling campaigns in 2015 and 2016.</li> <li>9 diamond drill holes for 1,781.75m</li> <li>Approximately 0.5 - 1m samples of 2-3kg were taken from diamond saw cut drill core whilst respecting geological boundaries.</li> <li>Approximately 2-3kg per 1m sample derived from diamond saw cut core trench samples perpendicular to vein strikes. Samples generally 1m while respecting geological boundaries.</li> </ul>
Drilling Techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open hole 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, where core is oriented and if so by what method</li> </ul>	<ul><li>9 HQ, NQ diamond core for 1,781.75m.</li><li>Core not oriented.</li></ul>
Sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximize 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.</li> </ul>	<ul> <li>Core reconstituted, marked up and measured for recovery in all drilling campaigns</li> <li>Generally excellent (95-100%)</li> <li>No relationship between recovery and grade was observed</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 of quantitative in nature. Core (or costean, channel etc) photography.</li> </ul>	<ul> <li>Core geologically logged by experienced geologists.</li> <li>Standard lithology codes used for interpretation.</li> <li>RQD and recoveries logged</li> <li>Logs loaded into excel spreadsheets and uploaded into access database.</li> </ul>
Sub-Sample techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter of half taken.</li> <li>If non core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry</li> <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 maximize representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results of field duplicate/ second half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled</li> </ul>	<ul> <li>Half core split by diamond saw on 0.5 - 1.0m samples while respecting geological contacts.</li> <li>Bagged core delivered to ALS Laboratories in Coquimbo</li> <li>Whole core crushed to 70% passing 2mm</li> <li>Crushed sample riffle split to 1kg and pulverized to 85% passing 75 microns.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Quality of assay data and laboratory tests	<ul> <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 geophysics tools, spectrometers, hand held XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation etc.</li> <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> </ul>	<ul> <li>33 elements including Cu and Ag analysed by ICP-AES after aqua regia digestion at ALS laboratories Coquimbo.</li> <li>Au by fire assay with AAS finish by ALS laboratories Coquimbo.</li> <li>QAQC analysis with Certified Reference material inserted every 20th sample.</li> <li>Acceptable levels of accuracy and precision established with the exception of two unexplained anomalies in early trench samples RH-70C and RH-76.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel</li> <li>The use of twinned holes</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols</li> <li>Discuss any adjustment to assay data</li> </ul>	<ul> <li>No verification of results by independent sources completed.</li> <li>No twinned holes were completed</li> <li>Primary assay data received electronically and stored by consultant geologist.</li> <li>All electronic data uploaded to access database</li> <li>Data validation with Surpac software, basic statistical analysis.</li> <li>Negative results for below detection limit assay data has been entered as detection limit.</li> </ul>
Location of data points	<ul> <li>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</li> <li>Specification of grid system used</li> <li>Quality and accuracy of topographic control</li> </ul>	<ul> <li>All hole collar surveys by licensed surveyor.</li> <li>All coordinates in WGS94</li> <li>RL's as MSL</li> <li>Down hole surveys by downhole camera</li> <li>Topographic dtm created by licensed surveyor and adjusted for known survey points (e.g. drill collars)</li> </ul>
Data Spacing and distribution	<ul> <li>Data spacing for exploration results</li> <li>Whether data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource and Ore Reserve estimation procedures and classifications applied.</li> <li>Whether sample compositing has been applied</li> </ul>	<ul> <li>Data spacing limited by low drill hole intercept numbers generally 100m x 100m or worse.</li> <li>Surface samples clustered on topographic surface</li> <li>Drill spacing is considered to be appropriate for the estimation of Inferred Mineral resources only.</li> <li>Samples have been composited on 1m lengths for the resource estimation.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between drilling orientation and the orientation of key mineralised structures is considered to have introduced sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>The majority of DDH have been drilled east-west sub-perpendicular to vein strike.</li> <li>Channel samples have been taken sub-perpendicular to the vein strike</li> <li>Drill hole orientation is not considered to have introduced any material sampling bias.</li> </ul>
Sample Security	• The measures taken to ensure sample security	<ul> <li>Samples ticketed and bagged on site.</li> <li>Delivered by RHM personnel, then courier to ALS laboratories in Coquimbo.</li> <li>Data integrity validated with Surpac Software for EOH depth and sample overlaps.</li> <li>Basic statistical analysis supports data validation</li> </ul>
Audits or Reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data</li> </ul>	<ul> <li>No audits or reviews of sampling data and techniques completed.</li> </ul>

# Section 2. Reporting of Exploration Results

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 tenure held at the time of reporting along with known impediments to obtaining a license to operate the area</li> </ul>	• RHM hold 65 exploration concessions in the Magellanes district of Chile.
Exploration done by other parties	<ul> <li>Acknowledgement and appraisal of exploration by other parties</li> </ul>	<ul> <li>Cutters Cove is a historic mining centre that operated from the early 1900's to the 1970's.</li> <li>The majority of the mining occurred on the site in the early 1970's until closure in 1975.</li> <li>operations consisted of a 50tpa crushing plant supplying two 8tph ball mills and a 400tpd flotation plant.</li> <li>Over the 2 years of operations, 211,754 tonnes of ore were extracted grading 1.72% Cu from a reserve of 237,654 @ 3.24% Cu.</li> <li>No previous modern exploration in the district apart from reconnaissance work.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation</li> </ul>	<ul> <li>Geology dominated by 2 allochthonous thrust slices striking NNW and dipping approximately 45° SSW.</li> <li>Older Paleozoic sediments thrust over Jurassic rhyolitic volcaniclastics.</li> <li>Mineralisation consists of late stage mesothermal and epithermal quartz-basemetal-precious metal veins with associated sheeted veining and disseminated basemetal sulphides.</li> </ul>
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</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>downhole length and interception depth</li> <li>hole length</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>	<ul> <li>Not applicable. This announcement refers to the Resource Estimation is not a report on Exploration Results.</li> </ul>
Data aggregation methods	<ul> <li>In reporting of Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cutoff grades are usually material and should be stated.</li> <li>Where aggregate intercepts include short lengths of high grade results and longer lengths of low grade results, the procedure used for aggregation should be stated and some examples of such aggregations should be shown in detail</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Diamond drill intercepts were cut on 1m basis while respecting geological contacts.</li> <li>Mineralized domains are delineated from geological logs and assay data with generally hard boundaries.</li> <li>Mineralised zones were reported as length weighted intercepts.</li> <li>No metal equivalents were used.</li> </ul>
Relationship between miner- alisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. down hole length true width not known).</li> </ul>	<ul> <li>Most drill holes have been drilled to intercept the deposit at high angles to best represent true widths of the mineralisation.</li> <li>Channel samples were taken perpendicular to the strike of the deposit.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulated intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill collar locations and appropriate sectional views.</li> </ul>	• See the body of this report for plan, long projections and section of the Franceses and Angelica Depoits.
Balanced reporting	<ul> <li>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</li> </ul>	<ul> <li>Not applicable. This report is a Mineral Resource Estimation and does not contain any exploration Results.</li> </ul>
Other substantive exploration data	<ul> <li>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 results, bulk density, groundwater, geochemical and rock characteristics, potential deleterious or contaminating substances.</li> </ul>	<ul> <li>No bulk samples or diamond drill core have been selected for metallurgical test work.</li> <li>Historic operation utilised standard sulphide flotation.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. test 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>	<ul> <li>Further resource extension and infill drilling is required to improve resource model and classification.</li> <li>Further local regional exploration is required to increase the resource base.</li> </ul>

# Section 3. Reporting of Mineral Resource Estimations

Criteria	JORC Code Explanation	Commentary
Database Integrity	<ul> <li>Measures to ensure the data has not been corrupted by, for example transcription or keying errors, between its initial collection and its use for Mineral Resource estimation.</li> <li>Data Validation and procedures used.</li> </ul>	<ul> <li>All data captured and stored in customised Access database by Red Hill.</li> <li>Drop down menu validation in Access.</li> <li>Digital data uploaded from laboratory reports to Access database.</li> <li>Data integrity validated with Surpac Software for EOH depth and sample overlaps and transcription errors.</li> <li>Data validated against historic plans and sections.</li> <li>Numerous errors in data location, particularly underground plans and samples fixed in data base.</li> <li>Negatives in database converted to half the detection limit.</li> </ul>
Site Visits	<ul><li>Comment on any site visits by the competent person and the outcome of any of those visits.</li><li>If no site visits have been undertaken indicate why this is the case.</li></ul>	<ul> <li>Site visit conducted from 29th January to 5th February 2014 to validate location, collars, drill core, Core processing facilities, historic workings, sampling methods, mineralisation styles and exploration potential. A second visit was made in June 2016 to Punta Arenas where drill core was reviewed.</li> </ul>
Geological Interpretation	<ul> <li>Confidence in (or conversely the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and any assumptions made.</li> <li>The effect if any of alternative interpretations on Mineral Resource estimation</li> <li>The use of geology in guiding and controlling the Mineral Resource estimation</li> <li>The factors effecting continuity of both grade and geology.</li> </ul>	<ul> <li>High confidence in the geological model. Simple geology and mineralisation style</li> <li>No alternative geological interpretations were attempted.</li> <li>Geology model used for mineralised domain modeling.</li> <li>Mineralised trends defined from drilling, trenching and field mapping.</li> <li>Similar trends and style to known mineralisation</li> </ul>

Criteria	JORC Code Explanation	Commentary
Dimensions	<ul> <li>The extent and variability of the mineral resource expressed as length (along strike or otherwise) plan width and depth below surface to the upper and lower limits of the Resource</li> </ul>	<ul> <li>The Franceses Fault consists of two subparallel tabular fissures of mineralisation extending 240m north south and dipping 50° west to 240m depth. Domain widths varied between 2 and 12 metres.</li> <li>Franceses sheeted consist of eleven separate veins striking north-south and dip west at 50-60°. Most veins defined by single intercepts.</li> <li>Angelica Fault consists of two separate tabular sheets of fault bound mineralisation separated by approximately 130m of felsic volcaniclastic sediments. Lower domain extends along a strike of 330° for 250m and dips southwest at -60° to a depth of 150m. The western domain trends 20° for a distance of 130m and dips west at -70° to a depth of 90m. The Angelica domains are poorly defined by two diamond drillholes and five surface trench samples.</li> </ul>
Estimation and Modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by products</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).</li> <li>In the case of blockmodel interpolation the block size in relation to the average sample spacing and search employed.</li> <li>Any assumptions behind modeling of selected mining units</li> <li>Any assumptions about correlation between variables</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of the basis for using or not using grade cutting or capping</li> <li>The process of validation, the checking process used, the comparison of model dataa to drill hole data, and the use of reconciliation data if available.</li> </ul>	<ul> <li>Rotated block modeled estimation completed with Surpac<sup>™</sup> software licensed to Tim Callaghan.</li> <li>Wire-framed solid models created from drillholes, trench samples and geological sections on sectional interpretation.</li> <li>Solid models snapped to drill holes</li> <li>Minimum mining width of 2m @ 0.4% Cu</li> <li>Internal dilution restricted to 2m with allowances for geological continuity</li> <li>Data composited on 1m intervals including Cu, Ag and Au</li> <li>No top cutting applied.</li> <li>Good correlation between Cu, Ag and Au.</li> <li>Insufficient data and data distribution for anisotropic variogram modeling. Downhole variogram models well-constructed with low nugget effect (20%) and short range of 5 to 10m to sill for major geological domains.</li> <li>Search ellipse set at 120m spherical range to ensure all blocks populated</li> <li>Inverse distance squared model estimated model constrained by geology solid model</li> <li>Block grades validated visually against input data.</li> </ul>
Moisture	• Whether the tonnages were estimated on a dry basis or with natural moisture, and the method of determination of moisture content.	• The estimate based on a dry tonnage basis
Cut-off Parameters	The basis of the adopted cutoff grades or cutoff parameters	• Cut off grades have been based on the natural break of mineralised domains.
Mining Assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or if applicable external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters made when estimating Mineral Resources may not always be rigorous. When this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul> <li>Amenable to narrow vein long hole open stoping Avoca method, shrink stoping or cut and fill mining.</li> <li>Typical ore loss and dilution factors for this type of mining are anticipated.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Metallurgical assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions made regarding metallurgical treatment processes and parameters made when estimating Mineral Resources may not always be rigorous. When this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>A standard crushing grinding circuit followed by sulphide flotation is likely given historic processing records.</li> <li>Historic production suggests an 11 to 1 upgrade to produce a 25% Cu concentrate.</li> <li>Historic recoveries not cited but typical sulphide float of 80% assumed.</li> </ul>
Environmental assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status for early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul> <li>No formal environmental studies have been conducted at this stage. Historic mining activities have left minor environmental legacies including minor areas of acid rock drainage. Tailings storage facilities, reagent storage and waste rock storage facilities will need to be addressed.</li> </ul>
Bulk Density	<ul> <li>Whether assumed or determined. If assumed the basis for the assumptions. If determined the methods used, whether wet or dry, the frequency of measurements, the nature size and representativeness of the samples.</li> <li>The bulk density for bulk materials must have been measured by methods that adequately account for void spaces (vughs, porosity etc.), moisture and difference between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Bulk density derived from diamond drill core using the Archimedes method.</li> <li>Determinations made of un-weathered core with no appreciable voids or porosity.</li> <li>Grade-density relationship used for bulk density determinations of mineralised zones: SG = (Cu% +8.6648)/3.5485</li> <li>Waste rock assigned bulk density of 2.7.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resource into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in continuity of Geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Persons view of the deposit.</li> </ul>	<ul> <li>Confidence in the geological model, data quality and interpolation is considered to be sufficient for the Mineral Resource to be classified as Inferred Resource only.</li> <li>Data quality is to industry standards.</li> <li>Data distribution and density is limited restricting confidence in the estimation.</li> <li>The resource classification appropriately reflects the views of the Competent Person</li> </ul>
Audits or Reviews	<ul> <li>The results of any Audits or Reviews of the Mineral Resource estimates.</li> </ul>	<ul> <li>No audits or reviews have been completed for this estimation</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource Estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy of the estimate.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The geological model is relatively simple and analogous to known mineralisation in the locality.</li> <li>Data distribution is poor restricting confidence in the estimate.</li> <li>There is moderate confidence in the global tonnage estimation as the geology is reasonable well constrained and simple.</li> <li>Grade estimation is based on a limited number of samples and many domains have single intercepts restricting confidence.</li> </ul>

# **Annexure B – Significant and Critical Accounting Policies**

The Group's principal accounting policies are set out below.

## (a) Consolidation and business combinations

The consolidated financial information of the Group comprises the financial information of the Company and entities controlled by the Company and its subsidiaries. The Company consolidates all subsidiaries in preparing consolidated financial information of the Group.

Control is achieved when the Company is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Generally, there is a presumption that a majority of voting rights results in control. To support this presumption, and when the Company has less than a majority of the voting or similar rights of an investee, the Company considers all relevant facts and circumstances in assessing whether it has power over an investee.

The Company re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Company obtains control over the subsidiary and ceases when the Company loses control of the subsidiary.

Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial information from the date the Group gains control until the date the Group ceases to control the subsidiary.

The profit or loss and each component of other comprehensive income are attributed to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial information of subsidiaries to bring their accounting policies in line with the Group's accounting policies. All intra-Group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If the Group loses control over a subsidiary, it derecognises the related assets (including goodwill), liabilities, non-controlling interest and other components of equity while any resultant gain or loss is recognised in the statement of comprehensive income. Any investment retained is recognised at fair value.

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred and included in administrative expenses. If the business combination is achieved in stages, any previously held equity interest is re-measured at its acquisition date fair value and any resulting gain or loss is recognised in the statement of comprehensive income.

Any contingent consideration to be transferred by the acquirer will be recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability that is a financial instrument, is measured at fair value with the changes in fair value recognised in the income statement.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests, and any previous interest held, over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in the statement of comprehensive income.

In the separate financial information of the Company, investments in subsidiaries are accounted for at cost less impairment. Cost is adjusted to reflect changes in consideration arising from contingent consideration amendments. Cost also includes direct attributable costs of the investment. The results of subsidiaries are accounted for by the Company on the basis of dividend received and receivable.

Impairment testing of the investments in subsidiaries is required upon receiving a dividend from these investments if the dividend exceeds the total comprehensive income of the subsidiary in the period the dividend is declared or if the carrying amount of the investment in the separate financial information exceeds the carrying amount in the consolidated financial information of the investee's net assets including goodwill.

# (b) Foreign Currency Translation

### (i) Functional and presentation currency

The functional currency of the Company and its subsidiaries is Australian dollars, which is the presentation currency of the Company.

### (ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or reporting date where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year-end exchange rates are recognised in the statement of comprehensive income.

# (c) Property, Plant and Equipment

## (i) Cost

PPE is stated at historical cost less accumulated depreciation and impairment losses, if any. Historical cost includes expenditure that is directly attributable to the acquisition of the items and costs incurred in bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. The cost of PPE includes the estimated cost of mine rehabilitation, restoration and dismantling.

## (ii) Depreciation and amortisation

The major categories of PPE are depreciated over the estimated useful lives of the assets on a unit of production or reducing balance basis as indicated below. The useful lives below are subject to the lesser of the asset categories' useful life and the life of the mine:

- Freehold land Not depreciated;
- Buildings Reducing balance 2.5%;
- Plant and machinery (mining and processing) Unit of production (tonnes mined and milled) or straight line over the useful life of the asset as applicable;
- Plant and machinery (other) Reducing balance 3–5 years;
- Construction in progress Not depreciated;
- Depreciation and amortisation commence when an asset is available for use.

The unit of production method is applied based on assessments of proved and probable Ore Reserves and a portion of Mineral Resources probable of extraction. Ore Reserves and Mineral Resources estimates are reviewed annually. The D&A expense calculation reflect the estimates in place at the reporting date, prospectively.

Major spare parts are carried as PPE when an entity expects to use them during more than one year, or when they can be used only in connection with an item of PPE. The carrying amount of any part replaced is subsequently derecognised.

All other repairs and maintenance are expensed in the statement of comprehensive income during the accounting year in which they are incurred.

## (iii) Disposal of PPE

On disposal of an item of PPE, the difference between the disposal proceeds and the carrying amount of the asset is recognised in profit or loss.

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# (d) Exploration and Evaluation Expenditure

Exploration and evaluation activities include expenditure to identify potential Mineral Resources, determine the technical feasibility and assess the commercial viability of the potential Mineral Resources.

Exploration and evaluation expenditure in relation to separate areas of interest for which rights of tenure are current is carried forward as an asset in the statement of financial position where it is expected that the expenditure will be recovered through the successful development of an area of interest, or by its sale, or exploration activities are continuing in an area and activities have not reached a stage which permits a reasonable estimate of the existence or otherwise of economically recoverable reserves.

Where a project or an area of interest has been abandoned, the expenditure incurred thereon is written off in the year in which the decision is made.

A regular review is undertaken of each area of interest to determine the appropriateness of continuing to carry forward costs in relation to that area of interest. An impairment exists when the carrying value of expenditure exceeds its estimated recoverable amount. The area of interest is then written down to its recoverable amount and the impairment losses are recognised in profit or loss.

Upon approval for the commercial development of an area of interest, exploration and evaluation assets are tested for impairment and transferred to mine properties. No amortisation is charged during the exploration and evaluation phase.

# (e) Mine Properties

Mine property and development assets include costs incurred in accessing the ore body and costs to develop the mine to the production phase, once the technical feasibility and commercial viability of a mining operation has been established. At this stage, exploration and evaluation assets are reclassified to mine properties.

Mine property and development assets are stated at historical cost less accumulated amortisation and any accumulated impairment losses recognised. The initial cost of an asset comprises its purchase price or construction cost, any costs directly attributable to bringing the asset into operation, the initial estimate of the rehabilitation obligation, and for qualifying assets (where relevant), borrowing costs. Any ongoing costs associated with mining which are considered to benefit mining operations in future periods are capitalised.

The balance for mine property includes mine development assets and the expected cost for the decommissioning, restoration and dismantling of an asset after its use.

## (i) Amortisation

Development expenditure is amortised over the estimated useful life of the mine on a unit of production basis. The unit of production method is applied based on assessments of proven and probable Ore Reserves and a portion of Mineral Resources probable of extraction. Resource and Reserves estimates are reviewed annually. The D&A expense calculation reflect the estimates in place at the reporting date, prospectively.

## (f) Impairment of Non-Financial Assets

Non-financial assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

An impairment loss is recognised for the amount by which the carrying amount of the asset exceeds its recoverable amount. The recoverable amount is the higher of the fair value less costs of disposal and value in use of an asset. For the purposes of impairment assessment, assets are grouped at the lowest levels for which there are separately identifiable cash flows.

Impairment loss related to non-financial assets is reviewed and may be reversed at subsequent reporting dates. A reversal of previously recognised impairment loss is limited to the lesser of the amount that would not cause the carrying amount to exceed its recoverable amount or the carrying amount that would have been determined (net of accumulated depreciation) had no impairment loss been recognised.

## (g) Financial Assets

Financial assets are classified at initial recognition and subsequently measured at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition that are debt instruments depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables are measured at the transaction price determined by the revenue recognition accounting policy as described in (s) below.

In order for a financial asset to be measured at amortised cost, it needs to give rise to cash flows that are 'solely payments of principal and interest' (SPPI) on the principal amount outstanding. This assessment referred to as the SPPI test is performed at an instrument level.

## Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in four categories:

- Financial assets at amortised cost (debt instruments);
- Financial assets at fair value through OCI with recycling of cumulative gains and losses (debt instruments);
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments); or
- Financial assets at fair value through profit or loss.

#### Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading, financial assets designated upon initial recognition at fair value through profit or loss, or financial assets mandatorily required to be measured at fair value. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets with cash flows which do not pass the SPPI test are classified and measured at fair value through profit or loss, irrespective of the business model. Debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in the profit or loss.

This category includes trade receivables subject to provisional pricing (QP adjustment), derivative instruments and listed equity investments which the Group has not irrevocably elected to classify at fair value through OCI. Dividends on listed equity investments are also recognised as other income in the statement of profit or loss when the right of payment has been established.

#### Financial assets at amortised cost (debt instruments)

The Group measures financial assets at amortised cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest rate (EIR) method and are subject to impairment. Interest received is recognised as part of finance income in the profit or loss. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired. The Group's financial assets at amortised cost include trade receivables (not subject to provisional pricing), other receivables and term deposits.

## Derecognition

A financial asset is primarily derecognised when:

- The rights to receive cash flows from the asset have expired; or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

## Impairment

The Group recognises an allowance for estimated credit losses (ECL's) for all debt instruments not held at fair value through profit or loss. ECL's are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original EIR. ECL's are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECL's are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade receivables (not subject to provisional pricing) and other receivables due in less than 12 months, the Group applies the simplified approach in calculating ECL's. Therefore, the Group does not track changes in credit risk, but instead, recognises a loss allowance based on the financial asset's lifetime ECL at each reporting date. For any other financial assets carried at amortised cost (which are due in more than 12 months), the ECL is based on the 12-month ECL when there has not been a significant increase in credit risk since origination. The 12-month ECL is the proportion of lifetime ECL's that results from default events on a financial instrument that are possible within 12 months after the reporting date. When there has been a significant increase in credit risk since origination, the allowance will be based on the lifetime ECL.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECL's, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment including forward-looking information.

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows and usually occurs when the asset is past due for more than one year and not subject to enforcement activity.

At each reporting date, the Group assesses whether financial assets carried at amortised cost are credit impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

## (h) Inventories

Inventories comprise raw materials, stores and consumables, work in progress and finished goods. Inventories are stated at the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and less applicable variable selling expenses.

Costs are assigned to individual items of inventory on the basis of weighted average costs. Costs include the costs of direct materials, overburden removal, mining, processing, labour, related transportation costs to the point of sale, an appropriate proportion of related production overheads, mine rehabilitation costs incurred in the extraction process and other fixed and variable costs directly related to mining activities.

## (i) Trade and Other Receivables

Trade receivables (subject to provisional pricing) are carried at fair value. Provisional payments in relation to trade receivables are due for settlement within 30 days from the date of recognition, with any mark to market adjustment due for settlement usually from 60–120 days.

Other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. If collection of trade and other receivables is expected in one year or less (or in the normal operating cycle of the business if longer), trade and other receivables are classified as current assets. If not, they are presented as non-current assets.

The Group recognises an allowance for ECL's for all receivables not held at fair value through profit or loss. ECL's are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows the Group expects to receive, discounted at an approximation of the original effective interest rate (EIR). For receivables due in less than 12 months, the Group does not track changes in credit risk, but instead, recognises a loss allowance based on the financial asset's lifetime ECL at each reporting date. The expected credit loss is based on its historical credit loss experience in the past two years, current financial difficulties of the debtor and is adjusted for forward-looking factors specific to the debtor and the economic environment.

## (j) Cash and Cash Equivalents

Cash and cash equivalents include cash in hand, deposits held at call with banks, other short-term highly liquid investments that are readily convertible to known amounts of cash, and bank overdrafts. In the statement of financial position, bank overdrafts, if any, are shown within borrowings in current liabilities.

## (k) Share Capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

# (I) Mine Rehabilitation, Restoration and Dismantling Obligations

Provisions are made for the estimated cost of rehabilitation, restoration and dismantling relating to areas disturbed during the mine's operations up to the reporting date, but not yet rehabilitated. Provision has been made in full for all the disturbed areas at the reporting date based on current estimates of costs to rehabilitate such areas, discounted to their present value based on expected future cash flows. The estimated cost of rehabilitation includes the current cost of recontouring, top soiling and revegetation to meet legislative requirements. Changes in estimates are dealt with on a prospective basis as they arise.

Uncertainty exists as to the amount of rehabilitation obligations that will be incurred due to the impact of changes in environmental legislation, and many other factors, including future developments, changes in technology, price increases and changes in interest rates. The amount of the provision relating to mine rehabilitation, restoration and dismantling obligations is recognised at the commencement of the mining project and/or construction of the assets to date, where a legal or constructive obligation exists at that time.

The provision is recognised as a liability, separated into current (estimated costs arising within 12 months) and non-current components, based on the expected timing of these cash flows. A corresponding asset is included in mine property and PPE, only to the extent that it is probable that future economic benefits associated with the restoration expenditure will flow to the entity, otherwise a corresponding expense is recognised in the statement of comprehensive income.

At each reporting date, the rehabilitation liability is remeasured in line with changes in discount rates, and the expected timing or amounts of the costs to be incurred. Rehabilitation, restoration and dismantling provisions are adjusted for changes in estimates. Adjustments to the estimated amount and timing of future rehabilitation and restoration cash flows are a normal occurrence in light of the significant judgements and estimates involved. Changes in the liability relating to mine rehabilitation, restoration and dismantling obligations are added to or deducted from the related asset, other than the unwinding of discount on provisions, which is recognised as a finance cost in the statement of comprehensive income. Changes to capitalised costs result in an adjustment to future depreciation charges.

## (m) Provisions and Contingent Liabilities

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and the amount has been reliably estimated.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small. Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation, to the extent these risks are not reflected in the estimate of the future cash flows. The increase in the provision due to the passage of time is recognised as an interest expense.

A provision for onerous contracts is recognised when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract.

The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. A provision is recognised for the amount expected to be paid under short-term or long-term incentive plans if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

Contingent liabilities are possible obligations that arise from past events and whose existence will only be confirmed by the occurrence of one or more future events not wholly within the control of the Group. Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote.

# (n) Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the statement of comprehensive income over the period of the borrowings using the effective interest method.

Borrowings are removed from the statement of financial position when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of the financial liability and the consideration paid, including any non-cash assets, is recognised in the statement of comprehensive income as finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

# (o) Borrowing Costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

The capitalisation rate used to determine the amount of borrowing costs to be capitalised is the weighted average interest rate applicable to the entity's outstanding borrowings during the period.

All other borrowing costs are recognised in profit and loss in the year in which they are incurred.

# (p) Current and Deferred Income tax

29Metals is the head entity of the tax consolidated Group.

Members of the tax consolidated Group will enter into a tax sharing agreement that determines the income tax liabilities between the entities should the head entity default on its tax payment obligations. In accordance with the tax sharing agreement, 29Metals will be required to determine the contribution amount for each member of the tax consolidated Group on a stand-alone basis. Possibility of default by the head entity is considered remote.

Tax expense/benefit, deferred tax liabilities and deferred tax assets arising from temporary differences of the members of the tax consolidated Group are recognised in the separate financial statements of the members of the tax consolidated Group using the 'stand-alone taxpayer' approach. Deferred tax on temporary differences are measured in the separate financial statements on tax bases as determined by the tax consolidated Group.

Members of the tax consolidated Group will enter into a tax funding agreement that determines the amount payable by each member for their portion of the Group's current tax and deferred tax liability. The tax funding agreement will determine that each member's funding amount was calculated as if the member was a stand-alone entity and not an entity of the tax consolidated Group.

Amounts payable to, or receivable by, each member of the Group in relation to income tax liability or benefit are recorded in the statement of financial position as intercompany tax funding payable or intercompany tax funding receivable.

# (q) Trade and Other Payables

Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

Trade and other payables are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as noncurrent liabilities.

# (r) Employee Benefits

## (i) Short-term employee benefits

Liabilities for wages and salaries, including non-monetary benefits and other short-term benefits expected to be settled within 12 months of the reporting date are recognised in respect of employees' services up to the reporting date. They are measured at the amounts expected to be paid when the liabilities are settled.

## (ii) Long-term employee benefits

The liability for long-term employee benefits including long service leave is recognised and measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date using the projected unit credit method. Consideration is given to future expected wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on high quality corporate bonds with terms to maturity and currencies that match, as closely as possible, the estimated future cash outflows.

# (s) Revenue from Contracts with Customers

The Group is principally engaged in the business of producing base and precious metals concentrates. Revenue from contracts with customers is recognised when control of the goods is transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. The Group has generally concluded that it is the principal in its revenue contracts because it typically controls the goods before transferring them to the customer.

For the Group's metal in concentrate sales not sold under Cost Insurance and Freight ('**CIF**') Incoterms, the performance obligation is the delivery of the concentrate. For the Group's metal in concentrate sales sold under CIF Incoterms, the Group is also responsible for providing freight/shipping services. In these situations, the freight/shipping services also represent separate performance obligations.

## (i) Concentrate sales

Revenue is initially recognised based on the most recently determined estimate of metal in concentrate using the expected value approach based on initial internal assay and weight results. The Group has determined that it is highly unlikely that a significant reversal of the amount of revenue recognised will occur due to variations in assay and weight results. Subsequent changes in the fair value based on the customer's final assay and weight results are recognised in revenue at the end of the QP.

The majority of the Group's sales of metal in concentrate are sold under CIF and allow for price adjustments based on the market price at the end of the relevant QP stipulated in the contract. These are referred to as provisional pricing arrangements where the selling price for metal in concentrate is based on prevailing spot prices on a specified future date after shipment to the customer. Adjustments to the sales price then occur based on movements in quoted market prices up to the end of the QP. The period between provisional invoicing and the end of the QP can be between one and five months.

Revenue is recognised when control passes to the customer, which occurs at a point in time when the metal in concentrate is physically transferred onto a vessel as a majority of the Group's sales of metal in concentrate are sold under CIF. The revenue is measured at the amount to which the Group expects to be entitled, being the estimate of the price expected to be received at the end of the QP, i.e., the forward price, and a corresponding trade receivable is recognised.

For these provisional pricing arrangements, any future changes that occur during the QP are embedded within the provisionally priced trade receivables. Given the exposure to the commodity price, these provisionally priced trade receivables will fail the cash flow characteristics test and will be required to be measured at fair value through profit or loss from the time of initial recognition until the date of settlement. These subsequent changes in fair value are recognised in profit or loss each period and presented in other revenue.

Changes in fair value until the end of the QP, are estimated by reference to updated forward market prices for the metal in concentrate as well as taking into account relevant other fair value considerations, including interest rate and credit risk adjustments.

## (ii) Shipping services

For CIF arrangements, the transaction price (as determined above) is allocated to the metal in concentrate and shipping services using the relative stand-alone selling price method. Under these arrangements, a portion of consideration is received from the customer at, or around, the date of shipment under a provisional invoice. Therefore, some of the upfront consideration that relates to the shipping services yet to be provided is deferred. It is then recognised as revenue over time using an output method (being days of shipping/transportation elapsed) to measure progress towards complete satisfaction of the service as this best represents the Group's performance. This is on the basis that the customer simultaneously receives are being provided. The costs associated with these shipping services are also recognised over the same period of time as incurred.

## (t) Leases

The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities to make lease payments and lease assets representing the right to use the underlying assets.

## (i) Right-of-use assets

The Group recognises right-of-use assets at the commencement date of the lease (i.e. the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any re-measurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Unless the Group is reasonably certain to obtain ownership of the leased asset at the end of the lease term, the recognised right-of-use assets are depreciated on a straight-line basis over the shorter period of its estimated useful life and the lease term (2–7 years). Right-of-use assets are subject to impairment.

## (ii) Lease liabilities

At the commencement date of the contract identified as containing a lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that are based on an index or rate and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate. The variable lease payments that do not depend on an index or a rate are recognised as an expense in the period on which the event or condition that triggers the payment occurs. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the in-substance fixed lease payments or a change in the assessment to purchase the underlying asset.

### (iii) Short-term leases and leases of low-value assets

Payments associated with short-term leases and leases of lowvalue assets are recognised on a straight-line basis as an expense in profit or loss.

Short-term leases are leases with a lease term of 12 months or less from the commencement date and do not contain a purchase option. Low-value assets comprise of office equipment.

## (u) Dividend distribution

Dividends are recognised as a liability in the financial year in which the dividends are approved by the Company's Shareholders or the Board, as appropriate.

## (v) Goods and services tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except:

- When the GST incurred on a sale or purchase of assets or services is not payable to or recoverable from the taxation authority, in which case the GST is recognised as part of the revenue or the expense item or as part of the cost of acquisition of the asset, as applicable; and
- When receivables and payables are stated with the amount of GST included.

The net amount of GST recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the statement of financial position. Commitments and contingencies are disclosed net of the amount of GST recoverable from, or payable to, the taxation authority.

Cash flows are included in the statement of cash flows on a gross basis and the GST component of cash flows arising from investing and financing activities, which is recoverable from, or payable to, the taxation authority is classified as part of operating cash flows.

## **Critical Accounting Estimates and Judgements**

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

## **Estimates and judgements**

## (i) Revenue recognition

Control of the product is transferred to the customer when the metal concentrate is physically transferred onto a vessel as this coincides with the transfer of legal title and the risk and rewards of ownership as a majority of the Group's sales of metal in concentrate are sold under CIF.

Revenue is initially recognised based on the most recently determined estimate of contained metal in concentrate based on initial internal assay and weight results. The Group has determined that it is highly unlikely that a significant reversal of the amount of revenue recognised will occur due to variations in assay and weight results. Subsequent changes in value based on the customer's final assay and weight results are recognised in revenue.

### (ii) Mine rehabilitation, restoration and dismantling obligations

Provision is made for the anticipated costs of future restoration, rehabilitation and dismantling of mining areas from which natural resources have been extracted in accordance with the accounting policy. These provisions include future cost estimates associated with reclamation, plant closures, waste site closures, monitoring, demolition, decontamination, water purification and permanent storage of historical residues. These future cost estimates are discounted to their present value. The calculation of these provision estimates requires assumptions such as the application of environmental legislation, the scope and timing of planned activities, available technologies, engineering cost estimates and discount rates. A change in any of the assumptions used may have a material impact on the carrying value of mine rehabilitation, restoration and dismantling provisions. For non-operating sites, changes to estimated costs are recognised immediately in the statement of comprehensive income.

The discount rate used in the calculation of the provision as at 31 December 2020 equalled 3.0%. The cash flows have been discounted over the life of mine taking into account when the rehabilitation activities will be undertaken.

### (iii) Mineral Resources and Ore Reserves estimates

The estimated quantities of economically recoverable Mineral Resources and Ore Reserves are based upon interpretations of geological and geophysical models and require assumptions to be made regarding factors such as estimates of short and long-term exchange rates, estimates of short and long-term commodity prices, future capital requirements and future operating performance.

Changes in reported Reserves and Resources estimates can impact the carrying value of PPE through depreciation, provisions for mine rehabilitation, restoration and dismantling obligations, the recognition of deferred tax assets, as well as the amount of D&A charged to the statement of comprehensive income. The changes are effective from the next financial year following completion of the updated Reserve and Resource estimates by the Group's competent person.

### (iv) Recoverability of non-financial assets

Impairment assessments require the use of estimates and assumptions such as long-term commodity prices (considering current and historical prices, price trends and related factors), discount rates, operating costs, future capital requirements, closure and rehabilitation costs, exploration potential, reserves and operating performance (which includes production and sales volumes). These estimates and assumptions are subject to risk and uncertainty. Therefore, there is a possibility that changes in circumstances will impact these projections, which may impact the recoverable amount of assets and/or cash generating units. In such circumstances, some or all of the carrying amount of the assets/cash generating units may be further impaired or the impairment charge reduced with the impact recognised in the statement of profit or loss.

## (v) Lease term under AASB 16

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated). This determination is reviewed if a significant event or a significant change in circumstances occurs that is within the control of the lessee.

## (vi) Estimating the incremental borrowing rate

The Group cannot readily determine the interest rate implicit in its leases. Therefore, it uses the relevant incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR, therefore, reflects what the Group would have to pay, which requires estimation when no observable rates are available and to make adjustments to reflect the terms and conditions of the lease.

### (vii) Coronavirus (COVID-19) Pandemic

Judgement has been exercised in considering the impacts that the COVID-19 pandemic has had, or may have, on the Group based on known information. This consideration extends to the nature of the products and services offered, customers, supply chain, staffing and geographic regions in which the Group operates. There does not currently appear to be either any significant impact upon the financial statements or any significant uncertainties with respect to events or conditions which may impact the consolidated entity unfavourably as at the reporting date or subsequently as a result of the COVID-19 pandemic.

# **Annexure C - Selected Reconciliations**

## Selected reconciliations are presented in this appendix relating to:

- Statutory Historical Results to Pro Forma Historical Results for FY2018;
- Statutory Historical Results to Pro Forma Historical Results for FY2019;
- Statutory Historical Results to Pro Forma Historical Results for FY2020;
- Statutory Forecast Results to Pro Forma Forecast Results for FY2021;
- Statutory Historical Cash Flows Information to Pro Forma Historical Cash Flow Information reconciliation for FY2018;
- Statutory Historical Cash Flows Information to Pro Forma Historical Cash Flow Information for FY2019;
- Statutory Historical Cash Flows Information to Pro Forma Historical Cash Flow Information for FY2020;
- Statutory Forecast Cash Flows Information to Pro Forma Forecast Cash Flow Information for FY2021;
- Pro forma balance sheet of Capricorn Copper Holdings and Lighthouse Minerals as at 31 December 2020; and
- Pro forma balance sheet of Redhill Mining as at 31 December 2020.

	Statutory (Golden Grove Holdings) (A\$000)	Golden Grove LP (A\$000)	Redhill Mining pre-IPO acquisition (A\$000)	Capricorn Copper Holdings (A\$000)	Accounting policy and 1 purchase price accounting adjustments (A\$000)	Capricorn Copper Joldings and Lighthouse Minerals pre-IPO acquisition (A\$000)	Impact of AASB16 (A\$000)	Impact of Derivative Payout, Debt and Working Capital Reduction (A\$000)	Public company costs (A\$000)	Tax effect (A\$000)	Pro forma (A\$000)
	1	2	e	4	Q	9	7	œ	6	10	
evenue	402,363	I	I	122,543	I	122,543	I	I	I	I	524,906
ost of sales											
dining costs	(112,107)	I	I	(56,043)	I	(56,043)	22,902	I	I	I	(145,248)
rocessing costs	(52,231)	I	I	(43,331)	I	(43,331)	117	I	I	I	(95,445)
ite services costs	(20,588)	I	I	(14,409)	I	(14,409)	1,498	I	(3,886)	I	(37,385)
bepreciation and amortisation	(35,789)	I	(16)	(22,194)	(20,678)	(42,872)	(21,498)	I	I	I	(100, 175)
tockpile movements	(5,308)	I	T	(1, 818)	I	(1, 818)	I	I	I	I	(7,126)
sovernment royalities	(17,351)	I	T	(6,021)	I	(6,021)	I	I	I	I	(23,372)
Other production and selling costs	(8,598)	I	I	(11, 206)	I	(11,206)	I	I	I	I	(19,804)
ost of sales	(251,972)	T	(16)	(155,022)	(20,678)	(175,700)	3,019	Т	(3,886)	T	(428,555)
iross profit	150,391	I	(16)	(32,479)	(20,678)	(53,157)	3,019	T	(3,886)	I	96,351
Other income	5,060	I	I	411	I	411	I	I	I	I	5,471
let gain/(loss) on derivative financial istruments	I	I	I	(18,208)	I	(18,208)	I	I	I	I	(18,208)
let foreign exchange gain/(loss)	(6,806)	I	(1)	(3,967)	I	(3,967)	I	938	I	I	(9,836)
dministration expenses	(2,082)	(667)	(733)	(6,105)	I	(6,105)	65	I	(9,199)	I	(18,721)
)ther expenses	(3,253)	I	T	70	T	70	I	I	I	I	(3,183)
rofit before net finance costs and income ax expense	143,310	(667)	(750)	(60,278)	(20,678)	(80,956)	3,084	938	(13,085)	I	51,874
inance income	994	I	I	32	I	32	I	I	I	I	1,026
inance costs	(11, 841)	I	I	(8,321)	(1)	(8,322)	(4, 212)	4,155	I	I	(20,220)
rofit before income tax expense	132,463	(667)	(750)	(68,567)	(20,679)	(89,246)	(1,128)	5,093	(13,085)	T	32,680
ncome tax expense	(44,288)	I	I	I	I	I	338	I	I	29,371	(14,579)
let profit for the year attributable to members	88,175	(667)	(750)	(68,567)	(20,679)	(89,246)	(062)	5,093	(13,085)	29,371	18,101

- Golden Grove Holdings' historical consolidated statement of comprehensive income derived from Golden Grove Holdings' consolidated financial report for FY2018 with certain reclassifications to align with 29Metals' line item classifications in the statement of comprehensive income. Ţ.
- Incremental historical results of Golden Grove LP after elimination of transactions with Golden Grove Holdings, conversion to A\$ and alignment with Golden Grove Holdings' AAS accounting policies. 5.
  - Redhill Mining's historical consolidated statement of comprehensive income derived from Redhill Mining's consolidated financial statements for FY2018. ю.
- Capricorn Copper Holdings' historical consolidated statement of comprehensive income derived from Capricorn Copper Holdings' financial report for FY2018 with certain reclassifications to align with 29Metals' line item classifications to align with 29Metals' line item classifications in the statement of comprehensive income. This includes reclassification of net foreign exchange gain/(loss) from other expenses to its own separate line item, reclassification of net gain/(loss) on derivative financial instruments from finance costs to its own separate line item, reclassification of interest income from other income to finance income and reclassification of certain sales related penalties and certain silver refining charges from cost of sales to revenue. 4.
- This pro forma adjustment includes higher D&A charges on account of increase to PPE and mineral rights, associated with new fair values arising from the provisional purchase price allocation 5.
  - 6. Capricorn Copper Holdings and Lighthouse Minerals pre-IPO acquisition sub total.
- Adjustment to reflect the application of AASB 16 as if it had been in place since the start of FY2018. As a result of the adoption of AASB 16, lease expenses included within costs of sales would decrease and depreciation and interest would increase. Refer to table 5.4 for further information. ∠.
- This pro forma adjustment removes the related finance costs and net foreign exchange gain/(loss) in respect of the Derivative Payout, Debt and Working Capital Reduction. œ.
- This adjustment incorporates additional estimated compliance costs, annual listing fees, incremental executive remuneration costs and the Staff Incentive Offer associated with being a listed company. 6.

10. Adjustment reflects the tax effect of the pro forma adjustments.

	Statutory (Golden Grove Holdings) (A\$000)	Golden Grove LP (A\$000)	Redhill Mining pre-IPO acquisition (A\$000)	Capricorn Copper Holdings (A\$000)	Accounting policy and purchase purchase accounting adjustments (A\$000)	Capricorn Copper Holdings and Lighthouse Minerals pre-IPO acquisition (A\$000)	Impact of Derivative Payout, Debt and Working Capital Reduction (A\$000)	Public company costs (A\$000)	Historical acquisition costs	Tax effect (A\$000)	Pro forma (A\$000)
	1	2	e	4	Q	9	7	8	6	10	
evenue	473,418	I	I	183,752	I	183,752	I	I	I	I	657,170
ost of sales											
dining costs	(127,162)	I	I	(60,923)	I	(60,923)	I	I	I	I	(188,085)
rocessing costs	(62,909)	I	I	(46,270)	I	(46,270)	I	I	I	I	(109,179)
ite services costs	(22,020)	I	I	(14,071)	I	(14,071)	I	(3,085)	I	I	(39,176)
Depreciation and amortisation	(50,139)	I	(10)	(37,334)	(27,471)	(64,805)	I	I	I	I	(114,954)
tockpile movements	7,973	I	I	(3,466)	I	(3,466)	I	I	I	I	4,507
sovernment royalities	(19,995)	I	I	(8,305)	I	(8,305)	I	I	I	I	(28,300)
Other production and selling costs	(10,357)	I	I	(13,879)	I	(13,879)	I	I	I	I	(24,236)
cost of sales	(284,609)	T	(10)	(184,248)	(27,471)	(211,719)	I	(3,085)	1	T	(499,423)
sross profit	188,809	I	(10)	(496)	(27,471)	(27,967)	I	(3,085)	I	I	157,747
Other income	7,476	I	I	290	I	290	I	I	I	I	7,766
let gain/(loss) on derivative financial nstruments	I	I	I	(6,022)	I	(6,022)	I	I	I	I	(6,022)
let foreign exchange gain/(loss)	(2,418)	I	I	(1, 491)	I	(1, 491)	(1,047)	I	I	I	(4,956)
dministration expenses	(4,036)	(356)	(608)	(5,304)	(1)	(5,305)	I	(9,988)	1,131	I	(19,162)
)ther expenses	I	I	(134)	(4,738)	I	(4,738)	I	I	I	I	(4,872)
rofit before net finance costs and income	100021	19541	(750)	1477741	1027 201	(15 222)	1210 11	1020.01	101		120 501
inance income	1,579	-	1	184		184		-	1	1	1,763
inance costs	(11,526)	I	I	(10,093)	I	(10,093)	6,121	I	I	I	(15,498)
rofit before income tax expense	179,884	(356)	(752)	(27,670)	(27,472)	(55,142)	5,074	(13,073)	1,131	I	116,766
ncome tax expense	(53,732)	I	T	1	I	I	I	I	I	18,710	(35,022)
let profit for the year attributable to members	126,152	(356)	(752)	(27,670)	(27,472)	(55,142)	5,074	(13,073)	1,131	18,710	81,744

- 1. Golden Grove Holdings' historical consolidated statement of comprehensive income derived from Golden Grove Holdings' consolidated financial report for FY2019.
- Incremental historical results of Golden Grove LP after elimination of transactions with Golden Grove Holdings, conversion to A\$ and alignment with Golden Grove Holdings' AAS accounting policies. 2.
  - Redhill Mining's historical consolidated statement of comprehensive income derived from Redhill Mining's consolidated financial statements for FY2019. . ന
- Capricorn Copper Holdings' historical consolidated statement of comprehensive income derived from Capricorn Copper Holdings' financial report for FY2019 with certain reclassifications to align with 29Metals' line item classifications in the statement of comprehensive income. 4.
  - This pro forma adjustment includes higher D&A charges on account of increase to PPE and mineral rights, associated with new fair values arising from the provisional purchase price allocation. 5.
    - 6. Capricorn Copper Holdings and Lighthouse Minerals pre-IPO acquisition sub total.

∠.

- This pro forma adjustment removes the related finance costs and net foreign exchange gain/(loss) in respect of the Derivative Payout, Debt and Working Capital Reduction.
- This adjustment incorporates additional estimated compliance costs, annual listing fees, incremental executive remuneration costs and the Staff Incentive Offer associated with being a listed company. . co
- One-off costs associated with prior acquisitions of Golden Grove have been removed from the historical trading results. The adjustment consists of the removal of prior acquisition costs of \$1.1 million in FY2019 relating to the historical acquisition of Golden Grove. 6.

10. Adjustment reflects the tax effect of the pro forma adjustments.

	Statutory (Golden Grove Holdings) (A\$000)	Golden Grove LP (A\$000)	Redhill Mining pre-IPO acquisition (A\$000)	Capricorn Copper Holdings (A\$000)	Accounting policy and purchase price accounting adjustments (A\$000)	Capricorn Copper Holdings and Lighthouse Minerals pre-IPO acquisition (A\$000)	Impact of Derivative Payout, Debt and Working Capital Reduction (A\$000)	Public company costs (A\$000)	Historical acquisition costs	Tax effect (A\$000)	Pro forma (A\$000)
	1	2	n	4	2	9	7	œ	6	10	10
evenue	434,451	I	I	190,663	I	190,663	I	I	I	I	625,114
ost of sales											
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(144,030)	I	I	(67,069)	I	(67,069)	I	I	I	I	(211,099)
rocessing costs	(69,384)	I	I	(44,049)	I	(44,049)	I	I	I	I	(113,433)
ite services costs	(23,894)	I	I	(17,842)	I	(17,842)	I	(2, 552)	I	I	(44,288)
bepreciation and amortisation	(56,148)	I	I	(43,550)	(32,093)	(75,643)	I	I	I	I	(131, 791)
tockpile movements	(5, 615)	I	I	(293)	I	(293)	I	I	I	I	(6,208)
sovernment royalities	(15, 312)	I	I	(8,927)	I	(8,927)	I	I	I	I	(24,239)
other production and selling costs	(11,456)	I	I	(15,224)	I	(15, 224)	I	I	I	I	(26,680)
ost of sales	(325,839)	T	I	(197,254)	(32,093)	(229,347)	1	(2,552)	1	I	(557,738)
iross profit	108,612	I	I	(6,591)	(32,093)	(38,684)	I	(2,552)	I	I	67,376
Other income	73	I	I	369	I	369	I	I	I	I	442
let gain/(loss) on derivative financial hstruments	8,359	I	I	(13,874)	I	(13,874)	I	I	I	I	(5,515)
let foreign exchange gain/(loss)	26,807	I	I	8,502	I	8,502	(6,526)	I	I	I	28,783
dministration expenses	(3,710)	(978)	(405)	(4, 771)	I	(4,771)	I	(9,594)	I	I	(19,458)
Other expenses	(3,988)	I	I	(10,000)	I	(10,000)	I	T	10,000	I	(3,988)
rofit before net finance costs and income ax expense	136,153	(978)	(405)	(26,365)	(32,093)	(58,458)	(6,526)	(12,146)	10,000	I	67,640
inance income	287	I	I	27	I	27	I	I	I	I	314
inance costs	(18,232)	I	I	(11, 192)	I	(11, 192)	7,709	T	I	I	(21, 715)
rofit before income tax expense	118,208	(978)	(405)	(37,530)	(32,093)	(69,623)	1,183	(12,146)	10,000	T	46,239
ncome tax expense	(34,514)	I	I	T	I	T	I	T	I	21,469	(13,045)
let profit for the year attributable to members	83,694	(978)	(405)	(37,530)	(32,093)	(69,623)	1,183	(12,146)	10,000	21,469	33,194

- 1. Golden Grove Holdings' historical consolidated statement of comprehensive income derived from Golden Grove Holdings' consolidated financial report for FY2020.
- Incremental historical results of Golden Grove LP after elimination of transactions with Golden Grove Holdings, conversion to A\$ and alignment with Golden Grove Holdings' AAS accounting policies. 2.
  - Redhill Mining's historical consolidated statement of comprehensive income derived from Redhill Mining's consolidated financial statements for FY2020. . ന
- Capricorn Copper Holdings' historical consolidated statement of comprehensive income derived from Capricorn Copper Holdings' financial report for FY2020. 4.
- This pro forma adjustment includes higher D&A charges on account of increase to PPE and mineral rights, associated with new fair values arising from the provisional purchase price allocation. 5.
- 6. Capricorn Copper Holdings and Lighthouse Minerals pre-IPO acquisition sub total.
- This pro form a djustment removes the related finance costs and net foreign exchange gain/(loss) in respect of the Derivative Payout. Debt and Working Capital Reduction. ∠.
- This adjustment incorporates additional estimated compliance costs, annual listing fees, incremental executive remuneration costs and the Staff Incentive Offer associated with being a listed company. . co
- One-off costs associated with prior acquisition of Capricorn Copper have been removed from the historical trading result. The adjustment consists of the removal of the contingent consideration payable to Metals X Limited of \$10.0 million in FY2020 relating to the historical acquisition of Capricorn Copper. 6.

10. Adjustment reflects the tax effect of the pro forma adjustments.

	Statutory (Golden Grove Holdings) (A\$000)	Redhill Mining pre-IPO acquisition (A\$000)	Capricorn Copper Holdings and Lighthouse Minerals pre- IPO acquisition (A\$000)	Impact of Derivative Payout, Debt and Working Capital Reduction (A\$000)	Public company costs (A\$000)	Offer costs (A\$000)	Tax effect (A\$000)	Pro forma (A\$000)
	1	2	e	4	ß	9	7	
Revenue	557,160	1	108,170	1	I	I	I	665,330
Cost of sales								
Mining costs	(193,115)	1	(36,661)	I	I	Ι	I	(229,776)
Processing costs	(92,216)	I	(24,039)	I	I	I	I	(116,255)
Site services costs	(36,095)	(76)	(11,861)	I	3,190	I	I	(44,842)
Depreciation and amortisation	(94,456)	I	(31,646)	I	I	I	I	(126,102)
Stockpile movements	18,528	I	(1,600)	I	I	I	I	16,928
Government royalities	(24,543)	I	(5,242)	I	I	I	I	(29,785)
Other production and selling costs	(16,138)	I	(4,241)	I	I	I	I	(20,379)
Cost of sales	(438,035)	(76)	(115,290)	I	3,190	I	I	(550,211)
Gross profit	119,125	(76)	(7,120)	I	3,190	I	I	115,119
Other income	22	I	51	I	I	Ι	I	73
Net gain/(loss) on derivative financial instruments	16,477	I	(49,001)	I	I	I	I	(32,524)
Net foreign exchange gain/(loss)	(2,308)	I	1,447	(1,447)	I	I	I	(2,308)
Administration expenses	(66,477)	(113)	I	I	(7,939)	54,828	1	(19,701)
Profit before net finance costs and income tax expense	66,839	(189)	(54,623)	(1,447)	(4,749)	54,828	I	60,659
Finance income	407	I	22	I	I	I	I	429
Finance costs	(10,581)	I	(2,972)	1,550	I	I	I	(12,003)
Profit before income tax expense	56,665	(189)	(57,573)	103	(4,749)	54,828	I	49,085
Income tax expense	117,773	I	I	I	I	I	(130,334)	(12,561)
Net profit for the year attributable to members	174,438	(189)	(57,573)	103	(4,749)	54,828	(130,334)	36,524

- 1. Statutory forecast results for FY2021. Note that the statutory forecast assumes the IPO acquisitions occur on completion of the Offer.
  - 2. Redhill Mining's forecast results for the period between January 2021 to completion of the Offer.
- Capricorn Copper Holdings' forecast results for the period between January 2021 to completion of the Offer with pro forma adjustment that includes higher D&A charges on account of increase to PPE and mineral rights. associated with new fair values arising from the provisional purchase price allocation for the period between January 2021 to completion of the Offer. . ന
- This proform a djustment removes the related finance costs and net foreign exchange gain/(loss) in respect of the Derivative Payout, Debt and Working Capital Reduction for the period between January 2021 to completion of the Offer. 4.
- This adjustment incorporates additional estimated compliance costs, annual listing fees, incremental executive remuneration costs and the Staff Offer Incentive associated with being a listed company for the period between January 2021 to completion of the Offer. 2.
  - Removal of Offer related expenses.
     Adjustment reflects the tax effect of the tax of tax of
- Adjustment reflects the tax effect of the pro forma adjustments, including the removal of tax adjustment as a result of Golden Grove joining the tax consolidated Group.

	Statutory (Golden Grove Holdings) (A\$000)	Golden Grove LP (A\$000)	Redhill Mining pre-IPO acquisition (A\$000)	Capricorn Copper Holdings (A\$000)	Lighthouse Minerals (A\$000)	ing policy and purchase price account - ing adjust- ments (A\$000)	Caphroon Copper Holdings and Lighthouse Minerals pre-IPO acquisition (A\$000)	Impact of AASB16 (A\$000)	Impact of Derivative Payout, Debt and Working Capital Reduction (A\$000)	Public company costs (A\$000)	Historical trans- action costs (A\$000)	Tax payment (A\$000)	Pro forma (A\$000)
	1	2	m	4	Q	9	7	œ	0	10	11	12	
Net profit/(loss) for the year attributable to members	88,175	(667)	(750)	(68,567)	I	(20,679)	(89,246)	(062)	5,093	(13,085)	T	29,371	18,101
Interest and other finance costs	11,841	I	I	6,537	I	I	6,537	4,212	(4, 155)	I	I	I	18,435
Depreciation and amortisation	35,789	I	16	22,194	I	20,678	42,872	21,498	I	I	I	I	100,175
Other items	10,919	I	$\leftarrow$	7,416	(2,567)	11,159	16,008	I	(938)	I	I	I	25,990
Changes in working capital	25,239	667	(17)	47,730	(11)	(11, 159)	36,560	(338)	(20,314)	I	16,214	(25,385)	32,626
Net cash flows from/(used in) operating activities	171,963	T	(750)	15,310	(2,578)	(1)	12,731	24,582	(20,314)	(13,085)	16,214	3,986	195,327
Payments for property, plant and equipment	(11,060)	I	I	(12,307)	I	I	(12,307)	I	I	I	I	I	(23,367)
Proceeds from the sale of property, plant and equipment	1,386	I	T	I	I	I	I	I	I	I	I	I	1,386
Payments for development activities	(25,172)	I	I	(14, 631)	I	I	(14, 631)	I	I	I	I	I	(39,803)
Exploration expenditure	(7,589)	I	(443)	(8,209)	I	I	(8,209)	I	I	I	I	I	(16, 241)
Net cash flows used in investing activities	(42,435)	I	(443)	(35,147)	I	I	(35,147)	I	I	I	I	I	(78,025)
Proceeds from share issue	I	I	I	36,176	I	I	36,176	I	I	I	I	I	36,176
Loans from/(to) related parties	I	I	I	(2,380)	2,567	(187)	I	I	I	I	I	I	I
Proceeds from external borrowings	115,841	I	I	17,095	I	I	17,095	I	(17,095)	I	I	I	115,841
Repayment of borrowings	(71,117)	I	I	(19,500)	I	I	(19,500)	I	19,500	I	I	I	(71,117)
Repayment of lease liabilities	I	I	I	(1, 129)	I	I	(1, 129)	(20,369)	I	I	I	I	(21,498)
Share buy back	(185,817)	I	I	I	I	I	I	I	I	I	I	I	(185,817)
Interest and borrowing costs paid	(11,324)	I	I	(5,043)	I	I	(5,043)	(4, 213)	4,155	I	I	I	(16,425)
Net cash flows from/(used in) financing activities	(152,417)	T	I	25,219	2,567	(187)	27,599	(24,582)	6,560	T	T	T	(142,840)
Net increase/(decrease) in cash and cash equivalents	(22,889)	I	(1,193)	5,382	(11)	(188)	5,183	I	(13,754)	(13,085)	16,214	3,986	(25,538)
casil equivalents	122,0071		(-, -, -)	2006	/	(001)	0,100	I	1101,011		(000,01)	(TO,OOJ) TO,ZIT	

- Golden Grove Holdings' cash flows information derived from Golden Grove Holdings' consolidated financial report for FY2018. Ţ.
- Incremental historical cash flow information of Golden Grove LP after elimination of transactions with Golden Grove Holdings, conversion to A\$ and alignment with Golden Grove Holdings' AAS accounting policies. Redhill Mining's cash flows information derived from Redhill Mining's consolidated financial statements for FY2018. 2. . .
  - Capricorn Copper Holdings' cash flows information derived from Capricorn Copper Holdings' financial report for the FY2018. 4.
    - Lighthouse Minerals cash flows information derived from unaudited financial records for FY2018.
- This adjustment includes impact of the purchase price allocation on loss after tax and non-cash items largely due to higher D&A charges on account of increase to PPE and mineral rights associated with new fair values arising from the provisional purchase price allocation. It also removes the proceeds from the shareholder loan payable, which will be converted to Shares on acquisition. It also includes the reclassification of Capricorn Copper Holdings' movements in derivative financial liabilities from 'changes in working capital' to 'other items' 6.
  - Capricorn Copper Holdings and Lighthouse Minerals pre-IPO acquisition sub total
- AASB 16 has no impact on net cash flows. Under AASB 16, the principal lease repayments are presented separately within financing cash flows. Under the previous AAS, these payments were included in operating cash flows.
  - This pro forma adjustment removes the related finance costs and net foreign exchange gain/(loss) and other cash flows in respect of the Derivative Payout. Debt and Working Capital Reduction. 6.
- 10. This adjustment incorporates additional estimated compliance costs, annual listing fees, incremental executive remuneration costs, the Staff Offer Incentive and other cash flows associated with being a listed company. 11. Removal of one-off costs and cash flows associated with prior acquisition of Golden Grove.
  - 12. Adjustment reflects the pro forma reduction in tax payments.

	Statutory (Golden Grove Holdings) (\$000)	Golden Grove LP (\$000)	Redhill Mining pre-IPO acquisition (\$000)	Capricorn Copper Holdings (\$000)	Lighthouse Minerals Pty Ltd (\$000)	Account- ing policy and purchase price account- ing adjust- ments (\$000)	Capricorn Copper Holdings and Lighthouse Minerals pre-IPO acquisition (A\$000)	Impact of Derivative Payout, Debt and Working Capital Reduction (\$000)	Public company costs (\$000)	Historical trans- action costs (\$000)	Tax payment (\$000)	Pro forma (\$000)
	1	2	e	4	Q	9	7	œ	0	10	11	
Net profit/(loss) for the year attributable to members	126,152	(356)	(752)	(27,670)	I	(27,472)	(55,142)	5,074	(13,073)	1,131	18,710	81,744
Interest and other finance costs	10,421	Ĩ	I	9,965	I	I	9,965	(6, 121)	I	I	I	14,265
Depreciation and amortisation	50,139	I	10	37,334	I	27,471	64,805	I	I	I	I	114,954
Other items	4,922	I	138	698	I	(2,659)	(1,961)	1,047	I	I	I	4,146
Changes in working capital	(3,147)	1,479	(10)	(12,726)	(333)	2,659	(10,400)	T	T	(372)	(14,820)	(27,270)
Net cash flows from/(used in) operating activities	188,487	1,123	(614)	7,601	(333)	(1)	7,267	T	(13,073)	759	3,890	187,839
Payments for property, plant and equipment	(25,952)	I	I	(4,162)	T	I	(4,162)	T	T	I	I	(30,114)
Proceeds from the sale of property, plant and equipment	47	I	I	I	I	I	I	I	I	I	I	47
Payments for development activities	(39,930)	I	I	(17,182)	I	I	(17, 182)	I	I	I	I	(57,112)
Exploration expenditure	(3,712)	I	(218)	(2,731)	I	I	(2,731)	I	I	I	I	(6, 661)
Net cash flows used in investing activities	(69,547)	I	(218)	(24,075)	I	I	(24,075)	I	I	I	I	(93,840)
Proceeds from share issue	I	I	I	33,169	I	I	33,169	I	I	I	I	33,169
Loans from/(to) related parties	1,123	(1, 123)	I	9,359	333	(9,692)	I	T	T	I	I	I
Proceeds from external borrowings	I	I	I	9,009	I	I	9,009	(6,009)	T	I	I	I
Repayment of borrowings	(57,278)	I	I	(17,009)	I	I	(17,009)	17,009	I	I	I	(57,278)
Repayment of lease liabilities	(15, 491)	I	I	(9, 312)	Ι	I	(9,312)	I	I	I	I	(24,803)
Interest and borrowing costs paid	(9,520)	I	I	(8,468)	I	I	(8,468)	6,121	I	I	I	(11, 867)
Net cash flows from/(used in) financing activities	(81,166)	(1,123)	T	16,748	333	(9,692)	7,389	14,121	T	T	T	(60,779)
Net increase/(decrease) in cash and cash equivalents	37,774	T	(832)	274	T	(9,693)	(9,419)	14,121	(13,073)	759	3,890	33,220

- Golden Grove Holdings' cash flows information derived from Golden Grove Holdings' consolidated financial report for FY2019. Ţ.
- Incremental historical cash flow information of Golden Grove LP after elimination of transactions with Golden Grove Holdings, conversion to A\$ and alignment with Golden Grove Holdings' AAS accounting policies. 2.
  - Capricorn Copper Holdings' cash flows information derived from Capricorn Copper Holdings' financial report for FY2019. Redhill Mining's cash flows information derived from Redhill Mining's consolidated financial statements for FY2019. ю. 4.
    - Lighthouse Minerals cash flows information derived from unaudited financial records for FY2019.
- This adjustment includes impact of the purchase price allocation on loss after tax and non-cash items largely due to higher D&A charges on account of increase to PPE and mineral rights associated with new fair values arising from the provisional purchase price allocation. It also removes the proceeds from the shareholder loan payable, which will be converted to Shares on acquisition. It also includes the reclassification of Capricorn Copper Holdings' movements in derivative financial liabilities from 'changes in working capital' to 'other items' 6.
- Capricorn Copper Holdings and Lighthouse Minerals pre-IPO acquisition sub total. N 00 0.
- This pro forma adjustment removes the related finance costs and net foreign exchange gain/(loss) and other cash flows in respect of the Derivative Payout. Debt and Working Capital Reduction.
- This adjustment incorporates additional estimated compliance costs, annual listing fees, incremental executive remuneration costs, the Staff Offer Incentive and other cash flows associated with being a listed company.
  - 10. Removal of one-off costs and cash flows associated with prior acquisition of Golden Grove.

11. Adjustment reflects the pro forma reduction in tax payments.

	Statutory (Golden Grove Holdings) (\$000)	Golden Grove LP (\$000)	Redhill Mining pre-IPO acquisition (\$000)	Capricorn Copper Holdings (\$000)	Lighthouse Minerals Pty Ltd (\$000)	Account- ing policy and purchase price account- ing adjust- ments (\$000)	Capricorn Copper Holdings and Lighthouse Minerals pre-IPO acquisition (A\$000)	Impact of Derivative Payout, Debt and Working Capital Reduction (\$000)	Public company costs (\$000)	Historical trans- action costs (\$000)	Tax payment (\$000)	Pro forma (\$000)
	Ţ	2	n	4	Q	9	7	œ	0	10	Ħ	
Net profit/(loss) for the year attributable to members	83,694	(978)	(405)	(37,530)	I	(32,093)	(69,623)	1,183	(12,146)	10,000	21,469	33,194
Interest and other finance costs	12,800	I	I	11,143	I	I	11,143	(7,709)	I	I	I	16,234
Depreciation and amortisation	56,148	I	I	43,550	I	32,093	75,643	I	I	I	I	131,791
Other items	(29,125)	I	7	(7, 918)	I	6,621	(1, 297)	6,515	I	I	I	(23,906)
Changes in working capital	7,085	977	4	21,442	95	(6, 621)	14,916	I	I	(10,000)	(17,964)	(4,982)
Net cash flows from/(used in) operating activities	130,602	(1)	(400)	30,687	95	I	30,782	(11)	(12,146)	I	3,505	152,331
Payments for property, plant and equipment	(31,294)	I	I	(6,379)	I	I	(6,379)	I	I	I	I	(37,673)
Proceeds from the sale of property, plant and equipment	96	I	I	I	Ι	I	I	I	I	I	I	96
Payments for development activities	(37,950)	I	I	(19,924)	I	I	(19,924)	I	I	I	I	(57,874)
Exploration expenditure	(9,740)	I	(158)	(1,941)	I	I	(1,941)	I	I	I	I	(11, 839)
Net cash flows used in investing activities	(78,888)	I	(158)	(28,244)	I	I	(28,244)	I	I	I	I	(107,290)
Loans from/(to) related parties	(1)	7	I	(757)	(115)	872	I	I	I	I	I	T
Proceeds from external borrowings	146,946	I	I	11,381	I	I	11,381	(11, 381)	I	I	I	146,946
Repayment of borrowings	(3,252)	I	I	(2,004)	I	I	(2,004)	2,004	I	I	I	(3,252)
Repayment of lease liabilities	(13,374)	I	I	(9,597)	I	I	(9,597)	I	I	I	I	(22,971)
Share buy back	(176,030)	I	I	I	I	I	I	I	I	I	I	(176,030)
Interest and borrowing costs paid	(11, 631)	I	I	(8,745)	I	I	(8,745)	7,709	I	I	I	(12,667)
Net cash flows from/(used in) financing activities	(57,342)	1	T	(9,722)	(115)	872	(8,965)	(1,668)	T	T	T	(67,974)
Net increase/(decrease) in cash and cash equivalents	(5,628)		(558)	(7,279)	(20)	872	(6,427)	(1,679)	(12,146)		3,505	(22,933)

- Golden Grove Holdings' cash flows information derived from Golden Grove Holdings' consolidated financial report for FY2020 Ţ.
- Incremental historical cash flow information of Golden Grove LP after elimination of transactions with Golden Grove Holdings, conversion to A\$ and alignment with Golden Grove Holdings' AAS accounting policies. 2.
  - Capricorn Copper Holdings' cash flows information derived from Capricorn Copper Holdings' financial report for FY2020. Redhill Mining's cash flows information derived from Redhill Mining's consolidated financial statements for FY2020. . ന 4.
    - Lighthouse Minerals cash flows information derived from unaudited financial records for FY2020.
- This adjustment includes impact of the purchase price allocation on loss after tax and non-cash items largely due to higher D&A charges on account of increase to PPE and mineral rights associated with new fair values arising from the provisional purchase price allocation. It also removes the proceeds from the shareholder loan payable, which will be converted to Shares on acquisition. It also includes the reclassification of Capricorn Copper Holdings' movements in derivative financial liabilities from 'changes in working capital' to 'other items' . <sup>5</sup>.
- Capricorn Copper Holdings and Lighthouse Minerals pre-IPO acquisition sub total. N 00 0.
- This pro forma adjustment removes the related finance costs and net foreign exchange gain/(loss) and other cash flows in respect of the Derivative Payout. Debt and Working Capital Reduction.
- This adjustment incorporates additional estimated compliance costs, annual listing fees, incremental executive remuneration costs. the Staff Offer Incentive and other cash flows associated with being a listed company.
  - 10. Removal of one-off costs and cash flows associated with prior acquisition of Capricorn Copper relating to the contingent consideration payable to MetalsX Limited of \$10.0 million.

11. Adjustment reflects the pro forma reduction in tax payments.

	Statutory (Golden Grove Holdings) (\$000)	Redhill Mining pre-IPO acquisition (\$000)	Holdings and Lighthouse Minerals pre-IPO acquisition (A\$000)	Perivative Payout, Debt and Working Capital Reduction (\$000)	Public company costs (\$000)	IPO costs (\$000)	Tax payment (\$000)	Pro forma (\$000)
	1	2	e	4	Q	9	7	
Net profit/(loss) for the year attributable to members	174,438	(189)	(57,574)	103	(4,749)	54,828	(130,333)	36,524
Interest and other finance costs	10,581	I	2,972	(1, 550)	I	I	I	12,003
Depreciation and amortisation	94,456	I	31,646	I	I	I	I	126,102
Other items (4	(42,477)	T	49,001	1,447	I	I	I	7,971
Changes in working capital (20	(204,160)	(11)	298	31,943	I	I	135,526	(36,404)
Net cash flows from/(used in) operating activities	32,838	(200)	26,343	31,943	(4,749)	54,828	5,193	146,196
Payments for property, plant and equipment ((	(35,503)	I	(5,673)	I	I	I	I	(41, 176)
Payments for development activities	(47,987)	(16)	(12,428)	I	I	I	I	(60,431)
Exploration expenditure	(5,684)	(5, 171)	(1,040)	I	I	I	I	(11,895)
Net cash flows used in investing activities	(89,174)	(5,187)	(19,141)	I	I	1	I	(113,502)
Proceeds from share issue	218,340	I	I	I	I	(218,340)	I	Ι
Repayment of borrowings	(78,729)	I	(3, 155)	55,824	I	I	I	(26,060)
Repayment of lease liabilities (2	(26,343)	I	(5,406)	I	I	I	I	(31,749)
Interest and borrowing costs paid	(12,860)	I	(2,861)	1,550	I	I	I	(14,171)
Net cash flows from/(used in) financing activities	100,408	T	(11,422)	57,374	I	(218,340)	I	(71,980)
Net increase/(decrease) in cash and cash equivalents	44,072	(5,387)	(4,220)	89,317	(4,749)	(163,512)	5,193	(39,286)

- 1. Statutory forecast cash flows information for FY2021. Note that the statutory forecast assumes the IPO acquisitions occur on completion of the Offer.
- Redhill Mining's forecast cash flows information for the period between January 2021 to completion of the Offer.
- Capricorn Copper Holdings' forecast cash flows information for the period between January 2021 to completion of the Offer. This adjustment includes impact of the purchase price allocation on loss after tax and non-cash items largely due to higher D&A charges on account of increase to PPE and mineral rights associated with new fair values arising from the provisional purchase price allocation for the period between January 2021 to completion of the Offer. . . . .
- This pro forma adjustment removes the related finance costs and net foreign exchange gain/(loss) and other cash flows in respect of the Derivative Payout. Debt and Working Capital Reduction for the period between January 2021 to completion of the Offer. 4.
- This adjustment incorporates additional estimated compliance costs, annual listing fees, incremental executive remuneration costs, the Staff Offer Incentive and other cash flows associated with being a listed company for the period between January 2021 to completion of the Offer. 2.
- The proceeds from the Offer, net of Offer costs, are removed on a pro forma basis. ю. И б
  - Adjustment reflects the pro forma reduction in tax payments.

	Capricorn Copper Holdings	Lighthouse Minerals Pty Ltd	Eliminate intercompany balances entries	Removal of contingent consideration payable to MetalsX	Removal of convertible loan	Purchase price allocation	Consolidation entries	Capricorn Copper
	1	2	S	4	2	9	7	
Current assets								
Cash and cash equivalents	5,738	I	I	I	I	I	I	5,738
Trade and other receivables	13,563	I	I	I	I	I	I	13,563
Inventories	15,283	I	I	I	I	913	I	16,196
Prepayments	1,064	I	I	I	I	I	I	1,064
Total current assets	35,648	1	1	I	I	913	I	36,561
Non-current assets								
Exploration and evaluation assets	5,764	I	I	I	I	(5,764)	I	I
Mine properties	60,121	I	66	Ι	I	321,066	Ι	381,253
Property plant and equipment	76,353	I	I	I	I	3,257	I	79,610
Right of use assets	22,624	1	I	I	I	(992)	I	21,632
Intangible assets	1,126	I	I	I	Ι	(1,126)	I	I
Deferred tax assets	1	I	I	I	I	I	I	I
Total non-current assets	165,988	I	66	I	I	316,441	I	482,495
Total assets	201,636	I	66	T	I	317,354	I	519,056
Current liabilities								
Trade and other payables	67,802	91	I	(5,000)	I	7,147	T	70,040
Lease liabilities	10,094	I	I	I	1	I	I	10,094
Derivative financial liabilities	15,121	I	I	I	Ι	48,976	I	64,097
Provisions	3,647	I	(20)	I	I	I	I	3,627
Interest bearing liabilities	15,246	I	I	Ι	I	I	40,160	55,406
Shareholder loan payable	8,999	5	I	I	(9,004)	I	I	I
Total current liabilities	120,909	96	(20)	(5,000)	(9,004)	56,123	40,160	203,264
Non-current liabilities								
Trade and other payables	5,000	I	I	(5,000)	I	I	I	I
Lease liabilities	11,538	I	I	Ι	I	Ι	Ι	11,538
Provisions	29,787	I	I	Ι	I	Ι	Ι	29,787
Interest bearing liabilities	40,160	I	I	I	I	I	(40,160)	I
Deferred tax liabilities	I	I	I	I	I	60,069	I	60,069
Total non-current liabilities	86,485	I	I	(5,000)	I	60,069	(40,160)	101,394
Total liabilities	207,394	96	(20)	(10,000)	(9,004)	116,192	I	304,658
Net assets	(5,758)	(96)	86	10,000	9,004	201,162	I	214,398
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Equity								
Share capital	153,817	1,026	(1,026)	I	9,004	I	51,577	214,398
Retained earnings	(159,575)	(1,122)	1,112	10,000	I	I	149,585	I
Consolidation reserve	I	I	I	I	I	201,162	(201,162)	I
Total equity	(5,758)	(96)	86	10,000	9,004	201,162	I	214,398

# Notes:

- 1. Capricorn Copper Holdings' historical consolidated statement of financial position derived from Capricorn Copper Holdings' financial report for FY2020.
  - Lighthouse Minerals Pty Limited statement of financial position as at 31 December 2020 derived from its unaudited financial records. 2.
- 3. Adjustment to eliminate intercompany receivables and payables between Capricorn Copper Holdings and Lighthouse Minerals as well as Lighthouse Minerals' share capital and retained earnings.
- Reflects the removal of contingent consideration payable to MetalsX of \$10 million on the basis that this payment obligation will be paid by EMR Capital Investment (No.6B) Pte. Ltd. 4.
- Reflects the removal of shareholder loan payable to EMR Capital Investment (No.6B) Pte. Ltd. as this will be converted to Shares on acquisition. 5.
- Adjustment to reflect the assets and liabilities acquired at their provisional fair values in accordance with the accounting principles in AASB 3 Business Combinations.
- Adjustment to consolidate Capricorn Copper Holdings and Lighthouse Minerals with the elimination of their share capital and retained earnings. On this basis, the share capital reflects \$214.4 million Shares issued as the expected purchase consideration to acquire all the shares of Capricorn Copper Holdings' external borrowings from 'non-current' to 'current' as these will be repaid on successful completion of the Offer. ю. Ч

		Fair value	Convertible	Consolidation	Redhill
5000	Redhill Mining	adjustment	note	entries	Mining
	1	2	со С	4	
urrent assets					
ash and cash equivalents	7	I	I	I	7
other current assets	m	I	I	I	e
otal current assets	10	I	T	T	10
lon-current assets					
xploration and evaluation assets	12,074	(12,074)	I	I	I
dine properties	I	12,136	I	I	12,136
otal non-current assets	12,074	62	1	I	12,136
otal assets	12,084	62	I	I	12,146
urrent liabilities					
rade and other payables	38	I	I	Ι	38
hareholder loan payable	3,960	I	(3,960)	I	I
otal current liabilities	3,998	I	(3,960)	I	38
otal liabilities	3,998	I	(3,960)	T	38
let assets	8,086	62	3,960	I	12,108
quity					
hare capital	15,400	I	3,960	(7,252)	12,108
eserves	(1,858)	I	Ι	1,858	I
etained earnings	(5,547)	I	I	5,547	I
onsolidation reserve	I	62	T	(62)	I
CTR	91	T	1	(91)	T
otal equity	8,086	62	3,960	I	12,108

Notes:
1. Redhill Mining's consolidated statement of financial position derived from Redhill Mining's consolidated financial statements for FY2020.
2. Adjustment to reflect the assets and liabilities acquired at their relative fair values.
3. Adjustment to remove convertible loan to EMR Capital Investment (No.4B) Pte. Ltd. as this will be converted to Shares on acquisition.
4. The consolidation of Redhill Mining will result in the elimination of its share capital, retained earnings and reserves.



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29METALS LIMITED ACN 650 096 094

Broker Code

Adviser Code

als	NOT FOR DISTRIBUTION OR RELEASE IN THE UNITED STATES
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# **Broker Firm Offer Application Form**

This is an Application Form for Shares in 29Metals Limited under the Broker Firm Offer on the terms set out in the Prospectus dated 21 June 2021. You may apply for a minimum of \$2,000 worth of Shares and multiples of \$500 thereafter. This Application Form and your cheque or bank draft must be received by your Broker by the deadline set out in their offer to you.

This Application Form does not constitute an offer to sell, or solicitation of an offer to buy, Shares in the United States or in any jurisdiction in which, or to any person to whom, it would not be lawful to make such an offer or solicitation. The Shares referred to herein have not been, and will not be, registered under the U.S. Securities Act of 1933, as amended (the "U.S. Securities Act") or under the securities laws of any state or other jurisdiction of the United States. Any Shares described in, or sold pursuant to, this Application Form may not be offered or sold, directly or indirectly, in the United States except in transactions exempt from, or not subject to, the registration requirements of the U.S. Securities Act and any other applicable U.S. securities laws.

If you are in doubt as to how to deal with this Application Form, please contact your accountant, lawyer, stockbroker or other professional adviser. The Prospectus contains information relevant to a decision to invest in Shares and you should read the entire Prospectus carefully before applying for Shares.

	Shares applied for			Pric	e per Shar	re				Applic	ation N	/lonies	;				
Α				at	A\$2.00	)		В	A\$								
	(minimum \$2,000, the	ereafter in multi	ples of \$500	)													
	PLEASE COMPLETI Applicant #1 Surname/Company N	E YOUR DETA lame	ILS BELOW	(refer ov	erleaf for c	orrect	forms of	regist	rable r	names)	)						
С																	
	Title First	Name					Middle	Name									
	Joint Applicant #2 Surname																
	Title First	Name					Middle	Name									
		Name					Wilduic	Name									
	Designated account of	e.g. <super fur<="" th=""><th>nd&gt; (or Joint</th><th>Applican</th><th>t #3)</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></super>	nd> (or Joint	Applican	t #3)												
	TFN/ABN/Exemption First Applicant	Code		Joi	nt Applicar	nt #2				Jo	int App	olicant	#3				
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	TFN/ABN type – if NO PLEASE COMPLETI	DT an individua	ll, please ma <b>ETAILS</b>	rk the ap	propriate b	DOX	Com	pany		Partr	nership	)	Trust		Sup	ber Fu	und
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	If you have a Broker's this step. Failure to d until after the stock e	Sponsored acco o so will result xchange listing	ount and wou in your secu takes place	uld like yo rities beiu and you	our securition ng allocate will need to	es to b ed to a o reque	e allocate new Issu est your b	ed to t er Spo roker	his acc onsore to do i	count, ed acco this for	it is imp ount. Yo you.	oortan 'ou will	t that yo not be	ou ent able t	er you to cha	ur HII ange	V at this
	Telephone Number wi	nere you can be	contacted du	uring Busi	iness Hours	s	Contact I	Name	(PRIN	VT)							
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	Cheques or bank dra	fts should be d	rawn up acco	ording to	the instruc	tions of	given by v	our B	roker.								
	Cheque or Bank Draf	t Number		B	SB	Ì	,,,			Ac	count	Numb	er				
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You must return your application so it is received by your Broker by the deadline set out in their offer to you.

# Your Guide to the Application Form

Please complete all relevant white sections of the Application Form in BLOCK LETTERS, using black or blue ink. These instructions are cross-referenced to each section of the form.

The Shares to which this Application Form relates are 29Metals Limited ("29Metals") Shares. Further details about the Shares are contained in the Prospectus dated 21 June 2021 issued by 29Metals Limited. The Prospectus will expire no later than 13 months after the date of this Prospectus. While the Prospectus is current, 29Metals Limited will send paper copies of the Prospectus, any supplementary document and the Application Form, free of charge on request.

The Australian Securities and Investments Commission requires that a person who provides access to an electronic application form must provide access, by the same means and at the same time, to the relevant Prospectus. This Application Form is included in the Prospectus.

The Prospectus contains important information about investing in the Shares. You should read the Prospectus before applying for Shares. By applying for the Shares, you are deemed to have made the acknowledgments, representations, warranties and agreements set out in section 8.10 of the Prospectus, including that I am/we are not in the United States and am/we are Australian retail client(s) of participating Brokers who have a registered address in Australia and have received an invitation from a Broker to acquire Shares under the Prospectus, and this Application Form and hereby declare that all details and statements made in this Application Form are complete and accurate.

- A Insert the number of Shares you wish to apply for. The Application must be for a minimum of \$2,000 worth of and thereafter in multiples of \$500. You may be issued all of the Shares applied for or a lesser number.
- **B** Insert the relevant amount of Application Monies. To calculate your Application Monies, multiply the number of Shares applied for by the issue price. Amounts should be in Australian dollars. Please make sure the amount of your cheque or bank draft equals this amount.
- **C** Write the full name you wish to appear on the register of Shares. This must be either your own name or the name of a company. Up to three joint Applicants may register. You should refer to the table below for the correct registrable title.
- D Enter your Tax File Number (TFN) or exemption category. Business enterprises may alternatively quote their Australian Business Number (ABN). Where applicable, please enter the TFN or ABN for each joint Applicant. Collection of TFN(s) and ABN(s) is authorised by taxation laws. Quotation of TFN(s) and ABN(s) is not compulsory and will not affect your Application. However, if these are not provided, 29Metals Limited will be required to deduct tax at the highest marginal rate of tax (including the Medicare Levy) from payments.

- E Please enter your postal address for all correspondence. All communications to you from 29Metals Limited and the Share Registry will be mailed to the person(s) and address as shown. For joint Applicants, only one address can be entered.
- F If you are already a CHESS participant or sponsored by a CHESS participant, write your Holder Identification Number (HIN) here. If the name or address recorded on CHESS for this HIN is different to the details given on this form, your Shares will be issued to 29Metals Limited's issuer sponsored subregister.
- **G** Please enter your telephone number(s), area code and contact name in case we need to contact you in relation to your Application.
- H Please complete the details of your cheque or bank draft in this section. The total amount of your cheque or bank draft should agree with the amount shown in section B.

If you receive a firm allocation of Shares from your Broker make your cheque payable to your Broker in accordance with their instructions.

# CORRECT FORMS OF REGISTRABLE NAMES

Note that ONLY legal entities are allowed to hold Shares. Applications must be in the name(s) of natural persons or companies. At least one full given name and the surname is required for each natural person. The name of the beneficiary or any other non-registrable name may be included by way of an account designation if completed exactly as described in the examples of correct forms below.

Type of Investor	Correct Form of Registration	Incorrect Form of Registration
Individual Use given names in full, not initials	Mrs Katherine Clare Edwards	K C Edwards
Company Use Company's full title, not abbreviations	Liz Biz Pty Ltd	Liz Biz P/L or Liz Biz Co.
Joint Holdings Use full and complete names	Mr Peter Paul Tranche & Ms Mary Orlando Tranche	Peter Paul & Mary Tranche
Trusts Use the trustee(s) personal name(s)	Mrs Alessandra Herbert Smith <alessandra a="" c="" smith=""></alessandra>	Alessandra Smith Family Trust
Deceased Estates Use the executor(s) personal name(s)	Ms Sophia Garnet Post & Mr Alexander Traverse Post <est a="" c="" harold="" post=""></est>	Estate of late Harold Post or Harold Post Deceased
Minor (a person under the age of 18 years) Use the name of a responsible adult with an appropriate designation	Mrs Sally Hamilton <henry hamilton=""></henry>	Master Henry Hamilton
Partnerships Use the partners' personal names	Mr Frederick Samuel Smith & Mr Samuel Lawrence Smith <fred &="" a="" c="" smith="" son=""></fred>	Fred Smith & Son
Long Names	Mr Hugh Adrian John Smith-Jones	Mr Hugh A J Smith Jones
Clubs/Unincorporated Bodies/Business Names Use office bearer(s) personal name(s)	Mr Alistair Edward Lilley <vintage a="" c="" club="" wine=""></vintage>	Vintage Wine Club
Superannuation Funds Use the name of the trustee of the fund	XYZ Pty Ltd <super a="" c="" fund=""></super>	XYZ Pty Ltd Superannuation Fund

Put the name(s) of any joint Applicant(s) and/or account description using < > as indicated above in designated spaces at section C on the Application Form.

# **Corporate Directory**

### 29Metals registered office

Level 2 150 Collins Street Melbourne, Victoria, 3000 Australia

# Sole Global Co-ordinator and Joint Lead Manager

# Macquarie Capital (Australia) Limited

50 Martin Place Sydney, New South Wales, 2000 Australia

# Joint Lead Managers

# Credit Suisse (Australia) Limited

Level 31, Gateway 1 Macquarie Place Sydney, New South Wales, 2000 Australia

#### Morgan Stanley Australia Securities Limited

Level 39, Chifley Tower 2 Chifley Square Sydney, New South Wales, 2000 Australia

# Institutional Co-Lead Manager

### Canaccord Genuity (Australia) Limited

Level 62, MLC Centre 19 Martin Place Sydney, New South Wales, 2000 Australia

# Australian legal adviser to 29Metals and SaleCo

# King & Wood Mallesons

Level 61, Governor Phillip Tower 1 Farrer Place Sydney, New South Wales, 2000 Australia

# US legal adviser to 29Metals and SaleCo

Sidley Austin Level 10

7 Macquarie Place Sydney, New South Wales, 2000 Australia

### **Investigating Accountant**

#### KPMG Financial Advisory Services (Australia) Pty Ltd

Tower Two, Collins Square 727 Collins Street Melbourne, Victoria, 3008 Australia

# Tax adviser

# KPMG

Tower Three International Towers Sydney 300 Barangaroo Avenue Sydney NSW 2000 Australia

### **Technical Experts**

### Behre Dolbear Australia Pty Ltd

Level 9 80 Mount Street North Sydney, New South Wales, 2060 Australia

# AMC Consultants Pty Ltd

Level 21 179 Turbot Street Brisbane, Queensland, 4000 Australia

# Share Registry

### Link Market Services

Locked Bag A14 Sydney South, New South Wales, 1235 Australia

# **Offer Information Line**

1800 500 095 (within Australia) or +61 1800 500 095 (outside Australia) from 8:30am to 5:30pm (Melbourne time)

### **Offer Website**

https://www.events.miraqle.com/29metals-ipo/

# **Corporate Website**

https://www.29metals.com/