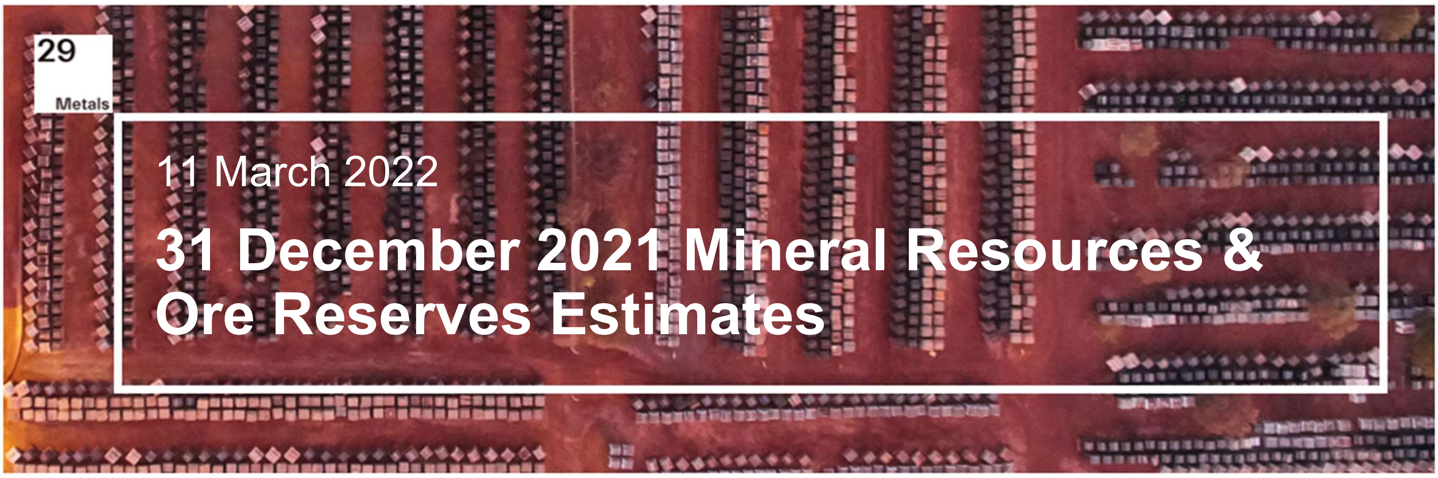

11 March 2022

31 December 2021 Mineral Resources & Ore Reserves Estimates

29Metals Limited ('**29Metals**' or, the '**Company**') today released its 31 December 2021 Mineral Resources and Ore Reserves estimates.

The Mineral Resources and Ore Reserves estimates reported in this release have been prepared and are reported in accordance with the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves* (2012 Edition) (the '**JORC Code**').

29Metals' 31 December 2021 Mineral Resources and Ore Reserves estimates comprise:

- Mineral Resources and Ore Reserves estimates for each of Golden Grove, in Western Australia, and Capricorn Copper, in Queensland; and
- Mineral Resources estimates for Redhill, in Chile.

Competent persons statements are included with the underlying asset estimates and JORC Code *Table 1* disclosures are included in the Appendices to this document.

Summary

Updated Mineral Resources and Ore Reserves estimates for Golden Grove and Capricorn Copper are cited as at 31 December 2021 and incorporate depletion for the period since the date of prior estimates (ranging between 13 months and 19 months – refer to page 2). Mineral Resources estimates for Redhill are unchanged from May 2016 estimates.

Mineral Resources estimates

Combined Mineral Resources estimates for the Group at 31 December 2021 are 123.4 Mt, with contained metal estimates of 2.1 Mt copper, 1.3 Moz gold, 2.6 Mt zinc, and 75 Moz silver.[1] Mineral Resources estimates include depletion of 4.7 Mt, offsetting additions to Mineral Resources estimates for drilling results and subsequent model updates (+4.1 Mt).

Notably, at the Cervantes deposit at Golden Grove, aggregate zinc and copper Mineral Resources estimates (measured, indicated, and inferred) have seen a 100% increase in estimated tonnes to 4.6Mt @ 1.4% Cu, 6.6% Zn, 0.7g/t Au, 40g/t Ag (2020: 2.3Mt @ 1.1% Cu, 6.9% Zn, 0.5 g/t Au, 34 g/t Ag).

The 31 December 2021 Mineral Resources estimates for Golden Grove include drilling results up to 31 March 2021 in all orebodies other than Cervantes, which includes drilling results up to 31 December 2021.

The 31 December 2021 Mineral Resources estimates for Capricorn Copper include drilling results up to 19 May 2021 at Esperanza South and 12 March 2021 at Greenstone.

Ore Reserves estimates

Updated Ore Reserves estimates for the Group at 31 December 2021 are 25.3Mt, with contained metal estimates of 0.5 Mt copper, 0.3 Moz gold, 0.7 Mt zinc, and 17 Moz silver.[1] December 2021 Ore Reserves estimates include depletion of 3.4 Mt, partly offset by Ore Reserves addition as a result of mine design updates (+2.6Mt).

There are currently no Ore Reserves estimates reported for Gossan Valley or Cervantes at Golden Grove as at 31 December 2021.

This announcement was authorised for release by the Managing Director & Chief Executive Officer, Peter Albert.

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[1] Mineral Resources and Ore Reserves estimates cited at the Group level are an aggregation of underlying Mineral Resources and Ore Reserves estimates at the asset level. Detailed information regarding the underlying Mineral Resources and Ore Reserves estimates at the asset level are set out in this report.

Competent Persons

Competent persons statements for 29Metals' Mineral Resources and Ore Reserves estimates are included with the corresponding estimate. The table below sets out information regarding the Competent Persons for 29Metals' Mineral Resources and Ore Reserves estimates.

ESTIMATE	COMPETENT PERSON	QUALIFICATION	MEMBERSHIP	EMPLOYER
Golden Grove				
Mineral Resources	**Leonard Mafurutu**	Geology (Hons)	MAusIMM (CP)	Golden Grove Operations Pty Ltd [1]
Ore Reserves	**Nyasha Gwatimba**	BSc (Hons) - Mining Engineering	MAusIMM	Golden Grove Operations Pty Ltd [1]
Capricorn Copper				
Mineral Resources	**Danny Kentwell** (*Estimation and Reporting* - Mammoth, Pluto, Esperanza)	BSC Surveying; MSc Geostatistics	FAusIMM	SRK Consulting
	Esteban Jimenez (*Estimation and Reporting* - Esperanza South and Greenstone)	MS Geostatistics, Geology (Hons), BSc.	MAIG	Capricorn Copper Pty Ltd [1]
	Rosemary Gray (*Sampling Techniques and Data, and Reporting of Exploration Results*)	BSc (Geology)	MAIG	Capricorn Copper Pty Ltd [1]
Ore Reserves	**Christopher Desoe**	BE (Mining)	FAusIMM (CP) RPEQ	Australian Mine Design and Development Pty Ltd
Redhill				
Mineral Resources	Tim Callaghan	BSc (Hons); M. Econ. Geol	MAusIMM MAIG	Resource and Exploration Geology

1. Wholly owned subsidiary of 29Metals Limited.

Each of the Competent Persons identified in the table above has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to activity being undertaken to qualify as a competent person for the purposes of the JORC Code.

Estimate Reporting Dates

The table below sets out the reporting date for the prior Mineral Resources and Ore Reserves estimates for 29Metals' assets.

	LAST REPORTED ESTIMATES DATE[1]	UPDATED ESTIMATE DATE
Golden Grove		
Mineral Resources	30 June 2020	31 Dec 2021
Ore Reserves	30 June 2020	31 Dec 2021
Capricorn Copper		
Mineral Resources	31 May 2020	31 Dec 2021
Ore Reserves	1 December 2020	31 Dec 2021
Redhill		
Mineral Resources	16 May 2016[2]	16 May 2016

1. Reported in the 29Metals Prospectus dated 21 June 2021 (released to ASX on 2 July 2021)
2. No material changes to the Mineral Resources estimates for Redhill have occurred since 16 May 2016.

Group Ore Reserves and Mineral Resources Estimates

Mineral Resources

Mineral Resources estimates at the Group level are the aggregation of Mineral Resources estimates for **Golden Grove**, **Capricorn Copper** and **Redhill** reported in the following pages of this release. Mineral Resources have been depleted for production to 31 December 2021 and are reported as at that date.

		2021									2020								
			Grade				Contained Metal					Grade				Contained Metal			
Category	Asset	Tonnes	Cu	Au	Zn	Ag	Cu	Au	Zn	Ag	Tonnes	Cu	Au	Zn	Ag	Cu	Au	Zn	Ag
		Mt	%	g/t	%	g/t	kt	koz	kt	koz	Mt	%	g/t	%	g/t	kt	koz	kt	koz
Measured	Golden Grove	21.9	1.7	0.8	3.2	31	374	528	704	21,634	22.7	1.7	0.8	3.6	34	385	602	814	24,505
	Capricorn Copper	5.5	1.8	-	-	6	97	-	-	1,061	5.4	1.8	-	-	6	96	-	-	1,110
	Redhill	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	**27.4**	*Grades not additive*				**471**	**528**	**704**	**22,695**	**28.2**	*Grades not additive*				**482**	**602**	**814**	**25,615**
Indicated	Golden Grove	26.0	1.6	0.7	5.3	29	423	551	1,386	24,386	24.9	1.6	0.7	5.3	29	400	546	1,323	23,182
	Capricorn Copper	32.7	1.9	-	-	8	624	-	-	7,970	33.8	1.9	-	-	8	638	-	-	8,534
	Redhill	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	**58.7**	*Grades not additive*				**1,047**	**551**	**1,386**	**32,356**	**58.6**	*Grades not additive*				**1,038**	**546**	**1,323**	**31,716**
Inferred	Golden Grove	10.5	1.5	0.7	4.6	30	160	220	483	10,009	10.1	1.4	0.5	4.7	25	140	153	477	8,281
	Capricorn Copper	22.6	1.6	-	-	7	360	-	-	5,334	23.3	1.6	-	-	7	366	-	-	5,481
	Redhill	4.3	1.7	0.3	-	33	71	40	-	4,611	4.3	1.7	0.3	-	33	71	40	-	4,611
	Total	**37.4**	*Grades not additive*				**592**	**260**	**483**	**19,954**	**37.7**	*Grades not additive*				**578**	**193**	**477**	**18,373**
Measured, Indicated & Inferred	Golden Grove	58.4	1.6	0.7	4.4	30	957	1,299	2,573	56,029	57.8	1.6	0.7	4.5	30	926	1,301	2,615	55,968
	Capricorn Copper	60.8	1.8	-	-	7	1,081	-	-	14,365	62.5	1.8	-	-	8	1,100	-	-	15,125
	Redhill	4.3	1.7	0.3	-	33	71	40	-	4,611	4.3	1.7	0.3	-	33	71	40	-	4,611
	Total	**123.4**	*Grades not additive*				**2,109**	**1,338**	**2,573**	**75,006**	**124.5**	*Grades not additive*				**2,097**	**1,341**	**2,615**	**75,704**

Note, estimates reported in the table above are subject to rounding (one significant figure). Additional metals - Pb, Co, As, S and Fe - are reported in underlying Mineral Resources estimates for assets (where applicable).

Ore Reserves

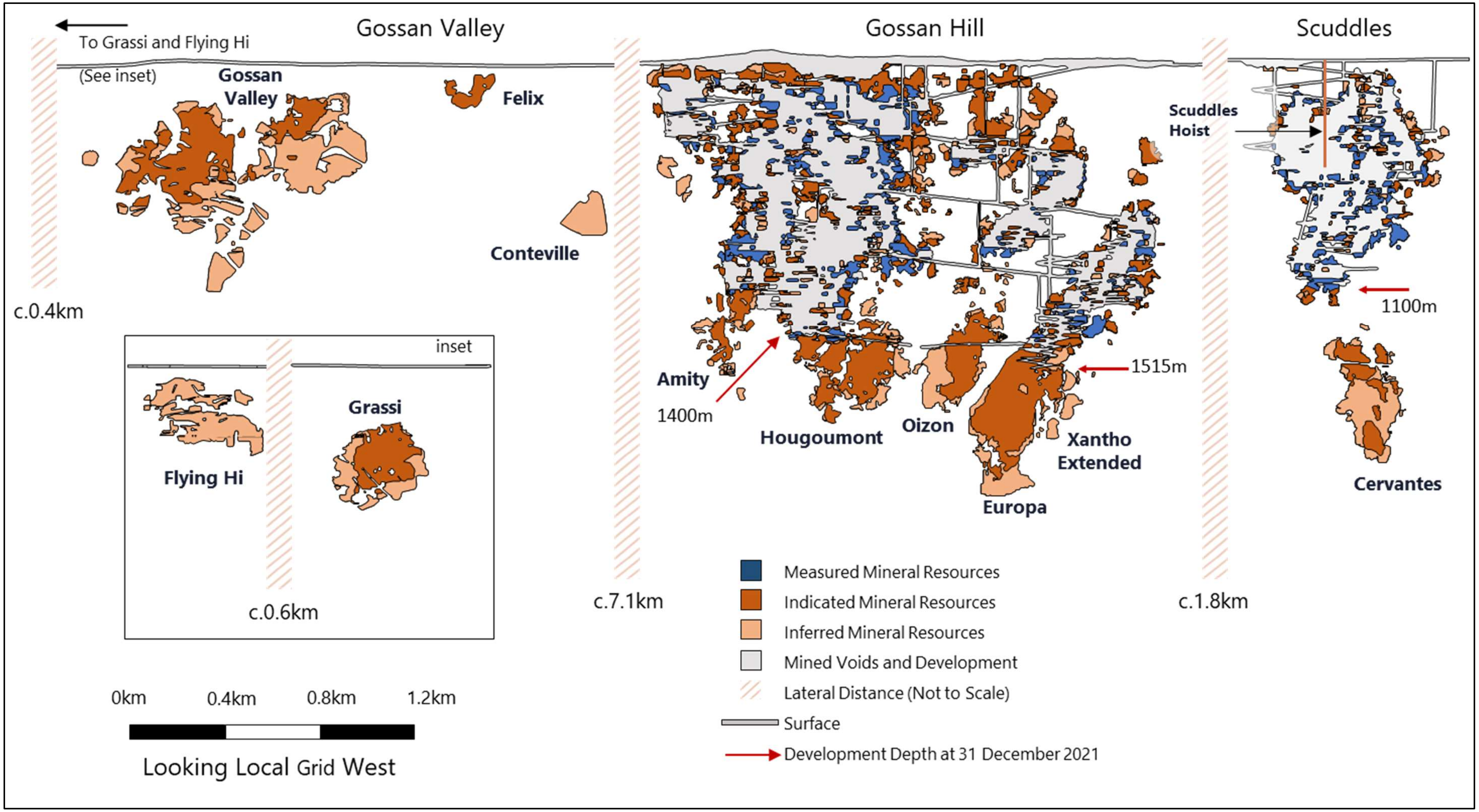
Ore Reserves estimates at the Group level are the aggregation of Ore Reserves estimates for Golden Grove and Capricorn Copper reported in subsequent sections of this release. Ore Reserves have been depleted for production to 31 December 2021 and are reported as at that date.

		2021									2020								
			Grade				Contained Metal					Grade				Contained Metal			
Category	Asset	Tonnes	Cu	Au	Zn	Ag	Cu	Au	Zn	Ag	Tonnes	Cu	Au	Zn	Ag	Cu	Au	Zn	Ag
		Mt	%	g/t	%	g/t	kt	koz	kt	koz	Mt	%	g/t	%	g/t	kt	koz	kt	koz
Proved	Golden Grove	3.2	1.7	0.9	2.8	34	54	96	88	3,404	3.6	1.3	1.4	4.1	47	47	157	149	5,467
	Capricorn Copper	1	1.7	-	-	7	20	-	-	200	1.1	1.9	-	-	8	20	-	-	300
	Total	**4.1**	*Grades not additive*				**74**	**96**	**88**	**3,604**	**4.7**	*Grades not additive*				**67**	**157**	**149**	**5,767**
Probable	Golden Grove	9.6	1.9	0.8	5.9	32	182	238	567	9,905	10.7	1.8	0.8	6.1	32	194	277	655	11,017
	Capricorn Copper	12	1.8	-	-	10	210	-	-	3,800	12.3	1.8	-	-	11	220	-	-	4,600
	Total	**21.2**	*Grades not additive*				**392**	**238**	**567**	**13,705**	**23.1**	*Grades not additive*				**414**	**277**	**655**	**15,617**
Proved & Probable	Golden Grove	12.7	1.9	0.8	5.1	33	236	334	655	13,309	14.3	1.7	0.9	5.6	36	241	433	804	16,484
	Capricorn Copper	13	1.8	-	-	10	220	-	-	4,100	13.4	1.8	-	-	11	240	-	-	4,800
	Total	**25.3**	*Grades not additive*				**456**	**334**	**655**	**17,409**	**27.8**	*Grades not additive*				**481**	**433**	**804**	**21,284**

Note, Golden Grove estimates reported in the table above, other than silver, are rounded to one decimal place. Estimates for silver are rounded to zero decimal places. For Capricorn Copper, aggregated totals for Proved and Probable Ore Reserves tonnes have been rounded to the nearest 1Mt. The combined total for both assets reflects rounding to the nearest 0.1Mt. For Capricorn Copper, aggregate estimates of contained Cu metal have been rounded to the nearest 10kt, estimates of contained silver have been rounded to the nearest 100koz. Additional metals - Pb, and As - are reported in underlying Ore Reserves estimates for assets (where applicable).

Golden Grove Mineral Resources and Ore Reserves Estimates

The outline of material mineralisation included in 31 December 2021 Mineral Resources estimates for Golden Grove is depicted below for illustrative purposes.



Mineral Resources

The Mineral Resources estimates for **Golden Grove** as at 31 December 2021 are set out in the table below. JORC Code *Table 1* disclosures for these estimates are set out in Appendix 1.

The Golden Grove Mineral Resources estimates incorporate the results of additional extension, resource development and grade control drilling completed since the cut-off for the previous Mineral Resources estimates for Golden Grove (June 2020), depletion, updated resource modelling and geological interpretation, updates to the metallurgical and economic assumptions, and changes to cut-off values.

			Grade					Contained Metal				
Ore Type	Category	Tonnes Mt	Cu %	Au g/t	Zn %	Ag g/t	Pb %	Cu kt	Au koz	Zn kt	Ag koz	Pb kt
Oxide Copper	Measured	-	-	-	-	-	-	-	-	-	-	-
	Indicated	0.3	3.9	1.0	0.0	25	0.0	10	8	0	207	0
	Inferred	0.0	2.9	0.1	0.0	7	0.0	0	0	0	0	0
	Total	**0.3**	**3.9**	**0.9**	**0.0**	**24**	**0.0**	**10**	**8**	**0**	**207**	**0**
Partial Oxide Zinc	Measured	0.1	1.8	2.0	6.2	133	1.3	1	5	5	321	1
	Indicated	0.4	0.8	1.8	3.2	119	0.8	3	25	14	1,619	3
	Inferred	0.3	0.4	1.4	3.5	78	0.5	1	12	9	655	1
	Total	**0.8**	**0.8**	**1.7**	**3.6**	**106**	**0.8**	**6**	**42**	**28**	**2,595**	**6**
Primary Zinc	Measured	7.2	0.5	1.1	8.8	59	0.7	36	265	634	13,533	51
	Indicated	11.7	0.7	0.9	11.4	39	0.6	76	330	1,326	14,732	68
	Inferred	4.7	0.5	0.7	9.7	40	0.5	22	112	459	6,017	21
	Total	**23.6**	**0.6**	**0.9**	**10.3**	**45**	**0.6**	**134**	**707**	**2,419**	**34,282**	**141**
Primary Copper	Measured	14.4	2.3	0.5	0.4	15	0.0	335	240	62	7,114	6
	Indicated	13.7	2.4	0.4	0.3	18	0.0	333	188	46	7,828	4
	Inferred	5.5	2.5	0.5	0.3	19	0.0	137	96	15	3,337	2
	Total	**33.5**	**2.4**	**0.5**	**0.4**	**17**	**0.0**	**805**	**524**	**124**	**18,279**	**12**
Surface Stockpiles	Copper - Measured	0.1	1.2	1.8	0.4	12	0.0	1	6	0	40	0
	Zinc - Measured	0.0	0.7	1.1	3.3	29	0.4	0	1	1	31	0
	Gold - Measured	0.1	0.3	2.8	1.5	162	0.7	0	10	2	595	1
	Total	**0.3**	**0.7**	**2.2**	**1.3**	**82**	**0.4**	**2**	**18**	**3**	**666**	**1**
Total	Measured	21.9	1.7	0.8	3.2	31	0.3	374	528	704	21,634	59
	Indicated	26.0	1.6	0.7	5.3	29	0.3	423	551	1,386	24,386	76
	Inferred	10.5	1.5	0.7	4.6	30	0.2	160	220	483	10,009	24
	Total	**58.4**	**1.6**	**0.7**	**4.4**	**30**	**0.3**	**957**	**1,299**	**2,573**	**56,029**	**160**

Note, estimates reported in the table above, other than silver, are rounded to one decimal place. Estimates for silver are rounded to zero decimal places

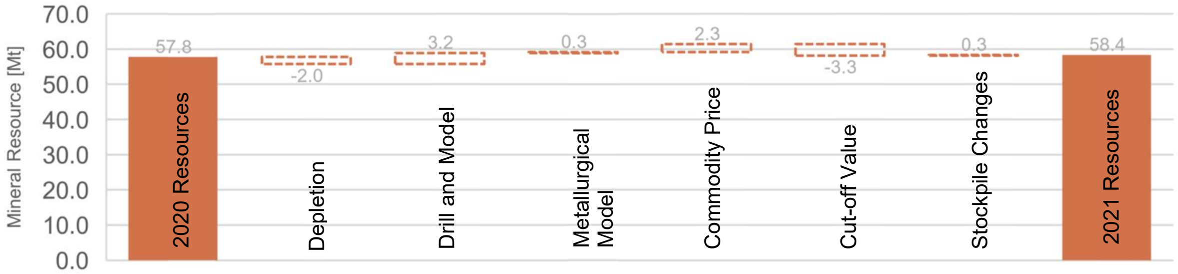
Changes in the Mineral Resources estimates

Changes to the Golden Grove Mineral Resources estimates, relative to the last estimates (June 2020) are outlined below. Material changes comprise:

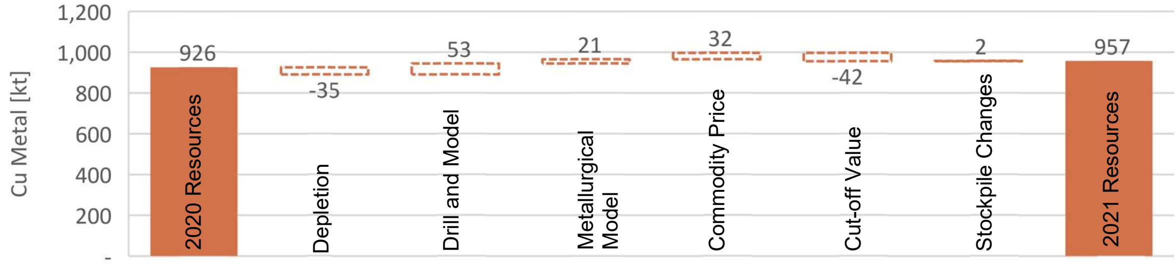
- Depletion - 2.0Mt reduction in 2021, including:
  - 18 months of mining and processing operations (1.7 Mt reduction), aligning the estimates to calendar year reporting;
  - 0.3 Mt reduction for remnant areas within the Scuddles deposit no longer considered recoverable;

- Drilling results - increase in Mineral Resources estimated tonnes of 3.2 Mt, reflecting analysis of data from extension, resource development, grade control drilling, and associated geological interpretations;[2]
- Updated metallurgical modelling – 0.3 Mt increase;
- Economic cut-off assumptions:
  - 2.3 Mt increase as a result of increases to the copper and gold price assumptions applied to Mineral Resources estimates (see below); and
  - 3.3 Mt reduction in Mineral Resources tonnes as a result of increases to the net smelter return (‘**NSR**’) cut-off value.

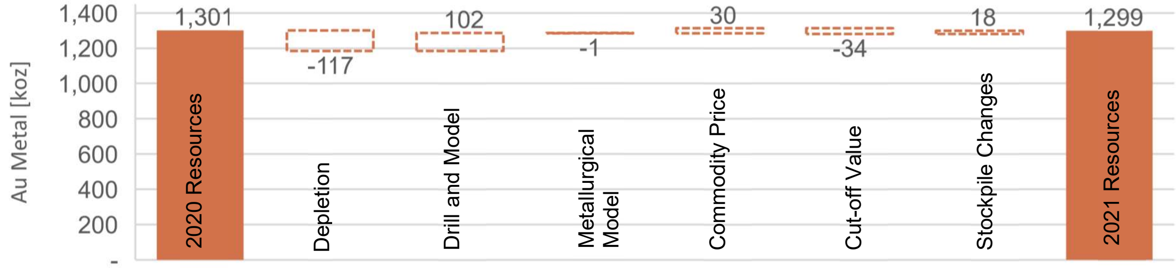
Mineral Resources – June 2020 to December 2021 - Tonnes (Mt)



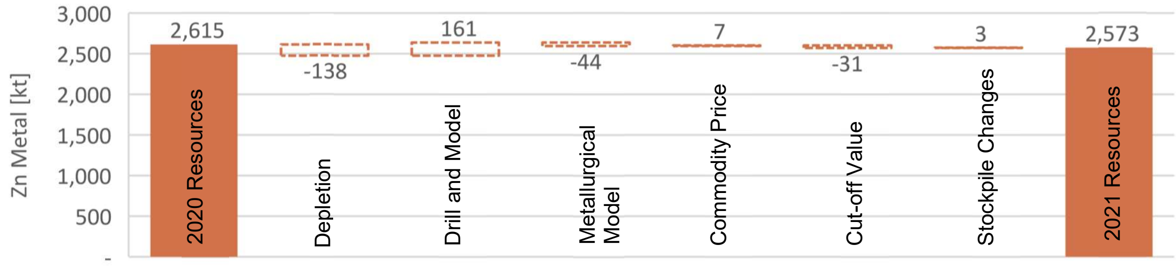
Mineral Resources – June 2020 to December 2021 – Contained Cu Metal (kt)



Mineral Resources – June 2020 to December 2021 – Contained Au Metal (koz)



Mineral Resources – June 2020 to December 2021 – Contained Zn Metal (kt)



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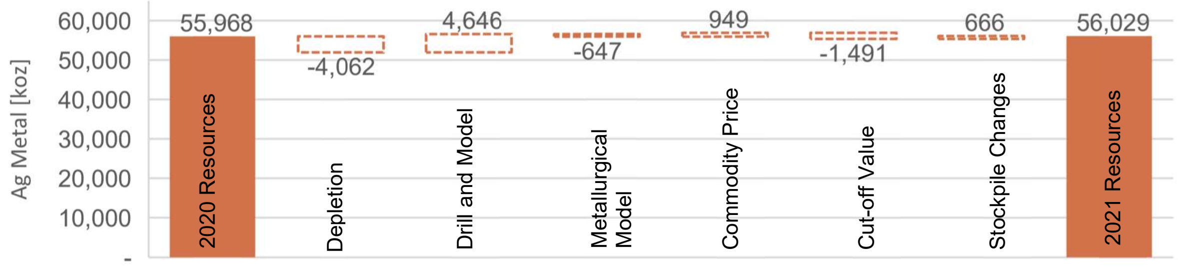
[2] Drilling results for Mineral Resources estimates for Golden Grove were cut-off at 31 March 2021, other than Cervantes. Mineral Resources estimates for Cervantes are to 31 December 2021.

Mineral Resources – June 2020 to December 2021 – Contained Ag Metal (koz)



Economic cut-off assumptions

The following economic cut-off assumptions were applied for the purposes of the 31 December 2021 Mineral Resources estimates for Golden Grove. Cut-off for the prior estimates (June 2020) is also provided for reference.

Cut-off assumptions (NSR)

Orebody	31-Dec-21 $A/t	30-Jun-20 $A/t
ABCD	127.92	121.83
ABCD Oxide	127.92	121.83
Amity	135.63	129.55
Cambewarra	131.10	125.02
Catalpa/Ethel	132.56	126.47
D Zinc	130.77	124.69
GG4	130.77	124.69
Hougoumont Main and Hangingwall	135.63	129.55
Hougoumont Extended	142.95	136.87
Oizon	142.34	136.26
Tryall	129.04	122.95
Tryall Cu-Au Oxide	129.04	122.95
Xantho	137.03	130.95
Xantho Extended	143.51	137.43
Scuddles - Zinc	132.21	126.13
Scuddles - Copper	132.21	126.13
Scuddles Oxide	129.04	122.95
Cervantes - Zinc	139.65	133.57
Cervantes - Copper	139.65	133.57
Gossan Valley	135.00	135.00
Grassi	135.00	135.00
Felix	135.00	135.00
Flying High	145.00	145.00

Commodity price and foreign exchange

Price/FX	Unit	31-Dec-21	30-Jun-20
Copper	US$/lb	3.60	3.50
Lead	US$/lb	1.10	1.10
Zinc	US$/lb	1.50	1.50
Gold	US$/oz	1,736	1,600
Silver	US$/oz	23	23
AUD:USD		0.75	0.75

Competent Persons Statement

The Mineral Resources estimates set out in the table above are based on and fairly represent information and supporting documentation compiled by Leonard Mafurutu, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM Membership No. 316349). Mr Mafurutu is a full-time employee of Golden Grove Pty Ltd (a wholly owned subsidiary of 29Metals Limited).

Mr Mafurutu has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code. Mr Mafurutu consents to the inclusion of the information regarding Golden Grove Mineral Resources in the form and context in which it appears.

Ore Reserves

The Ore Reserves estimates for **Golden Grove**, comprising the Gossan Hill mine and Scuddles mine, as at 31 December 2021 are set out below. JORC Code *Table 1* disclosures are set out in Appendix 2.

The 31 December 2021 Ore Reserves estimates for Golden Grove incorporate changes to the Golden Grove Mineral Resources estimates (refer above), depletion, changes to cut-off grades and other economic assumptions (including commodity price assumptions).

			Grade					Contained Metal				
Ore Type	Asset	Tonnes Mt	Cu %	Au g/t	Zn %	Ag g/t	Pb %	Cu kt	Au koz	Zn kt	Ag koz	Pb kt
Primary Zinc	Proved	1.1	0.6	1.3	7.3	59	0.8	7	44	79	2,041	8
	Probable	4.6	1.0	1.1	11.3	43	0.7	44	156	523	6,421	33
	Total	**5.7**	**0.9**	**1.1**	**10.6**	**46**	**0.7**	**51**	**201**	**601**	**8,462**	**41**
Primary Copper	Proved	1.9	2.5	0.5	0.3	12	0.0	47	33	6	729	0
	Probable	5.0	2.8	0.5	0.9	22	0.0	138	82	44	3,481	2
	Total	**6.8**	**2.7**	**0.5**	**0.7**	**19**	**0.0**	**185**	**114**	**50**	**4,210**	**2**
Primary Gold	Proved	0.2	0.3	3.1	1.8	104	0.4	1	19	4	635	1
	Probable	0.0	0.1	1.5	2.3	81	0.4	0	0	0	3	0
	Total	**0.2**	**0.3**	**3.1**	**1.8**	**103**	**0.4**	**1**	**19**	**4**	**637**	**1**
Total	Proved	3.2	1.7	0.9	2.8	34	0.3	54	96	88	3,404	9
	Probable	9.6	1.9	0.8	5.9	32	0.4	182	238	567	9,905	34
	Total	**12.7**	**1.9**	**0.8**	**5.1**	**33**	**0.3**	**236**	**334**	**655**	**13,309**	**44**

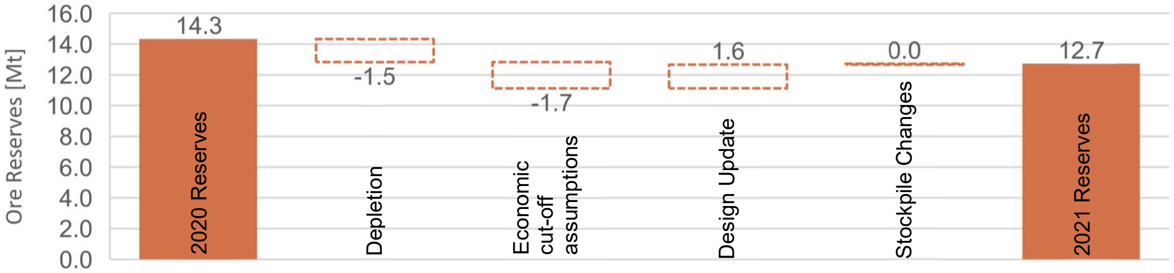
Note, estimates reported in the table above, other than silver, are rounded to one decimal place. Estimates for silver are rounded to zero decimal places

Changes in Ore Reserve estimates

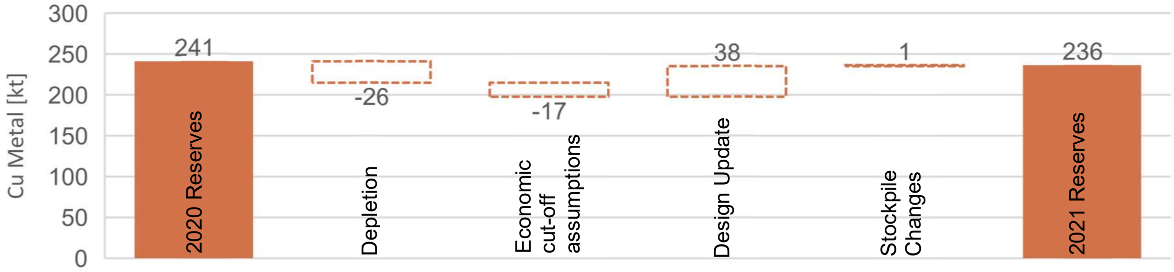
Changes to Ore Reserves estimates at 31 December 2022 relative to the previous estimates (June 2020) comprise:

- Depletion – 1.5 Mt reduction for mining and processing depletion in the period 30 June 2020 to 31 December 2021;
- Economic cut-off assumptions – 1.7 Mt reduction as a result of an increase in the cut-off value ('**COV**') reflecting increases in mining costs assumptions; and
- Mining updates – 1.6 Mt increase, reflecting updated Mineral Resources estimates at 31 December 2021 and resource modelling, and the impact of a higher copper price assumption (refer below).

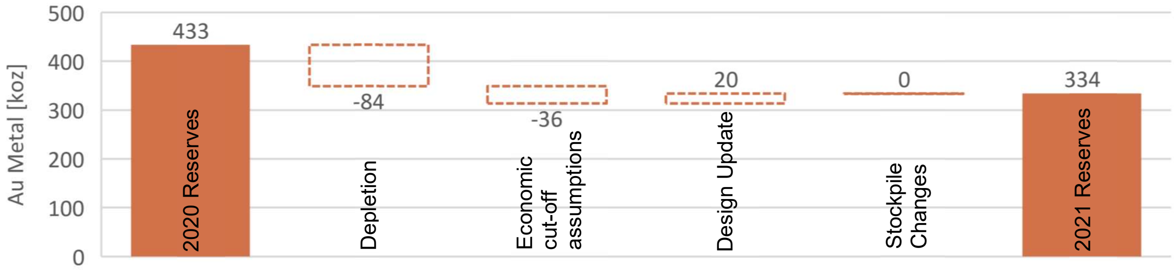
Ore Reserves – June 2020 to December 2021 – Ore Tonnes (Mt)



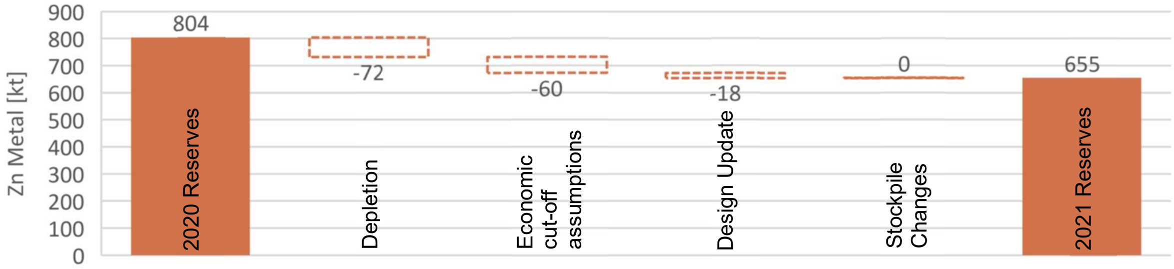
Ore Reserves – June 2020 to December 2021 – Contained Cu Metal (kt)



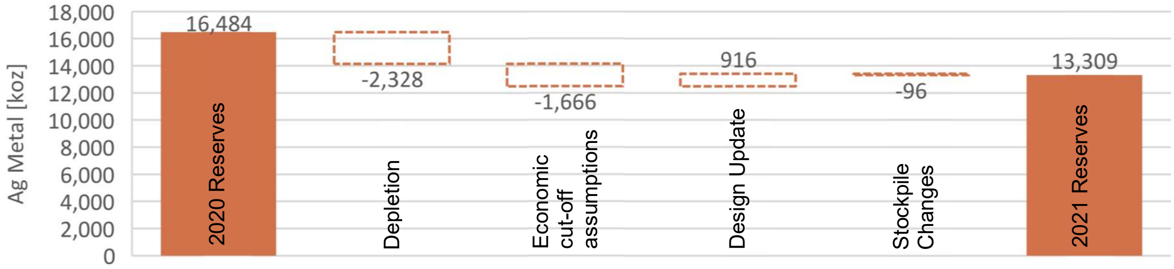
Ore Reserves – June 2020 to December 2021 – Contained Au Metal (koz)



Ore Reserves – June 2020 to December 2021 – Contained Zn Metal (koz)



Ore Reserves – June 2020 to December 2021 – Contained Ag Metal (koz)



Economic cut-off assumptions

The following assumptions were applied for the purposes of the Golden Grove 31 December 2021 Ore Reserves estimates for Gossan Hill and Scuddles.

Cut-off assumptions	31-Dec-21	30-Jun-20
Orebody	NSR $/t	NSR $/t
ABCD	127.92	121.83
Amity - Remnant	135.63	129.55
Cambewarra	146.87	n/a
D Zinc	146.54	136.85
Tryall	144.81	135.12
Catalpa/Ethel	132.56	126.47
Hougoumont Main & Hangingwall Remnant	141.41	135.19
Hougoumont Extended	158.72	149.04
Xantho	152.80	143.11
Xantho Extended	159.28	149.60
Oizon	158.11	148.42
GG4	136.55	130.33
Scuddles	137.99	131.78

Commodity Price and forex for estimate

Pricing/FX	Unit	31-Dec-21	30-Jun-20
Copper	US$/lb	3.30	3.00
Lead	US$/lb	0.95	0.95
Zinc	US$/lb	1.10	1.10
Gold	US$/oz	1,446	1,400
Silver	US$/oz	21	21
AUD:USD		0.73	0.73

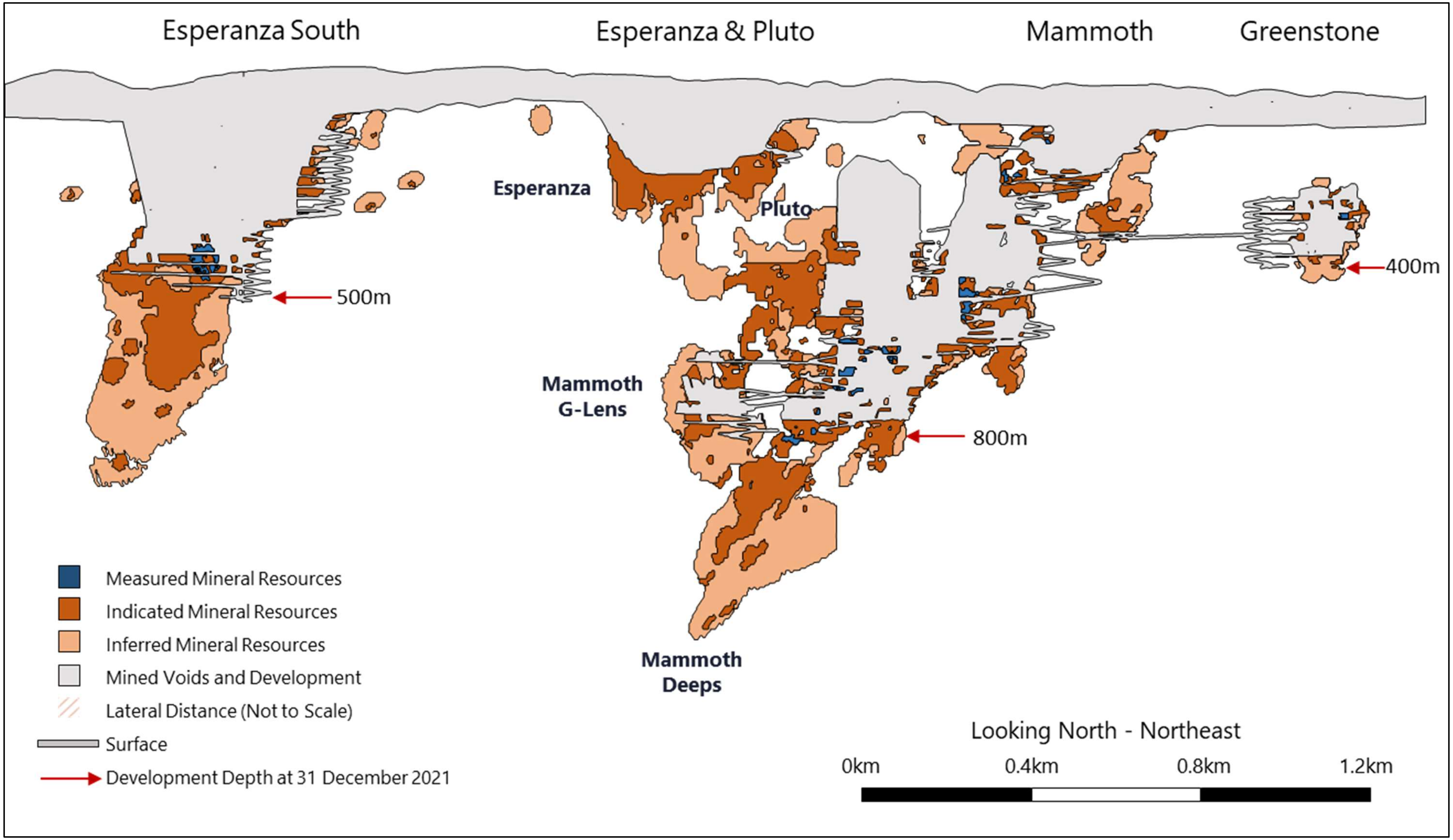
Competent Persons Statement

The Ore Reserves estimates set out above are based on and fairly represent information and supporting documentation compiled by Nyasha Gwatimba, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AUSIMM Membership No. 312232).

Mr Gwatimba is a full-time employee of Golden Grove Operations Pty Ltd (a wholly owned subsidiary of 29Metals Limited) and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code. Nyasha Gwatimba consents to the inclusion of the information regarding Ore Reserves for Gossan Hill and Scuddles in the form and context in which they appear.

Capricorn Copper Mineral Resources and Ore Reserves Estimates

The outline of material mineralisation included in 31 December 2021 Mineral Resources estimates for Capricorn Copper is depicted below for illustrative purposes.



Mineral Resources

The Mineral Resources estimates for **Capricorn Copper** as at 31 December 2021 are set out in the table below. JORC Code *Table 1* disclosures for these estimates are set out in Appendix 3.

The 31 December 2021 Mineral Resources estimates for Capricorn Copper incorporate the results of additional resource development and grade control drilling completed since the cut-off date of the previous Mineral Resources estimates for Capricorn Copper (May 2020), depletion through mining and processing, and updated resource modelling and geological interpretation.

			Grade						Contained Metal					
Orebody	**Category**	**Tonnes** Mt	**Cu** %	**Ag** g/t	**Co** ppm	**As** ppm	**S** %	**Fe** %	**Cu** kt	**Ag** koz	**Co** kt	**As** kt	**S** kt	**Fe** kt
Esperanza South	Measured	0.6	2.3	18	701	1,251	12.4	11.6	14	342	0	1	75	69
	Indicated	7.8	1.9	18	749	1,081	12.4	13.1	148	4,499	6	8	962	1,022
	Inferred	6.9	1.7	15	576	836	8.6	12.6	117	3,253	4	6	599	876
	Total	**15.3**	**1.8**	**16**	**669**	**977**	**10.7**	**12.8**	**278**	**8,094**	**10**	**15**	**1,635**	**1,967**
Esperanza	Measured	-	-	-	-	-	-	-	-	-	-	-	-	-
	Indicated	2.7	2.3	11	1,472	2,203	6.0	21.3	62	972	4	6	162	575
	Inferred	1.3	1.7	9	1,103	1,352	7.7	18.5	22	368	1	2	100	241
	Total	**4.0**	**2.1**	**10**	**1,351**	**1,924**	**6.5**	**20.3**	**84**	**1,337**	**5**	**8**	**260**	**812**
Pluto	Measured	-	-	-	-	-	-	-	-	-	-	-	-	-
	Indicated	2.3	2.3	1	239	277	0.9	11.2	53	52	1	1	21	258
	Inferred	0.9	1.6	1	238	259	0.4	13.6	14	26	0	0	4	122
	Total	**3.2**	**2.1**	**1**	**239**	**272**	**0.7**	**11.8**	**67**	**72**	**1**	**1**	**22**	**378**
Greenstone	Measured	0.3	1.6	1	51	104	0.9	2.2	5	10	0	0	3	7
	Indicated	1.0	1.8	1	92	122	0.8	2.6	17	34	0	0	8	25
	Inferred	0.5	1.4	1	74	115	0.8	2.7	7	15	0	0	4	14
	Total	**1.8**	**1.6**	**1**	**80**	**117**	**0.8**	**2.5**	**30**	**58**	**0**	**0**	**15**	**46**
Mammoth	Measured	4.4	1.7	5	92	2,194	7.7	8.5	77	663	0	10	343	376
	Indicated	18.9	1.8	4	109	1,589	4.9	7.5	344	2,413	2	30	927	1,423
	Inferred	13.0	1.5	4	134	1,758	4.8	7.6	200	1,673	2	23	618	982
	Total	**36.3**	**1.7**	**4**	**116**	**1,723**	**5.2**	**7.7**	**621**	**4,749**	**4**	**63**	**1,888**	**2,781**
Stockpile	Measured	0.1	1.1	11	268	503	6.3	6.8	1	46	0	0	8	9
	Indicated	-	-	-	-	-	-	-	-	-	-	-	-	-
	Inferred	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	**0.1**	**1.1**	**11**	**268**	**503**	**6.3**	**6.8**	**1**	**46**	**0**	**0**	**8**	**9**
Total	Measured	5.5	1.8	6	161	1,932	7.8	8.4	97	1,061	1	11	429	461
	Indicated	32.7	1.9	8	383	1,382	6.4	10.1	624	7,970	13	45	2,080	3,303
	Inferred	22.6	1.6	7	327	1,355	5.8	9.9	360	5,334	7	31	1,325	2,235
	Total	**60.8**	**1.8**	**7**	**342**	**1,422**	**6.3**	**9.9**	**1,081**	**14,365**	**21**	**86**	**3,833**	**5,998**

Note, estimates reported in the table above, other than silver, are rounded to one decimal place. Estimates for silver are rounded to zero decimal places.

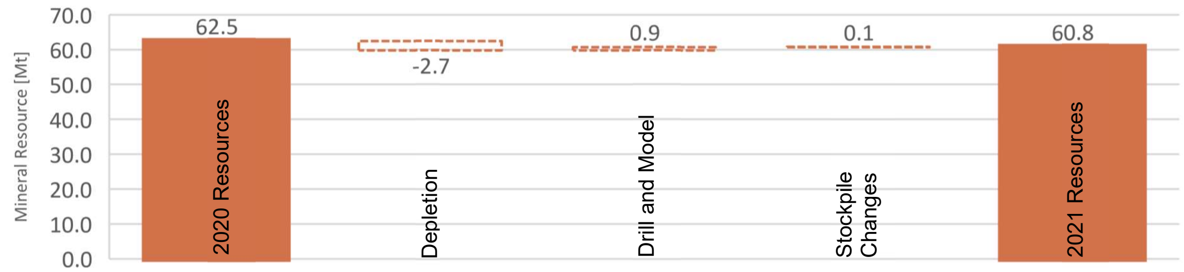
Changes in Mineral Resource estimates

Changes to the Mineral Resources estimates for Capricorn Copper, relative to the last estimates (May 2020), are outlined below. Material changes comprise:

- Depletion – 2.7 Mt reduction as a result of:
  - mining and processing volumes for the period May 2020 to December 2021;

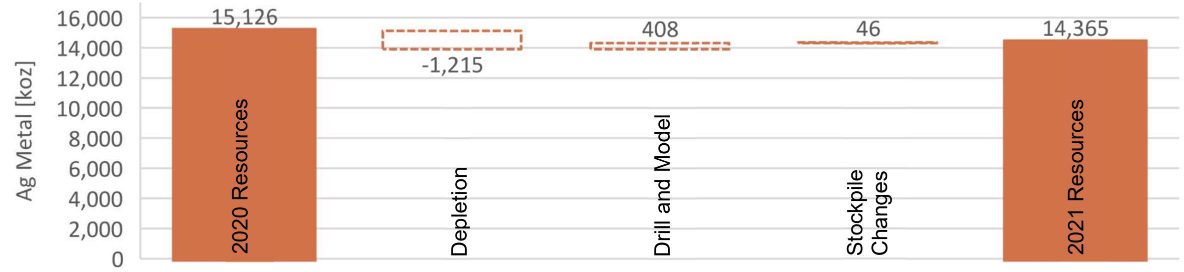
  - expansion of the envelope of material considered non-recoverable around the southern sub-level cave at Esperanza South,
  - adjustment of the skin around historical cave voids at Mammoth considered non-recoverable from 10m to 7m; and
- Drilling and model – increase of 0.9 Mt, reflecting analysis of resource development and grade control drilling at Esperanza South and Greenstone, as well as adjustments to compositing prior to estimation.

Mineral Resources – May 2020 to December 2021 - Tonnes (Mt)

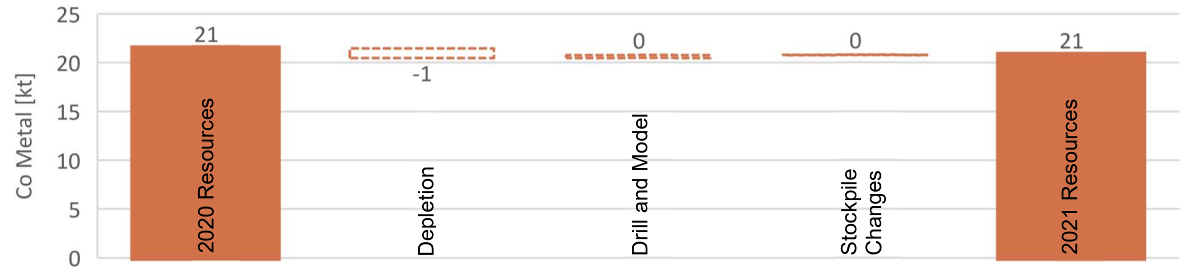


Mineral Resources – May 2020 to December 2021 – Contained Cu Metal (kt)

Mineral Resources – May 2020 to December 2021 – Contained Ag Metal (koz)



Mineral Resources – May 2020 to December 2021 – Contained Co Metal (kt)



Economic cut-off assumptions

The following cut-off assumptions were applied for the purposes of the 31 December 2021 Mineral Resources Estimates for Capricorn Copper. Cut-off for the previous estimates (May 2020) is provided for reference.

Cut-off assumptions

Orebody	31-Dec-21 Cut-off (%Cu)	31-May-20 Cut-off (%Cu)
Esperanza South	0.8	0.8
Esperanza	1.0	1.0
Pluto	1.0	1.0
Greenstone	1.0	1.0
Mammoth	1.0	1.0

Mineral Resource estimates for Capricorn Copper apply copper grade for cut-off purposes, set at a level slightly below the level applied for cut-offs for Ore Reserves estimates, specific to each deposit / mining method. Esperanza South utilises a cut-off of 0.8% Cu due to sub-level caving mining method, while all other deposits utilise a 1.0% Cu cut-off due to long-hole stoping mining method.

Competent Persons Statement

Information that relates to the sampling techniques, sample and geology data and interpretations (section 1 of the JORC Code *Table 1*); and reporting of these results (section 2 of the JORC Code Table 1), for inclusion in the 31 December 2021 Mineral Resources estimates for Capricorn Copper is based on and fairly represents information and supporting documentation compiled by Rosemary Gray.

Ms Gray is a full-time employee of Capricorn Copper Pty Ltd (a wholly owned subsidiary of 29Metals Limited), and member of the Australian Institute of Geoscientists (MAIG, Membership No. 8014).

The information in this report that relates to the Estimation and Reporting of Mineral Resources for Greenstone and Esperanza South (section 3 of the JORC Code Table 1) is based on information compiled by Mr Esteban Jimenez, a Competent Person who is a Member of Australian Institute of Geoscientists (MAIG, Member No. 7818). Mr Jimenez is a full-time employee of Capricorn Copper Pty Ltd (a wholly owned subsidiary of 29Metals Limited).

The information in this report that relates to the Estimation and Reporting of Mineral Resources for Esperanza, Pluto and Mammoth (section 3 of the JORC Code Table 1) is based on information compiled by Mr Danny Kentwell. Mr Kentwell is a full-time employee of SRK Consulting, and is a Fellow of The Australasian Institute of Mining and Metallurgy (FAusIMM, Member No. 20341)

Ms Gray, Mr Jimenez, and Mr Kentwell each has sufficient experience that is relevant to the style of mineralisation, type of deposit and the activity being undertaken to qualify as Competent Persons as defined in the JORC Code.

Ms Gray, Mr Jimenez, and Mr Kentwell consent to the inclusion of Mineral Resources estimates for Capricorn Copper in the form and context in which it appears.

Ore Reserves

The Ore Reserves estimates for **Capricorn Copper** as at 31 December 2021 are set out below. JORC Code *Table 1* disclosures are set out in Appendix 4.

The 31 December 2021 Ore Reserves estimates for Capricorn Copper incorporate changes to the Capricorn Copper Mineral Resources estimates (refer above), depletion for mining and processing, changes to cut-off grades and economic parameters, changes to stope and sub-level cave designs, and changes to dilution and recovery assumptions.

			Grade			Contained Metal		
		Tonnes	Cu	Ag	As	Cu Metal	Ag Metal	As
Deposit	Category	Mt	%	g/t	ppm	kt	koz	kt
Esperanza South	Proved	0.2	1.7	14	1,000	3	100	0
	Probable	6.7	1.5	15	1,100	101	3,200	7
	Total	**6.8**	**1.5**	**15**	**1,100**	**104**	**3,300**	**7**
Esperanza	Proved	-	-	-	-	-	-	-
	Probable	0.2	2.0	11	2,200	5	100	1
	Total	**0.2**	**2.0**	**11**	**2,200**	**5**	**100**	**1**
Pluto	Proved	-	-	-	-	-	-	-
	Probable	1.1	2.7	1	300	31	-	0
	Total	**1.1**	**2.7**	**1**	**300**	**31**	**-**	**0**
Greenstone	Proved	0.1	1.6	1	100	1	-	0
	Probable	0.1	1.6	1	100	2	-	0
	Total	**0.2**	**1.6**	**1**	**100**	**3**	**-**	**0**
Mammoth Deeps	Proved	0.0	1.6	3	1,300	0	-	0
	Probable	2.3	2.1	4	2,100	47	300	5
	Total	**2.3**	**2.1**	**4**	**2,100**	**47**	**300**	**5**
Mammoth Remnants	Proved	0.5	1.9	5	2,600	10	100	1
	Probable	1.2	1.8	5	2,000	22	200	2
	Total	**1.8**	**1.9**	**5**	**2,200**	**33**	**300**	**4**
Stockpile	Proved	0.1	1.1	11	500	1	-	0
	Probable	-	-	-	-	-	-	-
	Total	**0.1**	**1.1**	**11**	**500**	**1**	**-**	**0**
Total	Proved	1	1.7	7	1,800	20	200	2
	Probable	12	1.8	10	1,300	210	3,800	15
	Total	**13**	**1.8**	**10**	**1,300**	**220**	**4,100**	**17**

Note, Ore tonnes and grade estimates reported in the table above, other than aggregated total tonnes and silver and arsenic grades, are subject to rounding to one decimal place. Estimates for aggregated total tonnes and silver grade are rounded to zero decimal places and estimates for arsenic are rounded to the nearest 100ppm. Estimates of contained silver and arsenic metal have been further rounded reflecting relative confidence. Aggregate estimates of contained Cu metal have been rounded to the nearest 10kt, estimates of contained silver have been rounded to the nearest 100koz.

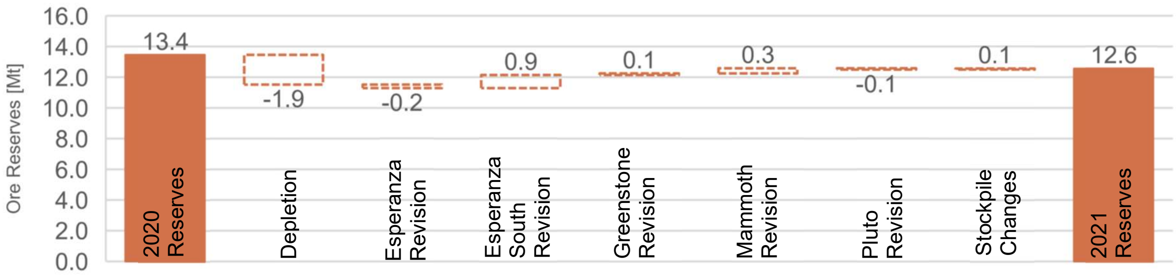
Changes in Ore Reserve Estimates

Changes to Ore Reserves estimates for Capricorn Copper, relative to the last estimates (December 2020) are outlined below. Material changes comprise:

- Depletion – 1.9 Mt reduction, reflecting mining and processing from 1 December 2020 to 31 December 2021;
- Mineral Resources estimates – increases in Mineral Resources estimates for Esperanza South and Greenstone (refer above);
- Economic cut-off assumptions - changes to cut-off grades for all deposits reflecting changes in key economic assumptions:
    - increase in long term copper price to US$3.30/lb (Dec 2020: US$3.00/lb);

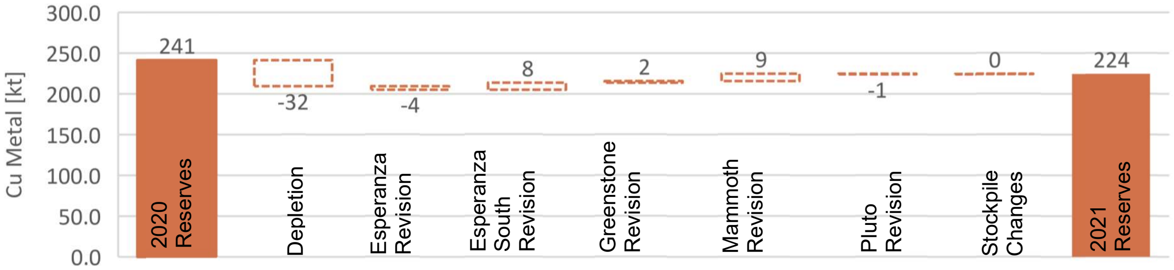
  - increase in forecast mining costs for Esperanza South, Mammoth Deeps, Mammoth Remnants, Esperanza and Pluto;
  - decrease in forecast mining costs for Greenstone;
  - decrease in forecast processing and site services costs;
  - year on year changes to process recoveries applied for the purpose of stope optimisations, specifically reduced recoveries for Esperanza South, Pluto, and Esperanza, and increased recoveries for Greenstone and Mammoth.
  - the impact of incorporating a dilution factor in calculation of cut-off grades to apply to stope optimisation;
- Mine design:
  - changes to stope designs for Mammoth Deeps and Mammoth Remnants, Greenstone, Esperanza and Pluto, reflecting 31 December 2021 Mineral Resources estimates for Capricorn Copper (refer above), revised cut-offs and revised dilution skins.
  - an update of the sub-level cave design for Esperanza South, reflecting the 31 December 2021 Mineral Resources estimates for Capricorn Copper (refer above), and revised cut-off and shutoff grades.

Ore Reserves – December 2020 to December 2021 - Tonnes (Mt)



Note, changes cited as *Revisions* comprise changes to Mineral Resources estimates, economic cut-off assumptions, and mine design changes. In order to better present the changes, the values shown in the table above are reported with more significant figures than the aggregated information contained in the 2020 and 2021 estimates

Ore Reserves – December 2020 to December 2021 – Contained Cu Metal (kt)



Note, changes cited as *Revisions* comprise changes to Mineral Resources estimates, economic cut-off assumptions, and mine design changes. In order to better present the changes, the values shown in the table above are reported with more significant figures than the aggregated information contained in the 2020 and 2021 estimates

Economic cut-off assumptions

The following economic cut-off assumptions were applied for the purposes of the 31 December 2021 Ore Reserves estimates for Capricorn Copper. Cut-off for the prior estimates (December 2020) is provided for reference. An initial set of cut-off grades was applied to create stope shapes. These cut-off grades are shown under “Stope optimisation cut-off” in the table below. A final, revised set of cut-off grades, shown under “Head Grade (Diluted)” in the table below, was subsequently applied to exclude any stopes for which the overall stope grade was not greater than the cut-off.

	31-Dec-21		1-Dec-20	
Orebody	Stope Optimisation Cut-off (%Cu)	Head Grade (Diluted) (%Cu)	Stope Optimisation Cut-off (%C)	Head Grade (Diluted) (%Cu)
Esperanza South Total	**1.19**	**1.19**	1.22	1.22
Esperanza South Shutoff	**0.98**	**0.98**	1.02	1.02
Esperanza South Development	**0.58**	**0.56**	0.63	0.63
Greenstone	**1.05**	**1.00**	1.18	1.22
Greenstone Development	**0.50**	**0.48**	0.57	0.57
Mammoth (Remnants and Deeps)	**1.49**	**1.41**	1.42	1.41
Mammoth Development	**0.51**	**0.49**	0.58	0.58
Pluto	**1.65**	**1.50**	1.38	1.46
Pluto Development	**0.58**	**0.55**	0.57	0.57
Esperanza	**1.65**	**1.50**	1.23	1.28
Esperanza Development	**0.57**	**0.55**	0.57	0.57

Commodity Price and forex for estimate

Pricing/FX	Unit	31-Dec-21	1-Dec-20
Copper	US$/lb	**3.30**	3.00
AUD:USD		**0.73**	0.73

Competent Persons Statement

The information regarding 31 December 2021 Ore Reserves estimates for Capricorn Copper is based on and fairly represents information and supporting documentation compiled by Christopher Desoe, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM (CP) Membership No. 104206).

Mr Desoe is a full-time employee of Australian Mine Design and Development Pty Ltd and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code.

Mr Desoe consents to the inclusion of the information regarding Capricorn Copper Ore Reserves estimates in the form and context in which they appear.

Redhill Mineral Resources Estimates

The Mineral Resources estimates for **Redhill** as at 16 May 2016 are set out in the table below. JORC Code *Table 1 disclosures* for these estimates are set out in Appendix 5.

No material changes to the Mineral Resources for Redhill have occurred since 16 May 2016.

Redhill will be the subject of further field work and assessment in 2022 the objective of estimating the potential size of the mineralised system. This may progress to drilling in 2023.

				Grade			Contained Metal	
Deposit	Category	Tonnes Mt	Cu %	Au g/t	Ag g/t	Cu t	Au oz	Ag koz
Cristina	Inferred	1.3	2.3	0.3	41	29,601	10,481	1,719
Angelica	Inferred	0.6	1.5	0.4	53	8,840	7,382	978
Gorda	Inferred	0.4	0.6	1.6	56	2,018	18,210	637
Cutters	Inferred	0.3	3.0	0.1	51	9,542	612	520
Franceses	Inferred	1.7	1.2	0.1	14	21,249	3,124	757
Total	**Inferred**	**4.3**	**1.7**	**0.3**	**33**	**71,249**	**39,809**	**4,611**

Note, estimates reported in the table above, other than silver, are subject to rounding (one significant figure). Estimates for silver are rounded to zero decimal places

Economic cut-off assumptions

The following assumptions were made in calculation of the Redhill Mineral Resources estimate:

Cut-off assumptions

Orebody	Cut-off (% Cu)
Cristina	0.4
Angelica	0.4
Gorda	0.4
Cutters	0.4
Franceses	0.4

Commodity price for estimates

Pricing/FX	Unit	
Copper	US$/lb	3.00
Gold	US$/oz	1,300
Silver	US$/oz	22

Competent Persons Statement

The Mineral Resources estimates for Redhill are based on and fairly represents information and supporting documentation compiled by Tim Callaghan, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM Membership No. 222210). Mr Callaghan is a full-time employee of Resource and Exploration Geology.

Mr Callaghan has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code.

Mr Callaghan consents to the inclusion of the information regarding the Redhill Mineral Resources estimates in the form and context in which they appear.

Appendix 1

Golden Grove Mineral Resources estimates – JORC Code Table 1 Disclosures

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. • 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. • Entire half core samples are crushed and pulverised to 85% passing 75µm. • Historical underground drill sampling practices are comparable with the current practice, the only difference being primary core diameter for the underground drilling. The current core hole diameter is NQ2 (50.6mm), LTK60 (44.0mm), and in some cases BQTK (40.7mm), whereas historically a diameter of LK48 (35.3mm) was used. • 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. • Post 1994 surface RC samples were captured in a bag attached to the cyclone and subsequently split using a triple stage riffle splitter. • Measures taken to ensure sample representativity include the collection, and analysis of field and coarse crush duplicates.
Drilling techniques	• Diamond Drill core and minor Reverse Circulation data was used in the Mineral Resource estimation for Gossan Hill, Scuddles and Gossan Valley deposits. • Current DD core diameter is NQ2 (50.6mm), LTK60 (44.0mm) or BQTK (40.7mm) • Historic DD core diameter was LK48 (35.3mm) • 9,029 drillholes used in the Gossan Hill Mineral Resource model. • 4,158 drillholes used in the Scuddles Mineral Resource model. • 566 drillholes used in the Gossan Valley Mineral Resource model. • Over 874,407 samples across all deposits. • 1,645 drillholes were used in the Open Pit Mineral Resources (comprised of 77 Aircore, 162 Diamond Core and 1406 RC holes). • The Reflex Act II™ tool is used for core orientation marks on selected DD holes.
Drill sample recovery	• 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. • The rocks are very competent, and recoveries are very high with average core recovery greater than 99.1% for both mineralised and non-mineralized material. • 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. • 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. • Preferential loss/gains of fine or coarse materials are not considered significant. • There is no known relationship bias between recovery and grades.
Logging	• All (100%) drill core and chips are logged geologically using codes set up for direct computer input into the Micromine Geobank™ database software package. • 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.

CRITERIA	STATUS
	• Logging is both qualitative and quantitative (percentage of sulphide minerals present). • All (100%) drillholes are logged in full detail from start to finish using laptop computers directly into the drillhole (Geobank) database. • Standard mineralised rock codes used. Standard weathering, alteration and appropriate geological comments entered.
Sub-sampling techniques and sample preparation	• 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. • RC drilled samples have been cone split and dry sampled. Wet sampling only conducted when drillholes intersected the water table. • All routine and duplicate RC drilled samples were 1m composites. • 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. • The sample preparation of RC chips and DD core adheres to industry best practice. A commercial laboratory is used which involves: ○ Weighing ○ Oven drying at 105º C ○ Coarse crushing using a jaw crusher to 70% passing 6mm ○ Samples > 3kg crushed to 2mm and split using a rotary splitter (this represents < 0.01% of total sample used for Mineral Resource estimation). ○ Pulverising in an LM5 to a grind size of 85% passing 75µm. ○ Collection of 400g pulp from each sample; rejects kept or discarded depending on drilling programme. • 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. • 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 to the same assay process as routine samples. • Sampling conducted by previous owners is assumed to be industry standard at the time. • Although field duplicates showed good reproducibility across the grade range for Cu, Zn and Au, their use was ceased in 2014 after consultation with the Principal Resource Geologist and Technical Services Manager regarding their collection method and application as a true duplicate.
Quality of assay data and laboratory tests	• 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 projects. Previously it used a 0.4g sample in a HF-HNO3-HClO4 digestion, with HCl 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. • 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 determined using AAS. • Gold and silver assay method: fire assay, AAS FA-AAS. • Historic analysis includes fire assay, aqua regia, four acid digest and AAS or ICP. • 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. • 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 flushes are inserted at the end of any significant ore horizon. • QAQC data returned are checked against pass/fail limits once the results have been loaded into the database. QAQC data is reported quarterly and demonstrates sufficient levels of accuracy and precision.

CRITERIA | **STATUS**

- Sizing tests ensure the grind size of 85% passing 75µm is achieved.
- The laboratory performs internal QC including standards, blanks, repeats and checks.
- Oxide grade control analysis:
  - Standards have been used in most programs.
  - Base metals assay method: 4 acid digest followed by ICP MA-ICPOES for the first program with XRF applied for subsequent programs. Checks showed no bias between analysis methods.
  - Acceptable levels of accuracy and precision have been established.

Verification of sampling and assaying

- 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.
- 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.
- No specific twinned holes have been drilled at the Golden Grove underground sulphide deposits. However nearby and scissor drillholes show compatible geology and results.
- 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.
- 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 ensure data has been correctly transcribed.
- Assay data is retained in text files (.SIF) and stored once loaded into the database.
- Samples of RC drillholes are retained in chip trays and the remaining drill core is stored in core trays at the core yard.
- 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™-based application. In 2008 the data was migrated to a Micromine Geobank™ database. Validation of data has been performed during each migration and is periodically reviewed against hardcopy records.
- 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.
- All re-assayed data will replace original results that failed QAQC; both results are retained in the database, with the results that failed QC being excluded from general use and export.
- Use of both DD and RC indicates there is no significant bias between drilling methods.
- All assay data remains in its original state and has not been adjusted.

Location of data points

- All underground drillhole collars are picked up by 29Metals Golden Grove surveyors using a Leica TS-15 (total station) with an expected accuracy of 10mm. Surface exploration drillhole collars are picked up by company surveyor using a Trimble RTK R8 GPS with an expected accuracy of 40mm.
- Before 2016 all drillholes were down hole surveyed gyroscopically by the drilling companies (currently DDH1 and Boart Longyear) once each drillhole was completed. This was tied into a starting azimuth and dip picked up off the rod string by our onsite survey department while the rig was drilling. Surveys were also carried out every 30m using an Eastman single shot camera while the hole is in progress to track deviation.
- Since 2016 the Champ and Reflex north seeking tools have been utilised for both our rig alignment and surveying. Holes outside of 20 degrees dip are surveyed every 12m using the north seeking function while holes inside +/- 20 degrees are surveyed using the gyroscopic components of the tool every 30m while drilling and then at end of hole every 10m.
- The accuracy and quality of historic surveys is generally unknown.
- A local grid system (GGMINE) is used. It is rotated 52.4 degrees west of MGA94 zone 50. The two-point conversion is as follows:

Mine Grid to MGA94 Two-Point Conversion

Point	GGMINE East	GGMINE North	MGA East	MGA North
1	3644.47	10108.13	502093.5	6810260.7

CRITERIA | **STATUS**

2	9343.2	29162.02	490480.1	6826394.2

- Topographic measurement on most of the Exploration leases is by 1m contour generated from aerial photography, however topographic measurement on mining leases is by GPS with surface control point with an accuracy of 10mm.

Data spacing and distribution

- Drill data spacing ranges from less than 10m x 10m in the active mining areas to greater 80m x 80m in exploration areas.
- The table below shows drill spacing classification by ore type

Drill spacing classification by ore type

Ore Type	Drill Spacing Classification Criteria		
	Measured	Indicated	Inferred
Primary Sulphide	20	40	60
Partial Oxide Zinc	20	40	60
Oxide Copper	20	40	60

- Data spacing is sufficient to establish geological and grade continuity for the appropriate classification of the Mineral Resources.
- 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 orebody under study.
- 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.
- Current gold pit RC grade control drilling is sampled on 1m intervals. Past RC samples (gold and copper) up to 5m has occurred.
- 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.

Orientation of data in relation to geological structure

- Drilling has mostly been oriented on sections that are orthogonal to the strike of mineralisation. Drillholes frequently overlap and are scissored as drilling is oriented from both footwall and hanging-wall directions.
- No significant sampling bias has been recognised due to orientation of the drilling in regard to mineralised structures.

Sample security

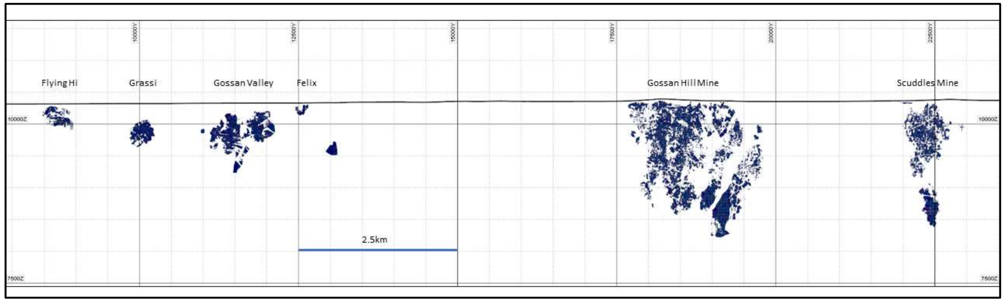
- Measures to provide sample security included:
    - Adequately trained and supervised sampling personnel.
    - Half-core samples placed in a numbered and tied calico sample bags.
    - Bag and sample numbers are entered into Geobank database.
    - Samples are couriered to assay laboratory via truck in plastic bulker containers.
    - Assay laboratory checks off sample dispatch numbers against submission documents and reports any inconsistencies.
    - Remaining DD core is stored within the Golden Grove core yard.

Audits or Reviews

- The most recent laboratory audit was conducted on the 23rd of November 2021, while the previous one was conducted on 16th of June 2020. No major concerns were raised.
- An internal peer review process was carried out on all models by geologists onsite in 2021. An external Competent Person review was carried out in 2020.
- An internal review of RC and DD core sampling procedures were completed in 2014. The sampling procedures were found to meet industry standards.
- 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

<table>
<tr><th>CRITERIA</th><th>STATUS</th></tr>
<tr><td>Mineral tenement and land tenure status</td><td>
The mineral tenement and land tenure status of the Golden Grove operations are listed in the below table.
Mineral tenement and land tenure status for Golden Grove operations
<table>
<tr><th>Tenement No.</th><th>Prospect Name</th><th>Date Expires</th><th>Term Years</th><th>Date Granted</th></tr>
<tr><td>M59/03</td><td>Scuddles</td><td>08/12/2025</td><td>21</td><td>28/01/2005*</td></tr>
<tr><td>M59/88</td><td>Chellews</td><td>18/05/2030</td><td>21</td><td>20/04/2009*</td></tr>
<tr><td>M59/89</td><td>Coorinja</td><td>18/05/2030</td><td>21</td><td>20/04/2009*</td></tr>
<tr><td>M59/90</td><td>Cattle Well</td><td>18/05/2030</td><td>21</td><td>20/04/2009*</td></tr>
<tr><td>M59/91</td><td>Cullens</td><td>18/05/2030</td><td>21</td><td>20/04/2009*</td></tr>
<tr><td>M59/92</td><td>Felix</td><td>18/05/2030</td><td>21</td><td>20/04/2009*</td></tr>
<tr><td>M59/93</td><td>Flying Hi</td><td>18/05/2030</td><td>21</td><td>20/04/2009*</td></tr>
<tr><td>M59/94</td><td>Bassendean</td><td>18/05/2030</td><td>21</td><td>20/04/2009*</td></tr>
<tr><td>M59/95</td><td>Thundelarra</td><td>18/05/2030</td><td>21</td><td>20/04/2009*</td></tr>
<tr><td>M59/143</td><td>Bassendean</td><td>09/05/2031</td><td>21</td><td>21/04/2009*</td></tr>
<tr><td>M59/195</td><td>Gossan Hill</td><td>17/05/2032</td><td>21</td><td>17/06/2011*</td></tr>
<tr><td>M59/227</td><td>Crescent</td><td>07/05/2033</td><td>21</td><td>08/05/2012*</td></tr>
<tr><td>M59/361</td><td>Badja</td><td>01/03/2037</td><td>21</td><td>01/03/2016*</td></tr>
<tr><td>M59/362</td><td>Badja</td><td>01/03/2037</td><td>21</td><td>01/03/2016*</td></tr>
<tr><td>M59/363</td><td>Badja</td><td>01/03/2037</td><td>21</td><td>01/03/2016*</td></tr>
<tr><td>M59/543</td><td>Walgardy</td><td>04/02/2023</td><td>21</td><td>05/02/2002</td></tr>
<tr><td>M59/480</td><td>Marloo</td><td>01/07/2029</td><td>21</td><td>02/07/2008</td></tr>
</table>
* 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 Golden Grove Pty Ltd (a wholly owned subsidiary of 29Metals Limited).
</td></tr>
<tr><td>Exploration done by other parties</td><td>
• Original definition and exploration drilling were performed by Joshua Pitt, of Aztec Exploration, in 1971.
• 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.
• Newmont, Normandy, Oxiana, OZ Minerals, MMG, EMR and29Metals have all been involved with the drilling and exploration of the Golden Grove leases since 1991.
• The exploration and resource geology groups remained unchanged throughout the takeovers; hence the exploration management and methods have effectively remained constant since Oxiana acquired the project in 2005.
• Exploration on the Northern and Southern Leases around the Golden Grove Tenements is ongoing and being conducted by 29Metals.
</td></tr>
</table>

CRITERIA	STATUS
Geology	• The mineralisation style is volcanogenic hosted massive sulphide (VHMS) which occurs as sub-vertical lenses within layered sediments and volcanics. • 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. • 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.
Drillhole information	• Over 28,600 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	• This is a Mineral Resource Statement and is not a report on Exploration Results hence no additional information is provided for this section. • No metal equivalents were used in the Mineral Resource estimation
Relationship between mineralisation widths and intercept lengths	• 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.
Diagrams	 *Long-projection of the Golden Grove deposits*
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	• Exploration and delineation drilling will continue underground, and the results will be modelled and reported in subsequent Mineral Resource estimates. • Surface exploration activities including RC and DD drilling will continue on the mining leases.

Section 3 Estimating and Reporting of Mineral Resources

CRITERIA	STATUS
Database Integrity	• The following measures are in place to ensure database integrity: o Golden Grove uses an SQL database system. o Data is logged directly into Micromine Geobank™ (front-end software) using wireless transfer protocols on Dell Latitude 5424 Rugged™ 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. o 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. o 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. o Assays are imported electronically from files (.sif) received from the laboratory. o Drillholes are checked and locked from users modifying data whenever assays are received. • The measures described above ensure transcription or data entry errors are minimised. • Data validation procedures include: o Data is validated on-entry using library of codes and key fields which ensure intervals cannot duplicate or overlap. o Collar co-ordinates and drilling direction (azimuth and dip) are validated via comparison of planned data to surveyed data. o 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. o 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.
Site Visits	• The Competent Person is employed full-time at Golden Grove and is satisfied with the standard of the procedures instituted by the site. • The Resource third party reviewer of the resources has visited site on several occasions with the most recent being in mid-2020. No material issues affecting the resource estimates were identified during that visit.
Geological interpretation	• Confidence in geological interpretation of the mineral deposits and associated lithologies is considered to be moderate to high. • Data used for the interpretation included geological mapping of development drives, assay results and geological logging of all DD holes. • Alternate structural and geological interpretations are routinely considered and tested with diamond drilling. • Geological interpretation was totally reviewed in every drill hole to get a consistent geological interpretation in the whole area. • Geological interpretations have been modelled as three-dimensional wireframes of mineralisation and other lithologies, which have been used to construct block models and to control grade estimation as hard boundaries. • Primary sulphide interpretation: o Zinc-rich mineralisation occurs as massive to semi-massive sulphide lenses. These lenses also contain moderate copper, lead, silver, and gold mineralisation. o 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. o Zinc and copper lenses are each surrounded by low-grade mineralisation haloes. Low-grade domains have been constructed for some of the deposits. o Intrusive rocks and faults have been interpreted that cut across and displace mineralisation and stratigraphy. o These domains were derived from the geology of the area. Lithological codes obtained from the logging of drillholes aids in establishing continuity of geology. o The majority of barren intrusive wireframes have been constructed from implicit modelling in Leapfrog software. Other barren intrusive triangulations have been constructed from interpreted polygons snapping to drillhole intersections on 10m spaced plan sections, though these sections are shortened or lengthened appropriately with clustering of data. Interpretations account for all available geological information.

CRITERIA	STATUS
	○ Primary sulphide domains are estimated using Categorical Indicator Kriging (CIK). Lithological codes are taken from the drilling database and used to populate a matrix of indicators in the database. This provides the indicator data to produce and analyse variograms which supply the input for the CIK estimation. • Oxide gold, silver and zinc interpretation: ○ Mineralisation occurs as steep westerly dipping strata bound lenses that have been modelled separately based on the following general grades: ▪ Gold: 0.1g/t Au ▪ Silver: 10g/t Ag ▪ Zinc: 0.2% Zn ○ The basis for each of the above domain boundaries were selected by analysis of probability and histogram distribution plots, observing the distribution of sample data in 3D and consideration of geology. These domains maintain a consistent mineralisation shape after considering the geology and assay data. ○ Wireframes have been constructed from interpreted polygons on 20-metre spaced plan sections. Interpretations account for all available geological information. ○ Confidence in geological interpretation of Inferred mineralisation is at a lower level than Indicated mineralisation due to the limited sampling in these areas, hence implied but not verified geological and grade continuity occurs.
Dimensions	• 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 40m in thickness. The current Mineral Resource is located from 200m to 2,150m below surface. • Gossan Valley mineralisation is hosted in Golden Grove Member 4 (GG4) of the Golden Grove Formation. The nature of mineralisation is considered to be strata bound. 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. • Oxide Copper is reported above the weathering profile. It is about 300m long, 80m deep and 20m to 30m in thickness. • Partial Oxide Zinc mineralisation is approximately 450m long and was reported above the weathering profile. • Partial Oxide Gold is reported mostly above the weathering profile and just below the surface. It is 120m long, 30m deep and 10m to 20m in thickness.
Estimation and modelling techniques	**Primary Sulphide** • 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. ○ For all deposits other than Gossan Valley, Grassi, Felix, Flying High, D Zinc Extended and Europa, 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. ○ The Gossan Valley, Grassi, Felix, Flying-High, D-Zinc Extended and Europa mineralised domains were modelled using the conventional wireframing approach. The cut-offs for the wireframes were 0.4% for copper and 2% for zinc. ○ Copper, Zinc, Magnetite and barren sediment domains were modelled using the CIK method as described above. ○ Cross-cutting intrusive dykes are barren and have been modelled as such, using 3D wireframes snapped to drilling data. ○ Data compositing for estimation was set to 1m, which matches the majority of drillhole sample lengths underground and provides good definition across interpreted domains. ○ 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 (Snowden) software, Isatis software and Vulcan™ (Maptek) software. ○ Ordinary Kriging interpolation has been applied for the estimation of Cu, Zn, Pb, Ag, Au, Fe and density after lithology-domaining by CIK. ○ The estimation method is considered appropriate for the estimation of Mineral Resources at Golden Grove. ○ Interpolation was undertaken in up to five passes. ○ Discretisation was set to 4 x 4 x 4. • Block model results are comparable with previous Mineral Resource estimations after depletion, additions due to drilling and re-modelling of the site.

CRITERIA	STATUS
	• 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. • Iron has been estimated as it is related to the recovery of payable elements. Sulphur is also estimated in the underground Mineral Resources. Underground waste material is used to back fill mined stopes or treated as potential acid forming (PAF) material when moved to the surface • For the majority of models 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. The D-Zinc Extended block sizes are 0.75m (x) x 2.5 (y) x 2.5m (z) (with 0.25m (x) x 1.25m (y) x 1.25m (z) sub cells). • No assumptions have been made about the correlation between variables. All variables are comparably informed and independently estimated. • 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. • 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. • Mining voids are ‘stamped’ onto the block model to ensure depleted material is excluded from the Mineral 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. • The estimation validation process included the following steps: o Visual checking of block model estimated grades against the input drilling data. o Comparison of block model and sample statistics. o Drift plots comparing block model against input samples by easting, northing and RL. o Grade/Tonnes curves as well as comparison of the existing and updated models’ tonnes, grade and metal content by elevation. **Oxide and Partial Oxide** • The current block modelling for the oxide Mineral Resource covers the Scuddles Oxide area, the Tryall area and the ABCD Zinc models and includes all the material above the weathering surface. • 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: o Ordinary Kriging interpolation has been applied for the estimation of Cu, Zn, Pb, Ag and Au in the ABCD model. Ordinary Kriging interpolation has been applied for the estimation of Cu, Ag and Au in the Scuddles Oxide model. Inverse distance estimation method was applied in the Tryall Copper oxide deposit. o Data compositing for estimation was set to match the majority of drillhole sample lengths and provides good definition across interpreted domains. o Variogram analysis was reviewed and updated for new interpretations and for existing domains materially affected by new drill data. • There have been no assumptions made regarding the recovery of by-products. • 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. • Iron has been estimated as it is related to the recovery of payable elements. • Sulphur was estimated within Au, Ag and Cu domains for the oxide material for environmental considerations. Sulphur within the Zn domain was estimated in the partial oxide material. No other deleterious or ancillary elements have been modelled. • No assumptions have been made about the correlation between variables. All variables are comparably informed and independently estimated. • 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. • The block models and estimate has been validated in the following ways: o Visual checking of block model estimated grades against the input drilling data. o Comparison of block model statistics against sample statistics. o Swath plots comparing average block model estimated grades against input samples by easting, northing and RL.

CRITERIA	STATUS
Moisture	• All tonnages have been estimated on a dry basis.
Cut-off parameters	• 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.

Orebody	31-Dec-21 $A/t	30-Jun-20 $A/t
ABCD	127.92	121.83
ABCD Oxide	127.92	121.83
Amity	135.63	129.55
Cambewarra	131.10	125.02
Catalpa/Ethel	132.56	126.47
D Zinc	130.77	124.69
GG4	130.77	124.69
Hougoumont Main and Hangingwall	135.63	129.55
Hougoumont Extended	142.95	136.87
Oizon	142.34	136.26
Tryall	129.04	122.95
Tryall Cu-Au Oxide	129.04	122.95
Xantho	137.03	130.95
Xantho Extended	143.51	137.43
Scuddles - Zinc	132.21	126.13
Scuddles - Copper	132.21	126.13
Scuddles Oxide	129.04	122.95
Cervantes - Zinc	139.65	133.57
Cervantes - Copper	139.65	133.57
Gossan Valley	135.00	135.00
Grassi	135.00	135.00
Felix	135.00	135.00
Flying High	145.00	145.00

CRITERIA	STATUS
	• Metal Price and exchange rate assumptions as shown in the table below. (see table below) • 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. • The reporting cut-off grades are in line with 29Metal's policy on reporting of Mineral Resources which have reasonable prospects of eventual economic extraction.
Mining factors or assumptions	• 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. • Any blocks within three metres of the Hangingwall or footwall of a mined void is deemed non-recoverable and is not reported. • Surface mining is applied to the oxide copper mineralisation and involves the open pit mining method. ○ No mining factors and assumptions have been proposed for the oxide copper
Metallurgical factors or assumptions	• The 29Metals 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 2021 block models through the NSR value calculations. • Traditionally metallurgical processing of ore at 29Metals 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 is replaced by the triple sequential flotation system with improved recoveries and reduced downtimes for campaign change overs. • Primary sulphide material: ○ Metallurgical factors are incorporated into block model values via the calculation of the NSR value. ○ 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. ○ Higher grade zinc mineralisation is amenable to better precious metal (which is projected to be about 66%) recoveries. • Au and partial oxide gold material: ○ 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. ○ The partial oxide zinc and oxide copper material can cause issues as it contains a mixture of oxides and primary sulphides. This can be mitigated through a blending strategy with traditional sulphide.
Environmental factors or assumptions	• 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.

Price/FX	Unit	31-Dec-21	30-Jun-20
Copper	US$/lb	3.60	3.50
Lead	US$/lb	1.10	1.10
Zinc	US$/lb	1.50	1.50
Gold	US$/oz	1,736	1,600
Silver	US$/oz	23	23
AUD:USD		0.75	0.75

CRITERIA	STATUS
Bulk Density	• 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. • 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. • 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.
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

Classification	Ellipse Orientation			Ellipse Axes			Samples Per Estimate		Min No. Holes
	Bearing (Z)	Plunge (Y)	Dip (X)	Major	Semi-Major	Minor	Minimum	Maximum	
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

CRITERIA	STATUS
Classification (continued)	○ 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 the remaining 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.

CRITERIA	STATUS

Audits or reviews

- The Block modelling, estimation, validation, and Mineral Resource tabulations were peer reviewed by 29Metals geologist.
- Peer reviewers noted that 2021 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.
- No material issues with the Mineral Resource estimates were identified

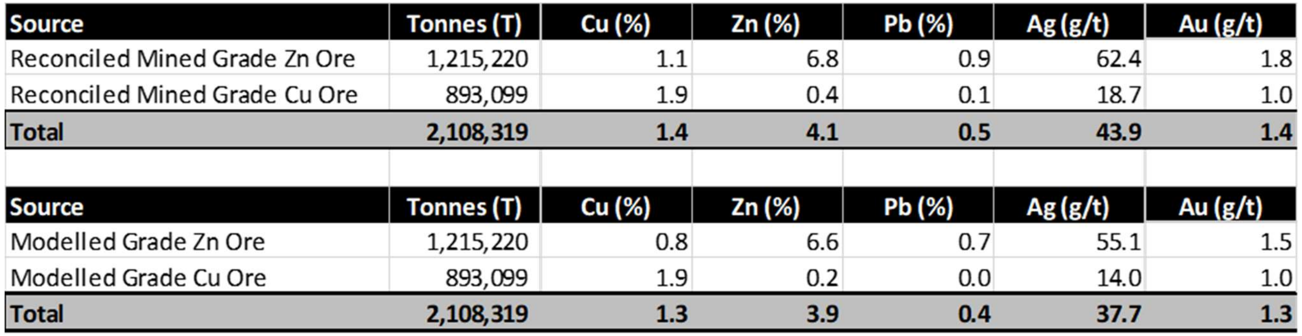
Discussion of relative accuracy/ confidence

- The Mineral Resource data collection, data analysis and estimation techniques used for the 29Metals 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.
- 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.
- These estimates relate to the lens (deposit) scale i.e. in the order of millions of tonnes.
- Reconciliation of block model against mill production for zinc and copper stoped volumes, tonnes and grade for the period June 2020 to December 2021 is shown in the table below. Block models performed very well over that period. Tonnes reconciled extremely well whilst grades were similar for copper, whereas mined zinc grades were underestimated by 5% for zinc.

Reconciliation of zinc and copper July 2020 to December 2021

Reconciliation of the mine claimed grade against to milled actual grade occurs monthly. The process involves a comparison of all available measurement's 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, to evaluate block model performance without the influence of mine call factors.



Source	Tonnes (T)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)
Reconciled Mined Grade Zn Ore	1,215,220	1.1	6.8	0.9	62.4	1.8
Reconciled Mined Grade Cu Ore	893,099	1.9	0.4	0.1	18.7	1.0
Total	**2,108,319**	**1.4**	**4.1**	**0.5**	**43.9**	**1.4**

Source	Tonnes (T)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)
Modelled Grade Zn Ore	1,215,220	0.8	6.6	0.7	55.1	1.5
Modelled Grade Cu Ore	893,099	1.9	0.2	0.0	14.0	1.0
Total	**2,108,319**	**1.3**	**3.9**	**0.4**	**37.7**	**1.3**

- These differences are commensurate with the accuracy implied by the resource classification.
- The Competent Person is satisfied with the accuracy and the confidence of the Mineral Resource estimates.

Appendix 2

Golden Grove Ore Reserves estimates – JORC Code Table 1 Disclosures

Section 4 Estimation and Reporting of Ore Reserves

CRITERIA	COMMENTARY
Mineral Resources estimates for conversion to Ore Reserves	The Mineral Resource is based on geological block model provided by the 29M Golden Grove Geology department. These models were depleted as of 31 March 2021. The Vulcan block models were converted to Datamine block models to be used for interrogation.
	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
Site visits	The Competent Person is a full-time employee of the site on a FIFO roster rotation.
Study status	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
	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.
Cut-off parameters	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. A marginal cut-off grade of NSR A$57.30/tonne for development material was used to classify material contained within the mine design as Ore or Waste. The NSR cut-off grades were derived from recent actual costs and budget cost models along with the following metal price and exchange rate assumptions: Copper Price US$ 3.30/lb. Zinc Price US$ 1.10/lb. Silver Price US$ 21/oz. Gold Price US$ 1,446/oz. Lead Price US$ 1.10/lb. AUD/USD 0.73

CRITERIA | COMMENTARY

Mining factors or assumptions

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.

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, Cemented Hydraulic Fill (CHF) or Paste fill. 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. Paste fill will be used in new areas of the mine – Xantho Extended, Oizon and Hougoumont Hangingwall - from August 2022.

Based on geotechnical parameters including the rock mass rating, tunnelling quality index, unconfined compressive strength, the hydraulic radius (HR) was determined. The HR is used to determine the stope design dimensions.

Major assumptions for stope design are as follows:

Sub-Level Spacing Nominally 30 metres and double lifts of 60 metres when allowed. Pre-developed levels dictate level intervals in those areas. Parts of Xantho Extended have level interval spacings of 45m and no double-lifts.

Mining dilution: New mining areas (Hougoumont Extended, Oizon, Xantho Extended) had dilution skins applied to design shapes, with the associated tonnes and grade reported from the resource model. Remnant stope shapes had dilution applied manually, generally 10% unless otherwise specified by the geotechnical department. Development dilution was per the table below:

Item	Value	Comment
Mine Dilution - Dev Lat Ore	1	Dilution for ore development where in-situ NSR >= CoG NSR - Dev
Mine Dilution - Dev Lat Waste	1.14	Dilution for waste development where in-situ NSR < CoG NSR - Dev (8.5% Strip + 5.5% OB)
Mine Dilution - Dev Vert	1	Dilution for all vertical development
Mine Dilution – CHF Dev	1	Dilution for waste development through existing CHF

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

Mining Recovery	Orebody
88%	GET
90%	GDZ., GOZ, GTR
93%	GAC
94%	GAM, GH6, GHW
95%	GAB, GCT, GCW, GQC, GXE, GXT, GXU, SCU
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 42.8kt (<0.4% of the total Ore Reserve).

CRITERIA	COMMENTARY
	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, cooling and ventilation infrastructure.
Metallurgical factors orassumptions	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.
	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.
	A four product (3 x concentrates 1 x tail) sequential flowsheet was implemented in April 2021. Commissioning of the sequential flowsheet is complete and capable of performing in line with design performance criteria. This is also able to revert to current flowsheet configuration as required. 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.
	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. Silica levels are managed via froth washing in the zinc flotation circuit.
	Given the mature operating and processing nature of Golden Grove, no bulk sampling or pilot scale test work was completed.
	At Golden Grove there are no minerals that are defined by a specification, hence no need for ore reserves estimation based on mineralogy.
Environmental	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. 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. The licence was most recently updated on 5 August 2021 for TSF1 Lift 5. Golden Grove has a working Closure Plan that is reviewed annually. The calculated closure costs for Golden Grove at 2021 are based on the 2020 Life of Asset review. The calculated total raw closure cost is $69.3M. An updated Life of Asset review will be available in January 2022.
Infrastructure	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	COMMENTARY
Costs	The capital costs for the project were derived from recent actual costs, quotes, budget estimates, and current underground contract mining rates. The operating costs for the Reserve were derived from a combination of first principles build up, using current costs derived from the Golden Grove 2021 Q1 Forecast adjusted for abnormal costs (non-recurring costs such as rolling plant hire, incorrectly coded paste plant costs, labour hire costs no longer required, back-charges forecast at lower levels based on historical data). The Q1 forecast is actuals from January-March 2021 and forecast for April-December 2021. The presence and impact of any deleterious elements are well understood and incorporated into actual operating costs for the operation. The metal prices used were: Copper Price US$ 3.30/lb. Zinc Price US$ 1.10/lb. Silver Price US$ 21/oz. Gold Price US$ 1,446/oz. Lead Price US$ 1.10/lb. The exchange rate used was A$/US$ 0.73. Transportation charges were based on agreements with transport contractors. Toll treatment charges were based on negotiations with the relevant companies. Allowances for royalties has been accounted for in the NSR calculation as well as site operating budgets and financial models
Revenue factors	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 Metal prices and currency exchange rates provided by 29M Corporate guidance
Market assessment	Golden Grove has been in continuous operation for 29 years. The mine produces three concentrates comprising zinc, copper and HPM. The concentrates produced at Golden Grove are sold either direct to smelters or to trading companies. **Zinc concentrate** is sold under long-term contract. The level of deleterious element in the product is low and thus attractive from a marketing and demand perspective. **Low precious metal copper concentrate** 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. **High precious metal concentrate** 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 bulk of Zinc and Copper concentrates are sold under contract expiring in 2025. In addition, the long-term offtake provides the buyer with a right of first offer for a portion of HPM production, allowing Golden Grove to market each shipment on an individual basis. For 2021, 29M adopted the mean forward-looking long-term real consensus prices for copper and gold respectively, rounding to the nearest 5c interval, while maintaining prior years methodology for the other metals and rates as described below. Commodity prices and exchange rates have been provided by 29M 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.

CRITERIA	COMMENTARY
Economic	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. Sensitivities to the major costs (mining & processing) and to NSR revenue were tested across a range of ±20%, as shown: 
Social	The site is already established, having been continually operated for many years. As such, all social licences to operate are already in place.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: As such, any naturally occurring risks to the site are considered unlikely. Marketing contracts with smelters are already in place All government approvals are currently in place
Classification	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 This result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources is less than 13% of the total Probable Ore Reserve.
Audits or reviews	The project parameters, Mineral Resources and outcomes have been prepared and reviewed by 29M Golden Grove.
Discussion of relative accuracy/confidence	The modifying factors 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. 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

Appendix 3

Capricorn Copper Mineral Resources estimates – JORC Code Table 1 Disclosures

Note: *Abbreviations specific to Sections 1-4 of JORC Code Table 1 disclosures:*

ESS	*Esperanza South resource area*
GST	*Greenstone resource area*
PTO	*Pluto resource area*
MAM	*Mammoth Deeps resource area*
ESP	*Esperanza sub-pit resource area*
CC	*Capricorn Copper / Capricorn Copper Pty Ltd*
RC	*Reverse Circulation Drill Hole*
DD	*Diamond Core Drill hole*

Section 1 Sampling Techniques and Data

<table>
<tr><th>CRITERIA</th><th>COMMENTARY</th></tr>
<tr><td>Sampling techniques</td><td>
<p>Pre-2016 – 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 were undertaken at accredited commercial laboratories and from 2007 at Aditya Birla on-site laboratory.</p>
<p>The entire sample was dried and crushed to 2 mm and then split and a portion pulverised to 80% passing 100 µm. 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.</p>
<p>No information has been provided concerning the RC drill hole analysis.</p>
<p>Post-2016 – CC has drilled and sampled orientated and unorientated 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.</p>
<p>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 conventionally drilled core). Recoveries for all holes targeting the ore bodies for CC since 2016 have averaged 96.9%. The percentages for each diamond core size of the samples taken by CC are shown in the table below:</p>
<table>
<tr><th>Hole Diameter</th><th>Percentage</th></tr>
<tr><td>Not Recorded</td><td>0.9%</td></tr>
<tr><td>BQ</td><td>0.2%</td></tr>
<tr><td>HQ</td><td>0.3%</td></tr>
<tr><td>HQ3</td><td>48.7%</td></tr>
<tr><td>LTK60</td><td>7.2%</td></tr>
<tr><td>NQ2</td><td>19.4%</td></tr>
<tr><td>NQ3</td><td>20.8%</td></tr>
<tr><td>PQ</td><td>1.4%</td></tr>
<tr><td>PQ3</td><td>1.2%</td></tr>
</table>
</td></tr>
</table>

CRITERIA	COMMENTARY
	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 0.3m 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 core was full core sampled to provide a sufficient sample weight. From 2021 33% of NQ core was half core sampled, whilst the rest was full core sampled. 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. Sample preparation was completed at ALS (Mount Isa) and analysis at ALS (Townsville or Brisbane). Samples are weighed upon arrival and 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:** Prior to 2021 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. From 2021, drill core sampling included all material within the LOM planned volume, including a 10 m buffer, in addition, sampling also occurred whenever visible sulphides were present, plus a 5 m buffer. **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.
Drilling techniques	**Pre-2016:** The deposit has historically been drilled and sampled by previous operators. Aditya Birla (2003 – 2015) compiled and validated all this data as below: **ESS:** A total of 109 (PQ, HQ and NQ) DD holes and 8 RC drill holes (in excess of 25,000 m). **GST:** A total of 40 (PQ, HQ and NQ) DD holes were drilled, (in excess of 21,729 m). **PTO:** 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 359,000 m) **ESP:** A total of 256 DD holes (HQ and NQ), 6 percussion holes and 44 where drill type is not recorded. **Post-2016:** 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.

CRITERIA	COMMENTARY

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 NQ3 for up-dip holes. In few instances, the NQ3 holes were collared in HQ sized core.

Prior to 2021, no PQ 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. From 2021 only Exploration holes were orientated.

Prior to 2021 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™ EZ-TRAC single/multishot survey tool or by a REFLEX™ 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. From 2021 all holes were surveyed at 15 m, at 30 m and every 30 m thereafter, and at the end of the hole using a gyroscopic survey tool.

The majority of drill holes were fully grouted upon completion due to mine requirements.

Drill totals for each deposit are as follows:

ESS: 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, 33 underground drill holes were drilled totalling 4,434.41 m (of 255.35 m HQ3, 3,835.95NQ3 and 343.1 mLTK60). The four holes which were partially drilled HQ3 were for both resource and survey monitoring purposes. In 2021 until May the 19th eighteen holes were drilled from UG totalling 1,889.2m (all NQ3 size).

GST: 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. In2020, nine holes were drilled from UG totalling 932.66m (all NQ3 size). In 2021 until May the 19th seventeen holes were drilled from UG totalling 1,938m (all NQ3 size).

PTO: 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.

ESP: 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).

A summary of the drill type and metres completed before CC and by CC (2016-2021) is provided in the table below:

Deposit	Hole Type	Pre-2016		2016-2021	
		Count	Metres	Count	Metres
ESS	RC	10	1,150	3	302

CRITERIA	COMMENTARY

ESS	DD	109	27,466	126	35,792
Esperanza South	**Total**	**119**	**28,616**	**129**	**36,094**
Greenstone	**Total**	**48**	**17,151**	**121**	**1,7665**
PTO	RC	1	42	0	0
PTO	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**	**322**	**80,235**

CRITERIA	COMMENTARY
Drill sample recovery	**Pre-2016:** 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. **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. From 2021 Core loss is recorded in the lithology table as NR At ESS, CC drill core has averaged 97.7% recovery; an average recovery of 96.7% at Greenstone; a 93.7% average recovery at Pluto; a 98.9% average recovery at Mammoth; and an average of 97.1% 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 Esperanza 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 orebody 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 and core integrity. Grade is not deemed to have a significant effect on 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.
Logging	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. **Pre-2016:** logging is both qualitative and quantitative. Lithology, mineralisation type, sulphide content, RQD, core recovery and structure α angles to core axis is recorded. For most DD holes, core has been photographed wet and dry. **Post-2016:** 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: -MAM – 253 holes for 22,979m -ESS – 74 holes for 11,640.2 m -GST – 11 holes for 2,075.5 m -PTO – 9 holes for 1,149.7 m 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 as standard. The detail and coverage of this logging has provided CC with an appreciable understanding of each orebody 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.
Sub-sampling techniques and sample	**Pre-2016:** 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.

CRITERIA	COMMENTARY
preparation	**Post-2016:** 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. Before 2021, CC used coarse crush split duplicates which were 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 is then used when collecting the coarse splits. In 2021, CC has replaced coarse reject duplicates with field duplicates; the complementary half core of an original sample is sampled and placed in a sample bag with a unique sample ID. In case of full core sampled drill holes, the interval where duplicates are taken, both the original and duplicated samples are half core. 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 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. From 2021, 33% of holes were half core sampled. For holes that were half cored, the samples were consistently taken from the right-hand side of the core (RHS) and were then placed into their designated calico sample bag. When five 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 placed in a large bulka bag, labelled with its sample range 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 75µm. 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.
Quality of assay data and laboratory tests	**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. Aditya Birla report using random use of standard, blank and duplicate samples. Site specific, matrix matched standard material prepared and certified by Ore Research & 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. 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

CRITERIA	COMMENTARY
	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. 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 orebody 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. In 2021, CC has replaced coarse reject duplicates with field duplicates; the complementary half core of an original sample is sampled and placed in a sample bag with a unique sample ID. In case of full core sampled drill holes, the interval where duplicates are taken, both the original and duplicated samples are half core. 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 June the 10th 2021, the new holes in the 2021 have utilised 524 QAQC samples from a total of 4,499 samples which accounts for 11.6% of all samples. A total of four 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 313-1 at 0.308% Cu) through to high grade (GBM 908-16 at 7.018% Cu). The standards used are also certified for Ag and As. Out of 176 CRM samples eleven assayed outside of two standard deviations (2ơ), which accounts for 6.3% of the CRM data. None of these anomalies were consecutive, implying that any calibration issues were resolved within acceptable time limits. A total of 40 duplicate samples (coarse splits) have been taken and show good repeatability and precision with samples >90% repeating within 10% of HARD. There was only one discrepancy greater than 10%, this was in an extremely low-grade sample. A total of 108 duplicate samples (field duplicates) have been taken and show a ~12% HARD for 70% of the samples, which is slightly over the desired limit (<10% HARD for 70% of the samples) for field duplicates. The poor repeatability was most evident within the <0.01%Cu interval, where the 40% of samples are contained, therefore it is likely that the overrepresentation of extremely low grades (<0.01%Cu) is deteriorating the HARD distribution. Blank material has shown isolated events where, when placed within high grade Cu intervals, there is possible low order "carry over" between samples. The magnitude of these anomalies is not considered enough to invalidate the Cu grade of the original samples in this area. Prior to 2021 QAQC was 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. The excellent repeatability shown in historical QAQC has been deemed sufficient to trust future internal SG's. Umpire sampling is also undertaken for geochemical assay. Results for the 2021 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

CRITERIA	COMMENTARY
	in the sample.
Verification of sampling and assaying	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: • **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. • **Post 2016:** Geological and geotechnical logging is recorded on 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. 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. 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. No adjustments have been made to the received assay data, except for assays below the lower detection limit (for Ag, As, Co, Cu, Fe and S), and assays above the upper detection limit (for S). All modifications are detailed in the report.
Location of data points	**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 reviewed by CC to ensure that the most accurate pickup data has been made available for other historic holes. It is believed by CC that the existing collar positions of 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. **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™ EZ-TRAC single/multishot or REFLEX™ 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 10% of the CC drill holes. All new holes used in the 2021 Mineral Resource Estimates have been surveyed after completion. The surface collar coordinates have also been validated against mine site Lidar data which provides accurate topographic data to an accuracy of roughly +/- 0.2m. The DGPS coordinates are recorded in both Mammoth Mine Grid and MGA 94 (Zone 54). The Mammoth Mine grid is a local grid derived from the AGD84 datum and roughly equates to – MAM_E = (AGD84_E – 300,000); MAM_N = (AGD84 – 7,800,000); and MAM_RL = (AGD84 + 5000). Underground coordinates are recorded solely in Mammoth Mine grid.

CRITERIA	COMMENTARY
Data spacing and distribution	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 – 2021 has aimed to reduce drill spacing of the ESS, GST and MAM ore bodies to between 20 – 25m 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 relation to geological structure	Drilling has been conducted at the most optimal angle for the interpreted orebody orientation as possible with the collar locations available. At ESS, most drill holes intersect the orebody optimal to dip and strike of the orebody, with surface 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 2020/2021 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 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.
Sample security	**Pre-2016:** Samples were bagged and sent to the laboratory in Townsville or Brisbane via Mt Isa. **Post 2016:** 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 and double bagged 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.
Audits or reviews	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

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

Permit	Status	Grant	Expiry	Authorised Holder	Native Title	Minerals / Use	Area	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	30/5/1974	31/03/2026	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	9.7	
ML 5486	Granted	10/1/1974	31/03/2027	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	76.9	PTO
ML 5500	Granted	17/1/1974	31/03/2026	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	6.1	MAM
ML 5549	Granted	13/02/1975	31/03/2029	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	0.01	
ML 5548	Renewal Lodged	12/06/1975	30/06/2017	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	110.5	GST, MAM
ML 5550	Renewal Lodged	12/02/1976	28/02/2017	Capricorn Copper Pty Ltd	Pre 1996 Grant	Co, Cu	108	
ML 5563	Granted	21/01/1982	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	27/09/1973	31/03/2026	Capricorn Copper Pty Ltd	Pre 1996 Grant	LIVQTR, TAILDM,	47.7	
ML 90178	Granted	9/08/2007	31/08/2028	CST Minerals Lady Annie Pty	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	17/07/2008	31/07/2029	CST Minerals Lady Annie Pty	Infrastructure	PIPWAO, POWERL	9	

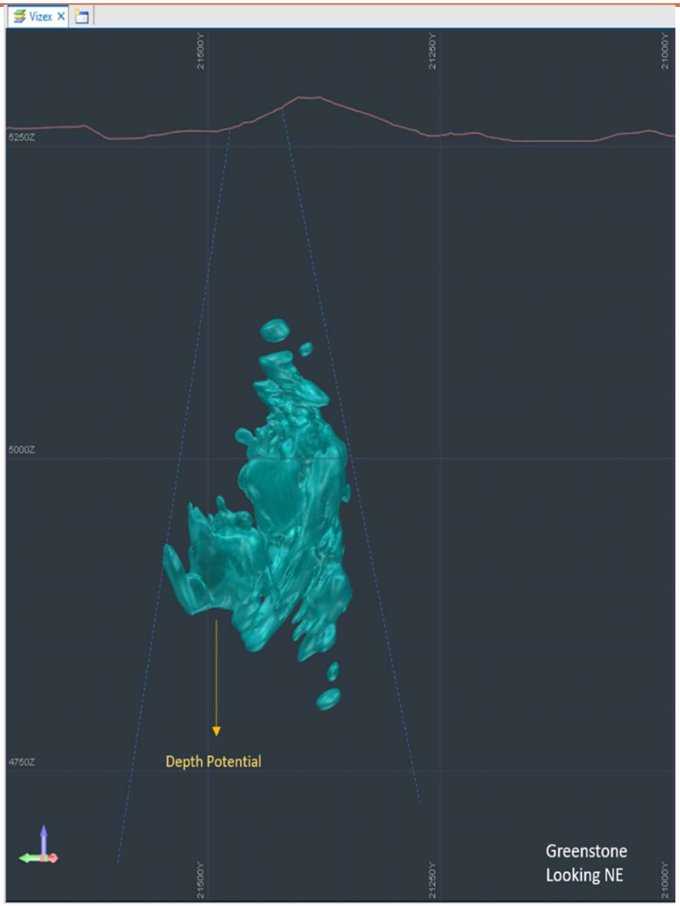
Mining Lease are surrounded by EPM 26421, granted 8th December 2017, expires 7th December 2022.

RTN: Right to negotiate

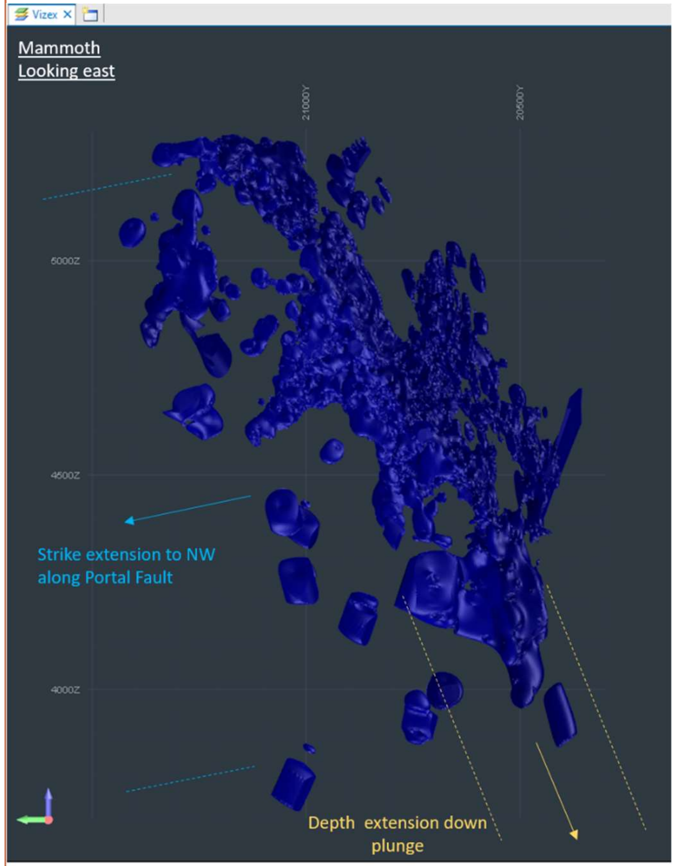
CRITERIA	COMMENTARY
Mineral tenement and land tenure status	• Capricorn Copper Pty Ltd (CC) are owned by 29Metals following the ASX listing on 02 July 2021. Table A (above) lists the Mining Leases at the mining operations which cover a total area of 1,082.5 hectares (10.8 km^2). The resources are confined 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.
Exploration done by other parties	• 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). • 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.
Geology	The CC deposits are structurally controlled, sediment-hosted copper deposits located within the Western Fold Belt of the Mount Isa Inlier. **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. 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. 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 lessen with depth but remains present in variable amounts to the deeper portions of the orebody, where the primary chalcopyrite-pyrite assemblage becomes more dominant. **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 sits within the core of this zone yet does not extend to surface due to significant weathering and vertical convergence of this zone. With depth, the hangingwall and footwall diverge and bound the Whitworth Quartzite wedge. Whilst structurally hosted, highly fractured zones do not tend to contain mineralisation. Mineralisation consists as chalcocite, bornite or chalcopyrite mineralisation hosted within fracture to breccia fill and is controlled as irregular, anastomosing fracture packages within the quartzite. **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 Foschi's Fault. Intense leaching and oxidation occur within the structural core, with mineralisation occurring 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

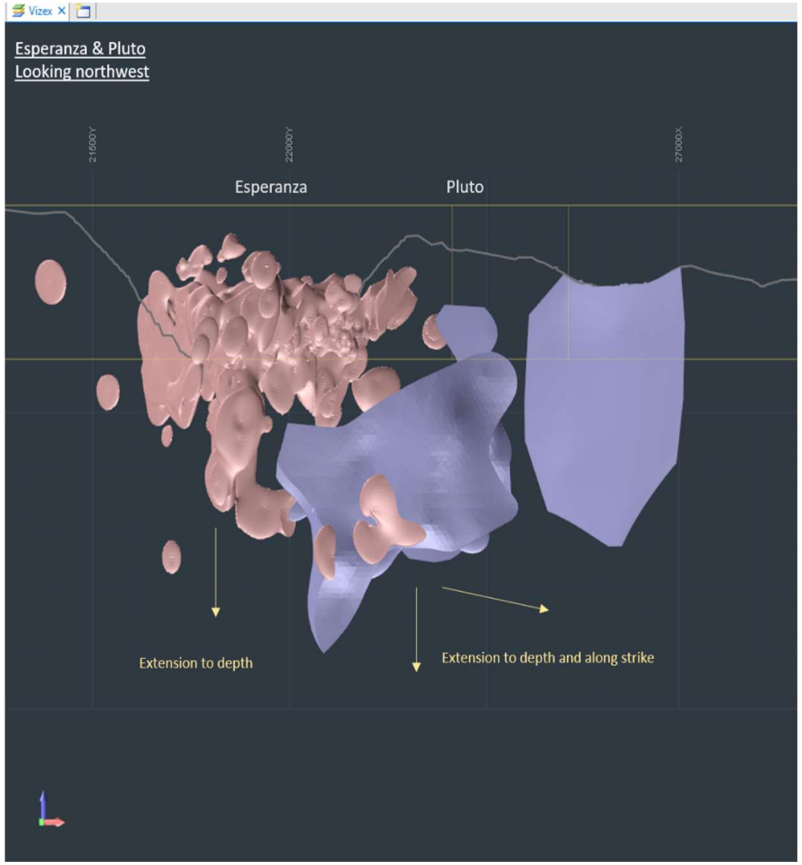
CRITERIA	COMMENTARY
	included pyrite, hematite and kaolinite. Ore contacts are typically sharp along with the oxidation fronts. Minor cobalt is also noted as a significant mineralisation type at Pluto and is typically seen within cobaltite and/or cobaltiferous pyrite as a halo around the more locally confined Cu mineralisation. The oxidation zone is approximately 200 m long by 20 – 30 m wide. **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 Extended Fault bounds the overall zone to the north and west, the Mammoth Fault localises the main strike of mineralisation which can occur either side of the fault, and the Portal Fault acts as a hard boundary on the east and controls the plunge of the mineralisation. The overall Mammoth domain plunges roughly at 65° to the SW. Mineralisation at Mammoth is found in three styles: massive, brecciated and veined; Massive mineralisation occurs adjacent to the Mammoth and Portal Faults and contains minor host rock fragments. Brecciated mineralisation occurs further away from the major faults and consists of angular and sometime fragmented clasts; Veined mineralisation is the most distal mineralising style from the faults. Individual ore lodes ("lenses") are locally controlled by the interplay between these major faults, minor local faults and shears, structural permeability and bedding. **ESP**: Hosted by the Esperanza Formation at the confluence of the Mammoth, Mammoth Extended and Foschi's faults. This formation is a sequence of well bedded to locally massive, black carbonaceous to locally grey or grey-green, weakly dolomitic siltstone and pyritic shale. A silica cap (referred to in literature as a "chert" body) historically overlay the deposit, hosting minor supergene mineralisation and is thought to represent a weathering horizon. Primary mineralisation 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.
Drill hole Information	• 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.
Data aggregation methods	• 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. • Significant intersections are not reported publicly. • No metal equivalent values have been used in developing geological models for the resource estimate.
Relationship between mineralisation widths and intercept lengths	• **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. • **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. • **PTO**: Pluto consists of multiple steeply plunging zones of breccia and veining that strike NE-SW and dip steeply (approximately 80º) to the SE. The mineralisation has an overall plunge to the SW at around 70º. 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. • **MAM**: Mineralisation is hosted within breccia associated with the Mammoth Fault (dipping 80-85° towards the north-west) and the Portal Fault (dipping 60-65° towards the west), however multiple ore orientations exist due to the interplay between major and minor structures and stratigraphy. Drilling has occurred at a vast number of orientations and inclinations dependent on the interpreted trend of the target mineralisation lode and the availability of underground drill collar locations. Where ore is most developed around the Mammoth Fault, drilling has typically been directed the south at 0 to -50° to achieve intersections at a high angle to the

CRITERIA	COMMENTARY
	ore zone. Drilling of the Mammoth Deeps area is limited by underground drill sites and as such drilling of some of the deeper intersection is slightly down plunge/dip and a lower angle. ● **ESP:** Mineralisation is typically sub-vertical with a north-east strike. This strike orientation is determined largely by the bounding Mammoth Extended and Foschi's Fault structures, which in this location dip steeply to the southeast and northwest respectively. Due to the subvertical nature of the orebody and north-east strike, drilling has been completed successfully in both a north-westerly and south-easterly direction.
Diagrams	● Diagrams for each deposit are shown under "further work" within this section.
Balanced reporting	● Mineral Resources are detailed in this report. Specific Exploration Results are not disclosed.
Other substantive exploration data	● Surface and underground geological mapping have 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. ● 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. ● 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. ● 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. ● The resource estimate uses cut-off grades that are guided by the mining and processing experience.
Further work	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 2021 infill diamond drilling program is expected to continue until the end of the year, with further infill drilling planned for 2022. 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:

CRITERIA	COMMENTARY
	 

CRITERIA **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	COMMENTARY
Database integrity	● Data entry spreadsheets are restricted so that only allowable values can be entered into a number of fields. ● Drill hole data entry is validated by at least one geologist (other than the person who entered the data) prior to being loaded. ● Validation at this stage is undertaken visually by the Geologist and is named and dated once complete. ● A number of checks were in place during import into the Geobank 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. ● Structural integrity of the database was checked during the export from Access and Import to Leapfrog Geo^{TM} and Micromine software with checks on: • Downhole survey anomalies • Overlapping intervals • Missing intervals • Duplicate intervals • Near duplicate positions • Blank, negative, zero and missing assay values • Wedge holes • Anomalous collar co-ordinates
Site visits	● **MAM, PTO and ESP Competent person** • Danny Kentwell, (SRK Consulting), has not visited site and has relied on Mr Mark Noppé, Mr Stuart Munro and Ben Jupp, all of SRK Consulting, for site specific information and validation. The MAM, PTO and ESP Resource estimates have not changed since 2019, with the exception of depletion. • 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. • 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. ● **ESS and GST Competent Person** • Mr Esteban Jimenez is the Senior Resource Geologist for Capricorn Copper, he has been an employee since September 2019 and visits site for eight days each month.
Geological interpretation	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, Leapfrog Geo^{TM} 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

CRITERIA	COMMENTARY
	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.
Dimensions	• **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. • **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. • **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. • **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. • **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.
Estimation and modelling techniques	• Estimates are by Co-kriging in two sets (typically Cu with Ag then Co, S, Fe and As together) utilising Isatis^{TM} software, for MAM, PTO and ESP. Ordinary kriging using Micromine^{TM} software was used for ESS and GST. • 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. • Previous estimates are available for comparison. No check estimates with alternate grade or density interpolators were run. For ESS and GST Mine to mill reconciliation were reported. • Cu and Ag are recoverable and payable. Co may be payable in the future. • Sulphur Iron and Arsenic are estimated where sufficient assay data is available and defaulted where it is not. • Block sizes vary between deposits. • Block models are estimated into parent cells with volumes calculated 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. • Correlations are accounted for by co-kriging for MAM, PTO and ESP. For ESS and GST no correlations are considered during interpolation. A sulphur regression based on Iron was used when Sulphur assays were reported over the upper limit of detection. • All Cu domains, except for GST, utilise hard boundaries at the 0.5% Cu threshold or Co 200 ppm threshold. GST considered a 0.25% Cu threshold. Variography and search parameters are typically oriented along the structural control orientations. • For MAM, PTO and ESP 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. For ESS and GST all grade variables were assessed for top capping for all domains. Grade interpolation used the top capped composites. • 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 in mind. Visual examination in 3D, plan, cross section and long section are also completed. Very high-grade areas are examined in detail to ensure block grades are not over or underestimated locally. In limited cases theoretical change of support checks on grade and tonnage curves are also performed.

CRITERIA	COMMENTARY
Moisture	• Dry density is used.
Cut-off parameters	• 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.
Mining factors or assumptions	• See above • All deposits were depleted for all open pit, stope and access development material mined to date. • For Mammoth only, a 7 m 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. • Esperanza South Mineral Resource tonnage reporting excludes broken stockwithin the current cave volume.
Metallurgical factors or assumptions	• 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. • Esperanza South, Mammoth and Greenstone modelling includes defined metallurgical domains derived from lithology and alteration logging and geochemical data.
Environmental factors or assumptions	• 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.
Bulk density	• Bulk density has been estimated from the sample data determined using: •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. •Prior to 2021 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). This second method was used only as a validation check against the primary “Specific Gravity” method. 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	• For MAM, PTO and ESP: • 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. • 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. • Esperanza sub-pit: measured 10m, indicated 20m, inferred 50m • Pluto: measured 15m, indicated 40m, inferred 80m

CRITERIA	COMMENTARY
	• Mammoth: measured 10-15m, indicated 30-40m, inferred 50-100m (Ranges are given due to the extensive nature and different controls within Mammoth. ● For both GST and ESS, classification are based on the indicator kriging of the copper grade, then using a bivariate matrix classification using the probability of the Cu domain (indicator estimate) and the kriging variance. This criteria considers both the quality of the copper grade estimation (kriging variance) and the Cu domain uncertainty (indicator estimate). ● 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	● The 2021 Resource models for GST and ESS have been peer reviewed by SRK and also reviewed by CC staff on site. The MAM, PTO and ESP models have also been subject to external overview and review by EMR appointed external experts in 2020 (Mr Scott Dunham).
Discussion of relative accuracy/ confidence	● Confidence 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. ● 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). ● The 2021 block models were reconciled against material fired in 2020. The global reconciliation showed that the reconciled tonnes were 2% higher than the estimates. The global reconciled grade was 6% higher than modelled, this is largely due to the mining of Inferred Mineral Resource at Mammoth. The reconciliations per mine are shown below: • ESS: Reconciled tonnes were 5% higher than modelled and the grade was 4% lower than modelled. • GST: Reconciled tonnes were 5% lower than modelled. The difference in tonnes is due to material left behind during a stope failure (5025 Level). The reconciled grade was 1% higher than modelled. • MAM: Reconciled tonnes were 1% higher than modelled. The reconciled grade was 36% higher than modelled. This is largely due to the mining of Inferred Mineral Resource, which was driven by the grade control model, where this higher grade Inferred zone was more accurately modelled. ● 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, the worse the global grade-tonnage accuracy is. The other factor is that larger block sizes have greater smoothing, but better 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. ● 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 samples is large. 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 unit (SMU) should be used, but for most resource models, drilling is too sparse to accurately estimate SMU sized blocks, hence larger block sizes and increased smoothing. Typically, secondary local grade control models are created for areas of denser drilling and sampling which can the utilise a smaller block size in comparison to the resource model for short term mine and grade control purposes. ● Resource models and grade control models both have their specific uses and resource model block accuracy may be inappropriate for the use of the resource model as a grade control model. Resource classification exists for a reason; it classifies how good the model is and it is why Inferred material should never play a significant part in any mine plan and areas of Inferred material require further drilling. ● So, while the Mineral Resource model classification begins on a block level, the classification volumes are consolidated up into larger volumes and therefore the model is expected to reconcile more effectively on a global basis, i.e. over longer timeframes, larger volumes and tonnages, than at a local, short-scale model level.

Appendix 4

Capricorn Copper Ore Reserves estimates – JORC Code Table 1 Disclosures

Section 4. Estimation and Reporting of Ore Reserves

Criteria	Comment
Mineral Resource estimate for conversion to Ore Reserves	• The Ore Reserve Estimate uses the 2021 Mineral Resource Estimate (MRE) updated by CC from the initial MRE prepared by SRK Consulting (Australasia) Pty Ltd in 2019. The 2021 MRE is as at 31 December 2021. • For the initial MRE, CC 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 December 2021. Esperanza and Pluto have not been mined and their MREs have not changed from the 2019 MREs. CC updated the Esperanza South and Greenstone MRE with additional sampling and geological information gathered during 2019, 2020 and 2021, as outlined below. • New Esperanza South estimate:- ○ In 2020 CC 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 29M, and it was peer-reviewed and signed off by SRK and audited by SD2. ○ In 2021, an updated Mineral Resource estimation was performed internally by 29M, which considered additional grade control and drilling data collected up to 19th May 2021. The model was peer-reviewed by SRK. • New Greenstone estimate: ○ The Greenstone mineralisation is difficult to model as it is made up of multiple trends. In 2020 CC completed significant work to better define these mineralisation trends and this work is included in the 2020 resource. CC has determined that the new resource comes within 6% of the reconciled grade. ○ In 2021, an updated Mineral Resource estimation was performed internally by 29M, which considered additional grade control and drilling data collected up to 4th May. The model was peer-reviewed by SRK. • 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) • For Mammoth, Pluto and Esperanza 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. • Ordinary kriging was used for ESS and GST. • 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. • 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 and a 1.7% Cu threshold. Variography and search parameters are typically oriented along the structural control orientations. • 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. • 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: ○ Esperanza sub-pit: measured 10m, indicated 20m, inferred 50m ○ Pluto: measured 15m, indicated 40m, inferred 80m

Criteria	Comment
	○ Mammoth: measured 10-15m, indicated 30-40m, inferred 50-100m. • For Greenstone and Esperanza South the resource classification considers quality of copper grade estimation and copper domain uncertainty and is determined by indicator kriging. • 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. • 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. • The MRE does not include stockpiled ore.
Site visits	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: • Underground areas ○ Esperanza South ○ Mammoth Remnants ○ Mammoth Deeps – G Lens ○ Greenstone ○ Decline turnoff to Pluto and Esperanza • Open cut and waste rock dump areas • Ore stockpiles • Core yard • Surface infrastructure
Study status	• The Project is an operating mine with a lengthy operational history. It was placed under care and maintenance by a previous owner in 2013 and was re-started in early 2017 as a joint venture between EMR Capital and Lighthouse Minerals. EMR, the ultimate parent of Lighthouse Minerals, spun off CCM along with other metal assets for the float of CC in mid-2021. • The overall technical feasibility of the current project is supported by the Capricorn Copper Definitive Feasibility Study, 1 Dec 2016. • Ore reserves have previously been reported for CC including historical estimates under previous ownership. Under recent ownership by EMR and CC ore reserves were last reported in early 2021, as at 1 *December 2020. The current Ore Reserves Statement is based on* ○ depletion since 1 December 2020 ○ revised MREs for Esperanza South and Greenstone, and ○ revisions to the mine plan due to • the above factors, • changes to economic and processing parameters resulting in new cut-off grades and • revised dilution skin allowances for open stopes • *The mine plan is broadly underpinned by the Mining chapter of the December 2016 Feasibility Study report as well as the Nov 2016 Feasibility Study by Mining Plus, MP-4173-FSDR-Capricorn Copper-r3 161116.pdf, covering development of and production from the following deposits: -* ○ Esperanza South ○ Mammoth Deeps[3] ○ Esperanza

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[3] Stopes in the Mammoth Remnants area were referred to as part of Mammoth Deeps in the 2016 Feasibility Study

Criteria	Comment
	○ Pluto ○ Greenstone • Additional studies have been completed and expert advice provided 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. • Esperanza South is currently the main production source. Mammoth Deeps, Mammoth Remnants and Greenstone are also in production. Pluto is scheduled to come into production in 2026 followed by Esperanza in 2027.
Cut-off parameters	Ore is selected by applying a different copper cutoff grade for each mining area as summarised in the table below. The final cut-off grade calculations are contained in the spreadsheet 202106_CoG Update v1.xlsx dated 27 August 2021. They take into account the following factors: • Average of life of mine metallurgical recoveries from 1 January 2021, forecast in April 2021 financial model based on the estimated recovery relationship at that time. • Budgeted operating costs from 1 January 2022 to the end of mine life for ○ Mining ○ Processing and maintenance ○ Site services, HSEC, Corporate and Marketing • 2022 budget costs for concentrate road and sea transport • Concentrate treatment and refining costs updated by CC • Queensland government royalty • US$3.30/lb copper price • 0.73 AUD/USD exchange rate These are simplified cut-offs that ignore contribution of silver and the impact of arsenic[4]. For each deposit the cut-off grades also assume a fixed recovery, and they do not consider variable haulage cost with depth[5]. The "Resource (undiluted)" cut-off grade was applied for stope optimisation, to maximise the value of each stope. CC applied the "Head Grade (diluted)" cut-off grade for each stope shape generated, as well as for the Esperanza South sublevel cave design and scheduling.

	Cut-off grade, %Cu	
	Resource (undiluted)	Head Grade (diluted)
Esperanza South Total	N/A	1.19
Esperanza South Shutoff	N/A	0.98
Esperanza South Development	0.58	0.56
Greenstone	1.05	1.00
Greenstone Development	0.50	0.48
Mammoth (Remnants and	1.49	1.41
Mammoth Development	0.51	0.49
Pluto	1.65	1.50
Pluto Development	0.58	0.55

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[4] Estimated life of mine revenue from silver represents only 4% of the total revenue. The estimated arsenic penalty charge over the life of mine represents only 4.5% of total sales/treatment charges and is of the order of 0.3% of total revenue. The combined effect of silver and arsenic is such that the copper cut-off grade will result in a slightly conservative ore selection.

[5] The cut-off grade calculation incorporates mining costs specific to each deposit, including haul costs. However, within each deposit, the mining costs are not varied with depth to account for haul distance and times.

Criteria **Comment**

Esperanza	1.65	1.50
Esperanza Development	0.57	0.55

Mining factors or assumptions

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	Longitudinal Sub-level Caving (SLC) with minor Transverse SLC
Greenstone	Long Hole Open Stoping with waste rockfill
Mammoth (Remnants and Deeps)	Long Hole Open Stoping with paste fill
Pluto	
Esperanza	

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 Pty Ltd prepared the original 2016 ESS plan and 2018 update using its PGCA cave flow modelling software. The ESS SLC plan is now updated by CC Lead Mine Planning & Scheduling Engineer Alonso Gonzales. The latest update uses the June 2021 ESS resource block model. The current SLC mine plan is supported by Section 5.1 of the CC 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
- CC 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 x 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 1.19%Cu cut-off 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 0.98%Cu shutoff grade was applied.

It is important to note the following points in relation to the estimated SLC tonnes and grade:-

- 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.
- The estimated SLC production tonnes are 21% lower than the insitu tonnes within the extraction shape. After derating the grade of the Inferred component and applying the 2.18% reconciliation adjustment, the estimated SLC production grade is only 2% lower than the average grade within the production ring shapes. AMDAD considers the

Criteria	Comment

production estimate to be atypical of common SLC tonnes-vs-grade-vs-draw relationships. The SLC production modelled using the PGCA program effectively applies a considerable degree of selectivity by application of the 0.98% shutoff grade. This will result in a significant tonnage of blasted material below this shutoff grade being left within the cave. The SLC estimate also suggests a higher than typical draw before dilution entry. In practice, disciplined SLC monitoring, grade control and draw control will be essential in order to achieve the SLC Ore Reserve.

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)*:-

  - Pluto – 2021-017 Pluto Stope sizes and ELOS Guidelines for MSO Runs-2021.pdf
  - Mammoth - 2021-020 Mammoth Geotechnical Parameters for MSO- 2021.pdf
  - Greenstone - 2021-019 Greenstone Geotechnical Parameters for MSO- 2021.pdf
  - Esperanza** – 2021-018 Esperanza LHOS sizes and ELOS Guidelines for MSO Runs-2021.pdf
  - General - CCPL-MINE-SUM-0014 Geotechnical_Information_Summary_Update.pdf

The main set of stope designs was updated by consultant Mining Plus using Datamine Studio Mineable Shape Optimiser (MSO) software, supervised by CC mine planning personnel. MSO was applied to the 2019 resource block models for Mammoth, Esperanza and Pluto, and the May 2021 resource model for Greenstone, to generate optimised stope shapes consistent with the nominated design parameters[‡]. The stopes were adjusted for depletion to 31 December 2021.

Stopes target Measured and Indicated Resources but may include Inferred Resources as internal dilution within the stope shapes. Individual stopes that included more than 30% of Inferred Resources were excluded from the Reserves. Although some stopes may include up to 30% 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.

* The CC geotechnical memoranda explain that stope footwalls are generally stable and CC considers that they do not warrant application of a dilution skin/overbreak allowance in MSO. The geotechnical memoranda provide estimates of expected hangingwall ELOS for each deposit. Accordingly, a hangingwall dilution skin of 0.5m was applied in MSO for Greenstone, Mammoth Deeps and Mammoth Remnants, and a 1.0m skin was applied for Esperanza and Pluto.

** 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 Life of Mine design process, Mining Plus prepared different stope sets using alternative settings. For the Ore Reserves estimate and life of mine schedule Mining Plus applied the cut-off grades and dilution skins outlined above and used the “four point” mode to generate stope shapes. CC reviewed the MSO stope shapes and adjusted those shapes as appropriate:-

- Trimming the bases of MSO shapes to match the floors of the existing or designed development headings,
- Removing Esperanza MSO shapes lying within the 50m pillar below the Esperanza Open Cut,
- CC prepared manual designs for many of the Greenstone and Mammoth Remnant stopes, and
- CC’s final designs, rather than MSO shapes, were included for Greenstone and Mammoth stopes that are in or close to production.

Please also note the following regarding stope design:-

- The limiting stable spans that are defined for stope walls and crowns in the geotechnical memoranda are based on single-lift stopes. However, considering the current available data including RQD and structure models, CC’s geotechnical personnel consider that double lift stopes are also feasible. CC advises that if the double lift stopes start to perform poorly, it can change the strike length of the stope to reduce the HR for each wall of the next stope in sequence.
- In the Mammoth Remnants area there will be two broad environments for the LHOS method; stoping adjacent to historical SLC zones and stoping adjacent to historical open stopes that will be filled with cemented paste fill:-
  - The historical SLC zones, nominally above 4680mRL, generally comprise unconsolidated broken rock along with air voids. For stability of stopes adjacent to these zones, a 7m wide pillar will be left between the stope and the SLC extraction boundary.
  - CC has confirmed that the historical open stopes at Mammoth Remnants area can be accessed and will be filled with cemented paste fill. This will allow full extraction of new stopes right up to the walls of the old stopes.
- In March 2021 ground movement was reported on 4630mRL in the Mammoth Remnants area. AMDAD understands that there was a pillar failure and subsequent flow of waste rock from a filled stope into the void of an unfilled stope. CC undertook an investigation of this incident assisted by specialist geotechnical consultant Cartledge Mining and

Criteria	Comment

Geotechnics (CMG). CMG concluded that stress and deformation conditions appear to be within normal levels, typical of similar mining environments in the region. However, CMG made recommendations in relation to the mining sequence as well as monitoring of ground conditions and deformation. CC has confirmed that the mine plan on which the Ore Reserves is based is consistent with CMG's advice.

- A small number of stopes are included in the Ore Reserves with head grades slightly below the nominated cut-off grade. These stopes have been included where the stope development has already been completed, effectively removing the development cost from the cut-off grade calculation and reducing the cut-off.

Ground Control Management Plan

CC 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.

Hydrogeological aspects have been addressed by various studies including 2011 by Dempers and Seymour cited in the 2016 FS and DFS reports, and in the CC 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:

- Previous open cut workings - Mammoth open cut, combined with the No1 Orebody underground workings, both now filled with waste and partly leached ore, and Esperanza open cut, currently partially filled with water and tailings; some sections of the walls have failed
- Existing major unfilled/partially filled underground voids with potential to cave through to surface or potential for uncontrolled pillar failure
    - For Mammoth Remnants, with a considerable proportion of ore reserves in proximity to old workings, CC 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.
- Potential for mining induced fault movement/seismicity
- Water ingress
    - Inflow of surface water to Mammoth pit and No1 Orebody groundwater, draining to Mammoth Decline
    - Inflows of surface run-off from potential subsidence zones associated with B Stope and 2 Lens SLC
    - Inflows from Esperanza Fault zone to Esperanza South SLC workings
    - Flows from Esperanza Pit along major fault structures to adjacent workings
    - Inflow of surface rainfall and run-off to Esperanza South SLC crater and subsidence zone
    - Inflows of surface runoff and groundwater via HS1 Shaft

CC has developed Hazard Management Plans and Trigger Action Response Plans (TARP) to manage these hazards to acceptable levels of risk.

Production reconciliation

Production since the 2017 restart has been from Esperanza South, Mammoth and Greenstone.

The 2021 resource models were reconciled against material fired in 2020. The global reconciliation indicated that the reconciled actual tonnes were 2% higher than the resource model estimates, and the reconciled actual grade was 6% higher than modelled. The higher reconciled actual grade is largely due to mining Inferred Mineral Resource at Mammoth. The reconciliations are summarised per deposit below:

- Esperanza reconciled actual tonnes were 5% higher than modelled and the grade was 4% lower than modelled.
- Greenstone reconciled actual tonnes were 5% lower than modelled. The difference in tonnes is due to material left behind as a result of a stope failure (5025 Level). The reconciled actual grade was 1% higher than modelled.
- Mammoth reconciled actual tonnes were 1% higher than modelled. The reconciled actual grade was 36% higher than modelled. This is largely due to mining of Inferred Mineral Resource, which was driven by the grade control model, where this higher grade Inferred zone was more accurately modelled.

A 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

Criteria **Comment**

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 grade control models and the resource models 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 2021 year-to-date from January to August this reconciliation has determined an average grade factor of 0.977 for Mammoth and Greenstone long hole open stoping, as summarised in the table below. CC has applied this factor to the grades reported for the MSO stope shapes. This is in addition to the dilution skins incorporated in the MSO shapes.

CC has also applied a recovery factor of 0.90 to the tonnes reported for the MSO stope shapes. This factor is not based specifically on the stope reconciliations, but is considered reasonable for the proposed long hole stoping method.

For Esperanza South SLC the production grade recorded by the mine is generated by the PGCA cave flow program. Since the resource model was updated with grade control data in May 2021 the reconciliation data indicate that the modelled grade is 2.2% higher than the actual grade measured by the processing plant. Accordingly CC has applied a grade factor of 0.978 to the production grade generated by PGCA.

Factor	Value Used	Description
Stope Tonnes factor	0.900	Applied to stopes only
LHOS grade factor	0.977	Based on Mine Reconciliation August 2021.xlsx spreadsheet
ESS SLC grade factor	0.978	

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 production component of the estimated Ore Reserve is 76% of the insitu tonnes and 97% of the grade. AMDAD considers this difference 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 and delay of dilution entry where possible - for instance by firing only two rings at a time. The ESS reserve will not be achieved with a focus on tonnes.

Mine Infrastructure, Other

- 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.
- Required mine infrastructure already exists including a pastefill plant and reticulation system, primary ventilation fans, dewatering system, electrical infrastructure and contractor fleet maintenance facilities.
- 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 recommended a change to the fill system downstream from the borehole. This involved 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 has been installed and should reduce the borehole liner wear. The paste system was recommissioned in mid-2021 and CC has confirmed that it is running effectively.
- A ventilation review by Ozvent in October 2020 made recommendations regarding additional ventilation and cooling infrastructure. It then completed an Addendum to its report following review by CC. CC has committed to implementing the recommendations.

Metallurgical factors or assumptions

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 CC ore types.

Prior to the 2017 restart of operations the CC 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.

Criteria	Comment
	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 cut-off grade for a particular deposit in the mine plan was calculated from the average of the recoveries estimated 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 cut-off grades were determined. The recovery model has since been refined to the model in the current financial model. The LOM processing recoveries are at a high level of confidence, commensurate with Proved Ore Reserves for ESS, MAMR, GST and Probable Ore Reserves for the other deposits.
Environmental	CC 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. CC has confirmed that there are no environmental issues or factors that will impact on the ability of the mine to produce the estimated reserves.
Infrastructure	CC is an existing operation with all necessary major infrastructure in place and operational, including the following: - • road access by sealed Barkly Highway then 85km of unsealed road • processing plant (consisting of a crushing, milling and conventional sulphide flotation circuit) • portal and underground development at the Mammoth deposit and the Esperanza South deposit • paste backfill plant • tailings storage facility • mine ventilation, electrical and dewatering systems • workshops and stores • concentrate storage shed • fuel farm and wash down bay • administration and other offices • power provided by a 220kV high voltage power line with power supplied from the grid • water licences and supply from Lake Waggaboonya and water treatment plant, • accommodation camp, located 5km from the mining operation, • sewerage, water and electricity utilities as well as information and communication systems at the mine and in the camp • sealed, all-weather airstrip, located 8km south of Capricorn Copper Mine. CC has confirmed that the existing Surface infrastructure in mining and processing is adequate to service the production levels scheduled in the LOM plan. The production levels scheduled in the LOM plan have been demonstrated in past performance through the existing infrastructure over congruent years. Additional tailings capacity, not yet existing, will need to be constructed over the course of the LOM plan, at strategic times, when additional capacity is required. Concept designs have been completed and costs are included in the LOM plan and financial analysis. To the extent relevant to criteria in the JORC code Table 1 report template in-line with the JORC code explanation for estimation and reporting of Ore Reserves I can confirm that there no other material issues that impact the project and/or the estimation and classification of the Ore Reserves.
Costs	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. Significant capital cost items include: - • Capitalised underground mine development • Ventilation upgrade: - All lateral development for the ventilation upgrade 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.

Criteria	Comment
	- Ladderway extensions and replacement and extension of the fill reticulation system - Processing plant expenditure for sodium hydrosulphide reagent facilities and gravity circuit - Expansion of tailings storage facility capacity over the life of mine. - Rehabilitation costs Mine operating costs are based on: - - unit costs for the current mining contract schedule of rates applied to scheduled mining quantities as well as fixed monthly contract charges, and - paste fill costs based on contract rates and cement supply cost. Other site operating costs are based on current budget levels for personnel, consumables 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. Copper treatment and refining charges have been forecast by CC. Allowances are included for payable percent and arsenic penalty based on current terms. The realisation costs assume a near term concentrate grade of 26% copper to mid 2026, then 21.5% over the remainder of the life of mine. The AUD/USD exchange rate is based on forecasts by CC of 0.76 in 2022, 0.75 in 2023, 0.74 in 2024, then 0.73 for the remaining life of mine. Transport charges are from analysis by CC. The allowances for copper and silver royalty payments to the Queensland government are based on current royalty rates.
Revenue factors	CC assumes the following metal prices for its financial modelling:- - Copper price of US$3.90/lb for 2022, US$3.70/lb for 2023, US$3.50/lb for 2024, then US$3.30/lb for 2025 onwards. - Silver price of US$24.00/oz for 2022, US$23.00/oz for 2023, US$22.00/oz for 2024, then US$21.00/oz for 2025 onwards. Assumptions for the exchange rate and realisation costs are outlined in the preceding section.
Market assessment	CC has confirmed 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. - The varying arsenic levels in future years do not pose any issue with regard to selling the concentrates. Only China bans the import of concentrates above 0.5% arsenic, leaving many alternatives for CC to deliver its concentrates into smelters in countries such as Japan, South Korea, Philippines, India, European smelters or to traders with blending facilities. On top of that CC has its existing option of delivering to the Mount Isa smelter. - The concentrate market has a standard arsenic penalty structure to impose on concentrates with arsenic contained in them.
Economic	CC 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. For internal purposes, in the financial model CC uses 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, 2022 Reserves Base Case v2.xlsm, gives a positive $PV_{8\%}$ of A$27.2 million for Cash Flow Available for Debt Service, demonstrating the economic viability of the Ore Reserves. Sensitivity analysis was run for this financial model, with the grade of the diluting Inferred Resources set to zero. This still gave positive $PV_{8\%}$ of A$0.7 million for Cash Flow Available for Debt Service. CC is assuming that all of its concentrate is sold domestically.
Social	CC confirms 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	CC has confirmed that there are no other material issues that impact the project and/or the estimation and classification of the Ore Reserves.
Classification	The Proved Ore Reserve is a sub-set of Measured Mineral Resource. 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

Criteria	Comment
	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 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 14% 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	In April 2021 Behre Dolbear Australia (BDA) conducted an Independent Technical Review of the Capricorn Copper Project in conjunction with the CC Initial Public Offering process. As part of this work, BDA reviewed the Ore Reserve estimate at that time, prepared by AMDAD in April 2021. BDA considered the Reserve parameters and modifying factors applied to the resource models to be appropriate for the cave and stope designs. Please note that BDA's report was prepared and provided to assist potential financiers or investors in assessment of technical issues and risks of the project and is not to be relied on for any other purpose. BDA's review does not constitute a technical audit.
Discussion of relative accuracy/ confidence	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.

Appendix 5

Redhill Mineral Resources estimates – JORC Code Table 1 Disclosures

Section 1 Sampling Techniques and Data (Cristina, Cutters and Gorda)

CRITERIA	COMMENTARY
Sampling Techniques	• The Cutters Cove Project has been sampled through 2 recent short diamond drilling campaigns and surface cut channel sampling campaigns in 2013 to 2014. • Total of 17 diamond drill holes for 2,339.45m • Approximately 0.5 - 1m samples of 2-3kg were taken from diamond saw cut drill core whilst respecting geological boundaries • Approximately 2-3kg samples derived from diamond saw cut core trench samples perpendicular to vein strikes and respecting geological boundaries. • 181 Backs channel samples taken during 1970's mining operations. Width and grade recorded on Historic Plans. • Historic backs samples consist of 15cm by 2-3cm deep chipped channel samples traversing the vein suggesting sample weights of approximately 10-12kg.
Drilling Techniques	• 17 diamond HQ, NQ diamond core for 2,339.45m. • Core not oriented.
Sample recovery	• Core reconstituted, marked up and measured in all drilling campaigns. • Generally excellent (95-100%) • No relationship between recovery and grade was observed. Recoveries are not considered to have a material impact on resource estimation.
Logging	• Core geologically logged by experienced geologists over 2 campaigns. • Standard lithology codes used for interpretation. • RQD and recoveries included with lithological logs. • Logs loaded into excel spreadsheets and uploaded into access database. • Logging of the simple geology and vein mineralisation is not considered to have a material impact on resource estimation.
Sub-Sample techniques and sample preparation	• No record of historic (Pre 2010) sample preparation • Half diamond core split by diamond saw on 0.5 – 1.0m samples while respecting geological contacts. • Bagged and ticketed core delivered to ACME Laboratories in Santiago • Whole core crushed to 80% passing 2mm. • Crushed sample quartered to 500g and pulverized to pass 75 micron • Sub sampling is considered to be to industry standard for the recent drilling campaign. .
Quality of assay data and laboratory tests	• No record of laboratory tests for historic (Pre 2020) backs samples. • No record of QAQC procedures were available for historic sampling. • Recent samples Cu, Pb, Zn and Ag analysed by AAS after aqua regia digestion at ACME laboratories Santiago which is considered appropriate for base metal sulphide mineralisation.. • Au analysed by fire assay with AAS finish by ACME laboratories Santiago which is considered appropriate for gold mineralisation. • Some samples analysed by 32 element analysis by ICP_ES after Aqua Regia digestion. • QAQC of laboratories checked with Certified Reference Material inserted every 20th sample.
Verification of sampling and assaying	• No independent laboratory analyses completed. • Some verification of historic samples was completed with twinned recent channel samples.

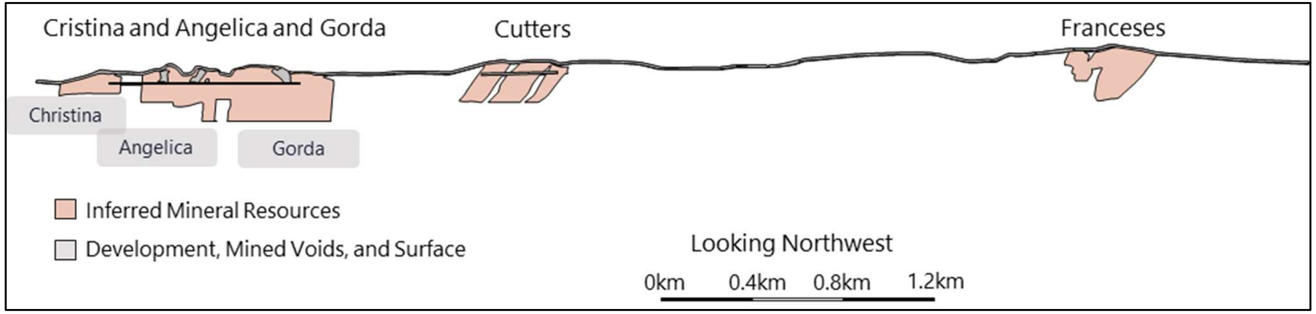
CRITERIA	COMMENTARY
	• No twinned holes were completed • CRM inserted every 20th sample returned results within acceptable limits.. • Primary assay data was received electronically and stored by consultant geologist. • All electronic data uploaded to access database. • Historic data loaded onto spreadsheets and uploaded to Access database. • Data validation with Surpac software, basic statistical analysis and comparison with historic plans and sections. • Negative results for below detection limit assay data have been entered as detection limit. • Verification of sampling and assaying is not considered to be adequate for historic samples introducing uncertainty into resource estimation. Historic production and twinning of some samples support the inclusion of these samples in modelling and estimation. The relative uncertainty is taken into consideration in resource classification.
Location of data points	• All hole collar surveys by licensed surveyor. • All coordinates in WGS94 • RL's as MSL • Down hole surveys by downhole camera • Underground samples located from registered plans and sections (accuracy to +/-2m) • Topographic dtm created from lands department 10m contour maps adjusted for known survey points (e. g. drill collars).
Data Spacing and distribution	• Sample spacing approximately 5 x 10m around mine openings. • Drill spacing approximately 100 x 100m or worse below mine development. • Sample spacing is clustered around mine levels. • Drill spacing is considered to be appropriate for the estimation of Indicated to Inferred Mineral resources and is reflected in Resource classification. • Samples have been composited on vein intercepts for the resource estimation.
Orientation of data in relation to geological structure	• The majority of DDH have been drilled east-west sub-perpendicular to vein strike. • Channel samples have been taken sub-perpendicular to the vein strike • Drill hole orientation is not considered to have introduced any material sampling bias.
Sample Security	• Samples ticketed and bagged on site. • Bagged and sealed samples delivered by courier to ACME laboratories in Santiago. • All historic data captured and stored in customised access database • Data integrity validated with Surpac Software for EOH depth and sample overlaps. • Manual check by reviewing cross sections with the historic drafted sections and plans. • Basic statistical analysis supports data validation
Audits or Reviews	• No audits or reviews of sampling data and techniques completed.

Section 1 Sampling Techniques and Data (Franceses and Angelica)

CRITERIA	COMMENTARY
Sampling Techniques	• 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. • 9 diamond drill holes for 1,781.75m • 34 diamond saw cut channel samples of 5-10kg • Approximately 0.5 - 1m diamond core samples of 2-3kg were taken from diamond saw cut drill core whilst respecting geological boundaries. • 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.
Drilling Techniques	• 9 HQ, NQ diamond core for 1,781.75m. • Core not oriented.
Sample recovery	• Core reconstituted, marked up and measured for recovery in all drilling campaigns • Generally excellent (95-100%) • No relationship between recovery and grade was observed. • Sample recovery is not considered to have a material effect on resource estimation.
Logging	• Core geologically logged on site by experienced geologists. • Standard lithology codes used for interpretation. • RQD and recoveries logged with lithology • Logs loaded into excel spreadsheets and uploaded into access database. • Logging of the simple geology and vein mineralisation is not considered to have a material impact on Resource modelling.
Sub-Sample techniques and sample preparation	• Half core split by diamond saw on 0.5 – 1.0m samples while respecting geological contacts. • Sub samples generally 2-3kg for drill core, 8-10 kg for diamond saw cut channel samples • Bagged core delivered to ALS Laboratories in Coquimbo • Whole core crushed to 70% passing 2mm • Crushed sample riffle split to 1kg and pulverized to 85% passing 75 microns.
Quality of assay data and laboratory tests	• 33 elements including Cu and Ag analysed by ICP-AES after aqua regia digestion at ALS laboratories Coquimbo which is considered appropriate for this style of mineralisation. • Au by 30g fire assay with AAS finish by ALS laboratories Coquimbo which is considered appropriate for this style of mineralisation. • QAQC analysis with Certified Reference Material inserted every 20th sample. • Acceptable levels of accuracy and precision established with the exception of two unexplained anomalies in early trench samples RH-70C and RH-76.
Verification of sampling and assaying	• No verification of results by independent sources completed. • No twinned holes or cut channels were completed • Primary assay data received electronically and stored by consultant geologist. • All electronic data uploaded to access database • Data validation with Surpac software, basic statistical analysis. • Negative results for below detection limit assay data has been entered as detection limit.
Location of data points	• All hole collar surveys by licensed surveyor.

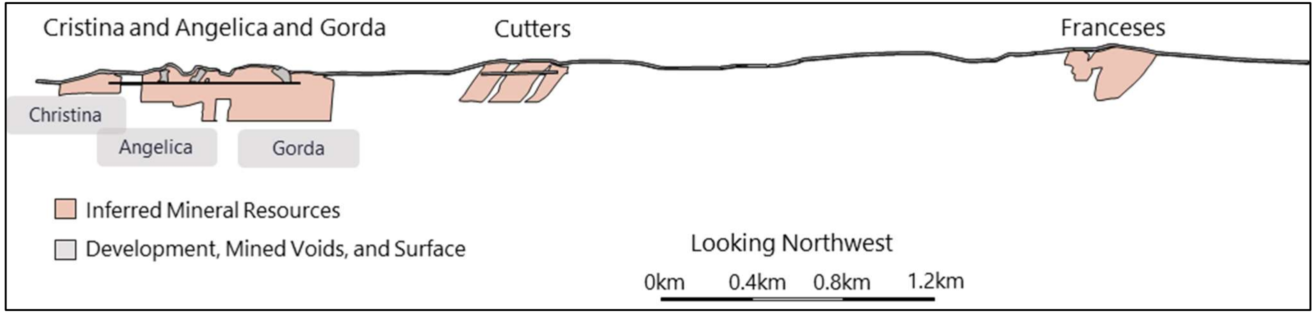
CRITERIA	COMMENTARY
	• All coordinates in WGS94 • RL's as MSL • Down hole surveys by downhole camera • Topographic dtm created by licensed surveyor and adjusted for known survey points (e.g. drill collars)
Data Spacing and distribution	• Data spacing limited by low drill hole intercept numbers generally 100m x 100m or worse. • Surface samples clustered on topographic surface • Drill spacing is considered to be appropriate for the estimation of Inferred Mineral resources only. • Samples have been composited on 1m lengths for the resource estimation.
Orientation of data in relation to geological structure	• The majority of DDH have been drilled east-west sub-perpendicular to vein strike. • Channel samples have been taken sub-perpendicular to the vein strike • Drill hole and channel sample orientation is not considered to have introduced any material sampling bias.
Sample Security	• Samples ticketed and bagged on site. • Delivered by RHM personnel, then courier to ALS laboratories in Coquimbo. • Data integrity validated with Surpac Software for EOH depth and sample overlaps. • Basic statistical analysis supports data validation
Audits or Reviews	• No audits or reviews of sampling data and techniques completed.

Section 2 Reporting of Exploration Results (Cristina, Cutters and Gorda)

CRITERIA	COMMENTARY
Mineral tenement and land tenure status	- RHM hold 65 exploration concessions in the Magellanes district of Chile.
Exploration done by other parties	- Cutters Cove is a historic mining centre that operated from the early 1900's to the 1970's. - The majority of the mining occurred on the site in the early 1970's until closure in 1975. - operations consisted of a 50tpa crushing plant supplying two 8tph ball mills and a 400tpd flotation plant. - 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. - No previous modern exploration in the district apart from reconnaissance work.
Geology	- Geology dominated by 2 allochthonous thrust slices striking NNW and dipping approximately 45º SSW. - Older Paleozoic sediments thrust over Jurassic rhyolitic volcaniclastics. - Mineralisation consists of late stage mesothermal and epithermal quartz-base metal-precious metal veins with associated sheeted veining and disseminated base metal sulphides.
Drill Hole Information	- Not applicable. This announcement refers to the Resource Estimation is not a report on Exploration Results.
Data aggregation methods	- Diamond drill intercepts were cut on 1m basis while respecting geological contacts with minimum sample widths of 0.5m. - Mineralized domains are delineated from geological logs and assay data with generally hard boundaries. - Mineralised zones were reported as length weighted intercepts. - No metal equivalents were used.
Relationship between mineralisation widths and intercept lengths	- Most drill holes have been drilled to intercept the deposit at high angles to best represent true widths of the mineralisation. - Channel samples were taken perpendicular to the strike of the deposit.
Diagrams	 **Redhill Mineral Resources outlines at May 16 2021. No material changes to the Mineral Resources estimates have occurred since 16 May 2021**
Balanced reporting	- Not applicable. This report is a Mineral Resource Estimation and does not contain any exploration Results.

Other substantive exploration data	• No bulk samples or diamond drill core have been selected for metallurgical test work. • Historic mining operation utilised standard sulphide flotation after crushing and grinding to produce copper and precious metal concentrates.
Further work	• Further resource extension and infill drilling is required to improve resource model and classification. • Further local regional exploration is required to increase the resource base.

Section 2 Reporting of Exploration Results (Franceses and Angelica)

CRITERIA	COMMENTARY
Mineral tenement and land tenure status	• RHM hold 65 exploration concessions in the Magellanes district of Chile.
Exploration done by other parties	• Cutters Cove is a historic mining centre that operated from the early 1900's to the 1970's. • The majority of the mining occurred on the site in the early 1970's until closure in 1975. • operations consisted of a 50tpa crushing plant supplying two 8tph ball mills and a 400tpd flotation plant. • 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. • No previous modern exploration in the district apart from reconnaissance work.
Geology	• Geology dominated by 2 allochthonous thrust slices striking NNW and dipping approximately 45º SSW. • Older Paleozoic sediments thrust over Jurassic rhyolitic volcaniclastics. • Mineralisation consists of late stage mesothermal and epithermal quartz-base metal-precious metal veins with associated sheeted veining and disseminated base metal sulphides.
Drill Hole Information	• Not applicable. This announcement refers to the Resource Estimation is not a report on Exploration Results.
Data aggregation methods	• Diamond drill intercepts were cut on 1m basis while respecting geological contacts. • Mineralized domains are delineated from geological logs and assay data with generally hard boundaries. • Mineralised zones were reported as length weighted intercepts. • No metal equivalents were used.
Relationship between mineralisation widths and intercept lengths	• Most drill holes have been drilled to intercept the deposit at high angles to best represent true widths of the mineralisation. • Channel samples were taken perpendicular to the strike of the deposit. .
Diagrams	 **Redhill Mineral Resources outlines at 16 May 2016. No material changes to the Mineral Resources estimates have occurred since 16 May 2016**
Balanced reporting	• Not applicable. This report is a Mineral Resource Estimation and does not contain any exploration Results.

Other substantive exploration data	• No bulk samples or diamond drill core have been selected for metallurgical test work. • Historic operation utilised standard sulphide flotation.
Further work	• Further resource extension and infill drilling is required to improve resource model and classification. • Further local regional exploration is required to increase the resource base.

Section 3 Estimation and Reporting of Mineral Resources (Cristina, Cutters and Gorda)

CRITERIA	COMMENTARY
Database Integrity	• All data captured and stored in customised Access database by Redhill. • Drop down menu validation in Access. • Digital data uploaded from laboratory reports to Access database. • Data integrity validated with Surpac Software for EOH depth and sample overlaps and transcription errors. • Data validated against historic plans and sections. • Numerous errors in data location, particularly underground plans and samples fixed in data base. • Negatives in database converted to half the detection limit. • The reliance on historic data and poorly located plans has introduced some uncertainty into the estimation and is reflected in the Resource Classification.
Site Visits	• 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.
Geological Interpretation	• 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. • Historic backs maps and channel samples used for geological domaining. • No alternative geological interpretations were attempted. • Geology model used for mineralised domain modelling. • Brittle faulting and low grade quartz zones effect grade and location of mineralisation.
Dimensions	• Cristina Vein 1.3km by 200m with a NNW strike and steep west dip (80o). Vein width average 2.5m. • Cutter Vein 400m strike by 200m depth with a NNW and 45o west dip. Vein width averages 1.8m. • Gorda Vein 500m NW strike, 80m depth with 5m avg width.
Estimation and Modelling techniques	• Block modelled estimation completed with Surpac^{TM} software licensed to Tim Callaghan. • Wire-framed solid models created from level plans, backs maps and vein width composited sample data • Solid models snapped to drill holes • No Minimum mining width • Internal dilution not restricted • Data composited on vein widths including Cu, Au, and Ag • 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 • Excellent correlation between Cu and Au grades • 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. • 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 1.25m in the x and z directions. • 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 • Search ellipse set at 200m spherical range to ensure all blocks populated with no anisotropy • Inverse distance squared estimated model constrained by geology solid model • Block grades validated visually against input data

CRITERIA	COMMENTARY
	• Good correlation with previous polygonal estimations • Acceptable correlation of depleted model with historic production
Moisture	• The estimate is based on a dry tonnage basis
Cut-off Parameters	• No cut-off parameters applied for this estimation. Results are reported on the whole vein.
Mining Assumptions	• Underground mining will involve conventional decline accessed 2-300ktpa operation. • Underground long hole stoping, Avoca method, cut and fill or shrink stopes
Metallurgical assumptions	• A standard crushing grinding circuit followed by sulphide floatation is likely given historic processing records. • Historic production suggests an 11 to 1 upgrade to produce a 25% Cu concentrate. • Historic recoveries not cited but typical sulphide float of 80% assumed.
Environmental assumptions	• 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.
Bulk Density	• 49 Bulk density determinations by ACME laboratories in Phase 1 program by unspecified methods. • 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. • Determinations made of un-weathered core with no appreciable voids or porosity. • 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
Classification	• 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. • 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. • The resource estimate appropriately reflects the views of the Competent Person
Audits or Reviews	• No audits or reviews have been completed for this estimation
Discussion of relative accuracy/confidence	• The geological model and data quality within 30-60m of the sill drives is well understood and modelled. 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. • There is reasonable confidence in the global tonnage estimation as the geology is reasonable well constrained and simple. • 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.

Section 3 Estimation and Reporting of Mineral Resources (Franceses and Angelica)

CRITERIA	COMMENTARY
Database Integrity	• All data captured and stored in customised Access database by Redhill. • Drop down menu validation in Access. • Digital data uploaded from laboratory reports to Access database. • Data integrity validated with Surpac Software for EOH depth and sample overlaps and transcription errors. • Data validated against historic plans and sections. • Numerous errors in data location, particularly underground plans and samples fixed in data base. • Negatives in database converted to half the detection limit.
Site Visits	• 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.
Geological Interpretation	• High confidence in the geological model. Simple geology and mineralisation style • No alternative geological interpretations were attempted. • Geology model used for mineralised domain modelling. • Mineralised trends defined from drilling, trenching and field mapping. • Similar trends and style to known mineralisation
Dimensions	• 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. • Franceses sheeted consist of eleven separate veins striking north-south and dip west at 50-60o. Most veins defined by single intercepts. • 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 330o for 250m and dips southwest at -60o to a depth of 150m. The western domain trends 20o for a distance of 130m and dips west at -70o to a depth of 90m. The Angelica domains are poorly defined by two diamond drillholes and five surface trench samples.
Estimation and Modelling techniques	• Rotated block modelled estimation completed with Surpac^{TM} software licensed to Tim Callaghan. • Wire-framed solid models created from drillholes, trench samples and geological sections on sectional interpretation. • Solid models snapped to drill holes • Minimum mining width of 2m @ 0.4% Cu • Internal dilution restricted to 2m with allowances for geological continuity • Data composited on 1m intervals including Cu, Ag and Au • No top cutting applied. • Good correlation between Cu, Ag and Au. • Insufficient data and data distribution for anisotropic variogram modelling. Downhole variogram models well-constructed with low nugget effect (20%) and short range of 5 to 10m to sill for major geological domains. • Search ellipse set at 120m spherical range to ensure all blocks populated • Inverse distance squared model estimated model constrained by geology solid model • Block grades validated visually against input data

CRITERIA	COMMENTARY
Moisture	• The estimate based on a dry tonnage basis
Cut-off Parameters	• Cut off grades have been based on the natural break of mineralised domains.
Mining Assumptions	• Amenable to narrow vein long hole open stoping Avoca method, shrink stoping or cut and fill mining. • Typical ore loss and dilution factors for this type of mining are anticipated.
Metallurgical assumptions	• A standard crushing grinding circuit followed by sulphide flotation is likely given historic processing records. • Historic production suggests an 11 to 1 upgrade to produce a 25% Cu concentrate. • Historic recoveries not cited but typical sulphide float of 80% assumed.
Environmental assumptions	• 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.
Bulk Density	• Bulk density derived from diamond drill core using the Archimedes method. • Determinations made of un-weathered core with no appreciable voids or porosity. • Grade-density relationship used for bulk density determinations of mineralised zones: SG = (Cu% +8.6648)/3.5485 • Waste rock assigned bulk density of 2.7.
Classification	• 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. • Data quality is to industry standards. • Data distribution and density is limited restricting confidence in the estimation. • The resource classification appropriately reflects the views of the Competent Person
Audits or Reviews	• No audits or reviews have been completed for this estimation
Discussion of relative accuracy/confidence	• The geological model is relatively simple and analogous to known mineralisation in the locality. • Data distribution is poor restricting confidence in the estimate. • There is moderate confidence in the global tonnage estimation as the geology is reasonable well constrained and simple. • Grade estimation is based on a limited number of samples and many domains have single intercepts restricting confidence.