

29Metals Limited ('**29Metals**' or, the '**Company**') today announced results of its March quarter 2023 drilling program at Capricorn Copper. The results of the program, completed prior to the recent extreme weather event, highlight the continuing potential of Capricorn Copper with demonstrated extensions of known mineralisation at Esperanza South ('**ESS**') and the Mammoth deposits, and the identification of a new mineralised trend east of Mammoth.

The drilling results 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**').

Highlights¹

Mammoth

Initial drilling east of the Mammoth orebody intersected broad intervals of copper mineralisation in both drillholes. Key results include:

- UDMAM22_110: 228.0m @ 1.2% Cu, 3g/t Ag, 50ppm Co, from 427.0m:
 - o Including, 36.0m @ 3.9% Cu, 6g/t Ag, 188ppm Co, from 427m.

Mineralisation intersected in this drilling program is within 310m of current development at Mammoth and includes evidence of a new mineralised trend not previously identified.

Future campaigns at Mammoth will expand the scope of the drilling in this area, seeking to identify higher grade areas which may support a new mining front.

ESS

Surface drilling program intersected mineralisation down plunge of existing mineral resources estimates for ESS.² Key results include:

- SDESS22_003_W3A: 70.0m @ 2.8% Cu, 26g/t Ag, 1083ppm Co, from 821m
- SDESS22_003_W2: 48.1m @ 2.7% Cu, 23g/t Ag, 1221ppm Co, from 878.9m
- SDESS22_003A_W1: 23.0m @ 3.0% Cu, 10g/t Ag, 779ppm Co, from 737m

The results reported today are not included in 29Metals' updated Mineral Resources & Ore Reserves estimates at 31 December 2022 (reported on 23 February 2023).

Commenting on the drilling results reported today, Managing Director & Chief Executive Officer, Peter Albert, said:

"These tremendous results continue to demonstrate the growth potential at the Capricorn Copper ore bodies, building upon the highly successful drilling at Capricorn Copper in 2022 which supported a significant increase in estimated Mineral Resource and Ore Reserves tonnes for ESS of 3.5 Mt or 23% and 3.9 Mt or 58%, respectively, in our end-of-year estimates.

These results further demonstrate the medium and longer term potential we see at Capricorn Copper, and highlight the importance of our ongoing recovery work to safely return Capricorn Copper to operations following the impacts of the extreme weather event in March 2023."

¹ In this release, all drilling results lengths cited are down-hole lengths. unless otherwise stated.

² In this release, unless the context requires otherwise, a reference to Mineral Resources estimates is a reference to estimates included in 29Metals' 2022 Mineral Resources and Ore Reserves estimates, as released on the ASX announcement platform on 23 February 2023 (a copy of which is available on 29Metals' website at: <u>https://www.29metals.com/investors/reports-presentations</u>).

Capricorn Copper drilling program

A long-section of Capricorn Copper illustrating the boundary of 29Metals' 2022 Mineral Resources and Ore Reserves estimates, and highlighting the target areas for the drilling results reported in this release is set out in figure 1 (below).

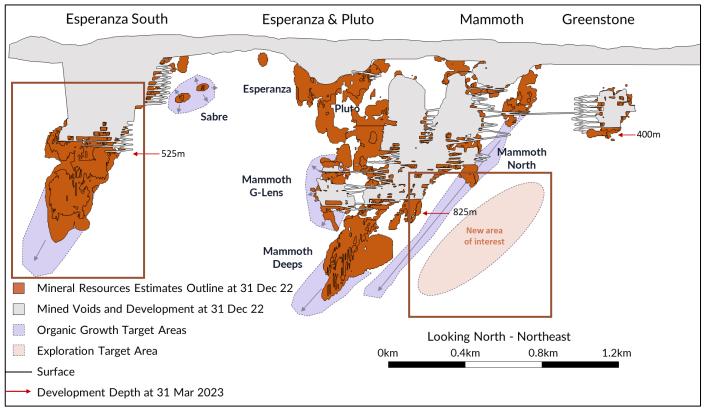


Figure 1 – Capricorn Copper long-section highlighting ESS drilling target area (box to left) and Mammoth drilling target area (box to-right) reported

Mammoth

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Overview

The Mammoth deposit is defined on it's eastern edge by a structure known as the *Portal Fault*. Historical drilling at Mammoth has terminated at this fault boundary and testing east of the fault is extremely limited.

The drilling program involved two holes initially designed to test along strike of existing estimates at Mammoth (referred to in this release as '**Resource Extension**' drilling). Following the identification of sulphides at the initial design end-of-hole, the decision was taken to extend the drill holes beyond the Portal Fault for several hundred metres.

For reporting purposes, 29Metals characterises the drilling results to the east of the Portal Fault as *Exploration* as intersected mineralisation not directly correlated with 29Metals' existing Mineral Resources estimates for Mammoth.

Results

Both drillholes on the eastern side of the Portal Fault intersected multiple copper mineralization zones, with the most significant interval being 36m @ 3.9% Cu within a broader zone of 228m @ 1.2% Cu. Results east of the Portal Fault are highlighted in figure 2 (below).



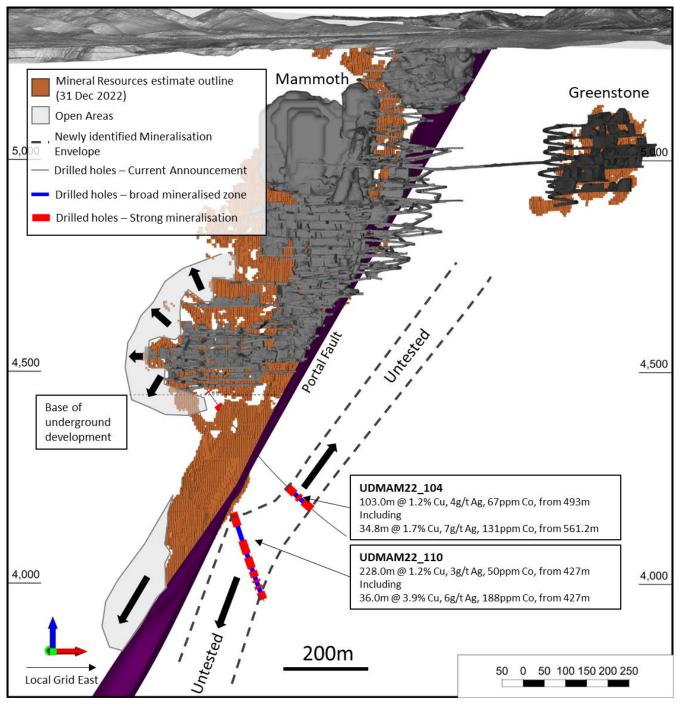


Image of Mammoth and Greenstone ore bodies showing drilling beyond the Portal Fault in relation to existing Mineral Resources estimates and mining voids. Image is oriented to look down the Portal Fault. All intersections for drilling results reported in this release are reported in Appendix 1.

The drilling confirms the potential of the area east of the Portal Fault, which presents a sizable exploration opportunity. The area shows potential in all directions, both up and down dip, as well as along strike.

A summary of the highlighted drilling results from Figure 2 are set out in Table 1 below. All intersections for the Mammoth drilling program reported today are included in Appendix 1.

Table 1 - Summary of highlighted drilling results

Hole ID	Drilling Type		Depth From	Depth To	Downhole Length	Cu	Ag	Со
			m	m	m	%	g/t	ppm
UDMAM22_110	Exploration		427.0	655.0	228.0	1.2	3	50
		including	427.0	463.0	36.0	3.9	6	188
UDMAM22_104	Exploration		493.0	596.0	103.0	1.2	4	67
		Including	561.2	596.0	34.8	1.7	7	131

The location of the completed drill holes in the current program, along with the existing mammoth and greenstone resources and mine workings, is shown in Figure 2. All drilling results are reported in Appendix 1.

Follow up drilling in this area will comprise 5-10 broadly spaced holes to interpret the controls on mineralisation and determine extents of the prospective zones.

<u>ESS</u>

Overview

This drilling program followed the successful program completed in 2022 (reported on 1 August 2022). The aim of the program was to enhance the confidence levels of material classified as *Inferred* Mineral Resources in 29Metals' current estimates (referred to in this release as '**Resource Conversion**' drilling) and Resource Extension drilling seeking to extend mineralisation beyond existing estimates .

The Resource Extension drilling at ESS targeted down plunge of known mineralisation and involved seven drillholes from the surface.

Results

All drilling in the program intersected mineralisation, with Resource Extension drilling at depth intersecting broad copper, silver, and cobalt mineralisation outside 29Metals' current Mineral Resources estimates, while Resource Conversion drilling to the north is considered likely to extend mineralisation at depth while improving overall resource confidence.

This drilling has the potential to both grow 29Metals' Mineral Resource estimates, as well as improving overall confidence which will assist in the strategic long-term planning for ESS. ESS remains open down plunge across the full strike of the orebody.

Highlighted drilling results are set out in Table 2 below and shown in figure 3.

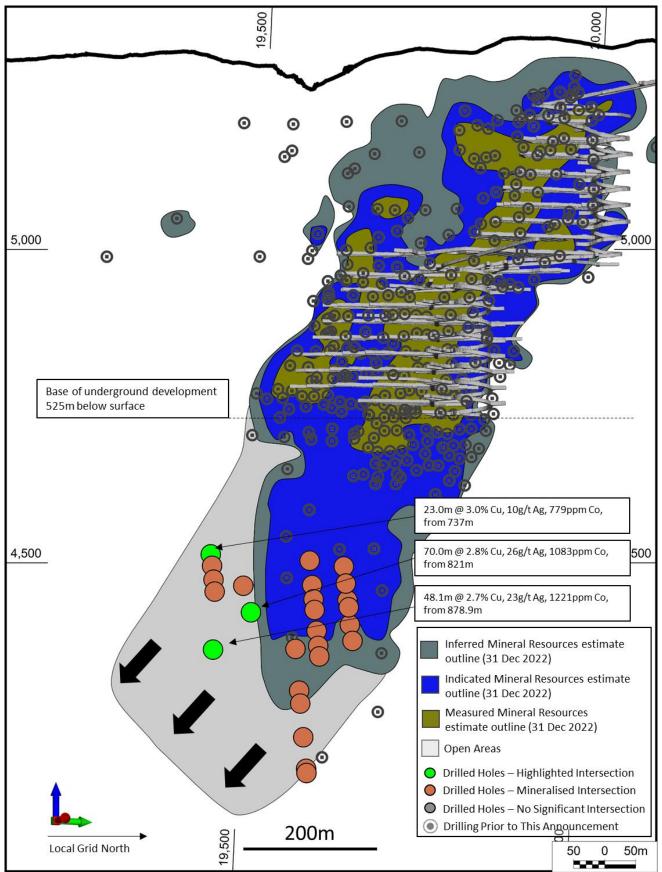
Table 2 - Summary of highlighted drilling results

Hole ID	Drilling Type	Depth From	Depth To	Downhole Length	Cu	Ag	Со
		m	m	m	%	g/t	ppm
SDESS22_003_W3A	Resource Extension	821.0	891.0	70.0	2.8	26	1083
SDESS22_003_W2	Resource Extension	878.9	927.0	48.1	2.7	23	1221
SDESS22_003A_W1	Resource Extension	737.0	760.0	23.0	3.0	10	779

The location of the completed drill holes in relation to historical drilling and the current Mineral Resources estimates for ESS is shown in Figure 2.

All completed drilling results from the ESS program are reported in Appendix 1.

Figure 3 – Long section presentation of ESS



Long section of ESS showing pierce points of assay results from holes reported in this release, with select results highlighted, as well as the pierce point location of historic drilling, relative to an illustrative presentation of the current Mineral Resources estimates. All intersections from the drilling results reported in this release are reported in Appendix 1.

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

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Competent Person Statement

The information regarding exploration results in this release is based on and fairly represents information and supporting documentation compiled by Mr Mark van Heerden. Mr van Heerden (RPGeo – Mineral Exploration) is Group Manager Geology and a full-time employee of 29Metals Limited. Mr van Heerden is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to this style of mineralisation and type of deposit under consideration, and to the activity being reported on, in this release to qualify as a Competent Person as defined in the JORC Code.

Mr van Heerden has consented to the inclusion of the information regarding exploration results in this release in the form and context in which it appears.

Appendix 1: Esperanza South Drilling Results

Hole ID	Drilling Type	Easting	Northing	RL	Azi	Dip	Total Depth	Depth From	Depth To	Downhole Length	Cu	Ag	Со
		Local	Local	Local	Local	deg	m	m	m	m	%	g/t	ppm
SDESS22_001_W5A	Resource Conversion	26611	19757	5221	WEDGE	WEDGE	908	716.4	780.0	63.6	1.1	9	225
								809.0	821.0	12.0	1.0	12	400
								842.0	886.0	44.0	1.5	8	380
SDESS22_001_W6	Resource Conversion	26611	19757	5221	WEDGE	WEDGE	974	748.0	777.0	29.0	2.5	29	251
								795.0	820.0	25.0	1.3	8	289
								861.0	881.0	20.0	1.1	7	158
SDESS22_002	Resource Conversion	26571	19694	5225	124	-80	1122	869.0	872.0	3.0	1.0	7	268
								945.0	951.0	6.0	1.3	11	161
								969.0	975.0	6.0	1.7	28	391
								1033.0	1038.0	5.0	1.4	8	1505
								1094.0	1097.0	3.0	1.0	8	1970
								1102.0	1105.0	3.0	3.1	10	346
SDESS22_002_W5	Resource Conversion	26571	19694	5225	WEDGE	WEDGE	990	727.0	731.0	4.0	3.8	19	451
								767.0	783.0	16.0	1.4	10	296
								794.0	809.0	15.0	1.2	5	148
								820.0	823.0	3.0	2.2	9	346
								855.5	866.0	10.5	1.4	7	165
								886.0	892.5	6.5	1.0	10	552
								902.0	917.0	15.0	0.9	10	392
SDESS22_003A_W1	Resource Extension	26524	19595	5231	129	-79	868	737.0	760.0	23.0	3.0	10	779
								770.0	773.0	3.0	1.8	13	1398
								788.0	811.0	23.0	0.9	8	598
								821.0	826.6	5.6	1.0	18	831
SDESS22_003_W2	Resource Extension	26524	19595	5231	WEDGE	WEDGE	958	878.9	927.0	48.1	2.7	23	1221
SDESS22_003_W3A	Resource Extension	26524	19595	5231	WEDGE	WEDGE	1080	791.9	810.0	18.1	1.0	7	326
													-



Hole ID	Drilling Type	Easting	Northing	RL	Azi	Dip	Total Depth	Depth From	Depth To	Downhole Length	Cu	Ag	Со
		Local	Local	Local	Local	deg	m	m	m	m	%	g/t	ppm
								821.0	891.0	70.0	2.8	26	1083
UDMAM22_104	Resource Extension	28012	20611	4533	46	-47	733	139.0	143.0	4.0	1.5	2	176
								186.0	214.0	28.0	1.1	6	185
								281.0	284.0	3.0	0.9	8	189
								304.0	315.0	11.0	0.8	3	84
	Exploration							493.0	596.0	103.0	1.2	4	67
							Including	493.0	526.2	33.2	1.4	4	46
							and	538.0	549.0	11.0	1.5	3	21
							and	561.2	596.0	34.8	1.7	7	131
UDMAM22_110	Resource Extension	28012	20611	4533	42	-66	661	224.8	232.0	7.2	1.0	6	798
								265.0	292.0	27.0	1.7	4	156
								310.0	336.0	26.0	2.2	8	162
	Exploration							427.0	655.0	228.0	1.2	3	50
							Including	427.0	463.0	36.0	3.9	6	188
							and	500.0	535.0	35.0	0.8	5	36
							and	544.0	573.0	29.0	1.0	4	42
							and	580.0	596.0	16.0	0.9	2	21
							and	603.6	609.0	5.4	0.9	1	15
							and	619.0	625.0	6.0	1.0	3	27
							and	635.8	655.0	19.2	0.9	2	13

Appendix 2: JORC Code Table 1 disclosures

Section 1 - Sampling Techniques and Data

Note: Abbreviations used in these 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

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UG Underground

CRITERIA	COMMENTARY
Sampling techniques	Samples have been collected via DD drilling, from underground and surface in 2022 and 2023.
	No information has been provided concerning the historical RC drilling analysis.
	• Sample length is preferentially set to 1m and ranges from 0.3m to 1.5m of half and full core. Sample intervals do not cross geological boundaries; this ensures samples are representative of the lithological unit without mixing of grade at lithological boundaries.
	• For core that was half 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 a unique sample ID.
	• 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.
	Core samples are crushed and pulverised to 85% passing 75µm.
	Measures taken to ensure sample representativity include the collection, and analysis of field duplicates.
Drilling techniques	• Pre 2016: The deposits have historically been drilled and sampled by previous operators. This data has been compiled and validated.
	Post 2016: DD drilling and RC drilling. DD diameter drilled includes PQ, HQ and NQ2.
	 All holes are surveyed at 15 m, at 30 m and every 30 m thereafter, and at the end of the hole using a REFLEX™ EZ-TRAC single/multishot survey tool or from 2021 by a REFLEX™ EZ-GYRO gyroscopic survey tool.
	The majority of drill holes were fully grouted upon completion due to mine requirements.
Drill sample recovery	

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.



CRITERIA	COMMENTARY
	Recoveries of DD drilling core are recorded as percentages calculated from measured core versus drilled metres. The final recovery of a particular run is ther 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 PTO 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. 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.
	Drilling process was controlled by the drill crew and geological supervision provides a means for maximising sample recovery and ensures suitable core presentation. Depth is checked against depth provided on core blocks.
Logging	• All (100%) drill core are logged in full detail from start to finish using laptop computers for import into the Micromine Geobank™ database software package.
	 All (100%) DD UG core is geotechnically logged to record core recovery, including documented core loss areas and RQD, as well as parameters such as UCS, LUP, fracture count, and joint set data. Surface parent holes are All (100%) geotechnically logged. ESS daughter holes are logged 50m past the stratigraphic unit that hosts the Esperanza South deposit.
	DD cores are photographed wet and dry.
	Logging is both qualitative and quantitative (percentage of sulphide minerals present).
	Standard rock codes are used. Standard weathering, alteration, structural and appropriate geological comments are entered.
	• The detail and coverage of logging has provided appreciable understanding of each orebody to a level which is able to support geological modelling and minera resource estimation and therefore subsequent mining and metallurgical studies. Further metallurgical test work has been completed on ore types across all or the deposits.
Sub-sampling techniques and sample preparation	 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 par of the inventory and the areas where they have been drilled are predominantly mined out currently.
	 All DD core is either full core or half core sampled, in rare occasions quarter core sampling has occurred. Core is cut onsite using an automatic core saw with samples always taken from the same side. Half core is used for field duplicates. Current sample length ranges between 0.3 and 1.5m adjusted to geologica boundaries. No RC drill holes were sampled and do not form part of the resource estimates.
	The sample preparation DD core adheres to industry best practice. A commercial laboratory is used which involves:
	o Weighing
	 Oven 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 sub-sample is then pulverised using a ring mill so that 85% passes 75µm. Samples > 3kg crushed to 2mm and split using a rotary splitter
	 A representative 20 – 60g pulp is then shipped to the analysis laboratory in Brisbane. The unused pulps (upon completion of the analysis) are returned to the CC mine site and stored at the core shed facility.
	 Field duplicates are taken every 30 samples; the complementary half core of an original sample is sampled and placed in a sample bag with a unique sample ID.



CRITERIA	COMMENTARY
Quality of assay data and laboratory tests	 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 limit (including 1% for Cu, Co and As, 10% for S, and 100g/t for Ag) by using a further four-acid digest and ICP-AES analysis.
	 The assay results are finalised by the laboratory upon completion of the analyses and review of the internal QAQC processes and are delivered to CC in digita 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.
	 Certified reference material (CRMs), with a range of values are inserted at a rate of 1:30 into every DD hole to assess laboratory accuracy, precision and possibl contamination. Blanks is inserted at a rate of 1:30 and field duplicate samples assigned with unique sample numbers and placed into the sample stream at a rate of 1:30.
	• QAQC data returned are checked against pass/fail limits. QAQC data is reported annually and demonstrates sufficient levels of accuracy and precision.
	The laboratory performs internal QC including standards, blanks, repeats and checks.
Verification of sampling	Significant intersections are reviewed by site geologists.
and assaying	No specific twinned holes have been drilled as a part of this program. However nearby drill holes show compatible geology and results.
	Assay data is retained in files (.CSV) and stored once loaded into the database.
	An 80*100m minimum spacing of drill core is stored for posterity at the onsite core farm.
	 Pre-2016: 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.
	 In 2022 the data was migrated to a Micromine Geobank[™] database. Validation of data was performed during this migration.
	 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 abov the upper detection limit (for S).



CRITERIA	COMMENTARY
Location of data points	 Before 2016, 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. From 2022 holes were aligned using a gyroscopic camera. 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. In addition, from 2021 holes were aligned using a gyroscopic camera. 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. 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. 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. 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 Local Mammoth Mine Grid and MGA 94 (Zone 54). The Local 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 Local Mammoth Mine grid.
	 Local Grid Azimuth to Magnetic North conversion: Local Azimuth – 4.94 = Magnetic Azimuth
	Local Grid Azimuth to True North conversion: Local Azimuth + 0.55 = True Azimuth
	 Underground drillhole collars are picked up by CC surveyors using a Leica TS-16 (total station) with an expected accuracy of 10mm. All new surface holes on the mining lease since 2021 have been surveyed using a Leica RTK GS18 with CS20 controller with an expected accuracy of 40mm.
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 – 2022 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 20 – 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 PTO where samples were composited to 5 m due to the lower drilling intercept angles



CRITERIA	COMMENTARY
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 prior to 2019. The 2020 to 2022 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 MAM 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 PTO and ESP, the drill holes intersect many of the steeply dipping mineralised domains at relatively low 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	 Measures to provide sample security included: Adequately trained and supervised sampling personnel. Samples placed in a numbered and tied calico sample bags. Sample numbers are entered into Geobank database. Samples are couriered to assay laboratory via truck or site personnel in plastic bulker bags. Assay laboratory checks off sample dispatch numbers against submission documents and reports any inconsistencies. 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. Mr Noppé 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 the preceding section also applies to this section)

CRITERIA	COMMENTARY Table A. List of active Mining Leases at the CC Mine											
lineral tenement and land												
enure status	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 Exploration Permit EPM 26421, granted 8 December 2017, with a current expiry date of 7 December 2027..

• Table A (above) lists the Mining Leases (ML) at the mining operations which cover a total area of 1,082.5 hectares (10.8 km2). Current Mineral Resources estimates are confined to eight of the MLs as indicated in Table A. All tenements are in good standing and are supporting by applicable environmental and other approvals, consents and clearances.



CRITERIA	COMMENTARY
Exploration done by other	Mineralisation was first discovered at what was then known as Mt Gordon in 1882
parties	 The MAM deposit was discovered 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 Cemen 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.
	 ESS is a steeply plunging breccia located between the NNE-SSW-striking hangingwall and footwall margins of the Esperanza Fault zone The fault brings Easterr 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 footwal 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 from with the surrounding Paradise Creek Formation sediments. Bedding dip and strike of favourable stratigraphic units coupled with bedding parallel faulting plays an additional role in localising mineralisation. Copper is typically presented as supergene chalcocite and as cuprite and native copper in the more highly leached and oxidized zones. Gangue minerals included pyrite, hematite and kaolinite. Ore contacts are typically sharp along with the oxidation fronts. Minor cobalt is also noted as a significant mineralisation type at Pluto and is typically seen within cobaltite and/or cobaltiferous pyrite as a halo around the more locally confined Cumineralisation. The oxidation zone is approximately 200 m long by 20 – 30 m wide.



CRITERIA	COMMENTARY
	 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 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. The geology east of the portal fault categorised in this announcement as the "new area of interest" is consistent with the geology at Mammoth. 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 weather ring 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
Drill hole Information	Complete table of all Surface drill hole information for ESS since the 2022 Mineral Resources estimates is listed in Appendix 1 of the covering release.
	Complete table of all drill holes testing the area east of the Portal Fault since the 2022 Mineral Resources estimates is listed in Appendix 1 of the covering release.
Data aggregation methods	 Assay results are exported from the Geobank Database. Weighted averages are calculated using Micromine software to generate downhole grade intervals. General guidelines for weighted averages as follows: Copper intersections
	• Trigger value: 0.5% Cu
	Minimum Interval length 3m
	Minimum grade of final composite 0.8% Cu
	Max consecutive waste interval 6m
	 Short high-grade intervals can only be included if they exceed a minimum grade x length of 6%m
	 Broad intervals within holes UDMAM22_104 and UDMAM22_110 were achieved by allowing max consecutive waste intervals of 35m
	No top-cut value has been applied to any element.



CRITERIA	COMMENTARY
Relationship between mineralisation widths and intercept lengths	 All drilling reported as downhole length. District drilling confirms mineralisation is hosted within the same stratigraphic sequence as the operating mines and no fundamental change has occurred to the structural framework of the host sequence.
	 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°. Surface drilling has typically been undertaken from west to east at inclinations of -50° to -80° to best optimise the angle against mineralisation. Underground drilling has drilled from east to west, but at much shallower angles (+17° to -45°) to ensure the mineralised zone is intersected as orthogonal as possible. Underground intersections in Appendix 1 have been drilled at angles between (0° to -45°). Surface intersections in this appendix 1 have been drilled at angles between (-45° to -75°)
	 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 80°) to the SE. The mineralisation has an overall plunge to the SW at around 70°. The majority of drilling has been east directed at dips of -50° to -80°. Due to the difficulties in locating drill pads in locally steep terrain and with surface infrastructure, some historic drill holes, and one CC hole, have drilled toward the west at similar inclinations. Many holes have intersected the mineralisation at low angles due to these limitations. It is recommended that future drilling be undertaken from underground.
	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 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.
	• "New Area of Interest": Relationship between downhole intercept length and true width is not known at this time.
Diagrams	See diagrams within the body of the covering release
Balanced reporting	All drilling results for activities covered in this release have been reported without exception within Appendix 1.



CRITERIA	COMMENTARY
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 GST and the G-Lens area of MAM.
	 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.
	Specific Gravity's are taken routinely across all drill holes and provide a detailed database of density measurements across all orebodies.
	The resource estimate uses cut-off grades that are guided by the mining and processing experience
Further work	Future work will entail continued diamond drilling across all areas discussed in this report.