MT VENN CU-NI-CO EXPLORATION TARGET

HIGHLIGHTS

- **A copper-nickel-cobalt sulphide Exploration Target has been defined by independent geological consultants Entech at the Mt Venn Project and reported to the JORC Code (2012)**
- **Sulphide mineralised zones extend to the surface at Mt Venn, with very little weathering**
- **The Exploration Target was defined for mineralised zones within 200m of the surface and assumed that Mt Venn could be potentially mined via open-pit mining methods, based on depth from surface, tenor of mineralisation and consideration of analogous deposits**
- **The Exploration Target supports the Company's strategy to target Mt Venn 'satellites' that have the potential to increase the size and/or improve grade of near-surface mineralisation at Yamarna**
- **Recently reported results from the Minjina Prospect (located 900m North of Mt Venn) include several holes which intersected 'Mt Venn style' Cu-Ni-Co mineralisation – including the highest-grade cobalt intersections drilled in the Yamarna project to date – in holes MIRC004 and MIRC008[1]**
- **Planned ground geophysical programs (EM and gravity) are now complete with further targeting work and drilling planned to commence late February – early March.**
- **The upcoming drill program will include testing the compelling off-hole DHEM target defined at Minjina associated with drillhole MIRC003 which intersected widespread Zn-Pb-Ag mineralisation including a high-grade zone of[2]:**
    - **7m @ 3.20% Zn, 0.82%Pb (4.02% Zn + Pb) & 11.84 g/t Ag from 73m *including***
    - **2m @ 5.0% Zn, 1.4% Pb (6.4% Zn + Pb) & 18.83g/t Ag from 76m.**

Cosmo's Managing Director, James Merrillees commented:

"This is an outstanding result from several years of work from the Cosmo Metals and Great Boulder Resources exploration teams which highlights the potential for a valuable, shallow, sulphide-hosted base metals deposit at Mt Venn in Western Australia's emerging Yamarna region.

The identification of additional direct targets from the recently completed ground geophysics program will also assist in enhancing our technical understanding of the system.

Our technical team is excited by the opportunity to deliver a company making discovery from targets within the Minjina Prospect ~900m north of the Mt Venn Exploration Target. Minjina has already yielded high

[1] *Refer CMO ASX Announcement 24 January 2023*
[2] *Refer CMO ASX Announcement 24 January 2023*

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Shares on Issue: 50.5M
Market Cap: $7.5M (at $0.15)
Cash: $1.6M (at 31 Dec 2022)

grade Zn-Pb-Ag drill intercepts from Cosmo's initial RC drilling in late CY2022 and drill rigs are being mobilised in the coming weeks to test more high priority targets there.

We see parallels at Minjina with the mineralisation style and discovery history of the outstanding base metals deposits in the Teutonic Bore District including the Bentley deposit discovered in 2008, which has produced more than 42kt of copper, 318kt of zinc and 13.6Moz of silver from first production in 2010 to August 2021.[3]

Cosmo Metals Ltd ("Cosmo" or the "Company") (ASX: CMO) is pleased to announce the definition of an Exploration Target at the Mt Venn Cu-Ni-Co Prospect, within the Yamarna Project located ~150km east of Laverton in the Eastern Goldfields of Western Australia.

2023 Mt Venn Cu-Ni-Co Exploration Target

The Mt Venn Cu-Ni-Co deposit is located 125 km east of the township of Laverton and comprises granted exploration lease E38/2957 and associated exploration leases covering an area of approximately 370 km^2.

The Mt Venn Exploration Target was prepared during January 2023 by leading global mining consulting group Entech and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code) 2012 edition.

Tonnes and grade ranges for the Mt Venn Exploration Target range between (*refer Table 1 below*):

10.2 to 32.3 million tonnes of Copper (Cu)- Nickel (Ni) – Cobalt (Co) mineralisation with grades ranging from 0.55% CuEq to 0.63% CuEq.

The potential tonnes and grades of the Exploration Target expressed in this report are conceptual in nature and should not be considered as an estimate of a Mineral Resource. There has been insufficient exploration (and drilling density) to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target, being conceptual in nature, takes no account of geological complexity or metallurgical recovery factors.

***Table 1**: Mt Venn Exploration Target. Potential tonnes and grade ranges.*

Deposit	Attribute	Upper Limit >= 0.3% CuEq + 200mRL			Lower Limit >= 0.3% CuEq + Inpit[4]		
		Tonnes (Mt)	Metal (kt)	Grade (%)	Tonnes (Mt)	Metal (kt)	Grade (%)
Mt Venn	**CuEq2023[4]**	32.3	**177.2**	**0.55**	10.2	**64.5**	**0.63**
	Copper		99.1	0.31		37.3	0.36
	Nickel		26.1	0.08		8.9	0.09
	Cobalt		8.6	0.03		3.1	0.03

Notes: Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

[3] *Refer Aeris Resources website www.aerisresources.com.au*

[4] *The Copper equivalent has been calculated using metal pricing, recoveries and other payability assumptions for copper, nickel and cobalt as detailed in 'Other Substantive exploration data' in Section 2 of the attached JORC Code Table 1.*

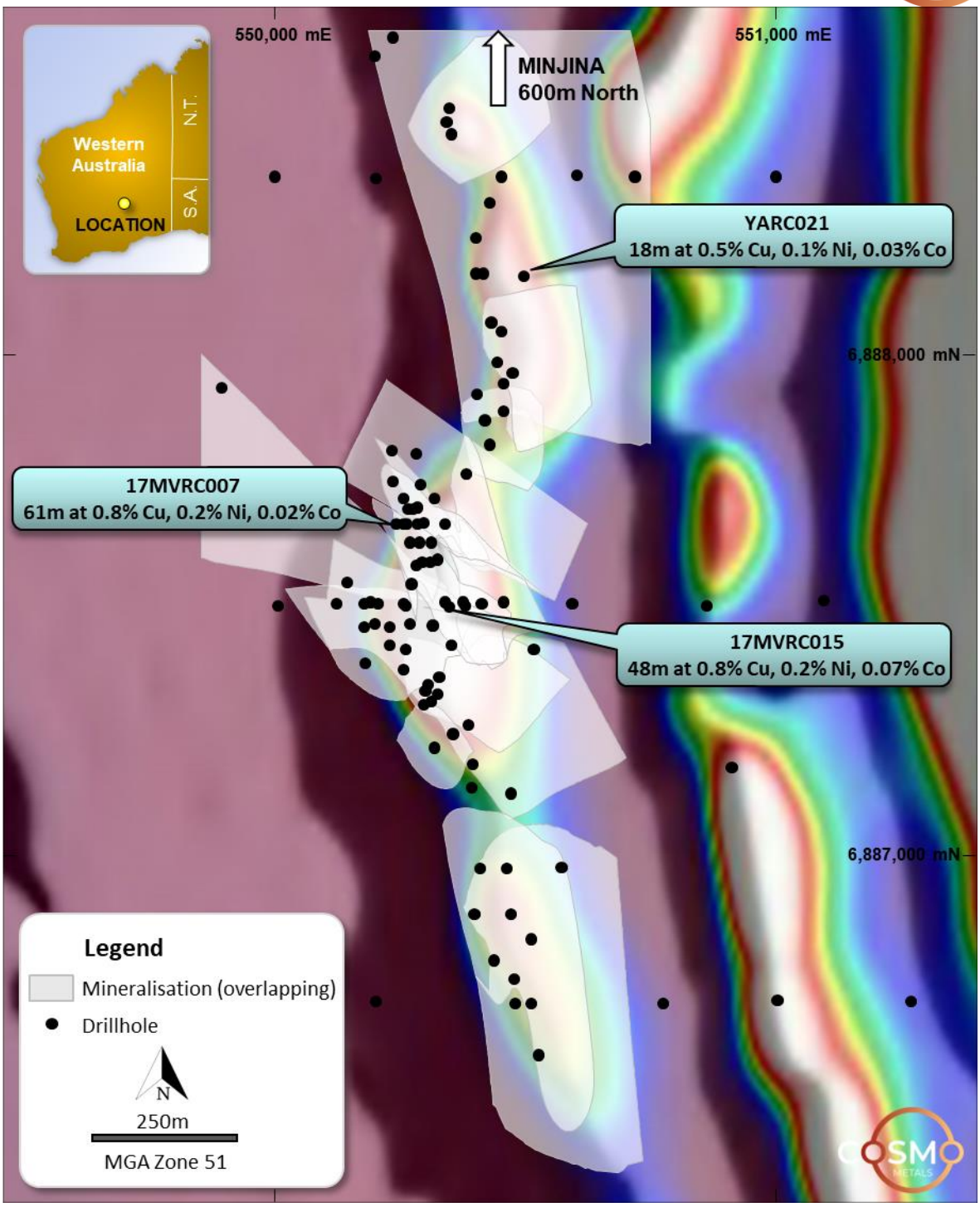

Figure 1: *Mt Venn outline of Exploration Target wireframes, exiting drilling and mineralisation envelopes on background magnetic image (RTP`TMI).*

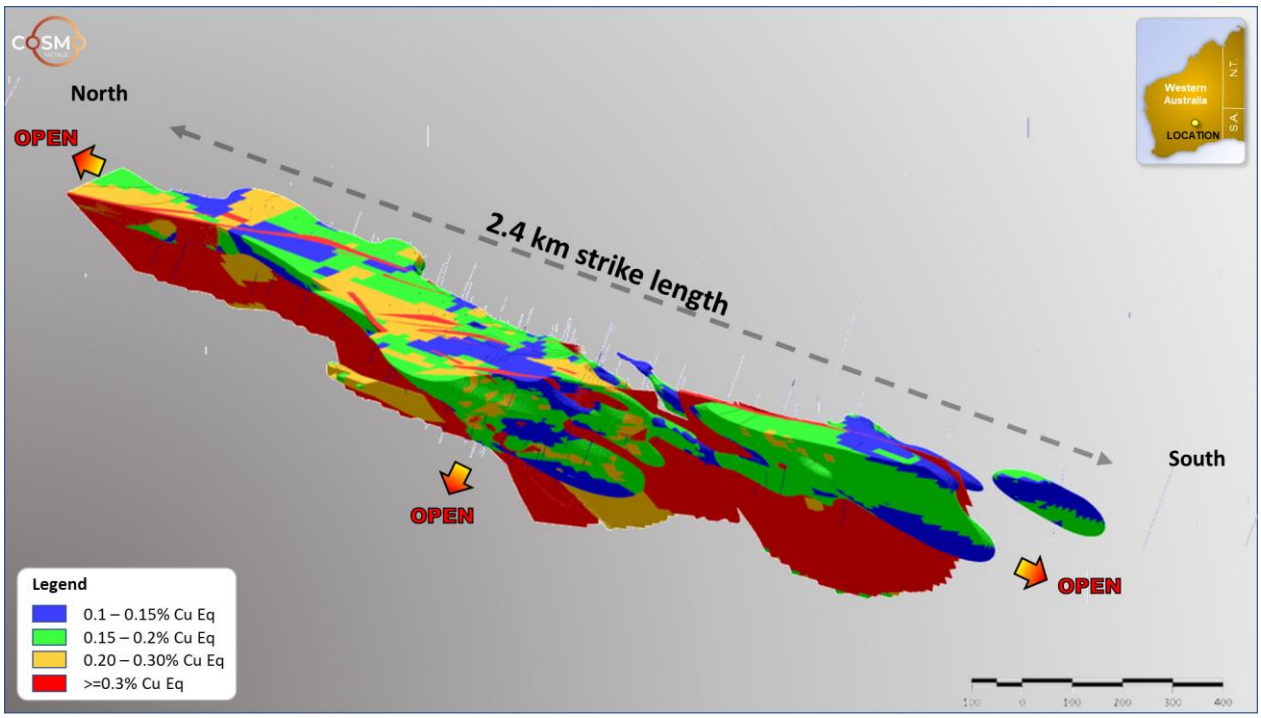

Figure 2: *Mt Venn Mt Venn Exploration Target, 3D Block Model, Oblique View*

The Exploration Target has been reported using a 0.3% copper equivalent cut-off value. The Exploration Target was reported above 200m RL (200m below topography) for the upper limit target range and constrained within a pit optimisation shell for the lower limit target range.

Entech completed a conceptual pit optimisation study[5] from which outcomes were used as a guide in the assessment of reasonable depths and confidence in mineralisation continuity.

Metallurgical testwork undertaken by Great Boulder Resources Ltd (GBR) in 2018[6] indicates that copper-nickel-cobalt reported in the Exploration Target can be recovered with current mineral processing technology[7]. Material classification is not applied for an Exploration Target.

The copper equivalent calculation is informed by metal recoveries from GBR's 2018 metallurgical test work undertaken and a rolling three-month average of LME metal price[8].

The copper equivalent formula and assumptions are presented in Table 2 below with the following formula used to calculate copper equivalent for reporting purposes:

CuEq(%) = ((Cu% + (((Ni% x 27105)/8891) x 0.7) + (((Co% x 38920)/8891) x 0.6))

Table 2*: Key copper equivalent assumptions*

Metal	Metal price[8] (USD$/t)	Metallurgical Recoveries[7]	Copper equivalent calculation
Cobalt	38,920	60%	CuEq% = Cu% + (Ni% x (Ni price/Cu price) x (Ni metallurgical recovery)) + (Co%*(Co price/Cu price) x (Co metallurgical recovery)).
Copper	8,891		
Nickel	27,105	70%	

[5] *ENT_856_CMO_J969 Mt Venn Conceptual Pit Optimisation Memorandum 20220527.pdf*
[6] *GBR ASX Announcement 23 October 2018*
[7] *ALS, May 2018. A18729 – Mineralogical Report MIN3216*
[8] *Source: London Metal Exchange: 3 month rolling average for Copper, Cobalt and Nickel from the London Metal Exchange as of 7 February 2023. Prices are in USD$/t*

NOTES:

- ***Material was classified as oxide, transitional and fresh based on interpreted surfaces***
- ***The Exploration Target above 200mRL and CuEq >= 0.3% has an average density of 3.36 g/cm³***
- ***It was assumed that Mt Venn could be potentially mined via open pit mining methods. This assumption was based on depth from surface, tenor of mineralisation and consideration of analogous deposits.***

NEXT STEPS

Further exploration targeting along the Mt Venn Trend is underway with ground electromagnetic (EM) surveys following up a further nine RC holes completed in late 2022 to assist with target evaluation.

The Company has recently completed downhole EM (DHEM) and fixed loop EM (FLEM) surveys used to identify mineralisation horizons to the north of the current Exploration Target interpretation, with follow-up drill testing planned to test target anomalies.

The Company has engaged a drill contractor to mobilise to site early next month to test these targets in addition to[9]:

- The compelling off-hole DHEM target at Minjina associated with drillhole MIRC003 which intersected widespread Zn-Pb-Ag mineralisation including a high-grade zone of:
    - 7m @ 3.20% Zn, 0.82%Pb (4.02% Zn + Pb) & 11.84 g/t Ag from 73m including
    - 2m @ 5.0% Zn, 1.4% Pb (6.4% Zn + Pb) & 18.83g/t Ag from 76m.
- Grid drilling on sections to the north and south around the discovery hole at MIRC003 to identify vectors and potential controls to the system
- 'Mt Venn style' Cu-Ni-Co targets identified from DHEM associated with 'near-miss' intersections in holes MIRC002 and MIRC009.

Further metallurgical testwork is planned in preparation for potential processing and economic studies once exploration target testing activities along the broader Mt Venn trend have been completed.

[9] *Refer CMO ASX Announcement 24 January 2023.*

February 2023 Minjina ground-based electromagnetic (EM) survey

This announcement is authorised for release to the ASX by the Board of Cosmo Metals Ltd.

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About Cosmo Metals Ltd

Cosmo Metals Ltd (Cosmo; ASX: CMO) is an ASX-listed, base metals exploration company focused on the advancement of its flagship Mt Venn, Winchester and Eastern Mafic projects in the underexplored Yamarna Belt, in the Eastern Goldfields region of Western Australia.

The Yamarna Belt is considered highly prospective for copper-nickel-cobalt (Cu-Ni-Co) and platinum group elements (PGE), and Cosmo's well regarded technical team is advancing exploration on multiple fronts to unlock the potential of the region.

With previous drilling having identified Cu-Ni-Co sulphide mineralisation at Cosmo's key projects, the company has a unique opportunity to add value from this 460km^2 landholding

Competent Persons Statement

The information in the Report to which this statement is attached that relates to the Mt Venn Cu-Ni-Co Exploration Target is based on information compiled by Ms Jill Irvin, BSc, a Competent Person who is a current Member of the Australian Institute of Geoscientists (MAIG 3035). Ms Irvin, Principal Geologist at Entech Pty Ltd, is an independent consultant to Cosmo Metals Ltd (CMO) with sufficient experience relevant to the style of mineralisation and deposit type under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ms Irvin consents to the inclusion in the report of matters based on her information in the form and context in which it appears.

The information in this report that relates to Exploration Results is based upon and fairly represents information compiled by Mr James Merrillees, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Merrillees is a full-time employee of the Company. Mr Merrillees 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 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Merrillees consents to the inclusion in the report of the matter based on his information in the form and context in which it appears.

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Cosmo's planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Cosmo believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

APPENDIX A

EXPLORATION TARGET METHODOLOGY

Entech undertook the following inspections in May and June 2022:

- Site visit to the Mt Venn Project: Areas visited included the current Mt Venn drilling and processing, sampling operations.
- CMO core storage facility in Balcatta, Perth: Drill core intercepting multiple zones of mineralisation was reviewed, visually confirming the current mineralisation model.

No material issues or risks pertaining to the Exploration Target were identified, observed or documented during the inspections.

Geology

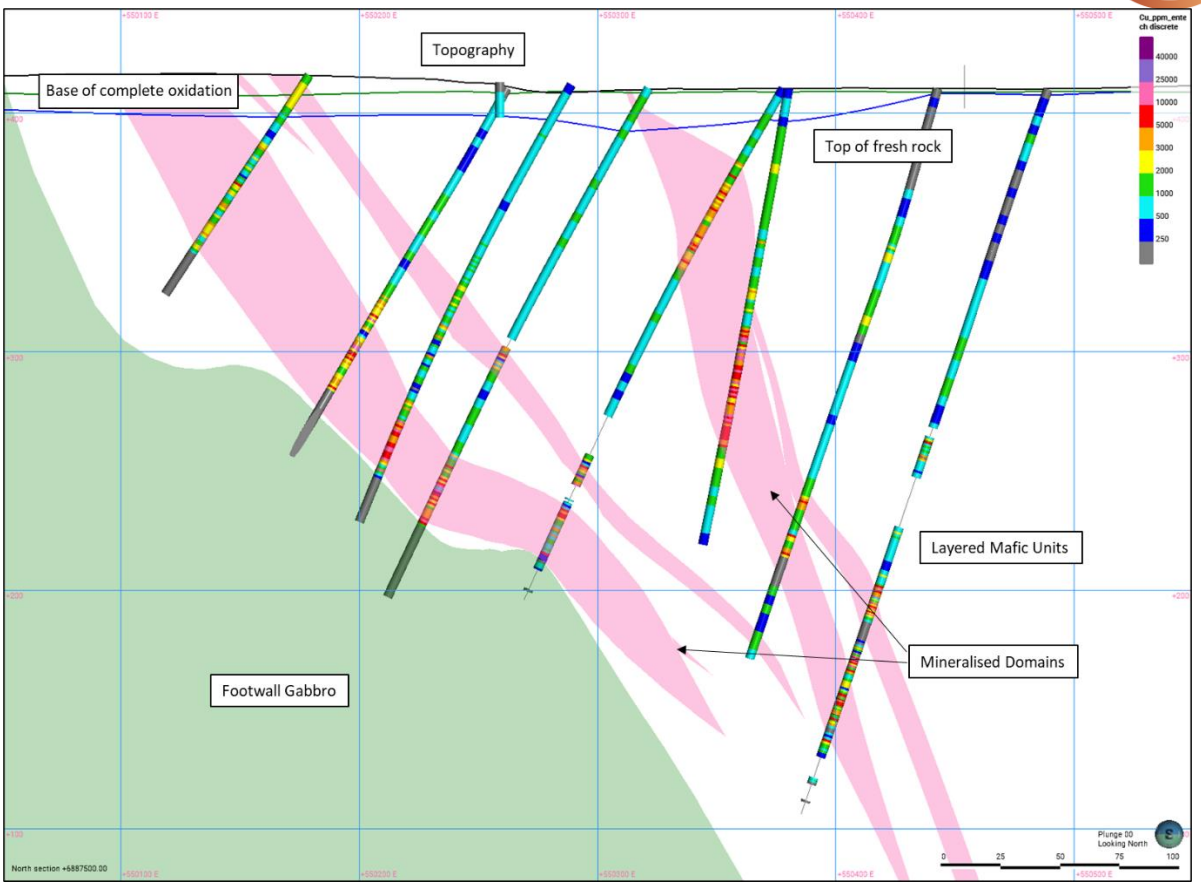
The Exploration Target is based on the current geological understanding of the mineralisation geometry and regional geology. The Mt Venn deposit lies within the Mt Venn Igneous Complex of the Yamarna Terrane.

The Mt Venn Igneous Complex is a 42 km wide, layered mafic intrusion, which ranges in composition from gabbro to dolerite, with minor pyroxenite horizons containing peridotite inclusions. The Yamarna and Dorothy Hills greenstone belts, forming part of the easternmost geological province of the Yilgarn Craton, are aligned in a north–northwesterly orientation adjacent to the 500 km long Yamarna Shear Zone which is considered the western boundary of the Yamarna Terrane.

Copper-nickel-cobalt mineralisation at the Mt Venn project is located along the western portion of the layered mafic intrusives, bounded by a footwall gabbro unit. The Cu-Ni-Co mineralisation is hosted within layered pyroxenites and gabbros in disseminated to massive pyrrhotite-rich sulphide horizons with minor pentlandite and chalcopyrite.

Elevated copper grades are associated with massive, secondary chalcopyrite lenses on the margins of such horizons[1].

[1] *ASX. CMO. 22 November 2021. Cosmo Metals Limited – Prospectus. Initial Share Offering*



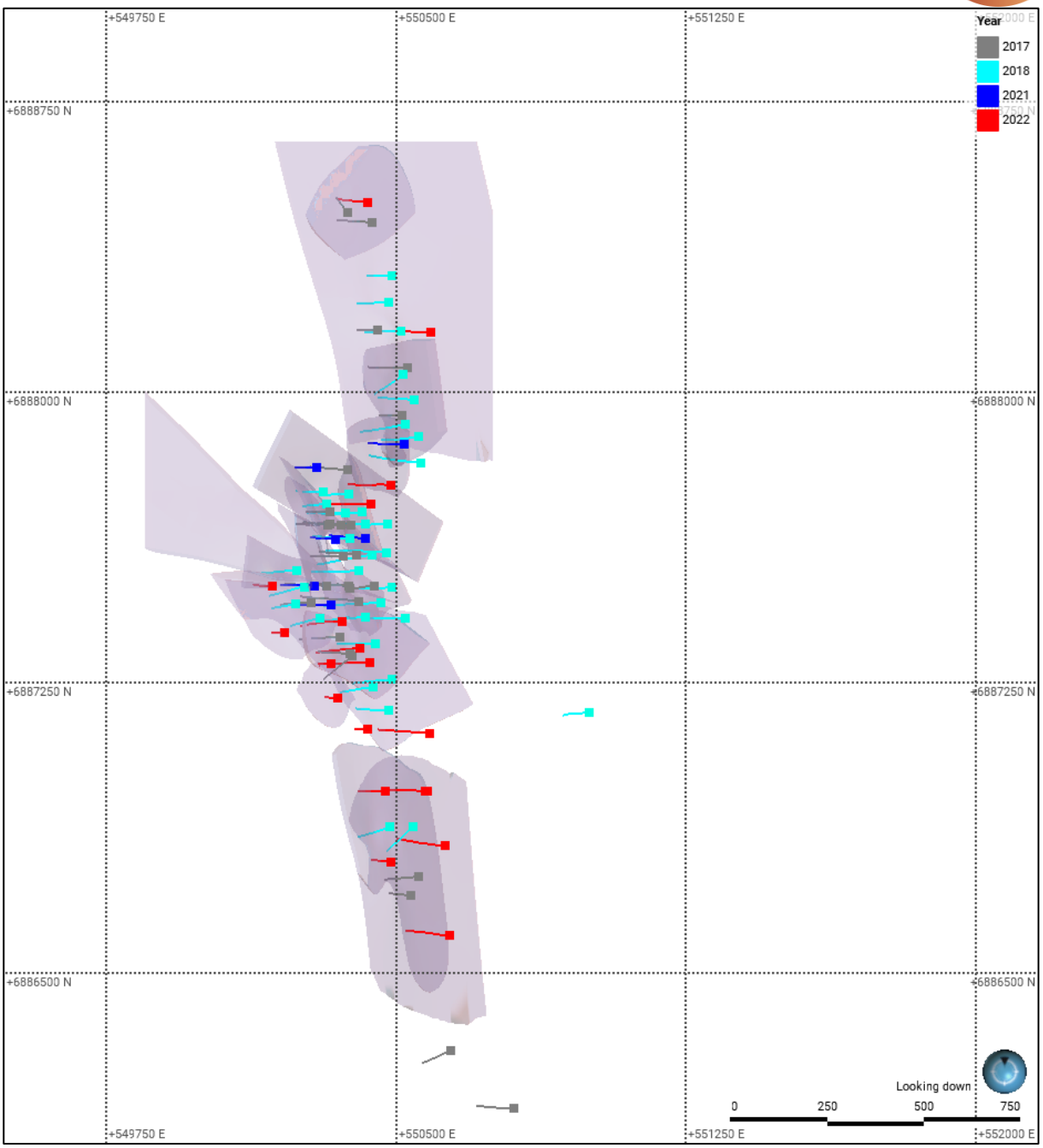
Mt Venn domains for lithology and mineralisation. ***Notes: Copper grades in parts per million (ppm); cross-section: 6887500 mN +/- 25 m***

Previous Exploration Activities

The data on which this Exploration Target has been prepared includes the recent exploration drilling completed by Cosmo Metals Ltd during 2022 comprising 19 holes for 3,064m.

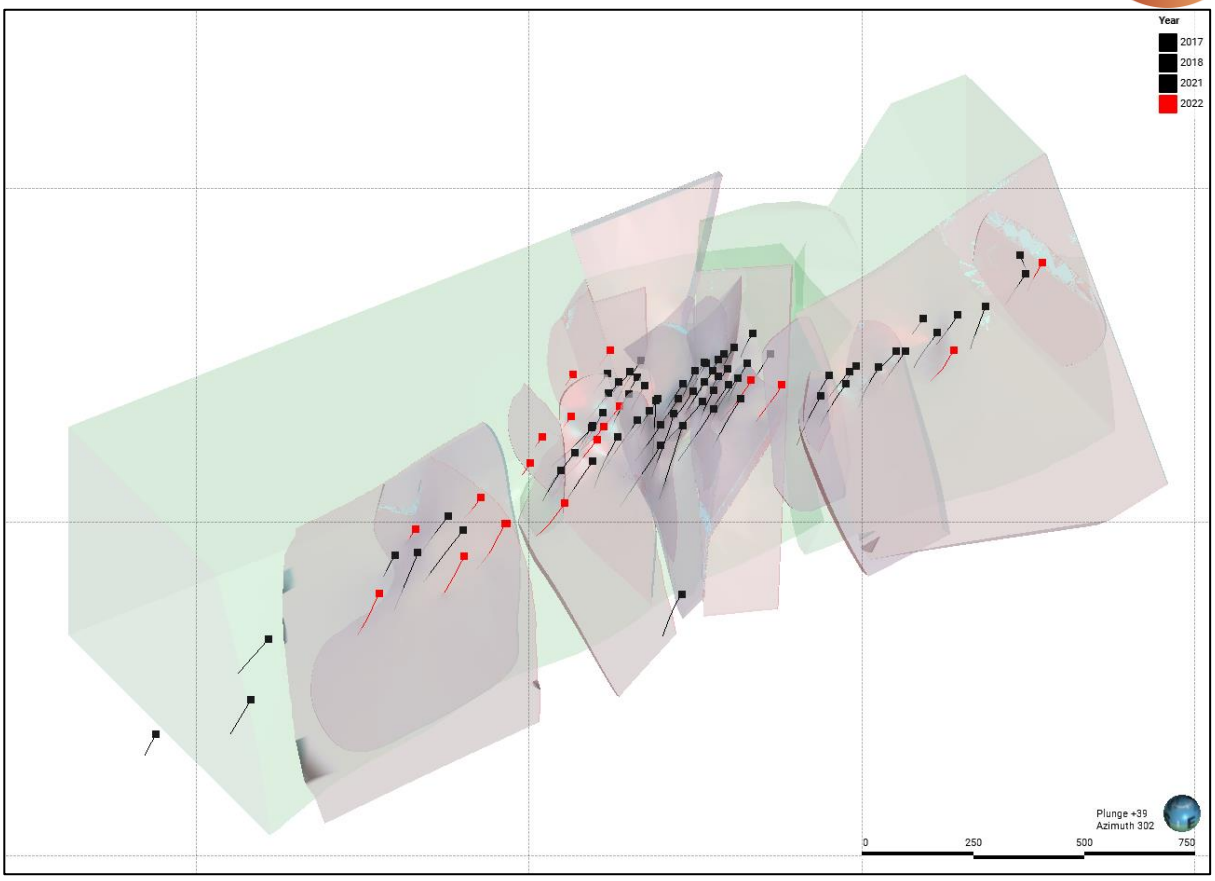
The drill programme objective to infill and step back drilling to test mineralisation continuity at depth and along strike was achieved with the majority of drillholes intersecting mineralisation at targeted locations. The 2022 drill hole locations are presented in **Error! Reference source not found.** and **Error! Reference source not found.**.

The Exploration Target for Mt Venn is informed by 15,923.6 m of drilling from 82 drill holes. Mineralisation interpretations were informed by 5 diamond drill holes (DD), 8 diamond drill holes with RC collars (DT) and 69 reverse circulation (RC) drill holes intersecting the domains with 3,165 m of drilling intersecting mineralisation.



Drilling history at Mt Venn with Exploration Target mineralisation domains (RC, DT and DD) – plan

Note: Red squares = 2022; Blue squares = 2021; light blue squares = 2018; Grey squares = 2017 for RC, DD and DT drilling. RC = Reverse circulation; DD = Diamond drilling; DT = Diamond tails with RC pre-collars.



2022 RC drill program (red) and previous drilling (black) against 2023 mineralisation interpretation (pink) and footwall gabbro (green) – oblique view looking to the north-west.

Great Boulder Resources Ltd completed a drilling campaign in 2021 comprising 70 reverse circulation (RC) and diamond drill holes for 13,700 m. This program was a follow-up to geological mapping, surface sampling, re-logging of historical drill core and a moving loop electromagnetic (MLEM) survey and has confirmed the presence of multiple, broad zones of sulphide mineralisation on the western margin of the Mt Venn Igneous Complex.

Assessment Methodology

Exploration drilling has been conducted along the broader Mt Venn Trend. Assessment of potential tonnes of the Mt Venn Exploration Target area is defined withing the follow area:

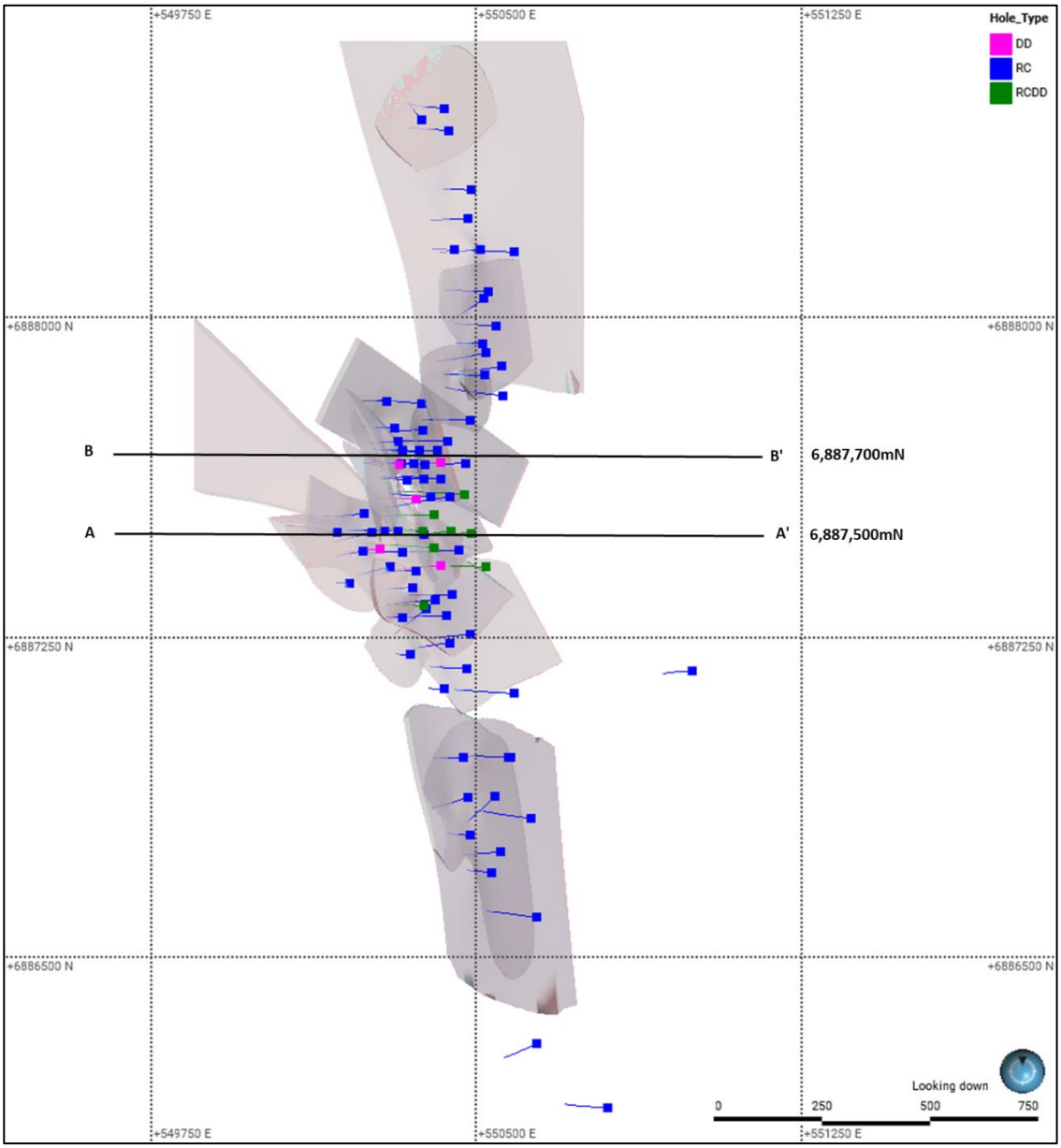
Coordinate (m)	Minimum MGA94_51	Maximum MGA94_51
Northing	6,885,800	6,888,750
Easting	549,750	551,010

The Exploration Target is defined by a combination of:

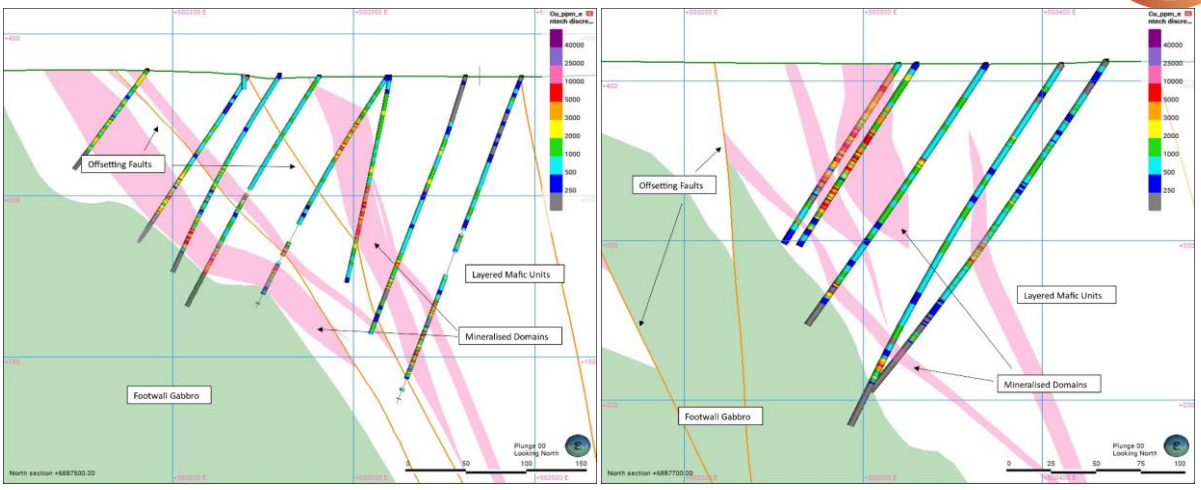
- Metadata:
  - Drill hole database 3D spatial validation and fatal flaw database audit of assay, collar, lithology and survey data
  - Review of recent quality assurance and quality control (QAQC) raw data
  - Density study – regression review and implementation of formulas within the block model.
- Geology: Interpretation of the footwall gabbro unit that bounds the mineralisation using a

combination of available lithology logging and assay information.

- Mineralisation volumes: Interpretation of 3D mineralisation domain solids underpinned by a structural framework and a nominal lower cut-off grade of 3000 ppm copper equivalent, comprising 19 fault-bound mineralisation domains. Domain widths were highly variable and ranged from 0.5 m to 35 m.
- Mineralisation intercepts: Definition of mineralisation intercepts (where 3D mineralisation solids intersected drill hole data).
- Exploratory Data Analysis of mineralised sample and composite data, including:
    - Sample statistics
    - Compositing of copper, nickel, cobalt, iron and sulphur values to 2 m, and declustering
    - Bias Analysis of Sample Type, Domaining, Weathering and Lithology
    - Top-capping analysis (none applied)
    - Spatial analysis and variogram modelling
    - Qualitative Kriging Neighbourhood Analysis.
- Estimation of copper, nickel and cobalt grades (ppm). Interpolation (Ordinary Kriging) of four domains (1001, 1003, 1005 and 4001) and (Inverse Distance Weighting) for all remaining domains (15 domains) with low sample populations for copper, nickel, cobalt, iron and sulphur followed by optimisation and validation of estimation outcomes.
- Density: Implementation of density regression calculations.
- Topography and Weathering were stamped into the block model.
- Peer review, check estimate and material risk assessment.

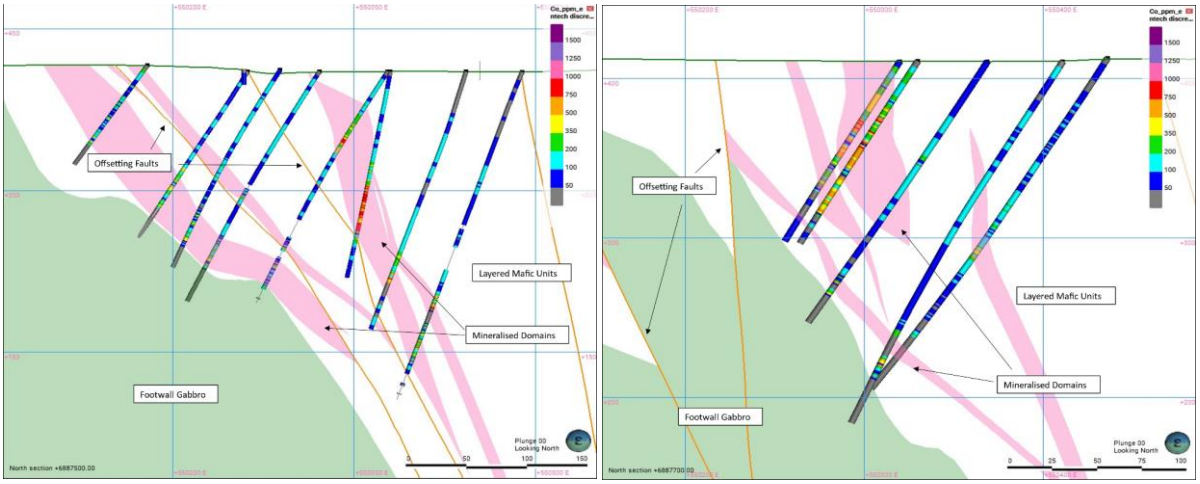


Drill hole collars, mineralisation domains and section locations (A at 6,887,700mN and B at 6,887,700mN) – plan view



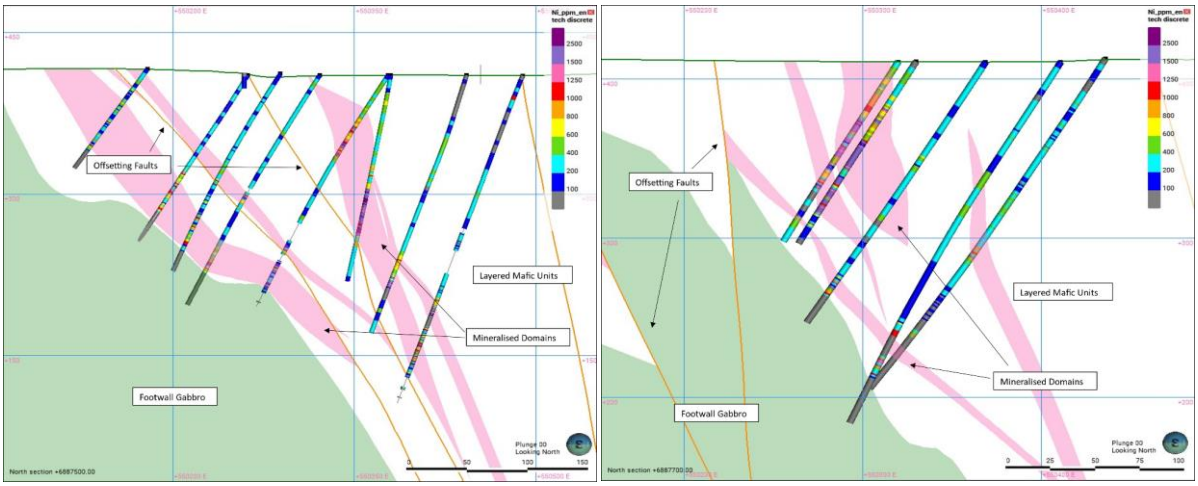
Sections A-A' (L) and B-B'(R) – lithology and mineralisation domains – copper

Note: Copper grades in parts per million (ppm); cross-section+/- 25 m



Sections A – A'(L) and B – B' (R) -lithology and mineralisation domains – cobalt

Note: Cobalt grades in parts per million (ppm); cross-section +/- 25 m



Sections A-A' (L) and B- B'(R) -lithology and mineralisation domains – nickel

Note: Nickel grades in parts per million (ppm); cross-section +/- 25 m

APPENDIX B

DRILL HOLE INFORMATION

TABLE 1: *Drill hole coordinate details for holes used in calculating the Mt Venn Exploration Target. Drill hole coordinates MGA94 Zone 51 (GDA94). Collars located with handheld GPS (±5 m accuracy), DD = Diamond drillhole; RC = Reverse Circulation drill hole DT = RC collar, diamond tail.*

HOLE TYPE	HOLE ID	EAST (MGA)	NORTH (MGA)	RL (M)	AZIMUTH (°)	DIP (°)	FROM (M)	TO (M)	INTERCEPT
DD	17MVDD001	550362	6887575	411	270	-61	64.5	113.72	Mineralisation
DD	17MVDD002	550323	6887657	411	277	-60	79.25	99	Mineralisation
							45	72.12	Mineralisation
							8	38.43	Mineralisation
							107.3	115.3	Mineralisation
DD	17MVDD003	550279	6887457	411	267	-60	97.3	142.38	Mineralisation
							69.26	85	Mineralisation
RC	17MVRC001	550321	6887500	411	271	-60	8	12	Mineralisation
							177	206	Mineralisation
							124	136	Mineralisation
RC	17MVRC006	550529	6888062	411	272	-60	138	154	Mineralisation
RC	17MVRC007	550358	6887658	411	271	-61	85	109	Mineralisation
							48	68	Mineralisation
							111	147	Mineralisation
RC	17MVRC014	550537	6886699	409	276	-61	84	86	Mineralisation
RC	17MVRC015	550380	6887493	410	289	-80	80.76	157.37	Mineralisation
RC	17MVRC016	550443	6887500	410	270	-75	183	207	Mineralisation
							172	183	Mineralisation
							240	248	Mineralisation
RC	17MVRC017	550329	6887659	411	273	-61	84.83	112	Mineralisation
							52	84	Mineralisation
							12	42	Mineralisation
							112	120	Mineralisation
RC	17MVRC021	550382	6887657	411	274	-61	116	137	Mineralisation
							75	84	Mineralisation
							152	176	Mineralisation
							24	47	Mineralisation
RC	17MVRC022	550330	6887690	411	273	-60	84	112	Mineralisation
							25	82	Mineralisation
							118	120	Mineralisation
RC	17MVRC023	550515	6887940	411	270	-60	51	69	Mineralisation

HOLE TYPE	HOLE ID	EAST (MGA)	NORTH (MGA)	RL (M)	AZIMUTH (°)	DIP (°)	FROM (M)	TO (M)	INTERCEPT
RC	17MVRC024	550452	6888159	411	272	-59	8	27	Mineralisation
RC	17MVRC026	550375	6887799	411	274	-60	108	121	Mineralisation
RC	17MVRC027	550386	6887318	410	229	-60	101	104	Mineralisation
							120	126	Mineralisation
							68	80	Mineralisation
RC	17MVRC028	550353	6887367	410	269	-65	122	156	Mineralisation
							96	104	Mineralisation
							2	64	Mineralisation
RC	17MVRC029	550397	6887580	411	274	-60	138	168	Mineralisation
RC	17MVRC031	550558	6886747	409	275	-70	164	176	Mineralisation
							143	144	Mineralisation
DT	17MVDT002	550378	6887499	410	270	-60	36	92	Mineralisation
							199	220	Mineralisation
							179	188.15	Mineralisation
DT	17MVDT008	550380	6887324	410	273	-60	98	125	Mineralisation
							129.7	136.44	Mineralisation
							48	56	Mineralisation
DT	17MVDT030	550404	6887459	410	270	-60	66	100.65	Mineralisation
							28	56	Mineralisation
							222.5	239.33	Mineralisation
							153	154	Mineralisation
DD	18MVDD001	550419	6887419	410	265	-60	54	78.84	Mineralisation
							42.35	43	Mineralisation
							201	222.05	Mineralisation
							172	173	Mineralisation
DD	18MVDD002	550420	6887660	411	266	-60	174.95	190.83	Mineralisation
							124	129.8	Mineralisation
							195	209.55	Mineralisation
							92.3	97.3	Mineralisation
RC	18MVRC001	550320	6887711	411	265	-61	78	89	Mineralisation
							4	75	Mineralisation
							112	116	Mineralisation
RC	18MVRC002	550369	6887689	411	271	-60	124	128	Mineralisation
							69	116	Mineralisation

HOLE TYPE	HOLE ID	EAST (MGA)	NORTH (MGA)	RL (M)	AZIMUTH (°)	DIP (°)	FROM (M)	TO (M)	INTERCEPT
							160	171	Mineralisation
RC	18MVRC003	550381	6887621	411	275	-60	123	153	Mineralisation
							159	164	Mineralisation
RC	18MVRC005	550439	6887580	410	260	-60	152	208	Mineralisation
							260	265	Mineralisation
RC	18MVRC006	550242	6887540	411	266	-60	52	60	Mineralisation
							92	96	Mineralisation
RC	18MVRC007	550262	6887497	410	258	-60	101	148	Mineralisation
							68	72	Mineralisation
RC	18MVRC008	550240	6887452	410	261	-60	66	100	Mineralisation
							24	54	Mineralisation
RC	18MVRC009	550302	6887416	410	255	-60	102	130	Mineralisation
							72	80	Mineralisation
							4	12	Mineralisation
RC	18MVRC010	550460	6887455	410	270	-60	132	159	Mineralisation
							105	111	Mineralisation
							232	274	Mineralisation
RC	18MVRC011	550523	6887917	411	259	-60	152	170	Mineralisation
							64	84	Mineralisation
RC	18MVRC012	550441	6887238	410	262	-60	109	138	Mineralisation
							144	148	Mineralisation
RC	18MVRC013	550483	6886876	409	250	-60	104	116	Mineralisation
							76	80	Mineralisation
RC	18MVRC014	550544	6886877	409	229	-60	165	181	Mineralisation
							156	159	Mineralisation
RC	18MVRC015	550488	6887257	410	266	-61	180	194	Mineralisation
							147	153	Mineralisation
RC	18MVRC016	550480	6887177	410	272	-60	121	138	Mineralisation
RC	18MVRC017	550445	6887350	410	272	-61	191	224	Mineralisation
							92	100	Mineralisation
RC	18MVRC021	550312	6887742	411	272	-60	88	95	Mineralisation
							32	82	Mineralisation
							103	112	Mineralisation
RC	18MVRC022	550378	6887737	411	268	-60	147	156	Mineralisation
							42	61	Mineralisation
RC	18MVRC023	550477	6887658	411	271	-60	228.7	251	Mineralisation

HOLE TYPE	HOLE ID	EAST (MGA)	NORTH (MGA)	RL (M)	AZIMUTH (°)	DIP (°)	FROM (M)	TO (M)	INTERCEPT
							218	223	Mineralisation
							255.7	262	Mineralisation
							184	195	Mineralisation
RC	18MVRC024	550559	6887886	411	260	-60	141.01	184	Mineralisation
							194	208	Mineralisation
							111	113	Mineralisation
RC	18MVRC025	550546	6887981	411	270	-60	136	168	Mineralisation
RC	18MVRC027	550519	6888045	411	231	-59	108	132	Mineralisation
RC	18MVRC028	550511	6888159	411	268	-60	39	75	Mineralisation
RC	18MVRC030	550411	6887690	411	261	-60	187	196	Mineralisation
							210	219	Mineralisation
							80	88	Mineralisation
RC	18MVRC032	550563	6887817	410	281		205	210.01	Mineralisation
DT	18MVDT004	550403	6887538	411	270	-60	86	150	Mineralisation
							203.65	210.2	Mineralisation
							223.05	237.81	Mineralisation
DT	18MVDT018	550523	6887416	410	269	-60	156	163.3	Mineralisation
							267	301.73	Mineralisation
DT	18MVDT020	550475	6887586	410	270	-60	252.18	258.4	Mineralisation
							200.15	201.48	Mineralisation
							164.8	165.42	Mineralisation
							152	159	Mineralisation
DT	18MVDT026	550489	6887495	410	269	-70	246.95	282	Mineralisation
							215	234	Mineralisation
RC	21MVRC001	550331	6887451	414	270	-61	7	8	Mineralisation
							141	185	Mineralisation
							134	136	Mineralisation
RC	21MVRC002	550289	6887500	412	273	-60	148	181	Mineralisation
							96	116	Mineralisation
RC	21MVRC003	550342	6887620	415	273	-61	39	114	Mineralisation
							120	130	Mineralisation
RC	21MVRC004	550420	6887622	412	273	-60	154	174	Mineralisation
							124	128	Mineralisation
							195	203	Mineralisation
							104	112	Mineralisation
RC	21MVRC005	550294	6887804	413	270	-60	47	58	Mineralisation

HOLE TYPE	HOLE ID	EAST (MGA)	NORTH (MGA)	RL (M)	AZIMUTH (°)	DIP (°)	FROM (M)	TO (M)	INTERCEPT
RC	21MVRC006	550520	6887865	419	272	-60	165	168	Mineralisation
							76	90	Mineralisation
RC	YARC005	550179	6887498	416	270	-58	34	88	Mineralisation
							4	13	Mineralisation
							16	23	Mineralisation
RC	YARC006	550361	6887407	416	271	-60	147	170	Mineralisation
							126	128	Mineralisation
							44	45	Mineralisation
RC	YARC007	550210	6887378	419	271	-60	4	15	Mineralisation
RC	YARC008	550406	6887337	418	272	-60	126	157	Mineralisation
							78	82	Mineralisation
RC	YARC009	550433	6887302	413	269	-59	152	163	Mineralisation
							102	108	Mineralisation
RC	YARC010	550332	6887297	415	271	-60	58	59	Mineralisation
							34	35	Mineralisation
RC	YARC011	550348	6887210	404	272	-60	39	40	Mineralisation
RC	YARC013	550588	6887119	414	271	-60	202	220	Mineralisation
RC	YARC014	550472	6886968	415	271	-61	93	108	Mineralisation
							66	68	Mineralisation
RC	YARC015	550486	6886786	413	275	-60	62	82	Mineralisation
							48	51	Mineralisation
RC	YARC017	550436	6887711	413	274	-61	202	206	Mineralisation
							132	149	Mineralisation
RC	YARC018	550639	6886595	412	274	-61	228	231	Mineralisation
							195	205	Mineralisation
RC	YARC019	550575	6886969	411	273	-62	210	214	Mineralisation
							156	166	Mineralisation
RC	YARC020	550427	6888491	415	275	-60	96	100	Mineralisation
							79	88	Mineralisation
RC	YARC021	550589	6888154	415	271	-60	142	159	Mineralisation
RC	YARC022	550628	6886827	412	275	-61	220	246	Mineralisation
							216	217	Mineralisation
	YARC023	550487	6887760	413	273	-61	179	192	Mineralisation
							93	96	Mineralisation

Drill Holes References
17MVDD001 to 18MVDT026 – refer to Independent Geologist's Report within Cosmo Metals' Prospectus dated 22 November 2021
21MVRC001 – 21MVRC006 – refer to CMO ASX Announcement 16/02/2022
YARC005 – YARC015 – refer to CMO ASX Announcement 25/07/2022
YARC017 – YARC023 – refer to CMO ASX Announcement 04/11/2022

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SECTION 1 - SAMPLING TECHNIQUES AND DATA

(Criteria in this section apply to all succeeding sections)

CRITERIA	COMMENTARY
Sampling techniques	The Mt Venn Exploration Target area is situated along the Mt Venn trend is defined within the bounding area as follows:

Coordinate (m)	Minimum MGA94_51	Maximum MGA94_51
Northing	6,885,800	6,888,750
Easting	549,750	551,010

A total of 16,585.6 m from 87 holes of exploration drilling has been completed to date within this area with reverse circulation (RC) comprising 81% and diamond (DD) and diamond tails (DT) making up the remaining 19%. All holes were drilled from surface to a maximum vertical depth of 285m.

Reverse circulation (RC) samples were collected into calico bags over 1 m intervals using a cyclone splitter. The residual bulk samples are placed in piles on the ground. Two cone splits are taken off the rig splitter for RC drilling.

Visually prospective zones were sampled over 1 m intervals and sent for analysis while the rest of the hole was composited over 4 m intervals by taking a spear sample from each 1 m bag.

Diamond drilling was also undertaken, with samples taken either as half core (NQ2), or quarter core (HQ) for laboratory analysis.

Geological logging was completed and mineralised intervals were determined by the geologists to be submitted as 1 m samples for RC drilling. In RC intervals assessed as unmineralised, 4 m composite (scoop or spear) samples were collected for laboratory analysis. If these 4 m composite samples show anomalous grades, the corresponding original 1 m split samples are then routinely submitted to the laboratory for analysis.

For the diamond drilling, samples were selected after geological logging and range in sample length from 0.2 m to 1.5 m.

The samples were crushed and split at the laboratory, with up to 3 kg pulverised and 50g samples analysed by industry standard methods.

CMO has implemented a QAQC protocol since 2017: insertion of commercially available certified reference materials (CRMs), blanks and repeat analyses.

Drilling techniques	A total of 16,585.6 m of drilling from 6 diamond (DD), 9 diamond tails (DT) and 74 reverse circulation (RC) drill holes have been completed within the Mt Venn Exploration Target area. RC drilling was undertaken by Challenge Drilling, K Drill and Blue Spec Drilling using 130–140 mm diameter drill bits. RC drilling employed face sampling hammers ensuring contamination during sample extraction is minimised. Diamond drilling was both NQ2 (50.5 mm core diameter) or HQ (63.5 mm core diameter). Core was oriented using the REFLEX Act II RDIS core orientation tool.
Drill sample recovery	Sample recovery data are noted qualitatively in geological comments as part of the logging process. Sample condition has been logged for every geological interval as part of the logging process. No quantitative twinned drilling analysis has been undertaken and no information is available to assess the relationship between sample recovery and grade. Drilling techniques to ensure adequate RC sample recovery and quality included the use of ' ooster' air pressure. Air pressure used for RC drilling was 700–800 psi .

CRITERIA	COMMENTARY
	Of the 16,585.6 m of RC drilling completed to date, overall logging of all sample recovery recorded 92% as 'good, 3% as 'moderate' and 6% as 'poor'. ogging of the RC sample condition has to date recorded 91% as 'dry', 3% as 'moist' and 7% as 'wet'. RC sample intervals recorded 42% is 1 m split samples and 55% is 4 m composite samples (note: generally composite samples are in unmineralised zones). The remaining 3% were composites of a length other than 4 m (typically at end of hole). The 6 diamond holes have an average core recovery of 99%.
Logging	Geological logging of drilling followed established company procedures. Qualitative logging of samples includes lithology, mineralogy, alteration, veining and weathering. Abundant geological comments supplement logged intervals. The level of detail is considered sufficient to support future Mineral Resource estimation, mining and metallurgical studies. Drill core was photographed (wet and dry) before sampling, after mark-up. All diamond drill core trays and RC chip trays are stored for future reference either on site or at the core shed/logging facility in Balcatta.
Sub-sampling techniques and sample preparation	1 m cyclone splits and 4 m speared composite samples were taken in the field. Samples were prepared and analysed at ALS Laboratories (Perth). All samples were submitted to ALS Laboratory (Perth) for analyses. Sample preparation included weighing, crushing (such that a minimum of 70% passes 2 mm) and pulverised (such that a minimum of 85% passes 75 µm) as per ALS standards. A 4-acid digest and ICP-AES (ALS method; MS-ICP61) was used for 33 multi-elements including Co, Cu, Ni and Zn. For elements that reported over range, ALS used ore grade 4-acid digest and ICP-AES methods; nickel (Ni-OG62), copper (Cu-OG62) and sulphur (S-IR08 LECO sulphur analyser). Sample collection, size and analytical methods are deemed appropriate for the style of mineralisation.
Quality of assay data and laboratory tests	All samples were assayed by industry standard techniques. Typical analysis methods are detailed in the previous section and are considered 'near total' values. Cosmo Metals td (CM) inserted routine 'standard' (mineralised pulp) certified reference material (CRM) at a nominal rate of 1 in 50 samples. Routine ' lank' material (unmineralised gravel) was inserted at a nominal rate of 1 in 50 samples. No significant issues were noted. No duplicate or umpire checks were undertaken. ALS (Perth) provided its own routine quality controls as part of its standard practices. No significant issues were noted. From 2009 until 2011, samples were predominantly submitted to ALS Laboratory in Townsville for base metal analysis by 2-acid aqua regia digest and ICP-AES (ALS: ME-ICP41). During this time the standard suite of elements analysed was Cu, Pb, Zn, Ag, Cd, Sb and Bi; other elements were analysed on an ad hoc basis. Gold analysis was by 30 g or 50 g fire assay with AAS finish (ALS: Au-AA25 or AU-AA26). Over-range base metal samples were generally re-assayed by a 2-acid aqua regia digest with ICP-AES finish (ALS: OG46). Insertion of standards, blanks and laboratory check analyses have been completed as a part of the QAQC procedures at Mt Venn. CRM insertion is at a rate of about one in 50 samples. Blanks were inserted at a rate of one in 100 up to mid-2018 and one in 50 in later drilling. The QAQC data available for the 2017, 2018 and 2022 drilling are reasonable with no serious bias or errors have been identified. The assay methods for the recent data reflect current industry practice. Results from the use of QAQC protocols are acceptable for Exploration Target assessment. Field duplicates were collected at 50 m intervals until January 2018 then at less frequent and random intervals. Laboratory repeats have been performed at random intervals from 1 m to 50 m. Umpire analyses should be included in any future drill program to obtain a better understanding of the precision of the data and how variable or nuggetty the deposit is.

CRITERIA	COMMENTARY
Verification of sampling and assaying	The standard CMO (formerly Great Boulder Resources Ltd) protocol was followed for insertion of standards and blanks: a blank and standard inserted every 50 samples. No QAQC problems were identified in the results. No twinned drilling has been undertaken.
Location of data points	Drill collars were set out using a handheld GPS and final collars were collected using a handheld GPS or DGPS. Sample locations were collected using a handheld GPS as was deemed acceptable for the nature of this program. Downhole surveys were completed by the drilling contractors using the REFLEX EZ-TRACK instrument with a measurement taken every 10 m downhole. Diamond drillholes were surveyed with an Axis Champ north-seeking gyro instrument. Holes without downhole survey use planned or compass bearing/dip measurements for survey control. The MGA94 UTM Zone 51 coordinate system was used.
Data spacing and distribution	Diamond and RC drilling across Mt Venn is at a spacing of 30 m × 30 m with down dip and strike extents drilled at a 100 m × 100 m spacing. Entech considers the data spacing to be sufficient to demonstrate the continuity of both the geology and the mineralisation. Spacing is sufficient to assist with assessment of potential tonnes and grade within the area defined as the Mt Venn Exploration Target area (Refer to Section 1 – Sampling Techniques for area definition) A total of 82 holes for 15,923.6m were used for the assessment of potential tonnes and grade within the defined Mt Venn Exploration Target area Assessment of potential tonnes and grade is informed by 69 RC and 13 DD and DT drillholes with 3,165 m of drilling intersecting the mineralisation. For estimation of potential tonnes and grade of the Exploration Target, a 2 m downhole composite was used.
Orientation of data in relation to geological structure	Drill holes are predominantly oriented perpendicular to lithology in an east-west (MGA94) direction. Intersection angles of the drilling and the Mt Venn mineralisation ranged from perpendicular to oblique. The orientation of mineralisation was delineated by the correlation of geophysical data, site-based observations and established continuity of along strike mineralisation in assay data. Entech was of the opinion the predominant drilling orientation is suitable for mineralisation volume delineation at the Mt Venn deposit, does not introduce bias nor pose a material risk to the Exploration target assessment.
Sample security	Cosmo Metals Ltd (CMO) (and formerly Great Boulder Resources) personnel are responsible for delivery of samples from the drill site to the courier company's dispatch centre in Kalgoorlie. Samples were transported by courier from Kalgoorlie to the laboratory in Perth.
Audits or reviews	Sampling techniques used over the years are consistent with industry standards prevailing at the time. No systematic external audits or reviews of sampling techniques have been carried out.

SECTION 2 REPORTING OF EXPLORATION RESULTS

(Criteria listed in the preceding section also apply to this section.)

CRITERIA	COMMENTARY
Mineral tenement and land tenure status	The Mt Venn project is 100% owned by CMO. The project is located within granted exploration leases E38/2320 and E38/2957. All tenements are in good standing.
Exploration done by other parties	There has been limited exploration over the Mt Venn project area prior to Great Boulder Resources acquiring the tenements in 2016. Kilkenny Gold NL undertook a program of wide-spaced, shallow rotary air blast (RAB) drilling in 1994–1995. Generally, only the regolith was tested, with many holes being terminated before reaching bedrock. Only gold was assayed for in this program and no significant anomalies were identified. Two shallow RC holes were completed in 2008 by Eleckra Mines Ltd (now Gold Road Resources Ltd) to test a potential southern extension of the Mt Venn Igneous Complex, based on magnetic anomalies. No significant sulphides or grade anomalies were intercepted. In 2011, Gold Road Resources completed an airborne XTEM geophysical survey, identifying two potential conductors in bedrock (XTEM-1 and XTEM-2). A 120 m, vertical water monitoring borehole was drilled as a water source; this borehole intercepted XTEM-1 and although sulphide mineralisation was logged, samples for assay were not taken. Great Boulder Resources acquired 75% of the Yamarna Project tenements prior to listing on the ASX in November 2016, and acquired the remaining 25% in early 2021. Great Boulder Resources proceeded to undertake a comprehensive geological review of the project tenements, including geological mapping and sampling of surface outcrops and re-logging of historic drilling. Great Boulder Resources followed up these activities with a moving loop electromagnetic (M EM) survey over targets based on Gold Road's XTEM data. Several targets were identified by this survey which were subsequently tested by drilling in 2017 and led to identification of the Mt Venn copper-nickel-cobalt prospect. Further drill programs have been completed by Great Boulder Resources at the Mt Venn prospect, 70 RC and diamond drill holes in total, for 13,700 m. This drilling has confirmed the presence of multiple, broad zones of sulphide mineralisation on the western margin of the Mt Venn Igneous Complex.
Geology	Copper-nickel-cobalt mineralisation at the Mt Venn project is located along the western portion of the layered mafic intrusives, bounded by a footwall gabbro unit. The copper-nickel-cobalt mineralisation is hosted in layered pyroxenites and gabbros in disseminated to massive pyrrhotite-rich sulphide horizons with minor pentlandite and chalcopyrite. Elevated copper grades are associated massive, secondary chalcopyrite lenses on the margins of such horizons.
Drill hole Information	No Exploration Results are being reported as a part of this Exploration Target. All relevant drill holes used for the Exploration Target have been reported in the appendices of the accompanying Technical Report
Data aggregation methods	No Exploration Results are being reported as part of this Exploration Target report.
Relationship between mineralisation widths and intercept lengths	No Exploration Results are being reported as part of this Exploration Target report.
Diagrams	Relevant maps and sections are included in the Exploration Target report.
Balanced reporting	No Exploration Results are being reported as part of this Exploration Target report.
Other substantive exploration data	There are 77 density measurements of which 17 are from unsampled intervals and have no associated assay data. The remaining density measurements have corresponding assay results, with 44 being in the high-grade wireframes and 16 being in the halo mineralisation. The method of density determination is unknown. A regression with nickel was used to assign densities in the high-grade wireframe. A regression

CRITERIA	COMMENTARY

with iron was used to assign densities in the halo mineralisation. Density was assigned to host rock and weathered zones outside the mineralised areas based on the available measurements.

Entech completed a conceptual pit optimisation study from which the outcomes were used as a guide in the assessment of reasonable depths and confidence in mineralisation continuity.

A copper equivalent percentage grade has been utilised to report the Exploration Target. The copper equivalence calculation present in the table below is informed by metallurgical recoveries from metallurgical test work undertaken by Great Boulder Resources Ltd (GBR) in 2018 and metal prices are a three-month rolling average as at 7 February 2023 sourced from the London Metal Exchange website.

The GBR 2018 metallurgical test work consisted of flotation and leach circuit recovery test work on one composite sample from 17MVDD002 from the central area of the deposit.

Key copper equivalent assumptions are:

Metal	Metal price (USD$/t)	Metallurgical Recoveries	Copper equivalent calculation
Cobalt	38,920	60%	CuEq% = Cu% + (Ni% x (Ni price/Cu price) x (Ni metallurgical recovery)) + (Co%*(Co price/Cu price) x (Co metallurgical recovery)).
Copper	8,891		
Nickel	27,105	70%	

The copper equivalent calculation is as follows:

CuEq% = (Cu% + (Ni% x 27105/8891 x 0.7) + (Co x 38920/8891 x 0.6))

Further work

Upcoming exploration programs at Mt Venn plan to extend known mineralisation along strike and infill current drilling to assist with future Mineral Resource estimation activities and Material classifications. A program of diamond drilling is designed to test down dip extensions of known mineralisation trends.

A ground-based geophysical (MLEM and DHEM) survey is proposed to test mineralisation horizons to the north of the current interpretation and regional targets, with follow-up RC drilling carried out on electromagnetic anomalies.

Geochemical and geological targets along strike of the current Exploration Target will be tested by aircore or auger drilling.

Further metallurgical testwork will be undertaken, feeding into preliminary economic studies for the project.