



14 MARCH 2023
ASX RELEASE

RC DRILLING UNDERWAY TO FOLLOW UP COMPELLING HIGH GRADE BASE METALS TARGET AT MINJINA

HIGHLIGHTS

- Cosmo has commenced a 2,000m RC drilling program to follow up exciting drill results at the Minjina Zn-Pb-Ag target within the Company's 100%-owned Yamarna Project
 - Drilling at Minjina by Cosmo in November 2022 defined two distinct zones of widespread mineralisation where the Company is targeting higher grade zones for follow up
 - The Minjina Zn-Pb-Ag target is coincident with anomalous Pb and Zn in auger drilling and a low magnetic signature, which was first intersected in hole MIRC003 drilled in December 2022 with:
 - 7m @ 3.1% Zn, 0.82% Pb & 11.9g/t Ag from 73m including:
 - 2m @ 5.0% Zn, 1.4% Pb and 18.9g/t Ag from 76m
 - Current program will 'step out' along strike and at depth from hole MIRC003 to test extents of high-grade VMS-style Zn-Pb-Ag mineralisation
 - The program includes hole YARC024 testing the newly identified EMV target, a strong off-hole conductor east of Mt Venn, defined by recently completed ground electromagnetic surveys
 - The drilling is being undertaken by Blue Spec Drilling with all holes cased for down-hole electromagnetic (DHEM) survey and the program anticipated to take three weeks to complete.
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Cosmo's Managing Director, James Merrillees commented:

"The RC program Cosmo completed in late CY 2022 revealed the most promising new base metals exploration target we've generated since our ASX listing. The high-grade zinc-lead-silver mineralisation in hole MIRC003 simply demands follow-up drilling.

We're also eager to take the opportunity to test the EMV geophysical target, more than 200m east of Mt Venn, significantly extending the search space for this growing sulphide hosted copper-nickel-cobalt mineralised system.

The Cosmo team is very excited to be back drill testing these extremely compelling targets at Minjina and look forward to updating our shareholders as RC results come to hand".

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Shares on Issue: 50.5M
Market Cap: \$6.6 (at \$0.13)
Cash: \$1.6M (at Dec 31 2022)

Cosmo Metals Ltd (“Cosmo” or the “Company”) (ASX: CMO) is pleased to announce that RC drilling is underway to test the high priority Minjina Prospect.

Minjina is located approximately 900m north of the Mt Venn Copper (Cu) - Nickel (Ni) – Cobalt (Co) deposit within Cosmo’s Yamarna project, located 190km east of Laverton in the Eastern Goldfields of Western Australia.

Contractor Blue Spec Drilling has been engaged to drill the ~2,000m RC program which will include up to eleven holes targeting further Zinc (Zn) - Lead (Pb) – Silver (Ag) mineralisation at the Minjina prospect as well as several adjacent ‘Mt Venn -style Cu-Ni-Co targets defined by recently completed downhole and fixed loop electromagnetic (EM) surveys.

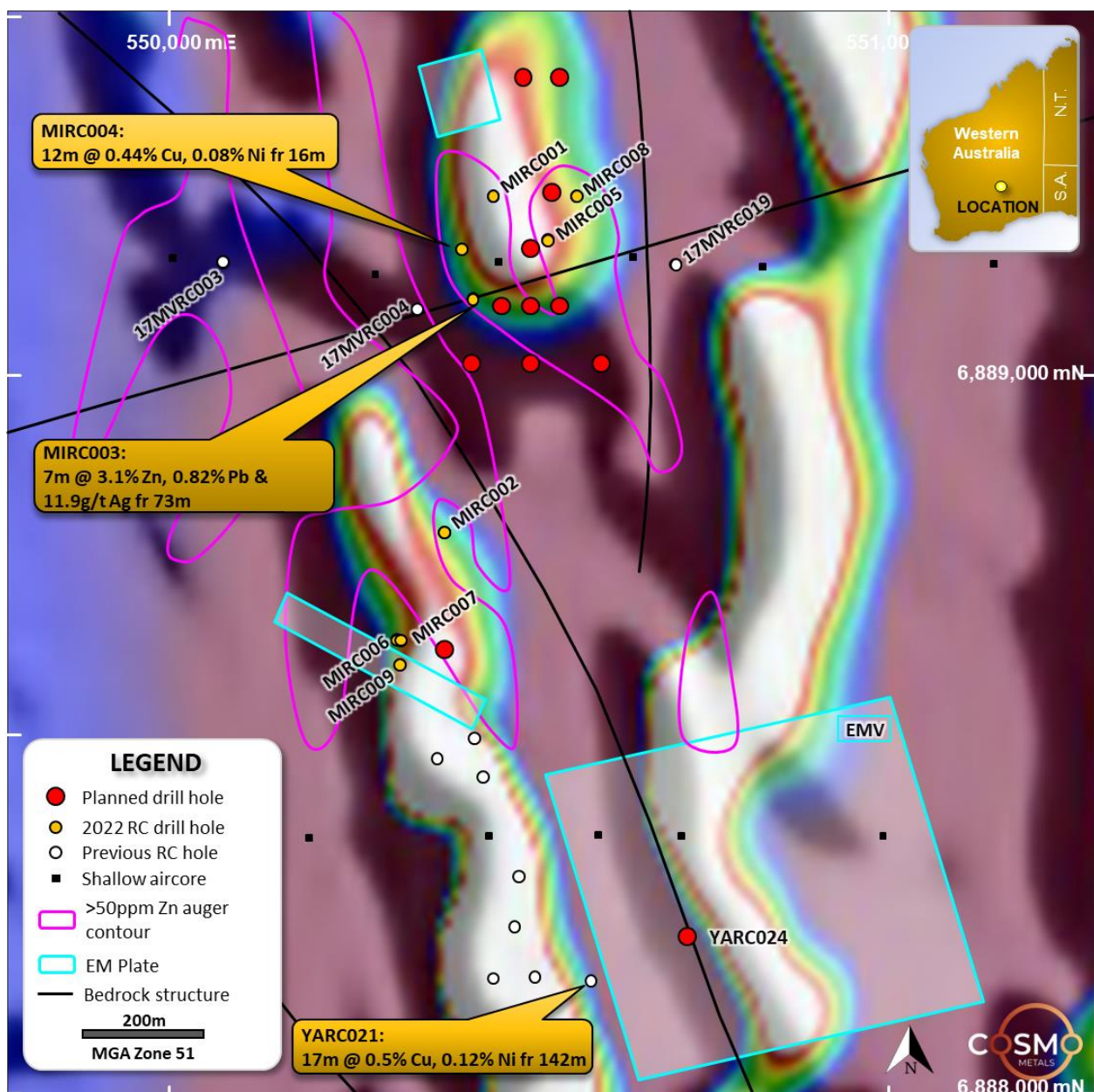


Figure 1: Cosmo Metals’ Minjina Prospect, EM plates, surface Zn anomalism, historical and planned drilling on regional airborne magnetic imagery (RTP TMI).



Minjina VMS-style Zn-Pb-Ag

The Minjina prospect was first tested by hole MIRC003 which targeted historical hole 17MVRC004 drilled in 2017 and which intersected¹:

- 12m @ 0.8% Zn, 3.3g/t Ag & 0.16% Pb from 48m *including*:
 - **2m @ 2.13% Zn, 3.56g/t Ag & 0.39% Pb from 58m**

Hole MIRC003, drilled 80m east of 17MVRC004, intersected a wider and higher-grade zone of Zn-Pb-Ag mineralisation including²:

- 4m @ 0.37% Zn, 0.34% Pb, 4.81g/t Ag from 28m *and*
- 8m @ 0.53% Zn, 0.12% Pb, 2.77 g/t Ag from 48m *and*
- **7m @ 3.20% Zn, 0.82% Pb, 11.84 g/t Ag from 73m which included:**
 - **2m @ 5.0% Zn, 1.4% Pb, 18.83g/t Ag from 76m**
- 4m @ 0.49% Zn, 0.10 % Pb, 2.74 g/t Ag from 116m

Follow up of the intersection in MIRC003 in the current program will include a series of 'step out' holes at 40 – 80m intervals to establish the extent of mineralisation in all untested directions, particularly at depth (*refer Figure 1*).

Additional holes are planned to test the widespread surface Zn (Pb-Cu) anomalism associated with an extensive non-magnetic sequence which are interpreted to represent the host rocks and/or alteration associated with the Zn-Pb-Ag mineralised system intersected in MIRC003.

¹ Refer GBR ASX Announcement 16/12/2019 and Independent Geologist's Report in CMO's Prospectus 22/11/2021

² Refer CMO ASX Announcement 16/02/2022



'Mt Venn style' Cu-Ni-Co

Cosmo's RC drilling program in late 2022 included testing of conductors associated with the strongly magnetic stratigraphy surrounding Minjina, >1km north of the Company's recently announced Mt Venn Exploration Target.

The 2022 program intersected widespread 'Mt Venn style' Cu-Ni-Co massive sulfides (pyrrhotite with minor chalcopyrite and pyrite) including holes MIRC004 and MIRC008³:

MIRC004

- 3m @ 0.37% Cu, 0.06% Ni & 0.18% Co from 7m and
- 12m @ 0.44% Cu, 0.08% Ni & 0.02% Co from 16m *including*:
 - **1m @ 1.31% Cu, 0.28% Ni and 0.08% Co from 24m**
- 20m @ 0.21% Cu, 0.10% Ni & 0.03% Co from 45m

MIRC008

- 5m @ 0.19% Cu, 0.09% Ni & 0.02% Co from 172m and
- 7m @ 0.58% Cu, 0.29% Ni & 0.06% Co from 182m and
- 1m @ 0.6% Cu, 0.02% Ni & 0.007% Co from 196m

Follow up ground EM surveys by the Company in early 2023 defined several new strong conductors which will be targeted in the current program. These targets include **EMV**, a 400m long by >800m deep, strong (>3,000 S) conductor east of previously drilled hole YARC021 which intersected⁴:

- 18m @ 0.48% Cu, 0.12% Ni, 340ppm Co from 142m

The EMV target will be tested with planned hole YARC024.

NEXT STEPS

The RC drill program will take approximately three weeks to complete, and the Company will conduct portable XRF analysis during the program to confirm mineralised zones and assist with logging.

Laboratory assays will be released as they come to hand, and all holes will be cased for future DHEM surveys.

³ Refer CMO ASX Announcement 24/01/2023

⁴ Refer CMO ASX Announcement 04/11/2022



Drilling underway at Minjina with Cosmo geologist logging at MIRC010

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

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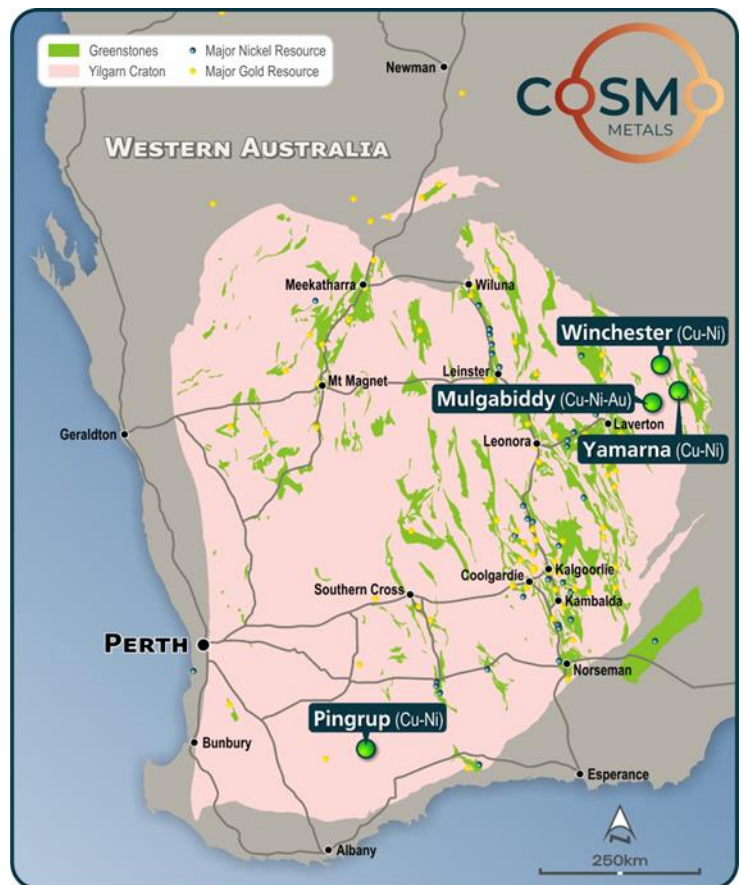
Note 1: Information on historical results, including JORC Code Table 1 information, is contained in the Independent Geologist's Report within Cosmo Metals' Prospectus dated 22 November 2021. The Company confirms it is not aware of any new information or data that materially affects the exploration results set out in the Prospectus and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

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 460km² landholding.



Competent Persons Statement

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.

The information that relates to Mt Venn Exploration Target was first reported by the Company in its announcement to the ASX on 16 February 2023. The Company is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

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.