

STRONG, SHALLOW CONDUCTORS IDENTIFIED AHEAD OF MAIDEN DRILL PROGRAM AT MINJINA

HIGHLIGHTS

- Shallow conductors identified from moving loop electromagnetic (MLEM) survey over the high priority Minjina base metals target located ~900m north of Mt Venn
- Two strong, discrete, late-time electromagnetic (EM) conductors identified at Minjina
- Shallow conductors are coincident with widespread auger copper (Cu) anomalism to 638ppm Cu, where historical hole 17MVRC004 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
- RC drilling program to commence next week to test conductors at Minjina and potentially other high priority targets from ongoing interpretation of the Company's October MLEM program.

Cosmo's Managing Director, James Merrillees commented:

"The Cosmo team is excited to be out drilling again testing high priority targets at the Minjina prospect, less than 1km to the north of Mt Venn.

The strong, late-time conductors associated with surface and drilling geochemistry, on the doorstep of Mt Venn has thrown up a compelling new target for Cosmo, and underlines the rationale for the January IPO, with a well-funded, technically driven team focussed on uncovering further base metals discoveries in the highly prospective Yamarna region."

MINJINA MOVING LOOP ELECTROMAGNETIC (MLEM) SURVEY

Cosmo Metals Ltd ("Cosmo" or the "Company") (ASX: CMO) is pleased to announce results from interpretation of a ground geophysical survey (MLEM) at the Minjina Prospect, on the Company's Yamarna Cu-Ni-Co project east of Laverton in the Eastern Goldfields of Western Australia (refer Figures 1 & 2).

The MLEM survey at Minjina was designed to follow up a downhole EM (DHEM) anomaly associated with historical drillhole 17MVRC004 which intersected²:

- 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

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 16/02/22

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Shares on Issue: 50.5M
Market Cap: \$8.1 (at \$0.16)
Cash: \$2.1M (at Sep 30 2022)

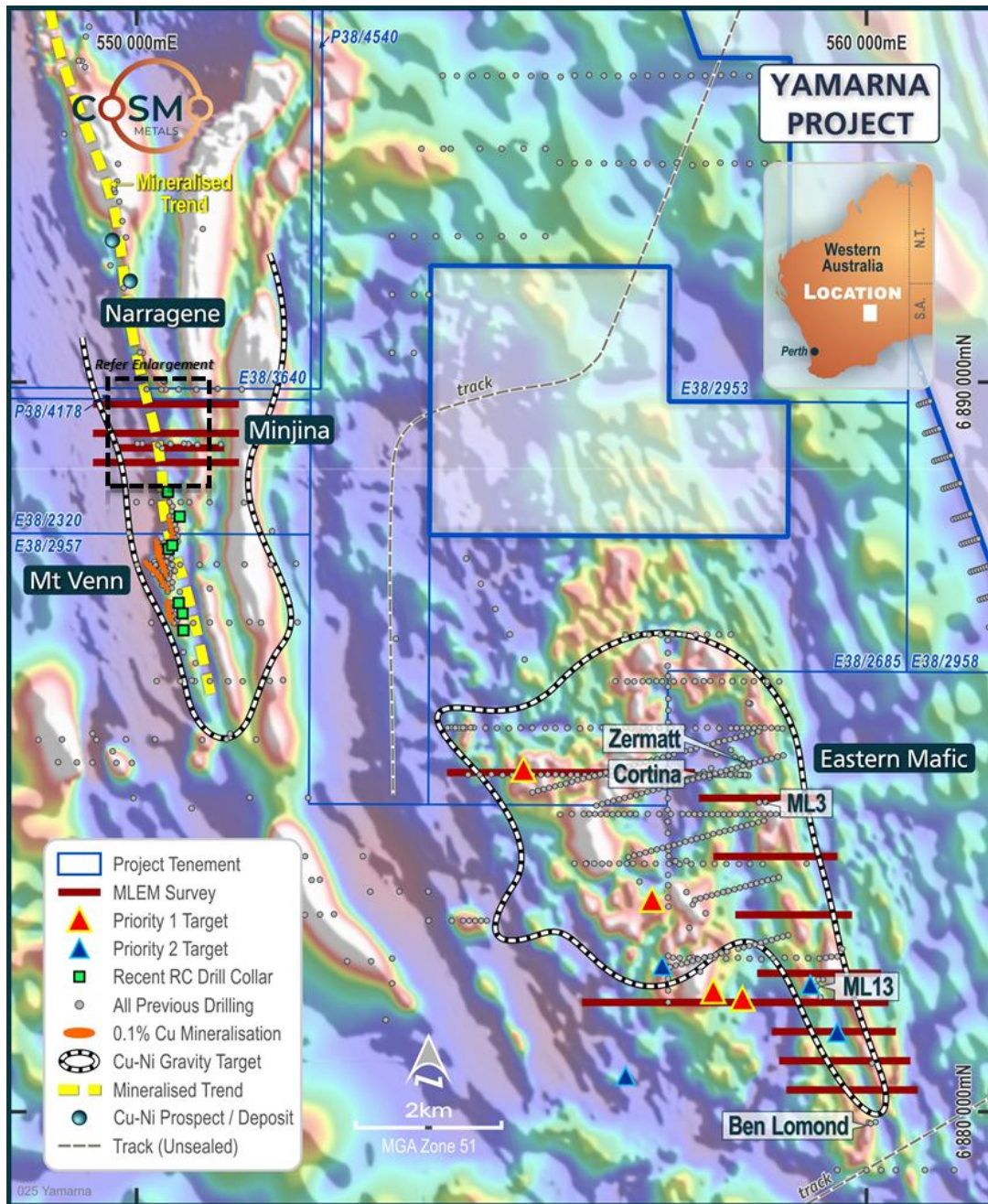


Figure 1: Cosmo Metals' Yamarna Project, Eastern Goldfields Western Australia. October 2022 MLEM survey with Minjina and regional prospects on regional airborne magnetic imagery (RTP TMI).

Cosmo's August DHEM survey at 17MVR0004 & hole 17MVR00019 (~400m to the east) identified a strong off-hole conductor untested by drilling³. This conductor is associated with widespread copper (Cu) anomalism identified in surface sampling, and to constrain the modelling and reveal the strike extent of the DHEM anomaly a MLEM survey was collected over Minjina with four lines collected using an ARMIT sensor.

The ARMIT sensor is designed to operate with lower noise levels than other EM technologies and is considered better able to penetrate conductive cover and potentially to deeper levels below the surface. This is the first time that an ARMIT sensor has been used at Yamarna and modelling and interpretation of the MLEM survey was completed in collaboration with the Company's geophysical consultants Newexco Exploration Pty Ltd.

³ Refer CMO ASX Announcement 05/10/22

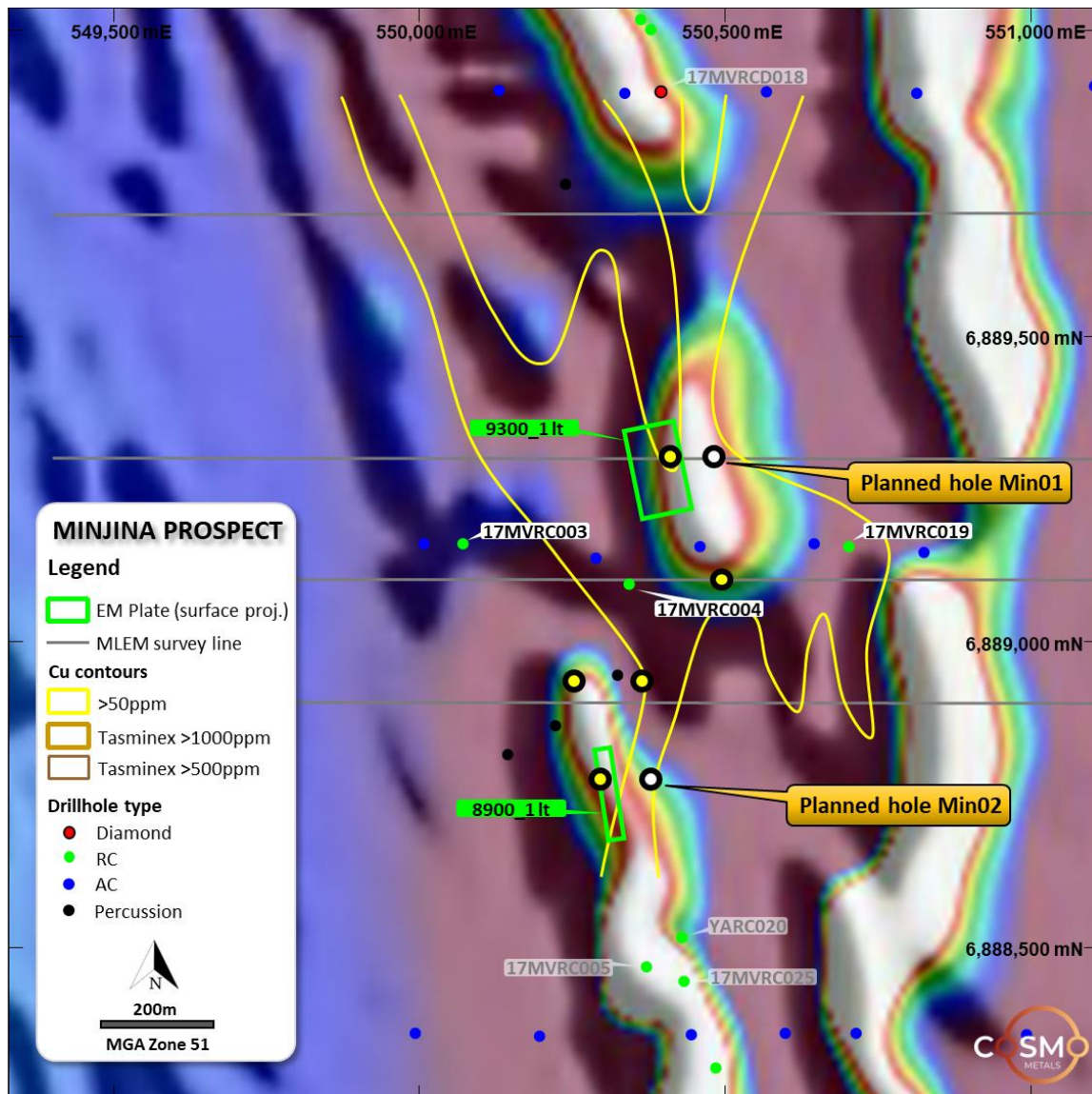


Figure 2: Cosmo Metals' Minjina Prospect, MLEM anomalies, surface Cu anomalism, historical and planned drilling on regional airborne magnetic imagery (RTP TMI).

Modelling of the MLEM defined several distinct plates at Minjina which are summarised in Table 1 below. Two, 300m deep angled drillholes have been planned to test these targets and an additional five holes have been sited to test for less conductive (but potentially mineralised) positions up-dip of and along strike from the two modelled conductors (refer Figures 2 & 3).

Review of the anomalies revealed that the northern anomaly (modelled plate 9300_1 lt) is also associated with a discrete magnetic high which is interpreted to represent a more pyrrhotite-rich part of the Minjina target. The southern anomaly (8900_1 lt) is interpreted to be a continuation of the Mt Venn orebody, ~300m north of the nearest drilling at Mt Venn.

Neither anomaly is visible in airborne EM (AEM) surveys (refer Figure 3) - largely reflecting shortcomings of the airborne systems in detecting buried massive sulphide targets –which supports the Cosmo technical teams' view that AEM historically flown in the region has only been partially effective, potentially opening other areas in the Mt Venn region for targeted ground surveys.

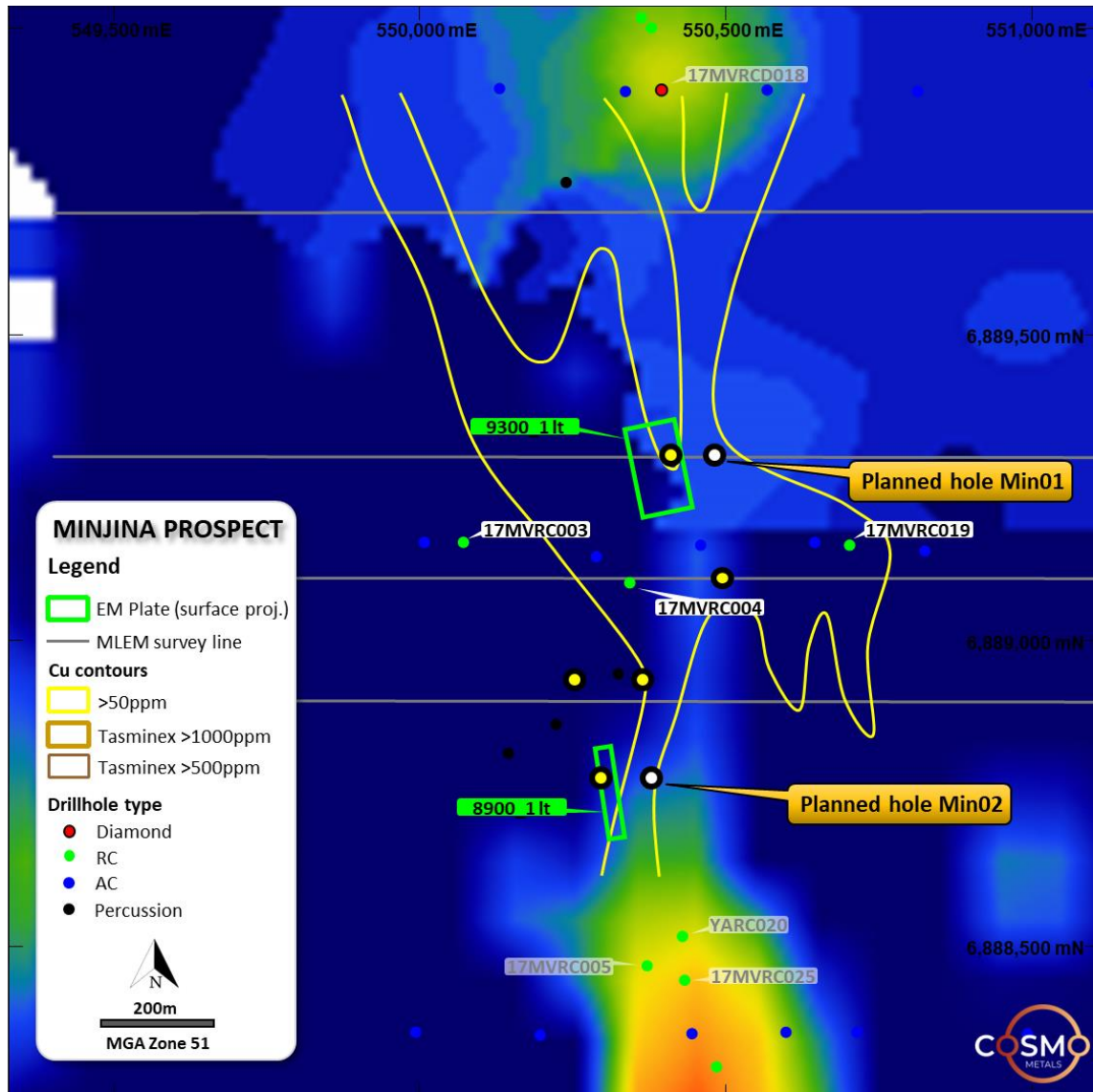


Figure 3: Cosmo Metals' Minjina Prospect, MLEM anomalies, surface Cu anomalism, historical and planned drilling on regional airborne electromagnetics (Bz late-time).

The October MLEM survey also covered targets at Eastern Mafic however processing and interpretation over these areas has not been finalised due to the focus on targeting at Minjina. The expectation is that compelling targets generated from this review will be tested in the upcoming program.

MINJINA RC DRILLING PROGRAM

A contractor has been engaged to commence RC drilling at Minjina in the coming week with the program expected to last approximately two weeks. The Company anticipates releasing visual summaries of the drilling supported by portable XRF shortly after that with analytical results anticipated early in the New Year.



TABLE 1: October 2022 Moving Loop Electromagnetic

| Plate_Name | x | y | z | Dip | Dip Direction | Length | Depth Extent | Conductance (S) | Planned Drillhole |
|----------------------------|--------|---------|-----|-----|---------------|--------|--------------|-----------------|-------------------|
| 9300_1 lt | 550352 | 6889339 | 267 | 65 | 100 | 150 | 150 | 1,214 | Min01 |
| DHEM Model of 17MVRC004,19 | 550483 | 6889317 | 283 | 66 | 147 | 361 | 106 | 1,153 | Model superseded |
| 8900_1 lt | 550300 | 6888745 | 260 | 80 | 83 | 150 | 150 | 2,000 | Min02 |

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

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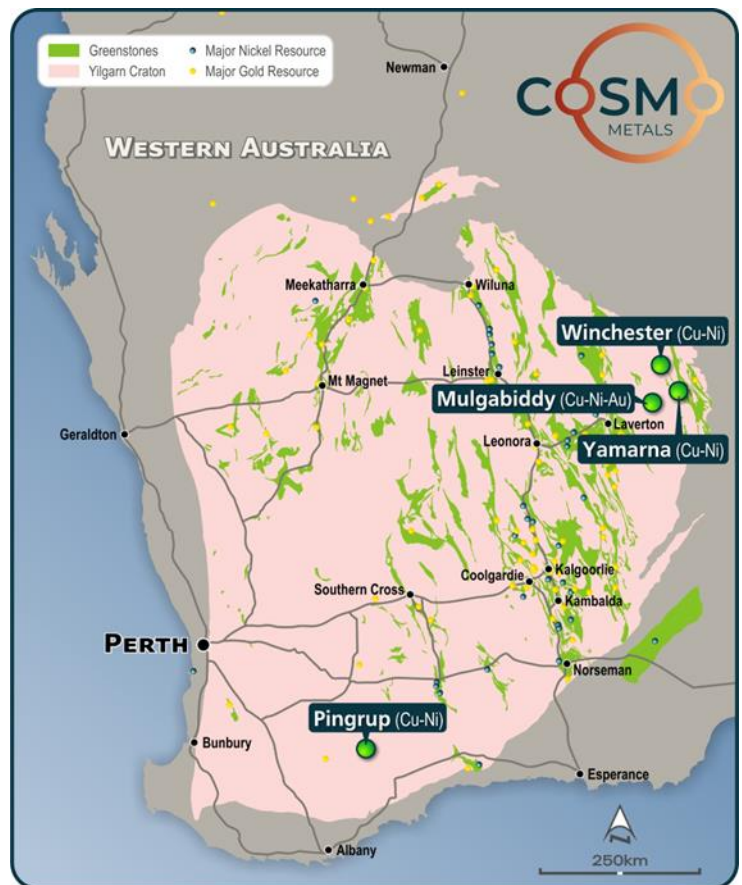
Note 1: Information on historical results, including JORC Code Table 1 information, is contained in the Independent Geologist's Report within Cosmo Metals' Prospectus dated 22 November 2021. The Company confirms it is not aware of any new information or data that materially affects the exploration results 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.

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 JORC CODE, 2012 EDITION – TABLE 1

SECTION 1 - SAMPLING TECHNIQUES AND DATA

(Criteria in this section apply to all succeeding sections)

| CRITERIA | COMMENTARY |
|--|--|
| <i>Sampling techniques</i> | <p>MLEM surveying was carried out by Vortex Geophysics using 200m x 200m transmitter loops powered by a Vortex VTX-100 transmitter and with data recorded on a MonEx TerraTEM receiver system paired with a high sensitivity MonEx ARMIT B-field sensor. The survey used a 'Slingram' configuration using a 300m offset.</p> <p>Surveying was carried out at 1.0Hz and 98 Amps for all lines. Each station had 3 readings of 64 stacks. Data were windowed using over 36 user defined windows.</p> <p>The MonEx ARMIT sensor records three orthogonal components of magnetic field: Bz, Bx and By. This sensor has an extremely low noise envelope.</p> |
| <i>Drilling techniques</i> | N/A - no drilling reported |
| <i>Drill sample recovery</i> | N/A - no drilling reported |
| <i>Logging</i> | N/A - no drilling reported |
| <i>Sub-sampling techniques and sample preparation</i> | N/A - no drilling reported |
| <i>Quality of assay data and laboratory tests</i> | <p>Data were acquired using MonEx ARMIT sensor and TerraTEM receiver system.</p> <p>Data were delivered by Vortex Geophysics who performed QA/QC on a daily basis.</p> <p>Data were again subject to QA/QC by consultants Newexco Exploration Pty Ltd daily. QA/QC was achieved using Maxwell software by ElectroMagnetic Imaging Technology Pty Ltd.</p> <p>MLEM parameters:</p> <ul style="list-style-type: none"> • Loop Size – 200m x 200m (single turn); • Slingram 300m offset; • Transmitter – Vortex VTX-100; • Sensor – ARMIT 3-component dB/dt, B-Field, high sensitivity magnetic field sensor; • Receiver – MonEx TerraTEM; • Line Spacing – 200-400m; • Station Spacing – 100m; • Transmitter Frequency – 1Hz; • Current – 98A; <p>Readings – minimum two per station.</p> |
| <i>Verification of sampling and assaying</i> | Data were check and validated daily using Maxwell software by ElectroMagnetic Imaging Technology Pty Ltd. |
| <i>Location of data points</i> | <p>MLEM survey stations were located using handheld GPS with nominal ± 10m error. Topographic control is nominal using the regional AHD.</p> <p>WGS84, Zone 51 coordinate system was used.</p> |
| <i>Data spacing and distribution</i> | <p>The spacing and location of most of the lines was 200-400m lines spacing with 100m station spacing. The line and station spacing is very common for exploration purposes.</p> <p>Each station has three orthogonal readings of 64 stacks.</p> |
| <i>Orientation of data in relation to geological structure</i> | The MLEM lines were orientated orthogonal to the interpreted prevailing geological strike. |
| <i>Sample security</i> | No physical samples have been collected. Geophysical data was digitally acquired by Vortex Geophysics in the field and reported to the Vortex's CEO in Perth. |



| CRITERIA | COMMENTARY |
|--------------------------|---|
| | Data were then forwarded directly from Vortex to Cosmo's geophysical consultants Newexco Exploration Pty Ltd. |
| <i>Audits or reviews</i> | None completed. |

SECTION 2 REPORTING OF EXPLORATION RESULTS

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

| CRITERIA | COMMENTARY |
|---|--|
| <i>Mineral tenement and land tenure status</i> | <p>The Yamarna Project comprises the following tenements held 100% by Cosmo Metals Ltd.</p> <p>Exploration licences E38/2320, E38/2685, E38/2952, E38/2953, E38/5957, E38/2958, E38/3640 and prospecting licences P38/4178 and P38/4540.</p> <p>E38/2129 is held 75% by Cosmo Metals, 25% by Ausgold Ltd.</p> |
| <i>Exploration done by other parties</i> | <p>Previous explorers included:</p> <ul style="list-style-type: none"> 1990's. Kilkenny Gold NL completed wide-spaced, shallow, RAB drilling over a limited area. Gold assay only. 2008. Elecktra Mines Ltd (now Gold Road Resources Ltd) completed two shallow RC holes targeting extension to Mt Venn igneous complex. XRF analysis only, no geochemical analysis completed. In 2011 Crusader Resources Ltd completed broad-spaced aircore drilling targeting extensions to the Thatcher's Soak uranium mineralisation. Only XRF analysis was completed. In late 2015 Gold Road drilled and assayed an RC drill hole on the edge of an EM anomaly identified from an airborne XTEM survey, identifying copper-nickel-cobalt mineralisation. In 2017 Great Boulder subsequently re-assayed the Gold Road hole and confirmed primary bedrock sulphide mineralisation, with peak assay results of 1.7% Cu, 0.2% Ni, 528ppm Co (over 1m intervals) over two distinct lenses. Great Boulder completed a ground based moving loop EM survey in September 2017 and reported extensive strong EM conductors and co-incident copper-nickel mineralisation from aircore geochemistry. <p>Full drillhole details of all historical drilling and exploration results can be found in the Independent Geologist's Report in Cosmo Metals' Prospectus dated 22 November 2021 available from the Company's website.</p> |
| <i>Geology</i> | <p>Cosmo Metals' Yamarna Project hosts the southern extension of the Mt Venn igneous complex. This complex is immediately west of the Yamarna greenstone belt.</p> <p>The mineralisation encountered in the Mt Venn drilling suggests that sulphide mineralisation is defined by a prominent long EM conductor trend and shows a highly sulphur-saturated system within a metamorphosed dolerite and gabbro sequence.</p> <p>Visual logging of sulphide mineralogy shows pyrrhotite dominant with accessory chalcopyrite and pyrite.</p> |
| <i>Drill hole Information</i> | N/A - no drilling reported |
| <i>Data aggregation methods</i> | N/A - no drilling reported |
| <i>Relationship between mineralisation widths and intercept lengths</i> | N/A - no drilling reported |
| <i>Diagrams</i> | Appropriate maps, sections and tabulations are presented in the body of this announcement. |
| <i>Balanced reporting</i> | All relevant exploration results are reported. |



| CRITERIA | COMMENTARY |
|---|---|
| <i>Other substantive exploration data</i> | The conductor plates referred to in the Report are modelled from observed data and are considered a “best-fit”, based on a set of standard assumptions. They should therefore not be considered absolute. |
| <i>Further work</i> | Further work is discussed in the body of this announcement. |