

# BASE METALS INTERSECTIONS EXPANDS MINJINA DISCOVERY

## HIGHLIGHTS

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- Portable XRF (pXRF) data confirms Zinc (Zn)-Lead (Pb)-Copper (Cu)-Silver (Ag) discovery in recently completed RC drill program at the Minjina base metals prospect within the Company's 100%-owned Yamarna Project
  - Mineralisation is unconstrained within a >1km x 750m zone of elevated Zn following up a higher-grade zone in hole MIRC003<sup>1</sup>:
    - 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
  - MIRC010 and MIRC014, drilled downdip of MIRC003, intersected wider zones of Zn-Pb-Ag mineralisation with Cu grades increasing down dip, and which remains open
  - Holes MIRC012 and 013 intersected wide zones of Zn-Pb mineralisation as well as Cu, extending the known Zn and Pb zone 80m to the south of MIRC003
  - MIRC013 includes a zone of massive sulphides with elevated Cu and Nickel (Ni) coincident with the Zn mineralisation in MIRC013, the first zone of coincident Cu-Zn mineralisation associated with massive sulphides intersected in the entire Yamarna Project
  - Cu grades increasing down section suggesting a vector pointing towards the focus of the Zn-Pb mineralised system
  - Downhole electromagnetic (DHEM) surveys completed with modelling of the data ongoing
  - Laboratory assay results are expected next month and will be integrated into the targeting model including results of the DHEM surveys in preparation for follow-up drilling campaigns in Q2 2023
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Cosmo's Managing Director, James Merrillees commented:

*"This is an outstanding result from the follow up program at Minjina. The confirmation of a thickening zone of zinc-lead-silver mineralisation in MIRC014 and MIRC010 as well as increasing copper mineralisation downdip supports the model that we are moving closer to the centre of the mineralised system where the best grades and thicknesses of mineralisation are interpreted to occur.*

*These results continue to support the interpretation that this may be the distal edge of a larger system. I look forward to the results of DHEM modelling in MIRC012 which stopped short of the massive sulphide*

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<sup>1</sup> Refer CMO ASX Announcement 23/01/2023

### Cosmo Metals

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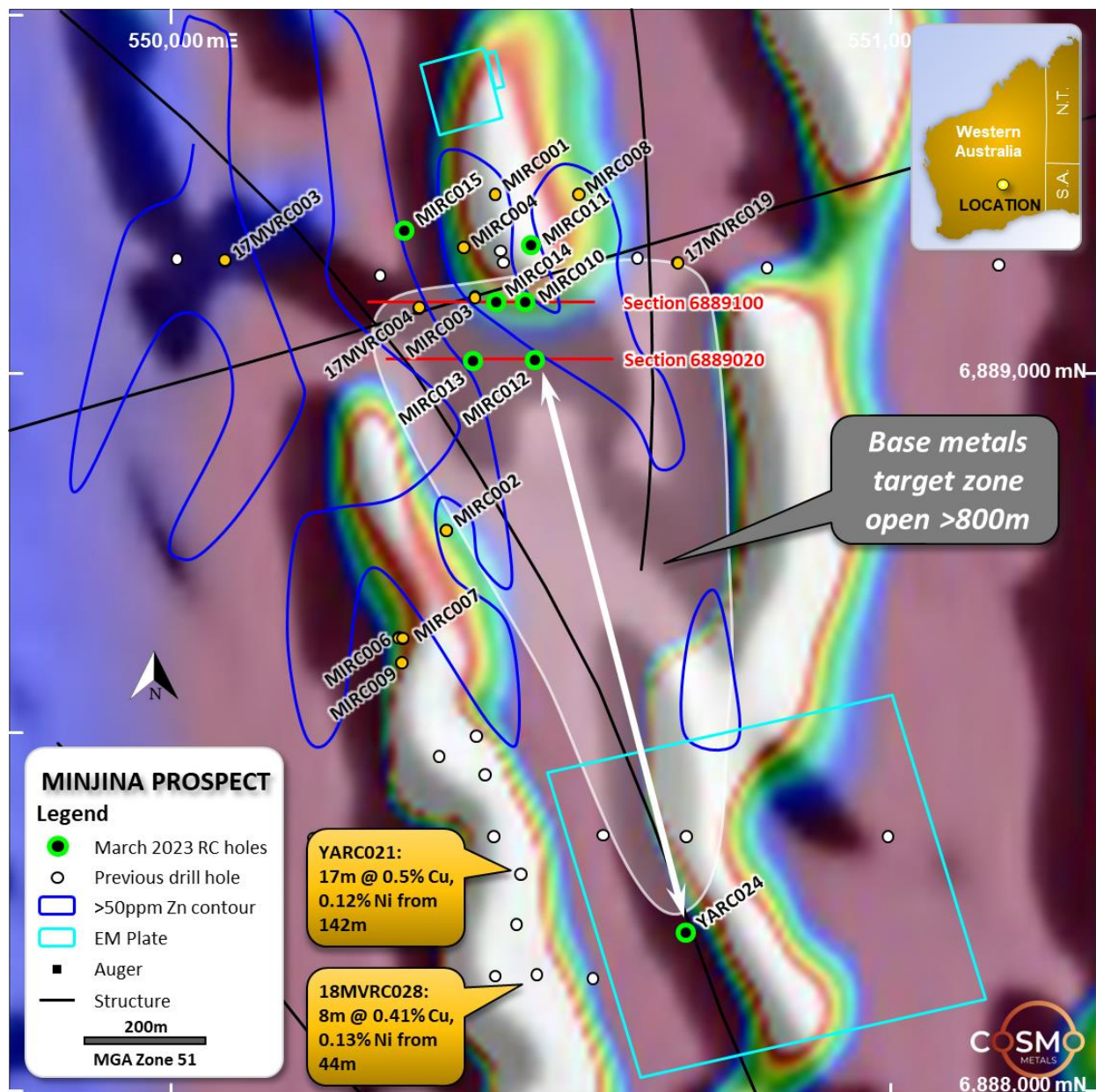
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**Shares on Issue:** 50.5M  
**Market Cap:** \$6.3M (at \$0.125)  
**Cash:** \$1.1M (at Dec 31 2022)

zone intersected in MIRC013, 80m south of MIRC003. This massive sulphide zone with not only copper but also zinc mineralisation, is the first time this coincidence of target elements has been intersected at Yamarna.

We're looking forward to laboratory results to support the pXRF data to incorporate in our targeting model and to get back out in the field at Minjina to follow up these exciting initial results."

Cosmo Metals Ltd ("Cosmo" or the "Company") (ASX: CMO) is pleased to announce preliminary results from a seven-hole (1,734m) RC drilling program at the Minjina Prospect, within the Yamarna Project located ~150km east of Laverton in the Eastern Goldfields of Western Australia.



**Figure 1:** Cosmo Metals' Minjina Prospect, Eastern Goldfields Western Australia. Location of recently completed and historical drill holes on regional airborne magnetic imagery (RTP TMI).

The program targeted two distinct mineralisation styles at Minjina located ~1km north of the Company's Mt Venn deposit:

1. **VMS-style Zn–Pb–Ag ( $\pm$ Cu–Au) mineralisation** analogous to the Teutonic Bore District deposits north of Leonora, which includes the Teutonic Bore, Jaguar and Bentley deposits. Zinc-rich mineralisation in this style of deposit is generally non-magnetic and very weakly conductive and therefore difficult to detect with traditional electromagnetic (EM) surveying.
2. **Massive sulphide hosted magmatic Cu–Ni–Co mineralisation** analogous to the Company's Mt Venn deposit, and associated with massive pyrrhotite, which is typically magnetic and conductive, representing a relatively straightforward target for surface geophysics in the region.

#### **Volcanogenic Massive Sulphide (VMS) Zn–Pb–Ag ( $\pm$ Cu–Au)**

VMS Zn–Pb–Ag mineralisation at Minjina was first identified from historic hole 17MVRC004 which intersected:

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

A follow up hole, MIRC003 drilled by the Company in late 2022, and collared 80m east of 17MVRC004, intersected significantly broader and higher-grade Zn–Pb–Ag mineralisation compared with 17MVRC004 including a higher-grade zone of:

- **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**

Mineralisation in MIRC003 is open down dip and along strike with the above significant intersections contained within a broad zone of anomalous (>0.1%) Zn extending most of the entire length of the hole.

The focus of the recently completed drilling was to test these open extensions of the MIRC003 intersection down dip and along strike position with RC drill holes MIRC010, 012, 013, 014 and 015 (*refer Table 1 and Figures 1, 2 & 3*).

Four of the holes (MIRC010, 012, 013 and 014) intersected multiple wide zones of Zn–Pb mineralisation, successfully extending the mineralised zone more than 80m to the east and 80m to the south of MIRC003 where it remains open in both directions. These wider pXRF\* intersections include (*refer Table 1 and Figures 1, 2 & 3*):

- **MIRC010**
  - 39m @ >0.2% Zn from 123m
  - 51m @ >0.2% Zn from 183m
- **MIRC012**
  - 10m @ >0.2% Zn from 220m
- **MIRC013**
  - 8m @ >0.2% Zn and >0.2% Cu from 207m within a broad zone of Zn mineralisation of 61m @ >0.1% Zn from 192m





- MIRC014
  - 54m @ >0.2% Zn from 6m
  - 120m @ >0.2% Zn from 128m

**\* pXRF Cautionary Statement**

*Portable XRF (pXRF) data is used as an exploration tool and a guide only and should never be considered as a proxy or substitute for laboratory analysis. pXRF measurements recorded are for a single spot only and may not be representative of the entire interval being measured. Cosmo will update shareholders when laboratory analyses become available.*

The consistent presence of mineralisation between several adjacent holes shows that the individual intersections form part of a large, coherent 1km x 750m mineralised system.

A fifth hole (MIRC015) was drilled to the northwest of MIRC003 and intersected a package of unmineralised gabbros, and has been surveyed with DHEM to identify conductors on this NW trend.

Mineralisation intersected in MIRC010, 012, 013 and 014 is generally hosted in mafic and intermediate rocks although it was noted that the zones of Zn-Pb identified from pXRF readings are visually indistinguishable from barren rock units and that mineralisation is not constrained to a specific lithological unit.

***Increasing widths of Zn and elevated Cu down-dip and massive sulphides in MIRC013***

pXRF data also confirmed that in addition to the thick zones of Zn Pb-dominant mineralisation there was a clear trend of increasing Cu grades down dip and along strike of MIRC003 (*refer Figures 2 & 3*)

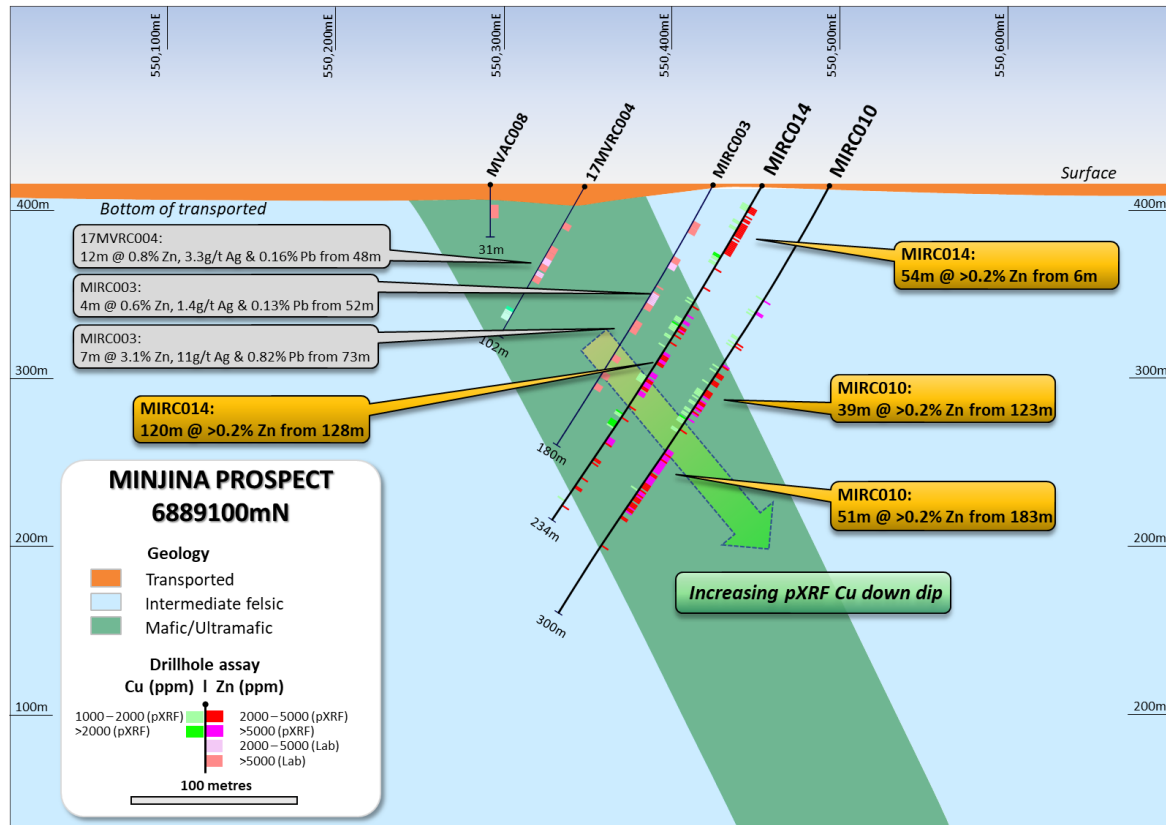
The Company is encouraged that this represents one possible vector to the focus of mineralisation in the Minjina system, with the Zn-dominant parts of the system considered more distal.

In addition to the increasing Cu grades noted above, MIRC013 (on a section 80m south of MIRC003), intersected massive sulphide mineralisation with elevated copper and zinc, the first time these elements have been detected in a massive sulphide zone in the Yamarna Project.

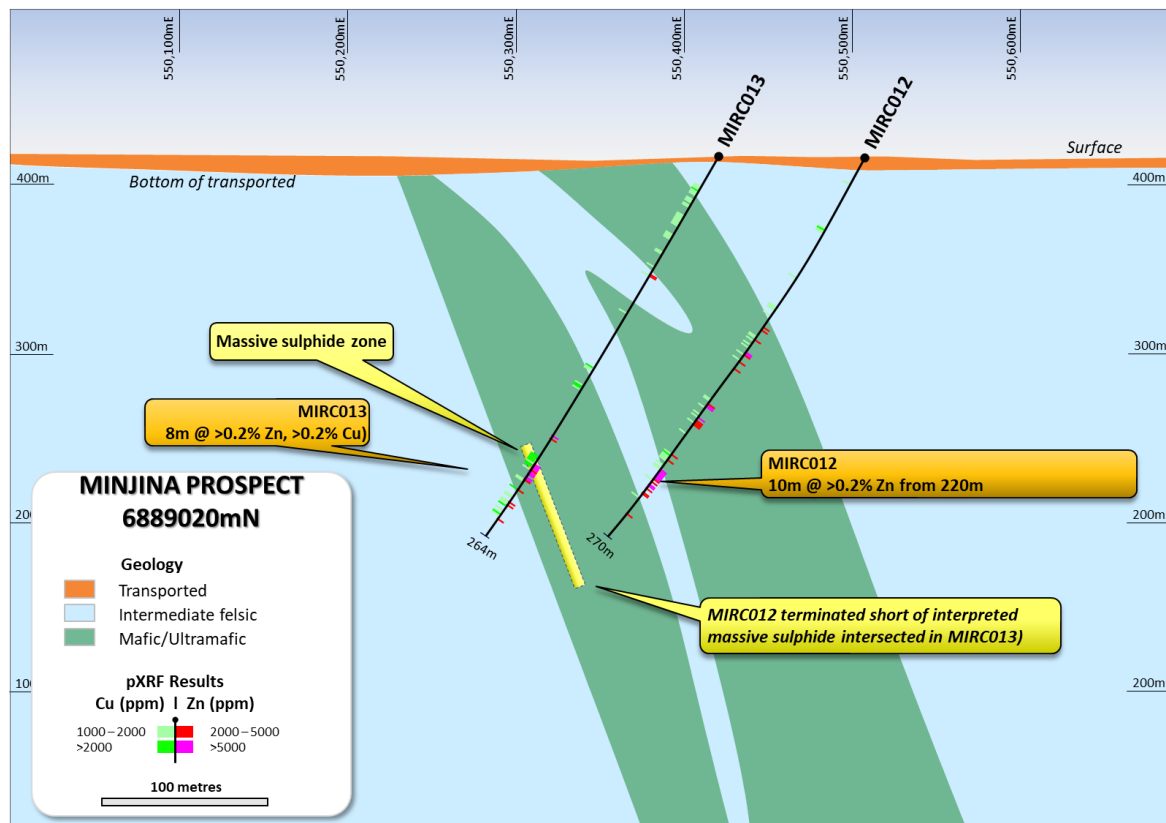
Unfortunately, MIRC012, drilled 80m east of MIRC013, was terminated short of this massive sulphide zone, which remains open (*refer Figure 3*). There is the potential for this hole to be re-entered and extended as part of a future drilling programme to test the interpreted position of the massive sulphide lens.

Despite issues with swelling clays the Company was able to survey MIRC012 for DHEM, and the results of this survey are expected to help define the extents of this (conductive) massive sulphide zone for follow up drill testing.

Cosmo's technical team are reviewing traditional pathfinder elements geochemistry and lithogeochemical modelling to refine the targeting, including interpretation of the DHEM data collected in MIRC012 and MIRC014 noting that holes MIRC010 and 013 were unable to be surveyed by DHEM due to swelling clays blocking the finished holes.



**Figure 2:** Section 6889100, MIRC010 and MIRC014 testing downdip of MIRC003 with pXRF Cu grades increasing down dip with increasing thicknesses of pXRF Zn. MIRC014 cased for DHEM.



**Figure 3:** Section 6889020, MIRC012 and MIRC013 testing 80m south of MIRC003 with zone of massive sulphides with elevated Cu and Zn remaining untested in MIRC012. MIRC012 cased for DHEM.



*MIRC013 with semi-massive and massive sulphide intervals highlighted*

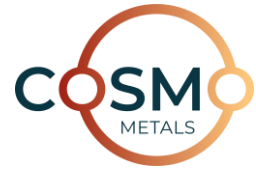


*Massive sulphide chips in MIRC013 from 207-208m (pXRF 0.7% Cu and 0.2% Ni)*

### **Magmatic Copper (Cu) – Nickel (Ni) – Cobalt (Co)**

The Company's systematic program of moving loop and downhole electromagnetic (FLEM & DHEM) surveying completed in January 2023 identified two strong, discrete, late-time EM conductors at Minjina, considered to represent Cu-Ni-Co targets analogous to the Company's Mt Venn deposit.

These conductors were tested by holes YARC024 and MIRC011 in the current RC program (*refer Figure 1*).



- **At Mt Venn, YARC024** targeted a large, moderate-strong (>3,000S) conductor identified from ground FLEM survey. Two main zones of copper mineralisation explained the modelled EM conductor (confirmed by DHEM) with several narrow zones of elevated (pXRF) Cu including:
  - 15m @ >0.1% Cu from 191m and
  - 12m @ >0.1% Cu from 216m

There was no significant Ni or Co mineralisation reported in the pXRF.

- **At Minjina, MIRC011** targeted an off-hole conductor modelled from DHEM in MIRC003 and MIRC008. MIRC011 intersected a magnetic gabbro overlying a footwall of massive, unaltered dacite.

Weak copper (Cu) mineralisation was intersected from 52-72m which correlates well with the Cu mineralisation in MIRC004.

An intersection of disseminated pyrrhotite with no nickel and trace chalcopyrite is interpreted to be the source of the target conductor.

Both holes were cased and surveyed with DHEM which will be modelled and incorporated into an updated target model at these prospects to identify the potential for stronger mineralisation at depth and along strike.

## NEXT STEPS

The Company is refining the geological model and modelling DHEM data to define targets for follow up drill testing to identify controls on the Minjina discovery, which will include laboratory assays.

Work programs planned over the coming months are expected to include:

- Modelling and interpretation of DHEM data from five holes (early April)
- Surface soils and/or auger sampling (est. mid-late April)
- Laboratory assays (est. late April/early May)
- RC (and potentially diamond) drilling targets vectoring on higher grade zinc-lead and copper-rich parts of the Minjina mineralised system (May).





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

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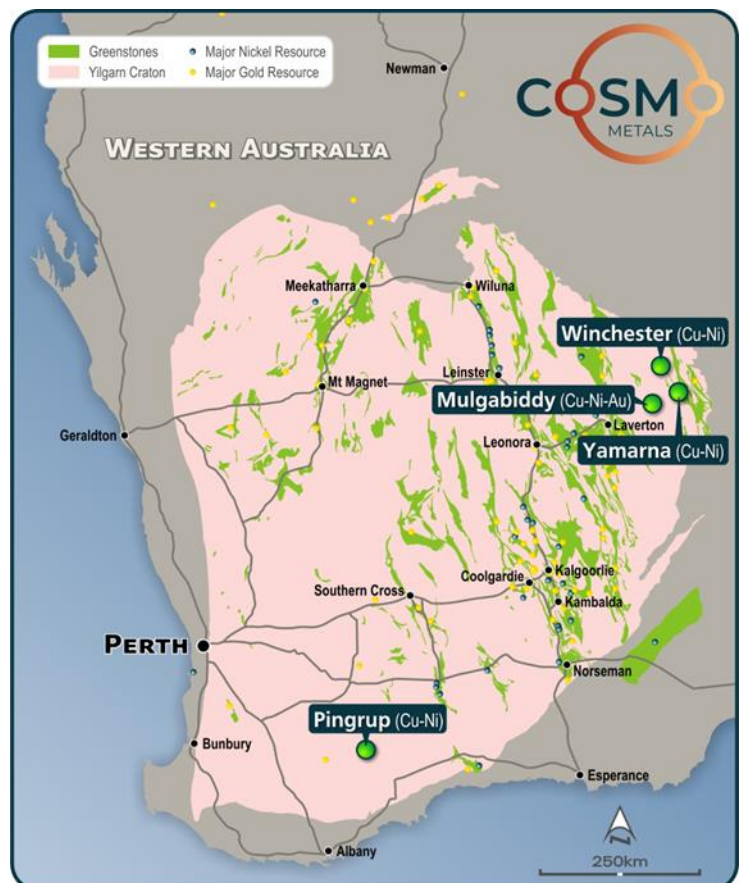
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**About Cosmo Metals Ltd**

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<sup>2</sup> 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 DRILL HOLE INFORMATION

**TABLE 1:** RC drill hole coordinate details. Drill hole coordinates MGA94 Zone 51 (GDA94). Collars located with handheld GPS ( $\pm 5$  m accuracy), EOH= end of hole depth, RC = Reverse Circulation drill hole.

PROSPECT	HOLE ID	HOLE TYPE	EOH (M)	EAST MGA	NORTH MGA	RL MGA	DIP	AZIMUTH MGA
MINJINA	MIRC010	RC	300	550493	6889099	415	-60	270
MINJINA	MIRC011	RC	276	550501	6889179	413	-60	270
MINJINA	MIRC012	RC	270	550506	6889019	414	-60	270
MINJINA	MIRC013	RC	264	550420	6889017	416	-60	270
MINJINA	MIRC014	RC	234	550453	6889100	415	-60	270
MINJINA	MIRC015	RC	150	550325	6889199	414	-60	270
MT VENN	YARC024	RC	240	550717	6888220	414	-60	270

**TABLE 2:** Discussion of drilling results with portable XRF (pXRF)  $>0.2\%$  Zn and  $0.1\%$  Cu cut-offs described. All widths quoted are downhole widths, true widths are not known at this stage. \* pXRF Cautionary Statement

Portable XRF (pXRF) data is used as an exploration tool and a guide only and should never be considered as a proxy or substitute for laboratory analysis. pXRF measurements recorded are for a single spot only and may not be representative of the entire interval being measured. Cosmo will update shareholders when laboratory analyses become available.

HOLE ID	EOH (M)	TARGET	MINERALISATION pXRF* $>0.2\%$ Zn, or $>0.1\%$ Cu	COMMENT	DHEM
MIRC010	300	<b>Zn-Pb-Ag</b> NW fault/EM plate targeting VMS-style Zn-Pb-Ag mineralisation downdip of MIRC003	Entire hole with elevated Zn including three wide zones of consistent Zn ( $>0.2\%$ ) mineralisation: <ul style="list-style-type: none"> <li>• 26m from 6m</li> <li>• 39m from 123m &amp;</li> <li>• 51m from 183m</li> </ul>	Widespread narrow intercepts of up to 1% Zn with most of the hole anomalous from 6m down to 252m where a dioritic intrusion begins. Anomalism corresponds well with the anomalism in the adjacent up dip holes MIRC003 and MIRC014 with consistent anomalism now demonstrated over a dip extent of over 80m. No visible evidence of mineralisation with only trace sulphides and no strong evidence for structure or veining observed. The main zone is associated with lead anomalism up to 0.7% Pb. The host rock is predominantly gabbro with an intermediate footwall.	Not cased, hole blocked
MIRC011	276	<b>Mt-Venn Style Cu-Ni-Co</b> Off hole conductor modelled from DHEM in MIRC003 and MIRC008	Weak copper mineralisation from 52-72m which corresponds well with the mineralisation in MIRC004 but with lower Cu, no nickel with disseminated pyrrhotite and trace chalcopyrite.	Magnetic gabbro overlying footwall massive, unaltered dacite. 239-256m pervasively biotite-altered gabbro with strong pyrrhotite, mag sus avg 80 (peak 150) contrasting with background of around 1 Lithogeochemically felsic however primary minerals completely replaced by biotite and lesser chlorite so the	Modelling underway

HOLE ID	EOH (M)	TARGET	MINERALISATION pXRF* >0.2% Zn, or >0.1% Cu	COMMENT	DHEM
				original rock type assumed to be mafic. No base metal anomalism associated with the magnetic unit. The hole is on the northern side of a significant fault which represents a change in geological setting making this hole more prospective for copper mineralisation rather than the zinc which is intercepted to the south.	
MIRC012	270	<b>Zn-Pb-Ag</b> Eastern hole on section to test mineralisation 80m south of MIRC003-MIRC010. NW fault & ENE fault – mag and gravity low	Most of the hole contains anomalous zinc with 144m @ >0.1% Zn from 114m with best intercepts: <ul style="list-style-type: none"> <li>50m @ &gt;0.2% Zn from 208m</li> </ul> Mineralisation hosted within gabbro & associated with weak pyrite.	Dominated by gabbro with a single thin unit of diorite intercepted from 168-174m with no evidence of a large felsic body to explain the mag/gravity low in this location. <b>The anomalism corresponds well to MIRC010 to the north extending the anomalism a further 80m south providing more evidence for the presence of large mineralised system. MIRC012 stopped short of the massive sulphide zone intersected in MIRC013.</b>	Modelling underway
MIRC013	264	<b>Zn-Pb-Ag</b> Western hole on section to test mineralisation south of MIRC003-MIRC010. NW fault & ENE fault – mag and gravity low	Two thin zones of Mt Venn style semi-massive sulphide from 145-146m and from 157-159m. Pyrrhotite dominant and the pXRF of the upper zone returned elevated Ni and Cu. Discontinuous Zn anomalism from 66-130m forming a series of zones of 2-3m width with >1,000ppm Zn separated by 5-10m widths of unmineralised rock. The lower target was intercepted at 192m and produced another significant of 61m @ >0.1% Zn including a 10m higher grade zone. 8m zone of semi-massive and massive sulphides from 207-215m grading >0.2% Cu, and nickel coincident with >0.1% Zn zone.	Host rock gabbro with uncommon metre scale intermediates. Hole was extended below the planned EOH depth to intersect the lower zinc target after it was not intersected in the initial interpreted position. Mineralised intervals are hosted by gabbro although the best grades were located within the massive sulphide unit. <b>This intersection is the first time that zinc and copper mineralisation have been intersected together at Yamarna.</b>	Not cased, hole blocked
MIRC014	234	<b>Zn-Pb-Ag</b> Testing Zn mineralisation between MIRC003 and MIRC010.	Most of the hole had anomalous zinc with two broad zones of anomalism producing intercepts of: <ul style="list-style-type: none"> <li>54m @ &gt;0.2% Zn from 6m</li> </ul>	Host rock is a thick gabbro body with a thin zone of stringer sulphides from 159-168m associated with 0.18% Cu and 9m of diorite intersected at the base of the hole.	Modelling underway

HOLE ID	EOH (M)	TARGET	MINERALISATION pXRF* >0.2% Zn, or >0.1% Cu	COMMENT	DHEM
			<ul style="list-style-type: none"> <li>120m @ &gt;0.2%Zn from 87m.</li> </ul>	<i>The mineralisation corresponds well to the location of mineralisation in the adjacent up and down dip holes confirming continuity of mineralisation between 17MVRC004 and MIRC010 for distance of over 150m down dip.</i>	
MIRC015	150	<b>Mt-Venn Style Cu-Ni-Co/ Zn- Pb-Ag</b> Stratigraphic hole to test NW extension of Minjina mineralised zone	No significant mineralisation intercepted	Massive gabbro throughout hole. Cased for DHEM.	Modelling underway
YARC024	240	<b>Mt-Venn Style Cu-Ni-Co</b> Large, moderate-strong (>3,000S) conductor identified from ground FLEM survey	Two main zones of copper mineralisation explained the modelled EM conductor (confirmed by DHEM). Several narrow zones of elevated Cu with main intersections: <ul style="list-style-type: none"> <li>15m @ &gt;0.1% Cu from 191m and</li> <li>12m @ &gt;0.1% Cu from 216m</li> </ul> There was no significant Ni or Co in the pXRF. Pyrrhotite with minor chalcopyrite, occurring as strongly disseminated to fine veinlets in the gabbro.	Broad zone of diorite to 120m before passing into gabbro / leucogabbro. Silica alteration through the diorite, including some zones with complete silica replacement & weak disseminated pyrite. Some variations in the gabbro based on the amount of quartz and coarse pyroxene phenocrysts. The location of the mineralised zones corresponds well to the mineralisation in 18MVRC0029 and supports a 45° easterly dipping lode. Mt Venn style semi-massive and massive sulphides not intersected.	In-hole conductor explained by drilling



## APPENDIX B 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>RC samples were collected into calico bags over 1m 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.</p> <p>Visually prospective zones were sampled over 1m intervals and sent for analysis while the rest of the hole was composited over 4m intervals by taking a spear sample from each 1m bag.</p> <p>A quality assurance /quality control (QAQC) system comprising internal and laboratory standards, blanks and duplicates were used to evaluate analytical results.</p> <p>Portable XRF data is collected with an Olympus Vanta M Series analyser on each 1m sample from spoil dumped on the ground, with a 30 second beam time using three beams.</p>
<i>Drilling techniques</i>	<p>Industry standard drilling methods and equipment were utilised.</p> <p>Reverse Circulation (RC) Drilling was undertaken by Blue Spec Drilling using 130 to 140mm diameter drill bits.</p> <p>RC drilling employed face sampling hammers ensuring contamination during sample extraction is minimised.</p>
<i>Drill sample recovery</i>	<p>Sample recovery data is 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.</p> <p>No quantitative twinned drilling analysis has been undertaken and no information is available to assess the relationship between sample recovery and grade.</p>
<i>Logging</i>	<p>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.</p>
<i>Sub-sampling techniques and sample preparation</i>	<p>1m cyclone splits and 4m speared composite samples were taken in the field.</p> <p>Samples were prepared and analysed at ALS Laboratories in Perth.</p> <p>Samples are weighed, crushed (such that a minimum of 70% pass 2mm) and pulverised (such that a minimum of 85% pass 75µm) as per ALS standards.</p> <p>All samples have been submitted for analysis via a 4-acid digest and ICP-MS (ALS method; ME-MS61L) for 33 multi-elements including Co, Cu, Pb, Ni &amp; Zn.</p> <p>For elements that report over range, ALS use ore grade 4-acid digest and ICP-AES methods; nickel (Ni-OG62), copper (Cu-OG62), and sulphur (S-IR08 Leco Sulphur analyzer).</p> <p>Sample collection, size and analytical methods are deemed appropriate for the style of exploration.</p>
<i>Quality of assay data and laboratory tests</i>	<p>All samples were assayed by industry standard techniques.</p> <p>Typical analysis methods are detailed in the previous section and are consider 'near total' values.</p> <p>Routine 'standard' (mineralised pulp) Certified Reference Material (CRM) was inserted by Cosmo at a nominal rate of 1 in 50 samples. Routine 'blank' material (unmineralised sand) was inserted at a nominal rate of 1 in 100 samples. No significant issues were noted.</p> <p>No duplicate or umpire checks were undertaken.</p> <p>ALS (Perth) provided their own routine quality controls within their own practices. No significant issues were noted</p> <p>pXRF instrument used is an Olympus Vanta M-series with 30 second beam time with three beams collected and standard instrument calibration procedures.</p>



CRITERIA	COMMENTARY
<i>Verification of sampling and assaying</i>	<p>The standard CMO protocol was followed for insertion of standards and blanks with a blank and standard inserted per 40 samples. No QAQC problems were identified in the results. No twinned drilling has been undertaken.</p> <p>pXRF data are downloaded into an Excel spreadsheet and then compiled into the Company's SQL database.</p> <p>No adjustments were made to individual spot XRF data reported.</p>
<i>Location of data points</i>	<p>Drill collars were set out using a handheld GPS and final collar locations collected using a handheld GPS. Sample locations are collected using a handheld GPS which is considered acceptable for the early-stage nature of this program.</p> <p>Downhole surveys were completed by the drilling contractors using the Reflex EZ-TRACK with a measurement taken every 30m downhole.</p> <p>Planned or compass bearing/dip measurements were used for survey control for holes without downhole survey data.</p> <p>MGA94 UTM zone 51 coordinate system is used.</p>
<i>Data spacing and distribution</i>	<p>The spacing and location of most of the drilling is variable which is common for early-stage exploration.</p> <p>The spacing and location of data is considered acceptable for exploration purposes.</p>
<i>Orientation of data in relation to geological structure</i>	<p>Drilling is nominally perpendicular to regional geological and mineralisation trends where interpreted, and practical. True width and orientation of intersected mineralisation is currently uncertain.</p> <p>The spacing and location of data is considered acceptable for exploration purposes.</p>
<i>Sample security</i>	<p>Cosmo Metals' personnel are responsible for delivery of samples from the drill site to the Yamarna exploration camp for courier pick-up and delivery to ALS in Perth.</p>
<i>Audits or reviews</i>	<p>None completed.</p>

## 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>Tenements comprise 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>
<i>Exploration done by other parties</i>	<p>Previous explorers included:</p> <ul style="list-style-type: none"> <li>• 1990's. Kilkenny Gold NL completed wide-spaced, shallow, RAB drilling over a limited area. Gold assay only.</li> <li>• 2008. Eleckra 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.</li> <li>• In 2011 Crusader Resources Ltd completed broad-spaced aircore drilling targeting extensions to the Thatcher's Soak uranium mineralisation. Only XRF analysis was completed.</li> <li>• 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.</li> <li>• 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.</li> </ul>



CRITERIA	COMMENTARY
	<ul style="list-style-type: none"> <li>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 airborne geochemistry.</li> </ul> <p>Full 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, conductive EM trend, demonstrating a highly sulfur-saturated system within a metamorphosed dolerite, pyroxenite and gabbroic sequence.</p> <p>Visual logging of sulphide mineralogy shows pyrrhotite dominant with chalcopyrite a subordinate sulphide phase.</p>
<i>Drill hole Information</i>	<p>A list of drill hole coordinates, orientations and intersections reported in this announcement are provided in the body and appendices within this announcement.</p>
<i>Data aggregation methods</i>	<p>Results are reported using cut-off levels relevant to the sample type.</p> <p>For laboratory assays single metre splits, significant intercepts are reported for grades greater than 0.15% Cu with a maximum dilution of 2m. High grade intervals are quoted using a &gt;1% Cu cut-off with a maximum of 2m internal dilution. For Zn-Pb intervals significant intercepts were reported for grades greater than 0.5% Pb + Zn with a maximum dilution of 2m. High grade intervals are quoted using a &gt;1% Pb + Zn cut-off with a maximum of 2m internal dilution.</p> <p>No maximum or minimum grade truncations have been applied.</p> <p>A weighted average calculation was used to allow for bottom of hole composites that were less than the standard 4m and when intervals contain composited samples plus 1m split samples.</p> <p>No metal equivalents are used.</p> <p>Portable XRF (pXRF) results are reported as where results are &gt;0.1% Cu or &gt;0.2% Zn given the inherent inaccuracy of the method due to the limited sample size being read.</p>
<i>Relationship between mineralisation widths and intercept lengths</i>	<p>The orientation of structures and mineralisation is not known with certainty; however, drill holes were oriented perpendicular to interpreted mineralisation.</p>
<i>Diagrams</i>	<p>Appropriate maps, sections and tabulations are presented in the body of this announcement.</p>
<i>Balanced reporting</i>	<p>All composite samples were assayed however comprehensive reporting of all results is not practicable.</p> <p>Significant intersections are reported in the body and appendices of this announcement</p>
<i>Other substantive exploration data</i>	<p>Not applicable, no other material exploration data.</p>
<i>Further work</i>	<p>Further work is discussed in the body of this announcement.</p>