



29 October 2024

## **FINAL ASSAY RESULTS FROM COBAR PROJECT CONFIRM POTENTIAL FOR INTRUSION-RELATED MINERALISATION**

**Copper anomalism confirmed at Windmill Dam, with IP survey planned to  
define key targets for follow-up drilling**

### **HIGHLIGHTS**

- Final assay results received from reconnaissance drilling at the newly defined **Windmill Dam** target and the advanced **Evergreen** prospect within the 100%-owned Cobar Project in NSW.
- Results from Windmill Dam show broad intercepts of Cu mineralisation, with assays from hole WDRCDD001 including:
  - **20m @ 0.3% Cu** from 186m; and
  - **30m @ 0.15% Cu** from 271m.
- Assay results from hole BRD022 at Evergreen have extended the strike extent of known mineralisation by a further 50m to the NNW:
  - 2.4m @ 0.6g/t Au, 5g/t Ag, 1.9% Pb and 3.7% Zn from 163.6m, including **0.5m** grading at **1.47g/t Au** from 164.5m.
- Latest results follow previously reported assays from the new Kelpie Hill target, where hole KHRC001 intersected significant high-grade gold plus base metal mineralisation:
  - **7m @ 4.3g/t Au**, 2.7g/t Ag, 0.3% Pb from 50m and **1m @ 4.17g/t Au**, 2.7g/t Ag from 82m.
- Induced Polarisation (IP) survey due to commence over the Cobar Project in the coming weeks. Results from the IP survey will help define and prioritise targets for immediate, follow-up drill testing.

Eastern Metals Ltd (**ASX: EMS**) ("**Eastern Metals**" or "the **Company**") is pleased to report final assay results from recent reconnaissance drilling at its 100%-owned **Cobar Project** in NSW.

The Company has completed drilling at its two newly defined targets, Kelpie Hill and Windmill Dam<sup>1</sup>, and at the more advanced Evergreen prospect<sup>2</sup> (refer to **Figure 1**). Assay results are reported in this announcement for two (2) holes completed at Windmill Dam (WDRCDD001) and Evergreen

<sup>1</sup> Eastern Metals (ASX:EMS) ASX Announcement 3 June 2024, 'New High-Priority Targets Identified at Browns Reef, NSW'.

<sup>2</sup> Eastern Metals (ASX:EMS) ASX Announcements 27 June 2022, 'Evergreen Discovery Zone Expanded at Browns Reef' & 2 August 2022, 'More High-Grade Assays in Evergreen Discovery at Browns Reef'

(BRD022). Assay results for Kelpie Hill were reported in the announcement dated 23 October 2024<sup>3</sup> where KHRC001 returned **7m @ 4.3g/t Au**.

Hole WDRCDD001 at Windmill Dam returned broad intercepts of copper mineralisation in both the Clements and Preston formations, with **20m @ 0.3% Cu from** 186m and **30m @ 0.15% Cu** from 271m along with silver, lead, zinc and gold suggesting intrusion-related mineralisation.

Assay results from hole BRD022 at Evergreen returned **2.4m @ 0.6g/t Au, 5g/t Ag, 1.9% Pb and 3.7% Zn** from 163.6m, including **0.5m grading at 1.47g/t Au** from 164.5m. Refer to **Table 1** for a summary of significant intercepts.

The Company is finalising the design of an Induced Polarisation (IP) survey, which is due to commence in the coming weeks. Results from the IP survey will help define and prioritise targets for follow-up drill testing.

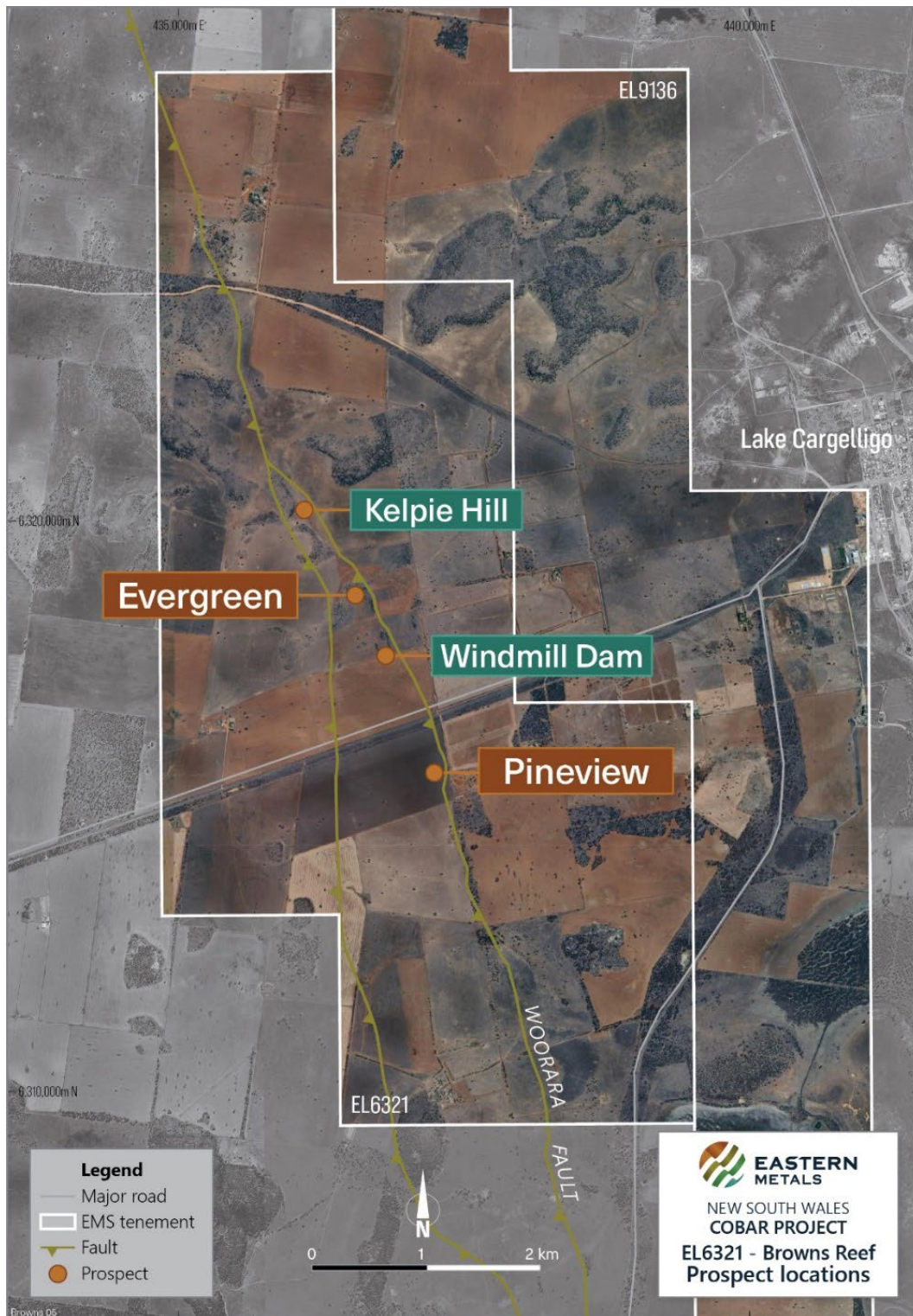
**Eastern Metals' Chief Executive Officer Ley Kingdom said:** *"The broad intercepts of copper mineralisation at Windmill Dam provide an enticing target for follow-up exploration, suggesting the potential for an intrusion-related mineral system. Drilling has also successfully extended the mineralised footprint at the Evergreen prospect by 50m to the north-northwest.*

*We are now completing planning for an IP survey across the Cobar Project area to help define and prioritise targets for follow-up drilling. This will include Windmill Dam and Evergreen, as well as the high-priority Kelpie Hill target where recent drilling returned high-grade intercepts of up to 7m @ 4.3g/t Au."*

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<sup>3</sup> Eastern Metals (ASX:EMS) ASX Announcement 23 October 2024, 'Shallow High-Grade Gold Zone Intersected at Kelpie Hill'.

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**Figure 1:** Location of EL6321 (Browns Reef) and the Kelpie Hill, Windmill Dam & Evergreen prospects.

## Key Points

- Assays results have been received for one drillhole at the newly identified target, Windmill Dam, and one drill-hole at the advanced Evergreen prospect within the 100% owned Cobar Project in NSW.
- Drilling at Windmill Dam intersected two broad low grade copper zones of **20m @ 0.3% Cu** from 186m and **30m @ 0.15% Cu** from 271m down-hole.
- Alteration assemblages intersected downhole within WDRCDD001 include chlorite-carbonate and phyllic (quartz-sericite-pyrite) alteration with significant breccia associations, and stringer style vein fill and fracture-controlled chalcopyrite and Pb-Zn mineralisation. These suggest the presence of an intrusion-related heat, fluid and metal source, a mineralisation style that has not previously been described at Browns Reef despite the presence of rhyolites observed in diamond core (e.g. BRD013).
- An Induced Polarisation survey will be undertaken in the coming weeks to identify targets for further drilling.
- BRD022 extended the strike of known mineralisation at the advanced Evergreen prospect 50m to the NNW, intersecting base and precious metal mineralisation for **2.4m @ 0.6g/t Au, 5g/t Ag, 1.9% Pb, 3.7% Zn** from 163.6m, including **0.5m grading at 1.47g/t Au from 164.5m**.

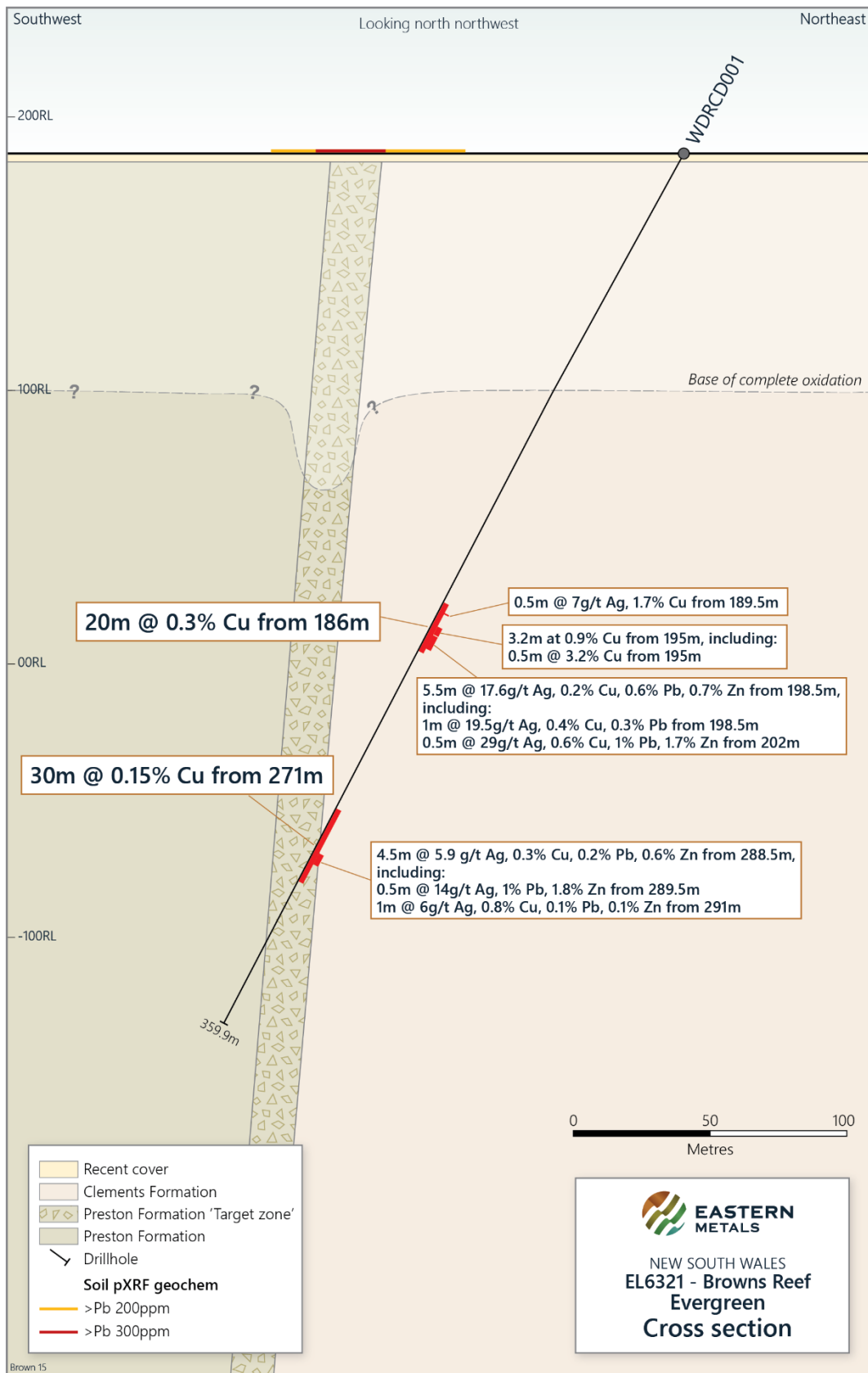
## Windmill Dam, Browns Reef (EL6321)

Windmill Dam is located between areas of known mineralisation at Pineview (the historical Browns Reef shaft) and Evergreen (refer to **Figure 1**).

One Reverse Circulation percussion (“RC”) hole, WDRC001, targeting a strong lead-arsenic-antimony surface geochemical anomaly, was subsequently extended with an HQ diamond cored tail to a total depth of 359.9m as hole WDRCDD001 (refer to **Figure 2**).

Windmill Dam is located between the Pineview and Evergreen prospects (refer to **Figure 1**) in an area that historically has remained under-explored due to farming activities and land access restrictions.

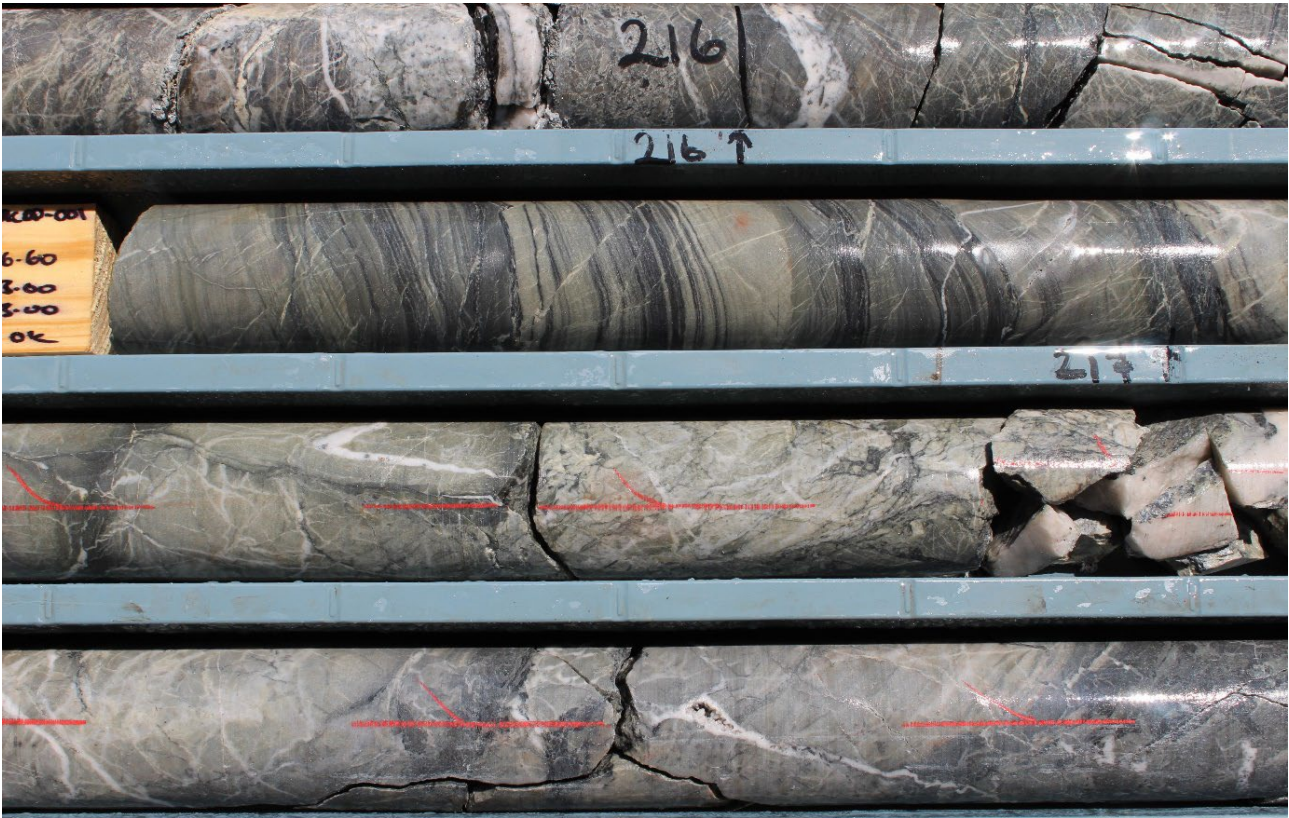
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**Figure 2:** Cross-section of Windmill Dam drillhole WDRCCDD001 showing significant intercepts.

Broad copper-rich zones and metal zonation intersected within WDRCDD001 suggests that a potential heat and mineralisation source is more proximal to this drill-hole than in previously drilled prospects along the Browns Reef trend.

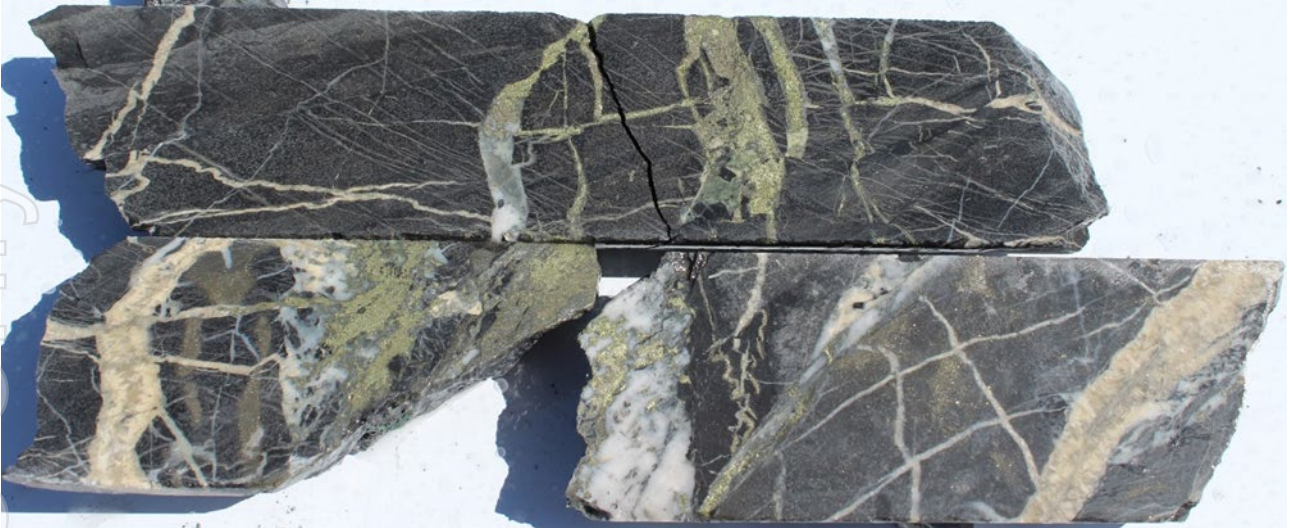
Texture destroying, intense phyllic (silica-sericite) alteration was intersected within the Clements Formation from approximately 216m down-hole, interpreted as evidence that an intrusive feeder zone may be present below. Refer to **Figure 3**.



**Figure 3:** Intense texture destroying phyllic (silica-sericite) alteration present within WDRCDD001 from 215.62m to 218.93m.

A breccia zone was intersected from 189.7m, with multiple localised zones of disseminated and blebby fill and replacement chalcopyrite and pyrite, with associated galena and sphalerite intersected further downhole. Refer to **Figures 4, 5 and 6**.

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**Figure 4:** WDRCDD001 with chalcopyrite, pyrite and quartz breccia/vein fill mineralisation intersected in the Ordovician Clements Formation from 188.7m to 190.1m. Refer to **Table 1** for assay grades.



**Figure 5:** WDRCDD001 with chalcopyrite bearing breccia/vein fill zone intersected in the Clements Formation from 189.7m. Refer to **Table 1** for assay grades.



**Figure 6:** WDRCDD001 195.35-195.6m chalcopyrite, galena and pyrite breccia fill within the Clements Formation. Refer to **Table 1** for assay grades.



WDRCDD001 intersected fresh Clements Formation sediments at 110m, equivalent to a vertical depth of 90m. Stringer quartz-pyrite-galena-[chalcopyrite-sphalerite] veins are present from approximately 160m downhole and are interpreted as potentially representing a footwall feeder zone to Browns Reef trend Zn-Pb-[Cu-Ag-Au] mineralisation. Refer to **Figure 7**.

These mineralised stringer zones are present within the Ordovician Clements Formation and are not restricted to the Devonian Preston Formation, which hosts the known Browns Reef trend mineralisation.



**Figure 7:** Stringer galena-quartz-pyrite-chalcopyrite-sphalerite vein in Clements Formation at 162.5m. Interpreted as representing a potential feeder zone for Browns Reef mineralisation. Refer to **Table 1** for assay grades.

The Clements Formation to Preston Formation contact was logged at a narrow shear at 244.5m. Basal Preston Formation comprised interbedded sedimentary breccias and sandstones, with minor shale/siltstone, interpreted as being turbidite facies.

Silica-sericite alteration is very strong, pyrite and chalcopyrite are locally common, mainly as breccia fill but also in fine veins, collectively suggesting proximity to an intrusive somewhere deeper in the footwall.

Fill and replacement textures observed were more common than seen elsewhere along the Browns Reef mineralised trend, suggesting a possible NE-SW orientated fault-related dilation zone at Windmill Dam, which has been inferred in mapping by Electrolytic Zinc Company of Australasia Ltd (EZ) in 1982, refer to **Figure 8**.

**Figures 9** and **10** below show textures observed in WDRCDD001 core.



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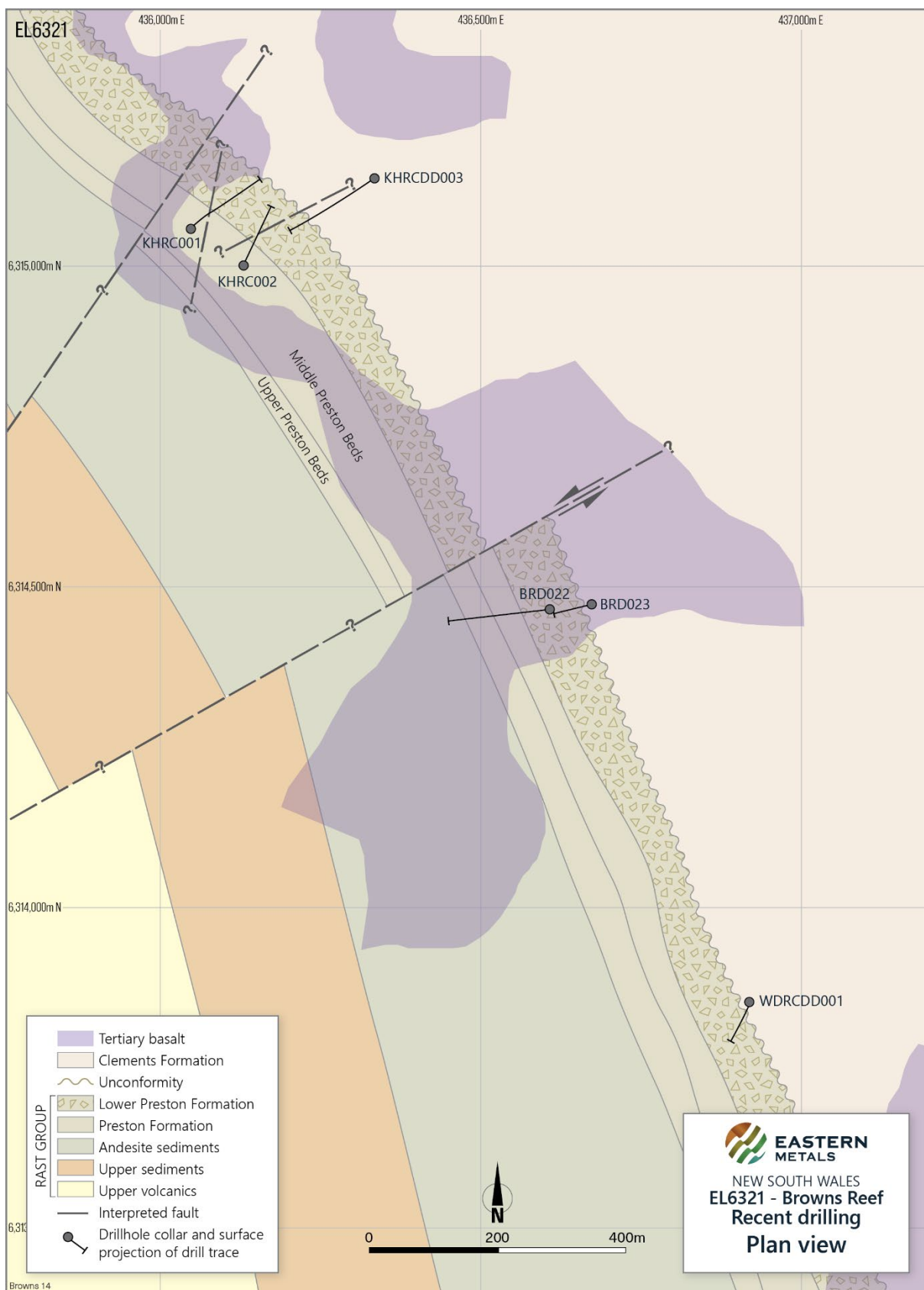
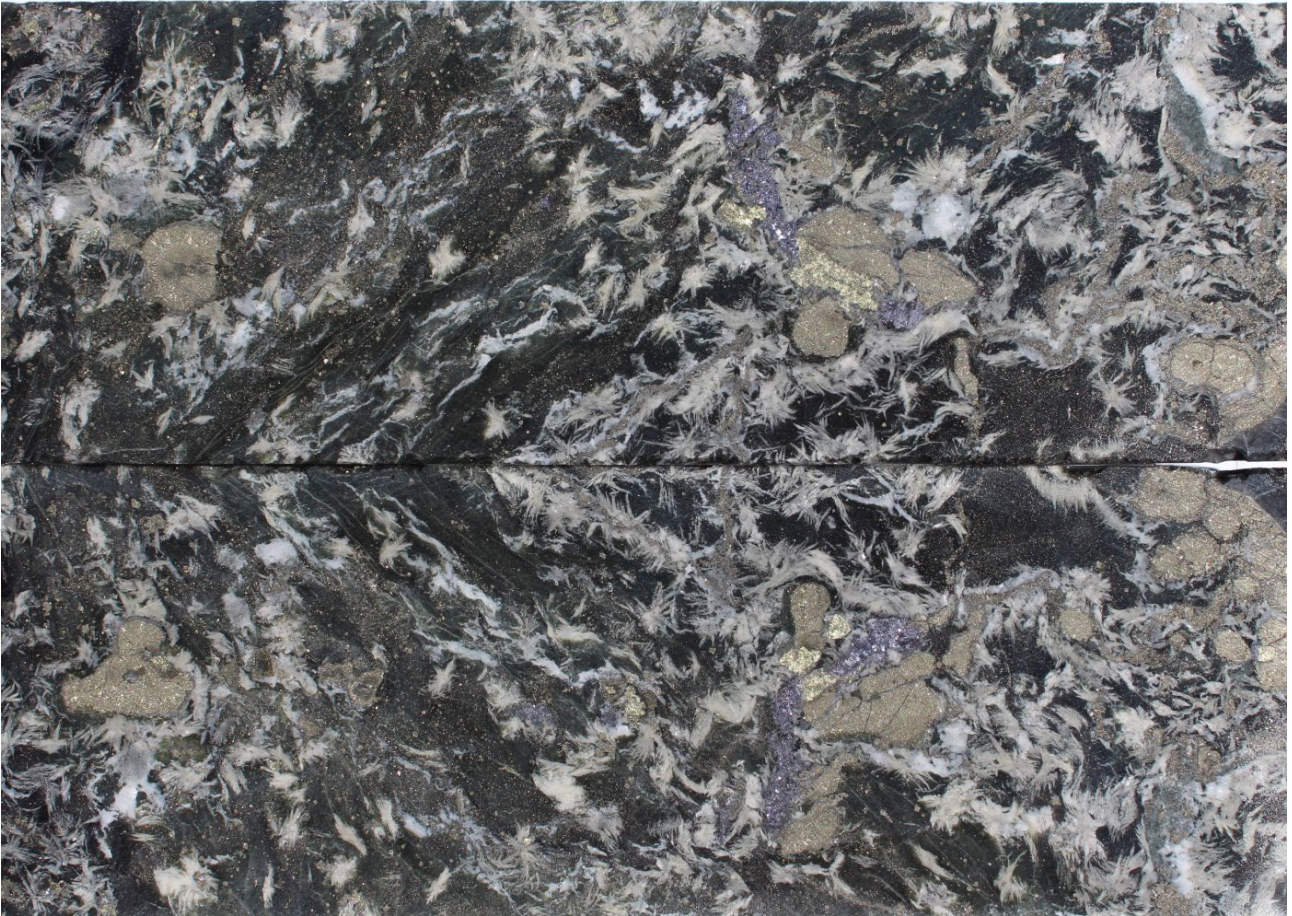


Figure 8: Plan view of recently drilled holes and inferred faults. Adapted from EZ mapping, 1982.



**Figure 9:** Possible dilation-zone replacement pyrite+chalcopyrite+(galena-sphalerite) in potentially ?fossiliferous sedimentary breccia in Devonian Preston Formation from 299.45m. Refer to **Table 1** for assay grades.



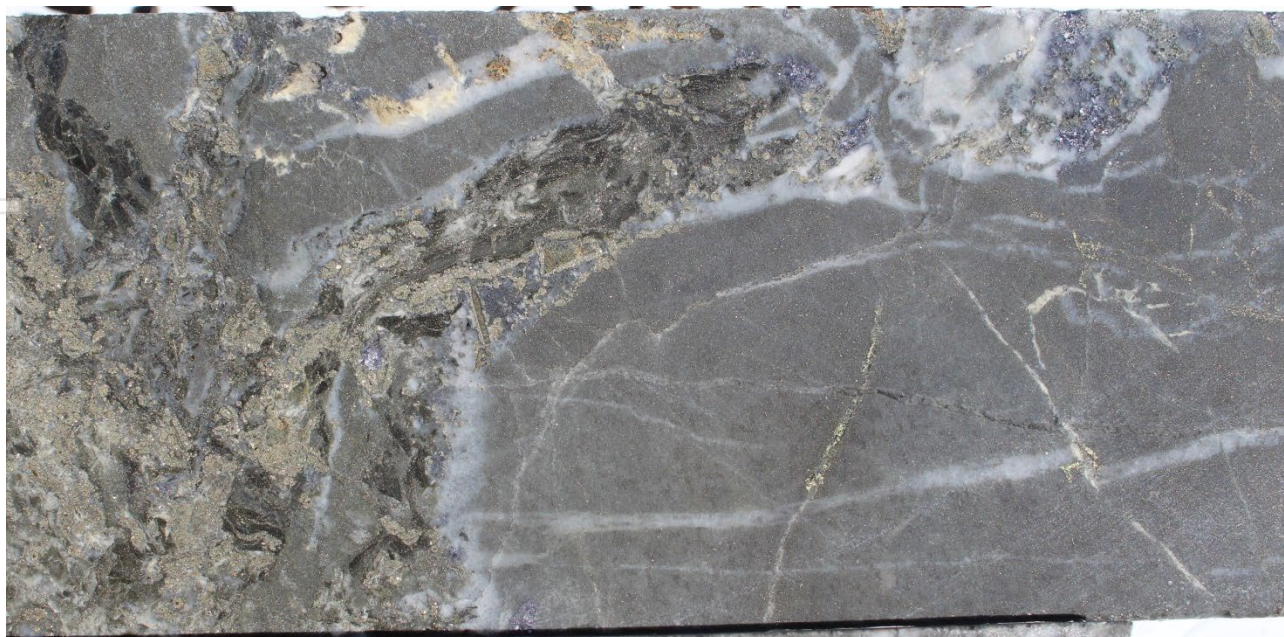
**Figure 10:** Close up of Figure 9 showing pyrite-chalcopyrite-galena and sphalerite textures in more detail. Refer to **Table 1** for assay grades.



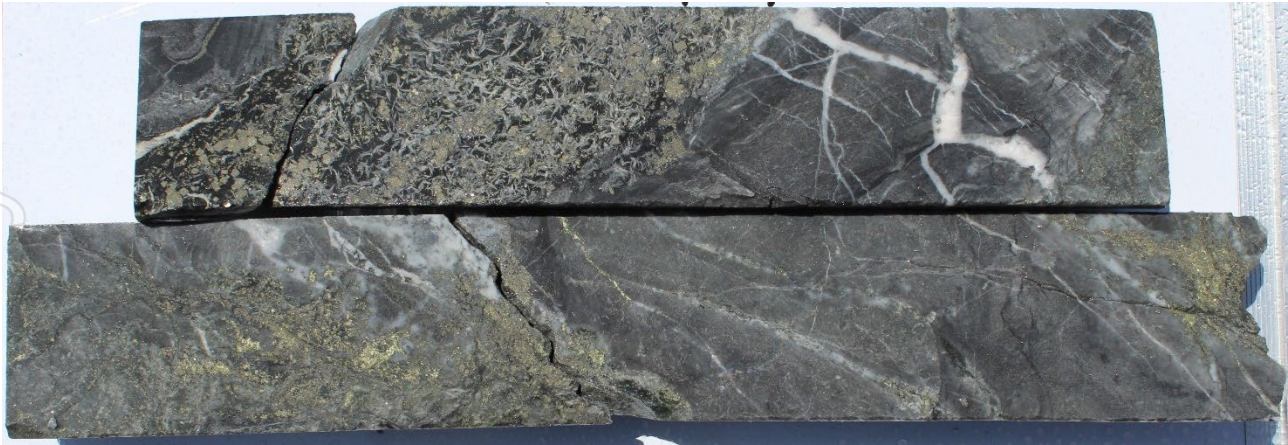
**Figures 11, 12 and 13** show narrow zones of high-grade pyrite-sphalerite-galena observed from 203.3m down-hole. Refer to **Table 1** for assay grades.



**Figure 11:** WDRCDD001 from 203.3-203.6m, with pyrite-galena-sphalerite and chalcopyrite with sericite-silica alteration. Possible later, cross-cutting chalcopyrite dominant veins were observed.



**Figure 12:** WDRCDD001 203.3-203.6 close up of textures in galena, sphalerite and pyrite mineralisation.



**Figure 13:** WDRCCDD001 291-291.7m pyrite, chalcopyrite and galena within the Preston Formation.

Recent re-logging of historical Browns Reef core identified a rhyolite within the Clements Formation footwall of the Evergreen 'discovery hole', BRD013<sup>4</sup>. Petrographic examinations indicate that the rhyolite is possibly a sub-aerial sill within the Ordovician Clements Formation and contains abundant pyrite and sphalerite.

Lead and zinc are strongly anomalous within the unit. This an important geological key to the understanding of the metal deposition for the Browns Reef area and revision of the Company's geological model is ongoing. It may represent active volcanic upwelling underneath the main Browns Reef mineralisation trend along the major fault corridor of the Woorara Fault Zone.

The rhyolite is strongly chlorite-sericite altered which suggests hydrothermal activity post-sill deposition. Deeper, intrusive bodies to which this rhyolite may have originated, could provide further metal-rich zones or deep ore-shoots along the NNW-SSE Woorara Fault corridor with further structural traps provided by the inferred NE-SW cross cutting fault zones. LA-ICPMS dating of zircons from the rhyolite indicate an age range of 414Ma to 437Ma, suggesting that the rhyolite may be coeval with the Ural Volcanics. Further petrological studies are planned.

Significant intercepts for **WDRCCDD001** include:

- 0.5m @ 6.7g/t Ag, 0.9% Pb, 0.3% Zn from 162.5m
- **20m @ 0.3% Cu** from 186m
- 0.5m @ 7g/t Ag, **1.7% Cu** from 189.5m
- **3.2m @ 0.9%Cu** from 195m, including:
  - 0.5m @ **3.2% Cu** from 195m
- **5.5m @ 17.6g/t Ag**, 0.2% Cu, 0.6% Pb, 0.7% Zn from 198.5m, including:
  - 1m @ **19.5g/t Ag, 0.4% Cu**, 0.3% Pb from 198.5m
  - 0.5m @ 37g/t Ag, 0.2% Cu, **1.3% Pb**, 0.6% Zn from 200m

<sup>4</sup> Kidman Resources (ASX:KDR) ASX Announcement 22 October 2014, '14.7% Zn in step out hole at Browns Reef'.

- 0.5m @ 20g/t Ag, 0.2% Cu, 0.9% Pb, 0.7% Zn from 201m
- 0.5m @ 29g/t Ag, **0.6% Cu, 1% Pb, 1.7% Zn** from 202m
- 1m @ **24.5g/t Ag**, 0.2% Cu, 0.9% Pb, 0.7% Zn from 203m
- 30m @ 0.15% Cu from 271m
- 3m @ 2.8g/t Ag, 0.3% Cu from 283m
- 4.5m @ 5.9g/t Ag, 0.3% Cu, 0.2% Pb, 0.6% Zn from 288.5m, including:
  - 0.5m @ 14g/t Ag, 1% Pb, 1.8% Zn from 289.5m
  - 1m @ 5.4g/t Ag, 0.2% Cu, 0.1% Pb, 1 % Zn from 290m.
  - 1m @ 6g/t Ag, **0.8% Cu**, 0.1% Pb, 0.1% Zn from 291m

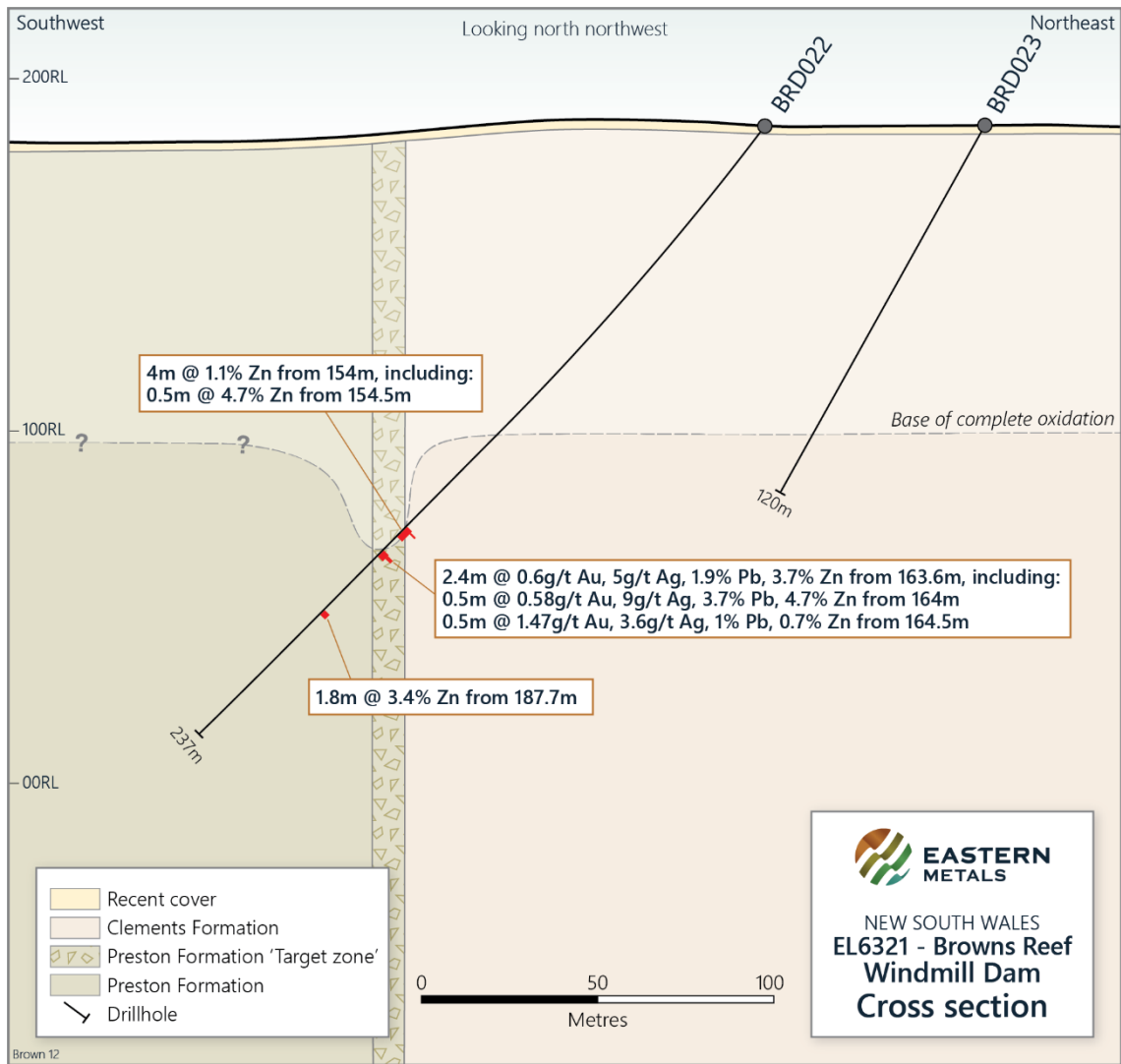
### **Evergreen Prospect, Browns Reef (EL6321)**

Two holes (BRD022 and BRD023) were drilled to test for an extension to the north of the known mineralised zone at Evergreen.

Both were pre-collared using RC to 120m, with one hole (BRD022) drilled to 236.9m with an HQ diamond core tail. Refer to **Figure 14**. Due to the width of the intersection in BRD022, the diamond tail for BRD023 has been deferred pending completion of an IP survey.

BRD022 was drilled as a step-out approximately 50m NNW from hole BRD019 drilled by Eastern Metals in 2022 (12.5m 10.8% Pb+Zn+Cu, 17g/t Ag, 0.5 g/t Au).

Geological logging of BRD022 revealed patchy, semi-massive sulphides including pyrite, sphalerite and minor galena from 163-165.5m. It was also noted that the basal Preston Formation sedimentary breccia unit was narrower in BRD022 than in BRD019.



**Figure 14:** Cross-section of Evergreen drillholes BRD022 and BRD023 showing significant intercepts from 163.6m.

Significant intercepts for **BRD022** include:

- 4m @ **1.1% Zn** from 154m, including:
  - 0.5m @ **4.7% Zn** from 154.5m
- 2.4m @ **0.6g/t Au, 5g/t Ag, 1.9% Pb, 3.7% Zn** from 163.6m, including:
  - 0.5m @ **0.58g/t Au, 9g/t Ag, 3.7% Pb, 4.7% Zn** from 164m
  - 0.5m @ **1.47g/t Au, 3.6g/t Ag, 1% Pb, 0.7% Zn** from 164.5m
  - 0.7m @ **0.37g/t Au, 4.6g/t Ag, 1.9% Pb, 0.5% Zn** from 165m
- 1.8m @ **3.4% Zn** from 187.7m

A narrow mineralised zone was intersected from 163.6 to 166m in BRD022, with visible pyrite, galena and sphalerite. Refer to **Figures 15** and **16**. Two other mineral-rich zones were intersected from 154 and 187.7m downhole.



**Figure 15:** BRD022 main mineralised intersection between 163.6-166m down-hole. Intercepts included 2.4m @ 0.6g/t Au, 5g/t Ag, 1.9% Pb and 3.7% Zn including 0.5m @ 1.47g/t Au, 3.6g/t Ag, 1% Pb and 0.7% Zn from 164.5m.



**Figure 16:** BRD022, 164.5-164.7m showing strong silica alteration in the Preston Formation with 0.5m @ 1.47g/t Au, 3.6g/t Ag, 1% Pb and 0.7% Zn from 164.5m.

Thinning of the sedimentary breccia unit noted in BRD022 may be a consequence of syndepositional faulting with an inferred NE trending fault, which may have also impacted the mineralisation process. Refer to **Figure 8**.

Constraint of the higher-grade mineralised Evergreen zone between NE-SW fault offsets of the principal NNW Woorara Fault and the Browns Reef mineralised trend, would be consistent with development of dilational zones, where the thickness of the sedimentary breccias provides evidence that these faults are growth faults developed during sedimentation. More speculatively, the faults may have acted as conduits for mineralising fluid flow.

Results from recent soil geochemical data<sup>5</sup> suggest that thicker, more developed zones are more localised, raising the probability that another factor is involved, such as cross fracturing and the potential for fault-related dilation zones.

<sup>5</sup> Eastern Metals Ltd (ASX:EMS) ASX Announcement 3 June 2024, 'New High-Priority Targets Identified at Browns Reef, NSW'.

Geological mapping combined with soil geochemistry suggests that the main Pb geochemical anomaly at Windmill Dam has a sinistral (left lateral) offset. Similar cross-cutting structures with spatially related dilational broadening of soil anomalies are suspected to be present at several other locations including Kelpie Hill (refer to **Figure 8**).

Also of note in WDRCDD001 is phyllic (silica-sericite) alteration with associated Zn-Pb-Cu-[Ag-Au] sulphide mineralisation in Ordovician Clements Formation sandstone and shale. The sulphide mineralisation at Browns Reef has historically been considered to be confined to the Devonian aged Preston Formation and not impacting the underlying Ordovician Clements Formation. Strong, locally constrained breccia and vein sulphide mineralisation and associated sericite-silica alteration within Clements Formation in WDRCDD001 suggest there may be an unidentified intrusive cross-cutting the Ordovician stratigraphy, perhaps utilising fault structures within the area as conduits.

### Next Steps

- Planning is in its final stages to conduct an IP survey, which is due to commence in the coming weeks. Results from the IP survey will help define and prioritise targets for future drill testing.

**Table 1:** Significant intersections for the Windmill Dam and Evergreen holes reported in this release. Intervals represent downhole widths; true widths are estimated only. Minimum cut off of 0.2g/t Au, 1g/t Ag or 0.1% Pb+Zn with internal dilution up to 1m.

Hole ID	Depth from (m)	Depth to (m)	Downhole interval (m)	Significant intersections						
				Estimated true width (m)*	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Zn+Pb (%)
WDRC DD001	162.5	163	0.5	0.4	-	6.7	-	0.9	0.3	<b>1.2</b>
	189.5	190	0.5	0.4	-	7	<b>1.7</b>	-	-	-
	195	198.2	<b>3.2</b>	2.56	-	-	0.9	-	-	-
	incl 195	195.5	0.5	0.4	-	-	<b>3.2</b>	-	-	-
	198.5	204	<b>5.5</b>	4.4	-	<b>17.6</b>	0.2	0.6	0.7	<b>1.3</b>
	incl 198.5	199.5	1	0.8	-	<b>19.5</b>	0.4	0.3	-	-
	and incl 200	200.5	0.5	0.4	-	<b>37</b>	0.2	<b>1.3</b>	0.6	<b>1.9</b>
	and incl 201	201.5	0.5	0.4	-	<b>20</b>	<b>0.2</b>	<b>1.4</b>	<b>3.4</b>	<b>4.8</b>
	and incl 202	202.5	0.5	0.4	-	<b>29</b>	<b>0.6</b>	<b>1</b>	<b>1.7</b>	<b>2.7</b>
	and incl 203	204	1	0.8	-	<b>24.5</b>	0.2	0.9	0.7	<b>1.6</b>
	283	286	3	2.4	-	2.8	0.3	-	-	-
	288.5	293	<b>4.5</b>	3.6	-	5.9	0.3	0.2	0.6	0.8
	incl 289.5	290	0.5	0.4	-	<b>14</b>	-	1	<b>1.8</b>	<b>2.8</b>
	and incl 290	291	1	0.8	-	5.4	0.2	0.1	<b>1</b>	<b>1.1</b>
and incl 291	292	1	0.8	-	6	<b>0.8</b>	0.1	0.1	0.2	
BRD022	154	158	4	3.2	-	-	-	-	<b>1.1</b>	<b>1.1</b>
	incl 154.5	155	0.5	0.4	-	-	-	-	<b>4.7</b>	<b>4.7</b>
	163.6	166	2.4	1.92	0.6	5	-	<b>1.9</b>	<b>3.7</b>	<b>5.6</b>
	incl 164	164.5	0.5	0.4	0.58	<b>9</b>	-	<b>3.7</b>	<b>4.7</b>	<b>8.4</b>
	and incl 164.5	165	0.5	0.4	<b>1.47</b>	3.6	-	<b>1</b>	0.7	<b>1.7</b>
	and incl 165	165.7	0.7	0.56	0.37	4.6	-	<b>1.9</b>	0.5	<b>2.4</b>
	187.7	189.5	1.8	1.44	-	-	-	-	<b>3.4</b>	<b>3.4</b>

\*Estimated at 80% of apparent thickness.



**Table 2:** Details for RC and RCDD drillholes reported and mentioned in this release.

Hole ID	Hole type	MGA94 East	MGA94 North	Dip	Azimuth (true)	RL	Depth	Comments
<b>WDRCDD001</b>	RCDD	436918	6313852	-60	205	185	359.90	RC hole abandoned at 136m due to excessive groundwater, HQ tail to EOH
<b>BRD022</b>	RCDD	436607	6314465	-60	257	186	236.90	RC precollar then HQ Diamond Drilling to EOH
<b>BRD023</b>	RC	436673	6314473	-55	256	186	120.00	RC precollar remaining open

### Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning the Company's planned activities, including mining and exploration programs, 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. In addition, summaries of Exploration Results and estimates of Mineral Resources and Ore Reserves could also be forward looking statements.

Although Eastern Metals 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.

### Previously Reported Information

Certain information in this announcement references previously reported announcements. The announcements are available to view on the Company's website ([www.easternmetals.com.au](http://www.easternmetals.com.au)) and on the ASX website ([www.asx.com.au](http://www.asx.com.au)). Other than the new information set out in this announcement, the Company confirms that it is not aware of any new information that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.

### Authorisation for this Announcement

This announcement has been authorised for release by the Company's Disclosure Officers in accordance with its Disclosure and Communications Policy which is available on the Company's website, [www.easternmetals.com.au](http://www.easternmetals.com.au).

## Competent Persons Statement

### Exploration

The information in this report that relates to Exploration Results (a term used and defined in the 2012 JORC Code) except where otherwise noted, is based on, and fairly represents, information compiled by Mr David Edgecombe. Mr Edgecombe is a Member of Australian Institute of Mining and Metallurgy and the Australasian Institute of Geoscientists, a full-time employee of Kelpie Exploration Pty Ltd and shareholder of Eastern Metals; however, Mr Edgecombe believes this shareholding does not create a conflict of interest.

Mr Edgecombe has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he is undertaking to qualify as Competent Persons as defined in the 2012 JORC Code. Mr Edgecombe consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

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## APPENDIX A: JORC Code, 2012 Edition – TABLE 1

### Section 1 – Sampling Techniques and Data, EL6321 Browns Reef

Reverse circulation percussion drilling and diamond tail drilling.

Criteria	JORC Code explanation	Commentary
Sampling techniques	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <hr/> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <hr/> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>RC percussion chips provided a representative sample that were logged for lithological, alteration, mineralisation, analytical and other attributes.</p> <p>Diamond drill core provided a high-quality sample that was logged for lithological, structural, geotechnical, analytical and other attributes.</p> <hr/> <p>A cyclone and cone splitter attached to the drill rig was used to collect the total material returned to the surface into a calico bag and large plastic bags for each one metre interval drilled. If sample size produced from the cone splitter was insufficient, a PVC spear driven into each of the 1m large plastic bags to obtain a consistent weight of approximately 3.5kg was used. Field duplicate samples were obtained via PVC spear method. Sampling of the mineralised core for assaying was carried out using a diamond saw as per industry best practice.</p> <hr/> <p>For RC drilling, 1m samples were submitted to an independent laboratory. Samples were pulverised and analysed by a low-level multi-element ICP and Au by fire assay on a 30g charge with AAS finish. High grade above detection limit multi-element samples were re-analysed by ICP following an Aqua Regia leach.</p> <p>The Windmill Dam and Evergreen diamond holes were drilled with standard diamond drilling techniques. Reverse Circulation Percussion drilling was used to pre-collar the holes to 136m and 120m respectively whereupon coring commenced in triple tube HQ size core (diameter: 63.5mm) to end of hole (EOH). Eastern Metals used a reputable drilling contractor; DrillIt from Parkes, NSW.</p>
Drilling techniques	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or</i></p>	<p>Standard reverse circulation percussion drilling was carried out by a contractor using a truck mounted rig with compressor and standby auxiliary air compressor. Diamond drill core recoveries were recorded</p>

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*standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*

during drilling and reconciled during the core processing and geological logging. Core was generally competent with some zones of broken core. There was no significant drill core lost during drilling.

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*Drill sample recovery*      *Method of recording and assessing core and chip sample recoveries and results assessed.*

Consistent volumes of RC chips were obtained from each of the 1m intervals drilled. 1-2m at the end of each hole began to diminish in quality due to water intersection and the holes were terminated. Diamond drill core is measured and marked after each drill run using wooden blocks denoting the depth. Rig procedures are adjusted as necessary including drilling rate, run length, bit and fluid pressure to maintain sample integrity and to keep the profile of the hole as near as possible to the planned dip and azimuth.

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<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<i>Drill sample recovery (cont.)</i>	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	<p>A cyclone and cone splitter attached to the drill rig and a sealed collar pipe ensured that all the material drilled apart from fine airborne dust was collected into the sample bags.</p> <p>Triple tube, HQ diameter drilling was used specifically to retain and recover as much core throughout the diamond drilling.</p>
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	No relationship between sample recovery and assay values and no sample bias is evident in the results obtained from the drilling.
<i>Logging</i>	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	<p>Systematic geological logging has been undertaken. Data collected includes:</p> <ul style="list-style-type: none"> <li>– Nature and extent of lithologies and alteration.</li> <li>– Intervals, amount, and mode of occurrence of metallic minerals such as pyrite, chalcopyrite, galena, and sphalerite.</li> <li>– Geotechnical logging is not possible on percussion chips.</li> <li>– Location, extent, and nature of structures such as bedding, cleavage, veins, faults etc. for diamond core.</li> <li>– Geotechnical data such as recovery and RQD for diamond core.</li> </ul>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Representative chips from each 1m interval were sieved, washed and placed into labelled chip trays Depending on the lithology being logged, drill chips were logged as both qualitative (discretionary) and quantitative (volume percent sulphide minerals, alteration minerals, quartz veining).
	<i>The total length and percentage of the relevant intersections logged.</i>	All holes were geologically logged from top to bottom (100%). Diamond drill hole intervals with no recovery were noted as such but were generally minor.
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken</i>	Core was cut using a manual diamond saw. Wherever possible all samples were collected from the same side of drill core. The full interval of half-core sample was submitted for assay analysis. Where core was incompetent due to being broken rock, representative samples were collected along the axis of the core.

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*If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*

Assay samples were cone split via the cyclone or in the case of field duplicates, PVC speared and were sampled dry. Rare wet samples were marked as such at the end of each hole.

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*For all sample types, the nature, quality and appropriateness of the sample preparation technique.*

The nature, quality and appropriateness of the sample preparation technique was in line with best industry practice.

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*Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*

No sub-sampling was completed by Eastern Metals. All sub-sampling and composite preparation of the pulverised chips was completed by the assay laboratory.

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*Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.*

The retention of the remainder of the 1m bags of RC chips and chip trays are important controls as they allow assay values to be viewed against the actual geology; and, where required, further samples may be submitted for quality assurance or petrography. OREAS Certified Reference Materials (CRMs) suitable to the deposit type, duplicate samples and blanks were included at regular intervals in the assay sample runs. No resampling of chips has been carried out on the project by Eastern Metals. The retention of the remaining half-core is an important control as it allows assay values to be viewed against the actual geology; and, where required, further samples may be submitted for quality assurance or petrography. No resampling of half core or duplicated samples have been completed at the project by Eastern Metals.

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*Whether sample sizes are appropriate to the grain size of the material being sampled.*

Sampling was appropriate to the grain size of those lithologies. The sample sizes are appropriate to correctly represent the mineralisation based on style of mineralisation.

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<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	The sample preparation and assaying methods used were selected by Eastern Metals and were appropriate for the style and grade of mineralisation. The techniques are considered as total.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	A Sciapps pXRF model X-555 was used on bagged 1m samples. The pXRF was set on mining mode setting, each reading being for 60 seconds. Daily calibrations were undertaken. A small plastic food grade, clear bag was used to protect the integrity of the prolene window and avoid damage to the tube with dusty or damp samples.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	Appropriate OREAS CRMs, blanks and duplicate samples were inserted into the sample stream at regular intervals. Results for these samples have shown acceptable levels of accuracy and precision. The laboratory used, On Site Laboratory Services in Bendigo is an ISO9001 certified mineral facility and has its own QA/QC procedures in relation to testing of standards, blanks and duplicates. Third-party laboratory checks will be forwarded to an independent laboratory for check assaying in due course.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	An independent qualified geologist working on contract to Eastern Metals verified the geology and visible sulphide mineralisation and alteration intersected in the RC and diamond drilling.
	<i>The use of twinned holes.</i>	No holes have been twinned at this early exploration phase on this prospect.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All data and logging were recorded directly into field laptops. Visual and numerical validation was completed by the on-site geologists.
	<i>Discuss any adjustment to assay data.</i>	No adjustment to the assay data was required.
Location of data points	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	Sample location co-ordinates were acquired by Garmin GPS Model GPDMAP Horizontal accuracy is +/-1.8m. Completed hole collar positions have been accurately measured by an independent surveying company, Arndell Surveying from Parkes, NSW. These were acquired using a DGPS system. Alignment of the drill rig was carried out using offset fore and back sight pegs and compass and confirmed with the down-hole survey tool. Down-hole surveys for dip and azimuth were

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carried out using an Axis gyroscopic survey instrument at down-hole intervals of between 25 and 30m.

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*Specification of the grid system used*

The grid system used for the project is Geodetic Datum of Australia (GDA) 94 Zone 55S.

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Criteria	JORC Code explanation	Commentary
	<i>Quality and adequacy of topographic control.</i>	Topographic control with hand-held GPS and government 1:50,000 scale topographic mapping was adequate for the project. Accurate topographic height measurements were obtained from the EMS hole collar positions by a registered land surveyor, Arndell Surveying from Parkes, NSW. The quality and adequacy of the topographic control are regarded as suitable.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Drill hole WDRC001 was designed to test a soil Pb anomaly, south of the known Evergreen deposit and was drilled from the northeast to southwest to avoid damage to cropped land. Due to excessive water intersected, RC drilling was abandoned at 136m and continued with HQ diamond coring until 359.9m. This anomaly is also along strike of the Browns Reef trend zone. BRD022 and BRD023 were drilled in an East-West orientation to avoid disrupting farming practices. These holes were collared into the Clements Formation and perpendicular to the known strike of the mineralisation. Both holes were a 50m step out to NNW from BRD019, drilled by EMS in 2022.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	Not applicable – no Mineral Resource or Ore Reserve estimates are reported herein.
	<i>Whether sample compositing has been applied</i>	Nil – no compositing of samples was applied.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The inclined drill holes were designed to intersect the known lithological and interpreted mineralisation as near as possible to a perpendicular orientation. The orientation of the drill holes achieved unbiased sampling.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	The drill holes were designed to intercept perpendicular to geological units and mineralisation to best obtain near true widths.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	The samples were taken from site to the secure Eastern Metals core shed daily by the two geologists that supervised the drilling. They were subsequently delivered to a registered transport company by the Eastern Metals Senior Exploration Geologist and transported directly to

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		On Site Laboratory Services in Bendigo. The same transporter regularly takes samples to this laboratory for other mining companies within the area.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or review are warranted at this stage.

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## Section 2 – Reporting of Exploration Results, EL6321 Browns Reef

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	EL6321 Browns Reef is located 5km west of Lake Cargelligo NSW. The tenement is held by Eastern Metals Ltd. Ground activity and security of tenure are governed by the NSW State government via the Mining Act 1992. Land is freehold and access was granted under the terms of a compensation agreement with the landholder.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	The Browns Reef base metal mineralisation was first discovered by the landowner who recognised outcropping gossanous material. The prospect was subsequently systematically developed by Jennings Industries-Electrolytic Zinc Company of Australia (EZ)-Esso Joint Venture, and later by Comet Resources. The most recent exploration was carried out by Kidman Resources which was acquired by Wesfarmers in 2019 and who sold the project to Eastern Metals in 2021. Eastern Metals has drilled six diamond holes within the northern portion of the Browns Reef zone prior to the current program.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	Structurally controlled, polymetallic volcanogenic massive and sedimentary exhalative (“SEDEX”) disseminated Cu, Pb, Zn, Ag, (Au) deposit extending along the inferred Woorara Fault, and the Preston Formation and Clements Formation geological unconformity, and intrusion-related mineralisation.
<i>Drill hole Information</i>	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li><i>* easting and northing of the drill hole collar</i></li> <li><i>* elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>* dip and azimuth of the hole</i></li> <li><i>* down hole length and interception depth</i></li> <li><i>* hole length.</i></li> </ul> <p><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the</i></p>	See <b>Table 2</b> in the body of the report.
		Not applicable – see above.

*understanding of the report, the Competent Person should clearly explain why this is the case.*

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<i>Data aggregation methods</i>	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	Length weighting of individual samples was used to obtain the mean grades contained in this report.
	<i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i>	The aggregation method used in reporting mean grades for intercepts from this drilling was simple length weighting.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Not applicable – no metal equivalents reported.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Drill hole azimuths were set at 205 MGA 94 Z55 grid for WDRCCDD001 and BRD022 respectively. This was to drill perpendicular to the strike of the mapped soil Pb/As geochemical anomalism and known strike of the Evergreen mineralisation. WDRCCDD001 was drilled in a manner that would not affect cropping activity. Previous assessment of historic drillholes within the area suggests the lode is sub-vertical (-85 to -90°) inclined steeply to the west to southwest. The holes were designed to intersect perpendicular to the interpreted mineralised zone to best gain near true widths.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Results of the drilling have confirmed that the mineralised zone dips to the southwest at an inclination of -85 to -90 degrees.
	<i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i>	True widths of the mineralisation can be estimated from the drill hole survey data and the interpreted dip and strike of the mineral zone.
<i>Diagrams</i>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	Please refer to figures in the body of report.
<i>Other substantive</i>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey</i>	Previous exploration activities are discussed in the body of the report. The main body of the announcement and entries in this JORC Table 1

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<i>exploration data</i>	<i>results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	above include references to previously reported information. No bulk samples were collected nor has any new metallurgical testing been carried out.
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	An IP survey and further follow up drilling is planned.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Location of the known prospects are highlighted within maps in the body of the report.

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