

ASX: EMS

ACN 643 902 943

CAPITAL STRUCTURE

Share Price: A\$0.24

Cash: A\$6.0M

Debt: Nil

Ordinary Shares: 54.5M

Market Cap: A\$13M

Enterprise Value: A\$4.9M

Options: 24.2M (3years/30c)

BOARD OF DIRECTORS**Robert Duffin**

Non-Executive Chairman

Wayne Rossiter

Managing Director & CEO

Cathy Moises

Deputy Chair & Lead

Independent Non-Executive
Director**Dr Jason Berton**Independent Non-Executive
Director**COMPANY SECRETARY**

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Lithium Exploration in the Barrow Creek Pegmatite Field

Key Highlights

- Eastern Metals will elevate its priorities to identify potentially lithium-bearing pegmatites at Barrow Creek, EL 23186 ('Barrow Creek');
- Barrow Creek is one of Eastern Metals' flagship assets consisting of 28 blocks or ~90km² in the Arunta block in the Northern Territory and holds potential for the discovery of hard rock lithium deposits developed in pegmatites, as well as the Home of Bullion copper deposit and the copper-nickel sulphide mineralisation at Prospect D;
- Barrow Creek lies within the Barrow Creek pegmatite field, part of the Northern Arunta pegmatite province. Many pegmatites are known in this area, and some have been worked in the past for tin, tungsten, tantalum, mica and other minerals;
- Several companies including Core Lithium (ASX: CXO) and Australasian Gold (ASX: A8G) have recently commenced exploration for lithium in the pegmatites in the Barrow Creek pegmatite field, and in the wider Northern Arunta pegmatite province, however, there has been no prior exploration for lithium in the Company's Barrow Creek project area;
- Sampling of old workings in the Barrow Creek pegmatite field by the Northern Territory Geological Survey has returned highly anomalous lithium values from pits immediately to the west;
- Eastern Metals has designed an exploration program to explore for lithium-bearing pegmatites; and
- Eastern Metals will begin its base metal and lithium exploration activities in EL 23286 at Barrow Creek when Covid travel restrictions are relaxed, and seasonal conditions allow.

Eastern Metals Limited's Exploration Licence EL 23186 Barrow Creek in the Northern Territory

Eastern Metals Limited (ASX: EMS, 'Eastern Metals' or 'the Company') is pleased to announce that in addition to the metalliferous exploration opportunities (see **Base Metal Targeting at EL 23186** below) at Barrow Creek, EL 23186 ('Barrow Creek') also holds potential for the discovery of hard rock lithium deposits developed in pegmatites.

Without detracting from its focus on metalliferous exploration, Eastern Metals will now elevate its priorities to identify potentially lithium-bearing pegmatites at Barrow Creek.

Eastern Metals completed the acquisition of EL 23186 in August 2021. The vendor was the former Kidman Resources Limited (that was acquired by Wesfarmers), which had developed considerable expertise in LCT-pegmatite related lithium exploration, following its discovery of the world class lithium deposit at Mt Holland in Western Australia. Kidman Resources Limited had prepared for, but did not implement prior to the sale, a soil sampling program at Barrow Creek, to be followed by drilling if prospective targets are generated. Eastern Metals has largely adopted this program (see **Exploration Work Program Planned for Lithium at Barrow Creek** below).

Location of the Barrow Creek Pegmatite Field and EL 23186

Eastern Metals' EL 23186 is part of the Company's Arunta Project, shown in Figure 1 below, and lies within the Barrow Creek pegmatite field.

The pegmatites in this area intrude metamorphosed mudstones, sandstones, schists and amphibolite of the Palaeoproterozoic Bullion Schist, which itself is the host rock of the Company's Home of Bullion copper deposit. The source of the pegmatites is the Barrow Creek granite complex, which occurs widely throughout the Barrow Creek area, including at Prospect D where it outcrops. Interpretation of geophysical data suggests the granite occurs at shallow depth in the Home of Bullion area also.

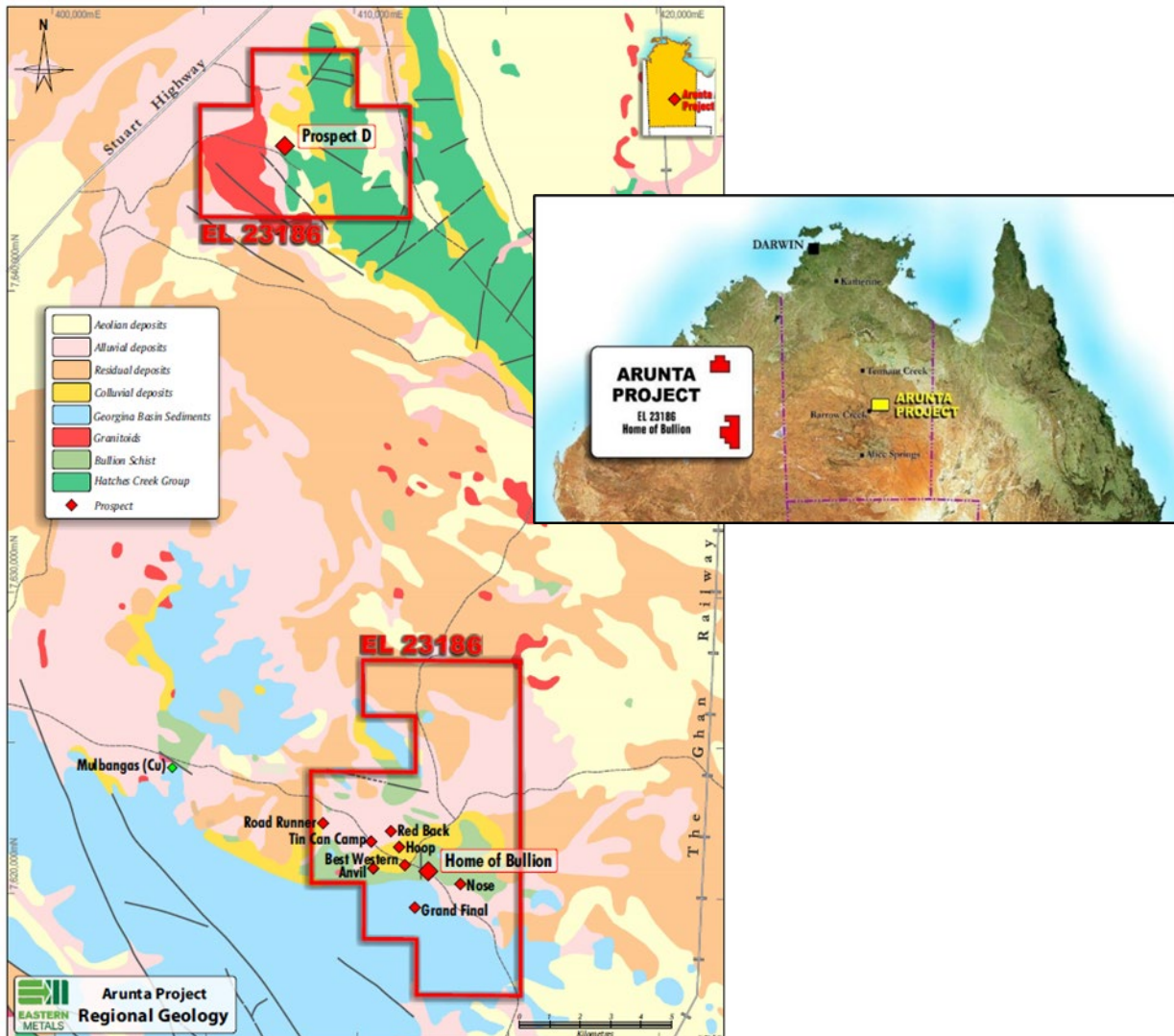


Figure 1. Location and Geology of Barrow Creek

Pegmatites in the Barrow Creek pegmatite field are grouped into three main zones known as the western group of pegmatites, the eastern group, and the Neutral Junction group. Some of these pegmatites were worked on a generally small scale, largely for tin, tungsten, tantalum, and mica, mainly from the 1940s to the 1980s. The pegmatites are up to a kilometre or so in strike length and from less than a metre to a few metres wide.

The Northern Territory Geological Survey (Frater, 2005) has reported analyses of grab samples taken from 12 pegmatite workings in the Barrow Creek field. The highest lithium values, averaging 570 ppm Li, were obtained from pegmatites in the Neutral Junction group. This result was amongst the highest values returned from sampling in the wider Northern Arunta pegmatite province.

The main occurrences in the Neutral Junction group are about 3 kilometres south of the Neutral Junction homestead. EL 23186 is on the Neutral Junction pastoral lease, about 4 kilometres to the east of the homestead. A photo of one of these workings is shown in Figure 2. These workings are not on EL 23186.

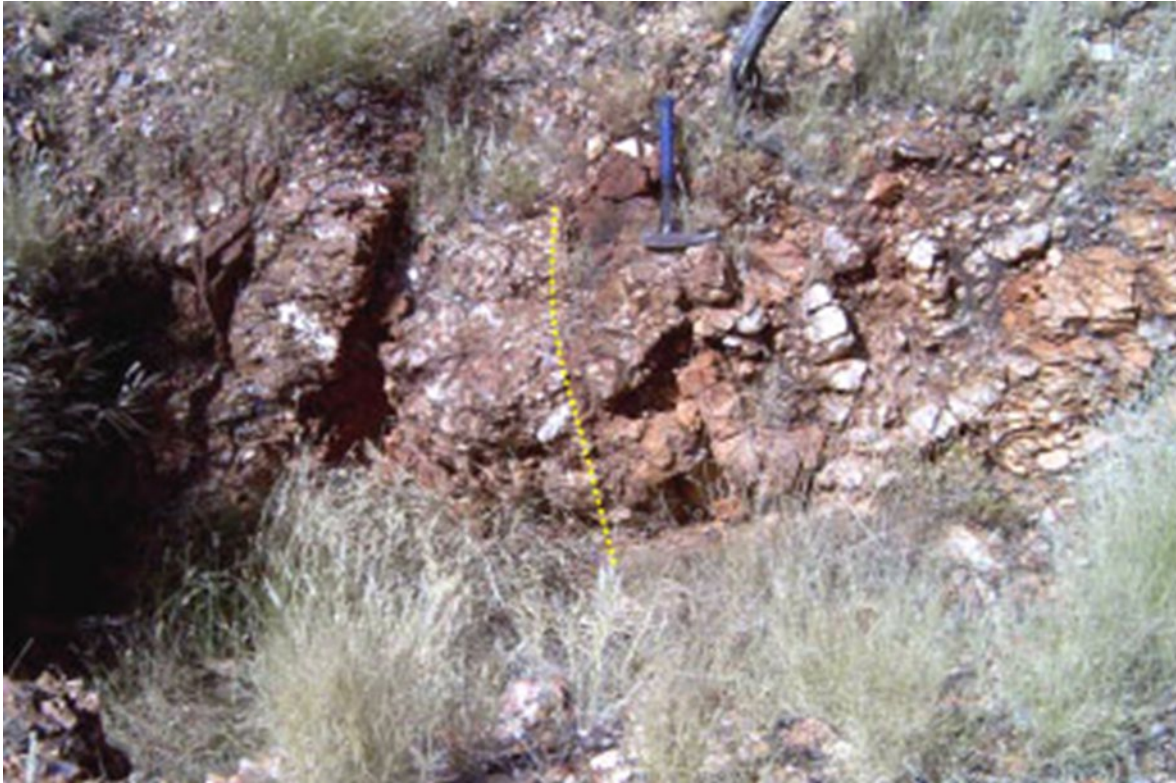


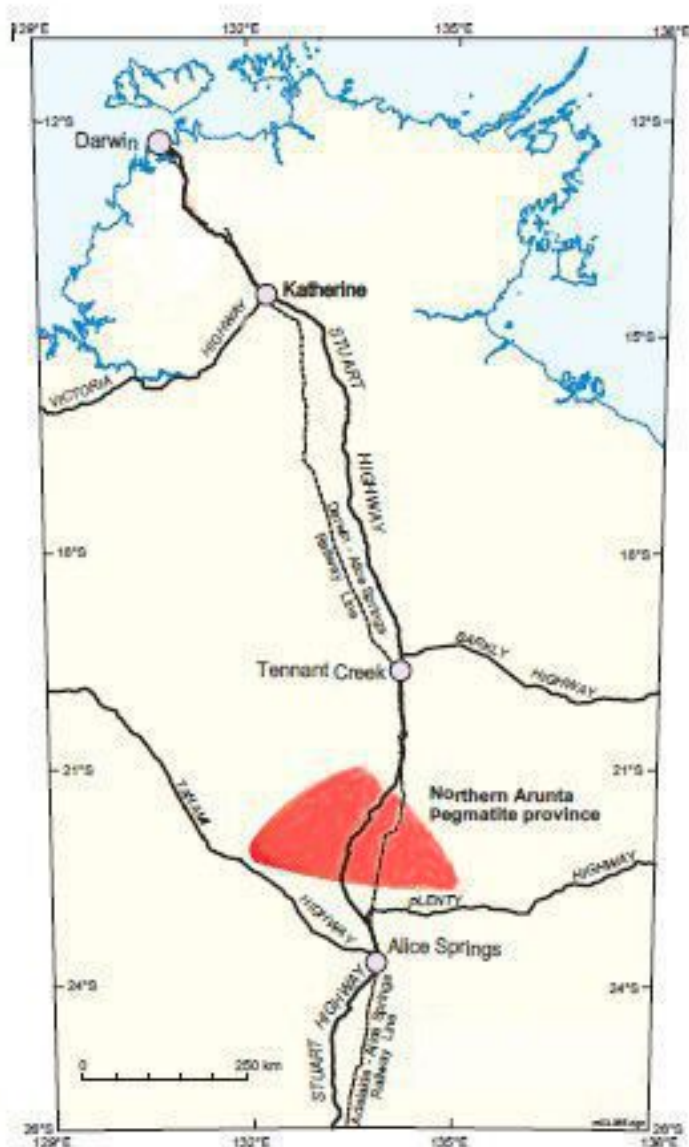
Figure 2. Shallow Pit Developed on Pegmatite in the Neutral Junction Group, Barrow Creek Pegmatite Field

Pegmatite Provinces in the Northern Territory

Pegmatites are intimately associated with granites. Although granites are generally barren of mineralisation, they can contain pegmatitic or coarse-grained phases and local pods of mineralisation in highly fractionated pegmatite dykes that surround the granite. Depending on the type of granite, the pegmatites fall into two families, referred to as niobium-yttrium-fluorine (NYF) and lithium-caesium-tantalum (LCT) types. All pegmatites in the Northern Territory are LCT-type ¹.

There are two main pegmatite provinces in the Northern Territory. These are the Pine Creek pegmatite province (also known as the Finniss River province) near Bynoe Harbour just south of Darwin, and the Northern Arunta pegmatite province between Alice Springs and Tennant Creek in the southern part of the Northern Territory. EL 23186 lies within the Northern Arunta province, as shown in Figure 3.

¹ Most of the geological information in this announcement, including Figures 2, 3 and 4, is based on the Northern Territory Geological Survey Report 16 by K M Frater, dated 2005, which largely pre-dates current levels of interest in lithium.



The Barrow Creek Pegmatite Field

The Northern Arunta pegmatite province covers a large area of the Arunta Block centred around the Stuart Highway, from just north of Alice Springs to south of Tennant Creek. It extends to the west to the Tanami Highway and to the east to the Plenty Highway. There is a large number of tin, tungsten, tantalum, mica and workings for other minerals developed in pegmatites in this province. Until very recently, no systematic exploration for lithium had been carried out in the Barrow Creek pegmatite field. Lithium is known to occur elsewhere in pegmatites in the minerals spodumene, petalite and lepidolite, a mica.

Figure 3. Location of the Northern Arunta Pegmatite Province

The mineralised pegmatites in the North Arunta province occur in four main clusters, one of which is referred to as the Barrow Creek pegmatite field. The other clusters are the Napperby pegmatite district northeast of Yuendumu, the Anningie pegmatite group north-east of Ti-Tree, and the Alcoota pegmatite district well to the east. The Anningie lithium projects held by Core Lithium (ASX: CXO) and Australasian Gold (ASX: A8G) near Mt Peake lie within the Anningie pegmatite group 60 kilometres southwest of Barrow Creek. The Mt Peake Vanadium-Titanium-Iron Project, owned by TNG Limited (ASX: TNG) also lies in this area. In addition, Core Lithium's Barrow Creek lithium project lies within the Barrow Creek pegmatite field.

These areas are shown in Figure 4.

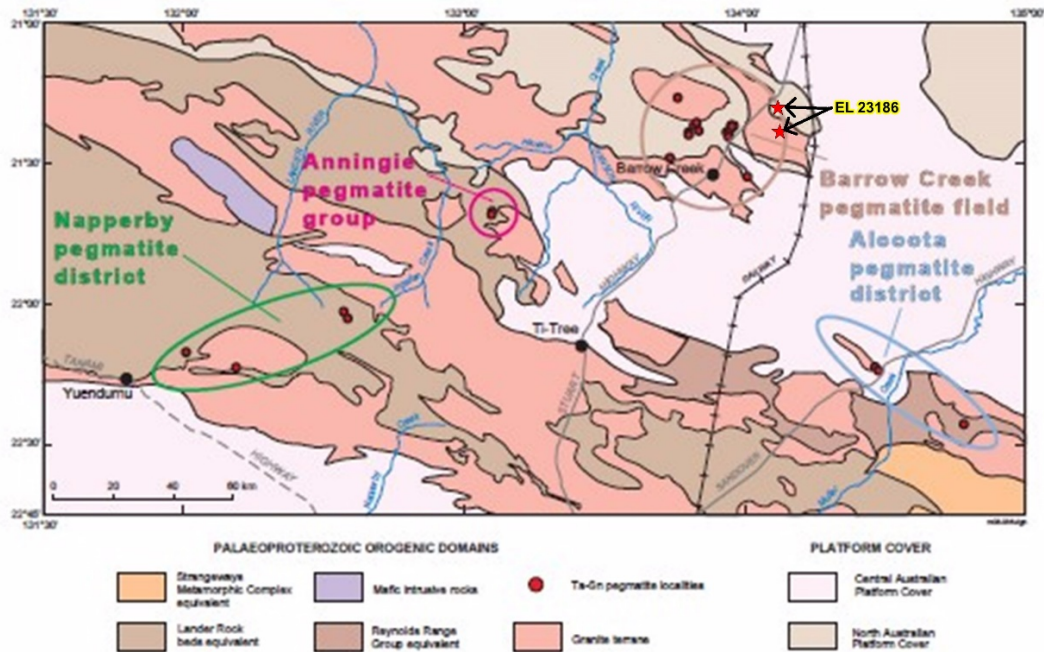


Figure 4. The Barrow Creek, Napperby, Anningie and Alcoota Pegmatite Areas in the Northern Arunta Pegmatite Province

Exploration Work Program for Lithium at Barrow Creek

Eastern Metals completed the acquisition of EL 23186 in August 2021. The vendor was the former Kidman Resources Limited, which had developed considerable expertise in LCT-pegmatite related lithium exploration, following its discovery of the world class lithium pegmatite deposit at Mt Holland in Western Australia.

Geological mapping and interpretation of geophysical data for the Barrow Creek area suggests the granites which outcrop in the northern block of EL 23186 may occur at shallow depth between the two blocks and within the southern block. Kidman had prepared for, but did not implement prior to the sale, a soil sampling program at Barrow Creek, to be followed by drilling if prospective targets are generated. Eastern Metals has largely adopted this program. Two zones in the eastern portion of the southern block of EL 23186 will be tested, consisting of up to 1,500 sample points across an area of 30 square kilometres, possibly aided by the use of portable XRF analysers. This sampling area will cover a large interpreted granitoid body which has been interpreted from analysis of magnetic imagery, providing a geochemical signature of this unit and possibly aiding in vectoring to lithium bearing intrusives. In addition, geological mapping in the northern portion of EL 23186 will also be carried out, particularly in areas of outcropping granite and its margins, to be followed by drilling if targets are generated.

The interpretation of the regional geophysics, locations of known pegmatites, and EL 23186 are shown in Figure 5.

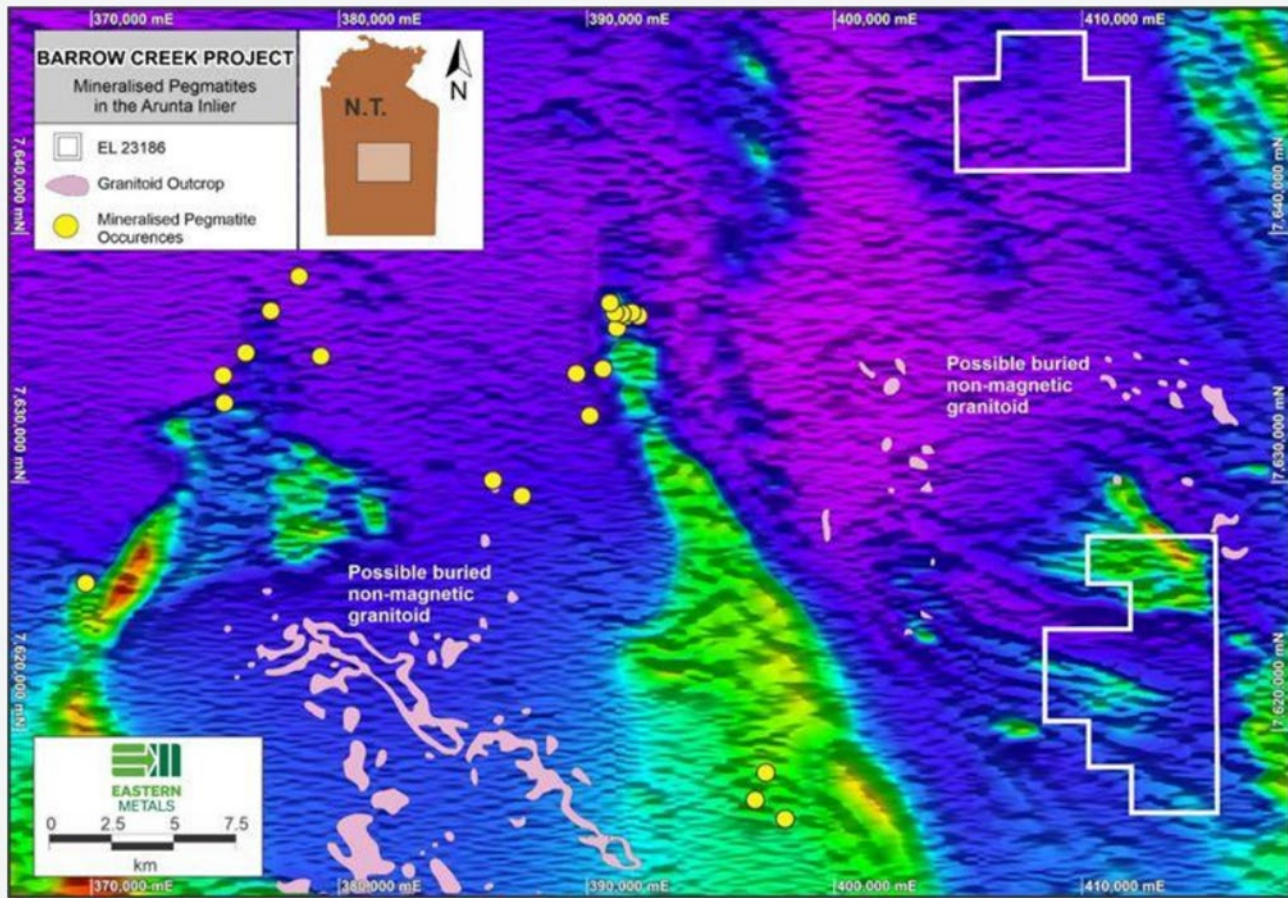


Figure 5. Known Pegmatites and Interpretation of Aeromagnetics Showing Possible Buried Granites

Base Metal Targeting at EL 23186

The Barrow Creek tenement consists of a southern block which contains the Home of Bullion copper deposit and a number of other metalliferous prospects, and a northern block which contains copper-nickel sulphide mineralisation at Prospect D. The total Identified Mineral Resource at Home of Bullion is 2.5 million tonnes averaging 1.8% copper, 2.0% zinc, 36g/t silver, 1.2% lead and 0.14g/t gold. Barrow Creek is one of Eastern Metals' two key tenement assets, the other being the Browns Reef polymetallic deposit near Cobar in New South Wales. The Browns Reef deposit contains an Exploration Target² of 27 to 37 million tonnes averaging between 1.3-1.4% zinc, 0.6- 0.7% lead, 9-10g/t silver and 0.2-0.3% copper. The potential quantity and grade of this Exploration Target are conceptual in nature and there has been insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will result in the determination of a Mineral Resource at Browns Reef.

² The Mineral Resource estimate for Home of Bullion was first released by Kidman Resources Limited in its announcement of 29 July 2014. The Exploration Target for Browns Reef was first released to the ASX by Kidman in its announcement of 20 January 2015. Eastern Metals confirms that it is not in possession of any new information or data that materially impacts on the reliability of these estimates.

Eastern Metals has developed drilling programs to test the potential for an increase in the Mineral Resource tonnage at Home of Bullion, and to explore for higher grade zones within the overall Exploration Target envelope at Browns Reef, as well as to test other targets in both tenements including Prospect D. These programs were set out in detail in the Company's 18 August 2021 IPO prospectus and in subsequent ASX disclosures.

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.

Previously Reported Information

The information in this report that references previously reported Exploration Results, Mineral Resources or Ore Reserves is extracted from the Company's Prospectus released on 18 August 2021 (ASX: EMS 22 October 2021). The Prospectus is available to view on the Company's website www.easternmetals.com.au or on the ASX website www.asx.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus 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 Person's findings are presented have not been materially modified from the original market announcements.

Forward Looking Statement

This announcement 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.

Competent Person Statement

The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves (as those terms are used and defined in the JORC Code), except where otherwise noted, is based on information compiled by Mr Gary Jones who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Jones is a full-time employee of Geonz Associates, Consultant Geologists, a former director of Eastern Metals, and Principal Consultant – Geology to the Company. Mr Jones 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 a Competent Person as defined in the JORC Code. Mr Jones 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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