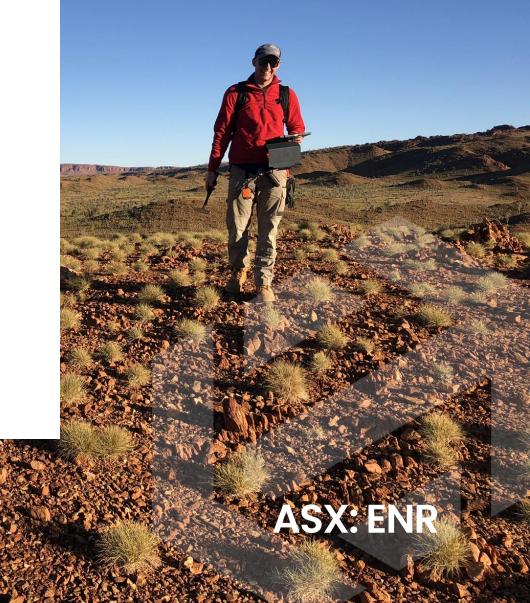


#### **Annual General Meeting**

29 November 2022

Exploring for the next copper, rare earths and lithium discoveries



#### Disclaimer and compliance statement

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The information in this report that relates to Exploration Results is based on information compiled by Mr. Mark Brodie who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Brodie holds shares and options in and is a full time employee of Encounter Resources Ltd and has sufficient experience which is relevant to the style of mineralisation under consideration 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 Brodie consents to the inclusion in the report of the matters based on the information compiled by him, in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant ASX releases and the form and context of the announcement has 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.

This announcement has been approved for release by the Board of Encounter.

#### Encounter at a glance

#### Creating value through project generation and discovery

Capital structure	
ASX ticker	ENR
Share price (28/11/2022)	\$0.17
Shares on issue	353M
Options	18M
Market capitalisation	~60M
Cash (30/9/2022)	~\$5.4M
Enterprise value	~\$55M

Major shareholders	
Board and Management	~14.4%
IGO	~8.1%
Silver Lake Resources	~5.3%

#### **Board of Directors**



Non Executive Chairman B.Comm, ACA, Grad. Dip. Tax, MAICD, MAUSIMM

**Dr Jon Hronsky** 

**Non Executive** 

BAppSci, PhD,

MAUSIMM, FSEG

**OAM** 

Director



Mr Paul Chapman Mr Will Robinson Managing Director B.Comm, MAusIMM





**Mr Peter Bewick Non Executive** Director B.Eng (Hons), MAUSIMM



**Mr Philip Crutchfield Non Executive** Director B.Comm., LL.B (Hons), LL.M LSE

**Paterson** 

**Province** 

Paterson Province

West

Arunta



Elliott

**Brunchilly** 

Dunmarra

Maryfield

Broadmere

Sandover

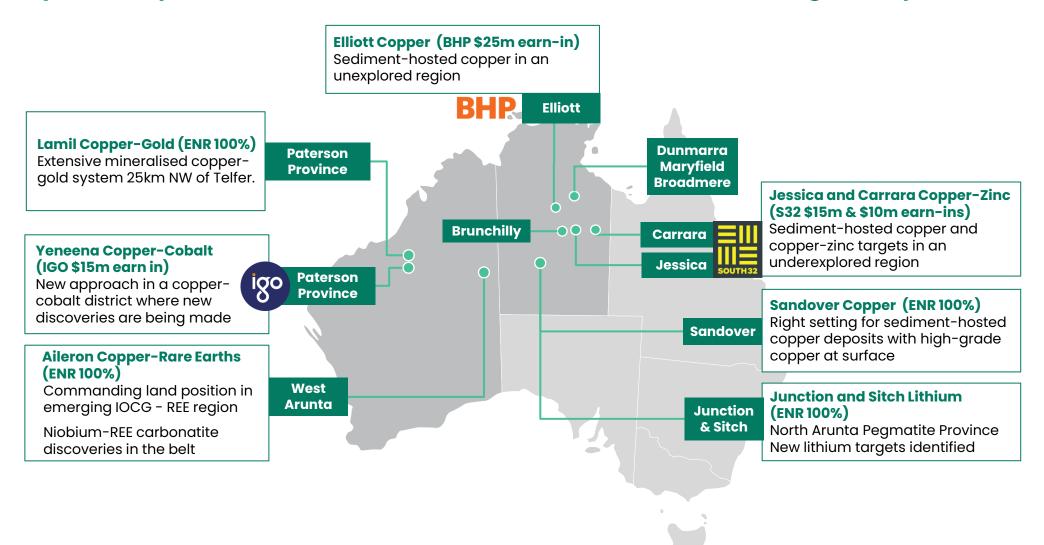
Junction

& Sitch

Carrara

#### A premier exploration portfolio

Early mover positions in world-class minerals belts attracting Tier 1 partners



### Current activity and recent highlights

#### Copper-REE - Aileron - West Arunta, WA (100% ENR)

- Niobium-REE mineralised carbonatite discovery by WA1 Resources (ASX:WA1)
- Highlights the region's potential for IOCG and carbonatite-hosted REE deposits
- Airborne magnetic-radiometric survey to refine IOCG and carbonatite targets

#### **Copper - Northern Territory**

- ~2,000m diamond drill program in progress at Elliott Copper (BHP farm-in)
- Eight drill targets defined at Jessica and Carrara, diamond drilling to commence in April-May 2023 (South32 farm-in)
- Gravity survey recently completed at Sandover (100% ENR)

#### Lithium - Northern Territory (100% ENR)

- Lithium targets identified at Junction and Sitch in the North Arunta Pegmatite Province
- Sampling of outcrops and surface geochemistry commencing

#### Paterson Province - Copper - WA

- Diamond drilling completed at Lamil with initial assay results expected in Dec 2022 (100% ENR)
- Six diamond drill holes completed at Yeneena. Assays Dec 2022 –Feb 2023 (IGO farm-in)





### West Arunta, Western Australia:

A new critical minerals province



### Discovery journey in a new mineral province

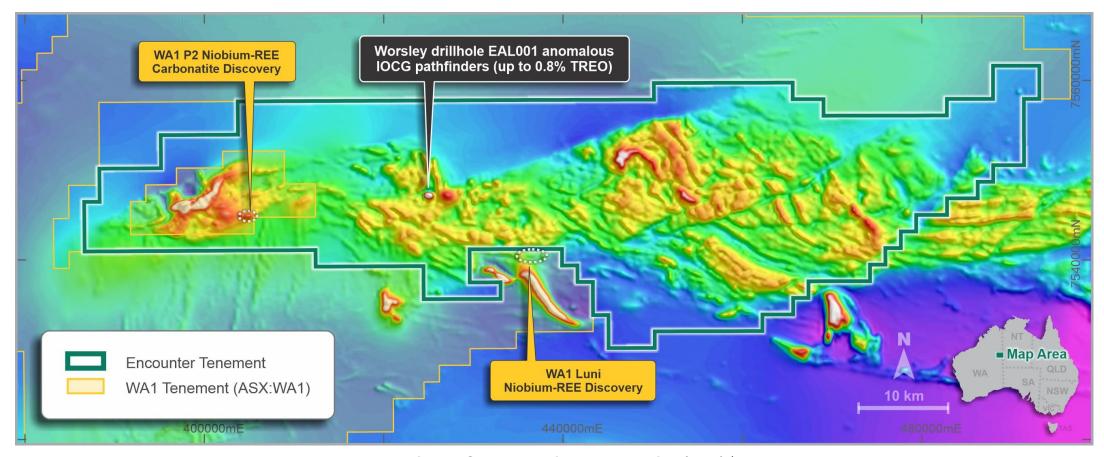
**Identified the West Arunta** Commencement of drilling at First hole intersects IOCG-style opportunity, secured tenure, Aileron in an area of no previous copper, gold and REE signature at introduced Newcrest as JV partner mineral exploration an easily explorable depth 2019 - 2020 28 January 2021 7 October 2020 Surface sampling identifies highly **Gravity survey commences to Return of 100% control of Aileron** elevated REE ~7km from the first refine targets for drilling drill hole 14 February 2022 11 February 2021 12 July 2021 **Geochronology confirms Olympic** Commencement of girborne EIS co-funding grant awarded for Dam age mineralising events at drilling to start April-June 2023 magnetic-radiometric survey **Aileron** 25 August 2022 27 October 2022 14 November 2022



### Aileron Copper-Rare Earths Project (100% ENR)

#### A new rare earth and IOCG province in Australia

- Commanding land position in the underexplored West Arunta with +100km long Aileron project
- Three rare earths ("REE") occurrences recently identified in the belt including the discovery of niobium-REE mineralised carbonatites by WA1 Resources Ltd (ASX:WA1) <1km from ENR tenement boundary



## Aileron Copper-Rare Earths Project (100% ENR) One of the most prospective regions in Australia for IOCG-REE deposits

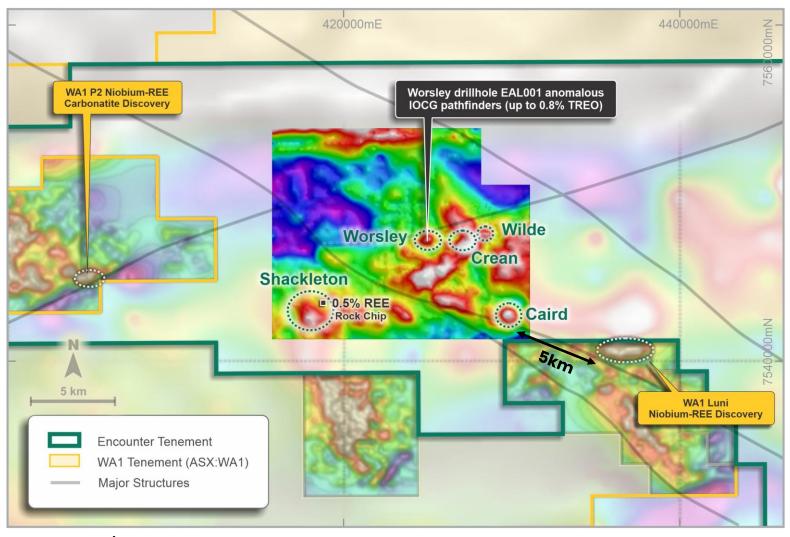


EAL001 - Hematite altered and fractured, coarse grained granitic rock with narrow mafic intrusive (88.5 - 91.7m)

- Only drill hole completed at Aileron (EAL001) (depth of 158m)
  - contained zones of anomalism in copper (up to 0.1% Cu), gold (up to 48ppb Au), molybdenum (up to 155ppm Mo), niobium (up to 773ppm Nb) and highly elevated rare earth elements (up to 0.8% TREO)
  - confirmed shallow cover depth
  - intersected hydrothermal hematite-chlorite altered mafic intrusions and granite with a distinctive IOCG geochemical signature
- GSWA has identified a new suite of granites at around 1.6Ga which is a similar age to Olympic Dam
- Comparable aged host sequence and hydrothermal event as well as similar geochemical signature to the major IOCG deposits of South Australia

## Aileron Copper-Rare Earths Project (100% ENR) Niobium-REE mineralised carbonatite system <1km from Aileron

- Gravity survey and surface sampling have upgraded Aileron targets
- Discrete, coincident gravitymagnetic anomalies on major regional structures
- Reconnaissance rock chip sampling returned 0.5% REE
- WA1 niobium-REE mineralised carbonatite discoveries highlight the potential for magmatic hydrothermal systems in the region



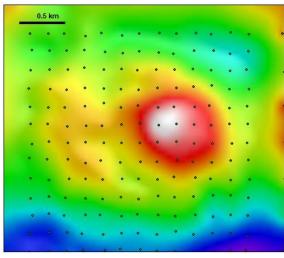
refer ASX release 28 January 2021
 refer ASX release by WA1 - 26 October 2022
 refer ASX release 14 February 2022
 refer ASX release by WA1 - 16 November 2022

Aileron IOCG /REE project - Detailed residual gravity image with interpreted structures and identified exploration targets 1,2,3,4

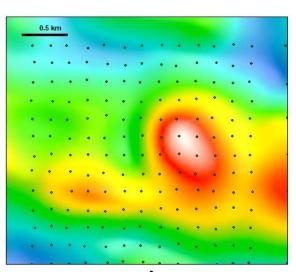
#### **Caird Target at Aileron**

#### Pipe-like gravity anomaly ~5km along the major structure from Luni

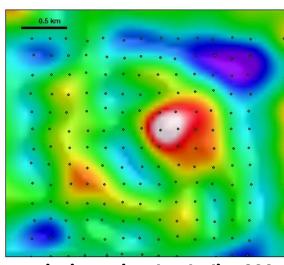
- Discrete, "bullseye" density anomaly ~600m by 600m (~2 mgal), coincident with magnetic anomaly
- Interpreted as a pipe-like intrusion or alteration system with potential for IOCG style copper and carbonatitehosted REE mineralisation
- Located on major regional fault that hosts the Luni mineralised carbonatite discovery by WA1<sup>2</sup>
- Surface geochemistry start of the 2023 field season
- Drilling to commence in April-June 2023



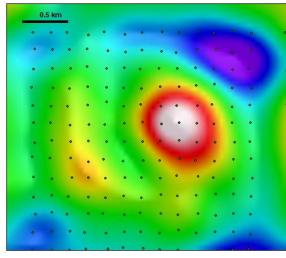
**Residual Gravity** 



**Magnetics RTP** 



Gravity inversion depth slice 300m

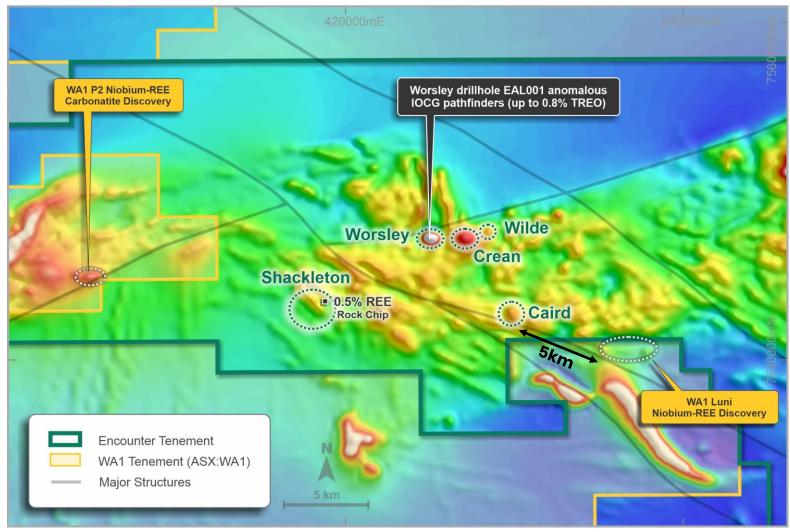


Gravity inversion depth slice 500m

### Aileron Copper-Rare Earths Project (100% ENR)

#### A new rare earth and IOCG province in Australia

- Magmatic hydrothermal mineral systems are active in the region
- Alkaline systems are key drivers in the formation of IOCG and carbonatitehosted REE deposits
- Numerous drill targets with limited or no prior exploration
- Co-funded drilling grant of up to \$220,000 under the WA Government's Exploration Incentive Scheme for drilling in 2023



<sup>&</sup>lt;sup>1</sup> refer ASX release 28 January 2021

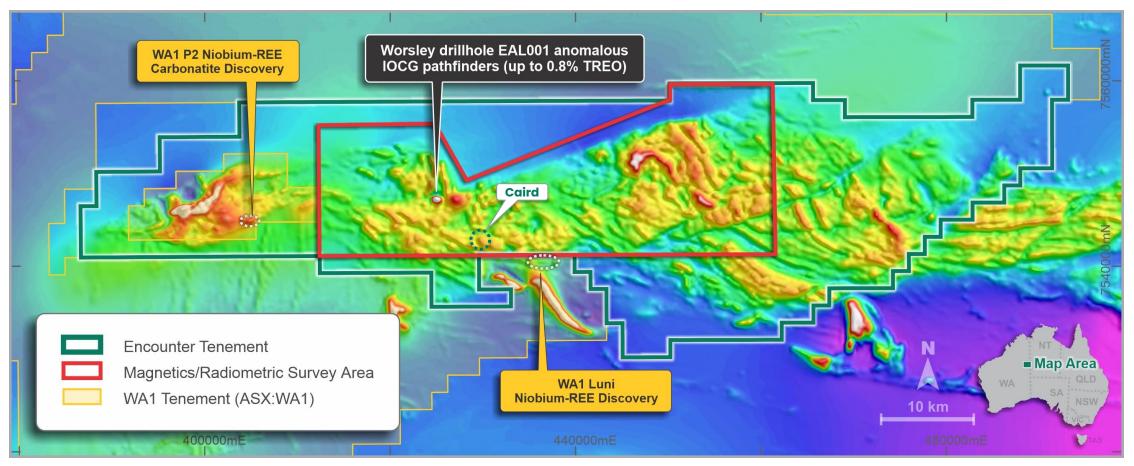
<sup>&</sup>lt;sup>2</sup> refer ASX release by WA1 - 26 October 2022

<sup>&</sup>lt;sup>3</sup> refer ASX release 14 February 2022

<sup>&</sup>lt;sup>4</sup> refer ASX release by WA1 – 16 November 2022

### Aileron Copper-Rare Earths Project (100% ENR)

Magnetic/radiometric survey to refine REE carbonatite and IOCG targets – results early December



Aileron Cu-REE project – Magnetics (RTP)



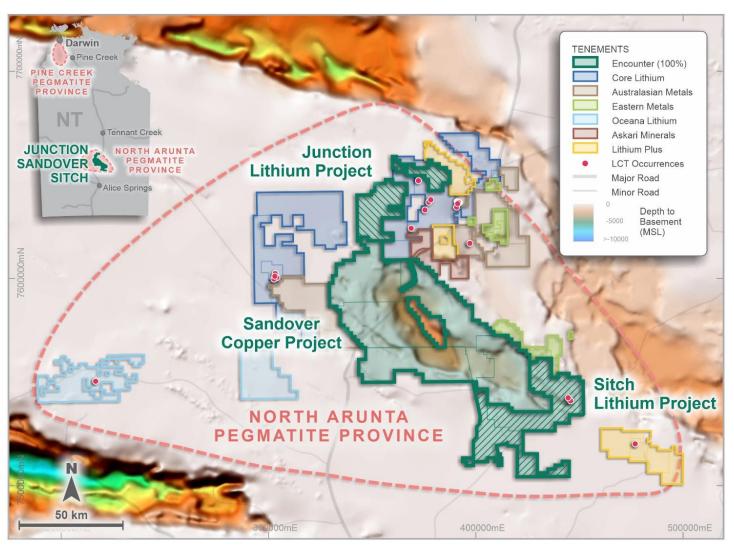
### **Northern Territory:**

Significant global opportunity for copper and lithium

### Junction and Sitch Lithium Projects (100% ENR)

#### Northern Arunta Pegmatite Province

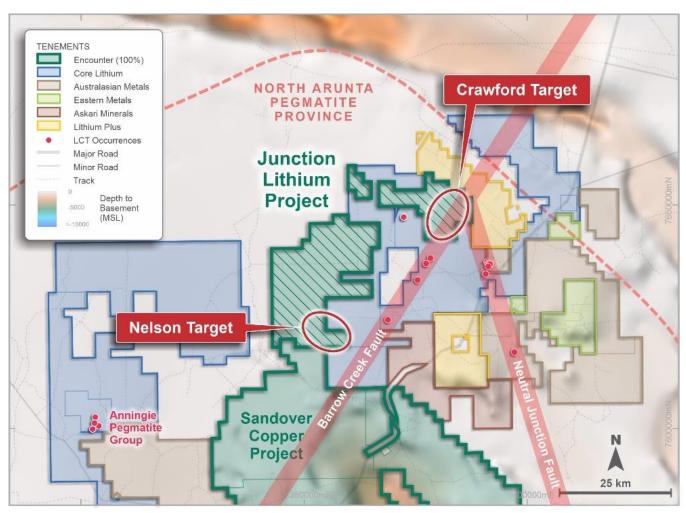
- Encounter controls a significant part of the North Arunta
   Pegmatite Province identified by the NT Geological Survey ("NTGS")
- Analogous to the host pegmatites of the lithium deposits at Greenbushes in WA and the Finnis deposit in the NT
- Several areas with strong lithium potential at Junction and Sitch
- First target to be investigated is the Crawford target at Junction



### Junction Lithium Project (100% ENR)

#### **Crawford target**

- Located at the intersection of two important, LCT-controlling structures
- A series of the most lithium rich occurrences in the Northern Arunta Pegmatite Province (controlled by Core Lithium Ltd (ASX:CXO)) are trending along the major Barrow Creek fault towards Crawford
- Minimal outcrop indicated to be a mixture of fractionated granite and pegmatite
- Majority of the target zone is beneath shallow cover which could be amenable to surface sampling
- Field assessment commencing



Northern Arunta Pegmatite Province – LCT pegmatite occurrences sourced from NTGS Report 16 tin-tantalum pegmatite mineralisation of the Northern Territory (Frater 2005)

### Sandover Copper Project (100% ENR)

#### Outcropping shale units that contain copper mapped for more than 20km

- Partially exposed Neoproterozoic Basin in the Georgina - 170km north-east of Alice Springs
- Copper mineralisation at surface returned assays up to 20.9% Cu and anomalous pathfinder elements (Zn, Ag, As, Bi, Mo and Pb)
- Limited historical drilling between 1966-71 demonstrated that anomalous copper continues downdip and into fresh rock
- Gravity survey completed November 2022

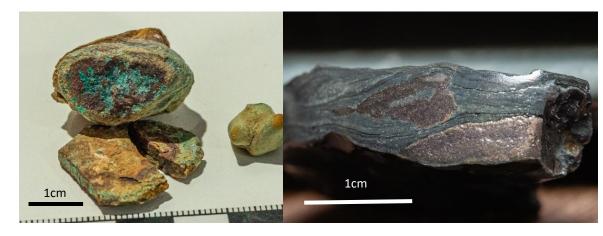
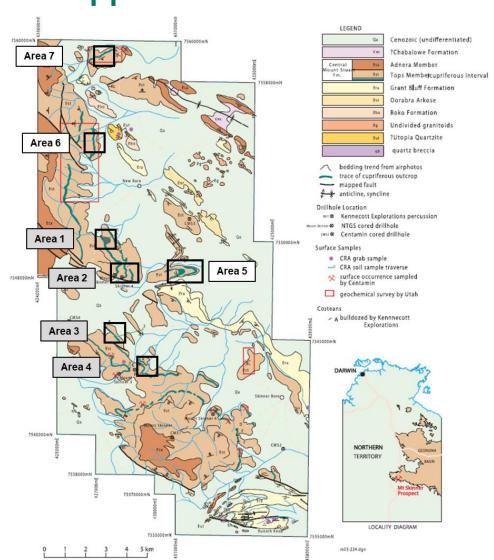


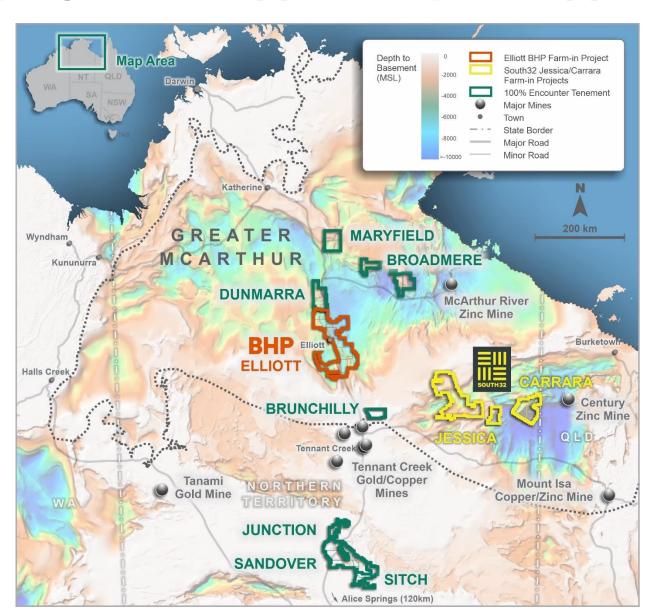
Photo 1– weathered copper rich nodules collected from surface at Area 1 – containing malachite (interpreted after bornite-chalcopyrite)

Photo 2– primary copper rich nodule from historical drillhole (Mt Skinner DDH3 203.3m) located adjacent to Area 4 containing bornite-chalcopyrite



#### Northern Territory: globally significant opportunity for copper

- Highly prospective, vastly underexplored region under shallow cover
- Located between the major copper-gold producing districts of Mt Isa and Tennant Creek
- Transformational investment in precompetitive data by Geoscience Australia (GA) and NTGS
- These new datasets are providing crucial early insights into areas prospective for sedimentary hosted copper deposits
- Encounter has a portfolio of first mover copper opportunities
- Majors acquiring new projects in the NT include: BHP, South32, Rio Tinto, OZ
   Minerals, Fortescue and Teck



### **Elliott Copper Project**

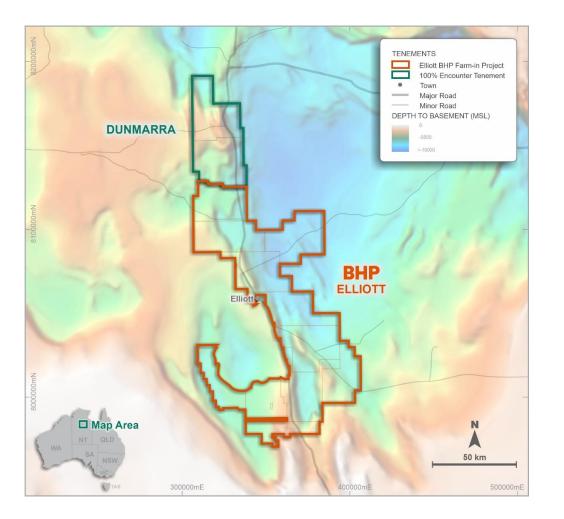
### **BHP**

#### BHP-funded diamond drilling (~2,000m) in progress

- BHP (ASX:BHP) earn-in and joint venture agreement covering the 7,200km<sup>2</sup> Elliott Copper Project
- BHP may earn up to a 75% interest by spending up to \$25 million over 10 years
- Compelling opportunity in the vastly underexplored Greater McArthur Super-basin
- Key ingredients for the formation of large sedimentary copper deposits



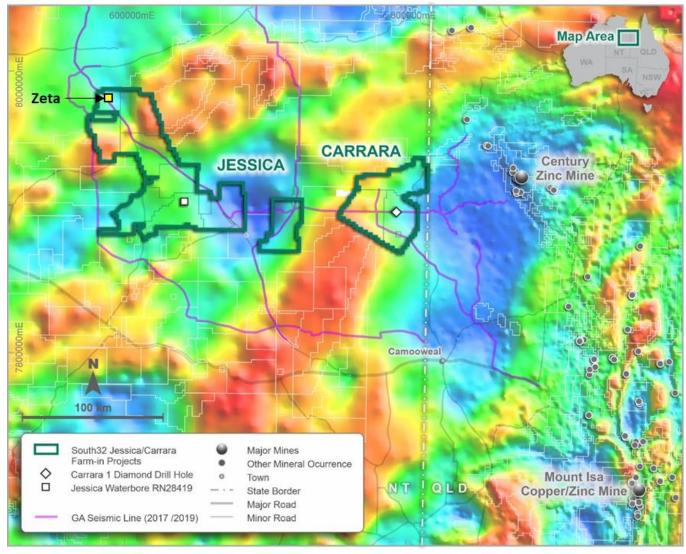
Diamond Drilling at Elliott - October 2022



## Jessica Copper and Carrara Copper-Zinc Projects South32 entered into two farm-in agreements in June 2022

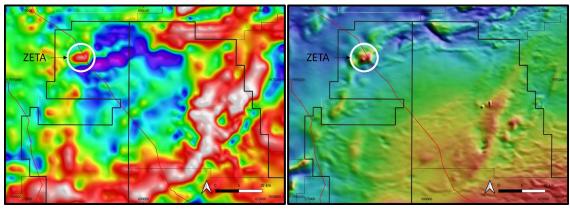


- Reprocessing of seismic lines has defined a number of groundbreaking, new drill targets at the Jessica and Carrara
- Diamond drilling is planned at Carrara to test multiple seismic features at key structural positions on the margin of the Carrara sub basin
- Stratigraphic drill hole (NDI Carrara-1) completed by the Minex CRC established the presence of zinc, lead and copper
- Eight new targets identified
- Diamond drilling to commence in April-May 2023

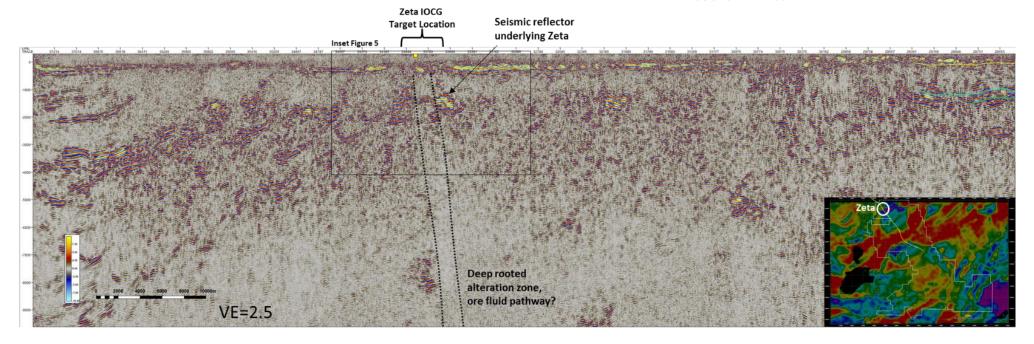


#### Jessica Copper Project **Zeta IOCG Target**

- Drilling at Jessica to include the newly defined Zeta IOCG target:
  - Coincident magnetic-gravity anomaly
  - Discrete seismic reflector
  - Adjacent to a regionally significant deep feeder structure



Zeta IOCG target. Gravity (IVD) (left) and Magnetics (RTP) (right), location of GA seismic lines shown in red





### Paterson Province, Western Australia:

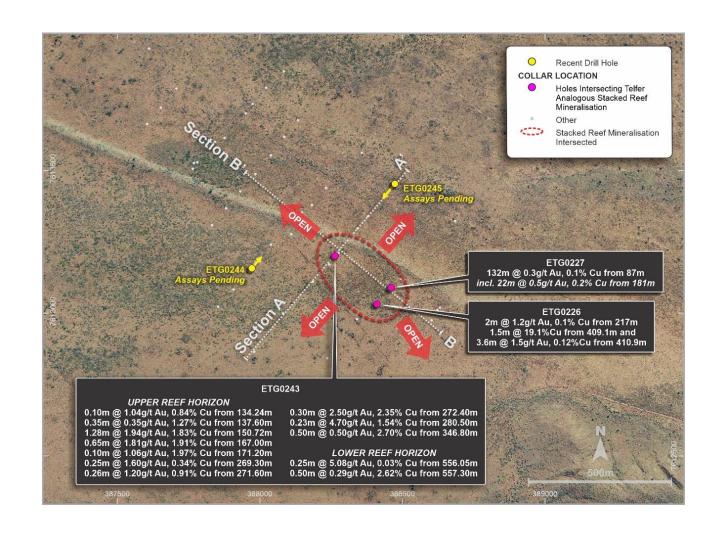
New large scale coppergold discoveries

### Lamil: Copper-gold system established

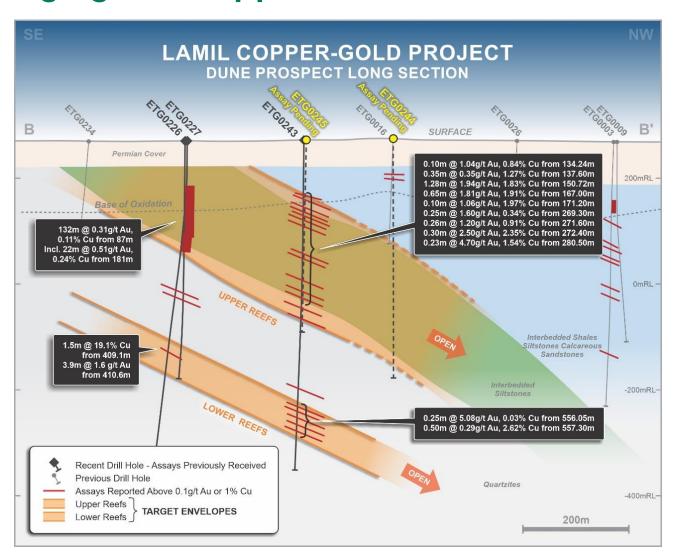
### (100% ENR)

#### EIS diamond drilling completed September

- Located 25km NW of Telfer
- Expansive copper-gold system >1km of strike containing multiple, stacked, narrow copper-gold reefs
- High-grade copper up to 19.1% Cu contained in chalcocite intersected in 2021 drilling
- EIS co-funded diamond drilling Sep 22
  - Both holes intersected the target package
  - Steep set of structures in ETG0244 may represent a new untested target
  - Downhole EM to test for off-hole conductors associated with Cu-Au mineralisation
  - Initial assay results Dec 2022



## Drilling results point to potential large copper-gold system High grade copper intersections rare outside of Winu and Havieron





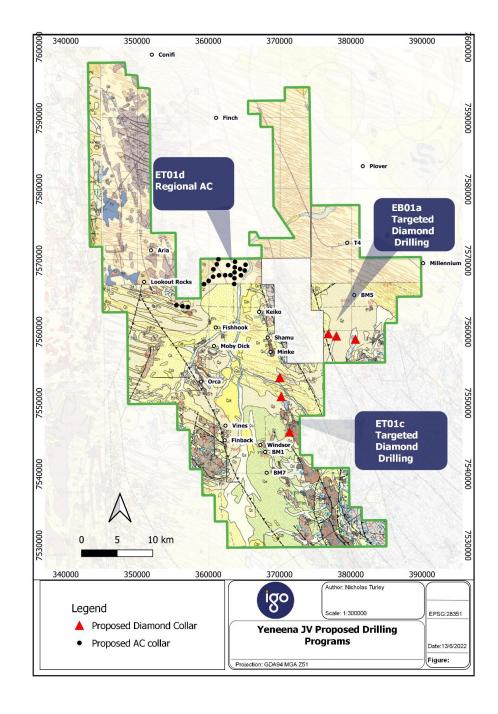
Semi-massive pyrite – chalcocite mineralisation drilled from 409.1 to 410.6m in ETG0226.

- · 1.5m @ 19.1% Cu from 409.1m
- 3.9m @ 1.6g/t Au from 410.6m

#### Yeneena Copper

### Paterson Province is a proven region with a history of discoveries

- Exploration at Yeneena is focused on discovering high-value sediment-hosted copper deposits
- ~1,450km² of the Paterson Province
- IGO Ltd (ASX:IGO) can sole fund \$15 million in exploration expenditure over a maximum seven years to earn a 70% interest
- 2022 exploration program included:
  - 4,000m of diamond drilling
  - 1,500m of aircore drilling
- Six diamond drill holes completed
- Assay results Dec 2022 Feb 2023





#### Large portfolio of exploration projects in Australia

#### 100% ENR projects

#### Aileron Copper-Rare Earths Project -WA

- IOCG style copper-gold-REE in drilling
- Olympic Dam age mineralisation events
- New niobium-REE discovery adjacent to Aileron

#### Sandover Copper Project - NT

- Key geological units and processes for sediment-hosted copper
- Bornite identified in historical drill core

#### Lamil Copper-Gold Project - Paterson Province WA

- Diamond drilling completed Sep 22
- Assay results Dec 22

#### **Junction Lithium Project - NT**

- North Arunta Pegmatite Province
- New lithium targets identified
- Field assessment commencing

#### Farm-in partners



#### **Elliott Copper Project - NT**

(up to \$25m farm-in funding)

- Targeting sediment hosted copper
- Diamond drill program Oct-Nov 2022



### Jessica and Carrara Projects – NT (up to \$25m farm-in funding)

- Two farm-in agreements completed Jun 22
- Eight new targets identified



#### Yeneena Project – Paterson Province WA

(up to \$15m farm-in funding)

- 4,000m diamond & 1,500m aircore drilling
- Six diamond drill holes completed

### **Upcoming news**

Aileron IOCG-REE (100% ENR) - WA – Completion of magnetic-radiometric survey	Nov 2022
Junction Lithium (100% ENR) – NT – Reconnaissance-surface sampling completion	Dec 2022
Sandover Copper (100% ENR) – NT - Gravity survey, drill target identification	Dec 2022
Lamil Copper-Gold (100% ENR) – WA - Assay results diamond drilling	Dec 2022
Yeneena Copper-Cobalt (IGO farm-in) – WA - Diamond drill program assays	Dec 22 -Feb 2023
Junction Lithium (100% ENR) – NT – Reconnaissance-surface sampling results	Jan-Feb 2023
Elliott Copper (BHP farm-in) – NT - Assay results diamond drilling	Jan-Mar 2023
Aileron IOCG-REE (100% ENR) - WA - Commencement of drilling	Apr-Jun 2023



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**ASX: ENR**