

## **TECHNICAL PRESENTATION**

DEFINING A NEW INTRUSION-RELATED GOLD DISTRICT IN WESTERN VICTORIA

23 June 2023

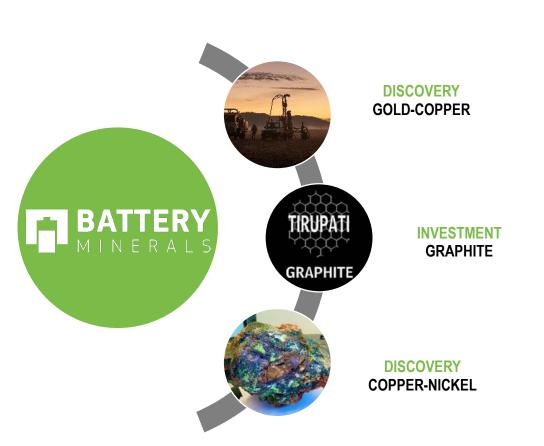






## **COMPANY OVERVIEW**





#### DEFINING A NEW INTRUSION-RELATED GOLD DISTRICT IN VICTORIA

- Priority drill targets in White Rabbit District, 15km from Stawell Gold Mine<sup>1</sup>, sheeted IRG quartz-sulphide veining with visible gold (ASX BAT 9 June 2023)
- Stawell Gold Mine (>5MOz²) (Stawell Gold Mines Pty Ltd Arete Capital Partners)
- Drilling / IP Geophysics underway

#### COMPANY INVESTMENT IN EMERGING MAJOR GRAPHITE PRODUCER

- Listed Investment in Tirupati Graphite (LSE.TGR), currently valued at \$9m<sup>2</sup> (ASX BAT 3 April 2023)
- Provides exposure to graphite market, technology company and investment
- TGR are high margin producer / increasing production / cashflow 2,996tpa FY2022 

  30,000tpa Q12023 

  84,000tpa 2024 (MDG Projects) 

  400,000tpa 2030 (LSE TGR 23 September 2022)

## **AZURA PROJECT**

VTEM conductors / anomalous surface geochem, up to 29.9% Cu rockchips (ASX BAT 22 June 2021)

## **BUSINESS DEVELOPMENT M & A**

Targeted / Incremental / Value accretive acquisitions under review



TWO DISCOVERY FAIRWAYS

STAWELL GOLD CORRIDOR - Au

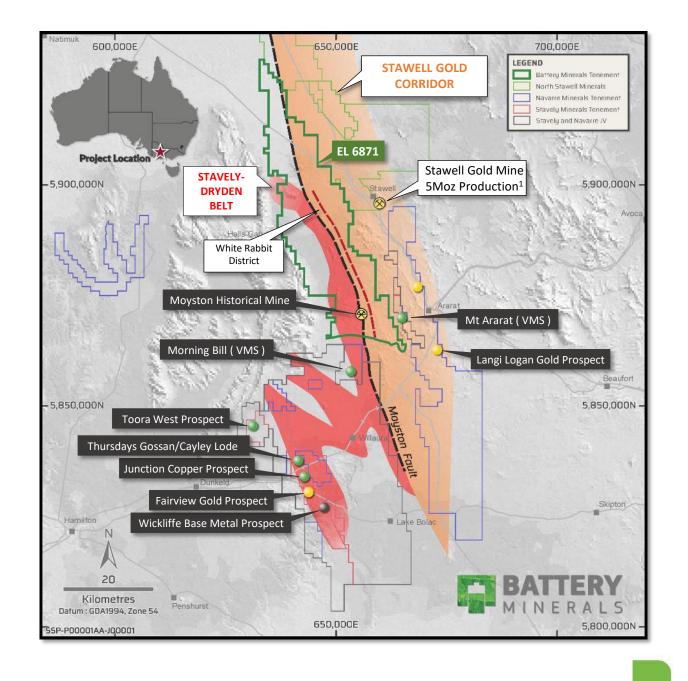
6Moz Stawell-Wonga Gold Mine<sup>1</sup>

Intrusion - Related Au (IRG)

## STAVELY-DRYDEN BELT – Cu, Au

Poorly explored, emerging discoveries, Thursdays Gossan / Cayley's Lode (SVY.ASX)

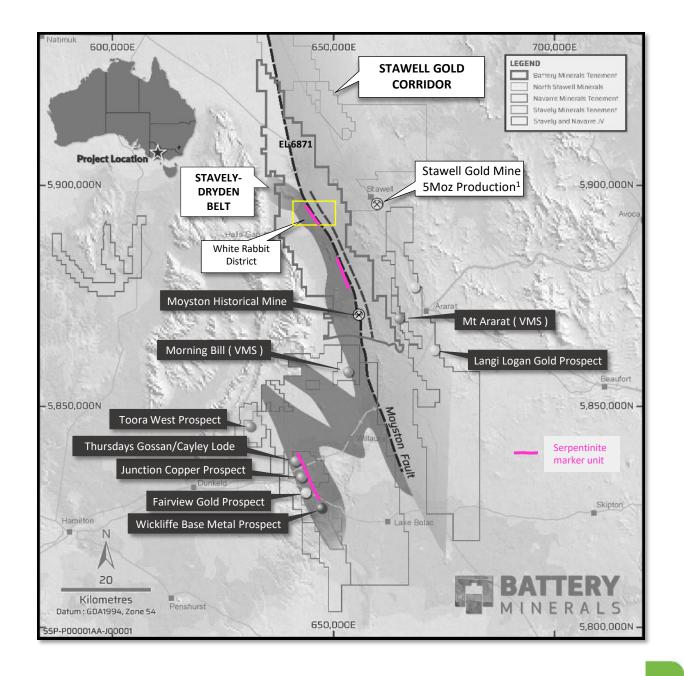
- 60 km strike of Stawell Gold Corridor Stavely-Dryden Belt
- Last sustained exploration effort early 1990s (Gold @ A\$400/oz)
- Stawell Gold Mine (>5MOz, 600koz of new resources discovered last 2.5years¹)
- Emerging Intrusion-Related gold district at White Rabbit





KEY BELT-SCALE MARKER UNIT

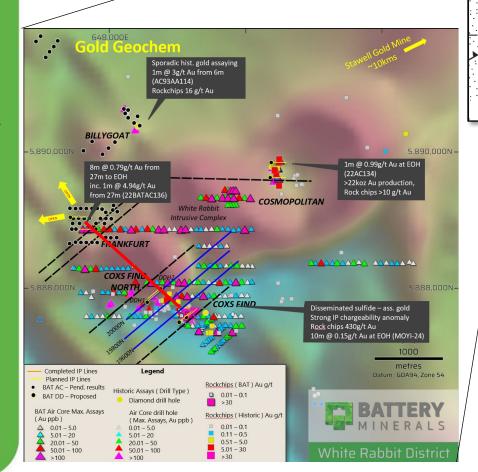
- Ultramafic/serpentinite units are a key belt-scale marker within the Stavely-Dryden Belt
- Thursdays Gossan-Cayley Lode Discoveries by ASX:SVY in southern portion of belt located adjacent and west of ultramafic/ serpentinite units, Cayley Lode MRE 9.3Mt @ 1.23% Cu, 0.23g/t Au (ASX SVY 25 April 2023)
- White Rabbit District located adjacent at western margin of ultramafic/serpentinite units

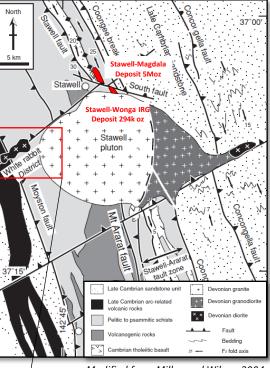




## TARGETING THE WHITE RABBIT INTRUSIVE COMPLEX

- Margin of Western Lachlan Orogen / Stawell Zone / Delamerian Orogen
- Devonian Intrusive Complex Stawell Granite
- Located along a regional, northeast trending structural corridor that contains the Wonga IRG Deposit (294oz @ 4.38g/t Au¹)





Modified from Miller and Wilson 2004



INTRUSION - RELATED GOLD SYSTEMS (IRGS)

#### ATTRACTIVE EXPLORATION TARGET – NOTABLE DEPOSITS

**POGO** - 8Moz @ 13.6g/t Au <sup>1</sup>

FORT KNOX - 7Moz @ 0.83g/t Au<sup>1</sup>

STAWELL-WONGA - 6moz 1

KIDSTON - 5Moz @ 1.7g/t Au 1

#### **MINERALISATION STYLES**

- 1) Intrusion-hosted, sheeted vein arrays, disseminated
- 2) Skarns within contact aureoles, W ± Cu ± Zn ± Au and Au-Bi-Cu ± W
- 3) Replacement, disseminated and/or fracture-controlled Au ± As ± Sb
- 4) Ag-Pb-Zn ± Au fissure veins of either late or peripheral disposition

#### **IRG – WHITE RABBIT EXPLORATION CRITERIA**

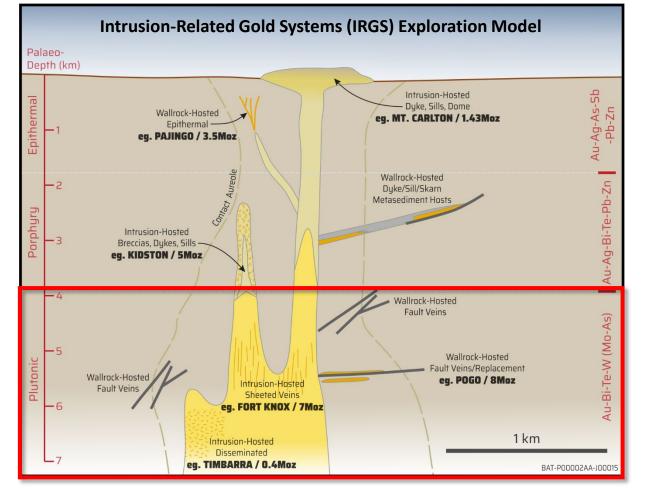
Au-Bi-Te-As-Mo-W pathfinder association

Evidence of replacement-style IRG at Coxs Find – IP chargeability/resistivity

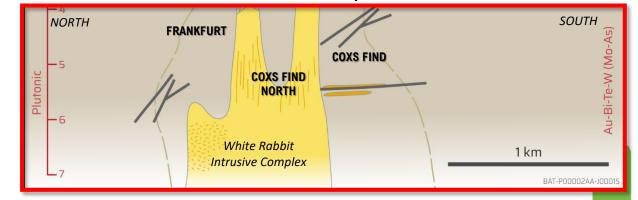
Fertile, reduced (ilmenite-series), I-type intrusive complex

Evidence of IRGS processes nearby at Wonga-Stawell Deposit

<sup>1</sup> Hart 2007, ASX NSM 11 May 2021, Miller and Wilson, 2004, ASX NST 30 August 2018



## White Rabbit District Exploration Model





INTRUSION - RELATED GOLD SYSTEMS (IRGS)

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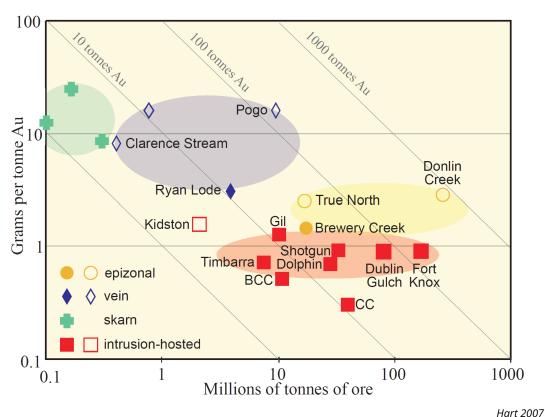
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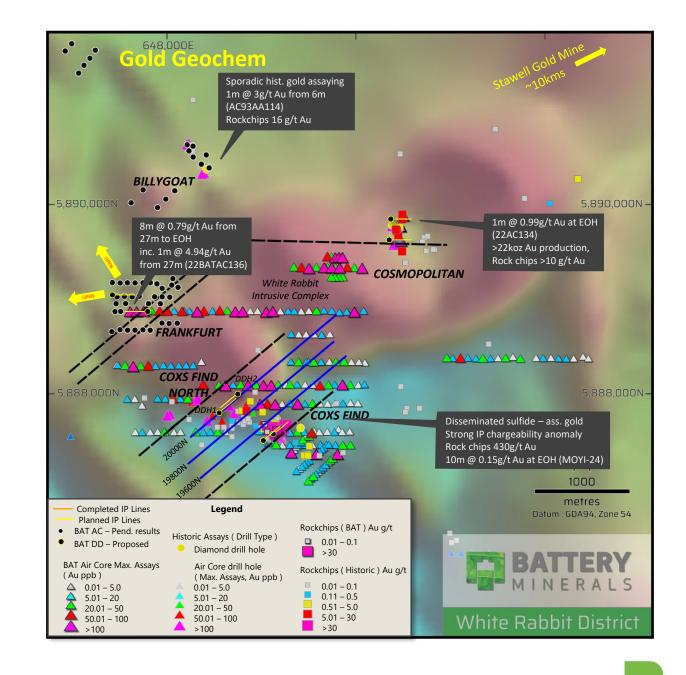


# FOUR PRIORITY GOLD PROSPECTS – 15km FROM STAWELL GOLD MINE<sup>1</sup>

- 1. COXS FIND Au historic workings, rock chips inc. 430 g/t Au, SEM/ICPMS indicating association with sulphides = bedrock potential (ASX BAT 2 May 2022)
- 2. FRANKFURT Au 8m @ 0.79g/t Au from 27m to EOH, 'fertile' gold-multielement signature (Au-Te-Bi-Mo-Sb-As), open >160m wide target zone
- 3. BILLYGOAT Au + Co sporadic historic gold assaying, inc. 1m @ 3g/t Au from 6m (AC93AA114), rockchips up to 16 g/t Au (ASX BAT 14 October 2021)
- **4. COSMOPOLITAN** Au >22koz hist production, rock chips >10 g/t Au (ASX BAT 14 October 2021)

#### **CURRENT EXPLORATION ACTIVITY**

- Extension AC drilling at Frankfurt, Billygoat (2500m) completed late-April 2023
- Diamond drilling at Coxs Find, Frankfurt, Cosmopolitan (1300m) underway
- IP geophysics at Coxs Find, Frankfurt, Cosmopolitan (10kms) underway



<sup>1</sup> Stawell Gold Mines Pty Ltd - Arete Capital Partners

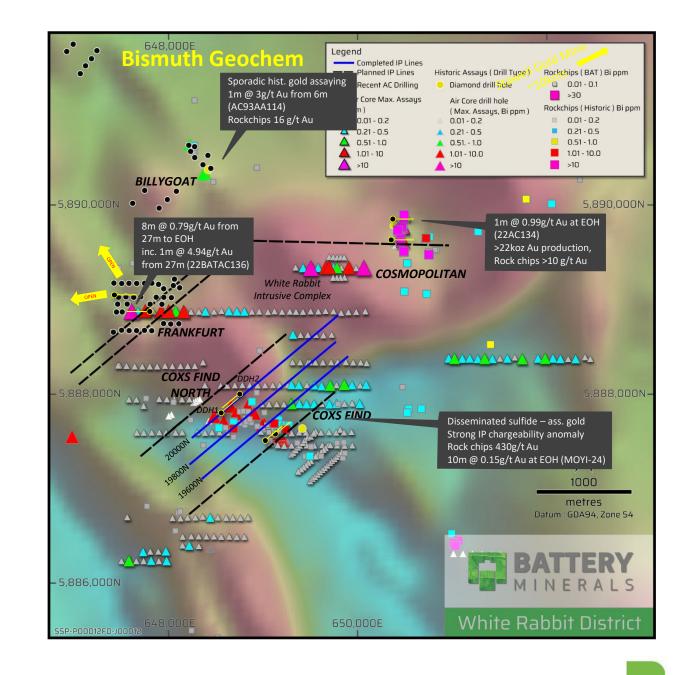


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JOURNEY TO DISCOVERY (COXS FIND)

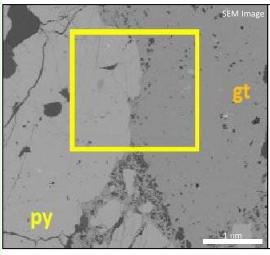
- 1) RECOGNISING HIGH VALUE DISCOVERY OPPORTUNITY
- 2) APPLY APPROPRIATE TARGET DEFINITION TECHNIQUE

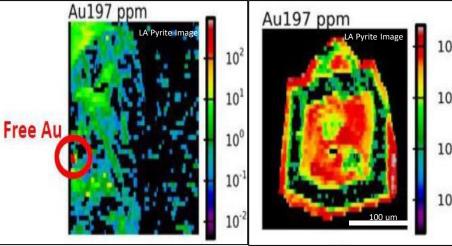
  3) DRILL PRIORITY TARGETS

- Pyrite petrography-microscopy SEM/ICPMS indicate gold association with disseminated sulphides (Collaborative Research Project - Centre of Ore Deposit Studies, UTas, ASX BAT 2 May 2022)
- Gold associated with disseminated sulphides = primary = fertile system = bedrock potential (ASX BAT 2 May 2022)
- Associated with disseminated-sulfide points to = bulk tonnage potential
- Strongly anomalous surface geochem points to = high grade potential









Pyrite petrography-microscopy SEM/ICPMS indicate association with sulphides = bedrock potential (Centre of Ore Deposit Studies, UTas, ASX BAT 2 May 2022)

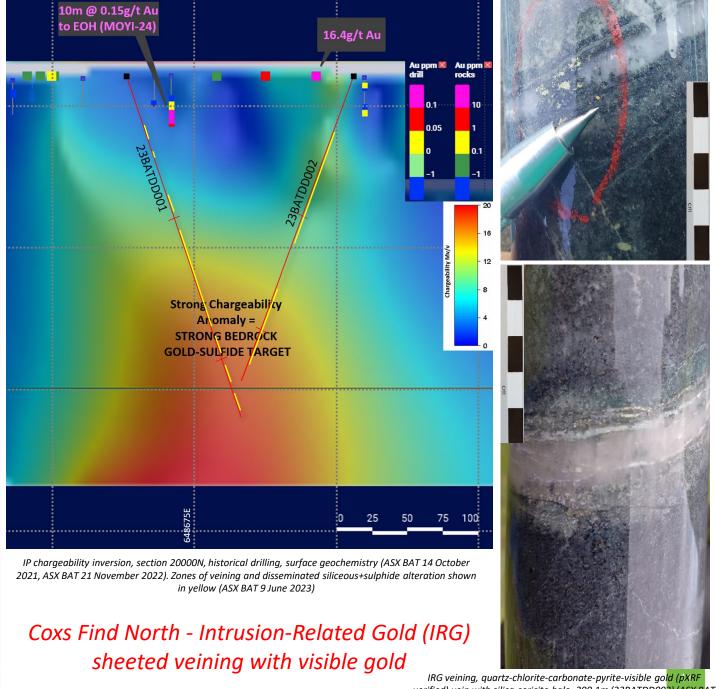
'Identified weathered hypogene gold mineralisation associated with disseminated sulphide' = Not alluvial = Primary gold = Fertile hydrothermal system



JOURNEY TO DISCOVERY (COXS FIND NORTH)

- 1) RECOGNISING HIGH VALUE DISCOVERY OPPORTUNITY
- 2) APPLY APPROPRIATE TARGET DEFINITION TECHNIQUE

  3) DRILL PRIORITY TARGETS
- Rockchip geochem. inc. 430 g/t Au, 174.5g/t Au (ASX BAT 2 May 2022), IRG pathfinder suite Au-Bi-Te-As-Mo-W
- PDIP Chargeability/resistivity datasets
- Petrography-Microscopy SEM/ICPMS indicate association with sulphides = bedrock potential (ASX BAT 2 May 2022)
- Drilling underway (ASX BAT 9 June 2023)



IRG veining, quartz-chlorite-carbonate-pyrite-visible go<mark>ld (pXRF</mark> verified) vein with silica-sericite halo, 200.1m (23BATDD00<mark>2) (ASX B</mark>AT 9 June 2023)

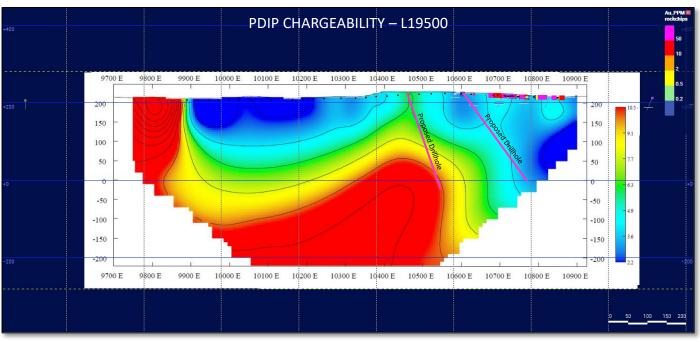


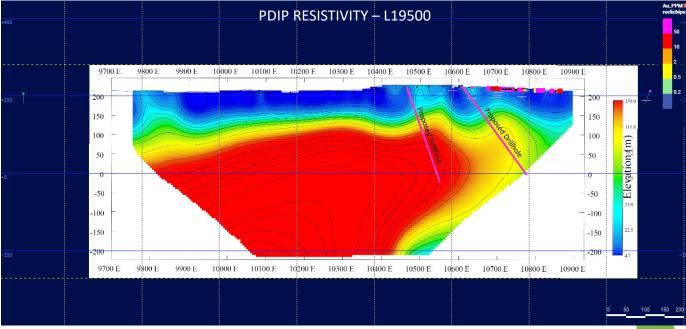
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- Drilling underway (ASX BAT 19 June 2023)





IP chargeability, resistivity inversions, section 19500N (ASX BAT 9 June 2023)



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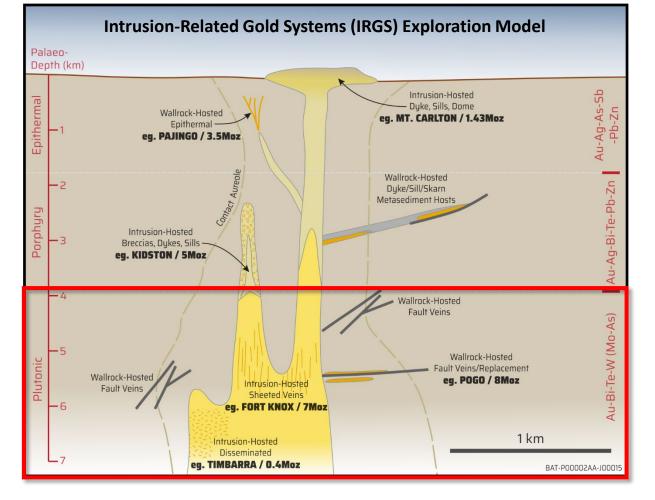
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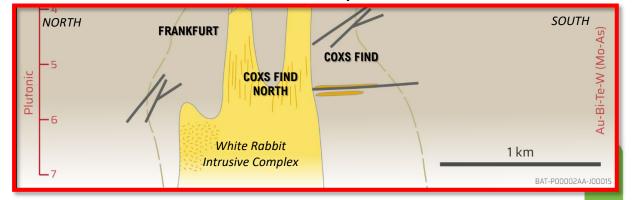
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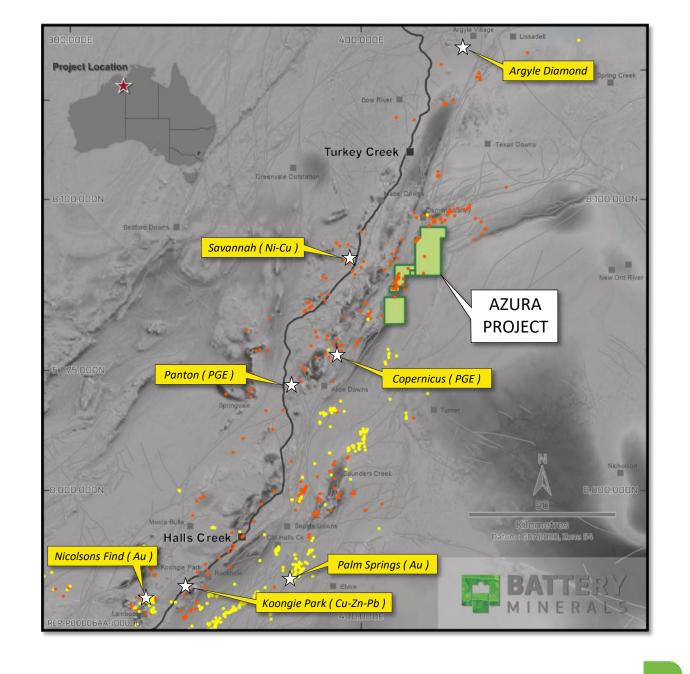




## **AZURA PROJECT**

COPPER - NICKEL - COBALT - PGEs

- Underexplored, multiple target styles
  - Michigan Cu-Ag
  - Magmatic Ni Cu PGEs
  - Skarn Cu-Au
  - Mesothermal Au Cu/Pb/Zn/Ag
- Operating Mines
  - Savannah Ni-Cu-Co (PAN.ASX)
  - Nicolsons Wagtail North Au (PNR.ASX)
- Operating Mines
  - Planned Environmental Surveys prior to drilling activity in late 2023

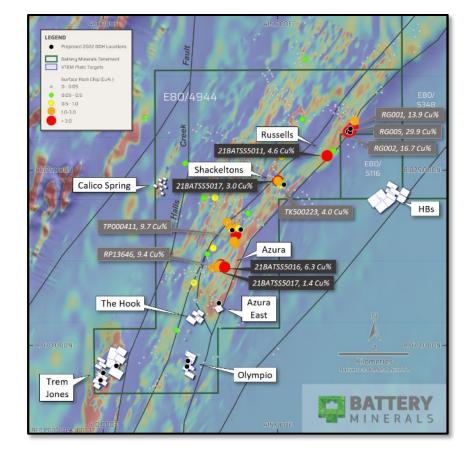


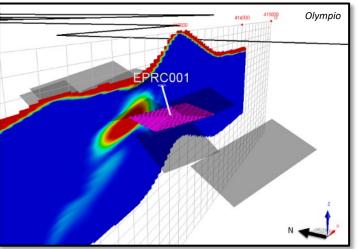


## **AZURA PROJECT**

## DRILL TARGETS - EM ANOMALIES - STRONG SURFACE GEOCHEM

- Priority Cu-Ni-Co-PGE drill targets identified
- EM conductors + strong surface Cu anomalism, up to 29.9% Cu rockchips (ASX BAT 22 June 2021)
- Olympio Target: coincident strong conductivity (600m long at 100m depth) and concealed, likely structurally thickened portion of the prospective target stratigraphy
- Timing of field activity under review ranked against the prospectivity of targets across the Company's portfolio







# COMPANY INVESTMENT IN EMERGING MAJOR GRAPHITE PRODUCER

#### LISTED INVESTMENT

Tirupati Graphite / LSE:TGR / MC:AU\$65m / AU\$9m<sup>1</sup>

### TGR - STRONG PRODUCTION GROWTH FROM TWO MINES

### TGR - HIGH MARGIN PRODUCER

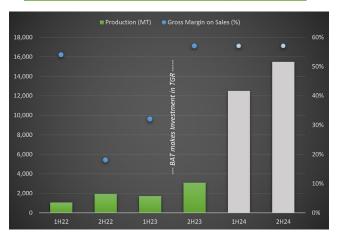
- Industry leading OPEX pre-concentrate pipeline to plant, column flotation

#### TGR - TARGETING 8% OF GLOBAL MARKET

 Offtake with 1<sup>st</sup> tier advanced electronics companies and vehicle manufacturers in Europe, Japan, US, Taiwan and South Korea,

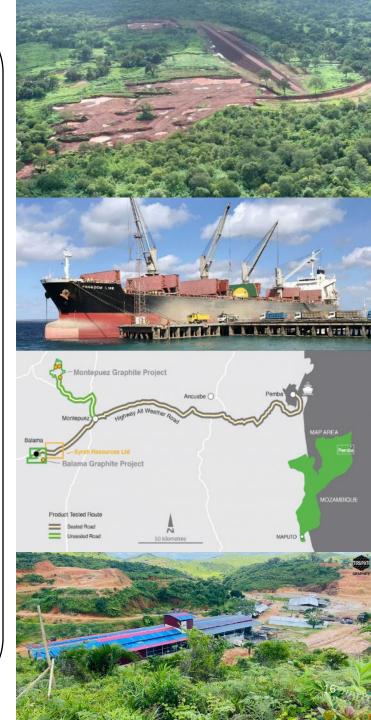
## Tirupati Graphite Operations<sup>1</sup>

| UKFY23 Results                | AUD       |
|-------------------------------|-----------|
| Production                    | 4,770t    |
| Average Flake Production Cost | \$597/t   |
| Average Flake Price achieved  | \$1,365/t |
| Average operating margin      | \$768/t   |
| Revenue                       | \$5.4m    |
| Gross Profit                  | \$2.6m    |



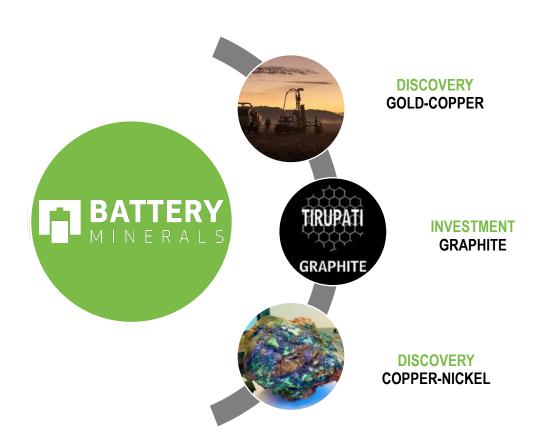
| Particulars                             | Unit | FY 2023   | FY 2022   | % Change YoY |
|---|------|-----------|-----------|--------------|
| Revenue and Sales                       |      |           |           |              |
| Quantity Sold & Shipped                 | MT   | 3,982     | 2,662     | +50%         |
| Revenue from Sales                      | £    | 2,890,010 | 1,645,308 | +76%         |
| Price realised                          | £/MT | 726       | 618       | +17%         |
| Production and Cost of Production       |      |           |           |              |
| Quantity Produced                       | MT   | 4,770     | 2,996     | +59%         |
| Mining & Processing Costs               | £    | 1,512,563 | 935,604   | +62%         |
| Human Resources                         | £    | 326,783   | 378,671   | -14%         |
| Logistics Utilities & Plant Admin Costs | £    | 368,061   | 308,278   | +19%         |
| (Increase) / Decrease in Inventory      | £    | -689,445  | -485,357  | +42%         |
| Total Cost of Production                | £    | 1,517,962 | 1,137,196 | +33%         |
| Cost of Production per ton              | £/MT | 318       | 380       | -16%         |
| Operating Profits & Margins             |      |           |           |              |
| Gross Profits                           | £    | 1,372,048 | 508,112   | +170%        |
| Gross Margin % of sales                 | %    | 47        | 31        | +52%         |
| Cost of Production % of Price realised  | %    | 44        | 61        | -28%         |





## **HIGH IMPACT NEWSFLOW**





|                   | ACTIVITY SUMMARY |                                 |         |  |          |  |          |  |  |  |  |
|-------------------|------------------|---------------------------------|---------|--|----------|--|----------|--|--|--|--|
|                   |                  | ACTIVITY                        | MAR QTR |  | JUNE QTR |  | SEPT QTR |  |  |  |  |
| E E               | QUE              | Admin transfer to Tirupati      |         |  |          |  |          |  |  |  |  |
| GRAPHITE          | MOZAMBIQUE       | Complete Tirupati transaction   |         |  |          |  |          |  |  |  |  |
| GR                | MOZ              | Admission of TGR shares         |         |  |          |  |          |  |  |  |  |
| PER               | WELL             | Target Definition, inc. geophys |         |  |          |  |          |  |  |  |  |
| GOLD-COPP         | STAVELY-STAWELL  | Drilling - AC                   |         |  |          |  |          |  |  |  |  |
| GOL               | STAVE            | Drilling – DD                   |         |  |          |  |          |  |  |  |  |
| PER-<br>KEL       | AZURA            | Enviro Surveys                  |         |  |          |  |          |  |  |  |  |
| COPPER-<br>NICKEL | AZU              | Field work / Drilling           |         |  |          |  |          |  |  |  |  |

Estimates of times are indicative and are subject to change

## **REFERENCES**



ASX BAT 2 May 2022 Coxs Find High Grade Gold

ASX BAT 11 July 2022 Stavely-Stawell Update

ASX BAT 27 September 2022 IP Commences at Stawell

ASX BAT 21 November 2022 IP Defines Priority Targets at Stawell

ASX BAT 3 April 2023 Completion of Tirupati Sale

ASX BAT 17 May 2023 White Rabbit Maiden Diamond Drilling Commences

Hart, C.J.R., 2007, Reduced intrusion-related gold systems, in Goodfellow, W.D., ed., Mineral deposits of Canada: A Synthesis of Major Deposit Types, District

Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special

Publication No. 5, p. 95-112.

Miller and Wilson, 2004, Stress Controls on Intrusion-Related Gold Lodes, Wonga Gold Mine, Economic Geology Journal, Vol 99



## **DISCLAIMER - IMPORTANT INFORMATION**



#### **Forward Looking Statements**

This announcement contains "forward-looking statements" within the meaning of securities laws of applicable jurisdictions. Forwardlooking statements can generally be identified by the use of forwardlooking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "believe", "continue", "objectives", "outlook", "guidance" or other similar words, and include statements regarding certain plans, strategies and objectives of management and expected financial performance. These forward-looking statements involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Battery Minerals and any of its officers, employees, agents or associates. Actual results, performance or achievements may vary materially from any projections and forward-looking statements and the assumptions on which those statements are based. Exploration potential is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Readers are cautioned not to place undue reliance on forward-looking statements and Battery Minerals assumes no obligation to update such information.

## **Competent Persons Statement**

- Any references to Exploration Results, Ore Reserve and Mineral Resource estimations should be read in conjunction with the competent person statements included in the ASX announcements referenced in this presentation as well as Battery Minerals' other periodic and continuous disclosure announcements lodged with the ASX, which are available on the Battery Minerals' website.
- The information in this report that relates to Battery Minerals', Mineral Resources or Ore Reserves is a compilation of previously published data for which Competent Persons consents were obtained. Their consents remain in place for subsequent releases by Battery Minerals of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.

- The information in this presentation that relates to Mineral Resources in the ASX announcement dated 29 March 2018 and entitled "Resources double at Balama Central Graphite Project in Mozambique" which is available at Battery Minerals Limited website www.batteryminerals.com in the ASX announcements page.
- This is not a disclosure document. Any material used in this presentation is a summary of selected data, and any investor should refer to all Battery Minerals Limited ASX releases and statutory reports before considering to invest in the company. Any forward-looking information in this presentation has been prepared on the basis of a number of assumptions that may prove not to be correct. Neither Battery Minerals Limited, nor its officers, employees and advisors make or give any representation, warranty or guarantee in relation to this presentation.
- Battery Minerals Limited reserves the right to update, amend or supplement the Information in this presentation at any time in its absolute discretion without incurring any obligation to do so.
- The information in this document that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Peter Duerden who is a Registered Professional Geoscientist (RPGeo) and member of the Australian Institute of Geoscientists. Mr Duerden is a full-time employee of Battery Minerals Limited and 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 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Duerden consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.
- Battery Minerals confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the market announcements continue to apply and have not materially changed. Battery Minerals 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.

#### **Previously Reported Information**

The information in this report that references previously reported exploration results is extracted from the Company's ASX market announcements released on the date noted in the body of the text where that reference appears. The previous market announcements are available to view on the Company's website 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 original market announcements. 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.

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