

# **Drilling Transformational Targets**

Au

Cu

NSW, Australia



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The information in this presentation that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Thomas Wall, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Wall is the Technical Director is a full-time employee of Legacy Minerals Limited and a shareholder, who has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Wall consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The release of these presentation materials has been authorised by the Board.



## **Asset Overview**

## **Core Focus – Epithermal Systems**

Black Range Au-Ag

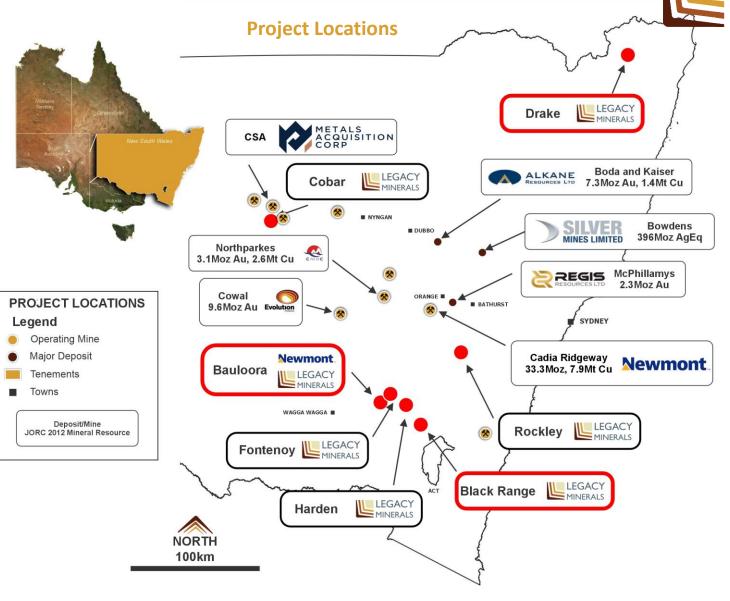
Bauloora Au-Ag **Newmont** 

Drake Au-Cu

## **Pipeline Projects**

Fontenoy Ni-Cu-PGE-Au [ ] T | ]

Cobar, Rockley, Harden



Map of central NSW showing Legacy Minerals tenements (red) and geographical location of major mining and exploration projects in NSW (figures are expressed as mineral resources).



## **Company overview**



Market Capitalisation 12M

Shares Outstanding 83M Options 5.3M

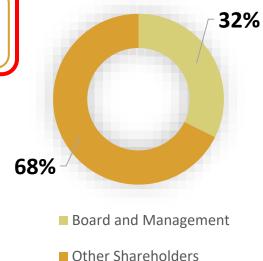
**Cash (Mar-30)** \$1.4M

**Cash (Sep-30)** \$1.3M **Issued Capital** 

**Debt** Nil **Top 20** 52%

Management aligned with shareholder interest – major shareholders

Joint Venture Funding \$19.5M



Low cost, high-impact exploration

Targeting minerals systems near surface amenable to low-cost exploration

Share Price - \$0.16





**Dr David Carland**Non-Executive
Chairman



**Douglas Menzies** Non-Executive Director



Matthew Wall Non-Executive Director

#### **Management**

**Directors** 



Christopher Byrne
CEO & Managing
Director



Thomas Wall
Exploration Manager
& Executive Director

# Why New South Wales?

#### Home to Australia's largest gold mine

- Located in a World class jurisdiction with known Tier 1 Deposits
  - Cadia 50Moz Au<sup>1</sup>, Cowal 15Moz Au<sup>2</sup> and Bowdens (400Moz Ag eq.)<sup>3</sup>

#### Safe jurisdiction to invest

- 2023 has seen major miners investing in NSW projects 2023 BHP, Rio Tinto, Newmont, AnlgoGold, IGO
- Two recent mine approvals McPhillamys and Bowdens

# Why Legacy Minerals?

#### **Targeting high value deposits**

- Epithermals are some of the richest gold deposits in the world
  - Eg. Cerro Negro (Newmont 7.1Moz Au, 500koz pa<sup>4</sup>)

#### **Quality Partnerships**

Newmont and Legacy Minerals actively exploring at Bauloora

#### Shareholder growth through discovery

Aggressive exploration underway across multiple projects

**Small market capitalisation presents growth opportunity** 



Newmont's Cadia-Ridgeway Mine (50Moz Au, 9.8Mt Cu1)



Legacy Minerals exploration team (Bauloora Project, Newmont Earn-In)



## What sets us apart?



#### **Legacy Minerals Discovery Vision**

#### **Direct funding**



- Five, 100% owned high-quality projects with no royalties
- Multiple projects being actively explored
- Full upside to shareholders upon exploration success

#### **Newmont funding**



- Aggressive exploration targeting world class deposits
- Financed pathway to mining under earn in
- Legacy Minerals retains 20% ownership of Project

### **Earth AI funding**



- Exposure to artificial intelligence
- LGM retain 100% ownership of Projects
- Success based No qualifying intercept, no earn-in







# **Hybrid Discovery Approach**

- Direct upside for shareholders through self-funded exploration
- · Minimise exploration risk, dilution, and financing risk with partner funding
- Multiple active projects increase the probability of discovery success



## Where the JV model has worked - Greatland Gold (LSE:GGP)



#### Newcrest Partnership at Havieron's delivered exceptional growth through discovery

#### Greatland - Newcrest JV<sup>1</sup>

- \$60M for 70% over 7 years
- Greatland to fund its 30%
- As of 2023 \$84M in debt and \$220M facility

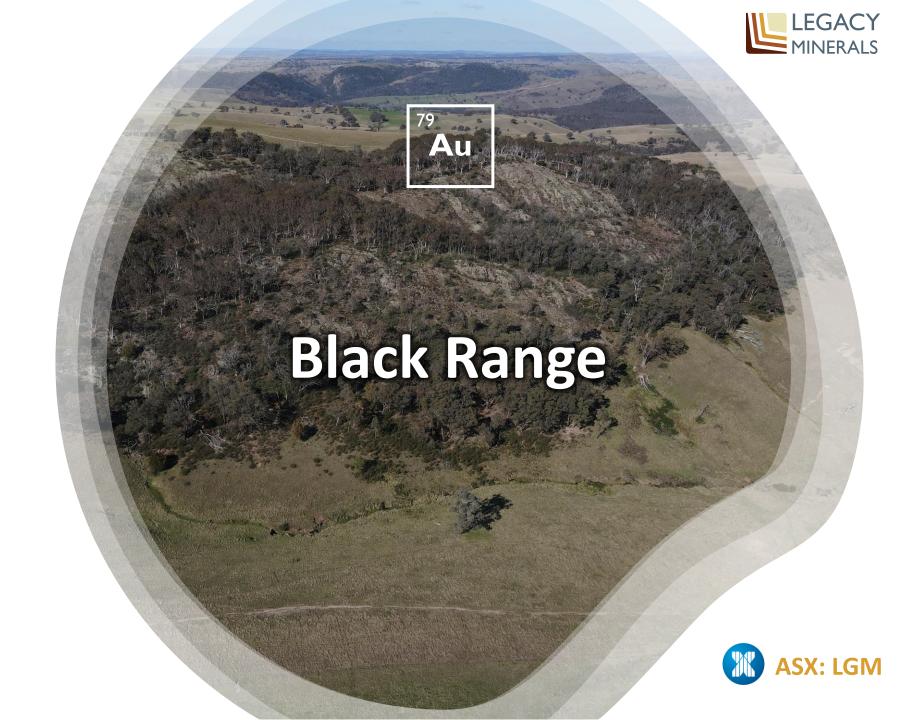
#### **Legacy – Newmont JV<sup>2</sup>**

- \$15M for 75% over 8 years
- LGM option be 20% loan carried to production by NEM
- Payments to come from production revenue





Large low sulphidation epithermal with district control in NSW



# **Black Range**



#### 100% ownership of an underexplored epithermal system

#### District scale control – 905km² license

- Large 7km<sup>2</sup> silica-sericite-sulphide alteration zone (Sugarbag Hill Prospect) associated with gold mineralisation.
- 30 years since last significant exploration (Newcrest Mining)
- Newcrest relinquished the ground in 1992 (year of the Cadia discovery)

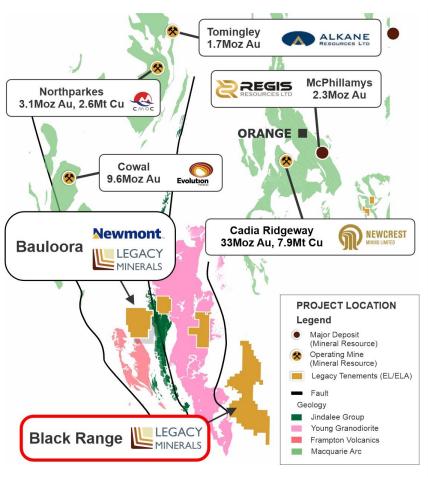
#### Why are we excited?

- Preservation potential and widespread anomalism
- 65km from Bauloora with known parallels between the two systems
- Newcrest dated Black Range to be the same age mineralisation as Bauloora

#### **Upcoming news flow**

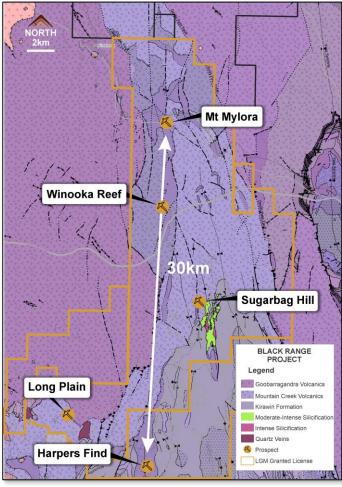
Systemic work with geology and terrain amenable to low cost, high impact exploration

#### **Black Range Project**



## Black Range EL with solid geology showing major prospect and geology (public data, MinView Department of Regional NSW)

#### **Main Prospects**

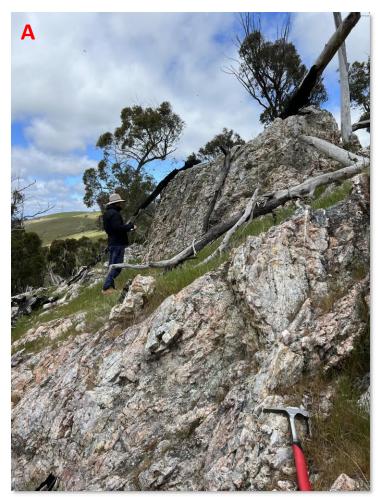


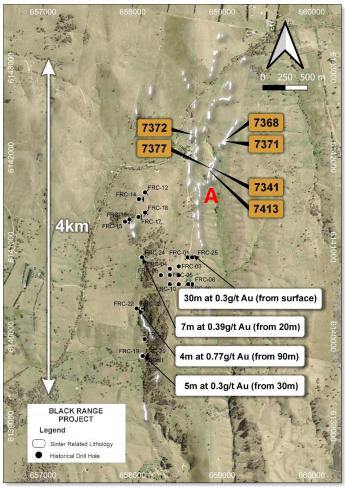
Black Range regional geology map overlain with EL and ELA tenement boundaries

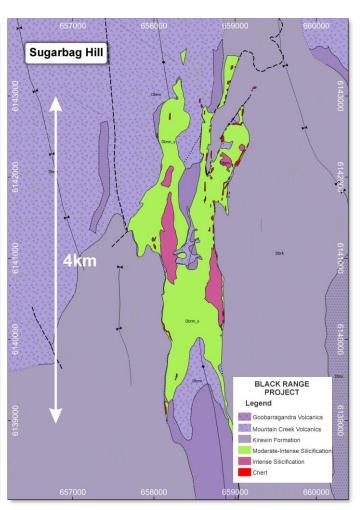


# **Black Range**

### **Sugarbag Hill Prospect – Exploration Underway<sup>1</sup>**







Sinter related lithology at the Sugarbag Hill prospect (Looking South)

Map of sinter related lithology and historic drilling at Sugarbag Hill prospect

Plan view of the Sugarbag Hill prospect showing mapped geology



## **Sinter Discovered at Black Range**

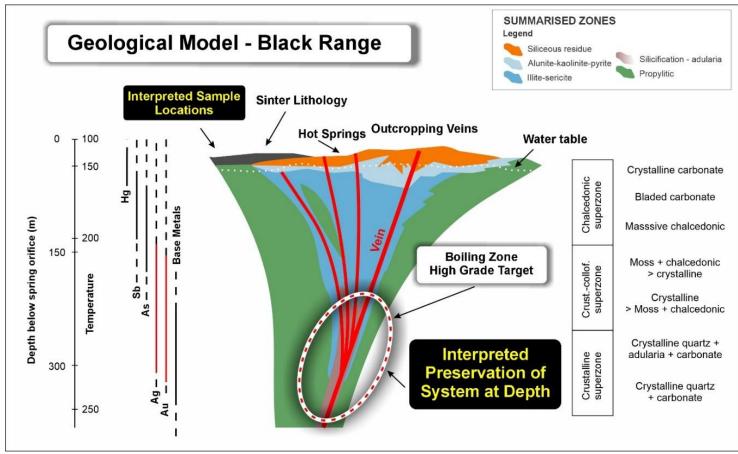






Rock Samples 7371 (7.89ppm Mo and 12.9ppm Sb) and 7377 (1.76ppm Mo and 1.28ppm Sb) are fine-grained siliceous rock interpreted to have formed as a hot spring precipitates, e.g. as silica sinter deposit.

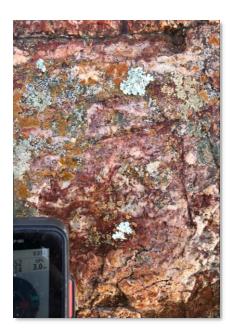
Siliceous chemical sediments are dominated by fine grained quartz (varieties include chalcedonic quartz and very fine to ultrafine granular material); in some there is diffuse layering (including crustiform banding) and small lobate, pelletal and elongate aggregates. Small aggregates, some of spicular form, are interpreted as of former organic origin, and might represent replaced carbonaceous material.

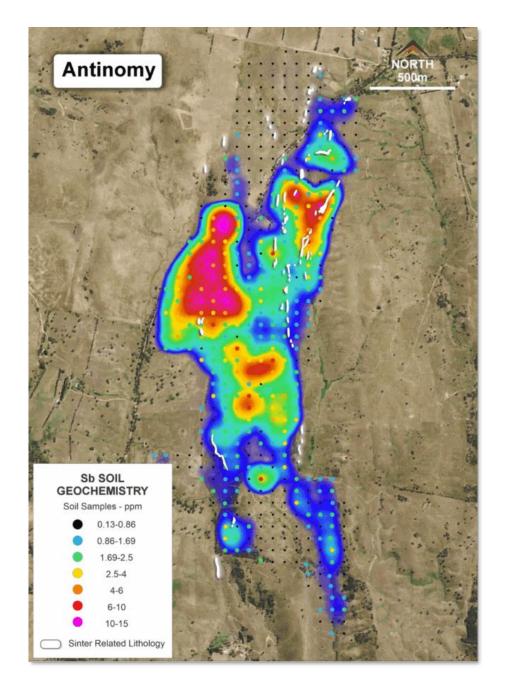


## **Black Range Geochem**

- The latest soil sampling results at Sugarbag Hill have mapped:
  - A <u>3.5km x 1.2km zone</u> of elevated low-sulphidation epithermal Au-Ag pathfinder elements
  - 2.2km long gold trend >20ppb Au (up to 296ppb Au).
- First pass rock chip sampling has returned up to 2.27g/t gold and 29.6g/t silver.
- Rock chip samples elevated in gold are dominated by chalcedonic quartz replacement textures consistent with low-sulphidation epithermal gold-silver style mineralisation.





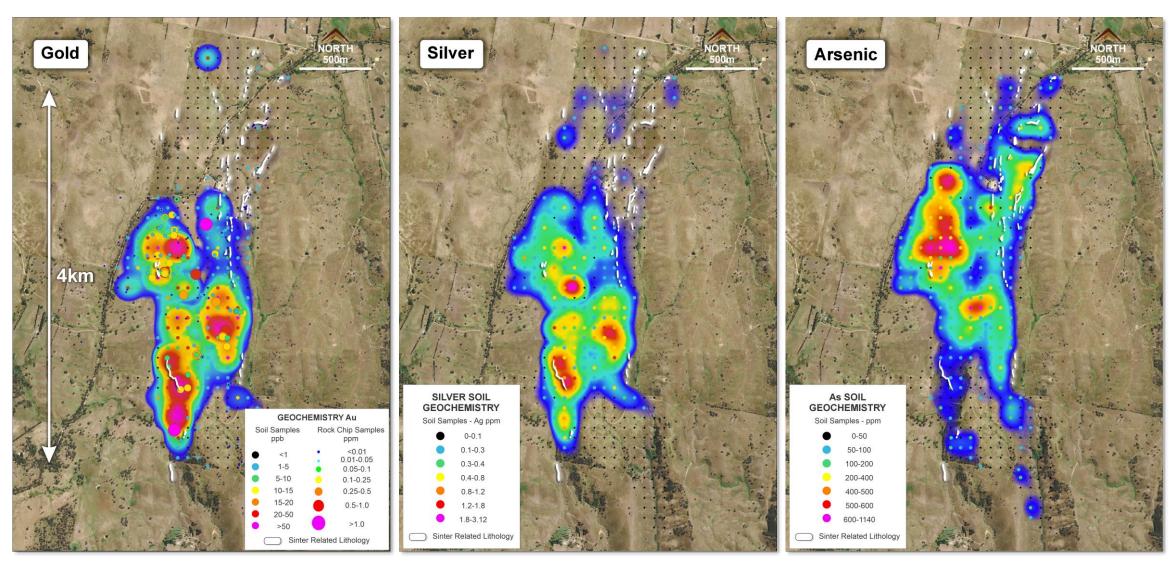






# **Significant Gold Soil Anomaly**

### **Undrilled coincident pathfinder element targets**

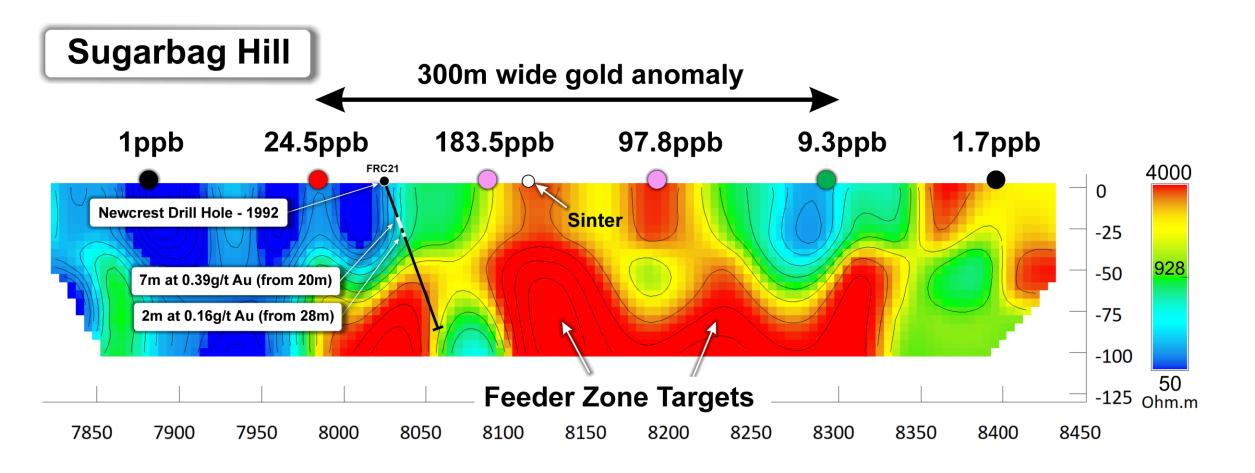




## **Undrilled IP Targets Beneath Sinter**



IP targets never before tested



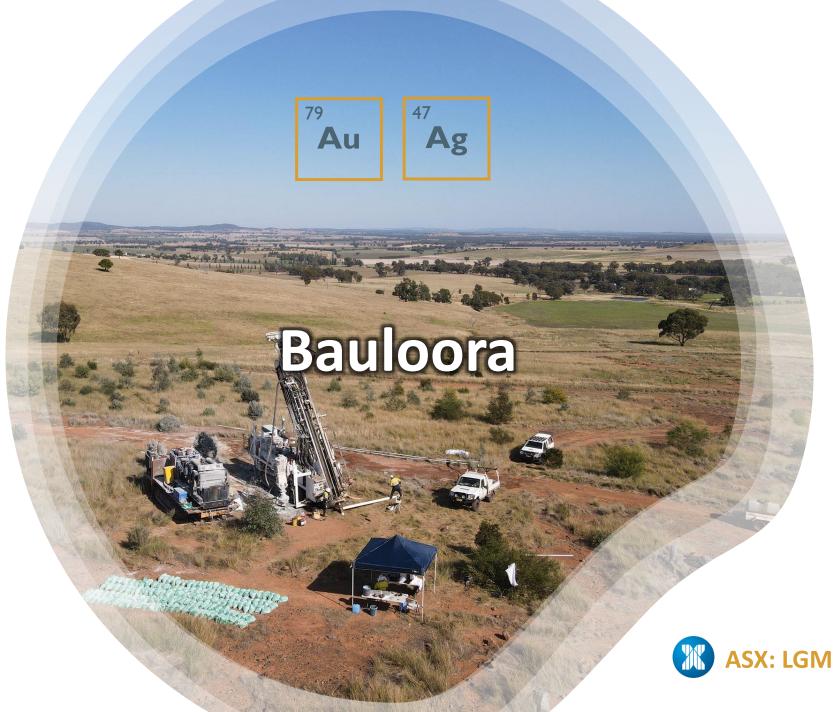




**Drilling for a major epithermal discovery** 

**Newmont** 

**Newmont Farm-in** 



## **Bauloora**

#### **Targeting a Tier 1 Epithermal Deposit**

#### **Drilling this quarter**

Immediate discovery exposure

#### **Newmont Joint Venture (\$15M)**

- Discovery focused joint venture
- LGM 20% loan carried to production

#### District scale control – 330km<sup>2</sup> license

- Alteration across 150km<sup>2</sup> zone
- 27km² low sulphidation vein field

#### **Untested potential**

· Previously unrecognised opportunity

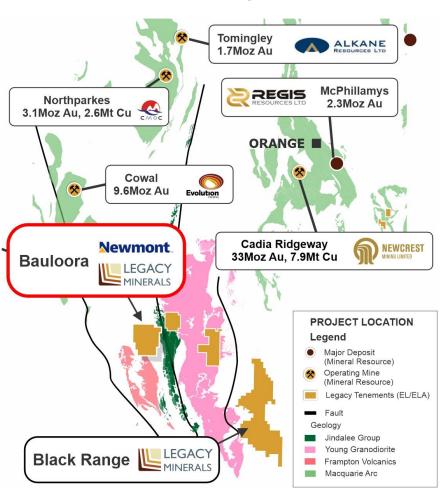
#### **High-Grades and Extensive Veining**

- High-grade gold, silver and base metals
- Veins up to 3m wide at surface for >2km

#### **Significant Programs Underway**

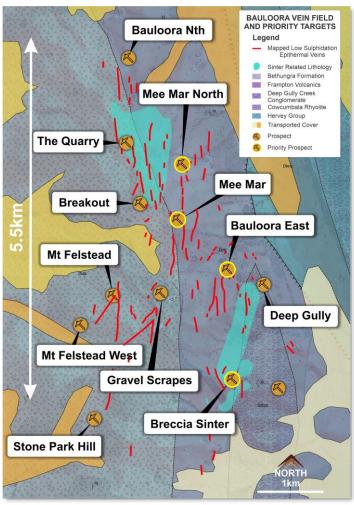
Large scale ground and airborne geophysics

#### **Bauloora Project**



Map of central NSW showing Legacy Minerals tenements and geographical location of major mining and exploration projects in NSW (figures are expressed as mineral resources).

#### **Primary Vein Field**



Current combined extent of low-sulphidation epithermal-style textured veins and sinter related lithology<sup>1</sup>

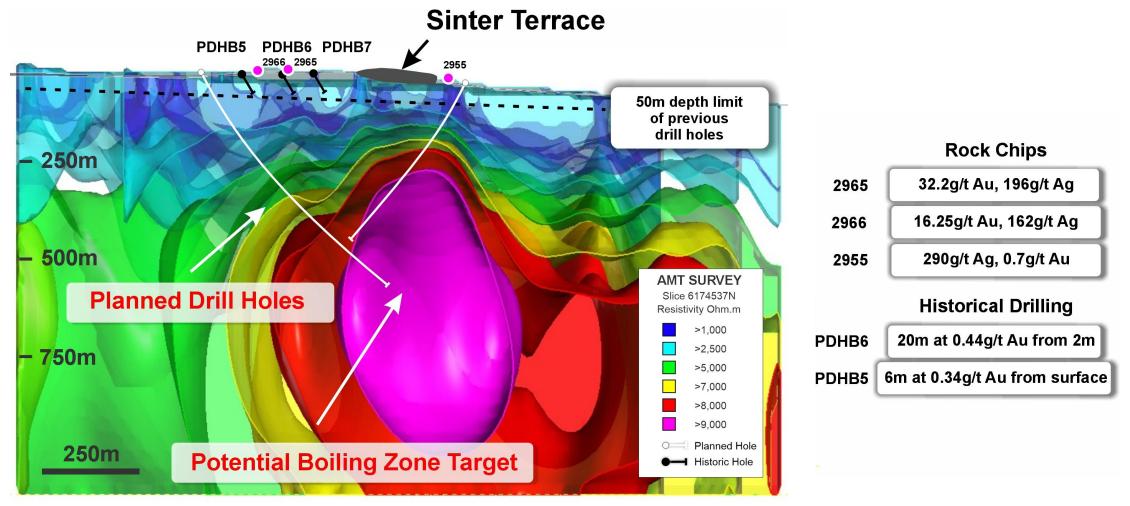


# 'Bulls Eye' 500mx500m Resistive Anomaly



#### **Drilling Underway**

A strongly resistive anomaly (~9,000 ohm\*m) has been identified and is depth extensive (>1,000m) and comes to within 300m of the surface<sup>1</sup>



## **Textbook Response**

#### **Geological Model for the Breccia Sinter and AMT Response<sup>1</sup>**

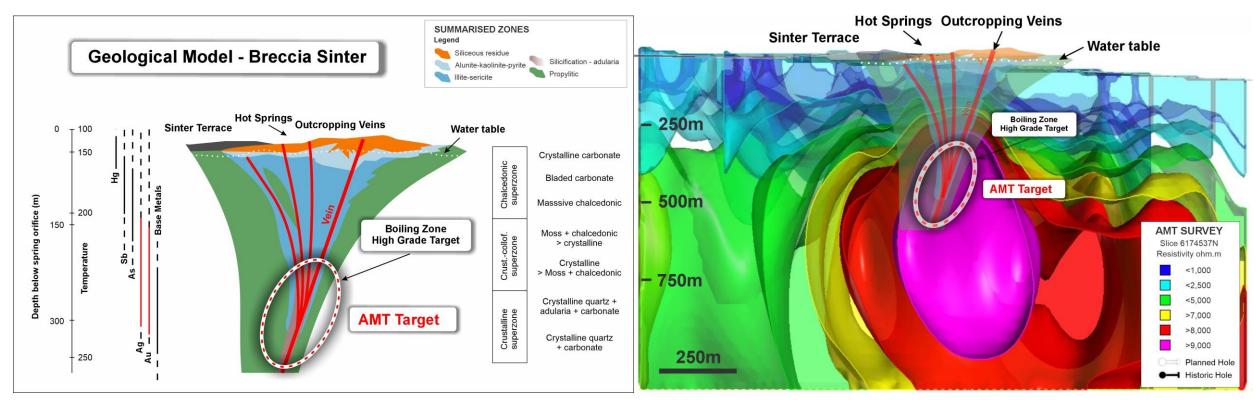


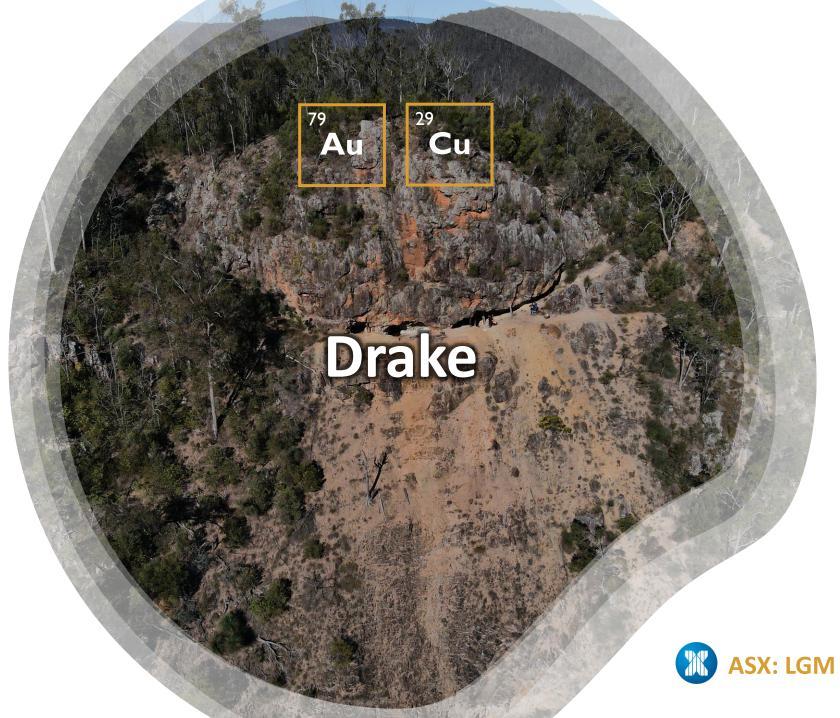
Figure 1. Showing the geological model used for targeting at Bauloora (after Buchanan, 1981)

**Figure 2.** Showing the geological model used for targeting at Bauloora (after Buchanan, 1981) overlain over the 3D AMT model at the Breccia Sinter prospect.





'Legacy' project with new copper-gold vision



## **Drake Exploration License**



#### **Significant Discovery Opportunity**

### **Transaction opportunity**

\$200k unencumbered sale from White Rock Resources (WRM)

- \$20-30M in project expenditure by previous companies
- Completely surrounds the Mt Carrington MLs 320kOz Au and 23Moz Ag of resources in existing open pit mines<sup>1</sup>
- District scale pegging opportunity

### Historical focus on mining has left behind great targets

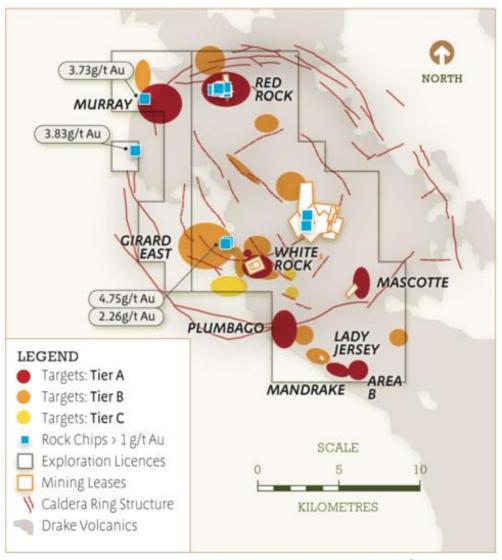
'Legacy' project with new exploration vision and approach

#### Significant project scale compared to global systems

- Prospective for LSE-ISE and PCD deposits
- Similar features in other magmatic arcs such as the Porgera

### Copper upside

- Extensive copper oxide potential across several kilometers
- Drilling on the neighbouring mining license (WRM:ASX) includes:
  - 18.65m at 5.8% Cu from 52m and
  - 10.1m at 7.26% Cu from 88m<sup>2</sup>.



Drake Regional Exploration Targets (2015 WRM ELs)<sup>3</sup>



At the head of the pack with artificial intelligence exploration

**Earth AI Exploration Alliance** 



# **Artificial Intelligence Drilling Underway**

#### **Targeting Ni-Cu-PGE**

Widespread Cu-Au and Ni-Cu-PGE anomalism with limited drilling testing<sup>1</sup>



#### **Earth Al**

#### Strategic Alliance putting LGM at the exploration forefront<sup>2</sup>

- Exposure for LGM shareholders to the proprietary artificial intelligence owned by Earth AI (EAI)
- Vertically integrated with drill rig ownership
- EAI will spend up to \$4.5M over 2 years
- Success based earn-in unlike a 'classic JV'
  - Need to get an economic intercept
- LGM retain 100% ownership of project



# Why Legacy Minerals?



Immediate discovery exposure



Tier 1 Jurisdiction Tier 1 Targets



**Exciting new projects** 



Vision to realise growth



## **Appendices – Endnotes**



Slide 3, Slide 9, Slide 16 1 Alkane Resources Kaiser Resource Estimate of ~4.7M Gold Equivalent 27 February 2023; 2 Silver Mines, Ord Minnett East coast Mining Conference, March 2023; 3 Alkane Resource and Reserve Statement FY22, 9 September 2022; 4 Newcrest Mining Annual Mineral Resources and Ore Reserves Statement 17 February 2022; 5 Sandfire Resources NL 2019 Annual Report; 6 Regis Resources Annual Mineral Resource and Ore Reserve Statement 8 June 2022; 7 CMOC Northparkes Mining and Technical Information; 8 Evolution Mining 2022 Annual Report

Project & Company	Mineral Resource	Measured Resource	Indicated	Inferred
			Resource	Resource
Bowdens, NSW (Silver Mines Ltd)	396Moz AuEq	236 AgEq	88 AgEq	73 AgEq
Boda-Kaiser, NSW (Alkane Resources Ltd)	7.26Moz Au, 1.38Mt Cu	-	-	7.26Moz Au, 1.38Mt Cu
Tomingley, NSW (Alkane Resources Ltd)	1.75Moz Au	0.13M Au	1.019Moz Au	0.59Moz
McPhillamys, NSW (Regis Resources Ltd)	2.29Moz Au		2.28Moz Au	0.001Moz Au
Cadia-Ridegway, NSW (Newcrest Mining Ltd)	33.31Moz Au, 7.9Mt Cu	0.31Moz Au, 0.041Mt Cu	33Moz Au, 7.3Mt Cu	0.75Moz, 1.1Mt Cu
Cowal, NSW (Evolution Mining Limited)	9.618Moz Au	0.367Moz Au	7.33Moz Au	1.92Moz Au
Temora, NSW (Sandfire Resources Ltd)	2.2Moz 728kt Cu	-	0.381Moz Au, 83kt Cu	1.8Moz Au, 645kt Cu
Nth Parkes, NSW (CMOC Mining Pty Ltd	3.09Moz Au, 2.63Mt Cu	1.64Moz Au, 1.2Mt Cu	1.1Moz Au, 1.1Mt Cu	0.35Moz Au, 0.33Mt Cu

#### **Mineral Equivalents:**

**Bowdens**: Calculations have been rounded to the nearest 100,000 t, 0.1 g/t silver and 0.01% zinc and lead grades respectively. The Ore Reserve is reported by economic cut-off grade with appropriate consideration of modifying factors including costs, geotechnical considerations, mining and process recoveries and metal pricing. Bowdens' silver equivalent: Ag Eq (g/t) = Ag (g/t) + 33.48\*Pb (%) + 49.61\*Zn (%) +80\*Au (g/t) calculated from prices of US\$20/oz silver, US\$1.50/lb zinc, US\$1.00/lb lead, US\$1600/oz gold and metallurgical recoveries of 85% silver, 82% zinc, 83% lead and 85% gold estimated from test work commissioned by Silver Mines Limited (Silver Mines, Ord Minnett East coast Mining Conference, March 2023)



## **Appendices – Endnotes (continued)**



Slide 7 1: Greatland Gold, greatlandgold.com/wp-content/uploads/2023/08/2023.08.07-Greatland-Diggers-Dealers-Presentation.pdf, greatlandgold.com/wp-content/uploads/2022/09/22092022-GGP-Corporate-Update-Sep-2022-vfinal.pdf 2: ASX LGM: 5 April 2023 Newmont Farm-in at Bauloora Project

Slide 9 1: ASX: 27 April 2023 Exploration underway at new low-sulphidation epithermal, NSW

**Slide 10** 1: ASX: 15 February 2023 Significant new discovery at the Bauloora Epithermal Project; 2: LGM ASX: 21 NOV2022 New High-Grade Gold Assays Returned Across Bauloora

Slide 11 1:ASX: Widespread Silica Sinter Confirmed at Black Range

Slide 12 1: ASX: Large 2.2km Long Gold Anomaly defined at Black Range

Slide 13 1: ASX: Large 2.2km Long Gold Anomaly defined at Black Range

Slide 14 1: ASX: High Conviction Drill Targets Defined at Black Range

Slide 16 1: ASX: 19 October 2022 Exploration Ramp up at Bauloora Epithermal Gold Project

Slide 17 1: ASX: 29 August 2023 Large 500m x 500m Bulls-Eye anomaly defined at Bauloora

Slide 20 1: ASX: 20 July 2023 Acquisition of District Scale Copper-Gold Epithermal Project 2: ASX: WRM 24 October 2022 High Grade Copper Target Identified at Mt

Carrington, 3: ASX WRM 28 July 2015 Investor Presentation

Slide 22 1: ASX: 22 June 2023 Nickel-Copper Sulphide and PGEs found at Fontenoy 2: ASX LGM 3 May 2022 Strategic Exploration Alliance with AI Explorer

