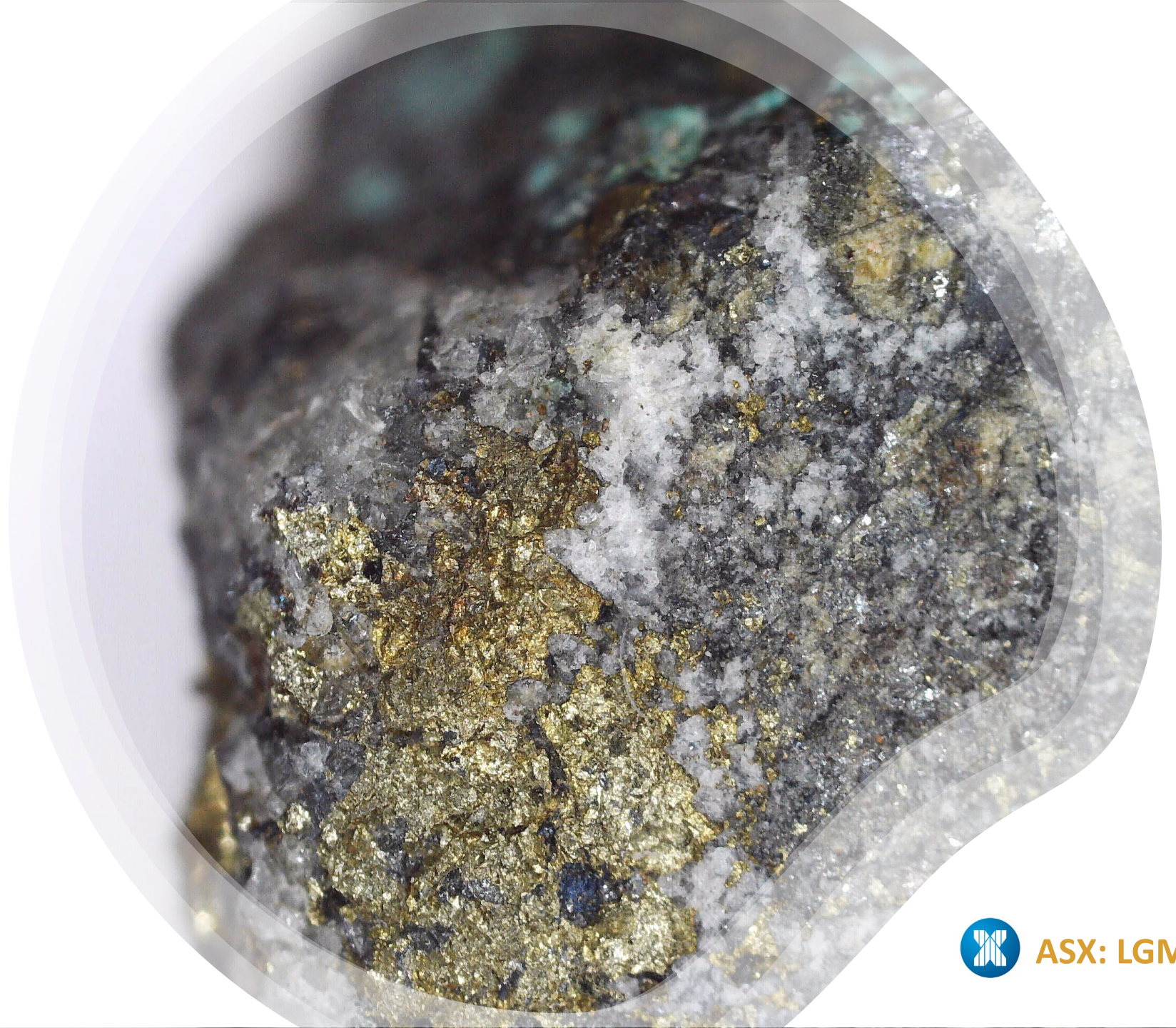




## Gold and Copper Exploration targeting World-class Assets

Lachlan Fold Belt, NSW

RIU Mining Conference, 10 May 2023





# Disclaimer

This presentation may contain certain statements and projections provided by or on behalf of Legacy Minerals Holdings Limited (**ASX: LGM, Legacy Minerals, or the Company**) with respect to the anticipated future undertakings. These forward-looking statements reflect various assumptions by or on behalf of Legacy Minerals.

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Nothing in this material should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities. It does not include all available information and should not be used in isolation as a basis to invest in Legacy Minerals.

This presentation contains exploration results and historic exploration results as originally reported the Company's Prospectus dated 28 July 2021 and released 9 September and subsequent ASX market announcements. 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.

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.



# Depth of Projects in a World Class Jurisdiction

**Black Range** Au-Ag Epithermal

**Rockley** Cu-Au Porphyry

**Cobar** Au-Cu Cobar Type

**Harden** Au Orogenic

**Bauloora** Au-Ag Epithermal

**Fontenoy** Cu-Au Porphyry

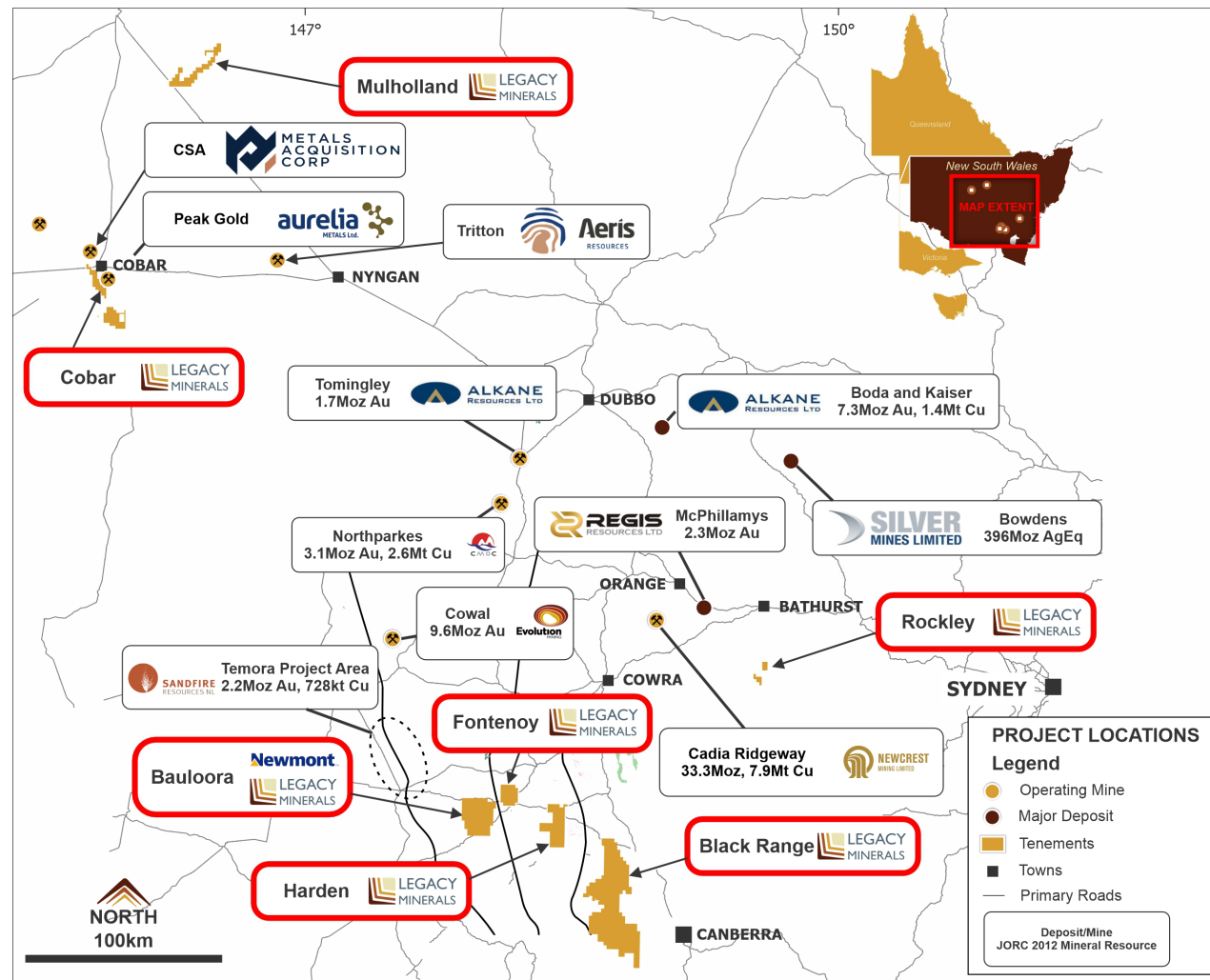
**Mulholland** Ni-Sn-REE Skarn

2,450km<sup>2</sup> of exploration tenements

**Newmont**

EARTH AI

EARTH AI



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).

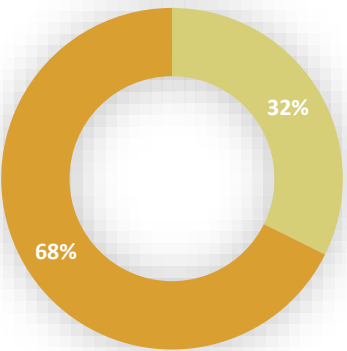
Note: references on this slide can be located in the Appendix – Endnotes on Slides 21 and 22

# Company overview

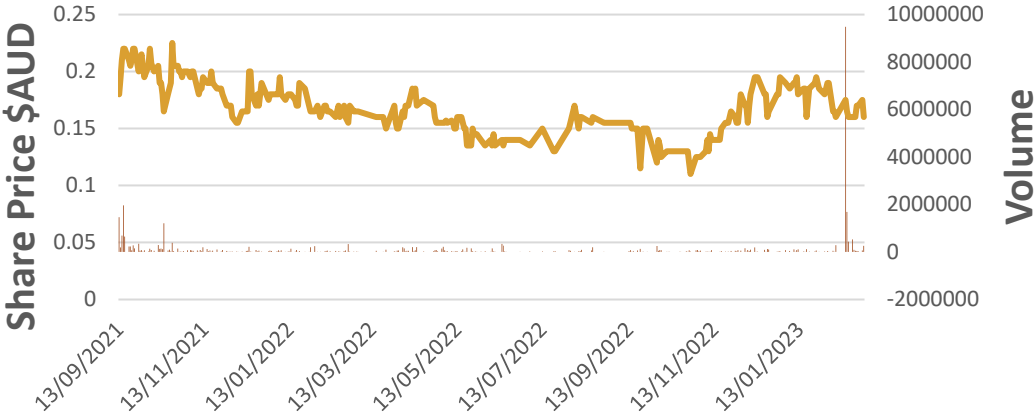
## Capital Structure<sup>1</sup>

<b>ASX Share Price</b>	<b>\$0.15</b>
Shares on Issues	83M
Options on Issue (30c, 22.5c)	4.9M, 0.4M
Market Capitalisation	\$13M
Joint Venture/Alliance Funding	\$19.5M
Cash (at Mar-31)	\$1.4M
Debt	Nil
Top 20	56%

## Issued Capital



■ Board and Management  
■ Other Shareholders



<sup>1</sup> As of 9 May 2023

## Directors



**Dr David Carland**  
Non-Executive  
Chairman

Investment banker with over 40 experience. Has held senior positions at UBS, Bankers Trust, CRA (now Rio Tinto). David was recently the Non-Executive Chair of Rex Minerals (RXM).



**Douglas Menzies**  
Non-Executive  
Director

Geologist with 28 years of widespread experience in the porphyry gold-copper districts of PNG and Australia, epithermal gold-silver projects in Australia, Indonesia, Fiji, Laos, Chile. Doug has held positions at Rio Tinto, Wafi-Golpu, and is the VP of Inflection Resources.



**Matthew Wall**  
Non-Executive  
Director

Commercial specialist with over 35 years of experience in metals and mining across sales, marketing, logistics, trading, and risk management. Matt has held senior management roles with Rio Tinto, EDF Trading and Wood Mackenzie and is the Chairman of Allegiance Coal (AHQ)

## Management



**Christopher Byrne**  
CEO & Managing  
Director

An engineer with diverse experience in the mining sector with Anglo American across maintenance, operations, and capital works. Proven record of delivering large and complex mining and infrastructure projects in greenfield and brownfield environments



**Thomas Wall**  
Exploration Manager  
& Executive Director

Exploration Geologist with wide ranging exploration industry experience with senior roles at Peak Gold Mines and New South Resources. Demonstrated exploration and mining success across a variety of commodities and deposit styles.



**Emerging large scale Au/Ag  
low sulphidation vein field**



# Bauloora Au-Ag (Newmont JV)



**ASX: LGM**



# Bauloora - Value creation through discovery

## Newmont Joint Venture

- Discovery focused joint venture
- \$15m for 75% over 8 years
- LGM carried through to production (Newmont finance option) with 20%

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

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

## Untested potential

- Previously unrecognised opportunity
- 1 drill hole every 75ha, average depth 88m

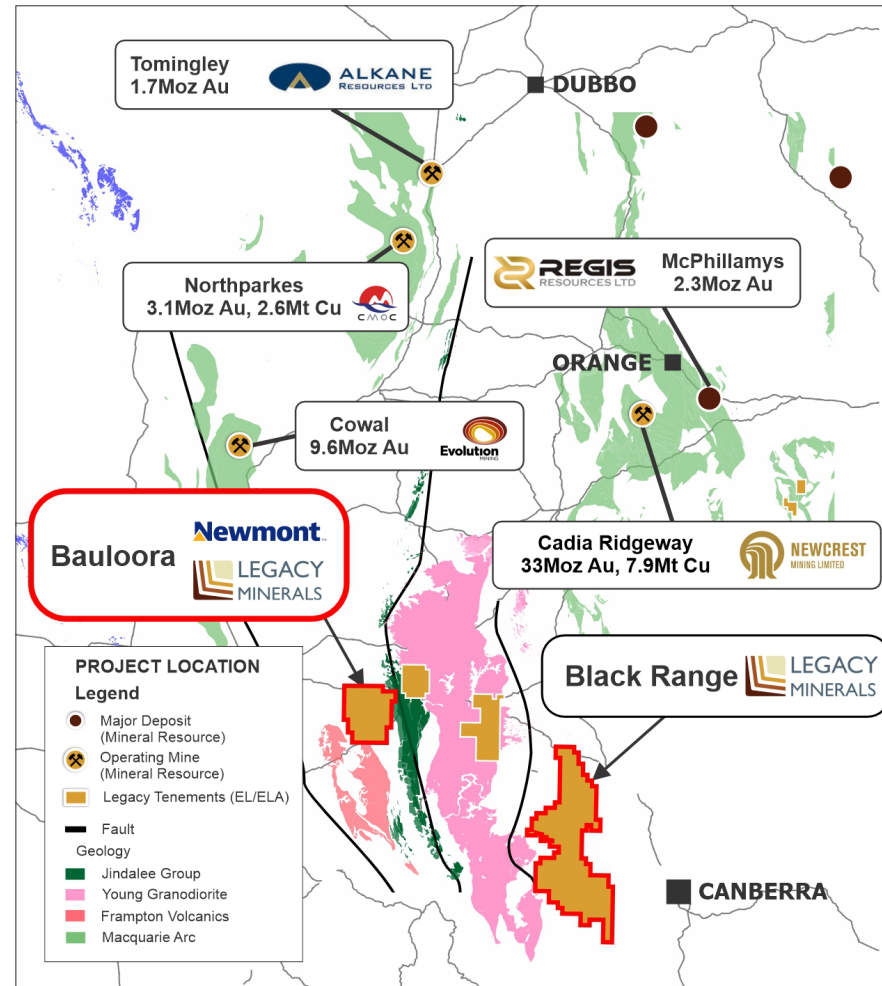
## High-Grades and Extensive Veining

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

## Preserved Epithermal System

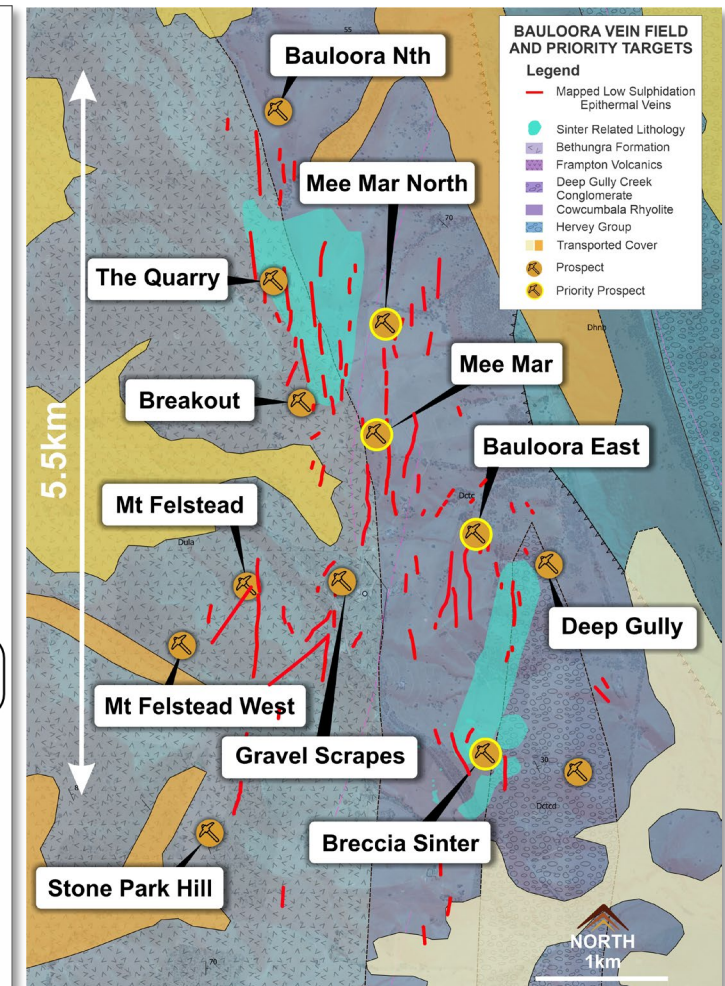
- Widespread recognition of sinter
- Strongly elevated in Hg, Sb, and As

## 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

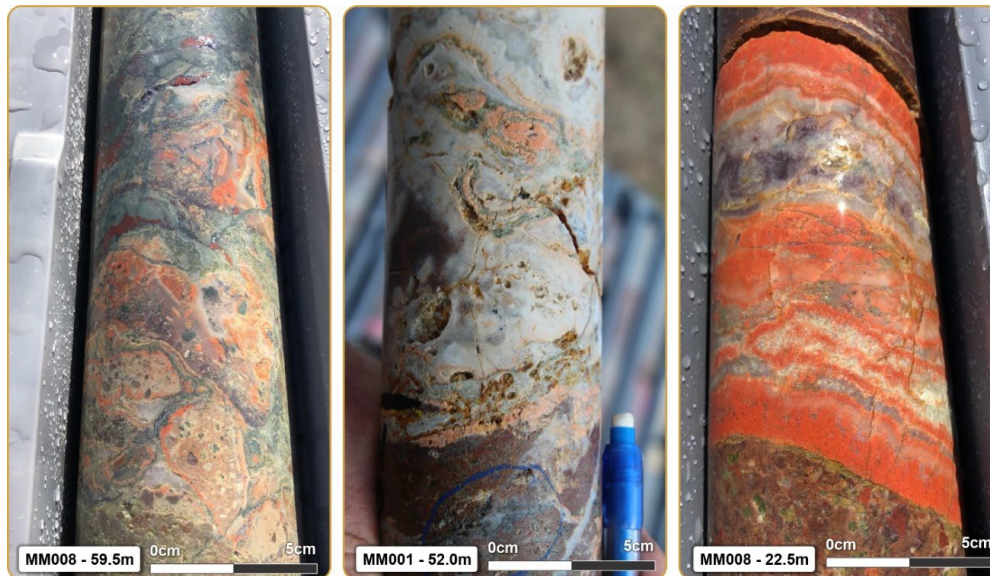
Note: references on this slide can be located in the Appendix – Endnotes on Slides 20 and 21



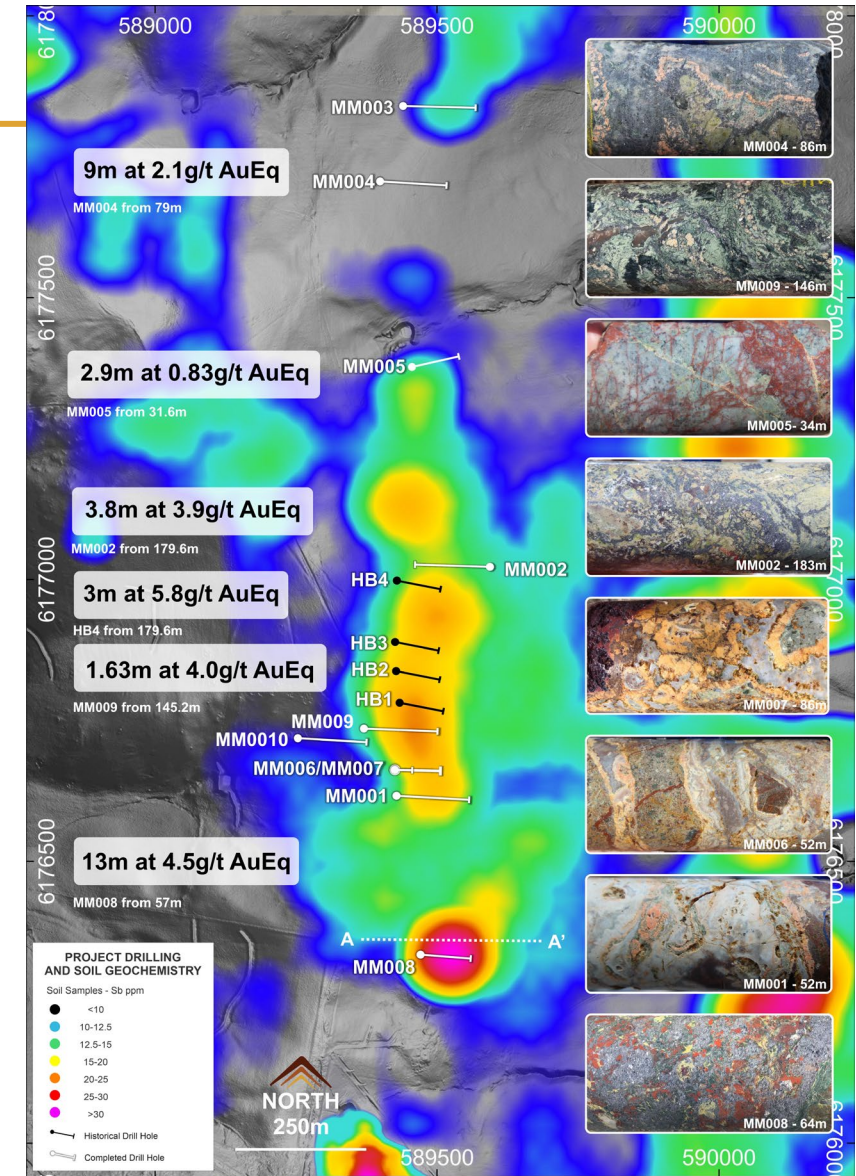
# Maiden Diamond Drilling – Mee Mar

## Assays confirm high grades and new discovery shoot

- Wide spaced proof of concept drilling tested 1.5km of strike
- Bluecap - new epithermal shoot discovery (MM008) parallel to Mee Mar vein trend
  - **13m at 4.53g/t AuEq incl. 6m at 8.00g/t AuEq** from 57m
- Impressive shallow continuity of mineralisation across entire strike length tested
- Preserved boiling zones high-grade mineralisation is **likely to extend to depth**



Hole MM008 and MM001 showing low sulphidation epithermal textured veins and breccia

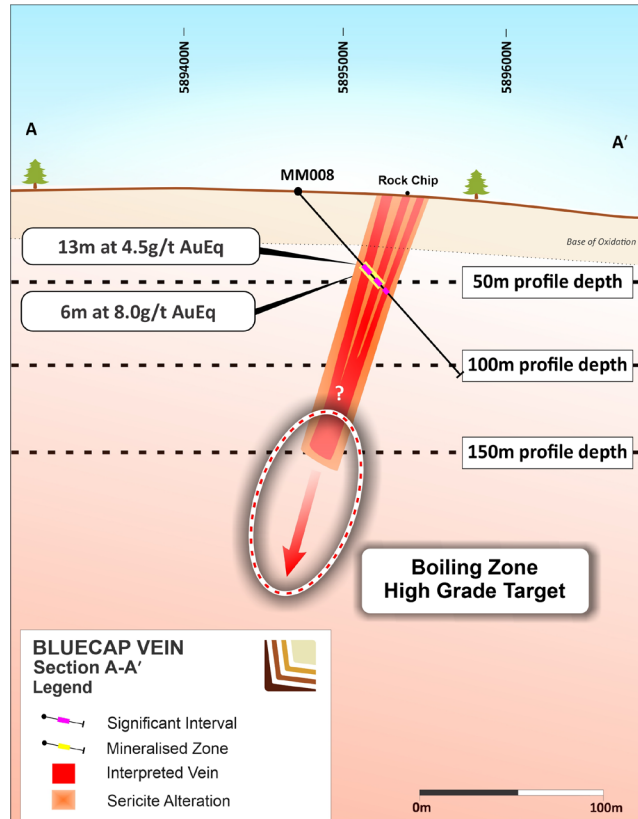


Mee Mar Prospect showing the location of completed diamond-cored drill holes, over Sb soil sample results and Au rock chip results<sup>2</sup>

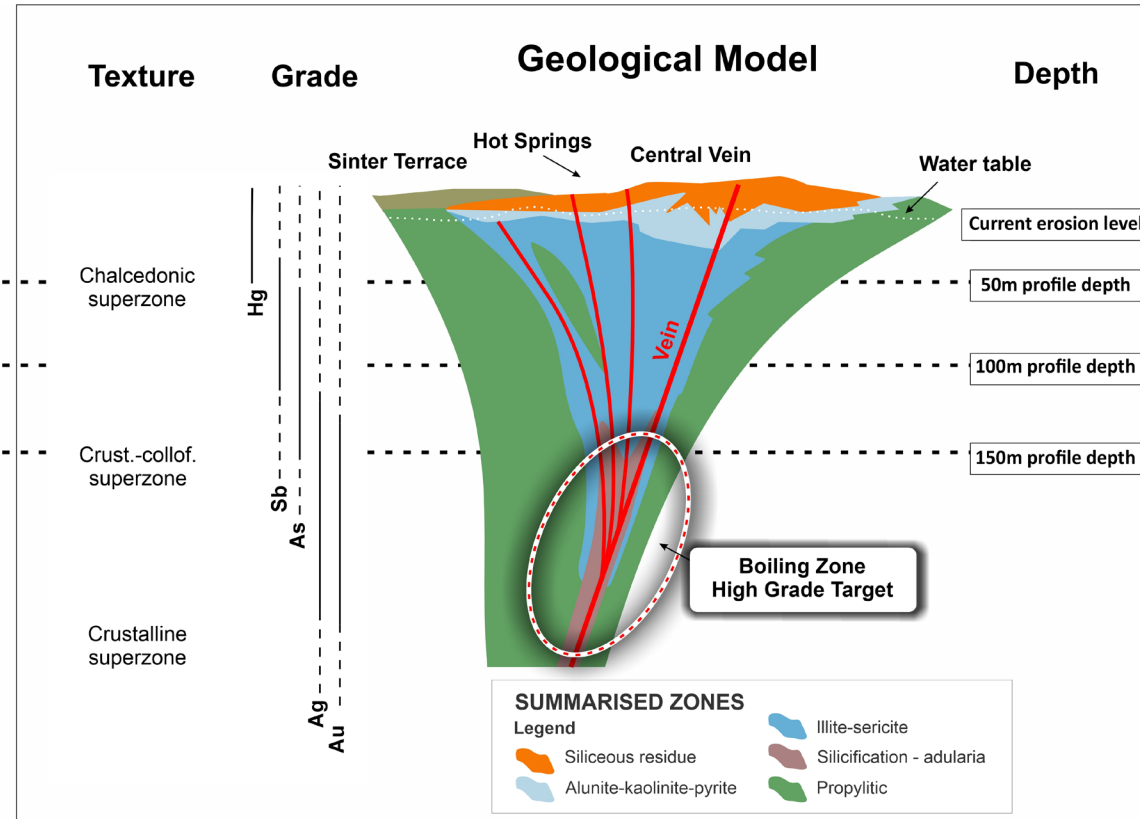
# Epithermal Systems – Develop with Depth



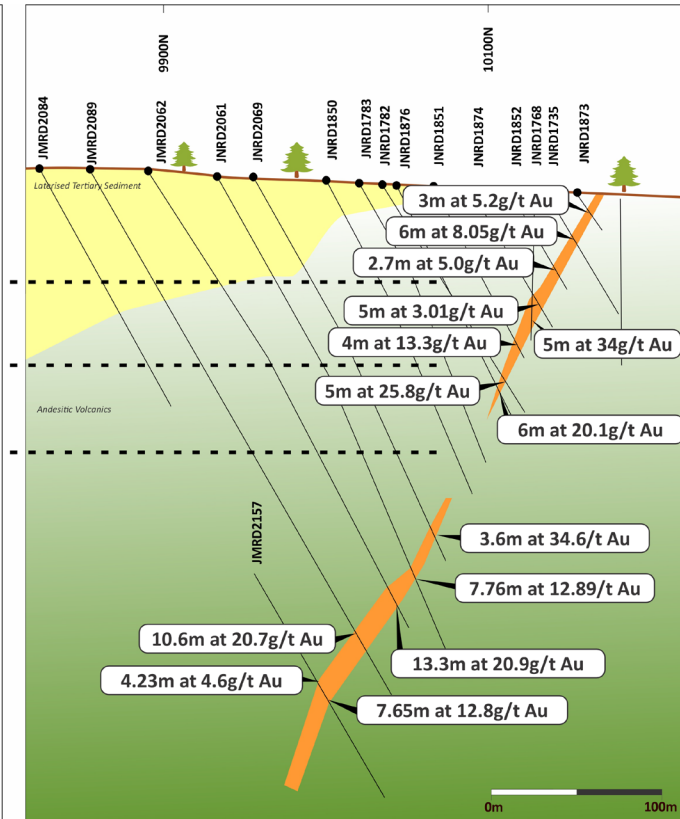
## Bluecap Shoot



## Epithermal System Model



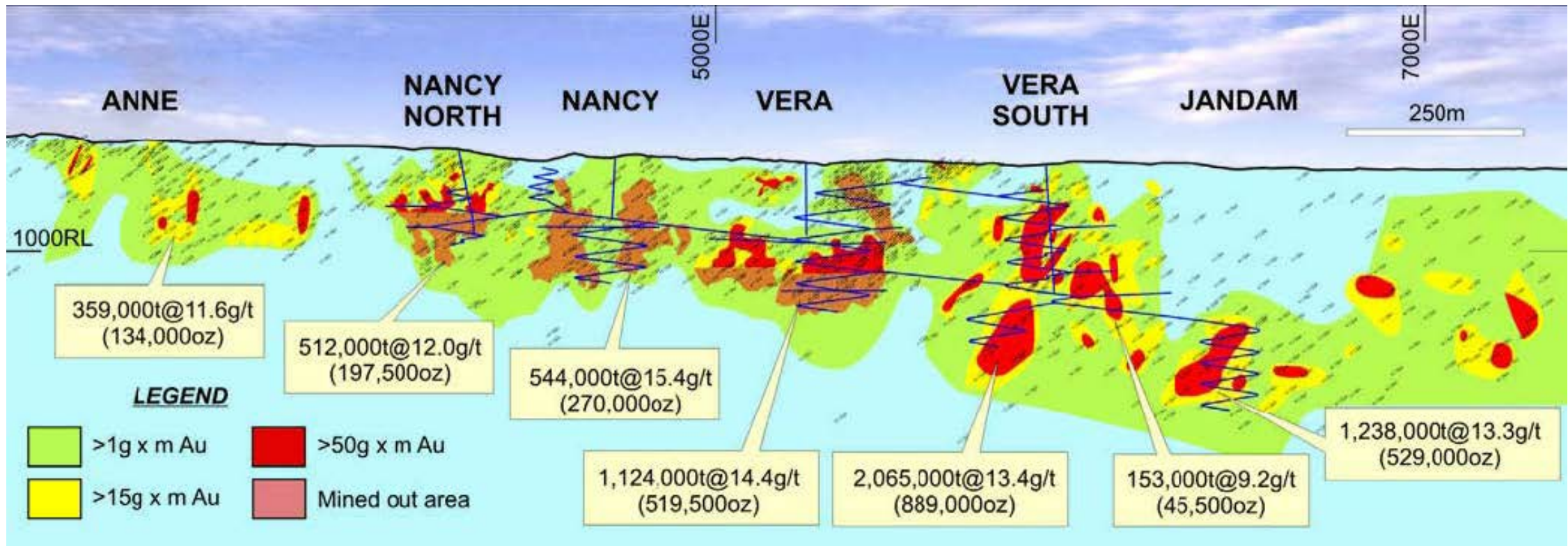
## Vera



**Vera: 1,124,000t at 14.4g/t (519,500oz)** with mineralisation in thin (generally 0.5–3 m wide) quartz veins up to 16m wide. Strike length of >500m<sup>1,2</sup>



# Vera-Nancy Structure

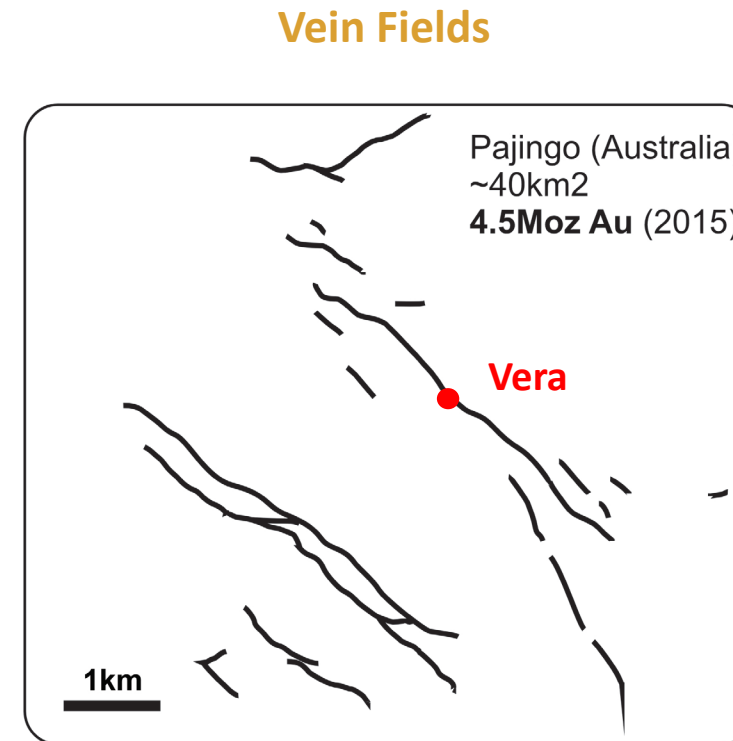
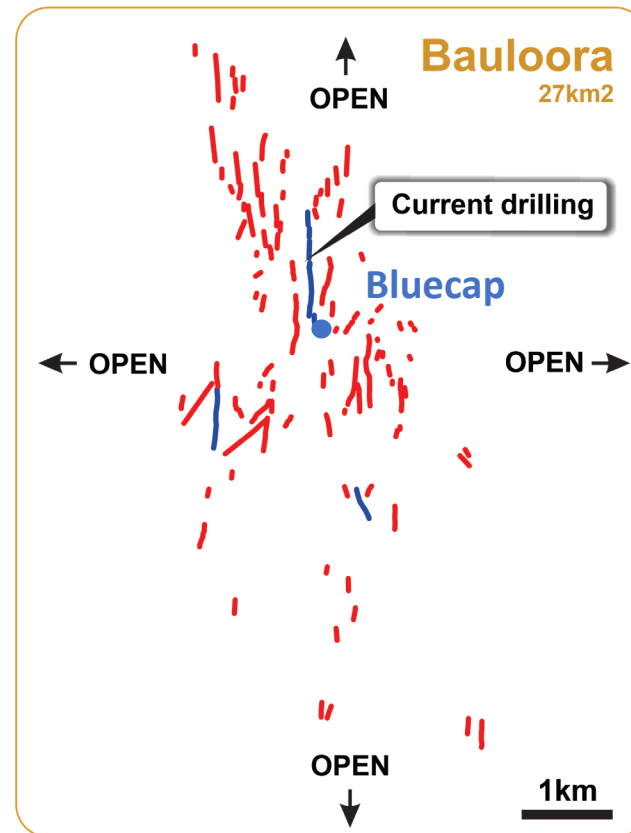


Long Section of the Vera-Nancy structure. Mined and remaining resources as at November 2002<sup>1</sup>.

# Globally Significant Project Scale



- The Bauloora vein field is of similar scale to typical multi-million oz vein fields found globally<sup>1</sup>
- The Company is actively stepping out and mapping the system which is **open in all directions**
- Technical comparisons due to similarities of textures, vein field size, and geochemistry made to major projects including Pajingo, Cracow and Cerro Negro





**District control of another  
underexplored low  
sulphidation epithermal**

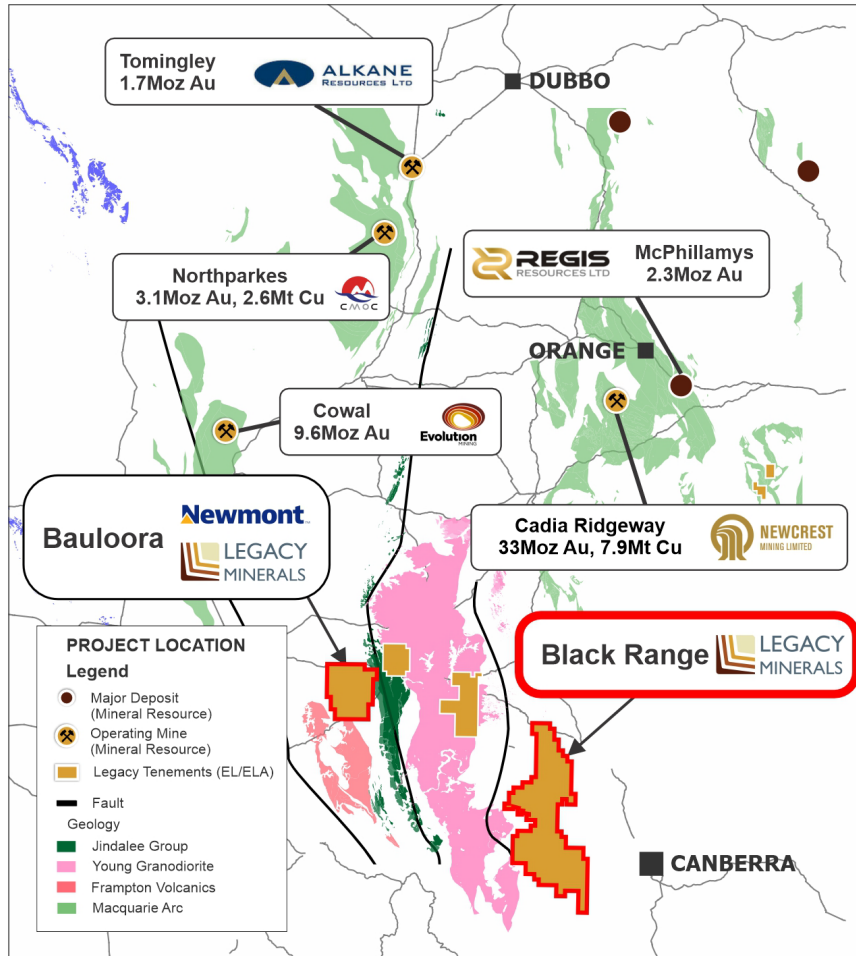


# **Black Range Au-Ag**



# Black Range – Another large, underexplored epithermal system...

## Regional Setting



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

## District scale control – 905km<sup>2</sup> license

- Large 4.5 x 1.5km silica-sericite-sulphide alteration zone (Sugarbag Hill Prospect)
- 30km of strike between known epithermal occurrences

### Untested potential

- 30 years since last drilling at Sugarbag Hill prospect - Newcrest Mining Limited 1992
- Extremely limited drilling across the tenement package

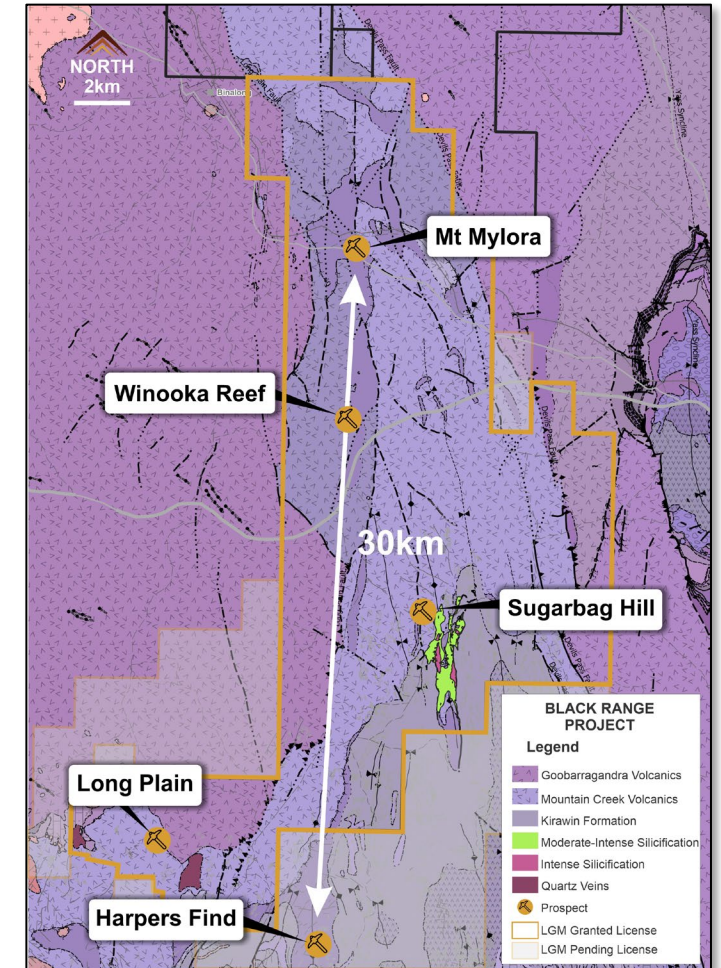
### Same age mineralisation as Bauloora

- Newcrest dating of Sugarbag Hill in 1992

### Work program underway

- Systematic work program to commence including geochemistry and geophysics

## Black Range Project



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



# Why does the opportunity still exist?



## No drilling = no discovery

### Bauloora and Black Range

- Bauloora
  - across the 27km<sup>2</sup> vein field zone 1 drill hole per 72 ha<sup>1</sup>
- Black Range
  - Virtually no exploration across the majority of 905km<sup>2(1)</sup>
- Systematic work not done

## No modern geochemistry or geophysics

- Limited historic electrical geophysical surveys
- Geochemistry mostly limited to minimal elements
  - **Lack of pathfinder elements analysed**

## Limited mapping and textural analysis

- Textures are key to unlocking the system.

## Held by major companies distracted by other successes

### Bauloora

Piece-meal exploration with misidentification of key epithermal textures

1992

North Limited (Rio Tinto)  
**Cowal Discovered** - focus shifted

1995

**Newmont and LGM  
Joint Venture**



2023

### Black Range

**Cadia Hill Discovered,**  
Newcrest cease exploration

No on ground exploration at  
Sugarbag Hill since (over 30 years)

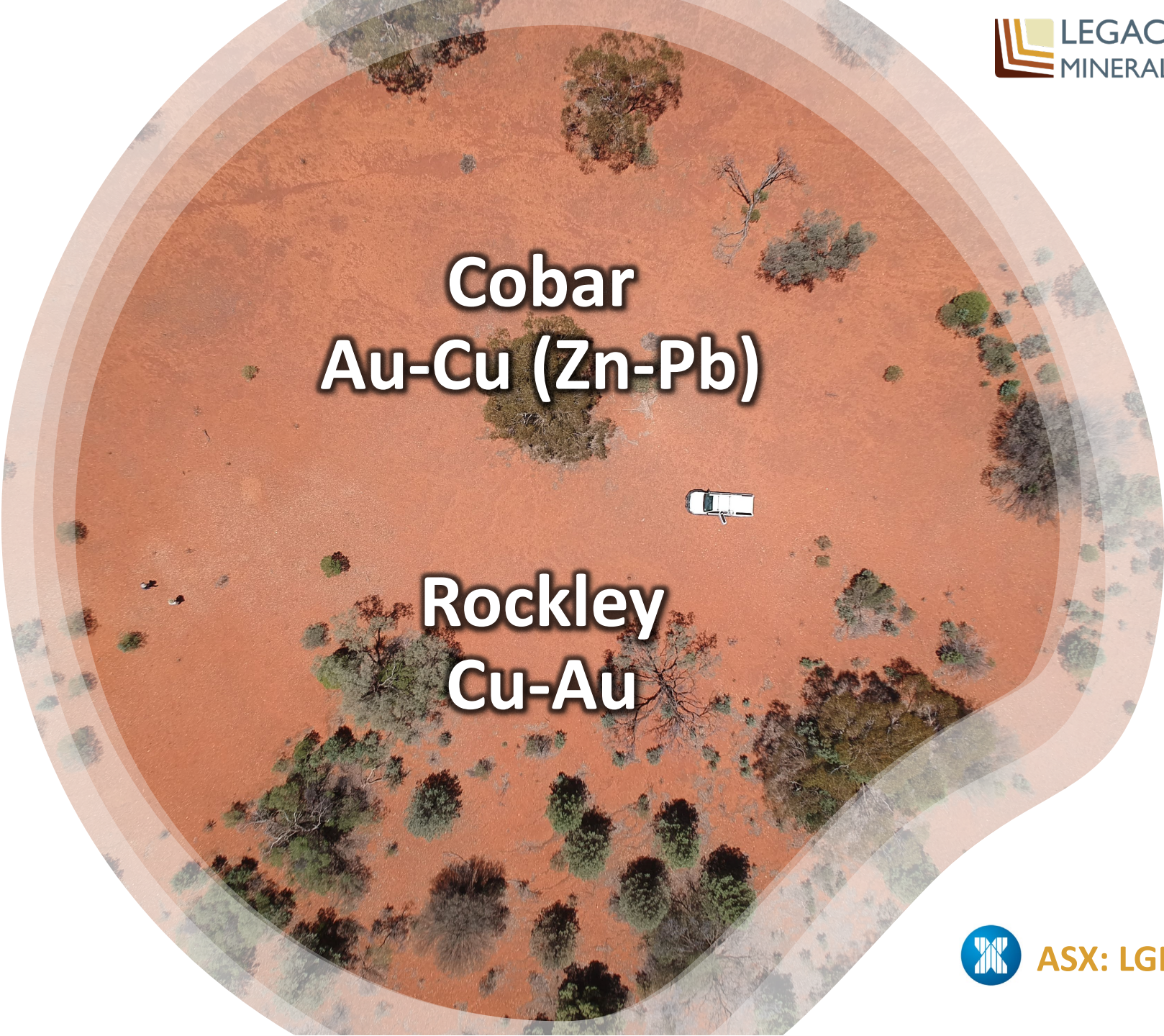
**LGM peg tenement and  
consolidate with ELA**



## Why are we excited?

- Geology and terrain is amenable to low cost – high value exploration methods
- Bauloora was a breakthrough - the recognition of sinter related lithology makes it one of the world's oldest preserved epithermal systems
- Black Range, dated to have similar age mineralisation as Bauloora, and has a **large low temperature silicified upper zone or 'cap'** that may represent the top of a preserved epithermal system.

**Depth of quality Au-Cu  
projects in the world class  
Lachlan Fold Belt**



**Cobar  
Au-Cu (Zn-Pb)**

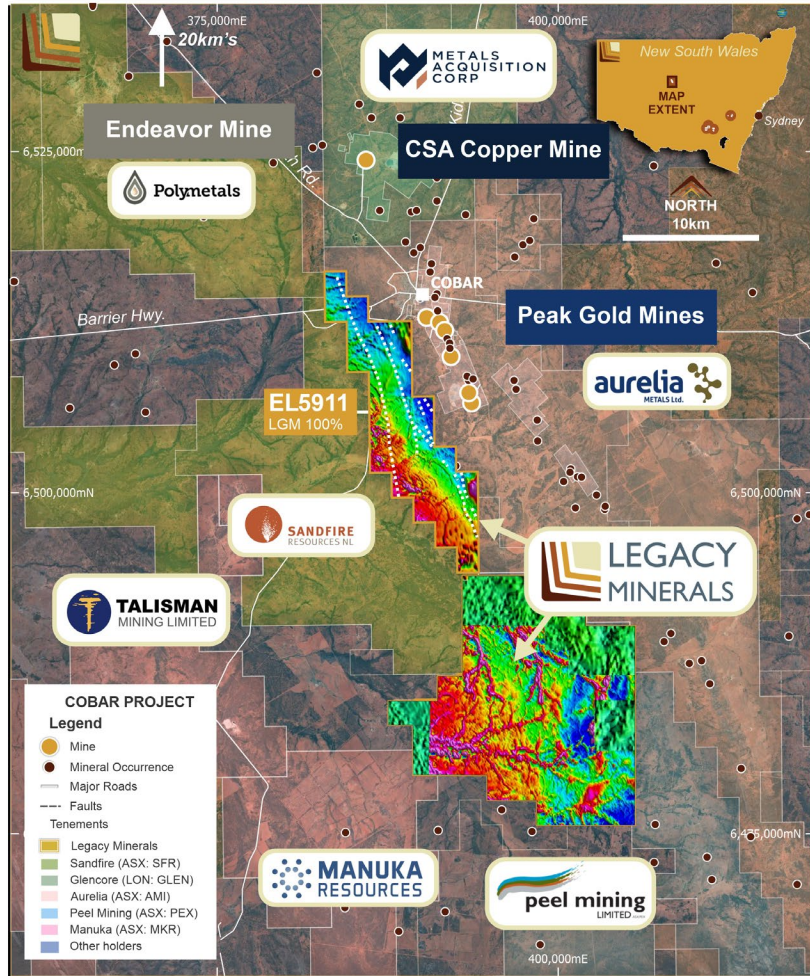
**Rockley  
Cu-Au**



# Cobar: Au-Cu (Zn-Pb)



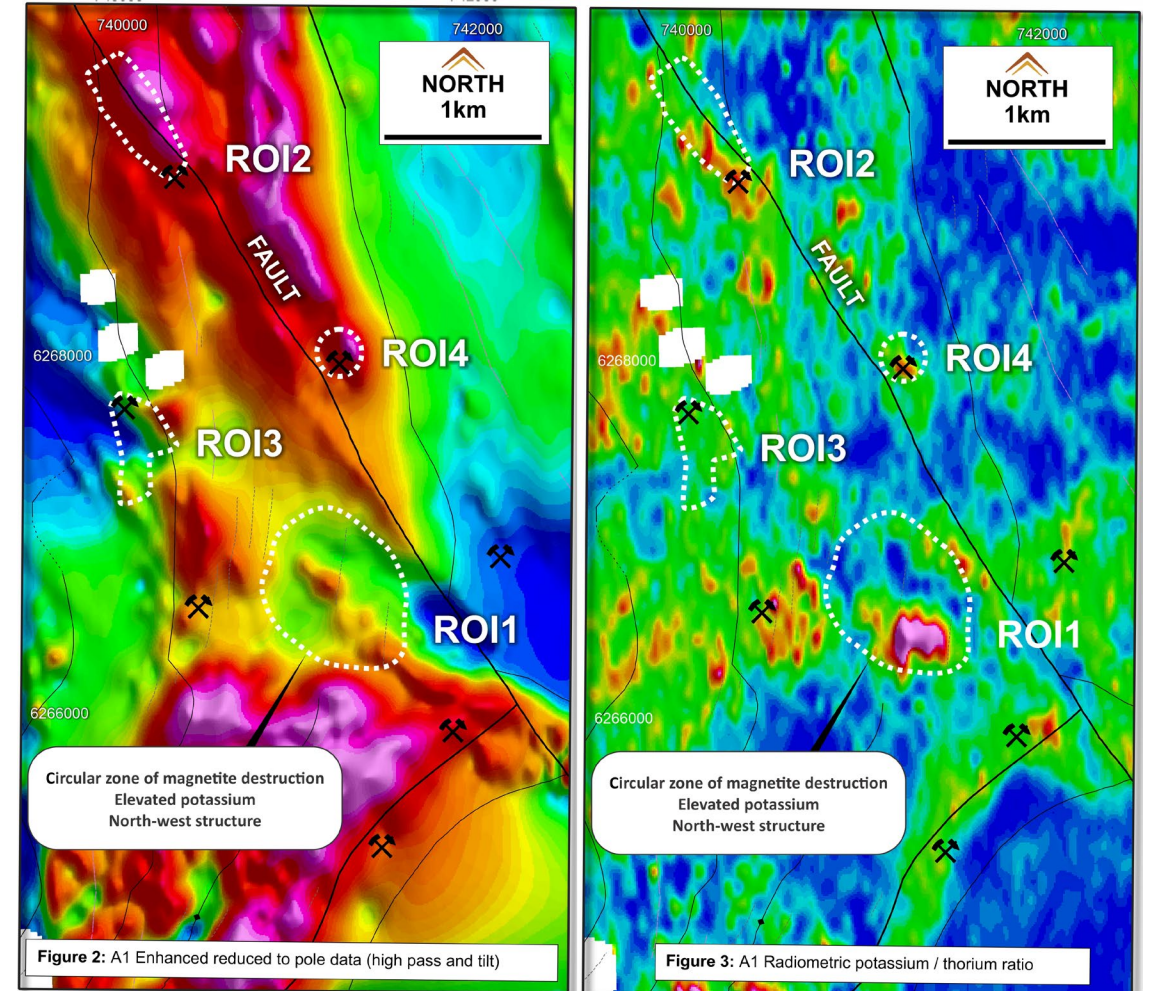
In the heart of the Cobar Basin with an undrilled search space



Cobar tenement boundary (EL5911) overlain with regional magnetics RTP and surrounding company licences

# Rockley: Au - Cu

Widespread copper anomalism and untested porphyry targets



Rockley tenement (EL8926) showing RTP magnetics and K/Th radiometric images overlain with historical workings and identified regions of interest (ROI).<sup>4</sup>

Note: references on this slide can be located in the Appendix – Endnotes on Slides 25 and 26

**Discovery exposure with  
leading artificial intelligence  
exploration company**



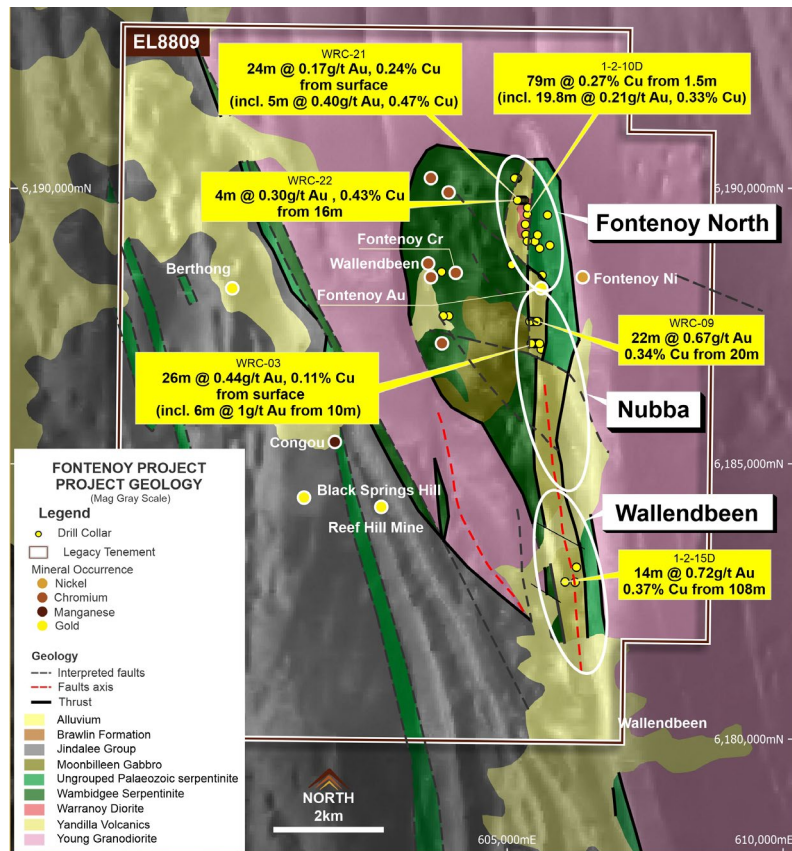


# Realising value through strategic partners



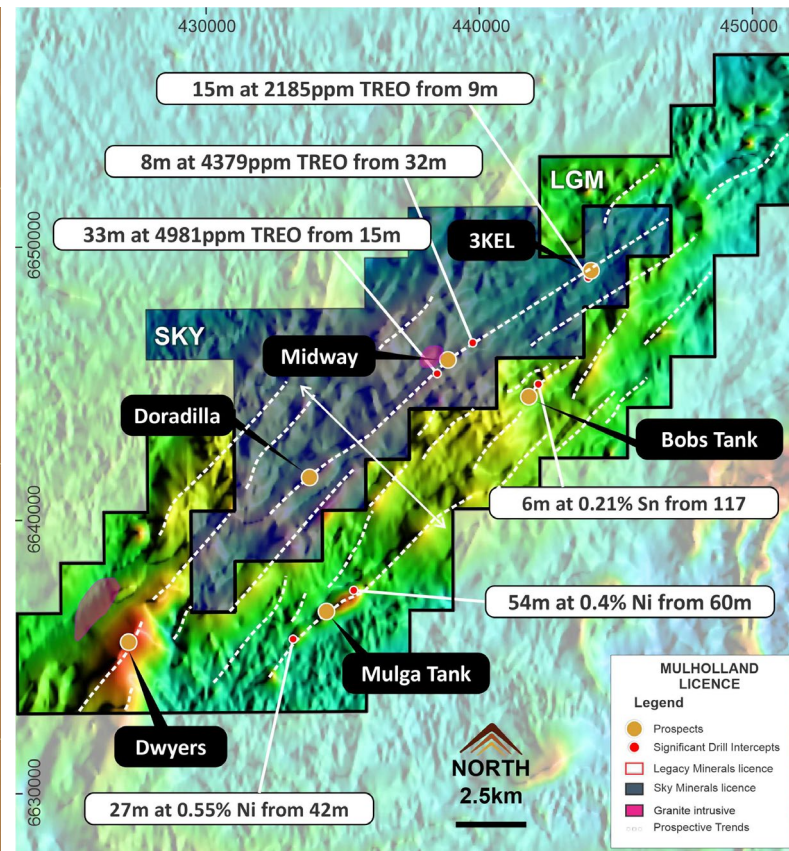
## Fontenoy – Cu, Au, PGE

8km of copper and gold mineralisation with limited drill testing



## Mulholland – Ni, Sn, REE

Known skarns and untested anomalies with several significant drill ready nickel and tin prospects



## Earth AI

Strategic Alliance putting LGM at the exploration forefront<sup>1</sup>

- Exposure for LGM shareholders to the priority AI owned by Earth AI (EAI)
- EAI have locally based drilling operations
- EAI will spend pp to \$4.5M over 2 years
- Unlike a 'classic JV' – purely success based
- LGM retain 100% ownership




**Accelerated exposure to potential discoveries**

# Planned Exploration Program (Current Funding)



**Q2**  
Black Range  
*Reconnaissance Field Work*

**Q2 - Q4**  
Black Range  
*Mapping and Geochem*

**Q3 - Q4**  
Black Range  
Cobar  
*Drill Campaign*

**Q2**  
Cobar  
*AEM Modelling*


**Q2 - Q3**  
Cobar  
*Geochem*

**Q3**  
Rockley  
*Geochem*

## Upcoming Announcements

ASX Progress Results (Till June)	Anticipated Date
Mee Mar Assays	Early May
Black Range Exploration	Mid-End May
Cobar AEM Modelling	Mid-End May
Fontenoy Scout Geochem	May - June
Bauloora Exploration Program	Mid May




**Q2**  
Mee Mar  
*Drill Assays*

**Q2**  
Bauloora  
*Geophysics*

**Q2 - Q3**  
Bauloora  
*Geochem*

**Q3**  
Bauloora -  
*Aerial mag/rad*


**Q3-Q4**  
Sinter Prospect  
*Drill Campaign*

- Follow up drill campaigns
- Follow up generative work



**Q2**  
Fontenoy  
*Scout Geochem*

**Q3**  
Fontenoy  
*AEM*

**Q3**  
Fontenoy  
*Drill Campaign*

Partnership funding  
up to \$19.5M over 8 years



## Why Legacy Minerals



Emerging discovery at Bauloora  
with Newmont JV



Black Range - another  
district scale epithermal  
gold system



Tier 1 Jurisdiction  
Tier 1 Partner  
Tier 1 Targets

## CONTACT

**ASX:LGM**

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*CEO and Managing Director*

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**+61 (0) 499 527 547**

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**ASX: LGM**

# Appendices – Endnotes



**Slide 3, Slide 12:** 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 Resource	Inferred 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:  $\text{Ag Eq (g/t)} = \text{Ag (g/t)} + 33.48 * \text{Pb (\%)} + 49.61 * \text{Zn (\%)} + 80 * \text{Au (g/t)}$  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 6:** 1: ASX: LGM 19 October 2022 Exploration Ramp up at Bauloora Epithermal Gold Project; 2: LGM ASX 1 November 2022 Geophysics Expands Potential Size of Bauloora Gold System

**Slide 7:** 1: LGM ASX: 15 February 2023 Significant new discovery at the Bauloora Epithermal Project; 2: LGM ASX: 21NOV2022 New High-Grade Gold Assays Returned Across Bauloora

**Slide 8:** 1: Evans, R. C., and B. H. Jones. "The Discovery and evaluation of the Vera Nancy deposit, North Queensland." *Proceedings*. 1997. 2: Pietrass, Bianca (2005) *The geological and grade continuity of the Pajingo epithermal gold* Masters (Research) thesis, James Cook University

**Slide 9:** 1: Evans, R. C., and B. H. Jones. "The Discovery and evaluation of the Vera Nancy deposit, North Queensland." *Proceedings*. 1997. 2: Pietrass, Bianca (2005) *The geological and grade continuity of the Pajingo epithermal gold* Masters (Research) thesis, James Cook University

**Slide 10:** ASX: LGM 19 October 2022 Exploration Ramp up at Bauloora Epithermal Gold Project

**Slide 13:** 1: MinView, [www.minview.geoscience.nsw.gov.au](http://www.minview.geoscience.nsw.gov.au)

**Slide 17:** 1: Company's Prospectus dated 28 July 2021 lodged 9 September 2021 (ASX: LGM)

**Slide 15:** 1: ASX: LGM 4 April 2022: Extensive Copper and Gold in Rock Chips and Rockley; 2: Company's Prospectus dated 28 July 2021 lodged 9 September 2021 (ASX: LGM) , ASX: LGM 27 July 2022 Geophysics Defines Porphyry Copper-Gold Targets at Rockley; 5: Company's Prospectus dated 28 July 2021 lodged 9 September 2021 (ASX: LGM)

**Slide 17:** 1: ASX: LGM 3 May 2022: Strategic Exploration Alliance with AI Explorer