

## Drilling Underway at Sugarbag Hill Gold-Silver Prospect

### First phase of drilling to test coincident gold-silver geochemical and IP anomalies

- First-phase, 1,100m diamond drilling (DD) program commences at the Sugarbag Hill Prospect located in NSW, Australia.

### Targets remain open and untested for over 30 years

- The last drilling conducted at Sugarbag Hill was by done by Newcrest Mining Limited in 1992<sup>iii,1</sup>.
- Newcrest were unable to find any high-grade feeder zones in their drilling or mapping<sup>iii</sup>.

### High conviction targets - coincident gold in soil and geophysical anomalies

- Legacy Minerals has identified coincident Induced Polarisation (IP) and geochemical targets that were not recognised by previous explorers and remain untested by drilling.
- The strong resistive target areas are closely associated with the 2.2km long gold trend in soil sampling >20ppb Au (up to 296ppb Au)<sup>i</sup>.
  - This includes a higher-grade gold zone **800m long, at an average of 107.5ppb Au**.
- Recent rock chip samples collected along the resistivity trend have confirmed altered lithologies to be gold and silver bearing with assays up to **2.27g/t gold and 29.6g/t silver**<sup>i</sup>.

### Large, underexplored district scale epithermal gold system.

- Sugarbag Hill is located on the Black Range Project which contains over 30km of underexplored epithermal strike length of low sulphidation epithermal gold-style quartz veins.
- The geological setting at the Black Range Prospect has similarities to many world class deposits including the Round Mountain Mine, USA<sup>ii</sup>.
- Isotope dating completed by Newcrest Mining Limited in 1992 identified Bauloora, currently explored by Legacy Minerals and Newmont under an earn-in agreement, as being the same aged system<sup>iii</sup>.



Figure 1: Diamond Drilling Rig on site at Black Range, NSW.

<sup>1</sup> See 'Endnotes' on page 9 for references

Legacy Minerals Holdings Limited (ASX: LGM, “Legacy Minerals” or the “Company”) is pleased to provide an update on drilling at its 100% owned Black Range Project (EL9464 and EL9589) in NSW to test a large epithermal gold-silver system that has remained undrilled for three decades.

**Management comment** - Legacy Minerals CEO & Managing Director, Christopher Byrne said:

*“The gold targets at Sugarbag Hill are large, compelling, and untested since Newcrest ceased exploration 32 years ago. The target remains open as Newcrest’s exploration program did not identify the high-grade feeding targets and there has been no on-ground exploration or drilling since 1992 at Sugarbag Hill.*

*To Legacy Minerals’ advantage there has been both a significant advance in epithermal mineral system understanding, as well as a sustained growth in the gold price. This increases both the probability of success and the value of a gold discovery.*

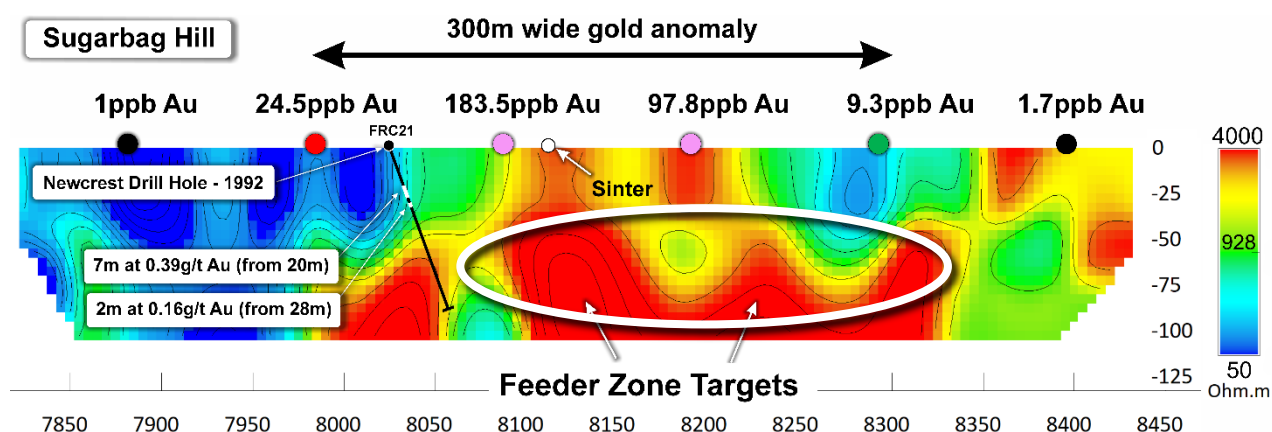
*Undrilled prospects of this nature are rare opportunities to test for high-grade gold and silver targets in mineral systems that are globally recognised for their potential to turn into high-margin gold mines.*

*In addition to Black Range, Legacy Minerals is in the unique position of controlling three district scale epithermal systems including, Bauloora, which is being explored with the world’s largest gold miner Newmont, and the Drake gold-silver epithermal system.*

*With the drilling now underway at Sugarbag Hill we look forward to updating the market as this exciting drilling program progresses.”*

## Sugarbag Hill Target Overview

The Prospect is located in an underexplored area of the Lachlan Fold Belt, NSW. Mineralisation is hosted within early I-type Devonian felsic rocks of the Mountain Creek Volcanics. Indications of a preserved epithermal sinter were identified during ground reconnaissance of historically mapped “cherts” within the Prospect area. Petrography has now confirmed an extensive silica sinter outcrop at the Prospect. Alteration at the Prospect is moderate to intense silica-sericite +/- pyrite in association with the exposed agglomerate and ignimbrite hosted in the Mountain Creek Volcanics<sup>iv</sup>.



Soil Geochemistry and Target Areas

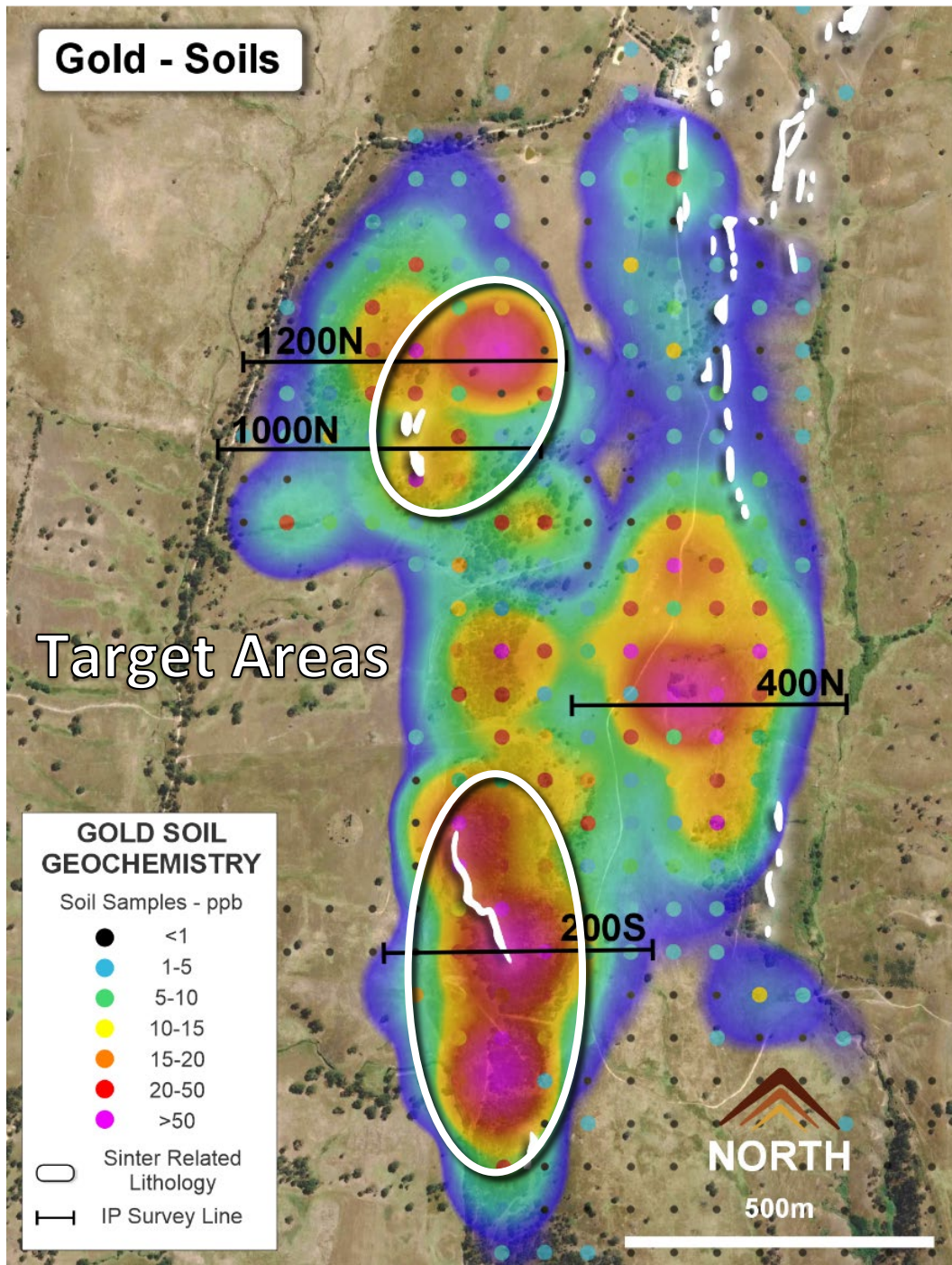


Figure 3: Sugarbag Hill gold in soils<sup>i</sup>, with target areas (white) and historic IP lines<sup>iii</sup>

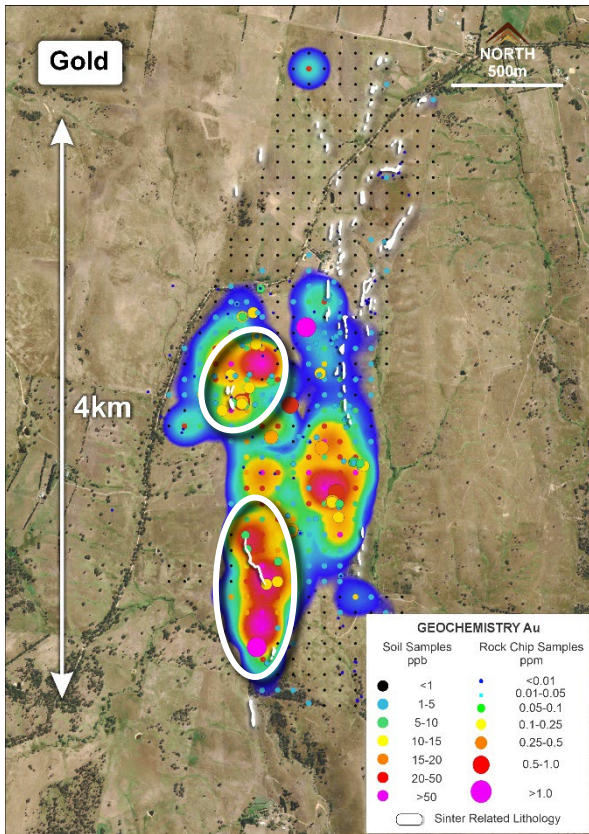


Figure 4: Sugarbag Hill Au soil sample results<sup>i</sup>

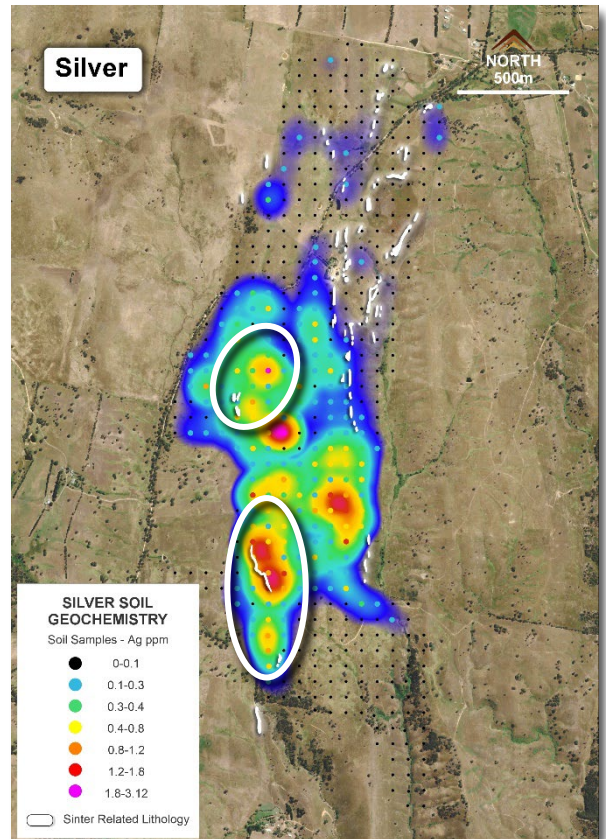


Figure 5: Sugarbag Hill Ag soil sample results<sup>i</sup>

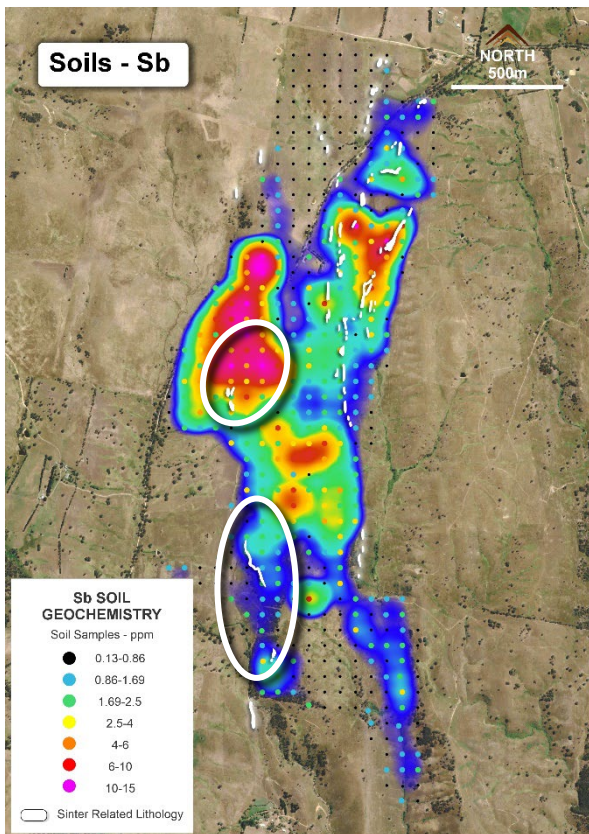


Figure 6: Sugarbag Hill Sb soil sample results<sup>i</sup>

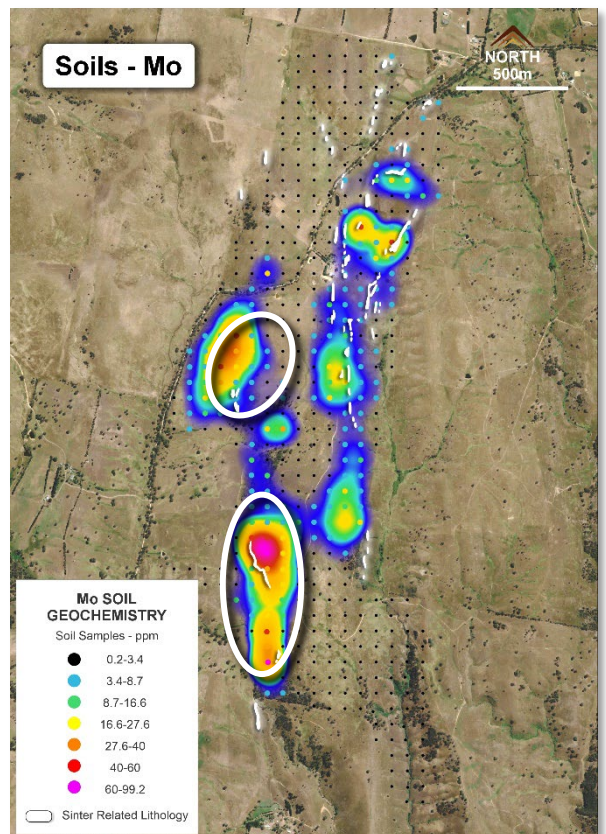


Figure 7: Sugarbag Hill Mo soil sample results<sup>i</sup>

## Historical Exploration and Geological Model

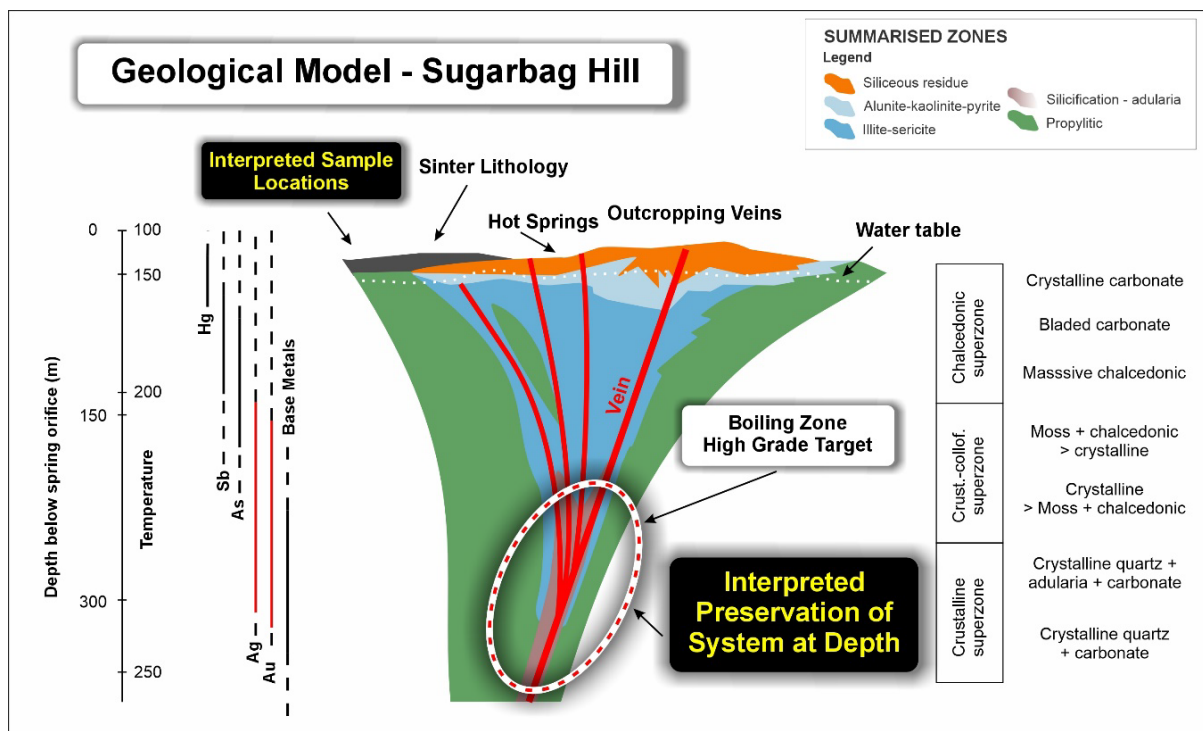
Legacy Minerals completed a review of the historical geophysical data at the Sugarbag Hill Prospect, Black Range, NSW. This review incorporated several historical exploration data sets, many of which are believed to have been collated for the first time. The data sets included recent airborne magnetics and radiometric surveys, as well as older ground magnetic, and IP surveys. In particular, the reprocessing of historical gradient array induced polarisation (GA-IP) and dipole-dipole induced polarisation surveys completed by Newcrest Mining in 1992 at the Sugarbag Hill Prospect have provided highly valuable data sets.

Historic exploration over the Prospect was completed by Newcrest Mining Limited who conducted the last on-ground exploration in 1992<sup>v</sup>. This consisted of geological mapping, soil sampling, geophysical IP surveys and several shallow reverse circulation percussion (RC) drill holes and a single, shallow diamond cored drill hole.

After this drill campaign completed between 1992 and 1993, Newcrest interpreted holes to have intercepted a “silica cap”. At the time, Newcrest was exploring for a shallow, near-surface bulk-tonnage deposit and therefore conducted mostly shallow vertical drilling. The historical drilling at the Sugarbag Hill Prospect gave highly encouraging results for a potential nearby feeder structure which demonstrates the potential at depth where an interpreted boiling zone is potentially located. Drill holes were commonly no deeper than 50m with the deepest to 119m. Drill results included:<sup>vi</sup>

- FRC-1: 30m at 0.3g/t Au (from surface)
- FRC-21: 7m at 0.39g/t Au, 97.1ppm Mo and 18.1ppm Bi (from 20m)
- FRC-24: 4m at 0.77g/t Au (from 90m)

These historic results indicate the potential for gold mineralisation within the feeder structures at depth. Legacy Minerals is completing the first on-ground exploration in over 30 years at the Sugarbag Hill Prospect.



**Figure 8** Model of the Black Range Epithermal Project<sup>vii</sup> and interpreted zones of preservation beneath silica sinter horizons

## Black Range Location

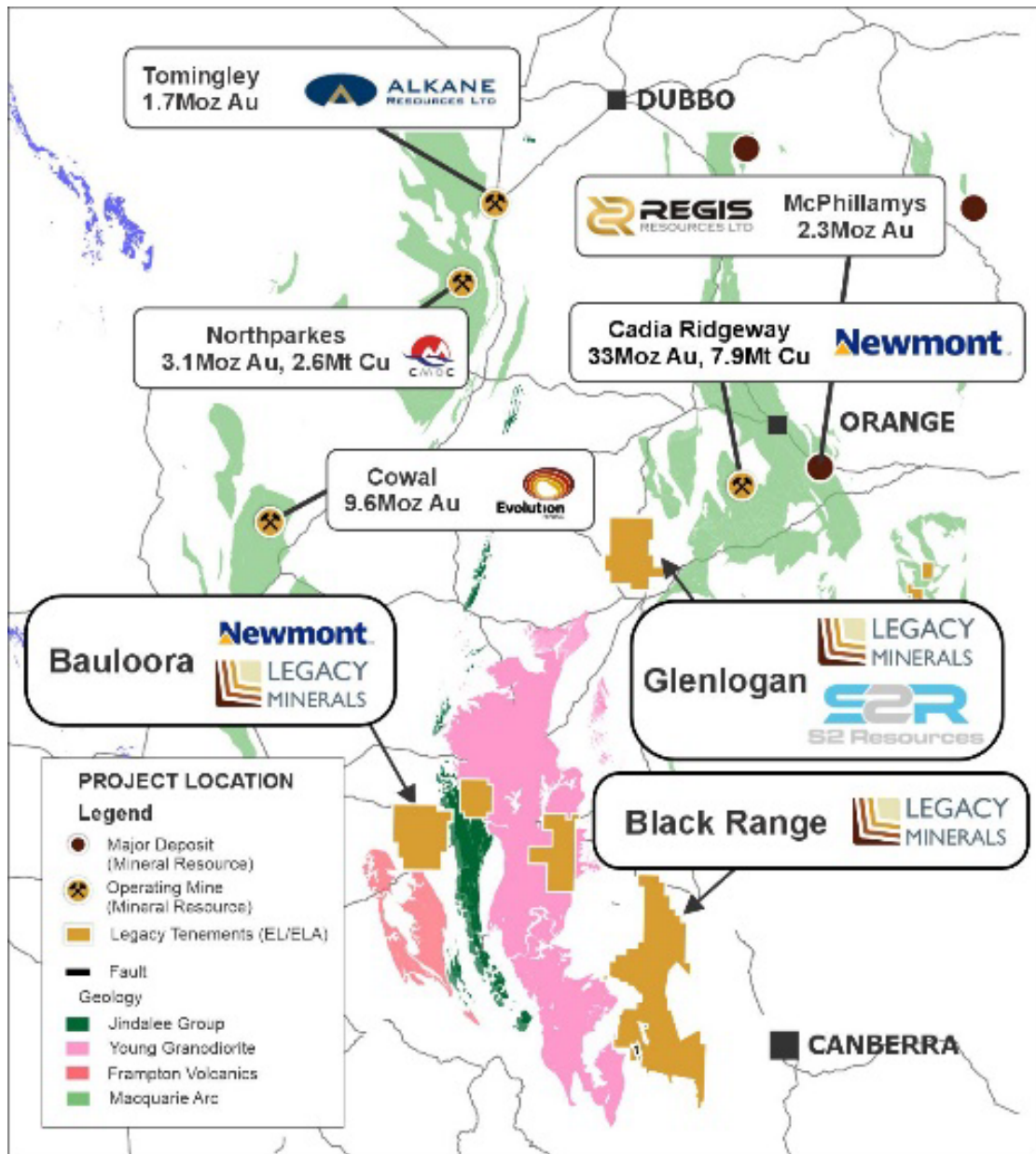


Figure 9: Location of the Black Range Project and Major Deposits in NSW

**Approved by the Board of Legacy Minerals Holdings Limited.**

**For more information:**

Investors:

**Chris Byrne**

CEO & Managing Director

[chris.byrne@legacyminerals.com.au](mailto:chris.byrne@legacyminerals.com.au)

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

Media:

**Nicholas Read / Kate Bell**

Read Corporate

[info@readcorporate.com.au](mailto:info@readcorporate.com.au)

**+ 61 (0) 419 929 046**

**DISCLAIMER AND PREVIOUSLY REPORTED INFORMATION**

Information in this announcement is extracted from reports lodged as market announcements referred to above and available on the Company's website <https://legacyminerals.com.au/>. The Company confirms that it is not aware of any new information that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

This announcement contains certain forward-looking statements. Forward looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside of the control of Legacy Minerals Holdings Limited (LGM). These risks, uncertainties and assumptions include commodity prices, currency fluctuations, economic and financial market conditions, environmental risks and legislative, fiscal or regulatory developments, political risks, project delay, approvals and cost estimates. Actual values, results or events may be materially different to those contained in this announcement. Given these uncertainties, readers are cautioned not to place reliance on forward-looking statements. Any forward-looking statements in this announcement reflect the views of LGM only at the date of this announcement. Subject to any continuing obligations under applicable laws and ASX Listing Rules, LGM does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement to reflect changes in events, conditions or circumstances on which any forward-looking statements is based.

**COMPETENT PERSON'S STATEMENT**

The information in this Report 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 and a full-time employee of Legacy Minerals Pty Limited, the Company's wholly-owned subsidiary, and a shareholder of the Company. Mr Wall 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 of the matters based on his information in the form and context in which it appears in this announcement.

## About Legacy Minerals

Legacy Minerals is an ASX listed public company that has been involved in the acquisition and exploration of gold, copper, and base-metal projects in NSW since 2017. The Company has eight projects that present significant discovery opportunities for shareholders.

<p><b>Au-Ag Black Range</b> (EL9464, EL9589) Extensive low-sulphidation, epithermal system with limited historical exploration. Epithermal occurrences across 30km of strike.</p>	<p><b>Cu-Au Drake</b> (EL6273, EL9616, ELA6642) Large caldera (~150km<sup>2</sup>) with similar geological characteristics to other major pacific rim low-sulphidation deposits.</p>
<p><b>Cu-Au Rockley</b> (EL8926) Prospective for porphyry Cu-Au and situated in the Macquarie Arc Ordovician host rocks with historic high-grade copper mines that graded up to <b>23% Cu</b>.</p>	<p><b>Au-Cu (Pb-Zn) Cobar</b> (EL9511) Undrilled targets next door to the Peak Gold Mines. Several priority geophysical anomalies and gold in lag up to <b>1.55g/t Au</b>.</p>
<p><b>Au-Ag Bauloora</b> (EL8994, EL9464) <a href="#">Newmont JV</a> One of NSW's largest low-sulphidation, epithermal systems with a 27km<sup>2</sup> epithermal vein field.</p>	<p><b>Au Harden</b> (EL9257, ELA6694) Large historical high-grade quartz-vein gold mineralisation. Drilling includes <b>3.6m at 21.7g/t Au</b> 116m and <b>2m at 17.17g/t Au</b> from 111m.</p>
<p><b>Cu-Au Glenlogan</b> (EL9614) <a href="#">S2 Resources JV</a> Large, undrilled magnetic anomaly underneath Silurian cover located 55kms from Cadia Valley.</p>	<p><b>Au-Cu Fontenoy</b> (EL8995) <a href="#">Earth AI Alliance</a> An 8km long zone of Au and Cu anomalism defined in soil sampling and drilling. Significant drill intercepts include <b>79m at 0.27% Cu</b> from 1.5m.</p>

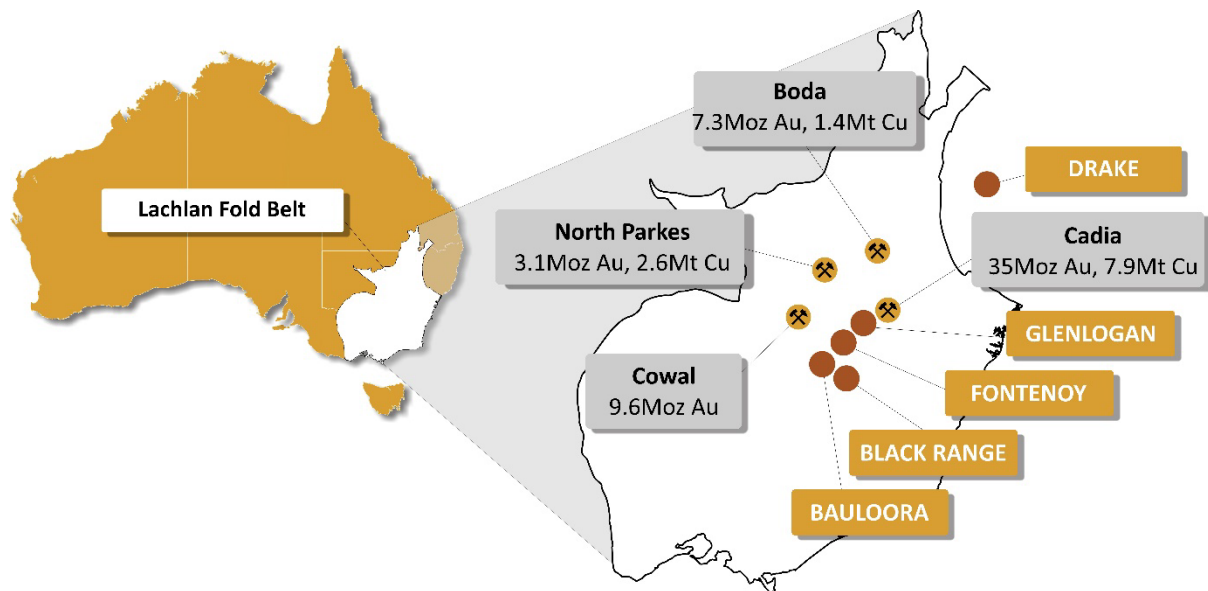


Figure 10: Location of Legacy Minerals Projects in NSW, Australia<sup>viii, ix, x, xi, xii</sup>



## ENDNOTES

<sup>i</sup> ASX LGM: 23 October 2023 *Large 2.2km Long Gold Anomaly defined at Black Range*

<sup>ii</sup> USGS, 2019, Round Mountain Gold Mine, available at [https://mrdata.usgs.gov/mrds/show-mrds.php?dep\\_id=10310392](https://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10310392). [accessed 30/11/2020]

<sup>iii</sup> Newcrest Mining Limited, Final Report EL3137 December 1992

<sup>iv</sup> ASX LGM: 11 October 2023 *Widespread Silica Sinter Confirmed at Black Range*

<sup>v</sup> Newcrest Mining Limited, Final Report EL3137 December 1992

<sup>vi</sup> 1993 Newcrest Mining Limited (R00001534) License 3137 Goondah

<sup>vii</sup> Buchanan, L. J. (1981) "Precious metal deposits associated with volcanic environments in the southwest," Arizona Geol. Soc. Digest, 14, pp. 237–261., Klondike Exploration Services, "Textural Zoning in Epithermal Quartz Veins", Townsville: Queensland 1995

<sup>viii</sup> CMOC Northparkes Mining and Technical Information, <http://www.northparkes.com/wp-content/uploads/2022/05/northparkes-mining-and-technical-information.pdf>

<sup>ix</sup> Alkane Resources Kaiser Resource Estimate of ~4.7M Gold Equivalent 27 February 2023

<sup>x</sup> Newmont 2023 Reserves Statement

<sup>xi</sup> Evolution Mining 2022 Annual Report

<sup>xii</sup> Evolution Mining 2022 Annual Report

Project & Company	Mineral Resource	Measured Resource	Indicated Resource	Inferred Resource
Boda-Kaiser, NSW (Alkane Resources Ltd)	7.26Moz Au, 1.38Mt Cu	-	-	7.26Moz Au, 1.38Mt Cu
Cadia-Ridegway, NSW (2023) (Newmont Corporation)	35Moz 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
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