

# **Drilling Intersects Multiple Epithermal Veins at Bauloora**

# Boiling zone textures observed in diamond core at Breccia Sinter

## Low-sulphidation epithermal veins

- Multiple epithermal style veins intersected in drill holes BX001 and BX002 which are open from surface, down dip and along strike at the Breccia Sinter Prospect.
- Drill hole BX002 intersected two broad vein intervals of low sulphidation epithermal style veins.
- The gold bearing potential of the Prospect area is supported by surface rock chips up to 32g/t Au, 196g/t Ag<sup>1,i</sup> and greater than 20ppb gold<sup>ii</sup> in soil anomaly 500m long and 250m wide.

# Interpreted "boiling zone" intersected

- Visual observations of fine sulphide-rich quartz bands in fibrous and moss textured chalcedonyadularia crustiform-colloform banded quartz veins, with lattice bladed quartz after carbonate, and cockade breccia.
- The mineralogy and textures are consistent with the top of the "boiling zone" which is commonly well mineralised in these types of systems and gives confidence to the prospectivity at depth.

## Implications of boiling zone textures

- Boiling zones can have significant vertical extents with potential for bonanza gold bearing veinsii.
- Multiple epithermal events support the interpretation that the Bauloora Project may host a large and long-lived epithermal system.

## **Drilling Campaign Extended**

A third hole will commence immediately to further test the newly intersected veins.







**Figure 1:** BX002 diamond drill core showing colloform-crustiform and cockade textures in banded chalcedony (white-grey)-quartz (white)-adularia (cream-orange)+/- hematite (brown-red) veins and localised breccia with rare fine pyrite-marcasite bands (dark-very dark grey-black). See Page 12 for further logging details.

<u>Cautionary Note – Visual Estimates of Mineralisation:</u> 'Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.'

<sup>1.</sup> See 'Endnotes' on Page 19 for references.



Legacy Minerals Holdings Limited (ASX: **LGM**, "**Legacy Minerals**" or "**the Company**") is pleased to announce the intersection of epithermal veining at the Bauloora Project (EL8995 and EL9464) in the Lachlan Fold Belt, NSW.

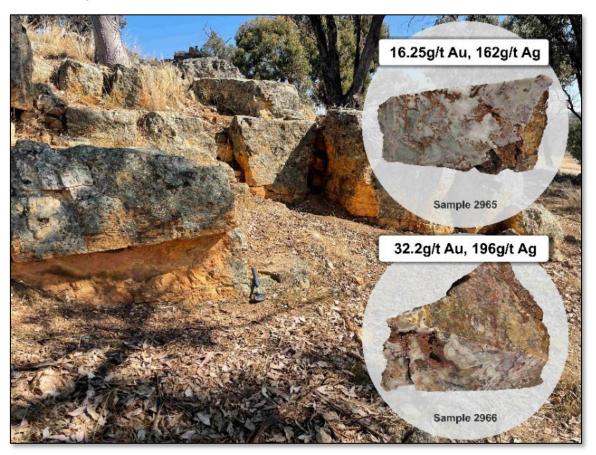
# **Management - Legacy Minerals CEO & Managing Director, Christopher Byrne said:**

"The current diamond drilling program at the Breccia Sinter Prospect has delivered some spectacular drill core and our initial interpretation is that we have intersected the upper levels of the boiling zone. This confirms our interpretation of a preserved epithermal system at the Breccia Sinter Prospect.

The recognition of textures indicative of a boiling zone is extremely encouraging as this is the zone that can potentially host very-high grades of gold and silver in a low sulphidation system. The presence of boiling textures at the Breccia Sinter is evidenced by intervals of lattice bladed textures within banded chalcedony-quartz-adularia veins and cockade breccia downhole.

Importantly, the coincidence of this interpreted boiling zone is below an area which reported significant gold anomalism at surface in rock chip samples up to 32.2g/t Au, providing encouragement that the veins nearby these rock chips may be gold-bearing.

With this positive outcome the drilling campaign will be expanded, and a third drill hole has now commenced to further test these veins."



**Figure 2:** Sinter outcrop above current drill holes with nearby high-grade rock chip samples<sup>i</sup>.

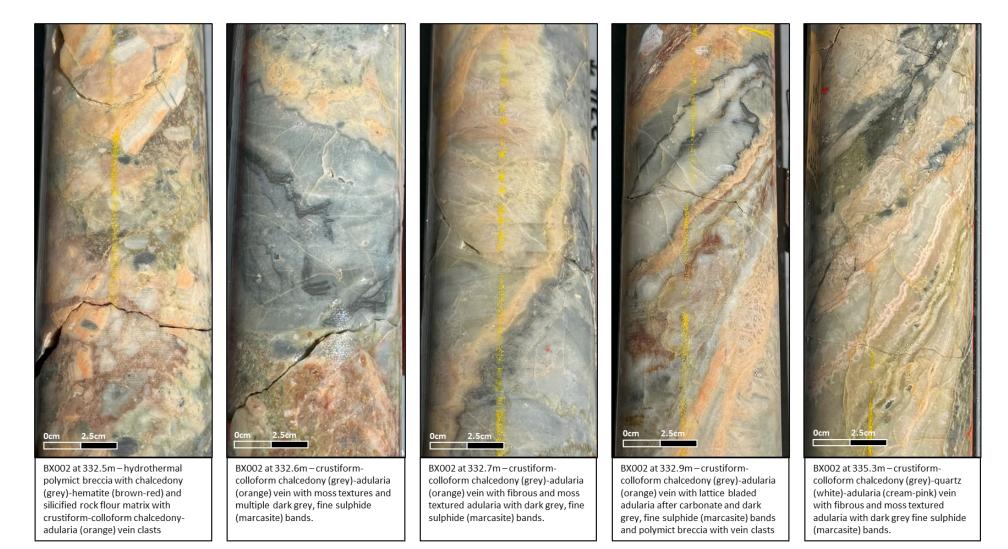


Figure 3. Diamond drill core photos of quartz vein textures in BX002.





BX002 at 353.8m – crustiform-colloform chalcedony (grey)-quartz (white)-adularia (cream-orange) vein with minor lattice bladed quartz after carbonate and fibrous and moss textured chalcedony.



BX002 at 354m – polymict chalcedony (grey) –quartz (white) -adularia (cream-orange) cockade breccia with porphyritic rhyolite clasts, vein clasts, moss textures and fine dark-sulphide (pyrite) bands.



BX002 at 354.3m – crustiformcolloform chalcedony (grey)-quartz (white)-adularia (cream) vein with fibrous and moss textured chalcedony, and polymict chalcedony breccia



BX002 at 354.4m – chalcedony (grey)quartz (white)-adularia (creamorange) vein with moss and fibrous textured chalcedony and fine dark grey sulphide (pyrite) bands.



BX002 at 354.9m – chalcedony (grey)-quartz (white)-adularia (cream-orange) cockade breccia with porphyritic rhyolite clasts and moss textured chalcedony with fine dark grey sulphide (pyrite) bands.

Figure 4. Diamond drill core photos of quartz vein textures in BX002.





BX001 at 47.6m – crustiform-colloform chalcedony (white-grey)-quartz (grey)-adularia (orange)-hematite (red) and celadonite (green) vein in hematite-sericite (pale green) altered porphyritic rhyolite.



BX001 at 98.3m – carbonate (white)sphalerite (yellow)-galena (silvery) breccia in conglomerate.



BX001 at 151.5m – colloform-crustiform chalcedony (grey)-quartz (white)-pyrite (dark grey) veins in silica-sericite altered porphyritic rhyolite.



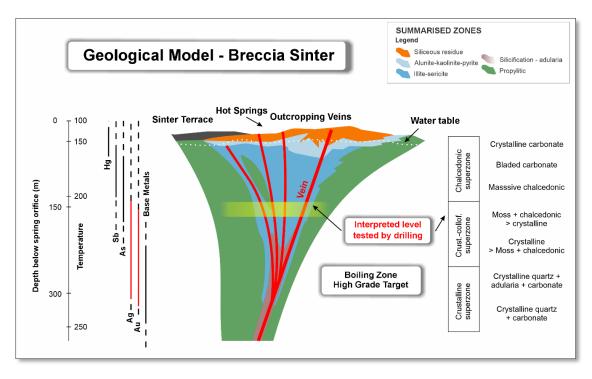
BX001 at 484.3m – crustiformcolloform chalcedony (grey)-quartz (white)-adularia (cream-orange)hematite (red) vein in sericite altered porphyritic rhyolite.



BX001 at 621.3m – crustiformcolloform chalcedony (grey)-quartz (white) vein and breccia with silicasericite altered porphyritic rhyolite clasts.

Figure 5. Diamond drill core photos of quartz vein textures in BX001.





**Figure 6:** Breccia Sinter Prospect conceptual low-sulphidation epithermal schematic model showing depth from paleo-surface, temperature, element distribution, vein textures, and alteration zones (modified from Buchanan 1981, Morrison et. al 1995)<sup>iii</sup>.

# **Diamond Drilling Progress Update**

At the Breccia Sinter Prospect, two diamond drill holes have been completed which tested the 500m by 250m long gold-silver (Au-Ag) bearing low sulphidation epithermal vein zone. A large zone of elevated gold, silver and pathfinder elements was defined in last year's soil and extensive rock chip sample collection program, which returned gold and silver grades up to 32.2g/t Au and 196/t Ag. In addition, a strong audio-frequency magnetotelluric (AMT) resistivity anomaly underlies the mapped surface sinter adding further encouragement to the geochemical signatures and result in compelling drill targets.

Low sulphidation epithermal-style veins have been intersected in all drill holes to date. Preliminary geological observations indicate these holes intersected host rocks that are variably altered rhyolites, conglomerate, volcaniclastic and tuffs. Broad zones of chlorite-sericite hydrothermal alteration are observed distal to structures and moderate to intense sericite-hematite or silica-sericite alteration proximal to epithermal-style veins.

Drillhole BX001 intercepted a 66m thick conglomerate package before intersecting a healed fault zone characterised by strong-intense sericite-pyrite altered porphyritic rhyolite from 126.3m to 182m with common chalcedony (+/-pyrite-adularia) veins and silicified tectonic breccia with lesser veins of crustiform-colloform chalcedony-quartz (+/- pyrite, hematite, galena and low-Fe sphalerite) veins. Minor quartz-carbonate +/- chalcopyrite, galena, low-Fe sphalerite veins are also observed throughout the drill hole.

Drill hole BX002 intercepted two zones of frequent low sulphidation epithermal-style veins interpreted to represent the top of the targeted boiling zone between 325m to 342m and 347m and 361m. Veins are crustiform-colloform banded chalcedony-adularia veins with common moss and fibrous quartz-adularia textures. Lattice bladed adularia and quartz after platy calcite is observed in some bands and occasional dark grey to black bands, of fine sulphide-rich bands dominated by marcasite and pyrite. Brecciated veins are common and are generally associated with further chalcedony (+/- hematite) infill and cockade textures. There is occasional overprinting by chalcedony-base metal (sphalerite-galena) veins.



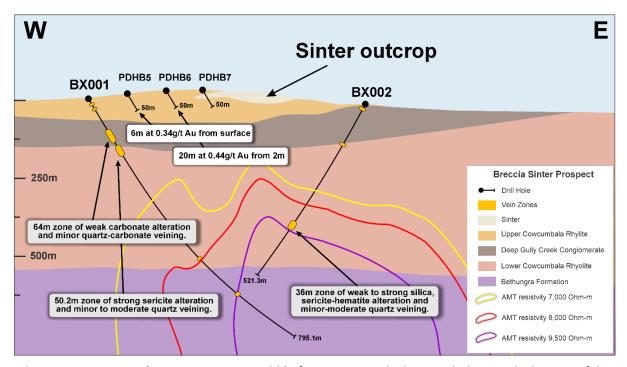
Observations in the BX002 core samples are consistent with the hot spring depositional model used as a basis for exploration on the project. The mineralogy and textures are consistent with the upper part of the boiling zone which is commonly well mineralised especially near and in hydrothermal breccias. These observations give encouragement to test further along strike and at depth. The narrow zones of multiphase hydrothermal breccias and veins may represent the periphery or top of the breccia body and therefore the start of the transition to a vein (over breccia) dominant character.

The diamond drill holes have confirmed low-sulphidation epithermal-style veins down dip from elevated gold, silver and pathfinder rock chip and soil geochemical results, and mapped veins. Preliminary down hole structural observations from these holes show veins strike north to north-north-east and steeply west dipping (80°-85°) veins and breccias and though true widths are not yet known, they are estimated to be 70% of the rock down hole. The vein trend remains open along strike and down dip.

A third drill hole of 500m has been approved for the program and is expected to be completed within the next four weeks. To date, two holes have been completed for 1,316.4m, with the last hole expected to be completed by the beginning of December 2023.

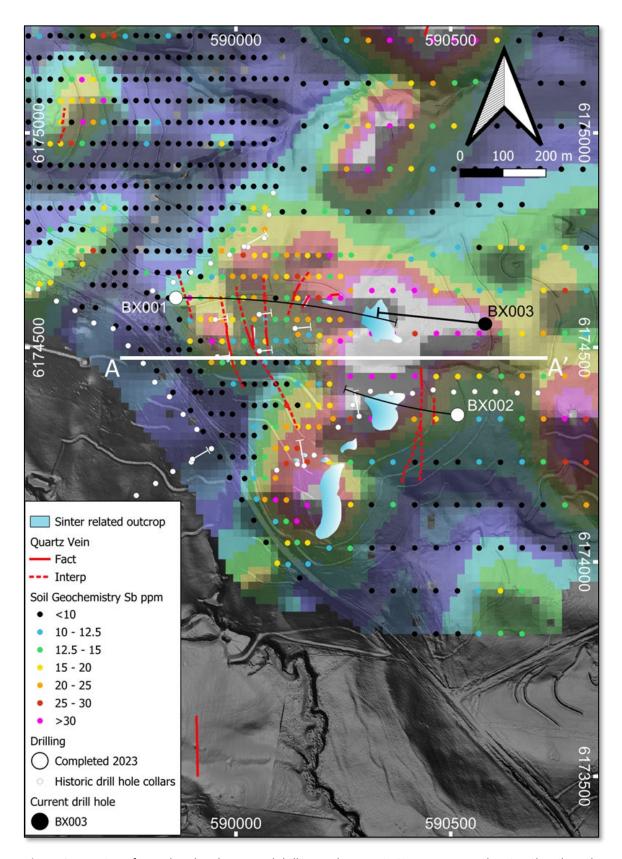
Core processing and logging is in progress and samples will be submitted for laboratory assay analysis upon completion of the drill campaign with results expected in February 2024. Drill hole details provided in Table 1.

| Hole ID | Easting<br>(MGA94/55) | Northing<br>(MGA94/55) | RL (m) | Dip | Azimuth (True<br>North) | Depth<br>(m) | Drill hole<br>status |
|---------|-----------------------|------------------------|--------|-----|-------------------------|--------------|----------------------|
| BX001   | 589860.1              | 6174615                | 449    | -60 | 87                      | 795.1        | Completed            |
| BX002   | 590517.6              | 6174342                | 438    | -60 | 277                     | 521.3        | Completed            |
| BX003   | 590573.0              | 6174543                | 418    | -65 | 275                     | 500          | Underway             |



**Figure 7:** Cross section (617450mN - 200m width) of AMT response looking north showing the location of the Breccia Sinter historical drilling<sup>iv</sup>, and completed drill holes BX001 and BX002 over interpreted geology. See Page 12 for further logging details.





**Figure 8**: Location of completed and proposed drilling at the Breccia Sinter Prospect showing Sb soil results over mapped sinter related geology<sup>v</sup>



# **About the Bauloora Project**

Legacy Minerals' Bauloora Project is located in the Lachlan Fold Belt of New South Wales which is host to world-class copper-gold orebodies including the Cadia-Ridgeway, Northparkes, and Cowal Mines. In 2023, Newmont Exploration Pty Ltd entered into a Farm-In and Joint Venture on the Project<sup>vi</sup>. It covers a large hydrothermal alteration zone  $27 \text{km}^2$  in size, within which is an anomalous gold zone currently mapped to  $15 \text{km}^2$ . Rock chip and soil samples collected by the Company from the project area have highlighted several priority areas of anomalous precious metal values with highly anomalous values of epithermal pathfinders<sup>vii</sup>. The drilling of the first of these targets resulted in the discovery of the Bluecap Prospect returning 13m at 1.66g/t Au, 6.68g/t Ag, 0.14% Cu and 4.23% Pb+Zn from  $57 \text{m}^{\text{vii}}$ .

Extensive epithermal alteration exists on the Project, including widespread zones of high-level chalcedonic veins, clay alteration and local sinter formations. The Project has seen very limited exploration drilling and the Company believes the results from work to date strongly support the assessment that there is significant potential for the discovery of a major low-sulphidation epithermal-style gold-silver deposit at the Bauloora Project.

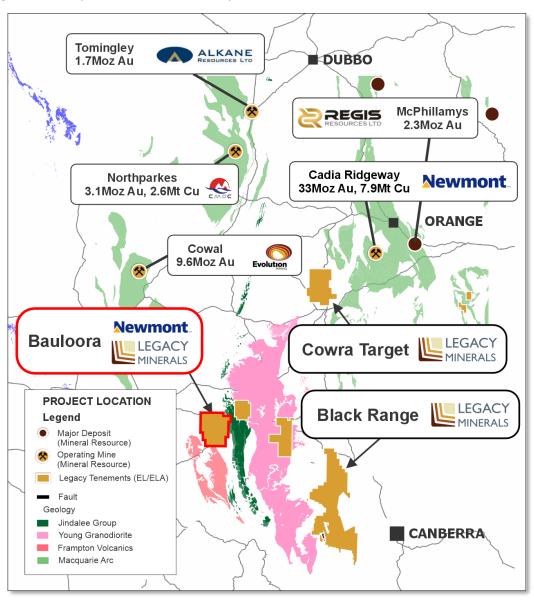


Figure 9: Regional setting of the Bauloora Project VIII, IX, X, XI, XII



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

## For more information:

#### **Chris Byrne**

**CEO & Managing Director** 

chris.byrne@legacyminerals.com.au

+61 (0) 499 527 547

## 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 <a href="https://legacyminerals.com.au/">https://legacyminerals.com.au/</a>. 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 this 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 the Lachlan Fold Belt since 2017. The Company has eight projects that present significant discovery opportunities for shareholders.

#### Au-Cu (Pb-Zn) Cobar (EL9511)

Undrilled targets next door to the Peak Gold Mines. Several priority geophysical anomalies and gold in lag up to **1.55g/t Au.** 

#### Au-Ag Bauloora (EL8994, EL9464) Newmont JV

One of NSW's largest low-sulphidation, epithermal systems with a 27km<sup>2</sup> epithermal vein field and 15km<sup>2</sup> gold zone.

#### Cu-Au Rockley (EL8296)

Prospective for porphyry Cu-Au and situated in the Macquarie Arc Ordovician host rocks with historic high-grade copper mines that graded up to 23% Cu.

#### Cu-Au Cowra (EL9614)

Large, drilled magnetic anomaly underneath Silurian cover located 55kms from Cadia Valley

#### Au Harden (EL8809, EL9257)

Large historical high-grade quartz-vein gold mineralisation. Drilling includes **3.6m at 21.7g/t Au** 116m and **2m at 17.17g/t Au** from 111m.

#### Au-Cu Fontenoy (EL8995) Earth Al-Alliance

An 8km long zone of Au and Cu anomalism defined in soil sampling and drilling. Significant drill intercepts include **79m at 0.27% Cu** from 1.5m.

#### Au-Ag Black Range (EL9466, EL9589)

Extensive low-sulphidation, epithermal system with limited historical exploration. Epithermal occurrences across 30km of strike

#### Cu-Au Drake (EL6273, ELA6640)

Large caldera (~150km²) with similar geological characteristics to other major pacific rim.

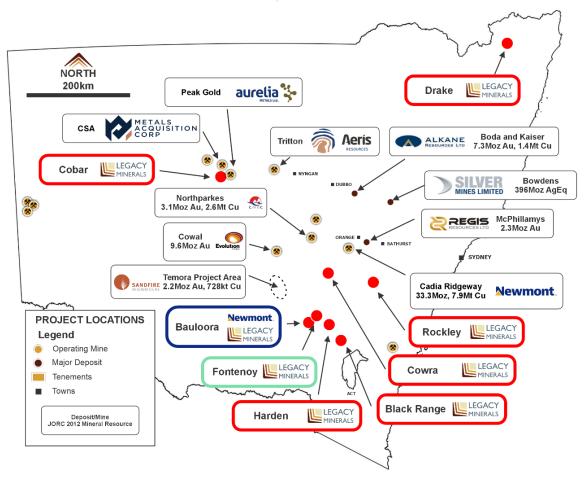


Figure 10: Regional setting of Legacy Minerals Projects ix,x,xi,xii,xiii



# Appendix 1 – Drill log vein summaries

| Hole ID | From  | То    | Down-<br>hole<br>width | Estimated<br>Vein % | Estimated<br>Sulphide % | Preliminary Observations - nature of mineral occurrence, mineral identification and estimated sulphide proportion  |
|---------|-------|-------|------------------------|---------------------|-------------------------|--|
|         | 9     | 14    | 5                      | 1                   | 0.25                    | CC qtz-chc and chc-adu-gal (30)-sph (70)+/-hem veins and veinlets  |
|         | 44    | 48    | 4                      | 2                   | 1                       | CC qtz-chc and chc-adu-gal (30)-sph (70)+/-hem veins and veinlets  |
|         | 60    | 123.7 | 64                     | 2                   | 0.25                    | Qtz-crb+/-gal (30)-sph (55)-cpy (10)-py (5) veins and veinlets   |
| BV001   | 126.3 | 150.5 | 24.2                   | 2                   | 0.1                     | Healed fault zone - Chc-py (80) and chc-crb+/-gal(8)-sph (10)-cpy(2) veins and veinlets  |
| BX001   | 150.5 | 163.5 | 13                     | 4                   | 0.2                     | Healed fault zone - Chc-py (80)and chc-crb+/-gal(8)-sph(10)-cpy(2) veins and veinlets  |
|         | 163.5 | 181   | 13                     | 1                   | 0.1                     | Healed fault zone - Chc-py (80)and chc-crb+/-gal (8)-sph(10)-cpy(2) veins and veinlets   |
|         | 181   | 621   | 440                    | 1                   | Tr                      | Qtz-crb veinlets   |
|         | 621   | 709   | 88                     | 2                   | Tr                      | Qtz-crb+/-gal(10)-sph(90) veinlets and CC qtz-chc-adl veinlets   |
|         | 709   | 795   | 86                     | 1                   | Tr                      | Qtz-crb veinlets   |
|         | 12    | 12.6  | 0.6                    | 60                  | Tr                      | Chc breccia  |
|         | 89    | 118   | 29                     | 1                   | Tr                      | Qtz-crb veinlets   |
|         | 135   | 137   | 2                      | 10                  | 0.5                     | Chc-hem+/-sph(80)-gal(20)  |
|         | 145   | 168   | 23                     | 1                   | 0.1                     | Chc-adl-hem+/-sph(80)-gal(20)  |
|         | 176   | 177   | 1                      | 20                  | 1                       | Chc-adl-hem-sph(80)-gal(20) breccia  |
|         | 264   | 267   | 3                      | 3                   | Tr                      | Qtz-crb veins  |
|         | 325   | 332   | 7                      | 5                   | Tr                      | Chc-adl veins and veinlets   |
| BX002   | 332   | 333   | 1                      | 80                  | 1                       | CC chc-adl-hem with moss and fibre recrystallisation textures, needle adl, lattice bladed adl after carbonate and fine mrc (80) sulphide bands. Overprint by hydrothermal chchem breccia and later chc-sph(18)-gal(2). |
|         | 333   | 353.5 | 20.5                   | 3                   | 0.1                     | CC chc-adl-py (100) with fibrous and moss textures. Local internal hydrothermal breccia  |
|         | 353.5 | 356   | 2.5                    | 80                  | 0.1                     | CC chc-adl with fibrous and moss textures and occasional fine py (100) sulphide bands. Localised internal cockade breccia.   |
|         | 356   | 361   | 5                      | 4                   | tr                      | CC chc-adl with fibrous and moss textures.   |
|         | 361   | 387   | 26                     | 1                   | Tr                      | Chc-adl and qtz-crb veins and veinlets   |
|         | 387   | 443   | 56                     | 0.5                 | Tr                      | Chc-adl and qtz-crb veins and veinlets   |

Observation codes: qtz - quartz, crb - carbonate, chc - chalcedony, adu - adularia, fl - fluorite, sph - sphalerite, gal - galena, cpy - chalcopyrite, hem - hematite, py - pyrite, CC - crustiform-colloform, Tr - trace.



# Appendix 2 – JORC Code, 2021 Edition Table 1

# **Section 1 Sampling Techniques and Data**

| Criteria                 | JORC Code Explanation   | Commentary  |
|--------------------------|---|---|
|                          | Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.   | No assays are being reported in this release.  References in this announcement to visual results are from HQ3/NQ diamond drill core.  Mineralised sections in drill core will be cut, and half-core sampled for assaying. Assay results are expected in February 2024.  |
| Sampling                 | Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.   | No sampling completed.  |
| Techniques               | Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information. | No assays are being reported in this release.   |
| Drilling<br>techniques   | Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diametre, triple or standard tube, depth of diamond tails, face sampling bit or other type, whether core is oriented and if so, by what method, etc).  | Diamond drilling is completed using HQ3 drill core. Core orientation completed using a REFLEX tool.   |
|                          | Method of recording and assessing core and chip sample recoveries and results assessed.   | Core recovery is captured in the core logging.  No assays are being reported in this release.   |
|                          | Measures taken to maximise sample recovery and ensure representative nature of the samples.   | No assays are being reported in this release.   |
| Drill sample<br>recovery | Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.  | To date, minimal sample recovery issues have been identified that would impact on potential sample bias in the competent fresh rocks that host the mineralised sulphide intervals.  Systematic geological and geotechnical logging was undertaken. Data collection where appropriate includes:  Nature and extent of lithologies.  Relationship between lithologies.  Amount and mode of occurrence of ore minerals.  Location, extent and nature of structures such as bedding, cleavage, veins, faults etc. Structural data (alpha & beta) are recorded for orientated core.  Geotechnical data is collected as required such as recovery, RQD, fracture frequency, |



|   |  | qualitative IRS, microfractures, veinlets and number of defect sets. For some geotechnical holes the orientation, nature of defects and defect fill may be recorded.  • Bulk density by Archimedes principle at regular intervals may be taken.  • Magnetic susceptibility recorded at 1m intervals for some holes as an orientation and |
|---|--|--|
|   | Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.                                | alteration characterisation tool.  Geological logging is carried out on all drill hole chips with lithology, alteration, mineralisation, structure and veining recorded where possible.  |
| Logging   | Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.   | Logging of records lithology, mineralogy, mineralisation, structures, weathering, colour and other noticeable features. This is generally qualitative except for % of sulphides and vein mineral content. Core trays are photographed in wet form.   |
|   | The total length and percentage of the relevant intersections logged.  | All drill holes are geologically logged in full.   |
|   | If core, whether cut or sawn and whether quarter, half or all core taken.  | No assays are being reported in this release.  |
|   | If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.  | No assays are being reported in this release.  |
| Sub-sampling  | For all sample types, the nature, quality and appropriateness of the sample preparation technique.   | No sampling completed.   |
| techniques and<br>sample<br>preparation             | Quality control procedures adopted for all subsampling stages to maximise representivity of samples.   | No sampling completed.   |
|   | Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.   | No sampling completed.   |
|   | Whether sample sizes are appropriate to the grain size of the material being sampled.  | No sampling completed.   |
|   | The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.   | No assays are being reported in this release.  |
| Quality of<br>assay data and<br>laboratory<br>tests | For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. | No assays are being reported in this release.  |
|   | Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.                 | No assays are being reported in this release.  |
|   | The verification of significant intersections by either independent or alternative company personnel.  | No assays are being reported in this release.  |



| Verification of<br>sampling and<br>assaying                         | The use of twinned holes.   | No twinned holes have been planned for the current drill programme.   |
|---|---|---|
| ussuymy   | Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.  | Primary data is captured onto a laptop through excel and using Datashed software and includes geological logging, sample data and QA/QC information. This data, together with the assay data, is stored both locally and entered into the LGM central online database.  |
|   | Discuss any adjustment to assay data.   | No adjustments or calibrations will be made to any primary assay data collected for the purpose of reporting assay grades and mineralised intervals. For the geological analysis, standards and recognised factors may be used to calculate the oxide form assayed elements, or to calculate volatile free mineral levels in rocks. |
| Location of<br>data points  | Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.   | A handheld Garmin GPSmap 65 was used to pick up collars with an averaged accuracy of 1m.  Downhole surveys are conducted using a downhole Gyro during drilling to record and monitor deviations of the hole from the planned dip and azimuth.   |
|   | Specification of the grid system used.  | The grid system used is GDA94, MGA Zone 55.   |
|   | Quality and adequacy of topographic control.  | Using government data topography and 2017 DTM data. A topographic surface has been created using this elevation data.   |
| Data spacing<br>and<br>distribution                                 | Data spacing for reporting of Exploration Results.  | The spacing and distribution of holes is not relevant to the drilling programs which are at the exploration stage rather than definition drilling. Drill holes were preferentially located at those areas considered most prospective.  |
|   | Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. | No sampling completed.  |
|   | Whether sample compositing has been applied.  | No compositing has been applied to the exploration results.   |
| Orientation of<br>data in<br>relation to<br>geological<br>structure | Whether the orientation of sampling achieves  | The drill holes are orientated to intersect the dipping mineralised trends at as near perpendicular orientation possible (unless otherwise stated).   |
|   | unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.   | The orientation of key structures may be locally variable and any relationship to mineralisation has yet to be identified.  The orientation of drilling relative to key mineralised structures is not considered likely to introduce sampling bias.   |
|   | If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.  | Orientation of the mineralisation and structural trends is constrained by previous drilling and outcrop.  |



|                    |   | The orientation of sampling is considered appropriate for the current geological interpretation of the mineral style.  No sample bias due to drilling orientation is known.   |
|--------------------|---|---|
| Sample<br>security | The measures taken to ensure sample security.                         | Chain of Custody is managed by the Company until samples pass to a certified assay laboratory for subsampling and assaying. The core trays are stored on secure sites and delivered to the assay laboratory by the Company or a competent agent. When not in transit, they are kept in locked premises. Where appropriate transport logs have been set up to track the progress of samples. |
| Audits or reviews  | The results of any audits or reviews of sampling techniques and data. | Sampling techniques and procedures are regularly reviewed internally, as is data. To date, no audits of sampling techniques and data have been completed on the drilling programme.   |

# **Section 2 Reporting of Exploration Results**

(Criteria in this section apply to all succeeding section)

| Criteria                                | JORC Code Explanation  | Commentary  |
|---|--|---|
| Mineral<br>Tenement and<br>Land Status  | Type, name/reference number, location and ownership including agreements or material issues with third parties including joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. | The Bauloora Project is comprised of EL8994 and EL9464. The license is owned 100% by Legacy Minerals Pty Ltd (a fully owned subsidiary of Legacy Minerals Holdings Limited). There are no royalties or encumbrances over the tenement areas.  |
|   | The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.   | The land is primarily freehold land. There are no native title interests in the license area.   |
| Exploration<br>Done by Other<br>Parties | Acknowledgment and appraisal of exploration by other parties.  | Teck Exploration - conducted mapping, IP geophysics, rock chip sampling, diamond and RC drilling. BP Minerals/MM&S - conducted detailed mapping, geochemical sampling and AC drilling. Billiton Australia - conducted mapping, IP geophysics, rock chip sampling. North Limited – rock chip sampling, soil sampling, drilled AC and RC holes. Robust Resources – soil sampling diamond and RC drilling. Bushman Resources – Rock chip sampling. |
| Geology                                 | Deposit type, geological setting and style of mineralisation   | Known mineralisation at the Bauloora Project sits within the Silurian Frampton Volcanics, and Devonian Bethungra Formation, Cowcumbala Rhyolite and Deep Gully Creek Conglomerate. The Project is considered prospective for low-sulphidation epithermal style gold-silver and basemetal mineralisation.  |
| Drill hole<br>Information               | A summary of all information material to the understanding of the exploration results including tabulation of the following information for all Material drill holes:  | See Table 1 in the body of the article.   |



|  | <ul> <li>Easting and northing of the drill hole collar</li> <li>Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>Dip and azimuth of the hole</li> <li>Down hole length and interception depth</li> <li>Hole length</li> </ul> |   |
|--|--|---|
|  | If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.                                      | Not applicable. Information provided in Table 1.  |
|  | In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.   | Significant intervals defined using >=0.2g/t Au or >=10g/t Ag, or >=0.25% Cu, >=0.25% Pb+Zn, >=1m downhole width, and <=1m internal waste.  |
| Data<br>aggregation<br>methods                       | Where aggregated intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.                              | High-grade intervals are only reported where they differ significantly to the overall interval. Reporting of the shorter intercepts allows a more thorough understanding of the overall grade distribution.   |
|  | The assumptions used for any reporting of metal equivalent values should be clearly stated.  | No metal equivalents reported.  |
| Relationship<br>between                              | These relationships are particularly important in the reporting of exploration results. If the geometry of the   | Preliminary interpretation is that the veins dip steeply to the west averaging 85° and strike north to north-north-east. The vein trend remains open along strike and down dip. Preliminary down hole structural observations from these holes show steeply west dipping (80-85°) orientations for veins and breccias and though true widths are not yet known, they are estimated to be 70% of the down hole interval. |
| mineralisation<br>widths and<br>intercept<br>lengths | mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there   | The orientation of key structures may be locally variable and the relationship to mineralisation is yet to be identified.   |
|  | should be a clear statement to this effect.  | Drill holes are planned as perpendicular as possible in plan view to intersect the geological targets. At this early stage of exploration, drilling and geological knowledge of the project accurate true widths are not yet possible as there is insufficient data, however it is estimated true widths are likely 70% of downhole lengths.  |
| Diagrams   | Appropriate maps and sections (with scales) and tabulations of intercepts should be  | Refer to Figures in body of text.   |
|  | included for any significant discovery being<br>reported. These should include, but not be<br>limited to a plane view of drill hole collar<br>locations and appropriate sectional views.   | A prospect location map and plan view are shown in<br>the report. Other relevant maps are shown in the<br>Company's Prospectus dated 28 July 2021.  |
| Balanced<br>Reporting                                | Where comprehensive reporting of all<br>Exploration Results is not practical,<br>representative reporting of both low and  | See body of the report.   |
|  |  |   |



|   | high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.  | Reports on historical exploration can be found in the Company's Prospectus dated 28 July 2021.   |
|---|--|--|
| Other<br>substantive<br>exploration<br>data | Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observation; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. | All material or meaningful data collected has been reported. The geological results are discussed in the body of the report.   |
| Further Work                                | The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large – scale step – out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.   | See body of report.  See figures in body of report.  Further exploration will be planned based on ongoing drill results, geophysical surveys and geological assessment of prospectivity. |



## **Endnotes**

Table 2: Major Mineral Resources of NSW

| Project & Company   | Mineral<br>Resource      | Measured<br>Resource      | Indicated Resource                  | Inferred Resource               |
|---|--------------------------|---------------------------|-------------------------------------|---------------------------------|
| Boda-Kaiser, NSW (Alkane Resources<br>Ltd)                                  | 7.26Moz Au,<br>1.38Mt Cu | -                         | -                                   | 7.26Moz Au,<br>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 (2022)<br>(Newcrest Mining Ltd), Newmont<br>Corporation | 33.31Moz Au,<br>7.9Mt Cu | 0.31Moz Au,<br>0.041Mt Cu | 33Moz Au, 7.3Mt<br>Cu               | 0.75Moz, 1.1Mt<br>Cu            |
| Cadia East, NSW (2013)  | 37.6Moz Au,<br>7.53Mt Cu |                           | 2,500Mt @ 0.42g/t<br>Au, 0.28g/t Cu | 360Mt @ 0.34g/t<br>Au, 0.19% Cu |
| Cowal, NSW (Evolution Mining<br>Limited)                                    | 9.618Moz Au              | 0.367Moz Au               | 7.33Moz Au                          | 1.92Moz Au                      |
| Nth Parkes, NSW (CMOC Mining Pty Ltd  | 3.09Moz Au,<br>2.63Mt Cu | 1.64Moz<br>Au,1.2Mt Cu    | 1.1Moz Au, 1.1Mt<br>Cu              | 0.35Moz Au,<br>0.33Mt Cu        |

<sup>&</sup>lt;sup>1</sup> ASX LGM: 21 November 2022 New High-Grade Gold Assays Returned Across Bauloora Project

ii ASX LGM: 14 August 2023 Gold-Zone at Breccia Sinter Grows, Geophysics Completed

<sup>&</sup>lt;sup>iii</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

iv Legacy Minerals Prospectus, dated 28 July 2021.

<sup>&</sup>lt;sup>v</sup> ASX LGM: 14 August 2023 Gold-Zone at Breccia Sinter Grows, Geophysics Completed

vi ASX LGM: 5 April 2023 Newmont Farm-in at Bauloora Project

vii ASX LGM: 10 May 2023 Drilling Assays Confirm New Epithermal Discovery at Bauloora

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

ix Alkane Resources Kaiser Resource Estimate of ~4.7M Gold Equivalent 27 February 2023

<sup>&</sup>lt;sup>x</sup> Newcrest Mining Annual Mineral Resources and Ore Reserves Statement 17 February 2022

xi Regis Resources Annual Mineral Resource and Ore Reserve Statement 8 June 2022

xii Evolution Mining 2022 Annual Report

xiii Sandfire Resources NL 2019 Annual Report