

28 April 2023







## Quarterly Activities Report

For the Quarter Ended 31 March 2023

### HIGHLIGHTS:

#### LAVERTON SOUTH PROJECTS

-  Gold mineralisation confirmed to a depth of 200m in assay results received from RC drilling in the December Quarter at Target 3 with multiple +1g/t gold intercepts
-  Gold anomalism confirmed in air-core drilling at Target 4
-  Gravity survey completed at Target 3 revealing potential extensions to the prospective sheared granite contact host in the 2.6 kilometre-long gold anomaly
-  UltraFine+ soil sample assay results from a large >3,000 sample programme at Jungar Flats Project starting to be received

#### CORPORATE

-  \$4.49 million cash at quarter-end, meaning that E79 Gold is well-funded to continue significant exploration programs

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West Australian-based explorer E79 Gold Mines Limited (**ASX: E79**) ('E79 Gold' or 'the Company') is pleased to report on activities during the quarter ended 31 March 2023.

E79 Gold has 944 km<sup>2</sup> of prospective ground with two flagship projects, the Laverton South Project in the world-class Laverton gold district and the Jungar Flats Project in the North Murchison region.

**E79 Gold CEO, Ned Summerhayes, said:** *"This quarter saw a large volume of assay results, for work completed before Christmas, returning from the labs. Significant bedrock gold mineralisation was identified in RC drilling at Target 3 and initial air-core drilling returned promising results at Target 4. Results from the large-scale auger program at the Jungar Flats Project also started returning."*

#### ASX Code: E79

Shares on issue: 66M

Market capitalisation: 7.3M

Cash: \$4.49M (31 March 2023)

ABN 34 124 782 038

#### Head Office

168 Stirling Hwy

Nedlands, Western Australia 6009

T: +61 8 9287 7625

E: [info@e79gold.com.au](mailto:info@e79gold.com.au) W: [e79gold.com.au](http://e79gold.com.au)

*“Planned follow-up RC and air-core drilling for the quarter was delayed by drilling rig issues, so the Company used this time to undertake a gravity survey at Target 3 which appears very successful in outlining the prospective granite body. Potential extension and offset zones were identified and will be drill tested in upcoming air-core programs with RC drilling also re-commencing shortly at Target 3 testing at depth and along strike.*

*“Gold mineralisation at Target 3 has similarities with that at the Granny Smith Gold Mine where changes in the geometry of the granite contact controls the higher grade portions of a 3.5 kilometre gold anomalous zone.”*

## Safety and Productivity

A summary of key performance indicators during the March 2023 Quarter is provided below:

- Exploration activities were undertaken safely with no incidents to report.
- A gravity survey was completed at Target 3 at Laverton South.
- Exploration tenement applications were granted at the Murchison and Laverton South projects, increasing the Company's exposure to under-explored areas.

## Laverton South Projects

### Lake Yindana (100%) and Pinjin (100%)

The Laverton South Project, with an area of 355km<sup>2</sup>, covers a southern portion of the Laverton Tectonic Zone ('LTZ') approximately 130km east-northeast of Kalgoorlie, within the major gold producing Archean Yilgarn Craton of Western Australia (Figure 1).

The LTZ is one of the world's richest gold belts with more than 30 million ounces ('Moz') in historical production, reserves and resources and hosts numerous prolific deposits including Granny Smith (5.8Moz), Sunrise Dam (10.3Moz) and Wallaby (11.8Moz)<sup>1</sup>.

The Laverton South Project comprises two tenement packages, Lake Yindana and Pinjin:

**Pinjin (100%)** – 139km<sup>2</sup> of prospective ground with historical drill targets

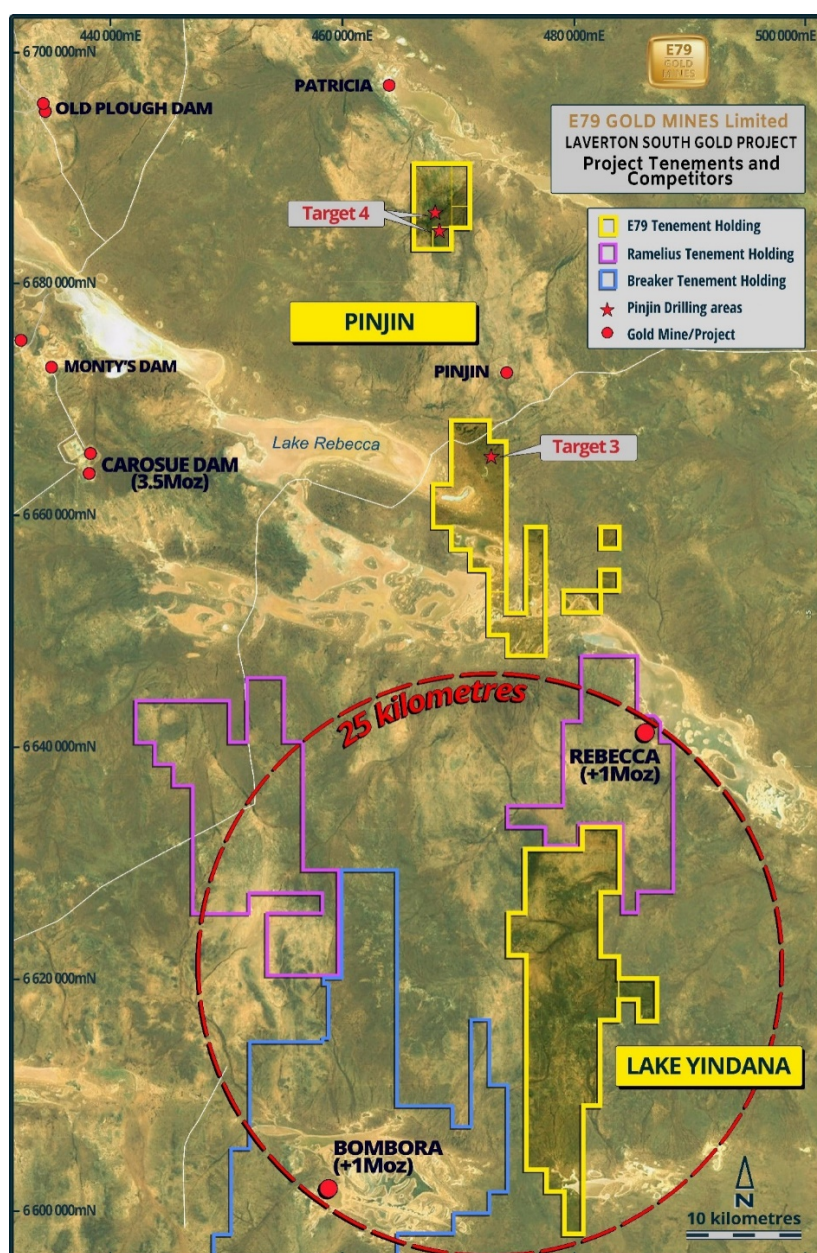
**Lake Yindana (100%)** – 216km<sup>2</sup> within a newly identified greenstone package

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<sup>1</sup> Refer to E79 Gold Prospectus dated 17 August 2021

These projects sit within 15km either side of the ~1Moz Rebecca deposit (Ramelius Resources<sup>2</sup>), while the Pinjin ground straddles the Anglo-Saxon deposits (Hawthorn Resources) and is located 7.5km south of the historic Patricia open pits (OzAurum Resources).

Breaker Resources' +1.5Moz Bombora project sits 20km west of Lake Yindana. Ramelius Resources' takeover offer<sup>3</sup> for Breaker Resources has commenced the corporate consolidation of gold deposits in the South Laverton region, with E79 Gold's Lake Yindana tenement located between Breaker's Lake Roe and Ramelius' Rebecca projects.



**Figure 1:** Map of Laverton South tenements showing neighbours and nearby deposits.

<sup>2</sup> Refer to Ramelius Resources Limited ASX Release dated 12 April 2022

<sup>3</sup> Refer to Ramelius Resources Limited ASX Release dated 20 March 2023

## **Pinjin (E28/2283, E28/2284, E28/2375, E31/0999, E31/1005, E31/1007, E31/1056, E31/1082) 100%**

The Pinjin Project covers 139km<sup>2</sup> of prospective ground within the Laverton South Project.

Work completed during the quarter included review and analysis of the returning RC drilling and AC drilling assays from the December Quarter.

The RC drilling demonstrated the presence of gold within a pyritised granite along the eastern contact of a small granitic intrusion. Gold was found to a depth of 200m, with the Target 3 gold system now delineated over a strike length of 2,600m and remaining open in all directions.

Results were released to the ASX on 13 February 2023 with significant assays including:

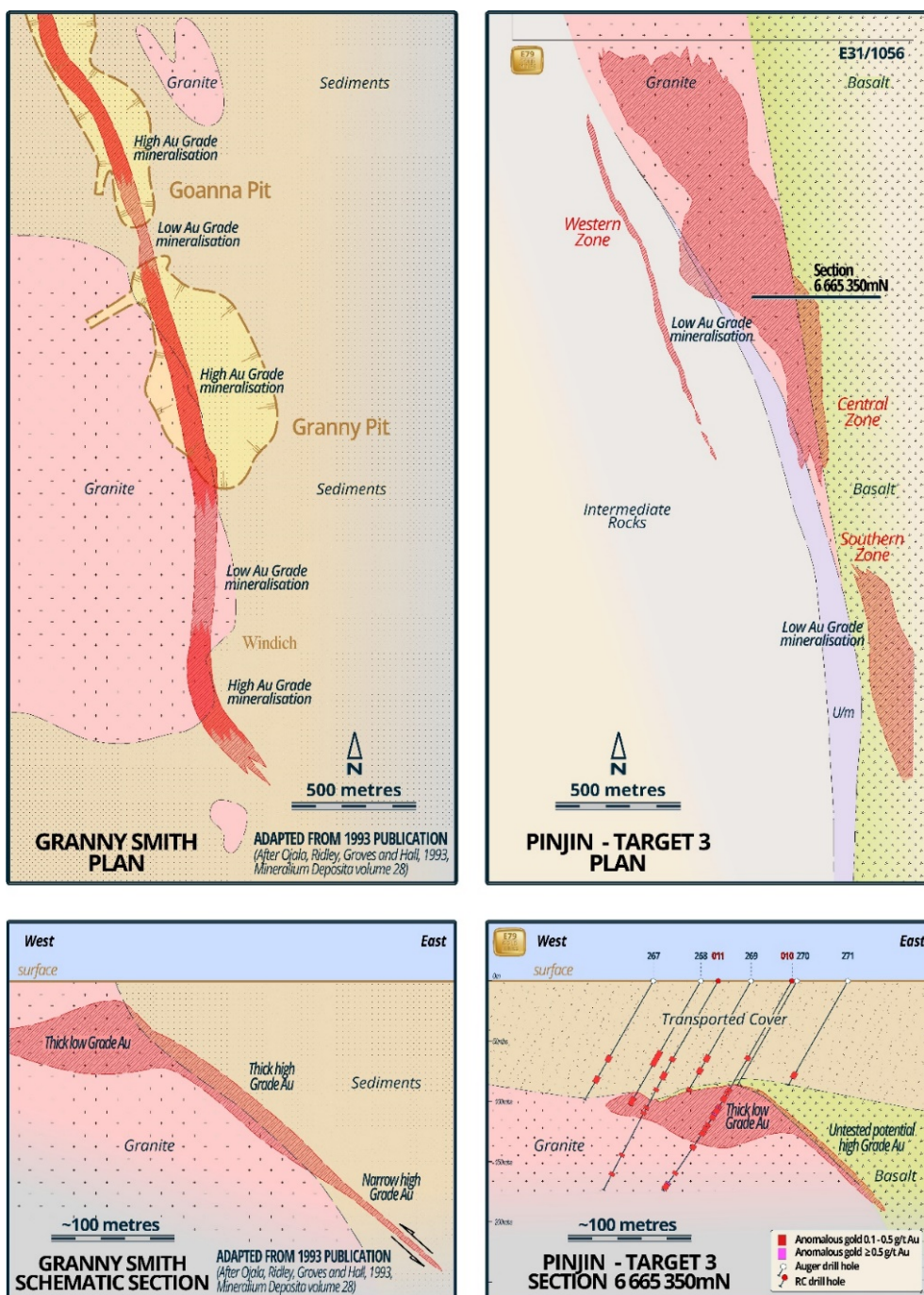
- **1m @ 1.70 g/t Au** from 103m, and
- **1m @ 1.35 g/t Au** from 106m, and
- **1m @ 1.80 g/t Au** from 110m within a broader anomalous zone of:
  - **23m @ 0.45 g/t Au** from 95m in drill-hole PRC009
- **1m @ 1.60 g/t Au** from 122m, and
- **1m @ 2.33 g/t Au** from 128m within a broader anomalous zone of:
  - **12m @ 0.58 g/t Au** from 120 in drill-hole PRC010
- **1m @ 1.78 g/t Au** from 197m within a broader anomalous zone of:
  - **5m @ 0.62 g/t Au** from 197m also in drill-hole PRC010
- **6m @ 0.36 g/t Au** from 162m in drill-hole PRC008

The gold mineralisation / anomalism from first-pass RC drilling at Target 3 demonstrate strong similarities with the large Granny Smith deposits (Goanna, Granny Smith and Windich), where gold deposits sit within a ~3km long zone of low-grade gold anomalism within which the higher-grade gold deposits are related to changes in geometry of the host structures on the eastern side of a kilometre-scale granitic intrusion<sup>4</sup>.

Gold mineralisation in the Granny Smith deposits is expressed as thick zones of low-grade material within the granite, with thick high-grade zones along the granite/greenstone contact where the angle of the contact becomes flatter (see Figure 2).

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<sup>4</sup>There is no certainty that further work will lead to achieving the same size, shape, grade or form of the comparison deposit. E79 Gold's project is in a different stage of development and that further exploration needs to be undertaken to further prove or disprove any comparison.



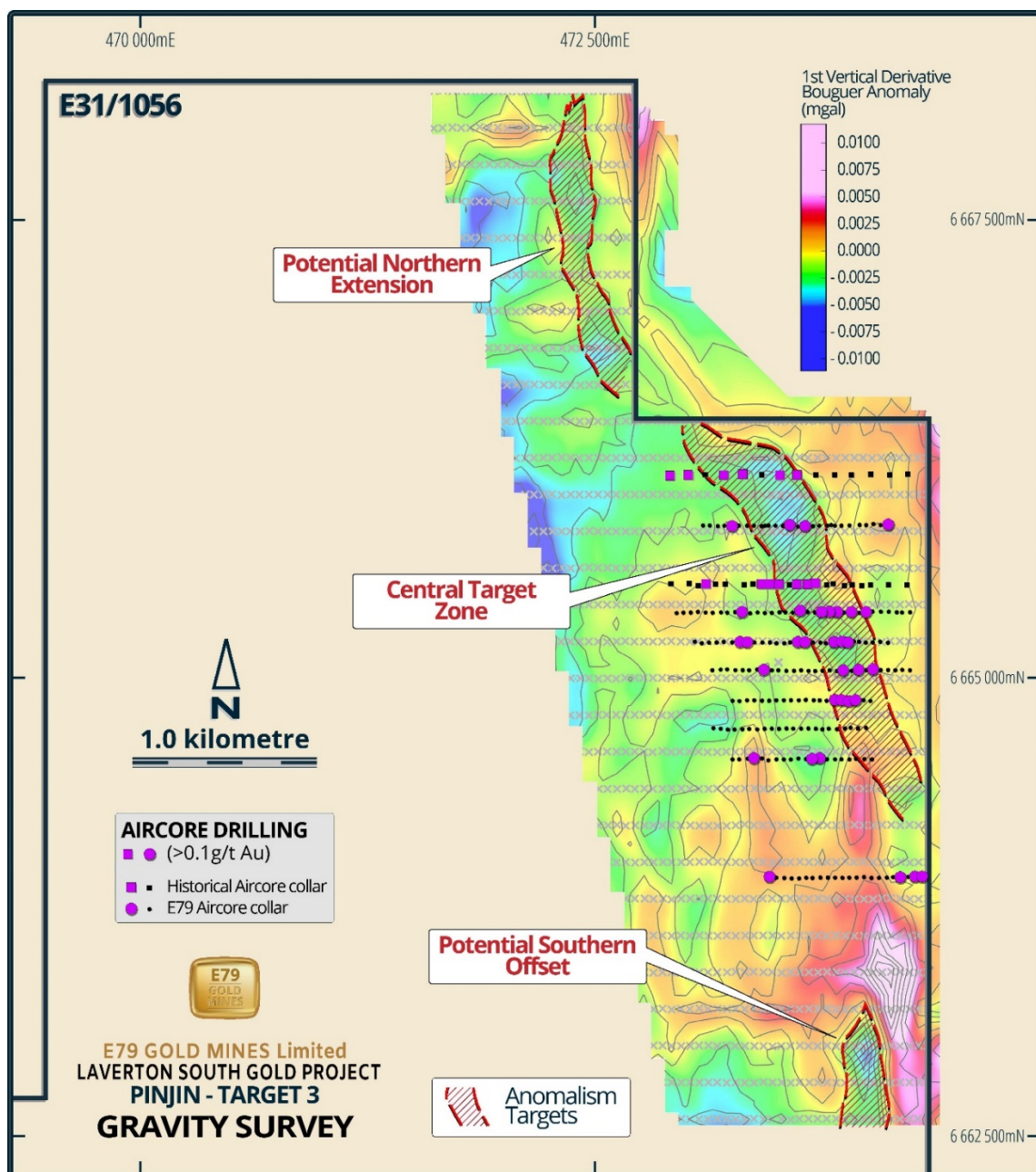
**Figure 2:** Comparison of Granny Smith gold system on the left (from 1993 publication) and Target 3<sup>5</sup> on the right.

A ground gravity survey was completed late in the quarter at Target 3 in an effort to map the prospective granite under the transported cover.

The data was acquired on a 200m line spacing and 50m station spacing. Results<sup>6</sup> show the prospective granitic intrusion and potential extensions to the north and a possible offset to the south. These will be drill tested in upcoming air-core drill programs.

<sup>5</sup> Refer to E79 ASX Announcement 13 February 2023

<sup>6</sup> Refer to E79 ASX Announcement 27 April 2023

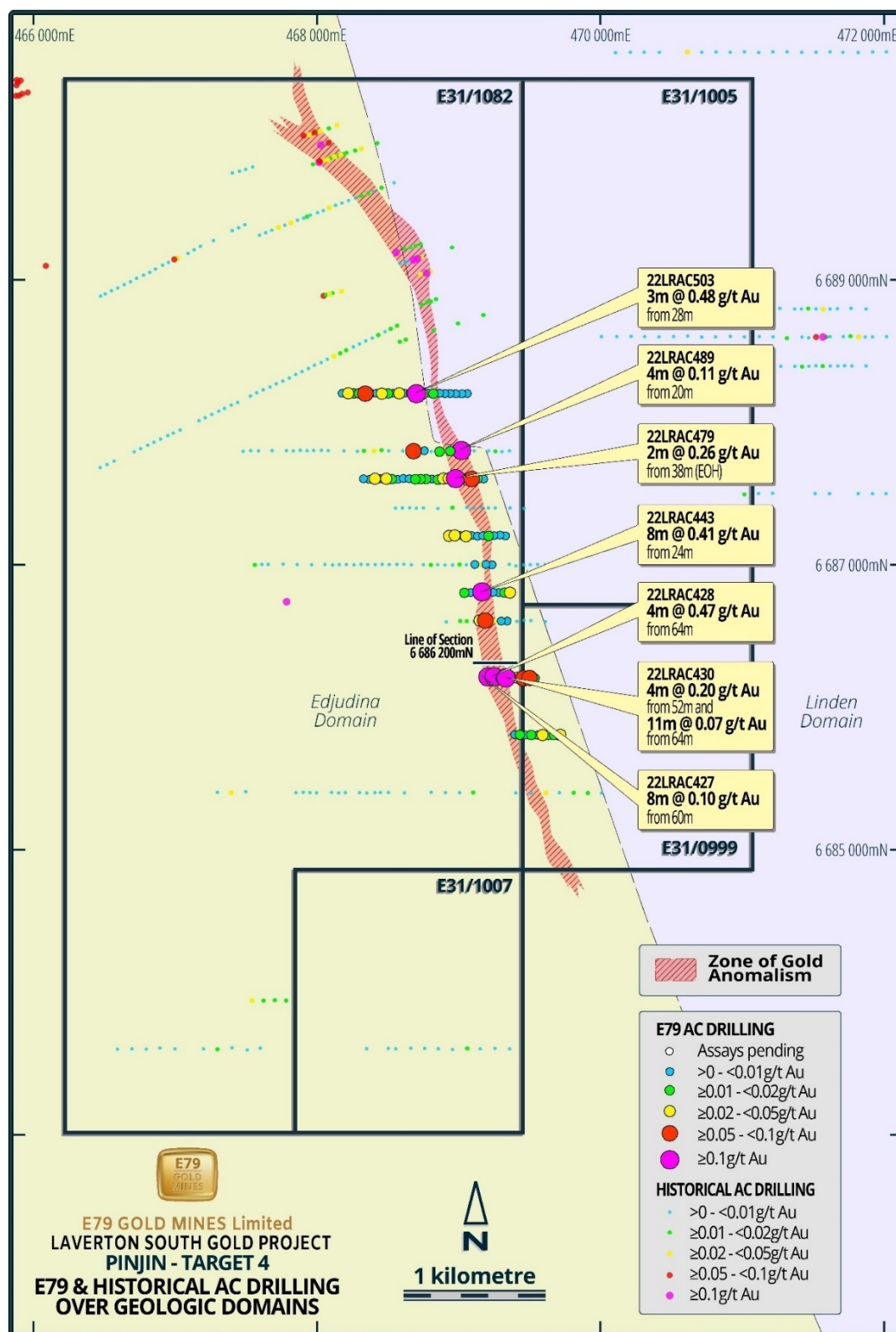


**Figure 3:** Bouguer Anomaly gravity image showing subtle gravity low around prospective granite intrusion.

Elsewhere at the Pinjin Project, results from the 4,000m air-core program at Target 4 were returned during the quarter<sup>7</sup>. Gold anomalism was identified in fresh rock, proximal to a contact between intermediate and mafic units, supported by gold pathfinder elements including arsenic and antimony anomalism. Significant results include:

- 8m @ 0.41 g/t Au from 24m (22LRAC443)
- 4m @ 0.47 g/t Au from 64m (22LRAC428)
- 3m @ 0.48 g/t Au from 28m (22LRAC503)
- 2m @ 0.26 g/t Au from 38m (22LRAC479) (EOH)

<sup>7</sup> Refer to E79 ASX Announcement 27 February 2023



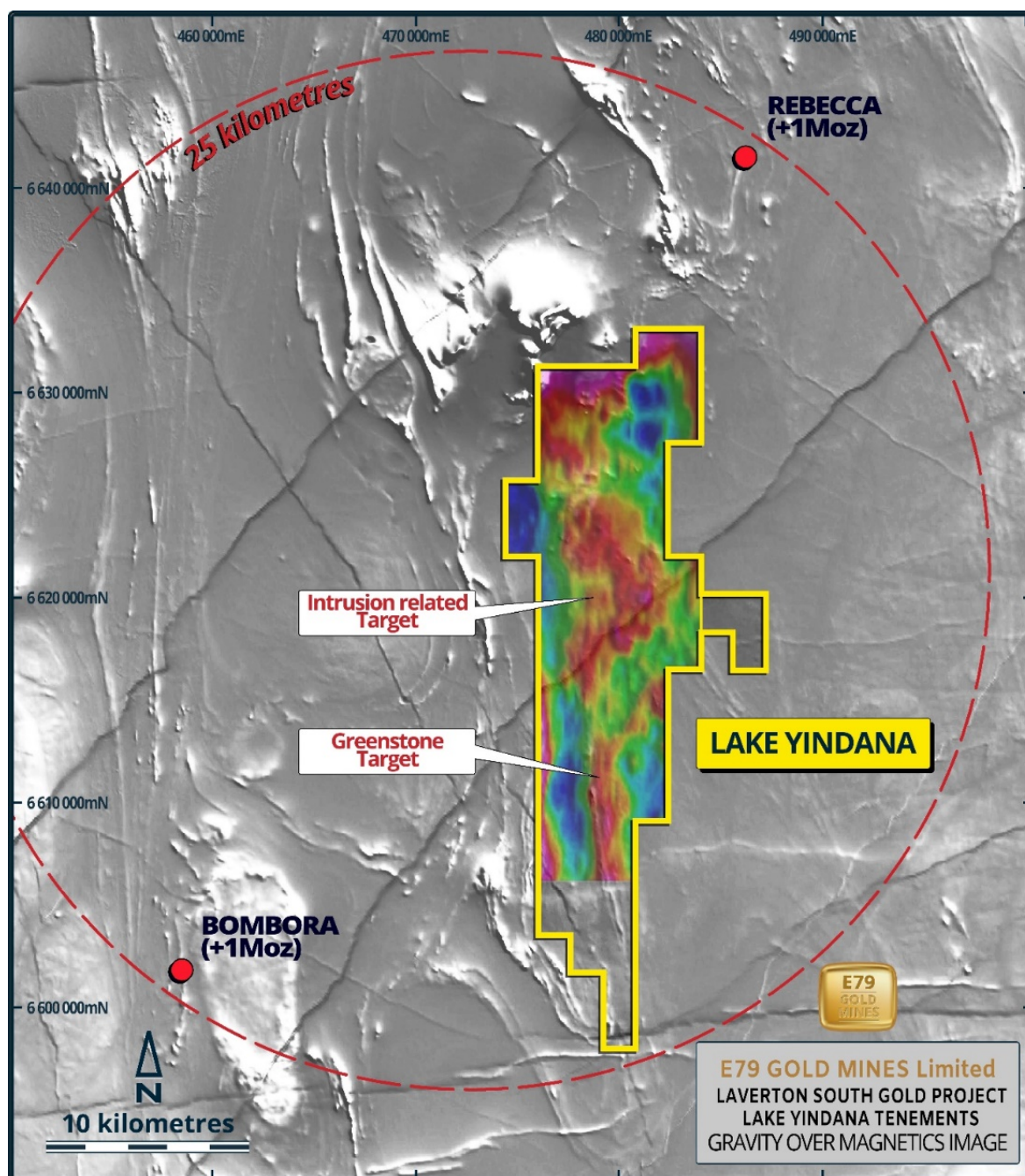
**Figure 4:** Map of air-core results at Target 4.

In the north of the area drilled, an east-west break is observed in the regional magnetic data, with anomalous gold in drilling occurring on either side of the break, with aircore drill lines spaced 400m apart. This break could represent a cross-cutting fault, or a demagnetised zone, both of which are conducive to gold deposition.

## Lake Yindana (E28/2659, E28/3239) 100%

Lake Yindana covers an area of 216km<sup>2</sup> in the southern portion of the +30Moz LTZ, approximately 130km east-northeast of Kalgoorlie (Figure 1).

The Project consists of a large untested greenstone belt, defined by corroborating magnetics and gravity data (see Figure 5), as well as historic drilling, which runs for over 25km through the tenement.



**Figure 5:** Map of gravity survey at Lake Yindana. Hotter colours are more dense greenstone rocks. Map background is regional magnetics.

Access to the ground has been to date stalled by heritage issues, which was simplified during the quarter with new claim boundaries being drawn up to reduce the number of Native Title claimants to one.

E79 Gold looks forward to working with the relevant heritage group to advance the understanding of this under-explored area.

E79 Gold believes that the largest deposits are typically found early in new exploration search spaces, and the recently identified greenstone belt at Lake Yindana represents an exciting ‘first mover’ opportunity.

## **Murchison Project**

### **Jungar Flats**

**(E51/1975, E51/1803, E51/1848, E20/0926, E51/2122) 100%,  
(E51/1681) 100% of Mineral Rights (Excluding Iron Rights)**

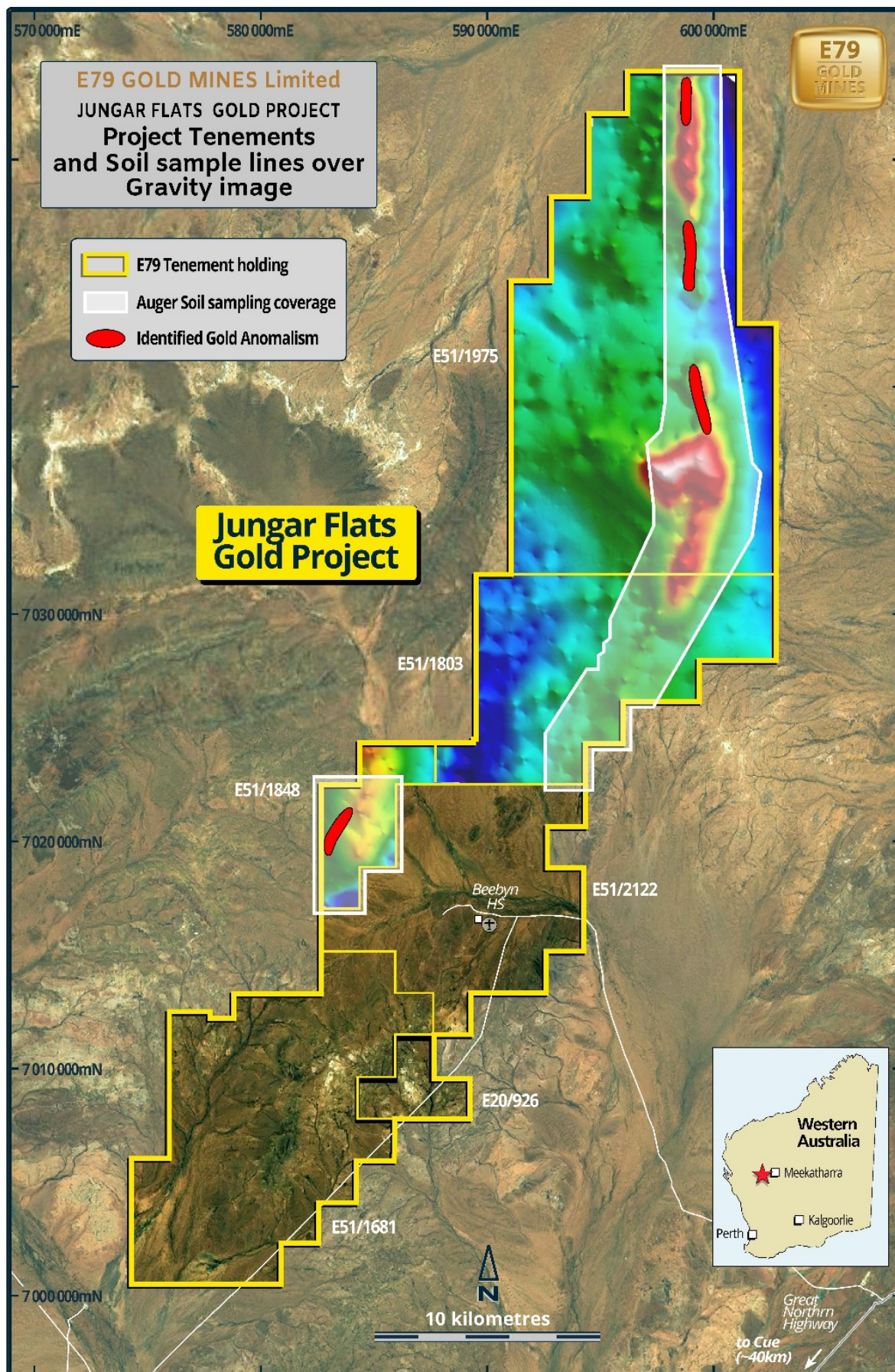
The Jungar Flats Project, in the North Murchison region, is located 70km west of Meekatharra and 45km north-northeast of the 2.8Moz Big Bell gold deposit.

The Project tenure covers an area of 541km<sup>2</sup>, including a recently pegged tenement and the tenement that E79 Gold has the mineral rights (excluding iron rights).

This area contains approximately 90km of strike of the highly prospective Big Bell Shear and straddles a narrow north-south trending greenstone belt.

During the December Quarter, a 2,883-sample auger soil sampling program was completed testing for gold and multi-elements over 35km of prospective greenstone at Jungar Flats (Figure 6).

Results started returning during the March Quarter but were not available at the time of this report. The Murchison area is prospective for gold, base metals, rare earths, iron ore and platinum group elements (‘PGE’s’).



**Figure 6:** Jungar Flats Project area, with soil sample lines over gravity.

## Corporate

As at the end of the Quarter, the Company's cash totalled \$4.49 million. E79 Gold remains well-funded to progress significant exploration programs.

### *Use of Funds*

On 7 October 2021, E79 Gold successfully commenced trading on the ASX after raising a total of \$7 million. As required by ASX Listing Rule 5.3.4, E79 Gold provides a comparison of actual expenditure to 31 March 2023 against the estimated expenditure set out in the Company's Prospectus dated 17 August 2021.

| Activity Description                                   | Prospectus<br>Estimated Use<br>of Funds<br>\$ | Actual<br>to<br>31 March 2023<br>\$ |
|--|---|-------------------------------------|
| Exploration costs (including staff costs) – 2 years    | 6,860,000                                     | 3,128,933                           |
| Administration costs (including staff costs) – 2 years | 1,400,000                                     | 1,030,961                           |
| Expenses of the Offers                                 | 660,000                                       | 689,298                             |

### *Additional ASX Information*

- Exploration expenditure during the quarter was \$305,000 excluding staff costs. Full details of exploration activity during the quarter are included in this Quarterly Activities Report.
- There were no mining production and development activities during the quarter.
- Payments to related parties of the Company and their associates during the quarter was \$36,000. This consists of non-executive directors' fees.

E79 Gold is an active explorer with upcoming activities including:

- **April 2023** Commence AC and RC drilling at Laverton South Project
- **May-June 2023** Commence aircore drilling at Lake Yindana
- **August 2023** Commence aircore drilling at Murchison Project

E79 Gold Mines will be presenting at the following events:

- **May 2023** Present at RIU Sydney Conference
- **May 2023** Present at RSS Conference on Gold Coast

Our motto: **Money in the ground.**

Yours sincerely,



**Ned Summerhayes**  
**Chief Executive Officer**

*The information in this report that relates to Exploration Results is based on information compiled by Mr Ned Summerhayes, a Competent Person who is a member of the Australian Institute of Geoscientists. Mr Summerhayes is a full-time employee, a shareholder and an option holder of the Company. Mr Summerhayes 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 Summerhayes consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

**Previously Reported Information:** *The information in this report that references previously reported exploration results is extracted from the Company's ASX market announcements released on the date noted in the body of the text where that reference appears. The previous market announcements are available to view on the Company's website or on the ASX website ([www.asx.com.au](http://www.asx.com.au)). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.*

Authorised for release by the CEO of E79 Gold Mines Limited.

**For Further Information, please contact:**

**E79 Gold Mines Limited**

Phone: 08 9287 7625

[info@e79gold.com.au](mailto:info@e79gold.com.au)

**Media Enquiries:**

Nicholas Read – Read Corporate

Phone: 08 9388 1474

## Appendix 1: Tenement Information

| Lease                         | Location<br>(Western Australia) | Area (km2) | Status  | % Interest<br>at start of<br>Quarter | % Interest<br>at end of<br>Quarter |
|-------------------------------|---------------------------------|------------|---------|--------------------------------------|------------------------------------|
| <b>Murchison Project</b>      |                                 |            |         |                                      |                                    |
| E 51/1975                     | Jungar Flats                    | 211.3      | LIVE    | 100                                  | 100                                |
| E 51/1803                     | Jungar Flats                    | 90.7       | LIVE    | 100                                  | 100                                |
| E 20/0926                     | Jungar Flats                    | 12.2       | LIVE    | 100                                  | 100                                |
| E 51/1848                     | Jungar Flats                    | 21.4       | LIVE    | 100                                  | 100                                |
| E51/2122                      | Jungar Flats                    | 82.5       | LIVE    | 100                                  | 100                                |
| E51/1681                      | Jungar Flats                    | 122.4      | LIVE    | 100*                                 | 100*                               |
| <b>Laverton South Project</b> |                                 |            |         |                                      |                                    |
| E 28/2659                     | Lake Yindana                    | 206.8      | LIVE    | 100                                  | 100                                |
| E28/3239                      | Lake Yindana                    | 8.9        | LIVE    | 100                                  | 100                                |
| E 31/1082                     | Pinjin                          | 20.8       | LIVE    | 100                                  | 100                                |
| E 31/1005                     | Pinjin                          | 5.9        | LIVE    | 100                                  | 100                                |
| E 31/1056                     | Pinjin                          | 65.2       | LIVE    | 100                                  | 100                                |
| E 28/2375                     | Pinjin                          | 32.6       | LIVE    | 100                                  | 100                                |
| E 28/2283                     | Pinjin                          | 3.0        | LIVE    | 100                                  | 100                                |
| E 28/2284                     | Pinjin                          | 5.9        | LIVE    | 100                                  | 100                                |
| E 31/1007                     | Pinjin                          | 3.0        | LIVE    | 100                                  | 100                                |
| E 31/0999                     | Pinjin                          | 3.0        | LIVE    | 100                                  | 100                                |
| <b>Mount Gibson Project</b>   |                                 |            |         |                                      |                                    |
| E59/2772                      | Mt Gibson                       | 47.7       | PENDING | 100^                                 | 100^                               |

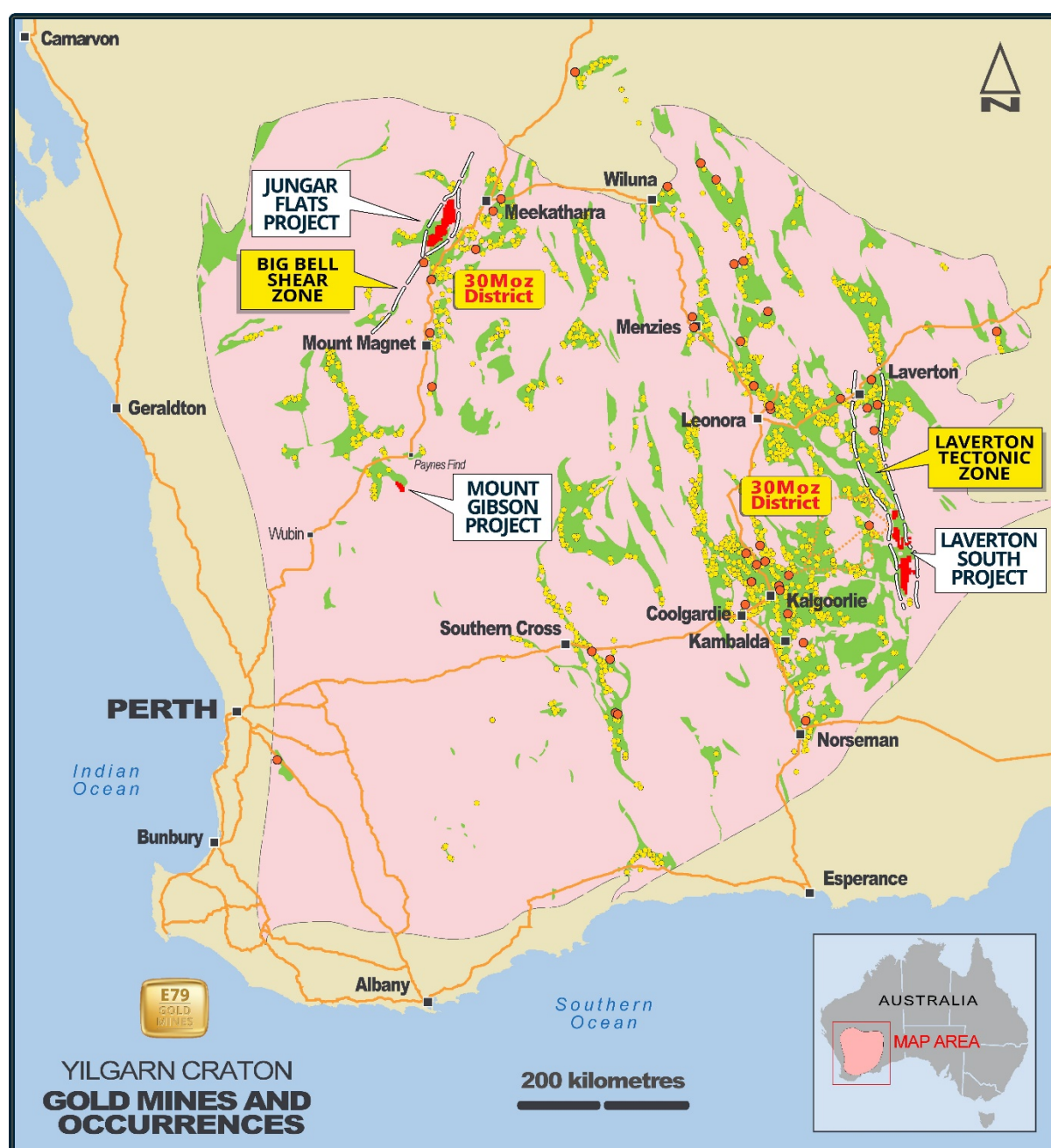
\* E79 Gold holds mineral rights (excluding iron rights)

^ Tenements under application

## ABOUT E79 GOLD MINES LIMITED (ASX: E79)

E79 Gold's Projects comprise ~944km<sup>2</sup> of highly prospective ground within the Laverton Tectonic Zone and the Murchison Goldfields, both of which are endowed with >30 million ounces of gold. The Laverton South Project is located 130km east-northeast of Kalgoorlie while the Jungar Flats (Murchison) Project is located 70km west of Meekatharra. The Projects are a mix of early stage greenfields exploration and walk-up drill targets.

E79 Gold is well funded to undertake large-scale greenfields exploration programs with a motto of spending money in the ground.



**Figure 7:** Yilgarn Craton Greenstones showing E79 Gold Project locations.