



Geophysics Update

-  **Preliminary results received from a recently acquired ground gravity survey at the Pinjin JV at Laverton South**
-  **2D seismic data collected at Pinjin JV**
-  **Baseline gravity survey to commence at Jungar Flats Project**
-  **Initial aircore drilling program increased to 25,000m with new geophysical targets identified**

West Australian-based explorer E79 Gold Mines Limited (**ASX: E79**) ('E79 Gold' or 'the Company') is pleased to report preliminary results from recently completed geophysical programs over its Laverton South Gold Project in WA.

E79 Gold, which listed recently on the ASX following a successful \$7 million Public Offer, has two flagship projects, the Laverton South Project in the world-class Laverton Tectonic Zone ('LTZ') and the Jungar Flats Project in the North Murchison region. Both of these large, underexplored projects sit within greenstone belts that are endowed with over 30 million ounces of gold.

E79 CEO, Ned Summerhayes, said: *"E79 Gold has been busy undertaking various geophysical activities on our tenement package while we conclude our heritage surveys prior to initial drilling at the Laverton South project. Within the Pinjin JV we have both gravity and 2D seismic, with preliminary results from the gravity survey showing a potential intrusion within the greenstone stratigraphy, which requires further exploration. The 2D seismic will be processed in due course and we look forward to unearthing more information about this highly prospective area. Once completed the baseline gravity data at Jungar Flats will give us valuable insight into the geology and structure under cover, similar to the insight's recent gravity data at our Lake Yindana Project has provided."*

ASX Code: E79

Shares on issue: 65M
Market capitalisation: 15.3M
Cash: \$8.7M (12 October 2021)
ABN 34 124 782 038

Head Office

168 Stirling Hwy
Nedlands, Western Australia 6009
T: +61 8 9287 7625
E: info@e79gold.com.au W: e79gold.com.au

Laverton South Project

The Laverton South Project, with an area of 346km², covers a southern portion of the Laverton Tectonic Zone ('LTZ') approximately 130km east north-east 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 (3.7Moz), Sunrise Dam (10.3Moz) and Wallaby (11.8Moz).

Within the Laverton South Project E79 have two tenement packages, Lake Yindana and the Pinjin JV. These projects sit within 15km either side of the ~1Moz Rebecca deposit (Apollo Consolidated - subject to a Board-recommended take-over offer from Ramelius Resources), while the Pinjin JV ground straddles the Anglo Saxon deposits (Hawthorn Resources) and has the historic Patricia open pits 7.5km to the north.

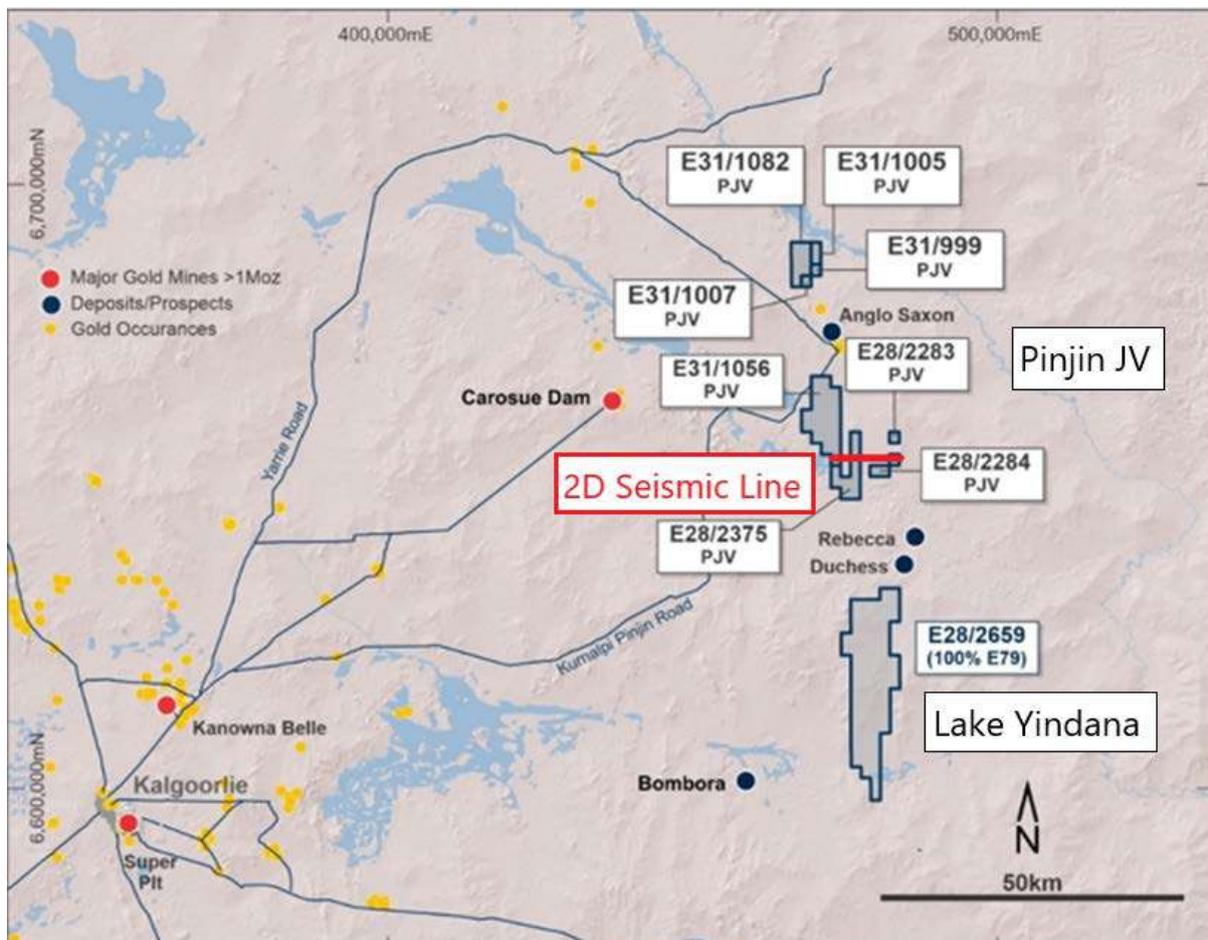


Figure 1: Map of E79 tenements at Laverton South Project

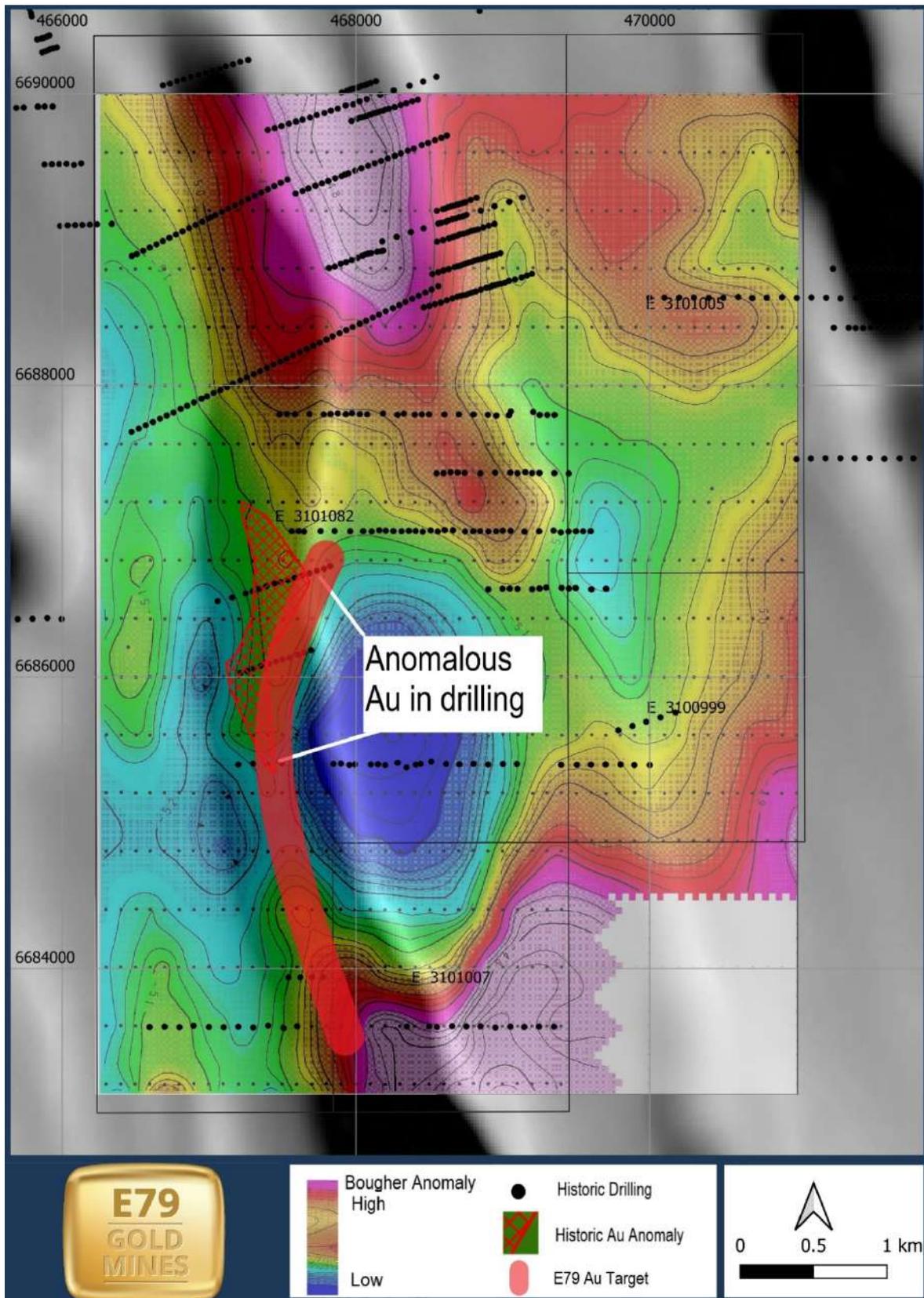


Figure 2: Map of bouguer gravity over magnetics showing gravity low flanked by historic soil anomaly.

Pinjin JV (E28/2283, E28/2284, E28/2375, E31/0999, E31/1005, E31/1007, E31/1056, E31/1082) E79 Earning-In

E79 has a farm-in agreement with St Barbara Limited (“St Barbara”) over the Pinjin Project, covering 139km² of prospective ground within the Laverton South Project. Details of the JV agreement can be found in the Company’s Prospectus.

The Pinjin JV contains a number of targets that were evaluated and ranked by St Barbara, including walk-up drill targets. These targets are generally associated with a dolerite unit that runs through the southern tenement package and contains several highly ranked targets. A 2D seismic survey was recently undertaken to map this dolerite unit at depth and identify the regional stratigraphy. Data has been collected and processing is underway.

A ground survey was completed by Haines Surveys in the northern part of the JV, with preliminary results revealing a potential intrusion into the stratigraphy, as inferred from the deep gravity low on Figure 2.

This potential intrusion is significant as it puts the results from historical exploration into context. The potential intrusion has a historic gold in soil anomaly over the western contact and RAB drilling from a 1987 campaign identified anomalous gold near the northern contact of the intrusion (SWP136 - 12m @ 0.86 g/t Au from 4m and 8m @ 0.23 g/t Au from 24m to EOH¹). This target is considered a high priority with exploration and drill planning underway.

Lake Yindana (E28/2659) 100%

Lake Yindana covers an area of 207km² in the southern portion of the +30Moz LTZ, approximately 130km east-northeast of Kalgoorlie.

The Project consists of a large untested greenstone belt, defined by corroborating magnetics and gravity data, as well as historic drilling, which runs for over 25km through the tenement. Lithologies from the historic drilling shows gabbro, ultramafic and granitic gneiss, with the latter being a similar host to Apollo Consolidated’s Lake Rebecca deposit, 9km to the northwest. Additionally recent gravity data shows intrusion related targets within the greenstone stratigraphy.²

E79 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.

¹ Refer to E79 prospectus

² Refer to ASX Announcement 14 October 2021

Murchison Project

Jungar Flats (E51/1975, E51/1803, E51/1848, E20/0926) 100%

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 (Figure 3).

The Project tenure covers an area of 336km², contains approximately 30km of strike of the highly prospective Big Bell Shear and straddles a narrow north south trending greenstone belt. The Company has contracted Haines Surveys to undertake a gravity survey over the bulk of the tenement package, commencing in late November. Of particular interest is the central greenstone belt which is obscured by granite through the central zone of the tenements. The gravity survey will allow the Company to infer contacts between granite the greenstone sequences and broad structural trends under cover help the Company to refine and plan its initial exploration activities.

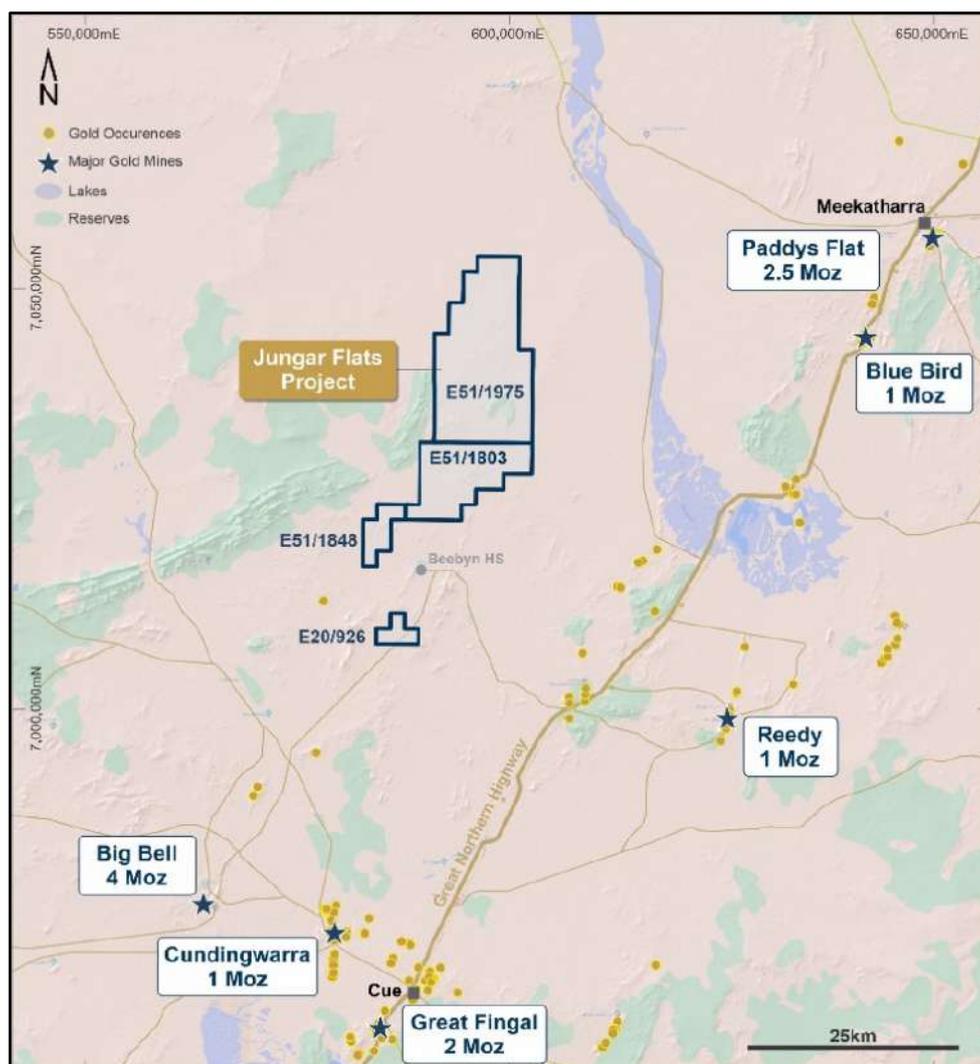


Figure 3: Jungar Flats Project area.

ABOUT E79 GOLD MINES LIMITED (ASX: E79)

E79's Projects comprise ~680km² of highly prospective ground within the LTZ 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 Project is located 70km west of Meekatharra. The Projects are a mix of early stage greenfields exploration and walk-up drill targets.

E79 aims to rank and drill targets within the tenement holdings with 50,000m of drilling planned for its first year of operations.

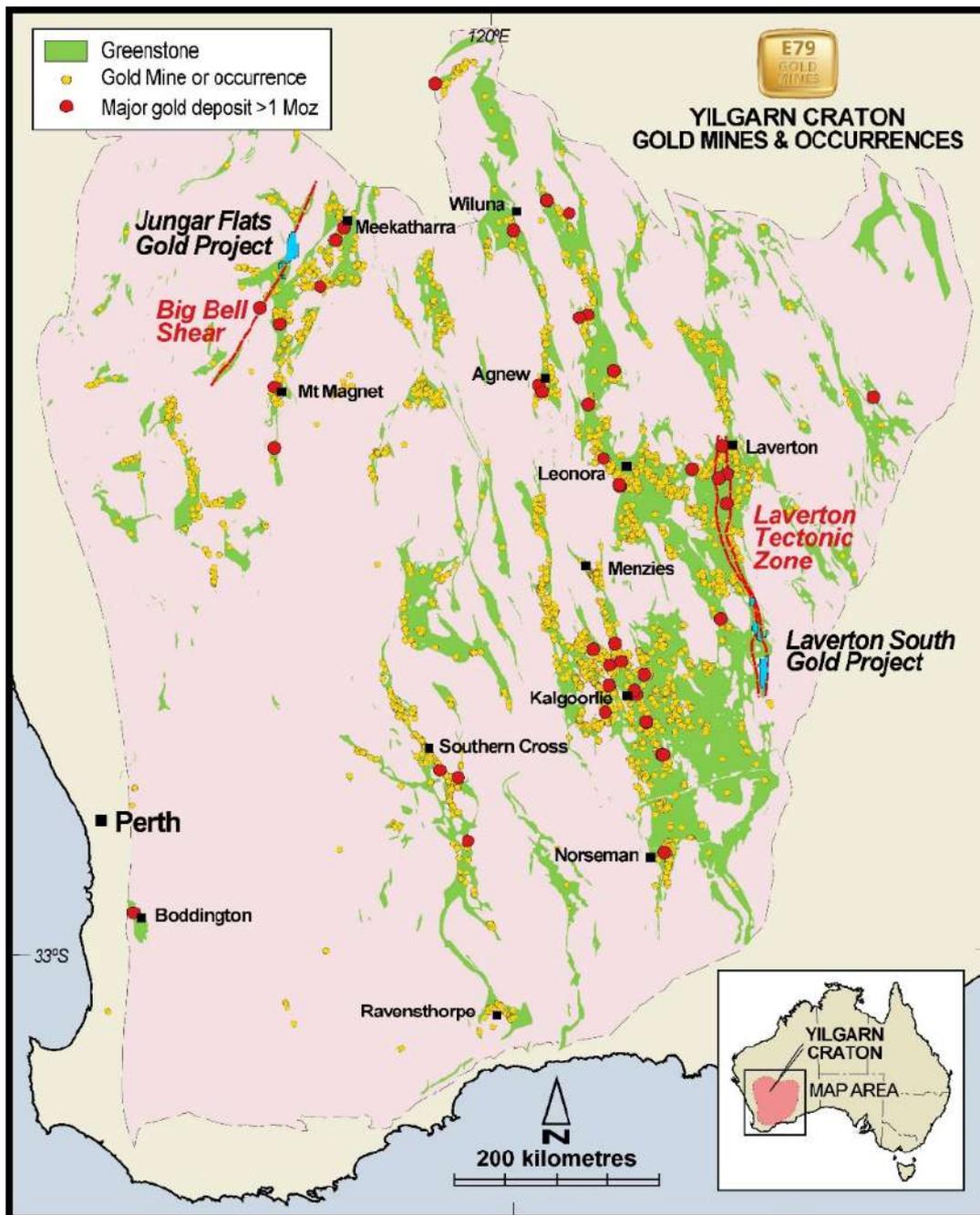


Figure 4: Yilgarn Craton Greenstones showing Project locations.



Planned Activities

E79 is planning a busy and active initial 12 months over the Laverton South and Jungar Flats Projects including:

- **November 2021** Commence baseline Gravity Survey at Jungar Flats
- **November 2021** E79 Annual General Meeting on 26/11/2021
- **December 2021** Present and exhibit at the RIU Resurgence Conference in Perth
- **December 2021-February 2022** Complete initial aircore drill programs
- **February 2022** Exhibit at the RIU Explorers Conference in Fremantle
- **March 2022** Commence large-scale soil sampling at Jungar Flats
- **February-June 2022** Continue drill testing high priority targets
- **May 2022** Present and exhibit at the RIU Sydney Resources Roundup
- **July-August 2022** Test high-priority targets at Jungar Flats

Our motto: Money in the ground.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Ned Summerhayes'.

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.

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

Media Enquiries:

Nicholas Read – Read Corporate

Phone: 08 9388 1474

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • <i>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.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g., ‘reverse circulation drilling was used to obtain 1 m 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.</i> 	<ul style="list-style-type: none"> • The Pinjin JV gravity survey reported consisted of approx. 782 gravity stations in an irregular grid comprising 18 east west lines with a line spacing of 400m and a station interval of 100m. • The lines ranged in length from 3.1km to 4.7km. • Gravity measurements were made using a SENTREX CG5 instrument. Readings of 40 seconds were made at stations. • Base station readings were taken at the beginning and end of each day.
Drilling techniques	<ul style="list-style-type: none"> • <i>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, 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).</i> 	<ul style="list-style-type: none"> • Not applicable as no drilling conducted.
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>Whether a relationship exists between sample recovery and grade and whether sample bias</i> 	<ul style="list-style-type: none"> • Not applicable as no drilling conducted.

Criteria	JORC Code explanation	Commentary
Logging	<p><i>may have occurred due to preferential loss/gain of fine/coarse material.</i></p> <ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • Not applicable as no drilling conducted.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • Not applicable as no samples collected.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • 0.1milligal precision • elevation precision +- 3 cm • 40 second reading times

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> • Not applicable
Location of data points	<ul style="list-style-type: none"> • 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. • Specification of the grid system used. • Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> • Geodetic grade GPS, Trimble R8
Data spacing and distribution	<ul style="list-style-type: none"> • Data spacing for reporting of Exploration Results. • 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. 	<ul style="list-style-type: none"> • Gravity readings were taken at 100m intervals along lines spaced 400m apart.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • 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. 	<ul style="list-style-type: none"> • The survey lines were oriented east west to cross proposed structures which run north north west through the tenement.
Sample security	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • Not applicable as no samples collected.
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> • No audits or reviews were undertaken, but the raw data was studied and interpreted by experienced consultants.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> • <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Pinjin JV North is located on E31/999, E31/1005, E31/1007 and E31/1082, • The tenements are held by St Barbara Limited and are under the control of E79 through the earn-in period for the Pinjin Joint Venture. • Exploration Lease E31/999 is granted and held until 2022 and renewable for a further 2 years. • Exploration Lease E31/1005 is granted and held until 2022 and renewable for a further 2 years. • Exploration Lease E31/1007 is granted and held until 2022 and renewable for a further 2 years. • Exploration Lease E31/1082 is granted and held until 2025 and renewable for a further 2 years. <ul style="list-style-type: none"> • All production is subject to a Western Australian state government Net Smelter Return ("NSR") royalty of 2.5%. • Registered Aboriginal Site 2708 (Lake Reyside) occurs in the north of E31/1082 and E31/1005. There are no pastoral compensation agreements over the tenement.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<p>Modern gold exploration commenced in 1987 with RAB drilling by Indian Ocean Resources Limited. Previous owners include Gold and Mineral Exploration NL, Hawthorn Resources and St Barbara Limited.</p> <p>Work conducted by the various owners on this package of tenements comprised surface geochemical sampling, rock chip sampling, geological mapping, geological interpretations from broad spaced aeromagnetic surveys and followed by RAB and aircore drilling on variable section spacing from 100 m ranging up to +1 km.</p>
<i>Geology</i>	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • The Laverton South Project is located within the Eastern Goldfields Superterrane of the

Criteria	JORC Code explanation	Commentary
		<p>Archean Yilgarn Craton in the southern extensions of the LTZ, a 250 km long and laterally extensive significant gold bearing structure. Basement geology within the Project area is overall poorly understood due to the presence of extensive transported cover that obscures much of the bedrock geology, and a lack of historical drilling.</p>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> • <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Not applicable as no drilling conducted.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> • <i>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.</i> • <i>Where aggregate 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.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • Not applicable as no drilling conducted.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the</i> 	<ul style="list-style-type: none"> • Not applicable as no drilling conducted.

Criteria	JORC Code explanation	Commentary
	<p><i>drill hole angle is known, its nature should be reported.</i></p> <ul style="list-style-type: none"> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').</i> 	
<i>Diagrams</i>	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> Appropriate maps are included within the body of this report.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> Not applicable as no drilling conducted.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; 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.</i> 	<ul style="list-style-type: none"> Relevant geological observations are included in this report.
<i>Further work</i>	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Additional geophysical surveys may be carried out in the future in order to assist in the delineation of drilling targets.