



ASX ANNOUNCEMENT AND MEDIA RELEASE

23 September 2020

## Drilling Progresses at the Jundee South Gold Project Testing Eight High Priority Targets

### Highlights

- Drilling program at Jundee South Gold Project progressing as planned
- The Jundee South Project is a contiguous land package in a prospective region with over 720 km<sup>2</sup> of tenure
- Eight Priority One and Six Priority Two targets being first pass tested with aircore drilling
- Aircore holes seeking more definitive and reliable results than historic RAB drilling

Aveniria Limited (ASX:AEV) (**Aveniria** or **the Company**) is pleased to advise that its maiden drilling program currently being carried out at its Jundee South Gold Project is progressing as planned. As announced on 11 September, 2020, this drilling program has been designed to test eight Priority 1 targets and six Priority 2 targets identified from the recently completed assessment of all available geologic, geochemical and geophysical information obtained on the Jundee South Gold Project.

Aveniria's use of aircore drilling in areas previously drilled with broad spaced RAB drilling is delivering definitive bedrock samples allowing for recognition of rock types and faults and shears. The presence of multigeneration faulting is the element of the gold mineralisation model being sought.

**Aveniria's Executive Chairman, Brett Clark** commented "*Aveniria's drilling is proceeding on schedule to test all eight independent Priority 1 targets. Initial geological logging is providing optimism for Aveniria's approach to exploration.*"

*"The location of our Jundee South Project on the Yandal Greenstone Belt is a key factor in our belief of the Project's prospectivity, having used the surrounding significant gold resources (listed below) to assist in our interpretation of the aeromagnetic surveys which were used to define our initial High Priority targets."*

### Highly Prospective Area

The Jundee South Gold Project is located in the Yandal Greenstone Belt, immediately south of the Jundee Gold Mine. The Yandal Greenstone Belt has produced both large and medium sized gold resources including:

- Jundee Gold Mine (Northern Star): Production of 7.8Moz of gold<sup>1</sup>
- Bronzewing: Production of over 3Moz of gold<sup>2</sup>
- Darlot Gold Mine (Red 5 Ltd): Production of 2.9Moz of gold<sup>3</sup>
- Flushing Meadows (Yandal Resources Ltd): Mineral Resource of 190koz Au<sup>4</sup>
- Ramone and Gourdis (Northern Star): 273koz Au<sup>5</sup> and 180koz Au<sup>6</sup>, respectively

The geological setting of these mines were used to interpret the existing aeromagnetic data and identifying analogues for drill target generation. Aveniria's presentation of 11 June 2020 summarised the results of this activity.

Crucially, the review of historic data identified gaps in previous explorer's activities and valid targets generated by them but some of which were never tested.

<sup>1</sup> <https://www.nsr ltd.com/wp-content/uploads/2018/08/NSR-Jundee-Operations-Fact-Sheet-July-18.pdf> and 2081 - 2020 annual reports

<sup>2</sup> [https://www.wikiwand.com/en/Bronzewing\\_Gold\\_Mine](https://www.wikiwand.com/en/Bronzewing_Gold_Mine)

<sup>3</sup> <https://www.red5limited.com/site/operations/darlot-gold-mine#:~:text=The%20mine%20has%20a%20long,mining%20commenced%20in%20November%201988>. And annual reports

<sup>4</sup> ASX:YRL announcement 24 September 2019

<sup>5</sup> <https://www.nsr ltd.com/wp-content/uploads/2018/08/Jundee-Operations-Site-Visit-5-August-2018.pdf>

<sup>6</sup> <https://www.nsr ltd.com/wp-content/uploads/2015/08/GeologyUpdate-JundeeOperationsAugust2015-17-8-2015.pdf>



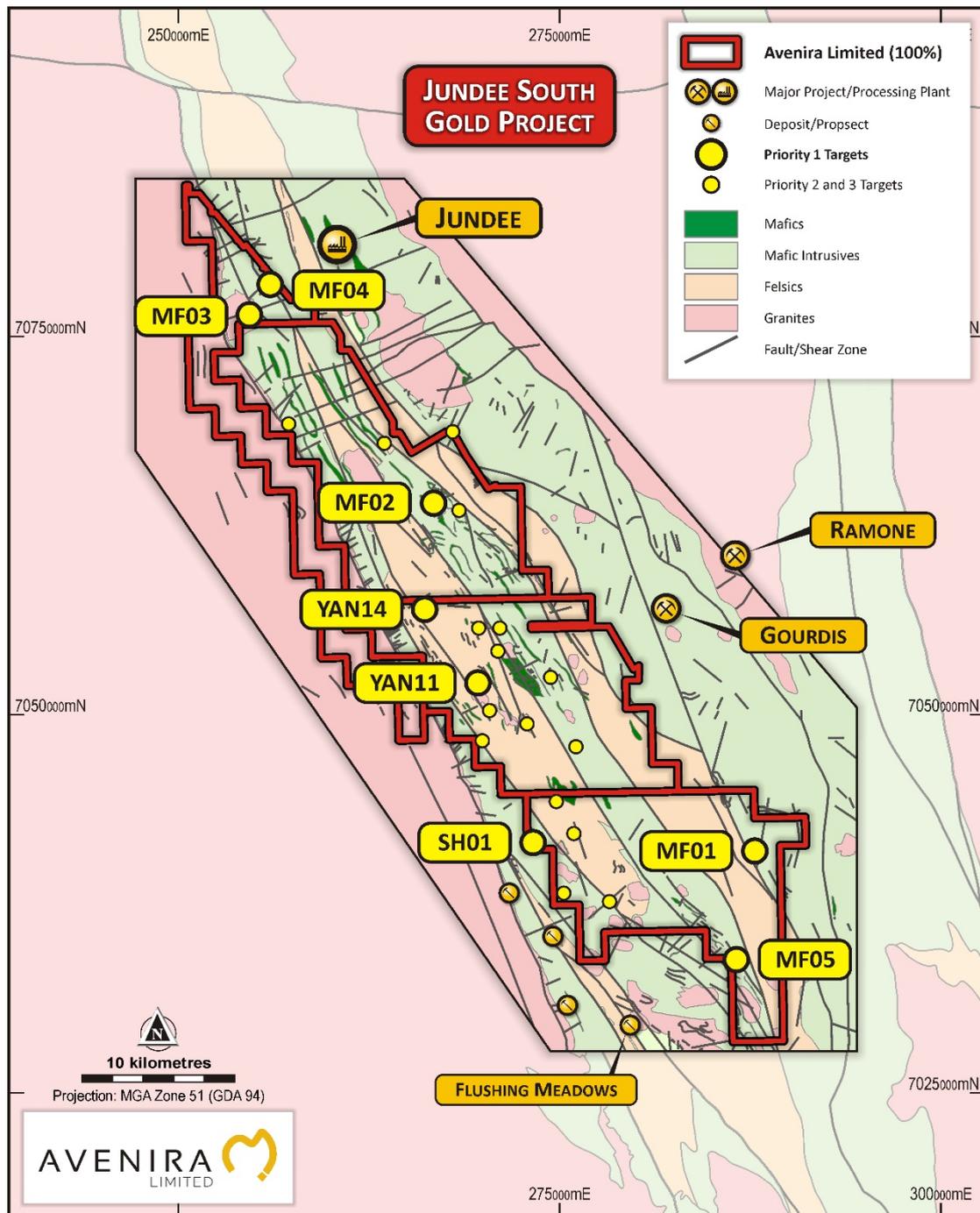
Cautionary Statement: Avenira does not hold any interest in the mines and resources <sup>1,2,3,4,5,6</sup> and there has been insufficient exploration in the district to determine if additional resources exist in Avenira's tenements, however Avenira has a contiguous land package in the region with over 720 km<sup>2</sup> of tenure.

### **Eight Priority 1 Targets identified for drill testing**

Avenira's exploration team identified targets using the controls evident at the neighbouring world-class gold mines:

1. Complex geology that allows focusing of gold bearing fluids into "gold traps"; lithologies that scavenge gold.
2. Multi-phased structural preparation: long lived structures that allow long lived passage of auriferous fluids and short lived brittle structures that remobilise gold into high grade concentrations. Quartz veining and pervasive alteration are hallmarks of these processes.
3. Proximal intrusive activity that provides the heat engine to drive both gold bearing fluids and cause pervasive alteration.
4. Geochemical indicators that alert to the presence of gold in the system.

Twenty four targets were identified on these criteria, eight of which met all four criteria and as such were designated by Avenira to be Priority 1 targets (Figure 1). A further six Priority 2 targets were also identified which are being tested during this phase of drilling. The Priority 2 and 3 targets are shown in Figure 1.



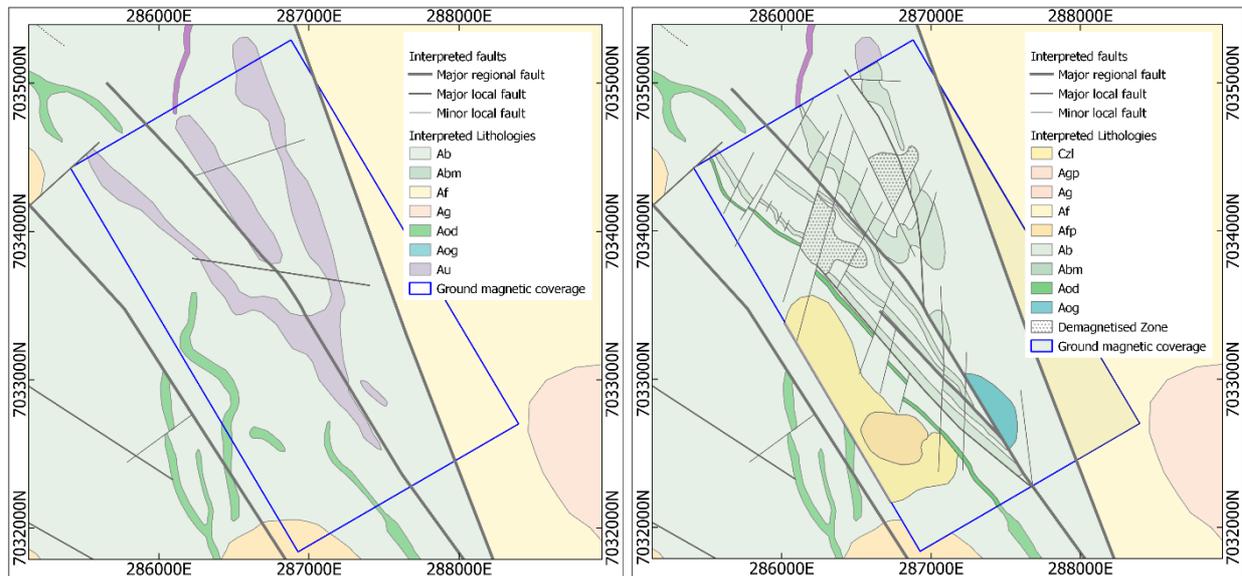
**Figure 1: Priority 1 targets identified by Avenira at the Jundee South Project**

### Ground Geophysics

As a prelude to drilling, four Priority 1 Targets were singled out for high resolution ground magnetic surveys, designed to help in identifying and precisely locating large regional faults and shears and smaller local faults and more accurately mapping rock contacts. MF01, MF05, Yan12, and Yan14 were surveyed.



The surveys have produced data from which more precise interpretations have been made. As an example, Figure 2a (on the left) shows the regional aeromagnetic interpretation, while Figure 2b (on the right) shows the updated interpretation based on the ground magnetic data.



**Figure 2:** Interpretation based on aeromagnetic data (left) and interpretation based on ground magnetic data (right)

The interpretation of the ground magnetic data is “live” as feedback from the drilling program is received. These surveys, once validated by drilling, will direct the use of further ground magnetic surveys.

### Initial drilling results demonstrate Avenira is on the right track

The first indications from holes drilled into the Priority 2 YaN18 target are encouraging. The rocks show significant disruption by potentially mineralising fluids resulting in common phyllic (Quartz-Sericite-Pyrite) alteration (Figure 3). Phyllic alteration is an indicator of circulation of hydrothermal fluids, an important precursor to gold emplacement. Collar information pertaining to the drillhole containing the sample from Figure 3 is contained in Table 1.



**Figure 3:** Aircore sample from hole JSA20\_175 at 91-92 metres (end of hole) showing phyllic (Quartz-Sericite-Pyrite) alteration and Quartz-Hematite veining with pyritic vein selvage.



This announcement has been authorised by the Board of Avenira Limited.

**Brett Clark**

**Executive Chairman**

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### **About Avenira**

Avenira is listed on the Australian Securities Exchange under the code AEV. Avenira is a Western Australian based mining and exploration company with a focus on gold and phosphate projects in Australia.

In addition to the Jundee South Project, Avenira will also continue to review various precious metals projects in Australia as they are presented to the Company.

### **Competent Person Statement**

The information in this document that relates to Exploration Results, geology, and data compilation is based on information compiled by Mr Stephen Harrison who is a Member of The Australian Institute of Geoscientists. Mr Harrison has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Harrison is a part-time employee of the Company and consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.