



ASX ANNOUNCEMENT AND MEDIA RELEASE

2 October 2020

## Drilling Announcement at the Jundee South Gold Project

Avenira Limited (ASX:AEV) (**Avenira** or **the Company**) advises the following updated information in relation to the announcement made on 23 September 2020 regarding the progress of the drilling program at the Jundee South Gold Project.

This 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.

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

The first indications from holes drilled into the Priority 2 YaN18 target are encouraging. The rocks show massive disruption by potentially mineralising fluids resulting in common phyllic (Quartz-Sericite-Pyrite) alteration (Figure 1). 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 1 is contained in Table 1.



**Figure 1:** Aircore sample from hole JSA20\_175 at 91-92 metres (end of hole).

The interval displayed in Figure 1 has been geologically logged as containing:

- An undetermined mafic volcanic rock
- Pervasive sericite (white mica) alteration of moderate intensity (30-70%)
- Pervasive carbonate alteration of weak intensity (10-30%)
- 1% of oxidised stockwork-textured sulphide veining with inclusions of quartz-carbonate veining
- 20% of semi-massive pyrite forming a selvage around the oxidised stockwork veining
- Alteration products form a halo around the stockwork veining

**Cautionary Statement:** Determination of the alteration, deformation, vein features and mineralisation discussed above is based on visual observations by suitably qualified geologists. Features by their very nature may or may not contain gold mineralisation due to the multi-phase veining, deformation and veining events present in the geological terrane being explored. Observations are based on a ~50g subsample of >2mm chips taken from approximately 6kg of material generated from each metre of drilling. These observations therefore may not be representative of the sample as a whole.



**Table 1. Drillhole Information**

Hole ID	Target	Easting	Northing	RL	Grid	Dip	Azimuth	Final Depth
JSA20_175	YaN18	263548	7068444	549	MGA20_Z50	-60	050	92m

Samples are being dispatched from the Jundee South Project for analysis at the Jinning Pty. Ltd. Laboratory in Canning Vale (Perth), with results expected to be available for reporting in the December Quarter.

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 West Australian headquartered 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.

# 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"> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Samples are all broken chips generated by a rotating drill bit and high -pressure air as per standard industry practice</li> <li>Samples obtained for analysis are mostly composites of 2-3kg size. Sampling and analysis methods are discussed elsewhere.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	<ul style="list-style-type: none"> <li>Aircore (AC) – standard 3” holes drilled with standard aircore blade and inner tube assembly to blade refusal</li> <li>Challenge Drilling were engaged to complete drilling activities</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Notes made in geological logs and sampling sheets as to any contamination or recovery issues encountered</li> <li>Markings on drill rig mast ensured correct intervals placed in each pile</li> <li>No results have been received so link between recovery and grade has not been assessed</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Geological logging has been captured in a digital, interrogatable form</li> <li>Logging mostly qualitative in nature, although degrees of alteration and weathering are noted. Quantitative estimations made of sulphide and veining contents</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• 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.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples were collected using a trowel from chip piles and composited over 4 metres and weighing approximately 2kg. Care taken during sampling to ensure cross section through complete interval without including underlying ground</li> <li>• Wet samples were placed in holes lined with paper to ensure minimized risk of inclusion of underlying soil in sample</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• 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.</li> <li>• Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<p><b><u>ANALYSIS METHOD</u></b></p> <ul style="list-style-type: none"> <li>• Samples submitted to Jinning Pty. Ltd. in Canning Vale (Perth). The samples were numerically ordered then placed in ovens for drying. After drying they are pulverized to a nominal ~75 microns, 150-200 grams is then split off for weighing while the remainder is kept for reference checks if required. A 50 gram subsample sample is then weighed off and placed in a crucible with appropriate fluxes and is fired in a furnace. The resultant lead bead is removed and dissolved in an Regia acid digest using Hydrochloric and Nitric before being read for gold by the Atomic Absorption Spectrometer to a 0.01 ppm level of detection.</li> </ul> <p><b><u>QUALITY CONTROL SAMPLES</u></b></p> <ul style="list-style-type: none"> <li>• Blanks of barren (non-certified) quartz inserted at a rate of 1/50</li> <li>• Standards inserted at a rate of 1/25 into sequence. Standards are certified OREAS pulverized standard material</li> <li>• Duplicate samples inserted at a rate of 1/25 into sequence</li> <li>• The laboratory undertakes QC checks in the form of repeats, blanks and reanalyses. Further detail will be provided when analytical results have been received</li> </ul>

Criteria	JORC Code explanation	Commentary
ANALYSIS METHOD	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Analytical results have not been received so no verification is possible at present</li> <li>Verification of logged intervals is undertaken as required for training purposes and targeting purposes</li> <li>Twin holes have not been drilled at this stage</li> <li>Primary data is captured in an Excel worksheet, which is backed up and sent to the Chief Geologist every second day</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Drillholes were setout using a handheld GPS, with locations being selected based on the ability to reduce ground disturbance whilst maintaining reasonable proximity (i.e. &lt;20m) to the planned location</li> <li>Drillholes picked up using a handheld GPS</li> <li>Accuracy of setout and pickup are usually in the vicinity of +/- 5m</li> <li>Grid system used is MGA2020 Zone 51</li> <li>Topographic control used is based on GPS coordinates</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Data spacing insufficient for reporting of a classified resource</li> <li>Hole spacings are between 80 and 160 metres</li> <li>Samples are taken as 4m downhole composites</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The spacing of the exploration work undertaken to date combined with the lack of surface expression of mineralisation means that the orientation of mineralized structures has not been adequately determined</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Composite samples taken as soon as practicable after drilling</li> <li>Raw samples and pulverized material currently retained in bulkabag at laboratory. More permanent storage facility being sourced</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits at this stage</li> </ul>

## 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"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Granted exploration licences E53/1856, E53/1859, E53/2078, E53/2079 comprise the Jundee South Project</li> <li>• All licences are in good standing</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration has been undertaken previously by several companies, including – ASARCO, Dominion, Cyprus Gold, Great Central Mines, Eagle Mining, Hunter Resources, Wiluna Gold, Fortis, Aragon, Eon Metals, Chevron Exploration</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The exploration area is located in the Yandal Greenstone Belt. The belt forms part of the Norseman-Wiluna Belt within the Yilgarn Craton. Gold mineralisation is orogenic in nature with considerable dispersion from later weathering events.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>• <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"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• See Table 1 in release</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <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</i></li> </ul>	<ul style="list-style-type: none"> <li>• No analytical results received at this stage</li> <li>• Geological logging undertaken at 1m intervals, but composited over intervals where the same geological features are observed</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>• The exact geometry of mineralisation is unknown at this level of detail, hence the true width of mineralisation is unknown</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• See relevant figures</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Analytical results are not being reported</li> <li>• Geological features related to mineralisation comprise roughly 20% of the total intervals logged thus far. These features include quartz veining, sulphides and pervasive alteration</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration work has comprised surface mapping, surface sampling, drilling and various geophysical surveys</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Work planned comprises ground truthing of existing anomalies and surface sampling. Drilling of existing anomalies with Aircore or Reverse Circulation is planned</li> </ul>