

# FURTHER NEAR PLANT HIGH GRADE GOLD TARGETS AT HILL END:

ASX ANNOUNCEMENT 5<sup>TH</sup> DECEMBER 2023

## HIGHLIGHTS:

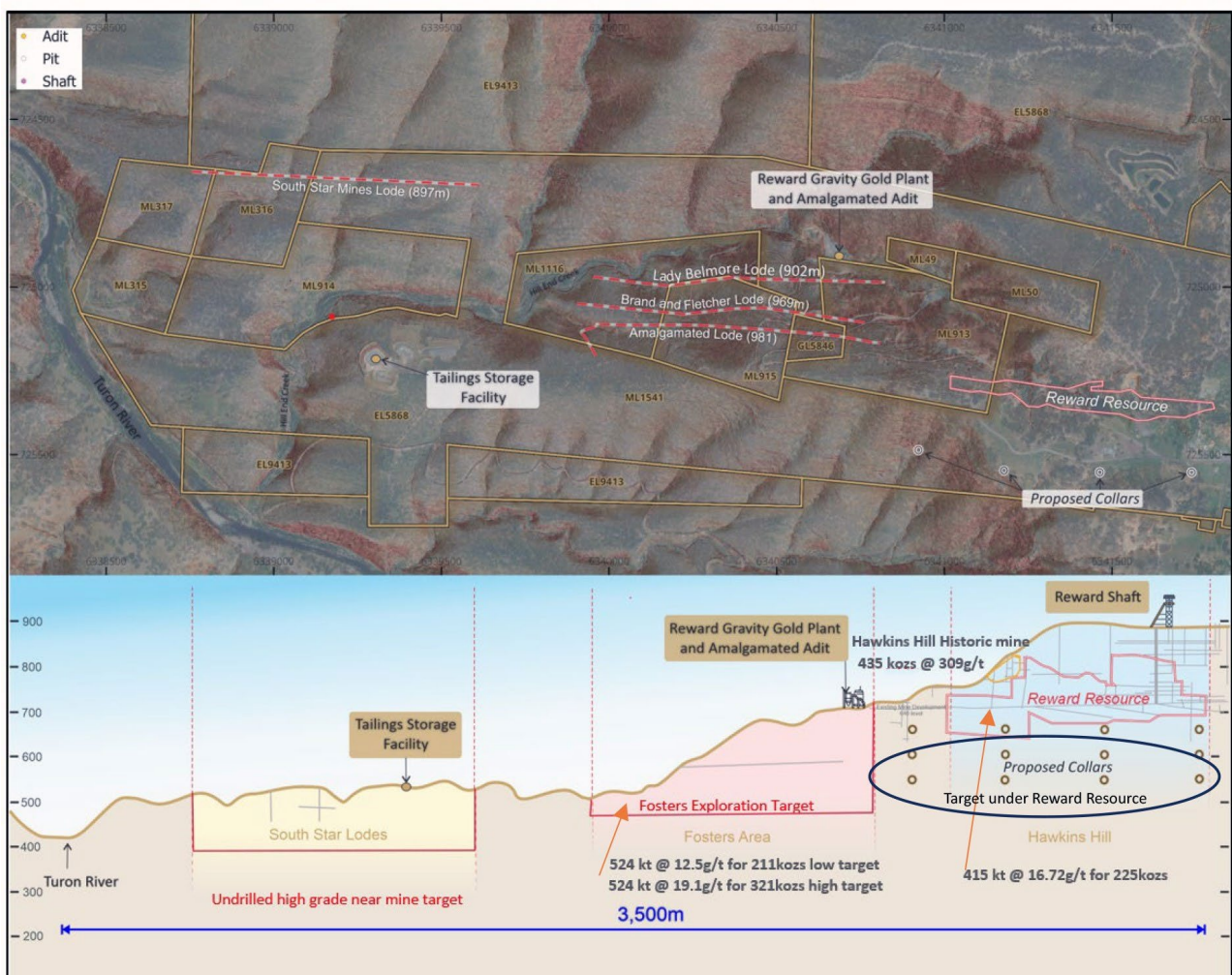
- Further high-grade gold targets identified south of Vertex's Hill End Gold Plant and Reward Resource,
- Ground truthing LiDAR data reveals further workings around the South Star group of mines (refer to Figure 1).
- Multiple parallel gold bearing quartz veins at South Star strike >800m.
- Historically, South Star reported most production was from the west-dipping veins on the western limb of the Hill End Anticline. Weber and Baker (1977) cite reports stating *"the South Star vein averaged about 10cm wide to a depth of 51m and widened to 38-46 cm at 52m after passing into a shale host, with Au present in quartz over the entire vertical extent. Grades of 153-184 g/t Au with one sample of 540 g/t Au were reported above 51m depth"*
- South Star lies 1.5km south of the Hill End Gold Plant and has the potential to provide future feed,
- No drilling has been carried out at South Star and only limited sampling has been completed,
- The Vertex team are planning diamond drill programs at;
  1. South Star,
  2. Fosters Exploration Target and
  3. Below the Reward Resource (see drill collar locations on Figure 1.)

\*The above aim to build upon the existing Reward Resource
- The Reward Gold Mine PFS expected to be finalised in December 2023
- The Reward gold mine is well-placed for a simple start-up:
  - ✓ The existing gravity processing plant is located adjacent to the underground mine access point
  - ✓ Mine access point extends into the resource, so only stripping and refurbishment development is required.
  - ✓ Second egress in place with ladder way and motorised Alimak conveyance.
  - ✓ Some underground fleet and utility services are already in place.
  - ✓ Hill End gravity gold processing plant refurbishment near completion.
  - ✓ Permitted Mining licence and DA in place for Plant, Stockpiles, and the Reward underground mine.

**Vertex Minerals Limited (ASX:VTX) (“Vertex” or the “Company”)** is pleased to advise further near mine high grade gold targets have been recognised just south of the Gravity process plant and Reward Gold Mine, Hill End NSW at the South Star group of gold mines.

**Executive Director, Tully Richards commented:**

“Vertex is pleased to announce further exploration and resource development opportunities as its Reward Resource PFS comes closer to completion. Ground truthing of the company’s LiDAR dataset, around the South Star group of gold mines, as covered by ML’s, has revealed greater latitude for further ‘near mine’ resource growth. An extensive mapping and sampling program is being planned for summer and drill program planning is underway.”



**Figure 1 Showing in long section the location of the South Star lode relative to the Hill End Gold plant and the High-grade Reward Gold Resource.**

\* For further details of the current resource at Reward, refer ASX Announcement dated 26 June 2023

\* For further details of the Fosters Exploration Target, refer ASX Announcement dated 29 August 2023

\*Hawkins Hill was mined in the 1870s

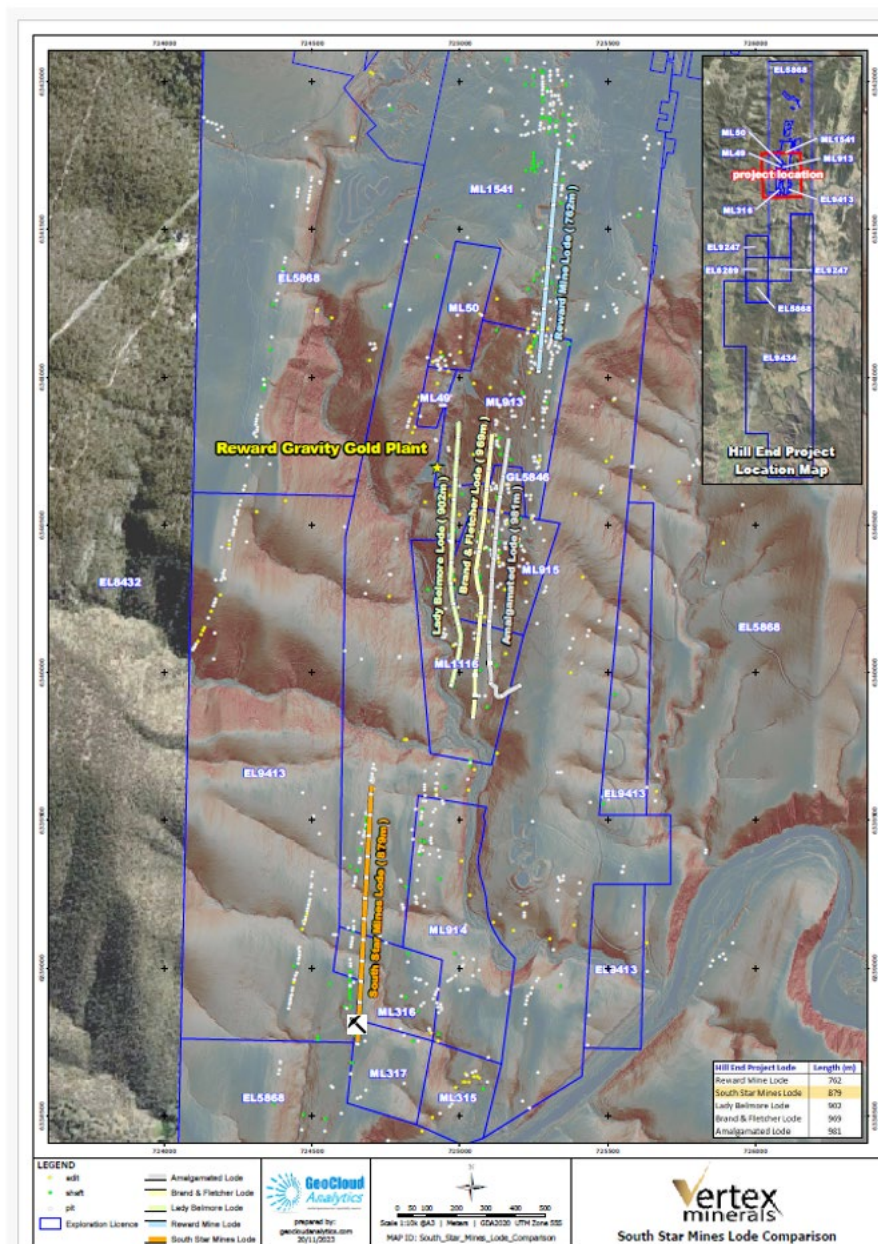


Figure 2 Location of the South Star Lode relative to the Hill End Project and photo locations (figures 3, 4,5)



## The South Star

The South Star prospect area is located on the Hill End Anticline about 2-km south of Hawkins Hill and immediately north of the Turon River. Linear arrays of old mine workings are present on both flanks of the anticline and one or more saddle reefs outcrop along the axis. Most reported historical production has come from laminated bedding-parallel quartz veins on the west limb of the anticline, with reports that some occurrences are sets of multiple veins over minable widths.

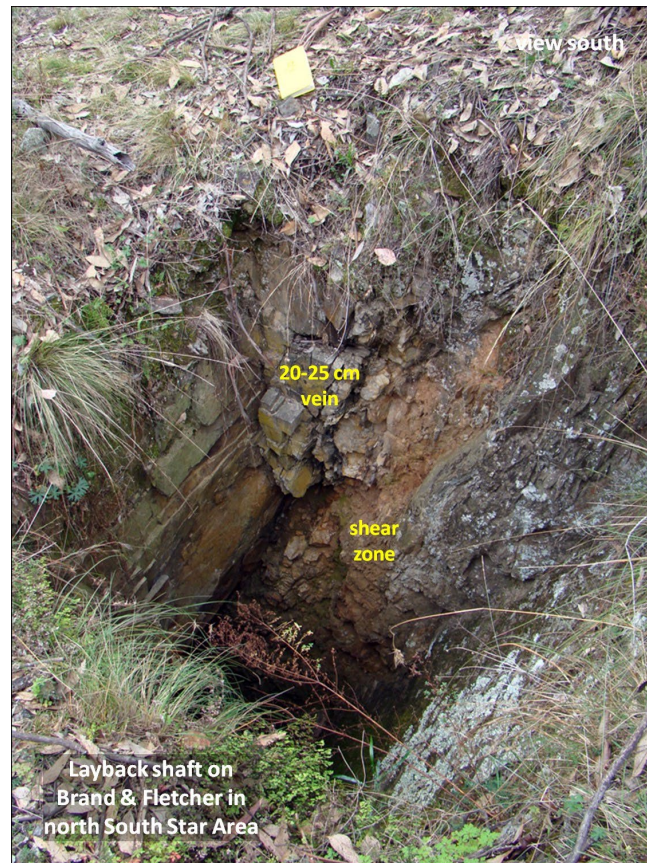
Review of existing published and in-house reports and geologic and mineral deposit maps suggests styles of mineralisation similar to that at Hawkins Hill-Reward. There is significant untested potential for Reward-type bedding-parallel fold limb vein set high-grade Au targets in the South Star area, with the caveat that the coincidence of Indicator-type feeder structures and significant bedding-parallel vein set are present. Additionally, the potential for Hargraves and Germantown-type saddle reef mineralisation has not been adequately investigated.

## Historical information

Gold mineralisation was discovered in the 1860s by the Thomas Wythes party but there was little production until the claims were acquired by the South Star Gold Mining Company in 1871 and Lewis' crusher installed on the Turon River in September 1872. By that time the South Star Mine underlay shafts on the west limb veins extended to 51.8-m.

Most reported production was from the W-dipping veins of South Star line on the west flank of the Hill End Anticline. Weber and Baker (1977) cite old reports stating that this vein averaged about 10-cm wide (Figure 2) to a depth of 51-m and widened to 38-46 cm at 52-m after passing into a shale host, with Au present in quartz over the entire vertical extent. It is unclear whether the vein cuts stratigraphy or this represents a facies change. Grades of 153-184 gpt Au with one sample of 540 gpt Au were reported above 51-m depth. Button (1987) quotes records of some crushings (1.4-24.5 tonnes) from South Star ranging from 15-78 gpt Au.

The South Star shaft was extended to 69-m in 1873 and mined two quartz veins 7-cm apart. The shaft reached 74-m in 1874 with the veins only 5-cm apart and the main vein widening. The shaft is reported at 82-m in 1877. Similar multiple quartz veins separated by less than a metre are reported from the Clan Campbell Mine to the south.



**Figure 3 Layback shaft on the Brand and Fletcher lode (Quartz) in the South Star area. Host rock Turbidites and Greywackes**



**Figure 4 South Star lode showing two quartz veins, in Turbidites and Greywackes**



**Figure 5 South Star load showing a quartz vein at surface at around 30cm thick, hosted in Turbidites**

This announcement has been approved by the Board of Vertex Minerals Limited.

**Further Information:**

Roger Jackson, Executive Chairman

[roger@vertexminerals.com.au](mailto:roger@vertexminerals.com.au)

Tully Richards, Technical Director

[tully@vertexminerals.com.au](mailto:tully@vertexminerals.com.au)



## ABOUT VERTEX MINERALS LIMITED

Vertex Minerals Limited (ASX: VTX) is an Australian based gold exploration company developing its advanced Hill End gold projects located in the highly prospective Eastern Lachlan Fold Belt of Central West NSW. Other Company assets include the Pride of Elvire gold project and Taylor Rock gold/nickel/lithium project both located in the Eastern Goldfields of WA. The focus of Vertex Minerals is to advance the commercial production of gold from its NSW projects embracing an ethical and environmentally sustainable approach:

- **Gravity Separation:** The deportment of gold at the Hill End Project allows high recovery to a concentrate produced using gravity separation techniques.
- **Direct Smelting:** The use of direct smelting of a gold concentrate that eliminates the need to use cyanide as a solvent.
- **Contrast in Density:** These separation techniques take advantage of the contrast in density of gold ( $\rho=19.3$ ) relative to quartz ( $\rho=2.65$ ).
- **Renewable Energy Potential:** The unique landscape and infrastructure makes Hill End ideal for the establishment of renewable sources of power. The Crudine Ridge Windfarm is only 30km from the project site and Vertex plans to examine a pumped hydro-electricity scheme as an integral part of any proposed development. The topography and existing mine workings including shafts and adits make the establishment of a pumped hydro scheme achievable at modest expense.
- **Benign Tailings:** The tailings will essentially be quartz with little to no sulphide minerals.

### HARGRAVES GOLD PROJECT (NSW)

- Hargraves Gold project is located approximately 2.5 km south of the town of Mudgee.
- The goldfield is 4 x 10 km with numerous mineralised structures with little modern exploration.
- An updated mineral resource in accordance with JORC 2012 Code was completed by SRK Consulting (Australasia) Pty Ltd (SRK) – total of **2.3Mt at 2.38g/t Au for 177koz Au**.

### HILL END GOLD PROJECT (NSW)

- Consists of 10 mining leases and three Exploration Licences located in the core of the Hill End Trough on the eastern Lachlan Fold Belt.
- Gravity Gold Plant
- PFS underway for the Reward Gold Mine
- 24km of continuous gold lode with gold recovery rate to gravity at +90%. **Pride of Elvire Gold Project (WA)**
- Tenements surround the Mt. Elvire homestead approximately 210km north of Southern Cross in Western Australia
- The project has seen historical drilling with encouraging gold results achieved.

### TAYLOR ROCK PROJECT (WA)

- Located 80km WSW of Norseman in the Southern Goldfields region of Western Australia.
- The project has both Gold and Nickel potential, interesting historical intercepts have recorded encouraging mineralisation.

## HILL END GLOBAL RESOURCE

| Hill End Project Mineral Resource Estimate |                |              |                |                    |
|--------------------------------------------|----------------|--------------|----------------|--------------------|
| Deposit                                    | Classification | Tonnes (kt)  | Grade Au (g/t) | Contained Au (koz) |
| Reward Gold Mine <sup>1</sup>              | Indicated      | 141          | 15.5           | 71                 |
|                                            | Inferred       | 278          | 17.3           | 155                |
| <b>Sub Total</b>                           |                | <b>419</b>   | <b>16.7</b>    | <b>225</b>         |
| Hargraves Project <sup>2</sup>             | Indicated      | 1,109        | 2.7            | 97                 |
|                                            | Inferred       | 1,210        | 2.1            | 80                 |
| <b>Sub Total</b>                           |                | <b>2,319</b> | <b>2.4</b>     | <b>178</b>         |
| Red Hill Project                           | Indicated      | 413          | 1.4            | 19                 |
|                                            | Inferred       | 1,063        | 1.8            | 61                 |
| <b>Sub Total</b>                           |                | <b>1,476</b> | <b>1.7</b>     | <b>80</b>          |
| Project Total                              | Indicated      | 1,663        | 3.5            | 187                |
|                                            | Inferred       | 2,551        | 3.6            | 296                |
| <b>Grand Total</b>                         |                | <b>4,214</b> | <b>3.6</b>     | <b>483</b>         |

## FOSTERS EXPLORATION TARGET<sup>3</sup>

| Deposit                        | Range       | Tonnes (kt) | Au (g/t) | Ounces Au (koz) |
|--------------------------------|-------------|-------------|----------|-----------------|
| Fosters below Reward Gold Mine | Lower Range | 524         | 12.5     | 211             |
|                                | Upper Range | 524         | 19       | 320             |

### Cautionary Statement

*The Exploration Target is conceptual in nature as there has been insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will result in the determination of a Mineral Resource under the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code" (JORC 2012). The Exploration Target is not being reported as part of any Mineral Resource or Ore Reserve.*



## COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr. Roger Jackson, a Director and Shareholder of the Company, who is a 25+ year Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM), Fellow of the Australian Institute of Geoscientists (FAIG) and a Member of Australian Institute of Company Directors. Mr. Jackson has sufficient experience which is relevant to the style of mineralisation and type of deposits 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. Jackson consents to the inclusion of the data contained in relevant resource reports used for this announcement as well as the matters, form and context in which the relevant data appear.

## FORWARD LOOKING STATEMENTS AND IMPORTANT NOTICE

This report contains forecasts, projections and forward-looking information. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions it can give no assurance that these will be achieved. Expectations and estimates and projections and information provided by the Company are not a guarantee of future performance and involve unknown risks and uncertainties, many of which are out of Vertex Minerals’ control.

Actual results and developments will almost certainly differ materially from those expressed or implied. Vertex Minerals has not audited or investigated the accuracy or completeness of the information, statements and opinions contained in this announcement. To the maximum extent permitted by applicable laws, Vertex Minerals makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and takes no responsibility and assumes no liability for the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission from, any information, statement or opinion contained in this report and without prejudice, to the generality of the foregoing, the achievement or accuracy of any forecasts, projections or other forward looking information contained or referred to in this report. Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company’s securities.

## JORC COMPLIANCE STATEMENTS

Where statements in this announcement make reference to exploration results which previously been reported, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original announcements, and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not materially modified from the original market announcements.

<sup>1</sup> For further details of the current resource at Reward, refer ASX Announcement dated 26 June 2023

<sup>2</sup> For further details of the resource at Hargraves and Red Hill, refer to the IGR in the Company's listing prospectus dated 21 October 2021 and released on ASX on 12 January 2022.

<sup>3</sup> For further details of the Fosters Exploration Target, refer ASX Announcement dated 29 August 2023

Sources of information and maps include:

- Geological Survey of NSW Department of Mines survey report GS 1975/279, "Appraisal of geological work involved in mapping in the South Star area, Hill End" by Bowman, Holmes and Baker in October 1975.
- Geological Survey of NSW Department of Mines survey report GS 1977/045, "The South Star line of reefs, Hill End, NSW" by Weber and Baker in March 1977. Good detailed information on the South Star line of lode.

APPENDIX 1. SOUTH STAR – JORC CODE TABLE 1, CHECKLIST OF ASSESSMENT AND REPORTING CRITERIA

Section 1: Sampling Techniques and Data

| CRITERIA              | JORC Code Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Commentary                                                                          |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SAMPLING TECHNIQUES   | <ul style="list-style-type: none"> <li>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.</li> </ul>                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>No sampling has been carried out.</li> </ul> |
|                       | <ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>Not Applicable.</li> </ul>                   |
|                       | <ul style="list-style-type: none"> <li>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 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.</li> </ul> | <ul style="list-style-type: none"> <li>Not Applicable.</li> </ul>                   |
| DRILLING TECHNIQUES   | <ul style="list-style-type: none"> <li>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).</li> </ul>                                                                                                                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>No drilling is being reported on.</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> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>Not Applicable.</li> </ul>                   |
|                       | <ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Not Applicable.</li> </ul>                   |
|                       | <ul style="list-style-type: none"> <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>Not Applicable.</li> </ul>                   |



| CRITERIA                                       | JORC Code Explanation                                                                                                                                                                                                                               | Commentary                                                        |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 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>Not Applicable.</li> </ul> |
|                                                | <ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>                                                                                            | <ul style="list-style-type: none"> <li>Not Applicable.</li> </ul> |
|                                                | <ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>                                                                                                                             | <ul style="list-style-type: none"> <li>Not Applicable.</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> </ul>                                                                                                                         | <ul style="list-style-type: none"> <li>Not Applicable.</li> </ul> |
|                                                | <ul style="list-style-type: none"> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>                                                                                                     | <ul style="list-style-type: none"> <li>Not Applicable.</li> </ul> |
|                                                | <ul style="list-style-type: none"> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> </ul>                                                                                               | <ul style="list-style-type: none"> <li>Not Applicable.</li> </ul> |
|                                                | <ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>                                                                                             | <ul style="list-style-type: none"> <li>Not Applicable.</li> </ul> |
|                                                | <ul style="list-style-type: none"> <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> </ul>                          | <ul style="list-style-type: none"> <li>Not Applicable.</li> </ul> |
|                                                | <ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>                                                                                                             | <ul style="list-style-type: none"> <li>Not Applicable.</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> </ul> | <ul style="list-style-type: none"> <li>No samples have been submitted for assaying yet</li> </ul> |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|

| CRITERIA                              | JORC Code Explanation                                                                                                                                                                                                                                                              | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       | <ul style="list-style-type: none"> <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> </ul> | <ul style="list-style-type: none"> <li>No geophysical tools, spectrometers, or handheld XRF instruments have been used to date to determine chemical composition at a semi-quantitative level of accuracy.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                  |
|                                       | <ul style="list-style-type: none"> <li>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.</li> </ul>               | <ul style="list-style-type: none"> <li>No samples have been dispatched to date.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| VERIFICATION OF SAMPLING AND ASSAYING | <ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>                                                                                                                            | <ul style="list-style-type: none"> <li>It has not been possible to independently verify significant intersections to date.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                       | <ul style="list-style-type: none"> <li>The use of twinned holes.</li> </ul>                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>There has been no use of twinned holes to date.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                       | <ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>                                                                                                       | <ul style="list-style-type: none"> <li>Not Applicable.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                       | <ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>No adjustments to assay data have been made.</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> </ul>                                                      | <ul style="list-style-type: none"> <li>Surface workings around the South Star group of mines (ie shafts, adits, mine dumps and associated mining related infrastructure) were picked up during a LiDAR survey completed in August 2022.</li> <li>LiDAR data was collected in GDA2020 – MGAz55, by Aerometrex Ltd using a fixed wing aircraft flying at 1000m. Data was collected at a resolution of 10 points per square metre and 10cm vertical accuracy.</li> <li>Survey control required prior to processing said LiDAR was completed by Precision Exploration Services.</li> </ul> |

| CRITERIA                                                | JORC Code Explanation                                                                                                                                                                                                                                                          | Commentary                                                                                                                                                                                                                                                         |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                         |                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Processing of the resulting survey-controlled LiDAR data was completed by GeoCloud Analytics. Out puts included a 0.5m resolution DEM from which surface workings could be recognized and highlighted.</li> </ul>           |
|                                                         | <ul style="list-style-type: none"> <li>Specification of the grid system used.</li> </ul>                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>GDA2020 – MGAz55</li> </ul>                                                                                                                                                                                                 |
|                                                         | <ul style="list-style-type: none"> <li>Quality and adequacy of topographic control.</li> </ul>                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>Surveyed static base points, levelling swatches tied into available Trig Stations (for vertical control) and level and frequency control pickups followed by RTK processing ensured a very high quality data set</li> </ul> |
| DATA SPACING AND DISTRIBUTION                           | <ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>                                                                                                                                                                           | <ul style="list-style-type: none"> <li>The spacing of LiDAR data collected was 10 points per square metre..</li> </ul>                                                                                                                                             |
|                                                         | <ul style="list-style-type: none"> <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> </ul> | <ul style="list-style-type: none"> <li>There are no Mineral Resources or Ore Reserves.</li> </ul>                                                                                                                                                                  |
|                                                         | <ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>Not Applicable, no sample compositing was carried out on site.</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> </ul>                                                                   | <ul style="list-style-type: none"> <li>LiDAR data at the high resolution collected results in an unbiased representation of geological and cultural features.</li> </ul>                                                                                           |
|                                                         | <ul style="list-style-type: none"> <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>Not Applicable.</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>Not Applicable (sampling has yet to be carried out)</li> </ul>                                                                                                                                                              |

| CRITERIA          | JORC Code Explanation                                                                                                   | Commentary                                                        |
|-------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 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>Not Applicable.</li> </ul> |

## Section 2: Reporting of Exploration Results

| CRITERIA                                | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MINERAL TENEMENT AND LAND TENURE STATUS | <ul style="list-style-type: none"> <li>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.</li> </ul>                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>The Project tenements are 100% held by Vertex Minerals Limited.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                         | <ul style="list-style-type: none"> <li>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.</li> </ul>                                                                                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>All tenements are in good standing.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| EXPLORATION DONE BY OTHER PARTIES       | <ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>Geological Survey of NSW report GS1977/045 by C.R. Weber and C.J. Baker provides a good summary of exploration by other parties on "THE SOUTH STAR LINE OF GOLD REEFS, HILL END NSW"</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| GEOLOGY                                 | <ul style="list-style-type: none"> <li>Deposit type, geological setting, and style of mineralisation.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>The below 'South Star summary of geology' is quoted from, Geological Survey of NSW report GS1977/045 by C.R. Weber and C.J. Baker "THE SOUTH STAR LINE OF GOLD REEFS, HILL END NSW"</li> </ul> <p>"Surface and underground geological investigations along (parts of) the South Star Line of Gold Reefs, Hill End, have shown the auriferous quartz veins in the area are mostly parallel to bedding and dip westerly at 55deg to 60deg. They are probably epigenetic and were perhaps formed during diagenesis. The quartz veins contain gold. The country rocks at South Star are different to the country rocks at Hawkins Hill, where rich gold deposits have been found previously. The South Star quartz veins do not appear to occupy similar stratigraphic positions as those at Hawkins Hill.</p> |
| DRILL HOLE INFORMATION                  | <ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <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> </li> </ul> | <ul style="list-style-type: none"> <li>Not Applicable as no drilling has been completed</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                         | <ul style="list-style-type: none"> <li>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.</li> </ul>                                                                                                                                                                                                                                                  | <ul style="list-style-type: none"> <li>Not Applicable as no drilling has been completed</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| DATA AGGREGATION METHODS                | <ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of</li> </ul>                                                                                                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>No results are being reported</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |



| CRITERIA                                                         | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                   | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                  | high grades) and cut-off grades are usually Material and should be stated.                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                  | <ul style="list-style-type: none"> <li>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.</li> </ul>                                                                                                                                | <ul style="list-style-type: none"> <li>No grades are reported</li> </ul>                                                                                                                                                                                                                                                                                                                                                        |
|                                                                  | <ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>                                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>No metal equivalents are reported.</li> </ul>                                                                                                                                                                                                                                                                                                                                            |
| RELATIONSHIP BETWEEN MINERALISATION WIDTHS AND INTERCEPT LENGTHS | <ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul>                                                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>No local grid has been applied.</li> </ul>                                                                                                                                                                                                                                                                                                                                               |
|                                                                  | <ul style="list-style-type: none"> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>Not Applicable as no drilling has been completed</li> </ul>                                                                                                                                                                                                                                                                                                                              |
|                                                                  | <ul style="list-style-type: none"> <li>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').</li> </ul>                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>Not Applicable as no drilling has been completed</li> </ul>                                                                                                                                                                                                                                                                                                                              |
| DIAGRAMS                                                         | <ul style="list-style-type: none"> <li>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.</li> </ul>                                                                                                                     | <ul style="list-style-type: none"> <li>Refer to figures contained within this report.</li> </ul>                                                                                                                                                                                                                                                                                                                                |
| BALANCED REPORTING                                               | <ul style="list-style-type: none"> <li>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.</li> </ul>                                                                                                                                                             | <ul style="list-style-type: none"> <li>Balanced reporting of Exploration presented within this report.</li> </ul>                                                                                                                                                                                                                                                                                                               |
| OTHER SUBSTANTIVE EXPLORATION DATA                               | <ul style="list-style-type: none"> <li>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.</li> </ul> | <ul style="list-style-type: none"> <li>The Project includes exploration data collected by previous companies, including geological mapping and mine drawings (which are yet to be digitized)</li> <li>Previous mining has been limited and involved very selective mining and hand sorting. No systematic data has been collected to date to assess metallurgy and mining parameters relevant to a modern operation.</li> </ul> |
| FURTHER WORK                                                     | <ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>                                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>Vertex plans to conduct drilling followed by Resourcing, met work, tailings characterization, waste characterization to then undertake a scoping study</li> </ul>                                                                                                                                                                                                                        |
|                                                                  | <ul style="list-style-type: none"> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>Refer to figures contained within this report.</li> </ul>                                                                                                                                                                                                                                                                                                                                |