Consultant engaged to design gold plant for Pre-Feasibility Study at Reward gold mine

ASX ANNOUCEMENT 17TH OCTOBER 2023

HIGHLIGHTS:

- **Internal Studies and conceptual mine plan reviews for the Reward Gold Mine have now been concluded, and strongly support the implementation of a Pre-Feasibility Study (PFS).**
- **Vertex to carry out a PFS study at Reward underground Gold Mine, Hill End NSW**
- **Ground Control Engineering has been engaged to undertake the PFS, with Gekko Systems engaged to review the Metallurgical data and engineer and design a larger Gravity gold processing plant**
- **PFS was expected to be finalised by August but due to equipment availability, Vertex will undertake an upgrade of the existing plant, rather than complete a brand new build.**
- **An updated Mineral Resource Estimate for the Reward Gold Mine was recently carried out by independent consultants HGS Australia, in accordance with the guidelines set in the 2012 JORC Code**
- **Mineral Resource Estimate (MRE) for the Reward gold deposit at Hill End now stands at 419,000 tonnes at 16.72g/t Au for 225,200oz Au:**

Classification	Cut-off	Tonnes	Au (g/t)	Ounces (koz)
Indicated	4	141,000	15.54	70,500
Inferred	4	278,000	17.28	154,700
Total	**4**	**419,000**	**16.72**	**225,200**

- **An Exploration Target has been calculated for the Fosters Gold Project (Fosters), an area ~400m south of the Reward Gold Mine (Reward) (refer to Figure 1)**

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**

- **PFS will be based on Indicated resources and does not consider the Inferred Mineral Resource, providing the project with additional exploration upside.**
- **The Reward gold mine is well-placed for a simple start-up:**
  - **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 are 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 is in a ramp-up phase treating stockpiles.**

Vertex Minerals Limited (ASX:VTX) ("Vertex" or the "Company") is pleased to advise the commencement of a metallurgical review, along with design and engineering works for the Gravity Gold plant in connection with a Pre-Feasibility Study (PFS) for a high-grade gold operation at the Reward Gold Mine, Hill End NSW.

Gekko Systems has been engaged to design and engineer the expansion of the Gravity gold plant at Hill End, based on the existing 35ktpa plant that is located alongside the Amalgamated Adit (Reward). The Gekko study will also form part of the PFS, providing details on the Capital cost and operating cost of the expanded gold plant.

METALLURGY

The mineralogy of the Hill End gold mineralisation is relatively simple with most gold being of high fineness and hosted within quartz veins with low sulphide content. The gravity separation plant on site achieved a 95% recovery rate during 2009.

POTENTIAL EXPLORATION UPSIDE

The Study considers only the Indicated Mineral Resource, which is a small portion of the existing resource inventory and excludes Inferred Mineral Resources. The Reward Gold Project has significant additional growth potential, including:

- Mineralisation sitting in the Fosters Exploration Target:
  - 524kt @ 12.5g/t Au (lower range) 211kozs
  - 524kt @ 19.0g/t Au (upper range) 321kozs
- Mineralisation open at depth and along strike:
  - Expansion of multiple higher-grade targets within the main Hill End Anticline directly to the south
  - Expansion of the Red Hill and Hargraves Resources
  - Potential to discover additional mineralisation centres.

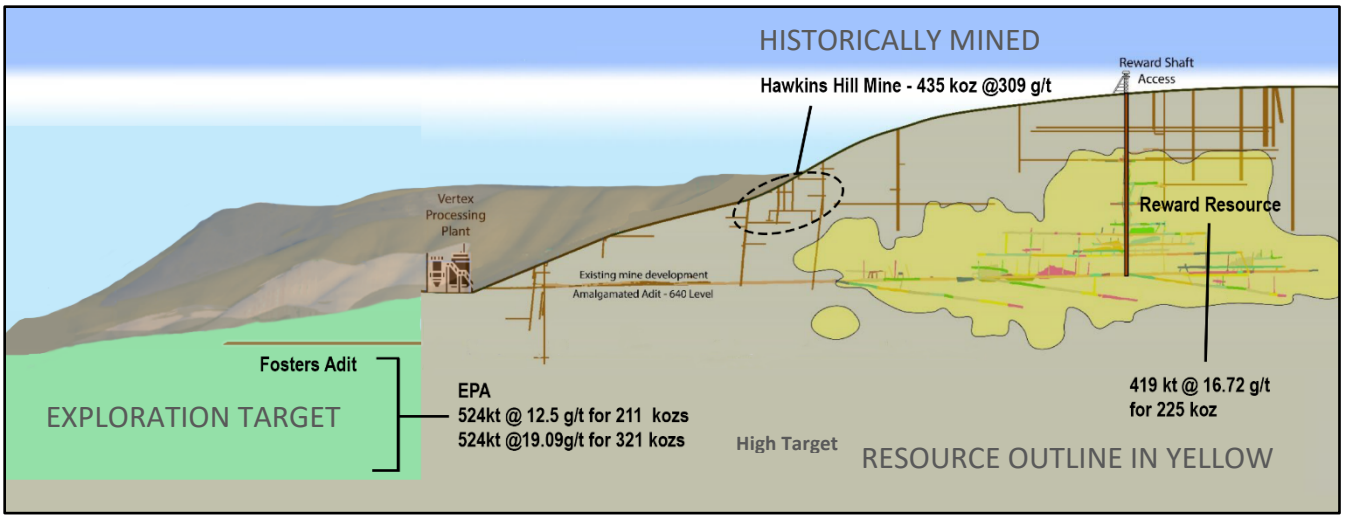

Figure 1, showing Fosters Exploration Target (green panel) south of the Reward underground gold mine workings, below Hawkins Hill (Historical Mine and shown in dotted line). Yellow showing the Reward Resource.

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.

ABOUT GEKKO SYSTEMS

Gekko Systems is a global leader in mineral processing, providing fully integrated solutions to mining companies around the world. Gekko was founded in 1996 in Victoria, Australia. Gekko Systems Pty. Ltd. develops mineral processing equipment. The Company offers modular systems, inline pressure jigs, inline leach reactors, resin columns, mag screens, dense media separators, tracers, and ragging products.
Innovative modular designs, elegant systems, and smart manufacturing launched Gekko as a world technical leader in gold processing and low-energy mining solutions. Offering significant cost benefits and a low environmental footprint; Gekko process designers customise self-contained high-recovery plants for minimal start-up capital, using high-quality components and in-house expertise. These flexible modular plants are engineered to deliver super-efficient, environmentally friendly recoveries, by combining Gekko's gravity pre-concentration, flotation, and intensive leach technologies. Gekko serves the mining industry worldwide through satellite operations.

Visit www.gekkos.com for more information.

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

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About Vertex Minerals Limited

Vertex Minerals Limited (ASX: VTX) is an Australian based gold exploration company developing its advanced Hargraves and 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 Taylors 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 (ρ=19.3) relative to quartz (ρ=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.
- 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.

Taylors 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				
	Indicated	141	15.5	71
	Inferred	278	17.3	155
Sub Total		419	**16.7**	225
Hargraves Project				
	Indicated	1,109	2.7	97
	Inferred	1,210	2.1	80
Sub Total		**2,319**	**2.4**	**178**
Red Hill Project				
	Indicated	413	1.4	19
	Inferred	1,063	1.8	61
Sub Total		**1,476**	**1.7**	**80**
Project Total				
	Indicated	1,663	3.5	187
	Inferred	2,551	3.6	296
Grand Total		**4,214**	3.6	**483**

FOSTERS EXPLORATION TARGET

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

MINERAL RESOURCE STATEMENT

The resource estimates are classified in accordance with the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC, 2012). The Reward estimate was completed by Andrew Hawker of HGS Australia. Mr Hawker has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Hawker consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. The resource is classified as Inferred. The classification was considered appropriate based on drill hole spacing, sample intervals, geological interpretation and representativeness of all available assay and density data. The classification reflects the low confidence in short range grade estimations in the model.

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 appears.

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 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	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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 (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.*	• Diamond drilling – Variable sample length depending on vein thickness. Quartz veining was half-cored by diamond saw except where veining was isolated and narrow. Core cut down long axis with same relative portion of sampled for each interval. Routinely a few centimetres of wall rock around the vein(s) were included in the sample to ensure that the vein footwall and hanging wall were left intact. Sampling of wall rock carried out adjacent to high grade intervals to test for peripheral mineralization with minimal values returned. • Reverse Circulation Drilling – Samples collected over 1m intervals via a cyclone and split to 3kg samples for submission to the laboratory. The only RC holes that intercepted the mineralised domains interpreted in this estimate have diamond core tails through the mineralised intervals. • Face Sampling - Face samples were approximately 8kgs of representative vein material taken by a geologist from the face. Only quartz vein material was sampled, with two or more samples collected if two or more veins are present. The distance between faces is approximately 1.75m and generally every second face was sampled giving approximately 3.5m sample spacing or rarely a 5.4m sample spacing
Drilling techniques	• *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).*	• Diamond Drilling – Surface diamond drill holes were either NQ3 or HQ3 in size whereas underground drill holes were LTK48. Core was oriented using the Ballmark method. • Reverse Circulation Drilling – RC holes were generally 130mm diameter face sampling bits with diamond core tails through mineralized zones.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Diamond Drilling - Core recovery (total core recovery) averaged >99% and the average RQD was 75%. • Reverse Circulation Drilling – Bag containing the 1m sample intervals were weighed prior to sub-sampling. No RC intervals intercepted mineralisation therefore recovery not an issue. • There is no apparent relationship between sample recovery and grade.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Core was laid out in an angle iron with a base of hole line marked for core orientation. All artificial core breaks were marked by red chinagraph crosses. The core also had metre marks, tray and hole numbers marked in chinagraph pencil prior to digital photography. Geotechnical logging was completed with recovery, rock quality designation (RQD), fracture frequency and orientation quality digitally recorded in Excel spreadsheets. Core was logged for geological and geotechnical parameters, with data collected digitally and transferred directly to the database. Holes were logged in detail for alteration, lithology, structure, vein style and mineralisation by geologists with data being plotted and interpreted on section during drilling. High quality digital photographs are available for all recent core. • Reverse Circulation Drilling – RC holes logged for lithology, colour, structure, alteration, mineralisation, weathering & oxidation, and vein quartz characteristics. As field staff sampled each hole the following information was recorded: Hole Name, Sample Name, Interval, Sample date, sampler name(s), Sample Mass, and sample moisture. This data was subsequently digitally recorded in Excel spreadsheets.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in*	• Diamond Drilling - Core was cut down the structural long axis and the same relative portion of half core was always sampled. Sample intervals, true vein thickness, angle of vein to core axis and vein composition were recorded. For screen fire assays each core sample was submitted to the laboratory, weighed, dried, and then pulverised in its entirety in an LM2 to a P85 of -75 microns. For Leachwell digestion methods sample protocol involved drill core samples of approximately 1kg weighed, dried, crushed and pulverised in an LM2 (removable-bowl

Criteria	JORC Code explanation	Commentary
	situ material collected, including for instance results for field duplicate/second-half sampling. • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	pulveriser) to 85% passing -75 micron. • Reverse Circulation Drilling - RC drilling: dust samples were collected in a side-mounted cyclone and dumped into large plastic bags annotated with the Hole Number and the interval depth. The bags were stacked in order at each site. A wet sample was frequently encountered at the water table. In all cases the water was able to be controlled and only a few samples were damp in the entire program. This is probably due to free draining old workings below the area of RC drilling. After weighing on a floor scale, each sample was carefully passed through a cradle riffle splitter by 2 field assistants sufficient to produce a ~3kg sample for dispatch to the laboratory. • Sample sizes are appropriate for the grain size of the material being sampled. • No systematic collection of field duplicate or second half sampling was recorded.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• Prior to January 2007 all HEGL core samples were analysed by the screen fire assay technique at the ALS Chemex Laboratory in Orange, NSW. Each core sample was submitted to the laboratory, weighed, dried, and then pulverised in its entirety in an LM2 to a P85 of -75 microns. The entire sample was weighed and wet screened using -75 micron disposable nylon screen. The +75 micron fraction was dried in aluminium trays, weighed and fire assayed to extinction. The -75 micron fraction was collected using flocculant, the liquor then decanted and the fines sample dried in an oven. This was homogenised in the LM2, weighed and fire assayed in duplicate using a 50 g charge. The assays for the -75 micron fraction were averaged and a weighted average is calculated with the +75 micron fraction. • In January 2007, drill core samples entered the production stream at SGS Labs-Townsville and were assayed for gold by accelerated cyanide leach using “Leachwell” reagent with fire assay finish. Sample protocol involved drill core samples of approximately 1kg weighed, dried, crushed and pulverised in an LM2 (removable-bowl pulveriser) to 85% passing -75 micron followed by a quartz flush. Both quartz flush and the sample were inserted in a Leachwell bottle filled with water and a predetermined number of Leachwell tablets. The containers were rolled for 24 hours whereupon the liquor was

Criteria	JORC Code explanation	Commentary
		homogenous and a subsample is extracted for fire assay. For assays greater than 10g/t, bottle tails were washed filtered and fire assayed. For assays greater than 50g/t, bottle tails were washed filtered and screen fire assayed. This additional protocol ensured coarse gold that may not have been dissolved in the accelerated cyanide leach process was captured. • For HEGL, Reverse Circulation drilling produced 1 metre samples which initially were all submitted for fire assay with any intervals returning elevated gold being re-assayed by screen fire assay. Post-December 2005, RC samples containing quartz were assayed by screen fire assay. After January 2007 RC samples were assayed by Leachwell methods. • Assay techniques are considered total and appropriate for the mineralisation style. • There is no documentation of the systematic collection of field duplicates or use of Certified Reference Material during the various drilling and sampling programs to monitor the precision and accuracy of the assay results. Instead, previous companies relied on the quality control procedures of the laboratory undertaking the sample assays to verify accuracy and precision. Each sample assayed by screen fire assay method had a duplicate 50g firing from the -75 micron fraction. The ALS Chemex QC protocol required that each batch of 50 samples analysed included a reagent blank, 3 replicate determinations and 2 standard materials [Certified Reference Material]. Samples exhibiting anomalous values (high or low) were routinely analysed using either the original pulp or a second split. All routine replicate analyses were reported to the client. During the analytical sample preparation stage, crushing and grinding equipment was flushed with barren quartz material between each sample. The quartz flush sample was stored, which could later be analysed to test for contamination or “loss of grade”. • Review of results of the lab’s internal QAQC results, indicate an acceptable level of accuracy and precision has been established for the drilling results. • Previous reporting on internal laboratory accuracy and precision has

Criteria	JORC Code explanation	Commentary
		not raised any significant issues. • The lack of QC at the sample collection stage is not considered to be a significant problem with the data from the deposit, as reconciliation of mined grades to model grades during trial production were within acceptable tolerances for an area of Paxtons vein mined and processed in 2008. Comparison of the estimated Mineral Resource and mill production to the end of June 2009 revealed a gold content reconciliation of 104%. .
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• The drilling database was validated for overlapping sample intervals, compatibility of hole depths between database tables as well as collar elevations compared to surface surveys and visual checks of drill hole traces in Surpac. No issues were found. • There are a number of drill holes that have intercepted mineralisation within relatively close proximity to each other and these drill holes have been investigated. Holes located less than 10m apart were assessed and found to have satisfactory levels of similarity and acceptable to be used in Resource estimation.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The majority of surface drill holes were surveyed using differential GPS and underground holes surveyed by underground total station methods. • Underground sample locations were located using a tape from the nearest underground survey station which were generally less than 20m apart. • Holes paths were surveyed using a downhole gyro or an Eastman single shot down-hole camera at 30 metres (or at the end of reverse circulation pre-collars) and then every 50 metres to the end of holes. • The level of accuracy for drill hole locations is considered appropriate for Resource estimation purposes. • This Resource estimate was undertaken using Zone 55 of the MGA94 grid coordinate system. • A reasonably detailed surface topographic survey was supplied. This Resource estimate is not impacted by surface topography as the uppermost extents of the mineralised domains occur between 60m and 100m below the surface.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Drill hole intercept spacing averages around 10m to 40m along strike and around 10m to 20m in the dip direction. Underground drill fans have resulted in intercepts as close as 2m apart in the dip direction. Down hole sampling intervals vary from 10cm to 5.25m with an average of 0.5m. • The data spacing and distribution is sufficient to establish grade continuity appropriate for the Mineral Resource estimation procedures and classifications applied. • No sample compositing was carried out prior to analysis.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Holes were drilled in an orientation to ensure sampling was undertaken, as close as possible, orthogonal to the strike and dip of the mineralised vein packages. This orientation achieves the least biased sample interval.
Sample security	• *The measures taken to ensure sample security.*	• All samples were collected and sub-sampled on site by company staff. Samples were submitted to the external laboratory using standard paperwork and delivered by company staff.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Review of QAQC data by Snowden (2006) showed moderate to high variability in laboratory duplicate data, mainly in the lower grades (<0.1g/t), but would not have a major impact on the global grade of the resource. • HEG personnel undertook audits of the ALS laboratory in Orange and the SGS laboratories in West Wyalong and Townsville with no issues discovered that may have a negative impact on sample preparation or analysis.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *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.* • *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.*	• The project is located within granted Exploration Licence EL5868 Mining leases ML1541, ML1116, ML315, ML316, ML317, ML49, ML50, ML913, ML914, ML915 and GL5846 with the earliest expiry date of 19 January 2033. The leases are held by Vertex Minerals Pty Ltd. • First Tiffany Resources Corporation is registered as having a 15% free carried interest in EL5868. • The site is covered by EPL 12008, scheduled activity is mining for minerals.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Modern exploration of the Hill End goldfield has been carried out by various companies since the early 1980's using surface and underground mapping and sampling, geophysical investigations, diamond and reverse circulation drilling. Previous exploration appears to have been performed to industry standards.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Mineralisation at the Reward deposit occurs within a series of bedding parallel quartz veins occurring along the limbs of the Hill End Anticline which is located in the mid-Silurian to mid-Devonian Hill End Trough containing sedimentary and volcanic rocks. The deposit is best described as a brittle, thrust-dominated, competency-controlled orogenic gold low sulphide system developed post ductile deformation.

Drill hole Information	• *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:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the*
		• There are approximately 3,800 separate drill holes and face sample locations used in the estimate and tabulation of the information would be cumbersome. A summary of all relevant drill hole and face sample information in this report is considered not to be material to the understanding of the report.

Criteria	JORC Code explanation	Commentary
	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.	
Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Exploration results are not the subject of this report. • Mineralised intercepts were composited to a nominal 1m in length for the purpose of statistical analysis and grade estimation. • No metal-equivalent values have been used in reporting (gold only).
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• Exploration results are not the subject of this report. • Holes were drilled to intersect the direction of main grade continuity at approximate right angles.
Diagrams	• *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.*	• Maps and sections of the drill hole locations, mineralised intercepts and domain interpretations are included in this report.
Balanced reporting	• *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.*	• Exploration results are not the subject of this report. • All intersections have been included in the estimation of Mineral Resources.
Other substantive exploration data	• *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.*	• Exploration results are not the subject of this report. • Bulk density measurements and metallurgical test results are discussed in the report. • There are no potentially deleterious elements in the Reward deposit.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Further exploration work will include drilling to extend the Mineral Resource along strike as well as up and down dip.

Criteria	JORC Code explanation	Commentary
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• A long section is included in the report showing the potential areas for extension of the Resource (Exploration Target).

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary

Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*
	• *Data validation procedures used.*
		• Core was logged for geological and geotechnical parameters, with data collected digitally and transferred directly to the database. Holes were logged in detail for alteration, lithology, structure, vein style and mineralisation by geologists with data being plotted and interpreted on section during drilling.
		• The following database validation activities have been carried out:
		  • Ensure compatibility of total hole depth data in the collar and assay drill hole database files.
		  • Check for overlapping sample intervals.
		  • Checking of drill hole locations against the surface topography.
		  • Visual validation in Surpac software.
		• No issues were found with the database.

Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• No site visit was completed by the Competent Person due to time and budgetary constraints.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Confidence in the geological interpretation is high as the deposit has been the subject of over 150 years of investigations and mining. • Data from sampling of diamond drill holes and underground exposures has been used in the estimation of grade. Any unsampled intervals were considered to have practically zero grade. • There are currently no alternative geological interpretations as the current interpretation has been considered the only feasible explanation of mineralisation for some time.

Criteria	JORC Code explanation	Commentary
		• Geological mapping of bedding, vein and fault orientations have been used to guide and constrain Mineral Resource estimation. • The principal gold mineralisation is associated with a series of bedding parallel quartz veins and associated saddle reefs occurring along both limbs and across the axis of the Hill End Anticline. veins are generally confined to slate units interbedded within coarser metasandstone units. Individual veins are narrow (0.05 to 0.3m wide) strike 190° and dip ~60°E. On some sections, up to 8 mineralised veins have been recorded. Minor near-horizontal, laminated (crack-seal), "leader" veins intersect layer-parallel veins. This intersection forms near-horizontal north plunging high-grade ore shoots. Also present are minor steeply dipping, crosscutting "spur" veins and crosscutting faults which kinematic analysis suggests resulted from minor dextral strike-slip movement. Steeply plunging high-grade ore shoots also formed at the intersection of these crosscutting structures and layer-parallel veins.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Mineralisation occurs as a series of 14 stacked quartz vein sets that strike approximately north-south and steeply dip to the east. The current defined Mineral Resource extends for 700m along strike, has a horizontal combined width of around 70m and a vertical height of about 250m. The top of the Mineral Resource occurs between 70m and 90m below the surface.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	• Surpac software was used for data validation, analysis, geological and mineralized domain modelling, sample compositing, grade interpolation and reporting. • Grade domains for constraining Resource estimation were interpreted and modelled based on geological logging and assay results contained within the supplied database. Fourteen separate vein sets were modelled. • The resource model is based on statistical and geostatistical investigations generated using 1m composited sample intervals. Assessment of the data suggests requirement for high grade cutting for the input datasets to be used for resource estimation and a value of 120 g/t Au was used.

Criteria	JORC Code explanation	Commentary
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• A sub-celled block model was constructed using parent block dimensions of 1m East by 10m North by 5mRL with sub-blocking for the purpose of providing appropriate definition of the grade domain boundaries. • Resource estimation was carried out for gold on the basis of analytical results available up to October 2022. Ordinary Kriging (OK) was selected as an appropriate estimation method based on the quantity and spacing of available data and style of deposit under review. A three-pass strategy was employed to generate the grade estimates. The number of composites for a successful estimate was restricted to a minimum of 6 and a maximum of 12 for the first pass, minimum of 4 and a maximum of 12 for the second pass, minimum of 2 and a maximum of 12 for the third pass reducing to 1 and 12 for the fourth pass. The search axes were created from block optimization studies and align with the average orientation of the mineralised domains while search distances were derived from variographic analyses of the data sets. • Production records are not available for comparison to this estimate. Comparison of the estimated Mineral Resource and mill production to the end of June 2009 revealed a gold content reconciliation of 104%. (HEG Annual Report 2009) • No assumptions of byproduct recovery have been made. • There are no deleterious elements associated with the Reward deposit. Sulphide content is low with an average of 3% logged when present. • Block sizes in the block model were chosen based on average drill spacing and block optimization studies. • Parent block size are comparable to underground mining selective units. • No assumptions about correlation between variables has been made. • Validation of the estimate was completed and included both interactive and statistical review. The validation methods included: -

Criteria	JORC Code explanation	Commentary
		• Visual comparison of the input data against the block model grade in plan and cross section. • Comparison of global statistics. • Swath plots, comparing the composite grade and the estimated grade grouped by intervals in plan and section The model was found to be robust.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Mineral Resource has been reported using a lower cut-off grade of 4 g/t Au. This grade reflects the underground mining method and relatively low cost processing method and is consistent with previous estimates.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• The deposit has been mined in the past using small scale mining methods which have a high degree of selectivity. Lower cost bulk mining methods are currently being investigated for future mining campaigns.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• The mineralogy of the Hill End gold mineralisation is relatively simple with most gold being of high fineness and hosted within quartz veins with low sulphide content. • Preliminary metallurgical testing by Metcon Laboratories Brookvale NSW, indicated that the gold is coarse and free milling. Testing has determined that 98% of the contained gold is liberated and recoverable at a P80 grind size of 670 microns. • The gravity separation plant on site achieved a 95% recovery rate. During 2009 a total of 12,591 tonnes of ore at a grade of 15.9g/t was processed producing 5,871 ounces of gold.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and*	• The free-milling coarse gold and low sulphide content of the ore is unlikely to present any significant mine waste issues.

Criteria	JORC Code explanation	Commentary
	processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Specific gravity determinations were made from 101 samples of unmineralized and mineralized quartz veins and wall rock submitted to the laboratory. The relative abundance of each rock type was factored into the analysis of the results, resulting in a bulk density of 2.7 t/m3 for all vein sets.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*
	• *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*
		• The Resource has been classified as Indicated and Inferred with the key parameters considered during the resource classification being:
		  • Geological knowledge and interpretation.
		  • Deposit style.
		  • Confidence in the sampling and assay data.
		  • The spacing of the exploration drill holes.
		  • Interpolation search pass.
		  • Prospects for eventual economic extraction.
		  • Continuity based on underground sampling
		• The exploration data used for the Reward estimate is robust and appropriate for resource estimation purposes, with the current data spacing sufficient to generate robust mineralisation interpretations. The geology of the project area has been studied in detail over numerous years, providing confidence in the interpretation of mineralisation style. Historical mining records give further confidence in the existence of economic mineralisation.
		• Prospects for eventual economic extraction are high as the deposit is partly developed, the gold is easily beneficiated using simple methods and there is an existing processing plant on site.

Criteria	JORC Code explanation	Commentary
		• There is insufficient confidence in historical drilling results, primarily due to a lack of information regarding quality control results and procedures used during drilling programs, that would allow the classification of a Measured Resource. • The classification reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• There have been no audits or reviews of the estimate apart from the previous resource conducted by Groundwork Plus in Dec 2022.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• There has been no attempt to apply geostatistical methods to quantify the relative accuracy of the Mineral Resource to within a set of confidence limits. • The Competent Person believes the Mineral Resource estimate provides a good estimate of global tonnes and grade. • No change of support adjustment has been made to the block estimates. • The accuracy and confidence of this Mineral Resource estimate is considered suitable for public reporting by the Competent Person.