

ASX Code: VTX

Advanced Hill End Gold Project (NSW)  
34km strike length high grade gold system –  
to be developed on a large scale - 1.6m ozs  
historically mined.

Combined existing 2012 JORC 484K oz @  
3.28 g/t + Significant exploration upside

Highly prospective Pride of Elvire Gold Project  
(WA) & Taylors Rock Nickel Gold Project  
(WA).

Hill End is home to the largest gold reef  
nugget ever found – world record.



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# Vertex, Red Hill Optimisations & MLA update.

ASX ANNOUNCEMENT 12<sup>TH</sup> APRIL 2023

## HIGHLIGHTS;

- Resource, Pit & Mining Schedule optimisation underway & reflect recent drilling & high gold price,
- Mining Licence Application (“MLA”) studies well underway & include:
  - ✓ Stakeholder engagement
    - Landowner (the Crown)
    - Bathurst Regional Council
    - Community, including
    - Future employees.
  - ✓ Total Water Management (incl. >10yrs bore monitoring)
  - ✓ Dust monitoring/benchmarking
  - ✓ Additional studies earmarked for completion.
- Red Hill ore is amenable to gravity processing & it is expected that ore could be trucked and treated through the Hill End Gravity Gold Plant\*,
- The Hill End Gravity Gold Plant is near readiness for commissioning with historic stockpile feed,
- Additional resource targets exist along strike, to the north of the existing Red Hill resource and at depth (see figure 1.)
- ✓ Importantly, the new interpretation of mineralisation has defined a significant target for future drilling, as the interpreted feeder zone structure and its stacked stockworks have not been tested.

\*Hill End Gold Announcement 30 November 2015

**Vertex Minerals Limited (ASX: VTX) (“Vertex” or the “Company”) is pleased to announce it has made good progress on Red Hill.**

**Executive Director Tully Richards commented:**

*“Red Hill represents a great opportunity to revisit the golden days of Hill End. An improved understanding of gold mineralisation, together with community support should see the Red Hill project a success! Furthermore, Red Hill should be a “stepping stone” to further resource development within the legendary Hill End Goldfield”*

The Vertex directors are now satisfied that Red Hill Gold Project is viable as a stand-alone project. The project plan includes a first phase of two shallow open pits. The ore will be hauled from Red Hill to the Hawkins Hill gravity processing plant and infrastructure located at Hill End.

Previous metallurgical test work on oxide, transition and primary material from Red Hill has confirmed that a high recovery of gold is achievable with simple gravity processing at a coarse grind and without the use of cyanide. This is similar processing performance to the Hill End and Hargraves deposits, which only require gravity processing to achieve ~90% recovery of gold. (Hill End Gold Announcement 30<sup>th</sup> November 2015) Consequently the processing plant, power requirements and infrastructure are a very low capital cost and of low environmental impact. The Company’s existing gravity processing plant located at Hill End is amenable to expansion to cater for the Red Hill feed.

Successive past drilling campaigns continued to discover new *en echelon* vein sets at depth and wide mineralised quartz ‘bedded’ stockwork zones have been intersected in the White’s, Red Hill and Marshall McMahon areas. There is potential to extend the resource in several locations immediately adjacent to the resource at depth and along strike. Additional shallow resource extensions are expected in the Red Hill area, such as at the Western Line of mineralisation.

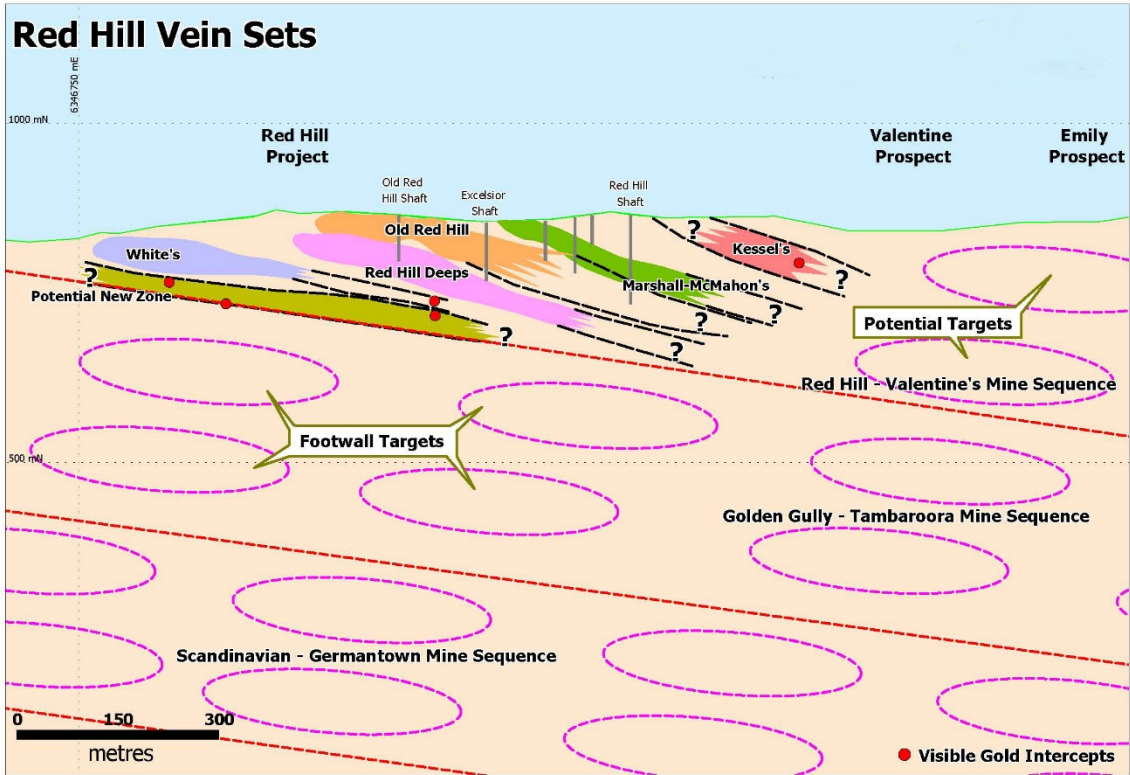


Figure 1. Red Hill future targets, note the 'visible gold' intersections shown occur outside the initial resource area.

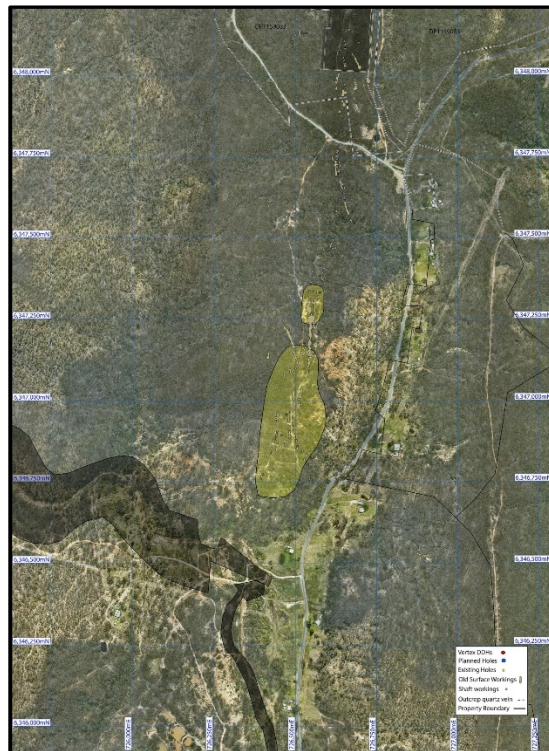


Figure 2 Potential Pit Locations



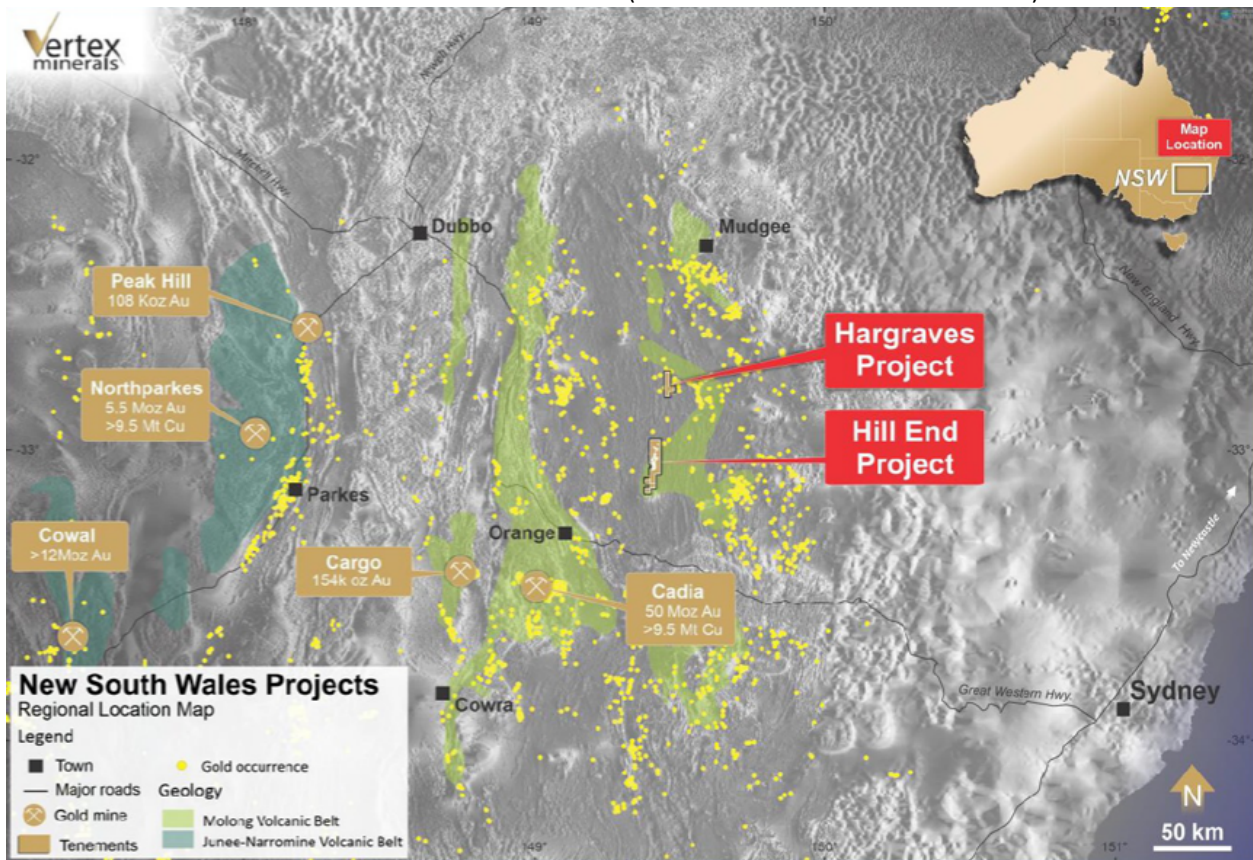
**Table 1 – Hill End Project Mineral Resource Estimate**

Deposit	Classification	Tonnes (kt)	Grade Au (g/t)	Contained Au (koz)
Reward Gold Mine	Indicated	55	12.4	22
	Inferred	782	8.1	205
<b>Sub Total</b>		<b>837</b>	<b>8.5</b>	<b>227</b>
Hargraves Project	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>
<b>Project Total</b>	Indicated	1,577	2.7	138
	Inferred	3,055	3.5	347
<b>Grand Total</b>		<b>4,632</b>	<b>3.3</b>	<b>485</b>

Reward Gold Mine: 2.0g/t reporting cutoff grade

Hargraves: 0.8 g/t reporting cutoff grade (ASX Announcement 29 May 2020).

Red Hill: 0.5 g/t per block, ordinary kriging grade interpolation, classified mineral Resources limited to 160mRL below surface. (ASX Announcement November 2015)



**Figure 3- NSW mines and Vertex project locations**



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

**Further Information:**

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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 ( $\rho=19.3$ ) 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.
- 14km of continuous gold lode with gold recovery rate to gravity at +90%.
- Work undertaken in 2015 by Hill End Gold Limited (HEG) culminated in a JORC 2012 resource estimate of **80,000 oz Au @ 1.7 g/t to 150m** depth.

### 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.

## JORC Compliance Statements

This announcement contains references to Mineral Resource estimates, which have been extracted from previous ASX announcements. These include announcements made by Peak Resources Ltd (ASX:PUA), the parent company of VTX prior to the Company's separate listing in 2022. The Resource estimate for the Reward deposit was announced by Vertex on 23 November 2022. For full details of Exploration Results in this release that have been previously announced, refer to those announcements.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the said 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.

### **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), Member of the Australasian Institute of Geoscientists 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.