

EXPLORATION PROGRESS UPDATE

ASX Code: VTX

**ETHICALLY AND ENVIRONMENTALLY
SUSTAINABLE**

Advanced Hill End Gold Project (NSW)
14km strike high grade gold system – to be developed on a large scale 1.6m ozs historically mined

Advanced Hargraves Gold Project (NSW)
moving to a PFS

Combined existing 2012 JORC 257K oz @ 2.11 g/t & significant exploration upside likely to be amenable to gravity recovery, with recoveries potentially as high as 95%

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 to be found – Globally

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ASX ANNOUNCEMENT 28 JULY 2022

Vertex Minerals Ltd (ASX:VTX, **Vertex** or **Company**) provides the following update on exploration activities at its flagship Hill End Project.

RED HILL DRILLING PROGRAM

Vertex announced earlier this month that an RC drilling campaign had commenced at the Red Hill Gold project. The drill location has encountered a prolonged period of unusually high rainfall, with associated access and potential safety issues being encountered. As a result of these and other factors, Vertex has opted to temporarily suspend drilling operations. The Vertex management team considers safe and efficient drilling operations to be of paramount importance.

The Red Hill drilling program will recommence once a suitable drill rig is available, and the Company is well advanced in negotiations to this effect.

Red Hill has an existing resource of 80,000 oz Au at 1.7 g/t to a maximum depth of 150m below surface. The Mineral Resource at Red Hill forms 1km of the total 14km of mineralized strike length that comprises the Hill End Goldfield. The entire 14km is within the Company's mineral tenements.

Additional components of the drilling and sampling campaign will now include sample collection for metallurgical test work, geotechnical analysis, and waste rock characterisation. These work elements are essential items for the progression of mining studies to support the application for a Mining Licence.

Metallurgical test work will be undertaken to determine if the Red Hill Resource has the same recovery as achieved in previous processing operations at Hill End. Geotechnical work will improve the confidence around open pit slope design and stability whilst waste rock characterisation will enhance the knowledge associated with mine closure requirements.

The Company will provide advice on the anticipated recommencement date once confirmed.

The Red Hill Resource forms 1km of the 14km strike length at the Hill End Gold Project located in the highly prospective Eastern Lachlan Fold Belt of Central West NSW (refer *image 1*). The project has seen extensive historical mining, however, most of the previous workings were impeded by a high-water table. Work undertaken in 2015 by Hill End Gold Limited ('HEG') culminated in a JORC 2012 resource estimate at the Red Hill Resource of **80,000 oz Au @ 1.7 g/t to 150m** depth. The complete resource is summarised in *Table 1* below.

Category (0.5 g/t Cut Off)	Oxidation	Tonnes	Gold Grade (g/t)	Contained Gold (oz)
Indicated	<i>Oxide</i>	228,000	1.3	9,300
	<i>Transition</i>	77,000	1.3	3,300
	<i>Fresh</i>	107,000	1.8	6,000
Total Indicated		413,000	1.4	18,600
Inferred	<i>Oxide</i>	180,000	1.6	9,200
	<i>Transition</i>	212,000	1.7	11,400
	<i>Fresh</i>	671,000	1.9	40,700
Total Inferred		1,063,000	1.8	61,400
Total Indicated & Inferred		1,475,000	1.7	80,000

Table 1: Red Hill resource table as announced by HEG in November 2015

The Red Hill metallurgy is believed to be amendable to gravity recovery methods, with previous test work reporting recovery rates greater than 90%. The project boasts an existing 100% owned and permitted processing plant. Easy access to the existing plant and high metallurgical recovery presents Vertex with the opportunity to develop a gold mine with a very small environmental footprint.

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 and its Pride of Elvire and Taylors Rock gold projects located in a well-known WA gold precinct. The focus of Vertex Minerals is to advance the commercial production of gold from its NSW projects embracing an ethical and environmentally sustainable approach, utilising the below attributes/techniques to uniquely positioning the company as Australia's first truly environmentally sustainable producer of **green gold**:

- **Direct Smelting:** The use of direct smelting of a gold concentrate that eliminates the need to use cyanide as a solvent
- **Gravity Separation:** The deportment of gold at the Hill End Project allows high recovery to a concentrate produced using gravity separation techniques
- **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:** 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 sulphides

Hargraves Gold Project (NSW)

- Hargraves Gold project is located approximately 25 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**

2012 JORC-compliant Mineral Resources

	Classification	Tonnes (t)	Grade (Au g/t)	Contained oz
Hargraves	Indicated	1,108,651	2.7	97,233
	Inferred	1,210,335	2.1	80,419
Sub-Total		2,318,986	2.4	177,652
Red Hill	Indicated	413,000	1.4	18,600
	Inferred	1,063,000	1.8	61,400
Sub-Total		1,475,000	1.7	80,000
Combined Total	Indicated	1,521,651	2.35	115,833
	Inferred	2,273,335	1.96	141,819
		3,791,986	2.11	257,653

Hargraves: 0.8 g/t reporting cut-off [ASX Announcement 29 May '20](#)

Red Hill: 0.5 g/t per block, ordinary kriging grade interpolation, classified Mineral Resources limited to 160mRL below surface. ASX announcement 30 Nov 2015: [ASX announcement Nov '15](#)

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% - **green gold**
- 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

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) 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.