

## GREAT SOUTHERN MINING TO COMMENCE EXPLORATION DRILLING AT COX'S FIND GOLD PROJECT

### HIGHLIGHTS:

- Program of Works (POW) approved for Great Southern Mining to commence extensive maiden drill program at the historic high-grade Cox's Find Gold Project.
- The primary objective is to discover a substantial high-grade gold resource.
- Data reviews show the historic open pit (to 10m) and underground production (to 158m) of **106,009 tons at 22.6g/t gold for 75,816oz** by Western Mining Corporation (WMC) between 1936 and 1942.
- Phase 1 will consist of Reverse Circulation (RC) and Diamond Drilling (DD) aimed at testing new predictive structural models with a view to extending the high-grade gold mineralization beyond the current workings.
- The maiden drilling campaign will represent the first exploratory drilling at the deposit for over 25 years and the first drilling beyond 60m vertical depth.
- The Cox's Find Gold Project is located in a world class gold district, 65km north of Laverton and is in close proximity to multiple gold operations and infrastructure (refer Figure 1).

Great Southern Mining (ASX: GSN or the "Company") is pleased to advise that it has received approval for the planned Program of Works ("POW") with the Department of Mines, Industry, Regulation and Safety ("DMIRS") to start extensive drilling at the Company's 100% owned Cox's Find Gold Project ('Cox's Find'). The commencement of the maiden program is imminent and will consist of a combination of RC and DD holes 'tails'. GSN is anticipating between 1,500m and 2,000m of drilling during the first phase.

**Commenting on the potential at Cox's Find and the imminent maiden drilling program, GSN's Executive Chairman John Terpu said:**

*"The exploration team at GSN have built a 3D model for the project which has been used to guide this phase of drilling. The process involved collating over 80 years of historical production, exploration and technical data which has shed new light on the potential for this project.*

*The key objective of this drill program is to acquire valuable diamond core profiles through the deposit with the targeted drilling testing new predictive structural models increasing our understanding of the high-grade gold distribution, structural controls and orientation of the quartz reefs. This will then help us design Phase 2 of the program with extensive RC and DD drill programs that will aim to extend the areas of high-grade gold mineralisation beyond the current workings.*

*The 3D model demonstrates that Cox's Find is an exceptional opportunity for exploration and resource growth of an old high-grade gold mine. The drilling will enable us to gauge the potential size and viability of the deposit with potential near-term production scenarios given its close proximity to several significant processing facilities and infrastructure."*

### ASX ANNOUNCEMENT 11 October 2019

#### BOARD OF DIRECTORS

*Executive Chairman*  
John Terpu

*Non-Executive Director*  
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*Non-Executive Director*  
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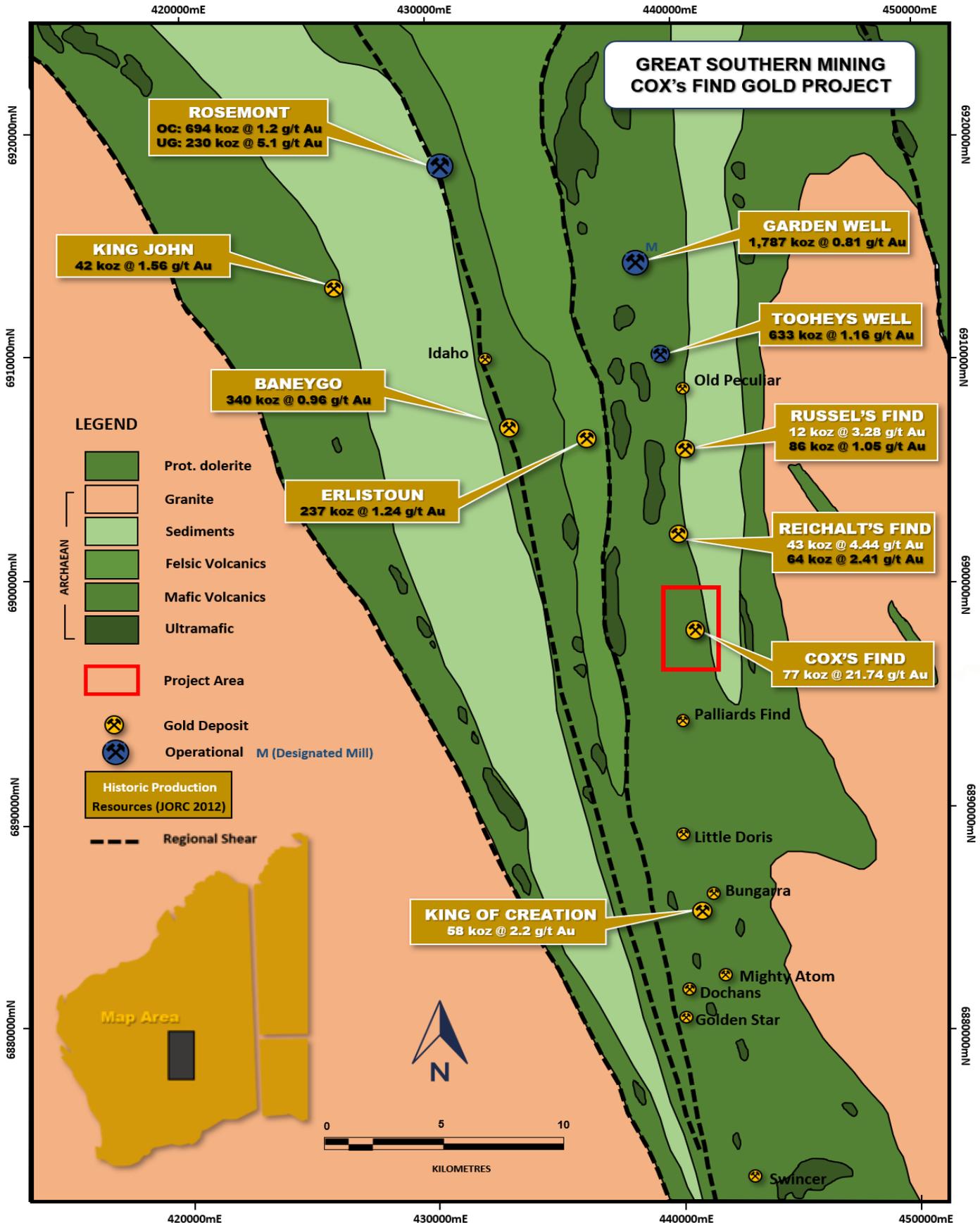


Figure 1: Cox's Find Gold Project location to existing mills and infrastructure

## BACKGROUND TO THE PROJECT

Cox's Find is a shear hosted Archaean orogenic gold deposit located in the Duketon Greenstone Belt, located along strike from, and within 12kms of, Regis multi-million-ounce Garden Well which was first drilled in 2008.

The historical Cox's Find gold mine and surrounding tenements which form part of the Project have been largely unexplored for over 30 years. The mine, being Western Mining Corporation's (WMC) first venture into gold production in Australia.

The mine was worked to a depth of 158m, however mining activities ceased in 1942 when the gold price was approximately USD \$33.85. Whilst the mine operated at very high grade, the economic conditions at the time of mining under WMC meant that even ore grading up to 12 g/t was left in-situ, being deemed unpayable or uneconomic to mine.

The current site hosts the abandoned shallow (<20m) open pit, underground mining stopes, untreated stockpiles of material on the surface and remnant tailings from the underground operation. The Company is in the process of obtaining the necessary information to update the market with a JORC 2012 compliant Resource on the surface material as announced 17 September 2019.



The previous exploratory surface drilling to define the reef structure is limited to ~60m vertical depth beyond which the ore shoots are broadly defined by the areas of stoping to the base of the existing workings at ~150m depth. The workings indicate that the gold mineralisation is open at depth and down plunge providing immediate drill targets.

Following the significant exercise in collating the 80 years worth of historical data and through GSN's initial interpretation (during the due diligence period) using modern techniques, it is GSN's view that the exploration model adopted historically was inappropriate for the primary structural controls in targeting the extensions of discrete high-grade shoots. Further details are contained in the Company's announcement on 26 August 2019.

This provides GSN with considerable exploration potential and affords GSN the opportunity to apply modern exploration techniques to a high-grade gold mine that is poorly understood and significantly under explored.

## PROGRAM OF WORKS (POW)

The planned drilling will focus on shallow, high-grade gold mineralisation adjacent to the historic high-grade development with the drill targets identified from the integration and modelling of historic mining and exploration data. The POW will be the first exploration holes drilled into the deposit in over 25 years and the first to include significant drilling past a vertical depth of 60m.

The program will consist of a combination of RC and DD 'tails' with GSN anticipating drilling between 1,500m and 2,000m during the first phase. Figure 3a and 3b show the planned location of the holes.

Mineralisation at Cox's Find occurs as quartz saddle reefs within drag folds varying in thickness up to 8m and projecting off north-northeast shear zones. The high-grade mineralisation is associated with bluish grey to black vuggy quartz-sulphide lodes with visible gold within altered schists that also host marginal stockworks. The host sequences occur within interflow sediments between two mafic volcanic units. This dark quartz is cut by a network of white quartz veinlets which also contain gold. The reef unit dips eastwards at 50 to 60 degrees at surface with dips shallowing to approximately 20 degrees at the No. 6 level (158.2m) of the Cox Find Gold Mine. Drag folds are developed within the sediment/quartz unit plunge southeast at 45 degrees.

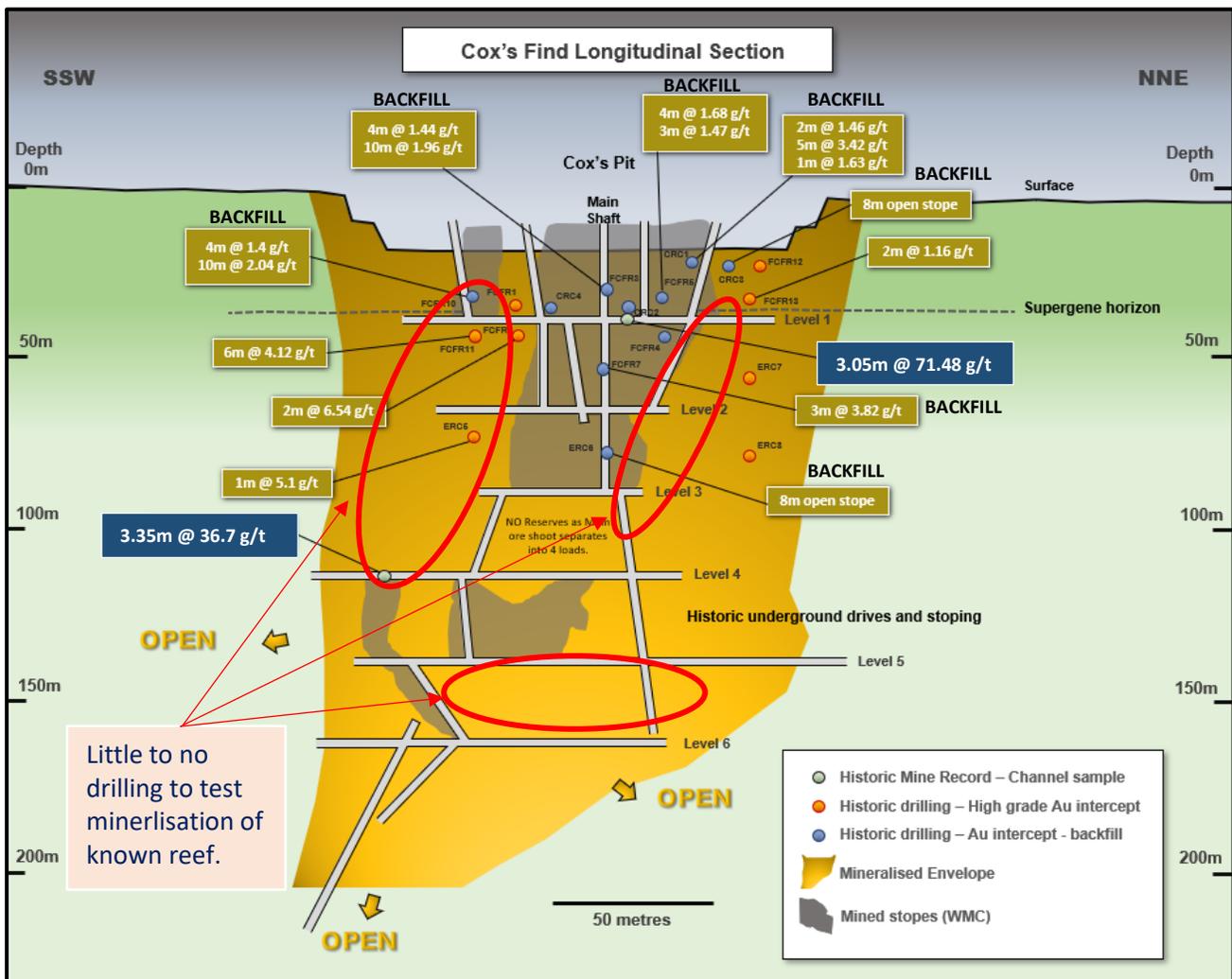


Figure 2: GSN interpretation of longitudinal section through the Cox's Find development showing historical drilling results.

The development of the high-grade quartz reefs is currently poorly understood. Most exploratory work by WMC involved shaft sinking, driving or cross-cutting and testing of quartz veins for 18 m south and 30-40 m north of the mined area shoot with delineation of ‘no pay values’ or ‘no values’ sometimes described as ‘low value’ or “erratic but unpayable values”. The reported breakeven cost of mining at that time at Cox’s Find (with no allowance for development costs) was in the order of 11 – 12 g/t gold.

The ore shoots have developed with a morphology similar to the drag folds. The main ore shoot is best developed on the 3 and 4 levels (66.17m to 105.9m). A second ore shoot is located to the south of the main ore shoot and is developed on the 4 and 5 levels (105.9m to 132.2m). This second ore shoot has the morphology of a parasitic drag fold with similar plunges to the main drag fold.

Drilling will also target a **number of historically identified and untested ultra-high-grade quartz reefs** that were delineated in development drives but never extracted during stoping and which have not been drill tested. These include:

- 1) An untested quartz reef located along the development drive on level 5 (132.2m) approximately 25m north of the main shoot (Figure 3a), and
- 2) A potential structurally repeated quartz reef that was intersected in a main shaft along level 5 located approximately 15m below the main shoot (Figure 3b).

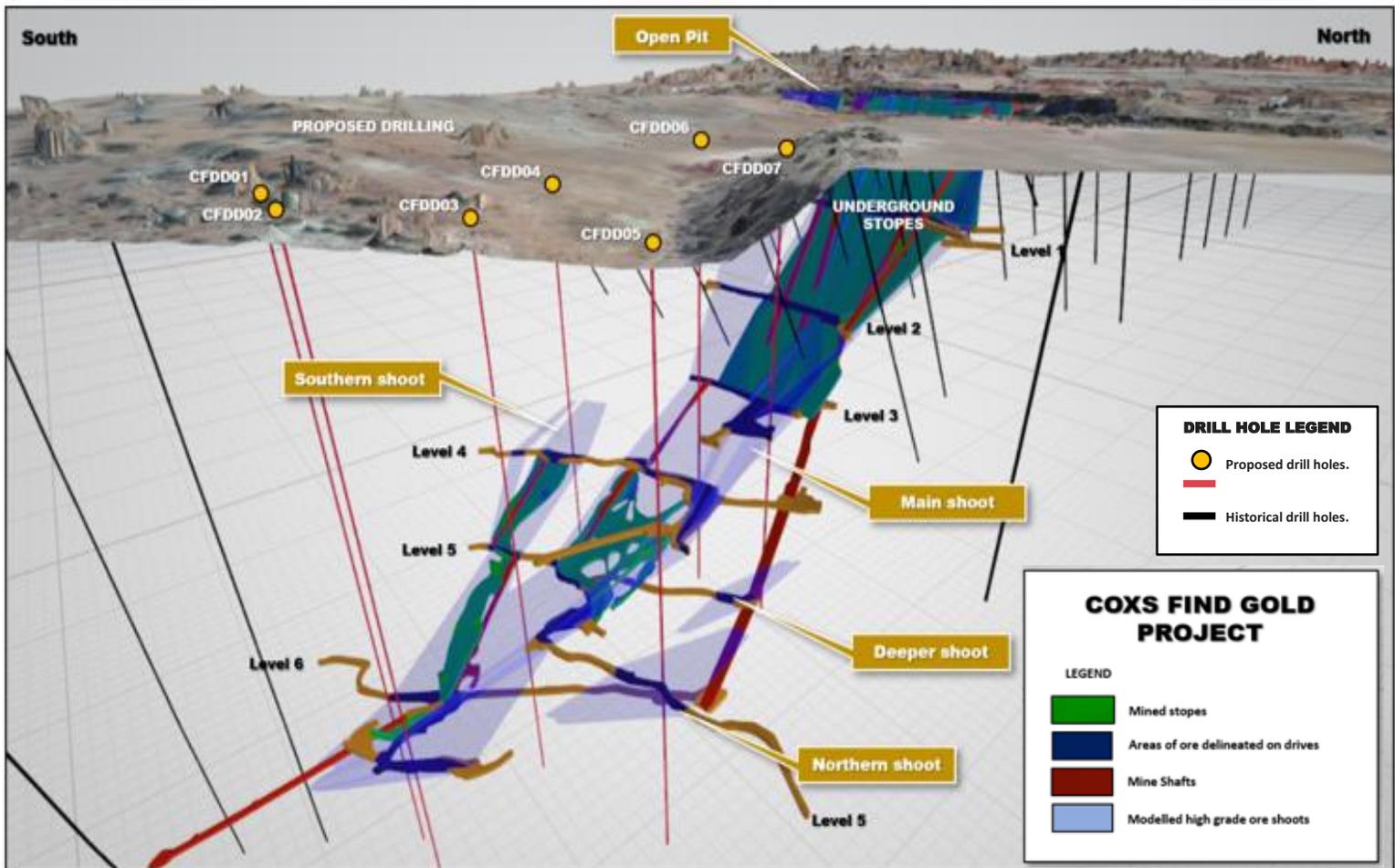


Figure 3a: Proposed drill holes (CFDD01 – 07).

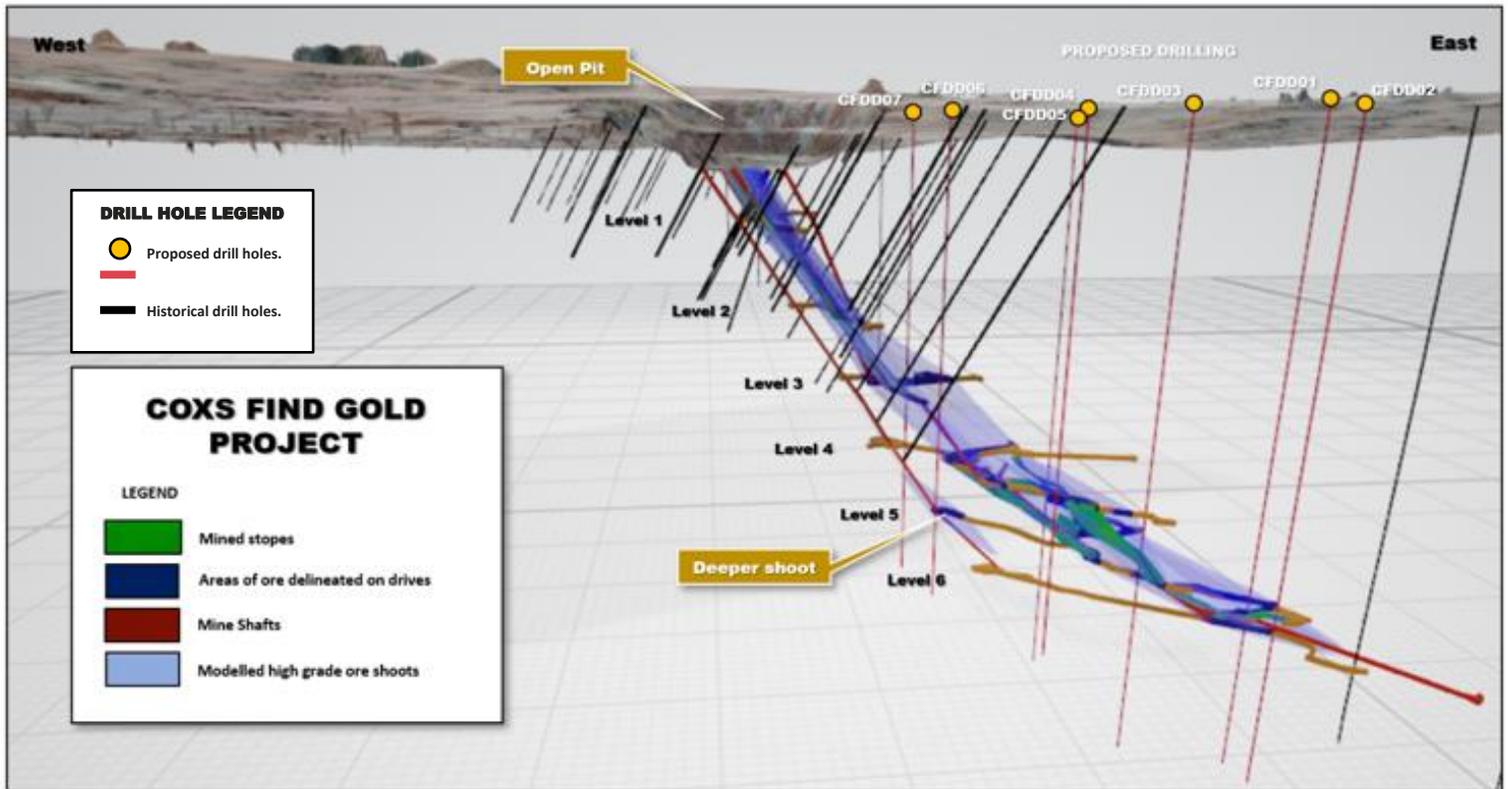


Figure 3b: Cox’s Find Project modelled high grade orebody, mine layout and proposed exploration holes

### ABOUT GREAT SOUTHERN MINING LIMITED

Great Southern Mining Limited is a Western Australian based Company listed on the ASX. Its aim is to become a leading gold exploration Company in Australia. With significant land holdings in the world-renowned gold districts of Laverton in Western Australia and the Mt Carlton Region of North Queensland, all projects are located within 25km of operating gold mills and major operations.

The Company’s focus is on creating and capturing shareholder wealth through efficient exploration programs and strategic acquisitions of projects that complement the Company’s existing portfolio of quality assets.

## Competent Person's Statement

*The information in this report that relates to Exploration Results on M38/578, M38/170 and M38/740 is based on information compiled by Dr Bryce Healy, a Competent Person who is a Member of the Australian Institute of Geoscientists. Dr Healy is employed by Noventum Group Pty Ltd (ACN 624 875 323) and has been engaged by Great Southern Mining Limited as Head of Exploration. Dr Healy 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'. Dr Healy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

## Forward Looking Statements

*Forward-looking statements are only predictions and are not guaranteed. They are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of the Company. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward looking statements or other forecast. The occurrence of events in the future are subject to risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to differ from those referred to in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, the Company, its directors, officers, employees and agents do not give any assurance or guarantee that the occurrence of the events referred to in this announcement will occur as contemplated.*