

20 January 2020

# King of the Hills Final Feasibility Study Progress Update

Red 5's King of the Hills Final Feasibility Study continues to deliver against milestones and is on schedule for completion in the September 2020 Quarter

- Final Feasibility Study (FFS) for the proposed stand-alone integrated bulk open pit and underground mining and processing operation at the King of the Hills (KOTH) Gold Project in Western Australia is progressing on schedule for completion in the September 2020 Quarter.
- Updated Process Plant and Infrastructure layout plans submitted by GR Engineering Services (GRES).
- Underground extensional drilling continuing with three diamond drill rigs and results being progressively incorporated into an updated KOTH geological model that will form the basis for future Resource and Reserve updates.
- In-fill RC drilling of western wall at KOTH open pit completed (36 holes for 7,568m) while in-fill drilling at the Cerebus-Eclipse and Centauri satellite deposits is well advanced and on track for completion by the end of January 2020 (102 holes drilled from the planned 126 holes for 17,000 metres).
- Geotechnical core drilling and test pitting program completed in the open pit and for key Project infrastructure (Process Plant, Village Accommodation, TSF5 and TSF6).
- Geotechnical, hydrogeological and metallurgical diamond drilling at the Cerebus-Eclipse, Centauri and Rainbow satellite deposits scheduled to commence in late January 2020.
- Field works have largely been completed for flora, fauna, archaeology and anthropology surveys.

Red 5 Limited ("Red 5" or "the Company") (ASX: RED) continues to make strong progress across all areas of the Final Feasibility Study (FFS) for the proposed stand-alone integrated bulk open pit and underground mining and processing operation at the King of the Hills (KOTH) Gold Project in Western Australia.

Multiple work streams have been progressed since the last update on 12 December 2019, with the overall delivery schedule on track for completion in the September 2020 Quarter.



Figure 1: High grade quartz+sulphide vein in underground drill core.

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#### **KEY ACTIVITIES CURRENTLY BEING PROGRESSED**

#### 1. General Site Arrangement

GR Engineering Services (GRES) were engaged in late 2019 to produce a preliminary infrastructure design and layout. The Red 5 FFS team has been reviewing the initial designs in conjunction with GRES and have developed a preliminary tender package list. Designs are well advanced for TSF 5 and TSF 6 (Knight Piesold), the Process Plant and the Accommodation Village.



Figure 2: Aerial view of KOTH Site showing most recent designs of TSF5, TSF6, Process Plant and Village.

### 2. Underground Resource

As previously reported, the underground component of the KOTH resource of 17.5Mt at 2.0g/t Au for 1.11Moz of contained gold (see ASX announcement 20 May 2019) presents a key underground mine extension opportunity for the project.

Three diamond drill rigs from Australian Underground Drilling (AUD) are progressively exploring multiple extensional opportunities to the existing underground operations. Interim assays and geological modelling are encouraging and provide increasing confidence in a potential uplift to the existing Resource. These assays will be released progressively.

Consultants Entech have recently been engaged to develop the underground mine plan and schedule with a key focus being on the interactions with the proposed open pit operations.





Figure 3: Underground drill contractor AUD.



Figure 4: Underground drill core at various stages of preparation and logging.



### 3. Surface Resource drilling

In-fill RC drilling of the western crest of the KOTH open pit has been completed. This program consisted of 36 holes for 7,568m and aims to evaluate the potential for Resource extension and assist further pit optimisation works.

In-fill drilling at the prospective Cerebus-Eclipse and Centauri near-mine satellite deposits to the north-west of the KOTH open pit is continuing. Drilling contractor Precision Exploration Drilling (PXD) now have two RC rigs dedicated to the program, which has completed 102 holes from the planned 126 holes (<u>17,000 metres</u>) as at date of this announcement. The program remains on track for completion in January 2020.



Figure 5: RC drilling at satellite deposit Cerebus-Eclipse.



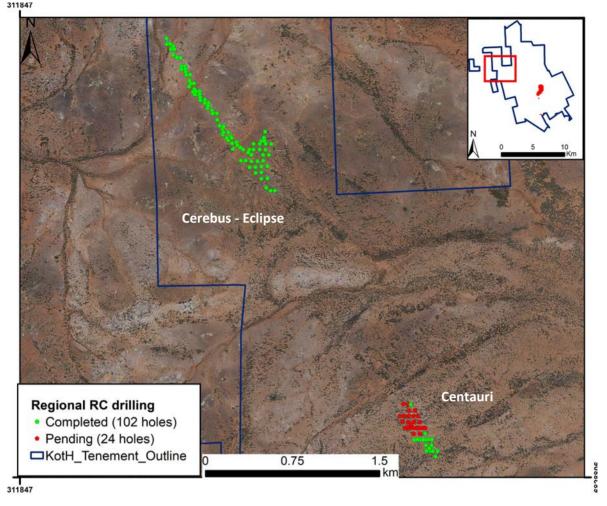


Figure 6: Surface drill program locations and status at Cerebus-Eclipse and Centauri.

### 4. Open Pit

A substantial program to assay historical core has been ongoing and is now nearing completion with approximately 33,500m sampled to date, providing further data and confidence to both the open pit and underground Resources. Prior to incorporation of these assay results, the Resource model has assigned a value of 0.005 g/t, effectively zero, to unassayed core. Therefore, all assays above this grade are expected to add to the previously reported 3.1Moz Resource. An updated KOTH Mineral Resource is scheduled for release in the June quarter.

Several poorly documented low-grade stockpiles across the site which were generated during the 1990's remain and present a potentially valuable resource. To quantify this asset, Red 5 has embarked upon a project to confirm the remaining tonnage, grade and economic viability of these stockpiles for the Final Feasibility Study. Results of this survey are expected late in the March 2020 Quarter.

### 5. Geotechnical and Metallurgy drilling

Drilling contractor DDH1 has completed all 11 diamond drill holes around the wall of the KOTH open pit for the purpose of geotechnical and metallurgical evaluation. A number of these holes are currently being instrumented with Vibrating Wire Piezometers (VWP's) to enhance the existing hydrogeological monitoring network under the guidance of consultant Big Dog Hydrogeology.

Also complete is the geotechnical borehole program (14 holes and 60 test pits) in the infrastructure areas (TSF 5, TSF 6, Process Plant and Accommodation Village), which will inform the structural design engineering program undertaken by GRES and Knight Piesold (tailings facilities).

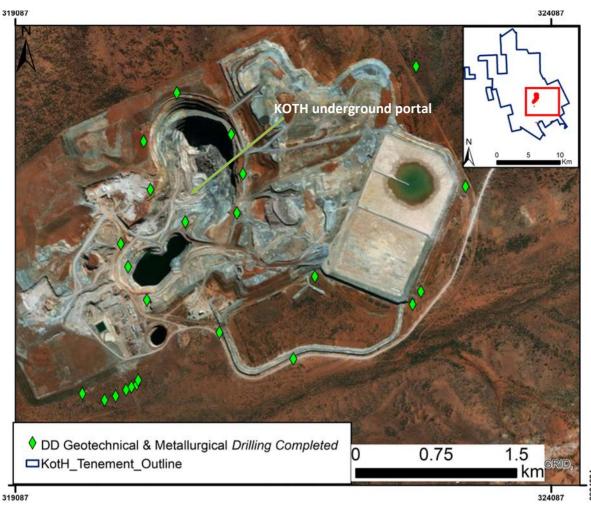


On completion of the installation of all open pit VWPs, DDH1 will commence a 15-hole diamond program at the KOTH projects satellite deposits (Cerebus-Eclipse, Centaurus and Rainbow deposits). These holes will primarily be for geotechnical, hydrogeological and metallurgical evaluation and will be completed in February.



Figure 7: DDH1 installing vibrating wire piezometers in the KOTH open pit as part of geotechnical investigations.





*Figure 8:* Diamond drill locations around KOTH open pit, Process Plant, TSF5 and TSF6 locations (geotechnical, metallurgical and hydrogeological investigations.

### 6. Fauna and Flora

Field works have largely been completed for flora (Mattiske Consulting Pty Ltd) while a second seasonal fauna survey (Terrestrial Ecosystems) will be undertaken during Autumn 2020. Studies to date have identified the existence of flora species of importance in the region and potentially near the proposed new mine disturbance areas. Careful mine planning and environmental management will avoid or ensure minimal impact on these species and sites and Red 5 will look to enhance the knowledge, understanding and protection of all environmental values at the KOTH Project.

### 7. Cultural Heritage

Sites with Aboriginal heritage significance are located within the KOTH tenements. Archaeology (Waru Consulting) and anthropology surveys (Daniel de Gand and traditional owner representatives) are now nearing completion with reports and documenting these sites is expected in February. Some of these sites do interact with initial mine site infrastructure designs. However, taking into account the views and inputs of the traditional owners, designs have been modified to maximise protection of sites of importance.

### 8. Environment

MBS Environmental has been engaged to provide an Approvals Strategy and Plan to de-risk the permitting process. All approvals requirements will be identified and scheduled to minimise the risk of potential delays.

MBS Environmental will be conducting soil and landform studies in the near term to complement the existing catalogue of historical information gathered during previous operations at the site. The existing groundwater monitoring system at KOTH is being extended in parallel with the multiple drill programs at the satellite deposits and around the partly constructed TSF 5. TSF 5 will accommodate approximately five years tailings production after decommissioning of the existing TSF 4 which has capacity for the initial year of proposed operations.

### MANAGEMENT COMMENT

Red 5 Managing Director, Mark Williams, said the Company has continued to make good progress across multiple work streams, with activities now ramping back up quickly across the site following the Christmas and New Year period.

"Geotechnical, resource extension and resource in-fill drilling programs are in full swing again following a short break for the festive season," he said.

"We expect to receive further results from underground extensional drilling and ongoing assaying of previously un-assayed historical drill core from KOTH, which will be progressively incorporated into an updated KOTH geological model.

"Infrastructure design, metallurgical testwork design and permitting, approvals and stakeholder engagement programs are also moving forward well as planned.

"This is a very exciting time for Red 5, as we work towards the delivery of a Final Feasibility Study for a major new stand-alone gold project at King of the Hills later this year, laying the foundations for Red 5 to take its next major growth step as a leading Australian gold producer."

ENDS

For more information:

### Investors/Shareholders:

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### **Competent Person's Statements**

### **Mineral Resource and Exploration Results**

Mr Byron Dumpleton, confirms that he is the Competent Person for the Mineral Resource and Exploration Results summarised in this report and Mr Dumpleton has read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition). Mr Dumpleton is a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in this report and to the activity for which he is accepting responsibility. Mr Dumpleton is a Member of the Australian Institute of Geoscientists, No. 1598. Mr Dumpleton is a full-time employee of Red 5. Mr Dumpleton has reviewed this report and consents to the inclusion of the matters based on his supporting information in the form and context in which it appears.

#### JORC 2012 Mineral Resource and Ore Reserves

Red 5 confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and 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 been materially modified from the original market announcements.

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#### **Forward-Looking Statements**

Certain statements made during or in connection with this statement contain or comprise certain forward-looking statements regarding Red 5's Mineral Resources and Reserves, exploration operations, project development operations, production rates, life of mine, projected cash flow, capital expenditure, operating costs and other economic performance and financial condition as well as general market outlook. Although Red 5 believes that the expectations reflected in such forward-looking statements are reasonable, such expectations are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward looking statements and no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, delays or changes in project development, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in metals prices and exchange rates and business and operational risk management. Except for statutory liability which cannot be excluded, each of Red 5, its officers, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in this statement and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this statement or any error or omission. Red 5 undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events other than required by the Corporations Act and ASX Listing Rules. Accordingly, you should not place undue reliance on any forward-looking statement.