



ASX Announcement

20 February 2019

Positive recoveries and increased resource potential supports study expansion to 2.0Mtpa

De Grey Mining Limited (ASX: "DEG", "De Grey") wishes to advise that its Board has decided to expand the scale of the Pilbara Gold Project's development study to a 2Mtpa plant throughput.

The Board's decision to increase scale has arisen as a result of:

- An increase in resources to 1.4M¹ ounces from the previous 1M ounces on which the 2017 Scoping Study³ was based;
- Recent exploration results coupled with the ongoing exploration potential of De Grey's tenements; and
- The recent material increases in gold recoveries², to between 90% to 94%.

The decision to increase scale is further supported by:

- Preliminary economic evaluations which show the increased scale should result in a production profile over 100,000 ounces per annum, and provide significantly higher returns across the project;
- Improved gold outlook and recent price increases;
- Economies of scale with reduced unit operating costs;
- Simplified processing plant flowsheet;
- Confidence in defining new resource additions; and
- Potential for higher grade underground lodes below at least 4 deposits.

GR Engineering Services is nearing completion on design and costing of a proposed 2Mtpa processing plant. This work will be completed to PFS standard (+/- 20%) and will form a critical aspect of defining operating costs used in open pit and underground optimisations and evaluations.

Cube Consulting will then undertake revised open pit optimisations based on the new operating and mining costs. From this work any additional drilling to expand both open pit and underground resources, metallurgy and geotechnical activities and associated timeframes will be determined.

To rapidly advance resource extension drilling, two drilling rigs are already operating. A diamond rig is continuing to target the encouraging underground high-grade lodes and an RC rig is currently targeting the shallower targets beneath the existing Withnell pits. Subsequently, both rigs will move to test and extend resources to a depth >200m at Toweranna, where previous optimisations indicate pit shells are restricted by the depth of drilling and the high-grade quartz lodes show potential for open pit resource extensions and underground lodes to at least 400m depth.

Further drilling is planned to target resource extensions at the Mallina and Mt Berghaus deposits for shallow open pit resources along strike and depth extensions where higher grade zones are becoming evident.

The expansion is in line with De Grey's stated corporate goals and material milestones:

- Expanding resources to 3.0Moz, with 2.0M oz targeted by end of 2019;
- Establishing a future mining operation with production rate >100,000oz per year; and
- Defining a minimum 7 year mine life.

De Grey Chairman, Simon Lill, commented:

"De Grey is an exciting Australian gold growth story with a material and near-term development opportunity in one of the world's best mining jurisdictions.

Our vision is very simple; we have our foot on a significant new gold province and we plan to grow resources towards 3.0Moz and ultimately develop a new standalone +100,000-ounce gold mining operation.

To achieve this vision, exploration guidance is to increase resources to 2.0Moz in 2019. Recent open pit evaluations, together with improved gold recoveries, show expanding the mining and processing rate to 2.0Mtpa is likely to deliver far superior returns and increase production beyond our goal of 100,000ozpa compared to the original 65,000ozpa defined in the 2017 1Mtpa scoping study.

¹ ASX: 3 October 2018 – *"2018 Total Gold Mineral Resource increases to 1.4M oz's"*

² ASX: 12 February 2019 – *"Positive gold recoveries enhance Pilbara Gold Project potential"*

³ ASX: 4 August 2017 – *"Positive Scoping Study completed at Pilbara Gold Project"*

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