

## 3D RESOURCES DELIVERS A POSITIVE INITIAL SCOPING STUDY FOR THE ADELONG GOLD PROJECT NSW

---

3D Resources Limited (ASX:DDD) (3D Resources or the Company) is pleased to advise that it has completed the first part of its proposed Scoping Study for its Adelong Gold Project located in Southern New South Wales (NSW). The full Scoping Study will now be finalised once a further round of drilling is completed to upgrade the Caledonian Inferred Resources which the company was unable to complete due to inclement weather. As the Company has completed all other components of the study it has decided to publish the initial components based on mining the Challenger and Currajong deposits which are predominantly (89%) Measured and Indicated Resources. This Initial Scoping Study generates Production Targets from mining just 40% of the published JORC Resource for the Project and demonstrates a viable project in its own right, not only for the Challenger Deposit but also for open cut mining on the Currajong deposit. Further drilling is required to fully assess the remaining resources and once completed a full scoping study will be released.

### Cautionary Statement

*The Initial Scoping Study referred to in this announcement is a preliminary technical and economic study of the potential viability of developing the Adelong Gold Project by developing a mine and redeveloping the processing facility onsite. The Initial Scoping Study referred to in this announcement is based on lower-level technical and preliminary economic assessments and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or certainty that the conclusions of the full Scoping Study will be realised.*

*Approximately 89% of the "Life-of-Mine" production defined by this Initial Scoping Study is in the Measured and Indicated Mineral Resource categories and 11% is in the Inferred Mineral Resource category. The Company has concluded it has reasonable grounds for disclosing a Production Target, and that there is potential significant upside once work is concluded on the remaining 60% of the resources and other production opportunities.*

*As there is a low level of geological confidence associated with Inferred Mineral Resources, there is no certainty that further exploration work will result in the determination of further Measured or Indicated Mineral Resources or that the Production Target or preliminary economic assessment will be realised.*

*This Initial Scoping Study is based on the material assumptions outlined elsewhere in this announcement. These include assumptions about the availability of funding. While the Company considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Initial Scoping Study will be achieved.*

*To achieve the potential mine development outcomes indicated in this Initial Scoping Study, funding in the order of A\$14-15 million will likely be required. Investors should note that there is no certainty that the Company will be able to raise funding when needed, however the Company has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes that it has a "reasonable basis" to expect it will be able to fund the development of the Project.*

*It is also possible that such funding may only be available on terms that may be dilutive to, or otherwise affect the value of the Company's existing shares. It is also possible that the Company could pursue other strategies to provide alternative funding options including project finance. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Initial Scoping Study.*

**SCOPING STUDY – SUMMARY**

The aim of this Initial Scoping Study on the Adelong Gold Project was to assess the different development and processing options, demonstrate the viability of the project, prepare a plan on which exploration continued to upgrade the Inferred Resources for inclusion in the final Scoping Study but also provided the details on which discussions could be held with the NSW Government, local Council and local Community.

**Commenting on the Initial Scoping Study, 3D Resources Managing Director, Mr Peter Mitchell, said:**

*“The Initial Scoping Study for the Adelong Gold Project demonstrates an attractive commercial project based on mining only the existing measured and indicated resources which comprise only ~40% of the current JORC resources. This underpins the project but allows on-going exploration and evaluation work to fully define the excellent opportunities for establishing a bigger long term mining project. The Company expects to finalise the full Adelong Scoping Study once some of the inferred resources representing a further ~20% of the project resources are upgraded, which on the basis of some preliminary work completed to date, could add significantly to the viability of the entire project”.*

Various mining and processing options were considered as part of this Initial Scoping Study with the final selection (Base Case) showing the following results:

*Table 1 - Summary of the financial analysis  
 (Based on US\$1,850/oz Gold and Exchange Rate \$A0.73)*

| <b>SCOPING STUDY SUMMARY</b>                          |                |
|---|----------------|
| Initial Capital Costs (\$M)(Excludes Working Capital) | \$11.20        |
| Mine Life   | 5 Years        |
| Production based on Initial Scoping Study(gold oz)    | 67,579         |
| <b>Cash Flow (A\$M)</b>                               |                |
| Revenue (\$M)   | \$170.40       |
| OPEX (\$M)  | \$100.24       |
| Production CAPEX (\$M)                                | \$7.90         |
| <b>PRODUCTION CASHFLOW (Before Tax)(\$M)</b>          | <b>\$62.26</b> |
| Initial Capital Costs (\$M)(Excludes Working Capital) | \$11.20        |
| <b>NET CASH FLOW(Before Tax) (\$M)</b>                | <b>\$51.06</b> |
| <b>IRR % (Before Tax)</b>                             | <b>62%</b>     |
| <b>NPV (5%) Before Tax (\$M)</b>                      | <b>\$39.20</b> |

As with all forecasts, any variations in the gold price, gold recovery and changes operating cost estimates can change the outcome of these forecasts. Tabulated below in Table 2 is a sensitivity analysis based on a 5% Change to some of the assumptions.

*Table 2 - Sensitivity to changes in operating conditions*

| SENSITIVITY ANALYSIS     |     | Net Cash Flow<br>\$M | Change in Cash<br>Flow % |
|--------------------------|-----|----------------------|--------------------------|
| Change                   |     |                      |                          |
| <b>Base Case</b>         |     | \$51.06              |                          |
| <b>Gold price</b>        | 5%  | \$59.25              | 16.02%                   |
|                          | -5% | \$42.89              | -16.02%                  |
| <b>Recovery</b>          | 5%  | \$59.25              | 16.02%                   |
|                          | -5% | \$42.89              | -16.02%                  |
| <b>Mining cost \$/t</b>  | 5%  | \$48.00              | -6.01%                   |
|                          | -5% | \$54.14              | 6.01%                    |
| <b>Process cost \$/t</b> | 5%  | \$49.77              | -2.54%                   |
|                          | -5% | \$52.37              | 2.54%                    |

Substantial further upside potential exists as this Initial Scoping Study has only assessed the economics based on mining ~40% of the current published resources at Adelong. Key targets for improving this Initial Scoping Study are:

- An initial pit optimisation on the Inferred Resources at Caledonian has shown that based on cost estimates for mining, processing and administration that an open cut at Caledonian can potentially recover around 70% of the 30,000oz of the gold in Caledonian Inferred Resources which could add materially to the project. Further drilling will be required to fully assess the resources in sufficient detail for inclusion in the final Scoping Study.
- The Mullock Dumps scattered around many of the historic mines around Adelong have not been brought into a JORC resource but have historically been extensively tested, bulk sampled and included in historical feasibility studies as Mineable Reserves. It is not the plan of the company to construct a pilot test plant in order to replicate the earlier test work, but assay data shows this material is above cut-off grade. Recent metallurgical testing of dump material from various mullock dump sites has shown that the gold in this material is recoverable in the proposed processing plant and would be expected to be processed and add to any future commercial production.
- The absence of detailed exploration drill data in the case of some of the “Inferred Resources” has prevented a detailed mine plan to develop the underground potential for mining at Currajong, Donkey Hill and Caledonian. Further drilling is required
- Recent drilling below the proposed Challenger Open Cut has demonstrated higher grade intersects than previous drilling had shown. This is likely to allow commercial development of some of the mineralisation below the planned open cut that have not been included in the current Production Targets.

This Base Case analysis demonstrates the viability of the Adelong Gold Project and is the basis for planning/assessing the staged development of this project. However, the Scoping Study also provides a framework for assessing future project requirements (government approvals, additional drilling needed to permit mine planning for underground development of resources excluded from this study) but also sets the basic parameters and mine plans for the Company to obtain competitive quotes from contractors.

*Table 3 - Production Targets used in the Scoping Study*

| Production Targets     | Tonnes (t)     | Grade g/t Au | Contained Gold (g) | Contained Gold (oz) |
|------------------------|----------------|--------------|--------------------|---------------------|
| Challenger Open Cut    | 372,218        | 3.84         | 1,412,899          | 45,426              |
| Challenger Underground | 74,782         | 3.59         | 268,703            | 8,639               |
| Currajong Open Cut     | 262,141        | 2.27         | 595,713            | 19,153              |
| <b>Total Treated</b>   | <b>709,141</b> | <b>3.21</b>  | <b>2,277,315</b>   | <b>73,218</b>       |

This Initial Scoping Study is based mainly upon Measured and Indicated Resources representing 89% of the Production Target. Table 4 demonstrates this and it is the Company's view that the project would be viable based solely on these Measured and Indicated Resources. It should be noted that a large portion of the mainly "Inferred Resources" were not included in the Production Targets as they required more detailed drilling to allow mine planning and cost estimates to be properly assessed. In addition, all the resources estimates for this project were independently assessed and similarly, all the production targets generated from those resources were generated by independent consultants. The Company considers the production targets are a reasonable assessment of potential production within the level of accuracy of the Scoping Study.

*Table 4 Source of Estimated Profits in relation to Mineral Resource Categories and Production Schedules.*

| Production Targets                        | Estimated Contribution To Earnings (\$M) | Measured and Indicated Resources | Inferred & Other Resources | Schedule  |
|---|--|----------------------------------|----------------------------|-----------|
| Challenger Open Cut                       | \$48.9M                                  | 96%                              | 4%                         | Year 1-3  |
| Challenger Underground                    | \$8.0M                                   | 100%                             |                            | Years 4-5 |
| Currajong Open Cut                        | \$13.2M                                  | 69%                              | 31%                        | Years 3-4 |
| Capital Cost(LOM)                         | (\$19.1M)                                |                                  |                            |           |
| <b>Expected Earnings (\$M) Before Tax</b> | <b>\$51.1M</b>                           | <b>89%</b>                       | <b>11%</b>                 |           |

## ASSUMPTIONS ADOPTED FOR INITIAL SCOPING STUDY

The Initial Scoping study is based upon a number of assumptions of which the major ones are summarised below:

- Gold Price US\$ 1,850/oz and US\$0.73 Exchange rate
- On average the Scoping study would be accurate to 35%- 40%
- Initial target production as outlined in Table 3 with production scheduling broadly in the order listed
- Mining Costs are based on Contract Mining rates quoted for the project so involve low capital outlay
- Rebuilding much of the plant to increase processing capacity from around 6t/hr to 35t/hr represents the major initial capital requirement. Of the \$11.2M Capital costs set out in Table 1, around \$10.6M (93%) is expected to be spent on the Processing Plant Upgrade (includes spares/first fill consumables). This plant includes:
  - A 3 stage crushing and 2 stage grinding circuit (P<sub>80</sub> 1mm and 350 $\mu$ ) (inc a new rod mill)
  - Gravity recovery circuit to process ground ore between >2.5mm and <38 $\mu$  using two banks of spirals following each grinding stage.
  - A Knelson Concentrator used to scavenge any gold from the spiral's tailings.
  - Regrind followed by intense cyanide leach of the gravity concentrate
  - The less than 38 $\mu$  material generated from grinding and tails from the intense cyanide leach would then be combined and subjected to a low cyanide leach circuit
  - Gold recovered by activated carbon and gold bullion recovered by conventional circuit
  - Tailings from cyanide circuit deposited in a tailings dam after processing through a detox circuit, while fine sand tailings generated from the gravity circuit would be stacked
- Additional working capital of around \$3M is assumed to start the project
- Start up production based on 120,000tpa (single shift) moving to 240,000tpa in year 3
- Based on metallurgical test work, the spirals would be expected to generate ~20g/t Au that can be leached from around ~10% mass pull. Cyanide used to leach the concentrates and "fines" (<38 $\mu$ ) with an overall gold recovery of +92% expected to be achieved. Test work on mineralisation from several mines that form the Adelong Project has also shown that all these deposits are amenable to gravity gold recovery
- Power is to be supplied by 3 existing diesel gensets and the purchase of an additional unit for the crushing circuit
- Water supply is to be delivered from the discharge from the Adelong Sewerage plant (currently discharged into the Adelong Creek after processing) and potable water from the town water supply
- Other infrastructure requirements are to be supplied from regional towns such as Adelong (>900 people) and Tumut (>6,000 people) and Wagga (~64,000 people)
- To implement the full scope of the Scoping Study, various government approvals will be required to expand production to 240,000tpa, to develop the satellite ore deposits, and enlarge the open cut mine at Challenger to the extent proposed. Other regulatory approvals such as final tailings dam design and operational plans will also be required.

**INITIAL SCOPING STUDY - OVERVIEW**
**INTRODUCTION**

In May 2020, 3D Resources took control of the Adelong Goldfield which covers 70km<sup>2</sup>, comprising the old Adelong Gold Project situated in Southern NSW located approximately 20km from Tumut and 80km from Gundagai. The Goldfield also contains 17 freehold properties with all mining and processing plant equipment onsite, and until recently was a producing mine. The project now carries a JORC (2012) Resource of 171,700oz of gold, made up as follows:

**Table 5: Resources Statement (JORC 2012) for the Adelong Gold Project based on 1g/tAu Cut-off**

| <b>CHALLENGER deposit</b>                    |             | <b>Tonnes (t)</b> | <b>Au (g/t)</b> | <b>Au (oz)</b> |
|--|-------------|-------------------|-----------------|----------------|
| Measured                                     | 60%         | 357,000           | 4.17            | 47,900         |
| Indicated                                    | 23%         | 163,000           | 3.50            | 18,300         |
| Inferred                                     | 17%         | 144,000           | 3.07            | 14,100         |
| <b>Total</b>                                 | <b>100%</b> | <b>663,000</b>    | <b>3.77</b>     | <b>80,300</b>  |
| <b>CURRAJONG deposit</b>                     |             | <b>Tonnes (t)</b> | <b>Au (g/t)</b> | <b>Au (oz)</b> |
| Measured                                     | -           | -                 | -               | -              |
| Indicated                                    | 22%         | 126,000           | 2.57            | 10,400         |
| Inferred                                     | 78%         | 407,000           | 2.63            | 34,400         |
| <b>Total</b>                                 | <b>100%</b> | <b>533,000</b>    | <b>2.61</b>     | <b>44,800</b>  |
| <b>DONKEY HILL deposit</b>                   |             | <b>Tonnes (t)</b> | <b>Au (g/t)</b> | <b>Au (oz)</b> |
| Measured                                     | -           | -                 | -               | -              |
| Indicated                                    | -           | -                 | -               | -              |
| Inferred                                     | 100%        | 103,000           | 5.03            | 16,600         |
| <b>Total</b>                                 | <b>100%</b> | <b>103,000</b>    | <b>5.03</b>     | <b>16,600</b>  |
| <b>CALEDONIAN deposit</b>                    |             | <b>Tonnes (t)</b> | <b>Au (g/t)</b> | <b>Au (oz)</b> |
| Measured                                     | -           | -                 | -               | -              |
| Indicated                                    | -           | -                 | -               | -              |
| Inferred                                     | 100%        | 157,000           | 5.94            | 30,000         |
| <b>Total</b>                                 | <b>100%</b> | <b>157,000</b>    | <b>5.94</b>     | <b>30,000</b>  |
| <b>TOTAL ADELONG GOLD PROJECT RESOURCES*</b> |             | <b>Tonnes (t)</b> | <b>Au (g/t)</b> | <b>Au (oz)</b> |
| Measured                                     | 25%         | 357,000           | 4.17            | 49,700         |
| Indicated                                    | 20%         | 289,000           | 3.09            | 29,200         |
| Inferred                                     | 55%         | 811,000           | 3.65            | 95,400         |
| <b>Total</b>                                 | <b>100%</b> | <b>1,457,000</b>  | <b>3.67</b>     | <b>171,700</b> |

See ASX releases 29 September and 5 October 2021 for details.

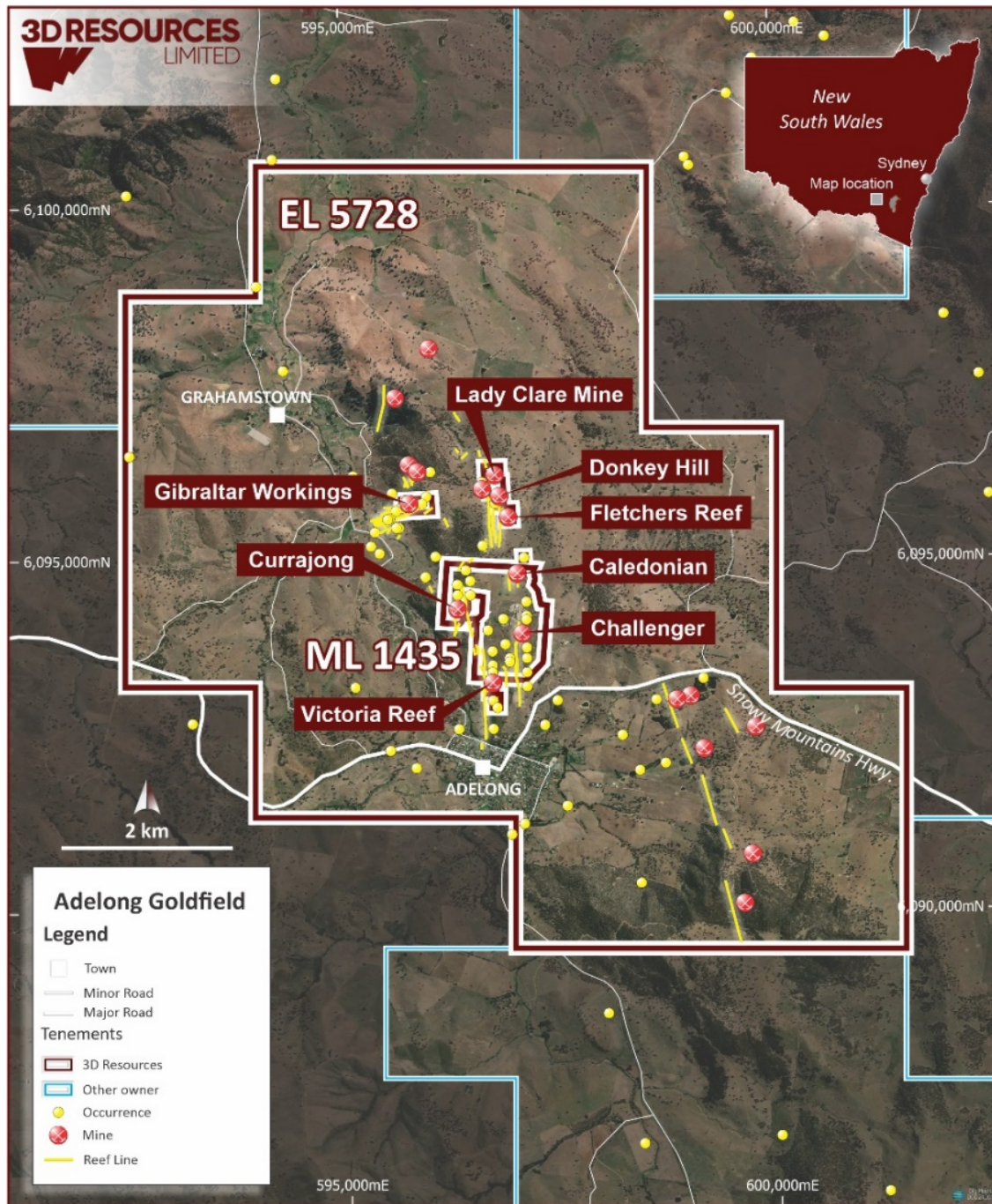


Figure 1 - Adelong Goldfield

A Study, that comprised a 374page document, was compiled by the Company in September 2021, based on a series of independent consultant reports engaged to review different options for mining, processing and developing the Adelong Gold Project. This study contained an economic analysis of the Open Cut and Under Ground Mining Potential at Challenger as well as the Open Cut potential at Currajong. However restrictions precluding the use of inferred resources for the purpose of forecasting production targets from deposits where a 100% of the resources are in the Inferred category has meant that 3D Resources has had to restrict release of the study to components based only on the measured and indicated resources and delay the full report until further drilling is completed to upgrade the inferred resources classification. This is expected to occur over the summer months.

For the purposes of the announcement the “Base Case” is summarised in this report as it offers the most flexible and commercial approach to mining and processing the Challenger and Currajong Resources, but other development options also generated positive returns and had been reviewed in finalising this Scoping Study. This report will be revised once the Inferred Resources at Caledonian are re-assessed and resources are upgraded.

## MINING

### Challenger and Challenger Extended Projects

The JORC Resources estimates for Challenger were recently updated and are summarised in Table 6 following a review by the Independent Geological Consultant. The details of this updated Resource Estimation were announced to the ASX on [5 October 2021](#). These revised estimates are summarised as follows:

Table 6- Resource Estimates for the Challenger Deposits

| JORC Resource Estimate for CHALLENGER deposits |      | Tonnes (t) | Au (g/t) | Au (oz) |
|--|------|------------|----------|---------|
| Based on 1g/t Au Cut-off                       |      |            |          |         |
| Measured                                       | 60%  | 357,000    | 4.16     | 47,900  |
| Indicated                                      | 23%  | 163,000    | 3.48     | 18,300  |
| Inferred                                       | 17%  | 144,000    | 3.06     | 14,100  |
| Total  | 100% | 663,000    | 3.77     | 80,300  |

See ASX Announcement 5<sup>th</sup> October 2021 for details

The main Challenger deposit lies at the northern end of Victoria Hill with the Challenger Extended deposit extending north towards the processing plant site. (See Figure 2). The deposit occurs as a series of steep veins forming in a mineralised shear trending 350°N to 355°N with the mineralisation dipping 75-80° to the West and the ore shoots plunging to the north.

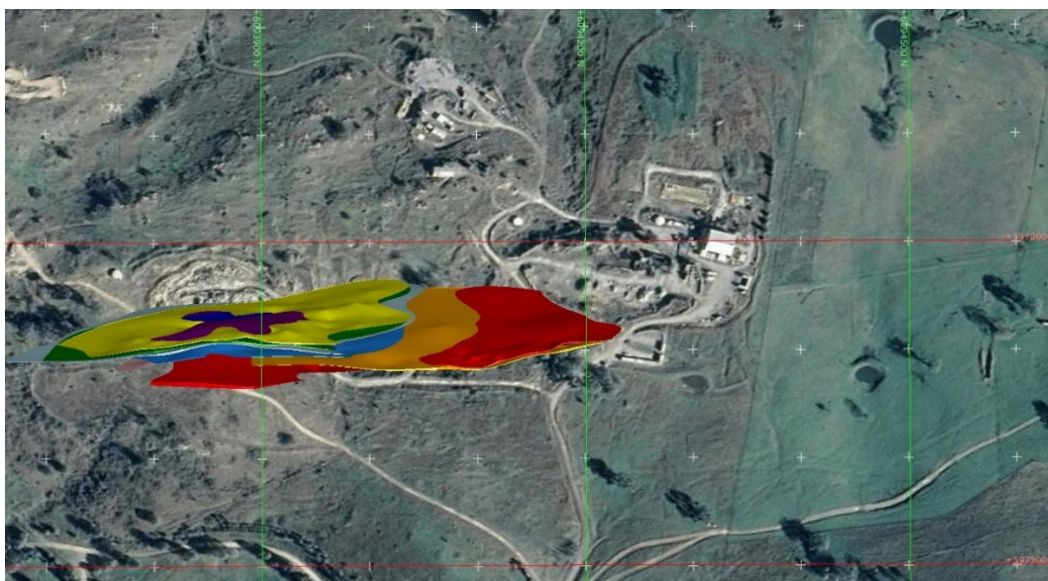


Figure 2 - Challenger Vein System showing the location of the veins relative to the Plant (North to right)

Given the proximity of the Challenger Extended deposit to the plant site, only the main Challenger deposit was considered for open cut mining and Challenger Extended deposit was selected for underground mining.



Current access exists to the main Challenger deposit via a decline to the 1380m RL.

The host rock of the Challenger deposits is the Wondalga Granodiorite which is a very competent rock that has been assessed in geotechnical reports as capable of being mined with an overall pit slope of 60-65°. On this basis an initial pit optimisation study was completed and subsequent open pit design on the main Challenger

Deposit was based on a 60° pit slope, and a 10m wide 1 in 10 haul road delivering ore directly to the ROM pad adjacent to the Adelong Processing Plant.

The Open Pit design was evaluated on 5m bench levels in order to schedule waste and ore production. A dilution factor of 10% and ore loss factor of 5% was applied to these resources produced from the pit to provide the following production targets from the Challenger Open Cut mine in table 7.

*Table 7 - Production Targets from the Challenger Open Cut mine*

| Challenger    | Waste (bcm)      | Tonnes (t)     | Grade (Au g/t) | Au (Oz)       |
|---------------|------------------|----------------|----------------|---------------|
| Year 0        | 57,500           |                |                |               |
| Year 1        | 781,443          | 124,304        | 2.55           | 10,194        |
| Year 2        | 880,594          | 116,060        | 3.84           | 14,345        |
| Year 3        | 320,605          | 132,033        | 4.92           | 20,887        |
| <b>Totals</b> | <b>2,040,142</b> | <b>372,397</b> | <b>3.79</b>    | <b>45,426</b> |

Costs estimates for drilling, blasting and mining the open cut were based on indicative quotes from independent contract miners operating in Eastern Australia.

The Challenger Extended deposit (to the north of the pit) as well as some resources in the immediate surround to the open cut (after leaving support pillars) offered additional mineable resources by underground mining methods. These formed part of an underground mine plan and cost estimate generated by an independent consulting group for the Challenger and Challenger Extended deposits.

The mining method proposed for underground mining at Adelong in the Challenger Extended and most of areas outside the open cut is a modified Avoca mining method, driving in ore with long hole stoping between 25-35m levels.

Figure 3 shows a longitudinal section of the open cut mine plan (red) overlain on the planned underground mine stope blocks (green) whilst the grey blocks have not been scheduled for mining at this stage in the Scoping Study. Only those underground stope blocks (green) to the north(left of the pit) and comprising largely the Challenger Extended deposits were selected for underground mining in this Scoping Study(See Table 8).

As noted in the recent announcements of drilling results for the Challenger deposit, 5 drill holes below the planned open cut show higher grades are present. This will potentially allow additional stope blocks to be defined below the pit to add to those already defined (in grey). This should allow mining to continue below the 305 Level that could add to the potential underground production shown in Table 8.

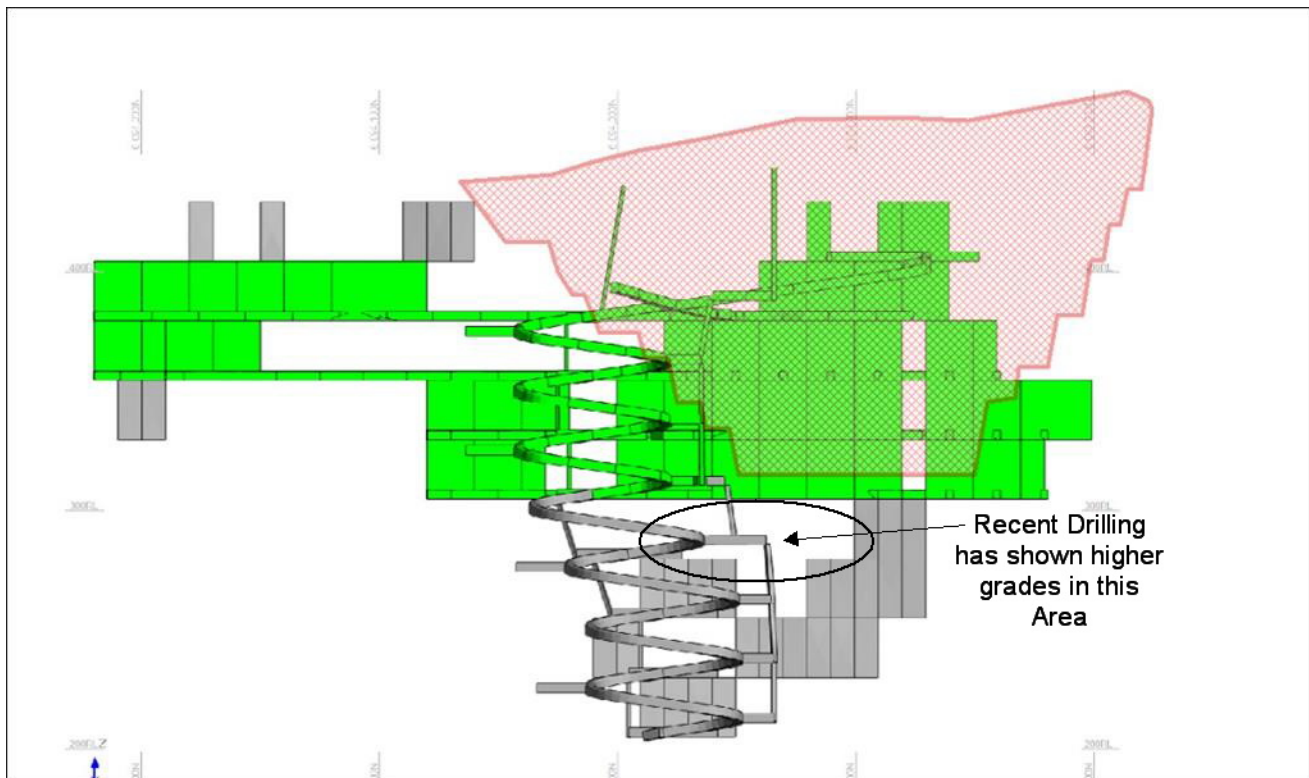


Figure 3 - Longitudinal Section overlaying the Challenger open cut mine plan (red) on the planned underground mine stope blocks (green)

The majority of the resources proposed for development on the Challenger deposits, are either Measured or Indicated Resources and so the geology and resource distribution is sufficiently well defined to allow underground mine planning. Four levels were selected for development of the underground from the open cut. These provided additional stope blocks that are summarised as follows:

Table 8 – Underground Mining stope blocks included in the Production Target

| PRODUCTION TARGETS       | LEVEL(RL) | Resources (t) | Grade (g/t Au) | Gold (oz)    |
|--------------------------|-----------|---------------|----------------|--------------|
| LEVEL                    | 380       | 32,023        | 3.34           | 3,431        |
| LEVEL                    | 360       | 14,584        | 4.06           | 1,900        |
| LEVEL                    | 330       | 14,663        | 3.71           | 1,744        |
| LEVEL                    | 305       | 13,512        | 3.55           | 1,540        |
| <b>TOTAL UNDERGROUND</b> |           | <b>74,782</b> | <b>3.58</b>    | <b>8,614</b> |

It should be noted that this assessment did not include any resources below the 1305mRL level, any of the blocks south of the pit or immediately adjacent to the pit and any potential northern extension to the Challenger Extended deposit.

The costs estimates and production rates used in this Scoping Study for underground mining are based on factors assessed by the independent consultant for the Challenger deposit.

**Currajong , Caledonian and Donkey Hill Projects**

Resources quoted in ASX announcement on the 29 September 2021 are shown in table 9.

*Table 9- Resource Statements - Currajong and Caledonian*

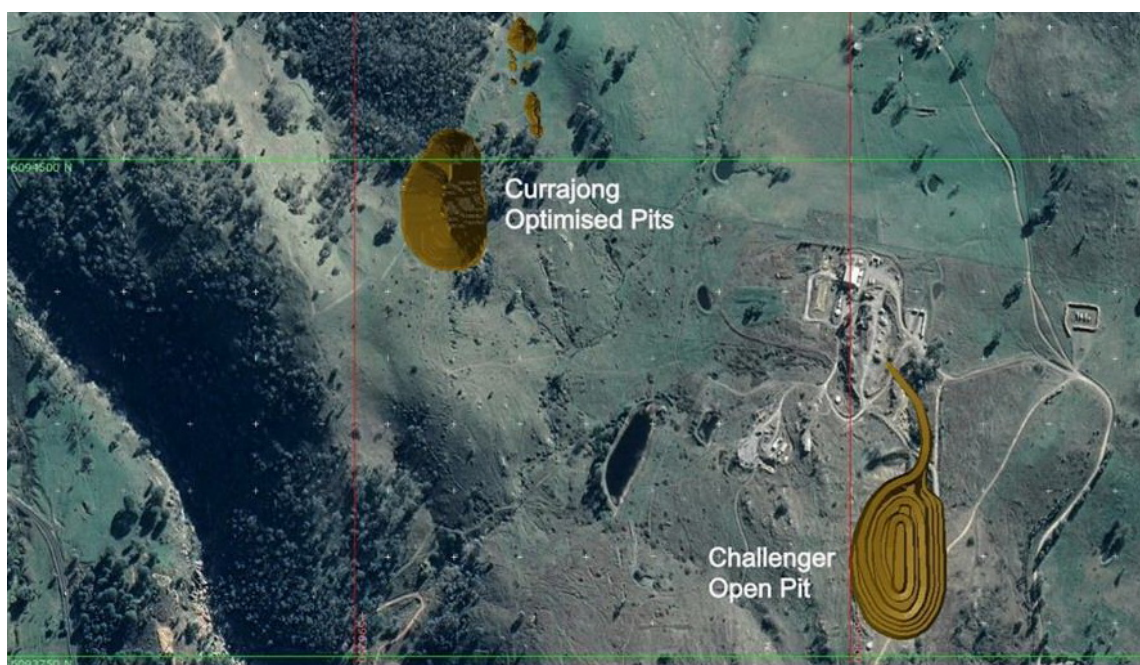
| CURRAJONG WEST & CURRAJONG EAST |             | Tonnes (t)     | Au (g/t)    | Au (oz)       |
|---------------------------------|-------------|----------------|-------------|---------------|
| Measured                        | -           | -              | -           | -             |
| Indicated                       | 24%         | 126,000        | 2.57        | 10,400        |
| Inferred                        | 76%         | 407,000        | 2.63        | 34,400        |
| <b>Total</b>                    | <b>100%</b> | <b>533,000</b> | <b>2.61</b> | <b>44,800</b> |

*See ASX Announcement 29 September 2021 for details*

Pit optimisation studies were run on the Currajong deposit to identify what components of those resources may be economic to mine via open cut. These studies generated an optimum pit shell for these resources from which production targets and waste removal schedules were generated and imported into financial analysis in the Scoping Study. Cost estimates generated from the detailed evaluation of the Challenger Deposit were used to assess the potential financial returns from open cut mining at Caledonian and Currajong. Both the Resource Estimates and the Pit Optimisation studies were completed by Robin Rankin as an independent consultant and Competent Person.

*Table 10 - Summary of the results of the pit optimisation study and scheduling at Currajong*

| Project                | Production Target (t) | Grade (g/t Au) | Gold (oz)     | Waste (bcm)      | Stripping Ratio |
|------------------------|-----------------------|----------------|---------------|------------------|-----------------|
| <b>Year 3</b>          | 86,270                | 1.52           | 4,220         | 400,000          |                 |
| <b>Year 4</b>          | 175,870               | 2.64           | 14,930        | 656,774          |                 |
| <b>Total Currajong</b> | <b>262,140</b>        | <b>2.27</b>    | <b>19,150</b> | <b>1,054,074</b> | <b>11:1</b>     |



*Figure 4 - Position of the Challenger, and Currajong pits, and Central Processing Plant*

None of the deeper resources at the Currajong Deposit were assessed for underground mining so have not been included in this Scoping Study. Additional drilling would be needed to prepare an open cut plan for Caledonian as well as underground mine plan for the Currajong, Caledonian and Donkey Hill deposits.

### Production Targets

The above mining plans generate the Production Targets that are expected to be delivered to the processing plant for treatment and represent those used in the Initial Scoping Study. These Production Targets are summarised in Table 11 below.

*Table 11 - Production Targets used in the Scoping Study*

| Production Targets   | Tonnes (t)     | Grade g/t Au | Contained Gold (g) | Contained Gold (oz) |
|----------------------|----------------|--------------|--------------------|---------------------|
| Challenger Open Cut  | 372,218        | 3.80         | 1,412,899          | 45,426              |
| Challenger U/ground  | 74,782         | 3.59         | 268,703            | 8,639               |
| Currajong Open Cut   | 262,141        | 2.27         | 595,713            | 19,153              |
| <b>Total Treated</b> | <b>709,141</b> | <b>3.21</b>  | <b>2,277,315</b>   | <b>73,218</b>       |

As noted above there are additional resources that for lack of detailed drilling and technical information have not been assessed for development in this Initial Scoping Study and so excluded from these Production Targets. Less than 40% the published resources at Adelong have been assessed at this stage. Additional exploration and evaluation will be required to determine what components of the remaining resources may be incorporated in the Production Targets in future.

### Processing Plant

The original development approval that led to the grant of the Mining Lease (ML1435) for the Adelong Gold Project was based on a conventional CIL circuit treating ore from a proposed small scale open cut and underground mining at Challenger. However, much of the subsequent work, including the plant constructed in 2016/7, was based on a flotation/gravity circuit followed by cyanide gold recovery from the concentrates.

Initially, 3D Resources Ltd assessed the current plant and its performance. It was found that the failure of the 2017 project can be largely blamed on poor plant design, poor equipment choices, and low throughput. However, the historical metallurgical test work shows that Adelong ore is amenable to a full range of processing options and so the task facing the Company was to look at alternate process routes and plant designs that can work commercially at Adelong.

Details of the test work undertaken and the assessments completed are included in the body of the Initial Scoping Study, but many of the findings were announced to the ASX in the June 2021 Quarterly Report released on [19 July 2021](#). The key focus of the test work was on reducing the grinding requirements. Adelong ore, and associated host rock, are extremely hard with a work index(WI) of between 17 – 27kWhr/t. with a much harder host rock having a WI of 25-27kWhr/t. So recovering the gold at a coarse grind size was critical to reducing energy costs and improving plant throughput.

As a result of the test work, the final plant design chosen for this Initial Scoping Study involves:

- A three stage crushing circuit reconfigured with the addition of one new crusher. This aims to take the ore to P<sub>80</sub> 12mm;

- A two stage grinding circuit with the addition of a rod mill followed by the existing ball mill;
- A gravity circuit comprising two sets of rougher and cleaner spirals taking P<sub>80</sub> 1mm material from the initial rod mill and P<sub>80</sub> 350 $\mu$  from the ball mill. A final Knelson concentrators acting as a scavenger to recover any liberated gold lost by the spirals to tailings. All tails from this gravity circuit would be stacked and potentially the sand sold. (No sales of sand included in the revenues in the Scoping Study).
- Concentrates from the Spirals and Knelson concentrators to be subject to a regrind with P<sub>80</sub> 100 $\mu$  followed by intense cyanide leach
- Slimes and fines from the grinding circuits is to be sent to leach tanks which would then be combined with the residues from the concentrate leach tanks for final cyanide leach
- Gold recovered to activated carbon and then to dore/gold bullion by conventional electrowinning and smelting process.
- Tailings from cyanide leach circuit is to go to a detox tank to reduce cyanide levels to <30ppm CN WAD prior to discharge into a Tailings Storage Facility (TSF). The Adelong Project is approved for the use of cyanide and discharge of tails at that level.

### Other infrastructure and requirements

A preliminary tailings facility has been designed with an initial dam (TSF1) located below the plant and a second dam (TSF2) just north of this on a neighbouring property. Estimates have been made for constructing these dams in the model.

Water is to be sourced from Adelong. The revised plant requirements are unlikely to be available from Town Water Supply but the council have indicated they are prepared to provide wastewater that is currently discharged from the Adelong Sewerage plant into the Adelong Creek (at a cost).

The study assumes that power will be supplied via existing diesel gensets with the addition of an additional diesel genset. A very brief review was undertaken of taking power from a 66kVa power line that crosses the property but an indicative cost of +\$2M was suggested as the cost of such a substation and this option was rejected. Potential exists for seeking a contracted power supply that would capitalise the costs of the substation.

The Adelong Gold Project is ideally located with the local communities of Adelong, Wagga, and Tumut and so offers a range of services (engineering, cranes, surveying, accounting and machinery repairs etc) as well as a source of local labour .

The development plan would expand the area of disturbance so will increase the environmental bond requirements with the NSW government. These have been estimated for the purpose of this study.

## Key Financial Metrics

Table 12 – financial/project summary

|   |                              |
|---|------------------------------|
| Initial Capital Costs (A\$M) (excludes working capital) | \$11.20                      |
| Years of Operation                                      | 5                            |
| Employees(approx.)                                      | 30                           |
|   |                              |
|   | <b>INITIAL SCOPING STUDY</b> |
| Tonnes Mined & Processed (t)                            | 709,320                      |
| Grade (g/t Au)  | 3.21                         |
| Contained Gold (Ounces)                                 | 73,216                       |
| Gold Produced (oz)                                      | 67,579                       |
|   |                              |
| Gold Price (US\$/oz)                                    | \$1,850                      |
| Exchange Rate   | \$0.73                       |
|   |                              |
| <b>Revenue (A\$M)</b>                                   | <b>\$170.40</b>              |
| <b>Operating Costs (A\$M)</b>                           |                              |
| Mining Costs  | \$62.31                      |
| Processing Costs  | \$27.05                      |
| Administration  | \$4.60                       |
| Cost of Sales   | \$0.64                       |
| Royalties   | \$5.65                       |
| <b>Total Operating Costs (A\$M)</b>                     | <b>\$100.24</b>              |
|   |                              |
| Production CAPEX (A\$M)                                 | \$7.90                       |
|   |                              |
| <b>PRODUCTION CASH FLOW (A\$M)(Before Tax)</b>          | <b>\$62.26</b>               |
| Initial Capital Costs (A\$M) (excludes working capital) | \$11.21                      |
| <b>NET CASH FLOW (A\$M)(Before Tax)</b>                 | <b>\$51.06</b>               |
|   |                              |
| <b>Total COSTS (\$A/oz)</b>                             | <b>\$1,766</b>               |

A more detailed analysis (Table 13) shows that a major source of the potential earnings identified in this Scoping Study comes from the Challenger deposits which are largely Measured and Indicated Resources so have a high probability of supporting the planned development of this project.

Table 13 - Project Analysis (Approx.)

|                                     | Tonnes         | Grade       | Contained oz  | EBITDA (\$M) |
|-------------------------------------|----------------|-------------|---------------|--------------|
| <b>Challenger Open Cut</b>          | 372,218        | 3.80        | 45,426        | 48.9         |
| <b>Challenger Underground</b>       | 74,782         | 3.59        | 8,639         | 8.0          |
| <b>Currajong</b>                    | 262,141        | 2.27        | 19,158        | 13.2         |
| <b>TOTAL CAPITAL (Project Life)</b> |                |             |               | -19.1        |
| <b>TOTALS</b>                       | <b>709,141</b> | <b>3.21</b> | <b>73,218</b> | <b>51.1</b>  |

### Project Financing

The Company believes there is a reasonable basis to assume that the necessary funding for the Project will be able to be obtained, because of (but not limited to) the following:

- The positive financial metrics of the project and the underlying demand for gold is expected to see prices rise from those used in the Scoping Study;
- The 5 year mine life and the likely percentage of Measured and Indicated Resources that should be able to be converted to Reserves to establish a long “Reserve tail” that is generally a prerequisite for debt capital markets participation in mining projects;
- The proven and well understood processing route reducing technical risk;
- The location of the Project and the positive geopolitical risk profile associated with it; and
- The likely size of the capex is likely to mean there are significantly more financing options available than a project with larger capex.

### Upside Potential

- Around 60% of the resources have not been included in this initial Scoping Study at this stage as the drilling is insufficient to plan their development. Additional discoveries may also be made;
- While the project is expected to produce significant quantities of rock and sand and tests show this material is of a quality that can be sold, no income from the sale of this material has been included in the Scoping Study forecasts.

### Downside Risks

- The resources, and in particular, the Inferred Resources at Currajong, represent a geological risk and further exploration may reduce the potential ore that is delivered to the plant and so affect these forecasts
- The study is +/-40% accuracy and so may result in a negative (or positive) change.
- Government approvals including environmental approvals may delay or require changes to the development plans as outlined in the Scoping Study.

### Future Plans

The Initial Scoping Study has demonstrated a commercial project exists based solely on the Challenger and Currajong deposits. Applying similar cost structures at Caledonian has also shown that these Inferred Resources could add significant value longer term and so will be the subject of further exploration work to better realise these values for inclusion in any final Scoping Study. Similarly recent exploration below the proposed Challenger Open Cut has shown the potential for the possibility of accessing the deeper resources which will warrant additional investigation.

With these additional options there is the basis of a potential +5years mining operation that can form the basis for future discussions with government and obtaining the approvals to develop the mines at Currajong, Caledonian and Donkey Hill, as well as the plans to expand production

-ENDS-

Released with the authority of the board.

For further information on the Company and our projects, please visit: [3dresources.com.au](http://3dresources.com.au)

Contact:

**3D Resources Ltd**

**Peter Mitchell**

Managing Director

[Peter.mitchell@3dresources.com.au](mailto:Peter.mitchell@3dresources.com.au)

+61 400 880 309

**Andrew Draffin**

Company Secretary

[andrew.draffin@3dresources.com.au](mailto:andrew.draffin@3dresources.com.au)

+61 3 8611 5333

**Mark Flynn**

Investor Relations

[mark.flynn@3dresources.com.au](mailto:mark.flynn@3dresources.com.au)

+61 416 068 733

**Competent Persons Statement**

Information in this “ASX Announcement” relating to Exploration Results, geological data , and metallurgical testing has been compiled by Mr. Peter Mitchell. Mr Peter Mitchell is a Member (#104810) of the Australasian Institute of Mining and Metallurgy, the Institute of Materials, Minerals and Mining and the Canadian Institute of Mining, Metallurgy and Petroleum. He is Managing Director and paid by 3D Resources Ltd. Peter Mitchell has sufficient experience that is relevant to the style of mineralisation and types of deposits under consideration and to the activity being undertaken to qualify as a Competent Person (CP) as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’ (the JORC Code). Mr Peter Mitchell believes that these Resource Estimates fairly represent the resources the subject of this Report.

The information relating to JORC 2012 Resource Estimates and Pit Optimisation studies and Mine Plans which generated the Production Targets for the open cut mines were completed by Robin Rankin. Robin Rankin is a Competent Person who is a Member (#110551) of the Australasian Institute of Mining and Metallurgy (MAusIMM) and accredited since 2000 as a Chartered Professional (CP) by the AusIMM in the Geology discipline. Robin Rankin provided this information to his Client 3D Resources Limited as paid consulting work in his capacity as Principal Consulting Geologist and operator of independent geological consultancy GeoRes. He and GeoRes are professionally and financially independent in the general sense and specifically of their Client and of the Client’s project. This consulting was provided on a paid basis, governed by a (in this case an on-going engagement) scope of work and a fee and expenses schedule, and the results or conclusions reported were not contingent on payments. Robin Rankin has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person (CP) as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’ (the JORC Code). Robin Rankin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.