



Hillgrove Resources Limited (ASX: HGO) report for the quarter ended 31 December 2021

# **SUMMARY**

# **Updated Kanmantoo Underground Mineral Resource Estimate**

- Total Kanmantoo resource of over 5.6 Mt at 1.1% Cu, 0.33 g/t Au for 62.5kt of Cu metal.
- 82% increase in Cu Metal over the previous Kanmantoo Mineral Resource Estimate.
- The resource estimates are constrained by the extent of the drilling and not by the geology.
- Further drilling has recommenced in late October 2021.

# **Kanmantoo Underground Economic Assessment**

- Detailed assessment identified strong potential project economics for Stage 1 of the project:
  - Post tax free cash flows of \$196 million.
  - o NPVs of \$166 million.
  - o Internal rate of return of 389%.
  - Payback period of 7 months post the completion of pre-production works.
- One of the lowest capital intensity projects in the world.
- The Company is continuing to examine further improvements to the project economics.
- Aiming to fund development, commence underground mining, and produce first ore in 2022.

### **Completion of Successful Capital Raising**

- Completed the over subscribed Share Purchase Plan during the quarter, raising \$2.0 million.
- Along with the Placement, a total of \$12.0 million was raised.

#### Other

- Kanmantoo decline completed the portal and initial 20 metres of development using the Komatsu MC51 continuous mechanical cutting machine.
- Stella exploration final petrology and multi element geochemistry results received.

### MANAGING DIRECTOR'S STATEMENT

"It was an exciting quarter for the Company and the Kanmantoo site, which has seen us complete an updated Mineral Resource Estimate (MRE) that increased copper metal by 82% from 34.4kt to 62.5kt of copper as a result of the 2021 drilling and re-optimisation of the copper cut-off from the mining studies. Importantly, the updated MRE also improved the geological confidence, with the proportion of the Indicated category of the Resource's copper metal increasing from 46% of the total Resource to 72%.

Off the back of the updated MRE, we were also pleased to present our detailed Economic Assessment during the quarter, which highlights the strong potential economics of Stage 1 of the Kanmantoo Underground project, including free cash flows of A\$196 million from an initial three year plan, at a low capital cost of only A\$26 million, and at an all in sustaining cost of A\$6,991 per tonne of copper. These strong economics are further strengthened at the corporate level, with a tax shield of over A\$190 million through carried forward tax losses and A\$17 million of franking credits.

This Economic Assessment reinforced the decision earlier in the year to commence the underground decline development ahead of the final investment decision using transformational continuous mining technology in the form of the Komatsu MC51 mechanical cutting machine, which promises to change the way industry approaches underground development, making it safer, faster, more efficient, and greener. The portal to the Kavanagh lodes is complete.

In addition, we have commenced a further 16,000m drill program, focussed on other lodes within the permitted mining lease, with a view to bringing these areas into the early stages of mining at Kanmantoo. This drill program will also aim to improve the geological confidence and expand the resource base ahead of commencement of underground mining.

Looking forward, we will continue to refine the plan as we pursue the optimal funding mix which will minimise costs with due consideration to the financial risks.

## **UNDERGROUND EXPLORATION & DEVELOPMENT**

### Kanmantoo Underground Exploration / Updated Mineral Resource Estimate

All assays from the 2021 drilling program to 30 June 2021 were received and incorporated into an updated Mineral Resource Estimate for the various Kavanagh lode systems including East Kavanagh, Central Kavanagh, West Kavanagh, Spitfire and South-West Kavanagh<sup>1</sup>. It demonstrated that the Kavanagh mineral lodes extend up to 500m below the base of the pit and continues to remain open at depth.

Highlights of this updated MRE includes:

- A total Kanmantoo resource tonnage of over 5.6 Mt at 1.1% Cu, 0.33 g/t Au for 62.5kt of Cu metal, an 82% increase in Cu Metal over the previous Kanmantoo MRE.
- A 55% increase in the total estimated Cu metal in the Kavanagh UG Resources compared to the 2020 Kavanagh MRE (at the same cut-off grade).
- 72% of the MRE is now classified as Indicated.
- The updated Kavanagh MRE now covers an area 500m long by 200m wide by 500m deep.
- The resource estimates are still constrained by the extent of the drilling and not by the geology, in both the along strike and dip directions.

The successful fund raising completed during the quarter allowed the drilling to re-commence in late October, focusing on the Nugent and West Kavanagh resource areas and an initial test of the North Kavanagh Cu-Au zone. This drilling program is expected to be completed in the first quarter of 2022. Results for this drilling are awaited.

The Nugent resource will be updated at the conclusion of the current drill program.

<sup>&</sup>lt;sup>1</sup> Refer ASX release of 14 December 2021.

# **Kanmantoo Underground Economic Assessment**

An Economic Assessment was also completed during the quarter. This assessment confirmed the outstanding potential of Stage 1 of the Kanmantoo Underground project, which demonstrated strong project economics<sup>2</sup>:

- Post tax free cash flows of A\$196 million;
- NPV<sub>8</sub> of A\$166 million;
- Internal rate of return of 389%;
- Payback period of 7 months post the completion of pre-production works; and
- At an all in sustaining cost of A\$6,991 per tonne of copper (US\$2.22 per pound).

The existing infrastructure that is currently being maintained for ready restart:

- enables a fast restart, with first copper sales expected within 7 months of a final investment decision; and
- contributes to the low capital costs of only A\$26 million, making the Kanmantoo Underground one of the lowest capital intensity projects in the world, at just US\$1,550 per tonne of annual copper produced.

The Company will continue to examine further improvements to the project economics, which will include but not be limited to:

- Undertaking an additional fully funded drilling program of 16km, with a view to further increasing geological
  confidence and bringing additional work areas within the permitted mining lease into the early stages of
  mining at Kanmantoo;
- Reducing unit operating costs with additional annual throughput through utilising the latent capacity in the
  processing facility, which only operates for approximately 40% of the time under the Stage 1 plan; and
- · Assessing the optimal cut off grade to also better utilise the existing mill capacity.

# **Kanmantoo Underground Decline**

The underground decline commenced during the quarter using Komatsu's MC51 mechanical cutting machine. The portal has been completed and services at the portal established. The MC51 is operating under trial conditions and is partially funded by Komatsu, and a \$2m grant from the South Australian Government's Jobs and Economic Growth Fund<sup>3</sup>. At quarter end, the decline had progressed approximately 20 meters. The intent is to establish underground drilling platforms that can be used for both exploration drilling and stope definition works. In the future, the decline will also serve as the future underground mine access, reducing what is already a low cost and short timeframe to first copper.

<sup>&</sup>lt;sup>2</sup> Cu (US\$9,450/t), Au (US\$1,750/oz), Ag (US\$22/oz), AUD/USD (0.70). Refer ASX release of 14 December 2021 for assumptions and full economic assessment.

<sup>&</sup>lt;sup>3</sup> Refer ASX release of 31 August 2021 for details of GA government grant.

#### **EXPLORATION**

Hillgrove has a strong pipeline of exploration opportunities over more than 6,100km<sup>2</sup> of tenements.

These tenements comprise two project areas, the Near Mine area (within 10 kms of Hillgrove's processing plant) and the Regional area within the south-east Delamerian Volcanic Arc Cu-Au province.

### **Near Mine Exploration**

The Cu-Au targets within 10 kms of the Kanmantoo processing plant includes the Stella and North West Kanmantoo geochemical and geophysical targets.

# Stella

During the quarter, final petrology and multi-element geochemistry from the Stella drilling were received. These results affirm the magmatic related albitisation with attendant copper mineralisation is a significant event and separate to, and younger than, the Kanmantoo Cu-Au mineralisation. This is a new exciting Cu-Au target in close proximity to the Kanmantoo infrastructure.

Figure 1: Hillgrove Tenements

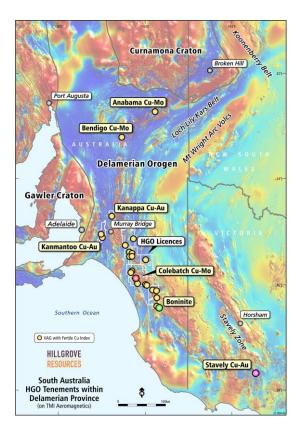
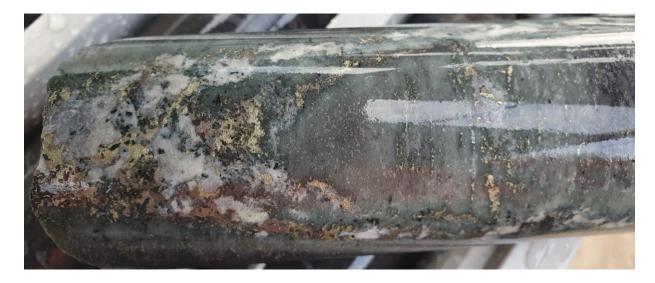


Figure 2: Stella (SLDD001) drill core from 505.0m downhole assaying 1.1m @ 0.87 g/t Au, 0.72% Cu in albite-carbonate alteration



## **Regional Exploration**

The regional area comprises 5,652km<sup>2</sup> of exploration licences in the south-east of South Australia, within the Delamerian Orogen. The Delamerian Orogen is now being investigated by the Geological Survey of South Australia and MINEX-CRC for its magmatic arc related copper-gold endowment as a consequence of the discoveries on the Stavely Belt in western Victoria, which is also within the Delamerian Orogen.

The Company was also successful in being granted funds under the South Australian Government's ADI scheme to empirically test various soil geochemical sampling/analyses techniques that have showed some great promise in early trials in the South-East.

## HILLGROVE CORPORATE

The Company continues to be prudent with cash burn, through cost reduction initiatives. However, to maintain the processing plant for a quick restart, costs are incurred for site care and maintenance, water recirculation, and regulatory obligations.

For the quarter, the Company incurred the following exploration and development expenditures:

- Exploration of \$0.3 million; and
- Development of \$2.6 million.

#### SUCCESSFUL CAPITAL RAISING

As announced to the market on 22 September 2021, the Company undertook a successful Placement of \$10.0 million to new and existing institutional and sophisticated investors during the quarter. This was conducted through the issue of 192.3 million shares at an issue price of \$0.052 per share.

In addition to the Placement, Hillgrove also offered eligible shareholders to purchase up to \$30,000 worth of shares under a non-underwritten Share Purchase Plan (SPP) at an offer price of \$0.052 per share. Hillgrove was seeking to raise up to \$2.0 million under the Share Purchase Plan offer. During the quarter, the Company completed the SPP, receiving 335 applications from eligible Shareholders, totalling approximately \$4.2m (\$2.2 million of oversubscriptions). This strong demand necessitated a scaling back of applications in accordance with the SPP Terms, which raised approximately \$2.0 million, with a total of 38.9 million new fully paid ordinary Hillgrove shares issued.

CORPORATE INFORMATION	
Issued Share Capital at 31 December 2021	
Ordinary shares	1,168,169,769
Unlisted Options	34,000,000
Employee Performance Rights	37,241,841
Share price activity for the Quarter	
High	0.066
Low	0.049
Last (31 December 2021)	0.054

SHARE REGISTRY	REGISTERED OFFICE
Boardroom Limited GPO Box 3993 Sydney NSW 2001, Australia F: +61 2 9290 9655 T: (within Australia) 1300 737 760 T: (outside Australia) +61 2 9290 9600	Hillgrove Resources Limited Ground Floor 5-7 King William Road Unley, South Australia, Australia E: info@hillgroveresources.com.au T: +61 8 7070 1698

### For more information contact:

Lachlan Wallace, Managing Director, Tel: +61 8 7070 1698