UNCOVERING A NEW COPPER-GOLD PROVINCE

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All currency referred to is Australian dollars ($) unless otherwise indicated (e.g. US$).
**COMPETENT PERSON STATEMENTS**

**Competent Person’s Statement**

The information in this release that relates to the 2016 Mineral Resource Estimate for Giant is based upon information compiled by Mr Peter Rolley, who is a Member of The Australian Institute of Geoscientists. Mr Rolley is a full-time employee of Hillgrove Resources Limited and has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration 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 (JORC Code)’. Mr Rolley has consented to the inclusion in the release of the matters based on their information in the form and context in which it appears.

The information in this release that relates to the 2013 Mineral Resource not including Giant is based upon information compiled by Ms Michaela Wright, who is a Member of The Australasian Institute of Mining and Metallurgy. Ms Wright is a former full-time employee of Hillgrove Resources Limited and has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration 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 (JORC Code)’. Ms Wright has consented to the inclusion in the release of the matters based on their information in the form and context in which it appears.

The information in this release that relates to Ore Reserves is based upon information compiled by Mr Lachlan Wallace, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Wallace is a full-time employee of Hillgrove Resources Limited and has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration 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 (JORC Code)’. Mr Wallace has consented to the inclusion in the release of the matters based on their information in the form and context in which it appears.

The information in this release that relates to Exploration Results is based on information compiled by Mr Peter Rolley, who is a Member of The Australian Institute of Geoscientists. Mr Rolley is a full-time employee of Hillgrove Resources Limited and has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration 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 (JORC Code)’. Mr Rolley has consented to the inclusion in the release of the matters based on their information in the form and context in which it appears.

**Exploration Results Here-In**

All exploration drill results, soil sampling images, and rock chip results have previously been reported to the ASX by Competent Person at the time. The results reported herein are reported in the form and context of the original ASX releases of 15 May 2015, 18 Oct 2016, 25 May 2017, 20 Oct 2017.
1. KANMANTOO MINE – THE KEY

2. KANMANTOO MINE – WHAT HAVE WE LEARNED

3. EXPLORATION IN THE REGION

Utilising existing infrastructure and cash flow at Kanmantoo to create Company transforming mining projects
Hillgrove Resources Ltd (ASX:HGO) operates the Kanmantoo Copper-Gold Open Pit in the south-east of South Australia.

Located approx. 55kms from Adelaide

Grid power, water on site

Local labour force

Awards for Community Consultation

Leader in Environmental Rehabilitation practises

Low cost mill and Tailings Facility operational

Open pit in cash generating phase

KEY TAKEAWAYS
- Infrastructure fully operational and permitted
- Ideal location for services and on-site labour
The Kanmantoo Copper-Gold Mine is located along the Tasman Line of the Delamerian Orogen of south-east South Australia.

The Tasman Line (Foden et al, 2006) is interpreted to represent the continent-vergent deformation zone of the Early Cambrian, then its transition in mid-Cambrian to an Andean subduction margin and magmatic arc, and finally an era of extensional tectonics.

The magmatic arc, where exposed, in western Victoria and western Tasmania hosts Stavely, Mt Lyell, Roseberry, Hellyer and Henty copper-gold and base-metal deposits.

In mainland Australia, the Tasman Line is predominantly under-cover.

**KEY TAKEAWAYS**

- Continental scale structures
- Where volcanics exposed, large orebodies
A quick re-cap

Here is an interpretation of the Delamerian Orogen in south-east South Australia (after Belperio et al, 1998 and Foden et al, 2006)

Kanmantoo is located in the rift basin – the Kanmantoo Trough

And the Kanappa – Mt Rhine projects are located at the margin of the Magmatic Arc and the Kanmantoo Trough

The age of the Magmatic Arc granites is 492.8 => 480 Ma
The regional magnetics clearly show the Kanmantoo Trough sedimentary basin and the magmatic arc (Padthaway Ridge) to the east.

Significant projects for Hillgrove within the Delamerian Orogen include:

- Kanmantoo Cu-Au
- Kanappa Cu - Au
- Mt Rhine Cu – Au

### KEY TAKEAWAYS

- Strong Cu-Au endowment
- Prospective areas under deep cover
And then there is the portion of the Magmatic Arc that is now covered by the Murray Valley sediments

So what have we learned from the mining of Kanmantoo about the types of orebodies that could be found, undercover?

**KEY TAKEAWAYS**

- Strong Cu-Au endowment
- Prospective areas under deep cover
Dating of the copper-gold lodes shows a late Cambrian – early Ordovician age

469 Ma – Focke, 2010
492 Ma – Wilson, 2009

Earliest igneous activity within the pit are peraluminous dykes subjected to D2 deformation, but pre-mineralisation – dating is in progress (Uni Adelaide – Dr R. Lilly)

A late, undeformed, alkali feldspar granite at the mine site is overprinted by destructive potassic feldspar alteration (Dr Roger Taylor)

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**KEY TAKEAWAYS**

- Magmatic activity is evident late Cambrian
- Mineralisation is late Cambrian and possibly related to regional extensional tectonics
Mineralising system is Fe-Cu-Au-Bi
Note * Fe rich garnet, biotite, chlorite with ore zones (HyLogger – DPC)

Fluids are acidic and likely magmatic

Fe as both magnetite and pyrrhotite

Last deformation event is K-rich with sulphides
Dating is in progress

Gold rich lodes to 105g/t Au with low copper
are late and quartz rich
  e.g. 5m @ 32.3g/t Au, 0.3% Cu

Where else do we see these patterns?

**KEY TAKEAWAYS**

- Kanmantoo appears coeval with magmatic fluids and intrusives
- It is a Cu-Au endowed system, that happens to outcrop
The Kanappa Cu-Au zone is 50kms from Kanmantoo

A series of pegmatites and aplites intrude into a sequence of Fe and potassic altered schists and carbonates

Soil copper zone 4.4kms long

Geochem zoning from west to east
  Cu-Zn => Cu-Bi => Cu-Au => Au => W

Peak rock chips of 34% Cu 4.0g/t Au (separate samples)

To date – Soil geochemistry
  Ground magnetics
  Pole-dipole IP

**KEY TAKEAWAYS**

- Large hydrothermal alteration and Cu-Au mineralised system
Magnetic anomalism is strong and not related to rock types, implying it is alteration related.

Best magnetic zones are correlated with the best geochemistry over 2km strike length.
2 km long zone of coincident Geochemistry, Magnetics, IP Chargeability
250m wide
Open to south

KEY TAKEAWAYS

Large scale coincident Cu-Au geochem, magnetics, and IP anomaly
Strong alteration system proximal to Igneous Arc magmatism to east
The Mt Rhine copper-gold zone is 10kms from Kanappa

Soil copper zone 1.7kms long

Peak rock chips of 13% Cu 49.8g/t Au (separate samples)

Peak Channel Sampling of 6m @ 15.9g/t Au

Much higher gold tenor cf Kanappa

Also completed soils, mags, IP

KEY TAKEAWAYS

- Large scale alteration system with
- Zone of Cu, IP and magnetic anomalous over 1.7kms long and 500m wide
KEY TAKEAWAYS

Stacked sections of IP chargeable model, with 3D magnetic model superimposed
Continuous zone of IP and magnetic anomalism
Mt Rhine has a strong zone of Cu geochemistry, magnetic and IP Chargeability anomalism
Over a 1.7km long, 500m wide zone
Proximal to Igneous Arc to east
Significant projects for Hillgrove within the OUTCROPPING portion of the Delamerian Orogen include:

- **Kanmantoo**: Cu - Au
- **Kanappa**: Cu - Au
- **Mt Rhine**: Cu – Au

**KEY TAKEAWAYS**

- The geochemical footprint is large and being characterised by Hillgrove
And then there is the Under-cover portion of the Magmatic Arc

The work underway at Kanmantoo is enabling Hillgrove to
• characterise the Geochemical Footprint of Cu-Au mineralisation
• develop vectors to the next Cu-Au orebody.

A geochemical footprint is a much larger target to discover (kms in size)

And thereby to identify the areas of economic potential – under cover

**KEY TAKEAWAYS**

- The geochemical footprint is large and being characterised by Hillgrove
KANMANTOO – WHAT HAVE WE LEARNED

- It is a large Fe-Cu-Bi-Au system
- It appears to be post peak-metamorphism
- It appears to be coeval with magmatic activity
- Strong gold endowment is late and associated with low Cu
  - 5m @ 32.3g/t Au, 0.3% Cu

REGIONAL COPPER-GOLD PROJECTS

- Magmatic copper-gold zones with high tenor copper – gold
- Large scale alteration systems
- Kanappa drill ready and to commence within 2 months

WORKING FROM KNOWN TO THE UNKNOWN

Kanmantoo is located within a significant copper-gold province
Which is being un-covered by Hillgrove Resources

Utilising existing infrastructure and cash flow at Kanmantoo to create
Company transforming mining projects