

Thursday, 03 September 2020

DRILLING EXPANDS CU-AU FOOTPRINT AT KANMANTOO UNDERGROUND

HIGHLIGHTS

- Assays for all holes have been received from recent diamond drilling of the Nugent and Kavanagh UG Cu-Au deposits at Kanmantoo, with every drill hole intersecting Cu-Au mineralisation. The intersections clearly demonstrate the down dip and lateral continuity of the higher grade copper mineralisation on the Kavanagh and Nugent Cu-Au lodes. Highlights from the drilling¹ include;

Central and East Kavanagh

- KTDD190_W2 20.3m @ 2.07% Cu, 0.67 g/t Au, 7.0 g/t Ag from 490.0m downhole
- KTDD197 20.65m @ 2.01% Cu, 0.42 g/t Au, 6.0g/t Ag from 326.6m downhole

Nugent

- KTDD192 10m @ 1.43% Cu, 0.46 g/t Au, 1.6 g/t Ag from 295m downhole
- KTDD194 6.0m @ 1.13% Cu, 1.86 g/t Au, 1.9 g/t Ag from 281m downhole
- KTDD195 11m @ 1.15% Cu, 0.58 g/t Au, 2.9 g/t Ag from 301m downhole

West Kavanagh

- KTDD189 16.7m @ 1.27% Cu, 0.08 g/t Au, 2.7 g/t Ag from 496m downhole

- The outstanding Cu-Au intersection in KTDD190_W2 is the deepest and furthest north drill hole drilled to date and has therefore extended the strike length and depth extents of the Kavanagh mineralisation.
- A total of 5,556.9 metres has been drilled over 14 diamond holes, all of which are beyond the limits of the current Mineral Resource Estimate released 30 October 2019.
- The drilling continues to highlight the continuity of the high grade Cu-Au mineralisation.

Further to the announcement on 20 June 2019, Hillgrove Resources Limited (Hillgrove, the Company) (ASX:HGO) is pleased to provide the following Kanmantoo Underground development drilling update, located 55kms southeast of Adelaide in South Australia and hosted within the Delamerian Orogen, host to the Stavely porphyry Cu-Au mineral system.

¹ intersections at a 0.6% Cu cut-off grade over a minimum of 5m horizontal width.



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A total of 14 diamond drill holes were completed to increase geological confidence in the continuity and grade of the higher grade Cu-Au lodes for resource estimation, underground mine planning and evaluation between 920 and 700mRL at West, Central and East Kavanagh, and between 1050 and 900mRL at Nugent. Note that the previous maiden Resource announced by Hillgrove in 30 October 2019 only estimated a resource for a portion of the Central and East Kavanagh Cu-Au lodes between 900 to 750mRL.

Further details of the drilling are provided in Appendices A and B.

Commenting on the drilling results, Hillgrove CEO and Managing Director, Lachlan Wallace said:

“These Cu-Au drill results continue to demonstrate the continuity of the high grade Cu-Au zones across multiple lodes at Kanmantoo. The Cu-Au lodes continue to be open at depth and along strike and we are excited to be undertaking an evaluation of this underground mining project at Kanmantoo which, if successful, is a path forward to return the Company to cash generation as quickly as possible.”

The next steps for the potential Kanmantoo underground development are as follows:

- Completion of an updated mineral resource estimate,
- Completion of gold metallurgical test work to increase gold recoveries,
- Additional drilling to increase inventory and geological confidence,
- Undertaking initial designs and feasibility studies, and
- Securing funding for development and working capital requirements.

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ABOUT HILLGROVE

Hillgrove is an Australian mining company listed on the Australian Securities Exchange (ASX: HGO) and focused on underground development at the Kanmantoo Copper Mine in South Australia and mineral exploration in the south-east of South Australia. The Kanmantoo Copper Mine is located less than 55 kilometres from Adelaide in South Australia.

Competent Person's Statement

The information in this release that relates to the Exploration Results 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.

APPENDIX A

The Kanmantoo diamond drilling program is being undertaken from the natural surface at a location near to the north-east end of the Giant open pit. Refer to Figure 1 for a location diagram.

The seven Nugent drill holes are all drilled from seven separate collars, with each hole intersecting the Nugent lode zone. The seven West Kavanagh and Kavanagh drill intersections were drilled from three parent holes, utilising conventional wedges and directional drilling techniques to achieve the desired intersection depths and targets.

Collar co-ordinates of the parent hole and of the hole lengths are provided in Table 1.

Table 1 Collars of all drill holes (MGA94_Zone 54)

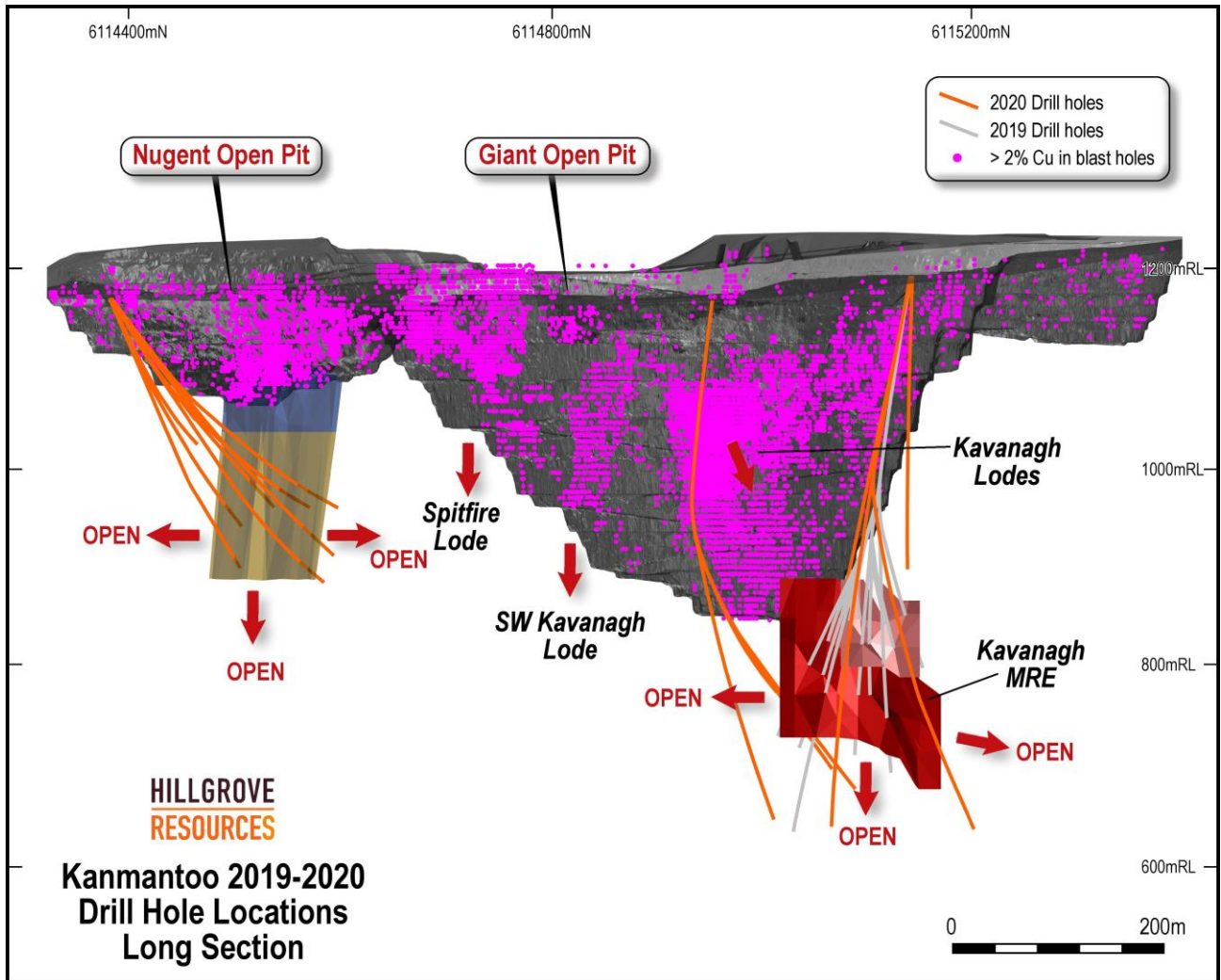
Hole_Id	East	North	Local Elevation	ASL Elevation	Wedge Depth	Core Length	EOH depth	Lode System
KTDD189	318476	6114953	1166.0	166.0	0.0	535.0	535.0	West Kavanagh
KTDD189_W1	318476	6114953	1166.0	166.0	226.2	344.5	570.7	West Kavanagh
KTDD189_W2	318476	6114953	1166.0	166.0	343.2	239.4	582.6	West Kavanagh
KTDD189_W3	318476	6114953	1166.0	166.0	251.9	327.7	579.6	West Kavanagh
KTDD190_W1	318483	6115141	1187.7	187.7	177.0	393.0	570.0	Kavanagh
KTDD190_W2	318483	6115141	1187.7	187.7	177.9	387.1	565.0	Kavanagh
KTDD191	318557	6114380	1167.0	167.0	0.0	345.4	345.4	Nugent
KTDD192	318561	6114382	1167.0	167.0	0.0	336.4	336.4	Nugent
KTDD193	318561	6114382	1167.0	167.0	0.0	330.0	330.0	Nugent
KTDD194	318561	6114382	1167.0	167.0	0.0	342.3	342.3	Nugent
KTDD195	318561	6114382	1167.0	167.0	0.0	363.2	363.2	Nugent
KTDD196	318557	6114380	1167.0	167.0	0.0	207.1	207.1	Abandoned
KTDD197	318483	6115143	1187.7	187.7	0.0	433.1	433.1	Kavanagh
KTDD198	318483	6115143	1187.7	187.7	0.0	282.4	282.4	Precollar
KTDD199	318557	6114380	1167.0	167.0	0.0	339.0	339.0	Nugent
KTDD200	318561	6114382	1167.0	167.0	0.0	351.3	351.3	Nugent

The diamond drilling is successfully intersecting the ore zones, with the use of navi-drilling to intersect the Cu-Au mineralisation within 15m of target. Drilling rates are up to 140m of NQ2 per day, and core recovery is >99% and RQD is 98-100%.

All core is being structurally logged to assist in understanding the local controls on the mineralisation. In addition, the core is logged for geotechnical quality to assist with future underground assessments.

Various samples will also be collected for metallurgical assessment, in particular to assess the possibility of improving the gold recoveries.

Figure 1 Location of Diamond Drilling (Section)



The list of all drill hole intersections is shown in Table 2, for intersections with a minimum of 3m at a 0.6% Cu cut off grade, except for KTDD193 which is included for its gold content.

Table 2 List of drill hole intersections

Hole Name	Length Downhole (m)	Depth Downhole From (m)	Cu (pct)	Au g/t	Ag g/t
KTDD189	16.70	496.00	1.27	0.08	2.7
KTDD189_W1	7.00	525.00	1.02	0.05	2.3
KTDD189_W2	3.80	564.00	1.03	0.06	2.2
KTDD189_W3	11.40	474.60	1.04	0.08	2.6
KTDD190_W1	4.15	296.85	2.23	0.22	5.1
KTDD190_W2	20.30	490.00	2.07	0.67	7.0
KTDD191	3.00	325.00	0.78	0.43	1.4
KTDD192	10.00	295.00	1.43	0.46	1.6
KTDD193	3.00	292.00	0.41	2.04	1.2
KTDD194	6.00	281.00	1.13	1.86	1.9
KTDD195	11.00	301.00	1.15	0.58	2.9
KTDD197	20.65	326.60	2.01	0.42	6.0
	3.60	392.00	1.17	0.94	3.7
KTDD198	6.70	148.30	1.06	0.42	5.1
KTDD199	4.60	299.00	1.12	0.53	1.4
KTDD200	5.00	287.00	1.06	0.72	1.3

Kavanagh Drilling

Figure 2 is a longitudinal section along the Kavanagh lodes showing the relevant historic Hillgrove diamond drill holes, the 2019 diamond drill holes (note that these holes are all prefixed by “KTDD187_”), the seven 2020 drillholes in the West Kavanagh and Kavanagh mineralisation and the Giant open pit blast hole data.

It is important to note that the past and the current drill holes are all at various angles to section, and that the mineralisation strikes at ~015deg, dips at ~ -75deg east, and plunges at ~-70deg northeast.

Figure 2 Longitudinal section showing all Kavanagh drill hole intersections

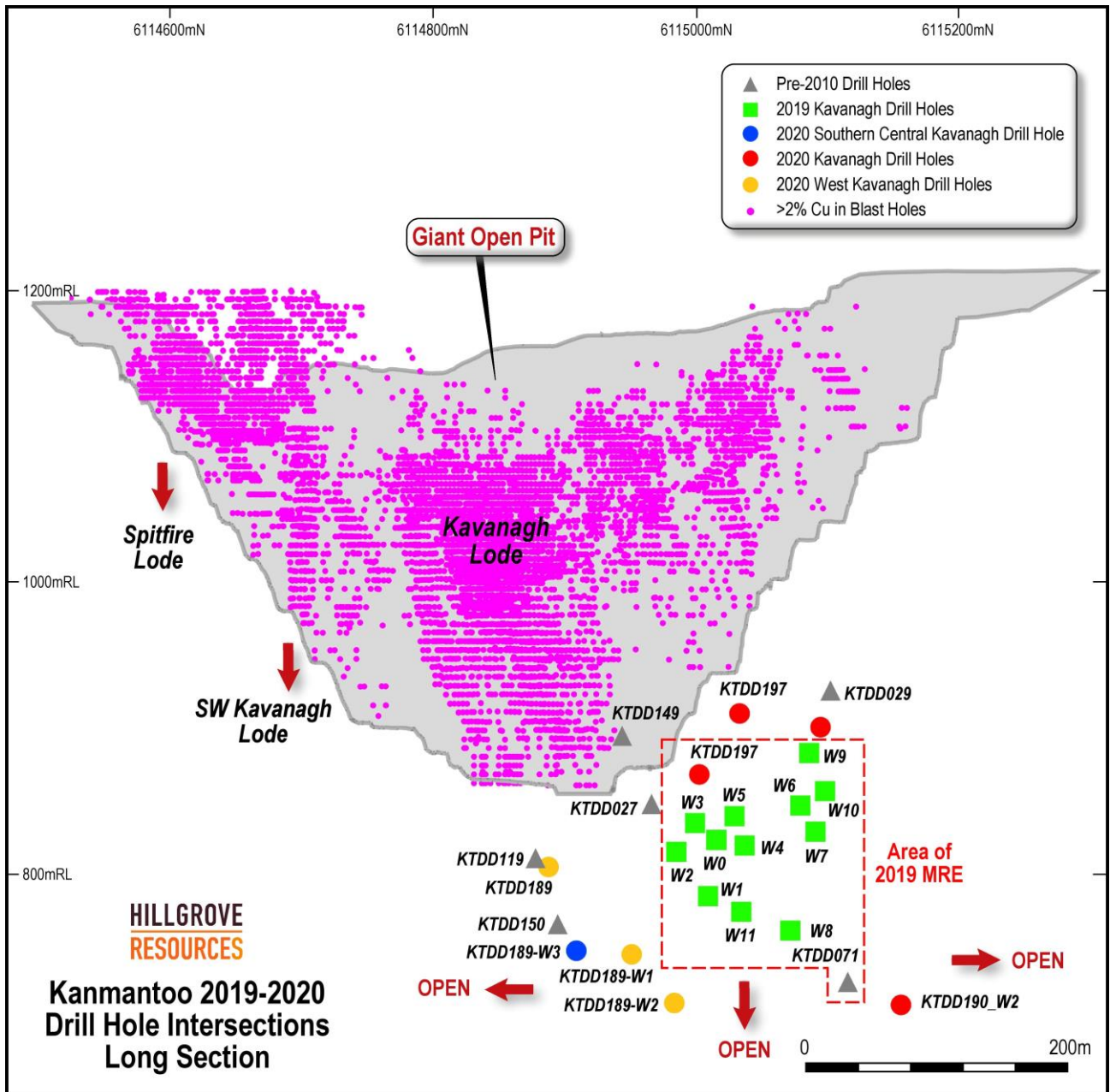


Figure 3 provides an example of the Cu-Au mineralisation in KTDD197 in Kavanagh from 329.06m to 333.51m. The vein chalcopyrite-pyrrhotite is hosted in a garnet andalusite biotite schist. Note the excellent core recovery.

Figure 3 Cu-Au mineralisation in KTDD197 in Kavanagh from 329.06m to 333.51m



Nugent Drilling

Seven diamond holes were drilled through the Nugent lode. Every hole intersected Cu-Au mineralisation within a strike length of 120 metres (open north and south along strike) and within a vertical depth of 170 metres from the base of the Nugent open pit (completed in 2015) and open to depth.

Figure 4 Longitudinal section showing all Nugent drill hole intersections

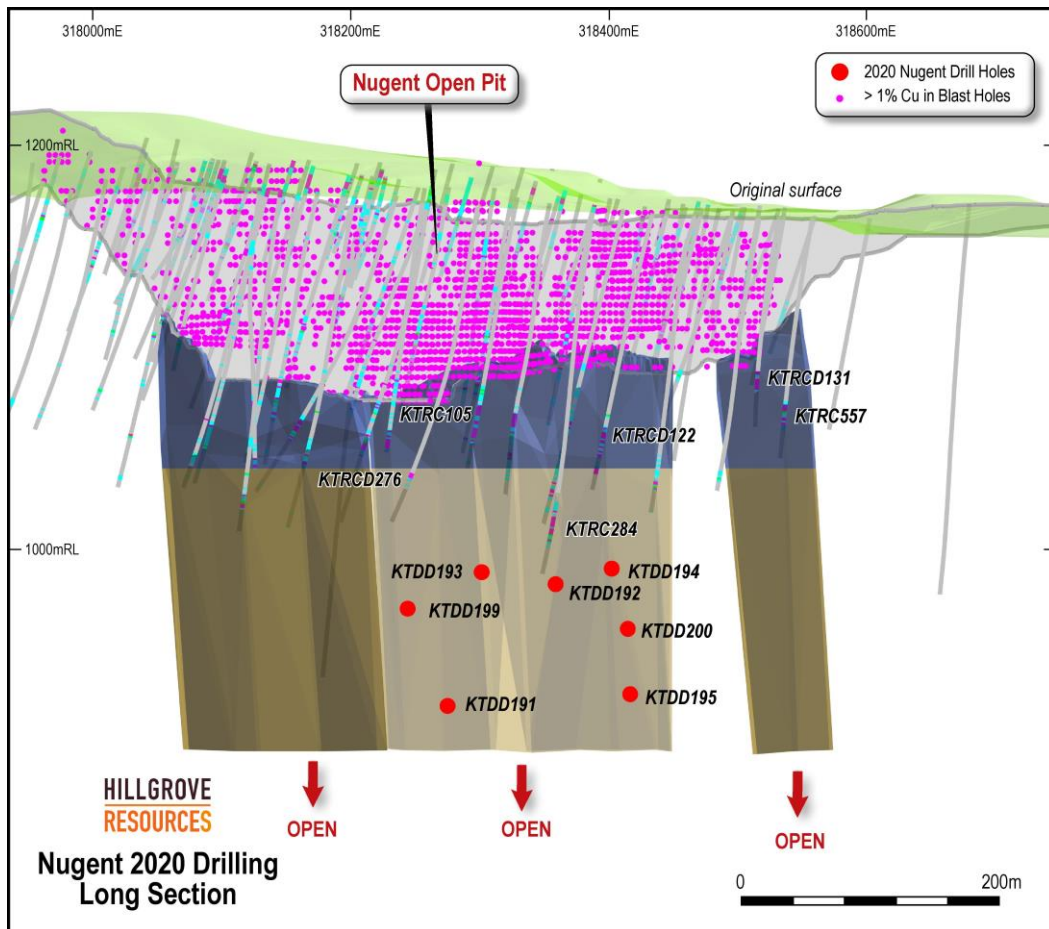


Figure 5 below is an example of the siliceous Cu-Au lodes at Nugent.

Figure 5 **KTDD195 (Nugent) from 320.2 to 325.6m**



Summary

The diamond drilling of the Nugent, West Kavanagh, and Central and East Kavanagh Cu-Au mineralisation has proceeded according to plan and budget. Drill results are currently consistent with previous drilling in the vicinity and are expected to enable updated mineral resource estimates to be undertaken at the earliest opportunity in the December quarter of 2020.

APPENDIX B – JORC Table 1

Section 1 Sampling Techniques and Data

Criteria	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> The 2020 Diamond Drill Hole (DDH) sampling at Kanmantoo was conducted as per the Hillgrove Resources procedures and QAQC protocols. Sample intervals from 1.0m to 0.23m as determined by geology through visibly mineralised zones were split from the drill core, with the drill core sawn in half with a diamond core saw. Samples were prepared by ALS Adelaide with each sample being wholly pulverised to >85% passing <75µm.
<i>Drilling techniques</i>	<ul style="list-style-type: none"> All drilling undertaken by external drilling contractor. HQ core as a precollar. Thence NQ drilling for all subsequent daughter holes at Kavanagh. NQ for all Nugent drill holes.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> Recovered drill core metres were measured and compared to length of drill hole advance to calculate core recovery for every core run. On average sample recovery is >98%. There is no correlation between sample recovery and copper grades in this DDH drill program.
<i>Logging</i>	<ul style="list-style-type: none"> All drill core was logged for lithology, alteration, weathering and mineralisation by Hillgrove geologists in accordance with Hillgrove's Core Logging Procedure. Colour and any additional qualitative comments were also recorded. High quality photographs of all drill core before being sampled were taken under controlled light at the HGO core yard at Kanmantoo. All drill core is stored at Hillgrove's Kanmantoo core yard facility. All geological logging is recorded into Excel spread sheet templates and visually validated before being imported into the Hillgrove drill hole database. Additional validation is conducted automatically on import. In addition a structural log is recorded utilising the "base of core" orientation mark collected during diamond drilling. A geotechnical log is also recorded.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> For selected intervals the core was sawn in half and the half core despatched to ALS for each sample interval and the entire sample then crushed and 1kg riffle split from the crushed mass and the 1kg sub-sample then pulverised. A sub-split of 200 grams was then split by ALS and retained, and the reject pulverised material returned to Hillgrove. From the 200 gram sub-split a 2 gram aliquot was scooped and weighed by ALS for 4-acid digestion. Hillgrove have detailed sampling and QAQC procedures in place to ensure sample collection is carried out to maximise representivity of

Criteria	Commentary
	<p>the samples and minimise contamination, and maintain sample numbering integrity.</p>
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> • All samples were submitted to ALS for analysis. ALS code ME-MS61 using a 4-acid digest with determination by Mass Spectrometry. If the copper result was greater than 1%, the analysis was repeated using a modified acid digestion technique. • Gold is assayed by 30g Fire Assay. • The QAQC of sample preparation and analysis processes were via the following samples: <ul style="list-style-type: none"> ○ Certified reference materials (CRM's) inserted into the sample sequence at a frequency of one in 20. OREAS standards 58P, 504b, and 502b have been used to provide a grade range from 0.511 - 1.1% Cu, 2.09 - 3.07 Ag and 0.495 - 1.6 g/t Au. ○ HGO prepared blanks are inserted at a rate of one in every 20 samples. ○ Laboratory inserted QAQC samples were inserted with a minimum of two standards and one blank for every batch of 40 samples. • Quartz flushes were introduced to the bowl pulverisers within every high sulphide interval and the flush material assayed. Any contamination investigated and determined to be negligible. • Hillgrove's Quality policy is that at a minimum of 5% of all samples are CRM's, and 5% of samples submitted are blanks thus ensuring that as a minimum, 10% of all samples submitted for analysis are Hillgrove QAQC samples. • Results from all returned QAQC samples provide reasonable confidence as to the accuracy of the assay results used in the estimation. All CRM results all fall within the expected ranges.
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> • Sample data sheets are prepared in Excel and printed for technicians use. All core is marked for sampling and confirmed by the logging geologist. Sample Sheets also include the sample number sequence and the sample numbers to be assigned to the QAQC samples. Sample intervals input from the excel spreadsheet into an SQL database via Datashed. Data was visually checked by the Geologist prior to import and additional validation was carried out by the database upon import. Copper results were reported in ppm units from the laboratories and then converted to a % value within the database.
<p><i>Location of data points</i></p>	<ul style="list-style-type: none"> • The map projection of Map Grid of Australia 1994 - Zone 54, (MGA94-54) was used for all work undertaken for this drilling. • All drill hole collars were surveyed with a Trimble survey station. The accuracy of this instrument is 0.01m. All pick-ups were reported in MGA94-54 coordinate system. Downhole surveys were determined using a gyro survey instrument at 30m intervals. All holes were repeat surveyed for verification.
<p><i>Data spacing and</i></p>	<ul style="list-style-type: none"> • See Figures 1, 2 and 4 in the body of the text for drill hole locations.

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Criteria	Commentary
<i>distribution</i>	
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> • All holes are angled drill holes, dipping at -29 to -70deg towards 250 – 280deg (true). This is approximately normal to the observed strike of the mineralisation from in-pit mapping, • Dominant mineralisation trends as measured from in-pit mapping are strike 015deg and dip -75deg to east.
<i>Sample security</i>	<ul style="list-style-type: none"> • A Hillgrove employee is present for the collection of core trays from the DDH rig and is also responsible for collecting and organising the samples ready for assay. Hillgrove has a detailed sample collection/submission procedure in place to ensure sample security. • Drill core is transported in covered trays from the drill site to Hillgrove’s core yard at Kanmantoo in Hillgrove vehicles under the supervision of Hillgrove staff. • Transport of the half-sawn drill core samples is by dedicated road transport to the Adelaide sample preparation facility. All samples are transported in sealed plastic bags and are accompanied by (either paper form or by email) a detailed sample submission form. • On receiving a batch of samples, the receiving laboratory checks received samples against a sample dispatch sheet supplied by Hillgrove personnel. On completion of this check a sample reconciliation report is provided for each batch received.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> • There has not been an external review of this DDH drilling program. Previous audits of the Hillgrove sampling methods were reviewed by independent consultant in 2008 and were considered to be of a very high standard.

Section 2 Reporting of Exploration Results

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> The Kanmantoo Cu-Au mine is situated 55kms south-east of Adelaide on Mining Lease ML6345 and is owned 100% by Hillgrove Resources Limited (HGO). HGO owns the land covered by the Mining Lease.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Hillgrove Resources commenced exploration drilling in 2004 and since then has completed a number of exploration sampling and mapping campaigns which have resulted in defining the drill targets. The Table 1 of the 2019 Kanmantoo drilling was reported on 10 October 2019.
<i>Geology</i>	<ul style="list-style-type: none"> Mineralisation occurs as a complex system of structurally controlled veins and disseminations of chalcopyrite, pyrrhotite, pyrite, magnetite, within a quartz + biotite + andalusite ± garnet ± chlorite +/- staurolite schist host rock. Structural studies suggest the mineralisation is within brittle structures that have been multiply re-activated.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> Drill collars, surveys, intercepts are reported in the body of this release.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> Intercepts tabulated in the body of the report are amalgamated over a minimum down hole length of 5m > 0.6% Cu with a maximum of 2m internal dilution < 0.6% Cu. No assays were cut before amalgamating for the intercept calculation. No metal equivalent values have been reported.
<i>Mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> Table of downhole mineralised intercepts is reported in the body of this release.
<i>Diagrams</i>	<ul style="list-style-type: none"> Diagrams that are relevant to this release have been included in the body of the release.

Criteria	Commentary
<i>Balanced reporting</i>	<ul style="list-style-type: none">All drill holes have been reported.
<i>Other exploration data</i>	<ul style="list-style-type: none">In situ rock density has been measured by wet immersion method to assess if there is a correlation between Cu grade and rock density. The results indicate that the bulk rock density of 3.09t/m³ as used by the mine site for the past 8 years is still a reasonable representation of bulk density for all mineralisation.
<i>Further work</i>	<ul style="list-style-type: none">Geological interpretation of the geology and assays to estimate a resource suitable for underground evaluation studies.