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NEW GOLD DISCOVERY CONFIRMED AT STELLA NEAR KANMANTOO

HIGHLIGHTS

- The first Stella diamond drill hole (SLDD001) intersected an 82.35m wide alteration zone including copper and gold veining from 315m downhole. In total, three alteration zones with copper gold veining over a combined 158 metres were intersected.
- Highlight of SLDD001 is:
 0.6m @ 16.86 g/t Au, 10.1% Cu, 44.8 g/t Ag from 344m downhole
- The Au-Cu intersections in hole SLDD001 are down-dip and along strike from previous drill intersections that have not previously been linked, including a 1994 drill hole from Aberfoyle Resources (KAN01) that is 190m up-dip from SLDD001 and assayed:
 - 0.9m @ 9.28 g/t Au, 0.18% Cu from 156.4m downhole¹, within a 36m wide alteration zone of gold and copper veining from 154m downhole.
- The gold intersection at 344m downhole in drill hole SLDD001 is over 300m below surface and demonstrates that the gold mineralisation continues and is open to depth.
- The geophysical modelling indicates that the mineralised alteration zones intersected in SLDD001 are open for over 700m strike length.
- Within the geophysical target area there is a shallow RC percussion hole drilled by HGO in 2010 (KTRC854) located 350m to the south of SLDD001, which assayed 3m @ 0.71 g/t Au from 168m downhole before the hole collapsed within the gold zone. This hole also confirms the validity of the geophysical extent of the Au-Cu alteration systems.
- The Stella gold zone is located 350m southeast of Hillgrove's Kanmantoo Mine Lease on land owned by the Company.
- The drilling has been undertaken with the financial assistance of the South Australian Government's Accelerated Drilling Initiative (ADI) grant.

¹ Drill results from Aberfoyle drilling in 1994 were publicly reported in document ENV08183 pp543-891 and lodged with DEM South Australia (<u>https://sarigbasis.pir.sa.gov.au/WebtopEw/ws/samref/sarig1/image/DDD/ENV08183.pdf</u>)

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

"The multiple Au-Cu alteration zones at Stella is an exciting new discovery and provides an opportunity to add significant value to the invested infrastructure at Kanmantoo over and above the Kanmantoo Underground. In addition, the new discovery of Cu-Au epithermal mineralisation in the Delamerian of south-east South Australia has important implications for the region, in particular the potential to host large scale Cu-Au deposits. These results illustrate the importance of the South Australian Government's Accelerated Discovery Initiative in assisting explorers to unlock the State's mineral wealth."

Hillgrove Resources Limited (Hillgrove, the Company) (ASX:HGO) is pleased to provide the following Stella drilling update, located near its Kanmantoo mining operations around 55kms southeast of Adelaide in South Australia and hosted within the Delamerian Orogen, host to the Stavely porphyry Cu-Au mineral system. The Stella project is located 350 metres from the south-east boundary of Hillgrove's fully permitted Mining Lease This update includes results from the first (SLDD001) of two diamond holes drilled into the Stella project. Assays have not been received for the second hole (SLDD002) and are not expected until September.

Figure 1 shows the cross section along the SLDD001 drill hole and Figure 2 the location of the two completed drill holes within the Stella Project area.



Figure 1 Cross section showing the Stella drill hole intersections



Figure 2 Plan view of the Stella drilling

Figure 2 shows the lateral extents of the geophysical anomaly and a compilation of past drilling that is now linked by the completion of SLDDD01 and the geophysics.

The significance of the low-grade gold zone at the end of the collapsed drill hole KTRC854 has previously not been appreciated but is now linked to the gold zone in SLDD001 and with the gold zone in KAN01.

The overall zone is now interpreted to be over 700m in length.

Drill Results

Drill hole SLDD001 intersected four separate mineralised zones of varying chemistry and alteration, three of which are Au-Cu endowed. Not all zones are economic where intersected by SLDD001, but the extent and tenor of the alteration and associated metals indicate that large mineral systems are present and may have the potential to generate significant value for the Company.

Zone 1

The main mineralised zone intersected in SLDD001 is characterised as an Fe-Au-Cu-Bi Zone similar in style and texture to the Kanmantoo mineralisation mined by Hillgrove from 2011 to 2019.

• SLDD001 0.6m @ 16.85 g/t Au, 10.1% Cu, 44.8 g/t Ag from 344m downhole Within 3m @ 3.53 g/t Au, 2.76% Cu, 11.9 g/t Ag from 343m downhole

This high-grade Au-Cu intercept is part of an 82.35m zone of Cu veining from 315m downhole and is a new discovery and exploration target for the Company to add additional value to its invested infrastructure.

Figure 3 Kanmantoo style Fe-Au-Cu-Bi mineralisation in SLDD001 at 344m

The interval pictured in Figure 3 is part of the 344 to 344.6m with an average of 0.6m @ 16.85 g/t Au, 10.1%Cu.



Zone 2

A second zone of 33m of Fe-Au-Cu-Bi mineralisation similar to the Kanmantoo style of mineralisation was also intersected by SLDD001 from 570m downhole. Within SLDD001 the zone is weakly mineralised but is evidence that a second Cu target is present in this area. Figure 5 is an example of part of this zone. Peak value is:

• SLDD001 1.0m @ 0.54% Cu, 0.13 g/t Au from 591m downhole

Zone 3

In addition to the Kanmantoo style Fe-Cu-Au-Bi veining intersected in SLDD001, the drill results demonstrate a new style of Au-Cu mineralisation not previously encountered by Hillgrove geologists at Kanmantoo. This zone is interpreted to be epithermal in texture and alteration and is a new style of significant opportunity for new Cu-Au deposits in South Australia.

Extensive widths of albitisation resulting from albite-carbonate veins with pyrrhotite-pyrite-chalcopyritegold are a new style of mineralisation in this region. See Figures 6 and 7 below for examples. The albitisation and albite-carbonate veining is definitely post-Delamerian Orogen and is spatially associated with small un-deformed dykes of monzonite with attendant Fe-Cu sulphides. The albitisation and albite-carbonate veining extends over at least 43.5m and is incompletely sampled at this stage. The discovery of post-Delamerian epithermal Cu-Au mineralisation in spatial association with monzonitic dykes is a significant change in the mineral systems for exploration in the South-East of South Australia and is interpreted as being an Epithermal Cu-Au system.

Zone 4

A fourth style of mineralisation encountered by SLDD001 is a suite of chlorite-carbonate-albite veins and associated alteration with base metal mineralisation to 0.3% combined Pb-Zn-Ag, also not previously observed at Kanmantoo. See Figure 8 below. The base metal veins are within a sericite-carbonate altered meta-sediment host.

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

The next steps for the evaluation of the Stella gold zone are as follows:

- Completion of the planned drilling program and receipt of all assays therefrom,
- Evaluation of the drill results for additional gold mineralisation opportunities, and
- Continued drilling if justified.

For more information contact:

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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 Company commenced drilling Stella in June after receiving an ADI Grant from the Department of Energy and Mining of South Australia for this project. Two holes have been drilled to test a coincident northward striking gravity low and MT Conductivity zone, with magnetic anomalies along the eastern and western margins of the gravity low. Logging of a diamond drill hole (KAN01) drilled in the near vicinity by Aberfoyle Resources in 1994² (the core for which is stored at the DEM Tonsley Core Library facility) identified significant Au-Cu mineralisation in spatial association with a small, undeformed monzonite dyke (confirmed by petrology by Dr R. Taylor³).

Collar co-ordinates and total hole length are provided in Table 1. Refer to Figure 2 above for a location diagram.

The diamond drilling successfully intersected the gravity, magnetic and MT Conductivity geophysical targets to be tested. No navi-drilling was required as a result of the application of extensive Company knowledge of the drilling conditions in these meta-sediments. Drilling rates are up to 65m of NQ2 per 12-hour shift, 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.

All assaying is of ½ cut core. Sample preparation is undertaken by ALS in Adelaide and analytical work in ALS-Perth. Multi-element geochemistry is by 4-acid digest and ICP-MS analysis. High grade Au is confirmed by gravimetric finish of a fire assay. The high-grade gold intercepts were individually checked and re-assayed and, in all cases, confirmed. Blank flushes and blank standards are inserted throughout every sample despatch for cross-equipment contamination in these high sulphide mineral systems. Mineral standards are also inserted in every batch to check for metal assaying precision.

The two zones of Fe-Cu-Au mineralisation (Zone A from 315m and Zone B from 570m downhole) are with attendant garnet and pyrrhotite and explain the two magnetic anomalies interpreted from the modelling of the ground magnetic traverses.

The 43.5m wide albite-carbonate alteration and Cu-Au zone at 462m downhole (Zone C) is coincident with the gravity low and MT conductivity zone.

https://sarigbasis.pir.sa.gov.au/WebtopEw/ws/samref/sarig1/image/DDD/ENV08183.pdf

² Youles, I.P.;Border, A.;Drummond, A.;Anderson, B.E.;Robinson, P.;Anderson, J.A.;Toteff, S.;Pontifex, I.R.;Radke, F;Schultz, P.K.;Painter, J.A.C.;Purvis, A.C.;Biggins, S.;Barnes, J.;Owler, L. *Kanmantoo area. Data release on partial relinquishment - progress, annual and technical reports for the period 28/4/89 to 31/7/99.* South Australia. Department of Primary Industries and Resources. Open file Envelope.

³ R.Taylor June 2019 Petrology of KAN01 at 273.7m is a leucocratic monzonite intruded by a second coarser grained monzonite with carbonate cavity infill and minor pyrite, and sericite alteration of K-feldspar.



Figure 4 Aerial view of SLDD001 looking west towards the Kanmantoo Mine Lease

Figures below provide examples of the various styles of gold copper mineralisation encountered in SLD001. Figure 3 above is an example of the Au-Cu mineralisation hosted by the Kanmantoo style Fe-Cu-Au-Bi garnet pyrrhotite zone in Zone A at 344m downhole.

Figure 5 Au-Cu mineralisation in SLDD001 at 582m

The interval shown below from 582 to 583m is 1.0m @ 0.6%Cu. This zone of Fe-Cu mineralisation occurs over 33m from 570m downhole and has a peak interval of 0.54% Cu (591-592m). The mineralisation is hosted by coarse andalusites altered to garnet, chlorite, biotite and is similar to the Kanmantoo deposit mined by Hillgrove from 2011 to 2019.



Figure 6 Albite hosted Cu mineralisation in SLDD001 at 471m

The core shown is within the interval from 471 to 472m which assays 1.0m @ 0.29% Cu. The host andalusite meta-sediments are totally altered by the cross-cutting albite and carbonate veining with fracture-fill Fe-Cu sulphides. The albitisation-carbonate zone extends over at least 43.5m from 462m downhole but is incompletely assayed at this stage. Peak value is 1.1m @ 0.87 g/t Au, 0.72% Cu from 504m.



Figure 7 Albite hosted Au-Cu mineralisation in SLDD001 at 504m

The interval 504 to 505.1m is 1.1m @ 0.87 g/t Au, 0.72% Cu. The albite-carbonate vein is infilled by Fe-Cu sulphides and albite-carbonate is also totally replacing the host meta-sediments. The albite-carbonate veining cross-cuts at a high angle the S2 fabric and by inference is late to post-Delamerian.



Figure 8 Sericite-chlorite-carbonate hosted Pb-Zn veining in SLDD001 at 148m

The interval shown in Figure 8 assays 0.22% Pb, 0.12% Zn, 13.9 g/t Ag. It is part of a zone of Pb-Zn veining over 10m from 145m downhole and is also geochemically anomalous in As, Cd, and Sb. The zone crosscuts the dominant S2 cleavage and is therefore assumed to be late or post-Delamerian in age. The zone is also characterised by albitisation and carbonate alteration. This is not a style encountered at the Kanmantoo operation.



Summary

The diamond drilling of the Stella gold zone has proceeded according to plan and completed within budget. Drill results have successfully intersected several Au-Cu zones of mineralisation with attendant high grade gold mineralisation.

The drilling has made two significant new discoveries:

- 1. High grade gold copper in an area not previously identified as economically prospective
- 2. Epithermal style Cu-Au mineralisation and alteration previously unrecognised in the Delamerian of south-east South Australia.

APPENDIX B – JORC Table 1

Section 1 Sampling Techniques and Data

| Criteria | Commentary |
|---|--|
| Sampling techniques | • The 2021 Diamond Drill Hole (DDH) sampling at Stella was conducted as per the Hillgrove Resources procedures and QAQC protocols. |
| | • Sample intervals from 1.0m to 0.30m 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. |
| Drilling techniques | • All drilling undertaken by external drilling contractor. HQ core as a precollar. Thence NQ drilling. |
| Drill sample recovery | • 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. |
| Logging | 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 LogChief (a database product from Maxwell Geosciences) 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. |
| Sub-sampling techniques and sample preparation | • 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 the samples and minimise contamination and maintain sample numbering integrity. |

| Criteria | Commentary |
|--|--|
| Quality of assay data and laboratory tests | • 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: |
| | 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. |
| | 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. |
| | Laboratory inserted QAQC samples were inserted with a minimum of two standards and one blank for every batch of 40 samples. |
| | • Quartz flushes are introduced to the bowl pulverisers within every high sulphide interval and the flush material assayed. These are monitored and where Cu contamination of the quartz flush occurs the batch is repeated by the assay lab. For the holes reported there are no examples of sulphides contaminating successive samples via sample preparation processes. |
| | • Quartz washes are also utilised through the Boyd crusher where high sulphides are present as identified by the logging geologist. |
| | • 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. |
| | Cu by 4-acid digest ad ICP-MS analysis duplicates |



| Criteria | Commentary |
|---|--|
| | Au by FA with Gravimetric finish duplicates |
| | Duplicates Report Chart Method: Au-GRA21 Analyte: Au Precision: +/- 10% |
| | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| | ♦ All Data |
| Verification of sampling and assaying | • 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. |
| Location of data points | • 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 24m intervals. All holes were repeat surveyed for verification. |
| | HoleId East North Elev TotDepth |
| | SLDD001 318300 6113435 140 613 |
| | SLDD002 318536 6113602 135 700 |
| Data spacing and | See Table 1 and Figures 1 and 2 in the body of the text for drill hole locations. |

| Criteria | Commentary |
|--|--|
| distribution | |
| Orientation of data in relation to geological structure | • All holes are angled drill holes, collared at -80deg to 267deg azimuth (true). This is approximately normal to the observed strike of the dominant structural fabric (D2 cleavage) from surface and in-pit mapping. |
| | • Dominant structural trend as measured from surface mapping are strike 015deg and dip -75deg to east. |
| Sample security | • 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. |
| Audits or reviews | • 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 |
|---|---|
| Mineral tenement and land tenure status | The Kanmantoo Cu-Au mine and the Stella Au Project are 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 Stella project area. |
| Exploration done by | Aberfoyle Resources completed a single diamond drill hole in 1994 and reported in |
| other parties | Youles, I.P.;Border, A.;Drummond, A.;Anderson, B.E.;Robinson, P.;Anderson, J.A.;Toteff, S.;Pontifex, I.R.;Radke, F;Schultz, P.K.;Painter, J.A.C.;Purvis, |
| | A.C.;Biggins, S.;Barnes, J.;Owler, L. Kanmantoo area. Data release on partial relinquishment - progress, annual and technical reports for the period |
| | 28/4/89 to 3 ////99. South Australia. Department of Primary industries and Resources. Open file Envelope. |
| | Hillgrove Resources commenced exploration drilling in 2004 and since then has completed a number of exploration geophysical and sampling and mapping campaigns which have resulted in defining the Stella drill target. |
| | Hillgrove completed a number of shallow RC holes in 2004-2006 (KTRC170, 253-258) as shown in Figure 1 over a soil anomaly zone. These intersected a number of narrow zones of copper and gold. As the exploration target at the time was open pit > 0.9% Cu, these drill results did not represent a high value target for further drilling. Re-logging of these holes shows the Cu-Au mineralisation to be within, or proximal to, the weathering boundary and represent a significant geochemical zone of highly elevated copper gold results. |
| | Hillgrove also drilled a set of 4 shallow RC holes in 2010 (KTRC852-855) south of SLDD001 reported herein. Hole KTRC854 intersected 3m @ 0.7 g/t Au from 168m downhole and then the hole collapsed. Hole KTRC855 intersected 10m @ 0.4%Cu, 0.14 g/t Au from 74m downhole in the weathered zone. These holes demonstrate the continuity of the geophysical anomaly and Cu-Au mineralisation 300m to the south of SLDD001. |
| Geology | • The main Kanmantoo 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. |
| | • The drilling at Stella shows that there is also a low temperature albitisation-carbonate mineralised event with attendant Au-Cu that is undeformed by the Delamerian deformation. This mineralisation is interpreted as epithermal. |
| Drill hole Information | Drill collars, surveys, intercepts are reported in the body of this release. |
| Data aggregation | Intercepts tabulated in the body of the report are amalgamated over a minimum down hole length of 3.0m > 0.2% Cu. No assays were cut before amalgamating for the intercept calculation. |

| Criteria | Commentary |
|---|--|
| methods | No metal equivalent values have been reported. |
| Mineralisation widths and intercept lengths | Table of downhole mineralised intercepts is reported in the body of this release. |
| Diagrams | Diagrams that are relevant to this release have been included in the body of the release. |
| Balanced reporting | All drill holes have been reported. |
| Other exploration data | No other data reported. |
| Further work | Geological interpretation of the geology and assays to determine future drilling priorities. |