

HILLGROVE RESOURCES

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KANMANTOO COPPER RESOURCE INCREASES TO 25.3MT

Hillgrove Resources Limited (ASX:HGO) advises that an updated Mineral Resource Estimate has been completed for the Kanmantoo Copper Mine and resulted in an increase in the resource by approximately 7 million tonnes or 38% to 25.375 million tonnes at 1.0% copper and 0.2 g/t gold. Total contained copper metal has increased by 26% to 248,100 tonnes and contained gold ounces by 50% to 156,700 ounces.

The Kanmantoo deposit is located approximately 55km east south-east of Adelaide in South Australia and is currently undergoing a pre-feasibility study assessment by Roche Mining.

David Archer, the Managing Director of Hillgrove said today "Kanmantoo is shaping up as one of the best potential near term, mid-tier copper producers in Australia. With road, rail, water, power and accommodation already in the area the project would, if developed, have a low capital intensity in comparison to its peers with the potential for superior returns to our shareholders. The drilling at Kanmantoo has substantially increased both the resource tonnage and confidence and, with substantial gaps and possible strike extensions targeted for drilling, there is excellent potential for further significant copper resource growth in and around the open cut".

Over the past two and a half years the global resource at Kanmantoo has increased by over 300% highlighting Kanmantoo as a major copper gold system. Potential for further copper and gold discoveries within the 489km² Kanmantoo Joint Venture area is considered to be very high.

New JORC Resource at Kanmantoo

The Mineral Resource Estimate was completed by Resource Evaluations Pty Ltd (ResEval) and complies with recommendations in the Australasian Code for Reporting of Mineral Resources and Ore Reserves prepared in 2004 by the Joint Ore Reserves Committee (JORC), therefore it is suitable for public reporting.

The ResEval resource estimate is summarised below (Figure 1) and is detailed in Appendix 1.

Kanmantoo Deposit Resource Estimate - May 2006
(No Cutoff above -100mRL, 1%Cu Cutoff below -100mRL)

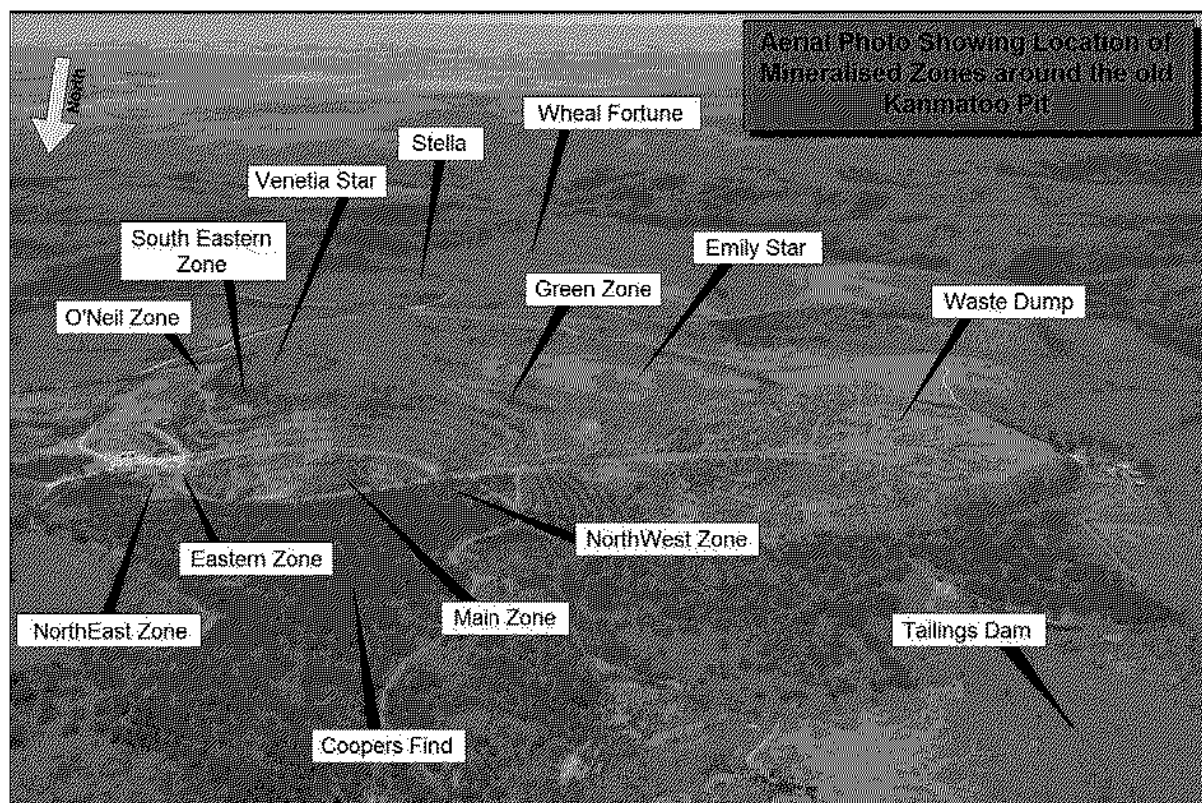
Type	Indicated			Inferred			Total				
	Tonnes T	Cu %	Au Uncut g/t	Tonnes T	Cu %	Au Uncut g/t	Tonnes T	Cu %	Au Uncut g/t	Cu Metal Tonnes	Au Uncut Ounces
Oxide	195,300	1.0	0.3	95,300	1.1	0.2	290,600	1.0	0.3	2,900	2,300
Transitional	1,264,000	1.0	0.2	647,000	0.9	0.2	1,911,000	1.0	0.2	18,600	13,800
Fresh >-100mRL	13,152,000	1.0	0.2	8,170,000	0.8	0.2	21,322,000	0.9	0.2	199,600	135,100
Fresh <-100mRL	33,000	1.2	0.1	1,819,000	1.5	0.0	1,852,000	1.5	0.1	26,900	5,500
Total	14,644,000	1.0	0.2	10,731,000	0.9	0.2	25,375,000	1.0	0.2	248,100	156,700

(Note: The resource estimate was completed using ordinary kriging (OK) and inverse distance to power 2 (ID2) interpolation inside a wireframe defined by a 0.25% Cu contour. Zones of internal dilution were included (no-cut off internally) to maintain continuity of individual zones which make up the resource.)

The Main Zone had the highest resource upgrade increasing by 2,788,600 tonnes or 46% to 8,852,000 tonnes at 1.1% copper and 0.2 g/t gold and illustrating the continuing potential to materially increase the overall resource from new mineralisation from this key area.

Inaugural copper/gold resources were recognised from the newly discovered North West Zone and Coopers Find. The North East Zone has recorded elevated copper and gold values of 1.2% copper and 0.6 g/t gold and is a key target. Venetia Star recorded an inaugural gold only Inferred Resource of 102,000 tonnes at 2.3 g/t and holds promise to increase into a larger gold only resource with further drilling.

The bulk of the resource (74%) is within ML 5776 and EL 3298 (Hillgrove 100%), with the balance in EL 3277 (Hillgrove 90%, Argonaut Resources N.L. 10%). A breakdown of the resource as between tenements is given in Appendix 2 below.



Pre-Feasibility resource definition drilling is continuing at Kanmantoo and a further updated resource assessment is scheduled to be announced at the end of September 2006.

The Mineral Resource Estimate referred to in this announcement was completed under the supervision and direction of Mr. Paul Payne who is a Competent Person as defined in the 2004 Edition of the Australian Code for the reporting of Mineral Resources and Ore Reserves (JORC Code) and who has consented to this information being released. The other geological information contained in this report that relates to Exploration Results is based on information compiled by Mr Dale Ferguson, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Ferguson is the General Manager – Exploration and Operations of Hillgrove Resources Limited and has sufficient experience to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

About Hillgrove

Hillgrove is an Australian resources company listed on the Australian Stock Exchange which focuses on identifying resources opportunities that can either be brought into production readily or those where there is a clearly defined value adding route within a clearly understood risk environment. Commodities that are of particular interest include copper, gold, garnet, silver, lead, zinc, uranium and natural gas.

Hillgrove is exploring a total of 974 km² in the Kanmantoo Trough and the Gawler Craton, two of the most prospective regions of South Australia, for copper and gold. Additionally, Hillgrove has a 31% shareholding in InterMet Resources Limited (ASX:ITT) which has over 6,000 km² of ground in the Gawler Craton prospective for copper, gold, nickel and uranium.

Hillgrove is currently undertaking a pre-feasibility study of the Kanmantoo Copper Mine, a potential mid-tier copper producer, where it has established an Indicated and Inferred Resource of 25.375MT grading 1.1% copper and 0.2 g/t gold. Additionally, the copper/gold mineralisation is associated with what is thought to be a World Class resource of garnet which has application as an abrasive.

In October 2005 Hillgrove announced the conclusion of a strategic alliance with Sempra Metals, a subsidiary of Fortune 500 Company Sempra Energy, involving an \$8 million equity and debt package to assist the development of Kanmantoo.

The Company has a 32.5% interest in the Gunnedah Basin Gas Joint Venture's PEL 238 Coal Seam Gas Project in New South Wales. The Joint Venture currently has five wells in test production with a nine well production pilot currently being drilled. PEL 238 contains one of the largest onshore accumulations of natural gas in Australia totalling 17,000PJ's (17 TCF) of gas-in-place within two thick coal seams.

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APPENDIX 1:
Resource Summary – Kanmantoo Deposit May 2006 Estimate

Undiluted Resource

No Cut-off above -100mRL, 1% Cu Cut-off below -100mRL

Class	Tonnes	Cu %	Au g/t	Cu (T)	Au Oz
Measured	-	-	-	-	-
Indicated	14,644,000	1.0	0.2	148,300	94,400
Inferred	10,731,000	0.9	0.2	99,800	62,300
Total	25,375,000	1.0	0.2	248,100	156,700

The resource estimate was completed using the following parameters:

- The Kanmantoo resource area extends over a strike length of 1,640m (from 19,660mN to 21,300mN) and includes the 625m interval from 225mRL to minus 400mRL.
- Results are based on drilling conducted by Kanmantoo Mines Limited (KML) in the 1960's and 1970's and contemporary drilling by Hillgrove Resources Limited.
- Drill holes used in the resource estimate included 151 surface (HGO) RC holes, 23 surface (HGO) diamond holes, 90 surface (KML) diamond holes and 16 underground (KML) diamond holes for a total of 47,409m of drilling. Holes were drilled at variable spacings but averaged around 20-30m spacings in the better mineralised portion of the deposit. **Historic (KML) holes have been removed from the estimate where there exists reasonably close spaced recent drill holes.**
- A site visit was conducted by Aaron Green of ResEval from 20–21 March 2006. General procedures were reviewed and a site familiarisation was conducted which included the main Kanmantoo open pit and surrounding prospects.
- Core size and sampling procedures were not documented for Kanmantoo Mines drilling. Hillgrove conducted RC drilling using 5^{3/4"} drill bits with samples collected through a 75/25 splitter. Sample quality was excellent with only rare wet samples being obtained. Diamond drilling by Hillgrove used oriented HQ core from surface to fresh rock and then NQ2 core to end of hole. Sampling was undertaken as 1m intervals or to geological boundaries.
- Assay methods were not documented for the Kanmantoo Mines drilling. Hillgrove samples were prepared by Genalysis Laboratories in Adelaide and shipped to Genalysis Perth for assaying. Cu was assayed via Mixed Acid Digest (AT) with determination by OES, if Cu >4% re-assayed with a Mixed Acid Digest (AX). Au was determined via Fire Assay (FA50). Other elements assayed for included Ag, Bi, S, Pb, Zn and As.
- Quality control data was not available for the Kanmantoo Mines drilling. Data for the Hillgrove drilling was provided by Nola Hackman and reviewed by ResEval and found to be satisfactory.
- Full database verification was not carried out by ResEval, although the database has been reviewed on numerous occasions during the past 18 months and was found to be satisfactory.
- Kanmantoo Mines drillhole collars appear to have been accurately surveyed in Imperial grid (feet) by contract surveyors. Down hole surveys were available for most drill holes. Where downhole surveys were not available, assumed deviations were used based on analysis of real survey data, although this only applied to dip measurements. Recent drilling has shown that significant changes in the azimuths occur with a tendency to move

northwards with depth, therefore placing some doubt about the real location of these KML holes.

- Hillgrove drillholes were accurately surveyed by contract surveyors at the conclusion of the drill programme. Downhole surveys were undertaken using Eastman single-shot and digital downhole cameras every 30-50m. The majority of holes were re-surveyed using Gyro downhole instrument using Surtron Technologies.
- Wireframes were constructed using cross sectional interpretations based on a 0.25% Cu cut-off grade.
- Samples within the wireframes were composited to even 2.0m intervals based on analysis of the sample lengths in the database. No high grade cut was applied to either the copper or gold values based on statistical analysis.
- A Surpac block model was used for the estimate with a block size of 4m EW x 20m NS x 10m vertical with sub-cells of 1m x 5m x 2.5m.
- Ordinary Kriging (OK) interpolation with an oriented ellipsoid search was used to estimate copper only. A first pass long axis radius equal to the total range of the experimental variogram was used for all zones. It was increased to 200m for the second pass. A third pass search of 500m was used to fill any unestimated blocks.
- ID2 grade interpolation used an oriented search ellipse based on individual lode geometry, with a first pass radius of 40m and a second pass radius of 80m. Greater than 80% of the blocks were filled in the first two passes. The radius was subsequently increased to 200m until all blocks were filled. An 'ellipsoid' search method was used.
- Kanmantoo Mines drillholes were not assayed for gold. Therefore individual lodes were assessed for their proportion of gold assays from recent Hillgrove drilling. Those lodes determined to have insufficient gold assays were assigned a zero value for gold (9% of blocks). Where there were sufficient gold values, the blocks were interpolated as per the above parameters.
- Bulk density values of 2.40t/m³, 2.90t/m³ and 3.20t/m³ were applied to Oxide, Transitional and Fresh mineralisation based on interpreted weathering profiles. Density values were derived from testwork on 112 samples of drill core.
- The deposit was classified as an Indicated and Inferred Mineral Resource. The Indicated portion of the resource was defined where the drill spacing was generally less than 30m by 30m, there was a significant proportion of new drillholes and lode continuity was good. The Inferred included areas of the resource where sampling was greater than 30m by 30m, small isolated pods of mineralisation outside the main mineralised zones (generally defined by 3 or less holes), geologically complex zones and deep zones where the accuracy of old downhole surveys was questionable.

APPENDIX 2:
Resource Break Down by Tenement – Kanmantoo Resource Estimate May 2006

Total Resource

No Cutoff above -100mRL, >1% Cu Cutoff below -100mRL (Main Zone Only)

	Tonnes	Cu %	Copper T	Au g/t	Au Ounces
Argonaut JV	5,171,000	0.9	46,000	0.1	16,600
HGO 100%	20,204,000	1.0	202,100	0.2	140,100
TOTAL	25,375,000	1.0	248,100	0.2	156,700

*all values rounded

FIGURE 1

