

Monday 13 December 2004

KANMANTOO COPPER-GOLD RESOURCE **MORE THAN DOUBLES TO 18.37 MILLION TONNES**

Highlights

- JORC compliant Indicated and Inferred Resource of **18.37Mt at 1.1% Copper and 0.2g/t Gold** calculated by Resource Evaluations Pty. Ltd. for Kanmantoo Project.
- Preliminary scoping study is about to begin and is due for completion in early 2005.
- Maiden resource of **2.54Mt at 1.1% Copper** outlined at Emily Star Prospect (part of Kanmantoo Global Resource).
- Significant potential for further resources to be outlined, with mineralisation open both along strike and down dip.
- Preliminary metallurgical test work underway.
- Low cost of discovery, 0.5c/lb of Copper.
- Regional exploration is continuing on a number of highly prospective green fields targets, with first pass drilling expected early in the New Year.

Kanmantoo Project

Hillgrove Resources Limited (ASX: HGO) is pleased to announce that its consultant, Resource Evaluations Pty. Limited has completed a revised resource estimate for the Kanmantoo project incorporating results from the recently completed campaign of RC and diamond drilling . The resource estimate totaled

- **18,371,000t at 1.1% Copper and 0.2g/t Gold (for 196,700t of copper metal and 104,400 ounces of gold).**

The resource is summarized in Table 1 below, with a detailed breakdown of the resource and parameters used for the calculation provided in Appendix 1. The resource estimate was prepared by Resource Evaluations Pty. Limited and complies with recommendations in the Australasian Code of Reporting of Mineral Resources prepared in 1999 by the Joint Ore Reserves Committee (JORC) and is therefore suitable for public reporting.

Table 1. Kanmantoo Deposit Resource Estimate (December 2004)

Type	Indicated			Inferred			Total				
	Tonnes	Cu	Au	Tonnes	Cu	Au	Tonnes	Cu	Au	Cu	Au
	T	%	g/t	T	%	g/t	T	%	g/t	Metal T	Oz
Oxide	204,000	1.0	0.3	41,000	1.6	0.2	245,000	1.1	0.3	2,700	2,400
Transitional	1,041,000	1.1	0.2	310,000	1.0	0.4	1,351,000	1.1	0.2	14,700	10,600
Fresh >-100mRL	9,673,000	1.1	0.2	5,781,000	0.9	0.1	15,454,000	1.0	0.2	160,300	90,300
Fresh <-100mRL				1,321,000	1.4	0.0	1,321,000	1.4	0.0	19,000	1,100
Total	10,918,000	1.1	0.2	7,453,000	1.0	0.1	18,371,000	1.1	0.2	196,700	104,400

(Note: 0.3% Cutoff above -100mRL, 1%Cu Cutoff below -100mRL)

This new resource estimate has more than doubled the previous estimate of 8,452,000t to 18,371,000t. This represents a discovery cost of \$1.2M or 0.5 cents/pound copper, using current copper price of USD\$1.36 per pound. The current resource area extends over 1,320m and includes the 620m interval from 220mRL to -400mRL. Significant potential exists to further expand the mineralization at Emily Star, O'Neil Zone, South East and North East zones which all remain open both along strike and down dip. These areas will be targeted with the upcoming RC and diamond drill programs. In addition, regional exploration has outlined mineralization over 5km along the Kanmantoo Mine trend, which offers significant potential for new discoveries along strike.

The current resource calculation provides the first estimate of the likely gold grade of the deposit. It is important to note that due to the lack of gold assays in the historical data, 32% of the resource has been given an assumed gold value of zero, which has significantly reduced the overall gold grade. Further drilling in these areas has the potential to significantly enhance the overall gold content (ounces) of the deposit.

Seventy seven per cent of the resource is within ML5776 (Hillgrove 100%), with the balance in EL2663 (Hillgrove 90%, Argonaut Resources N.L. 10%). A break down of the resource is given in Table 2 below.

Table 2. Resource Breakdown by Tenement.

Tenement		T	Cu %	Au g/t
EL2663 (Hillgrove 90%)	above -100mRL	4,196,000	0.9	0.1
ML5776 (Hillgrove 100%)	above -100mRL	12,854,000	1.1	0.2
	below -100mRL	1,321,000	1.4	0.0
	ML5776 Total	14,175,000	1.1	0.2
	Resource Total	18,371,000	1.1	0.2

Scoping Study

A scoping study to determine the base case preliminary economic model, including open pit optimizations, preliminary capital and operating costs is about to commence. This work will be conducted by RSG Global and the results from this study are expected to be available early in 2005.

Preliminary Metallurgy

A preliminary metallurgical study on the Kanmantoo ore is currently underway. This study will include grind determination tests to outline likely mill parameters and floatation test work to determine recoveries and optimal float conditions. This baseline work will then be integrated into the scoping study to provide some more accurate site specific data. This work will be released to the market when it comes to hand.

Resource Drilling

The next phase of resource drilling is due to get underway shortly, with an additional 6-8,000m of RC and 1-2,000m of diamond drilling planned. This drilling will be targeted at further expanding the known mineralization and ultimately adding to the resource base. Drilling is fully funded following a recently completed \$3.75 million capital raising resulting in Hillgrove having a cash balance as at 31 October 2004 of approximately \$4.66 million.

Regional Exploration

Detailed exploration including rock chip and soil sampling and geological reconnaissance is continuing to the south of the old Kanmantoo mine and to the north in the Kanappa and Mt Rhine areas. A number of new prospects have now been defined and will be drill tested early in the New Year.

Project Background

The Kanmantoo Project is located 55km southeast of Adelaide in the Mount Lofty Ranges in South Australia. Hillgrove holds a 90% interest in EL 2663 (Argonaut Resources 10%) and 100% of Mining Lease 5776, covering an area of 46 hectares around the former Kanmantoo Copper Mine. The Mine produced a total of 4.05 million tonnes of ore grading 1.1% copper and unknown gold.

About Hillgrove

Hillgrove is an Australian resources company listed on the Australian Stock Exchange which is focusing 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, natural gas and silver, lead and zinc.

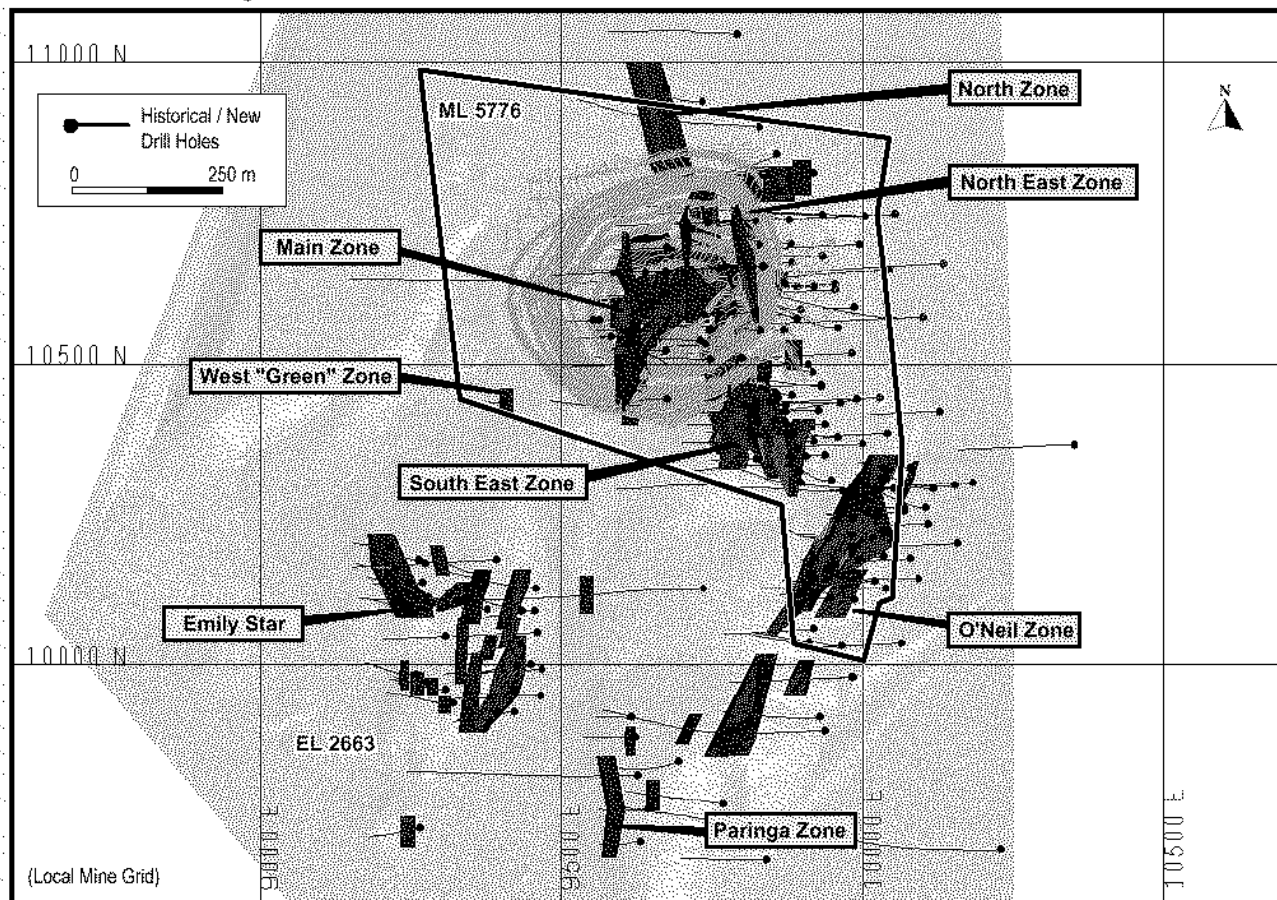
Hillgrove is exploring a total of 974 km² in the Gawler Craton and the Kanmantoo Trough, two of the most prospective regions of South Australia for copper and gold, and is earning a 32.5% interest in the PEL 238 Coal Seam Gas Project in the Gunnedah Basin in NSW. Four production test wells have recently been completed and are currently undergoing production testing. PEL 238 contains one of the largest onshore accumulations of natural gas in Australia.

For more information contact:

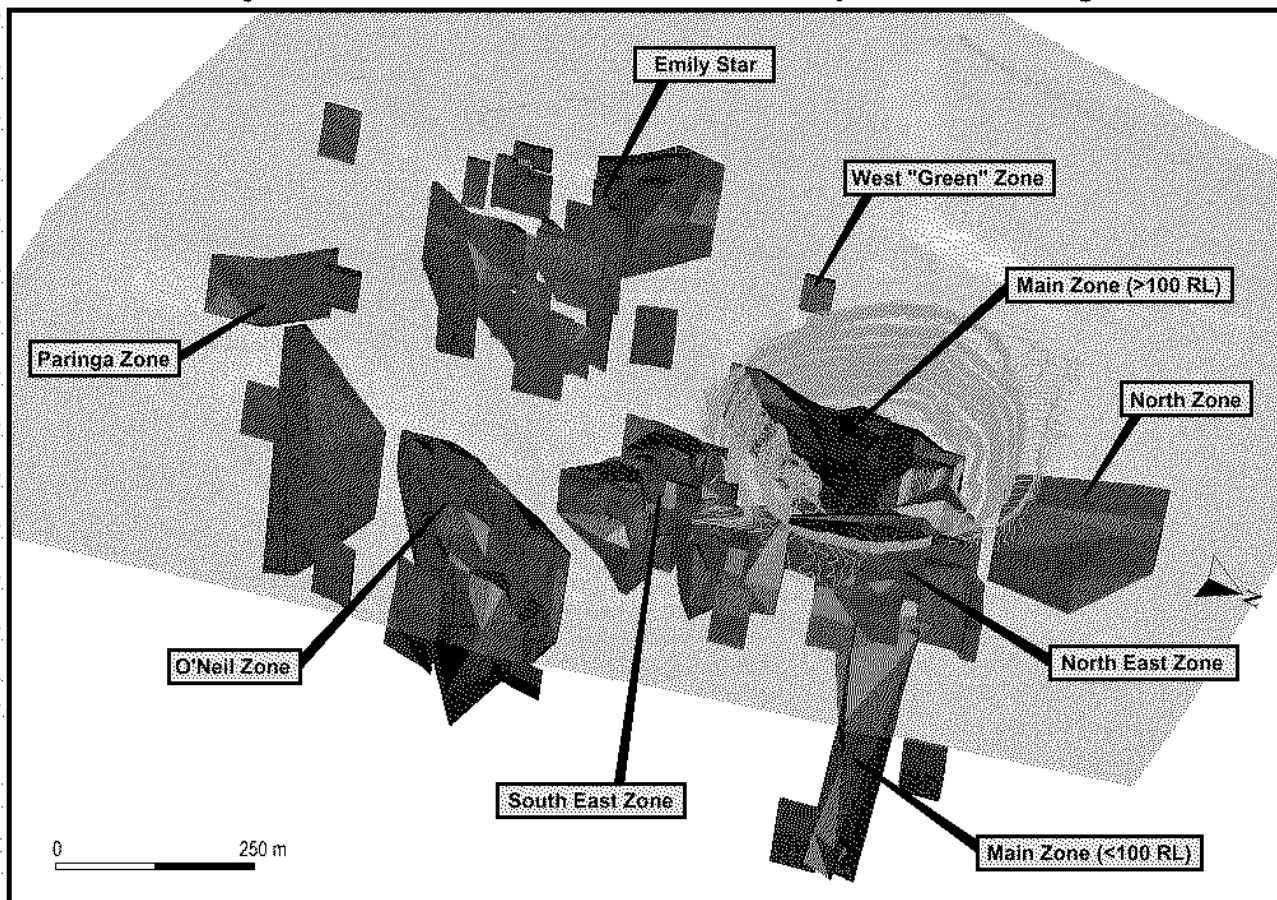
David Archer
Managing Director
Hillgrove Resources Limited
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The Mineral Resource Estimate referred to in this announcement was completed under the supervision and direction of Mr. Paul Payne who is a Competent Person as defined by the Australian Code for the reporting of Mineral Resources and Ore Reserves (JORC Code) 1999 Edition and who has consented to this information being released. Other geological information contained in this report was compiled by Mr. Dale Ferguson of Hillgrove Resources Limited who is a Member of the Australasian Institute of Mining and Metallurgy and who has in excess of five years experience in this field of activity.

Kanmantoo Project : Drill Hole Collar Plan with Resource Ore Block Model



Kanmantoo Project : Resource Ore Block Model - Oblique View Looking to SW



APPENDIX 1: Summary of Resource and Parameters used to Calculate Resource

Kanmantoo Deposit Resource Estimate - December 2004

(No Cutoff above -100mRL, 1%Cu Cutoff below -100mRL)

Type	Indicated			Inferred			Total				
	Tonnes T	Cu %	Au g/t	Tonnes T	Cu %	Au g/t	Tonnes T	Cu %	Au g/t	Cu Metal T	Au Oz
Oxide	204,200	1.0	0.3	41,000	1.6	0.2	245,300	1.1	0.3	2,700	2,400
Transitional	1,041,000	1.1	0.2	310,000	1.0	0.4	1,351,000	1.1	0.2	14,700	10,600
Fresh >-100mRL	9,673,000	1.1	0.2	5,781,000	0.9	0.1	15,454,000	1.0	0.2	160,300	90,300
Fresh <-100mRL				1,321,000	1.4	0.0	1,321,000	1.4	0.0	19,000	1,100
Total	10,919,000	1.1	0.2	7,453,000	1.0	0.1	18,371,000	1.1	0.2	196,700	104,400

Kanmantoo Deposit Resource Estimate - December 2004

(No Cutoff above -100mRL, 1%Cu Cutoff below -100mRL)

Zone	Indicated			Inferred			Total				
	Tonnes T	Cu %	Au g/t	Tonnes T	Cu %	Au g/t	Tonnes T	Cu %	Au g/t	Cu Metal T	Au Oz
Main >-100mRL	4,152,000	1.3	0.1	590,000	1.3	0.3	4,742,400	1.3	0.1	60,900	17,500
Main <-100mRL				1,321,000	1.4	0.0	1,321,000	1.4	0.0	19,000	1,300
South East	2,790,000	1.0	0.3	469,000	0.8	0.2	3,258,300	0.9	0.2	30,700	25,600
North East	864,000	1.0	0.1	318,000	1.5	0.8	1,181,600	1.2	0.3	13,700	10,700
West 'Green'	0	0.0	0.0	20,000	0.7	0.1	19,600	0.7	0.1	100	0
North	0	0.0	0.0	646,000	0.6	0.3	646,100	0.6	0.3	4,100	6,200
O'Neil	2,111,000	1.1	0.5	2,029,000	0.7	0.1	4,139,800	0.9	0.3	36,600	34,500
Emily Star	1,002,000	1.1	0.1	1,541,000	1.0	0.1	2,543,000	1.1	0.1	26,800	6,900
Paringa	0	0.0	0.0	519,000	1.0	0.1	519,000	1.0	0.1	5,000	2,000
Total	10,919,000	1.1	0.2	7,453,000	1.0	0.1	18,371,000	1.1	0.2	196,700	104,400

The resource estimate was completed using the following parameters:

- The Kanmantoo resource area extends over a strike length of 1,320m (from 9,680mN to 11,000mN) and includes the 620m interval from 220mRL to -400mRL.
- Drill holes used in the resource estimate included 57 surface RC holes, 122 surface diamond holes, and 30 underground diamond holes for a total of 37,849m of drilling. 82 of the holes were completed by Hillgrove with the remainder drilled by Kanmantoo Mines in the 1960's and 1970's. Holes were drilled at variable spacings but averaged around 20m spacings in the better mineralised portion of the deposit. Underground holes were generally drilled at 10m-20m spaced sections.
- A site visit was conducted by Aaron Green of ResEval on the 5th August 2004. General procedures were reviewed and a site familiarisation was conducted which included the main Kanmantoo open pit, underground workings 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 were Ag, Bi, S, Pb, Zn and As.
- Quality control data was not available for the Kanmantoo Mines drilling. Data for the Hillgrove drilling was reviewed by ResEval and found to be satisfactory.
- Database verification was carried out by ResEval. A portion of the recent drilling (16 holes) conducted by Hillgrove was selected and checked against the original data for survey, collar and assay data. The database was found to be in good order.
- 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. 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.
- Wireframes were constructed using cross sectional interpretations based on a 0.3% Cu cut-off grade.
- Samples within the wireframes were composited to even 2.0m intervals. 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 2m x 10m x 5m.
- ID2 grade interpolation used an oriented search ellipse based on individual lode geometry, with a first pass radius of 40m. Approximately 80% of the blocks were filled in the first pass. The radius was subsequently increased until all blocks were filled. An 'octant' 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 (32% 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.