

Tuesday, 4 May 2010

34% INCREASE IN KANMANTOO ORE RESERVE

- **Increase in Ore Reserve by 34.2% to 14.8Mt @ 0.85% Cu, 0.17g/t Au and 3.1g/t Ag**
- **21.3% increase in Reserves of contained copper to 125k tonnes**
- **Increase in Reserves of contained gold by 14.1% to 81k ounces and contained silver by 25% to 1.5M ounces**

Hillgrove Resources Limited (ASX:HGO) advises that an updated Ore Reserve for the Kanmantoo Mine Copper/Gold Mine has been completed as part of the Life of Mine Plan in preparation for financing and a Final Investment Decision.

The new Ore Reserve shows an increase in both the reserve confidence and contained metal when compared to the December 2007 Ore Reserve reported as an output of the 2007 Definitive Feasibility Study. The total Ore Reserve now stands at 14.8Mt at 0.85% copper, 1.7g/t gold and 3.1g/t silver for contained metal of 125k tonnes of copper, 81k ounces of gold (increase of 14.1%) and 1.5M ounces of silver (increase of 25.0%) (Table1 and Appendix 1).

Table 1. Kanmantoo Ore Reserve – April 2010

Category	Tonnes Mt	Cu %	Au g/t	Ag g/t
Proved	2.3	0.87	0.13	3.2
Probable	12.5	0.84	0.18	3.1
Ore Reserve	14.8	0.85	0.17	3.1

David Archer, the Managing Director of Hillgrove said today “the increase in the Ore Reserve underscores the growth potential of the Project. We are confident of adding to the Project’s life with further potential discoveries from continuing exploration within our extensive tenement package”.

Dismantling and transport of the Pillara plant to Kanmantoo is continuing in parallel with project financing discussions with project finance banks.

About Hillgrove

Hillgrove is an Australian mining company listed on the Australian Securities Exchange (ASX: HGO) focused on developing its Indonesian, South Australian and Queensland base and precious metals projects. The Company is targeting the discovery of world class epithermal gold and porphyry copper/gold deposits in Eastern Indonesia.

Hillgrove's flagship development is the Kanmantoo Copper Gold Project, located less than 60km from Adelaide in South Australia. Kanmantoo currently hosts a Mineral Resource of 32.2Mt (2.3Mt Measured, 22.5Mt Indicated and 7.4Mt Inferred) grading 0.9% copper and 0.20g/t gold, containing 292k tonnes of copper, 191k ounces of gold and 3.3M ounces of silver. With production targeted for the first quarter of 2011, Kanmantoo will be a 2Mt p.a. open-cut mine producing approximately 17,000 tonnes of copper in concentrate and 8,000 ounces of gold per annum.

The information in this Ore Reserve statement that relates to Mineral Resource estimates defined as part of the November 2008 Resource are based on information compiled by Mr Paul Payne, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Payne is Executive Consultant with Runge Limited and has sufficient relevant 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'.

The information in this Ore Reserve statement that relates to Metallurgical factors and assumptions are based on information compiled by Mr Bill McCallum, who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr McCallum is Director of Havilah Consulting Pty Ltd and has sufficient relevant 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'.

The information in this Ore Reserve statement that relates to Ore Reserve estimates is based on information compiled by Mr Geoff Davidson, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Davidson is a Principal Consultant and Director of Mining and Cost Engineering Pty Ltd and has sufficient relevant 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'.

The Competent Persons have consented to the inclusion in the report of the matters based on their information in the form and context in which it appears.

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1. ORE RESERVE ESTIMATION

The Ore Reserve for the Kanmantoo Copper Project tabulated below is reported from within an optimised pit design and uses a cut-off of 10.5 (AUD/t) Net Smelter Return (NSR). The pit optimisation considered only Measured and Indicated Mineral Resources. The NSR is calculated on a recoverable payable basis, incorporating copper, gold and silver grades, metallurgical recoveries, prices and realisation costs. Metal prices used in determining the NSR include US\$2.60/lb for copper, US\$950/oz for gold and US\$13.50/oz for silver. A foreign exchange rate of US\$0.75 was also used.

Table 1. Kanmantoo Ore Reserve – April 2010

Description	Tonnes Mt	Cu %	Au g/t	Ag g/t
Proved	2.3	0.87	0.13	3.2
Probable	12.5	0.84	0.18	3.1
Ore Reserve	14.8	0.85	0.17	3.1

The Ore Reserves and Mineral Resources figures in this report are current as at the date of this release. All tonnes and grade information has been rounded to reflect the relative uncertainty in the estimates; there may therefore be small differences in the totals. Mineral Resources are reported inclusive of Ore Reserves produced by modifying these Mineral Resources. Commodity prices and exchange rates used to estimate the economic viability of Ore Reserves are based on long term forecasts applied at the time the estimate was calculated.

2. MINERAL RESOURCE ESTIMATE FOR CONVERSION TO ORE RESERVE

An updated Mineral Resource estimate for the Kanmantoo Copper deposit was completed and reported by Hillgrove Resources in November 2008. The Kanmantoo Mineral Resource, inclusive of Ore Reserve, is provided in Table 2.

Table 2. Kanmantoo Mineral Resource – November 2008

Class	Tonnes Mt	Cu %	Au g/t	Ag g/t
Measured	2.3	0.9	0.2	3.5
Indicated	22.5	0.9	0.2	3.3
Inferred	7.4	0.9	0.2	2.9
Total	32.2	0.9	0.2	3.2

Inclusive of Ore Reserve and reported using 0.25%Cu cut-off grade

The Kanmantoo Resource area extends over a strike length of 1,945m (from 19,400mN - 21,345mN) and includes the 635m interval from 1,235mRL to 600mRL. Drill holes used in the resource estimate included 477 surface RC holes (HGO), 156 surface diamond holes (including diamond tails) (HGO), 40 RC grade control holes (HGO), 65 surface diamond holes (Kanmantoo Mines Limited - 'KML') and 18 underground diamond holes (KML) for a total of 16,018m within the resource wireframes.

Drilling extends to a depth of approximately 650m below surface and the mineralisation has been modelled and estimated to that depth.

Wireframes were constructed using cross sectional interpretations based on a 0.25% Cu cut-off grade. Samples within the wireframes were composited to even 1.0m intervals based on analysis of the sample lengths in the database. High grade cuts of 8%, 6g/t and 50g/t were applied to Cu, Au and Ag values respectively based on statistical analysis.

A Surpac block model was used for the estimate with a block size of 4m EW by 20m NS by 10m vertical with sub-cells of 2m by 10m by 5m.

Ordinary Kriging (OK) interpolation with an oriented 'ellipsoid' search was used to estimate Cu, Au and Ag.

Bulk density values of 2.85t/m³ for Oxide (ore and waste), 2.85t/m³ for 'Transitional Waste', 3.00t/m³ for 'Transitional Ore', 3.00t/m³ for 'Fresh Waste' (2.80t/m³ for Emily Star) and 3.15t/m³ 'Fresh Ore' (2.96t/m³ for North West Zone) were applied based on interpreted weathering profiles. Density values were derived from testwork on 945 samples, which involved wax-coated drill core and pycnometer readings of sample pulps.

The resource was classified as Measured, Indicated and Inferred Mineral Resource. The Measured portion of the resource was defined where the drill spacing was less than 20m by 20m (generally 20m by 10m), there was a significant proportion of new drillholes, and lode and grade continuity was good. Several zones were also supported by historical surface and underground workings. The Indicated portion 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, with small isolated pods of mineralisation.

The Mineral Resource estimate complies with recommendations in the Australasian Code for Reporting of Mineral Resources and Ore Reserves (2004) by the Joint Ore Reserves Committee (JORC).

3. PROJECT STATUS

Hillgrove Resources Limited has recently completed a Life of Mine Plan in preparation for the Final Investment Decision to progress to the construction stage of the Kanmantoo Copper Project.

A Definitive Feasibility Study (DFS) was completed in 2007 and an Ore Reserve was published as part of these results. The DFS determined that the mining plan developed during the study was technically achievable.

Subsequent to this study further drilling was undertaken and a revised Mineral Resource estimated. The latest resource (November 2008) includes regions drilled to sufficient definition to warrant being upgraded to Measured or Indicated status as defined by JORC 2004. The latest Mineral Resource forms the basis of this Ore Reserve estimate.

Project capital costs are well understood and controlled on the basis of advanced construction contracts and the purchase of a complete, proven and Australian based ore processing plant. Similarly operating costs are well controlled with an advanced mining contract, and the benefit of the site proximity to mains power, water, labour and transport.

Subject to financing and a Final Investment Decision being made, the Kanmantoo Mine development is poised to go into production in early 2011, with virtually all pre-development work now completed for what will be Australia's latest mid-sized copper mine.

4. CUT-OFF PARAMETERS

Due to the variability of metallurgical recoveries throughout the mining areas, the Net Smelter Return (NSR) method was used to identify economically recoverable regions within the Mineral Resource. This method calculates the value of the minerals in situ after accounting for processing losses and all other costs incurred beyond the mine gate.

The following section describes the revenue and cost factors used to estimate this range of cut-off grade and NSR values used in determining the Ore Reserve.

4.1 Net Smelter Return FOB Port

The NSR was calculated for each block in the resource model. The following algorithm was used:

$$\text{NSR} = 64.81 \cdot \text{mill_rec_cu} \cdot \text{cu_cut} + 35.53 \cdot \text{mill_rec_au} \cdot \text{au_cut} + 0.49 \cdot \text{mill_rec_ag} \cdot \text{ag_cut}$$

Whereby:

NSR	=	Net Smelter Return in AUD per tonne treated
mill_rec_cu	=	the process plant metal recovery of copper to concentrate
cu_cut	=	the in situ copper grade
mill_rec_au	=	the process plant recovery of gold to concentrate
au_cut	=	the in situ gold grade
mill_rec_ag	=	the process plant recovery of silver to concentrate
ag_cut	=	the in situ silver grade

The revenue factors assigned to each of the elements (Cu, Au, Ag) were estimated from industry standard price and cost factors incurred beyond the mine gate.

4.2 Cut off grade calculations

An incremental operating cost was used as the NSR cut-off between ore and waste. Diluted mineralisation with a NSR of 10.5 (AUD/t) therefore represents breakeven value material.

The Ore Reserve was reported inside the optimised pit design using cut-off of 10.5 (AUD/t) NSR.

5. MINING FACTORS AND ASSUMPTIONS

The Ore Reserve was derived from the Mineral Resource through a process of optimisation and design. This process incorporated the application of various mining factors consistent with the 2007 Definitive Feasibility Study.

5.1 Mining method

Being a near surface deposit, Kanmantoo is amenable to open pit mining methods. The Mineral Resource extends below the base of the proposed pit. This statement relates only to the proposed open cut mine.

The proposed open pit will apply conventional hard rock open pit methods typically employed throughout Australia.

5.2 Ore Reserve Estimation

Modifying factors were applied to the Mineral Resource to estimate the Ore Reserve to a standard consistent with the JORC Code 2004.

5.3 Modifying Factors applied to Mineral Resource

A preliminary mining outline based on only measured and indicated material was determined using Whittle optimisation software.

Slope parameters are consistent with the ultimate pit designs created in the 2007 Definitive Feasibility Study (Coffey Mining Pty Ltd 2007).

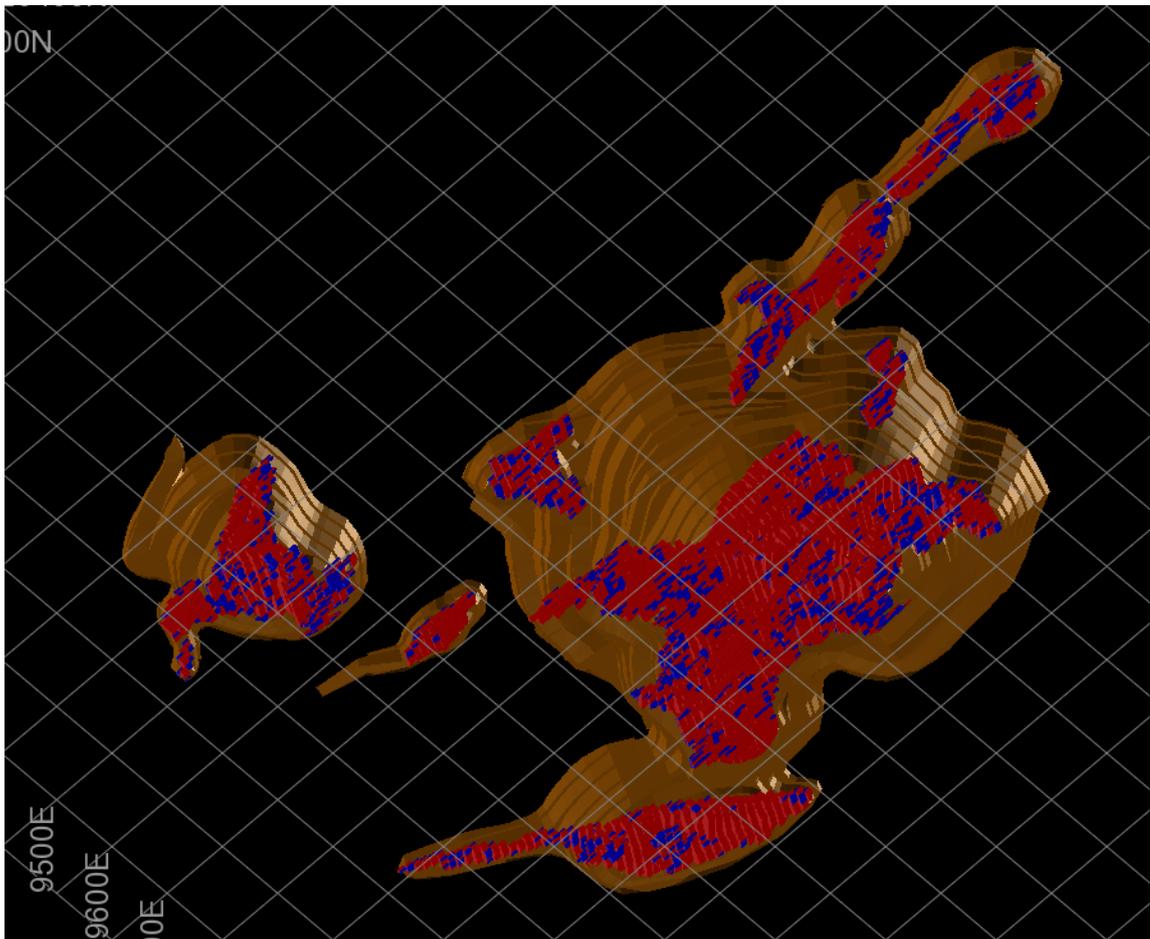
Pre-production capital requirement of \$121.4 million was applied and a discount factor of 8% p.a. was used to generate best and worst case discounted cash flows. Dilution and ore loss factors applied were 12% and 5% respectively. Note, project capex to completion

remains at \$98 million after capex spend to date and net of receipts from sales of surplus equipment.

Using the selected pit shell a practical mine design was developed which addresses access requirements and mining sequences.

Given the variability in the width of each lens of mineralisation, a minimum selective mining unit (SMU) was applied to the resource. The SMU represents the smallest block of material that can be practically recovered by the proposed mining equipment, in this case a 200t hydraulic excavator in backhoe configuration. Given the nature of the deposit and the size of the machine, an SMU size of 6m wide by 10m long by 5m deep was deemed appropriate. The economic SMU identified are illustrated in Figure 1. This material formed the basis of the Ore Reserve as discussed in the following section.

Figure 1. Economic SMUs Identified in Stopesizer Analysis



5.3.1 Kanmantoo Ore Reserve estimate

The Ore Reserve for Kanmantoo was estimated to be 14.8Mt and was derived from Measured and Indicated resources contained within the pit design and within SMU limits.

5.3.2 Classification of Kanmantoo Ore Reserve Estimate

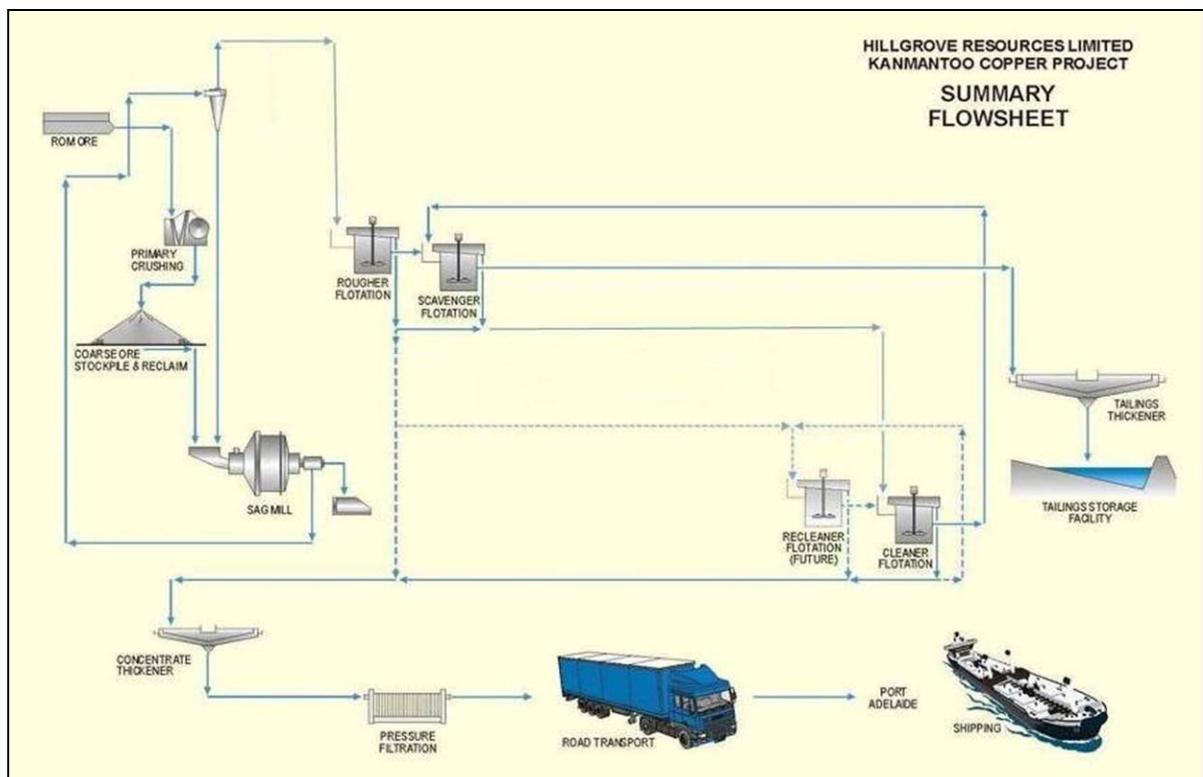
The Ore Reserve was classified in accordance with the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code 2004). Ore Reserve was classified into Proved and Probable in the manner set out in the JORC Code 2004. Each classification contains a proportion of dilution material applied on a tonnage weighted basis. The JORC classified Ore Reserve is given above in Table 1.

6. METALLURGICAL FACTORS AND ASSUMPTIONS

Ore samples from four of the five mining areas; Emily Star, Main, South East and O'Neill were tested and analysed during the 2007 Definitive Feasibility Study (Montesuma Pty Ltd Dec 2007). The fifth open cut mine, the Green Zone, is a small excavation and not scheduled for production in the early years of operation. Metallurgical evaluation of this ore will be completed before mining of the Green Zone pit.

Kanmantoo is a brownfield development previously operated by Kanmantoo Mines Limited from 1971 to 1975. The proposed flowsheet for Hillgrove Copper's operation is similar to Kanmantoo Mines Limited's operation and metallurgical results from recent testing are consistent with the historical operation. Processing incorporates a single stage SAG milling with rougher cleaner flotation and one stage of flotation cleaning on the rougher/scavenger flotation concentrate. A simplified schematic of the proposed Kanmantoo process flow sheet process is provided in Figure 2.

Figure 2. Kanmantoo Process Flowsheet



Hillgrove Copper has purchased the idle Pillara ore processing facility near Fitzroy Crossing in Western Australia and is currently dismantling and trucking this facility to the mine site at Kanmantoo.

Hillgrove Resources commissioned independent due diligence studies to ensure the suitability of the Pillara ore processing facility for treating Kanmantoo copper ores.

The proposed tailings dam for the new Kanmantoo operation will be fully lined to prevent any seepage of process solution into the water table. Analyses of the concentrates produced during metallurgical evaluation indicate fairly 'clean' concentrates with levels of deleterious elements below penalty thresholds.

Figure 3. Pillara Process Plant Being Dismantled Ready for Transportation



7. COST AND REVENUE FACTORS

Cost and revenue factors incorporated in the financial analysis are discussed in the following sections. Some of the unit costs vary from those used in the mine optimisation and design stage reflecting an up-to-date outlook on commercial terms affecting the project.

7.1 Mining costs

Mining costs were taken from tendered prices provided by the selected mining contractor. In addition to the contractor costs, provision was made for mining overheads including grade control and mining geology.

Figure 4. Private By-pass Road Groundworks



7.2 Processing costs

Variable processing costs factors were estimated and were based on the flow sheet for the proposed process plant and the recommended consumption rates for wear parts and reagents.

A fixed cost for processing was estimated and includes site administration and overheads.

7.3 Transport costs

Transport costs included road freight to the port of Adelaide, port handling charges and sea freight to the destination port. A moisture content of 9% was used in the estimate.

7.4 Selling costs

A standard structure off-take was used for the sale of concentrate with TC/RC charges consistent with industry standard price and cost factors.

A state royalty of 1.5% was applied for the first five years of operation beyond which reverted to a rate of 3.5% for the remainder of the project.

7.5 Revenue factors

The financial analysis was based on conservatively generated revenue factors

8. MARKET ASSESSMENT

Revenue from copper sales represents 92% of all revenues for the project. Given this proportion, the copper price used in estimating the Ore Reserve was validated by referring to the Copper Quarterly Industry and Market outlook published in January 2010 by CRU International Limited (CRU). CRU is an independent authority on metals' markets.

In the Kanmantoo cash flow model used a copper price which is more than 10% below CRU's three month LME average price of US\$7324/tonne for the five year period 2010 to 2014

All dollar values are expressed in [real 2010] US currency.

Hillgrove Resources have based the external review factors on independent market research.

9. OTHER EXTERNALITIES

Statutory approvals

The Kanmantoo site layout is illustrated in Figure 4. Mining Lease 6435 encompasses the entire project. PIRSA has fully approved Hillgrove's Mining and Rehabilitation Plan associated with the Project. An extractive mining license (EML6340) was granted in September 2009 for the removal of clay soils required for the construction of the tailings storage facility which forms part of the Integrated Waste Land form.

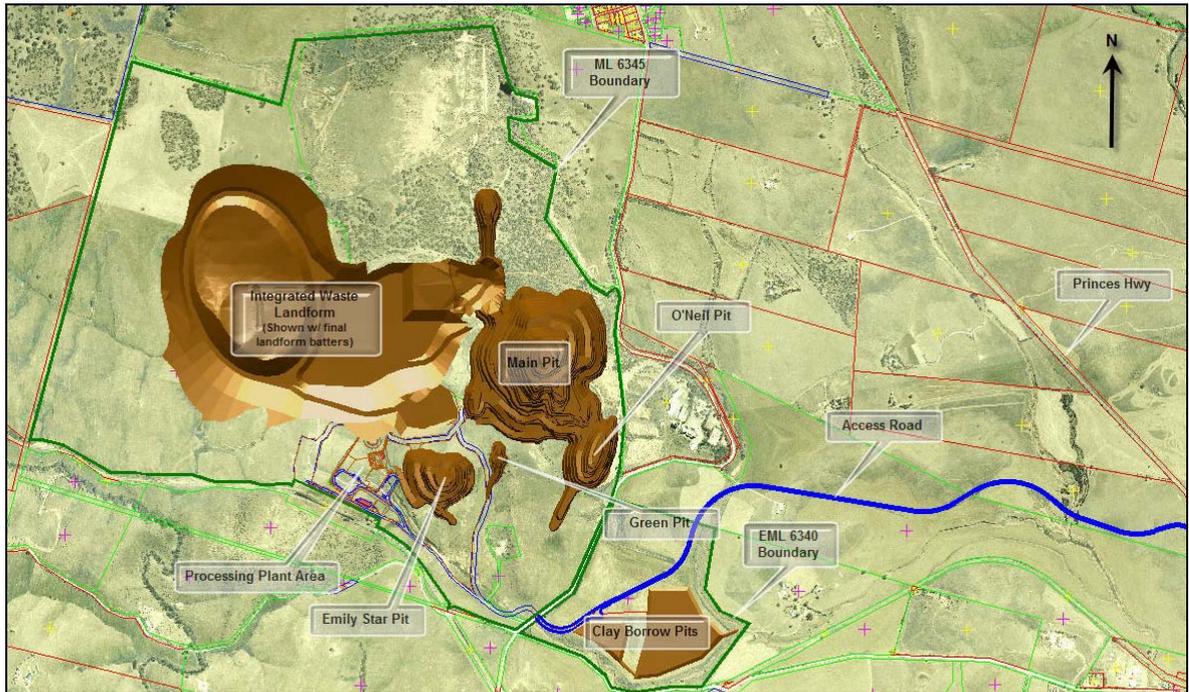
The Mining and Rehabilitation Program (MARP) for mining lease ML6345 was approved by the department of Primary Industries and Resources SA (PIRSA) in December 2009.

EPA works approval was granted in April 2010.

No other encumbrances exist over ML6345.

Other than those outlined above, all statutory approvals and permits have been granted and no other external project impediments are known or can be foreseen.

Figure 4. Kanmantoo Mine Site Layout



10. AUDITS AND REVIEWS

This Ore Reserve and Mineral Resource statement has been subject to internal Hillgrove review.

11. ACCURACY AND CONFIDENCE

A sensitivity analysis was carried out on the cash flow model. Key parameters were varied by 10% each way. The project sensitive areas typically relate to revenue drivers. Importantly, none of the parameters tested resulted in a negative net cash flow.