



## Hillgrove Res Ltd (HGO)

Quarterly report : grade control happening; Restoring to BUY.

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### Four Key Points

- The HGO share price has been beaten up by a combination of relatively normal mine commissioning issues, leading to perceived cash tightness which led to a very poor capital raising, which led to the demise of the then MD.
- In the July quarter, HGO generated net cash of \$3.5m, after exploration but before financing as the Kanmantoo mine improved operations, to have cash of nearly \$27m, and net debt of about \$23m.
- The Kanmantoo mine has improved the grade of ore processed, from 0.60% to 0.67%, which is still well below the reserve grade of 0.84% Cu. The current share price reflects a long term grade of about 0.62%
- We expect the mine will produce 0.75% - 0.80% and our valuation of 20c is based on 0.75% Cu feed.

### Kanmantoo in commissioning

#### Kanmantoo operation : normal commissioning issues

The Kanmantoo mine treated its first ore in December 2011, about a month later than the original plan, but with a 12 month ramp up.

There have been 2 major issues in the commissioning :

- The ore was harder than expected, so that mill throughput was constrained
  - this has since been rectified by a mobile secondary crusher and refinement of blasting so that mill throughput is now consistently above plan; and
- Poor grade control, so that feed grade has been below plan.

Ore feed grade was 0.60% in the Jan 2012 quarter, to 0.63% in April and 0.67% in the July quarter. However, mill recoveries, while yet to reach plan, are above our expectations at this stage of the commissioning period.

Copper production has increased (1,381t to 2,681t to 3.473t) and costs have fallen (\$3.35/lb (OP est) to \$2.81/lb to \$2.35/lb).

#### Kanmantoo exploration delivering

HGO's tenement area is highly prospective and HGO has been exploring near the main pit for further ore sources. It is currently developing other ore sources and expects to deliver from them by the end of this year, which will enhance operations.

Drilling has yielded many intercept of good width and grades, some quite shallow; eg. 18m @ 1.43% Cu from 14m, 15m @ 1.07% Cu from 33m and 4m @ 1.14% from 20m.

#### Restoring Buy recommendation

The HGO share price is beaten up, but the previous MD has been exited. Kanmantoo operations are improving. We are confident that a mill feed grade of 0.75% Cu will be achieved, which drives our valuation of 20c.

### Recommendation

**Buy**

Previous Recommendation	Hold
Risk Rating	High
Current Share Price	\$0.09
12 Month Price Target	\$0.20 (from \$0.26)
Price Target Methodology	
Total Return (Capital + Yield)	121.4%
NAV / Share	\$0.20 (from \$0.26)
Market capitalisation	\$81m
Liquidity – Daily Value	\$0.4m

### EPS Changes & Octa Phillip vs. Consensus

Y/e (\$m)	2010F	2011F	2012F
Previous EPS (cps)			
Change in EPS (%)			
Consensus EPS (cps)			
Octa Phillip vs Consensus (%)			

### Financial Forecasts & Valuation Metrics

Y/e (\$m)	2012A	2013F	2014F	2015F
Revenue	15	112	146	152
NPAT	-18.6	-2.5	12.6	15.8
EPS (cps)	-2.3	-0.3	1.2	1.5
EPS Growth		88%	531%	25%
DPS (c)	0.0	0.0	0.0	0.0
EV / EBITDA (x)	na	5.4	1.9	0.9
PER (x)	-3.8	-32.7	7.6	6.0
Dividend Yield	0.0%	0.0%	0.0%	0.0%
Gearing	14%	12%	-3%	-17%
Interest Cover (x)	na	0.6	5.6	10.8

Source: Octa Phillip Securities estimates

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Source: Octa Phillip Securities estimates

# HGO : Beaten up; restore Buy recommendation

HGO share price performance has been shocking over the last 6 months.

## HGO's under-performance is recent

Figure 1 shows that the HGO share price moved with both the copper price and the All Ords index for 2 years, until about May 2012, since when it has under-performed.

Figure 1a : HGO v. copper price



Source : IRESS, Octa Phillip

Figure 1b : HGO v. All Ords



Source : IRESS, Octa Phillip

## Kanmantoo Ramping Up

The Kanmantoo mine is ramping up.

Figure 2 compares the actual performance of the Kanmantoo mine with the achievements to date.

The mine failed to achieve the start-up times expected in mid 2011, but not by significant margins.

Figure 2 shows that copper production is ramping up in line with Octa Phillip's original expectations, adjusted for the slightly later start.

Figure 2 also shows that there is still further to go.

It has had commissioning issues, but that is always to be expected.

To achieve the expected volumes will take further attention to mine planning and refining details of the operation.

However, this is very normal.

The major issue, from the costs perspective, and hence value, has been the grade of ore fed into the mill

### Processed Grade

The one area of concern is the head grade of the processed material. That it as low in the first 2 quarters was not a concern as it is normal to commission an operation on oxide and transition ore that is often lower in grade.

Also refining grade control practices, both in definition, in blasting and in mining, usually takes a little time.

The ore at Kanmantoo has a significant halo, with poor and inconsistent definition between grade, which has contributed to more tonnes being mined at a lower grade.

Figure 2 : Kanmantoo Actual v. planned performance

	Plan	Achieved	Jan. 2012	Apr. 2012	July 2012
First Concentrate	Oct. 2011	30 Nov. 2011			
First Revenue	Nov. 2011	19 Jan 2012			
Reserve v. head grade					
Copper	0.84 %		0.60 %	0.63 %	0.67 %
Gold	0.17g/t		0.12g/t	0.14g/t	0.13g/t
Silver	3.1g/t		2.2g/t	2.9g/t	3.4g/t
Recoveries					
Copper	94%		74.0 %	86.8 %	90.5 %
Gold	70%		65.0 %	58.0 %	50.4 %
Silver	70%		79.9 %	49.7 %	48.0 %
Ore mined, quarter	600 kt		288 kt	544 kt	486 kt
Mill throughput, quarter	600 kt		331 kt	488 kt	572 kt
Copper produced	4,764 t		1,381 t	2,681 t	3,473 t
Octa Phillip est.			1,480 t	2,764 t	3,402 t
Conc. - Cu grade	27.0 %		28.9 %	26.0 %	26.2 %
Cash Costs	161 c/lb		335 c/lb	281 c/lb	235 c/lb

Source : various HGO ASX releases, Octa Phillip

Figure 3 shows the sensitivity of OCTa Phillip’s valuation of HGO to changes in the processed grade.

Our valuation is very sensitive to the feed grade.

Figure 3 : Sensitivity of valuation to processed grade

<u>0.60 %</u>	<u>0.65 %</u>	<u>0.70 %</u>	<u>0.75 %</u>	<u>0.80 %</u>	<u>0.85 %</u>
8.4 c	12.3 c	16.0 c	<b>19.7 c</b>	23.3 c	27.0 c

Source : Octa Phillip estimates

Figure 2 indicates that the current share price for HGO reflects an expected processed grade of about 0.62%, which is consistent with that achieved in the first 2 quarters of the mine’s operation.

### Kanmantoo Exploration

Figure 4a shows the Kanmantoo Mining Lease and the pit that is being mined, recalling that Kanmantoo has been previously mined in the 1970s, leaving the open pit shown. Figure 4a also shows many occurrences of historical mining.

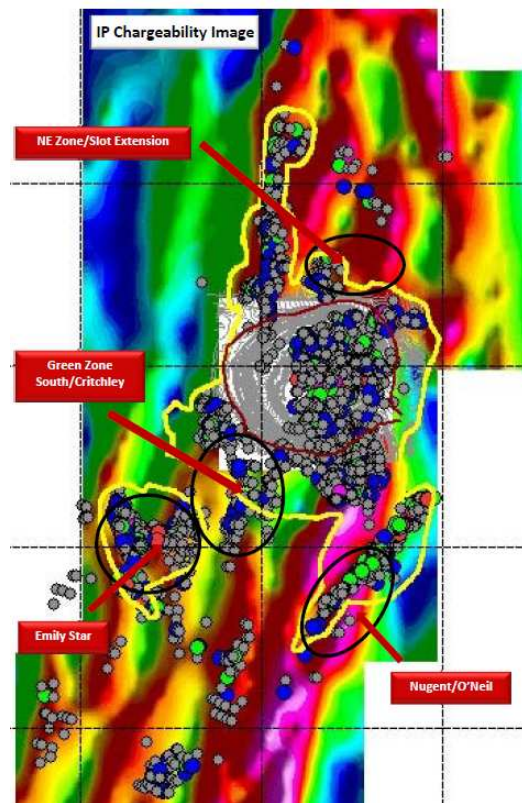
Figure 4b shows the results of an IP survey, showing many “hot spots” and the results of some drilling.

Figure 4a : Kanmantoo mine and surrounds



Source : HGO presentation, June 2012

Figure 4b : Kanmantoo exploration



Source : HGO presentation, March 2012

There is still significant mineralised potential near the present mine

Figure 5 shows that Kanmantoo has 236kt of copper in nearly 33Mt of Resources.

This is defined by the drilling, shown in Figure 4b, within the yellow outline.

Reserves, of 125kt of copper in 14.8Mt of ore,

grading 0.84% Cu, are shown in the maroon outline in Figure 4b.

Figure 5 : Kanmantoo Resources, May 2012

Resources		Copper		Gold		Silver	
In Situ							
Measured	4.2 Mt	0.85 %	36 kt	0.13g/t	17.6 koz	2.36g/t	319 koz
Indicated	20.5 Mt	0.87 %	178 kt	0.16g/t	105.5 koz	2.34g/t	1,542 koz
Inferred	6.5 Mt	0.66 %	43 kt	0.15g/t	31.4 koz	1.73g/t	362 koz
Long Term stockpiles							
Measured	1.1 Mt	0.46 %	5 kt		0.0 koz		0 koz
Indicated	0.5 Mt	0.18 %	1 kt		0.0 koz		0 koz
	<b>32.8 Mt</b>	<b>0.80 %</b>	<b>263 kt</b>	<b>0.15g/t</b>	<b>154.4 koz</b>	<b>2.22g/t</b>	<b>2,223 koz</b>

Source : HGO ASX announcement, 31 May 2012

Recent drilling has given very attractive grades and intercepts, not far from the surface.

HGO is currently executing a 7,000m RC drill program, targeting 5 zones, each of which is shown in Figure 4a by the red label. Various results from this program have included :

- KTRC861: 36m @ 0.81% Cu from 75m including 21m @ 1.22% Cu from 79m
- KTRC863: 4m @ 2.46% Cu from 50m
- KTRC866: 16m @ 2.47% Cu from 123m
- KTRC879: 25m @ 0.44% Cu from 62m including 6m @ 1.01% Cu from 66m
- KTRC888: 24m @ 0.78% Cu from 27m including 15m @ 1.07% Cu from 33m
- KTGC0073 – 18m @ 1.43% Cu from 14m (26m%)
- KTRC888 – 24m @ 0.78% Cu from 27m (19m%), including: 15m @ 1.07% Cu from 33m (16m%).
- KTRC903 – 4m @ 1.41% Cu from 86m (6m%); and
- KTRC904 – 4m @ 1.14% Cu from 20m (5m%).

In Octa Phillip’s view, these drill results will lead to an increase in resources.

### Capital Raising

Octa Philip was surprised when HGO announced an equity raising on 11 July 2012.

The reasons we were surprised included :

- HGO reported a cash balance of \$17.92m, with total borrowings of \$65.2m;
- Mined grade in the April quarter was 0.82%, which indicated that the grade control issue was under control
- Reported cash costs were \$2.81/lb, in line with Octa Phillip’s estimate; and
- Projected cash costs for the July quarter were about \$2.35/lb, suggesting that HGO should be generating net cash.

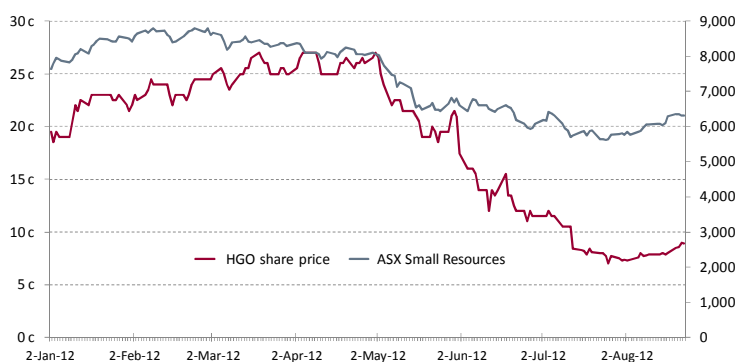
Also, we did not believe that the management and Board would be so DUMB as to raise equity at a time when the markets were highly risk averse.

Figure 6 indicates that in addition to risk aversion, there has also been significant aversion to HGO as a stock, significantly underperforming the Small Resources index. .

We were surprised but he capital raising, though it appears that the market was not

The operations for the July quarter showed that HGO generated cash as we expected.

Figure 6 : HGO share price during 2012



Source : IRESS, Octa Phillip

The cashflow report for the quarter ended July showed that HGO had \$26.9m in cash, after reducing borrowings. Net cash generated from operations, after paying for exploration and overheads, was \$3.3m.

Also, HGO has forward sales in place that lock in revenue as shown in Figure 7. The NPV is our estimate, using a 10% discount rate.

Figure 7 : HGO’s hedge book

Entered into	Start date	End date	Value	volume per quarter	NPV
Oct. 2010	April 2012	Jan. 2014	\$A 8,000/t	3,125 t	\$A 13.3m
Nov. 2010	April 2014	Jan. 2016	\$A 8,700/t	8,700 t	\$A 12.8m
Oct. 2013	April 2014	Jan. 2016	\$A 9,171/t	313 t	\$A 3.9m

Source : HGO presentations, Octa Phillip

## Revised Valuation

Figure 8 shows Octa Phillip's medium term projections for HGO's Kanmantoo operations. We expect

- the feed grade will rise to 0.75%, which is still well below the reserve grade of 0.84%; and
- the volume of material will initially stabilise at 600kt a quarter and then be moved up to 2.7Mt/yr as the satellite pits are progressively developed.

Our valuation has been revised down to 20c a share due to

- We have lowered our assumed feed grade, from the reserve grade of 0.84% Cu to 0.75%; and
- We have allowed for the increase in the number of share on issue, including our estimate of the SPP, the details of which are still to be announced.

Figure 8 : Octa Phillip's projections for Kanmantoo

	Jan. 2012	April 2012	July 2012	Oct. 2012	Jan. 2013	April 2013	July 2013	Oct. 2013	Jan. 2014	April 2014	July 2014
Cocntrate sales	4,263 t	8,590 t	15,462 t	14,970 t	16,114 t	16,810 t	17,391 t	17,625 t	17,625 t	17,625 t	17,625 t
Copper price	US\$ 7,512/t	US\$ 7,385/t	US\$ 7,385/t	US\$ 7,385/t	US\$ 7,385/t	US\$ 7,385/t	US\$ 7,385/t	US\$ 7,385/t	US\$ 7,385/t	US\$ 7,385/t	US\$ 7,385/t
Gold price	\$ 1,685/oz	\$ 1,575/oz	\$ 1,575/oz	\$ 1,575/oz	\$ 1,575/oz	\$ 1,575/oz	\$ 1,575/oz	\$ 1,575/oz	\$ 1,575/oz	\$ 1,575/oz	\$ 1,575/oz
Silver price	\$ 31.8/oz	\$ 27.5/oz	\$ 27.5/oz	\$ 27.5/oz	\$ 27.5/oz	\$ 27.5/oz	\$ 27.5/oz	\$ 27.5/oz	\$ 27.5/oz	\$ 27.5/oz	\$ 27.5/oz
AUD/USD	1.013	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.002	1.000
Copper Revenue	\$A 9.1m	\$A 16.5m	\$A 29.9m	\$A 27.6m	\$A 30.9m	\$A 33.5m	\$A 34.7m	\$A 35.1m	\$A 35.1m	\$A 35.1m	\$A 35.1m
Cu TC / RC	(\$A 0.9m)	(\$A 1.9m)	(\$A 2.4m)	(\$A 2.8m)	(\$A 3.0m)	(\$A 3.2m)	(\$A 3.3m)	(\$A 3.3m)	(\$A 3.3m)	(\$A 3.3m)	(\$A 3.3m)
By-products, net	\$A 1.3m	\$A 1.8m	\$A 2.5m	\$A 2.4m	\$A 2.7m	\$A 3.0m	\$A 3.1m	\$A 3.4m	\$A 3.5m	\$A 3.5m	\$A 3.5m
Cash Costs	(\$A 9.7m)	(\$A 13.8m)	(\$A 20.1m)	(\$A 17.0m)	(\$A 17.9m)	(\$A 18.6m)	(\$A 19.3m)	(\$A 20.1m)	(\$A 20.7m)	(\$A 20.2m)	(\$A 20.4m)
Royalties	(\$A 0.1m)	(\$A 0.2m)	(\$A 0.4m)	(\$A 0.4m)	(\$A 0.5m)	(\$A 0.5m)	(\$A 0.5m)	(\$A 0.5m)	(\$A 0.5m)	(\$A 0.5m)	(\$A 0.5m)
Dep'n & Amort'sn	(\$A 5.0m)	(\$A 4.3m)	(\$A 5.1m)	(\$A 5.3m)	(\$A 5.6m)	(\$A 5.9m)	(\$A 5.9m)	(\$A 5.9m)	(\$A 5.9m)	(\$A 5.9m)	(\$A 5.9m)
E B I T	(\$A 5.2m)	(\$A 1.9m)	\$A 4.4m	\$A 4.4m	\$A 6.6m	\$A 8.2m	\$A 8.7m	\$A 8.7m	\$A 8.1m	\$A 8.6m	\$A 8.5m
Tax Expense											
Project Cap.Ex		\$A 0.0m	\$A 3.0m	\$A 3.0m	\$A 3.0m						
Sus. Cap. Ex	\$A 0.0m	\$A 0.0m	\$A 0.8m	\$A 0.8m	\$A 0.8m	\$A 0.8m	\$A 0.8m	\$A 0.8m	\$A 0.8m	\$A 0.8m	\$A 0.8m
<b>Net Cashflow</b>	<b>(\$A 21.4m)</b>	<b>(\$A 3.5m)</b>	<b>\$A 2.4m</b>	<b>\$A 4.2m</b>	<b>\$A 4.5m</b>	<b>\$A 9.8m</b>	<b>\$A 11.1m</b>	<b>\$A 11.5m</b>	<b>\$A 11.4m</b>	<b>\$A 11.9m</b>	<b>\$A 11.8m</b>

Source : Octa Phillip estimates

Figure 9 shows our revised base case valuation is now 20c, after allowing for the shares that have been issued under the institutional placement and our guess that about \$4m was raised at about 7.4c a share under the SPP.

Figure 9 : Octa Phillip's revised valuation now 20c a share

discount rate =	12.5%	31-Jan-12		24-Aug-12	
		100%	Product	per share	
Kanmantoo Reserves	100 %	\$A 185m	\$A 185m	17.8 c	18.1 c
fanking credits	60 %	\$A 9m	\$A 5m	0.5 c	0.5 c
Kanmantoo Resources	80 %	\$A 33m	\$A 27m	2.6 c	2.7 c
fanking credits	48 %	\$A 16m	\$A 8m	0.7 c	0.8 c
Corporate	100 %	(\$A 32m)	(\$A 32m)	(3.1c)	(3.0c)
Exploration - Sumba	100 %	(\$A 31m)	\$A 0m	0.0 c	0.0 c
Exploration - Bird's Head	100 %	(\$A 31m)	\$A 0m	0.0 c	0.0 c
Exploration - other	100 %	\$A 0m	\$A 0m	0.0 c	0.0 c
Hedging	100 %	\$A 26m	\$A 26m	2.5 c	2.2 c
Cash / debt	100 %	(\$A 30m)	(\$A 30m)	(2.8c)	(2.1c)
Investments	100 %	\$A 0m	\$A 0m	0.0 c	0.6 c
Options	100 %	\$A 0m	\$A 0m	0.0 c	0.0 c
<b>TOTAL</b>		<b>\$A 146m</b>	<b>\$A 189m</b>	<b>18.1 c</b>	<b>19.7 c</b>
Shares on issue		793.6m	FPO shares	32.0m	options
		229.8m	Issued	21.4m	exercised

Source : Octa Phillip estimates

We restore our BUY recommendation as the current price reflects a very poor outcome and the balance of risks is nearly all to the upside.

## Conclusions

We are confident, that with the change in MD, HGO is now focussed on the operations at Kanmantoo. Our analysis at Figure 3 shows that the current share price prices in operations much worse than we expect.

While significant risk remains, it is biased to the upside, but it will time, probably a significant amount of time, for the company to regain the confidence of investors,.



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**Recommendation Criteria****Investment View**

Octa Phillip Securities Investment View is based on an absolute 1-year total return equal to capital appreciation plus yield.

Buy	Hold	Sell
>20%	20% – 5%	<5%

A Speculative recommendation is when a company has limited experience from which to derive a fundamental investment view.

**Risk Rating**

Octa Phillip Securities Limited has a four tier Risk Rating System consisting of: Very High, High, Medium and Low. The Risk Rating is a subjective rating based on: Management Track Record, Forecasting Risk, Industry Risk and Financial Risk including cash flow analysis.

Disclosure of Economic Interests

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