APP Securities Company Research

KBL Mining Limited

KBL A\$0.03 TARGET PRICE

KBL Mining Ltd operates the Mineral Hill copper lead gold mine in NSW, Australia.

and holds a 75% interests in the Sorby Hills lead silver project in northern Western

A\$0.10

BUY

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Asia Pacific

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Exciting Times Ahead

APP Securities has visited KBL Mining Limited's (ASX:KBL) Mineral Hill operations. The upgrade and extension of the plant is in its final stages and production from the Pearse gold deposit is expected in August 2015. Once the plant has been completed, the Mineral Hill operations are capable of producing three separate concentrates (Cu, Pb, Zn) simultaneously as well as gold dore from oxide ore and flotation tailings through the CIL circuit.

The imminent start of gold production from Pearse ore is expected to (1) generate significant free cash flows and (2) also provide the underground sufficient breathing room to prove up mill feed to improve head grades and optimise mill throughput going forward.

We maintain our BUY recommendation and A\$0.10ps target price.

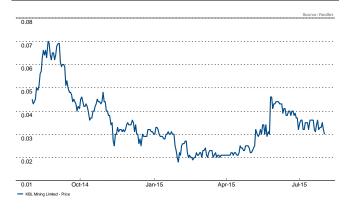
- First gold from Pearse is nigh...: First gold-silver concentrate production is expected in September 2015.
 First dore production from the CIL plant in November 2015.
- ...accompanied by significant cash flow: We estimate Pearse open cut to generate some A\$31M in cash flow from operations in FY16, based on APP Securities' forecast gold price of A\$1,507/oz.
- Pearse also gives the U/G breathing room: During the Pearse open cut production, underground operations are expected to continue with development access to future production sources and exploration. The opening of numerous lodes underground and the delineation of a robust mine plan is expected to improve operational efficiencies and reduce unit costs at Mineral Hill.
- We calculate a valuation for KBL of A\$64M or A\$0.10ps.
 A 10% increase across all A\$ denominated commodity prices lifts our valuation by 22% to A\$78M or A\$0.12ps.
- Our A\$0.10ps target price is underpinned by our valuation.

Disclaimer: APP SECURITIES PTY LTD acted as Lead Manager to the KBL Placement as announced by the ASX on 20 July 2015 for which it received fees.

Company Data

Number of shares	621M
Market capitalisation	\$ 18.6M
Free Float (%)	82%
12 month high/low	\$0.018/\$0.070
Average monthly turnover	\$0.5M
% S&P/ASX 200	nm
% All Ordinaries	nm
DDM Ranking	68
GICS Industry Group	Precious Metals

Share Price Performance



Source: FactSet

Pearse, the Game Changer

KBL is currently pre-stripping the Pearse gold-silver deposit at Mineral Hill. We estimate gold production from Pearse alone at 41.2koz in FY16, generating operating cash flows of A\$30.8M at our forecast gold price of A\$1,507/oz. This is net of the impact of lower metal prices received on 24.1% of sales volumes, due to the Quintana funding deal.

Prioritising High Value Mill Feed

KBL's strategy is to supply the mill with ore from the Southern Ore Zone (lenses A, B, D and G) until the Pearse open cut commences delivering higher value gold-silver sulphide ore to the mill.

Pearse is expected to account for the majority of ore feed for the next ten to twelve months and Mineral Hill production is expected to be dominated by gold-silver concentrate.

During this time, KBL plans to continue developing underground access to future production, such as the G and A lodes. The company's goal is to increase the underground's profitability by drilling sufficient reserves ahead which is expected to reduce the variability in head grade seen in the past.

Figure 1. Pre Stripping at Pearse Open Pit



Source: APP Securities Pty Ltd

Figure 2. Eastern Ore Zone Pit with Declines



Source: APP Securities Pty Ltd

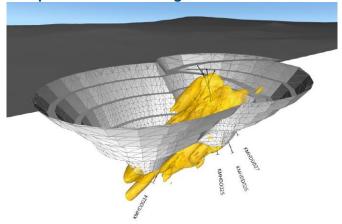
First Gold Shipment on Track for September 2015

The open pit at Pease is well advanced with over 150,000bcm moved as of 30 June 2015, with oxides currently being stockpiled for later processing through the CIL circuit. In total we estimate some 1,200,000bcm or about 3.0Mt of material to be moved over the life of the deposit.

First production from sulphides remains on target for late August 2015. The first shipment of gold concentrates is scheduled for September 2015 and first dore production in November 2015.

The company has appointed local contracting firm MAAS to mine the Pearse open cut. Westech International is building the CIL plant.

Figure 3. Pearse Optimised Pit Looking North West



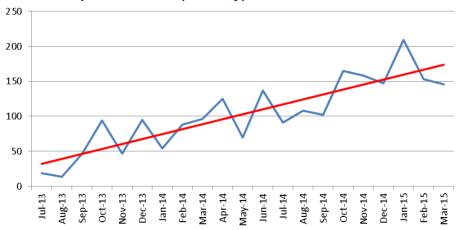
Source: KBL

Working Towards Better Understanding of the Underground

Underground development was at a record for KBL, achieving 566 metres in JunQ15 and focussed on opening up reserves.

The increased underground development has opened a substantial proportion of the G lode reserves, expected to be mined in twelve months' time. Grades in the G lode development are consistent with resource grades.

Figure 4. Development Metres (monthly)



Source: KBL

As of June 2015, KBL had developed 90 metres into the G lode with over 110 metres of development outstanding. The G lens is a high grade gold-copper lode and the company intends to commence production here in 12 months, giving it time to develop, drill and delineate a robust mine plan.

Plant Upgrade Nearing Completion

The plant at Mineral Hill is in the final stages of an expansion and upgrade.

Works are now well advanced to modify the process plant to allow for copper, lead and zinc concentrates to be sequentially produced without the need for any particular product stoppages. The lead circuit is complete and the zinc circuit should be commissioned in August 2015.

The next phase is the installation of the zinc thickener and flotation cells which are expected to be completed during the current SepQ15.

Figure 5. Mineral Mill Plant



Source: APP Securities Pty Ltd

Figure 6. Ball Mills



Source: APP Securities Pty Ltd

In parallel, KBL is constructing a CIL circuit for the treatment of Pearse oxide ore as well as any tailings from the flotation circuit containing gold and silver. The CIL gold plant is on schedule for commissioning in November 2015.

Metallurgical test work on Pearse sulphide ore indicates gold recoveries of approximately 70-75% at the flotation plant with a further 15% from the CIL plant. APP Securities estimates total gold recoveries of 85%.

Figure 7. Erecting of CIL Tanks



Source: APP Securities Pty Ltd

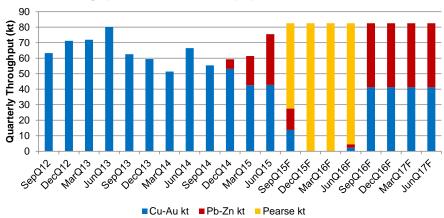
Figure 8. Flotation Cells



Source: APP Securities Pty Ltd

The planned hiatus of delivering underground ore to the mill while the company explores and delineates reserves underground is expected to improve the quality and quality of the mill feed significantly. We estimate unit costs per tonne milled to decrease as a result going forward.

Chart 1. Mill Throughput at Mineral Hill (kt)



Source: APPS estimates

KBL Offers Material Upside at Current Share Price

We have calculated an NPV of A\$73.8M or A\$0.11ps for the Mineral Hill operations, net the impact of the Quintana funding deal. Our NPV is based on APP Securities commodity price forecast.

Table 1. APP Securities Commodity Forecasts

	•						
cast	FY16	FY17	FY18	FY19	FY20	FY21	FY22
A\$/oz	1507	1507	1507	1507	1507	1507	1507
A\$/oz	21	21	21	21	21	21	21
A\$/lb	1.10	1.10	1.10	1.10	1.10	1.10	1.10
A\$/lb	1.23	1.23	1.23	1.23	1.23	1.23	1.23
A\$/lb	3.42	3.42	3.42	3.42	3.42	3.42	3.42
US\$/A\$	0.73	0.73	0.73	0.73	0.73	0.73	0.73
	A\$/oz A\$/oz A\$/lb A\$/lb A\$/lb	A\$/oz 1507 A\$/oz 21 A\$/lb 1.10 A\$/lb 1.23 A\$/lb 3.42	A\$/oz 1507 1507 A\$/oz 21 21 A\$/lb 1.10 1.10 A\$/lb 1.23 1.23 A\$/lb 3.42 3.42	A\$/oz 1507 1507 1507 A\$/oz 21 21 21 A\$/lb 1.10 1.10 1.10 A\$/lb 1.23 1.23 1.23 A\$/lb 3.42 3.42 3.42	A\$/oz 1507 1507 1507 1507 A\$/oz 21 21 21 21 A\$/lb 1.10 1.10 1.10 1.10 A\$/lb 1.23 1.23 1.23 1.23 A\$/lb 3.42 3.42 3.42 3.42	A\$/oz 1507 1507 1507 1507 1507 A\$/oz 21 21 21 21 21 A\$/lb 1.10 1.10 1.10 1.10 1.10 1.10 A\$/lb 1.23 1.23 1.23 1.23 1.23 A\$/lb 3.42 3.42 3.42 3.42 3.42	A\$/oz 1507 <t< td=""></t<>

Source: APPS estimates

We estimate the total valuation of KBL at A\$64.2M or A\$0.10ps.

A 10% increase across all A\$ denominated commodity prices lifts our valuation by 22% to A\$78.2M or A\$0.12ps.

Table 1. Valuation Overview

Valuation Overview			
		A\$M	A\$ps
Operating Assets			
Mineral Hill (100%)		73.8	0.11
Sorby Hills (75%)		5.5	0.01
Subtotal		79.4	0.12
Cash		3.5	0.01
Debt		-11.0	-0.02
Corporate		-8.9	-0.01
Options		1.2	0.00
Total Valuation		64.2	0.10
Shares Outstanding	M	620.9	
In-the-Money Options	M	49.1	
Fully Diluted Shares	M	670.0	

Source: APPS estimates

The company estimates a mine life of potentially ten years at Mineral Hill. We have based our valuation on a 7 year mine life. A prolonged mine life could provide additional upside and exploration on KBL's tenements remain for both underground and open pit mineralisation. We have estimated annual exploration expenses at A\$1.0Mpa over the life of mine.

Sorby Hills on the Back Burner

In our view the Sorby Hills lead-silver-zinc project in Western Australia is unlikely to progress in any meaningful way in the near term. We expect the company to be fully engaged in mining and processing the Pearse precious metal ore body, proving up underground reserves at Mineral Hill and exploring the immediate area in FY16.

In the absence of any material news at Sorby Hills, we believe it is unlikely investors will ascribe much value, if any, to the project despite its resources of 16.5Mt at 4.7% lead. KBL has a 75% interest in the project, with JV partner Yuguang (SSE:600531) holding the other 25%.

We have included a nominal net value of A\$5.5M or A\$0.01ps for Sorby Hills in our valuation for KBL. This has been derived by estimating the in situ value of the probable ore reserve of 2.4Mt at 5% lead and 54g/t silver using A\$0.02/lb of lead and A\$0.50/oz of silver.

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Contact with KBL Mining Limited has been made during the preparation of this report for assistance with verification of facts.

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Free Float (float / current shares outstanding) *100 – This float figure is the number of shares that are available to the public and is calculated by subtracting the shares held by insiders and those deemed to be stagnant shareholders. Stagnant holders include ESOP's, ESOT's, QUEST's, employee benefit trusts, founding shareholder equity stake plus senior management equity stake, corporations not actively managing money, venture capital companies and shares held by Governments.

Terminal Value methodology - APP Securities' Discounted Cash Flow (DCF) valuation applies a terminal growth rate to the last forecast year's cash flow and discounts the amount using Weighted Average Cost of Capital (WACC). The Terminal Value is tested using ASX-listed company multiples. For resource companies there is no terminal value because cash flows are forecast to the end of mine life.

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