

MARDIE OPTIMISATION POSITIVE; IRON ORE PRICE TAILWINDS CONTINUE

BCI Minerals Limited (BCI) recently reported the outcomes of a Pre-Feasibility Optimisation Study for the Mardie Salt & Potash Project. Key changes to the development case include;

- Salt production increasing from 3.5Mtpa to 4.0Mtpa
- SOP production increasing from 75ktpa to 100ktpa
- Salt cash costs reducing by 19% to A\$16/t FOB
- SOP cash costs reducing by 16% to A\$211/t FOB
- Total capital costs increasing from A\$335m to A\$498m, mainly due to 1) a new port now being constructed on site and not at Cape Preston East (CPE) which was previously envisaged, and 2) an increase in the size of the evaporation ponds and SOP plant to facilitate the increase in production.

The study is overwhelmingly positive, with reported pre-tax NPV₁₀ increasing to A\$560M, however it does require a significant uplift in the capital funding envelope. We believe this could be addressed through a number of options, which include 1) the divestment of additional iron ore assets, 2) securing an infrastructure funding partner, and 3) delaying the SOP side of the operation to reduce initial capital costs by A\$100m. We also note the track record of support from largest shareholder Wroxy Pty Ltd (29.1% - recently acquire ~1% on-market), who has supported every capital raising by BCI and predecessor company Iron Ore Holdings.

Mardie Port. Results from the updated PFS indicate that the cost of the port at Mardie will be A\$200m. Although this is considerably more expensive than the CPE option (\$75m vs \$200m), we still believe that the decision to focus on a port at the project site rather than that at CPE is the right one. Having the port on site will eliminate road haulage costs thus decreasing operating costs significantly, which we believe is essential in a long-life 60 year project. The Mardie Port option is also entirely independent, whereas the CPE option relied on some port facilities already by the time Mardie needed to use it. In terms of funding the port, we feel that a good option for BCI would be to look for an infrastructure funding partner. One in particular that we feel would be suitable is the Northern Australia Infrastructure Finance (NAIF), they are a A\$5 billion government lending facility that looks to provide loans to infrastructure projects in Northern Australia.

Sell the Iron Valley Royalty to reduce equity dilution? With the price of iron ore now above US\$100/t, BCI's earnings will significantly increase if prices remain at these levels. With conservative prices, we now value the NPV of the Iron Valley Royalty at A\$58m with upside if prices remain high or if Mineral Resources Ltd implements the 'BOSS' light rail. Selling the Iron Valley Royalty to reduce the amount of capital needing to be raised for the Mardie project seems like a viable option.

Valuation: \$0.30/share (prior: \$0.25/share). Our Valuation has increased by \$0.05/share as we have adjusted our numbers to reflect the increased production of both Salt and SOP and have increased the price at which equity may be raised given the 40% increase in the share price since we initiated back in March.

Year End June 30	2017A	2018A	2019F	2020F	2021F
Reported NPAT (A\$m)	5.7	(16.9)	12.1	(4.5)	(3.4)
Recurrent NPAT (A\$m)	5.7	(16.9)	(4.9)	(4.5)	(3.4)
Recurrent EPS (cents)	1.4	(4.3)	(1.2)	(1.1)	(0.4)
EPS Growth (%)	na	na	na	na	na
PER (x)	na	na	na	na	na
EBITDA (A\$m)	9.5	(14.4)	(3.7)	(2.1)	(1.6)
Capex (A\$m)	2.2	10.1	0.1	46.5	105.0
Free Cashflow	11.2	(22.0)	(5.4)	(43.1)	(100.8)
FCFPS (cents)	2.8	(5.5)	(1.4)	(10.8)	(12.8)
PFCF (x)	na	na	na	na	na
DPS (cents)	0.0	0.0	0.0	0.0	0.0
Yield (%)	0.0	0.0	0.0	0.0	0.0
Franking (%)	0.0	0.0	0.0	0.0	0.0

24 May 2019		
12mth Rating	SPECULATIVE BUY	
Price	A\$	0.21
Target Price	A\$	0.30
12mth Total Return	%	45.5
RIC: BCI.AX		BBG: BCI AU
Shares o/s	m	397.6
Free Float	%	63.0
Market Cap.	A\$m	81.5
Net Debt (Cash)	A\$m	-13.1
Net Debt/Equity	%	na
3mth Av. D. T'over	A\$m	0.116
52wk High/Low	A\$	0.21/0.13
2yr adj. beta		0.71
Valuation:		
Methodology		DCF
Value per share	A\$	0.30

Analyst: James Farr
Phone: (+61) 8 9263 1215
Email: jfarr@psl.com.au

12 Month Share Price Performance



Performance %	1mth	3mth	12mth
Absolute	24.2	32.3	36.7
Rel. S&P/ASX 300	22.5	27.3	29.1

Figure 1: Changes in key assumptions

Assumption	PFS	Optimised PFS
Salt Production Target	3.5Mtpa	4.0Mtpa
SOP Production Target	75ktpa	100ktpa
Seawater Intake	132GLpa 4.2Mtpa NaCl 135ktpa SOP equivalent	147GLpa 4.7Mtpa NaCl 150ktpa SOP equivalent
Concentrator Pond Area	70km ²	79km ²
Crystalliser Area	17km ²	20km ²
NaCl Total Recovery	83%	85%
SOP Total Recovery	56%	67%
Salt Logistics	Trucked ~70km to Cape Preston East for export (bulk freight)	Exported directly from Mardie Port (bulk freight)
SOP Logistics	Trucked ~100km to the Dampier Cargo Wharf for export (bulka bags)	Exported directly from Mardie Port (bulk and bulka bags)
Capex Estimate	A\$335M	A\$498M
Sustaining Capex	A\$1.7M pa	A\$6.0M pa
Salt Cash Cost Estimate	A\$20/t	A\$16/t
SOP Cash Cost Estimate	A\$250/t	A\$211/t
Operating Life	30 years	60 years
Salt Price	US\$30/t FOB	Unchanged
SOP Price	US\$500/t FOB	Unchanged
Exchange Rate	0.75 US\$ per A\$	0.70 US\$ per A\$
Discount Rate	10% real	Unchanged

Source: BCI Minerals Limited

Changes in reported key metrics

- Pre-tax NPV now A\$560m (previously A\$335m)
- EBITDA of \$155m (previously A\$102m)
- IRR unchanged at 20%

FUNDING OPTIONS

Divestment of Iron ore portfolio

With capital costs now totalling A\$498m, we feel BCI could continue to look at the divestment of its iron ore assets to reduce its capital raising requirements. With the Iron ore price now climbing above US\$100/t, BCI earnings from its Iron Valley Royalty will increase significantly if the higher prices are maintained. In our valuation of the Iron Valley Royalty we assume a long term iron ore price of US\$70/t which is 30% below the current price. Our valuation could again potentially increase with the implementation of the BOSS light rail system to upwards of \$85m, which we believe would significantly reduce equity dilution if BCI manages to sell the asset in the near term. BCI is also exploring options for the divestment of its Buckland Project and the CPE port rights, currently we value both of these assets in range of \$14-20m.

Figure 2: Iron Valley Royalty (No BOSS)

Case 1: No Boss		1	2	3	4	5	6	7	8	9	10	11	12	13
Production	Mtpa	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.0	7.0	7.0	7.0	7.0
Royalty A\$/t	A\$/t	1.5	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Royalty	A\$M	10.5	9.9	9.9	9.9	9.5	9.3	9.3	9.2	9.2	9.2	9.2	9.2	9.2
Tax									-2.8	-2.8	-2.8	-2.8	-2.1	-2.1
Royalty	A\$M	10.5	9.9	9.9	9.9	9.5	9.3	9.3	6.5	6.5	6.5	6.5	7.2	7.1
Post Tax NPV	A\$M	\$58												

Source: Patersons Research

Figure 3: Iron Valley Royalty (BOSS railway included)

Case 2: Boss		1	2	3	4	5	6	7	8	9	10	11	12	13
Production	Mtpa	7.5	7.5	12.0	14.0	14.0	14.0	14.0	12.0					
Royalty	A\$/t	1.5	1.3	1.6	1.6	1.6	1.6	1.6	1.6					
Royalty	A\$M	10.5	9.9	19.2	22.4	22.4	22.4	22.4	19.2					
Tax							-6.7	-6.7	-5.8					
Royalty	A\$M	10.5	9.9	19.2	22.4	22.4	15.7	15.7	13.4					
Post Tax NPV	A\$M	\$85												

Source: Patersons Research

Northern Australia Infrastructure Facility (NAIF)

Another potential option for BCI is The Northern Australia Infrastructure Facility (NAIF), a corporate Commonwealth entity that has a \$5 billion lending facility that looks provides loans to infrastructure projects in northern Australia. Given the Mardie port's ability for public benefit which would be able to service multiple users we feel the port is an ideal project for the NAIF. The NAIF can lend up to 100% of the debt, provided there is appropriate risk sharing. Some of the projects the NAIF has granted funding for include:

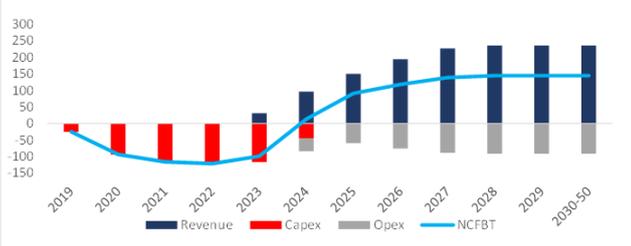
- Kalium Lakes Limited, WA, Up to \$74 million
- Northern Territory Airports, NT, up to \$150 million.
- James Cook University, Queensland, up to \$98 million.
- Sheffield Resources Limited, WA, up to \$95 million.
- Commercial In confidence project, Queensland, up to \$50 million.
- Voyages Indigenous Tourism Australia, NT, up to \$27.5 million.
- Pilbara Minerals Limited, WA, up to \$19.5 million.
- Onslow Marine Supply Base, WA, up to \$16.8 million.
- Humpty Doo Barramundi Farm, NT, up to \$7.18 million, with potential up to \$30 million over three stages.
- Genex Power, Queensland, \$450 - \$516 million.
- Amaroo (Verdant), NT, up to \$160 million.

Delay the SOP side of the Operation?

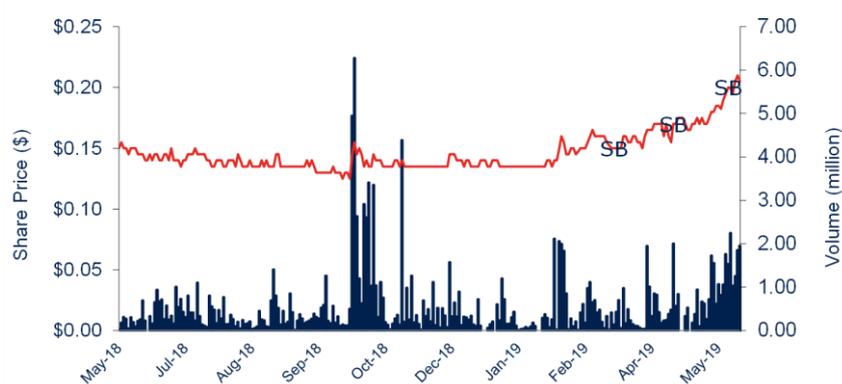
Another possible way in which BCI can look to reduce capital costs could be to delay the timing on the SOP side of the operation. BCI could look to commence an expanded production scenario in which they would hold off on producing SOP, ensure that the salt side of the operation can be proven at a commercial scale and then look to expand into SOP after, thus minimising early capital and investor risk. If BCI were to undertake this option it would potentially reduce the capital costs of the project by A\$100m, combining this with the potential asset sale of the Iron Valley Royalty, funding becomes a lot more manageable.

VALUATION

Our BCI valuation is based on a discounted cash flow analysis of the Mardie Project risk weighted at 50% and the discounted cash flow analysis of the Iron Valley Royalty. Although we have increased the equity component of the capital requirements, our valuation has increased by \$0.05/share as we have adjusted our numbers to reflect the increased production of both Salt and SOP and have increased the price at which equity may be raised given the 40% increase in the share price. We currently have a \$0.30/share price target and maintain our Speculative Buy rating.

BCI MINERALS (BCI.ASX)			Price		\$0.21		Year End 30 June				
Valuation	\$m	\$/sh	Commodity Assumptions		2017A	2018A	2019F	2020F	2021F		
Mardie Project (Risky at 50%)	153	0.10	US\$/A\$		0.75	0.77	0.72	0.73	0.73		
Iron Valley	59	0.04	Platts 62%Fe (US\$/dmt CFR)		72	70	81	75	75		
Other Assets	14	0.01	NaCl Price (FOB) (US\$/t)		30	30	30	30	30		
Net Cash (Post DFS Spend)	17	0.01	SOP Price (FOB) (US\$/t)		500	500	500	500	500		
Unpaid Capital	250	0.16	Iron Valley		2017A	2018A	2019F	2020F	2021F		
Corporate costs	(32)	(0.02)	Annual production (Mt)		8.0	6.1	7.5	7.5	7.5		
Total Valuation	461	0.30	Royalty A\$/t		2.3	0.9	1.5	1.3	1.3		
Cash Flow Mardie Project			EBITDA A\$m		18.3	5.6	7.4	9.9	9.9		
			Profit & Loss (A\$m)		2017A	2018A	2019F	2020F	2021F		
Iron Valley Reserves & Resources			Total revenue		63.5	33.0	49.2	55.8	55.8		
Iron Valley Ore Reserves			Cost of Sales		(54.0)	(47.4)	(52.8)	(58.0)	(57.5)		
Proved - In-situ	56.6	58.4	4.6		9.5	(14.4)	(3.7)	(2.1)	(1.6)		
Proved - Stockpiles	5.2	56.1	8.3		DD&A	(3.0)	(2.9)	(3.0)	(3.0)		
Probable	33.6	58.6	5.0		EBIT	6.5	(17.3)	(6.7)	(5.2)		
Total	95.4	58.4	5.0		Net interest income (expense)	0.6	0.4	0.3	0.7		
Iron Valley Mineral Resources					NPAT (Before abnormals)	5.7	(16.9)	(4.9)	(4.5)		
Measured - In-situ	86.8	57.9	5.2		NPAT (Reported)	5.7	(16.9)	12.1	(4.5)		
Measured - Stockpiles	5.2	56.1	8.3		Diluted EPS (cps)	1.4	(4.3)	(1.2)	(1.1)		
Indicated	79.6	58.4	5.2		DPS (cps)	0.0	0.0	0.0	0.0		
Inferred	26.1	57.8	6.6		Cash Flow (A\$m)		2017A	2018A	2019F		
Total	197.7	58.1	5.4		Operating Cashflow	11.9	(12.0)	(5.4)	3.4		
Directors & Management					Capex (+exploration)	(0.6)	(10.0)	0.0	(46.5)		
Name	Position				Property, plant & equipment	(1.6)	(0.1)	(0.1)	0.0		
Mr Brian O'Donnell	Chairman: Non-Executive				Divestment of Assets	0.0	0.0	27.0	10.0		
Mr Alwyn Vorster	Managing Director				Cash Flows from Investing activities	(2.2)	(10.1)	26.9	(36.5)		
Mr Michael Blakiston	Director: Non-Executive				Proceeds from equity issues	24.2	0.0	0.0	70.0		
Ms Jennifer Bloom	Director: Non-Executive				Proceeds from borrowings	0.0	0.0	0.0	0.0		
Simon Hodge	Chief Financial Officer				Repayment of borrowings	(2.0)	0.0	0.0	0.0		
Susan Hunter	Company Secretary				other	(5.2)	(1.3)	0.0	0.0		
Top Shareholders					Cash Flows from Financing activities	17.1	(1.3)	0.0	70.0		
	Shares (m)	%			Net increase in cash and cash equivalents	26.7	(23.3)	21.6	36.9		
Wroxby Pty Ltd	111	29.1			Cash at beginning	9.7	36.4	13.0	34.6		
One Managed Investment Funds Limited	10	2.6			Cash at end	36.4	13.0	34.6	71.5		
Mineralogy Pty Ltd.	6	1.5			Balance Sheet (A\$m)		2017A	2018A	2019F		
Pacific Level Pty Ltd	5	1.2			Cash	36.4	13.1	34.6	71.5		
Alwyn Vorster	4	1.0			Total Assets	119.6	100.5	112.6	190.9		
Top 5 Shareholders	135.9	34			Creditors	12.1	9.4	11.5	11.5		
					Current Borrowings	0.0	0.0	0.0	0.0		
					Non-current Borrowings	0.0	0.0	0.0	0.0		
					Provisions	5.2	6.1	(2.4)	10.4		
					Total Liabilities	17.3	15.4	9.1	21.9		
					Shareholders Funds	107.2	90.6	103.5	169.1		

Recommendation History



Date	Type	Target Price	Share Price	Recommendation	Return
12 Mar 19	Research Note	0.25	0.15	SB	
16 Apr 19	Research Note	0.25	0.17	SB	13.3%
17 May 19	Hot off the Press	0.25	0.20	SB	14.7%
	Current Share Price		0.21		5.1%

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1300 582 256
 patersons@psl.com.au
 www.psl.com.au

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1300 582 256
patersons@psl.com.au
www.psl.com.au

Research

Cathy Moises - Head of Research	Phone: (+61 3) 9242 4030	Email: cmoises@psl.com.au
James Farr - Associate Analyst	Phone: (+61 8) 9263 1215	Email: jfarr@psl.com.au
Daniel Veasey - Associate Analyst	Phone: (+61 8) 9225 2818	Email: dveasey@psl.com.au
Jacob Ballard - Research Assistant	Phone: (+61 3) 9242 4031	Email: Jballard@psl.com.au

Strategy & Economics

Greg Galton - Director Private Wealth	Phone: (+61 8) 9263 1612	Email: ggaltan@psl.com.au
Daniel Veasey - Associate Analyst	Phone: (+61 8) 9225 2818	Email: dveasey@psl.com.au

Commodities

Cathy Moises - Head of Research	Phone: (+61 3) 9242 4030	Email: cmoises@psl.com.au
Cam Hardie - Analyst	Phone: (+61 3) 9242 4153	Email: chardie@psl.com.au
Xavier Braud - Analyst	Phone: (+61 8) 9225 2813	Email: xbraud@psl.com.au
Phil Carter - Analyst	Phone: (+61 8) 9225 2819	Email: Pcarter@psl.com.au
James Farr - Associate Analyst	Phone: (+61 8) 9263 1215	Email: jfarr@psl.com.au

Industrials

Martyn Jacobs - Analyst	Phone: (+61 3) 9242 4153	Email: mjacobs@psl.com.au
Phil Carter - Analyst	Phone: (+61 8) 9225 2819	Email: Pcarter@psl.com.au
Allan Franklin - Analyst	Phone: (+61 3) 9242 4155	Email: afranklin@psl.com.au

Institutional Dealing

Dan Bahen	Phone: (+61 8) 9263 1274	Email: dbahen@psl.com.au
Michael Brindal	Phone: (+61 8) 9263 1186	Email: mbrindal@psl.com.au
Tom Bahen	Phone: (+61 8) 9263 1180	Email: tbahen@psl.com.au
Artie Damaa	Phone: (+61 2) 8238 6215	Email: adamaa@psl.com.au
Paul Doherty	Phone: (+61 3) 8803 0108	Email: pdoherty@psl.com.au
Chris Kelly	Phone: (+61 3) 9242 4078	Email: ckelly@psl.com.au
Jeremy Nugara	Phone: (+61 3) 8803 0166	Email: jnugara@psl.com.au
Phil Schofield	Phone: (+61 2) 8238 6223	Email: pschofield@psl.com.au
Sandy Wylie	Phone: (+61 8) 9263 1232	Email: swylie@psl.com.au

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