PILBARA MINERALS (PLS)

INCREASING PRICE TARGET TO $1.25

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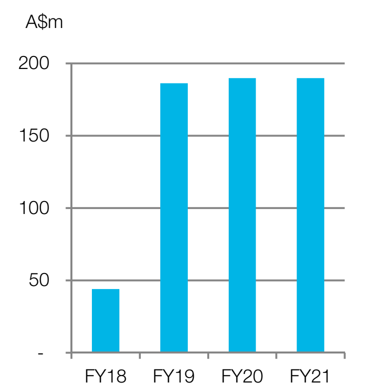
We say	Price	Target	Strategic Target
BUY	0.47	1.25	2.50

Last week Pilbara released two studies on its Pilgangoora lithium project which in our view confirmed the project's status as the world's best undeveloped spodumene deposit and galvanised the company's position as the "go-to" ASX lithium exposure. The company expects to begin construction of the A$224m project in the next few months and is also due to release a Scoping Study shortly on its plans to build an offshore lithium conversion facility with its JV partner, General Lithium. Maintain Buy.

PLS SHARE PRICE (A$)

EBITDA (vs. CAPEX OF A$224M)



COMPANY DATA & RATIOS

Enterprise value	$494m
Diluted market cap*	$594m
Diluted shares*	1,264m
Free float	100%
12 month price range	0.22-0.87
GICS sector	Materials

Management holds ~8% (fully diluted)
*Diluted for 114m options

IMPLIED RETURN

Implied all-in return	166%

PILGANGOORA DFS: A WORLD CLASS PROJECT

The DFS outlined a 2mtpa project producing 314ktpa of 6% spodumene concentrates. Initial capex is A$224m and opex to customer is likely to be best-in-class at US$258/t. At current prices we estimate project payback in less than 1.8 years… impressive for a project with a 36 year mine life. At current prices we estimate an NPV of A$1,047m and an IRR of 55%.

SCALABLE TO 4MTPA

The company also released a PFS for an expansion at Pilgangoora to 4mtpa in year 3 of the mine. Expansion capital is a very modest A$128m, representing less than one year's operating cash flow at 2mpta (A$133m) even on the company's conservative prices of US$537/t. We believe the *strategic value* of Pilgangoora is highly likely to make PLS a takeover target.

INCREASING PRICE TARGET TO $1.25

We update our forecasts to reflect the company's studies released last week. We value the 2mtpa case at a spodumene price of US$650/t (with a 10% discount) and apply a 40% discount to the expansion to 4mtpa. We also include the downstream processing JV with General Lithium in our valuation for the first time, albeit with a 60% discount, given no figures have been released yet.

PILGANGOORA: A WORLD CLASS PROJECT

Pilbara published two studies on its Pilgangoora lithium project last week, which in our view confirmed Pilgangoora's status as the world's best undeveloped spodumene deposit and galvanised the company's position as the "go-to" ASX lithium exposure.

The two studies comprised:

- A Definitive Feasibility Study (DFS) for a 2mtpa project
- A Preliminary Feasibility Study (PFS) for an expanded 4mtpa project

In our view, Pilgangoora is a compelling, low-risk development project due to its:

- World-class scale (the largest undeveloped spodumene deposit globally)
- Above average grade
- Tantalum credit (unlike most peers)
- Leading cost position (likely to be the lowest cost spodumene producer globally)
- Low permitting and sovereign risk (WA ranked #1 jurisdiction for mining investment[1])
- Low technical risk (compared to brine counterparts)
- Low capital intensity
- Fast payback and return on capital (even at *substantial* discounts to current prices)
- Supported by strong marco thematic (uptake of EV's and grid power); and its
- Experienced team

In terms of the development timetable for Pilgangoora, Pilbara is targeting:

- Construction to commence in Q4 CY16
- Commissioning from late CY17

DISPUTE WITH MINRES

In recent times, Pilbara's share price has been weighed down by its public dispute with Mineral Resources (MinRes) in relation to MinRes's first right of refusal over Pilgangoora's lithium offtake.

In our view:

- MinRes's claims are *unlikely* to lead to a material impact on the company's development timetable for Pilgangoora
- The uncertainty created by these claims, in our opinion, has *disproportionately* impacted the PLS share price, and **represents a *compelling* buying opportunity**

We include a 3-month buffer to first production in our forecasts (compared to the company's schedule) to allow for any unforeseen delays… but given the mine life is 36 years (at 2mtpa), this allowance has **no material financial impact on our DCF-based valuation**.

MinRes has 45 days from 15 September (i.e. until 31 October) to:

- match the offer from General Lithium (on price, volume and other material terms); or
- waive the right (which would then convert to a 2.5% NSR for MinRes)

[1] Fraser Institute

DFS OUTCOMES (2MTPA) + SCENARIOS

Pilgangoora will be a simple open pit mine in WA, with very conventional processing: crush, grind, float, magnetic separation. The table below summarises:

- The DFS at 2mtpa reported by PLS last week at US$537/t spodumene
- Our estimates at US$650/t, the latest agreed price in WA (and no other changes)
- Our estimates at US$650/t and a 70c A$ (and no other changes)

DFS Throughput	mtpa	PLS 2mtpa	BOEQ at Current Prices	BOEQ at Current Prices plus a 70c A$
Lithium Head Grade	%	1.26%		
Lithium Recovery	%	77.5%		
Avg Spodumene Production	kt	314		
Cost to customer	A$/t	344		
Australian Dollar FX	A$/US$	0.75		**0.70**
Cost to customer	US$/t	258		
Spodumene Price	US$/t	537	**650**	**650**
% Margin	*%*	*52%*	*60%*	*63%*
Capex	A$m	224		
Avg Annual EBITDA	A$m	121	164	184
Capex to EBITDA ratio	x	1.9x	1.4x	1.2x
Mine Life	years	36		
Post Tax NPV_{10}	**A$m**	**709**	**1,047**	**1,202**
Post Tax IRR	%	38%	55%	61%
Payback	years	2.7	1.8	1.6

Source: Company, Blue Ocean estimates

Our conclusions from this analysis:

- Pilgangoora is a *very* robust project, even at US$537/t spodumene, which in our view may prove to be a *very* conservative price, particularly in light of the pricing mechanism built into the company's offtake agreement with General Lithium (we discuss prices on p5)
- With an NPV of A$709m, even on PLS's conservative price assumptions, the company's current ~A$600m mcap is comfortably underpinned by the 2mtpa project (ignoring the considerable value of the potential expansion to 4mtpa and the downstream processing project)
- Based on the most recently agreed spodumene price of ~US$650/t, the 2mtpa case for Pilgangoora has an NPV_{10} of A$1.1bn (we would also argue a 10% nominal discount rate is too high for a project in WA in the current low interest rate world!)
- If the A$ pulls back to 70c, at US$650/t spodumene, the NPV for Pilgangoora at 2mtpa is A$1.2bn, or *double* the current market cap! (again, ignoring the considerable value of the potential expansion to 4mtpa and the downstream processing project)

EXPANSION OUTCOMES (4MTPA) + SCENARIOS

The company also completed a PFS for an expanded 4mtpa plant at Pilgangoora from year 3 for the project. In keeping with the analysis on the previous page, the table below summarises:

- The PFS at 4mtpa reported by PLS last week at US$539/t spodumene
- Our estimates at US$650/t, the latest agreed price in WA (and no other changes)
- Our estimates at US$650/t and a 70c A$ (and no other changes)

PFS **Throughput**	**mtpa**	**PLS PFS 4mtpa**	**BOEQ at Current Prices**	**BOEQ at Current Prices plus a 70c A$**
Lithium Head Grade	%	1.26%		
Lithium Recovery	%	77.5%		
Avg Spodumene Production	kt	564		
Cost to customer	A$/t	307		
Australian Dollar FX	A$/US$	0.75		**0.70**
Cost to customer	US$/t	230		
Spodumene Price	US$/t	539	**650**	**650**
% Margin	*%*	*57%*	*65%*	*67%*
Capex	A$m	352		
Avg Annual EBITDA	A$m	245	321	356
Capex to EBITDA ratio	x	1.4x	1.1x	1.0x
Mine Life	years	19		
Post Tax NPV_{10}	**A$m**	**1,165**	**1,620**	**1,830**
Post Tax IRR	%	46%	68%	74%
Payback	years	3.05	1.8	1.6

Source: Company, Blue Ocean estimates

Our conclusions from this analysis:

- While PLS has not yet committed to the expanded 4mtpa case, given it will be developed for year 3 of the mine, it is more than 4 years away from first production. In our view, the demand for lithium is likely to be substantially stronger by then… and we expect EVs will be much closer to mainstream adoption.
- The incremental capex to expand the mine to 4mtpa is a very modest A$128m, in part because allowance for this expansion is being built into the 2mtpa case.
- The modest expansion capex of A$128m is less than one year's EBITDA for the 2mtpa case on PLS's conservative price assumptions of US$537/t! (PLS estimates average annual EBITDA of A$133m p.a. over the first 15 years at a 2mtpa rate)
- At current prices of US$650/t, we estimate an NPV for the 4mtpa case of A$1.6bn
- If the A$ pulls back to 70c, at US$650/t spodumene, the NPV for Pilgangoora at 4mtpa is A$1.8bn, or *triple* the current market cap! (ignoring the value of the downstream processing project)

THE DEAL WITH GENERAL LITHIUM

In early July, PLS announced a landmark 3 part deal with General Lithium:

1) Offtake
   - **Volume**:140kt of 6% spodumene (~40% of production)
   - **Period**: 6 years from Q1 CY18 + an option to extend for another 4 years
   - **Price**: A pricing mechanism linked to the lithium carbonate price, designed to allow PLS to share in the current elevated prices of lithium carbonate in China
2) JV to build downstream lithium processing facility
   - A ~20ktpa plant in Malaysia (50/50 lithium carbonate / lithium hydroxide)
3) Equity in PLS
   - General Lithium to invest $17.75m into PLS at 50c to purchase a 3% stake post satisfaction of conditions precedent
   - General Lithium to acquire a further 2% stake once a final investment decision has been made to build the downstream lithium plant in the JV

One of the most interesting aspects of this agreement is the pricing mechanism, which we believe has been <u>designed to more evenly distribute the margin</u> between the spodumene miner (PLS) and the lithium converter (General Lithium).

Based on our assessment of the cost structure of the lithium converters, we have estimated what spodumene price would be required to 'equalize' the margins. On our estimates, it is likely to be approximately 5-5.5% of the lithium carbonate price. i.e. Something like:

Lithium Carbonate Price (US$/t)	Equivalent Spodumene Price (US$/t)
10,000	~525
12,000	~650
14,000	~750
20,000	~1,000

Source: Blue Ocean estimates

There is currently a large difference between Chinese domestic lithium carbonate prices and imported prices and we believe it is likely PLS's pricing mechanism is linked to *both* of these prices.

It's important to note these numbers should be treated as an approximation only, and they have <u>not</u> been endorsed by Pilbara Minerals as the pricing mechanism is confidential.

But these figures do appear to be broadly consistent with anecdotal evidence we have heard from a number of market participants that Mt Cattlin (a spodumene mine in WA owned by Galaxy Resources) is likely to finalise its spodumene offtake agreements for CY17 in the next few months and <u>the agreed price could potentially be as high as US$800-1,000/t</u>. Again, this figure should <u>not</u> be relied upon until it is confirmed as this type of anecdotal information is often unreliable. It's also important to note that Mt Cattlin produces a lower grade 5.5% concentrate, so the equivalent price for PLS's higher grade 6% concentrate would be roughly 9% higher.

But <u>if</u> Galaxy can achieve this sort of pricing for its CY17 spodumene offtake, we believe it would have a *very* positive read through for the Pilbara Minerals, given this price <u>would be a material 33-66% increase</u> on the US$600/t price agree for Mt Cattlin's offtake for CY16.

DOWNSTREAM PROCESSING JV

In addition to its offtake agreement with General Lithium, Pilbara also has a JV with General Lithium which is assessing the merits of building downstream lithium processing facility in Malaysia. A Scoping Study is underway and is due in the next few weeks.

In our view, this project is likely to be worth significant value to Pilbara Minerals and so we now include it in our valuation for the first time (albeit heavily discounted until the study is released).

In our preliminary valuation, we assume:

- A 20ktpa Plant: 10ktpa Lithium Carbonate + 10ktpa Lithium Hydroxide
- Initial Capex (100%): US$120m
- Price: US$12,000/t (compared to current prices of ~US$20,000/t)
- Opex: ~US$7,850/t product (based on a spodumene price of US$650/t)
- Operating Margin: 35%
- Corporate Overheads: US$5m p.a.
- Sustaining Capex: 3.5% of Initial Capex
- Financial Outcomes:
    - Post Tax NPV of US$363m (based on a nominal 10% discount)
    - Post Tax IRR: 43%
    - i.e. A compelling project, at *well* below current prices

In terms of ascribing a value to PLS for this project we assume:

- PLS's 50% share is worth US$182m, or A$242m (at a 0.75 A$/US$)
- We then apply a heavy 60% discount to get A$97m (or 8c per share in our PLS valuation)

It is our intention over time to reduce the discount applied as the Scoping Study is completed and this project is de-risked over time.

<u>For context, at a lithium carbonate price of US$12,000/t, we believe PLS's 50% share in this project could be worth at least ~20c per share to PLS.</u>

General Lithium Corporation

General Lithium is a very experienced producer of downstream lithium products in China and has been developing its conversion technology for over 20 years.

General Lithium has a current production capacity of 8-10ktpa of battery grade lithium carbonate with a second 10ktpa lithium hydroxide plant in construction.

General Lithium is one of the key suppliers of high purity lithium carbonate in China (99.99%).

Source: General Lithium

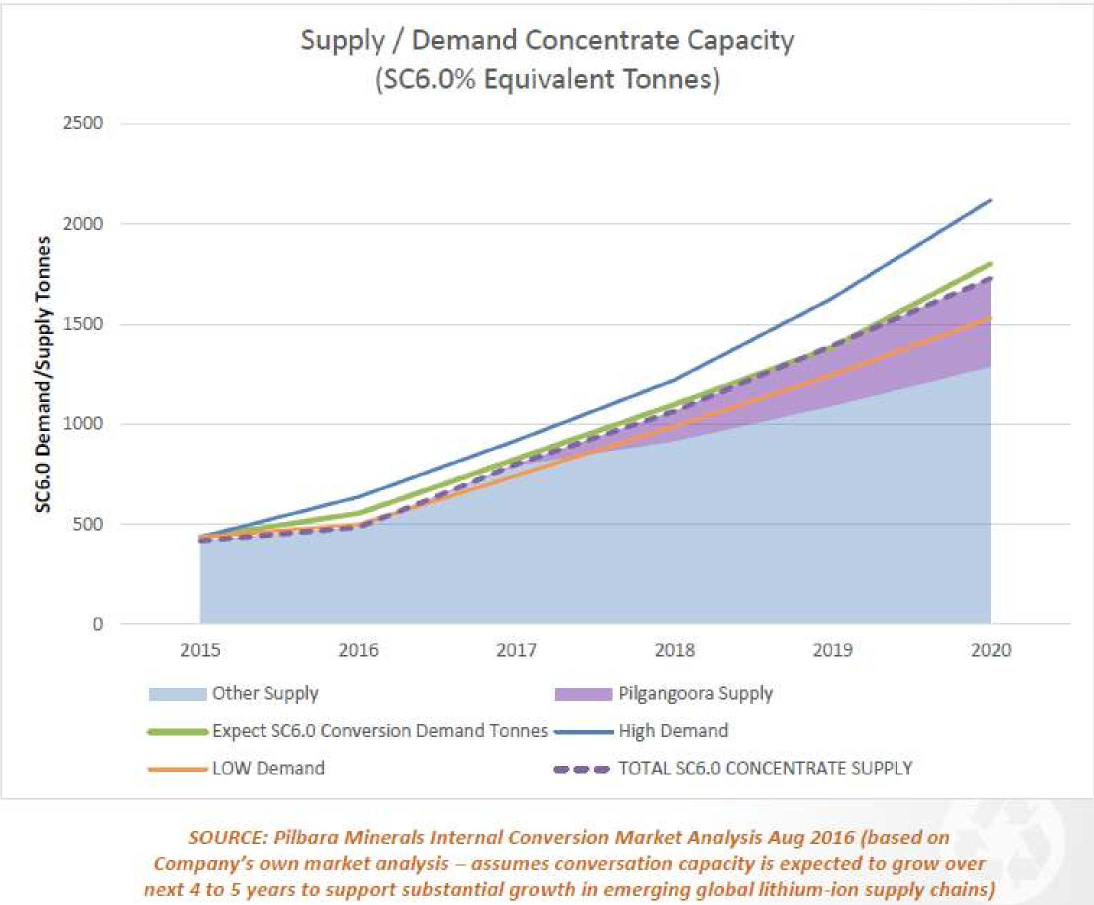
DEMAND OUTLOOK FOR LITHIUM

In its DFS release on Pilgangoora, Pilbara also included a section on the demand outlook for lithium. While Pilbara clearly has a vested interest in the outlook for lithium, it also has a *significant* advantage over most of the other 'experts' trying to take a view on this opaque market given:

- The lion's share of near-term demand growth is expected to come from China
- Pilbara has spent *considerable* time in China over the past 12-18 months:
  - Meeting with the 7 key lithium converters in the context of potential offtake (i.e. PLS has *much* better access to the key players in this market)
  - Discussing current capacity, expansions underway and future plans
  - Bottom line: In our view, we believe Pilbara is in a far stronger position to assess the potential demand outlook than most of the 'experts'
  - **As per the chart below, PLS does not forecast an oversupply of spodumene for the next 4-5 years** (consistent with the view of Benchmark Minerals)

Pilbara expects further growth in conversion capacity of the next 4-5 years to support the substantial growth in emerging global lithium-ion supply chains.

According to Pilbara, the main driver of demand is major automotive manufacturers commencing the mass production of EVs, HEVs and PHEVs using lithium-ion batteries, driven by Chinese legislation, Electric Bus demand, and Tesla's success with its existing models.



Source: Pilbara Minerals

SENSITIVITY ANALYSIS

In the tables below, we provide three pricing scenarios, in two cases – with and without risk adjustment discounts applied.

Given our valuation is materially above the current share price in all six scenarios, in our view the clear take away from the tables below should be that PLS is materially undervalued and is a compelling buying opportunity at the current level… at 47c!

It's also important to note that the current lithium carbonate price in China is ~US$20,000/t and all of the scenarios below represent a *significant* pullback in prices from that level.

Sensitivity Analysis

Price Scenarios with Discounts		Downside Case		Base Case		Upside Case	
Spodumene Price		$525/t		US$650/t		US$750/t	
Lithium Carbonate Price		US$10,000/t		US$12,000/t		US$14,000/t	
Valuation	Discount	A$m	A$/sh	A$m	A$/sh	A$m	A$/sh
Pilgangoora 2mtpa	10%	663	0.52	1,025	0.81	1,314	1.04
Expansion to 4mtpa	40%	265	0.21	410	0.32	526	0.42
Downstream Processing Plant	60%	58	0.05	97	0.08	135	0.11
Corporate & Other		(36)	(0.03)	(36)	(0.03)	(36)	(0.03)
Debt		-	-	-	-	-	-
Cash		100	0.08	100	0.08	100	0.08
Risk adjusted NAV		**1,050**	**0.83**	**1,595**	**1.26**	**2,038**	**1.61**

Price Scenarios without Discounts		Downside Case		Base Case		Upside Case	
Spodumene Price		US$525/t		US$650/t		US$750/t	
Lithium Carbonate Price		US$10,000/t		US$12,000/t		US$14,000/t	
Valuation	Discount	A$m	A$/sh	A$m	A$/sh	A$m	A$/sh
Pilgangoora 2mtpa	0%	737	0.58	1,138	0.90	1,460	1.15
Expansion to 4mtpa	0%	442	0.35	683	0.54	876	0.69
Downstream Processing Plant	0%	146	0.12	242	0.19	338	0.27
Corporate & Other		(36)	(0.03)	(36)	(0.03)	(36)	(0.03)
Debt		-	-	-	-	-	-
Cash		100	0.08	100	0.08	100	0.08
Risk adjusted NAV		**1,388**	**1.10**	**2,127**	**1.68**	**2,738**	**2.16**

Source: Blue Ocean estimates

PRICE TARGET & RATING

We increase our price target to $1.25 (from $0.95) based on our risk-adjusted NAV representing an implied return of over 160%.

The main changes since our last published note are:

- Updating our forecasts for the DFS on the 2mtpa case
- Reducing the discount applied to our NPV from 20% to 10% on completion of the DFS (a key de-risking milestone)
- Updating our forecasts for the potential expansion to 4mtpa based on the PFS on the 4mtpa case. We also include a 40% discount for this project.
- Adding a component to our valuation for the downstream processing option, with studies due in the coming weeks (which includes a substantial 60% discount)
- Increasing our spodumene prices ~8% to US$650/t (from US$600/t) to better reflect the latest agreed contract price at Mr Cattlin in WA.

STRATEGIC TARGET

Our $2.50 Strategic Target for Pilbara minerals is primarily based on:

- Running the 4mtpa case as our base case (instead of the 2mtpa case)
- Removing the discounts applied to each element of our valuation
- Using US$800/t spodumene instead of US$650/t

KEY RISKS

Pilbara Minerals is exposed to all the normal risks associated with developing and operating mining projects, including permitting, funding and construction risk.

The company is also in dispute with Mineral Resources (MinRes) in relation to a first right of refusal on its offtake. In our view, MinRes's claims are unlikely to impact PLS's development of Pilgangoora. However, if there is a prolonged dispute with MinRes it could impact the Pilgangoora development timetable and the company's share price.

Assuming the company makes the transition into production, the company's revenues will be derived from the sale of lithium concentrate (spodumene) and tantalum. Fluctuations in the lithium concentrate and tantalum price as well as the Australian dollar could impact the company's cash flow, profitability and share price.

Pilbara Minerals' shares also carry embedded Australian sovereign risk as the company's projects are based in Western Australia.

MODEL SUMMARY – FINANCIALS & VALUATION

Stock Details							
						Enterprise Value	$494m
Recommendation:	BUY					Diluted MCap	$594m
Target	$1.25	Share Price	$0.47	Strategic Target (ST)	$2.20	Diluted Shares	1,264m
NAV	$1.26	52 Week High	$0.87	Implied Return to ST	368%	Free Float	100%
Implied Return	166%	52 Week Low	$0.22			Avg Daily Value	$5.4m

Macro Assumptions	FY16	FY17E	FY18E	FY19E	FY20E
Exchange Rate (A$/US$)	0.73	0.74	0.72	0.71	0.70
Avg Li Conc Price (US$/t)	650	650	650	650	650
Tantalum Price (US$/lb)	60	60	60	60	60
Avg Li Conc Price (A$/t)	892	881	903	915	929
Tantalum Price (A$/lb)	82	81	83	85	86

Profit & Loss (A$m)	FY16	FY17E	FY18E	FY19E	FY20E
Revenue	-	-	82	333	338
Operating Costs	-	-	(35)	(141)	(141)
Operating Profit	**-**	**-**	**47**	**192**	**196**
Corporate & Other	(31)	(1)	(3)	(4)	(4)
Exploration Expense	(11)	(2)	(1)	(3)	(3)
EBITDA	**(42)**	**(3)**	**44**	**186**	**190**
D&A	(0)	(0)	(2)	(7)	(7)
EBIT	**(42)**	**(3)**	**42**	**179**	**183**
Net Interest Expense	(2)	2	(4)	(2)	(0)
Pre-Tax Profit	**(44)**	**(2)**	**38**	**177**	**183**
Tax Expense	(0)	-	(12)	(53)	(55)
Underlying Profit	**(44)**	**(2)**	**26**	**124**	**128**
Signficant Items (post tax)	(11)	-	-	-	-
Reported Profit	**(56)**	**(2)**	**26**	**124**	**128**

Cash Flow (A$m)	FY16	FY17E	FY18E	FY19E	FY20E
Operating Cashflow	(5)	(1)	45	189	192
Tax	(1)	-	-	-	(54)
Net Interest	(0)	2	(4)	(2)	(0)
Net Operating Cash Flow	**(6)**	**1**	**40**	**187**	**138**
Exploration	(10)	(3)	(1)	(3)	(3)
Capex	(5)	(58)	(170)	(8)	(8)
Acquisitions / Disposals	(2)	-	-	-	-
Other	(1)	-	-	-	-
Net Investing Cash Flow	**(17)**	**(61)**	**(171)**	**(11)**	**(11)**
Equity Issue	116	6	16	13	8
Borrowing / Repayments	4	-	44	(44)	-
Dividends	-	-	-	-	(13)
Other	-	-	40	-	-
Net Financing Cash Flow	**120**	**6**	**100**	**(31)**	**(5)**
Change in Cash Position	97	(53)	(30)	144	123
FX Adjustments	-	-	-	-	-
Cash Balance	**100**	**47**	**16**	**160**	**283**

Balance Sheet (A$m)	FY16	FY17E	FY18E	FY19E	FY20E
Cash	100	47	16	160	283
Other Current Assets	2	2	2	2	2
PP&E	1	59	227	228	229
Exploration & Development	0	1	1	1	1
Other Non Current Assets	0	0	0	0	0
Total Assets	**103**	**107**	**245**	**391**	**515**
Debt	0	0	44	0	0
Other Liabilities	4	4	16	69	69
Net Assets	**98**	**103**	**185**	**321**	**445**

Ratio Analysis		FY16	FY17E	FY18E	FY19E	FY20E
Diluted Shares	m	1,242	1,273	1,314	1,346	1,359
EPS - Diluted	Ac	(4.3)	(0.1)	2.0	9.4	9.4
P/E	x	**n.m.**	**n.m.**	**23.2x**	**5.0x**	**5.0x**
CFPS - Diluted	Ac	(0.6)	0.1	3.1	14.1	10.2
P/CF	x	**n.m.**	**n.m.**	**15.1x**	**3.3x**	**4.6x**
FCF - Diluted	Ac	(0.8)	(4.6)	(9.5)	13.4	9.6
P/FCF	x	**n.m.**	**n.m.**	**n.m.**	**3.5x**	**4.9x**
Dividends	Ac	-	-	-	-	2.0
Dividend yield	%	-	-	-	-	4.3%
Payout Ratio	%	-	-	-	-	20%
Franking	%	-	-	-	-	100%
Enterprise Value	A$m	495	548	623	434	312
EV/EBITDA	x	**n.m.**	**n.m.**	**n.m.**	**2.3x**	**1.6x**
ROE	%	(45%)	(1%)	14%	39%	29%
ROA	%	(43%)	(1%)	11%	32%	25%
Net Debt or (Cash)	A$m	(100)	(46)	28	(160)	(283)
Gearing (ND/(ND+E))	%	n.m.	n.m.	13%	(99%)	(174%)
Gearing (ND/E)	%	n.m.	n.m.	15%	(50%)	(64%)

Lithium (Li_2O)	P&P Reserves			M&I Resources			Inferred
	mt	%	cont(kt)	mt	%	cont(kt)	cont(kt)
Pilgangoora	69.8	1.26%	883	83.6	1.26%	1,057	515
						Total	**1,572**

Tantalum (Ta_2O_5)	P&P Reserves			M&I Resources			Inferred
	mt	ppm	cont(mlb)	mt	ppm	cont(mlb)	cont(mlb)
Pilgangoora	29.5	134	8.7	83.6	135	24.94	14.24
Tabba Tabba	0.13	1,290	0.38	0.22	1,077	0.53	0.14

Earnings Sensitivity			FY19E	FY20E	FY19E	FY20E
			A$m	A$m	%	%
Lithium conc price	US$/t	+10%	20	20	16%	16%
Tantalum price	US$/lb	+10%	2	2	1%	1%
Exchange Rate	A$/US$	-10%	22	22	18%	17%

Valuation	Discount	Stake	A$m	A$/sh
Pilgangoora 2mtpa (un-risked)		100%	1,138	0.90
Pilgangoora 2mtpa	10%	100%	1,025	0.81
Expansion to 4mtpa	40%	100%	410	0.32
Downstream Processing Plant	60%	50%	97	0.08
Corporate & Other			(36)	(0.03)
Debt			-	-
Cash			100	0.08
Risk adjusted NAV			**1,595**	**1.26**

Source: IRESS, Company data, Blue Ocean estimates

MODEL SUMMARY – INPUTS & FREE CASH FLOW

Macro Assumptions		FY16	FY17E	FY18E	FY19E	FY20E
Exchange Rate	A$/US$	0.73	0.74	0.72	0.71	0.70
Chem Spodume Price	US$/t	650	650	650	650	650
Tech Spodume Price	US$/t	-	-	-	-	-
Avg Li Conc Price	US$/t	650	650	650	650	650
Tantalum Price	US$/lb	60	60	60	60	60
Realised Li Conc Price	A$/t	892	881	903	915	929
Realised Ta Price	A$/lb	82	81	83	85	86

Operational Summary		FY16	FY17E	FY18E	FY19E	FY20E
Pilgangoora						
Ore Milled	mt	-	-	0.5	2.0	2.0
Lithium Head Grade	%	-	-	1.33%	1.33%	1.33%
Recovery	%	-	-	75%	75%	75%
Li Conc Produced	**kt**	**-**	**-**	**84**	**334**	**334**
Tantalum Head Grade	ppm	-	-	134	134	134
Recovery	%	-	-	55%	55%	55%
Tantalum Production	**klb**	**-**	**-**	**81**	**322**	**322**
Net Cash Cost (post credit)	A$/t conc	-	-	338	340	341
All-in Sustaining Cost	**A$/t conc**	**-**	**-**	**372**	**377**	**379**
% AISC Margin	***%***	***-***	***-***	***59%***	***59%***	***59%***

FCF Contribution	A$m	FY16	FY17E	FY18E	FY19E	FY20E
Pilgangoora						
Lithium Revenue		-	-	75	306	310
Tantalum Revenue		-	-	7	28	28
Operating Costs (ex credit)		-	-	35	141	141
Operating Margin		**-**	**-**	**47**	**192**	**196**
Sustaining Capex		-	-	2	8	8
Sustaining Exploration		-	-	0	1	1
Corp Overheads		-	-	-	4	4
All-in Sustaining Margin		**-**	**-**	**-**	**180**	**184**
Growth Capex		4	58	168	-	-

Group Operations	A$m	FY16	FY17E	FY18E	FY19E	FY20E
Revenue		-	-	82	333	338
All-in Sustaining Cost		1	1	40	154	154
All-in Sustaining Margin		**(1)**	**(1)**	**42**	**180**	**184**
Growth Capex		4	58	168	-	-
Growth Exploration		4	3	1	2	2
All-in Margin		**(9)**	**(62)**	**(126)**	**178**	**182**

Corporate	A$m	FY16	FY17E	FY18E	FY19E	FY20E
Cash Tax		1	-	-	-	54
Other Items		13	-	(40)	-	-
FCF pre Debt Service		**(23)**	**(62)**	**(86)**	**178**	**127**
Net Interest		0	(2)	4	2	0
Debt Drawdown / (Repayment)		4	-	44	(44)	-
FCF post Debt Service		**(19)**	**(60)**	**(46)**	**132**	**127**

New Equity/Dividends	A$m	FY16	FY17E	FY17E	FY18E	FY20E
Proceeds from Shares/Options		116	6	16	13	8
Dividends Paid		-	-	-	-	13
Change in Cash		**97**	**(53)**	**(30)**	**144**	**123**

Cash Balance		**100**	**47**	**16**	**160**	**283**

Source: IRESS, Company data, Blue Ocean estimates

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