



Pilbara Minerals Ltd (PLS.ASX)

Equity raise signals PLS well on path to becoming a producer

Event:

- PLS equity raising; Increase in exploration target.

Investment Highlights:

- **On April 4th PLS announced it raised \$100M at \$0.38/share**, comprising a \$54M unconditional and \$31M conditional placement, and a \$15M underwritten SPP.
- **We expect ca. \$92M of the funding to be allocated for Pilgangoora project capex**, with the balance for completion of the DFS and exploration. PLS will have \$106M post placement and the SPP, and we estimate it will require another \$107M for the balance of project capex and working capital. We expect PLS will likely source this primarily from debt instruments and/or project equity or offtake pre-payments.
- **The company announced it had increased its Exploration Target to between 130 and 150Mt at 1.2%-1.5% Li₂O**, above the previous target of 100-110Mt. This was mostly due to identifying extensions north of the Central Pegmatites as part of its successful drilling campaign. This provides us with confidence of a likely increase in JORC Resources and Reserves, as well as a reduction in strip ratio.
- **We expect the company to begin shipping bulk samples for marketing by the end of May and in June.** This will be an important step of seeking to convert its offtake MoUs into binding offtake agreements.
- **Mr Ken Brinsden was appointed to the Board as Managing Director**, a key step as the company ultimately transitions from developer to producer.
- **We expect a resource upgrade prior to the release of the DFS in August.** This will likely include an increase in JORC Reserves to underpin a longer mine life than the 15 years examined in the PFS.
- **While we expect the DFS will be based on 2Mtpa operation as the base case, we expect there may be some analysis of a 3Mtpa as an option, given the size of Pilgangoora.** We expect some improvement in flotation recoveries and strip ratio over the PFS.

Earnings and Valuation:

- **Our valuation of PLS has increased to \$0.78/share risked and \$1.03/share unrisked (previous \$0.76 and \$0.86).** This is mostly due to including some optionality of a 3Mtpa case and the increase in exploration target, partially offset by the more dilutive equity raise than we had forecast, and an upward revision of our A\$ forecasts. We forecast NPAT of \$55.5M and \$83.0M in FY18e and FY19e.
- **We assume the balance of funding required for capex and working capital of to be raised from debt will be \$107M.** We believe PLS would have sufficient interest coverage at this debt level of ca. over 10x. Less debt may be sourced if project equity or pre-payments are utilised.

Recommendation:

- **We maintain our Buy recommendation on PLS and increase our price target to \$0.78/share (prior \$0.76/share) based on our risked valuation.**
- **Catalysts include the DFS; Resource upgrade; progress on offtake and financing; and continuing positive industry and pricing outlook for lithium.**

Recommendation	Buy
Previous	Buy
Risk	High
Price Target	\$0.78
Previous	\$0.76
Share Price (A\$)	\$ 0.675
ASX Code	PLS
52 week low - high (A\$)	0.048-0.695
Valuation (A\$/share) - risked	\$0.78
Methodology	DCF
Capital structure*	
Shares on Issue (M)	1,134
Market Cap (A\$M)	765
Net Debt/(Cash) (A\$M)	-106
EV (A\$M)	659
Options (M)	41
Fully diluted EV (\$M)	687

*Pro-forma assuming conditional placement and SPP

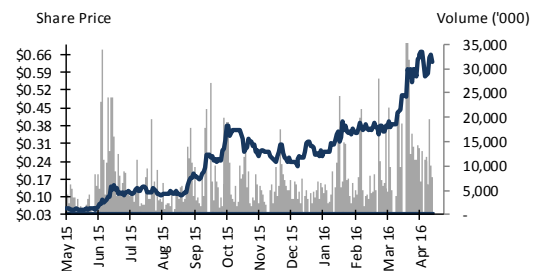
12mth Ave Daily Volume ('000) 7,283

Y/e Jun (A\$M)	2015a	2016e	2017e	2018e
Sales	0.0	0.0	0.0	119.1
Adj EBITDA	-3.2	-4.8	-4.8	43.4
Adj NPAT underlying	-3.4	-4.9	-2.7	55.5
Adj EPS diluted \$	-0.01	-0.01	0.00	0.05
PER x diluted	nm	nm	nm	13.7
EV/EBITDA x	nm	nm	nm	8.9

*Adj = undelying FSB estimate

Board	
Tony Leibowitz	Non-Executive Chairman
Ken Brinsden	Managing Director
Neil Biddle	Executive Director
Robert G Adamson	Non-Executive Director
John Young	Executive Director

Share Price Graph



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Foster Stockbroking acted as Sole Lead Manager to the \$12M placement of 52M shares at \$0.23 in November 2015. Foster Stockbroking received fees for this service.



Pilbara Minerals (PLS)

Full Year Ended 30 June

Profit and Loss A\$M	2015a	2016e	2017e	2018e
Sales	0.0	0.0	0.0	119.1
Operating Costs	3.2	4.8	4.8	43.4
Underlying EBITDA	-3.2	-4.8	-4.8	75.7
D&A	0.0	0.0	0.0	12.0
Underlying EBIT	-3.2	-4.8	-4.8	63.7
Net Interest exp / (income)	0.2	0.1	-2.2	5.1
Profit before tax	-3.4	-4.9	-2.7	58.5
Tax exp / (benefit)	-0.1	0.0	0.0	3.0
Underlying NPAT	-3.4	-4.9	-2.7	55.5
Non-recurring items	-2.1	0.0	0.0	0.0
Reported NPAT	-5.5	-4.9	-2.7	55.5
Underlying EPS diluted (\$)	-0.01	-0.01	0.00	0.05

Financial Metrics	2015a	2016e	2017e	2018e
Sales growth %	nm	nm	nm	nm
EPS growth %	nm	nm	nm	nm
EBITDA margin	nm	nm	nm	64%
EBIT margin	nm	nm	nm	53%
Gearing (ND/ND+E)	-13%	-1420%	-10%	17%
Interest Cover (EBIT/net int)	nm	nm	nm	12x
Average ROE %	nm	nm	-2%	39%
Average ROA %	nm	nm	-3%	25%
Wtd ave shares (M)	589	840	903	1,134
Wtd ave share diluted (M)	589	937	1,175	1,175

Cashflow A\$M	2015a	2016e	2017e	2018e
Underlying EBITDA	-3.2	-4.8	-4.8	75.7
Change in WC	-0.2	0.6	0.0	-12.8
Tax paid	0.0	0.0	0.0	-3.0
Other	-0.1	0.0	0.0	0.0
Net interest	0.0	-0.1	2.2	-5.1
Share based payments	2.0	0.0	0.0	0.0
Operating Cashflow	-1.5	-4.3	-2.6	54.7
Purchase of PP&E	-0.1	0.0	-92.0	-97.4
Acquisitions	-1.0	0.0	0.0	0.0
Capitalised expenses	-0.5	-2.9	-2.9	-2.9
Investments	0.0	-2.0	0.0	0.0
Other	-1.6	-1.0	0.0	0.0
Investing Cashflow	-3.1	-5.9	-94.9	-100.3
Equity issue	5.2	115.0	0.0	0.0
Debt proceeds	1.7	0.0	107.0	0.0
Debt repayments	0.0	0.0	0.0	0.0
Other	-0.1	0.0	0.0	0.0
Financing Cashflow	6.8	115.0	107.0	0.0
Net Cashflow	2.2	104.8	9.5	-45.5

Sales and earnings multiples	2015a	2016e	2017e	2018e
P/E x	nm	nm	nm	14.1
EV/EBITDA x	nm	nm	nm	8.9
EV/EBIT x	nm	nm	nm	10.6
Dividend yield %	0	0	0	0

Company Valuation	A\$M	A\$/sh	A\$M	A\$/sh
DCF, WACC 10% nominal				
	Unrisked	Unrisked	Risked	Risked
Segment	A\$M	A\$/sh	A\$M	A\$/sh
Pilgangoora Yrs 1-15 Reserves	491.8	\$0.42	467.7	\$0.40
Pilgangoora Yrs 16-30 Potential Reserves	230.1	\$0.20	195.6	\$0.17
Pilgangoora Other Resource/Exploration	137.1	\$0.12	89.1	\$0.08
3Mtpa optionality	229.9	\$0.20	46.0	\$0.04
Tabba Tabba	15.0	\$0.01	7.5	\$0.01
Cash from conditional placement and SPP	46.0	\$0.04	46.0	\$0.04
Cash from options	3.2	\$0.00	3.2	\$0.00
Net cash (debt) April 22nd	60.0	\$0.05	60.0	\$0.05
Company Valuation	1213.1	\$1.03	915.1	\$0.78
Diluted shares (M) now*	1,053.4			
Shares from conditional placement & SPP	121.1			
Pro-forma diluted shares	1,174.5			
*Includes options which are in-the-money at FSBe valuation.				

Balance Sheet A\$M	2015a	2016e	2017e	2018e
Cash	3.2	108.0	117.4	71.9
Receivables	0.9	0.0	0.0	19.6
PPE	0.1	0.1	92.1	177.4
Capitalised exploration	1.8	1.8	1.8	1.8
Intangibles	1.2	1.2	1.2	1.2
Other	1.6	8.0	12.0	14.4
Total Assets	8.9	119.1	224.5	286.3
Accounts payable	0.7	0.4	0.4	7.1
Provisions	0.0	0.5	0.4	3.6
Debt	2.6	0.0	107.0	107.0
Other	0.0	2.6	3.8	0.1
Total Liabilities	3.4	3.5	111.6	117.8
Reserves and capital	24.9	139.9	139.9	139.9
Retained earnings	-19.4	-24.3	-27.0	28.6
Minorities	0.0	0.0	0.0	0.0
Total Equity	5.4	115.6	112.9	168.5

Commodity Assumptions	2015a	2016e	2017e	2018e
Prices				
Spodumene 6% Li ₂ O (US\$/t)	-	454	496	506
Tantalite (US\$/lb)	-	60	60	60
A\$ (US\$)	-	0.73	0.70	0.70
Production				
Spodumene kt	-	0.0	0.0	165.1
LCE kt	-	0.0	0.0	24.5
Tantalite t	-	0.0	0.0	104.2
C3 costs US\$/t of spodumene	-	0	0	170

Capital structure	M
Ordinary shares	1,012.4
Conditional placement shares	81.6
SPP shares	39.5
Options (ex price \$0.03 to \$0.15, expiries Dec 2016 to Dec 2017)	41.0
Fully diluted equity pro-forma	1,174.5

Source: Company; Foster Stockbroking estimates



PLS RAISES EQUITY OF \$100M

- On the 4th April Pilbara Minerals (PLS) announced it had raised \$100M at a price of \$0.38/share, comprising:
 - \$54M unconditional placement of 142M shares;
 - \$31M conditional placement of 81.7M shares subject to shareholder approval at a General Meeting on the 24th May; and
 - \$15M via a share purchase plan, to be fully underwritten, closing on 18th May.

Funding to be predominantly allocated for capex

- The funds raised by PLS will be predominantly allocated to capex. We estimate ca. \$92M will be for capital expenditure, with the balance (\$8M) for completion of the DFS including engineering, drilling, and pilot testing, as well as further exploration.

FUNDING OPTIONS FOR BALANCE OF CAPEX

- With approximately \$106M pro-forma cash post placement and SPP, we estimate PLS will require a further \$107M funds to spend on the balance of the Pilgangoora project capex and working capital. Our breakdown of the requirement is shown in Figure 1.

Figure 1: Forecast PLS Funding

Item	A\$M
Cash at 22 nd April (includes unconditional placement funds)	60.0
Conditional placement & SPP funds	46.0
Cash balance pro-forma (A)	106.0
DFS	5.0
Exploration	3.0
Capex	184.0
Working capital	21.1
Funds required (B)	213.1
Balance required (B-A)	107.1

Source: Company; Foster Stockbroking estimates.

Debt and project equity/pre-payment options

- We expect PLS will examine various options to raise the outstanding funds, including conventional and other/hybrid debt instruments, as well as offtake party options such as pre-payments or even project equity. The company expects to complete financing by end CY2016.

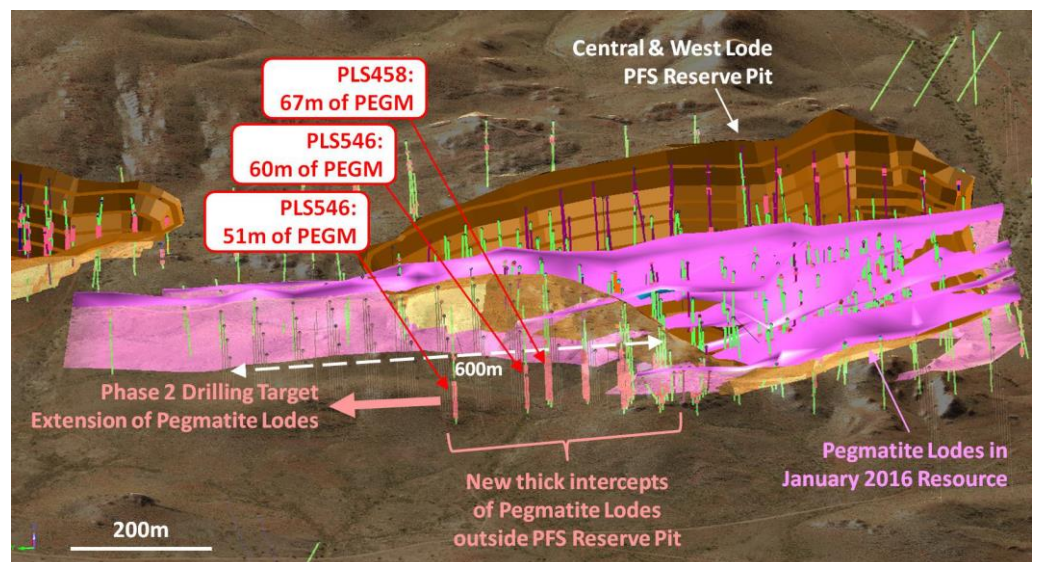
INFILL AND EXTENSIONAL DRILLING INCREASES EXPLORATION TARGET

- **PLS this week increased its exploration target to between 130 and 150Mt at 1.2-1.5% Li₂O above the previous target of 100-110Mt at 1.2-1.5% Li₂O.** The target is inclusive of its 80.2Mt JORC Resources. Recent results showed the Central Pegmatites extend north and remain open along both strike and depth beyond the current resource. Some of the best intersections yielded grades in the range 1.7%-2.0% Li₂O.

Pit extension likely to reduce strip ratio

- The company has been undertaking a 15,000m drill campaign since February to in-fill, upgrade, and expand the current JORC Resource, and has completed ca. 12,500m to date. A further 16,000m program is to commence 10th May to identify resources outside the current JORC envelope, as well as increase the Reserves. This drilling will mostly target north west extensions at the Central prospect, with a larger pit likely to be generated as a result of the infill and exploration drill program. Extension of the Central Pit will likely reduce the strip ratio.

Figure 2: PLS Pilgangoora Central Pit Extensions from Recent Drilling



Source: Company; Foster Stockbroking estimates

BULK SAMPLES FOR MARKETING

- PLS is undertaking diamond drilling to extract samples for network, as well as bulk samples for marketing. We expect battery grade samples will likely be shipped to interested offtake parties by end of May, and technical grade samples in June. We believe these samples will be an important step in converting MoUs to binding agreements.

CEO KEN BRINDEN APPOINTED TO BOARD

- The company announced this week the appointment of CEO Mr Ken Brinden to the Board, who now becomes Managing Director. This is another key step in PLS eventually transitioning from developer to producer, drawing on Mr Brinden's experience as a mining engineer and being MD at a producer (Atlas Iron Ltd). Executive Director Mr Neil Biddle will plan to step down to a Non-Executive Director role after release of the DFS. The company intends to appoint additional Board members to bring in a mix of skills in accordance with the company's growth in size.



IMMEDIATE MILESTONES GOING FORWARD

- We envisage substantial newsflow from the company over the next few months as it strives to bring Pilgangoora eventually into production. This includes:
 - **Likely resource upgrade in size and quality.** We expect a resource upgrade prior to release of the DFS. These will likely include an increase in the quality of the resource classification, with an increase in JORC Reserves to underpin a longer life for the DFS than the 15 years examined in the PFS. We note at the time of the PFS, PLS had identified a 54Mt mining inventory which it was seeking to ultimately convert into reserves underpinning a greater than 25 year mine life.

DFS Release. The company expects to release its DFS for Pilgangoora in August 2016. Some parameters for which we expect improvements are flotation recoveries and strip ratios. We also anticipate the DFS will examine a longer mine life (>20 years) based on an increase in JORC Reserves. While we expect the DFS to examine 2Mtpa as the base case, it may contain some analysis of 3Mtpa case, given 1) The size of the Pilgangoora and 2) Should future lithium demand increase greater than market expectations. There may also be some price sensitivity analysis.
 - **Offtake agreements.** The company continues to progress discussions with potential customers to convert its offtake MoUs into a binding contracts, and we expect bulk samples to be shipped from May onwards. We believe there is a reasonable likelihood that PLS may convert at least one of its numerous MoUs prior to release of the DFS
 - **Long lead time order and early works.** After release of the DFS, we expect the company may likely place orders for long lead items in the 3Q CY2016. We anticipate commencement of early site works such as completion of roads upgrade by 4Q 2016 before construction proper of the plant beginning 2017.

**VALUATION – \$0.78/SHARE RISKED, \$1.03/SHARE UNRISKED**

- **Our risked valuation of PLS has increased to \$0.78/share and unrisked to \$1.03/share (previously \$0.76 and \$0.86).** The reasons for our increase are attributable to: 1) Adding the optionality of a 3Mtpa expansion case, and 2) The increase in exploration target. These have offset the slightly more dilutive equity raising than we had forecast, as well as a revision upward of our immediate A\$ forecasts.
- **3Mtpa optionality case.** We expect 2Mtpa to be the base case of the DFS, and it is also the base case in our DCF model. However, given the increasing size of the project, a 3Mtpa case cannot be neglected, and we expect PLS will examine it as an option in the DFS. Consequently we have run a 3Mtpa scenario in our DCF (beginning Year 5), and found that the incremental value to NPV is \$230M, by virtue of bringing forward production. However we have risked this scenario by 20%. While Pilgangoora has the size to underpin a 3Mtpa project, it needs the supply-demand dynamics also to work in its favour. This may occur if EVs penetrate more deeply and rapidly than the market expects, and/or other lithium projects take longer to come onstream. If either or both these scenarios eventuate, then 3Mtpa becomes more probable.
- **Increase in exploration target.** We have added the increase in Exploration Target tonnes at the back end of our DCF model. These additional tonnes are risked by 65%.
- The increase in valuation from adding the 3Mtpa optionality and increased Exploration Target was partially offset by factoring in PLS's equity raising of \$100M at \$0.38/share which was slightly more dilutive than our previous assumption of a \$66M equity raise at \$0.35/share. We also revised our A\$ forecasts in the immediate years as follows:
 - FY17e: US\$0.70 (previous \$0.69);
 - FY18e: US\$0.70 (previous \$0.69); and
 - FY19e: US\$0.71 (previous US\$0.70).
- Our long term A\$ forecast remains unchanged at US\$0.73.

Figure 3: PLS Equity Valuation

Segment	Unrisked A\$M	Unrisked A\$/sh	Risked A\$M	Risked A\$/sh	Risk factor
Pilgangoora Yrs 1-15 Reserves	491.8	\$0.42	467.7	\$0.40	5%
Pilgangoora Yrs 16-30 Potential Reserves	230.1	\$0.20	195.6	\$0.17	15%
Pilgangoora Other Resource/Exploration	137.1	\$0.12	89.1	\$0.08	35%
Incremental value from 3Mtpa option	229.9	\$0.20	46.0	\$0.04	80%
Tabba Tabba	15.0	\$0.01	7.5	\$0.01	50%
Cash from conditional placement and SPP	46.0	\$0.04	46.0	\$0.04	0%
Cash from outstanding options	3.2	\$0.00	3.2	\$0.00	0%
Net cash (debt) April 22nd	60.0	\$0.05	60.0	\$0.05	0%
Company Valuation	1,213.1	\$1.03	915.1	\$0.78	25%
Diluted shares (M) now*	1,053.4				
Shares from conditional placement & SPP	121.1				
Pro-forma diluted shares	1,174.5				

*Includes options which are in-the-money at FSBe valuation.

Source: Foster Stockbroking estimates.

**We assume debt funding in our model for balance of capex**

- We now assume the outstanding \$107M required for Pilgangoora's capex and working capital will be financed from conventional debt. Previously we had assumed \$134M of debt required, but the larger size of the equity raised by PLS has now reduced the quantum of debt. We forecast interest coverage (EBIT/net interest expense) in FY18e would be ca. 12x if \$107M of debt was drawn. We note that PLS may raise less debt than we have assumed e.g. by utilising pre-payments and/or project equity.

Pricing the key upside risk to our valuation

- We have left our spodumene pricing forecasts unchanged, our long-term forecast price being US\$488/t. However we note that this is below current pricing achieved by recent emerging producers (e.g. US\$600/t for spodumene for Mt Cattlin).
- PLS's valuation is most sensitive to the spodumene price, and every US\$100/t increase in the long-term price adds \$0.20-\$0.23/share to PLS's risked and unrisked valuation (Figure 4).

Figure 4: PLS Pilgangoora Valuation Sensitivity to Long-Term Spodumene Price

LT Spodumene Price US\$/t:	488	500	600	700
Risked Valuation \$/share	0.78	0.80	1.00	1.21
Unrisked valuation \$/share	1.03	1.06	1.29	1.52

Source: Foster Stockbroking estimates.

EARNINGS FORECASTS

- We forecast NPAT of \$55.5M in FY18e and \$83.0M in FY19e for PLS.
- At the current shareprice PLS is on a PER of 9.4x FY19, which is the first full year of production from Pilgangoora. We show NPAT and PER for other price scenarios in FY19 in Figure 4.

Figure 4: PLS NPAT and PER Sensitivity to Spodumene Price in FY19e

Spodumene Price US\$/t	NPAT A\$M	PER x
US\$495/t – Base Case	83.0	9.4x
US\$600/t	116.4	6.7x
US\$700/t	146.5	5.3x

Source: Foster Stockbroking estimates.



RECOMMENDATION BUY PRICE TARGET \$0.78/SHARE

- **We maintain our Buy recommendation on PLS and increase our price target to \$0.78/share** (prior \$0.76/share) based on our risked valuation.
- **Catalysts include:**
 - Release of the DFS;
 - Resource upgrade;
 - Binding offtake agreements;
 - Progress on financing; and
 - Continuing positive industry and pricing outlook for lithium.



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Specific disclosure: Foster Stockbroking acted as Sole Lead Manager to the \$12M placement of 52M PLS shares at \$0.23 in November 2015. Foster Stockbroking received fees for this service.