



ASX / MEDIA ANNOUNCEMENT

29 April 2019

# **MARCH 2019 QUARTERLY ACTIVITIES REPORT**

Commercial production declared at the Pilgangoora Lithium-Tantalum Project (Stage 1, 2Mtpa operation) as Pilbara Minerals embarks on a Stage 3 partnering process following positive Scoping Study results and progression of its downstream 'value adding' strategy.

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# **HIGHLIGHTS**

#### PRODUCTION AND MARKETING

- March Quarter production of 52,196 dry metric tonnes (dmt) of spodumene concentrate (December quarter: 47,859dmt), despite the impact of Tropical Cyclone Veronica.
- March Quarter sales of 38,562dmt of spodumene concentrate, impacted by the delay of one shipment following Tropical Cyclone Veronica (December quarter: 46,598dmt). Tantalite concentrate sales of 30,356lbs (December quarter: 27,821lbs).
- Declaration of commercial production effective from 1 April 2019.
- Lithia recovery rates continue to improve, contributing to higher spodumene concentrate production during April as compared to the March Quarter.

## **PROJECT DEVELOPMENT**

- Scoping Study for Stage 3 project expansion delivers positive results including:
  - **Exceptional project economics**: post-tax NPV<sub>10%</sub> of A\$3.73B; LOM project revenue of A\$16.6B (real excluding tantalite) and LOM Project EBITDA of A\$10.3B (pre-tax, real).
  - **Substantial increase in processing capacity** to 7.5Mtpa to deliver average annual production of approximately 1.2Mtpa of SC6.0 spodumene concentrate and approximately 1.1Mlbspa of 30% tantalite concentrate over a 15-year mine life (based on existing Reserves).
  - **Competitive LOM operating costs** of approximately US\$291/tonne CIF (real, net of tantalite credits).
- Partnering process commenced to consider Stage 3 offtake, further vertically integrated chemical facilities and the potential sale of a minority project-level interest of between 20% and 49% in the Pilgangoora Lithium-Tantalum Project (Pilgangoora Project).
- Early works, engineering and ordering of long lead items for the Stage 2 development continued to progress, as well as ongoing progression of Stage 2 funding initiatives.

## CORPORATE

- Exercise of option to participate in an incorporated downstream joint venture (DJV) with POSCO to develop a 40ktpa LCE chemical conversion facility in South Korea, subject to final due diligence, financing, completion of binding documentation and the Board making a final investment decision (FID), expected in the June Quarter 2019.
- Receipt of A\$50M from Jiangxi Ganfeng Lithium Co. Ltd (Ganfeng) under the previously announced Equity Subscription Agreement (*ASX announcement 2 January 2019*).
- Cash balance as at 31 March 2019 of A\$103.9M (31 December 2018: A\$70.2M).



# **1. MANAGEMENT OVERVIEW**

Ken Brinsden, Pilbara Minerals' Managing Director and CEO, said:

"The March Quarter was another busy period for Pilbara Minerals as we continued to make further operational progress at the Pilgangoora Project, whilst maintaining momentum with our long-term growth initiatives – including the Stage 2 and 3 expansions and our strategy to diversify operations into the downstream chemical conversion industry.

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"The operational progress made during the Quarter resulted in the declaration of commercial production at the Pilgangoora Project effective from 1 April 2019, which was a fantastic achievement so soon after the start of mining and just over four years since exploration work first commenced at the site. The team continues to work hard on optimising the performance of the Stage 1 plant, with solid gains being made from the second half of March which have flowed through into notable improvements in lithia recoveries during April.

"With the Stage 1 project now in commercial production, our proposed expansion plans are taking shape with the completion of a Stage 3 Scoping Study highlighting the outstanding economics of increasing production to 1.2 million tonnes per annum of spodumene concentrate.

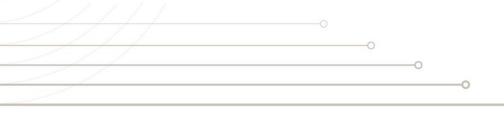
"Following these results, the Company commenced a Stage 3 partnering process to consider further offtake, downstream participation options and the potential sale of a minority interest in the Pilgangoora Project.

"The Pilgangoora Project's Tier-1 status has historically attracted strong interest from participants across the global lithium supply chain.

"Our participation in downstream chemical conversion facilities is building momentum through the recent exercise of our option to enter into a joint venture with POSCO for a 40ktpa LCE capacity chemical conversion facility in South Korea, as well as the positive scoping study results to evaluate a potential secondary lithium chemical conversion facility. Collectively, these projects have the potential to support further vertical integration of our business and diversify Pilbara Minerals' entrance into this high value market."



#### Figure 1: Pilgangoora Lithium-Tantalum Project





# **2. SAFETY PERFORMANCE**

An improved safety performance for the Quarter ended with a reduction in the rolling 12-month total recordable injury frequency rate (TRIFR) to 2.83, compared to 3.21 from the previous quarter.

# **3. PRODUCTION AND SALES**

	Units	Q3 FY18	Q4 FY18	Q1 FY19	Q2 FY19	Q3 FY19
Ore mined <sup>1</sup>	wmt	0	336,648	487,987	762,531	540,426
Waste mined <sup>1</sup>	wmt	1,832,205	2,859062	1,921,907	2,154,690	2,445,917
Total material mined	wmt	1,832,205	3,195,710	2,409,894	2,917,220	2,986,342
Ore processed	wmt	-	-	173,667	420,221	414,223

#### Table 1: Total ore mined and processed

<sup>1</sup>Prior quarter results have been adjusted to reflect the re-classification of certain ore tonnes to mineralised waste.

	Units	Q3 FY18	Q4 FY18	Q1 FY19	Q2 FY19	Q3 FY19
Direct Shipping Ore (DSO) sold	wmt	-	145,974	205,766	O <sup>2</sup>	0 <sup>2</sup>
Spodumene concentrate produced	dmt	-	-	11,015	47,859	52,196
Spodumene concentrate sold	dmt	-	-	0	46,598 <sup>1</sup>	38,562
Tantalite concentrate produced	lb	-	-	22,151	56,663	33,374
Tantalite concentrate sold	lb	-	_	7,378 <sup>1</sup>	27,821	30,356 <sup>3</sup>

#### Table 2: Production and sales

<sup>1</sup> Concentrates have been adjusted following final results.

<sup>2</sup> The DSO program was suspended in Q2 FY19.

<sup>3</sup> Sales estimates pending final assays results.

#### Table 3: Stocks

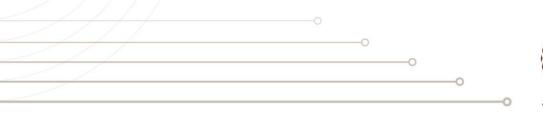
	Units	Q1 FY19	Q2 FY19	Q3 FY19
ROM stockpile	dmt	N/A <sup>1</sup>	487,292 <sup>3</sup>	520,606
Coarse ore stockpile	dmt	N/A <sup>1</sup>	82,430	96,139
Spodumene concentrate stocks	dmt	17,677 <sup>2</sup>	17,266 <sup>2</sup>	30,900 <sup>2</sup>
Tantalite concentrate product stocks	lb	14,774 <sup>4</sup>	43,6164	46,634

<sup>1</sup>No previous reporting for period due to completion of build and commissioning phase.

<sup>2</sup> Includes low-spec stocks produced during initial commissioning phase, which are expected to be sold over time.

<sup>3</sup> Prior quarter results have been adjusted to reflect the re-classification of certain ore tonnes to mineralised waste.

<sup>4</sup> Concentrates adjusted following final sales results.





# **4. OPERATIONS OVERVIEW**

### 4.1 MINING

Mining activities at the Pilgangoora Project continued to progress well (albeit with minor impacts from cyclone Veronica late in the quarter), with increased mining volumes from the prior quarter being consistent with the overall project ramp-up plan and requirements for increased ore feed.

Mine production during the Quarter comprised 540,426 ore tonnes grading 1.26% Li from the Central pit.

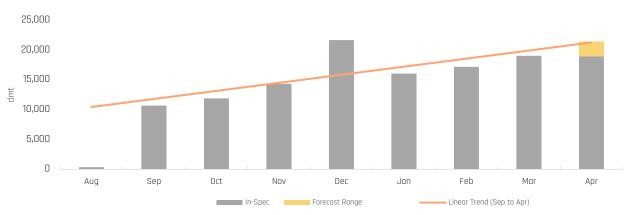
### 4.2 PROCESSING

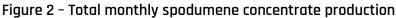
The March 2019 Quarter has focused on continued optimisation of the process plant operation as advised previously in the Company's ASX announcement dated 28 March 2019.

Mill throughput for the Quarter totalled 414,223dmt, with the Pilgangoora Project's processing plant performing within expectations for both product throughput and concentrate quality throughout the Quarter.

Spodumene concentrate production volumes are outlined below (refer Figure 2).

Consistent delivery of spodumene concentrate meeting an average of approximately 6% lithia content (SC6.0) has been achieved throughout the March Quarter. It should be noted that coarse and fines product from the plant are blended together to meet customer and grade specifications.





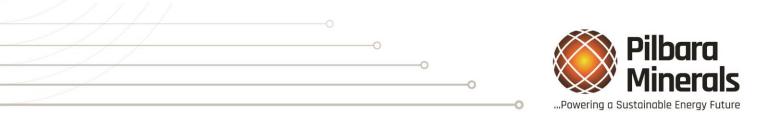
<sup>1</sup> April production is unreconciled production to 27 April 2019, with an estimate of expected production to April 2019 month end.

Leading into the end of the March Quarter, a series of optimisations to the flotation circuit were completed, with a commensurate uplift in lithia recoveries achieved up to 18<sup>th</sup> April. During this period the average unreconciled recovery was 63%, representing 84% of the target design recovery (75%).

Following a planned shutdown in early April, further adjustments to the plant (consistent with the Company's recovery improvement program) were implemented, and average recovery (unreconciled) between 9<sup>th</sup> April and 18<sup>th</sup> April was 65%.

In the last week, lithia recovery has been impacted by the ore blend fed to the plant containing higher than normal 'transitional ore' content (mined earlier in the schedule), as a result of Tropical Cyclone Veronica impacting access to the Central 'Stage 1' pit in late March and early April, thereby delaying the mining of 'fresh ore'. The mining sequence has now returned to Central Stage 1 pit providing fresh ore as part of the regular blend to the process plant, with a commensurate improvement in lithia recovery rates anticipated.

Final April spodumene concentrate production is expected to be in range of 20-22kt (dmt, SC6.0 basis).



The expectation remains that design recovery levels will be achieved before the end of CY2019 through the series of ongoing production improvement projects which have previously been foreshadowed (*refer to ASX release 28 March 2019*).

### 4.3 SALES

Consistent production of spodumene concentrate (SC6.0 basis) has been achieved throughout the March Quarter at Pilgangoora.

Three shipments of spodumene concentrate were completed, totalling 38,562 dry metric tonnes (dmt). The product was a blend of coarse and fines concentrate to achieve contracted grade specification and was shipped to offtake partners in north Asia.

One of these shipments allowed for the blending of some "off-specification" concentrate produced early in the commissioning cycle, which resulted in 9,090dmt of product grading 5.81% lithia being sold.

In light of Stage I spodumene concentrate operations and softer market conditions for DSO product, the DSO program remained suspended throughout the Quarter pending a final evaluation from Pilbara Minerals, its customer (Atlas Iron) and end customer (Sinosteel) (*refer ASX announcement dated 2 January 2018*). The parties have since elected to terminate the DSO operation.

A provisional 30,356lbs of tantalite concentrate was sold during the Quarter (pending final assay results).

# **5. PROJECT DEVELOPMENT**

#### 5.1 IMPROVEMENT PROJECTS

During the Quarter, the Company progressed several improvement projects aimed at delivering progressive increases in production to support Pilbara Minerals' objective of achieving nameplate process plant recovery by the end of CY2019.

The Quarter primarily focused on a series of optimisations to the flotation circuit and concentrate filtration equipment. Following implementation, the flotation circuit optimisations have increased recovery to product as evidenced by improved recovery rates achieved subsequent to the end of the March Quarter. The improvements made to the filtration equipment have included volumetric increases and improvements to control systems, supporting consistent flotation plant performance and enabling higher filtration throughput.

The Company also progressed a series of modifications to the existing plant directly related to prior works performed by the EPC contractor RCR (in administration). These works are being undertaken by the Company in accordance with "step-in" rights under the EPC contract and estimated costs are expected to be recovered from bank guarantees and monies held by the Company. The works are expected to be completed within CY2019.

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## 5.2 STAGE 3, 7.5MTPA EXPANSION SCOPING STUDY

The outcomes of a Scoping Study assessing the merit of an expanded operation, from 5Mtpa to 7.5Mtpa, at the Pilgangoora Project (termed "Stage 3") delivered strong economic results during the Quarter.

The Scoping Study re-affirmed the Pilgangoora Project's scale and quality and strengthens Pilbara Minerals' potential to become one of the world's largest, lowest cost hard-rock lithium and tantalum producers.

With an estimated incremental capital cost of A\$225.83M (+/- 30%), the proposed Stage 3 expansion would see the Pilgangoora Project's processing capacity expand to 7.5Mtpa. This would deliver an average of approximately 1.2Mtpa ~6% spodumene concentrate and ~1.1Mlbspa 30% tantalite concentrate over an estimated 15-year LOM, based on the existing project Reserves. Stage 3 capital is in addition to the previously announced Stage 2 capital expenditure of A\$231M.

The Scoping Study, which was based on the current Reserves of 108Mt, has delivered positive economics (for 100% of Stage 1, 2 and 3) including a LOM project revenue of A16.6B, a post-tax NPV<sub>10%</sub> of A3.73B and an average annual LOM cash operating cost of US291/tonne CIF.

The Stage 3 expansion would build off the current Stage 1 operation and the proposed Stage 2 expansion, through the construction of a parallel processing train. While the key process steps would remain unchanged, the build would involve the construction of an additional 2.5Mtpa crushing circuit to complement the combined processing capacity of the Stage 1 and 2 circuits of 5Mtpa.

KEY SCOPING STU	DY OUTCOMES
Life of mine (based upon reserves)	15 years <sup>1</sup>
LOM project revenue (real	A\$16.6 billion
excluding tantalite)	
LOM project EBITDA (pre-tax; real)	A\$10.3 billion
Stage 3 pre-production capital (incl	A\$225.83million <sup>2</sup>
contingency)	
Post-tax NPV <sub>10%</sub>	A\$3.73 billion <sup>3</sup>
Average annual LOM cash	US\$291/dmt CIF⁵
operating costs <sup>4</sup> (real, net of $Ta_2O_5$	
credits)	
Spodumene concentrate price first	US\$700/dmt CIF⁵
five years (average, real)	
Spodumene concentrate price (LOM	US\$765/dmt CIF⁵
average, real)	
Foreign currency exchange rate	0.75
(AUD: USD)	
LOM average annual EBITDA (real)	A\$684M

#### Table 4: Stage 3 Scoping Study key outcomes

<sup>1</sup> Mine life is calculated from 1 July 2019.

iv Future

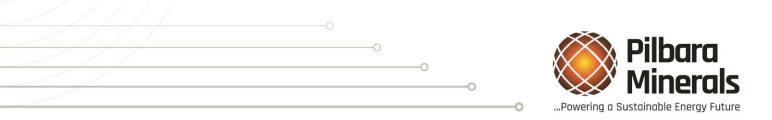
<sup>&</sup>lt;sup>2</sup> Stage 3 capital is exclusive of Stage 2 capital of A\$231 million as per Pilbara Minerals' Stage 2 Definitive Feasibility Study (3 August 2018).

<sup>&</sup>lt;sup>3</sup> Valuation date is 1 July 2019 at an after-tax nominal discount rate of 10%.

<sup>&</sup>lt;sup>4</sup>Cash operating costs include mining, processing, transport, state and private royalties, native title costs, port, shipping/freight and site based general and administration costs, an allocation of corporate administration/overhead cost and are net of Ta<sub>2</sub>O<sub>5</sub> by-product credits.

<sup>&</sup>lt;sup>5</sup> CIF ("Cost Insurance and Freight") (Incoterm) is a trade term requiring the seller to deliver goods

onboard at port of discharge, plus cover the cost of transport and freight insurance to the destination port.



A final investment decision and delivery schedule for Stage 3 is dependent on further feasibility studies, market conditions and customer requirements. The timing of its delivery may also be dependent on the outcomes of the partnering process and/or any associated chemical conversion facility and project funding requirements.

Full details of the Stage 3 Scoping Study were provided in the Company's ASX Announcement dated 26 March 2019.

# **5.3 STAGE 3 PARTNERING PROCESS**

Following the completion of the Stage 3 Scoping Study, Pilbara Minerals commenced a partnering process during the Quarter to consider Stage 3 offtake, further vertically integrated chemical facilities and the potential sale of a minority project level interest in the Pilgangoora Project of between 20% to 49%.

It is anticipated that between ~270ktpa and 400ktpa of additional SC6.0 spodumene concentrate will become available following the development of Stage 3, either as offtake to an incoming participant in the partnering process or for the development of an additional chemical conversion facility in conjunction with a downstream partner. The available uncommitted spodumene concentrate tonnes (beyond 270ktpa), will be subject to the exercise of any extended terms for expanded offtake agreements with existing customers.

The partnering process will consider a range of potential transactions including the sale of a minority interest of between 20% and 49% in the Pilgangoora Project, offtake arrangements for the Stage 3 expansion and/or the creation of a newly established joint venture to develop a second chemical conversion facility, either locally or internationally.

The partnering process will not include Pilbara Minerals' interest in the proposed POSCO downstream joint venture (DJV) for a potential ~40ktpa lithium hydroxide facility in South Korea (*ASX announcements: 3 January and 18 March 2019*), which the Company intends to retain as a separate legal entity within its corporate structure. The proposed DJV plant with POSCO will be supported by the existing offtake arrangements from the Pilgangoora Project.

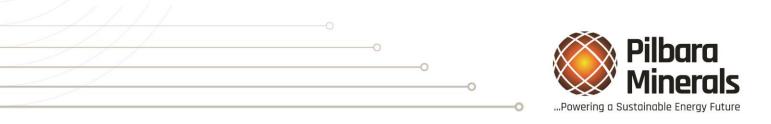
Pilbara Minerals is targeting a decision in respect of a potential partnering transaction in mid CY2019. However, there is no certainty that any transaction will be announced or completed.

Pilbara Minerals will only enter into a transaction if it is value accretive and in the best interests of shareholders. The Company believes that neither its Stage 3 expansion nor its downstream 'value adding' strategy are reliant upon a sell-down at the project level.

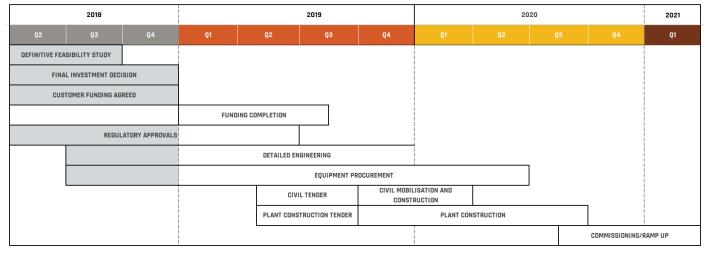
Pilbara Minerals has appointed Macquarie Capital (Australia) Limited and Allen & Overy to assist in managing the partnering process.

## 5.4 STAGE 2, 5MTPA EXPANSION

In light of the potential to revise the Company's funding structure through the partnering process being contemplated (outlined above) and in consideration of the needs of our customers (who in turn are developing or commissioning their own chemical facilities), Pilbara Minerals announced during the Quarter that commissioning of the Stage 2 project would be delayed by approximately six months to the September Quarter of 2020 (Figure 2).



#### Figure 2: Indicative Stage 2 project schedule



# **6. EXPLORATION**

### **6.1 PILGANGOORA PROJECT EXPLORATION**

Reverse Circulation ("RC") grade control drilling programs were completed in the Central and Eastern pit areas and, by the end of the Quarter, a total of 266 holes had been drilled for an advance of 10,939m. Further RC grade control drilling is scheduled to resume in the September 2019 Quarter.

An exploration RC drilling program over a selection of targets within the greater Pilgangoora mine area is scheduled to commence in early April 2019. Many of the targets have been qualified by the occurrence of outcropping spodumene-bearing pegmatites. While the drilling program is focused on exploration, an additional objective is to sterilise unexplored areas for potential infrastructure and materials handling.

During the Quarter, Pilbara Minerals continued water exploration drilling to source additional supply for the Stage 2 and 3 expansion. A total of 10 exploration pilot holes were drilled for 1,051m. The program was highly successful, resulting in the development four new production water bores to the west of the Pilgangoora Project. This supplementary water supply will add significantly to the overall water balance in support of current activities and future water requirements for project expansion(s).

#### 6.2 MT FRANCISCO JOINT VENTURE (PLS 70% / AGO 30%)

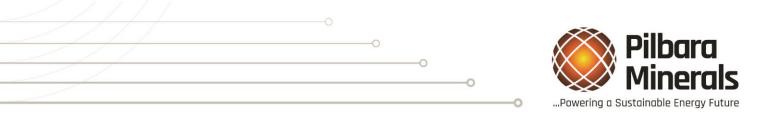
No exploration activity was undertaken on the Mt Francisco Joint Venture.

# 7. CORPORATE

## 7.1 COMMERCIAL PRODUCTION

During the Quarter, Pilbara Minerals declared commercial production at the Pilgangoora Project effective from 1 April 2019 following sustained performance across the following key production criteria:

- **Production** steady spodumene concentrate production with production trending towards design capacity.
- **Feed-rate** process plant feed-rates achieved plant design requirements of 270 tonnes per operating hour, with an expectation to continue to do so into the future.



- **Product Quality** product quality achieved and expected to continue to meet customer specification requirements.
- **Recovery** average recovery rates achieved were stable, albeit below the planned recovery curve due to the longer commissioning period, as well as specific process plant issues experienced during the March Quarter which have now been largely rectified.

The Company expects further improvement to be made across all performance metrics as improvement projects are executed and further optimisation of the process plant occurs. The recent uplift in lithia recoveries in April are indicative of this. Of these performance metrics, improvement in the average lithia recovery is a key focus and Pilbara Minerals expects to deliver 100% of the designed product recovery level (of 75%) by the end of CY2019.

## 7.2 PROCEEDS FROM SALES

During the Quarter, Pilbara Minerals shipped 38,562dmt of spodumene concentrate (including 9,090dmt of product grading 5.81% lithia – refer section 4.3 above). The received price for contracted deliveries on an SC6.0 basis was US\$675/dmt (CIF China), which is reflective of the offtake pricing model developed with its key customers.

For China sales, the spodumene concentrate pricing model establishes a price reference weighted towards the Chinese domestic battery grade lithium chemicals sales, with the balance based on the price of imported lithium carbonate to select cathode materials buyers.

Sales for the Quarter were impacted by bad weather, with one shipment of ~10,000dmt delayed as a result of Tropical Cyclone Veronica in late March 2019.

# 7.3 GANFENG PLACEMENT

On 26 March 2019, Pilbara Minerals received A\$50M from Jiangxi Ganfeng Lithium Co. Ltd (Ganfeng) under the previously announced Equity Subscription Agreement (see ASX Announcement, 2 January 2019). The A\$50M placement was in lieu of a debt or pre-payment facility for Ganfeng to secure an additional 75,000tpa of spodumene concentrate under its Stage 2 offtake agreement (for a total of 150,000tpa under the Stage 2 offtake agreement).

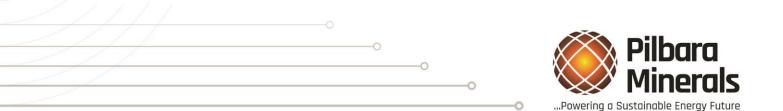
The Equity Subscription Agreement utilised part of Pilbara Minerals' existing placement capacity under Listing Rule 7.1. The equity subscription comprised the issue of 77,663,871 ordinary fully-paid shares at an issue price of \$0.6438 per share (being the 5-day VWAP prior to the execution of the Equity Subscription Agreement on 28 December 2018).

# 7.4 CASH BALANCE

Pilbara Minerals had a cash balance of A\$103.9M as at 31 March 2019 (A\$70.2M as at 31 December 2018).

Major items of expenditure during the Quarter included:

- A\$54.1M on the Pilgangoora Project operation, inclusive of Stage 1 pre-production commissioning and ramp-up costs (including inventory build), as well as costs associated with the development and construction of both Stage 1 and Stage 2 of the Project. This amount was offset by A\$12.04M received pursuant to a contractual claim for a delay in achieving a construction milestone for Stage 1.
- A\$1.6M on DSO mining costs associated with prior quarter activities.
- A\$4.3M in interest and financing payments largely associated with the USD senior secured bond



facility.

- A\$2.9M on payroll, administration and corporate costs.
- A\$1.0M on exploration and evaluation work in relation to the Pilgangoora Project (including associated feasibility studies).

During the Quarter, Pilbara Minerals received:

- Proceeds of A\$36.1M largely from concentrate sales (inclusive of spodumene and tantalite); and
- A\$50M following the equity placement to Ganfeng in exchange for providing additional offtake from Stage 2.

Pre-production costs incurred during the Quarter included expenditure to continue to build inventory levels that will support the ongoing operations at the Pilgangoora Project. Expenditure invested in inventory held by the Company at 31 March 2019 totalled \$47.5M.

Pre-production operating costs during the March 2019 Quarter were reflective of the ramp-up activities underway. Operating costs can be expected to be higher compared to equivalent costs once in steady-state operation and should normalise over the coming 2-3 quarters as the operation ramps up to its life-of-mine name plate capacity of ~320,000dmtpa of spodumene concentrate.

At 31 March 2019, the Company's US\$15M Working Capital Facility remains undrawn.

#### 7.5 EXERCISE OF POSCO OPTION

During the Quarter, Pilbara Minerals' Board conditionally exercised its option to enter into an incorporated joint venture with POSCO (for up to 30% participation) for the development of a downstream lithium chemical conversion facility in South Korea.

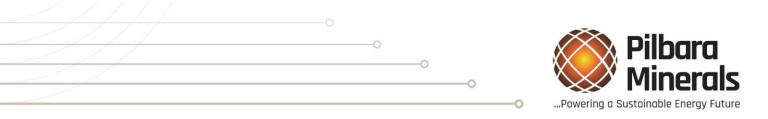
The facility, to be located in the Gwangyang Free Economic Zone in South Korea, will have up to 40ktpa LCE capacity and process spodumene concentrate from the Pilgangoora Project using POSCO's patented PosLX purification process.

Since Q4 2018, Pilbara Minerals has been undertaking technical due diligence to assess the proposed chemical plant development and work to date has delivered promising results. Due diligence has included a visit of technical staff and assessment of POSCO's existing demonstration plant using their PosLX technology, based on Pilbara Minerals' spodumene delivered from the Pilgangoora Project.

POSCO has developed their first demonstration plant (after the initial development of a pilot scale plant) that produces between 2,500tpa to 3,000tpa of lithium chemicals on an LCE basis. Based on spodumene chemical conversion, the plant has the capacity and flexibility to produce both high-grade lithium hydroxide, or alternately lithium carbonate products (i.e. the plant has the capacity to be dual purpose) with low impurities expected in the final products produced.

With PosLX technology, POSCO has been able to demonstrate the production of a very high purity lithium hydroxide which is expected to be highly sought after by South Korean battery manufacturers. Prior to Pilbara Minerals' Board making a final investment decision regarding its full participation in the DJV, there are still several outstanding conditions that will need to be satisfied. These conditions include completion of further due diligence on the proposed chemical conversion plant, financing, and finalisation of the final binding joint venture and technology licensing terms consistent with key commercial principles previously agreed between the parties. Once complete, these matters will be put to Pilbara Minerals' Board for a final decision and commitment to the joint development during the June 2019 Quarter.

The parties would then aim to complete construction of the chemical conversion plant in late 2020 with



commencement of ramp-up and production from early 2021.

### 7.6 STAGE 1 DEBT FUNDING

During the Quarter, Pilbara Minerals continued to comply with the terms and conditions of the secured US\$100M Nordic Bond used to finance Stage 1 of the Pilgangoora Project.

## 7.7 STAGE 2 AND 3 FUNDING

The positive Stage 3 Scoping Study released during the Quarter, together with the partnering and offtake process (outlined above), provides Pilbara Minerals the opportunity to pursue an optimised funding package for the combined Stage 2 and Stage 3 expansions.

The Stage 2 and Stage 3 expansions have a capital cost requirement of A\$231M and A\$226M respectively.

Pilbara Minerals previously announced a 3-part funding package for the Stage 2 expansion comprising:

- A\$50M equity placement to Ganfeng to secure an additional 75Ktpa of spodumene concentrate under its Stage 2 offtake agreement (for a total of 150Ktpa under the Stage 2 offtake agreement) this equity placement was completed on 26 March 2019;
- US\$25M pre-payment from Great Wall Motor Company to secure 75Ktpa of spodumene concentrate from Stage 2 a binding term sheet was executed in January 2019, with draw-down expected upon completion of the balance of the Stage 2 financing; and
- Additional debt funding, with the preferred source being a proposed US\$50M "Tap Issue" in accordance with the terms and conditions of the Company's existing Nordic Bond.

Pilbara Minerals continued to engage with bondholders on the "Tap Issue" during the Quarter and to assess a range of alternative debt funding options in support of the Stage 2 expansion. However, as a result of the partnering and offtake process currently being pursued, Pilbara Minerals has decided to defer sourcing the additional debt funding required for Stage 2 until this partnering and offtake process is further progressed.

This should provide greater clarity on the Company's outstanding funding requirements so that a complete and comprehensive funding solution can be pursued across both Stage 2 and 3 if desired.

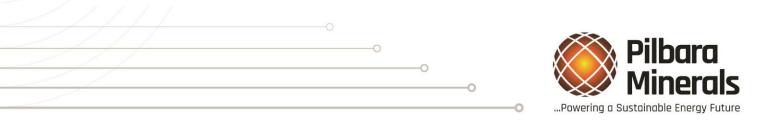
**CONTACTS:** Investors / Shareholders Ken Brinsden Managing Director and CEO Ph. +61 (0)8 6266 6266

<u>Media</u> Nicholas Read Read Corporate Ph. +61 (0)8 9388 1474

#### COMPETENT PERSONS STATEMENTS

The Company confirms it is not aware of any new information or data that materially affects the information included in the 17 September 2018 Pilgangoora Mineral Resource Estimate and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed when referring to its resource announcement made on 17 September 2018.

The Company confirms it is not aware of any new information or data that materially affects the information included in the 17 September 2018 Pilgangoora Ore Reserve Estimate and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not materially changed when referring to its resource announcement made on 17 September 2018.



### FORWARD LOOKING STATEMENTS AND IMPORTANT NOTICE

This announcement may contain some references to forecasts, estimates, assumptions and other forward-looking statements. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved. They may be affected by a variety of variables and changes in underlying assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to differ materially from those expressed herein. All references to dollars (\$) and cents in this announcement are to Australian currency, unless otherwise stated. Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.

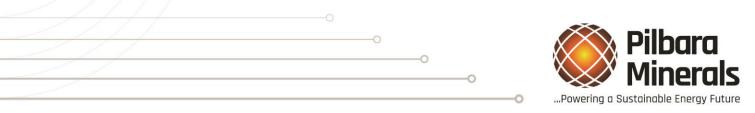


# APPENDIX 1 - TENEMENT TABLE AS AT 31 MARCH 2019

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TENEMENT		STATUS	REGISTERED HOLDER	PLS BENEFICIAL HOLDING AT START OF	PLS BENEFICIAL HOLDING AT END OF
TENEMENT			PERIOD		
E45/2241	T		PLICATIONS AT COMMENCEMENT	100%	ER 100%
	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd		
E45/3560	Pinnacle	Granted	Pilbara Minerals Limited	100%	100%
E45/3648	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
E45/4523	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
E45/4624	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
E45/4633	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
E45/4640	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
E45/4648	Pinga	Granted	Pilbara Minerals Limited	100%	100%
E45/4689	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
E45/4270	Mt Francisco	Granted	Pilbara Minerals Limited / Atlas Iron Ltd	51%	70%
E45/5332	Pilgangoora	Application	Pilbara Minerals Limited	100%	100%
L45/396	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/402	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/403	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/411	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/413	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/414	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/417	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/421	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/425	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/426	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/429	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/430	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/434	Pilgangoora	Application	Pilbara Minerals Limited	100%	100%
L45/449	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/450	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/453	Pilgangoora	Application	Pilbara Minerals Limited	100%	100%
L45/454	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/473	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/477	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/478	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/479	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/480	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/481	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/482	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/497	Pilgangoora	Application	Pilgangoora Operations Pty Ltd	100%	100%
M45/1256	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
M45/1266	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
M45/1275	Pilgangoora	Application	Pilgangoora Operations Pty Ltd	100%	100%
M45/333	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
M45/511	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
M45/78	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%



P45/2783	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%			
P45/3058	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%			
P45/3096	Pilgangoora	Application	Pilgangoora Operations Pty Ltd	100%	100%			
	APPLICATIONS MADE DURING THE QUARTER							
Nil								
TENEMENTS DISPOSED OF DURING THE QUARTER								
Nil								