



Pilbara Minerals

Tuesday 28<sup>th</sup> August, 2018

## Strong Progress at Pilgangoora as Production Ramp-Up Begins

*Pilbara's disciplined investment and project development approach delivers as the Stage 1 Concentrator moves from the commissioning phase to growing production* 

## **HIGHLIGHTS**

- First shipment loading forecast to commence 14<sup>th</sup> 21<sup>st</sup> September.
- Haulage of spodumene concentrate to Port Hedland to commence imminently.
- Primary tantalite concentrate sales underway with the first delivery to GAM during first half of September.
- Stage 1 Concentrator has already demonstrated ~220tph process run-rates, representing approximately 80% of the plant's design capacity of 270tph.

Australian lithium producer Pilbara Minerals Limited (ASX: PLS) (Pilbara Minerals or the Company) is pleased to announce that commissioning of the Stage 1 Concentrator at its 100%-owned Pilgangoora Lithium-Tantalum Project in WA's Pilbara is progressing into the ramp-up of fines concentrates production for customer delivery.

Product specifications for both fines spodumene concentrate and primary tantalite concentrates, are now consistent with saleable specifications, marking the achievement of another key milestone following the start of plant commissioning just over two months ago (refer ASX announcement, 13 June 2018).

As a result, the Company's focus now turns to growing concentrate production for sale via the steady ramp-up of the plant's capacity towards both the total Stage 1 design throughput and recovery targets.

Spodumene concentrate recovery at the Pilgangoora plant is achieved via Dense Media Separation (DMS) of the ore to a coarse concentrate, and fines flotation to recover the remaining spodumene. For the purpose of first concentrate sales to customers the fines circuit was prioritized due to the larger proportion of product supply, with the DMS circuit to follow. The full fines circuit is now in operation with production consistent with saleable concentrate requirements. Haulage of the concentrate to Port Hedland will commence imminently.

The DMS circuit has achieved some positive results through the commissioning process with select samples achieving ~6.2% lithia content with typically less than 1.8%  $Fe_2O_3$  (ultimately targeting below 1.4%  $Fe_2O_3$  in product). While promising, the results are still not being achieved consistently at this stage of the DMS commissioning. Further adjustments are being worked on (primarily in relation to further iron removal and optimising the higher-density Stage 2 DMS recovery) prior to this product stream being fully operational. This is expected to be resolved in the coming weeks.

Tantalite concentrate is recovered via the gravity circuit in the Pilgangoora Concentrator. Commissioning of this circuit is now fully complete and approximately ~44 tonnes of ~8% tantalite primary concentrate (representing ~7,800 lbs  $Ta_2O_5$ ) has already been produced and is now ready for shipment to Global Advanced Metals (GAM), under the existing Mine Gate Off-take Agreement for primary concentrate sales.

Pilbara Minerals' Managing Director and CEO, Ken Brinsden, said the Company was continuing to make excellent progress at Pilgangoora, with its significant upfront investment in metallurgical testwork and the engineering, design and the construction of a world-class project now delivering great results.

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ASX Code: PLS ACN 112 425 788



"Congratulations are in order for our primary plant contractors RCR and CSI, for the delivery of outstanding facilities that have not only been built quickly but also showing strong signs of delivering high quality products," Mr Brinsden said.

"We are also very pleased with the early signs we are seeing in relation to the plant's capacity," he said.

"Once the installed Stage 1 plant capacity has been fully ramped-up to an annual production rate of approximately 45,000tpa on a Lithium Carbonate Equivalent basis (LCE), the Pilgangoora site will already be one of the world's largest lithium raw material mines. That's before we embark on the expected 5Mtpa, Stage 2 Expansion Project," Mr Brinsden added.

"With our focus now shifting from commissioning the Stage 1 Concentrator to the ramp-up of production towards steady-state levels, we have booked our first shipment from mid-September, which will mark another huge milestone for everyone involved in the project.

"From there, concentrate production should continue to increase each month, reaching designed plant tonnage throughput by the end of the calendar year.

"Consistent with the nature of the plant and the interconnected wet plant processes, we would expect to achieve our design plant lithia recovery of approximately 75%, by Q4 FY19. That represents the final stage of optimisation of the plant following ramp-up and reflects the additional time required to balance all of the plant components once we achieve commercial steady-state production throughput levels."



Above: Fines concentrate production from filter press (left hand side) and tantalite product bags (right hand side) ready for delivery

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## Forward looking statements and important notice

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Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.

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