Pilbara Minerals
...Powering a Sustainable Energy Future

ASX / MEDIA ANNOUNCEMENT 28 October 2019

SEPTEMBER 2019 QUARTERLY ACTIVITIES REPORT

Pilbara Minerals secures strategic investment from China's largest EV battery manufacturer, CATL, as part of A$111.5M equity raising to support its long-term growth strategy, while responding operationally and strategically to current market conditions.

KEY POINTS

PRODUCTION AND MARKETING

- As previously advised, production was moderated at the Pilgangoora Project in response to customer requirements and current market conditions.
- Focus continued on further plant optimisation/improvement works, and the draw-down of stocks.
- Production of 21,322 dry metric tonnes (dmt) of spodumene concentrate at 6.06% Li_2O (June Quarter: 63,782 dmt).
- Shipped tonnes of 20,044 dmt of spodumene concentrate (June Quarter: 43,214 dmt), including parcels of both SC6 (6% Li_2O) and SC5.5 (5.5% Li_2O).
- Tantalite concentrate sales of 12,171 lbs (June Quarter: 38,856 lbs).
- First sales contract for secondary tantalite concentrate signed subsequent to the quarter-end for 36,500 lbs (nominally 30% Ta_2O_5), with delivery to occur in October 2019.
- First shipment to China's Great Wall Motor Company completed in August, pursuant to the new offtake agreement for 20,000 dmt per annum over a period of approximately six years.

PROJECT DEVELOPMENT

- Technical studies completed to support an optimised and incremental expansion of Stage 2 production capacity (for an ultimate total of 5Mtpa) over time ("Revised Stage 2").
- Study for the Revised Stage 2 targeted for completion in January 2020, paving the way for a final investment decision in early 2020, subject to customer requirements.

CORPORATE

- A$111.5M equity raising announced, comprising a A$55.0M strategic placement to China's largest EV battery manufacturer, CATL, a A$36.5M underwritten institutional placement and a A$20.0M Share Purchase Plan (SPP).
- Binding terms reached with South Korean conglomerate, POSCO, for the formation of an incorporated joint venture (JV) in South Korea to build and operate a 40ktpa LCE primary lithium hydroxide downstream chemical processing facility, with finalisation of approvals and execution of agreements expected during the December Quarter 2019.
- Despite strong interest from several credible parties, Pilbara Minerals' Board elected not to pursue the sale of a minority interest in the Pilgangoora Project in a softening market.
- Cash balance as at 30 September 2019 of A$60.9M (30 June 2019: A$63.6M). Subsequent to quarter-end an additional A$70M of cash was received from investors following the successful completion of the equity raising.

1. MANAGEMENT OVERVIEW

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

"While the month of June and the entire September Quarter were challenging for both Pilbara Minerals and the global lithium raw materials sector, our team has responded quickly and decisively to these short-term market challenges. Despite difficult decisions having to be made, the response of management and the Board to the challenging market conditions ensures that value is maintained in the Pilgangoora asset for the long term and we can respond as market demand improves from here.

"With a strengthened balance sheet from our recent equity raising, we are well placed to see through the current downturn in the global market for spodumene concentrate, while at the same time being able to complete the plant rectification and improvement works designed to ensure the Pilgangoora Project can successfully achieve its ramp-up to steady-state production towards the end of this financial year.

"The two key highlights for the September Quarter were the signing of binding terms with POSCO in respect of the proposed downstream chemical conversion facility in South Korea and the introduction of CATL as a strategic investor in Pilbara Minerals.

"The execution of binding terms for our joint venture with POSCO to build and operate a downstream chemical conversion facility in South Korea cements our long-standing and important relationship with a world-class strategic partner in the rapidly-growing South Korean lithium raw materials market, providing significant exposure to one of the world's most dynamic and fastest growing markets for lithium chemicals.

"The A$55M equity investment from CATL underpins the formation of an ongoing strategic relationship between our two companies, which will see Pilbara Minerals' experience in mining, development and upstream spodumene production combined with CATL's expertise in the downstream supply chain and its strong customer relationships with EV manufacturers.

"Both of these outcomes clearly demonstrate strong interest from major participants in the global lithium supply chain and in a large scale, long life and high-quality project in a very safe mining jurisdiction like the Pilgangoora Project.

"On the operational front, production in the September Quarter was moderated in response to soft market conditions and our offtake partners' slower-than-expected ramp-up of their facilities in China. This has provided the opportunity to focus on important plant improvement and rectification works which should contribute to improving product recoveries and lower operating costs in the coming quarters."

2. OPERATIONS OVERVIEW

As previously advised, during the September Quarter (the Quarter) Pilbara Minerals Limited ("Pilbara Minerals or the Company") moderated its production in response to customer demand, which has been impacted by relatively weak market conditions and constrained conversion capacity. Both mining and processing capacity was curtailed resulting in mining activity, processed tonnes and ultimately shipped concentrate being well down on prior quarters. Future production activities will be continuously assessed based on customer demand and market conditions.

As part of the current moderation strategy, the December 2019 half sales will be supported from existing run-of-mine ore, crushed ore and final product stocks on hand. This is a sensible and prudent response to modest demand conditions currently being experienced in the Chinese market. Please refer to further market commentary in section 2.4.

The moderated production strategy also saw the operating team rationalised across the mine and processing areas (and some support employees in Perth), where required, to match operational requirements. This resulted in approximately 40 positions being made redundant, as well as some one-off restructuring costs being incurred during the Quarter, as discussed further in section 5.4.

The quarterly volumes for mining, ore processed, shipments and stocks are shown in Tables 1, 2 and 3 below.

Table 1: Total ore mined and processed

	Units	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20
Ore mined	*wmt*	487,987	762,531	540,426	640,173	303,177
Waste mined	*wmt*	1,921,907	2,154,690	2,445,917	1,900,027	868,441
Total material mined	*wmt*	2,409,894	2,917,220	2,986,342	2,540,200	1,171,618
Ore processed	*dmt*	173,667	420,221	414,223	456,541	202,596

2.1 MINING COMMENTARY

Mine production for the Quarter totalled 303,177 wet metric tonnes (wmt) at an average grade of 1.32% lithia.

Given that broken ore stocks remain both within the Central Pit and at the Run-of-Mine ore stockpile, two small mining campaigns are expected during the December Quarter 2019 to support the required plant production. Mining activity on a continuous shift roster is likely to restart during quarter three of the 2020 financial year (FY2020), subject to market conditions and demand as assessed at the time.

2.2 PROCESSING COMMENTARY

The process plant operated in campaigns (with run-time representing approximately 38% across the Quarter), resulting in spodumene concentrate production of 21,322 dry metric tonnes (dmt) (refer Figure 1 below).

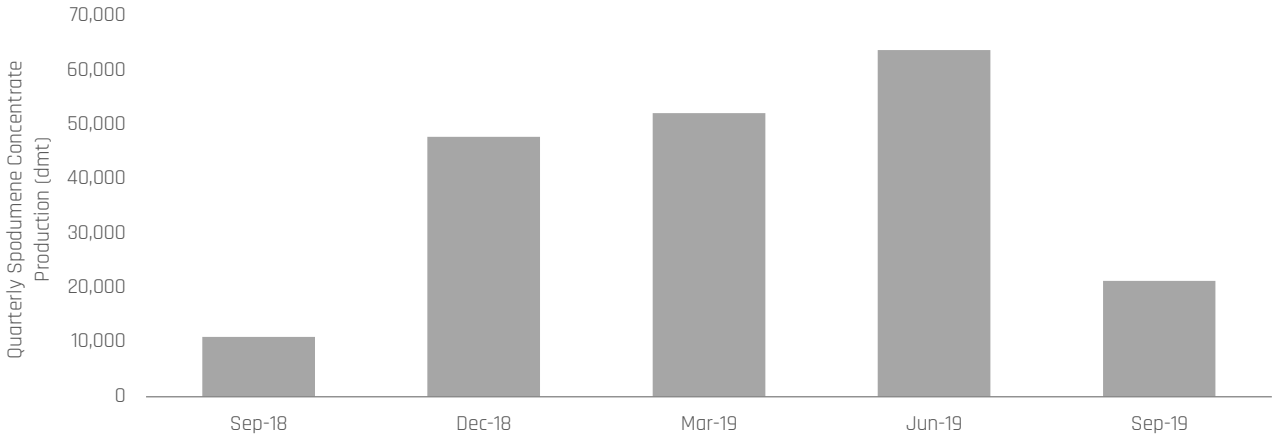
The campaigned operations during the Quarter continued to demonstrate the strong performance of the plant's unit processes which support tonnes throughput, plant utilisation and final product quality, with an average combined coarse and fines spodumene concentrate production grade of 6.06% Li_2O achieved during the Quarter.

While plant operations were moderated during the Quarter, the Company was pleased with the improvements achieved in the start-up, shut-down and continuous operation of the plant, which continue to be aided by the improvement works currently in progress.

Spodumene concentrate recovery rates remained relatively unchanged from the June Quarter as major recovery improvement projects are yet to be commissioned. A step-change in recovery is expected during the December Quarter 2019 following commissioning of the recently completed plant rectification works, as discussed further in section 2.2.1.

Further works are planned for the second half of FY2020 that are also expected to contribute to improved recovery to achieve targeted recovery rates. These are described in further detail in section 2.2.1.

Figure 1 – Quarterly spodumene concentrate production



2.2.1. PROCESS PLANT IMPROVEMENT PROJECTS

During the Quarter, the Company progressed several improvement projects to the plant which remain in progress, including (but not limited to):

- **Fines product circuit – grind size**
  - The classification process for ore sizing ("grind size") pre-flotation is an important contributor to float performance (and therefore overall fines spodumene concentrate recovery). Absolute grind size and any variability in grind size should be controlled within relatively tight parameters to maximise float performance. Additional plant controls (including some automation) and continued plant surveys are expected to contribute to further grind size control in plant operations from the December Quarter 2019.
- **Fines product circuit – iron removal equipment**
  - LIMS – Installation of additional LIMS (low intensity magnetic separation drums), with their primary purpose being removal of introduced iron arising from wear within the plant itself (and mainly from the ball milling circuit). The installation is now largely complete with commissioning and ramp-up during October 2019.
  - WHIMS – Installation of controls for improved operation of WHIMS (wet high intensity magnetic separation) iron removal equipment completed.
- **Overall plant control and automation**
  - Further work to provide additional monitoring and control loops to assist in the stability and control of the plant during operations.

In addition to the above items, further work has also been progressed relating to improvements to the flotation filter press equipment and rectification of prior works performed by the EPC contractor. Projects completed included process control improvements, plant instrumentation upgrades and continued replacement of non-specification valves and piping.

The Company is continuing to work on further initiatives that are intended to contribute to improved plant operation (and therefore product recovery improvements), including (but not limited to) run-of-mine ore blending strategies, additional ore type testwork to optimise plant configurations, further plant monitoring and control systems and general commissioning and optimisation of prior works whilst the plant is in operation.

These initiatives should incrementally improve product recovery to help achieve design target recovery rates by June 2020.

2.3 SHIPMENTS AND SALES

Two shipments of spodumene concentrate were completed during the Quarter, totalling 20,044 dmt. The product was a blend of coarse and fines concentrate achieving contracted lithia grade specification (either SC6.0% or SC5.5% Li_2O) and shipped to offtake partners in North Asia. The SC5.5% product shipped is part of the Company's strategy to reduce stockpiles throughout its supply chain, including the lower-grade material generated during the ramp-up of the plant.

Current market conditions have continued to deteriorate since reduced delivery schedules were signed in early July and there remains a level of uncertainty in the direction of the market. As a result, prior sales guidance for the December Quarter 2019 has been revised to 35,000 to 70,000dmt of spodumene concentrate based on indicative customer demand, their existing inventory levels and their current capacity to take further product. Engagement continues with existing customers to manage their offtake commitments as well as prospective customers to maximise sales for the December Quarter and the market will be updated on any material developments.

A provisional 12,171 lbs of tantalite concentrate was sold during the Quarter (pending final reconciliation and assay results).

As previously advised, Pilbara Minerals has continued to work on the development of secondary tantalite concentrate sales (in the range of 20-35% Ta_2O_5 in concentrate), with trials at a large-scale processing facility in Perth progressed over the last six months. The Company is pleased to announce that the first of those sales contracts has now been signed, with 36,500 lbs at approximately 30% Ta_2O_5 being shipped during October 2019 to global customers.

The Company is continuing to assess the customer base in this product segment to determine the future production requirements of secondary concentrate as opposed to primary concentrate.

Table 2: Production and shipments

	Units	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20
Spodumene concentrate produced	*dmt*	11,015	47,859	52,196	63,782	21,322
Spodumene concentrate shipped	*dmt*	0	46,598	38,562	43,214	20,044
Tantalite concentrate produced	*lb*	22,151	56,663	33,374	67,075	48,825
Tantalite concentrate sold	*lb*	7,378	27,821	30,356	38,856	12,171[1]

[1] Sales estimates pending final reconciliation and assay results.

Table 3: Stocks position

	Units	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20
ROM stockpile	*wmt*	N/A[1]	487,292	520,606	685,912	775,992
Coarse ore stockpile	*wmt*	N/A[1]	82,430	96,139	83,620	84,749
Spodumene concentrate stocks	*dmt*	17,677[2]	17,266[2]	30,900[2]	51,468[2]	52,450[2]
Tantalite concentrate product stocks	*lb*	14,774	43,616	46,634	74,853	111,508

[1] No previous reporting for period due to completion of build and commissioning phase.
[2] Includes some lower-specification stocks produced which are expected to be sold over time as either lower grade product or as a blended SC6.0 grade product.

2.4 MARKET COMMENTARY

The Quarter was particularly weak in respect of customer demand in lithium raw materials, impacting both spodumene exports from Western Australia and prices received across the entire lithium raw materials and chemicals product suite. Pilbara Minerals has been proactive in its response to these conditions by actively moderating production, reducing costs and using available ore and final product stocks to support customer sales.

The entire lithium raw materials industry is being impacted by weaker demand conditions in China (where virtually 100% of today's spodumene concentrate is delivered) as a result of changes to the subsidy regime to support Chinese electric vehicle (EV) production. While EV production is still growing in China, the relative pace of growth has tempered over approximately the last 12 months, resulting in lower demand for lithium chemicals thereby impacting price. This in turn, has impacted the spodumene concentrate market, where pricing as reported by Platts (S&P Global) was USD$545/dmt (SC6.0 CFR basis) as at 30 September 2019.

The slower uptake of the Chinese subsidy regime, which now supports higher nickel content batteries, has resulted in persistent weak market conditions for lithium chemicals. However, in the medium-term stronger support for lithium raw material demand growth should occur as a result of the sourcing initiatives currently underway by battery and car manufacturers which is expected to lead to increased demand for lithium-ion batteries within and outside China

Pilbara Minerals expects its offtake partners will be able to comply with their full offtake commitments once they are sufficiently advanced in the ramp-up of their respective chemical conversion capacity, have drawn-down their existing inventories and as overall demand conditions improve. Further, the Company has and will continue to engage with its other partners and additional industry participants with a view to growing and diversifying its sales portfolio in the near-term.

3. PROJECT DEVELOPMENT

3.1 STAGE 2, 5MTPA EXPANSION

Following the decision not to proceed with the partnering process for the Pilgangoora Project (see below), Pilbara Minerals is now embarking on an optimised and incremental pathway for the Stage 2 (5Mtpa) expansion that better aligns with customer requirements. Please refer to the Company's ASX announcement of 27 August 2019 for further details on the Revised Stage 2 approach.

Pilbara Minerals is conducting further technical studies for the Revised Stage 2 development in anticipation of completing a revised study by January 2020, positioning it to make a final investment decision thereafter having regard to customer demand and funding requirements.

With the added flexibility of the Revised Stage 2 development, the future Stage 2 offtake requirements of Great Wall Motor Company, the proposed POSCO JV and Ganfeng are expected to be met from latent capacity in Stage 1 and progressively through the continued development of the phased build-out of the Stage 2 expansion over time. To date, the Company's discussions with customers have been supportive of a delayed and incremental development for Stage 2 to ensure that its timing and deliveries are aligned with their respective construction, commissioning and production profiles.

The Company remains focused on ensuring that its production capacity aligns with customer requirements, which may include concentrates being delivered across any one of the development phases at the Pilgangoora Project, depending on the timing and availability of their chemical conversion facilities.

A final investment decision for the Revised Stage 2 project (including any incremental and phased build-out within Stage 2) will only be implemented if the expanded mine site production is ultimately supported by the customer group and their respective available chemical conversion capacity.

4. EXPLORATION

Exploration during the Quarter included geological mapping within the Pilgangoora mining area and several regional tenements. No exploratory drilling programs were undertaken.

4.1 PILGANGOORA PROJECT

Geological and geotechnical mapping was carried out in the Pilgangoora mining area to complement the existing surface geological mapping data. Information collected will be utilised to build a comprehensive 3D geological model of the pegmatite system, encompassing wall rock units and principal deformation zones. Orientated structural data of brittle deformation zones also being collected for future geotechnical appraisals.

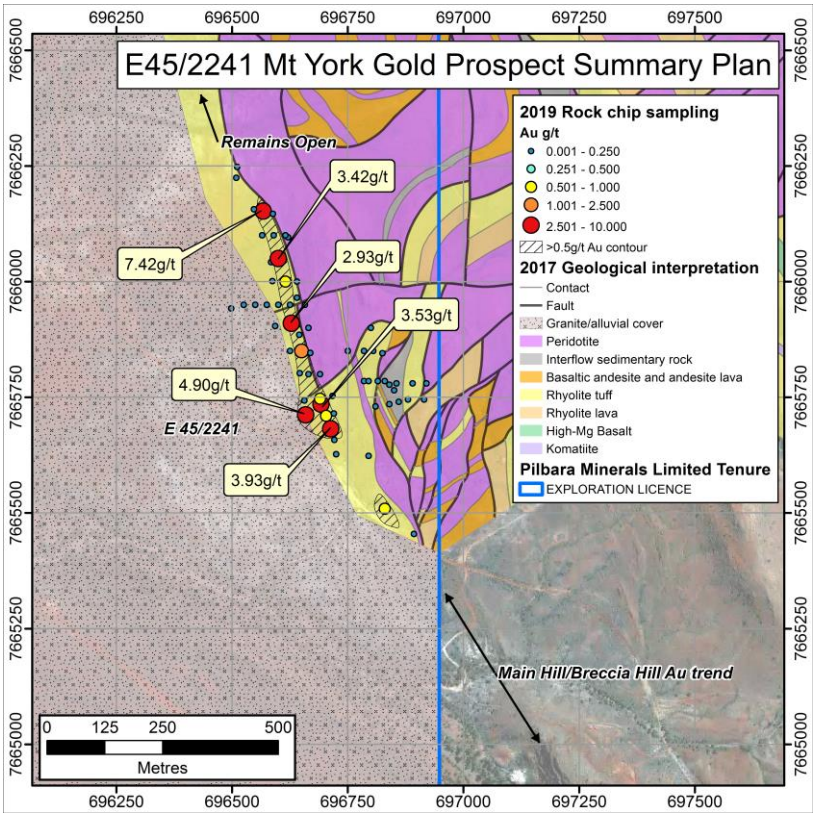
4.2 MOUNT YORK (E45/2241)

During the Quarter, Pilbara Minerals initiated a review of several of the Company's regional tenements for rare metal pegmatites and other mineral commodities. Surface geochemistry and geological mapping was undertaken over the Mount York Project (E45/2241) which is contiguous with the Pilgangoora block of tenure.

A total of 42 rock chip samples were collected which resulted in the definition of a semi-contiguous >0.5g/t Au surface gold anomaly extending over 700m with a peak assay of 7.4g/t Au. The Company intends to undertake follow-up exploration including RC drilling to further test this anomaly which along with the remaining potential for rare metal pegmatites has added material value to this tenement.

The proposed program ensures maximum potential value is realised in all of Pilbara Minerals' tenure, where it can complement and add value to its core lithium and tantalum tenement position.

Figure 3: Mt York geology and surface geochemistry



4.3 MT FRANCISCO JV (Pilbara Minerals Limited 51%, Atlas Iron 49%)

No exploration work was undertaken at Mt Francisco during the Quarter.

5. CORPORATE

5.1 A$111.5M EQUITY RAISING

During the Quarter, Pilbara Minerals announced an equity raising comprising of a A$55.0M strategic placement to the leading Chinese battery manufacturer for electric vehicles, Contemporary Amperex Technology (SZSE: 300750) ("CATL"), an institutional placement of A$36.5M and a A$20.0M Share Purchase Plan to raise a total of approximately A$111.5M. The equity raising involved the issue of approximately 371.7M new Pilbara Minerals' ordinary shares at a price of A$0.30 per share.

The introduction of CATL as a shareholder was an important development for Pilbara Minerals. CATL, which is listed on the Shenzhen Stock Exchange with a market capitalisation of US$22.1B[1] has available cash of US$4.7B[2], and is China's largest battery manufacturer for EVs. It has strong existing relationships with leading global EV manufacturers including Toyota, BMW, Volkswagen and Honda.

The investment by CATL in Pilbara Minerals will underpin the formation of a new strategic relationship that combines Pilbara Minerals' expertise in mining, development and upstream spodumene production with CATL's expertise in the downstream supply chain and its strong customer relationships within the EV market. The relationship will further diversify Pilbara Minerals' shareholder base and aligns it with a major player in the battery sector with a robust balance sheet to support the Company's long-term growth trajectory.

The institutional placement, which was heavily oversubscribed with strong support from both existing shareholders and new institutional investors was completed on 10 September 2019.

The CATL Placement was settled subsequent to the Quarter end in two tranches, split according to the relevant approval conditions:

- Tranche 1 for A$20.0M was completed on 11 October 2019 and issued under Pilbara Minerals' placement capacity under ASX Listing Rule 7.1 following receipt of regulatory approvals from the People's Republic of China ("PRC Approvals") ("Tranche 1").
- Tranche 2 for A$35.0M was completed on 21 October 2019 and issued following PRC Approvals and Pilbara Minerals' shareholder approval on 16 October 2019 ("Tranche 2").

Application under the Share Purchase Plan closed on 11 October 2019 heavily oversubscribed (A$27.5M) with final allotments for A$20.0M completed on 21 October 2019.

Pilbara Minerals intends to use proceeds from the equity raising for the following purposes:

- General working capital to strengthen balance sheet – enhanced financial flexibility to provide support for the Pilgangoora Project as it ramps-up to Stage 1 spodumene concentrate nameplate capacity;
- POSCO JV – assist with funding Pilbara Minerals' initial 21% equity interest in the proposed POSCO downstream JV, involving a primary lithium hydroxide downstream chemical processing facility in South Korea, which will process spodumene concentrate from the Pilgangoora Project and integrate Pilbara Minerals further into the downstream value-add supply chain (as announced to the ASX on 27 August 2019);
- Pilgangoora Project Stage 1 process plant works – the completion of Stage 1 rectification and improvement projects including the installation of additional low-intensity magnetic separation (LIMS) units that will assist in improved recovery, as well as wet high intensity magnetic system (WHIMS) upgrades, replacement of valves (and piping) and classification process improvements (as previously announced in the June 2019 quarterly report); and
- Pilgangoora Project Revised Stage 2 expansion studies - engineering studies required to complete the Study by January 2020 and the completion of existing long-lead orders, paving

[1] As at 3 September 2019, based on Class A common shares.

[2] As at 30 June 2019.

the way for a final investment decision in early 2020 (refer ASX announcement dated 27 August 2019).

5.2 TERM SHEET FOR SOUTH KOREAN CHEMICAL JV WITH POSCO

Pilbara Minerals has finalised and executed a detailed terms sheet with POSCO to proceed with the formation of an incorporated JV in South Korea to develop and operate a 40ktpa lithium hydroxide and carbonate chemical conversion facility (Conversion Facility).

The execution of JV terms represents an important next step towards obtaining respective board approvals and ultimately the development of the proposed Conversion Facility. However, the formation of the JV is subject to completing and approving an initial business plan and budget (including CAPEX and OPEX estimates), execution of definitive agreements and Board approvals from both parties, which are all expected to occur in the December Quarter 2019.

POSCO is an important strategic partner for Pilbara Minerals and the JV is consistent with the Company's long-term business strategy to become a fully integrated lithium raw materials company with a globally diversified customer base.

The new Conversion Facility is to be expanded from the initial planned output of 30ktpa to 40ktpa lithium carbonate equivalent (LCE) and supported by POSCO's leading purification technology "PosLX",and the existing spodumene concentrate offtake agreement from the Pilgangoora Project, which will be increased to 315ktpa (an additional 75ktpa from the 240ktpa originally proposed) over the lesser of 20 years and the life of the Pilgangoora Project.

The PosLX technology will be provided to the JV under a technology licence agreement for the life of the JV on commercial terms.

Pilbara Minerals' initial 21% participation in the JV is expected to be largely funded through the previously announced A$79.6M convertible bond agreement being provided by POSCO Australia Pty Ltd to Pilbara Minerals (see ASX: 28th February 2018) and the recently completed equity raising. Funds from the convertible bond facility will become available upon formation of the JV and completion of other conditions precedent to the draw-down of the facility, which are targeted to be satisfied during the December Quarter 2019.

Under the revised offtake terms, the JV will also provide Pilbara Minerals with a second ranking secured US$25M prepayment which will be used to partly fund the Stage 2 expansion of the Pilgangoora Project. The prepayment will be conditional on the consent of senior secured bond holders.

Further details of the JV terms are provided in the ASX Announcement dated 27 August 2019.

5.3 STAGE 3 PARTNERING PROCESS

In March 2019, Pilbara Minerals appointed Macquarie Capital to assist in managing a partnering process for the sale of a project equity position at Pilgangoora Project (ASX announcement, 28 March 2019). The Company received a strong level of engagement from parties across the battery minerals supply chain who expressed a genuine interest in partnering with Pilbara Minerals to further develop this world-class asset.

The Company evaluated formal proposals received, which included proposals consisting of one or more of the following: the acquisition of a 20-50% equity interest at the asset level, entry into long-term offtake, joint development of lithium hydroxide conversion facilities (either locally and/or abroad)

and a product streaming financing proposal. The proposals received were from a range of domestic and global parties across the spectrum of the supply chain.

However, against the backdrop of a relatively weak short-term market for lithium raw materials, the Board determined that the proposals received did not represent an appropriate long-term valuation for substantial ownership of one of Australia's premier long-life lithium projects.

As a result, the formal partnering process was closed during August 2019.

5.4 RESULTS FROM OPERATIONS

During the Quarter, the Company shipped 20,044 dmt of spodumene concentrate (at the lower end of the most recent guidance), with approximately 50% of the tonnes being sold on an SC5.5% basis. The SC6.0 reference price applied to sales during the Quarter was in the range of USD$550-USD$600/dmt CIF China.

As previously noted, operations at the Pilgangoora Project were moderated during the Quarter in response to lower demand from customers as they experienced delays in the construction, commissioning and ramp-up of their chemical conversion facilities and continued weak lithium chemical demand. In response, Pilbara Minerals has wherever possible drawn down existing stockpiles, delayed mining activity and extended process plant shutdowns, resulting in the plant running for a total of approximately five weeks during the Quarter.

The implementation of the moderation strategy has meant site-based costs during the Quarter included fixed costs incurred during plant shut down time and one-off restructuring costs, together totalling approximately A$5M. After adjusting for these fixed and one-off costs, the estimated quarterly unit operating cost was largely consistent with the prior quarter (being approximately USD$530/dmt CFR China). Unit operating costs include mining, processing, transport, state and private royalties, native title costs, port, shipping/freight and site based general and administration costs and are net of Ta_2O_5 by-product creditsUnit operating costs will continue to be elevated whilst the Company operates under a moderated production strategy and until steady-state operations can be achieved.

It is noted that the cashflow and gross-cost benefit of the production moderation strategy will have a larger impact in the December Quarter 2019, given implementation occurred part way through the Quarter.

Following the achievement of steady-state operations, costs should then normalise over the next two to three quarters as the operation ramps-up to the life-of-mine name plate capacity of ~320,000 dmtpa of spodumene concentrate. Costs are expected to trend towards USD$320-350/dmt CFR China once design plant production capacity is consistently achieved, inclusive of the anticipated improvements from plant recovery, plant stability and site optimisation works being undertaken.

5.5 CASH BALANCE

Pilbara Minerals had a cash balance of A$60.1M as at 30 September 2019 (A$63.6M as at 30 June 2019). Subsequent to the quarter-end the equity raising was completed resulting in an additional A$70M of cash being received. During the Quarter, Pilbara Minerals received:

- Proceeds of A$36.5M following the completion of the institutional placement and a A$5M deposit from CATL paid in respect of their commitment to subscribe for the A$55M CATL placement; and
- proceeds of A$14.6M largely from concentrate sales (inclusive of spodumene and tantalite). Subsequent to quarter end, proceeds totalling A$6.9M were received related to customer shipments in the September Quarter.

Major cash outflows during the Quarter included:

- A$35.7M on operating costs, inclusive of costs incurred during prior quarter activities (but

paid in the Quarter) and those associated with the moderation strategy implemented during the Quarter;
- A$11.4M on capital costs attributable to the Pilgangoora Project, inclusive of Stage 1 capital costs, Stage 1 improvement projects and Stage 2 long lead items and development costs;
- A$4.1M in interest and financing payments, largely associated with the USD senior secured bond facility;
- A$3.6M on payroll, administration and corporate costs (inclusive of certain redundancy costs);
- A$1.7M on exploration and evaluation work in relation to the Pilgangoora Project (including associated feasibility studies); and
- A$1.7M of costs associated with the equity placement.

At 30 September 2019, the Company's US$15M working capital facility remains undrawn.

5.6 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.

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COMPETENT PERSONS STATEMENTS

The information in this report that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared by Mr John Holmes (full-time Exploration and Geology Manager of Pilbara Minerals Limited). Mr Holmes is a shareholder of Pilbara Minerals. Mr Holmes is a member of the Australasian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Holmes consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

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 30 SEPTEMBER 2019

TENEMENT	LOCATION	STATUS	REGISTERED HOLDER	PLS BENEFICIAL HOLDING AT START OF PERIOD	PLS BENEFICIAL HOLDING AT END OF PERIOD
ACTIVE TENEMENTS and APPLICATIONS AT COMMENCEMENT OF THE QUARTER					
E45/2241	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
E45/3560	Pinnacle	Granted	Pilbara Minerals Limited	100%	100%
E45/3648	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
E45/4270	Mt Francisco	Granted	Pilbara Minerals Limited / Atlas Iron Ltd	70%	70%
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%
E45/4961	Strelley	Granted	Pilgangoora Operations Pty Ltd	100%	100%
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%
L45/429	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/430	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	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%
L45/528	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					
TENEMENTS DISPOSED OF DURING THE QUARTER					
L45/426	Pilgangoora	Surrendered	Pilgangoora Operations Pty Ltd	100%	0%
L45/434	Pilgangoora	Withdrawn	Pilbara Minerals Limited	100%	0%

APPENDIX 2

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	• Surface geochemistry undertaken over interpreted extension of the Mt York gold deposit • Pilbara Minerals Limited (PLS) collected 42 rock chip samples on nominal 50m line spacings across the targeted zone. • Open File soil samples collected on 50m x 50m spacings in 2011
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• PLS completed rock chip sampling on nominal 50m x 25m spacings
	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is*	• PLS surface samples were sent to Nagrom laboratory in Perth and analysed via ICP method for a suite of 17 elements.

Criteria	JORC Code explanation	Commentary
	coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• No drilling undertaken by PLS
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• N/A
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• N/A
	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• N/A
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• PLS has recorded rock chip descriptions for each sample • Detailed geological mapping over the area has been undertaken by PLS in 2019

Criteria	JORC Code explanation	Commentary
		• Regional geological mapping undertaken by PLS in 2016 and 2017
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.*	N/A
	• *The total length and percentage of the relevant intersections logged.*	• N/A
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• PLS surface samples comprise between 3-5kg of chipped rock fragments collected from surface outcrop. Samples taken on nominal 50m x 25m spacings dependent on suitable outcrop being available for sampling.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• No QA/QC samples were submitted for PLS rock chip sample • Nagrom provided labaoratory standards and bland as part of the internal QA/QC analysis
	• *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.*	• N/A
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Sample sizes are considered to be appropriate to correctly represent this style of potential gold mineralization.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total*	• PLS samples were assayed by NAGROM Perth laboratory and analysed for a suite of 17 elements including Au, Ag, Hg via ICP008 and As, Co, Cu, Fe, Mg, Mn, Ni, P, Pb, S, SO3, Se, Te and Zn via ICP03.
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	• No geophysical tools were used to determine any element concentrations
	• *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• No QA/QC samples were submitted with this group of rock chip samples
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	• N/A
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* •	• An electronic database containing sample location, assays and geology for all PLS samples has been maintained. Data is compiled and stored by independent database administrators (Mitchell River Group) • All PLS assays were sourced directly from NAGROM as certified laboratory files
	• *Discuss any adjustment to assay data.*	• No adjustment to assay data

Criteria	JORC Code explanation	Commentary
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• PLS surface samples were located with a handheld GPS +/- 4 to 5m accuracy.
	• *Specification of the grid system used.*	• The grid used was MGA (GDA94, Zone 50)
	• *Quality and adequacy of topographic control.*	• PLS surface samples were located with a handheld GPS +/- 4 to 5m accuracy.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results*	• PLS surface samples were collected at nominal 50m x 25m intervals
	• *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	• The continuity of the mineralization has been interpreted from PLS detailed geological mapping and also public domain mapping data
	• *Whether sample compositing has been applied.*	• No compositing of surface samples were undertaken
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• Samples were collected at surface from altered (silicified / limonitised) rocks where available
	• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• No orientation-based sampling bias has been identified.
Sample security	• *The measures taken to ensure sample security.*	• Chain of custody for PLS samples were managed by PLS personnel. Samples for analysis were delivered to the Nagrom laboratory in Kelmscott

Criteria	JORC Code explanation	Commentary
		by Regal Transport courier truck in 2019.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The surface sample data has been reviewed by compiling a SQL relational database. This allowed some minor sample numbering discrepancies to be identified and amended.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites*	• E45/2241 is registered in the name of Pilbara Minerals Limited.
	• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• No known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• GAM/Talison completed surface soil sampling in 2011 on 50m x 50m spacings • Lynas Gold partially drill tested the target area in 1997 with up to 13 RC holes drilled. Best intercept was 7m @ 2.16g/t Au from 15m. Hole locations could not all be confirmed in the field.

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Gold mineralization has been interpreted to be shear hosted and associated with Archaean banded iron formation along with other iron rich sediments and silica alteration zones along strike from the Mt York gold mining area. Historical deposits include Breccia Hill, Main Hill and Zakanaka.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes, including easting and northing of the drill hole collar, elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth plus hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• N/A

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• N/A
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• N/A

Criteria	JORC Code explanation	Commentary
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See Figures 3
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.*	• Comprehensive reporting of surface rock chip results has been made.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All meaningful & material exploration data has been reported.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Further work includes assessment of the geological model developed from the detailed mapping program in conjunction with the surface geochemistry and historical drilling results. The Company intends to undertake RC drilling of the defined zone.

Criteria	JORC Code explanation	Commentary
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	