



ASX / MEDIA ANNOUNCEMENT

28 APRIL 2020

# **MARCH 2020 QUARTERLY ACTIVITIES REPORT**

MODERATED PRODUCTION STRATEGY, IMPROVED RECOVERIES AND LOWER COSTS ENSURE STRONG CASH POSITION MAINTAINED. POSITIONING PILBARA MINERALS WELL FOR MARKET RECOVERY

### **KEY POINTS**

#### PRODUCTION AND SALES

- Significant focus on health and safety initiatives in response to the COVID-19 pandemic. Health and safety performance continued to be strong for the quarter, with no reportable injuries.
- Campaign mining and processing continued in response to challenging market conditions.
- Production of 20,251 dry metric tonnes (dmt) of spodumene concentrate (December Quarter: 14,711 dmt).
- Spodumene concentrate shipments totalled 33,729 dmt (December Quarter: 33,171 dmt).
- Tantalite concentrate sales totalled 33,970 lbs (December Quarter: 75,369 lbs).
- Improved lithia recovery rates continued, with recovery now largely in line with plant design specifications.
- Five-year, 75,000tpa offtake agreement signed with Yibin Tianyi (a key participant in CATL's lithium supply chain), further diversifying Pilbara Minerals' global customer base, with the first shipment of 20,000t of spodumene concentrate completed in March 2020.

#### PROJECT DEVELOPMENT

- Stage 2 technical studies supporting an incremental expansion continued during the Quarter with delivery of results expected by mid-year.
- Pilbara Minerals and POSCO continue to pursue the downstream joint venture in South Korea, with POSCO currently conducting further evaluation of both the design and timing of the chemical conversion facility in light of lithium market conditions.

#### LITHIUM MARKET

- Softer market conditions continued during the Quarter with spodumene concentrate pricing (SC6.0 basis) lower than achieved during the December 2019 half-year.
- Resumption of economic activity in China following the lift of COVID-19 lockdown measures and an extension of China's EV subsidy program expected to boost the lithium-ion battery sector and improve market conditions in the medium to longer term.

#### CORPORATE

- Moderated production strategy and cost reductions maintained a strong balance sheet, ensuring the Company is well placed to capitalise on the market turnaround.
- Healthy quarter-end cash balance of \$108.2M (31 December 2019: \$105.5M), inclusive of \$7.2M of irrevocable bank letters of credit for shipments completed in late March 2020.
- Subsequent to Quarter-end, the Company has implemented a salary sacrifice scheme that invites employees and executives to sacrifice up to 25% of their salaries for share rights issued under the Company's Employee Awards Plan as part of its ongoing strategy to manage cashflows and encourage further employee share ownership.



### 1. COVID-19 RESPONSE

Pilbara Minerals Limited's (**Pilbara Minerals or the Company**) key focus during the coronavirus (COVID-19) pandemic has been on managing the risk to, and maintaining the health and safety of, its people and contractors, while at the same time maintaining business continuity.

During the March Quarter 2020 (**the Quarter**), the Company deployed a comprehensive set of control measures to ensure the safety of its people and alignment with government directives to support the broader community response to COVID-19.

These measures included, but are not limited to:

- Increased sanitation and cleaning procedures across operations.
- Communication and engagement with employees and contractors on personal hygiene, social distancing and personal health responsibilities.
- Sanction on non-essential travel.
- Reduction of people movements through the implementation of longer operational rosters and working from home arrangements.
- Implementation of health checks and screening for the operational fly-in, fly-out workforce (including contractors).
- Mental health and communication initiatives in support of employees and contracting partners.
- Social distancing within company transportation and across site, including camp facilities.
- Engagement with government and industry.
- Activation of response plans and procedures.
- Undertaking business continuity and scenario planning.

To date, Pilbara Minerals has not experienced any material operational impact at the Pilgangoora Lithium-Tantalum Project (**Pilgangoora Project**) as a direct result of the COVID-19 pandemic.

While there has understandably been some disruption within China's supply chain (where the Company's largest customers are based), the ability to secure sales, credit and shipping continued during the Quarter in line with Pilbara Minerals' moderated production strategy in response to softer market conditions.

Pilbara Minerals continues to monitor the implications of the COVID-19 pandemic, both within China and globally, to determine the potential impact on the lithium market, including engagement with existing customers and potential new customers on future spodumene concentrate sales and shipments.

### 2. MANAGEMENT OVERVIEW

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

"The rapid escalation in the COVID-19 pandemic has been the dominant theme for the first few months of 2020. As a business we have responded rapidly and in line with government directives to this unfolding situation. I am pleased with the concerted and focused way in which our team has responded, and I would like to thank everyone for their work in this area.

"Notwithstanding the backdrop of COVID-19, the March Quarter was a reasonably positive and productive period for our business. Operationally and financially, we achieved exactly what we set out to do, with the moderated production strategy deployed last year continuing to deliver pleasing results. The benefits of the plant improvement works were reflected in our ability to continue to achieve improved lithia recovery, even in a moderated



production environment, and therefore reduce unit costs to preserve cash-flow and strengthen our balance sheet by quarter-end.

"With lithia recovery now broadly within plant design specifications, we are confident in our ability to further reduce unit cash operating costs towards our targeted level of US\$320-350/dmt (CFR China) as the plant's run-time increases and stabilises during steady-state, full production.

"From a sales perspective, we were able to maintain shipments of spodumene concentrate during the Quarter. That said, there is still uncertainty in the near-term demand outlook as a result of both the pre-existing general market weakness in lithium raw materials, combined with the recent impact of the COVID-19 pandemic.

"With the lifting of COVID-19 restrictions in China, coupled with the extension of China's EV subsidy program, the Company is hopeful of an improvement in market conditions as economic activity resumes in China. In another positive signal for the medium to longer term outlook for the lithium market, we welcomed Yibin Tianyi as a new offtake partner for our Pilgangoora Project during the Quarter. Yibin Tianyi is a key lithium chemical supplier to our largest shareholder CATL, and this agreement reflects the significant work our team has put in to further diversify our customer base to support our long-term production base. It is also an important first step in developing a longer-term relationship with this key player in the global lithium-ion supply chain.

"We look forward to working with Yibin Tianyi in the future as a key project partner to support their lithium hydroxide operations, including their proposed expansions from 25ktpa LCE to 100ktpa LCE over the next few years. The signing of this agreement is also testament to the strong relationships we have been building throughout the entire lithiumion battery supply chain, with some of the world's biggest players like CATL.

"Having taken prudent measures over the past nine months in response to soft market conditions, Pilbara Minerals is well placed having maintained a strong balance sheet. Underpinned by a world-class asset in the Pilgangoora Project and our ability to ramp up production once market conditions improve, this puts us in a strong position to capitalise on the recovery in the market and resume our longer-term growth pathway."

#### 3. OPERATIONS OVERVIEW

Pilbara Minerals is pleased to report there were no reportable safety incidents during the Quarter.

Plant production remains moderated in response to market conditions, with recent campaigns continuing to highlight Pilbara Minerals' ability to improve lithia recovery performance, which is now largely in line with plant design specifications (72% - 78% recovery, dependent on the ore blend being delivered to the plant).

Shipments of spodumene concentrate during the Quarter drew down stocks on hand, requiring mining activities to recommence late in March to re-establish run-of-mine (ROM) stocks.

During the Quarter, Pilbara Minerals completed two shipments of spodumene concentrate (parcelling concentrate to multiple customers) totalling 33,729 dmt, including the first shipment of product to Yibin Tianyi. Spodumene concentrate stock on hand at the Quarter end was 11,286 dmt (31 December 2019: 25,730 dmt).

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



Table 1: Total ore mined and processed

	Units	Q4 FY19	Q1 FY20	Q2 FY20	Q3 2020
Ore mined	wmt	640,173	303,177	65,941	4,954
Waste mined	wmt	1,900,027	868,441	26,046	21,775
Total material mined	wmt	2,540,200	1,171,618	91,987	26,729
Ore processed	dmt	456,541	202,596	102,251	137,407

#### 3.1 MINING COMMENTARY

Consistent with the moderated production strategy, which aims to conserve cash flow and working capital during the current soft market conditions, Pilbara Minerals continued to focus on the draw-down of existing stock on hand to satisfy customer sales requirements during the Quarter.

As a result of multiple processing campaigns and sales, mining stocks on hand were depleted requiring the resumption of drill-and-blast and mining activity towards the end of the Quarter, to replenish run-of-mine (ROM) stockpiles. Total material mined during the Quarter was 26,729 wmt. Mining activity is expected to continue during the June 2020 Quarter, moderated to match customer demand.

As expected, mined head-grades during the Quarter were slightly elevated (1.35-1.45%  $\rm Li_2O$ ) in comparison to the average life-of-mine head grade (being 1.25%  $\rm Li_2O$ ). This is consistent with the original mine development plan, which always contemplated presenting a slightly higher grade in the first 3-5 years of mining.

#### 3.2 PROCESSING COMMENTARY

The processing plant continued to be campaign operated during the Quarter, with plant runtime moderated to align with the available final product stocks and customer demand requirements, to produce 20,251 dmt of spodumene concentrate (refer Table 2). Pilbara Minerals' products conform to SC6.0 specifications.

This production was supported by two processing campaigns, both of which demonstrated continued improvements in lithia recovery, confirming that the results achieved in the previous quarter could be sustained with further plant run time. The most recent campaign, in March 2020, delivered periods of sustained lithia recoveries (with fresh ore feed) which were largely in line with plant design criteria (being 72% to 78%, depending on the source(s) and/or blend of ore fed to the plant). Please refer to the ASX announcement of 25 March and the corporate presentation of 24 February.

The ability of the processing plant to deliver improved lithia recovery results consistently reflects the optimisation and improvement works completed by the Company over the past 12 months. The continued achievement of these strong and competitive lithia recovery results, even in a moderated production environment, provides confidence that the processing plant will be able to achieve both design lithia recovery and full production capacity once in steady-state operations on a continuous basis. Improved lithia recovery will enable Pilbara Minerals to continue to reduce cash operating costs towards its target of US\$320-350/dmt CFR China or US\$270-US\$300/dmt (FOB Port Hedland and exclusive of royalties) on a SC6.0 basis.

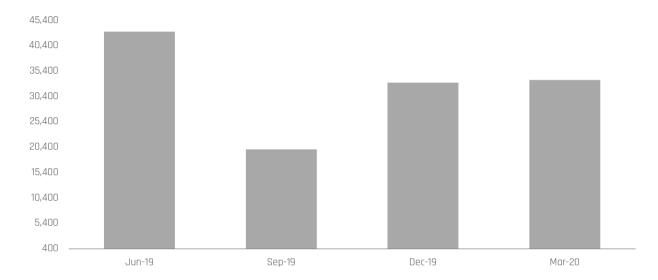
 $<sup>^1</sup>$  Cash operating costs include mining, processing, transport, state and private royalties, native title costs, port, shipping/freight and site based general and administration costs and are net of Ta<sub>2</sub>O<sub>5</sub> by-product credits.



#### 3.3 SHIPMENTS AND SALES

A total of 33,729 dmt of spodumene concentrate was shipped, largely consistent with the lower end of previous guidance. Product shipped was a blend of coarse and fines concentrate achieving (SC6.0% Li<sub>2</sub>O) lithia grade specification.

Figure 1: Quarterly spodumene concentrate shipments (dmt)



During the Quarter, Pilbara Minerals continued to engage with its existing offtake customers in relation to compliance with their offtake commitments. This engagement has resulted in a gradual improvement in sales, with customers indicatively confirming their demand requirements for CY2020.

However, their demand for this year continues to be affected by weak market conditions (principally within China) and is below their expected annual commitments under the offtake agreements. While the Company has reserved its position under its offtake agreements and reminds its customers of their obligations, the Company chooses to continue to work with its customers in the current challenging conditions as they are considered to be strategic partners in the lithium supply chain (and in some cases shareholders) who have and will continue to support the business for the longer term when the market improves.

The Company has also engaged with various prospective customers as it continues to diversify its customer base.

While the Company remains optimistic about medium to longer term demand growth for lithium raw materials, there remains material uncertainty on the near-term outlook given the pre-existing weakness in the lithium raw materials market, now complicated by the effect of the COVID-19 pandemic, both within China and across the globe.

Based on indicative customer demand, Pilbara Minerals' sales guidance for the June Quarter 2020 is forecast to be in the range of 25,000 to 35,000 dmt of spodumene concentrate.

The Company will provide further guidance should there be a material change.

During the Quarter, tantalite concentrate sales totalled 33,970lbs of tantalite concentrate sold (provisional sales, pending final reconciliation and assay results).



Table 2: Production and shipments

	Units	Q4 FY19	Q1 FY20	Q2 FY20	Q3 2020
Spodumene concentrate produced	dmt	63,782	21,322	14,711	20,251
Spodumene concentrate shipped	dmt	43,214	20,044	33,171	33,729
Tantalite concentrate produced	lb	67,075	48,825	11,162	3,600
Tantalite concentrate shipped	lb	38,856	10,765	75,369	33,970 <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Sales estimates pending final reconciliation and assay results.

Table 3: Stocks position

	Units	Q4 FY19	Q1 FY20	Q2 FY20	Q3 2020
ROM stockpile	wmt	685,912	775,992	125,762 <sup>2</sup>	70,852
Coarse ore stockpile	dmt	83,620	84,749	92,034	10,382
Spodumene concentrate stocks	dmt	51,468	52,450	25,730	11,286 <sup>3</sup>
Tantalite concentrate product stocks	lb	74,853	112,914	45,920	18,379 <sup>4</sup>

<sup>&</sup>lt;sup>2</sup> Stockpile volumes adjusted in prior period when finalising half-year accounts – refer to FY20 Interim Financial Report (ASX announcement 20<sup>th</sup> February 2020).

#### 3.4 OFFTAKE AGREEMENT WITH YIBIN TIANYI

During the Quarter, Pilbara Minerals secured a new long-term offtake partner for the Pilgangoora Project. Through its strategic relationship with Contemporary Amperex Technology (CATL), the Company entered into a five-year offtake agreement for spodumene concentrate (SC6.0 basis) supply with Yibin Tianyi Lithium Industry Co Ltd (Yibin Tianyi).

The five-year agreement is for up to 75,000tpa of spodumene concentrate, with 60,000tpa to be supplied initially in 2020, increasing to a minimum of 75,000tpa for the remainder of its term. Yibin Tianyi took delivery of an initial shipment of 20,000t in March 2020 and, following execution of the offtake agreement, Pilbara Minerals expects a second shipment in the June Quarter and a regular delivery schedule thereafter.

Based in the city of Yibin in China's Sichuan Province, Yibin Tianyi is set to become a leading lithium chemical and battery materials supplier. With the support of one of its major shareholders, CATL, Yibin Tianyi has been pursuing a growth strategy to become a globally significant lithium chemical manufacturer by expanding its footprint in the new energy technology sector.

Yibin Tianyi is currently constructing a lithium chemical plant in Sichuan with an initial production capacity of up to 25,000tpa of lithium chemicals (including primary hydroxide production and facilities for lithium carbonate production). Production is targeted to commence by approximately mid-year. Once in production, Yibin Tianyi plans to increase capacity to approximately 100,000tpa by 2022, which will make it one of the biggest lithium chemical suppliers in China. CATL currently holds a ~15% stake in Yibin Tianyi.

Key terms of the Yibin Tianyi offtake agreement were provided in the Company's ASX announcement dated 25 March 2020.

#### 4. MARKET COMMENTARY

The Quarter remained weak in respect of lithium raw materials, with sustained low pricing and demand across the entire lithium raw materials and chemicals supply chain. Pilbara Minerals continues to moderate production in a proactive response to these market conditions, thereby

<sup>&</sup>lt;sup>3</sup>Closing balance includes adjustments of 966dmt during the March Quarter comprised of 624dmt new sheeting (for stockpile base) following extensive rainfall, and 342dmt following rehandle losses off legacy stockpiles.

<sup>&</sup>lt;sup>4</sup>Closing balance includes an adjustment for 2,829lbs for prior quarter reconciliation adjustments.



preserving cash and reducing costs by depleting available stocks of ore and final product to support customer sales.

COVID-19 has resulted in the suspension and curtailment of production at major automotive OEMs and battery manufacturers. With expected weaker global demand for purchases (such as electric vehicles), Roskill has downgraded its total lithium demand for 2020 by more than 25%. However, demand for rechargeable battery applications is still expected to show growth in 2020, though at a significantly slower rate than previously forecast.

In China, the State Council officially announced a series of measures to support automobile sales including extending tax breaks and subsidies on electric vehicle purchases for two years. The Chinese lithium supply chain, having been impacted by COVID-19 for a period during the Quarter, has now resumed production with participants almost back to full capacity.

Pilbara Minerals continues to monitor the situation, both within China (and globally) to determine the potential impact on the lithium market, and will continue to engage with existing customers and potential customers on future spodumene concentrate sales and shipments. There remains material uncertainty as to the near-term direction of the market.

Globally, Argentinian lithium projects are on virus lockdown and have suspended operations, while Eramet announced its decision not to build its Argentinian lithium project.

During the Quarter, Pilbara Minerals continued to actively engage with all offtake partners and additional industry participants. The execution of an additional five year, 75,000tpa offtake being signed with Yibin Tianyi (an associate of CATL) provides a recent example of the expanding lithium-ion supply chain base to serve the expected growth in the battery market, especially for high-nickel cathode materials which are competitively supplied via the high-quality spodumene and lithium hydroxide supply base.

### 5. PROJECT DEVELOPMENT

#### 5.1 STAGE 2 (5MTPA) EXPANSION

During the Quarter, the Company further progressed technical studies to support the delivery of the phased and incremental Stage 2 expansion up to 5Mtpa.

The phased expansion being pursued segments the total expansion into three incremental steps. This approach reduces the capital required to deliver the first incremental tonnes, improves timing for the initial expansion steps (when required) and provides flexibility to align subsequent increases with customer requirements.

The test work completed during the Quarter continues to support the incorporation of mass-rejection in the dense media separation circuit. This process step is a key enabler to facilitate the phased and incremental expansion approach being progressed by the Company.

The technical studies now well underway will finalise the processing methods to be deployed in the incremental expansion and are expected to be completed in the June Quarter. Following the completion of these studies, the Company anticipates commencing a revised Stage 2 Definitive Feasibility Study (DFS). The timeline to complete the revised DFS will ultimately be influenced by the level of deviation that the chosen process methods differ as compared to the original Stage 2 DFS process design.

Further, the timing of any subsequent expansion will be guided by customer needs and market conditions. If supported by customer demand, the Company considers that the first phase of the incremental expansion could be delivered within nine months following the initial financial investment decision (FID).



### 6. EXPLORATION

Exploration during the Quarter included continuation of geo-metallurgical studies on the various ore types present at the Pilgangoora Project and an RC drilling program at the Mt York Gold Project to ensure that minimum tenement expenditure was maintained.

#### 6.1 PILGANGOORA PROJECT (PILBARA MINERALS 100%)

Pilbara Minerals continued with advanced geo-metallurgical studies including whole-rock geochemistry, petrography and QEMSCAN analysis on the various ore types present at the Pilgangoora Project during the Quarter. Preliminary findings have been encouraging and it is anticipated that the results will provide geochemically based modelling criteria to discriminate pegmatite ore types, thereby supporting alternate process plant blend feed strategies that may yield further improvements in lithia recovery.

#### 6.2 MT YORK GOLD PROJECT (PILBARA MINERALS 100%)

Pilbara Minerals has completed a reconnaissance RC drilling program at its Mt York Gold Project located 5km south of the Pilgangoora Project's mine site. Drilling was undertaken by Mt Magnet Drilling Pty Ltd using a truck mounted RCD300 drill rig and included seven holes for 582m. This modest drill program was initiated to maintain the minimum tenement expenditure requirements and to generally add value to Pilbara Minerals' exploration tenure base.

The inaugural drilling program was designed to drill test a semi-contiguous >0.5g/t Au surface gold anomaly extending over 700m with a peak assay of 7.4g/t Au (Figure 2).

Significant zones of silica alteration and sulphide mineralization (pyrrhotite and arsenopyrite) were intercepted in the majority of holes.

Down hole composite samples were collected on 4m intervals and were submitted to Nagrom Laboratories in Kelmscott for analysis.

Composite results were encouraging with a best intercept of 16m @ 2.43 g/t Au (from 16m) returned from drill hole MYRC007 (Figure 3). The mineralised zone remains open both along strike and down-dip and warrants further exploration drilling.

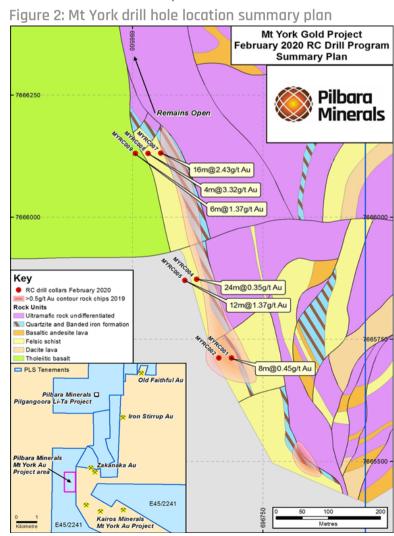
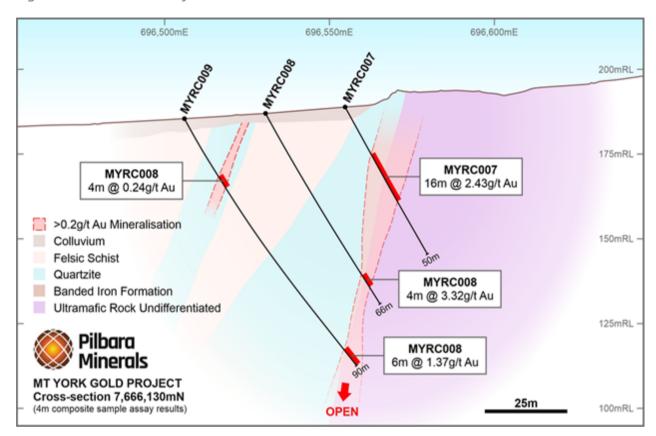




Figure 3: Mt York Gold Project - cross section 7666130mN



#### 6.3 MT FRANCISCO JV (PILBARA MINERALS LIMITED 51%, ATLAS IRON 49%)

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

### 7. CORPORATE

#### 7.1 POSCO DOWNSTREAM JOINT VENTURE

Pilbara Minerals and POSCO continue to pursue the downstream joint venture (JV) to operate a chemical conversion facility in South Korea, which remains a key strategic and long-term objective for both companies.

As announced last quarter (ASX Announcement 30 January 2020), POSCO is undertaking further technical evaluations on the design of the chemical conversion facility and additional market evaluation before both companies are able to finalise JV documentation and obtain formal approvals. While timing remains dependent on market conditions and the technical evaluations, final investment committee and board approvals and the execution of formal JV documentation is targeted in the third quarter of the 2020 calendar year.

#### 7.2 FINANCIAL RESULTS FROM OPERATIONS

During the Quarter, the Company shipped 33,729 dmt of spodumene concentrate. The average SC6.0 market reference price continued to decline during the Quarter, in response to continued weakness in lithium raw material markets.

Spodumene concentrate prices reported during the Quarter by 3<sup>rd</sup> party agencies included US\$465/t CIF China by Asian Metals, US\$475/t CIF China by Shanghai Metals Market, US\$430/t



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FOB Australia by Benchmark Minerals and US\$419/t FOB Australia by S&P Global Platts. Pilbara Minerals notes there was likely further weakening in spodumene pricing during the latter part of the Quarter and into the month of April.

During the Quarter, operations at the Pilgangoora Project continued to be moderated as market conditions remained weak. As part of the production moderation strategy, Pilbara Minerals delayed mining activity, extended process plant shutdowns and, wherever possible, drew down on existing stockpiles to conserve cash. The plant operated over a period of approximately five weeks during the Quarter.

While the Company operates under a production moderation strategy, unit operating costs will continue to be elevated until the benefits of economies of scale can be garnered from steady-state operations. 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 credits.

The recent improvements to lithia recovery provides confidence that the Company's long term unit costs should trend towards US\$320-350/dmt CFR China or US\$270-US\$300/dmt (FOB Port Hedland and exclusive of royalties) on a SC6.0 basis once design plant production capacity is consistently achieved. Unit costs should normalise at these levels during the two to three quarters after steady state production has been achieved and once the plant has ramped up to nameplate capacity of ~320,000 dmtpa of spodumene concentrate.

#### 7.3 CASH BALANCE

The Company's production moderation strategy during the Quarter continued to focus on matching site production and available stocks to customer demand to minimise investment in working capital.

The Company closed the Quarter with a cash balance of \$108.2 million, inclusive of \$7.2 million of irrevocable bank letters of credit for shipments completed within the Quarter, after paying all operating costs, capital expenditure, corporate costs and interest expense. This represents a positive increase of \$2.7 million compared to the balance at the end of the December 2019 Quarter of \$105.5 million. The net receivables/payables balance at 31 March 2020 is materially consistent with the balance at 31 December 2019.

During the Quarter, Pilbara Minerals received:

• Proceeds of \$27.0 million from concentrate sales (inclusive of spodumene and tantalite), including \$7.2 million attributable irrevocable bank letters of credit for shipments completed within the Quarter.

Major cash outflows during the Quarter included:

- \$11.4 million on operating costs at the Pilgangoora operation;
- \$3.2 million 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;
- \$5.4 million in interest and financing payments, largely associated with the USD senior secured bond facility;
- \$2.6 million on payroll, administration and corporate costs (including \$0.3M paid to all directors for directors' fees/salaries); and
- \$0.9 million on exploration and evaluation work in relation to the Pilgangoora Project (including associated feasibility studies).

At 31 March 2020, the Company's US\$15 million working capital facility remained undrawn.



Where possible, the Company has retained USD denominated sales proceeds received from customers as a natural hedge against the Company's USD denominated secured Nordic bond and related interest payments.

The Company continues to work on initiatives that preserve cash flow. Subsequent to the March 2020 Quarter-end, the Company implemented a salary sacrifice scheme whereby employees and executives will be invited to sacrifice up to 25% of their salaries for share rights issued under the Company's existing Employee Awards Plan which will automatically convert to ordinary fully-paid shares in the Company.

The scheme provides an opportunity for employees to take a personal investment in the Company which is aligned with shareholder interest, while also enabling the Company to preserve cashflow in a challenging market. The KMP of the Company have elected to sacrifice 25% of their salary as part this salary sacrifice scheme, subject to any necessary shareholder approvals.

#### 7.4 STAGE 1 DEBT FUNDING

During the Quarter, Pilbara Minerals continued to meet its payment obligations under its secured US\$100M Nordic Bond used to finance Stage 1 of the Pilgangoora Project.

The Company continues to comply with the terms of the Bond, including financial covenants which are reported to the Nordic Trustee on a quarterly basis.

With its strong balance sheet and \$108.2 million in cash and bank letters of credit at 31 March 2020 (inclusive of \$7.2 million of irrevocable bank letters of credit for shipments completed in late March 2020), Pilbara Minerals is well placed to continue to readily meet all its debt service requirements (principal repayments and interest) under the Bond.

Key terms of the Bond include:

- Term of 5 years, with a maturity date of June 2022;
- Eight equal quarterly principal repayments of US\$6.25 million commencing from June 2020, with a final repayment of US\$50 million at maturity in June 2022;
- Coupon rate of 12%;
- Call premia payable 104.8% reducing to 102.4% in the event the Bond is redeemed before December 2021; and
- A "Make Whole" amount payable in the event the Company wishes to redeem the Bonds prior to June 2020.

With the pending expiry of the "Make Whole" payment impediment in June 2020, the Company now has the opportunity to evaluate various options which could reduce the cashflow impact of the Bond, in the event favourable proposals emerge. Such a review forms part of the Company's continued prudent approach to evaluating and managing its capital and cash-flows.

Available options to Pilbara Minerals may include restructuring the terms of the existing Bond (for example, extending the maturity date and/or delaying the start of the amortisation period and/or changing the dates for call option premia) or refinancing the Bond with a different debt instrument, including through the support of its customers or strategic partners in an alternate financing instrument or a combination thereof.

Pilbara Minerals will keep the market updated in relation to such initiatives, should a material change to the Company's financings emerge.



#### CONTACTS

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Release authorised by Ken Brinsden, Pilbara Minerals Limited's Managing Director.

#### MORE INFORMATION

#### ABOUT PILBARA MINERALS

Pilbara Minerals is an Australian lithium-tantalum producer and a top-200 company on the Australian Securities Exchange (ASX: PLS). Through the development of its 100% owned, Pilgangoora Lithium-Tantalum Project (Pilgangoora Project), the Company is positioned to become a major player in the world's rapidly growing lithium supply chain, underpinned by the electric vehicle and energy storage markets.

Located in Western Australia's resource rich Pilbara region, the Pilgangoora Project hosts one of the world's largest hard rock lithium-tantalum deposits and is recognised as one of the most important new sources of lithium raw materials globally. The Pilgangoora Project's significant scale and outstanding quality has not only resulted in a remarkable development timeline, with Pilbara Minerals having progressed it from first drill hole to production in under four years, but also attracted a consortium of high quality global partners including Ganfeng Lithium, General Lithium, Great Wall Motor Company, POSCO, CATL and Yibin Tianyi.

Now that production is underway, Pilbara Minerals is focused on an expansion and diversification strategy to become one of the biggest and lowest cost lithium producers, and a fully integrated lithium raw materials and chemicals supplier in the years to come.

#### 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.

#### **COMPETENT PERSON STATEMENT**

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.

Information relating to the current Mineral Resource and Ore Reserve estimates, production targets and forecast information derived from the production targets (including information relating to the proposed expansions of the Pilgangoora Project), each in respect of the Pilgangoora



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Project, is extracted from the ASX announcement dated 3 August 2018 entitled "Outstanding DFS Results Support Pilgangoora Expansion", the ASX announcement dated 17 September 2018 entitled "Pilgangoora Reserve and Resource Upgrade", the ASX announcement dated 27 August 2019 entitled "Update on Partnering Process and Revised Stage 2" and as updated in the 30 June 2019 Annual Report. Pilbara Minerals confirms that it is not aware of any new information or data that materially affects the information included in these announcements and that all material assumptions and technical parameters underpinning the resource and reserve estimates, production targets and forecast financial information derived from the production targets in the announcements continue to apply and have not materially changed. Pilbara Minerals confirms that the form and context in which the competent persons' findings are presented in this report have not been materially modified from the original market announcements.

The technical studies referred to in this report in respect of the Revised Stage 2 expansion have been undertaken to determine the potential viability of the expansion and to reach a decision to proceed with more definitive studies. Each technical study is based on low-level technical and economic assessments and is insufficient to provide assurance of an economic development case at this stage or provide certainty that the conclusions of the studies will be realised. The results of the studies should not be considered a profit forecast or production forecast.



### APPENDIX 1 - TENEMENT TABLE AS AT 31 MARCH 2020

ALLEN	IBIX I TENEI	TENT TABLE	AS AT 31 MARCH 2020	PLS	PLS
				BENEFICIAL HOLDING AT START OF	BENEFICIAL HOLDING AT END OF
TENEMENT	LOCATION	STATUS	REGISTERED HOLDER	PERIOD	PERIOD
			PPLICATIONS AT COMMENCEMENT O	100%	100%
E45/2241	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%
E45/4270	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	Granted	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	Granted	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%
		1	<u> </u>		I.



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TENEMENT	LOCATION	STATUS	REGISTERED HOLDER	PLS BENEFICIAL HOLDING AT START OF PERIOD	PLS BENEFICIAL HOLDING AT END OF PERIOD
L45/497	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
L45/528	Pilgangoora	Granted	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	Granted	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%
P45/3058	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
P45/3096	Pilgangoora	Granted	Pilgangoora Operations Pty Ltd	100%	100%
	APPLICATIONS MADE DURING THE QUARTER				
L45/555	Pilgangoora	Application	Pilgangoora Operations Pty Ltd	100%	100%
		TENEMENTS	DISPOSED OF DURING THE QUARTEI	R	
P45/2783	Pilgangoora	Expired	Pilgangoora Operations Pty Ltd	100%	100%

#### APPENDIX 2 - DRILL HOLE COLLAR LOCATIONS

HOLE ID	EAST GDA94	NORTH GDA94	RL (m)	DIP	AZIMUTH	DEPTH (m)
MYRC001	696690	7665711	184	-60	90	94
MYRC002	696666	7665712	182	-60	90	95
MYRC004	696623	7665872	178	-60	90	75
MYRC005	696601	7665870	174	-60	90	112
MYRC007	696555	7666131	189	-60	90	50
MYRC008	696531	7666130	187	-60	90	66
MYRC009	696506	7666130	185	-60	90	90

### APPENDIX 3 - DRILL HOLE INTERCEPTS

Hole ID	From (m)	To (m)	Thickness (m)	Au (g/t)	Intercept
MYRC001	12	20	8	0.45	8m @ 0.45 g/t Au
MYRC001	24	28	4	0.21	4m @ 0.21 g/t Au
MYRC001	68	72	4	0.26	4m @ 0.26 g/t Au
MYRC002	0	4	4	0.22	4m @ 0.22 g/t Au
MYRC004	0	4	4	0.2	4m @ 0.20 g/t Au
MYRC004	28	52	24	0.35	24m @ 0.35 g/t Au
MYRC004	60	64	4	1.21	4m @ 1.21 g/t Au
MYRC005	80	92	12	1.37	12m @ 1.37 g/t Au
MYRC005	96	104	8	0.32	8m @ 0.32 g/t Au
MYRC007	16	32	16	2.43	16m @ 2.43 g/t Au
MYRC008	56	60	4	3.32	4m @ 3.32 g/t Au
MYRC009	20	24	4	0.24	4m @ 0.24 g/t Au
MYRC009	84	90	6	1.37	6m @ 1.37 g/t Au

Note – Assay results are from 4m composite samples. 1m split sample results outstanding.



#### APPENDIX 4

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.	Pilbara Minerals Limited (PLS) completed 7 reverse circulation (RC) drill holes for 582m at the Mt York prospect in February 2020.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	<ul> <li>Samples were collected every Im using a cyclone and cone splitter attached to the rig with a steel brace. The cyclone splitter was configured to split the cuttings at 85% to waste (to be captured in 600mm x 900mm green plastic mining bags) and 15% to the sample port in draw-string calico sample bags (12-inch by 14-inch). Calico bags were left onsite for Im sample submissions following assessment of 4m composite results.</li> <li>4m composite samples were collected from all drill holes using a spear. Approximately 3-5kg of sample was captured in calico draw-string bags.</li> </ul>
	<ul> <li>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</li> </ul>	Composite samples were sent to Nagrom laboratory in Kelmscott, Perth and analysed for Au, As, Ag, Bi, Cu, S, Hg, Pb, Sb, Te and Zn using ICP Analysis to various detection limits.



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	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 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, openhole 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.).	<ul> <li>RC drilling was completed by Mt Magnet Drilling Pty Ltd using a truck mounted RCD300 drill rig with an auxillary compressor with 1350cfm / 350psi and truck mounted support vehicle.</li> <li>Drilling undertaken using a face sampling RC bit</li> <li>Booster compressor unit not utilised.</li> </ul>
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<ul> <li>Recoveries for the majority of holes were logged as good.</li> <li>Water was intersected between 29 and 58m. Samples were recorded as being damp or wet below water table.</li> </ul>
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<ul> <li>Rods were flushed with air after every 6m. In addition, moist or wet ground conditions resulted in the cyclone being washed out between each sample run.</li> </ul>
	Whether a relationship exists between sample recovery and grade and whether	No material bias has been identified. Results from 1m split samples are awaited.



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
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.	<ul> <li>Comprehensive geological and geotechnical logging has been undertaken to a level of detail to support appropriate Mineral Resource estimation.</li> <li>Im samples were laid out in lines of 20 or 30 samples with cuttings collected and geologically logged for each interval and stored in 20 compartment plastic rock-chip trays with hole numbers and depth intervals marked (one compartment per lm).</li> <li>Rock-chip trays are stored on site at Pilgangoora in a secured containerised racking library.</li> </ul>
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	<ul> <li>Logging data was directly entered into the Pilbara Minerals         OCRIS data logging system to streamline data entry to the         DataShed database management system.</li> <li>Photography has been collected for all chip trays using a digital         SLR camera.</li> </ul>
	The total length and percentage of the relevant intersections logged.	All drill chips have been logged in detail on a meter by meter basis.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> </ul>	RC samples collected were split at the rig using a cone splitter mounted directly beneath the cyclone.



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	<ul> <li>Quality control (QA/QC) sampling including duplicates and blanks were undertaken as part of the Pilbara Minerals QA/QC sampling regime. PLS did not include Au standard samples.</li> <li>Duplicates were collected every 20<sup>th</sup> sample.</li> <li>Nagrom provided laboratory standards and blanks as part of the internal QA/QC analysis.</li> </ul>
	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.	<ul> <li>QA/QC sampling including duplicates and standards were undertaken as part of the PLS standard sampling regime.</li> <li>Blanks submitted every 50<sup>th</sup> sample.</li> <li>Duplicates submitted every 20<sup>th</sup> sample</li> <li>Im split samples were collected in calico bags.</li> <li>4m composite samples returning greater than 0.2 ppm / Au will be resubmitted as Im split samples and analysed for Au by Fire Assay.</li> </ul>
	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 mineralization.
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  The nature, quality and appropriateness of the assaying and laboratory procedures used	<ul> <li>Composite RC samples were sent to Nagrom laboratory in Kelmscott, Perth and analysed for Au, As, Ag, Bi, Cu, S, Hg, Pb, Sb, Te and Zn using ICP Analysis to various detection limits.</li> <li>Im samples will be analysed for Au only via Fire Assay</li> <li>Both techniques are considered suitable for this style of mineralisation.</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	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.	<ul> <li>QA/QC sampling including duplicates and standards were undertaken as part of the PLS QA/QC sampling regime.</li> <li>Blanks submitted every 50<sup>th</sup> sample.</li> <li>Duplicates submitted every 20<sup>th</sup> sample.</li> <li>Laboratory standards and blanks are also analysed as standard laboratory procedural checks on analysis.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	<ul> <li>Significant intersections have been verified by independent database consultants Mitchell River Group.</li> <li>Intersections are based on 4m composite samples.</li> <li>Single metre split samples from all composite samples &gt; 0.2ppm Au will be submitted for assay and intersections will then be recalculated.</li> </ul>
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul> <li>An electronic database containing sample location, assays and geology for all Pilbara Minerals samples has been maintained.         Data is compiled and stored by independent database administrators (Mitchell River Group).     </li> <li>All PLS assays were sourced directly from NAGROM as certified laboratory files.</li> </ul>
	Discuss any adjustment to assay data.	No adjustment to assay data at the time of reporting.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys),	Drill hole collar locations were surveyed at the end of the program using a DGPS with +/- 10cm accuracy on northing,



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	trenches, mine workings and other locations used in Mineral Resource estimation.	<ul> <li>easting &amp; RL by PLS personnel.</li> <li>Downhole survey information was also collected using a Reflex Gyro Survey/Steering System instrument for all holes.</li> </ul>
	Specification of the grid system used.	The grid used was MGA (GDA94, Zone 50).
	Quality and adequacy of topographic control.	Topographic control is maintained by mine site surveyors using accurate base stations.
Data spacing and distribution	Data spacing for reporting of Exploration     Results	Three drill sections were completed on nominal 200m line spacings across the mineralised zones. Hole spacing along the line was 50m.
	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 based on detailed geological mapping and surface rock chip sampling.
	Whether sample compositing has been applied.	Compositing of samples has been applied to this dataset.
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.	<ul> <li>The mineralisation dips steeply to the east and follows a major structurally controlled contact between two rock types.</li> <li>The drilling orientation and the intersection angles are deemed appropriate.</li> </ul>
	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 Pilbara Minerals samples were managed by Pilbara Minerals personnel. Samples for analysis were delivered



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
		to the Nagrom laboratory in Kelmscott by Centurion Transport courier truck in 2019.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.  The results of any audits or reviews of sampling techniques and data.	<ul> <li>The collar and assay data have been reviewed by compiling a SQL relational database. This allowed some minor sample numbering discrepancies to be identified and amended.</li> <li>Drilling locations and survey orientations have been checked visually using GIS software and found to be consistent.</li> </ul>



## 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	<ul> <li>E45/2241 is registered in the name of Pilgangoora         Operations Pty Ltd.</li> <li>The tenement is 100% owned by Pilgangoora Operations         Pty Ltd.</li> </ul>
	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.	Limited exploration drilling had been completed in the region by Lynas Gold in the 1990s. No accurate survey data is available and only limited drill hole collars / cuttings could be located.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Gold mineralisation within the Mount York district, is thought to be orogenic (Groves et al., 2019) and generated during the D3 Mosquito Creek Orogeny ca. 2890 Ma (Neumayr et al, 1998).</li> <li>An appropriate model for gold mineralisation in the Mount York district involves the fluxing of high-pressure gold-bearing hydrothermal fluids from late-D3 shear zones into the nearby network of faults and veins, during episodes.</li> <li>The prospect area lies over a NW-trending structure which links in the south with the Mount York shear zone at the Main Hill and Breccia Hill gold deposits.</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Drill hole Information	<ul> <li>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.</li> <li>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.</li> </ul>	Refer to Appendix 2 and 3 in this report.
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Length weighted averages used for drill hole results.</li> <li>Cutting of high grades was not applied in the reporting of intercepts in Appendix 3.</li> <li>No metal equivalent values are used.</li> </ul>



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	Downhole lengths are reported in Appendix 3 of this report.
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 2 and 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.	<ul> <li>Comprehensive reporting of drilling details has been provided in Appendix 2.</li> <li>Comprehensive reporting of drill results reported in Appendix 3.</li> </ul>
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	All meaningful and material exploration data has been reported.



CRITERIA	JORC CODE EXPLANATION	COMMENTARY
	characteristics; potential deleterious or contaminating substances.	
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further work includes analysis of the 1m samples</li> <li>Infill and further RC drilling along strike from the discovered zone has been recommended.</li> <li>Diagrams have been provided in the body of this report.</li> </ul>