

MARCH 2022 QUARTERLY ACTIVITIES REPORT

Production guidance achieved despite impact of COVID, with lithium prices continuing to hit new highs and key mid and downstream projects progressed

Access the quarterly investor, analyst and media webcast at 8.00am (WST) / 10.00am (AEST) on Thursday, 28 April 2022: https://webcast1.boardroom.media/watch_broadcast.php?id=6243aa2834c68

KEY POINTS

Production and sales

- Production of 81,431 dry metric tonnes (dmt) of spodumene concentrate (December Quarter: 83,476 dmt). Production volumes impacted by resourcing shortfalls in staff and contractors as a function of COVID-19 impacts and the tight labour market.
- Spodumene concentrate shipments of 58,383 dmt (December Quarter: 78,679 dmt), impacted by a port delay in loading a ~20,000 dmt cargo, which was scheduled for late March (departed Port Hedland on 7 April).
- Average spodumene price reference for sales in the March Quarter of US\$2,650/dmt (SC 6.0¹, CIF China basis), in line with prior guidance (being US\$2,600-3,000/dmt CIF China SC6.0 basis).
- Tantalite concentrate sales totalled 12,880 lbs (December Quarter: 29,038lbs).

Lithium market

- Price of US\$5,650/dmt (SC 5.5, FOB Port Hedland basis) achieved under Battery Material Exchange (“BMX”) auction conducted on 27 April 2022. Equates to an estimated price of US\$6,250/dmt (SC6.0, CIF China basis).
- Strong sales price dynamic during the March Quarter, with battery grade chemical pricing suggesting another significant step-up in the offtake concentrate sales price during the June Quarter.

Project development

- Pilgan Plant Improvements Project successfully commissioned, with installed production capacity now re-rated from 330ktpa to 360-380ktpa of spodumene concentrate.
- Staged restart of production from the Ngungaju Plant continued. Load commissioning of fines flotation circuit commenced on 9 April 2022.
- Scoping Study completed for Mid-Stream Project, providing preliminary support for the development and construction of a demonstration plant chemicals facility at Pilgangoora, producing value-added lithium phosphate salts via an innovative calcination and refining process.
- A Life Cycle Assessment was completed for the Pilgangoora Project identifying opportunities for decarbonisation at both Pilgangoora and within the supply chain downstream.

Corporate

- Operating cashflow of \$113.9M delivers Quarter-end cash balance of \$284.9M, inclusive of \$75.2M of irrevocable bank letters of credit for shipments completed up to 31 March 2022

¹ The actual concentrate grade delivered to customers may be less than 6% lithia content, in which case the actual price received is typically pro rata to the 6% reference price. Please refer to section 1.3 for further pricing commentary.

(December Quarter: \$245M).

- Key conditions precedent and other closing criteria were progressed during the Quarter for the formation of a downstream processing JV with POSCO, with completion occurring on 13 April 2022 including the Company subscription for its 18% interest in the JV.
- Managing Director and CEO, Ken Brinsden, advised his intention to step down from the role by the end of 2022. Pilbara Minerals has commenced an executive search process for the Company's next CEO.

1. Operations Overview

During the March Quarter 2022 (**the Quarter**), Pilbara Minerals Limited (**Pilbara Minerals** or **the Company** | **ASX: PLS**) continued to progress work programs to increase spodumene concentrate production at the Pilgangoora Project, responding to surging global demand for lithium raw materials.

Production for the Quarter of 81,431 dry metric tonnes (dmt) of spodumene concentrate was achieved, within previous guidance provided of 75,000 - 90,000dmt.

Production was, in part, impacted by the rising instance of community transmission of COVID-19 in Western Australia during the Quarter, which reduced the availability of staff and contractors.

With COVID-19 expected to continue to impact the Company's operations through the June Quarter, there remains some uncertainty regarding production levels through to 30 June 2022. COVID-19 has (and may continue in the near term) to cause operational delays, including staffing shortages for both shut-down and operating staff (mining and processing).

Despite these impacts, FY22 annualised production guidance has been maintained in the range of 340-380,000dmt, albeit noting that any continuing COVID-19 impacts may result in production being in the lower half of the guidance range.

1.1 Sustainability

1.1.1 Health and safety

The Company has continued to closely monitor the COVID-19 situation (including virus transmission among employees and contractors) and responded accordingly to any changes in directives by the State and Federal governments. Pilbara Minerals remains focused on taking all necessary steps to ensure the health and safety of its people and other key stakeholders, while responsibly maintaining site operations.

One recordable safety incident (cut hand) occurred in the March Quarter. At the end of the March Quarter, the Total Recordable Incident Rate was 3.5, down from the December quarter of 4.42.

1.1.2 Solar farm

During the March Quarter, the Company's main power contractor - Contract Power Australia mobilised for the construction of the 6MW solar photovoltaic farm, which is the first major step in the Company's pathway to decarbonising the Pilgangoora Operation. Site detailed civil works will be the predominate task for the coming Quarter, with final equipment installation and commissioning of the array targeting completion in the September 2022 Quarter.

1.1.3 People and culture

Strong progress continued to be made by the Company in its ongoing recruitment campaign to support its operational expansions. Despite the current extremely competitive labour market in the resources sector, 90 positions were recruited to join Pilbara Minerals' workforce during the March Quarter. The main focus of recruitment for Pilbara Minerals has been personnel to support the Company's owner-mining fleet (which was increased by an additional 81 positions in the March Quarter) and the additional operating and maintenance labour for the Ngungaju Plant.

As a result of this recruitment campaign, the Company's employee numbers increased by 15% in the March Quarter and 121% over the last twelve months with a total of 339 employees as at 31 March 2022.

While Pilbara Minerals has been largely successful with the recruitment of full-time personnel in support of expanded operations, peak labour availability across contractor workgroups including our mining contractor (MACA), construction, shutdown and breakdown maintenance groups continues to be challenging in light of further intensifying skills shortages in the mining industry and the impact of COVID-19. The Company continues to work with its key contractors to find innovative solutions to try to maintain appropriate manning levels that support ongoing operations.

1.2 Mining and processing commentary

Production volumes for the period were in line with guidance, with total production of 81,431 dry metric tonnes (dmt) of spodumene concentrate.

Previous guidance had assumed a level of operational impact from the effects of community transmission of COVID-19. During the Quarter these anticipated impacts were realised, principally in the form of shortfalls in operational personnel that was felt in all areas of the operation and were further challenged by the tight labour market for the WA mining industry.

These shortfall impacts translated to reduced mined volumes (compared to plan), reduced processing plant run-time for the Pilgan processing plant (due to extended process plant maintenance shut-downs) and slower commissioning and ramp-up of the Ngungaju processing plant.

1.2.1 Mining

Total material mined across the combined Pilgangoora Operation was 6,076,398 wet metric tonnes (wmt) (December Quarter: 4,672,233 wmt). Total ore mined for the Quarter was 815,387 (December Quarter 779,368 wmt) at an average grade of 1.39% Li_2O .

Total material movement increased during the period in support of the planned additional waste movements. However, total material movements were still below planned quantities due to COVID-19 impacts affecting personnel numbers for the both mining contractor (MACA) and Pilbara Minerals' owner-mining fleet.

1.2.2 Processing

Total processing plant feed of 613,202 dmt (December Quarter: 566,027 dmt) resulted in the production of 81,431 dmt of spodumene concentrate (December Quarter: 83,476 dmt) across the two processing plants (refer Table 2).

Lithia recoveries for the Pilgan processing plant were 61% and largely in line with the targeted recovery (64%), which anticipated there would be several changes in ore feed during the Quarter as ore was sourced from both Central and South pits, including new pit stages.

A long-run expected lithium recovery rate in the range of 70-75% remains in place for the Pilgan operation, during periods where consistent and optimal ore feed should allow stable processing plant operations.

During the period, planned maintenance shutdowns for the Pilgan processing plant over-ran as a function (principally) of personnel shortages.

Processing performance had continued to improve post the month of February, and there is an expectation that operational performance for the Pilgan operation will continue to improve through the June Quarter. This is mainly due to the combination of an expanded operations workforce being able to cover for any shortfalls which has supported the transition to more consistent ore sources from Central pit.

The quarterly activities for the Ngungaju processing plant comprised operation of the coarse circuit only, which has now moved into a more stable and consistent operating rhythm. In parallel, construction upgrade works were completed for the flotation circuit during the Quarter, and commissioning of this circuit commenced. Lithia recoveries for the coarse circuit were in line with expectations given the lower production outputs whilst commissioning works commenced for the flotation circuit.

Tantalite production for the Quarter was lower than planned principally due to changing ore feed source to South pit, that has minimal tantalite concentration. Tantalite production volumes are expected to return to normal levels as ore feed changes.

Quantities for mining, ore processed, shipments and concentrate stocks for the Quarter are detailed below (Refer Tables 1, 2 and 3 respectively).

Table 1: Total ore mined and processed

	Units	Q4 FY21	Q1 FY22	Q2 FY22	Q3 FY22
Ore mined	wmt	672,020	639,188	779,368	815,387
Waste mined	wmt	1,976,039	2,929,647	3,892,865	5,261,012
Total material mined	wmt	2,648,059	3,568,836	4,672,233	6,076,398
Ore processed	dmt	422,111	443,691	566,027	613,202

1.3 Shipments and sales

During the Quarter a total of 58,383 dmt of spodumene concentrate was shipped (both SC5.5 and SC6.0) under existing offtakes and to customers on a spot sale basis. Total tonnes shipped were impacted in late March by the delay of a cargo-ready 20,000 dmt shipment due to berth access constraints at Port Hedland. This vessel subsequently sailed post Quarter-end on the 7th of April, 2022 with final pricing consistent with previous March Quarter price guidance.

The average sales price for the March Quarter of ~US\$2,650/dmt (SC6.0, CIF China basis) was within previous guidance of US\$2,600-3000/dmt, inclusive of a cargo priced for shipment in the December Quarter that was eventually shipped in the March Quarter.

Offtake customer cargoes to date have typically been priced against a 6% lithia content reference price, however actual deliveries may contain a lower lithia content. In this instance, the actual price received is adjusted pro rata to the 6% lithia reference price.

Discussions continue with customers about delivered grades, with a view to maximising mine site recovery to product and therefore delivered lithia units to customers.

Battery grade chemical pricing continued to strengthen in the March Quarter, with current pricing dynamics suggesting further increases in spodumene concentrate pricing to be received for offtake contract sales during the June Quarter.

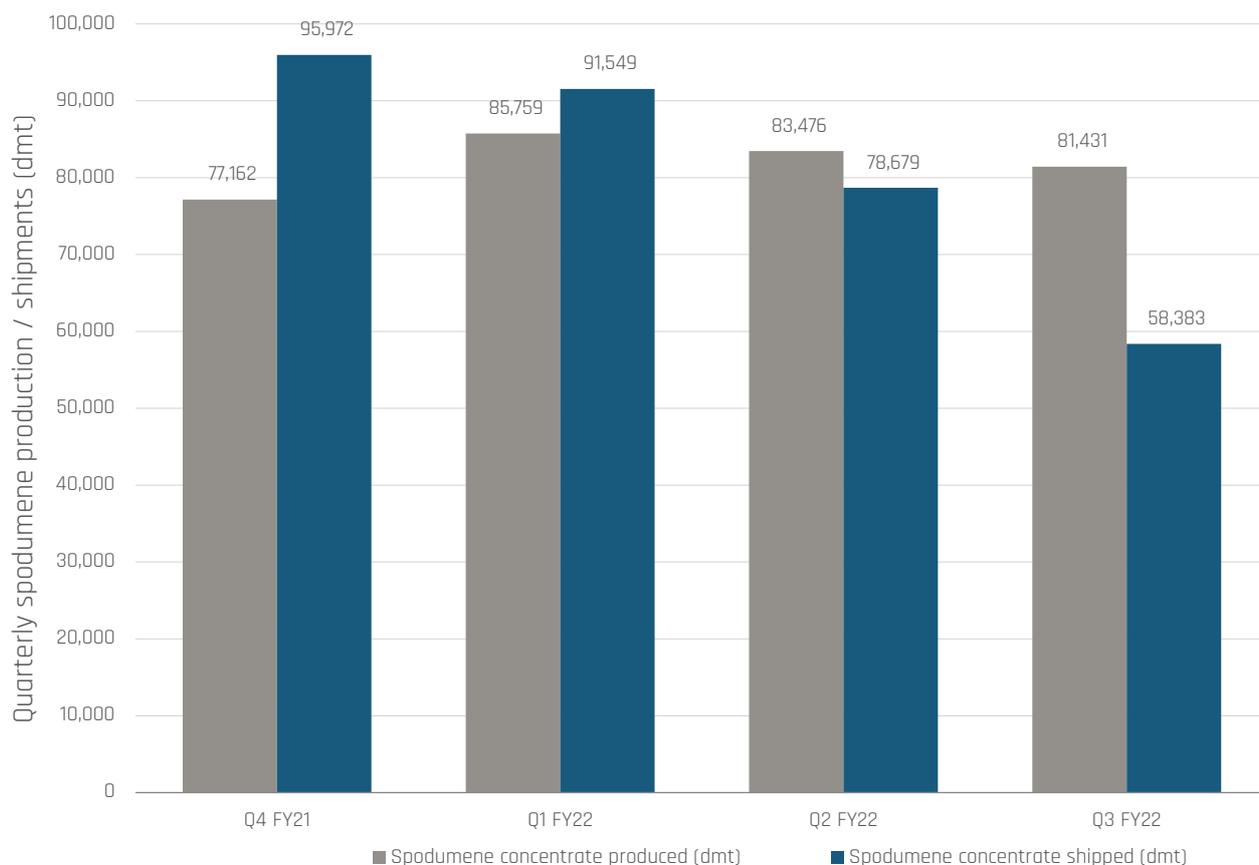


Figure 1: Quarterly spodumene concentrate production and shipments (dmt)

Tantalite concentrate sales for the Quarter were 12,880 lbs (including provisional sales, pending final reconciliation and assay results).

Table 2: Production and shipments

	Units	Q4 FY21	Q1 FY22	Q2 FY22	Q3 FY22
Spodumene concentrate produced	dmt	77,162	85,759	83,476	81,431
Spodumene concentrate shipped	dmt	95,972	91,549	78,679	58,383
Tantalite concentrate produced	lbs	34,048	33,557	24,629	2,654
Tantalite concentrate shipped	lbs	39,234	36,876	29,038	12,880

Table 3: Stocks position

	Units	Q4 FY21	Q1 FY22	Q2 FY22	Q3 FY22
Spodumene concentrate stocks	dmt	18,845	12,557	16,496	37,508¹
Tantalite concentrate stocks	lbs	19,588	16,269	11,860	1,633

¹ Closing balance includes reconciliation adjustments of (2,036) dmt during the Quarter for final survey adjustments, storage handling at the mine site, moisture reconciliation and draft survey at port.

1.4 Production Guidance

With COVID-19 expected to continue to partly impact the Company's operations through the June Quarter, there remains some uncertainty regarding production forecasts through to 30 June 2022. COVID-19 has and may continue in the near term to interrupt and cause operational delays,

including staffing shortages for both shut-down and operating staff (mining and processing).

Despite these impacts, FY22 annualised production guidance has been maintained in the range of 340-380,000dmt, albeit noting that any continuing COVID-19 impacts may result in production being in the lower half of the guidance range.

2. Market Commentary

Prices for spodumene concentrate and lithium raw materials continued to surge over the March Quarter, reaching new record highs on the back of strong demand from the automotive EV sector.

Price reporting agency, Benchmark Mineral Intelligence, reported battery grade lithium carbonate (EXW China, $\geq 99.5\%$ Li_2CO_3) averaging US\$76,700 a tonne in March – up 95% since the start of the calendar year. In March last year it was trading at US\$13,400 a tonne.

The lithium carbonate price in China has increased by approximately 472% from a low last June to a record high on March 15, according to pricing provider Asian Metal Inc.

At its inaugural Battery Megafactories Europe 2022 event in Berlin, Benchmark Mineral Intelligence's Simon Moores stated that EV Original Equipment Manufacturers (OEM's) will "need to become miners" and invest to bring new raw material mining capacity, not just refining capacity, to market

This view was supported by news that US EV giant, Tesla, has recently signed two supply agreements with lithium project developers in Australia, while major producer Ganfeng Lithium – with whom Pilbara Minerals has a long-term offtake agreement in place – unveiled plans to undertake a huge expansion program aimed at delivering eventual capacity of 600,000 tons of lithium carbonate equivalent, compared to current production of about 89,000 tons.

In April, carmaker Honda Motor Co also announced an investment of approximately US\$40 billion over the next decade to deliver 30 EV models worldwide, striving to achieve 100% electric sales by 2040.

Rental car giant Hertz further cemented its commitment to electric car hire with a new partnership with Polestar to buy up to 65,000 of its electric vehicles over five years. The announcement from Hertz followed a landmark order for 100,000 electric vehicles from Tesla last October.

2.1 Results of Fourth BMX Auction

Pilbara Minerals ("PLS") completed its fourth Battery Material Exchange ("BMX") auction after-market yesterday. As with all prior BMX auctions there was strong interest in both platform participation and bidding within the 30-minute auction window.

PLS intends to accept the highest bid of US\$5,650/dmt (SC5.5, FOB Port Hedland basis) for the intended 5,000dmt cargo. On an adjusted pro rata lithia basis inclusive of freight costs, this is approximately equivalent to a price of US\$6,250/dmt (SC6.0, CIF China basis).

Pursuant to the terms of the auction, the bidder is now required to enter into a sales contract with the Company, which requires a 10 percent deposit in the coming days and an irrevocable letter of credit from a recognised bank to be presented during the first week of May. Ship loading is expected from mid-June 2022.

Pilbara Minerals envisages that auctions will be held on a more regular basis as Ngungaju production continues to ramp-up and more uncommitted tonnes become available. The pricing received on the BMX sales trading platform is indicative of the critical shortage that exists in respect of lithium raw material supply. The sale further differentiates the emerging spot-market for spodumene sales, as compared to the typically longer-dated offtake sales arrangements and highlights how well Pilbara Minerals is placed to participate in this market and outperform its peers in respect of sales price received.

3. Project Development

3.1 Ngungaju Plant restart

Production from the Ngungaju Plant's coarse concentrate circuit went largely to plan during the March Quarter. Construction work for the restart of the flotation circuit is now complete, with no-load commissioning commencing during the Quarter.

Load commissioning (with the introduction of ore) commenced post Quarter end (9 April 2022).

Full commissioning and ramp-up of the Ngungaju Plant, including improved lithia recoveries, is expected to be achieved from the September 2022 Quarter, at which time targeted annual production capacity is expected to be between 180ktpa to 200ktpa of spodumene concentrate.

3.2 Pilgan Plant Improvements Project and Expansion

Following the successful commissioning of the Pilgan Plant Improvements Project, installed production capacity has now been re-rated from 330ktpa to 360-380ktpa of spodumene concentrate for throughput capacity.

3.3 Pilgangoora Incremental Expansion (Project name "P680")

Following the ramp-up of the Ngungaju operation, the next phase of incremental expansion for the Pilgangoora operation is the "P680 Project", providing an incremental increase of 100ktpa of spodumene concentrate from the Pilgan Plant. This will increase overall total installed production capacity at the Pilgangoora Project from 580ktpa to 680ktpa.

Pilbara Minerals is finalising the studies and estimates to support the Financial Investment Decision (FID) for the P680 Project, with FID targeted within the June 2022 Quarter.

Pilbara Minerals will continue revised studies for the subsequent incremental expansion beyond the P680 Project. The next expansion is targeted to increase total Pilgangoora production capacity to up to 1Mtpa and will be referred to as the "P1000 Project". The target date for FID for the P1000 Project is expected in the December Quarter of 2022.

3.4 Mid-Stream Project

During the Quarter, a Scoping Study was completed and announced to the market for the Mid-Stream Project (refer ASX Announcement dated 31-March-2022). The Mid-Stream Project's aim is to generate a higher value and more environmentally friendly lithium product for the battery materials industry.

The Scoping Study, which was undertaken by Lycopodium Minerals (ASX: LYL), provides preliminary support for the technical viability of constructing a demonstration-scale chemicals facility producing value-added lithium phosphate salts via an innovative refining process at Pilbara Minerals' Pilgangoora Operation.

The Study indicates lithium phosphate salt as the preferred mid-stream product, aiming to support a highly viable feedstock for a number of battery chemicals manufacturers, including the lithium ferro phosphate (LFP) battery cathode manufacturing industry, as well as lithium carbonate and lithium hydroxide production.

Using Calix's flash calcination technology, test-work has confirmed high calcination conversion rates (>95% for alpha to beta spodumene phase transformation) using fine flotation spodumene concentrate produced from Pilgangoora.

The contained lithia content of the product is expected to increase from ~5.7-6.0% in spodumene concentrates to >36% in lithium phosphate salts, thereby optimising offshore product logistics, reducing associated carbon emissions, and minimising waste in the destination market.

The Mid-Stream Project has the potential to deliver significant sustainability benefits across the lithium supply chain via:

- substantial reduction of carbon energy requirements by the complete electrification of the Mid-Stream process, including spodumene calcining, enabling the potential to power the project using up to 100% renewables sourced power;
- rationalisation of the carbon footprint via reduced waste movement requirements across transport and logistics supply chains from a more lithium-dense, and near zero-waste final product; and
- improved lithium recovery from the ore resource, as the proposed refining process should have the ability to treat very fine spodumene concentrates at lower lithia grades, which have traditionally been problematic for calcination in conventional direct-fired horizontal rotary calciners.

Consistent with the previously announced MoU, Pilbara Minerals and Calix intend to move forward with negotiations to establish a Joint Venture (JV) to potentially develop a demonstration plant, and for the commercialisation of the Mid-Stream process technology globally.

Further details of the Scoping Study were provided in the Company's ASX Announcement dated 31 March 2022.

3.5 Life Cycle Assessment

During the Quarter, Pilbara Minerals completed a Life Cycle Assessment (LCA) aligned with its Clean Energy Finance Corporation (CEFC) commitment to undertake a Scope 3 assessment of the product value chain to understand emissions and identify initiatives for further decarbonisation. The CEFC is a specialist clean energy investor who are a major lender under the Company's senior secured syndicated debt facility.

Minviro, a consultancy specializing in LCA, conducted the study which used a 'Cradle to Gate' process. The product life cycle impact was assessed from the point of resource extraction to the end-gate as battery grade lithium hydroxide monohydrate at the chemical conversion facility.

Outcomes from the LCA are being incorporated into project planning and will be included in the 2022 Annual Report in line with peers and other companies who have undertaken LCAs on their products.

4. Exploration and Geology

4.1 Overview

Exploration activities for the Quarter included regional surface geochemistry, heritage surveys and pad preparation for drilling programs scheduled for the June quarter. Assay results were also returned from recent RC drilling undertaken at Pilgangoora and Mt York.

4.2 Pilgangoora Project (Pilbara Minerals 100%)

Pilbara Minerals has received some encouraging results from the 16-hole RC sterilisation drilling program to the west of the Central pit area (Figures 2 and 3).

Selected intercepts from this program include:

- **9m @ 2.07% Li₂O** and 129 ppm Ta₂O₅ from 62m (PLS1395)
- **8m @ 1.90% Li₂O** and 107 ppm Ta₂O₅ from 1m (PLS1394)
- **13m @ 1.45% Li₂O** and 131 ppm Ta₂O₅ from 39m (PLS1394)

The wide and near surface pegmatite domains which are not included in the resource model, continue to highlight the scale and exploration potential of the Pilgangoora project area. An intercept summary table is included in **Annexure B**.

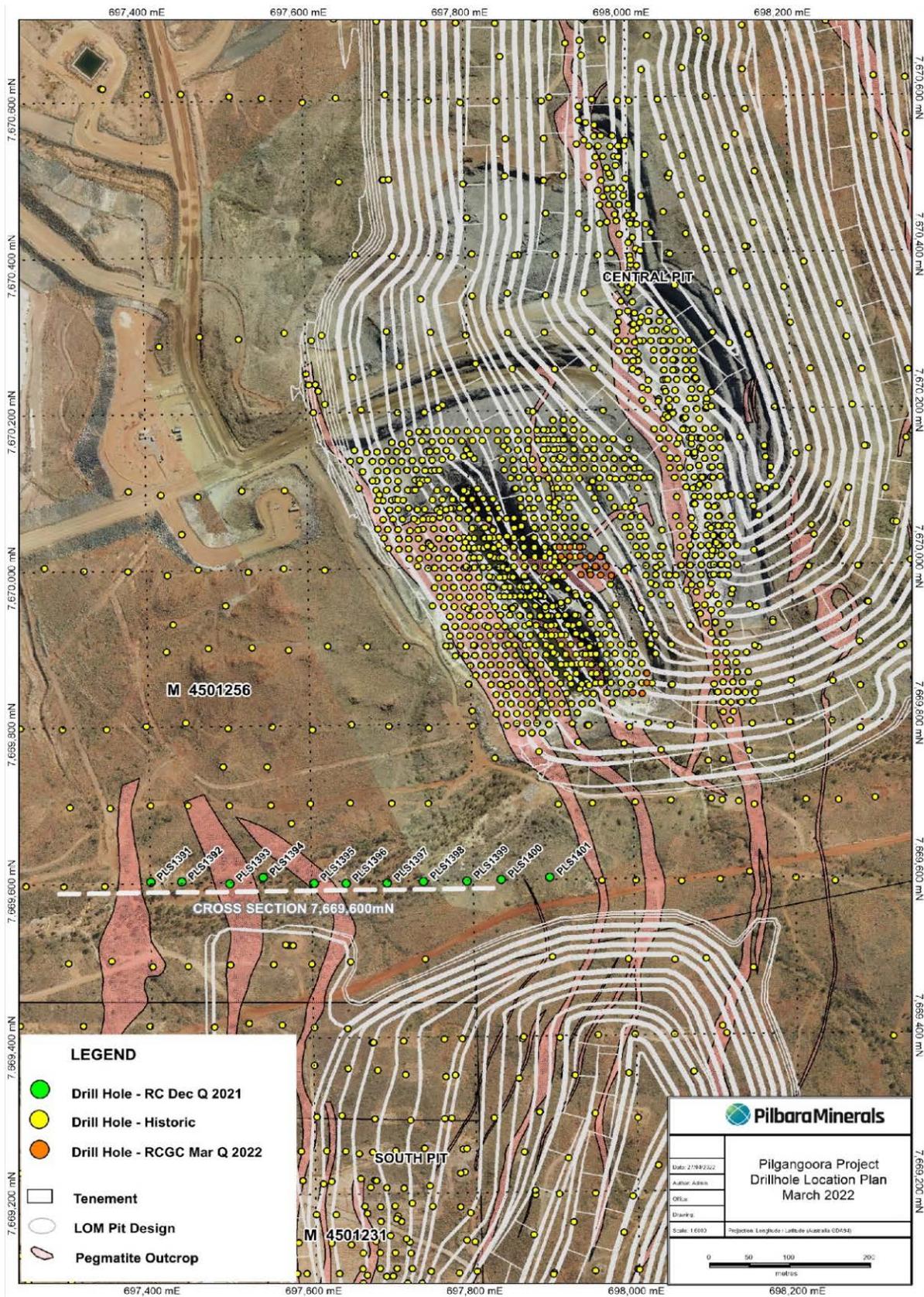


Figure 2 – Central Pit (West) Sterilisation Drill Program

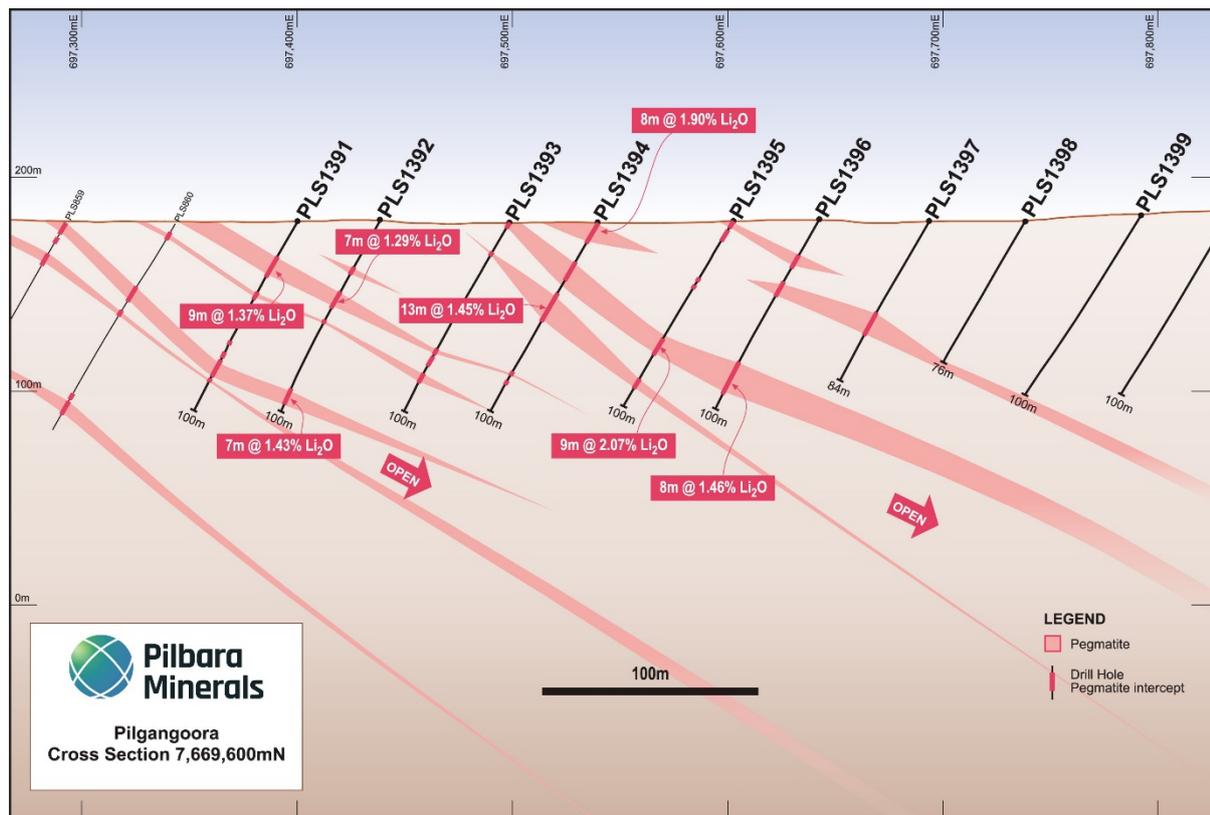


Figure 3 – Cross Section – 7,669,600mN

Pilbara Minerals was awarded up to \$200,000 in the 2021 EIS co-funded grant by the WA Government to drill a deep diamond hole to test the depth extent of the Pilgangoora rare-metal pegmatite system. Drilling is scheduled to commence in April 2022.

The Company also completed 132 RC grade control holes for 4,897m within the South and Central pits during the quarter (**Annexure A**). In addition, core drilling was undertaken for geotechnical test work of the ground conditions under the proposed expansion of the Pilgan processing facility.

4.3 Regional Projects (Pilbara Minerals 100%)

Exploration including desk top studies, field reconnaissance and surface geochemistry programs were undertaken over some of the Company's regional tenements during the quarter.

4.4 Mt York (E45/2241)

Encouraging results from the infill RC drilling program completed at the Mt York gold project last quarter have been received (Figure 4). Composite results included:

- 8m @ 2.41 g/t Au from 44m (MYRC011)
- 4m @ 1.77 g/t Au from 52m (MYRC012)

This modest drill program was expedited to maintain tenement expenditure requirements. The mineralised zone extends over 700m and remains open both along strike and down-dip warranting further exploration drilling.

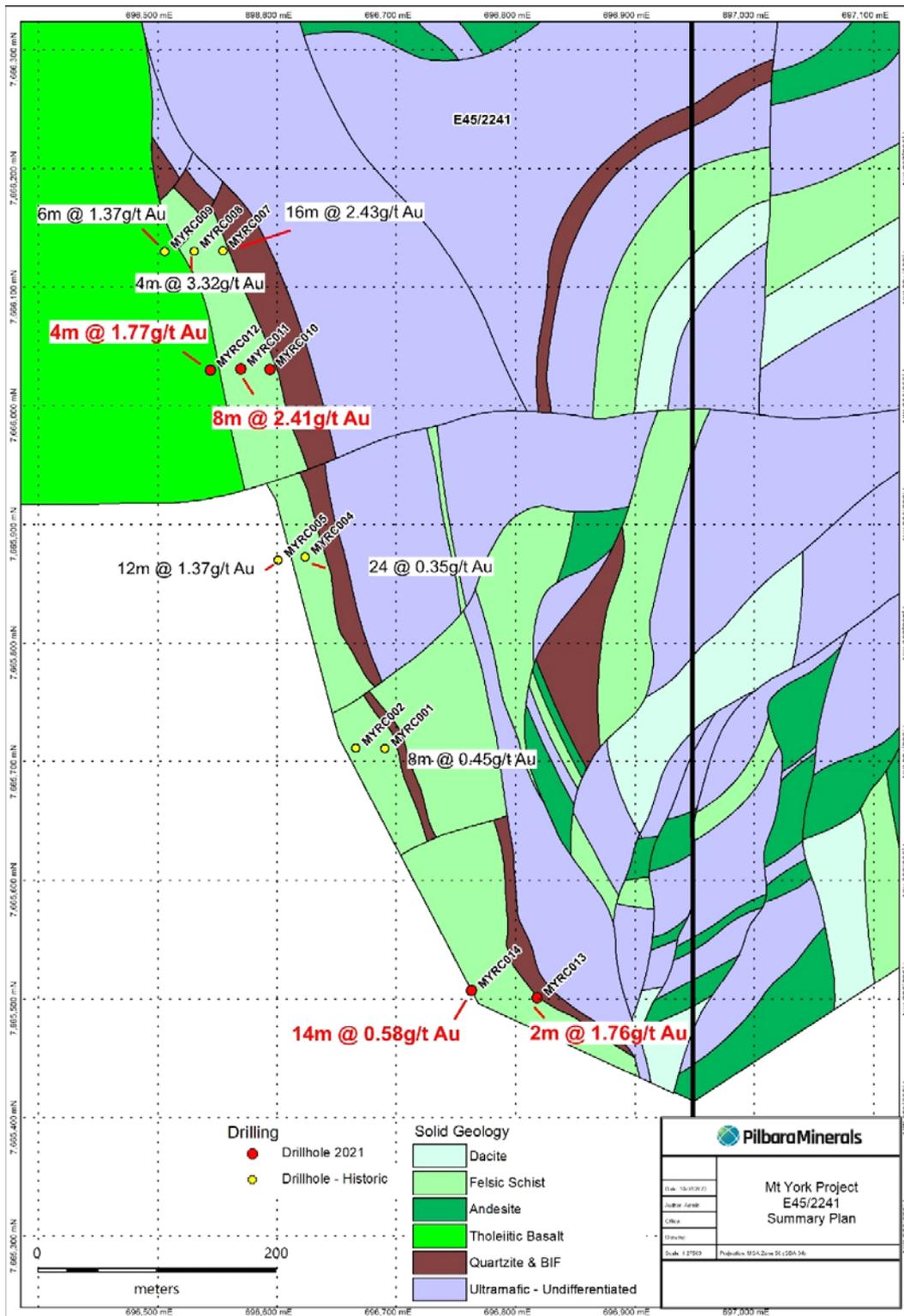


Figure 4 – Mount York Project, Summary Plan

4.5 Pilgangoora (E45/2363)

Field reconnaissance along with a heritage survey has been undertaken over several copper and gold prospect areas including “Lucky-13” within exploration licence E45/2363. An inaugural RC drilling program to test selected target areas is planned for later this year.

4.6 Forrest (E45/5700)

The Forrest Project located 7km south-west of the Wodgina lithium deposit, is one of the exploration licences included within the tenement package acquired from Altura Mining. The project area includes an extensive sequence of stacked pegmatite intrusions hosted within favourable greenstones. Rock chip sampling was undertaken from several of the pegmatite outcrops. There were no significant results.

4.7 Mt Francisco JV (Pilbara Minerals Limited 70%, Atlas Iron 30%)

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

5. Corporate

5.1 CEO Succession

During the Quarter, the Company's Managing Director and CEO, Ken Brinsden, advised of his intention to step down from the role by the end of CY 2022.

Pilbara Minerals has commenced an executive search for the Company's next CEO.

Mr Brinsden said he believed it was the right time for him to step back after what will be approximately seven years in the role as CEO of Pilbara Minerals. The decision is motivated by his desire to be able to spend more time with his family and to pursue personal interests after a lengthy career at senior executive levels, within listed companies in the WA resources sector.

The Company has appointed Derwent Executive to conduct the executive search and expects to make an announcement in Q3 calendar 2022 regarding Ken's successor.

5.2 Downstream Joint Venture with POSCO Update

Subsequent to the end of the Quarter, Pilbara Minerals announced that the key conditions precedent for the completion and formation of the downstream JV between POSCO and Pilbara Minerals had been satisfied and that completion occurred on 13 April 2022. Refer to ASX Announcements dated 11 and 13 April 2022.

The formation of the JV and Pilbara Mineral's initial 18% equity subscription (with an option to go to 30%) was conditional on satisfaction of certain conditions precedent. These included the provision of a detailed construction and ramp up budget acceptable to Pilbara Minerals, as well as Pilbara Minerals filing necessary regulatory approvals with the Korea Trade Investment Promotion Agency (KOTRA) for approval of its initial 18% investment in the JV Company. Both of these conditions were satisfied, leading the way for the formation of the JV on 13 April 2022.

The JV Company has been funded from a combination of equity from both POSCO (initial 82% equity interest) and Pilbara Minerals (initial 18% equity interest), with the balance of funding expected to be secured from non-recourse debt funding. Non-recourse external debt is expected to be finalised by POSCO and the JV Company from Korean commercial banks following the establishment of the JV.

Pilbara Minerals' initial 18% equity participation in the JV will be fully funded from the A\$79.6M 5-year Convertible Bond provided by POSCO, which was drawn down at the time the JV was formed.

For further details of the Company's strategic interest in the downstream JV with POSCO, refer to ASX Announcements dated 11 and 13 April 2022.

5.3 Financial Results from Operations

The Company shipped 58,383dmt of spodumene concentrate for the Quarter.

Average SC6.0 market reference prices continued to increase during the Quarter, resulting in substantially higher pricing being received from customers compared to the December Quarter 2021.

Actual average reference pricing for spodumene concentrate deliveries during the Quarter on a final basis was USD\$2,650/dmt (SC6.0, CIF China basis).

Pursuant to the terms of sale, the increasing pricing dynamic evident since the beginning of the March Quarter has led to positive final pricing adjustments of ~A\$13.3M (December Quarter: A\$8.7M) associated with provisionally priced cargoes shipped during the March Quarter 2022, with these cash proceeds expected to be received during the June 2022 Quarter (pending final pricing outcomes).

A unit operating cost (FOB Port Hedland excluding royalties)² of US\$458/dmt was achieved for the 50,418dmt of concentrate shipped from the Pilgan operation during the Quarter, being A\$632/dmt at a quarterly average AUD:USD exchange rate of 0.7243 (December Quarter: US\$420/dmt; A\$577/dmt at an average quarterly AUD:USD exchange rate of 0.7287).

This compares to the 2H FY2022 guidance released to the market on 23 February 2022 of A\$450 – A\$490/dmt (FOB Port Hedland excluding royalties).

Unit costs for the Quarter continued to be impacted by lower production rates, with operations significantly affected by manning shortfalls principally attributable to COVID-19 community transmission, as well as the buoyant labour market for the WA mining industry. Secondary impacts to this included reduced mined volumes translating to less-than-optimal ore feed being presented to the Pilgan plant, unplanned/extended plant maintenance shutdowns, as well as slightly lower lithia recoveries for the Pilgan Plant (61% v.s 64% planned).

Costs for the Quarter were further affected by higher fuel prices (\$16/dmt) (not forecast), a lower tantalum by-product credit of \$7/dmt because of ore feed being sourced from the South Pit which has minimal tantalite concentration, as well as the introduction of a staff retention bonus (\$7/dmt) (not forecast) during the Quarter, to assist in alleviating some of the labour shortages being experienced.

The Company anticipates an improved performance from the Pilgan operation during the June Quarter, with the current recruitment drive expected to expand the operational workforce sufficiently to provide cover for any future labour shortages, which should enable a more consistent ore feed to the plant and provide for an improved maintenance regime (including timely shutdowns).

This improvement in operating performance should translate to a lower unit operating cost (FOB Port Hedland excluding royalties) for the June Quarter, which is likely to be in the range of A\$490 – A\$530/dmt.

Including freight and royalty costs³, the unit operating cost for the March Quarter was US\$687/dmt, being A\$949/dmt at a quarterly average AUD:USD exchange rate of 0.7243 (CIF China) (December Quarter: US\$587/dmt; A\$805/dmt at an average quarterly AUD:USD exchange rate of 0.7287). Royalty costs increased during the Quarter due to a significantly higher selling price (US\$51/dmt cost increase compared to the December 2021 Quarter). Freight costs continued to increase and represented an additional cost impact of US\$12/dmt for the Quarter compared to the December 2021 Quarter.

² Unit operating costs (FOB Port Hedland excluding royalties) include mining, processing, transport, native title costs, port charges, and site based general and administration costs and are net of Ta₂O₅ by-product credits. It is calculated on an incurred basis (including accruals), and includes inventory movements, and credits for capitalised deferred mine waste development costs.

³ Royalty costs include a 5% state government royalty on the FOB selling price, a 1% native title royalty on the FOB selling price, and a 5% private royalty on the FOB selling price which is applied to a part of the resource/reserve acquired following the Altura Lithium Operation acquisition.

5.4 Cash Balance

Pilbara Minerals closed the Quarter with a cash balance of \$284.9M, inclusive of \$75.2M of irrevocable bank letters of credit for shipments completed within the Quarter.

This represents a \$39.9M increase over the equivalent balance of \$245M as at 31 December 2021, and was impacted by a \$25.1M debt repayment, as well as the delay of a cargo-ready 20,000 dmt shipment due to berth access constraints at the end of the Quarter. This vessel subsequently sailed on the 7th of April 2022, with final pricing consistent with previous March Quarter price guidance (CIF China, SC6 basis).

Cashflow from Pilgan operations of \$113.9M was achieved on the back of positive pricing dynamics, \$37.9M was spent on capital activities, and \$25.1M of the Syndicated Finance Facility was repaid to comply with the loan's cash sweep mechanism.

During the Quarter, Pilbara Minerals received:

- proceeds of \$169.2M from customer sales associated with production from the Pilgan Plant (inclusive of A\$8.7M of receipts following finalisation of final pricing adjustments for December Quarter cargoes that were provisionally priced); and
- net receipts of \$7.4M attributable to the restart of the Ngungaju operation following the sale of 7,965dmt of Ngungaju spodumene concentrate during the Quarter.

Major cash outflows and movements during the Quarter included:

- \$55.3M on operating costs at the Pilgan Project, inclusive of further investment in inventory as a result of the 20,000 dmt delayed cargo at Quarter end;
- \$37.9M on capital costs related to the Pilgan Plant Improvement Project, the re-start of the Ngungaju plant, and capitalised mine waste stripping costs associated with mining activities (\$15.5M);
- Interest costs of \$1.8M under the USD Syndicated Debt Facility and \$1.1M in respect of right of use lease assets;
- \$25.1M principal debt repayment to comply with the cash sweep mechanism under the terms of the USD Syndicated Debt Facility;
- \$7.2M repayment of other borrowings, including payments for right of use lease assets and the partial repayment of a customer prepayment;
- \$4.0M on payroll, administration and corporate costs;
- \$1.1M on exploration and evaluation work and feasibility studies; and
- \$3.3M unrealised foreign exchange movement on US\$ denominated cash reserves, following a strengthening in the Australian dollar at Quarter end.

During the Quarter the Company was in discussions with the senior lenders of its USD Syndicated Debt Facility to waive the cash sweep mechanism for the remainder of CY22. The cash sweep mechanism has the effect of accelerating the scheduled debt repayments. Subsequent to Quarter-end, the Company received in principle confirmation from the lenders that the cash sweep mechanism will be waived for the remainder of CY22. A formal waiver letter is expected to be executed shortly.

The US\$25M Working Capital Facility provided by BNP Paribas remains undrawn.

Contacts

Investors / shareholders

David Hann
Investor Relations Specialist
Ph. +61 (0)8 6266 6266

Media

Nicholas Read
Read Corporate
Ph. +61 (0)8 9388 1474.

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

MORE INFORMATION

About Pilbara Minerals

Pilbara Minerals is the leading ASX-listed lithium company, owning 100% of the world's largest, independent hard-rock lithium operation. Located in Western Australia's resource-rich Pilbara region, the Pilgangoora Project and Operation produces a spodumene and tantalite concentrate. The significant scale and quality of the operation has attracted a consortium of high quality, global partners including Ganfeng Lithium, General Lithium, Great Wall Motor Company, POSCO, CATL and Yibin Tianyi.

While it continues to deliver a low-cost, quality spodumene to market, Pilbara Minerals is pursuing a growth and diversification strategy to become a sustainable, low-cost lithium producer and fully integrated lithium raw materials and chemicals supplier in the years to come.

Through execution of this strategy, Pilbara Minerals is positioned to become a major player in the rapidly growing lithium supply chain, underpinned by increasing demand for clean energy technologies such as electric vehicles and energy storage as the world pursues a sustainable energy future.

Competent Person's Statement

The information in this ASX release that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared by Mr John Holmes (Exploration 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 a Competent Person 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.

Important Information

Information in this ASX release relating to mineral resource and reserves, production targets and forecast information derived from the production targets (including information relating to the proposed expansions of the Pilgangoora Project including the Pilgan Plant and Ngungaju Plant), is extracted from the ASX announcement dated 3 August 2018 entitled "Outstanding DFS Results Support Pilgangoora Expansion", the ASX announcement dated 27 August 2019 entitled "Update on Partnering Process and Revised Stage 2", ASX announcement dated 11 May 2021 (Pilbara Minerals and the Pilgangoora Project – Ready for the Global Energy Transformation), ASX announcement dated 25 June 2021 (Board Approves Staged Restart at Ngungaju Plant), ASX announcement dated 26 August 2021 (Annual Financial Results and FY2022 Guidance Presentation), ASX announcement dated 6 September 2021 (Significant Increase in Pilgangoora Resource), ASX announcement dated 6 October 2021 (Material Increase in Pilgangoora Ore Reserves), ASX announcement dated 13 October 2021 (Ramp-up of Pilgan Plant Improvement Project Commences), ASX announcement dated 13 October 2021 (First Concentrate Produced from the Ngungaju Processing Plant) and the 30 June 2021 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 Minerals Resource and Ore 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 ASX release have not been materially modified from the original market announcements.

Scoping and other technical studies in respect of the incremental expansion of the Pilgan Project have been undertaken to determine the potential viability of the expansion and to reach a decision to proceed with more definitive studies. Each scoping and 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.

Scoping and other technical studies in respect of the Mid-Stream Project have been undertaken to determine the potential viability of the demonstration plant and to reach a decision to proceed with more definitive studies and enter into a joint venture agreement. Each scoping study has been prepared to an accuracy level of +/-40% (for Capital costs) and +/-30% (for Operating costs). Each scoping and 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.

Forward Looking Statements

The production and sales guidance in this announcement is indicative only, based on the Company's revised budgetary forecasts and other estimates. It is developed in the context of an uncertain operating environment including in respect of COVID-19 related risks (community distribution and supply chain disruption) and the commissioning and ramp of both the Pilgan Plant Improvement Projects and the re-start and commissioning of the Ngungaju Plant which may impact production and have a flow on effect on sales volumes. Actual results may therefore vary significantly depending on these risks and the timing required to address certain short term operational challenges previously advised to the market which include reduced concentrate production, lower lithia recoveries, mining constraints affecting optimal ore feed blend and industry wide labour shortages for mining, maintenance and processing personnel. The information is therefore provided as an indicative guide to assist sophisticated investors with modelling of the Company. It should not be relied upon as a predictor of future performance.

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.

ANNEXURE A

DRILL COLLARS - MARCH QUARTER 2022

Prospect	Hole ID	Hole Type	North GDA94 Z50	East GDA94 Z50	Dip	Azimuth	Depth
Central	22CGC001	RC	7670163	697828	-60	270	42
Central	22CGC002	RC	7670151	697800	-60	270	42
Central	22CGC003	RC	7670150	697809	-60	270	42
Central	22CGC004	RC	7670150	697835	-60	270	42
Central	22CGC005	RC	7670150	697848	-60	270	42
Central	22CGC006	RC	7670137	697777	-60	270	46
Central	22CGC007	RC	7670138	697791	-60	270	42
Central	22CGC008	RC	7670138	697803	-60	270	42
Central	22CGC009	RC	7670137	697821	-60	270	42
Central	22CGC010	RC	7670137	697829	-60	270	42
Central	22CGC011	RC	7670138	697841	-60	270	42
Central	22CGC012	RC	7670138	697853	-60	270	42
Central	22CGC013	RC	7670138	697866	-60	270	48
Central	22CGC014	RC	7670125	697760	-60	270	29
Central	22CGC015	RC	7670125	697772	-60	270	36
Central	22CGC016	RC	7670125	697785	-60	270	42
Central	22CGC017	RC	7670125	697798	-60	270	42
Central	22CGC018	RC	7670125	697810	-60	270	42
Central	22CGC019	RC	7670125	697822	-60	270	42
Central	22CGC020	RC	7670125	697834	-60	270	42
Central	22CGC021	RC	7670126	697848	-60	270	42
Central	22CGC022	RC	7670125	697859	-60	270	42
Central	22CGC023	RC	7670125	697872	-60	270	42
Central	22CGC024	RC	7670113	697759	-60	270	27
Central	22CGC025	RC	7670113	697772	-60	270	29
Central	22CGC026	RC	7670115	697780	-60	270	38
Central	22CGC027	RC	7670118	697797	-60	270	42
Central	22CGC028	RC	7670113	697813	-60	270	42
Central	22CGC029	RC	7670113	697823	-60	270	42
Central	22CGC030	RC	7670113	697835	-60	270	42
Central	22CGC031	RC	7670113	697846	-60	270	44
Central	22CGC032	RC	7670113	697859	-60	270	42
Central	22CGC033	RC	7670112	697872	-60	270	42
Central	22CGC034	RC	7670112	697878	-75	270	42
Central	22CGC035	RC	7670104	697760	-60	270	15
Central	22CGC036	RC	7670105	697770	-90	0	22
Central	22CGC039	RC	7670100	697846	-60	270	42
Central	22CGC040	RC	7670100	697859	-60	270	42
Central	22CGC041	RC	7670100	697872	-60	270	42
Central	22CGC042	RC	7670100	697891	-60	270	42

Prospect	Hole ID	Hole Type	North GDA94 Z50	East GDA94 Z50	Dip	Azimuth	Depth
Central	22CGC043	RC	7670100	697899	-60	270	42
Central	22CGC045	RC	7670088	697851	-60	270	42
Central	22CGC046	RC	7670088	697862	-60	270	42
Central	22CGC047	RC	7670087	697875	-60	270	42
Central	22CGC048	RC	7670088	697887	-60	270	42
Central	22CGC049	RC	7670088	697901	-60	270	42
Central	22CGC050	RC	7670087	697906	-90	0	41
Central	22CGC052	RC	7670075	697858	-60	270	42
Central	22CGC053	RC	7670075	697882	-60	270	42
Central	22CGC054	RC	7670075	697894	-60	270	42
Central	22CGC055	RC	7670075	697906	-60	270	42
Central	22CGC056	RC	7670062	697861	-60	270	25
Central	22CGC062	RC	7670050	697864	-60	270	48
Central	22CGC063	RC	7670050	697875	-60	270	55
Central	22CGC064	RC	7670050	697889	-60	270	52
Central	22CGC065	RC	7670050	697901	-60	270	52
Central	22CGC066	RC	7670050	697913	-60	270	51
Central	22CGC067	RC	7670049	697925	-60	270	48
Central	22CGC068	RC	7670050	697927	-90	0	42
Central	22CGC069	RC	7670038	697873	-60	270	58
Central	22CGC070	RC	7670038	697881	-60	270	48
Central	22CGC071	RC	7670038	697895	-60	270	48
Central	22CGC072	RC	7670038	697907	-60	270	48
Central	22CGC073	RC	7670038	697919	-60	270	48
Central	22CGC074	RC	7670038	697932	-60	270	48
Central	22CGC075	RC	7670038	697937	-75	270	33
Central	22CGC076	RC	7670037	697939	-90	0	34
Central	22CGC077	RC	7670025	697882	-60	270	48
Central	22CGC078	RC	7670025	697887	-60	270	48
Central	22CGC079	RC	7670025	697901	-60	270	48
Central	22CGC080	RC	7670025	697912	-60	270	48
Central	22CGC081	RC	7670025	697926	-60	270	48
Central	22CGC082	RC	7670025	697938	-60	270	48
Central	22CGC083	RC	7670025	697944	-90	0	33
Central	22CGC084	RC	7670008	697895	-60	270	48
Central	22CGC085	RC	7670013	697906	-60	270	48
Central	22CGC086	RC	7670013	697919	-60	270	46
Central	22CGC087	RC	7670013	697932	-60	270	54
Central	22CGC088	RC	7670012	697944	-60	270	29
Central	22CGC089	RC	7670000	697907	-60	270	50

Prospect	Hole ID	Hole Type	North GDA94 Z50	East GDA94 Z50	Dip	Azimuth	Depth
Central	22CGC090	RC	7670001	697916	-60	270	48
Central	22CGC091	RC	7670001	697938	-60	270	23
Central	22CGC091A	RC	7670000	697944	-60	270	48
Central	22CGC092	RC	7670000	697951	-60	270	32
Central	22CGC093	RC	7670000	697957	-60	270	27
Central	22CGC094	RC	7669986	697923	-60	270	43
Central	22CGC095	RC	7669986	697926	-60	270	48
Central	22CGC096	RC	7669988	697938	-60	270	48
Central	22CGC097	RC	7669988	697950	-60	270	34
Central	22CGC098	RC	7669988	697962	-60	270	37
Central	22CGC099	RC	7669988	697969	-90	0	28
Central	22CGC101	RC	7669975	697932	-60	270	50
Central	22CGC102	RC	7669975	697944	-60	270	62
Central	22CGC103	RC	7669975	697969	-60	270	37
Central	22CGC104	RC	7669974	697974	-90	0	31
Central	22CGC106	RC	7669963	697951	-60	270	62
Central	22CGC107	RC	7669962	697963	-60	270	37
Central	22CGC108	RC	7669963	697979	-60	270	34
Central	22CGC111	RC	7669950	697970	-60	270	68
Central	22CGC124	RC	7669949	697956	-60	270	62
South	22SGC008	RC	7669087	697472	-60	270	18
South	22SGC010	RC	7669071	697457	-60	270	10
South	22SGC011	RC	7669074	697469	-60	270	18
South	22SGC012	RC	7669077	697483	-60	270	25
South	22SGC013	RC	7669057	697454	-60	270	12
South	22SGC014	RC	7669060	697466	-60	270	18
South	22SGC015	RC	7669063	697478	-60	270	25
South	22SGC016	RC	7669043	697452	-60	270	10
South	22SGC017	RC	7669046	697463	-60	270	18
South	22SGC018	RC	7669049	697475	-60	270	25
South	22SGC019	RC	7669052	697486	-60	270	32
South	22SGC020	RC	7669034	697461	-60	270	18
South	22SGC021	RC	7669036	697471	-60	270	25
South	22SGC022	RC	7669040	697483	-60	270	30
South	22SGC023	RC	7669022	697458	-60	270	15
South	22SGC024	RC	7669022	697469	-60	270	24
South	22SGC025	RC	7669027	697482	-60	270	31
South	22SGC026	RC	7669008	697453	-60	270	13
South	22SGC027	RC	7669010	697458	-60	270	22
South	22SGC028	RC	7669014	697481	-60	270	31

Prospect	Hole ID	Hole Type	North GDA94 Z50	East GDA94 Z50	Dip	Azimuth	Depth
South	22SGC029	RC	7668994	697448	-60	270	13
South	22SGC030	RC	7668999	697462	-60	270	28
South	22SGC031	RC	7669002	697478	-60	270	31
South	22SGC032	RC	7668980	697448	-60	270	11
South	22SGC033	RC	7668981	697460	-60	270	18
South	22SGC034	RC	7668984	697473	-60	270	31
South	22SGC035	RC	7668967	697445	-60	270	9
South	22SGC036	RC	7668970	697457	-60	270	16
South	22SGC037	RC	7668972	697469	-60	270	22
South	22SGC038	RC	7668955	697442	-60	270	8
South	22SGC039	RC	7668958	697456	-60	270	18
South	22SGC040	RC	7668959	697467	-60	270	24
Pilgan	DRA-BPH04	DDH	7671114	696932	-90	0	10
Pilgan	DRA-BPH06	DDH	7670938	697191	-90	0	10
Pilgan	DRA-BPH07	DDH	7670897	697100	-90	0	10
Pilgan	DRA-BPH08	DDH	7670824	697167	-90	0	10

ANNEXURE B

PILGANGOOORA PROJECT - SIGNIFICANT INTERCEPTS (0.5% Li₂O min cut-off)

Hole ID	From (m)	To (m)	Thickness (m)	Li ₂ O %	Ta ₂ O ₅ (ppm)
PLS1377	0	4	4	1.25	128.00
PLS1377	27	33	6	1.19	96.50
PLS1377	65	71	6	1.21	56.83
PLS1379	45	53	8	0.90	82.38
PLS1381	94	96	2	0.73	44.00
PLS1391	20	29	9	1.37	87.11
PLS1391	38	39	1	0.91	81.00
PLS1391	70	71	1	0.76	179.00
PLS1391	75	84	9	0.91	100.89
PLS1392	28	29	1	0.73	7.00
PLS1392	39	46	7	1.29	62.86
PLS1392	89	96	7	1.43	115.86
PLS1393	16	17	1	0.67	65.00
PLS1393	68	70	2	0.73	63.00
PLS1393	75	76	1	0.67	41.00
PLS1393	82	83	1	1.15	247.00
PLS1394	1	9	8	1.90	107.00
PLS1394	39	52	13	1.45	131.15
PLS1394	79	81	2	1.33	66.50
PLS1395	6	7	1	1.34	219.00
PLS1395	62	71	9	2.07	129.44
PLS1395	87	90	3	0.70	105.33
PLS1396	19	24	5	0.51	105.00
PLS1396	34	38	4	0.68	105.00
PLS1396	80	88	8	1.46	46.75

MT YORK PROJECT - SIGNIFICANT COMPOSITE INTERCEPTS (0.2g/t Au min cut-off)

Hole ID	From (m)	To (m)	Thickness (m)	Au (g/t)	
MYRC010	20	24	4	0.25	
MYRC011	12	20	8	0.49	
MYRC011	32	36	4	0.28	
MYRC011	44	52	8	2.41	
MYRC012	52	56	4	1.77	
MYRC012	76	84	8	0.47	
MYRC013	104	108	4	0.28	
MYRC013	116	118	2	1.76	
MYRC014	164	178	14	0.58	

JORC Code, 2012 Edition – Table

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	<ul style="list-style-type: none"> • PLS completed a total of 134 holes for 4,601 metres during the December quarter. This included 2,074m of exploration RC drilling, 2,410m infill RC grade control drilling, and 117.6m of diamond drill core. • Results from the drilling program have been received during the March Quarter 2022. • Rock chip samples collected from multiple pegmatite intrusions on tenement E45/5700
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<ul style="list-style-type: none"> • For the RC drilling at Pilgangoora, samples were collected every metre in pegmatite zones and 2 metres into footwall & hanging wall country rock. • PLS diamond core (HQ3) is generally sampled by taking a 15-20mm fillet at intervals dependent on ore type within the pegmatite zones. Cutting and sampling to be undertaken in the June quarter 2022. • RC drill holes at the Mt York prospect holes were sampled every metre, with samples split on the rig using a cyclone splitter. The sampling system consisted of a rig mounted cyclone with cone splitter and dust suppression system. 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 (10-inch by 14-inch). • In addition to the 1m split samples, 4m composite samples were collected at Mt York.

Criteria	JORC Code explanation	Commentary
	<p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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 coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></p>	<ul style="list-style-type: none"> • Exploration drill holes in 2021 were all RC, with samples split at the rig, samples are then sent to Nagrom laboratory in Perth and analysed for a suite of multi-elements. Analysis was completed by XRF and ICP techniques. • Exploration drill holes at Mt York were all RC, with samples split at the rig, samples are then sent to Nagrom laboratory in Perth and analysed for a suite of multi-elements including Au, As, Cu, Ni, Ag, Pb and S. • Diamond core is generally sampled at lengths were determined by mineralisation logged in the core. Half core samples through mineralised zones maybe sent to the laboratory for analysis. Drill core from this program was principally collected for geotechnical studies.
Drilling techniques	<p><i>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).</i></p>	<ul style="list-style-type: none"> • Diamond drilling was completed by Seismic Australia, using a platform mounted rig with numerous support vehicles. • Exploration RC Drilling in 2021 was completed by Mt Magnet Drilling utilising an RCD300-2 track mounted drilling rig with a truck mounted booster & auxiliary compressor (900cfm/350psi) coupled to a V8 booster up to 1000psi. • Drilling used a reverse circulation face sampling hammer. The sampling system consisted of a rig mounted cyclone with cone splitter and dust suppression system.
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the</i></p>	<ul style="list-style-type: none"> • Recoveries for PLS RC and diamond holes were virtually all dry and overwhelmingly logged as "good." • Whilst drilling through the pegmatite, rods were flushed with air after each metre drilled. In addition, moist or wet ground conditions resulted

Criteria	JORC Code explanation	Commentary
	<p><i>samples.</i></p> <p><i>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.</i></p>	<p>in the cyclone being washed out between each sample run.</p> <ul style="list-style-type: none"> Loss of fines as dust was reduced by injecting water into the sample pipe before it reached the cyclone. This minimises the possibility of a positive bias whereby fines are lost, and heavier, tantalum bearing material, is retained. No material bias has been identified.
Logging	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p>	<ul style="list-style-type: none"> 1m 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 1m). Geological logging information was recorded directly onto digital logging system and information validated and transferred electronically to Database administrators in Perth. The rock-chip trays are stored on site at Pilgangoora in a secured containerised racking library. 1m 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 1m). Geological logging information was recorded directly onto digital logging system (OCRIS) and information validated and transferred electronically to Database administrators in Perth. The rock-chip trays are stored on site at Pilgangoora in a shelved 40 ft sea container. Selected intervals of PLS Diamond core were transported to Perth for geotechnical testwork. The remainder of core has been stored onsite at Pilgangoora. All remnant drill core (excluding 2019 PQ core) is currently stored on

Criteria	JORC Code explanation	Commentary
		pallets at Pilgangoora.
	<i>The total length and percentage of the relevant intersections logged.</i>	<ul style="list-style-type: none"> The database contains lithological data for all holes in the database.
Sub-sampling techniques and sample preparation	<i>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.</i>	<ul style="list-style-type: none"> RC samples in 2021 were generally dry and split at the rig using a cyclone splitter, which is appropriate and industry standard. HQ diamond holes will be cut and sampled in the June quarter 2022. Rock chip sampling was representative of the outcropping zone. Approximately 1-2 kg of sample collected.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	<ul style="list-style-type: none"> PLS RC drilling contains QC samples (field duplicates and laboratory pulp splits, selected CRM's for PLS). Assay results not expected till February 2022. QAQC is maintained regularly on the Nagrom results . Assay results not expected till February 2022.
	<i>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.</i>	<ul style="list-style-type: none"> Field duplicates were taken approximately every 20m, and standards and blanks every 50 samples.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	<ul style="list-style-type: none"> Drilling sample sizes are considered to be appropriate to correctly represent the tantalum and lithium mineralization at Pilgangoora based on the style of mineralization (pegmatite) and the thickness and consistency of mineralization.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<ul style="list-style-type: none"> PLS samples to be assayed by Nagrom Perth laboratory and analysed for a suite of 9 elements via ME-MS91 Sodium Peroxide for ICPMS finish and Peroxide fusion with an ME-ICP89 ICPAES finish. Grade control samples were submitted to Nagrom Laboratories in Perth and analysed for a suite of 25 elements. A proportion of the grade

Criteria	JORC Code explanation	Commentary
		<p>control samples also assayed at the SGS laboratory located onsite at Pilgangoora.</p> <ul style="list-style-type: none"> No geophysical tools were used to determine any element concentrations used. Duplicates of the samples were taken at twenty metre intervals with blanks and standards inserted every 50m. Drilling contains QC samples (field duplicates, blanks and standards plus laboratory pulp splits, and laboratory internal standards). Results unavailable at the time of reporting.
Verification of sampling and assaying	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> No twin holes were drilled. An electronic relational database containing collars, surveys, assays and geology is maintained by Trepanier Pty Ltd, an Independent Geological consultancy. Tantalum was reported as Ta₂O₅ % and converted to ppm for the estimation process. A two-step adjustment has been applied to the Fe₂O₃ assays to account for (i) contamination of pulps by the steel bowl at the grinding stage, and (ii) contamination of RC chips with the drill bit and tube wear with

Criteria	JORC Code explanation	Commentary
		<p>increasing hole depth. Step one is to subtract 0.33% from all Nagrom Fe₂O₃ assays and 0.47% from all ALS Fe₂O₃ assays, step 2 is to subtract a regressed factor by depth from all PLS Minerals, Altura and historic RC samples. No second factor has been applied to the PLS or Altura diamond core Fe₂O₃ assays.</p>
<p>Location of data points</p>	<p><i>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.</i></p>	<ul style="list-style-type: none"> • All 2021 RC holes were surveyed using DGPS in GDA94, Zone 50. Down hole surveying of drill holes was conducted using a Gyro tool. Measurements were recorded at the bottom of each hole and every 10m up hole for vertical holes and continuous readings for angle holes. • Drill hole collar locations were surveyed at the end of each program by a differential GPS (DGPS). • All rock chip sample locations recorded with a handheld Garmin GPS.
	<p><i>Specification of the grid system used.</i></p>	<ul style="list-style-type: none"> • The grid used was MGA (GDA94, Zone 50)
	<p><i>Quality and adequacy of topographic control.</i></p>	<ul style="list-style-type: none"> • The topographic surface used was supplied by Pilbara Minerals. Drone surveys are undertaken on a monthly basis in the active mining area and this information is merged into a master topographic surface.
<p>Data spacing and distribution</p>	<p><i>Data spacing for reporting of Exploration Results.</i></p>	<ul style="list-style-type: none"> • Drilling spacings for the 2021 exploration RC holes varied between 50m to 75m apart. • Drill spacings for the grade control drilling were set out on a 12.5m offset grid where access permitted. • Rock chip samples were composited over a nominal 5m area at each of the sampled pegmatite intrusives.
	<p><i>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</i></p>	<ul style="list-style-type: none"> • The interpretation of the mineralised domains is supported by a moderate drill spacing, plus both geological zones and assay grades can be interpreted with confidence.

Criteria	JORC Code explanation	Commentary
	<i>procedure(s) and classifications applied.</i>	
	<i>Whether sample compositing has been applied.</i>	<ul style="list-style-type: none"> • No compositing was necessary, as all samples were taken at 1m intervals.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	<ul style="list-style-type: none"> • The mineralisation dips between 20 and 60 degrees at a dip direction between 050 and 115 degrees for the majority of the domains. • The drilling orientation and the intersection angles are deemed appropriate at Mt York.
	<i>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.</i>	<ul style="list-style-type: none"> • No orientation-based sampling bias has been identified.
Sample security	<i>The measures taken to ensure sample security.</i>	<ul style="list-style-type: none"> • Chain of custody for PLS holes were managed by PLS personnel.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> • 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. • Drilling locations and survey orientations have been checked visually in 3 dimensions and found to be consistent. • The collar and assay data have been reviewed by checking all of the data in the digital database against hard copy logs. • All PLS assays are being sourced directly from Nagrom laboratory.

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	<i>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</i>	<ul style="list-style-type: none"> • PLS owns 100% of mining tenements M45/1256, M45/333, M45/511, M45/1266, M45/1230 and M45/1231 • The Pilgangoora resource (including former Altura Lithium Operations) is located within M45/1256, M45/333, M45/1230 and M45/1231 which are 100% owned by PLS Minerals Limited. • The Lynas Find resource is located within M45/1266 • The Mt York Prospect is located on E45/2241 which is registered in the name of Pilgangoora Operations Pty Ltd. • The tenement is 100% owned by Pilgangoora Operations Pty Ltd. • Rock Chip samples collected on tenements E45/5700 and P45/3149 which are 100% owned by NGUNGAJU LITHIUM OPERATIONS PTY LTD
	<i>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.</i>	<ul style="list-style-type: none"> • No known impediments.
Exploration done by other	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<ul style="list-style-type: none"> • Talison completed RC holes in 2008 • GAM completed RC holes between 2010 and 2012.

Criteria	JORC Code explanation	Commentary
parties		<ul style="list-style-type: none"> • Dakota Minerals Ltd completed diamond and RC holes in 2016. • Altura completed Diamond and RC holes between 2010 and 2018. Altura completed two phases of diamond drilling (phase 1 2011-2013 & phase 2 2016) with a total of 18 holes drilled
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	<ul style="list-style-type: none"> • The Pilgangoora pegmatites are part of the later stages of intrusion of Archaean granitic batholiths into Archaean metagabbros and metavolcanics. Tantalum mineralisation occurs in zoned pegmatites that have intruded a sheared metagabbro. • 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). • 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. • 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. • Within E45/5700 Pegmatites intrude into mafic and ultramafic lithologies at the southern end of the Wodgina Greenstone belt. The majority of the tenement area is underlain by granite.

Criteria	JORC Code explanation	Commentary
Drill hole Information	<p><i>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.</i></p>	<ul style="list-style-type: none"> • Refer to December 2021 quarterly activities report for collars related to reported results • Refer to Annexure A for drill hole collar locations for holes drilled in the March quarter 2022 • Refer to Annexure B for results from the December 2021 drilling programs
Data aggregation methods	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<ul style="list-style-type: none"> •
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to</i></p>	<ul style="list-style-type: none"> • Results reported in Annexure B. • Selected intercepts shown on Figures 2 and 3

Criteria	JORC Code explanation	Commentary
	<p><i>the drill hole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></p>	
Diagrams	<p><i>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.</i></p>	<ul style="list-style-type: none"> • Maps and diagrams showing drill hole locations available in the December 2021 quarterly activities report • Selected intercepts from the Pilgangoora sterilization drilling shown on the cross section on Figure 3. • Selected intercepts from the Mt York drilling shown in Figure 4.
Balanced reporting	<p><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p>	<ul style="list-style-type: none"> • Comprehensive reporting of 2021 drill hole details has been previously reported. Analytical results reported this quarter.
Other substantive exploration data	<p><i>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.</i></p>	<ul style="list-style-type: none"> • All meaningful & material exploration data has been reported.
Further work	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible</i></p>	<ul style="list-style-type: none"> • Further planned drilling aims to test extensions to the currently modelled pegmatites zones and to infill where required to convert Mineral Resources to high confidence classification (i.e. Inferred to

Criteria	JORC Code explanation	Commentary
	<i>extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Indicated and Indicated to Measured).