

SEPTEMBER 2022 QUARTERLY ACTIVITIES REPORT

Increased production and sales generate a significant \$783.7M contribution towards a cash balance of \$1.375 billion, as works commence on the P680 Project.

Access the Quarterly Investor, Analyst and Media webcast at 8.30am (AWST) / 11.30am (AEDT) on Tuesday, 25 October 2022: <https://kapara.rdbk.com.au/landers/4bcb8f.html>

KEY POINTS

Production and sales

- Production - 147,105 dry metric tonnes (dmt) of spodumene concentrate (16% increase from the June Quarter 2022: 127,236 dmt).
- Shipments - 138,249 dmt of spodumene concentrate (June Quarter 2022: 132,424 dmt).
- Ngungaju Plant achieves nameplate capacity of 180-200,000 dmt/tpa.
- Sale of 45,041 dmt of “middlings” product (SC1.2 concentrate), which was produced during commissioning of the Ngungaju Plant.
- Shipping milestone - one millionth tonne of spodumene concentrate.
- Average realised sales price of US\$4,266/dmt SC5.3 basis (CIF China) achieved for spodumene concentrate shipped. This equates to a reference price of US\$4,813/dmt on an SC6.0¹ basis (CIF China) when adjusted pro-rata for lithia content (June 2022 Quarter: US\$4,267/dmt SC6.0 basis (CIF China)).
- Strong pricing achieved from three Battery Material Exchange (**BMX**) sale auctions, with one auction achieving a realised price of US\$6,988/dmt SC5.5 basis (FOB Port Hedland), which equates to US\$7,708/dmt on an SC6.0 equivalent basis (CIF China).

Project development

- P680 Project commenced, with bulk earthworks underway and long-lead item contracts awarded.
- Construction of the 43,000tpa LHM primary lithium hydroxide chemical processing facility in South Korea in joint venture with POSCO was progressed, with certain key contracts awarded and preliminary site activities underway.

Corporate

- A substantial \$783.7M increase in the Quarter-end cash balance to \$1.375B (June Quarter: \$591.7M).
- Cash balance inclusive of irrevocable letters of credit (\$132.2M) for shipments completed up to 30 September 2022 increased to \$1.508B (June Quarter: \$874.2M inclusive of \$282.4M of irrevocable bank letters of credit).

¹ The SC6.0 CIF China price is an industry accepted reference price. The actual concentrate grade delivered to customers is generally less than 6% lithia content ranging between 5.0% to 6.0% lithia, in which case the actual price received is adjusted pro-rata to the 6% reference price. Please refer to section 4.1 for further pricing commentary.

1. Operations Overview

During the September Quarter 2022 (**the Quarter**), Pilbara Minerals Limited (**Pilbara Minerals or the Company** | ASX: PLS) continued to increase spodumene concentrate production and sales from the Pilgangoora Project to take advantage of positive lithium raw material demand.

Production of 147,105 dmt of spodumene concentrate was achieved, representing a 16% increase over the June 2022 Quarter (127,236 dmt). A significant highlight of the Quarter was the Ngungaju Plant achieving nameplate capacity of 180-200,000 tpa.

The strong production performance reflects the Company's operating strategy and represents an annualised production rate of 588,000 dmt of spodumene concentrate.

In response to increasing customer demand and strong lithium raw materials pricing, the Company has continued to adjust production by lowering its targeted product grade to optimise product yield, thereby maximising sales volumes to take advantage of current market pricing conditions. The average grade of product sold during the Quarter was ~5.3% Li₂O (June Quarter: ~5.4% Li₂O).

2. Sustainability

2.1 Reporting

Subsequent to Quarter-end, Pilbara Minerals issued its FY2022 Annual and Sustainability Report. This year marked the release of Pilbara Minerals' fourth Sustainability Report. Since its initial report in 2019, the Company has made significant progress reporting against key metrics and aligning with recognised frameworks including the Sustainability Accounting Standards Board (SASB) under the category of "Extractives and Minerals Processing, Metals and Mining Industry", the Taskforce on Climate-related Financial Disclosure and the United Nations Development Goals. A multi-disciplinary disclosure review is currently being undertaken to ensure alignment with industry and value chain requirements, as well as stakeholder expectations.

2.2 Health and safety

Whilst two recordable safety incidents occurred during the Quarter, the Company's Total Recordable Injury Frequency Rate decreased to 4.2 (June 2022: Quarter: 4.4).

COVID-19 cases and associated absenteeism declined, with reducing rates during August and zero isolation cases experienced on site during the month of September. Pilbara Minerals continues to monitor COVID-19 and respond accordingly to any changes in directives by the State and Federal governments.

2.3 Community and Traditional Owner Engagement

Pilbara Minerals has partnered with Strelley School and Pacific Energy to construct a 33kW PV and lithium battery storage system. Strelley School is located between Port Hedland and the Pilgangoora Project and is one of Australia's oldest continuously operating independent Aboriginal Community Schools. The installation of renewable energy at this community will displace approximately 60,000 litres of diesel usage annually.

Pilbara Minerals' employees participated in an overnight cultural awareness camp on country with the Traditional Owners of the area on which the Pilgangoora Project is located,

the Nyamal People. The Company continues to engage with the communities in which it operates and provide support through its Community Investment Strategy.

2.4 Education

To support a future generation of resource sector employees, Pilbara Minerals launched its 2023 Graduate Program and hosted a group of female high school students from Curtin University's Girls in Engineering Tomorrow program at the Pilgangoora Project. The tour was coordinated in partnership with Roy Hill.

2.5 Decarbonisation strategy

During the Quarter, Pacific Energy completed construction of the 6MW solar photovoltaic farm, which is the first major step to decarbonise the Pilgangoora Project. Commissioning is underway.

During the Quarter, Powerline Plus completed the overhead power line construction (connecting the Pilgan and Ngungaju Plants to the solar farm), with commissioning expected to commence during the December Quarter 2022.

3. Mining

Total material mined across the combined Pilgangoora Project was 7,982,879 wet metric tonnes (**wmt**) (June Quarter: 7,293,353 wmt).

Total ore mined for the Quarter was 1,442,545 wmt (June Quarter: 1,172,450 wmt) at an average grade of 1.45% Li_2O (refer **Table 1**).

Total material movements continued to increase quarter-on-quarter in support of planned additional waste movements. However, volumes were still below planned quantities due to the impact of COVID-19. With infection rates continuing to decline and quarantine mandates easing, it is expected that COVID-19 impacts should abate during the December Quarter 2022.

During the Quarter, Pilbara Minerals continued its transition to a primarily "owner operator" mining model. However, a small proportion of mining will continue to be conducted by the Company's mining contractor, MACA during October and November 2022, to support the mine plan and retain a level of operational flexibility, after which time they are expected to demobilise from site on the expiration of the mining contract.

4. Processing

Total processing plant feed of 801,968 dmt (June Quarter: 792,428 dmt) resulted in combined production from both processing plants of 147,105 dmt of spodumene concentrate (June Quarter: 127,236 dmt) (refer **Table 2**).

The Pilgan Plant continues to perform to expectations, with production capacity in the range of 360-380,000 tpa (dmt) of spodumene concentrate.

The Ngungaju Plant successfully ramped up to nameplate capacity of 180-200,000 tpa during the Quarter. Production included 45,041 dmt of medium grade (~1.2% Li_2O) concentrate product (**middlings**) which was produced via the flotation feed during the commissioning phase. This middlings product was sold on the spot market for an average realised price of approximately US\$495/dmt (CIF China).

Tantalite production for the Quarter was lower than planned, principally due to ore continuing to be sourced from the South Pit which has minimal tantalite content. Tantalite

production volumes are expected to remain low for the December Quarter 2022 with a similar ore feed source expected and while planned maintenance activities are carried out to enhance tantalum recovery.

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	Q2 FY22	Q3 FY22	Q4 FY22	Q1 FY23
Ore mined	wmt	779,368	815,387	1,172,450	1,442,545
Waste mined	wmt	3,892,865	5,261,012	6,120,903	6,540,334
Total material mined	wmt	4,672,233	6,076,398	7,293,353	7,982,879
Ore processed	dmt	566,027	613,202	792,428	801,968

4.1 Shipments and sales

During the Quarter, a total of 138,249 dmt (June Quarter: 132,424 dmt) of spodumene concentrate was shipped under existing offtake agreements and through spot sales (including via the Company's Battery Material Exchange (**BMX**) digital sales platform) (refer **Table 2**).

As noted, Pilbara Minerals modified its production and marketing strategy by lowering its targeted product grade to optimise product yield, thereby maximising sales volumes in response to increasing demand. The average grade of product shipped during the Quarter was ~5.3% Li₂O, with a pro-rata pricing adjustment made against the SC6.0 reference price.

The average realised sales price for the Quarter was ~US\$4,266/dmt on a ~5.3% basis (CIF China) (June Quarter: US\$3,911/dmt). When adjusted pro-rata for actual lithia content, this represents a sales price on a SC6.0 equivalent basis of ~US\$4,813/dmt (CIF China) (June Quarter: US\$4,267/dmt). This average price does not include the value received for the 45,041 tonnes of middlings product sold during the Quarter, which received an average realised price of approximately US\$495/dmt (CIF China).

In accordance with Pilbara Minerals' offtake agreements, price reviews are currently in progress with customers to try to align pricing for the Company's spodumene concentrate with the prevailing market.

There was one tantalite concentrate sale during the Quarter of 6,174 lbs.

Approximately 87% of spodumene concentrate during the Quarter was sold under long-term offtake agreements, with the remainder (approximately 18,000 dmt) sold on the spot market (including via the BMX).

During the Quarter, Pilbara Minerals marked a significant milestone with the 1 millionth tonne of spodumene concentrate shipped from Port Hedland on 15 September 2022.

4.2 Results of BMX sales

During the Quarter, Pilbara Minerals undertook three BMX auctions, each for 5,000 dmt with a target grade of SC5.5.

The last auction on the BMX platform during the Quarter took place on 20 September 2022, with Pilbara Minerals accepting the highest bid of US\$6,988/dmt SC5.5 basis (FOB Port Hedland). Adjusted on a pro-rata basis for lithia content (inclusive of freight costs), this equated to a price of approximately US\$7,708 /dmt on an SC6.0 basis (CIF China).

An auction held on 2 August 2022 achieved a realised price of US\$6,350/dmt SC5.5 basis (FOB Port Hedland) equivalent to ~US\$7,012/dmt on an SC6.0 basis (CIF China) and an auction on 13 July achieved a realised price of US\$6,188/dmt SC5.5 basis (FOB Port Hedland) equivalent to ~US\$6,840/dmt on an SC6.0 basis (CIF China).

The strong prices received for the BMX cargoes demonstrates continued robust demand for lithium raw materials across the global lithium-ion supply chain.

Table 2: Production and shipments

	Units	Q2 FY22	Q3 FY22	Q4 FY22	Q1 FY23
Spodumene concentrate produced	dmt	83,476	81,431	127,236	147,105
Spodumene concentrate shipped	dmt	78,679	58,383	132,424	138,249
Tantalite concentrate produced	lbs	24,629	2,654	4,217	17,222
Tantalite concentrate shipped	lbs	29,038	12,880	(2,428)	6,174

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

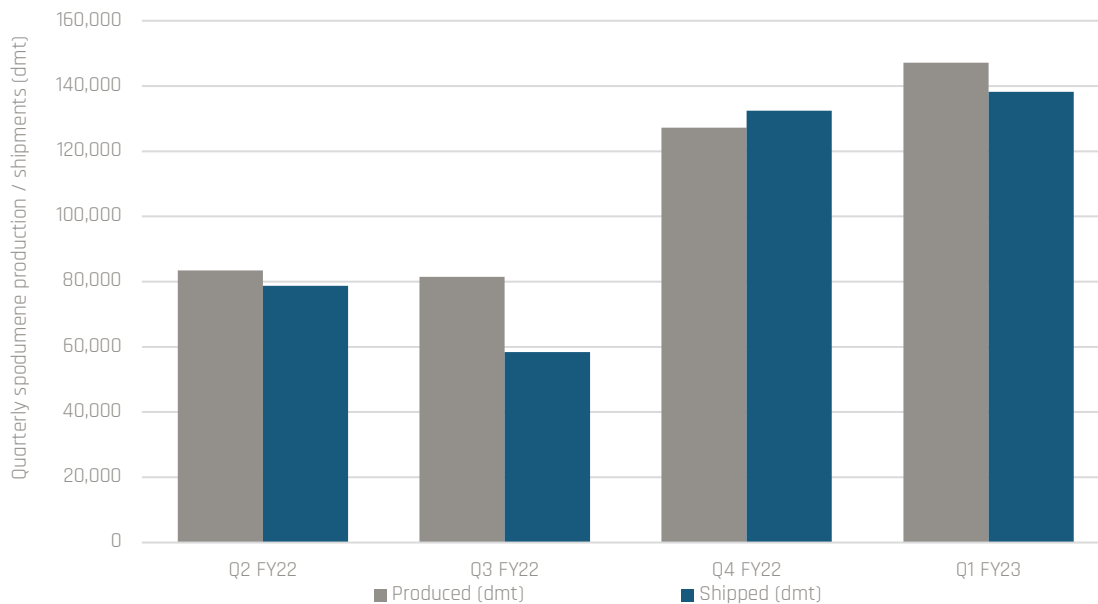


Table 3: Stocks position

	Units	Q1 FY22	Q2 FY22	Q3 FY22	Q4 FY22	Q1 FY23
Spodumene concentrate stocks	dmt	12,557	16,496	37,508	30,776	41,326 ²
Tantalite concentrate stocks	lbs	16,269	11,860	1,633	8,278	19,327

²Closing balance includes reconciliation adjustments of 1,694 dmt during the Quarter for final survey adjustments, storage handling at the mine site, moisture reconciliation and draft survey at port.

5. Project Development

5.1 Ngungaju Plant Restart

The ramp-up and optimisation of the Ngungaju Plant to nameplate production of 180-200,000 tpa was completed during the Quarter.

5.2 Pilgangoora Incremental Expansion (P680 Project)

Expansion works to construct a primary rejection circuit to deliver an additional 100,000 tpa of spodumene concentrate production from the Pilgan Plant commenced during the Quarter. Works undertaken included bulk earthworks and the ordering of long-lead items.

Commissioning of the primary rejection circuit is expected to begin in the September Quarter 2023, with ramp-up during the December Quarter 2023. The new 5Mtpa crushing plant and ore sorting facility is expected to be completed and begin commissioning in December Quarter 2023. Once completed, the expansion is expected to increase the combined total production capacity for the Pilgangoora Project to approximately 640-680,000 tpa (**P680 Project**).

Figure 2: Bulk earthworks underway for P680 project



5.3 Pilgangoora Incremental Expansion (P1000 Project)

The estimated combined capital cost of \$297.5M for the P680 Project includes approximately \$50M of pre-investment capital to assist with the proposed next phased expansion at the Pilgangoora Project, with targeted production capacity of up to 1Mtpa (**P1000 Project**).

A final investment decision (FID) by the Company for the P1000 Project is on track for late December 2022.

5.4 Mid-Stream Project

During the Quarter, the Company continued to progress formal documentation for a joint venture in relation to building a demonstration plant for the Mid-stream Project. Pilbara Minerals and Calix agreed core commercial terms in a binding Memorandum of Understanding in June 2022 and are now at the final stages of agreeing formal documents. Pilbara Minerals and Calix expect to sign a formal Joint Venture (JV) agreement in the coming weeks for the Mid-stream Project, which is aimed at producing value-added

lithium phosphate, a lower carbon energy intensity product for the battery materials industry.

The JV will undertake studies for the construction of a demonstration-scale chemicals facility, with a FID on this facility targeted for the March Quarter 2023.

Refer to the Company's ASX announcement dated 1 June 2022.

5.5 Downstream Joint Venture with POSCO update

Construction of the 43,000 tpa Lithium Hydroxide Monohydrate (LHM) Chemical Facility in Gwangyang, South Korea is continuing under the JV with POSCO, with key progress during the September Quarter including:

- ordering of key long-lead items and various work packages awarded (nearly 60% of work packages awarded); and
- continued progress with site-based activities including early civil works and access road construction, concrete casting for the sub-centre and head office, and piling for the calcination area.

Members of Pilbara Minerals' senior leadership team are scheduled to visit the site of the Gwangyang Facility during the December Quarter 2022.

Commissioning of the Chemical Facility is expected to commence from late CY2023.

6. Exploration and Geology

6.1 Overview

Exploration activities included regional surface geochemistry, water exploration and preparation for a resource development drilling program to be carried out at the Pilgangoora Project during the December Quarter 2022.

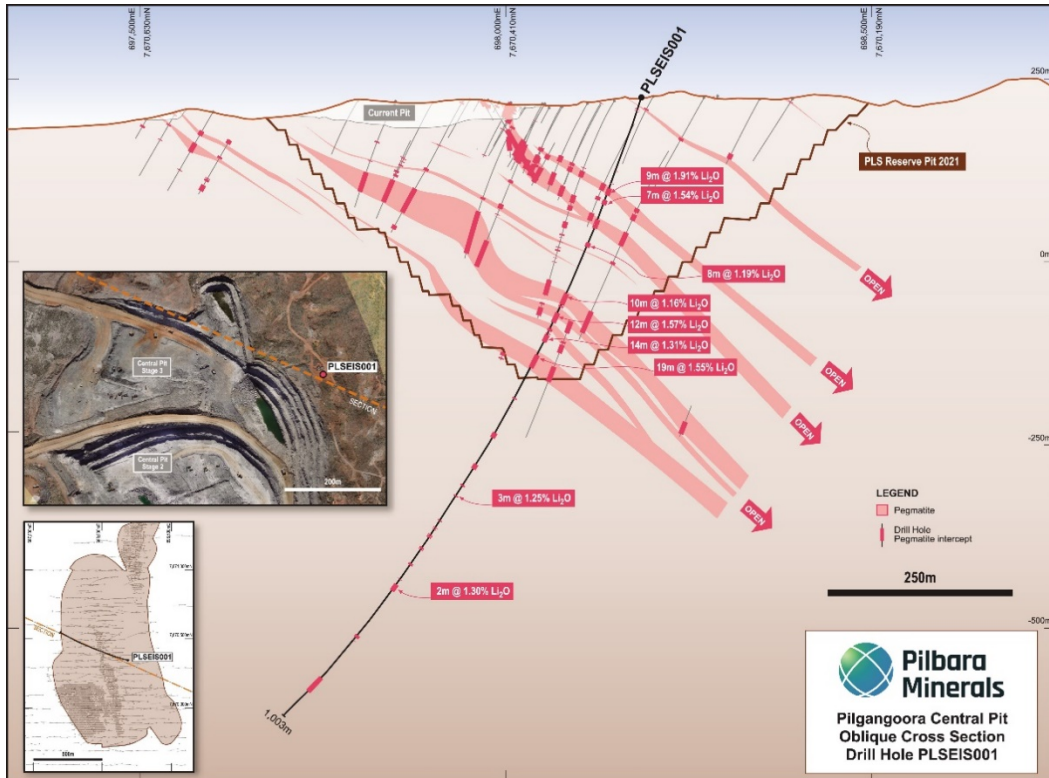
6.2 Pilgangoora Project (Pilbara Minerals 100%)

Final results from the co-funded State Government Exploration Incentive Scheme (EIS) drill hole completed during the June Quarter 2022, designed to test the depth extent of the Pilgangoora rare-metal pegmatite system (**Figure 3**), have been received. Multiple pegmatite domains were intersected including the following significant intercepts:

- 9m @ 1.91% Li₂O from 128m
- 8m @ 1.19% Li₂O from 207m
- 10m @ 1.16% Li₂O from 290m
- 12m @ 1.57 Li₂O from 326m
- 15m @ 1.31 Li₂O from 344m
- 19m @ 1.55 Li₂O from 398m

All intercepts have been tabled in Annexure A.

Figure 3: Oblique Cross Section PLS EIS001



A systematic grid-based surface sampling program was undertaken over the southern extension of the Pilgangoora Project area during the September Quarter 2022. A total of 651 samples were collected on 100 x 50m centres. Analytical results remain outstanding.

6.3 Regional Projects (Pilbara Minerals 100%)

Surface geochemistry programs were undertaken by Ozex Exploration Services over selected target areas on regional tenements E45/4633 and E45/4624. A total of 256 samples were collected and sent to Nagrom Laboratories for multi-element analysis. Analytical results remain outstanding.

Harrington Drilling commenced a water exploration and production bore drilling program to increase water supply for the proposed expansion works. A total of six (6) pilot exploration holes for 596m were completed with development drilling and pump testing continuing.

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

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

7. Corporate

7.1 Executive Leadership Movements

During the Quarter:

- Ken Brinsden formally stepped down as Managing Director in July 2022;
- Chief Executive Officer, Dale Henderson was formally appointed to the position of Managing Director;
- Vince De Carolis was recruited for the position of Chief Operating Officer with his appointment due to commence during the December Quarter 2022; and
- Brian Lynn advised he would be stepping down as Chief Financial Officer (but will assist the Company with the transition to a new CFO).

Pilbara Minerals is continuing the recruitment process to appoint a Chief Sustainability Officer, a Head of Projects, a Head of Business Development and has commenced the process to recruit a new Chief Financial Officer.

7.2 Financial Results from Operations

Pilbara Minerals shipped 138,249 dmt of spodumene concentrate during the Quarter at an average grade of ~SC5.3 Li₂O, achieving an average realised sales price of US\$4,266/dmt ~5.3% basis (CIF China). This equates to a reference price of US\$4,813/dmt on a SC6.0 basis (CIF China) following a pro-rata adjustment for actual lithia content.

Pursuant to the terms of sale, positive final pricing adjustments associated with provisionally priced cargoes shipped during the Quarter totalled ~\$9.7M (June Quarter: negative provisional pricing adjustments of \$19.8M), with cash receipts for these amounts expected during the December Quarter 2022 (pending final pricing outcomes).

A unit operating cost (FOB Port Hedland and excluding royalties)³ for the combined Pilgangoora Project of US\$434/dmt was achieved for the 138,249 dmt of spodumene concentrate shipped during the Quarter, being A\$635/dmt at a quarterly average AUD:USD exchange rate of 0.6836 (June Quarter 2022 Pilgan Plant only: US\$462/dmt; A\$648/dmt at an average quarterly AUD:USD exchange rate of 0.7146). This is at the lower end of the guidance of A\$635-A\$700/dmt (FOB Port Hedland excluding royalties) disclosed in the Company's ASX release dated 22 August 2022.

From 1 July 2022, unit operating costs are reported on a combined basis (including both the Pilgan and Ngungaju plants) following the successful ramp-up of the Ngungaju Plant to nameplate capacity (180-200,000 tpa) during the Quarter.

As noted in the Company's ASX release dated 22 August 2022, costs for the Quarter continued to be higher due to elevated strip ratios to support a substantial investment in mining activities, the impact of labour shortages in the WA mining sector (including the impact of COVID-19), supply chain disruptions and general inflationary cost pressures. Including freight and royalty costs⁴, the unit operating cost for the Quarter was US\$767/dmt (CIF China), being A\$1,122/dmt at a quarterly average AUD:USD exchange rate of 0.6836 (June Quarter Pilgan Plant only: US\$780/dmt; A\$1,092/dmt at an average quarterly AUD:USD

³ 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.

⁴ 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.

exchange rate of 0.7146).

During the Quarter, the Company sold 45,041 dmt of a middlings product at an average realised selling price of US\$495/dmt (CIF China) and a unit operating cost of US\$115/dmt, being A\$168/dmt at an average quarterly AUD:USD exchange rate of 0.6836 (June 2022: nil middlings sales).

7.3 Cash Balance

Pilbara Minerals closed the Quarter with a cash balance of \$1.375B, a \$783.3M increase over the equivalent balance of \$591.7M at 30 June 2022, which was achieved on the back of increased production and higher selling prices. When including \$132.2M of irrevocable bank letters of credit for shipments completed during the Quarter, this balance increases to \$1.508B (30 June 2022: \$874.2M inclusive of \$282.4M of irrevocable bank letters of credit).

During the Quarter, Pilbara Minerals received:

- proceeds of \$1.037B from customer sales associated with the sale of 138,249 dmt of spodumene concentrate and 45,041 dmt of middlings product (inclusive of \$19.0M of payments following completion of final pricing adjustments for June Quarter 2022 cargoes that were provisionally priced); and
- interest income of \$2.2M.

Major cash outflows and movements during the Quarter included:

- \$162.9M on operating costs to produce and sell both the spodumene concentrate and middlings products;
- \$54.6M on capital costs, including commissioning and ramp-up of the Ngungaju Plant, early works for the P680 Expansion Project, capitalised mine waste stripping costs associated with mining activities (\$27.5M), as well as other capital projects including installation and integration of the solar farm and construction works to increase the capacity of the tailings management facilities;
- interest costs of \$3.1M under the USD Syndicated Debt Facility and \$1.3M in respect of right of use lease assets;
- \$18.5M on the repayment of borrowings, including the first principal repayment under the USD Syndicated Debt Facility (\$7.7M), payments made for right of use lease assets and the partial repayment of a customer prepayment(\$1.7M);
- \$8.1M on payroll, administration and corporate costs (inclusive of bonus structures to attract and retain employees);
- \$4.8M on exploration and evaluation work and feasibility studies; and
- \$1.3M of unrealised foreign exchange movement on USD denominated cash reserves, following a reduction in the quantum of USD held during the Quarter partly offset by a weakening in the Australian dollar at Quarter end.

During the Quarter, Pilbara Minerals paid the first scheduled debt repayment of US\$5M under the terms of the USD Syndicated Debt Facility. Given the Company's strong cash position, the US\$25M Working Capital Facility with BNP Paribas was cancelled during the period. The Company's net cash position at 30 September 2022 was \$1.214B.

The Company is currently establishing a Capital Management Framework (including a dividend policy), which it expects to release during the December Quarter 2022.

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 Dale Henderson, Pilbara Minerals Limited's Managing Director and CEO.

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, 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

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.

The capital cost estimates in this announcement for the P680 Project are indicative only, based on the Company's studies and budgeting and the P680 FID economic model. 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), inflationary

macroeconomic conditions and arising from commissioning and ramp of the Primary Rejection and the Crushing & Ore Sorting Projects. The information is 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.

Information in this presentation regarding production targets and expansions in nameplate capacity of the Pilgan Plant in respect of the P680 and P1000 projects are underpinned by the Company's existing Ore Reserves that have been prepared by a Competent Person in accordance with the JORC Code (2012 Edition) and were released by the Company to ASX on 6 October 2021. The relevant proportions of proven Ore Reserves and probable Ore Reserves are 11% proven Ore Reserves and 89% probable Ore Reserves. The Company confirms it is not aware of any new information or data that materially affects the information included in that release or report and that all material assumptions and technical parameters underpinning the Ore Reserves estimates continue to apply and have not materially changed.

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.

All references to dollars (\$) and cents in this announcement are to Australian currency, unless otherwise stated.

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Annexure A

Pilgangoora 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)
PLSEIS001	128	137	9	1.91	73.98
PLSEIS001	145	152	7	1.54	75.62
PLSEIS001	176	179	3	0.78	107.59
PLSEIS001	181	184	2	0.45	51.11
PLSEIS001	207	215	8	1.19	71.39
PLSEIS001	290	300	10	1.16	102.76
PLSEIS001	302	303	1	1.40	81.36
PLSEIS001	314	326	12	1.57	68.93
PLSEIS001	338	341	3	3.45	64.10
PLSEIS001	344	359	15	1.31	80.20
PLSEIS001	379	398	19	1.55	83.24
PLSEIS001	603	606	3	1.25	218.10
PLSEIS001	689	692	3	0.63	63.63
PLSEIS001	757	759	2	1.30	34.49
PLSEIS001	762	764	2	0.69	28.09

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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 1 diamond drill hole for holes for 1,003 metres in the June 2022 quarter. This included 107.9m PQ, 561.2m HQ and 334m of NQ core.
	<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"> Drill core was split in half using a Corewise fully enclosed core cutting machine. Half core retained on site at Pilgangoora and the other half supplied to DMIRs as one of the requirements of the Co-Funded EIS drilling program. Drill core was cut in quarters for sample analysis. Samples were collected on irregular intervals up to 1m with boundaries determined by ore type and lithology.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other</i>	<ul style="list-style-type: none"> Diamond core is generally sampled at lengths were determined by mineralisation logged in the core. Quarter core samples through mineralised zones were sent to Nagrom Laboratories in Perth for lithium, tantalum and a suite of other analytes.

Criteria	JORC Code explanation	Commentary
	<p><i>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>	
<p>Drilling techniques</p>	<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 Mt Magnet Drilling Pty Ltd using a SD1000 multi-purpose drilling rig with numerous support vehicles.
<p>Drill sample recovery</p>	<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 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>	<ul style="list-style-type: none"> • Recoveries for the diamond holes was recorded as 100% for the majority of hole excluding first near surface runs. • Rock is generally very hard and competent and full recovery attained via diamond drilling. • No material bias has been identified.
<p>Logging</p>	<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</i></p>	<ul style="list-style-type: none"> • Drill core was meticulously laid on racks, marked up with orientation line, metre marks, structural points, sample boundaries and other information. Geological logging information was recorded using OCRIS logging software on a Panasonic Toughbook computer and information validated and transferred electronically to Database administrators in Perth. Half of the core retained on site and the other half has been dispatched to the DMIRS core library. • All core has been photographed dry and wet using a digital SLR camera.

Criteria	JORC Code explanation	Commentary
	<i>in nature. Core (or costean, channel, etc) photography.</i>	Photography retained on the PLS Perth server. <ul style="list-style-type: none"> All remnant drill core (excluding 2019 PQ core) is currently stored on pallets at Pilgangoora.
	<i>The total length and percentage of the relevant intersections logged.</i>	<ul style="list-style-type: none"> The entire diamond drill hole has been logged in high detail and data retained on the PLS database. The database contains lithological, structural, mineralogical, geotechnical and other data. Data is uploaded to a SQL server database using DATASHED.
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"> PQ, HQ and NQ diamond core has been cut and sampled in the June quarter 2022. Only the pegmatite domains and contact zones were sampled. Quarter core samples sent to the laboratory.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	<ul style="list-style-type: none"> QAQC is maintained regularly on the Nagrom results. Assay results were received during the September 2022 Quarter.
	<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"> 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	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and</i>	<ul style="list-style-type: none"> PLS samples were assayed by Nagrom Perth laboratory and analysed for a suite of 9 elements via ME-MS91 Sodium Peroxide for ICPMS finish and

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laboratory tests	<i>whether the technique is considered partial or total.</i>	<p>Peroxide fusion with an ME-ICP89 ICPAES finish. A suite of other elements also being analysed via XRF.</p> <p>Grade control samples were submitted to Nagrom Laboratories in Perth and analysed for a suite of 25 elements. A proportion of the grade control samples also assayed at the SGS laboratory located onsite at Pilgangoora.</p>
	<i>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.</i>	<ul style="list-style-type: none"> • No geophysical tools were used to determine any element concentrations used. • Gyro surveys taken both in and out of the hole during and at the completion of the drill hole.
	<i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	<ul style="list-style-type: none"> • Drilling contains QC samples (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>	<ul style="list-style-type: none"> • No twin holes were drilled.
	<p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p>	<ul style="list-style-type: none"> • An electronic relational database containing collars, surveys, assays and geology is maintained by Trepanier Pty Ltd, an Independent Geological consultancy.
	<p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> • 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

Criteria	JORC Code explanation	Commentary
		<p>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 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"> 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).
	<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"> NA
	<p><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the</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>Mineral Resource and Ore Reserve estimation 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.
	<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 data has been reviewed by compiling a SQL relational database. 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 • Diamond drill hole PLSEIS001 was drilled on M45/1256 • The tenement M45/1256 is 100% owned by Pilgangoora 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 parties	<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. • 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

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		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.
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 the June 2022 quarterly report for the drill hole collar location coordinates.
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</i></p>	

Criteria	JORC Code explanation	Commentary
	<p><i>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>	
<p>Relationship between mineralisation widths and intercept lengths</p>	<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 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>	<ul style="list-style-type: none"> • Intercepts reported are down hole length. The majority of intersected pegmatite domains are perpendicular to drill hole angle.
<p>Diagrams</p>	<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"> • Drill hole location and results are presented on Figure 3.
<p>Balanced reporting</p>	<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"> • Pegmatite intercepts have been reported at a 0.5% Li₂O cut-off in Annexure A.
<p>Other substantive exploration data</p>	<p><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results;</i></p>	<ul style="list-style-type: none"> • All meaningful & material exploration data has been reported.

Criteria	JORC Code explanation	Commentary
	<i>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>	
Further work	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	<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 Indicated and Indicated to Measured).