

26 October 2023

SEPTEMBER 2023 QUARTERLY ACTIVITIES REPORT

Key production and financial outcomes

	Units	Quarter on PCP			Quarter on Quarter		
		Q1 FY23	Q1 FY24	(%)	Q4 FY23	Q1 FY24	(%)
Production	kt	147.1	144.2	(2)	162.8	144.2	(11)
Sales	kt	138.2	146.4	6	176.3	146.4	(17)
Realised Price¹	US\$/t	4,266	2,240	(47)	3,256	2,240 ²	(31)
Revenue	A\$M	868	493	(43)	844	493	(42)
Unit operating cost (FOB)³	\$A/t	635	747	18	628	747	19
	\$US/t	434	489	13	420	489	16
Unit operating cost (CIF)⁴	A\$/t	1,122	1,004	(11)	976	1,004	3
	US\$/t	767	658	(14)	653	658	1
Cash balance	A\$B	1.4	3.0	121	3.3	3.0	(9)

KEY HIGHLIGHTS

- Strong operational quarter with production to plan of 144.2 thousand tonnes (**kt**) spodumene concentrate in the three-month period ended 30 September 2023 (**Q1**) of the 2024 financial year (**FY24**). Annual production for FY24 expected to be weighted towards the second half of the year once the P680 Primary Rejection Facility reaches nameplate capacity which provides an additional 100ktpa.
- Sales of spodumene concentrate totalled 146.4kt in Q1 FY24. On an ~SC5.3% basis, the average estimated realised price for spodumene concentrate for the quarter was US\$2,240/dmt² (CIF China). On an SC6.0 equivalent basis, the average estimated sales price was US\$2,553/dmt (CIF China).
- Revenue was 42% lower than the prior quarter at \$493.1M, reflecting a 31% decline in average realised selling price, and planned sales volume in Q1 FY24 being in line with lower production volume due to shut down maintenance and tie in works in support of the commissioning of the P680 expansion project.
- Unit operating cost (FOB) in Q1 FY24 was \$747/t reflecting operational readiness costs in support of the P680 expansion project and lower production volume relative to Q4 FY23. Unit operating costs are expected to decline over FY24 as production volumes increase from P680.
- Cash decreased to \$3.0B in Q1 FY24 from \$3.3B in Q4 FY23, reflecting a final FY23 dividend payment of \$421M and investment in growth projects. Cash margin from operations remained strong at \$360M in the period, notwithstanding lower spodumene prices.
- P680 Primary Rejection Facility successfully commissioned in October, and first ore produced.
- P1000 expansion project and Mid-Stream Demonstration Plant progressed and remain on schedule.
- First shipment of spodumene concentrate delivered to POSCO JV chemical plant in South Korea in preparation for commissioning of first train.
- Ore Reserves increased by 35% to 214Mt and study commenced to explore further expansion of production capacity beyond 1Mtpa with results expected to be released in Q4 FY24.

1. SUSTAINABILITY

1.1 Health and safety

Pilbara Minerals Limited (**Pilbara Minerals, Company** or the **Group**) reported two recordable injuries during Q1 FY24. The rolling 12-month Total Recordable Injury Frequency Rate (**TRIFR**) decreased from 4.69 in Q4 FY23 to 3.99 for Q1 FY24.

Field interactions increased, with site leadership being more actively engaged with operators and contractors and identifying at-risk behaviours. Quality safety interactions achieved for Q1 FY24 equated to 1.82 completed per 1,000 hours trending above target (1.0) versus 1.42 for Q4 FY23.

1.2 ESG Credentials

Pilbara Minerals engages in a range of ESG ratings for which the company has maintained a positive trend year on year across all ratings. The Group has a leading 'AA' rating (on a scale of AAA-CCC) in the MSCI ESG Ratings assessment⁵. This rating is a reflection of the Group's continued commitment to long-term sustainability and resilience against material ESG risks. The Company remains committed to upholding these high standards and continuously improving our ESG performance.

1.3 Decarbonisation

Pilbara Minerals continued to progress the development of a power strategy to support Pilgangoora Operation's current and future expansion power requirements while aiming to reduce carbon emissions and power costs. Subject to closing out contractual negotiations, the Company is targeting release of its power strategy in Q2 FY24 which will serve as a critical component within the Company's decarbonisation pathway and inform the establishment of an interim target.

1.4 Community Investment

Pilbara Minerals is committed to community engagement and social investment. Subsequent to quarter end, the Company announced the launch of an annual community grants program, aimed at making meaningful contributions to the community at a grassroots level.

2. OPERATIONS AND SALES

2.1 Production

The Group recorded a 7% increase in total material mined in the quarter when compared to the previous quarter which continues the positive trend of increased material movements over the past few quarters.

The total material mined supported an 11% increase in ore mined at 1,411k wet metric tonnes (**wmt**) in Q1 FY24, compared to 1,271k wmt in Q4 FY23. Productivity improvements continue as the Company implements a mining uplift plan which includes payload improvements and upgrades to road networks which have provided increased efficiencies in mining activity.

Pilgangoora Operations delivered spodumene concentrate production volumes to plan in the quarter with critical P680 tie-in maintenance shutdowns partially offset by an increase in processing throughput volumes. Processing plant performance across the two operations included runtime of 82% and plant utilisation of 97%. Lithia recoveries averaged 67% in Q1 FY24, in line with plan for the period. Recoveries were lower than the prior quarter due to processing tie-ins for the P680 expansion for the Pilgan processing plant and maintenance shutdowns for the Ngungaju processing plant.

These factors combined to deliver total production of 144.2k dmt of spodumene concentrate in Q1 FY24, in line with budget and achieved while also successfully carrying out significant P680 Primary Rejection expansion tie-ins.

Tantalite production increased with 8,496 lbs produced in Q1 FY24 compared to 7,224 lbs in Q4 FY23.

FY24 production is planned to be more heavily weighted towards the second half of FY24 with the ramp up of the P680 Primary Rejection Facility expected to be complete by the end of Q2 FY24.

2.2 Sales

Group sales volume totaled 146.4k dmt of spodumene concentrate in Q1 FY24 consistent with production for the quarter. The average grade of product shipped during Q1 FY24 was ~SC5.3% Li₂O.

Pilbara Minerals has recently secured long term access to additional storage at Berth 1 at Port Hedland which provides further capacity to export product to market and mitigates risk to loading operations.

There were no sales of tantalite concentrate during the quarter though it is expected that tantalite sales will resume in Q2 FY24.

2.3 Unit Operating Costs

Unit operating costs for the Group were \$1,004/t on a CIF basis versus \$976/t in Q4 FY23, a 3% increase on the prior quarter. Unit operating costs on a FOB basis (excluding freight and royalties) were \$747/t versus \$628/t in Q4 FY23. Unit costs reflected pre-investment in mine site operating costs including personnel and consumables for P680; lower production volumes due to planned shutdowns to complete key P680 tie-ins; and general inflation driven increases on key inputs such as diesel, labour and consumables. Unit operating costs on an FOB basis are expected to decline over FY24 as production volume increases with the addition of the P680 processing capacity.

2.4 Pricing

The estimated realised sales price for spodumene concentrate in Q1 FY24 was US\$2,240/dmt² (CIF China and based on ~SC5.3% product grade) down 31% on Q4 FY23 at US\$3,256/dmt (CIF China and based on ~SC5.3% product grade). On an SC6.0 equivalent basis, the average estimated sales price for spodumene concentrate in Q1 FY24 was US\$2,553/dmt (CIF China). Pricing for the quarter was influenced by sales being more heavily weighted in the month of September due to berth maintenance at Port Hedland.

Realised prices of spodumene concentrate sold by Pilbara Minerals were derived from a combination of pricing methodologies and pricing periods across the customer group linked to either spodumene concentrate prices as reported by price reporting agencies, or pricing formulas linked to lithium chemicals and continued to experience volatility over the quarter consistent with broad declines in pricing for battery grade chemicals and spodumene concentrate. Pricing periods used to adjust provisional pricing are typically a two-month period including the month of shipment which is intended to ensure final pricing is better aligned with the time of delivery of product to the end customer.

Demand for lithium raw materials is expected to remain consistent in Q2 FY24 which is typically a stronger period for EV sales. Market pricing for spodumene concentrate and lithium chemicals is however likely to continue to remain volatile in the near-term given uncertain macroeconomic conditions and closely managed inventories in the supply chain. The long-term outlook for lithium materials supply remains positive with an expected structural deficit of lithium materials supply relative to the expected demand for lithium-based products such as electric vehicles and battery energy storage.

3. PROJECT DEVELOPMENT

3.1 P680 Expansion Project

Construction and commissioning works were progressed during the period for the two major facilities associated with the P680 Expansion Project (**P680 Project**), being the Primary Rejection Facility and Crushing and Ore Sorting Facility.

Primary Rejection Facility

Structural, mechanical, piping and electrical works for the Primary Rejection Facility continued to progress to plan and into commissioning. All remaining brownfield tie-ins were successfully installed and commissioned in shutdowns completed in July and September.

First-ore was achieved from the Primary Rejection Facility in October (outside the reporting period) marking an important milestone in the ramp-up of the facility. This milestone followed the successful completion of construction and commissioning works during the reporting period.

Full capacity ramp up of the facility is targeted for the end of Q2 FY24.



Figure 1: P680 Primary Rejection facility

Crushing and Ore Sorting Facility

Civil and concrete works associated with the Crushing and Ore Sorting Facility were progressed towards completion in the quarter.

Long-lead orders including the ore sorting units and the crushing components arrived in WA. Steel fabrication progressed with first deliveries to site expected in Q2 FY24.

Commissioning of the new Company-owned Crushing and Ore Sorting Facility remains targeted for Q4 FY24 with ramp-up scheduled during Q1 FY25.

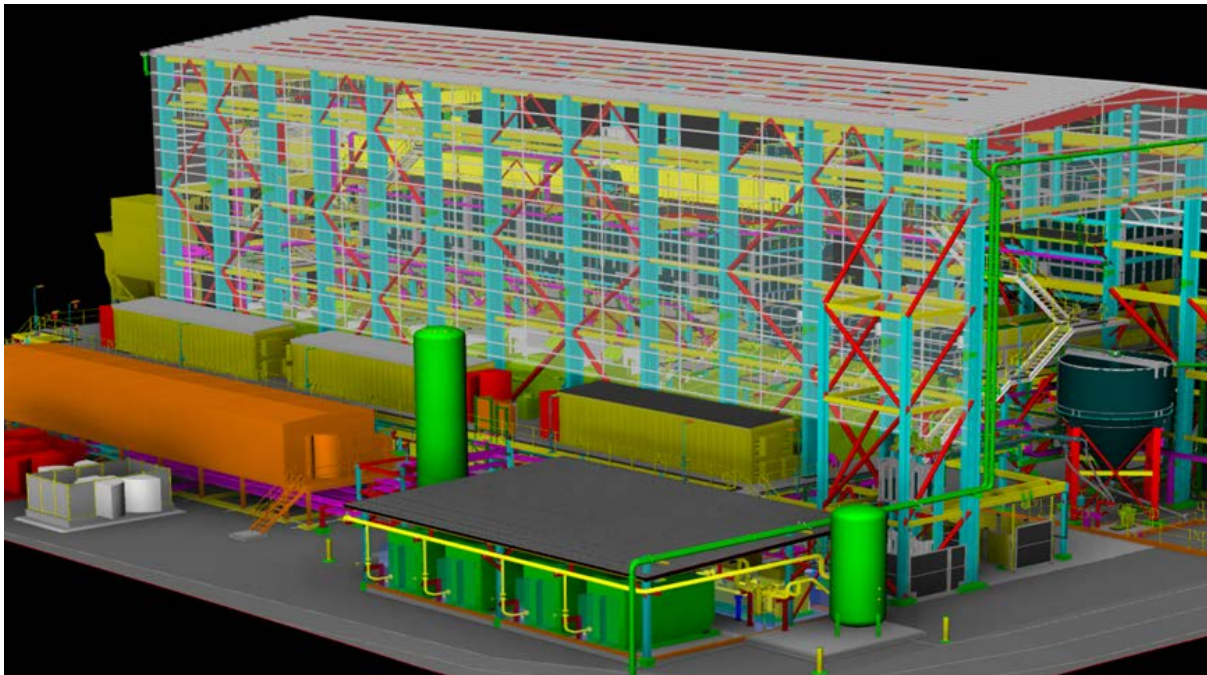


Figure 2: Schematic of the P680 Crushing and Ore Sorting facility

3.2 P1000 Expansion Project

The P1000 Expansion Project (**P1000 Project**) continues to progress to schedule.

Highlights for Q1 FY24 included:

- Detailed design completed to support construction and fabrication packages.
- Bulk earthworks construction contract awarded to Westforce who have mobilised to site and commenced construction works.
- Construction contract concrete tenders have been evaluated with contract award planned for Q2 FY24 and mobilisation expected to occur within two weeks of award.
- Steel fabrication and modularising tenders have been received with contract award planned for Q2 FY24.

The P1000 Project is on schedule to increase the annual nameplate production run rate from the Pilgangoora Operation to approximately 1Mtpa⁶ with first ore targeted for Q3 FY25.

3.3 Mid-Stream Demonstration Plant Project

During the quarter, the Group, and its joint venture partner Calix, made the Final Investment Decision (**FID**) to construct the Mid-Stream Demonstration Plant Project (**Demonstration Plant Project**) at the Pilgangoora Operation. The Demonstration Plant Project is partially funded with \$20M from an Australian Government Modern Manufacturing Initiative (**MMI**) grant.

The Demonstration Plant Project aims to validate the benefits of producing a mid-stream lithium enriched product using Calix's patented electric kiln technology which has the potential to reduce hard-rock lithium processing carbon emission intensity if powered by renewable energy.

Work undertaken during Q1 FY24 focused on procurement of long-lead time equipment and detailed engineering design.

3.4 Downstream Joint Venture with POSCO

Procurement and major construction works continued to be progressed by POSCO Pilbara Lithium

Solution Co Ltd (**PPLS**) during Q1 FY24 at the 43ktpa Lithium Hydroxide Monohydrate Chemical Facility (**Chemical Facility**) in Gwangyang, South Korea.

PPLS is a Joint Venture (**JV**) owned by POSCO Holdings (82%) and Pilbara Minerals (18%) with Pilbara Minerals having a call option at its election to increase its equity interest to 30% at any time up to 18 months after successful ramp of the Chemical Facility to 90% of nameplate capacity. Pilbara Minerals may exercise the call option at cost (plus 3.58% interest pa) up until the Chemical Facility receives independent battery certification from tier 1 battery producers and thereafter at fair value. This structure has been deliberately designed to allow sufficient time for the successful construction, ramp up and achievement of steady operations at the Chemical Facility ahead of any decision to be made by Pilbara Minerals to contribute further equity into the JV.

The PPLS JV has advised that Train 1⁷ (21.5ktpa) is 77% complete and remains on schedule for commissioning to commence in Q2 FY24 and Train 2 (21.5ktpa) is 44% complete and remains on schedule to commence commissioning in Q3 FY24.



Figure 3: Construction site at the POSCO Pilbara Lithium Solutions LHM facility as at 18 October 2023

A significant milestone was achieved during Q1 FY24 with the first shipment of Pilbara Minerals' spodumene concentrate shipped and delivered to South Korea, ahead of Train 1 commissioning during Q2 FY24.

The PPLS JV is expected to enter into a number of lithium hydroxide offtake agreements with South Korean and international customers over the coming months, including an offtake agreement on arm's length commercial terms with POSCO Future M which is a lithium cathode producer ~60% owned by POSCO Holdings.

Battery chemicals produced by chemical converters such as the PPLS JV need to be certified by lithium cathode customers before commercial quantities can be purchased. The certification process typically takes 6 – 12 months and this can occur concurrently with ramp up of the facility. Certification is expected to occur during FY25, with ramp up estimated to take 12 – 18 months from commissioning.

POSCO Holdings and the PPLS JV expect to recognise the commissioning of Train 1 with an opening ceremony to be held in Gwangyang, South Korea during Q2 FY24. The ceremony will represent a significant milestone for the Company as its strategy of progressing into the downstream value chain comes to fruition.

3.5 Other studies

Following the increase in Ore Reserves and extension of the Pilgangoora Operation's mine life to ~34 years⁸ in the quarter, a study was commenced to explore further expansion of production capacity beyond 1Mtpa at the Pilgangoora Operation with results from a pre-feasibility level study expected to be released in Q4 FY24.

4. EXPLORATION AND GEOLOGY

4.1 Pilgangoora and regional

The Group released a substantial increase to the Mineral Resource⁹ comprising a total Measured, Indicated and Inferred Resource of 413.8Mt grading 1.15% Li₂O, 112ppm Ta₂O₅ and 0.53% Fe₂O₃, containing 4.75Mt of lithium oxide and 101.8 million pounds of Ta₂O₅. The Mineral Resource update led to a 55 Mt increase in Ore Reserves⁸ for the Pilgangoora Operation to 214Mt reinforcing its position as a world class lithium project.

Reverse circulation (**RC**) and diamond drilling programs continued within the Pilgangoora Operation's mine corridor during Q1 FY24 with a total of 18,334m completed. Significant intervals of pegmatite mineralisation were intercepted to the north of the Central Pit and outside of the current Reserve pit shells. Whilst assays remain outstanding, the Group is encouraged by these new zones and will continue with Resource Development drilling through Q2 FY24. Plans for a significant exploration drilling campaign in CY24 are being finalised.

Surface geochemistry and geological mapping programs were also undertaken on several of the Group's regional exploration licences in the quarter. A total of 1,834 samples were collected and are currently with laboratories awaiting analysis.

5. CORPORATE

5.1 Cash

The Company reported an ending cash balance of \$3.0B as at 30 September 2023, reducing by \$297.4M relative to 30 June 2023. Proceeds from receipts from customers of \$540.5M less income taxes paid of \$116.3M, cash operating costs of \$180.8M and other operating cash flows of \$14.6M (cash inflow) resulted in a cash inflow from operating activities of \$257.9M. There were investing cash outflows of \$176.1M, dividends paid of \$421.0M, proceeds from borrowings of \$68.2M and interest and other financing cash flows of \$26.5M (a cash outflow) resulting in a net decrease in cash of \$297.4M. Cash margin from operations defined as proceeds from receipts from customers less cash operating costs remained strong at \$360M in the period, notwithstanding lower spodumene prices.

5.2 FY23 Final Dividend Payment and Capital Management Update

Following release of Pilbara Minerals' FY23 full year financial results, application of the Company's Capital Management Framework (and a payout ratio of 30% of second half FY23 free cash flow, the top end of the Group's payout ratio range) resulted in a final dividend of 14.0 cents per share (fully-franked) being paid to shareholders on 27 September 2023. This represented a total payment of \$421M. This takes total dividends distributed to shareholders related for the FY23 period to 25.0 cents per share (fully-franked), totalling \$750.8M.

The Group has previously outlined its Capital Management Framework and investment strategy which prioritises investment into our existing operations, sustainable dividends to our shareholders and investment in organic growth through the P680 and P1000 Pilgangoora expansion projects. Beyond that, the Group has flexibility to consider investment in a range of other organic and inorganic investment opportunities and/or additional returns to shareholders. While the Group has significant capital allocation flexibility today, with all previously disclosed capital expenditure fully funded from existing cash reserves, market conditions have softened in a period where the Group is undertaking major capital investment programs.

In light of this backdrop, the Board has determined, at this time, not to proceed with a one-off capital management initiative. The Group will continue to consider opportunities for further investment and/or capital management initiatives over time. In all cases, the use of surplus capital for growth will be tested against additional returns to shareholders, to ensure a prudent approach to capital allocation and value creation through the cycle.

5.3 Downstream partnering initiative

Pilbara Minerals is pursuing additional downstream partnering opportunities to maximise shareholder returns in respect of unallocated product from the P1000 Project. Up to 300kt of future annual spodumene concentrate production has been allocated to this initiative.

The partnering process was progressed during Q1 FY24 with the initiative expected to be concluded and outcomes announced in Q3 FY24.

5.4 Quarterly Investor, Analyst and Media Webcast

Access the quarterly investor, analyst and media webcast today at 6.00am (AWST) / 9.00am (AEDT):

- Retail shareholders and investors – [Webcast link](#)
- Analysts, brokers, fund managers and media – [Teleconference link](#)

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

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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 Operation produces spodumene and tantalite concentrates. The significant scale and quality of the operation has attracted a consortium of high quality, global partners including Ganfeng Lithium, General Lithium, POSCO, and Yibin Tianyi.

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.

Guidance as to production, unit costs and capital expenditure is based on assumptions, budgets and estimates existing at the time of assessment which may change over time impacting the accuracy of those estimates. These estimates are developed in the context of an uncertain operating environment including in respect of inflationary macroeconomic conditions, incomplete engineering and uncertainties surrounding the risks associated with mining and project development including the construction, commissioning and ramp up of P680 and P1000 which may delay or impact production and have a flow on effect on sales. Actual results may therefore vary significantly depending on these risks and the timing required to address them. All 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 announcement 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 24 August 2023. The relevant proportions of proven Ore Reserves and probable Ore Reserves are 9% proved Ore Reserves and 91% 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.

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

End notes

¹ The table below shows the SC6.0 CIF China equivalent price, adjusted pro-rata for an assumed SC6.0 lithia content, compared to the realised price (CIF China) in each period with corresponding lithia content.

	Units	Q4 FY23	Q1 FY24	(%)
SC6.0 CIF China	US\$/t	3,714	2,553	(31)
Realised Price CIF China	US\$/t	3,256	2,240	(31)
Lithia Content	%	~5.3%	~5.3%	0

² Average estimated realised price for ~5.3% Li₂O grade (SC5.3 CIF China) as at 19 October 2023. This includes 50,877 dmt shipped in September which reflects reference pricing data up to 19 October 2023, and is subject to final adjustment to take into account reference pricing data up to 31 October 2023. The final adjusted price may be higher or lower than the estimated realised price based on future price movements.

³ Unit operating cost (FOB Port Hedland excluding freight and royalties) includes mining, processing, transport, port charges, and site based general and administration costs and is net of any tantalite by-product credits. It is calculated on an incurred basis (including accruals), and includes inventory movements, and credits for capitalised deferred mine waste development cost, and it excludes depreciation of fixed assets and right of use leases, and amortisation of deferred stripping.

⁴ Unit operating cost (CIF China) includes the unit operating costs (FOB Port Hedland excluding freight and royalties) plus freight and royalty costs. 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 only applied to a part of the resource/reserve acquired following the Altura Lithium Operation acquisition.

⁵ The use by Pilbara Minerals of any MSCI ESG research LLC or its affiliates ("MSCI") data, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement, recommendation, or promotion of Pilbara Minerals by MSCI. MSCI services and data are the property of MSCI or its information providers and are provided 'as-is' and without warranty. MSCI names and logos are trademarks or service marks of MSCI.

⁶ Based on 5.7% lithia concentrate grade. Actual production achieved in any year will depend on the actual concentrate grade and mined grade and is variable over the mine plan.

⁷ Note that the naming of Trains 1 and 2 has been reversed by the PPLS Joint Venture. Train 1 was previously reported as Train 2, and Train 2 was previously reported as Train 1.

⁸ For more information see Pilbara Minerals ASX announcement "55Mt increase in Ore Reserves to 214Mt" dated 24 August 2023.

⁹ For more information see Pilbara Minerals ASX announcement "Substantial 109Mt Minerals Resource increase to 414Mt – further extends Pilgangoora's position as a world class lithium project" dated 7 August 2023.

Appendix

Physicals summary

Total Ore Mined and Processed	UNITS	Q1 FY23	Q2 FY23	Q3 FY23	Q4 FY23	Q1 FY24
Ore mined	wmt	1,442,545	1,095,739	1,225,563	1,271,150	1,411,017
Waste material	wmt	6,540,334	6,360,951	6,572,687	7,311,878	7,741,062
Total material mined	wmt	7,982,879	7,456,690	7,798,250	8,583,028	9,152,078
Average Li ₂ O grade mined	%	1.4%	1.4%	1.4%	1.3%	1.3%
Ore processed	dmt	801,968	902,924	846,949	893,500	852,148

Total Production and Shipments	UNITS	Q1 FY23	Q2 FY23	Q3 FY23	Q4 FY23	Q1 FY24
Spodumene concentrate produced	dmt	147,105	162,151	148,131	162,761	144,184
Spodumene concentrate shipped	dmt	138,249	148,627	144,312	176,314	146,354
Tantalite concentrate produced	lb	17,222	17,721	8,575	7,224	8,496
Tantalite concentrate shipped	lb	6,174	18,374	-920 ¹	-	-
Spodumene concentrate grade produced	%	5.2%	5.2%	5.3%	5.2%	5.2%
Lithia recoveries	%	68.8%	67.8%	66.4%	69.6%	66.6%

1. This is an adjustment on the previous quarter's total shipped quantity. No tantalite was shipped in the March 2023 Quarter, the June 2023 Quarter or the September 2023 Quarter.