

24 July 2024

# JUNE 2024 QUARTERLY ACTIVITIES REPORT

## Summary Operational and Financial Metrics<sup>1</sup>

	Units	Quarter on Quarter			FY on FY		
		Mar Q FY24	Jun Q FY24	(%)	FY23	FY24	(%)
<b>Production</b>	kt	179.0	<b>226.2</b>	26	620.1	<b>725.3</b>	17
<b>Sales</b>	kt	165.1	<b>235.8</b>	43	607.5	<b>707.1</b>	16
<b>Realised price<sup>2</sup></b>	US\$/t	804	<b>840<sup>3</sup></b>	4	4,447	<b>1,176</b>	(74)
<b>Revenue</b>	A\$M	192	<b>305</b>	58	4,064	<b>1,254</b>	(69)
<b>Unit operating cost (FOB)<sup>4</sup></b>	\$A/t	675	<b>591</b>	(12)	613	<b>654</b>	7
	\$US/t	444	<b>390</b>	(12)	413	<b>429</b>	4
<b>Unit operating cost (CIF)<sup>5</sup></b>	A\$/t	789	<b>733</b>	(7)	1,091	<b>818</b>	(25)
	US\$/t	519	<b>483</b>	(7)	735	<b>537</b>	(27)
<b>Cash balance</b>	A\$M	1.8	<b>1.6</b>	(9)	3.3	<b>1.6</b>	(51)

### HIGHLIGHTS

- Strong operational performance with record production volume of 226.2 thousand (**k**) dry metric tonnes (**dmt**) of spodumene concentrate in the three month period ended 30 June 2024 (**June Quarter**).
- Relative to the March Quarter 2024 (**prior Quarter**), prices increased by 4% to an average estimated realised price of US\$840/dmt<sup>3</sup> (CIF China) on a SC5.3 basis with sales increasing by 43% to 235.8k dmt.
- Revenue increased by 58% to \$305M compared to the prior Quarter, reflecting a 43% increase in sales volume and a 4% increase in average realised price.
- Unit operating cost (FOB) of \$591/dmt decreased by 12% compared to the prior Quarter, primarily driven by increased production volume due to the continuous operation of the P680 primary rejection facility and improved recoveries resulting from successful plant optimisation.
- Strong balance sheet position with June Quarter end cash balance of \$1.6B. Cash reduced by \$156M in the June Quarter largely due to continued capital expenditure for P680 and P1000 expansion projects. Both projects remain on schedule and on budget.
- Commencement of construction of the mid-stream demonstration plant at Pilgangoora Operation.
- Release of the P2000 pre-feasibility study (**PFS**) which determined that production capacity at the Pilgangoora Operation could be expanded to 2.0 million tonnes per annum (**Mtpa**) with the construction of an additional plant.
- 2024 financial year (**FY24**) guidance achieved or exceeded across all three metrics; production volume, unit operating cost (FOB) and capital expenditure.
- Guidance for FY25 released providing a further increase in production capacity care of two major brownfields expansion projects (P680 crushing and ore sorting and the P1000 Project) being brought online during the course of the year.

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## 1. SUSTAINABILITY

### 1.1 Health and Safety

Pilbara Minerals Limited (**Pilbara Minerals** or the **Company**) reported seven recordable injuries during the June Quarter with the rolling 12 month Total Recordable Injury Frequency Rate (**TRIFR**) decreasing to 3.63 from 3.73 in the prior Quarter. This is in response to targeted initiatives in addition to Pilbara Minerals core safety processes designed to drive continuous safety improvement.

Quality safety interactions<sup>6</sup> achieved for the June Quarter equated to 1.79 completed per 1,000 hours worked, trending above the target of 1.0.

### 1.2 Community

Pilbara Minerals released its inaugural Reflect Reconciliation Action Plan (**RAP**) in the Quarter, focused on creating enduring and mutually beneficial relationships with Traditional Owner partners and local communities surrounding the Pilgangoora Operation. The RAP sets the pathway toward meaningful reconciliation, which is centred on fostering respectful relationships, understanding the local context and working towards facilitating economic contributions that positively impact the well-being of First Nations Peoples.

Subsequent to the end of the June Quarter, Pilbara Minerals opened a second round of community grants, with community groups in Port Hedland and surrounding communities eligible to apply for up to \$10,000 in funding for projects that align with the Company's priority investment areas of education, community resilience and the energy transition.

## 2. OPERATIONS AND SALES

### 2.1 Production

June Quarter spodumene concentrate production volumes increased by 26% to 226.2k dmt compared to 179.0k dmt in the prior Quarter with the new production record supporting unit operating costs (FOB) of less than \$600/dmt. This strong performance was underpinned by the full utilisation of the P680 primary rejection facility coupled with a material improvement in recoveries.

Total material mined (**TMM**) was 9,249k wet metric tonnes (**wmt**) compared to 9,297k wmt in the prior Quarter with mining rates in line with plan. Ore mined in the Quarter increased by 20% to 1,842k wmt compared to the prior Quarter.

Lithium processing recoveries for the Quarter were 72.2% compared to 65.3% in the prior Quarter. Improved recoveries were due to improved plant stability and run-time facilitated by the optimised performance of the primary rejection facility and the execution of a suite of initiatives including the use of mobile crushing and ore sorting. Mobile crushing and ore sorting will continue through the September Quarter 2024 to support the ramp up of the P680 crushing and ore sorting facility.

### 2.2 Sales

Sales volume totalled 235.8k dmt of spodumene concentrate in the June Quarter with the average grade of product shipped being ~SC5.3% Li<sub>2</sub>O.

Sales of tantalite concentrate in the June Quarter totalled approximately 31,252 lbs<sup>7</sup>.

### 2.3 Unit Operating Costs

Unit operating costs on a FOB basis (excluding freight and royalties) improved by 12% to \$591/dmt compared to the prior Quarter driven by increased production and sales volumes for the Quarter.

Unit operating costs on a CIF basis were 7% lower than the prior Quarter at \$733/dmt, with the improvement in unit operating FOB cost partially offset by increases in royalty as a result of an increase in average realised prices and sales volume Quarter on Quarter.

## 2.4 Pricing

The estimated realised sales price for spodumene concentrate in the June Quarter was US\$840/dmt<sup>2</sup> (CIF China and based on ~SC5.3% product grade), up 4% on the prior Quarter. On an SC6.0 equivalent basis, the average estimated sales price for spodumene concentrate was US\$960/dmt (CIF China).

At the end of the Quarter Pilbara Minerals completed price reviews with two major offtake customers, resulting in improved pricing outcomes relative to the current pricing formula which are expected to be realised in the September Quarter.

## 3. PROJECT DEVELOPMENT

### 3.1 P680 Project - crushing and ore sorting facility

Construction continued to schedule and budget with the new P680 crushing and ore sorting facility commissioned in the June Quarter 2024.

First ore from the ore sorting facility was achieved in the first week of July 2024 and the commencement of ramp up is now underway, with full ramp up expected to be completed during the September Quarter FY25.



Figure 1: The P680 crushing and ore sorting facility as at 15 July 2024.

### 3.2 P1000 Project

The P1000 Project, which will increase annual nameplate production run rate to approximately 1Mtpa<sup>8</sup>, continues to progress to schedule and budget with first ore targeted for the March Quarter FY25.

Project highlights for the June Quarter include:

- progress completion of 60% at the end of the June Quarter;
- concrete construction and underground services completed;
- steel fabrication and modularising progressed with all three shipments arriving in Port Hedland;
- construction works continued to progress to schedule including the installation of steel modules, pipe racks and thickeners; and
- all major equipment on site ready for installation.



Figure 2: The P1000 Project as at 18 July 2024.

### 3.3 Mid-Stream Demonstration Plant Project

The Mid-Stream Demonstration Plant Project (**Demonstration Plant Project**) continued to progress to schedule and budget with detailed design and long-lead items advanced, and construction works commenced during the June Quarter.

The Demonstration Plant Project aims to validate the benefits of producing a valued added enriched lithium product using Calix's patented electric kiln technology. The processing path being explored has the potential to reduce transport volumes, transport costs and carbon emission intensity (if powered by renewable energy).

The Demonstration Plant Project is on schedule to achieve first lithium salt production in the June Quarter 2025.

### 3.4 Downstream Joint Venture with POSCO

During the June Quarter, significant progress was made with Train 1 production ramp up, and major construction works substantially completed for Train 2 at the POSCO Pilbara Lithium Solution Co. Ltd (**PPLS**) 43 ktpa Lithium Hydroxide Monohydrate (**LHM**) Chemical Facility in Gwangyang, South Korea.

The ramp-up phase for Train 1 is progressing to schedule, targeting full production capacity by the September Quarter 2025. Initial production volumes of technical and battery grade LHM were produced during the June Quarter with Train 1 achieving 45% of nameplate capacity for the month of June.

Major construction works on Train 2 were substantially completed during the Quarter, and commissioning activities are expected to commence as planned in the second half of calendar year 2024 (**CY24**). The ramp up of Train 2 is scheduled for CY25, with full capacity anticipated to be achieved within 12 – 18 months from the completion of commissioning.

Battery chemicals produced by chemical converters typically require certification from lithium cell and cathode customers, a process that usually takes up to 12 months and must be completed before commercial quantities of battery grade product can be purchased. The certification processes for the battery grade LHM from Train 1 commenced with two South Korean customers during the June Quarter, and negotiations for sales agreements of commercial quantities are currently underway with multiple parties.

### **3.5 P2000 PFS<sup>9</sup>**

During the Quarter Pilbara Minerals released the findings of the P2000 pre-feasibility study (**PFS**) which determined that production capacity at the Company's 100% owned Pilgangoora Operation could be expanded to more than 2.0Mtpa of spodumene concentrate at 5.2% grade. Such an expansion is expected to result in the first ten years of annual production averaging ~1.9Mtpa, with production of more than 2Mtpa over the first six years after ramp up.

The Company's existing Pilgangoora Ore Reserves<sup>10</sup> solely underpin the P2000 production profile with a revised life of mine (**LOM**) of 23 years.

P2000 would require construction of a new whole of ore flotation plant at Pilgangoora with an estimated capital expenditure of \$1.2B (-20/+30% accuracy). The new plant would complement existing processing flowsheets in use at the Pilgangoora Operation. The expansion is expected to create significant shareholder value with a P2000 incremental net present value (**NPV**) of \$2.6B and incremental internal rate of return (**IRR**) of 55%.

The P2000 option would further extend Pilbara Minerals' position as the largest pure play lithium producer globally. The timing of the P2000 Project will be subject to the successful outcome of the next level of feasibility study, project approvals and the market outlook at the time of the final investment decision (**FID**).

Pilbara Minerals has commenced a feasibility study in relation to P2000 (**FS**) with outcomes expected in the December Quarter of calendar year 2025 (**CY25**). A potential FID will follow the FS outcomes.

### **3.6 Joint Downstream Partnering Study**

Pilbara Minerals and Ganfeng signed a binding term sheet in the March Quarter, agreeing to complete a joint FS for a potential downstream conversion facility to produce lithium chemicals.

The FS remains on schedule with the outcomes of the study expected in the March Quarter 2025, with the option to progress to a FID thereafter.

## **4. EXPLORATION AND GEOLOGY**

### **4.1 Pilgangoora and Regional**

Resource development drilling continued during the June Quarter, targeting the depth extensions of pegmatite domains north of the Central Pit as well as a new domain to the east of the South Pit. A total of 49 holes were completed for an advance of 19,599m which included 3,950m of diamond drill

core. Drilling is scheduled to continue through to the end of CY24 with a resource upgrade expected in the March Quarter 2025.

Regional exploration activities, including surface geochemistry and water exploration, were also undertaken during the Quarter. Production bore drilling to meet future expansion water requirements is now scheduled to commence in the September Quarter 2024.

## 5. CORPORATE

### 5.1 Cash

The Company retains a very strong balance sheet position with an ending cash balance of \$1.6B as at 30 June 2024. Cash declined by \$156M in the June Quarter due to continued capital investment on the P680 and P1000 Projects.

Cash margin from operations (defined as receipts from customers less payments for operating costs) was strongly positive at \$123M in the June Quarter even with a low average realised price of US\$840<sup>3</sup>/dmt. Cash margin from operations less capitalised mine development costs and sustaining capex was also positive at \$59M.

Investment activities saw total capex spend of \$242M in the June Quarter on a cash basis and \$299M on an accrual basis. This included growth capital expenditure related to the P680 and P1000 Projects of ~\$172M, new projects and enhancements of ~\$63M, capitalised mine development costs of ~\$32M and sustaining capex of ~\$32M<sup>11</sup>. Finally, the June Quarter saw cash outflows from financing activities and foreign exchange impacts of \$63M.

## 6. FY24 AND FY25 GUIDANCE

### 6.1 FY24 guidance

The Company is pleased to confirm that it has delivered FY24 results which meet or exceed FY24 guidance provided to the ASX for production volume, unit operating cost (FOB) and capital expenditure. Guidance outcomes for FY24 are detailed below (refer Table 1).

	Units	FY24 guidance	Actual
<b>Production</b>	kt	660-690	<b>725.3</b>
<b>Unit operating costs (FOB)</b>	US\$/t	600-670	<b>654</b>
<b>Capital expenditure</b>	A\$M	820-875 (revised) <sup>12</sup>	<b>865</b>

Table 1: Guidance outcomes for FY24.

Production volume of 725kt for FY24 exceeds the top end of market guidance of 660-690kt due to strong June Quarter production volume performance. Unit operating cost (FOB) of \$654/t for FY24 is within the guidance range of \$600-670/t. Capital expenditure of \$865M (as measured on an accrual basis) is within guidance of \$820-875M.

The June Quarter results represent a full quarter for the Pilgangoora Operation with P680 primary rejection optimised and without the impact of any new projects being commissioned or ramped up.

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## 6.2 FY25 guidance

FY25 is a unique year for the Company given the combination of major mine expansion activities occurring in combination with ongoing operational and efficiency improvements. Given this unique circumstance, guidance has been brought forward to inform the market of the expectations for the year. The guidance outcomes for FY25 are detailed below (refer Table 2).

	Units	FY25 guidance
<b>Production</b>	kt	<b>800 - 840</b>
<b>Unit operating costs (FOB)</b>	US\$/t	<b>650 – 700</b>
<b>Capital expenditure</b>	A\$M	<b>615 - 685</b>
Growth	A\$M	195 - 215
Mine development	A\$M	120 – 135
Sustaining Capex	A\$M	60 – 68
Infrastructure / Projects	A\$M	240 – 267

Table 2: Guidance for FY25.

During the course of FY25 two major brownfields expansions will be integrated into the operation being the P680 crushing and ore sorting facility and P1000 Project.

The ramp up of the P680 crushing and ore sorting facility is planned for the September Quarter 2024 and the commissioning, then ramp up, of the P1000 Project in the March Quarter 2025. The shut down and ramp up periods (where processing optimisation occurs) will impact production volume and unit costs during FY25.

Capital expenditure guidance for FY25 consists of the following:

- Growth capex of \$195M to \$215M for the previously disclosed investment in the P680 and P1000 Projects with those projects substantially complete in FY25.
- Mine development costs of \$120M to \$135M for the opening of new mining faces and deferred stripping, which is broadly in line with FY24.
- Sustaining capex of \$60M to \$68M including maintenance, spares and upgrades, which is broadly in line with FY24.
- Infrastructure capex of \$240M to \$267M to support existing operations, expanded production capacity and to drive efficiency. Key projects include new tailings facilities, new access roads, new warehouses and new workshops.

FY25 is another period of expansion. Production volume is expected to be 800-840kt which is higher than FY24 due to the benefits of P680 primary rejection but is lower than annualising June Quarter FY24. As outlined above, June Quarter results represent a full quarter for the Operation with P680 primary rejection optimised and without the impact of any new projects being commissioned or ramped up. By comparison, during the course of FY25 two major brownfields expansions will be integrated into the operation.

FY25 expansion also requires increased operating costs to support the successful handover and ramp up of the P680 and P1000 projects before operating cost leverage from P1000 production volume rates begins to be achieved in FY26. This investment is reflected in a higher unit operating cost FOB guidance range of A\$650 – 700/t versus the June Quarter. The midpoint of this range at approximately A\$675/t is

broadly in line with March Quarter FY24 performance which was impacted by the optimisation of the P680 primary rejection facility.

Increased FY25 operating costs include a number of non-recurring items such as operating mobile ore sorters during the September Quarter to provide production volume contingency, higher maintenance costs related to extended shutdowns for project handover and commissioning and demobilisation costs for certain facilities and equipment no longer required as the P680 crushing and ore sorting facilities ramp up and transition to owner mining fleet.

## 7. Quarterly Investor, Analyst and Media Webcast

Access the quarterly investor, analyst and media webcast today at 7.00am (AWST) / 9.00am (AEST):

- Retail shareholders and investors – <https://edge.media-server.com/mmc/p/dnidxkmm>
- Analysts, brokers, fund managers and media – <https://register.vevent.com/register/Blacbf60cd1b6946b086ba7779e0643c09>

*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 POSCO, Ganfeng, Chengxin, Yahua, Yibin Tianyi and General Lithium.

### 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, P1000 and P2000 projects are underpinned by the Company's existing Ore Reserves that have been prepared by a Competent Person (Mr Ross Jaine) in accordance with the JORC Code (2012 Edition) and were released by the Company to ASX on 24 August 2023 in its release entitled "55Mt increase in Ore Reserves to 214Mt". The relevant proportions of proved Ore Reserves and probable Ore Reserves underpinning the production targets 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 and that all material assumptions and technical parameters underpinning the Ore Reserves estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not been materially modified from the original market announcement.

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

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## Appendix

### Physicals summary

<b>Total Ore Mined and Processed</b>	<b>Units</b>	<b>Jun Q FY23</b>	<b>Sep Q FY24</b>	<b>Dec Q FY24</b>	<b>Mar Q FY24</b>	<b>Jun Q FY24</b>	<b>FY23</b>	<b>FY24</b>
Ore mined	wmt	1,271,150	1,411,017	1,618,748	1,535,521	<b>1,841,748</b>	5,034,998	<b>6,407,034</b>
Waste material	wmt	7,311,878	7,741,062	7,965,907	7,761,304	<b>7,407,146</b>	26,785,850	<b>30,875,419</b>
Total material mined	wmt	8,583,028	9,152,078	9,584,655	9,296,825	<b>9,248,895</b>	31,820,847	<b>37,282,453</b>
Average Li <sub>2</sub> O grade mined	%	1.3%	1.3%	1.4%	1.4%	<b>1.5%</b>	1.4%	<b>1.4%</b>
Ore processed	dmt	893,500	852,148	982,028	995,326	<b>1,127,924</b>	3,444,341	<b>3,957,425</b>

  

<b>Total Production and Shipments</b>	<b>Units</b>	<b>Jun Q FY23</b>	<b>Sep Q FY24</b>	<b>Dec Q FY24</b>	<b>Mar Q FY24</b>	<b>Jun Q FY24</b>	<b>FY23</b>	<b>FY24</b>
Spodumene concentrate produced	dmt	162,761	144,184	175,969	179,006	<b>226,169</b>	620,147	<b>725,329</b>
Spodumene concentrate shipped	dmt	176,314	146,354	159,897	165,121	<b>235,762</b>	607,501	<b>707,133</b>
Tantalite concentrate produced	lb	7,224	8,496	15,392	48,292	<b>48,975</b>	50,741	<b>121,154</b>
Tantalite concentrate shipped	lb	-	-	19,128	12,327	<b>31,252<sup>13</sup></b>	23,627	<b>62,707</b>
Spodumene concentrate grade produced	%	5.2%	5.2%	5.2%	5.2%	<b>5.2%</b>	5.2%	<b>5.2%</b>
Lithia recoveries	%	69.6%	66.6%	65.9%	65.3%	<b>72.2%</b>	68.2%	<b>67.7%</b>

## End notes

<sup>1</sup> All financial data is unaudited and may be subject to change in the final audited financial statements. Throughout this announcement, amounts may not add due to rounding.

<sup>2</sup> 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	Mar Q FY24	Jun Q FY24	(%)
<b>SC6.0 CIF China</b>	US\$/t	927	960	<b>4</b>
<b>Realised Price CIF China</b>	US\$/t	804	840	<b>4</b>
<b>Lithia Content</b>	%	~5.3%	~5.3%	-

<sup>3</sup> Average estimated realised price for ~5.3% Li<sub>2</sub>O grade (SC5.3 CIF China) as at 12 July 2024. This includes approximately 84k dmt shipped in June which reflects reference pricing data up to 12 July 2024, and is subject to final adjustment to take into account reference pricing data up to approximately mid-August. The final adjusted price may be higher or lower than the estimated realised price based on future price movements.

<sup>4</sup> 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 costs, and it excludes depreciation of fixed assets and right of use leases, and amortisation of deferred stripping.

<sup>5</sup> 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.

<sup>6</sup> Quality safety interactions are a measure of leadership safety conversations and provide a lead indicator for the promotion of a strong safety culture.

<sup>7</sup> Tantalite sales include adjustments relating to the December and March Quarters and are subject to further final adjustment.

<sup>8</sup> 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. Refer to ASX release "P1000 Project Final Investment Decision" dated 29 March 2023 for further details and supporting information.

<sup>9</sup> For more information, refer to ASX release "Study Delivers 2MTPA Expansion Option" dated 21 June 2024.

<sup>10</sup> Refer to ASX release "55Mt increase in Ore Reserves to 214Mt" dated 24 August 2023 for further details and supporting information.

<sup>11</sup> The expenditure categories do not sum up to the noted capex spend in the Quarter due to timing of cash outflows vs recognition of capital additions on the balance sheet.

<sup>12</sup> Refer to ASX release "December 2023 Quarterly Activities Report" dated 24 January 2024 for further details.

<sup>13</sup> Tantalite sales are subject to final adjustment.