

## HIGHLIGHTS

- Record quarterly product sales of 19,020 tonnes and sales revenue of \$11.4 million
- Record leucoxene shipment and maiden L88 cargo exported in June 2016
- Quarterly saleable production of 10,826 tonnes
- Customer request for increased leucoxene volumes in 2016
- US\$37.5 million RMB Senior Debt Facility restructured to give greater flexibility and improved access to future cashflows
- Ronnie Beevor appointed Non-Executive Director
- Keysbrook Project officially opened April 2016

During the June quarter 2016, MZI's primary focus remained on ramping-up production at the Company's flagship Keysbrook Project to achieve targeted recovery and production rates. The Project was officially opened on 4 April 2016.

Production and sales data for the June quarter are depicted in Table 1 on page 3 of this report.

### Comment

MZI Managing Director Trevor Mathews said: "MZI again achieved good progress on both the operational and corporate fronts during the June Quarter.

*"At the corporate level, the successful restructure of the US\$37.5 million RMB Senior Debt Facility has significantly improved our financial flexibility, whilst the appointment of highly experienced financial markets executive Ronnie Beevor as a Non-Executive Director brings valuable additional expertise to our Board.*

*"At the operational level, we made further strides toward consolidating Keysbrook's emerging status as a premier global supplier of premium minerals sands products by commencing exports of our premium L88 leucoxene product as part of a record leucoxene shipment in June, and continuing to achieve good progress in our production ramp-up.*

*"Importantly, we continue to see widespread indicators of improving market fundamentals for titanium dioxide feedstocks, particularly for higher value products such as leucoxene, as demonstrated by a major customer's request for increased deliveries for the remainder of 2016.*

*"With a promising market outlook for our high quality products, and value-adding plant upgrades scheduled in the current quarter, we can look forward to the new financial year with confidence."*

## **CORPORATE**

MZI finished the June 2016 quarter with \$2.5 million in cash and undrawn debt and guarantee facilities of \$6.9 million. Proceeds of \$9.8 million from the record June leucoxene shipment were received in early July and are therefore not included in the quarter end cash position.

In June 2016<sup>1</sup> the Company announced it had successfully restructured the US\$37.5 million RMB Senior Debt Facility to provide greater flexibility, reduced fixed quarterly repayment obligations and increased access to surplus cashflow.

As announced, the term of the restructured facility has been extended by 27 months to 31 December 2021, and includes a six-month deferral of the start of the Company's principal repayment obligations to 31 March 2017. In addition, quarterly principal repayments will be reduced to a flat US\$1 million for the first five quarters, US\$2 million for the following ten quarters, and US\$2.5 million thereafter, significantly increasing the Company's financial flexibility and boosting free cashflow. Previously, quarterly principal repayments averaged US\$2.9 million.

The revised facility significantly reduces cash sweep provisions applying to surplus cashflow generated by the Keysbrook Mineral Sands Project after all quarterly costs and scheduled debt repayments have been met. MZI will now have access to 50% of surplus cashflow generated per quarter, with the remainder reserved for early debt retirement. Previously 70% of any quarterly surplus cashflow generated was applied to senior debt repayment. The Debt Service Reserve Amount will be reduced to US\$3 million from US\$4.5 million and its funding has been delayed by six months to 31 December 2016.

Interest will accrue at a margin of 5.85% per annum above the US LIBOR rate, pre-project completion and 5.35% per annum post project completion, an increase of 1.10%. Other key terms remain unchanged, as detailed in the Company's ASX announcement dated 3 September 2014. The revised agreement is effective as of 29 June 2016.

Early in the quarter<sup>2</sup>, MZI announced the appointment of Mr Ronnie Beevor, a highly experienced financial markets executive and corporate advisor, as a Non-Executive Director. Mr Beevor was appointed as a nominee of RCF and brings strong corporate, resources financing and development expertise to the MZI Board.

Total issued capital at 30 June 2016 was 203,841,970 ordinary shares with a further 8,125,000 unlisted options with varying exercise prices and maturity dates.

## **OPERATIONS**

### **Production and Costs**

The primary focus of activity during the June quarter was the continuing ramp-up of production at the Keysbrook Project.

---

<sup>1</sup> Refer ASX release dated 29 June 2016

<sup>2</sup> Refer ASX release dated 15 April 2016

# QUARTERLY ACTIVITIES REPORT

FOR THE PERIOD ENDING 30 JUNE 2016



**Table 1: Keysbrook Production and Sales**

Production	Unit	Dec-Qtr-2015	Mar-Qtr-2016	Jun-Qtr-2016	Total FY2015-16
Ore Mined	dt	618,480	886,357	1,017,474	2,522,311
Ore Processed	dt	599,369	847,995	937,957	2,385,321
Mined Grade	% HM	2.99	2.58	2.47	2.64
WCP Availability	%	82.4	83.5	82.9	82.9
MSP Availability	%	Commissioning	85.7	93.4	89.54
HMC Production (WCP)	dt	16,008	19,566	22,636	58,289
HMC Processed (MSP)	dt	9,011	24,055	20,140	53,206
L70	dt	2,316	6,349	3,475	12,140
L88	dt	1,795	4,943	3,779	10,297
Zircon concentrate	dt	1,775	4,888	3,572	9,663
<b>Sales</b>					
L70	dt	-	6,825	7,000	13,825 <sup>1</sup>
L88	dt	-	-	8,250	8,250
Zircon concentrate	dt	958	4,572	3,770	9,300
Total – all products	dt	958	11,397	19,020	31,375

1. 1,685 tonnes of L88 product blended with L70 to meet customer volume requirements over the half year period.

Mining continued according to plan in the period, with a record of 1,017,474 tonnes mined in the June quarter, compared with 886,357 tonnes in the preceding quarter. The mined grade for the quarter was 2.47% HM, compared with 2.58% in the previous quarter, reflecting the June quarter mine plan. Ore processed increased by approximately 11% to 937,957 tonnes.

Since commissioning and processing commenced in late 2015, the operational focus has been on improving heavy mineral recovery both at the Keysbrook Wet Concentrator Plant (WCP) and Doral's Mineral Separation Plant (MSP) and in achieving long term sustainable throughput rates and plant reliability.

Production of Heavy Mineral Concentrate (HMC) at the WCP totalled 22,636 tonnes in the quarter, an increase of approximately 16% compared with the preceding period. However, HMC processed at the Picton MSP was lower, totalling 20,140 tonnes compared with 24,055 tonnes in the March quarter. This reflected fewer effective MSP processing days in the quarter, including five days of processing time foregone to trial improvement initiatives. Consequently, production of saleable products totalled 10,826 tonnes in the June quarter, compared with 16,168 tonnes in the March quarter, and 5,885 tonnes in the December quarter.

As previously reported, optimisation activities are ongoing as part of the operational ramp-up in order to achieve targeted production rates. This continues to show an improvement trend with HM recovery at the WCP averaging 60% in the June quarter compared with 55% in the preceding period. Plant upgrades to the Keysbrook WCP, costing approximately \$2.3 million, are scheduled in the September quarter to further improve performance, comprising a new WCP screening unit and the addition of 48 large capacity spirals.

The screening unit will increase the HMC grade and lift MSP recoveries. The additional spirals are expected to increase WCP HM recovery to design levels.

Operating expenditure for the June quarter totalled \$8.8 million which includes accruals and current creditors, compared with \$6.7 million in the prior quarter. The expenditure difference reflects increased mining and HMC production volumes, higher materials handling and transport costs related to increased sales, and increased costs for planned and unplanned maintenance. Additional one-off expenditure was also associated with a range of optimisation activities, including an extension of grade control drilling over a broader area to assist with optimisation of the coming years mine production schedule.

## **Sales**

A key operational milestone was achieved in the period, with the maiden shipment of Keysbrook L88 leucoxene exported from the Bunbury Port aboard the MV Thor Infinity in June. The shipment of 8,250 tonnes of L88 was part of a record leucoxene shipment totalling 15,250 tonnes, including 7,000 tonnes of L70. The shipment had a total value of approximately \$9.8 million, proceeds of which were booked in the quarter and received in July.

Total product sales for the quarter was a record 19,020 tonnes, including 3,770 tonnes of zircon concentrate from the Port of Fremantle to major Chinese customer Tricoastal/Wensheng. Record sales revenue totalling \$11.4 million was booked for the June quarter, including revenue from the June leucoxene shipment which was received in early July.

Discussions have continued with potential customers regarding future supply of L88 leucoxene into pigment and welding rod applications. It is intended that some small shipments of Keysbrook L88 will be undertaken over the remainder of the year and subject to plant trial qualification, MZI expects to enter into commercial negotiations regarding offtake agreements.

Subsequent to the end of quarter the Company received notification from its major leucoxene customer of a substantial increase in the customer's requirements<sup>3</sup> and requesting an upward revision of the shipping schedule for the remainder of this calendar year. As a result of this revision, and other sales opportunities, the Company expects all production to be fully sold in 2016.

## **Mineral Sands Market**

Mineral sands products such as rutile and leucoxene contain titanium dioxide (TiO<sub>2</sub>), which is primarily used in the manufacture of pigments in paints, plastics, inks and coatings. TiO<sub>2</sub> is also used to produce titanium metal which is most commonly associated with aerospace and other specialist applications. Zircon is a major component in ceramics used to manufacture tiles and bathroom furniture and is also used in specialty chemicals, precision castings and specialty metals. Consequently, the mineral sands market is closely aligned with global economic growth and urbanisation.

The mineral sands market showed continued signs of improvement during the June quarter, particularly within the chloride pigment feedstock sector. A strong northern hemispherical painting season exceeded expectations in reducing pigment inventory, which is causing downstream restocking to occur and in turn placing upward pressure on feedstock prices. The outlook for zircon remains mixed with growth in demand

---

<sup>3</sup> Refer ASX release dated 18 July 2016

being reported in western economies while in China demand has remained subdued waiting for recovery in the building and construction sector. There is a continuing sentiment that the mineral sands market cycle has moved through the bottom as the reduction in feedstock supply starts to affect inventory and demand. Prices have stabilised and for some feedstocks are now increasing, meaning the outlook remains positive with continued recovery expected during the remainder of 2016. All major pigment producers have received and continue to announce price increases further signalling the bottom of the price cycle.

The US economy has remained relatively strong which augurs well for pigment consumption in 2016 and 2017. The demand for chloride pigment has been stronger than expected which has reduced inventory, meaning there is now upward price pressure on high-TiO<sub>2</sub> feedstock such as rutile and leucosene. Economic growth in the US and Europe is expected to continue to remain positive throughout 2016, further supporting overall pigment demand.

Slower than expected recovery in the Chinese building and construction sector has been driving negative sentiment in the zircon and TiO<sub>2</sub> coatings sector, although fresh stimulus is expected to help rebuild confidence. The zircon price slipped during the March quarter but zircon producers continue to manage production to ensure the market is not oversupplied. Major zircon producers have recently announced zircon price increases reversing slippage experienced early in the June quarter reflecting market conditions. Accordingly, the zircon price is expected to remain relatively stable throughout the remainder of 2016 with modest upside possible in 2017.

### **Health, Safety and Environment**

There were no Lost Time Injuries during the reporting period, making it the fifth consecutive LTI-free quarter. The Company wide rolling 12-month Total Recordable Injury Frequency Rate (per 1 million hours worked) was 20.0 at the close of the period. Proactive reporting of potential hazards by employees continued during the period, providing a strong platform for the reduction of the risk of harm, damage or loss.

The progressive rehabilitation of mined areas at the Keysbrook Operations commenced during the period, while rehabilitation and removal of infrastructure continued at the Company's Tiwi Islands operations.

### **Community**

Both the Shire of Murray and Shire of Serpentine Jarrahdale councils and executive toured the Keysbrook site, which included the mining area, the WCP and inspection of the first stages of pastoral rehabilitation. In addition, the Peel Development Commission's full Board also toured the site which included a presentation by MZI's Chairman and Managing Director. Community engagement activities continued throughout the reporting period. Recipients of community partnership funding included the Shire of Murray for fencing of a playground in North Dandalup, the Murray Districts Historical Society and the Jarrahdale Heritage Society for tree planting.

### **Geology and Regional Exploration**

Activities for the quarter were mostly associated with the Keysbrook drilling program, which was expanded to cover a broader area for grade control in addition to the incremental resource expansion drilling undertaken to the north and south of the current resource footprint. A total of 1,109 holes were drilled for



## QUARTERLY ACTIVITIES REPORT

FOR THE PERIOD ENDING 30 JUNE 2016



5,177.5 metres during the quarter. Analyses continue to be received, with compositing for metallurgical analysis, geological interpretation and resource estimation to commence in the upcoming quarter.

Other activities were limited during the quarter due to the focus on drilling operations, but included geological support to the Keysbrook operations.

### TIWI ISLANDS

The removal of remaining infrastructure at Lethbridge operations was completed during the period. This included the removal of the camp facility and remaining refuse. A review of the rehabilitation progress and activities was conducted during the quarter, with revegetation works to date successfully establishing stable platforms within which vegetation diversity and density will be built in the coming years.

Donation of the Lethbridge camp facilities to the Tiwi College was completed during the quarter. The College is using the camp to develop additional accommodation quarters for the Tiwi College staff.

For further details, please contact:

**Trevor Matthews**

*Managing Director*

+61 8 9328 9800



**Subscribe for our mailing list at**  
[www.mzi.com.au](http://www.mzi.com.au)

# QUARTERLY ACTIVITIES REPORT

## FOR THE PERIOD ENDING 30 JUNE 2016



### SCHEDULE OF TENEMENTS AS AT 30 JUNE 2016

Tenement	Location	Status	Registered Holder	Interest at quarter end
E70/2407	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
E70/2610	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
E70/2673	Pinjarra, WA	Application	MZI Resources Ltd	100%
E70/4628	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
E70/4723	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
E70/4725	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
E70/4764	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
E70/4765	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
E70/4766	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
E70/4767	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
E70/4768	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
P70/1662	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
P70/1663	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
P70/1676	Pinjarra, WA	Application	Keysbrook Leucoxene Pty. Ltd.	100%
P70/1677	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
P70/1678	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
P70/1679	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
P70/1680	Pinjarra, WA	Granted	Keysbrook Leucoxene Pty. Ltd.	100%
P70/1682	Pinjarra, WA	Application	Keysbrook Leucoxene Pty. Ltd.	100%
P70/1683	Pinjarra, WA	Application	Keysbrook Leucoxene Pty. Ltd.	100%
P70/1684	Pinjarra, WA	Application	Keysbrook Leucoxene Pty. Ltd.	100%
P70/1685	Pinjarra, WA	Application	Keysbrook Leucoxene Pty. Ltd.	100%
EL23862	Tiwi Islands, NT	Granted	MZI Resources Ltd	100%
EL24329	Tiwi Islands, NT	Granted	MZI Resources Ltd	100%
EL24851	Tiwi Islands, NT	Granted	MZI Resources Ltd	100%
EL25457	Anson Bay, NT	Application	MZI Resources Ltd	100%
EL25458	Anson Bay, NT	Application	MZI Resources Ltd	100%
EL25459	Anson Bay, NT	Application	MZI Resources Ltd	100%
EL25460	Anson Bay, NT	Application	MZI Resources Ltd	100%
EL25461	Anson Bay, NT	Application	MZI Resources Ltd	100%
EL26421	Anson Bay, NT	Application	MZI Resources Ltd	100%
EL29800	Croker Island, NT	Application	MZI Resources Ltd	100%
EL29839	Arnhem Land, NT	Application	MZI Resources Ltd	100%
EL30924	Tiwi Islands, NT	Application	MZI Resources Ltd	100%
ML24510	Tiwi Islands, NT	Granted	MZI Resources Ltd	100%
ML24511	Tiwi Islands, NT	Granted	MZI Resources Ltd	100%
ML27438	Tiwi Islands, NT	Granted	MZI Resources Ltd	100%