

***Delivering high value mineral sands products into an improving market***

**Proactive Spotlight CEO Investor Sessions**

October 2016

**Trevor Matthews, Managing Director**

# Reasons to invest in MZI



## World Scale

World's biggest primary producer of Leucoxene  
Newest producer of Zircon and  $\text{TiO}_2$

## Growth Potential

Significant potential to grow Resources through exploration  
Project expansion studies underway

## Robust Economics\*

Low LOM Operating costs  
Premium quality products  
Potential+30 year life, subject to land access and further approvals.



## Positive market outlook

Healthy global demand  
Prices for  $\text{TiO}_2$  feedstock increasing

## High Value Products\*

38 ktpa 88%  $\text{TiO}_2$   
29 ktpa 70%  $\text{TiO}_2$   
29 ktpa Zircon Concentrate  
Offtakes cover +80% of annual production

## Low Risk

100%-owned Australian Project  
Construction complete  
Production underway  
Soft environmental footprint

# The Keysbrook location advantage

- Mine located 70km south of Perth
- Near large population, mining and industrial centres
- No FIFO – no need for employee transport, accommodation or catering
- Connected to grid power, high standard road transport, product storage and port facilities
- Dry processing de-risked via toll treatment agreement to utilise Doral plant at Picton



# Keysbrook: a platform for reliable long life supply

- **155Mt Global Mineral Resource<sup>1</sup>**, including Ore Reserves of 72Mt<sup>1</sup>, with significant exploration upside
- **High value product mix and potential +30<sup>1</sup> years LoM** at initial planned production rate
- **Keysbrook operations cashflow positive** in September quarter 2016<sup>2</sup>
- **Low cost mining** – free dig sand, average depth 2.2m with nil strip ratio
- Simple conventional processing flowsheet
- **Offtake agreements for +80% of planned production** under five year sale agreements with blue-chip customers
- **Significant operational improvement** achieved since June quarter
- Nameplate production expected from \$2.3m WCP spirals and screening unit upgrades

<sup>1</sup> Refer ASX releases 7 August 2015 and 23 March 2016 and slides at end of presentation

<sup>2</sup> Refer ASX release dated 9 September 2016

# Shipping volumes continue to build

- Zircon concentrate sales commenced end December 2015
- L70 shipments commenced March 2016
- First L88 shipment June 2016
- Total +41,000t (all products) shipped to date:
  - 12,136t zircon concentrate
  - 13,825t L70
  - 15,100t L88



*Bulk carrier Aquitania at dock in Bunbury loading 6,850t of L88 for delivery to Chemours' Taiwan operations, September 2016*



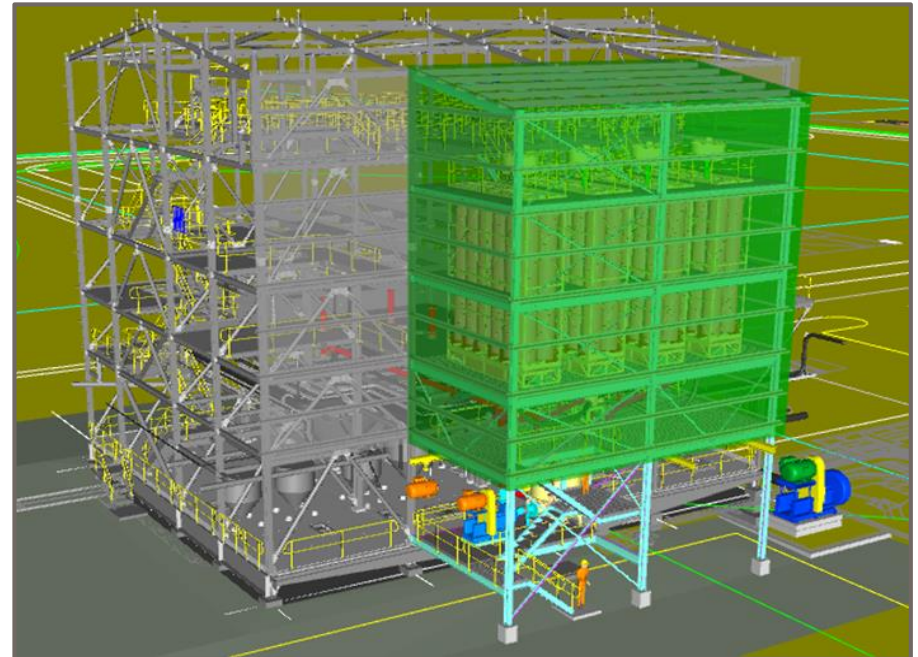
# WCP additional spirals project



- Siteworks commenced
- Short construction program
- Commissioning timing subject to receipt of start-up approvals

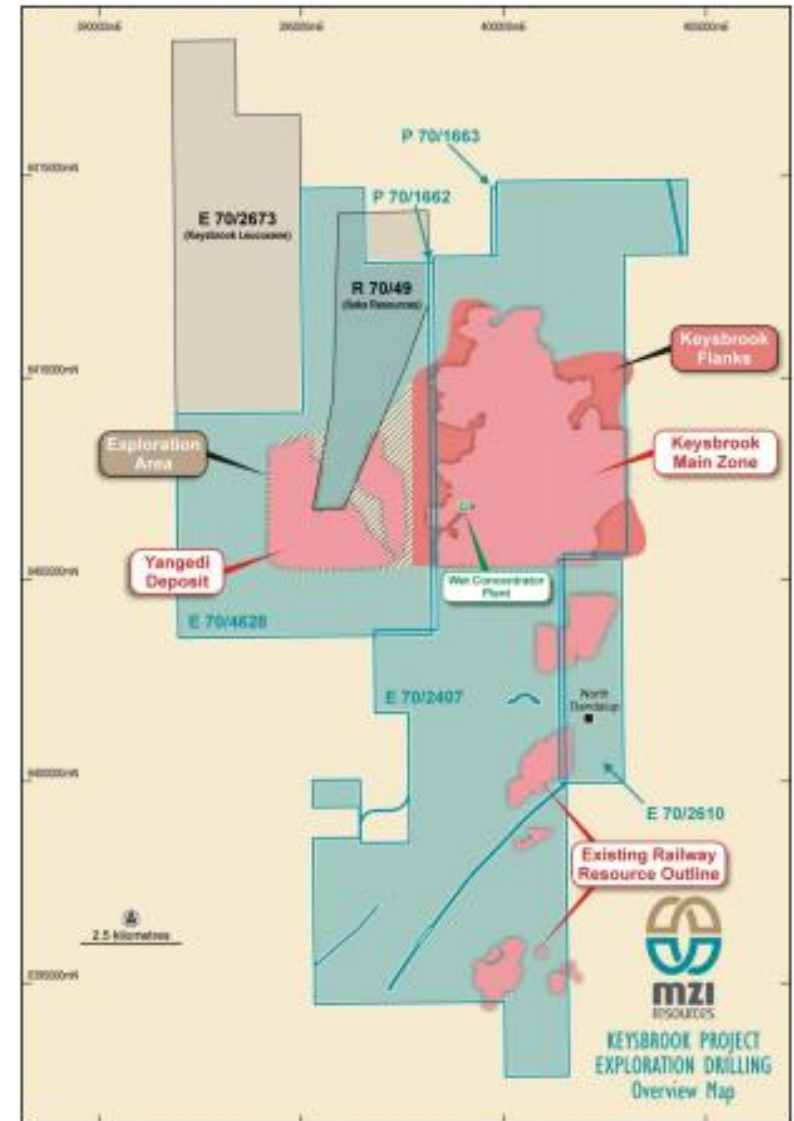
\$2.3m capex program comprises:

- 48 large-capacity spirals
- New WCP screening unit
- Significant improvement in WCP and MSP performance expected



# Large resource base with strong growth potential

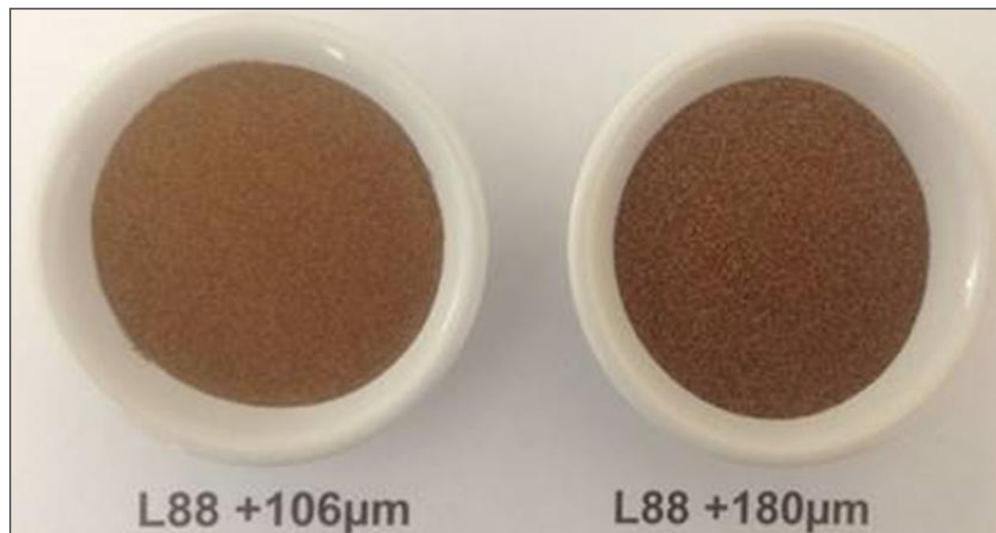
- Keysbrook Mineral Resource of **155Mt @ 2.0% HM<sup>1</sup>**
- Total contained heavy minerals of **3.1Mt**
- Total Ore Reserves of **72Mt @ 2.2% HM<sup>2</sup>** equivalent to **+15 years** of operations at current annual production rates
- Mineral Resources equivalent to **+30 years** of life<sup>1</sup>, subject to land access and further approvals
- Mineralisation remains open to the west, north and south
- Increased resource base positive for ongoing project expansion studies



1 Refer ASX release dated 7 August 2015, and slides at end of presentation.

2 Refer ASX release dated 23 March 2016 and slides at end of presentation.

# It's all about quality



- Zircon and Leucoxene retain **significant quality/price premium** over lesser mineral sands products such as ilmenite feedstocks
- Keysbrook produces **no low-value ilmenite**
- Leucoxene offers compelling value-in-use proposition:
  - *Categorised as material with variable  $TiO_2$  content ranging from 70% to 93%*
  - *L88 has similar mineralogy to rutile and is referenced to the rutile price*
  - *Superior mineralogy to synthetic rutile with fewer contaminants*
  - *No secondary processing/beneficiation required*



# What are Heavy Minerals?

## Zircon

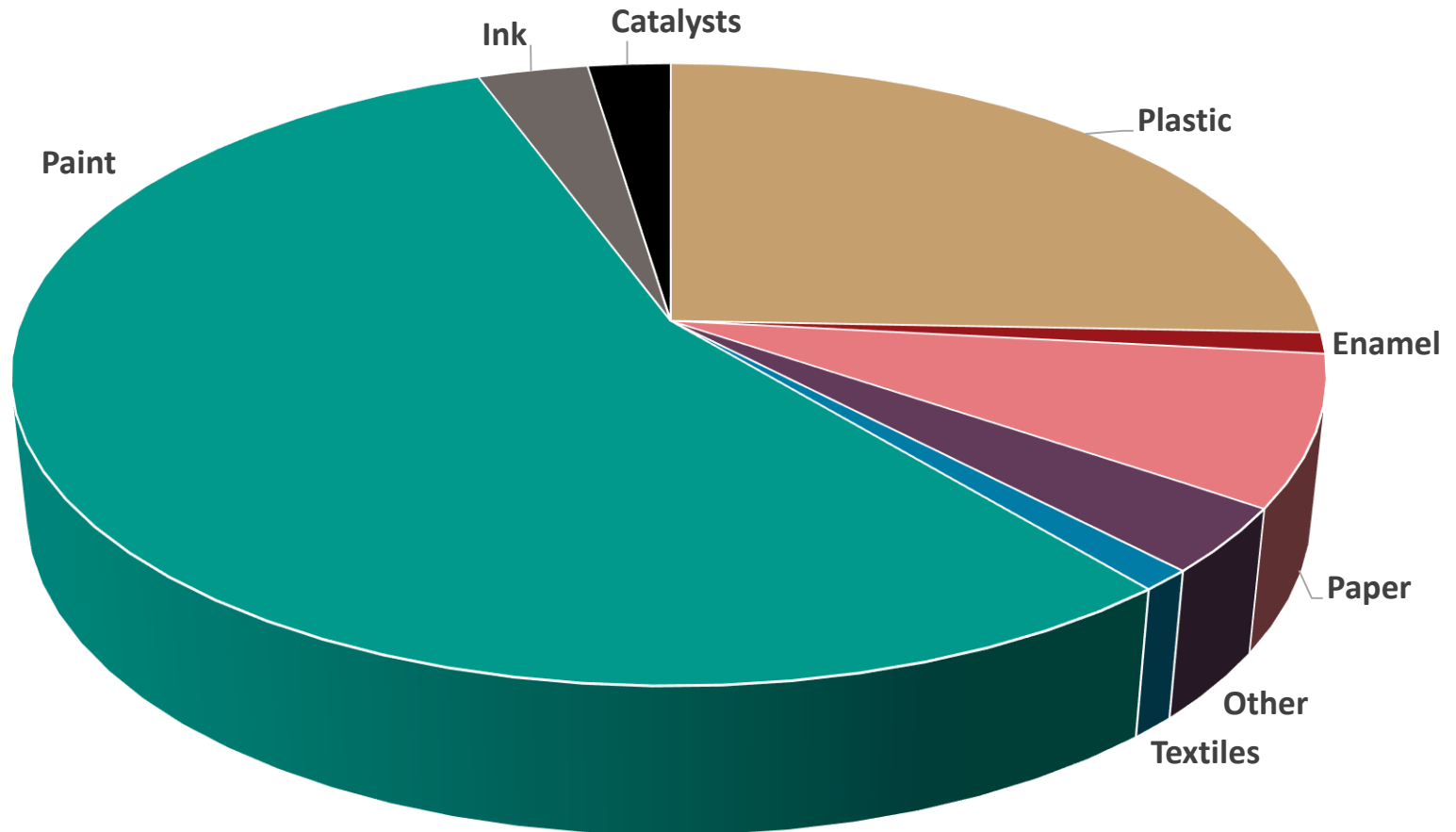
- Architectural ceramics (tiles, bathroom fixtures)
- High performance refractories (kiln/furnace linings)
- Friction abrasives (brakes)
- Precision casting (auto manufacturing)
- Digital printing inks
- Zirconium metal (nuclear fuel rods)

## TiO<sub>2</sub>

- Leucoxene (L88 and L70) is a high value source of TiO<sub>2</sub>
- Everyday pigments (paints, plastics, paper etc)
- Industrial uses (welding rods)
- Titanium metal applications (aerospace, industrial, medical)
- 3D Printing/Additive Manufacturing (AM)



# World $\text{TiO}_2$ pigments consumption



# Market Outlook

- Market for premium mineral sands products remains relatively stable compared with other commodities.
- Modest mid term price growth forecast.
- Broad demand for products used in everyday life.

## Zircon

- The zircon price is stable with premium grades currently selling for ~US\$950 pmt.
- Producers have reduced supply in response to soft market conditions.
- Global consumption is currently assumed to be ~1.0 million tonnes per year, with demand growing in step with global GDP.

## Titanium Dioxide

- Demand for  $\text{TiO}_2$  feedstock has started improving
- Tangible signs of price increases for premium feedstocks since June 2016.
- New titanium metal powders production technology are a potential longer term game changer for  $\text{TiO}_2$  demand

## Iluka reclaims rutile mine for \$455m

has been in place for quite some time but was deferred due to some priorities and circum-

an increased portfolio flexibility. He said Iluka saw potential operational improvements as the mine

The bid by Iluka for Sierra Rutile comes as mineral sands prices have begun to recover after a long time in the doldrums and as the

Titanium Dioxide imports of India jumped by 30% in March 2016 compared to Feb 2016

Petrosil Titanium Dioxide Report  
Titanium Dioxide Market Intelligence at Petrosil Group

China's TiO<sub>2</sub> prices and demand continue to move up in sync with the real estate market recovery

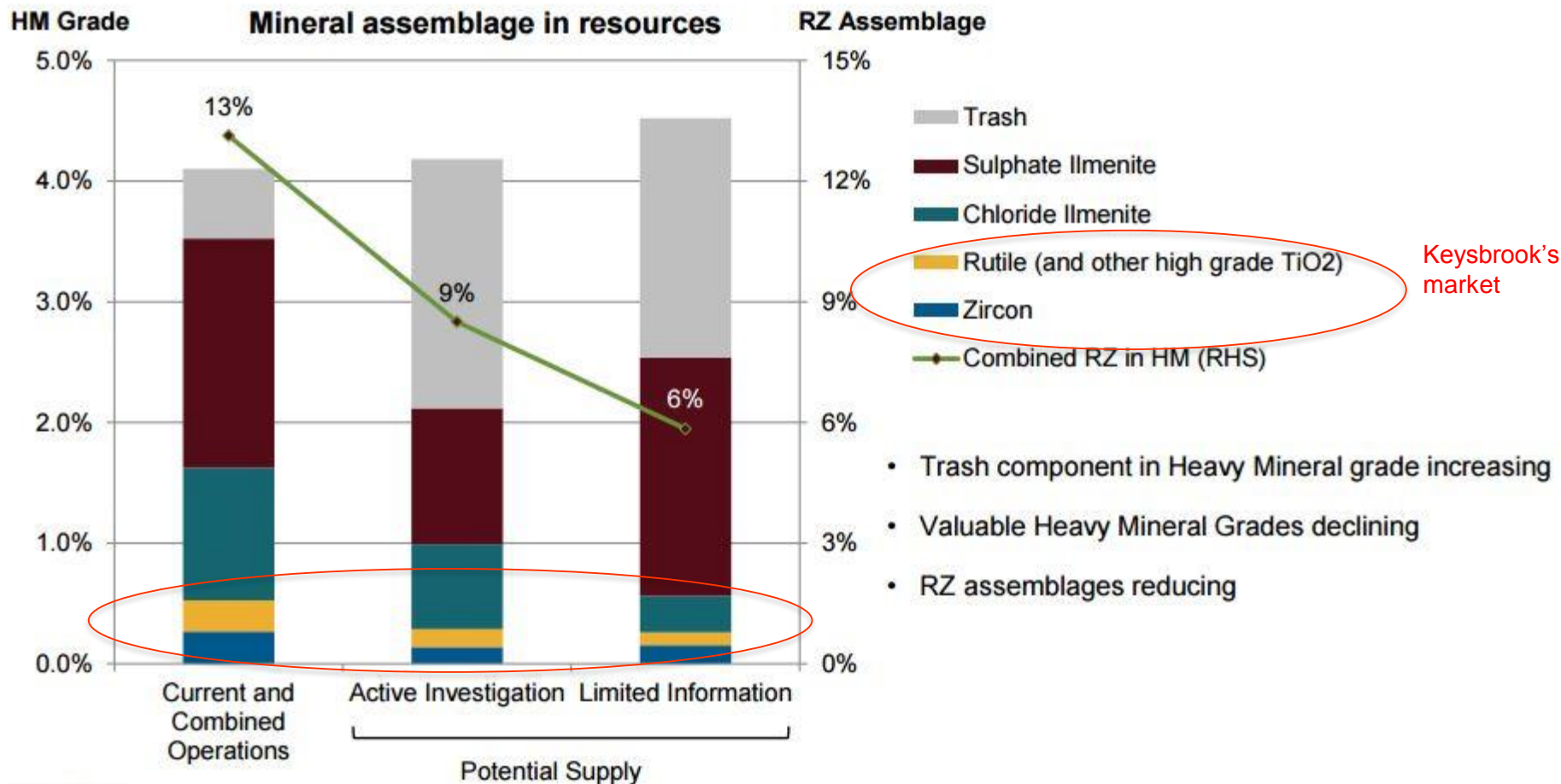
## Huntsman Announces Global Titanium Dioxide Price Increases

Russia's TiO<sub>2</sub> prices firm up, the country imported less

"We are seeing the most positive combination of factors for the pigment sector and ultimately for high-grade feedstock demand we have seen since 2012," Mr Robb said.



# Market Outlook: quality matters as grades decline



Source: Iluka Resources Ltd presentation, 1 August 2016

# Sustainable with a soft environmental footprint

- No crushing/grinding of mined sand and chemical free processing
- Recycle >85% of annual water requirements
- No residual waste from mining and processing operations
- 97.5% of mined material is returned to the location it was mined from
- Stockpiled topsoil is replaced and mine rehabilitation is complete within 2 to 3 growing seasons and returned to previous land use
- Disturbed areas revegetated to better than pre-mining state
- Comprehensive noise, dust, water and transport management plans in place



Post-mining rehabilitated pasture at Keysbrook

# Part of the community

- Local workforce with 90% of staff living within 30 mins of site
- Local service providers and contractors
- Active participation funding local initiatives through Keysbrook Community Consultation Group
- Long term partnership entered with Fairbridge Western Australia



# Reasons to invest in MZI

- ✓ **World's biggest primary producer of leucoxene**
- ✓ **Globally competitive** mineral sands producer
- ✓ **Positive price/demand outlook** for Keysbrook products
- ✓ Focused on higher-value end of mineral sands market: **Zircon, Leucoxene88, Leucoxene70**
- ✓ **Five year offtake contracts** with blue chip customers (Chemours and Tricoastal/Wensheng)
- ✓ **Long life asset** with significant growth/expansion potential
- ✓ **Low risk:** Australian location, in production, soft environmental footprint



# Important Notice



## Disclaimer

This presentation has been prepared by the management of MZI Resources Ltd (the 'Company') for the benefit of investors and not as specific advice for any particular party or person. The information is based on publicly available information, internally developed data and is based on the assumptions and limitations mentioned herein and is an expression of present opinion only. No warranties or representations can be made as to the origin, validity, accuracy, completeness, currency or reliability of the information. The Company disclaims and excludes all liability (to the extent permitted by the law), for losses, claims, damages, demands, costs and expenses of whatever nature arising in any way out of or in connection with the information, its accuracy, completeness or by reason of reliance by any person on any of it. Where the Company expresses or implies an expectation or belief as to the success of future exploration and the economic viability of future projects, such as expectation or belief is based on management's current predictions, assumptions and projections. However, such forecasts are subject to risks, uncertainties or other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forecasts. Such risks include, but are not limited to, exploration success, commodity price volatility, changes to the current mineral resource estimates, changes to assumptions for capital and operating costs as well as political and operational risks and government regulation outcomes. For more detail of risks and other factors, refer to the Company's other Australian Securities Exchange announcements and filings. The Company does not have any obligation to advise any person if it becomes aware of any inaccuracy in, or omission from, any forecast or to update such forecast.

## Forward-Looking Statements

This presentation contains forward looking statements concerning the projects owned by MZI Resources Ltd. Statements concerning mining reserves and resources may also be deemed to be forward looking statements in that they involve estimates based on specific assumptions. Forward-Looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward looking statements as a result of a variety of risks, uncertainties and other factors. Forward Looking statements are based on Management's beliefs, opinions and estimates as of the dates the forward looking statements are made and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

Data and amounts shown in this presentation relating to capital costs, operating costs and project timelines are internally generated best estimates only. All such information and data is currently under review as part of MZI Resources Ltd's ongoing development and feasibility studies. Accordingly, MZI Resources Ltd cannot guarantee the accuracy and/or completeness of the figures or data included in the presentation until the feasibility studies are completed.

## Competent Person's Statement – Exploration Results

The information in this report that relates to exploration results is based on information compiled or reviewed by Mr Stephen Harrison BSc (Hons) who is a member of the Australia Institute of Geoscientists. Stephen Harrison is a full time employee of MZI Resources Ltd. Stephen Harrison has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Stephen Harrison consents to the inclusion of this information in the form and context in which it appears in this report.

# Appendix

# MZI Corporate Overview



ASX	MZI
Issued Capital	207.6m FPO Shares
Current Price <sup>1</sup>	\$0.35
Market Capitalisation <sup>1</sup>	\$72.7m

## Major Shareholders

RCF	42.9%
Accent Resources	4.8%
Technical Investing	3.4%
Slade Technologies	2.4%
Xiang Lin	1.7%
Tricoastal	1.4%

## Funding Structure

RCF	
Convertible Loan (fully drawn)	US\$21.0m
Bridge Facilities (fully drawn)	US\$8.0m
RMB	
Project Facility (fully drawn)	US\$37.5m
Working Capital (fully drawn)	US\$3.0m
FX Hedge and Interest Rate Swap Facility	

## Board & Executive Management

Rod Baxter	Chairman
Trevor Matthews	Managing Director
Maree Arnason	Non-Executive Director
Ronnie Beevor	Non-Executive Director
Mal Randall	Non-Executive Director
Stephen Ward	Non-Executive Director
Nathan Wong	Non-Executive Director
Mike Ferraro	Chief Operating Officer
John Traicos	Legal Manager / Company Secretary
John Westdorp	Chief Financial Officer

## Broker coverage

Broker	Rating	12m target
Argonaut	Buy	A\$0.68 (18/07/16)
Bell Potter	Buy	A\$0.56 (11/07/16)
Patersons	Buy	A\$0.45 (15/06/16)

# Keysbrook Metrics\*

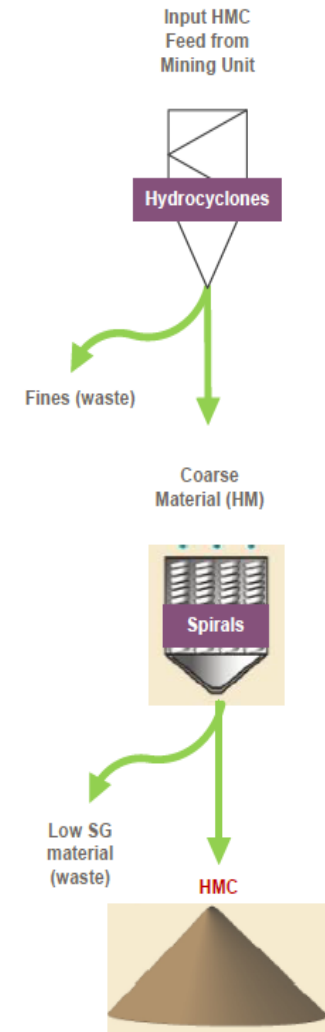
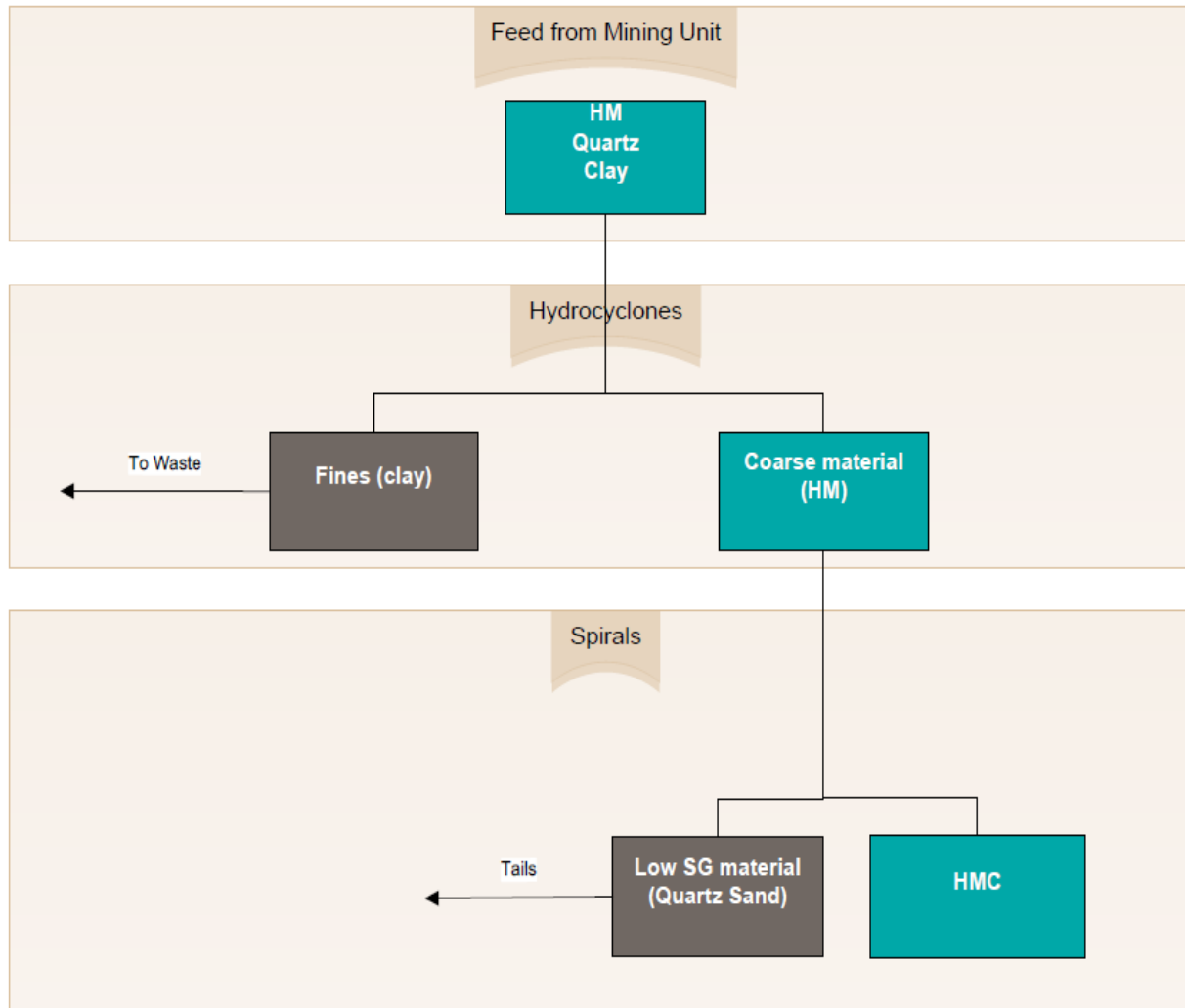


Item	Result
Ore Mining Rate	4.5Mtpa
Average mining depth	2.2 metres
Strip Ratio	Nil
Mining Inventory	72 million dry tonnes (Reserve)
Mine Life	16 years (Reserve) +30 years (Resource)
Concentrator throughput	4.0Mtpa (dry)
Concentrator Recovery	L70 – 90% L88 – 71% Zircon – 98%
HMC Produced	111,000tpa (dry)
MSP contract	Toll treating – month on / month off
MSP throughput	111,000tpa (dry)
MSP Recovery	L70 – 99% L88 – 90% Zircon – 98%
<b>Final Product*</b>	<b>L70 – 28,800tpa (dry)</b> <b>L88 – 38,400tpa (dry)</b> <b>Zircon con – 29,000tpa (dry)</b>
Zircon concentrate composition	56% Zr, 11% L88

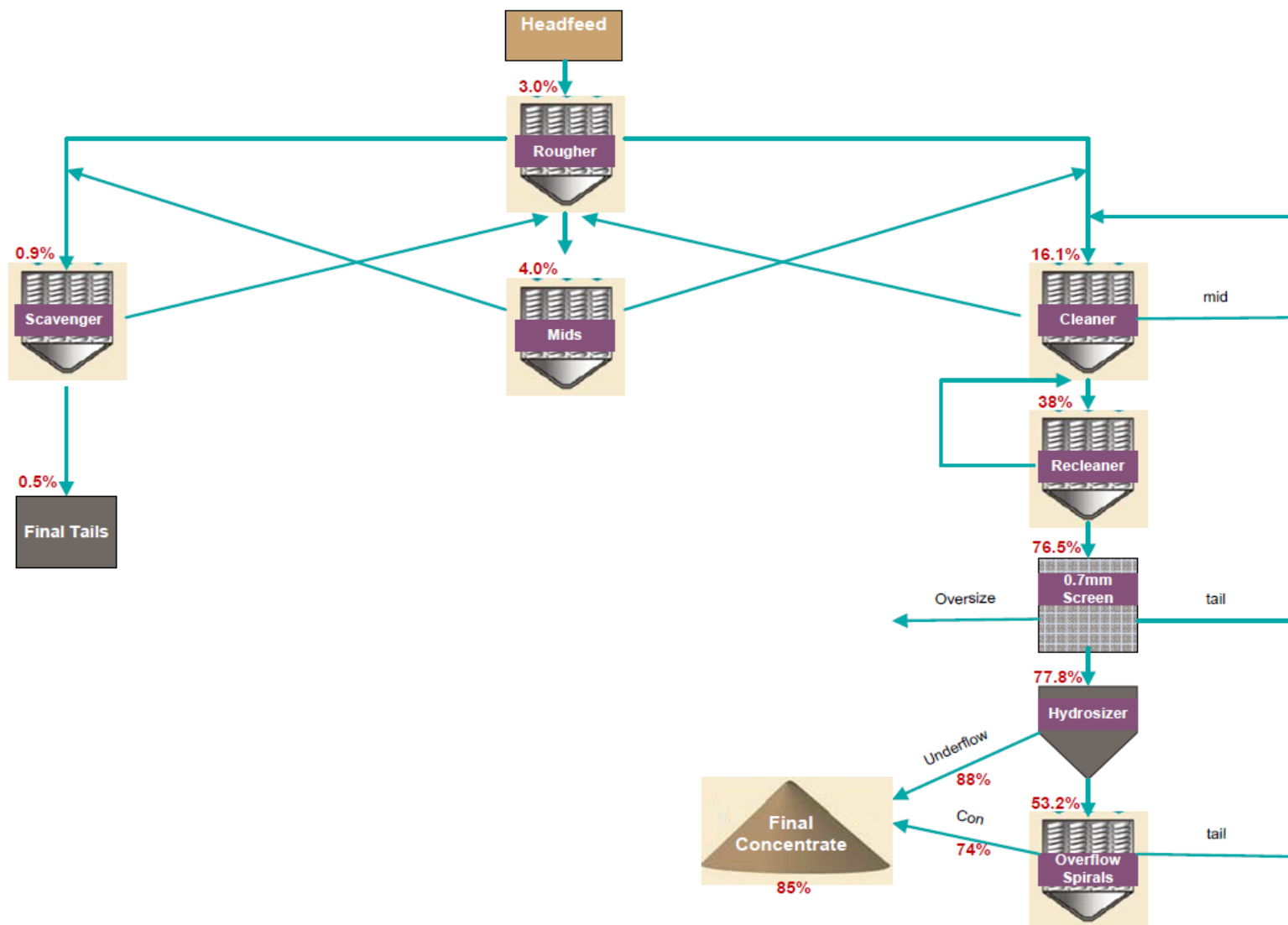
*\*\*Please refer to the Independent Expert Report attached to the Notice of Meeting dated 22 January 2016 for supporting information and details of Keysbrook production forecasts. All material assumptions underpinning the production forecasts in the Independent Expert's Report continue to apply and have not changed.*



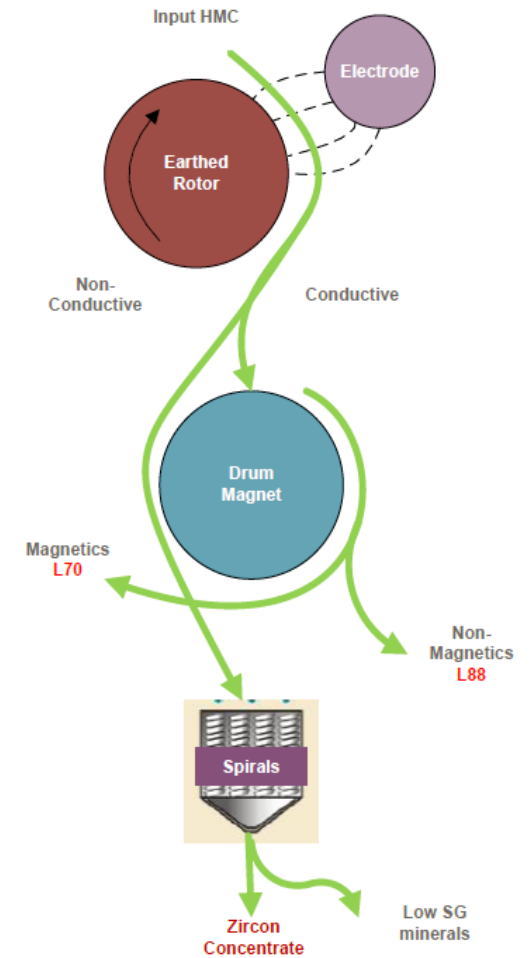
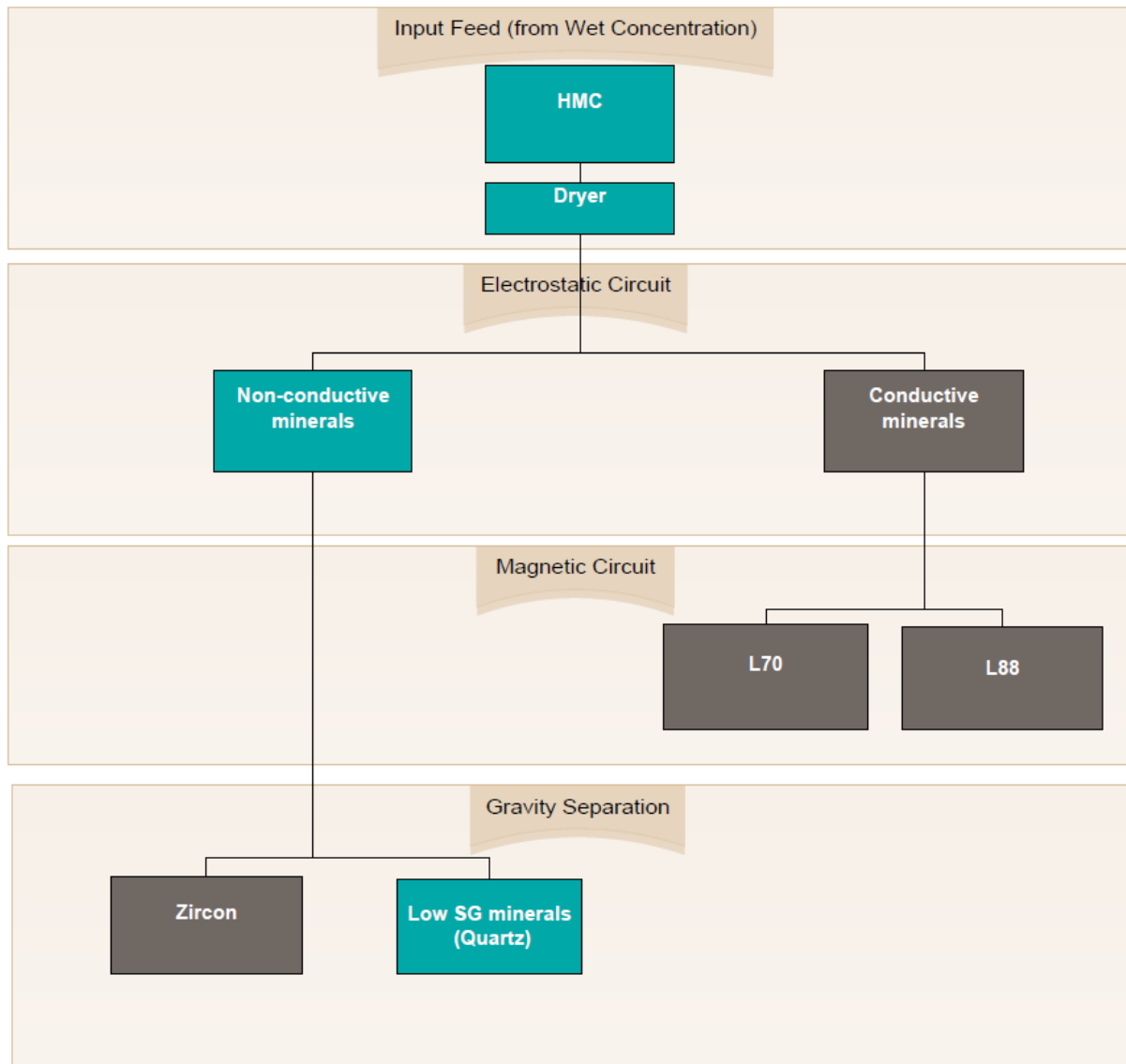
# Wet Concentration Process



# Spiral Concentration



# Dry Separation Process



**Table 1: Keysbrook Project –Global Mineral Resources (above a 1% THM cut-off grade and below a 20% slimes grade)**

Category	Tonnes (Mt)	Total Heavy Mineral (%)	Heavy Mineral (kt)	Clay Fines (-45um)%
Measured	63.9	2.2	1,400	8.1
Indicated	29.2	2.2	655	10.5
Inferred	61.9	1.6	1,050	12.0
<b>Total</b>	<b>155.0</b>	<b>2.0</b>	<b>3,105</b>	<b>10.1</b>

**Table 2: Keysbrook Project Component Resource Statement**

Category	Tonnes (Mt)	Total Heavy Mineral (%)	Heavy Mineral (kt)	Clay Fines (-45um) %	L70 %	L88 %	Zircon %
<b>Keysbrook Deposit</b>							
Measured	63.9	2.2	1,400	8.1	26.1	50.1	13.6
Indicated	15.6	2.2	350	10.2	28.0	46.1	14.7
Inferred	10.8	2.4	260	11.9	26.4	48.7	14.3
<b>Total</b>	<b>90.3</b>	<b>2.2</b>	<b>2,010</b>	<b>8.9</b>	<b>26.5</b>	<b>49.2</b>	<b>13.9</b>
<b>Yangedi Deposit</b>							
Inferred	51.1	1.5	790	12.1	61.2	20.0	10.8
<b>Total</b>	<b>51.1</b>	<b>1.5</b>	<b>790</b>	<b>12.1</b>	<b>61.2</b>	<b>20.0</b>	<b>10.8</b>
<b>Railway Deposit</b>							
Indicated	13.6	2.2	305	11.0	-	-	-
<b>Total</b>	<b>13.6</b>	<b>2.2</b>	<b>305</b>	<b>11.0</b>	<b>-</b>	<b>-</b>	<b>-</b>

Notes relevant to Tables 1 and 2:

1. Reported above a cut-off grade of 1% HM and below a cut-off of 20 % clay fines.
2. Stratigraphic units reported within the Mineral Resource are Yoganup Sand and Guildford Clay for Keysbrook, Bassendean Sand for Yangedi and Yoganup Sand for Railway.
3. Keysbrook Project resource is classified and reported in accordance with the guidelines of JORC Code 2012. Railway Deposit resource is classified and reported in accordance with the guidelines of JORC Code 2004.
4. HM is reported as a percentage of the +45um to -2mm size fraction reported as a percentage of the total material.
5. L70%, L88% and Zircon% are the proportion of the total HM.
6. The terms L70 and L88 refer to MZI products. L70 comprises minerals with an average titanium dioxide content of between 65% and 85% and L88 comprises minerals with an average titanium dioxide content between 85% and 95%.
7. Inconsistencies in totals are due to rounding.

Refer Slide 26 for Competent Persons Information

## Keysbrook Proved and Probable Ore Reserves as at 31 December 2015

Classification	Ore Million tonnes	In situ THM tonnes	THM grade %	L70 %	THM Assemblage L88 %	Zircon %	Other %
<b>Proved</b>	54.1	1.2	2.2	25.5	50.2	13.4	10.6
<b>Probable</b>	18.0	0.4	2.2	28.5	46.4	14.1	10.9
<b>Total</b>	<b>72.1</b>	<b>1.6</b>	<b>2.2</b>	<b>26.3</b>	<b>49.3</b>	<b>13.6</b>	<b>10.7</b>

### Notes accompanying the Ore Reserve Statement:

- Ore Reserves are based upon a cut-off grade of 1.0% THM and Mineral Resource material containing more than 20% slimes have been excluded from the Ore Reserves estimation*
- The Ore Reserves are based upon TZMI forecast pricing and offtake pricing*
- Mineral Resources have been reported as inclusive of Ore Reserves.*
- The Total Heavy Mineral (THM) assemblage is reported as a percentage of in situ THM content.*
- Tonnes and grade data have been rounded to one significant figure. Discrepancies in summations may occur due to rounding.*
- This Ore Reserve statement has been compiled in accordance with the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code – 2012 Edition).*
- The Ore Reserves have been compiled by Jean-Pierre Adams (MAusIMM) of MZI, under the direction of Andrew Law of Optiro, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Law has sufficient experience in Ore Reserve estimation relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Mineral Resources and Ore Reserves”.*
- Mr Law consents to the inclusion in the report of the matters compiled by him in the form and context in which it appears.*



## Competent Person's Statements – Mineral Resources (Tables 1 and 2)

The information in this report which relates to Mineral Resources is based upon information compiled by Mrs Christine Standing (in relation to the Keysbrook Project) who is a Member of the Australasian Institute of Mining. Mrs Standing is an employee of Optiro Pty Ltd and has sufficient experience relevant to the style of mineralisation, the type of deposit under consideration and to the activity undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mrs Standing consents to the inclusion in the report of a summary based upon her information in the form and context in which it appears.

The information in this report which relates to Mineral Resources is based upon information compiled Mr John Baxter (in relation to the Railway Deposit) who is a Member of the Australasian Institute of Geoscientists. Mr Baxter is a Consulting Geologist with sufficient experience relevant to the style of mineralisation, the type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Baxter consents to the inclusion in the report of a summary based upon his information in the form and context in which it appears.

For supporting information on Keysbrook Mineral Resources, refer ASX release - *MZI increases Keysbrook Mineral Resources by 68%* - dated 7 August 2015.

## Competent Person's Statements – Ore Reserves

The information in this report has been compiled by Jean-Pierre Adams (MAusIMM) of MZI, under the direction of Andrew Law of Optiro, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Law has sufficient experience in Ore Reserve estimation relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Law consents to the inclusion in the report of the matters compiled by him in the form and context in which it appears.