



# Keysbrook Project

Investor Roadshow - April 2015

Trevor Matthews – Managing Director



# The MZI Investment Case



- ✓ Keysbrook is fully funded through to production
  - Construction 44% complete – tracking on budget and ahead of schedule
  - Commissioning and production in Q4 2015
  - Shipments and sales revenue commence Q1 2016
- ✓ High margin project
  - Low risk construction and low capex
  - High grade mineral assemblage and final products
  - Simple and low cost mining and processing
  - \$38.5m first financial year EBITDA based on current spot prices and FX
  - Updated JORC Resource mid-2015
- ✓ Offtake secured
  - Five year binding sales contracts for 85% of annual production
  - Blue chip counterparties in DuPont (titanium dioxide L88 and L70) and Tricoastal/Wensheng (zircon)

# MZI Corporate Overview



ASX	MZI
Issued Capital	79m FPO Shares
Current Price	\$0.42
Market Capitalisation <sup>1</sup>	\$31.9m
Enterprise Value <sup>1</sup>	\$63.1m

## Board & Executive Management

Mal Randall	Chairman
Trevor Matthews	Managing Director
Nathan Wong	Non-Executive Director
Stephen Ward	Non-Executive Director
Mike Ferraro	Chief Operating Officer
Peter Gazzard	Technical Director
John Traicos	Legal Manager / Company Secretary
Jamie Wright	Chief Development Officer

## Major Shareholders

RCF	25.9%
Technical Investing	5.2%
Board and Management	5.0%
Slade Technologies	4.7%
Xiang Lin	4.4%
Tricoastal	3.6%

## Funding Structure

<b>RCF</b>	
Convertible Loan (fully drawn)	US\$21.0m
Bridge Facilities (US\$25.5m drawn)	US\$33.5m
<b>RMB</b>	
Project Facility (US\$12.2m drawn)	US\$37.5m
Working Capital	US\$3.0m
Bank Guarantee Facility	A\$11.5m
FX Hedge and Interest Rate Swap Facility	

<sup>1</sup>As at 20 April 2015

# Keysbrook Financials

Annual EBITDA	<ul style="list-style-type: none"><li>• Spot price \$38.5m<sup>1</sup></li><li>• Base case \$48.5m<sup>2</sup></li></ul>
Operating Costs	<ul style="list-style-type: none"><li>• Unit Cash Cost \$352 per product tonne<sup>4</sup></li></ul>
NPV	<ul style="list-style-type: none"><li>• \$219m</li></ul>
Capital Expenditure + Pre-operations Cost	<ul style="list-style-type: none"><li>• \$75.8m</li></ul>
Annual Average Sustaining Capital	<ul style="list-style-type: none"><li>• \$1.1m</li></ul>

Notes:

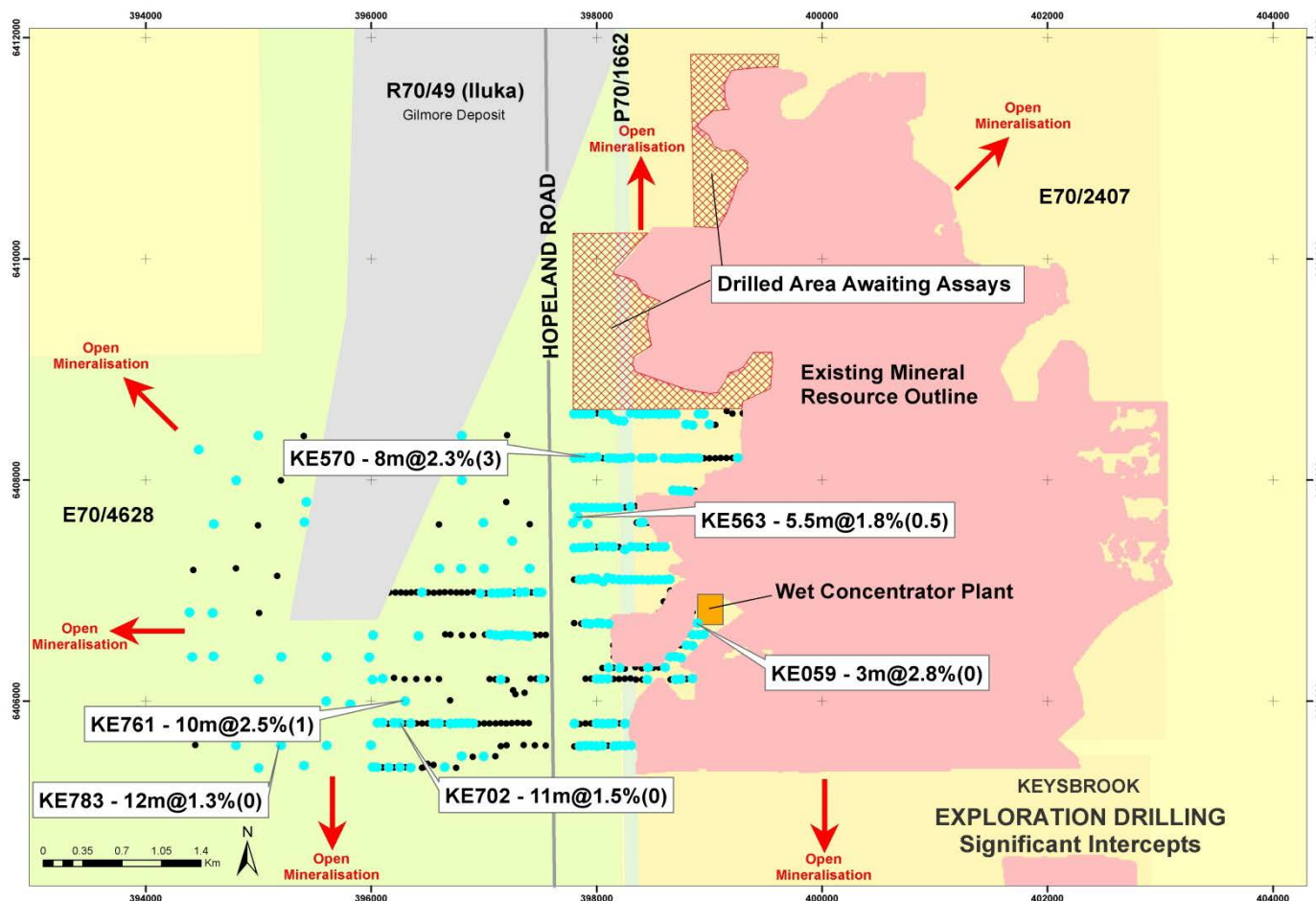
1. Based on current spot price for rutile and zircon. Exchange rate assumption is the average USD:AUD exchange rate for the week ending 17 April 2015 (USD:AUD 0.7663).
2. Revenue assumptions have been based on indexing to the Q1 2015 TZMI pricing outlook for comparable pricing benchmarks to Keysbrook's product suite (note the TZMI Base and High cases converge to the same long term pricing). FX based on Bloomberg forward curve..
3. EBITDA and unit cash costs for first full financial year of production.
4. Keysbrook expenditure only and includes all administration costs, royalties, landowner payments.
5. All values in AUD.
6. Capital cost includes power connection, contingency and growth.
7. Current as at 20 April 2015.

- 78.9Mt Mineral Resource at surface including Ore Reserve of 26Mt
- Low slimes
- High value product mix of leucoxene (L88 and L70) and zircon concentrate
  - 38 ktpa 88% TiO<sub>2</sub>
  - 29 ktpa 70% TiO<sub>2</sub>
  - 29 ktpa zircon concentrate (56% ZrO<sub>2</sub> and 11% rutile grade TiO<sub>2</sub>)
- Offtake agreements for 85% of production under five year sale agreements with DuPont and Tricoastal/ Wensheng
- Resource life of +15 years with exploration program in progress to expand<sup>1</sup>
- Updated JORC Resource scheduled for mid-2015

1. Refer to ASX announcement dated 16 April 2015 included in the appendix to this presentation.

# Keysbrook Resource Extension

- Results received for drilling completed to 13 March 2015 confirm the Keysbrook orebody is significantly larger than the current Project area.
- Drilling to date is extending the mineralisation to the west and north of the existing Mineral Resources.
- The majority of intercepts are from near surface (i.e. minimal overburden), show low clay fines and minimal oversize – all features consistent with the existing Keysbrook Mineral Resource.



## Note:

Drill collars located outside the resource are black  
 Drill collars containing significant intercepts are highlighted in blue  
 Drill intercept nomenclature:

Hole ID – intercept thickness @THM grade (from depth)  
 East of Hopeland Road: >0.5% THM x thickness, <20% clay fines & <15% +2mm oversize  
 West of Hopeland Road: >2% THM x thickness, <20% clay fines & <15% +2mm oversize



# Keysbrook Metrics

Item	Result
Ore Mining Rate	4.5Mtpa
Average mining depth	2.2 metres
Strip Ratio	Nil
Mining Inventory	24.5 million dry tonnes (Reserve)
Mine Life	5.5 years (Reserve) +15 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



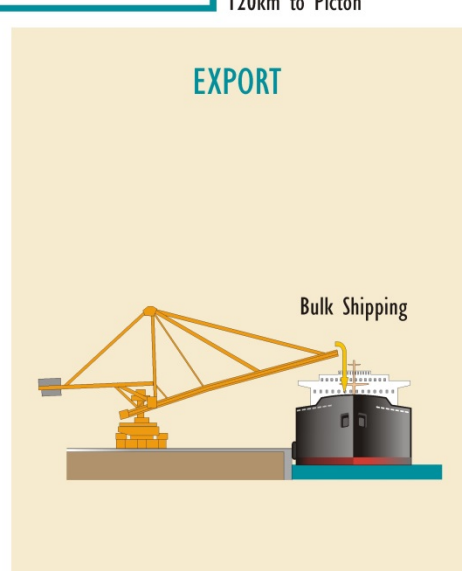
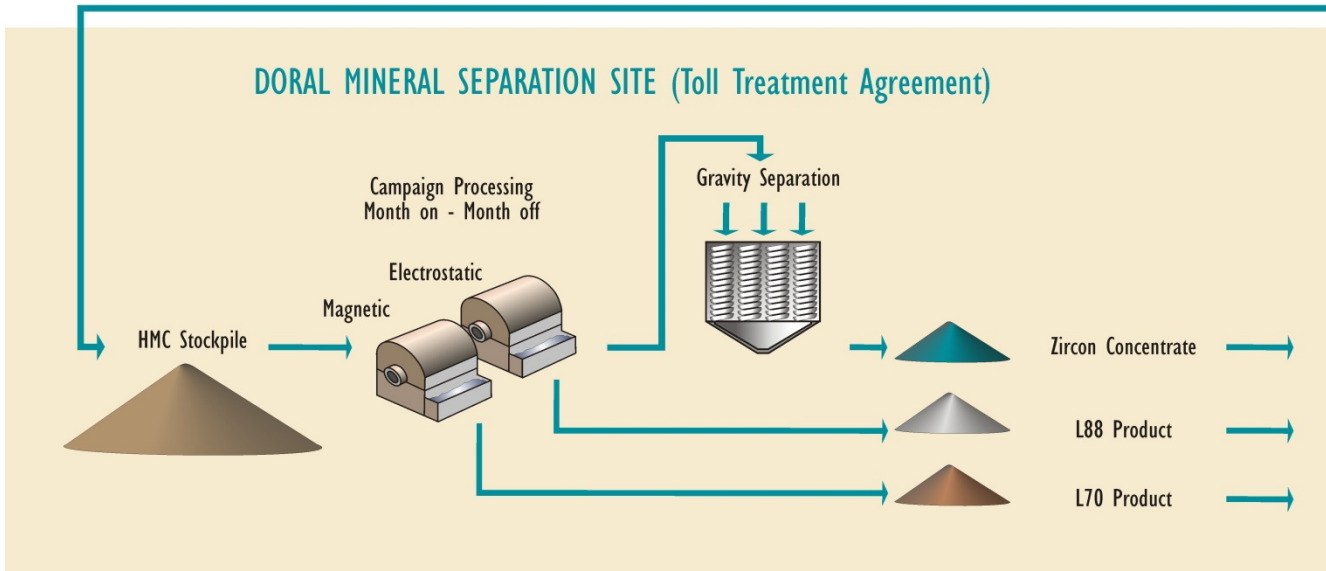
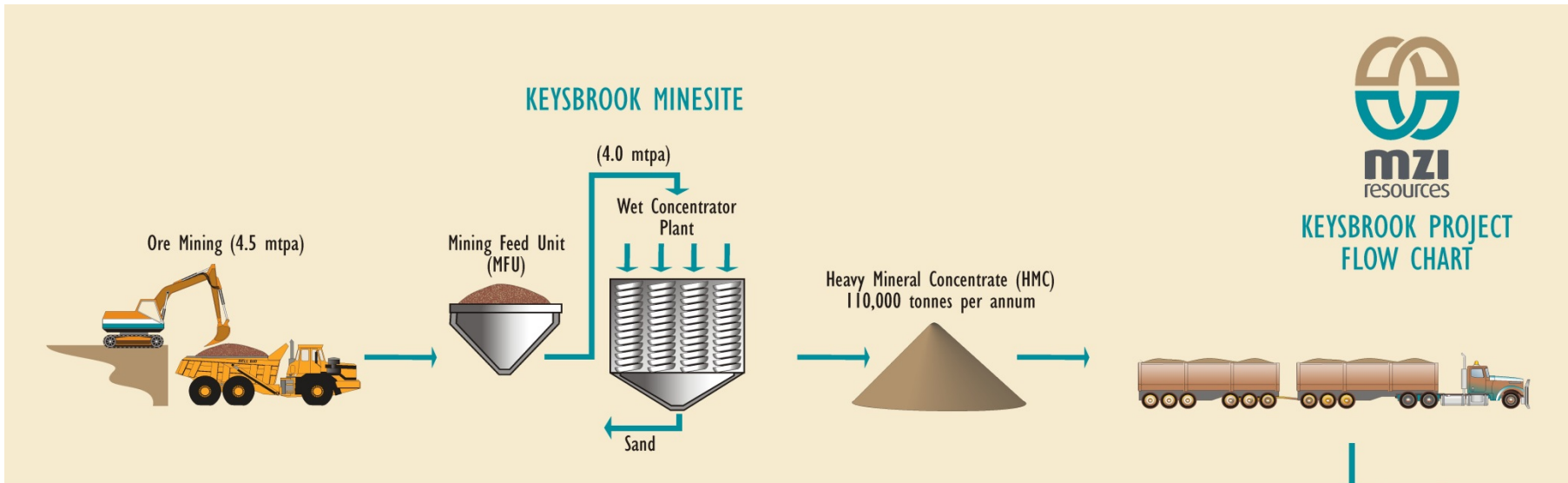
# The Keysbrook location advantage

- Mine located 70km south of Perth
- Near large population, mining and industrial centres
- No need for employee transport, accommodation or catering
- Power from SWIS, high standard road transport, product storage and port facilities
- Basic wet processing at mine site
- Dry processing de-risked via toll treatment agreement with Doral 120km from site





# Keysbrook – A Simple Flowchart



# Environmental credentials

- Chemical free processing
- Post processing sand and clay material is returned to the mined area
- Stockpiled topsoil is replaced and mine rehabilitation is complete within 2 to 3 growing seasons and returned to previous land use
- No residual waste from processing
- Recycle >85% of annual water requirements
- Site revegetated to 150% of pre-mining state



Rehabilitation works on the Tiwi Islands

# Construction Activities

Coronastats ready for delivery



Trial assembly of the thickener



Steel erection at Doral's MSP



Steel fabrication for the wet concentrator plant



# Short Term Project Upside

## Costs

- Low oil price leading to reductions in diesel prices
- Surplus energy supply in WA resulting in more competitive energy pricing
- No pressure on labour costs. Local workforce so no flights, accommodation or meal costs incurred
- Limited imported parts and consumables
- Most of Keysbrook's activities are based on existing infrastructure with contract prices for services including dry plant processing, concentrate and final product transport and storage and shiploading
- Four panel shift roster arrangements based on providing a manageable number of average hours worked each week – provides time for safety and skills training, continuous improvement programmes to drive efficiencies and productivity



## L88 recovery

- Current WCP recovery is 71%
- Losses mainly in the middlings circuit
- Testwork programme evaluating options for improved L88 recovery
- Objective is to identify plant modifications targeting 80% or better recovery i.e. overall 11% improvement in L88 production

## Mineralogy

- Mineralogy results from recent years work programmes show higher L88 mineralisation when compared with the Reserve
- Further work from the grade control programme by drilling assaying selected twin holes
- Using three different analysis methods to determine/confirm mineralogy
- Potential for increase in high value L88 production



- ✓ Strengthening mineral sands market
- ✓ Prices forecast to grow
- ✓ Broad demand for products used in everyday life

## Titanium Dioxide

- Demand for chloride  $\text{TiO}_2$  feedstock is stable due to the reduction in downstream pigment inventory and improving Western economies.
- A shortage of high quality pigment could appear later in 2015.

## Zircon

- The zircon price has remained stable over the past year with premium grades currently selling for ~ \$1,100 pmt.
- Supply/demand has moved back into balance with major producers (Iluka, Rio and Tronox) managing supply.
- Global consumption is currently assumed to be ~ 1.0 million tonnes per year. Demand is now estimated to be growing at ~ 4% per year.



# Summary: on budget and ahead of schedule



## Robust Project Economics

- ✓ Low Capex and Opex
- ✓ Low slimes and no waste
- ✓ Simple mining and processing
- ✓ Low sustaining capex
- ✓ High value mineral assemblage
- ✓ Sales agreements secured for 85% of product
- ✓ Profitable at current prices and exchange rates
- ✓ Low AUD strengthens project economics

## Corporate

- ✓ Strong board and management +100 years of mineral sands experience
- ✓ Proven ability to develop and operate mineral sands projects
- ✓ Company has prior experience in developing and operating a successful project in the Tiwi Islands
- ✓ Support from cornerstone investor Resource Capital Funds
- ✓ Keysbrook fully funded to production and cash flow

# 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 of 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, gold and copper 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

# ASX Announcement - Significant Extension to Keysbrook mineralisation



## ASX ANNOUNCEMENT

16 April 2015



### Significant extension to Keysbrook mineralisation

- Exploration drilling has significantly extended the Keysbrook mineralisation
- Confirms potential to materially extend the life of the Keysbrook Project
- Mineralisation remains open to south-west and west
- New Mineral Resource statement targeted for mid-year

MZI Resources Ltd (ASX:MZI) is pleased to announce that the exploration program commenced in January 2015 has confirmed significant extensions to mineralisation at the Keysbrook Project.

Results received for drilling completed to 13 March 2015 confirm the Keysbrook orebody is significantly larger than the current Project area. Drilling to date is extending the mineralisation to the west and north of the existing Mineral Resources. Intersections include:

- 3m@2.8%THM (Total Heavy Mineral) from 0m in KE059
- 5.5m@1.8%THM from 0.5m in KE563
- 8m@2.3%THM from 3m in KE570
- 11m@1.5%THM from 0m in KE702
- 10m@2.5%THM from 1m in KE761
- 12m@1.3%THM from 0m in KE783

These drilling results are consistent with the existing Keysbrook Mineral Resource.

The exploration drilling program has drilled 908 holes to 13 March with the results reported in the table attached to this announcement. Approximately 500 drillholes are scheduled to be drilled to complete the program. The program to date has confirmed mineralisation extending over 5 square kilometres of lateral extent.

Importantly, the majority of intercepts are from near surface (i.e. minimal overburden), show low clay fines and minimal oversize – all features consistent with the existing Keysbrook Mineral Resource.

#### COMPANY DIRECTORS

Mal Randall  
Non-Executive Chairman  
Trevor Matthews  
Managing Director  
Nathan Wong  
Non-Executive Director  
Stephen Ward  
Non-Executive Director  
SENIOR MANAGEMENT  
Mike Ferraro  
Chief Operating Officer  
Peter Gazzard  
Technical Director

John Tralcos  
Legal Manager/Company Secretary

Jamie Wright  
Chief Development Officer

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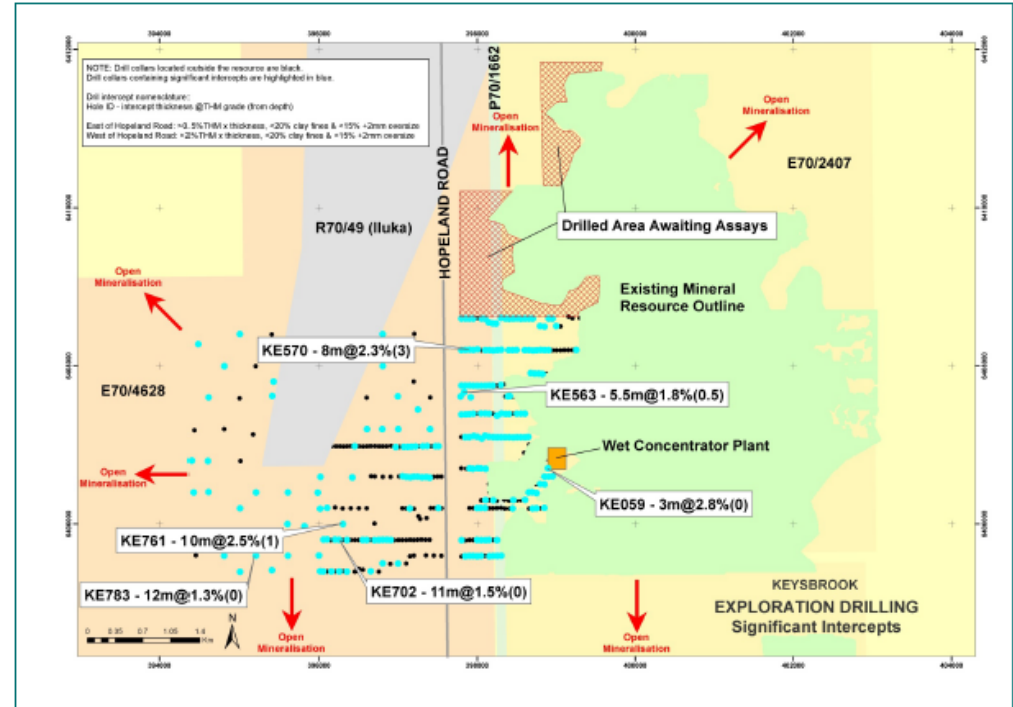


Figure 1 - Exploration Area



# ASX Announcement - Significant Extension to Keysbrook mineralisation



Assemblage analysis is yet to be completed on drill samples from the program. However, previous analysis on samples collected in the area (composited from an earlier auger program) indicate the L88 component of the mineral assemblage in the extension area may be higher than in the currently reported Mineral Resource.

Table 1: Comparison of Mineral Resource assemblage to extension area assemblage

Assemblage	THM%	L70%	L88%	Zircon%
Current Mineral Resource	2.6	28.7	46.0	14.7
Composite collected in new area	1.8	17.2	64.1	11.6

Notes: Hole location and relevant data previously reported in the ASX release dated 20 January 2015. Mineral assemblage data for the current resource is extracted from the ASX release dated 1 March 2013.

MZI will provide further updates to the mineral assemblage as they are received.

Preliminary evaluation of the results suggest that the western portion of the exploration area, located approximately 2 kilometres west of the existing Mineral Resource, may represent a new zone of mineralisation, however this will not be able to be confirmed until further assaying is completed during the June quarter.

Mineralisation remains open to the south-west and west based on these results and will provide a focus for further exploration into the future.

#### Planned Work

Given the success to date, the drilling program has been extended to include infill drilling in the newly discovered areas reported on above, as well as to undertake further exploration drilling to test for additional extensions to the mineralisation.

In parallel to this part of the program, MZI will undertake further assaying to determine mineral assemblage and resource estimation to enable a revised Mineral Resource to be released early in the third quarter of 2015.

#### Comment

MZI Managing Director Trevor Matthews said: "These drilling results give us even greater confidence that the Keysbrook Project will be a long life producer of high value mineral sands products."

"With construction at Keysbrook progressing well toward the scheduled commencement of production in December 2015, MZI is well on the way to establishing itself as an independent Australian based supplier of high value mineral products with a positive market outlook."

The Keysbrook Project, located approximately 70 kilometres south of Perth in Western Australia, is designed to produce in excess of 95,000 tonnes of leucoxene and zircon products annually.

For further details please contact:

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Managing Director

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#### 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 'Australian 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 1 – Results Table

Section A - Holes Located East of Hopeland Road												
HOLE	Easting	Northing	RL(m)	Azimuth	Dip	Total Depth	Depth From (m)	Thickness (m)	Oversize %	Slimes %	Total Heavy Mineral %	Survey Method
KED13	397905.189	6406699.168	23.051	-	-90	4	1	1	0.9%	11.3%	1.8%	DGPS
KED14	397942.447	6406699.778	23.186	-	-90	6	0	4	0.7%	9.5%	1.5%	DGPS
KED15	397997.121	6406702.786	23.370	-	-90	5	2	3	2.0%	15.9%	1.5%	DGPS
KED16	398043.749	6406702.439	23.370	-	-90	4	1	1	0.9%	14.2%	1.1%	DGPS
KED17	398104.107	6406701.687	23.711	-	-90	4	0	3	0.5%	7.7%	1.9%	DGPS
KED40	398454	6406303	29	-	-90	6	4	2	1.1%	10.6%	1.5%	GPS
KED59	398896.198	6406702.992	26.944	-	-90	6	0	3	0.2%	5.1%	2.8%	DGPS
KED62	398946.974	6406604.035	26.336	-	-90	3	0	2	1.0%	8.1%	2.1%	DGPS
KED63	398901.562	6406602.462	26.629	-	-90	6	0	2	0.0%	4.2%	3.0%	DGPS
KED64	398850.501	6406603.517	27.173	-	-90	6	0	2	0.0%	2.3%	2.0%	DGPS
KED71	398798.834	6406505.881	26.034	-	-90	3	0	1	0.2%	16.9%	2.6%	DGPS
KED72	398849.777	6406503.774	25.800	-	-90	3	0	1	4.2%	10.4%	1.3%	DGPS
KED73	398748.186	6406390.727	25.314	-	-90	3	0	1	3.6%	9.7%	2.1%	DGPS
KED74	398695.745	6406402.618	25.088	-	-90	3	0	2	2.4%	14.7%	2.4%	DGPS
KED75	398650.266	6406399.882	25.090	-	-90	3	0	1	0.2%	9.2%	1.2%	DGPS
KED77	398604.240	6406301.734	25.210	-	-90	6	0	2	0.3%	8.6%	1.6%	DGPS
KED80	397997.182	6406201.057	23.168	-	-90	3	0	1	0.1%	18.4%	1.9%	DGPS
KED81	398042.827	6406204.335	23.942	-	-90	2.5	1	1.5	2.3%	14.5%	1.3%	DGPS
KED82	398093.141	6406202.069	23.743	-	-90	3	0	2	1.8%	11.9%	1.2%	DGPS
KED89	398446.404	6406198.469	24.296	-	-90	3	0	1	0.2%	7.2%	1.3%	DGPS
KED91	398697.121	6406198.274	24.963	-	-90	3	0	1	5.0%	9.7%	2.1%	DGPS
KED92	398749.103	6406200.413	25.108	-	-90	6	0	1	1.9%	10.0%	1.6%	DGPS
KED94	398848.363	6406203.408	25.343	-	-90	3	0	1	2.4%	4.9%	1.6%	DGPS
KE120	398199.491	6406303.637	23.649	-	-90	3	0	1	2.4%	17.6%	4.6%	DGPS
KE122	398099.805	6406303.712	23.428	-	-90	3	0	1	0.6%	9.2%	1.1%	DGPS
KE127	398247.269	6405798.650	23.765	-	-90	6	1	2	8.4%	13.3%	1.5%	DGPS
KE129	398150.185	6405799.951	23.078	-	-90	3	0	1	1.3%	10.0%	1.3%	DGPS
KE130	398100.308	6405798.398	22.997	-	-90	3	0	1	0.1%	20.0%	1.7%	DGPS
KE134	398050.924	6405795.961	22.886	-	-90	3	0	1	3.5%	12.2%	1.6%	DGPS
KE135	397999.022	6405797.877	22.847	-	-90	3	0	1	3.5%	18.2%	1.0%	DGPS
KE139	397800.917	6405799.156	22.257	-	-90	3	1.5	0.5	0.2%	17.2%	1.2%	DGPS
KE142	398300.107	6405596.691	23.275	-	-90	3	0	2	11.0%	11.8%	1.6%	DGPS
KE143	398251.059	6405596.079	23.101	-	-90	3	0	2.5	0.7%	4.9%	1.4%	DGPS
KE144	398198.808	6405597.429	22.995	-	-90	3	0.5	1	6.4%	5.7%	1.5%	DGPS
KE145	398150.378	6405596.787	22.907	-	-90	3	0	1	1.5%	6.6%	1.1%	DGPS
KE147	398049.872	6405596.660	22.662	-	-90	3	1	0.5	1.3%	19.9%	1.3%	DGPS
KE148	397999.372	6405595.459	22.651	-	-90	3	0	1	0.0%	2.5%	1.1%	DGPS
KE148	397999.372	6405595.459	22.651	-	-90	3	2.5	0.5	0.1%	16.8%	2.1%	DGPS
KE149	397949.365	6405594.738	22.523	-	-90	3	0	1	1.7%	4.6%	1.5%	DGPS
KE150	397899.747	6405594.253	22.368	-	-90	3	0	1	4.2%	1.2%	1.2%	DGPS
KE151	397848.258	6405593.988	22.205	-	-90	3	1	0.5	0.5%	12.7%	1.0%	DGPS

# ASX Announcement - Significant Extension to Keysbrook mineralisation



Appendix 1 – Results Table

Section A - Holes Located East of Hopeland Road												
KE381	398801.878	8408200.492	26.987	-	-90	3	0	1	2.3%	6.1%	1.8%	DGPS
KE382	398851.786	8408201.837	28.375	-	-90	3	0	1.5	0.7%	3.5%	1.5%	DGPS
KE383	398901.188	8408200.870	27.812	-	-90	3	0	1	1.8%	4.3%	1.8%	DGPS
KE390	399250.224	8408203.347	29.123	-	-90	3	0	1.5	1.4%	1.5%	2.9%	DGPS
KE419	398826.113	8407998.514	26.789	-	-90	3	0.5	1	3.5%	12.6%	2.1%	DGPS
KE421	398772.865	8407901.279	26.499	-	-90	6	0	2.5	2.8%	9.4%	2.1%	DGPS
KE421	398772.865	8407901.279	26.499	-	-90	6	3	1	0.5%	13.1%	1.8%	DGPS
KE422	398724.311	8407904.561	26.251	-	-90	6	0	2	3.1%	8.4%	1.3%	DGPS
KE423	398873.997	8407907.910	25.903	-	-90	3.5	0	0.5	1.9%	4.7%	1.0%	DGPS
KE423	398873.997	8407907.910	25.903	-	-90	3.5	1.5	0.5	5.8%	14.4%	1.7%	DGPS
KE525	398650.861	8407100.022	25.958	-	-90	3	0	2	0.9%	5.5%	2.5%	DGPS
KE526	398599.358	8407098.625	25.344	-	-90	3	0	1.5	0.8%	9.2%	3.0%	DGPS
KE527	398650.013	8407098.561	25.150	-	-90	3	0	1.5	2.7%	12.6%	1.6%	DGPS
KE528	398499.787	8407099.181	25.280	-	-90	3	0	2.5	1.3%	8.4%	1.7%	DGPS
KE529	398450.537	8407099.259	25.218	-	-90	3	0	2.5	1.9%	5.0%	1.1%	DGPS
KE530	398400.288	8407099.370	24.842	-	-90	3	0	2.5	2.3%	9.5%	1.3%	DGPS
KE531	398349	8407098	25	-	-90	3	0	2.5	3.1%	7.2%	1.5%	GPS
KE532	398302	8407098	27	-	-90	3	0	2	1.2%	12.0%	2.2%	GPS
KE533	398357	8407393	30	-	-90	3	0	2	0.0%	7.0%	1.3%	GPS
KE534	398399.515	8407397.148	25.018	-	-90	3	0	1.5	0.1%	4.3%	1.2%	DGPS
KE535	398599.350	8407398.707	25.865	-	-90	3	0	1.5	1.3%	4.9%	1.2%	DGPS
KE536	398548.804	8407398.103	25.472	-	-90	3	0.5	0.5	0.0%	5.2%	1.2%	DGPS
KE537	398498.538	8407397.643	25.196	-	-90	3	0	1	0.1%	5.6%	1.1%	DGPS
KE539	398302.448	8407397.208	24.198	-	-90	3	0.5	1	0.0%	11.1%	1.4%	DGPS
KE540	398249.870	8407098.962	23.925	-	-90	3	0.5	0.5	0.2%	4.0%	1.1%	DGPS
KE541	398199.138	8407098.964	24.407	-	-90	3	0	3	0.8%	6.8%	1.7%	DGPS
KE542	398150.836	8407106.881	24.278	-	-90	6	0	4	0.4%	3.8%	1.3%	DGPS
KE543	398100.210	8407100.188	24.837	-	-90	6	0	4	0.0%	3.5%	1.5%	DGPS
KE544	398058.335	8407081.403	25.962	-	-90	6	1.5	3.5	0.1%	4.4%	1.6%	DGPS
KE545	397995.043	8407105.201	25.793	-	-90	6	0	5	1.8%	4.9%	1.8%	DGPS
KE546	397956.613	8407114.315	24.788	-	-90	6	0.5	5	0.1%	9.0%	1.4%	DGPS
KE547	397898.850	8407099.298	23.317	-	-90	6	3	0.5	0.0%	14.8%	1.4%	DGPS
KE548	397849.253	8407098.379	23.254	-	-90	6	2	0.5	0.1%	5.7%	1.0%	DGPS
KE548	397849.253	8407098.379	23.254	-	-90	6	3.5	0.5	0.0%	12.0%	1.1%	DGPS
KE548	397849.253	8407098.379	23.254	-	-90	6	5	1	0.0%	17.2%	1.7%	DGPS
KE550	398249.823	8407370.885	24.082	-	-90	3	0	1	0.4%	4.9%	1.2%	DGPS
KE552	398152.000	8407395.998	23.599	-	-90	3	0	0.5	0.1%	7.1%	1.1%	DGPS
KE553	398099.502	8407395.020	23.888	-	-90	3	0.5	2.5	2.8%	13.7%	1.1%	DGPS
KE554	398049.303	8407395.119	23.614	-	-90	3	0	2	0.6%	10.9%	1.1%	DGPS
KE556	397949.998	8407393.061	23.308	-	-90	3	0	1.5	0.0%	9.4%	1.2%	DGPS
KE557	397898.595	8407392.217	23.199	-	-90	3	0	1.5	0.7%	7.1%	1.4%	DGPS
KE558	397850.823	8407391.188	23.254	-	-90	3	0	2	1.3%	10.8%	1.3%	DGPS
KE559	397798.834	8407388.745	23.282	-	-90	3	0	2	1.3%	9.9%	1.4%	DGPS
KE560	398249.252	8407098.548	23.924	-	-90	3	0	1	0.9%	3.6%	1.2%	DGPS
KE561	397913.874	8407802.967	24.828	-	-90	6	1	2.5	0.1%	7.2%	1.7%	DGPS

Appendix 1 – Results Table

Section A - Holes Located East of Hopeland Road												
KE562	397787.038	8407613.384	24.501	-	-90	6	0	3.5	0.1%	2.9%	1.3%	DGPS
KE563	397833.655	8407668.669	25.909	-	-90	15	0.5	5.5	0.3%	6.5%	1.8%	DGPS
KE564	398198.410	8407751.293	23.750	-	-90	5.5	0.5	0.5	0.0%	2.5%	1.0%	DGPS
KE564	398198.410	8407751.293	23.750	-	-90	5.5	1.5	2	0.7%	10.8%	1.3%	DGPS
KE564	398198.410	8407751.293	23.750	-	-90	5.5	4.5	0.5	0.0%	19.8%	1.1%	DGPS
KE565	398150.574	8407750.043	23.690	-	-90	5	1	1	3.5%	16.2%	1.3%	DGPS
KE566	398100.839	8407749.329	23.489	-	-90	3	1	1	2.8%	15.4%	1.2%	DGPS
KE567	398049.424	8407750.768	23.743	-	-90	3	0	1.5	0.1%	3.4%	1.0%	DGPS
KE568	397997.655	8407750.291	23.811	-	-90	3	0	2.5	1.0%	9.7%	1.1%	DGPS
KE569	397951	8407748	31	-	-90	3	0	2.5	0.0%	8.4%	1.3%	GPS
KE570	397898.286	8407751.700	24.152	-	-90	3	0	2.5	0.1%	7.4%	1.3%	DGPS
KE571	397849.782	8407751.295	24.267	-	-90	6	0.5	3.5	0.3%	8.1%	1.3%	DGPS
KE572	397799.625	8407751.858	24.375	-	-90	4	1.5	1	0.0%	2.6%	1.0%	DGPS
KE574	398298.788	8407755.175	24.111	-	-90	4	2.5	0.5	0.0%	4.0%	3.5%	DGPS
KE578	398099.054	8408196.945	23.713	-	-90	3	0	0.5	0.1%	3.7%	1.0%	DGPS
KE579	398149.245	8408199.151	23.920	-	-90	3	0	1.5	0.9%	8.3%	1.4%	DGPS
KE580	398198.893	8408195.531	23.946	-	-90	3	0	1.5	4.9%	6.5%	1.4%	DGPS
KE581	398196.407	8408534.968	24.612	-	-90	3	0	1.5	0.6%	2.6%	1.6%	DGPS
KE582	398150.957	8408548.406	24.328	-	-90	3	0	0.5	0.1%	8.1%	2.3%	DGPS
KE583	397802.367	8408598.561	23.387	-	-90	3	0	0.5	3.6%	19.6%	1.1%	DGPS
KE584	397847.517	8408601.078	23.805	-	-90	3	0	1	0.4%	9.8%	1.9%	DGPS
KE585	397898.473	8408600.543	23.932	-	-90	3	0	1.5	0.1%	8.2%	1.5%	DGPS
KE586	397949.793	8408600.868	23.931	-	-90	3	0	2	0.7%	15.6%	1.3%	DGPS
KE588	397797.057	8408199.373	23.361	-	-90	3	0	1.5	2.0%	17.5%	1.2%	DGPS
KE589	397849.552	8408201.238	23.413	-	-90	3	0	2	3.1%	15.1%	1.5%	DGPS
KE590	397899.852	8408202.269	23.649	-	-90	3	0	2	0.3%	10.6%	1.8%	DGPS
KE591	397951.527	8408202.625	23.995	-	-90	3	0	2.5	0.8%	9.6%	1.6%	DGPS
KE592	397999.849	8408204.608	23.741	-	-90	3	0	1.5	3.0%	9.1%	1.0%	DGPS
KE593	398050.231	8408599.628	23.889	-	-90	3	0	0.5	1.7%	12.6%	1.6%	DGPS
KE594	398098.231	8408599.245	24.003	-	-90	3	0	2	2.0%	8.2%	1.4%	DGPS
KE595	398351.190	8408599.747	24.817	-	-90	3	0	1.5	2.4%	12.6%	1.5%	DGPS
KE596	398400.239	8408600.122	24.952	-	-90	3	0	1	0.0%	8.0%	1.4%	DGPS
KE597	398450.446	8408600.051	25.090	-	-90	3	0	1.5	3.6%	10.2%	1.8%	DGPS
KE598	398499.168	8408600.166	25.264	-	-90	3	0	2	1.9%	9.6%	1.6%	DGPS
KE599	398548.906	8408599.457	25.396	-	-90	2.5	0	0.5	0.1%	5.0%	1.1%	DGPS
KE600	398600.994	8408599.937	25.583	-	-90	3	0	0.5	0.9%	12.8%	1.5%	DGPS
KE601	398649.944	8408600.029	25.951	-	-90	3	0	2	0.6%	5.1%	1.4%	DGPS
KE602	398699.830	8408599.620	26.043	-	-90	3	0	1.5	0.6%	4.6%	2.0%	DGPS
KE603	398736.320	8408501.530	26.851	-	-90	3	0	2	3.2%	10.5%	2.6%	DGPS
KE605	398850	8408495	30	-	-90	3	0	2.5	1.5%	6.8%	2.3%	GPS
KE606	398901.392	8408598.463	27.254	-	-90	3	0	0.5	1.4%	10.6%	2.4%	DGPS
KE607	398949.293	8408599.535	27.685	-	-90	2	0	0.5	0.4%	4.0%	3.6%	DGPS
KE608	398999	8408503	25	-	-90	2.5	0	0.5	0.9%	5.0%	1.5%	GPS
KE612	398747.917	8408198.454	26.412	-	-90	1.5	0	1	10.7%	17.2%	1.2%	DGPS
KE613	398701.229	8408198.017	26.084	-	-90	3	0	2	2.4%	5.6%	2.3%	DGPS

# ASX Announcement - Significant Extension to Keysbrook mineralisation



Appendix 1 – Results Table

Section A - Holes Located East of Hopeland Road												
HOLE	Easting	Northing	RL(m)	Azimuth	Dip	Total Depth	Depth From (m)	Thickness (m)	Ovenize %	Slimes %	Total Heavy Mineral %	Survey Method
KE814	398550.111	8408198.442	25.751	-	-90	3	0	2.5	2.9%	9.3%	1.8%	DGPS
KE815	398599.507	8408198.814	25.591	-	-90	3	0	2	4.7%	10.9%	2.5%	DGPS
KE816	398547.350	8408198.901	25.356	-	-90	3	0	2.5	2.2%	12.4%	2.0%	DGPS
KE817	398498.574	8408198.544	24.989	-	-90	3	0	3	3.5%	14.7%	1.9%	DGPS
KE818	398449.126	8408198.197	24.708	-	-90	3	0	2.5	1.2%	13.1%	1.8%	DGPS
KE819	398397.011	8408198.041	24.553	-	-90	3	0	2.5	3.9%	7.9%	1.3%	DGPS
KE820	398345.983	8408197.875	24.484	-	-90	3	0	1	0.1%	10.9%	1.7%	DGPS
KE821	398299.820	8408199.880	24.350	-	-90	3	0	0.5	0.1%	10.3%	1.3%	DGPS
KE822	398240.048	8408333.988	24.582	-	-90	3	0	1	0.0%	12.1%	1.9%	DGPS
KE823	398249.750	8408199.054	24.049	-	-90	3	0	2.5	1.8%	9.4%	1.3%	DGPS
KE825	398301.235	8408804.974	25.070	-	-90	3	0	2	0.7%	8.2%	2.1%	DGPS
KE831	398411	8407815	27	-	-90	8	4.5	0.5	0.0%	15.8%	2.0%	GPS
KE832	398384.841	8407814.388	25.372	-	-90	8	4	0.5	0.0%	18.4%	1.1%	DGPS

NOTE: Intercepts are based on a cut-off of 0.5m thickness at 1%Tm, 20% clay fines and 15% +2mm ovenize. These cut-off figures represent the economic cut-off for the current Keysbrook reserve and display a degree of geological continuity.

Section B - Holes Located West of Hopeland Road

HOLE	Easting	Northing	RL(m)	Azimuth	Dip	Total Depth	Depth From (m)	Thickness (m)	Ovenize %	Slimes %	Total Heavy Mineral %	Survey Method
KE857	398448.041	8408985.720	21.275	-	-90	9	1	2	0.0%	5.3%	1.5%	DGPS
KE867	398968.816	8408977.594	21.202	-	-90	9	8	2	0.1%	16.2%	1.5%	DGPS
KE869	397071.198	8408977.821	21.887	-	-90	15	2	3	0.1%	11.9%	1.5%	DGPS
KE870	397119.488	8408978.415	22.251	-	-90	12	1	7	0.1%	13.2%	1.0%	DGPS
KE871	397170.119	8408981.157	22.787	-	-90	12	1	2	0.0%	2.8%	1.7%	DGPS
KE872	397221.057	8408983.713	22.908	-	-90	12	1	4	0.0%	3.9%	1.2%	DGPS
KE874	397312.297	8408983.940	24.041	-	-90	15	2	2	0.0%	4.5%	1.4%	DGPS
KE875	397367.568	8408984.742	24.885	-	-90	15	2	4	0.0%	3.4%	1.8%	DGPS
KE878	397420	8408983	25	-	-90	21	2	3	0.0%	7.7%	2.0%	GPS
KE889	398905	8405800	18	-	-90	15	3	8	1.9%	18.5%	1.3%	GPS
KE890	398853	8405800	20	-	-90	15	7	5	0.6%	14.3%	1.1%	GPS
KE891	398800	8405800	19	-	-90	12	3	5	1.7%	9.0%	1.4%	GPS
KE892	398752	8405800	19	-	-90	12	4	7	0.4%	11.2%	1.1%	GPS
KE893	398899	8405800	17	-	-90	12	0	4	0.0%	7.2%	1.1%	GPS
KE895	398801	8405800	15	-	-90	12	2	8	0.9%	11.9%	1.2%	GPS
KE898	398548	8405800	14	-	-90	12	0	8	1.4%	12.9%	1.1%	GPS
KE700	398349	8405800	20	-	-90	12	10	1	0.1%	15.8%	4.1%	GPS
KE702	398250	8405800	20	-	-90	12	0	11	0.8%	10.3%	1.5%	GPS
KE703	398200	8405800	23	-	-90	14	1	8	1.2%	8.8%	1.5%	GPS
KE703	398200	8405800	23	-	-90	14	10	2	1.2%	12.8%	1.3%	GPS
KE708	397309	8408200	21	-	-90	9	3	2	0.0%	3.1%	1.3%	GPS
KE712	397399	8408590	19	-	-90	12	2	2	0.0%	4.4%	1.8%	GPS
KE713	397354	8408800	19	-	-90	12	2	2	0.0%	9.1%	1.3%	GPS
KE714	397300	8408590	18	-	-90	9	2	2	0.3%	5.4%	1.8%	GPS
KE715	397245	8408800	19	-	-90	9	2	4	1.7%	5.9%	1.2%	GPS

Appendix 1 – Results Table

Section B - Holes Located West of Hopeland Road												
HOLE	Easting	Northing	RL(m)	Azimuth	Dip	Total Depth	Depth From (m)	Thickness (m)	Ovenize %	Slimes %	Total Heavy Mineral %	Survey Method
KE716	397198	8406600	20	-	-90	15	1	3	0.0%	2.8%	1.7%	GPS
KE717	397153	8406590	24	-	-90	9	1	6	0.1%	2.5%	1.3%	GPS
KE718	397102	8406600	25	-	-90	9	2	4	0.1%	5.4%	1.3%	GPS
KE719	397053	8406600	25	-	-90	15	2	3	0.0%	7.2%	1.4%	GPS
KE721	396017	8406600	23	-	-90	21	2	7	0.1%	6.1%	1.6%	GPS
KE722	396055	8405800	16	-	-90	9	6	2	1.0%	15.7%	1.4%	GPS
KE723	396101	8405810	16	-	-90	9	6	2	0.4%	14.6%	1.4%	GPS
KE724	396011	8405400	24	-	-90	21	6	2	6.0%	11.8%	1.6%	GPS
KE725	396051	8405400	23	-	-90	6	2	1	1.1%	13.7%	2.3%	GPS
KE725	396051	8405400	23	-	-90	6	4	2	2.2%	15.5%	3.8%	GPS
KE727	396153	8405400	23	-	-90	12	7	3	2.6%	12.8%	1.6%	GPS
KE729	396252	8405400	21	-	-90	15	5	4	2.3%	14.2%	2.0%	GPS
KE731	396348	8405400	25	-	-90	9	2	1	2.1%	16.2%	4.3%	GPS
KE735	396650	8405400	25	-	-90	12	6	2	0.2%	13.4%	2.7%	GPS
KE735	396650	8405400	25	-	-90	12	11	1	1.3%	10.2%	2.1%	GPS
KE737	396801	8405500	26	-	-90	12	7	4	0.3%	13.4%	2.0%	GPS
KE739	396997	8405500	24	-	-90	12	6	2	3.3%	13.0%	3.0%	GPS
KE747	397147	8406200	16	-	-90	9	4	2	0.0%	14.0%	1.2%	GPS
KE678	397511	8406980	25	-	-90	9	2	5	0.0%	15.5%	2.3%	GPS
KE677	397471	8406980	24	-	-90	8	3	3	0.1%	15.7%	2.7%	GPS
KE753	396296	8406200	15	-	-90	12	0	2	0.3%	5.8%	1.2%	GPS
KE754	396012	8406190	16	-	-90	15	1	3	0.0%	2.1%	1.7%	GPS
KE754	396012	8406190	16	-	-90	15	8	1	2.2%	11.9%	2.2%	GPS
KE755	396101	8406200	16	-	-90	15	6	3	0.3%	13.9%	1.5%	GPS
KE761	396300	8406000	15	-	-90	15	1	10	0.2%	6.1%	2.5%	GPS
KE766	396418	8406590	19	-	-90	15	3	0	0.0%	11.6%	3.1%	GPS
KE769	397403	8407200	21	-	-90	9	2	4	0.0%	7.1%	1.5%	GPS
KE770	397000	8407200	19	-	-90	9	0	3	0.1%	5.9%	1.1%	GPS
KE771	396797	8407200	19	-	-90	9	0	6	0.0%	6.1%	1.4%	GPS
KE772	396994	8407610	21	-	-90	12	2	4	0.0%	4.5%	1.5%	GPS
KE774	397251	8407450	21	-	-90	12	1	4	0.0%	3.3%	1.8%	GPS
KE775	396602	8407200	19	-	-90	12	1	3	0.0%	5.5%	1.4%	GPS
KE777	395605	8406400	16	-	-90	9	0	9	0.2%	9.9%	1.7%	GPS
KE778	395982	8406400	18	-	-90	9	2	7	0.1%	6.8%	1.2%	GPS
KE779	395813	8405970	6	-	-90	12	6	2	2.4%	5.8%	2.1%	GPS
KE780	395995	8405600	18	-	-90	6	0	1	0.0%	4.1%	2.2%	GPS
KE780	395995	8405600	18	-	-90	6	3	2	3.7%	15.5%	1.4%	GPS
KE781	395604	8405600	18	-	-90	8	0	2	5.7%	9.8%	2.8%	GPS
KE782	395402	8405420	24	-	-90	12	3	8	0.7%	16.0%	2.3%	GPS
KE783	395198	8405600	23	-	-90	12	0	12	1.1%	10.5%	1.3%	GPS
KE784	395000	8405400	18	-	-90	15	0	3	0.2%	4.5%	2.5%	GPS
KE785	394800	8405600	18	-	-90	9	0	7	2.1%	14.5%	1.6%	GPS
KE786	394500	8405800	19	-	-90	9	1	5	0.9%	11.0%	1.9%	GPS
KE788	395000	8406200	19	-	-90	9	1	8	1.2%	12.0%	1.3%	GPS
KE789	395200	8406400	18	-	-90	9	0	2	0.1%	13.4%	2.7%	GPS



# ASX Announcement - Significant Extension to Keybrook mineralisation



Appendix 1 – Results Table

Section B – Holes Located West of Hopland Road												
KE789	395200	8408400	18	-	-90	9	5	2	0.8%	9.8%	1.5%	GPS
KE790	395800	8408000	18	-	-90	9	0	1	0.4%	18.1%	2.7%	GPS
KE791	395800	8408000	18	-	-90	9	4	3	0.4%	11.9%	1.5%	GPS
KE792	394582	8408800	17	-	-90	9	4	2	0.0%	14.3%	1.9%	GPS
KE793	394988	8408400	22	-	-90	9	1	8	0.7%	10.7%	1.3%	GPS
KE794	394411	8408400	24	-	-90	12	7	5	1.8%	10.7%	2.1%	GPS
KE795	394389	8408800	25	-	-90	9	8	3	0.5%	11.5%	1.7%	GPS
KE800	395426	8407820	19	-	-90	9	0	2	0.7%	11.8%	1.9%	GPS
KE801	395424	8407800	19	-	-90	15	2	1	0.0%	18.9%	4.2%	GPS
KE801	395424	8407800	19	-	-90	15	8	4	0.4%	12.0%	1.4%	GPS
KE803	394802	8408000	18	-	-90	9	8	3	0.5%	11.7%	2.8%	GPS
KE804	394800	8407800	18	-	-90	9	2	4	0.2%	8.8%	1.9%	GPS
KE805	394988	8408280	17	-	-90	9	3	4	0.0%	5.0%	1.4%	GPS
KE806	394988	8408400	18	-	-90	9	2	2	0.0%	3.8%	1.8%	GPS
KE806	394988	8408400	18	-	-90	9	7	2	0.4%	10.1%	2.9%	GPS
KE808	398803	8408000	19	-	-90	9	3	2	0.0%	12.5%	1.8%	GPS
KE809	398802	8408400	19	-	-90	9	0	5	0.3%	9.2%	2.1%	GPS

NOTE: Intercepts are based on a minimum intercept grade of 2%Ni (i.e. THM grade multiplied by thickness >2). Grade cut-offs have of 1%THM, 20% clay fines and 15% >2mm oversize have also been applied.

JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement methods appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Samples analysed individually</li> <li>Samples collected in sample bucket, thoroughly homogenised by hand and placed into 2kg calico bags. Initial inert to pass through rotary splitter, however damp nature of some samples and splitter design resulted in extensive contamination issues, so splitter was removed.</li> <li>Analysis undertaken by Diamantina Laboratories. Samples were dried, rotary split to 100g then deslimed (no TSP). Material was sieved at -45um and +2mm and placed into TBE with an SG of 2.65g/cc for heavy media separation. Cleaned with acetone, then dried, weighed and calculations compiled.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>No sized (37") Aircore rods were utilised for all drilling completed. Drilling completed using Arntmooka Drilling utilising a Hydro RABSO truck-mounted drilling rig.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling completed with water injection as required to obtain sample return.</li> <li>Sample quality recorded during drilling.</li> <li>All observations logged into spreadsheet based system at the drill site.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Samples retained over 1 m intervals. Logging of rock types, quality, hardness, washability and grain size undertaken in field. Fanned estimate of clay fines, oversize and heavy mineral also completed. No photography taken. All intervals logged.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Samples collected in sample bucket, thoroughly homogenised by hand and placed into 2kg calico bags. Initial inert to pass through rotary splitter, however damp nature of drilling and design resulted in extensive contamination issues, so splitter was removed.</li> <li>Duplicate samples taken at a rate of 1 in 25. Samples taken as a second 2kg grab from homogenised bucket of sample.</li> <li>Refer to sample preparation and analysis technique above.</li> <li>No analysis of duplicate sampling undertaken at this stage.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and factors applied and their derivation, etc.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Heavy media separation - appropriate method.</li> <li>Twin holes drilled at the 20m intervals.</li> <li>Standards inserted at a rate of 1 in 25 samples.</li> <li>Blanks inserted at rate of 1 in 50 samples.</li> <li>Duplicate samples taken at a rate of 1 in 25 samples.</li> </ul>
Verification of	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company.</li> </ul>	<ul style="list-style-type: none"> <li>Twin holes drilled at 1 in 20 ratio.</li> </ul>

Appendix 2 – JORC Table 1

Criteria	JORC Code explanation	Commentary
Sampling and assaying	<ul style="list-style-type: none"> <li>personnel.</li> <li>The use of tanned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Data stored in Micromine logging files and backed up via email nightly.</li> <li>Compilation of analysis with geological data ongoing with any problems rectified prior to reporting.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>"DGRIP" in Appendix A – located via RTK DGRPS.</li> <li>"GPS" in Appendix A – located via handheld GPS in MGA54.</li> <li>Topographic coverage – east of 396800E accurate LIDAR data was captured with 0.5m vertical contour intervals.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drill spacing at either 400m spaced lines with 200m spaced drill centres, or 200m spaced lines with 50m spaced drill centres.</li> <li>Individual 1 m samples collected. Composite calculations used only for significant intersections outlined in the report.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>The orientation of the upper Bassenden sand dunes varies from north-south in the east of the licence adjacent to the Keybrook deposit to east-west in the west of the licence. The underlying base zone appears from current data coverage to have no preferred orientation.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples retained on locked property whilst awaiting dispatch for analysis. Samples stored in analytical laboratory sample preparation shed.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No reviews or audits undertaken to date.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Material tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material interests with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration Licence numbers E702402 &amp; E704533 are relevant to this report, as are Prospecting Licences P701952 and P701963. These tenements are held 100% by Keybrook Leucocrite Pty. Ltd, a wholly owned subsidiary of MZi Resources Ltd.</li> <li>The current understanding that all licences are located on pre-1959 fee simple, freehold land.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration has been undertaken during the period 2006-2008 by Iuka Resources as part of tenement E702455. This exploration work is the basis for a large proportion of the exploration data presented in this release. This data is acknowledged but not utilised as part of this release.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The tenement area is interpreted as being analogous to the Keybrook deposit, with regards to geology, setting and mineralisation.</li> <li>Geologically the deposit comprises Bassenden Sand Formation sediments. This is composed of localised sand dunes, overlying a basal zone of sand. These mineralised units overlie the clay-rich Gulford Formation.</li> <li>Mineralisation is dispersed throughout the sand units, having been reworked by wind</li> </ul>

Appendix 2 – JORC Table 1

Criteria	JORC Code explanation	Commentary
Drill hole information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>o easting and northing of the drill hole collar</li> <li>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>o dip and azimuth of the hole</li> <li>o down hole length and interception depth</li> <li>o hole length</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>refer Appendix A.</li> <li>and water action from more frequently mined strand-line-styler mineral sands deposits.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually used.</li> <li>Material and should be stated and explained in detail.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Length weighted averages were created using a minimum analysis grade of 1%THM. Internal waste of up to 2 m was incorporated into the length weighted average only if the average of the interval remained greater than 1%THM.</li> <li>Intervals included are only those considered to be analogous to the Keybrook deposit. Deeper mineralised structures are noted in the assay sheets but are not included in this assessment.</li> <li>Analyses with &gt;20% clay fines or &gt;15% &gt;2mm oversize are excluded.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Flat-lying mineralisation intersected by vertical drillholes.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Refer Figure 1.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Discussed within report.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical surveys results; geochemical survey results; bulk sample – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>Assesment data disclosed in the report has been generated from samples outlined in the ASX release dated 20 January 2015. The process of generating these results is as follows: <ul style="list-style-type: none"> <li>Compositing of TBE sink material to form single sample</li> <li>Processing of composite via QAPRC magnet to split sample into magnetic components (Mag 1+4 &amp; Non-Mag)</li> <li>XRF analysis of each component to ascertain concentration of relevant elements</li> <li>Post processing of XRF results via proprietary Excel-based algorithm to determine proportion of products</li> </ul> </li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretation and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Land access agreement discussions.</li> <li>Aircore drilling in order to define the mineralisation laterally and at depth across the lease area.</li> <li>Resource estimation</li> </ul>

## Keysbrook Project - Mineral Resources (above a 1% THM cut-off grade and below a 20% slimes grade)

Classification	Mineral Resource as at 28 February 2013		
	Million Tonnes	THM grade %	Slimes %
Measured	34.1	2.6	8.7
Indicated	33.2	2.2	7.6
Inferred	11.6	2.6	10.5
Total	78.9	2.5	8.5

## Kilimiraka Project – Mineral Resources (above a 1% THM cut-off grade)

Category	Tonnes (Mt)	Heavy Mineral Grade (%)	Heavy Mineral (kt)
Inferred	56.2	1.6%	894
Total	56.2	1.6%	894

### Competent Persons Statement

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 and Metallurgy and Mr John Baxter (in relation to the Kilimiraka Project) who is a Member of the Australasian Institute of Geoscientists. Mrs Standing is an employee of Optiro Pty Ltd and Mr Baxter is a Consulting Geologist, both have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking 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. Mrs Standing and Mr Baxter consent to the inclusion in the report of a summary based upon their information in the form and context in which it appears.



## Keysbrook Project – Ore Reserve statement as at 17 October 2012

Classification	Ore Million tonnes	In-situ THM tonnes	THM Assemblage					
			THM grade %	Magnetite %	L70 %	L88 %	Zircon %	Other %
Proved	23.0	610,000	2.7	0.26	27.8	46.6	14.6	10.8
Probable	2.8	68,000	2.5	0.26	27.4	46.5	15.0	10.8
<b>Total</b>	<b>26.0</b>	<b>670,000</b>	<b>2.6</b>	<b>0.26</b>	<b>27.8</b>	<b>46.6</b>	<b>14.6</b>	<b>10.8</b>

**Note:** L70 and L88 in the THM assemblage equate to the two Leucoxene products containing 70% TiO<sub>2</sub> and 88% TiO<sub>2</sub>.

### 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 Reserve estimation.*
- The Ore Reserves are based upon a Leucoxene 70 price of US\$352 per tonne, a Leucoxene 88 price of US\$1,166 per tonne and a Zircon price of US\$1,777 per tonne.*
- 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 two significant figures. 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 – 2004 Edition).*

The information in this report which relates to Ore Reserves have been compiled by Mr Andrew Law of Optiro Pty Ltd, 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 2004 Edition of the Australasian Code for Reporting of Mineral Resources and Ore Reserve. Mr Law consents to the inclusion in the report of the matters compiled by him in the form and context in which it appears.

# Project Delivery Structure

