



**Middle Island**  
RESOURCES LIMITED

Middle Island Resources Limited  
ACN 142 361 608

Suite 1, 2 Richardson Street  
West Perth WA 6005  
PO Box 1017  
West Perth WA 6872  
Tel +61 (08) 9322 1430  
Fax +61 (08) 9322 1474  
info@middleisland.com.au  
www.middleisland.com.au

**Middle Island Resources Ltd**  
ACN 142 361 608  
**ASX code: MDI**  
**www.middleisland.com.au**

**Capital Structure:**

698 million ordinary shares  
38,300,000 unlisted options

**Cash**

\$2m\* (as at 31 December 2017)  
\*After \$0.5m deferred Sandstone acquisition  
payment made in advance.

**Directors & Management:**

**Peter Thomas**  
Non-Executive Chairman  
**Rick Yeates**  
Managing Director  
**Beau Nicholls**  
Non-Executive Director  
**Dennis Wilkins**  
Company Secretary

**Contact:**

Rick Yeates  
Mob: +61(0)401 694 313  
[rick@middleisland.com.au](mailto:rick@middleisland.com.au)

## ASX Release – 18 January 2018

### Positive pit optimisation outcome on Wirraminna deposit at Sandstone gold project, WA

- Wirraminna Mineral Resource estimate of 550,000t at 1.3g/t Au at a 0.5g/t Au lower cut-off grade (refer ASX release 8 December 2017) was optimised at a gold price of A\$1,600/oz.
- The optimal pit shell included **72,000 t at a grade of 1.97 g/t gold** at a strip ratio of 9:1.
- Considerable opportunity remains to further extend and enhance the Wirraminna deposit via follow-up drilling, including extension drilling and confirming the location of historic higher grade holes.
- The Wirraminna deposit lies only 1km west of the Company's 100%-owned, 600,000tpa Sandstone gold processing plant.

**SANDSTONE GOLD PROJECT (WA)**

**Pit Optimisation Results - Wirraminna Deposit**

Middle Island Resources Limited (Middle Island, MDI or the Company) is pleased to advise that it has received positive results from pit optimisation of the Wirraminna deposit Mineral Resources. The Wirraminna deposit is located immediately adjacent to the Company's 100%-owned Sandstone gold project in WA and within 1km of the gold processing plant.

**Mineral Resources**

Middle Island declared a JORC 2012 compliant Mineral Resource estimate of 550,000t at 1.3g/t Au for 23,000oz gold at a 0.5g/t Au lower cut-off grade for Wirraminna in December 2017, refer to Table 1 below and the ASX release of 8 December 2017 for details.

Table 1 Wirraminna Deposit December 2017 Mineral Resource Estimate (0.5 g/t Au cut-off)									
Type	Indicated			Inferred			Total		
	Tonnage kt	Au g/t	Au Ounces	Tonnage kt	Au g/t	Au Ounces	Tonnage kt	Au g/t	Au Ounces
Oxide	304	1.5	14,500	165	1.1	5,800	468	1.4	20,400
Transitional	3	1.2	100	52	1.1	1,800	55	1.1	1,900
Fresh				26	0.9	700	26	0.9	700
<b>Total</b>	<b>307</b>	<b>1.5</b>	<b>14,600</b>	<b>243</b>	<b>1.1</b>	<b>8,400</b>	<b>550</b>	<b>1.3</b>	<b>23,000</b>

**Pit Optimisation Parameters**

Open pit optimisations using Whittle software were completed by Mining Focus Consultants Pty Ltd. The December 2017 Mineral Resource model (total resources) was optimised at a base case gold price of A\$1,600/oz, utilising other input parameters derived from the December 2016 Sandstone project Pre-Feasibility Study. A summary of the key input parameters are included in Table 2 below.

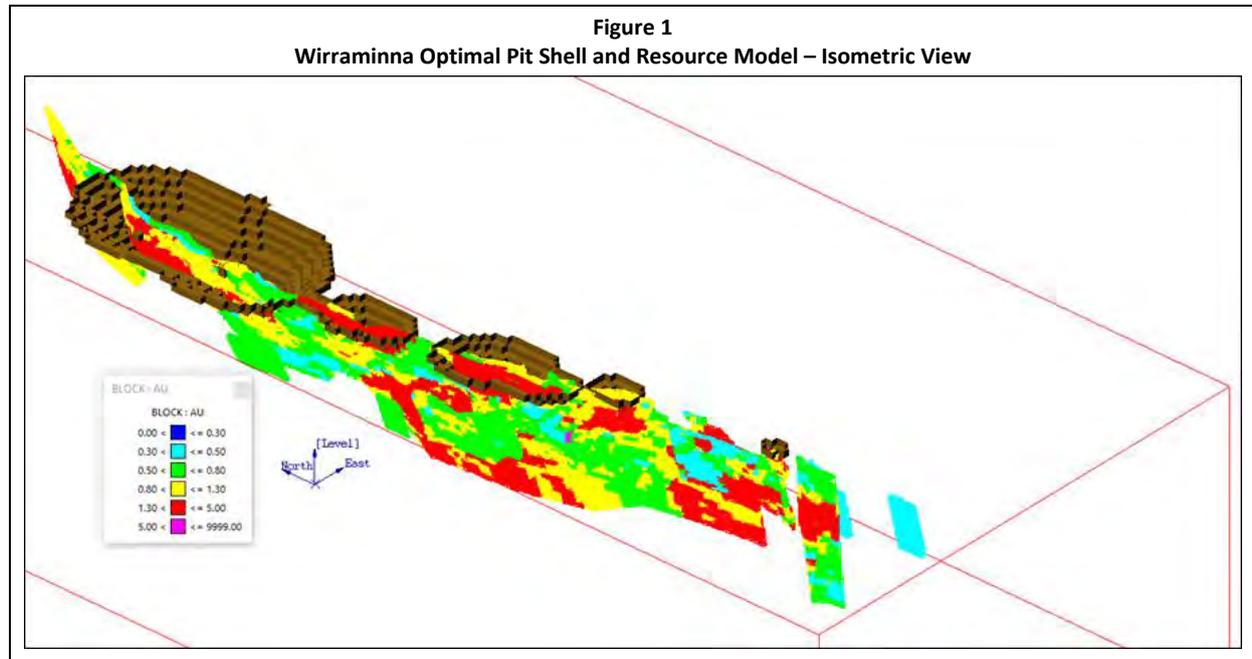
Table 2 Wirraminna Deposit Pit Optimisation Parameters		
Item	Unit	Value
Gold price	AUD/oz	1,600
Royalty (WA government only)	%	2.5
Mining recovery	%	95
Dilution allowance	%	10 (@ zero grade)
Overall pit slope angles (oxides)	degrees	35
Mill recovery	%	92.2
Average mining cost (optimal pit shell)	\$/t mined	3.41
Grade control	\$/t milled	0.50
Processing cost	\$/t milled	25.80
General and administration cost	\$/t milled	11.93
Off-site overhead and sustaining capital	\$/t milled	0.82

Refer to the ASX release of 8 December 2017 and the attached Appendix 1 (JORC Table 1) for further details of the assumptions used for the Mineral Resources estimate.

### **Pit Optimisation Results**

At a gold price of A\$1,600/oz the optimal pit shell, based on the maximum undiscounted operating cash flow, includes **72,000 t at a grade of 1.97 g/t gold** for a strip ratio of 9:1. This equates to a mill recovered 4,200 oz of gold. This pit shell depth is to a maximum of 45 m from surface and hence is wholly contained within the oxide zone.

An isometric view of the optimal pit shell and the Mineral Resource model is shown in Figure 1 below.



Increasing the overall pit slope to 45 degrees resulted in an approximate 30% increase in contained resource in terms of tonnes and 60% increase in net operating cash flow.

### **Next Steps**

Considerable opportunity remains to further extend and enhance the Wirraminna deposit via follow-up drilling, including infill and extension drilling of Inferred Mineral Resources, and confirming the location of historic higher grade holes.

As such, Middle Island is planning further RC drilling and will obtain additional data, prior to updating pit optimisations, considering pit design work and Ore Reserve estimation.

### **Middle Island Managing Director, Mr Rick Yeates:**

The positive drilling results, Mineral Resource estimation and pit optimisation work on the Wirraminna deposit serves to further extend the production profile for the proposed Sandstone gold operation. However, the quantum and grade of the deposit is presently insufficient to trigger a mill recommissioning decision in isolation.

Drilling indicates that substantial potential remains to extend the deposit, and the location of higher grade historic drill intercepts of 11m at 23.8g/t, 16m at 14.6g/t and 19m at 4.85g/t Au remain unresolved. As such, a programme of infill and extension RC drilling is planned to address these opportunities.

Middle Island looks forward to keeping shareholders updated on progress at Wirraminna during 2018.

COMPANY CONTACTS:

Rick Yeates – Managing Director +61 (0)401 694 313

MEDIA CONTACT:

Kevin Skinner Field Public Relations +61 (0)8 8234 9555 / +61 (0)414 822 631

WEBSITE: [www.middleisland.com.au](http://www.middleisland.com.au)

**Forward Looking Statements**

Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of Middle Island, industry growth or other trend projections are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors.

**Competent Persons' Statement**

Information in this report relates to exploration and pit optimisation results based on information compiled by Mr Rick Yeates and Mr Harry Warries respectively. Messrs Yeates and Warries are each Members of the Australasian Institute of Mining and Metallurgy. Mr Yeates is a fulltime employee of the Company while Mr Warries is an independent consultant to Middle Island Resources Limited. Each has sufficient experience which is relevant to the nature of work and style of mineralisation under consideration to qualify as Competent Persons as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Messrs Yeates and Warries consent to the inclusion in the release of the statements, based on their information, in the form and context in which they appear.