



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

ACN 142 361 608

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

Capital Structure:

586 million ordinary shares 38,300,000 unlisted options

Cash

\$1.84m (as at 30 June 2017)

Directors & Management:
Peter Thomas
Non-Executive Chairman
Rick Yeates

Managing Director **Beau Nicholls**

Company Secretary

Non-Executive Director **Dennis Wilkins**

Contact:

Rick Yeates

Mob: +61(0)401 694 313 rick@middleisland.com.au

ASX Release - 6 September 2017

Exceptional gold recoveries from new tests on Two Mile Hill tonalite deeps deposit, Sandstone gold project (WA)

- Positive metallurgical testwork results indicate gold recoveries of 93% to 97% for the Two Mile Hill tonalite deeps mineralisation at the Sandstone gold project.
- >58% of gold is recoverable via gravity concentration prior to leaching.
- Leach testwork exhibits rapid leach kinetics, with 90% of total gold extraction achieved within the first two hours on run-of-mine (ROM) composite samples following gravity gold recovery.
- Bond ball mill work index of 16.4kWh/t confirms ore amenability for treatment through the Sandstone mill.
- Low reagent consumptions and no deleterious elements indicate no issues for future treatment.
- Diamond drilling underway to extend Two Mile Hill tonalite deeps mineralisation from 500m depth to at least 850m depth.



SANDSTONE GOLD PROJECT (WA)

Aspiring gold developer, Middle Island Resources Limited (**Middle Island**, **MDI** or **the Company**), is pleased to announce that it has received exceptional results from a preliminary metallurgical testwork programme undertaken on the Two Mile Hill tonalite deeps mineralisation at the Company's 100%-owned Sandstone gold project in WA.

The testwork was undertaken by Australian Laboratory Services (ALS) in Perth, utilising site process water.

Continuous intervals of quarter NQ2 diamond core from TDD 034 (308-316m, 323-330m) and TDRC 732 (222-229m, 329-334m) were submitted to make a "ROM composite" for gravity gold recovery (GRG), followed by leach testwork at three grind sizes (125, 106 and 75um). A Bond ball mill work index test was also undertaken on diamond core from TDD 034 (269 – 288m).

In addition, continuous intervals of selected pulverised material from recent deep diamond drill hole, MSDD 156 (312-327m, 369-374m), were combined to make a "high grade (HG) composite" for whole-of-ore vs GRG/leach recovery testwork.

The selection process for testwork intervals utilised upper cut-off grades of 5g/t and 10g/t for the ROM composite and HG composite, respectively.

The multi-element assay results demonstrate low sulphide and organic carbon values in all samples, and no significant deleterious elements were detected.

Testwork results are summarised in Table 1 and the leach recovery curves are shown graphically in Figure 1.

The ROM composite sample results display rapid leach kinetics (>90% total extraction in 2 hours at all selected grind sizes), following gravity recoverable gold (GRG) removal. Dissolved oxygen levels ranged between 6.4-8.4ppm in the leach, without oxygen addition.

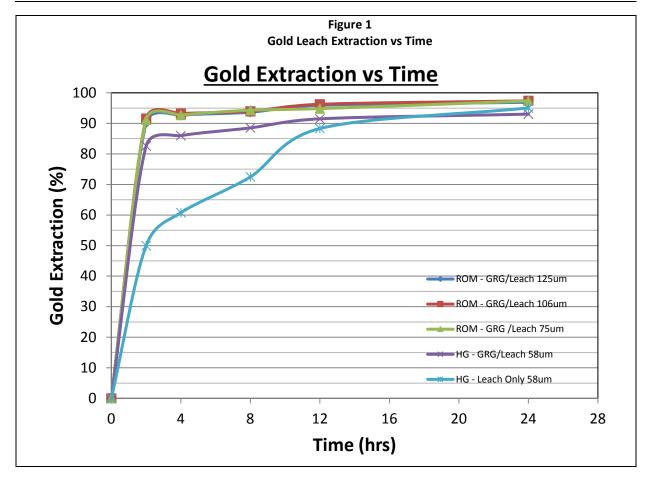
The HG composite sample reached 90% extraction within 12 hours via the GRG/leach process. The control HG sample, without the gravity recoverable gold (GRG) pre-treatment, took considerably longer to leach as anticipated. Dissolved oxygen levels ranged between 6.6–8.3ppm, without oxygen addition.

The Sandstone treatment plant leach/absorption circuit has more than 32 hour's retention time at a 45% pulp density and 60tph mill throughput.

Table 1 Gravity and Leach Recovery Results							
Composite	Cyanide (kg/t)	Lime (kg/t)	Grind Size (p80)	Calculated head grade (g/t Au)	Gravity gold recovery (%)	Residue grade (g/t Au)	Total gold extraction (%)
ROM	0.65	0.30	125um	1.77	68.9%	0.06	96.9%
ROM	0.77	0.32	106um	1.52	69.9%	0.04	97.4%
ROM	0.78	0.26	75um	1.13	60.4%	0.03	97.4%
HG	1.07	0.71	58um	3.23	n/a	0.16	95.0%
HG	0.77	0.32	58um	3.72	58.3%	0.26	93.0%

Testwork parameters:- target pH 9.5; target cyanide 0.05% initial; pulp density 45%; 3" Laboratory Knelson used for GRG tests; 5kg vat leach with air sparging used for leach tests; site process water utilised.





With more than 58% of the gold recoverable via gravity concentration in laboratory testwork, the Sandstone treatment plant gravity circuit will be utilised when treating ore derived from the tonalite deeps deposit.

Anticipated future plant gold recoveries from the tonalite deeps (-120m) are expected to match historic recoveries from the Two Mile Hill oxide material treated late in the 1990s. The bond ball mill work index of 16.4kWh/t indicates that the stockwork quartz-veined tonalite material at depth is unlikely to present an issue for the Sandstone comminution circuit (refer ASX release of 27 July 2017 for further details on the Sandstone mill capability).

As included in the ASX release of 28 August 2017, further drilling is underway at the Two Mile Hill deposit. A previous hole that ended in mineralisation at 498.9m depth, with an intercept of 66.9m at 3.27g/t Au, is being extended within the tonalite to at least 850m, and potentially up to 1,000m depth. In addition, reverse circulation percussion (RC) pre-collared diamond drilling will also assess up-dip extensions of the high grade, BIF-hosted gold mineralisation, which includes a best intercept of 22m at 23.8g/t Au (true width), adjacent to the Two Mile Hill tonalite.



Middle Island Managing Director, Mr Rick Yeates:

"While the Two Mile Hill tonalite deeps mineralisation was anticipated to be metallurgically benign, these results confirm and, indeed, exceed our expectations. This is particularly the case with respect to the high gravity recoverable gold and the rapid leach kinetics demonstrated by the testwork. The modest bond work index of 16.4kWh/t is also an exceptional result, no doubt due to the ameliorating influence of the pervasive sericite-carbonate alteration within the tonalite. Equally, the low indicative reagent (cyanide and lime) consumptions represent a significant bonus.

"While this testwork programme is preliminary in nature, the consistency of the tonalite-hosted mineralisation is such that we would not reasonably anticipate any significant deviation in any future testwork. The results also serve to vindicate the Company's decision to extend diamond hole MSDD156 from 500m to at least 850m depth, and potentially as much as 1,000m depth. The result also provides the confidence to progress further drilling and studies on what is evolving into a substantial, well-mineralised target.

"I look forward to keeping shareholders abreast of progress with the various drilling programmes that are now well underway, including deeper assessment of the Two Mile Hill tonalite."

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: <u>www.middleisland.com.au</u>

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 metallurgical and exploration results based on information compiled by Mr Hugo Viviani and Mr Rick Yeates, respectively. Mr Viviani and Mr Yeates are each Members of the Australasian Institute of Mining and Metallurgy. Mr Viviani is a consultant to Middle Island Resources Limited, while Mr Yeates is a fulltime employee of the Company. 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'. Mr Viviani and Mr Yeates consent to the inclusion in the release of the statements, based on their information, in the form and context in which they appear.