Andromeda Metals Limited
ABN: 75 061 503 375

Corporate details:

ASX Code: ADN

Cash: $0.13 million
(at 31 March 2017)

Issued Capital:
453,104,875 ordinary shares
23,668,938 listed options

Directors:

Colin G Jackson
Non-Executive Chairman

Chris Drown
Managing Director

Nick Harding
Executive Director and
Company Secretary

Jonathan Buckley
Non-Executive Director

Contact details:

69 King William Road,
Unley, South Australia 5061

PO Box 1210
Unley BC SA 5061

Tel: +61 8 8271 0600
Fax: +61 8 8271 0033

admin@andromet.com.au
www.andromet.com.au

Fact:

Australia in 2016 ranked as the World's second largest gold producer at 270 tonnes, after China which produced 455 tonnes. South Africa, which dominated world gold production during most of the 20th century, is now seventh with production of 140 tonnes.

Andromeda METALS

ASX announcement

6 July 2017

Eyre Peninsula Gold
(100% owned), South Australia

Superb metallurgical gold recoveries to 99.3% at Baggy Green using conventional flowsheet

Summary

- Gold recoveries to 99.3% and averaging 98.7% recorded for four metallurgical samples from the Baggy Green deposit, located in the wholly owned Wudinna Gold Camp.
- The samples comprise one supergene and three primary zone samples. A conventional gravity and cyanide leach flowsheet gave consistent gold recoveries across ore types.
- A minimum 40% of the gold reports to a gravity concentrate, while gravity tails leaching is achieved with only modest reagent additions.
- The Baggy Green results are equivalent to the excellent metallurgical results achieved for the nearby Barns deposit, where high gold recoveries averaging 97.9% were achieved using an identical gravity and cyanide leach flowsheet.
- Together Barns and Baggy Green contribute 95% of the Wudinna Gold Camp's total Mineral Resource of 200,300 ounces, and this work confirms that both deposits can be efficiently treated using a conventional flowsheet in a single processing plant.
- The next logical metallurgical test work for Barns and Baggy Green would involve coarsening the grind size to establish the optimum economic grind-recovery combination.

Chris Drown
Managing Director

Direct enquiries to Chris Drown. Ph (08) 8271 0600 or 0427 770 653.

Background

Andromeda Metals' main priority is progressing the wholly owned Wudinna Gold Camp, a cluster of gold prospects including Barns, Baggy Green and White Tank, into production.

The Wudinna Gold Camp falls in the Company's Eyre Peninsula Gold Project which comprises seven tenements totalling 2,385 km^2 in area on the Gawler Craton of South Australia (Figure 1).

Mineral Resources, estimated in accordance with the requirements of the JORC Code 2012, have been completed for the Barns, Baggy Green and White Tank deposits[(1)]. The consolidated Mineral Resource for the Wudinna Gold Camp is 3.849 million tonnes grading 1.62g/t gold for 200,300 ounces of gold, using a 0.5g/t gold cut-off.

The Mineral Resource is classified into Indicated Resources of 380,000 tonnes at 1.40g/t gold (17,000 ounces), and Inferred Resources of 3.469 million tonnes at 1.64g/t gold (183,300 ounces).

Together Barns (107,000 ounces) and Baggy Green (82,400 ounces) comprise 95% of the total Wudinna Gold Camp Mineral Resource, and these two deposits will be critical to the development of the project.

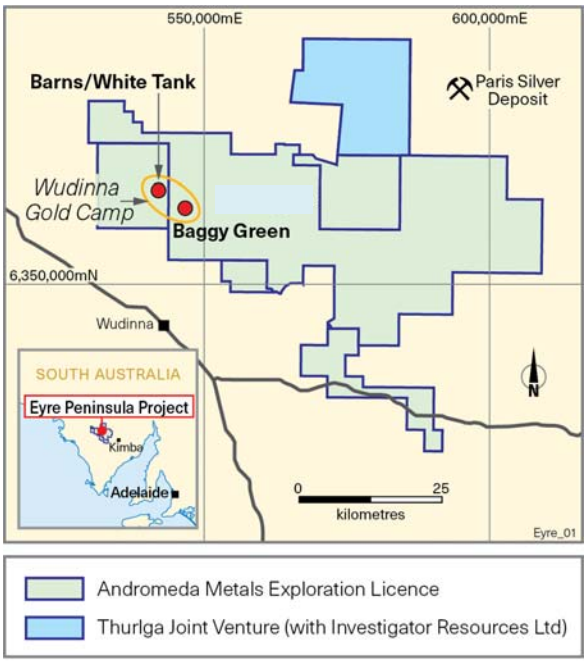

Figure 1: Eyre Peninsula project location plan.

In early 2017 the Company announced the results of metallurgical testwork on mineralisation from the Barns deposit[(2)], testing three potential processing options. A combination of gravity concentration and cyanide leaching of the gravity concentrate and tailings gave compelling results, with overall gold recoveries exceeding 97%.

The Barns gravity and cyanide leach results were achieved with low lime (~0.2kg/t) and modest cyanide (~1.0kg/t) additions for the primary mineralisation, presenting a viable conventional flowsheet option for the treatment of all identified Barns ore types.

Baggy Green metallurgical test work

Composite samples

The Company has now conducted metallurgical testing on gold mineralisation from Baggy Green to determine whether it can be successfully processed using an identical gravity concentration and cyanide leach flowsheet to that indicated for Barns.

Four composite samples were assembled from material retained following a reverse circulation drilling programme completed at Baggy Green in late 2016. The representative composites include:

- One sample of supergene gold hosted in weathered lower saprolite, and
- Three samples of primary gold hosted in fresh gneiss.

The testwork was completed by Bureau Veritas Minerals Pty Ltd metallurgical laboratories in Perth, Western Australia, the same laboratory that tested the Barns samples during the earlier study.

Representative sub-samples of each composite were submitted for gold, silver and copper analysis (Table 1).

Gold head grade assays showed variations implying the presence of coarse free gold, later borne out by the gravity test work.

Gravity and cyanide leach

2kg of each composite was ground in a stainless steel rod mill to a p80 nominally minus 75 microns.

The ground material was passed through a Knelson Concentrator to produce a gravity concentrate and gravity tailings. The gravity

concentrate was then passed over a Mozely Table to reduce the mass to approximately 0.25% of the initial feed.

The Mozely Table concentrate was then subjected to 24 hours of intense cyanidation at 10% pulp density with a solution of 2.5% sodium cyanide. The pregnant solution was analysed for gold, silver and copper.

The leach residue was combined with both the Knelson Concentrator and Mozely Table tailings and subjected to 48 hours leaching at 45% pulp density with initial and minimum sodium cyanide solution strength of 500mg/l and 300mg/L respectively. Oxygen was sparged and lime was added to maintain a pH of 10 during the test.

The pulp was filtered and the liquid and solids submitted for gold, silver, and copper analysis to determine metal recoveries.

Gravity plus leach gold recoveries totaled 94.3% for the supergene sample, and ranged between 97.5% and 99.3%, averaging 98.7%, for the primary zone samples (Table 2).

Analysis of results

Excellent gold recoveries are achieved for Baggy Green mineralisation through gravity and cyanide leach with low lime additions (~0.2kg/t for primary ores) and modest cyanide additions (~1.1kg/t for all ores).

The same conclusions were drawn following the identical earlier test work for Barns, and confirmation that a conventional gravity and cyanide leach flowsheet can efficiently deliver exceptional gold recoveries for both deposits is a positive result.

Next steps

The next logical metallurgical test work to be conducted on the Wudinna Gold Camp deposits would involve coarsening the grind size to establish the optimum economic grind-recovery combination.

The metallurgical results will also form important inputs into future studies investigating project economics.

Table 1 – composite sample analysis

Composite	Fire Assay				Acid Digest + ICP	
	Au1	Au2	Au3	Au Average	Ag	Cu
	g/t				g/t	%
BG Supergene 1	1.98	1.48	1.55	1.67	0.55	0.022
BG Primary 2	4.28	2.76	3.16	3.40	4.30	0.098
BG Primary 3	0.71	0.50	0.22	0.48	0.95	0.052
BG Primary 4	6.94	10.0	1.03	5.99	3.60	0.038

Table 2 – gravity and cyanide leach tests

Composite	Grind 80% passing	Reagent (kg/t)		Gold Assay (g/t)		Gold Extraction (%)		
		Lime	Cyanide	Calc. head	Leach residue	Gravity leach	Tail leach	Total
BG Supergene 1	75µm	2.62	1.11	2.21	0.13	40.0	54.3	**94.3**
BG Primary 2		0.20	0.95	5.36	0.04	75.0	24.2	**99.3**
BG Primary 3		0.15	1.31	2.44	0.04	45.0	54.3	**99.3**
BG Primary 4		0.19	1.02	4.04	0.10	58.6	38.9	**97.5**

References

[1] See ADN's ASX releases dated 19 July 2016 titled "Maiden 107,000 ounce gold resource estimated for Barns deposit" and dated 23 January 2017 titled "Wudinna Gold Camp Mineral Resource jumps to 200,000 ounces of gold" for full JORC information.

[2] See ADN's ASX release dated 16 January 2017 titled "Barns metallurgy results deliver 97% plus gold recovery with conventional flowsheet."

Competent Person Statement and 2012 JORC Compliance Notes – Exploration
The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Chris Drown, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Drown is employed by Drown Geological Services Pty Ltd and consults to the Company on a full time basis. Mr Drown has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being 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'. Mr Drown consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information contained in the report relating to exploration completed prior to 1 Dec 2013 by the Company and other explorers was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. The information contained in the report relating to exploration completed since 1 Dec 2013 has previously been reported in accordance with the JORC Code 2012.

Competent Person Statement - Metallurgy
The information in this report that relates to Metallurgical Processing has been reviewed by Dr Nigel Ricketts, Competent Person, who is a member of the Australasian Institute of Mining and Metallurgy and a Chartered Professional in Metallurgy. Dr Ricketts is employed as Technical Director of Altrius Engineering Services and consults to the Company on a part time basis. Dr Ricketts has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being 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'. Dr Ricketts consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.