Adelaide Resources Limited: Maiden 107,000 Ounce Gold Resource for Barns Deposit

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Adelaide - Adelaide Resources Ltd. (ASX:ADN) are pleased to announce a maiden Mineral Resource estimate for the 100% owned Barns deposit located on the Eyre Peninsula in South Australia.

- The Barns Mineral Resource estimate, reported in accordance with the JORC Code 2012, totals 2.11 million tonnes at 1.6g/t gold for 107,000 ounces at a 0.5g/t cut-off grade.

- The Resource is classified into 380,000 tonnes of Indicated and 1,730,000 tonnes of Inferred Resources.

- Gold mineralisation occurs in flat lying supergene zones overlying moderately dipping, quartz vein associated primary gold lodes.

- The Company now plans to complete metallurgical test work to establish gold recoveries, evaluate development options, and conduct exploration to increase the resource inventory.

- The Barns deposit is open to the south and down dip, and excellent potential to increase the resource exists. Five nearby gold prospects also show strong potential to deliver additional resources.

- Independent consultant Mining Plus Pty Ltd assisted with the estimation of the Barns resource.

Location

The Barns gold deposit is located 23 km north of the town of Wudinna on South Australia's Eyre Peninsula (Figure 1, see link below). The deposit is 100% owned by a subsidiary of Adelaide Resources, with Newcrest Mining Ltd. retaining a 1.5% NSR royalty.

Background

Barns was discovered in 2000 when the final hole of a 50-hole RAB drilling programme completed to test a large calcrete gold geochemical anomaly recorded intersections of 8 metres at 3.0g/t gold and 7 metres at 1.8g/t gold.

Subsequent programmes of reverse circulation, diamond and RAB/aircore drilling outlined a coherent body of gold mineralisation.

In the early 2000's gold traded in a range A$450 to A$600 per ounce and economic assessments at that time indicated Barns was sub-economic. Gold is now trading A$1,700 to A$1,800 per ounce, prompting a re-evaluation of the deposit including the decision to estimate a maiden Mineral Resource that can be reported in accordance with JORC 2012 guidelines.

Deposit Description

Geologically, Barns falls in the Central Gawler Gold Province, a belt of golddominant mineralisation which formed about 1590 million years ago during the regionally extensive Hiltaba/GRV tectonothermal event. Gold mineralisation at Barns is hosted in a granodiorite body assigned to the Tunkillia Suite, a group of 1690Ma granitiods that form important mineralisation host rocks in the Central Gawler Gold Province.

Primary gold mineralisation at Barns occurs in multiple, moderately west dipping lodes. Native gold is associated with narrow quartz-pyrite veins, and in sericite-pyrite alteration selvedge's surrounding the quartz-pyrite veins.

In the weathered zone, gold has been re-mobilised to form two parallel flat lying supergene zones of mineralisation.

A zone of total gold depletion occurs above the supergene zones, with the shallowest mineralisation commencing approximately 26 metres below surface.

Thin surficial quaternary sediments, dominantly Aeolian sand dunes, blanket the deposit.

In early 2016, the Company completed a detailed assessment of the deposit data resulting in the development of a 3-D mineralisation model (Figure 2, see link below).

Mineral Resource Summary

Using a 0.5g/t gold cut-off grade, the maiden Mineral Resource estimate for the Barns deposit is estimated to be 2.11 million tonnes at 1.6g/t gold for 107,000 ounces of gold (Table 1, see link below).

Figure 3 (see link below) presents a tonnage-grade graph showing how these two variables change at different cut-off grades.

Part of the supergene lodes is drilled at a sufficient density to allow classification as Indicated Resources, while the primary lodes and remainder of the supergene is classified in the Inferred category.

The Mineral Resource estimate was jointly completed by independent consultant Mining Plus Pty Ltd and Adelaide Resources. Mining Plus assumes responsibility for the block modelling, geostatistical analysis, grade interpolation and estimation classification. Adelaide Resources assumes responsibility for the sampling techniques, integrity of the drill hole data and interpretation of the 3-D mineralisation model.

The drill hole database for Barns comprises 327 drill holes. Further specific commentary is provided below.

Next Steps at Barns

An important consideration in progressing Barns towards mine development will be determining the metallurgical behaviour and gold recoveries under a number of potential treatment scenarios.

The simple mineralogy of the gold lodes and the commonly observed presence of native gold are positive metallurgical indicators.

Earlier metallurgical test work is limited to the testing of one composited sample from Barns and two from Baggy Green prospect. Each achieved favourable overall gold recoveries. The design of a comprehensive metallurgical test work programme to better assess gold recoveries is currently underway.

The Company will continue to be guided by an iterative economic assessment of the Barns deposit. The estimation and release of the maiden Mineral Resource at Barns will allow the Company to announce the results of such future economic scoping studies.

Opportunities to Grow Resource

The Barns deposit remains open both to the south and down-dip, and excellent potential to delineate further resources in these areas of the deposit remains.

Additionally, some of the mineralisation captured within the Barns 3-D model remains unclassified and excluded from the maiden Mineral Resource as a consequence of wide drill spacing, and infill drilling is likely to allow some or all of this mineralisation to be included in a future revised Mineral Resource estimate.

Barns is one of six gold prospects discovered by the Company in the local area, with the other five targets all located within 6 km of Barns (Figure 4, see link below).

These prospects are not as advanced as Barns in terms of drill hole coverage, however all have recorded significant gold intersections in historical drilling.

At Baggy Green historical drilling has located a gold mineralised structure however the existing drill spacing is too widely spaced to allow estimation of a resource. The Company is planning to complete infill drilling at Baggy Green later in 2016 potentially leading to the estimation of a Mineral Resource.
Further Commentary on Resource

The Mineral Resource database has been uniquely flagged with the mineralisation zone codes and then composited into one metre lengths which have been used to estimate the Mineral Resource. The composited data has been analysed for grade distribution with the effect of extreme grade values assessed for each zone and top-cuts applied if required. Variographic analysis has been undertaken on the top-cut composited data with the results of this analysis using in the grade estimation.

Grade estimation was undertaken in Vulcan V10 modelling software using the Ordinary Kriging method. A block model has been created with a parent block size of 5 m (X) by 25 m (Y) by 5 m (Z) and sub-blocks

down to 1 m (X) by 5 m (Y) by 1 m (Z), with the sub-blocks estimated inside the parent block. The block size is appropriate for the drill-hole spacing.

The block model has been populated with gold grades using three interpolation passes, with each subsequent run using a larger search ellipse and decreasing minimum numbers of samples required to fill a block. Pass 1 uses a minimum of 6 and a maximum of 16 samples into a search ellipse 50 m x 15 m x 10 m in size for all domains. A maximum of two samples per drill-hole has been used as an additional constraint.

The Mineral Resource estimate has been validated using visual and statistical methods, including the checking of the block model grades against the de-clustered input composite grades, use of swath plots on northings, easting and RL's and visual comparison of the block model grades versus the drill-hole grades.

The Mineral Resources has been classified into Indicated and Inferred categories following the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). The classification is based on drill hole intercept spacing, geological confidence, grade continuity and estimation quality. A combination of these factors guides the manual digitising of strings on drill sections to construct envelopes that were utilised to control the Mineral Resource categorisation. This process allows review of the geological control/confidence on the deposit. The results reflect the Competent Persons' view of the deposit.

To view tables and figures, please visit:
http://abnnewswire.net/lnk/E42RU40K

About Adelaide Resources Limited:

Adelaide Resources Ltd. (ASX:ADN) is an Australian Securities Exchange listed company focusing on mineral exploration for gold, copper and lithium deposits. The company has built a highly prospective exploration portfolio of projects covering 7,969 sq kms within 21 exploration licences located in South Australia, Queensland, Western Australia and the Northern Territory. Adelaide Resources was incorporated on 23 December 1993 and subsequently listed on the ASX on 11 September 1996. The company's head office is in Adelaide, South Australia.

Adelaide Resources' vision is to be a sustainable minerals exploration company providing shareholders with risk managed discovery, development and mining opportunities.

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