#### Adelaide Resources Limited ABN: 75 061 503 375

## Corporate Details

ASX Code: ADN (ordinary shares) ADNO (listed options)

Cash at 31 December 2015: \$0.885 million.

Issued Capital at 31 December 2015:

357,922,352 ordinary shares

37,222,104 listed options

1,125,000 performance rights

#### **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**

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# **Quarterly Report**

Period ending 31 December 2015

# **Overview**

### Drummond epithermal gold (100% interest)

 25 hole (1,855 metre) diamond drill programme completed at South West Limey Dam. Broad intervals of gold and silver mineralisation in holes testing large surface pathfinder metal anomaly.

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• Surface rock chips at Bunyip record results to a maximum of 19.65g/t gold. The strike length of outcropping epithermal veins at Bunyip is approximately 2,000 metres.

### Eyre Peninsula gold (100% interest)

- New Exploration Target estimated for the Barns, White Tank and Baggy Green gold prospects.
- First pass economic modelling of Barns commenced.

#### Corporate

- Confidentiality agreements executed with third parties reviewing the Company's copper projects.
- Mergers and acquisitions review commenced.

### Finance

- Underwritten Shareholder Share Purchase Plan and top-up placement completed.
- Queensland Government Collaborative Drilling Initiative grant of \$100,000 received.
- South Australian PACE programme and Federal Government Research and Development claim submissions lodged.
- The Company's cash position stood at \$0.885 million at period end.
- Executive director and senior staff salaries significantly reduced.
- Non-core tenements relinquished and office lease renegotiated to reduce costs.
- Federal Government Exploration Development Tax Incentive scheme claim submitted.





## **Managing Director's review**

Exploration programmes in 2015 comprised two copper-focused drilling programmes at Moonta, and gold-focused drilling programmes at each of Eyre Peninsula and Drummond. This quarter we report on the final results from the maiden Drummond drilling programme and on advances made on the Eyre Peninsula.

Epithermal gold deposits, which form our target at Drummond, can be exceptional prizes in terms of their size and grade. Drilling at South West Limey Dam delivered gold intersections that are encouraging but not spectacular. However, the drill holes delivered sub-surface information that confirms the systems are of the right style, and the geological model employed to be robust.

We believe that the Drummond tenements capture a camp of epithermal mineral systems. In this and the preceding quarter low-cost surface exploration delineated the sizable Bunyip target, and we are confident that similar additional work will deliver further opportunities.

Good drill results reported in the previous quarter from the Barns and Baggy Green gold prospects has led to mineralisation modelling and estimation of a new Exploration Target that we are confident can be achieved. A high level scoping study is underway to establish development potential of the Barns prospect and to identify various parameters where additional work can improve the economic outcome.

An R&D programme of biogeochemical sampling has been completed at the Empire (100% interest) copper-nickel-zinc prospect, which is 8km east of Baggy Green. Assaying of the samples is underway with results anticipated early in 2016.

We continue to pursue a strategy of seeking third party involvement in the copper-focused Moonta and Rover tenements, with several groups currently reviewing the project data. At the same time the Company has commenced reviews of similar businesses to review the many opportunities that currently present.

Shareholders supported the Company through their participation in a Share Purchase Plan in October, and further funds from state government exploration drilling incentive programmes have been received or claims formally lodged. The quality of the Company's exploration assets have not changed, however market conditions for the resources sector remain challenging. Accordingly the Board has implemented a range of measures to conserve cash. Salaries of executive directors and staff have been significantly cut, non-core tenements relinquished, and occupancy and administrative costs reduced.

Preliminary planning of next year's exploration programme has commenced, and I join fellow shareholders in the hope that better market conditions will prevail in 2016.

## Drummond epithermal gold

# South West Limey Dam drill programme completed

During the quarter the Company completed a 25 hole (1,855 metre) diamond drilling programme at the South West Limey Dam prospect, with the programme partly funded through a \$100,000 grant from the Queensland Government, payment of which has now been received.

Results previously announced contain broad intervals of gold and silver mineralisation in holes testing a large surface arsenic anomaly in the south of the prospect.

Gold results of note include 16.8 metres at 0.18g/t, 17.7 metres at 0.17g/t, 19.0 metres at 0.19g/t Au, and 5.2 metres at 0.34g/t gold. Silver results include 96.5 metres at 1.01g/t, and 36.2 metres at 0.91g/t.

A field review completed by consultant Dr Gregg Morrison, an epithermal specialist, interprets the South West Limey Dam prospect to be a classic hotspring geothermal-epithermal system.

Dr Morrison interprets the long intervals of low grade gold and silver in the latest holes as good indicators of the system being active and mineralised, but from the upper part of the system above the target high grade gold feeder vein zone.

The Morrison review finds there are good analogues for the South West Limey Dam system with significant deposits both in the region and internationally that encourage persistence.

The future exploration challenge at South West Limey Dam remains the identification of quartz veins that have better lateral and vertical continuity than those tested to date, and to target these veins at the depth where high to bonanza grades of gold are anticipated to occur.

## Bunyip target improves with new results

Last quarter the Company announced that surface exploration had delineated a new prospect named Bunyip on EPM 25660, leading to a second programme of rock chip sampling and mapping in the quarter under review.

One recently assayed rock chip sample recorded 19.65g/t gold and 9.1g/t silver, a high grade result which confirms that the Bunyip system has potential to deliver a high grade gold discovery. Other new rock chip gold results of note include samples which assayed 0.66g/t, 0.59g/t, 0.41g/t and 0.41g/t gold.

The combined strike length of outcropping quartz veins is approximately 2,000 metres. The main north trending veins are intersected by a northwest trending vein, with veins in both orientations mineralised.

Mapping in the vicinity of the Bunyip veins had discovered occurrences of sinter beds, geyserite (silica formed around the mouth of hot springs and geysers) and zones of clay-jarosite-gypsum alteration. The textures observed in the Bunyip veins exposed at the current land surface are also consistent with them being from the upper levels of an epithermal system.

The observations at Bunyip strongly support the interpretation that if present, the gold bearing level of the system remains preserved at depth. The presence of anomalous gold and of rare high grade samples such as the recent 19.65g/t gold sample, are likewise seen as encouraging signs that drilling to test deeper levels of this system could prove fruitful.

An aboriginal heritage survey has been completed over the Bunyip target and did not find any sites where future exploration activities are restricted, clearing the way for future drill testing.

## **Eyre Peninsula gold**

Adelaide Resources holds eight Exploration Licences on the Eyre Peninsula which secure a total area of 3,123 square kilometres. The Barns, White Tank and Baggy Green gold prospects are located within 5km of each other and fall on two wholly owned adjoining tenements.

A diamond drilling programme completed at Barns and Baggy Green in mid-2015 recorded a number of significant intersections.

At Barns results included 16.1 metres at 3.06g/t gold, and 15 metres at 1.25g/t gold. Intersections recorded at Baggy Green included 11 metres at 1.87g/t gold contained within a broader zone assaying 30 metres at 0.86g/t gold, and 8 metres at 1.22g/t gold.

The 2015 diamond holes add to an extensive database of historical aircore, reverse circulation and diamond drilling completed during the discovery and early delineation stages of the prospects over a decade ago.

Primary gold mineralisation at each of Barns, White Tank and Baggy Green is hosted in multiple stacked moderately west dipping lodes. Flat lying zones of secondary supergene gold are developed in weathered rock above the dipping primary gold lodes, while clay-rich zones exhibiting total geochemical depletion lie above the supergene gold horizons.

## **New Exploration Target**

All exploration drill data, incorporating both the 2015 drill programme results and historical drilling information, was used to produce a new model of the multiple discrete primary and supergene zones which host gold mineralisation at each of Barns, Baggy Green and White Tank.

To a depth of 200 metres below surface the new Exploration Target is estimated to contain between 2.5 and 3.5 million tonnes at a grade ranging between 1.3g/t gold and 2.0g/t gold.

The potential tonnage and grade of the new Exploration Target is conceptual in nature as there has been insufficient exploration to estimate a Mineral Resource, and it remains uncertain if further exploration will result in the estimation of a Mineral Resource.

Potential exists to extend the dimensions of mineralisation at each of the three prospects, while historical drilling has also identified other targets in the immediate vicinity which may contribute additional resources. For example past



drilling has recorded gold intersections at Barns West (7 metres at 2.23g/t gold), Barns South (8 metres at 1.81g/t gold), and Baggy Green North (10 metres at 2.56g/t gold).

## High level scoping study underway

As the Exploration Target detailed above is based on the modelling of real drill data, the Company believes it represents a realistic indication of the approximate size and grade of a resource that could be estimated with more detailed work.

In terms of contained gold ounces, the magnitude of the possible resource at Barns, Baggy Green and White Tank would appear to be comparable to other South Australian deposits either currently under development (Havilah Resources Limited - Portia Gold Mine) or proposed for development (WPG Resources – Tarcoola Gold deposit).

Many variables which impact economics, including degree of conversion of Exploration Target to Resources and then conversion of Resources to Reserves, mining and metallurgical parameters, optimal process flow sheet design and such, remain to be established.

The Company has commenced a high level scoping study to iteratively investigate these parameters. The study is expected to define areas where further exploration drilling has a good chance of discovering additional mineralisation, highlight project sensitivities, and clarify where additional investigations will be required to enable confident assumptions to be made for inclusion in more detailed economic modelling.

## Empire R&D biogeochemical sampling

An R&D programme of biogeochemical sampling has been completed at the Empire (100% interest) copper-nickel-zinc prospect, which is 8km east of Baggy Green. Assaying of the samples is underway with results anticipated early in 2016.

## Moonta copper and Rover coppergold

The Company is exploring potential opportunities to co-fund future exploration activities at Moonta and Rover with the view to both de-risking the projects financially and accelerating their development progress. Third parties are currently reviewing project data from these projects under confidentiality agreement.=

## Finance

The Company had \$0.885 million in cash and term deposits at 31 December 2015.

An underwritten Shareholder Share Purchase Plan offer and top-up placement raised a total of \$922,000 before costs, with a total of 46,376,667 new shares issued to subscribers. A Collaborative Drilling Initiative grant of \$100,000 was received from the Queensland Government during the quarter, and R&D and South Australian PACE submissions lodged which should see additional cash receipts for the Company.

A number of measures have been implemented by the Company to conserve cash. Executive director and staff salaries have been significantly cut, further non-core tenements relinquished, and occupancy and other administrative costs reduced.

The Company continues to await advice on the Federal Government's Exploration Development Tax Incentive (EDI) scheme submission, which if successful, would deliver an as yet unquantified tax credit to Australian shareholders. The cost to the Company of distributing any benefit is unknown.

#### Competent Person Statement and 2012 JORC Compliance Notes

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, see ADN's ASX releases dated 13 October 2015, 16 October 2015, 23 October 2015 and 12 November 2015.

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.