

#### **Adelaide Resources Limited**

ABN: 75 061 503 375

# **Quarterly Report**

Period ending 31 March 2016

#### **Corporate Details**

ASX Code: ADN (ordinary shares) ADNO (listed options) Cash at 31 March 2016:

Casil at 31 Maich 2010.

\$0.701 million.

Issued Capital at 31 March 2016:

357,922,352 ordinary shares

37,222,104 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

adres@adelaideresources.com.au www.adelaideresources.com.au

# Overview

# Drummond epithermal gold (100% interest)

- Programme of surface prospecting and rock chip sampling completed. 157 samples submitted for assay with results anticipated in April. Prime objective is to identify additional targets to test in conjunction with the Bunyip prospect mid-year.
- Applications lodged for two new tenements, tripling the Company's ground holdings in the Drummond. Both new tenements include historical epithermal gold prospects.

## Eyre Peninsula gold (100% interest)

- Barns scoping study progressed with thorough revision of mineralisation model which can be used for in-house mineral inventory work and a pit optimisation study.
- Biogeochemical and FPXRF geochemical R&D surveys completed at Empire identify copper anomalies that present future drill targets. The anomalies remain open and further sampling to define their boundaries will commence in April.

# Davenport Ranges lithium (100% interest)

- Tenement application lodged over ground that shows potential for lithium mineralisation by virtue of occurrences of tungsten-tantalum-niobium which are metals commonly found with lithium.
- The Company plans to sample the occurrences to confirm if lithium is present as a precursor to progressing the tenement application.

## **Finance**

- Research and Development claim for \$204,117 received.
- The Company's available cash position stood at \$0.701 million at period end.
- Receipt of South Australian PACE programme claim anticipated in April.
- Application approved to participate in Federal Government's Exploration Development
  Incentive scheme with an announcement on the timing of the transfer of available tax
  credits to eligible Company shareholders to be made by the end of May 2016.



Chris Drown
Managing Director
1 April 2016

Direct enquiries to: (08) 8271 0600 or 0427 770 653



# **Managing Director's review**

The start of 2016 has seen a welcome change in sentiment towards certain commodities. Gold has risen from under US\$1,100 to levels now over US\$1,230, while copper has risen from prices around US\$4,500/tonne to levels closer to US\$4,900/tonne today. While the US\$ price rises have been somewhat offset by recent strength in the Australian dollar, the price momentum is encouraging.

In 2015 and 2016 programmes of cost-effective surface prospecting, rock chip sampling and FPXRF soil geochemistry on the Drummond epithermal gold project tenements delineated the South West Limey Dam and Bunyip gold prospects. During the quarter fieldwork recommenced on the Drummond ground, with an expanded programme of surface work completed for which we now await assay results. The goal of this work is to delineate additional drill targets for testing in conjunction with the Bunyip target mid-year.

The Company's land position in the Drummond has also been significantly increased through the application of two new tenements which will triple the area held. Both new tenements include historical gold prospects described as being of epithermal style.

Work continued on the Eyre Peninsula gold ground with progress made on the Barns scoping study announced late in 2015, while an R&D programme of biogeochemical sampling has delineated new targets at the near-by copper-dominant Empire prospect.

One commodity that has attracted significant market interest in 2016 is lithium, a metal finding increasing application in batteries used in the technology, solar energy and automotive sectors. In response to this interest the Company has applied for a tenement in the Northern Territory which shows potential to host hard rock lithium mineralisation.

We continue to pursue a strategy of seeking third party involvement in the Moonta and Rover tenements, with several groups currently reviewing the project data.

## **Drummond epithermal gold**

## 2016 field programme commenced

Adelaide Resources holds exploration tenements in the Drummond Basin in Queensland which are prospective for epithermal gold deposits similar to those mined at Pajingo, Wirralie and Yandan.

Currently known epithermal gold prospects on the Company's two granted Drummond tenements include South West Limey Dam, Limey Dam, Breccia Hill and Bunyip. These prospects owe their discovery to past programmes of surface stream sediment and soil geochemistry, prospecting and rock chip sampling of quartz veins.

A similar programme of surface exploration was completed in the quarter to assess a number of areas where previous reconnaissance scale surface geochemical surveys and mapping indicated the possible presence of additional epithermal systems.

The goal of the programme is to define new drill targets to be tested in conjunction with the Bunyip prospect.

Twelve new areas were prospected, with each area exhibiting either gold or pathfinder metal anomalism in historical geochemical surveys, or having quartz veins mapped on either the QLD government geological sheets or the maps of past explorers.

A number of newly identified quartz veins of likely epithermal style were discovered during the programme. A total of 157 surface rock chip samples were collected and have been submitted to a commercial laboratory, with assay results expected in April.

### **New tenement applications**

Applications for two new exploration tenements have been lodged in the Drummond Basin. The two new applications, EPM 26154 and EPM 26155, cover a combined area of 564km², and together with existing titles, triple the total area held by the Company to 838km².



EPM 26154 lies to the east of the Company's existing granted licences. Detailed geological mapping completed by the Queensland Geological Survey on EPM 26154 records areas of outcropping Drummond Basin lithologies, including areas interpreted to be Stones Creek Volcanics which host epithermal gold prospects like South West Limey Dam.

The Quartz Ridge prospect on EPM 26154 is described as a 150 metre long northeast trending zone of low-sulphidation epithermal quartz veining. Historical rock chip sampling returned multiple samples assaying over 1g/t gold, with maximum precious metal results of 9.5g/t gold and 201g/t silver. Seven diamond holes were drilled by previous explorers, with anomalous gold and silver intersected.

EPM 26155 is located to the south of the Company's granted titles and is split into a northern and southern block.

Recorded prospects in the southern block include Mount Stone, a 3km long, 100 metre wide hydrothermal breccia pipe-vein system; and the Buried Hatchet prospect, where rock chip samples recorded up to 62g/t gold.

The southern block of EPM 26155 includes an area of Anakie Inlier basement which also hosts gold mineralisation. At the Carey Guille prospect highly anomalous stream sediment samples were found in creeks draining an area of gossanous quartz-sulphide veining in altered metasediments. Surface trenching delivered 70 metres at 0.22g/t gold with individual assays to 1.0g/t gold. Limited drilling returned a best intersection of 1 metre at 1.3g/t gold.

East of the tenement, significant results have been reported from the Sellheim-Gettysburg-Marrakesh-Madhya Pradesh line of prospects which occur near the contact of Anakie Inlier and Drummond Basin rocks. Drill intersections include 35 metres at 6.1g/t gold and 8 metres at 18.1g/t gold.

The Company is planning to conduct surface based exploration including rock chip sampling and soil geochemistry on the two new EPMs immediately on grant.

# **Eyre Peninsula gold**

#### Barns scoping study

The Barns prospect 3-D mineralisation model has been thoroughly reviewed and revised during the quarter.

The revision confirms the presence of two flat lying supergene zones, below which lie up to eight sub-parallel west dipping primary lodes. Most lodes appear to display good continuity on, and between, sections.

The primary lodes are curvilinear, with lode dips steepening in the up-dip direction. The curvilinear nature is supported by structural measurements of mineralised veins made on 2015 diamond drill core which show the same dip change. The dip change is likely to have caused additional dilation, enhancing fluid flow and mineralisation widths.

The 3-D model can now be used as a basis for in-house mineral inventory modelling followed by a pit optimisation study.

## **Empire prospect biogeochemical survey**

The Company is undertaking a Research and Development programme to determine whether biogeochemistry can be used as an alternative exploration technology. While biogeochemistry holds promise for gold exploration, its use for metals like copper is not well understood on the Eyre Peninsula, and the Empire prospect, located about 9km east of Baggy Green, presents an ideal test site.

The Empire calcrete geochemical anomaly is a large multi-element feature with copper in particular at exceptionally high levels. Historical rotary airblast (RAB) bedrock drilling returned some narrow and weak intersections including gold to 0.48g/t, and copper to 0.12%, but these are not considered to represent the source of the substantial surface calcrete defined anomaly.

A biogeochemical sampling programme was completed at Empire in late 2015, with mallee leaf samples collected on a 200 metre by 50 metre grid. At each mallee leaf sample site a Field Portable X-Ray Florescence (FPXRF) soil sample was also read.



All three geochemical media (historical calcrete, mallee leaf and FPXRF soils) define broadly coincident zones of copper anomalism at Empire, however the anomaly peaks read in the mallee leaf and FPXRF media differ in location from the peaks in the calcrete samples.

Historical RAB drilling was targeted on the calcrete results, and consequently the copper peaks in both the mallee leaf and FPXRF soils have not been effectively drill tested, presenting future drill targets.

The newly defined copper anomalies remain open and a further programme of FPXRF soil and mallee leaf sampling is planned in April.

# **Davenport Ranges lithium**

Lithium is finding increasing application in batteries used in the technology, solar energy and automotive sectors.

Market interest in exploration companies with lithium projects has been strong in 2016 and this interest has prompted Adelaide Resources to look at lithium opportunities to complement its gold and copper focussed interests.

The Company has applied for an exploration tenement, EL31211 in the Davenport Ranges area of the Northern Territory that shows potential to be prospective for hard rock lithium mineralisation and associated metals like tungsten, tantalum and niobium.

In common with much of Australia there has been no previous recorded lithium exploration on EL31211 however a study by the Northern Territory Geological Survey (NTGS) identified historical tungsten-tantalum-niobium occurrences at the Juggler and Trew Creek prospects. Tungsten, tantalum and niobium are metals that commonly accompany lithium.

The Northern Territory Mining Act (2010) includes provisions allowing limited early exploration activities prior to tenement grant. Accordingly, the Company plans to sample the occurrences to confirm if lithium is present as a precursor to progressing the tenement application.

# Moonta and Rover copper-gold

Third parties are currently reviewing data for these projects under executed confidentiality agreements.

#### **Finance**

The Company had \$0.701 million in available cash and term deposits at 31 March 2016.

A Research and Development claim of \$204,117 was received during the quarter. A South Australian PACE submission for \$75,000 has been lodged and its receipt is anticipated in April.

The Company continues to investigate and implement cost saving measures in order to conserve cash.

The Company has been successful in its application to participate in the Federal Government's Exploration Development Incentive (EDI) scheme. An announcement regarding the passing of available tax credits to eligible Company shareholders is to be made by the end of May 2016.

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

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, see ADN's ASX releases dated 23 February 2016, 22 March 2016 and 23 March 2016.