



## Adelaide Resources Limited

# **Quarterly Report**

Period ending 30 September 2012

#### Adelaide Resources Limited

ABN: 75 061 503 375

#### **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

#### **Corporate Details**

ASX Code: ADN

#### Issued Capital:

163,791,156 ordinary shares 2,744,167 unlisted options and performance rights

#### Directors:

Non-executive Chairman: Andrew Brown

Managing Director: Chris Drown

Non-executive Directors:

John den Dryver John Horan

Mike Hatcher

Company Secretary:

## Highlights

## Moonta Copper Gold Project - SA

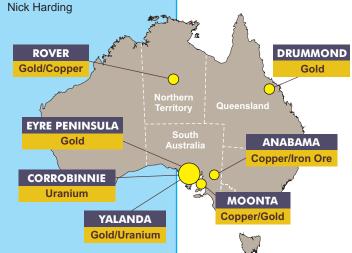
- Diamond drilling program just commenced at the 100% owned Paskeville Prospect to test a compelling exploration target at depth below the south eastern aircore drill traverse.
- An airborne EM survey flown at the Paskeville Prospect has delineated a number of conductivity features coincident with surface geochemical anomalies, increasing confidence in the quality of these undrilled targets.
- The EM survey also suggests the western limit of a wedge of Adelaidian sediments is coincident with the eastern limit of geochemical anomalism. Surface geochemistry is not considered to be effective through Adelaidian sediments and mineralisation may persist further east despite a lack of surface geochemical encouragement.

## Rover Gold Copper Project - NT

 Non JORC compliant inventory of the copper and gold mineralisation at the Rover 4 Prospect confirms that it has excellent potential to deliver satellite feed for a mill processing Rover Field ores.

#### **Finance**

- At 30 September 2012, the company had available funds of \$2.833 million.
- The company raised \$0.84 million through a Shareholder Share Purchase Plan finalised in August, and \$1.1 million through a placement completed after the end of the quarter.



## 2012 Annual General Meeting

Adelaide Resources Limited 2012 Annual General Meeting will be held at the Stamford Plaza Adelaide, Boulevard Room, 150 North Terrace, Adelaide, SA on Tuesday 27 November at 11.00 am (Adelaide time). Arrival from 10.30 am.

## **Moonta Copper Gold Project, SA**

Adelaide Resources 100% (except Moonta Porphyry JV area: Adelaide Resources 90%; Breakaway Resources Limited 10%).

The company's Moonta Project is located on the Yorke Peninsula of South Australia and falls towards the southern end of the Olympic Copper Gold Province, a world class geological belt that is highly prospective for copper and gold deposits of Iron Oxide Copper Gold (IOCG) style (Figure 1). From an economic viewpoint, copper is currently the most important metal won from the Olympic Copper Gold Province.

Copper remains a metal critical to the transition of economies undergoing modernisation and industrialisation such as China and other nations located in Australia's geographic region. The demand for copper has grown significantly in recent years and copper producers and forecasters alike anticipate this growth will continue into the future. Despite growing global demand, production levels by the world's major copper producers have generally declined over the past 1 to 2 years. These supply-demand factors suggest that copper prices are likely to remain strong into the future.

The quality of the mineral assets in the Olympic Copper Gold Province, and its perceived outstanding prospectivity, is evidenced by the presence of large copper mining companies like BHP Billiton Limited, Rio Tinto Limited and Oz

Minerals Limited. Exploration success achieved by Rex Minerals Limited at the Hillside discovery on the Yorke Peninsula has seen that company's market capitalisation increase substantially since listing in 2007. Adelaide Resources therefore views the Olympic Copper Gold Province as a region where exploration success can translate into outstanding growth opportunities for its shareholders.

#### **Paskeville Prospect**

The Paskeville Prospect is located in the 100% owned eastern part of the project tenement and is defined by a cluster of copper and gold geochemical anomalies, a number of which were targeted by a drilling program in the first half of 2012 (Figures 1 and 2).

Drilling at the Paskeville "Discovery Area" (Figure 2) defined a coherent body of low to moderate grade mineralisation (using a minimum 0.1% copper grade) with a confirmed strike length of 300 metres and with widths varying from around 15 metres to in excess of 130 metres. The mineralised body remains open along strike and at depth. Higher grade intervals are present with intersections including 10 metres at 1.06% copper, 9 metres at 1.27% copper, 7 metres at 1.16% copper, 42 metres at 1.10% copper, and 5 metres at 1.88% copper.

### **Diamond Drilling Program**

Interpretation of the 2012 first half aircore drilling results defines a compelling exploration target

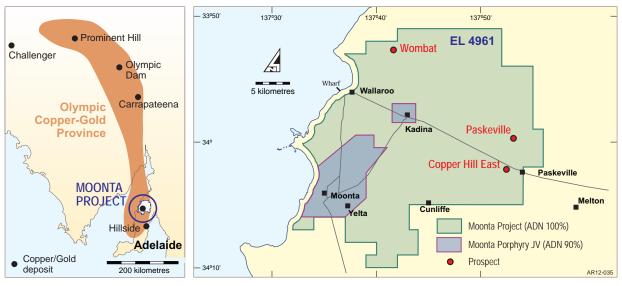


Figure 1: Moonta Copper Gold Project location plan.

at depth and centred on the most south easterly drill traverse completed at the prospect (Figures 2 and 3).

Figure 3 shows interpreted copper grade contours on this section to be increasing with depth, most notably down sub-zones within

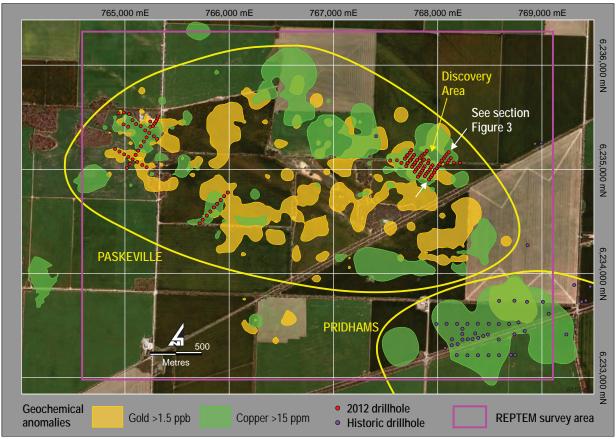


Figure 2: Plan of Paskeville Prospect summary plan.

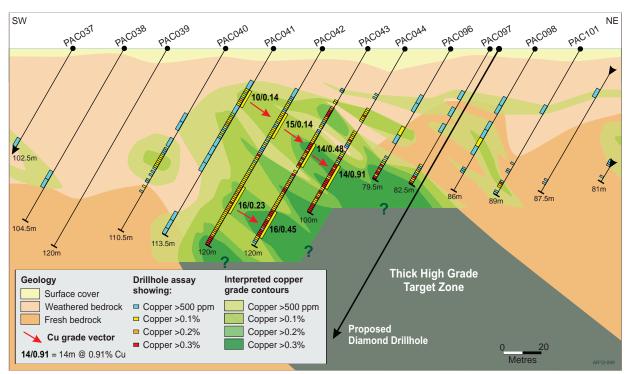


Figure 3: Interpreted copper grade contours on the southeast section.

the mineralisation. Should the grade continue to increase down dip, a thick and potentially attractive grade target presents beneath the limit of current drilling. A short program of diamond

765,000 mE 769,000 mE 769,000 mE 769,000 mE 20,000 mE 20

**Figure 4:** Paskeville Prospect REPTEM late time (3.7 msecs) conductivity image.

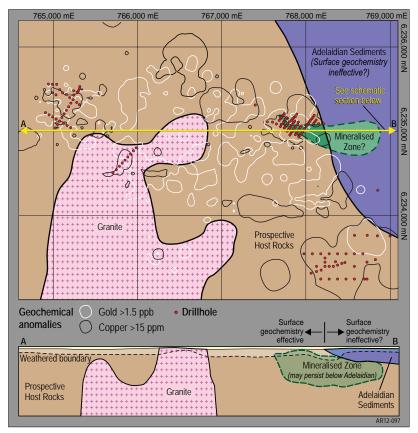


Figure 5: Paskeville Prospect interpreted basement geology and schematic cross-section.

drilling is planned as an initial test of this exciting target. A drill contractor has been secured, landowner approvals have been obtained, and government approvals to complete the drilling

are anticipated shortly, allowing drilling to commence before the end of October.

## **Electromagnetic Geophysical Survey**

Electromagnetic (EM) surveys map the earth's conductivity and are commonly used in mineral exploration. Conductive zones can be due to saline groundwater, graphitic rocks, zones of hydrothermal alteration, and importantly, bodies of massive sulphide or zones of sulphide veining. EM surveys played a significant role in the discovery of the Poona and Wheal Hughes copper-gold mines near Moonta. As different rock types often have different conductivities the technique can also be used to assist in interpreting subsurface geology.

A helicopter-borne airborne electromagnetic survey (REPTEM) was flown over the Paskeville Prospect area in late September. The survey covered a total area of 14.5 km² and comprised north-south oriented survey lines spaced 100 metres apart. The location of the REPTEM survey is shown on Figure 2 and interpretation of the REPTEM data is now complete.

The REPTEM survey has discovered a number of conductive features with positive technical attributes. *Figure 4* presents an image of latetime conductivity (coloured background - conductive features are orange and red), overlain by outlines of the surface geochemical anomalies and the drillholes at Paskeville.

The area of known mineralisation coincides with a moderate conductivity feature which appears to develop to the southwest, while several of the conductive features to the west and northwest of the "discovery area" coincide with geochemical anomalies, significantly increasing confidence in the quality of these undrilled targets.

The REPTEM data also reveals conductivity contrasts interpreted to be due to variations in the underlying geology. *Figure 5* presents a plan together with a schematic cross section of the interpreted geology at Paskeville based upon the REPTEM and drilling results.

765,000 mE 766,000 mE 767,000 mE 768,000 mE 769,000 mE

Figure 6: Paskeville Prospect Reduced To Pole magnetic image.

A zone of very low conductivity (purple colours in Figure 4) in the south western part of the surveyed area likely defines the boundary of a granite body intersected by a traverse of aircore holes completed in the 2012 drilling program. The granite is considered likely to be a member of the Hiltaba Suite, the igneous suite implicated in the genesis of copper-gold mineralisation in the Olympic Copper Gold Province.

Another zone of low conductivity in the east of the survey appears to accurately map the western limit of a wedge of Adelaidian aged sediments which occur beneath thin surficial cover but above the prospective basement rocks which host mineralisation in the district.

Significantly, the interpreted western boundary of the Adelaidian sediments coincides with the eastern limit of geochemical anomalism at Paskeville (Figure 5). Surface geochemistry is not considered to be effective in areas where an obscuring layer of Adelaidian sediments is present. Consequently, mineralisation in the host sequence can persist to the east beneath the Adelaidian despite a lack of surface geochemical encouragement.

#### **Reprocessing of Airborne Magnetics**

Reprocessing and modelling of 2002 high resolution airborne magnetic data reveals the

presence of a significant magnetic anomaly at the Paskeville Prospect (*Figure 6*). Geophysical modelling suggests the depth to the top of the magnetic body sourcing the anomaly is likely to be several hundred metres.

The nature of the magnetic source rock, and the role (if any) it has played in the location of the Paskeville mineralisation is presently unknown, however deep seated magnetic anomalies are known to be associated with other deposits in the Olympic Copper Gold Province.

#### **Other Prospects**

1-metre resplit sampling of gold and copper anomalous 5-metre composited drill samples collected during the first half of 2012 drilling program at the Copper Hill East Prospect (Figure 1) was completed and confirmed the presence of mineralisation. Resampling of an original 5-metre composite sample which assayed 5 metres at 3.73g/t gold from 25 metres downhole in CAC004 returned 5 metres at 2.86g/t gold and 5.06g/t silver, including a highest 1-metre gold result of 6.44g/t.

To reduce assaying costs, a handheld XRF instrument was used to scan diamond core from two holes completed at the Wombat Prospect in the first half of 2012. Intervals that the handheld XFR instrument show contain copper are now being cut and submitted for chemical assay.

# Rover Gold Copper Project, NT

Adelaide Resources 100%

The Rover Project is situated 85 kilometres southwest of Tennant Creek in the Northern Territory (Figure 7). Mineral deposits in the Rover Field are essentially geologically identical to the copper and gold deposits located in the Tennant Creek Field, many of which have been profitably mined in the past.

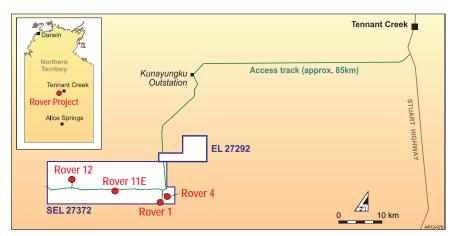


Figure 7: Rover Project location plan.

The Rover Field is buried beneath between 100 and 200 metres of sedimentary cover and its exploration is relatively immature when compared to the Tennant Creek Field. Despite this relative immaturity, significant gold and copper deposits and prospects have been discovered by Adelaide Resources and neighbour Westgold Resources Limited which has recently merged with Metals X Limited.

The Rover 4 prospect is located in the southeast of the project tenements. Drilling by the company has intersected significant copper and gold in two main areas at Rover 4, including the shallowest mineralisation discovered to date in the Rover Field. During the quarter AMC Consultants completed 3-dimensional geological modelling of the Rover 4 deposit, (Figure 8), and completed a non-

JORC compliant inventory of the copper and gold mineralisation at the prospect.

The AMC study confirms that the Rover 4 deposit, as currently defined, is too small to develop in its own right, but has excellent potential to play a role as a source of secondary feed for a mill processing Rover Field ores. The study also confirms that in terms of the broader Rover Field, the Rover 4

deposit currently ranks second behind the Rover 1 deposit which is largely owned by Metals X. The geological modelling and mineral inventory exercise has also highlighted a number of target areas at Rover 4 where further exploration has potential to increase the size of the deposit.

The majority of the Rover 1 deposit falls in tenements now owned by Metals X, however the company owns part of the Western Zone of the deposit where it crosses over the tenement boundary into Adelaide Resources' ground. A similar exercise to that completed at Rover 4 is currently underway to gauge the mineral inventory of Adelaide Resources' share of the deposit.

Evaluation of other Rover Project prospects, including Rover 12 which returned a number of narrow but attractive grade copper and gold drill intersections in 2011, is continuing.■

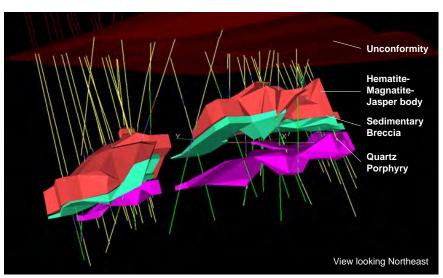


Figure 8: Rover 4 Prospect 3-dimensional geological model.

## **Eyre Peninsula Basement Project, SA**

Adelaide Resources 100% (except Kimba Verran JV area: Adelaide Resources 90%; Olliver Geological Services Pty Ltd 10%).

The Eyre Peninsula Basement Gold Project secures a total area of 2872 km² on the Northern Eyre Peninsula of South Australia (*Figure 9*). The palaeochannel uranium rights in the cover sediments for a sub area of 2042 km² are held by the Corrobinnie Uranium Joint Venture with the company holding 100% ownership of all basement mineral rights. The company holds rights to 100% of all minerals over a second 509 km² sub area, and rights to 90% of all minerals in two tenements totalling 321 km².

Previous exploration by Adelaide Resources and its past joint venturers on the Eyre Peninsula Basement Project discovered significant gold mineralisation at the Barns, Baggy Green and White Tank deposits, and identified numerous other prospects and targets that remain to be evaluated.

At the Barns, Baggy Green and White Tank prospects, gold mineralisation is developed in shallow west to northwesterly dipping fault/share zones interpreted to be thrusts. Mineralisation reaches significant widths on occasion with estimated true widths at Baggy Green often exceeding 25 metres, and widths of some zones at Barns in-excess of 100 metres.

The company believes that potential exists for high grade shoots of gold mineralisation at deposits such as Baggy Green and Barns, with historical RAB drilling at the White Tank Prospect (Figure 10) supportive of this model. High grade shoots of mineralisation could play an important role in the overall economic potential of these deposits.

Environmental approval has been obtained to complete drilling at the Baggy Green prospect, while efforts to satisfy Native Title legislative requirements are underway.

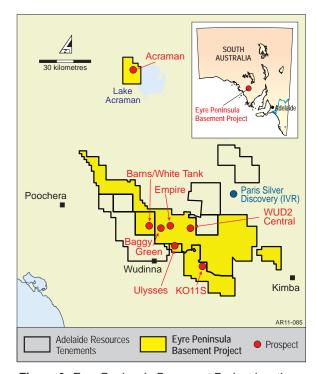


Figure 9: Eyre Peninsula Basement Project location plan.

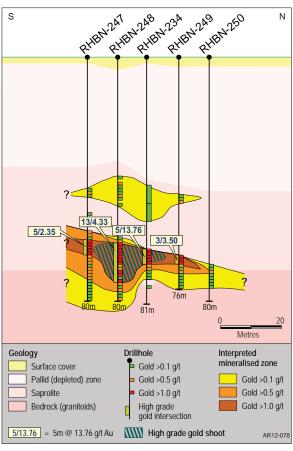


Figure 10: White Tank Prospect drill section.

## **Corrobinnie Uranium Joint Venture, SA**

Adelaide Resources 32.46%; Quasar Resources Pty Ltd 67.46%.

The Corrobinnie Uranium Joint Venture ("CUJV"), between Quasar Resources Pty Ltd and Adelaide Resources, is searching for uranium on the northern Eyre Peninsula of South Australia (*Figure 11*). Quasar Resources acts as the manager and operator of the CUJV.

After the end of the quarter, joint venture manager Quasar Resources advised the company that it now does not intend to recommend that the Corrobinnie Uranium Joint Venture compete any on-ground exploration in the remainder of 2012.

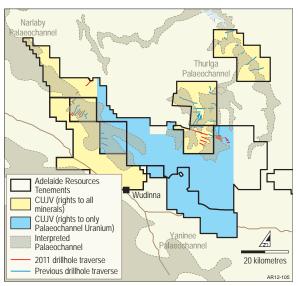


Figure 11: Corrobinnie Uranium JV location plan.

Chris Drown – Managing Director Signed on behalf of the

Board of Adelaide Resources Limited

Dated: 31 October 2012

### issued capital

The Company had 163,791,156 ordinary shares, 2,244,167 performance rights and 500,000 unlisted options on issue at 30 September 2012.

During the quarter 18,599,955 ordinary shares were issued under a Share Purchase Plan (SPP) which provided existing shareholders registered on 6 July 2012 the opportunity to subscribe for new fully paid ordinary shares in parcels of \$2,000, \$5,000, \$10,000 and \$15,000 at a subscription price of 4.5 cents per share. Gross proceeds of \$837,000 were raised under the SPP.

In addition, 192,500 ordinary shares were issued on the vesting of 192,500 performance rights under tranche 1 of performance rights issued to Adelaide Resources' employees under the Adelaide Resources Limited Employee Performance Rights Plan.

Subsequent to the end of the quarter, the Company announced on 29 October 2012 details of a placement which will see the issue of an additional 24,568,673 ordinary shares to professional and sophisticated investors at an issue price of 4.5 cents per share which will raise approximately \$1.1 million before costs.

### finance and corporate

The Company had \$2.833 million in cash and term deposits at 30 September 2012.

Exploration and evaluation expenditure by the Company during the September quarter was \$604,000. Exploration and evaluation expenditure incurred during the September quarter by joint venture parties on tenements in which the Company has an interest total \$21,244.

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Chris Drown, who is a Member of The Australasian Institute of Mining and Metallurgy and who is Managing Director of the company. Mr Drown has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2004 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.

Enquiries should be directed to Chris Drown, Managing Director. Ph (08) 8271 0600 or 0427 770 653.