



# **Adelaide Resources Limited**

# Quarterly Report

Period ending 31 March 2014

#### **Adelaide Resources Limited**

ABN: 75 061 503 375

#### **Contact Details**

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#### **Corporate Details**

ASX Code: ADN

#### Issued Capital:

229,079,813 ordinary shares 3,800,000 performance rights

#### Directors:

Non-executive Chairman:

Mike Hatcher

Managing Director:

Chris Drown

Non-executive Directors:

John den Dryver Jonathan Buckley

Company Secretary: Nick Harding

# **Highlights**

# Moonta Project, Olympic Copper-Gold Province – SA

The Moonta Project secures a major ground position in the world-class Olympic Copper-Gold Province. Copper mineralisation is widespread demonstrating the potential of the area for large tonnage, high quality deposits. During the quarter:

- Aircore drilling at Alford West discovered a new zone of mineralisation 1000 metres west of area drilled in 2013.
- Standout intersection from the new zone of 23 metres at 1.47% copper from 7 metres downhole, including 11 metres at 2.23% copper from 10 metres.
- Drilling closer to the area tested in 2013 has extended mineralisation strike. Best intersection of 11 metres at 0.94% copper and 0.17g/t gold from 71 metres to end of hole, including 6 metres at 1.24% copper and 0.22g/t gold.
- FPXRF soil geochemistry is rapidly and cost effectively defining new targets near Alford West, adding a powerful new search method that can be applied across the Moonta Project.

# Drummond Epithermal Gold Project – QLD

The Drummond Project is geologically analogous to the nearby plus 3 million ounce epithermal Pajingo gold field. During the quarter:

 A petrology study corroborates the company's interpretation that highly prospective epithermal gold systems are present.

# Corporate

 Mr Jonathan Buckley, formerly Group Managing Director for PhillipCapital Australia, appointed to the Board, adding considerable corporate finance and commercial expertise.

### **Finance**

 At 31 March 2014, the company had available funds of \$2.183 million.



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

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

# Introduction

The Moonta Copper-Gold Project is located on the Yorke Peninsula of South Australia (*Figure 1*). The project tenement covers the historical mining centres at Moonta, Kadina and Wallaroo which define the famous "Copper Triangle".

Geologically, the project falls at the southern end of the world-class Olympic Copper-Gold Province, an arcuate belt of Proterozoic rocks that are highly prospective for Iron-Oxide Copper Gold style deposits.

The company's recent focus at Moonta has been at the Alford West Prospect<sup>(1)</sup> and its satellite targets including Blue Tongue. Drilling in 2013 delivered numerous high grade copper and gold intersections at Alford West, and Adelaide Resources' goal is to establish a significant mineral resource at the prospect.

During the quarter fieldwork at Moonta included further surface geochemical sampling and a substantial program of aircore drilling at Alford West and its satellite targets.

# **FPXRF Geochemistry Survey**

Field Portable X-Ray Fluorescence (FPXRF) geochemical sampling was trialed at Alford

West in 2013, with the results confirming the technique's success in defining copper anomalies in surface soils reflecting underlying, drill defined mineralisation.

The success of the 2013 FPXRF geochemical trial led to an expansion of the survey into new areas at and around Alford West. In December 2013 the company reported the delineation of a significant new target called Blue Tongue<sup>(2)</sup> and another satellite anomaly called Kambula. Further geochemical surveying has continued throughout the current quarter, resulting in the discovery of another target called "Blue Tongue West"<sup>(3)</sup>.

Blue Tongue West is located to the west of the Blue Tongue target (Figure 2). Copper values in individual samples at Blue Tongue West approach those seen in the soil anomalies at Alford West and Blue Tongue, with the core of the new feature extending over a distance of 600 metres.

Copper anomalies coincident with the western lobe of the WMC/NBH 1970's auger defined Alford West Prospect, and the eastern limit of the Wombat Prospect are also apparent in the FPXRF data (*Figure 2*).

None of the FPXRF defined targets at Blue Tongue, Blue Tongue West or Kambula had been previously tested by any historical drilling.

The FPXRF geochemical program is proving to be very successful in rapidly defining new drill

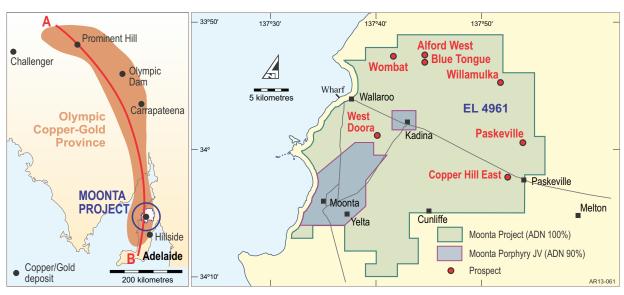


Figure 1: Moonta Copper-Gold Project location plan.

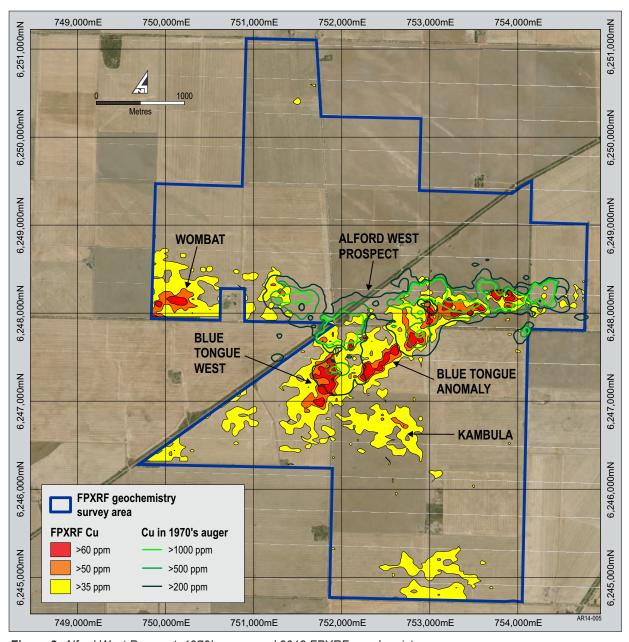


Figure 2: Alford West Prospect: 1970's auger and 2013 FPXRF geochemistry.

targets at a fraction of the cost that would be incurred through a conventional geochemical sampling program.

# **Aircore Drilling Program**

During the quarter a significant program of aircore drilling was completed at Alford West and its satellite targets. The 2014 drill program comprises 166 holes for 10,269 metres which adds to the 2013 program of 122 holes for 8155 metres. Holes in 2014 were drilled at Alford West and the Blue Tongue, Blue Tongue West and Kambula targets.

The Alford West Prospect is defined by a 3500 metre long copper anomaly in shallow auger drilling completed by past explorers in the 1970's (Figures 2 and 3). The auger anomaly includes a number of discrete internal areas that are strongly copper anomalous, and which appear as the yellow and red filled contours on Figure 3.

Only very limited historical deeper drilling had been completed in the western 2000 metre part of the auger anomaly at Alford West. Consequently the 2014 drill program was completed in two stages, with a first stage of

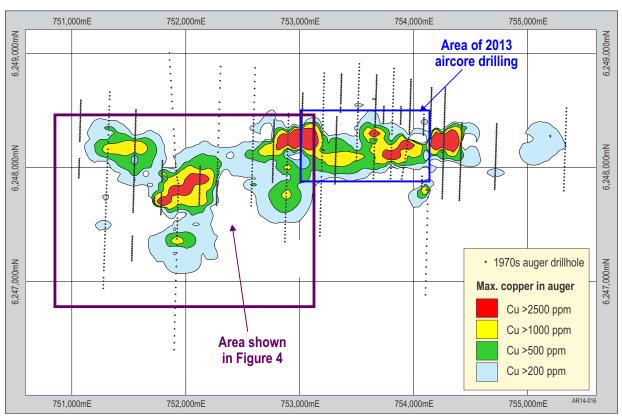


Figure 3: Alford West contoured historic auger copper geochemistry.

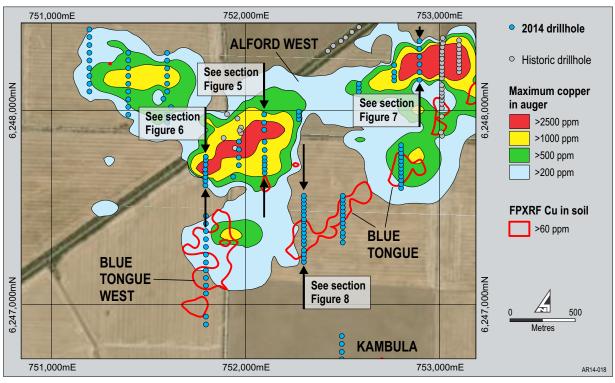


Figure 4: Alford West target showing drillhole loactions and contoured historic auger copper geochemistry.

broad spaced drill traverses targeting the better historic auger results (see Figure 4) followed by a second stage of more targeted follow-up drilling. Drilling was also completed at the Blue Tongue, Blue Tongue West and Kambula FPXRF soil anomalies to provide first pass tests.

Table 1: Drillhole Intersections in holes ALWAC128 to ALWAC250.

Hole Name	Easting (mga94)	Northing (mga94)	RL	Dip	Azimuth	Depth (m)	From (m)	To (m)	Interval (m)	Cu %	Au g/t
ALWAC128	752800	6247700	35	-60	180	59	29	54	25	0.26	<0.01
						incl.	35	37	2	0.64	<0.01
ALWAC129	752800	6247720	35	-60	180	64	46	58	12	0.29	0.01
ALWAC131	752800	6247760	35	-60	180	90	59	73	14	0.31	0.01
						incl.	65	67	2	0.66	0.01
ALWAC143	752500	6247500	35	-60	180	63	55	63	8	0.34	0.01
						incl.	61	63	2	0.57	<0.01
ALWAC144	752500	6247520	35	-60	180	58	27	33	6	0.21	<0.01
ALWAC152	752300	6247310	35	-60	180	50	3	8	5	0.40	<0.01
						incl.	3	5	2	0.70	<0.01
ALWAC153	752300	6247330	35	-60	180	50	18	24	6	0.30	<0.01
							28	33	5	0.23	0.01
ALWAC154	752300	6247350	35	-60	180	52	27	36	9	0.30	<0.01
ALWAC156	752300	6247390	35	-60	180	58	21	29	8	0.48	<0.01
							41	45	4	0.28	<0.01
							54	58	4	0.37	0.12
ALWAC158	752300	6247430	35	-60	180	52	38	52	14	0.30	<0.01
						incl.	46	48	2	0.51	<0.01
ALWAC159	752300	6247440	35	-60	180	82	2	8	6	0.31	0.05
							73	82	9	0.24	<0.01
ALWAC171	752100	6247720	26.3	-60	180	108	7	30	23	1.47	<0.01
						incl.	10	21	11	2.24	<0.01
	==0.400	00.4==00	22.2		100	incl.	10	15	5	3.36	<0.01
ALWAC172	752100	6247739	26.3	-60	180	60	6	9	3	0.86	<0.01
ALIMA 0475	750400	0047040	05.0	00	400	incl.	7	8	1	1.34	0.01
ALWAC175	752102	6247840	25.0	-60	180	44	15	25	10	0.31	<0.01
ALWAC176	752100	6247681	26.3	-60	180	63	35 36	46 40	11 4	0.46	0.02
						incl. incl.	37	38	1	0.80 1.26	0.06 0.20
ALWAC177	752099	6247701	26.3	-60	180	60	5	7	2	0.80	<0.01
ALWACTT	752099	0247701	20.3	-00	100	incl.	6	7	1	1.37	<0.01
ALWAC184	752899	6248201	32.5	-60	180	99	21	24	3	0.44	<0.01
ALWAC185	752900	6248239	31.9	-60	180	102	29	35	6	0.44	0.01
ALWAOTOS	732300	0240200	01.0	-00	100	102	38	42	4	0.27	0.01
ALWAC186	752899	6248276	32.6	-60	180	82	7	9	2	1.36	0.03
	. 02000	32.32.3	02.0	30	. 55		46	53	7	0.46	0.08
							71	82	11	0.94	0.17
						incl.	71	72	1	1.62	0.05
						incl.	76	82	6	1.24	0.22
ALWAC187	752900	6248318	34.3	-60	180	64	38	43	5	0.10	0.23
							51	59	8	0.48	0.03
						incl.	54	55	1	1.14	0.04
ALWAC189	752103	6247900	25.8	-60	180	108	19	24	5	0.29	<0.01
ALWAC190	752105	6247938	26.4	-60	180	86	21	26	5	0.22	<0.01
							67	75	8	0.21	<0.01
ALWAC191	752107	6247979	27.2	-60	180	102 incl.	21	25	4	0.33	<0.01
							46	64	18	0.43	0.02
							46	51	5	0.64	0.02
							77	93	16	0.27	0.02

Table 1: Drillhole Intersections in holes ALWAC128 to ALWAC250 (continued).

Hole Name	Easting (mga94)	Northing (mga94)	RL	Dip	Azimuth	Depth (m)	From (m)	To (m)	Interval (m)	Cu %	Au g/t
ALWAC193	751598	6247977	28.1	-60	180	70	58	66	8	0.33	<0.01
ALWAC197	751600	6248221	30.1	-60	180	88	23	27	4	0.25	<0.01
ALWAC198	751600	6248264	31.5	-60	180	60	51	58	7	0.24	0.03
ALWAC224	751799	6247138	31.1	-60	180	47	32	35	3	0.35	<0.01
ALWAC228	751800	6247300	30.3	-60	180	78	56	61	5	0.27	<0.01
ALWAC230	751800	6247379	29.5	-60	180	57	38	42	4	0.27	<0.01
ALWAC236	751797	6247682	26.3	-60	180	60	13	16	3	0.58	<0.01
ALWAC237	751797	6247701	26.1	-60	180	46	25	30	5	0.30	<0.01
ALWAC238	751798	6247723	25.7	-60	180	68	6	31	25	0.63	<0.01
						incl.	8	12	4	1.06	0.01
						and	22	25	3	1.13	<0.01
							49	56	7	0.29	<0.01
ALWAC239	751799	6247747	25.9	-60	180	60	13	20	7	0.58	<0.01
						incl.	17	19	2	1.04	<0.01
ALWAC240	751799	6247766	25.6	-60	180	60	57	60	3	1.29	<0.01

Intersections calculated by averaging 1metre chip grab samples. Copper determined by four acid digest followed by ICP-AES finish. Overrange copper (>1%) determined by AA finish. Gold determined by fire assay fusion followed by ICP-AES finish. Cut-off grade of 0.2% Cu or 0.2g/t gold applied with up to 2m internal dilution. List restricted to intersections >1m% Cu or 1gm Au. Introduced QA/QC samples indicate acceptable analytical quality. Intersections are downhole lengths - true widths are not known.

Laboratory assays of samples from the first stage holes at Alford West, and for the drill traverses completed at Blue Tongue, Blue Tongue West and Kambula are finalised, with significant results reported in *Table 1*.

Significant new results were reported from Alford West during the quarter<sup>(4)</sup>. On section 752,100mE (*Figure 5*) significant intersections

were returned including a high grade hit of 23 metres at 1.47% copper from 7 metres downhole in ALWAC171. The 23 metre intersection includes a higher grade core which returned 11 metres at 2.23% copper from 10 metres downhole. This zone, in turn, includes 5 metres at 3.36% copper also commencing from 10 metres downhole.

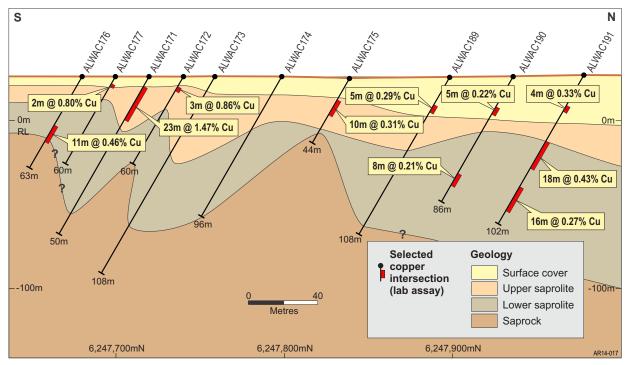


Figure 5: Alford West Section 752,100mE looking west.

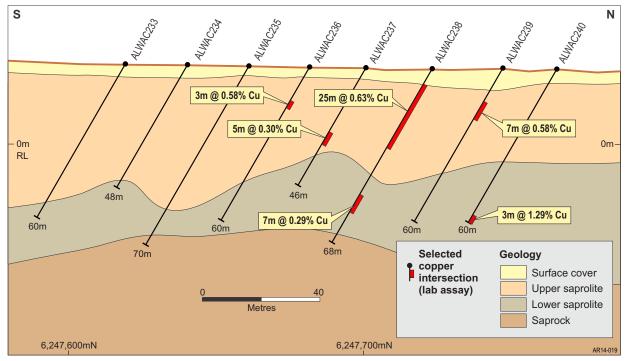


Figure 6: Alford West Section 751,800mE looking west.

ALWAC176 intersected 11 metres at 0.46% copper while the northern hole on the line, ALWAC191, intersected an un-bottomed 56 metre zone of copper mineralisation including 18 metres at 0.43% copper.

Section 751,800mE (Figure 6) is located 300 metres west of section 752,100mE, with a number of holes returning significant intersections. Hole ALWAC238 intersected 25 metres at 0.63% copper from 6 metres, including 4 metres at 1.04% copper from 8 metres and 3 metres at 1.13% copper from 22 metres. Adjacent hole ALWAC239 hit 7 metres at 0.58% copper from 13 metres, while ALWAC240 bottomed in mineralisation assaying 3 metres at 1.29% copper.

Strongly anomalous lead is present, often over broad intervals, in holes on Section 751,800mE, with individual samples returning grades ranging up to 1.76% lead.

The copper minerals in the intersections on lines 752,100mE and 751,800mE include the copper carbonate mineral malachite in shallow oxidised mineralisation, and likely the copper sulphide mineral chalcocite in deeper hits.

The discovery of significant grade mineralisation on the two sections reported above confirms the

presence of a new high grade zone within the broader Alford West target which is additional to the high grade targets discovered in the 2013 drilling program.

Section 752,900mE (*Figure 7*), located 120 metres west of the westernmost traverse drilled in 2013, includes a number of holes with mineralised intervals.

Hole ALWAC185 intersected 6 metres at 0.44% copper from 29 metres. Adjacent hole ALWAC186 hit 7 metres at 0.46% copper from 46 metres and bottomed in mineralisation with the final 11 metres of the hole assaying 0.94% copper and 0.17g/t gold from 71 metres, including 6 metres at 1.24% copper and 0.22g/t gold from 76 metres to end of hole. ALWAC187 hit 8 metres at 0.48% copper from 51 metres.

Copper mineralisation on 752,900mE is associated with significant molybdenum, with ALWAC187 hitting 46 metres at 372ppm molybdenum from 14 metres, including 7 metres at 0.16% molybdenum from 36 metres downhole. The intersections on 752,900mE represent a significant western extension to a zone of mineralisation discovered in 2013.

Three drill traverses tested the Blue Tongue target<sup>(5)</sup> (*Figure 4*). The copper carbonate mineral

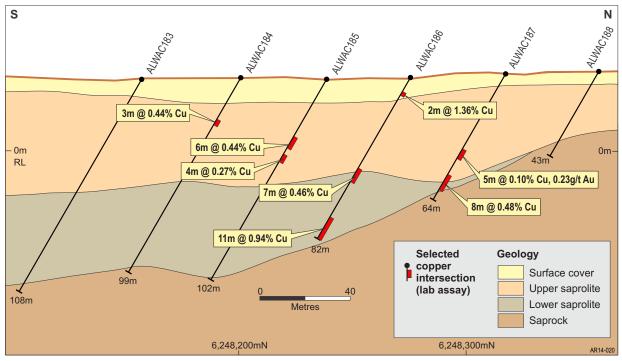


Figure 7: Alford West Section 752,900mE looking west.

malachite, was observed in drill samples collected from holes on each of the three drill lines.

On section 752,300mE (Figure 8), hole ALWAC154 intersected 9 metres at 0.30% copper from 27 metres downhole, ALWAC156 hit 8 metres at 0.48% copper from 21 metres, and ALWAC158 hit 14 metres at 0.30% copper from 38 metres.

The 2014 drill program indicates that a broad zone of low grade copper mineralisation has been discovered at Blue Tongue. There are likely to be sub-zones of higher grade mineralisation

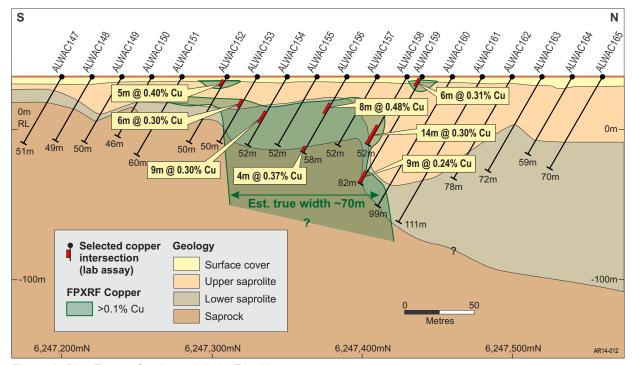


Figure 8: Blue Tongue Section 753,300mE looking west.



within Blue Tongue, presenting targets for deeper drill testing.

Intervals of anomalous to low grade copper were encountered in holes on the three western 2014 traverses at Alford West and the traverse testing the Blue Tongue West geochemical target. Hole ALWAC193 (Alford West) intersected 8 metres at 0.33% copper from 58 metres and hole ALWAC228 (Blue Tongue West) hit 5 metres at 0.27% copper. Holes testing the Kambula geochemical target intersected some zones of high iron but no copper or gold of significance.

Laboratory assaying of samples from the second, follow-up stage of drilling at Alford West is currently in progress. Field Portable X-Ray Fluorescence (FPXRF) scans of drill samples from a number of these follow-up holes indicate the presence of further mineralisation.

Aircore drill coverage of the broader Alford West target zone and satellite targets is now sufficient to enable development of a geological and mineralisation model. Construction of this model is currently underway and the company anticipates releasing it to the market in the near future.

# Drummond Epithermal Gold Project – QLD

Adelaide Resources 100%

# Introduction

Epithermal gold deposits are often high grade, forming very attractive exploration targets, so confirmation that epithermal processes have occurred within an exploration area is of great significance. Epithermal processes produce characteristic vein textures and alteration mineral

assemblages that can be observed in thin sectioned rock samples.

A total of thirteen rock samples from the Drummond Gold Project tenement, "Glenroy" (Figure 9), displaying veining and possible hydrothermal alteration, were studied in thin section by a consulting petrologist<sup>(6)</sup>.

Vein textures are described as including massive, weakly banded and thinly colloform banded space-filling veins. Very fine grains of gold were observed in one sample (*Plate 1*), while a second sample includes evidence of fluid boiling (*Plate 2*), another important characteristic of prospective epithermal systems.

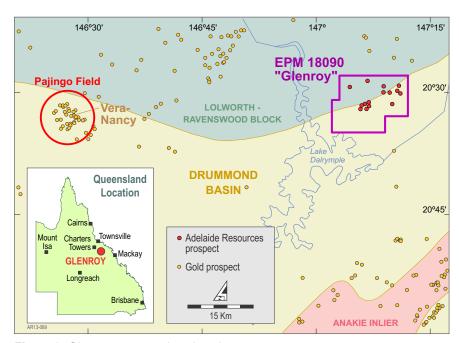


Figure 9: Glenroy tenement location plan.

The study also found that the mineralised host rocks formed as acid to intermediate volcanics and volcanoclastics, including andesite which is commonly found in epithermal settings. The host rocks have suffered high intensity pervasive alteration resulting in phyllic, intermediate phyllic and argillic assemblages also characteristic of epithermal mineral systems.

The vein textures and alteration assemblages observed in the Glenroy samples are identical to those described in the orebodies that comprise the >3 million ounce Pajingo Gold Field.

The consulting petrologist observed that "The mineralogies and textures suggest the veins formed by crystallisation of hydrothermal fluid at

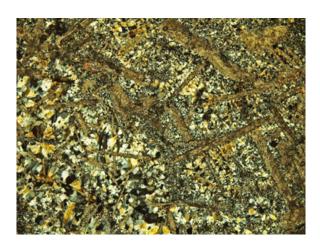
moderately low temperatures in a shallow crustal epithermal environment."

Adelaide Resources considers the consulting petrologist's study presents compelling support for the company's assessment that significant epithermal systems are present on the Drummond Gold Project tenement, and that the licence is highly prospective for high grade epithermal gold deposits.

The company is considering which of the various options available to it to progress exploration of the Glenroy tenement will deliver greatest value to shareholders. These include further self-funded exploration or the introduction of a third party through a joint venture or similar transaction.



**Plate 1:** This view from a quartz-sericite-gold band captures three tiny grains of gold (top left, centre, bottom right) that are between 5 and 10 microns in size. (Photo approximately 1mm wide).



**Plate 2:** Breccia cement illustrating the presence of bladed calcite crystals that indicate boiling may have occurred during crystallization. (Photo approximately 4.5mm wide).

# **Yalanda Hill Joint Venture**

On 27 February 2014, Adelaide Resources Limited and Investigator Resources Limited announced the termination of the Yalanda Hill Joint Venture which had explored three tenements on the eastern Eyre Peninsula of South Australia (*Figure 10*).

The Yalanda Hill Joint Venture was formed in 2009 and subsequent exploration included a systematic geochemical sampling program. This program failed to identify anomalies of a size or quality that ranked favourably against targets that either company had elsewhere in their portfolios. Consequently both parties agreed that their respective shareholders' interests were best served by discontinuing funding of any further work on the Yalanda Hill Joint Venture.

At termination, Adelaide Resources' equity in the Yalanda Hill Joint Venture was approximately 37% and Investigator Resources' equity approximately 63%.

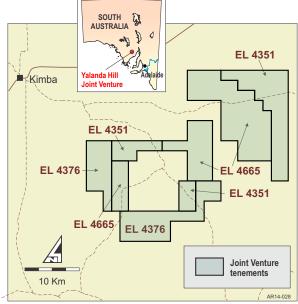


Figure 10: Yalanda Hill Joint Venture location plan.

The three tenements that were subject to the Joint Venture have been relinquished.■



# Appointment of Non-executive Director

On 7 April Mr Jonathan
Buckley was appointed
to the Board of Adelaide
Resources Limited. Mr
Buckley holds a Bachelor
of Economics from Monash
University and is a Senior
Fellow of the Financial
Services Institute of Australia.



Mr Buckley is a corporate executive with extensive commercial and corporate finance experience spanning over 25 years in Australia and the UK. He was previously Group Managing Director for PhillipCapital Australia, part of a

# issued capital

The company had 229,079,813 ordinary shares and 3,800,000 performance rights on issue at 31 March 2014.

During the quarter 1,550,000 performance rights were issued to company personnel under the Adelaide Resources Limited Employee Performance Rights Plan.■

leading Asian financial group providing corporate finance, funds management, stockbroking and wealth management services in Australia. He has been a founding director of a number of fund management businesses, in high growth sectors, including resources and healthcare.

Prior to establishing PhillipCapital Australia's corporate advisory business, Mr Buckley was Manager, Strategic Planning for Rothschild Asset Management UK based in London. He also had roles with KPMG Management Consulting and Barclays de Zoete Wedd Securities in London.

Mr Buckley's appointment adds considerable corporate finance and commercial expertise to the Board, balancing the strong technical experience of the existing directors.

# finance and corporate

The company had \$2.183 million in cash and term deposits at 31 March 2014.

Exploration and evaluation expenditure by the company during the March quarter was \$602,000. Exploration and evaluation expenditure incurred during the March quarter by joint venture parties on tenements in which the company has an interest total \$1,650.■

Chris Drown – Managing Director Signed on behalf of the

Board of Adelaide Resources Limited

Dated: 29 April 2014

# Competent Person Statement and JORC 2012 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.

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

<sup>(1)</sup> The information relating to Adelaide Resources' past exploration results and its assessment of exploration completed by past 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.

<sup>&</sup>lt;sup>(2)</sup> See ADN's ASX release dated 18 December 2013 titled "New Drill Target Defined Near Alford West Prospect – SA".

<sup>(3)</sup> See ADN's ASX release dated 12 February 2014 titled "Another New Drill Target Defined Near Alford West – SA"

<sup>(4)</sup> See ADN's ASX releases dated 11 March 2014 titled "Alford West Drilling Delivers Second High Grade Copper Target Zone - SA" and 9 April 2014 titled "Further Encouraging Alford West Results – SA".

<sup>(5)</sup> See ADN's ASX release dated 6 March 2014 titled "Maiden Drilling Intersects Copper At Blue Tongue – SA."

<sup>(6)</sup> See ADNs ASX release dated 3 April 2014 titled "Petrology Study Highlights Drummond Project Potential – QLD."