#### ARGONAUT RESOURCES NL

ABN 97 008 084 848

argonautresources.com

**ASX:** ARE

#### **CAPITAL STRUCTURE:**

Issued shares: 813,851,673

Listed options: None

Cash on hand: \$296,000

#### **DIRECTORS:**

Patrick Elliott, Non-Exec Chairman

Lindsay Owler, Director/CEO

Andrew Bursill, Director/Secretary

Malcolm Richmond, Non-Exec Director

#### **COPPER PROJECTS**

### Torrens, South Australia

Copper, gold (large IOCG)

- Phase: Permitting/ exploration
- Interest: Aeris Resources 70%, Argonaut 30%
- Agreement Phase: Exploration
- · Operator: Argonaut

#### Lumwana West, Zambia

Copper, cobalt (shear-hosted)

- Phase: Advanced exploration
- Interest: Argonaut 65%, Antofagasta 25%
- Agreement Phase: Exploration
- · Operator: Argonaut

#### LITHIUM PROJECTS

#### Crescent Lake, Canada

Confirmed lithium pegmatites deposits

- Phase: Advanced Exploration
- Interest: Acquiring 100%
- Agreement Phase: Exporation
- · Operator: Argonaut

#### Lake Blanche, South Australia

Lithium brine target

- Phase: Greenfields Exploration
- Interest: 100%
- Operator: Argonaut



# Quarterly report

FOR THE PERIOD ENDING 31 MARCH 2017

Argonaut Resources NL (*Argonaut* or the *Company*) (ASX: ARE) is pleased to present the following report for the period to 31 March 2017 (the *Quarter*).

# Highlights

# Copper

#### Torrens, South Australia

- The South Australian Environment, Resources and Development Court has granted native title authority to access and undertake exploration with the Torrens Project area.
- The Torrens Joint Venture is also seeking the reissue of two government approvals to finalise access provisions for a drilling program on EL5614.

#### Murdie, South Australia

- Argonaut has been granted two exploration licences in the area of Lake Torrens, South Australia.
- The licences cover a total of 1,015 square kilometres and are located immediately south and east of the Torrens project. The area east of the Carrapateena deposit is also covered.
- These licences cover confirmed IOCG targets in an area known as Murdie.

#### Lumwana West, Zambia

• The estimation of an Exploration Target including cobalt as well as copper was commissioned by Argonaut. The revised Exploration Target is:

#### Table 1: Nyungu March 2017 Exploration Target

| Commodity | Commodity Tonnage Range (Mt) |              | Contained Metal Range (kt) |
|-----------|------------------------------|--------------|----------------------------|
| Copper*   | 130 to 180                   | 0.45 to 0.65 | 580 to 1,150               |
| Cobalt    | 15 to 20                     | 0.08 to 0.12 | 12 to 24                   |

The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

- \* Copper Exploration Target announced to the ASX by Argonaut on 9 April 2013.
- Argonaut has reached preliminary and non-binding agreement to acquire a 25% interest in the Nyungu copper-cobalt deposit from a subsidiary of Antofagasta plc, increasing Argonaut's interest to 90%. The acquisition is subject to execution of definitive documentation.

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### Gold

#### Higginsville, Western Australia

- The company signed a definitive earn-in agreement for a package of 14 tenements in the Higginsville area of Western Australia. The tenements are prospective for gold and nickel.
- Gold targets are shallow oxide targets and deeper primary gold targets with the following historic drilling highlights:
  - ¬ AMC0007: 8m at 2.07g/t gold from 26m,
  - ¬ AMC0013: 5m at 4.03g/t gold from 21m,
  - AMC0015: 8m at 3.27g/t gold from 17 m, and
  - ¬ FFP0010: 7m at 2.13g/t gold from 28m.
- Nickel targets are prospective for massive nickel sulphides.

### Lithium

#### Crescent Lake, Canada

 Argonaut completed its assessment of the Falcon Lake and Zigzag claims in the Crescent Lake area and on 28 February 2017 exercised its option to acquire a 100% interest.

# Outlook

- Having cleared the native title hurdle during the period, shareholders can now expect drilling at the Torrens anomaly to proceed in the fourth quarter, 2017.
- The copper price stabilised during the Quarter and locked-in the gains enjoyed since September 2016.
- Argonaut's existing copper assets at Lake Torrens and Lumwana West are likely to be viewed in an increasingly
  positive light based on technical merit and metal prices.
- Argonaut will have held or acquired several tier-one exploration assets with company-making potential and is poised to commence exploration on large, prospective targets.

# Copper

# Torrens, South Australia

(Argonaut 30%)

#### Native Title Access Granted

On 31 March 2017, Judge Cole of the South Australian Environment, Resources and Development Court granted Kelaray Pty Ltd (Argonaut's wholly owned subsidiary and manager of the joint venture) and Aeris Resources Limited authority to enter and undertake mining operations (exploration) within the area of Exploration Licence 5614.

The granting of this authority is the most important step towards recommencement of drilling at the Torrens Project. Argonaut and its 70% Joint Venture partner, Aeris Resources Limited, look forward to working with all Traditional Owners to preserve and protect heritage sites nearby to the Torrens licence.

#### The Torrens Joint Venture

The Torrens Joint Venture is between Argonaut Resources NL and Aeris Resources Limited (ASX: AIS, previously Straits Resources Ltd) and relates to the Torrens Project, EL5614.

The Torrens Joint Venture is exploring for iron oxide-copper-gold systems in the highly prospective Stuart Shelf region of South Australia. The Torrens Project is located near the eastern margin of South Australia's Gawler Craton (Stuart Shelf), within 50 kilometres of Oz Minerals' Carrapateena copper-gold deposit and 75 kilometres from BHP Billiton's Olympic Dam mine.

#### The Way Forward

The Torrens Joint Venture is seeking the reissue of two state government approvals to finalise access provisions for a drilling program at Torrens. Both approvals were previously held by the joint venture for a similar drilling program. The joint venture expects that these approvals will be reissued, in accordance with required procedures, in three to five months.

#### The Torrens Anomaly

The Torrens anomaly is a coincident magnetic and gravity anomaly with a footprint larger than that of Olympic Dam. The anomaly is located at the Torrens Hinge Zone, a continent-scale zone of crustal weakness that appears to have been a conduit for mineralising fluids from the Earth's mantle.

Drilling of the Torrens anomaly by Western Mining Corporation in the late 1970s and by the Torrens Joint Venture in 2007 and 2008 confirmed the existence of a major iron oxide copper-gold mineralising system beneath several hundred metres of sedimentary cover.

More drilling is required to intercept the modelled copper-gold mineralisation. In the event of a discovery, the Torrens anomaly has the potential to host a world-class copper-gold deposit.

# Murdie, South Australia

In 2016 Argonaut submitted proposals to the South Australian Department of State Development seeking the grant of two Exploration Release Areas contiguous with the Company's Torrens project in South Australia. On 30 March 2017, one of the Exploration Licences was granted to Argonaut Resources. The second was granted subsequent to the Period in April 2017.

The licence applications cover a total of 1,015 square kilometres and are located immediately south and east of the Torrens project. The area east of the Carrapateena deposit is also covered (Figure 1).

These licences cover confirmed IOCG targets in an area known as Murdie.

These licences constitute excellent exploration opportunities in their own right and provide Argonaut with a commanding land holding in the event of a discovery at Torrens.

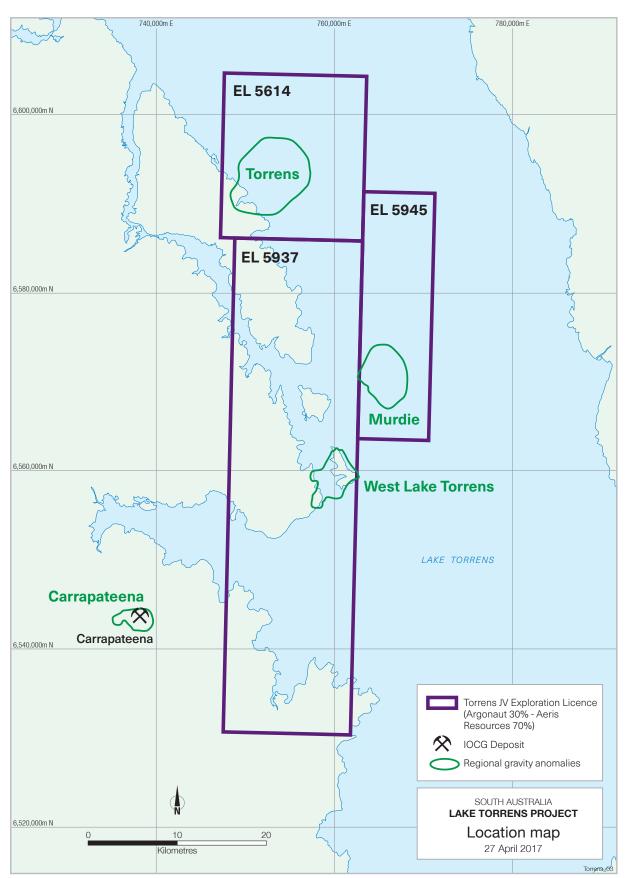


Figure 1: Lake Torrens exploration licences.

### Lumwana West

(Argonaut 65%, acquiring 90%)

The Lumwana West project is located in the Central African Copperbelt, North-Western Province, Zambia. The area is prospective for large tonnage, low to medium grade copper/cobalt deposits. There are several major mines nearby to Lumwana West that are hosted in similar geological settings.

Argonaut, via its majority held subsidiary, Mwombezhi Resources Ltd, has been successful in intercepting broad copper and cobalt intercepts at the Nyungu deposit and has defined a series of large, prospective targets that have now undergone first-pass drill testing.

#### **Revised Exploration Target**

The estimation of an Exploration Target including cobalt as well as copper was commissioned by Argonaut. The revised Exploration Target is:

Table 1: Nyungu March 2017 Exploration Target

| Commodity | Tonnage Range (Mt) | Grade Range (%) | Contained Metal Range (kt) |
|-----------|--------------------|-----------------|----------------------------|
| Copper*   | 130 to 180         | 0.45 to 0.65    | 580 to 1,150               |
| Cobalt    | 15 to 20           | 0.08 to 0.12    | 12 to 24                   |

The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The March 2017 Exploration Target is estimated to JORC 2012 standards. Argonaut is planning to undertake a drilling program targeting cobalt of at least 3,000 metres as soon as possible

#### **Cobalt Drill Intercepts**

Cobalt mineralisation occurs as coherent lenses within the footwall of the copper sulphide mineralisation. Argonaut intercepted strong cobalt mineralisation from its first drill hole into the Nyungu deposit in 2011, NYU11RD001 (120m at 0.06% Co, including 26m at 0.13% Co). Cobalt is intercepted predicably between drill traverses in a zone at or below the base of significant copper mineralisation.

Nyungu deposit cobalt drilling highlights:

Table 2: Nyungu copper-cobalt deposit - Cobalt drill intercepts

| Hole       | From (m) | Interval (m) | Co (%) | Cu (%) |
|------------|----------|--------------|--------|--------|
| NYU11RD001 | 37       | 120.0        | 0.06   | 0.34   |
| including  | 104      | 26.0         | 0.13   | 0.28   |
| NYU11RD010 | 155      | 72.0         | 0.08   | 0.61   |
| including  | 167      | 38.0         | 0.10   | 0.91   |
| NYU11RD013 | 31       | 1.0          | 0.56   | 0.57   |
| NYU11RD022 | 12       | 88.2         | 0.07   | 0.47   |
| including  | 42       | 10.0         | 0.19   | 0.61   |
| NYRD031    | 236      | 59.9         | 0.07   | 0.50   |
| including  | 237      | 22.0         | 0.13   | 0.58   |
| NYRD038    | 258      | 29.0         | 0.12   | 0.55   |
| including  | 259      | 21.0         | 0.16   | 0.57   |
| NYRD044    | 181.5    | 12.2         | 0.10   | 0.18   |
| including  | 186.8    | 6.0          | 0.16   | 0.24   |
| NYRD045    | 38.5     | 69.0         | 0.06   | 0.58   |
| including  | 93       | 8.0          | 0.11   | 0.29   |
| NYRD046    | 183.4    | 81.5         | 0.12   | 0.71   |
| including  | 218.5    | 23.0         | 0.21   | 0.51   |
| MM296      | 88       | 53.0         | 0.05   | 0.30   |
| including  | 90       | 12.0         | 0.13   | 0.50   |

<sup>\*</sup> Copper Exploration Target announced to the ASX by Argonaut on 9 April 2013.

The opportunity exists to drill further and better cobalt intercepts and to increase the tonnage and grade of cobalt mineralisation. This is mainly because drilling specifically targeted copper mineralisation, not cobalt.

Current cobalt prices have potential to transform the economics of the Nyungu deposit.

#### Milestone Payments

In February 2017, Argonaut and Antofagasta reached a preliminary and non-binding agreement of terms for the reacquisition by Argonaut of a 25% beneficial interest in the Lumwana West project earned by Antofagasta under an earn-in style option agreement that ran from April 2014 to October 2015. The acquisition by Argonaut is subject to the preparation and execution of definitive documentation. Antofagasta spent \$3,900,000 on regional exploration at Lumwana West during the earn-in period.

In exchange for Antofagasta's interest, Argonaut has agreed to make milestone payments and grant a net-smelter royalty on the following terms:

- Pay Antofagasta US\$1,000,000 on the commencement of a feasibility study; and
- on development decision
  - ¬ pay Antofagasta US\$3,000,000; and
  - ¬ grant Antofagasta a 1.5% net smelter royalty on production.

#### Additionally:

- Argonaut will have the right to buy the net smelter royalty from Antofagasta for US\$4,000,000; and
- Argonaut will pay Antofagasta 25% of any sale proceeds in the event the project is divested.

### Alford, South Australia

(Argonaut 100%)

The Alford Project on South Australia's Yorke Peninsula lies 20km north-east of Wallaroo within the geological province known as the Olympic Domain. The tenement is prospective for iron oxide copper-gold mineralisation as found at Prominent Hill, Olympic Dam and Hillside. No field based work was undertaken at Alford during the Quarter.

# Kroombit, Queensland

(Argonaut 100%)

No field based work was undertaken at Kroombit during the Quarter.

#### Background

Argonaut holds a 100% interest in the Kroombit zinc-copper deposit in Central Queensland via its interest in ML5631 and MDL2002. Mining on ML5631 is subject to a 2% net smelter royalty, payable to Aeris Resources Ltd.

On 11 June 2009 Argonaut announced a maiden resource estimation for the Kroombit deposit. The **Indicated and Inferred Resources** at Kroombit comprise:

- a Zinc Resource of 5.2 million tonnes at 1.9% zinc and 0.15% copper using a cut-off of 1.0% Zn, for 98,800 tonnes of zinc and 7,800 tonnes of copper; and
- a Copper Resource of 0.9 million tonnes at 1.0% copper at a cut-off of 0.5% Cu for 9,000 tonnes of copper.

In addition, Exploration Results are reported comprising a defined Exploration Potential of between:

- 1 million and 1.5 million tonnes at 1.5% to 2.0% zinc, and between
- 0.5 million and 1 million tonnes at 0.7% to 1.3% copper.

### Aroona, South Australia

(Argonaut 100%)

EL5220 and EL5336, Aroona, are subject to a joint venture agreement with Perilya Limited. No field based work was undertaken at Aroona during the Quarter.

# Gold

# Higginsville, Western Australia

(Argonaut earning 80%)

On 7 February 2017 Argonaut signed a definitive earn-in agreement for a package of 14 tenements in the Higginsville area of Western Australia. The tenements are prospective for gold and nickel.

The tenements that make-up the Higginsville project are located in Western Australia's Eastern Goldfields (Figure 2). Geologically, the package sits within the Norseman-Wiluna Belt, a belt of ancient rocks endowed with gold and nickel that sits within the broader Yilgarn Craton.

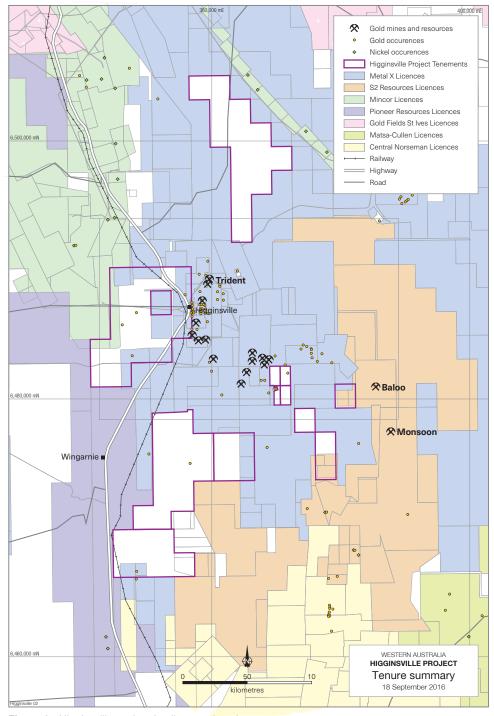


Figure 2: Higginsville exploration licences location.

Approximately 70% of Australia's historical gold production has come from the Yilgarn Craton and most of that from the Norseman-Wiluna Belt.

The Higginsville Project is located south of Kambala, west of Lake Cowan and adjacent to Higginsville where over two million ounces of gold has been historically defined. Gold discoveries at Baloo and Monsoon (Polar Bear) by S2 Resources are located immediately east of the Higginsville Project at Lake Cowen.

#### **Gold Exploration**

Argonaut's two primary goals in securing the earn-in agreement are to firstly explore for near-surface oxide gold in areas with historic shallow drilling results and secondly to target deeper primary gold mineralisation at depths previously untested by drilling.

#### Historic Drilling Highlights - Oxide Gold

Historic shallow drilling in the area of Amorphous and Footes Find prospects was completed by Resolute Mining Ltd in the early 1990s. Highlights of this drilling are show below. Detailed historic results are shown in Appendix 1.

#### **Amorphous Prospect**

- AMC0007: 8m at 2.07g/t gold from 26m including 2m at 7.94g/t gold from 28m
- AMC0010: 9m at 1.21g/t gold from 71m including 2m at 3.78g/t gold from 73m
- AMR0013: 5m at 4.03g/t gold from 21m including 2m at 10.37g/t gold from 22m
- AMR0015: 8m at 3.27g/t gold from 17m including 3m at 9.6g/t gold from 21m

#### **Footes Find Prospect**

 FFP0010: 7m at 2.13g/t gold from 28m including 1m at 12.5g/t gold from 30m

Amorphous and Footes Find are located approximately 5km along a sealed road from an operating mill and present an excellent opportunity for a meaningful, near-term exploration outcome.

#### Nickel Exploration

Nickel targets within the Higginsville tenement package are called Hayes Hill and Green Bananas. These targets are located south of Higginsville (Figure 1) near the west shore of Lake Cowan. The targets have been defined by auger drilling and are co-incident with magnetic signatures typical of nickel-bearing geological units.

Green Bananas features a nickel geochemistry anomaly with auger samples returning between 0.1 and 0.2% nickel.

These targets are prospective for massive nickel sulphides such as those discovered by Mincor Resources NL nearby at Cassini. Targets warrant a follow-up geophysical (EM) surveys.

#### Agreement Terms

Argonaut and Loded Dog Prospecting Pty Ltd executed the Eastern Goldfields Earn-In Joint Venture and Royalty Agreement on 7 February 2017. Under the agreement, Argonaut has the right to earn an 80% interest in the tenement package according to the following terms:

- Argonaut can earn a 51% interest in the tenement package in exchange for completing \$500,000 in exploration expenditure within two years of commencement; and
- Argonaut may earn a further 29% interest, for a total of 80%, for completing an additional \$1,500,000 in exploration expenditure within a further three years.
- Reimbursement of tenement acquisition expenses totalling \$250,000 are payable by Argonaut progressively under the agreement.
  - ¬ Reimbursement of \$100,000 is payable on execution of the definitive earn-in agreement;
  - $\neg$  reimbursement of \$75,000 is payable on the first anniversary; and
  - ¬ reimbursement of \$75,000 is payable on election to proceed to the second phase of the earn-in.

An issue of ordinary fully paid Argonaut shares to the value of \$50,000 is due on execution of the definitive earn-in agreement.

# Lithium

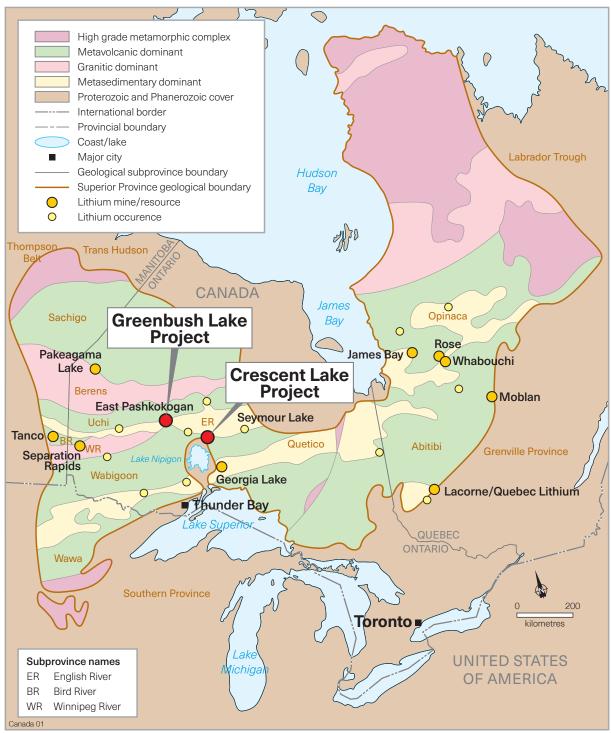


Figure 3: Geology of the Superior Province, Canada, showing Crescent Lake, Greenbush Lake and regional lithium occurrences.

# Crescent Lake, Canada

(Argonaut acquiring 100%)

On 4 March 2016, Argonaut released details of the Crescent Lake Lithium Project to the ASX. The initial acquisition included the Falcon Lake and Zigzag areas (Figure 4). On 8 June 2016, Argonaut announced the grant of 22 additional claims in the Crescent Lake area (Figure 4). These new claims are 100% held by Argonaut.

On 16 December 2016, Argonaut announced details of an extension and variation to the option to acquire the Falcon Lake and Zigzag areas.

On 28 February 2017, Argonaut exercised its option to acquire 100% of the Falcon Lake and Zigzag claims.

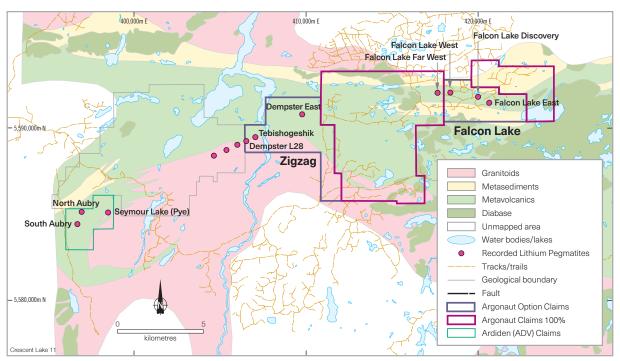


Figure 4: Crescent Lake claim locations, pegmatite occurrences and geology.

### Greenbush Lake, Canada

(Argonaut purchasing 100%)

The Greenbush Lake Lithium Pegmatite Project is in Ontario, Canada (Figure 3), and features a large, outcropping spodumene-bearing pegmatite with grades of up to  $2.46\%~\text{Li}_2\text{O}$  within an area confirmed as having the requisite geological components for lithium pegmatite emplacement.

The known lithium pegmatite occurrence is 15m wide by 30m in exposed strike length. The actual strike length of the known pegmatite has not yet been determined as the exposure continues under thin sedimentary cover to the north and under lake waters to the south. The pegmatite has not been drilled.

#### **Previous Exploration**

Three phases of exploration have been undertaken in the area of the lithium occurrence.

- The Ontario Department of Mines discovered the pegmatite around 1965 and took a chip sample across the full width (50 feet) of the outcrop. Analysis of the chip sample returned 1.25% Li<sub>2</sub>O.
- 2. **Placer** Development Ltd explored the area for tantalum in 1980. A magnetic survey attempting to define the extent of the pegmatite was unsuccessful; however, an **assay of the outcrop returned 2.46% Li<sub>2</sub>O**.
- 3. Canadian Orebodies Inc. undertook an exploration program in 2009. Highlights of a rock-chip sampling program are shown in Table 1.

Table 1: 2009 Rock-Chip sample highlights, Greenbush Lake Project

| Description | Li <sub>2</sub> O (%) |
|-------------|-----------------------|
| Outcrop     | 1.19                  |
| Float       | 1.96                  |
| Float       | 0.85                  |
| Float       | 0.95                  |
| Outcrop     | 1.58                  |

# Lake Blanche, South Australia

On 4 April 2016, Argonaut announced it has secured two exploration licences covering Lake Blanche, a salt lake with the potential to host lithium brines and potash in the north of South Australia. The grant of Exploration Licences covering Lake Blanche was finalised in the Quarter.

Argonaut also pegged the majority of Lake Callabonna to the southeast of Lake Blanche (Figure 5). This tenement is a strategic holding in the event of exploration success at Lake Blanche.

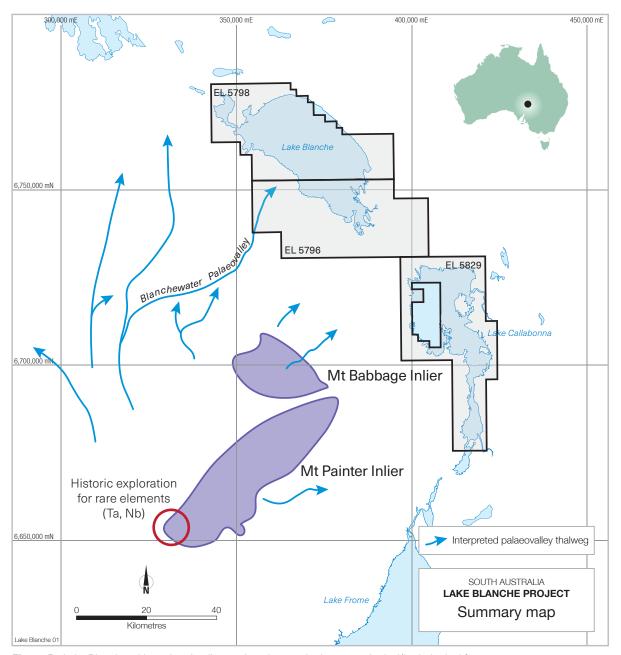


Figure 5: Lake Blanche with exploration licence locations and relevant geological/hydrological features.

Lake Blanche is a closed-to-restricted basin covering an area of 1,700 square kilometres. It has a broad catchment that includes the Mt Babbage and Mt Painter Inliers which are recorded as containing elevated rare elements including lithium and tantalum (Figure 5).

Economic concentrations of lithium in brine generally occur in circumstances where ground waters percolate through neighbouring lithium bearing rocks into a closed, continental basin that has not been subject to marine flooding throughout its geological history. Lake Blanche appears to fit these requirements.

An arc of lakes, including Lake Blanche, to the north of the Flinders Ranges has been independently defined as prospective by Geoscience Australia in a 2013 report titled 'A Review of Australian Salt Lakes and Assessment of their Potential for Strategic Resources'. Argonaut, having assessed the potential of each lake on merit, determined that Lake Blanche has the best potential for economic lithium grades.

In the event economic concentrations of lithium are contained in Lake Blanche's brines, the lake has the potential to be an internationally significant source.

No previous lithium brine exploration has been recorded in the Lake Blanche area although historic brine exploration has been undertaken at Lake Frome, to the southeast.

# About Argonaut

Argonaut is an Australia Securities Exchange listed exploration and development company. Argonaut operates the Torrens Iron Oxide Copper-Gold Joint Venture with Aeris Resources Ltd in South Australia, the Lumwana West copper-cobalt project with Chilean copper producer, Antofagasta plc, in north-western Zambia and the Crescent Lake lithium project in Ontario, Canada.

#### **Lindsay Owler**

Director and CEO

Argonaut Resources NL

Sections of information contained in this report that relate to Exploration Results were compiled or supervised by Mr Lindsay Owler BSc, MAusIMM who is a Member of the Australasian Institute of Mining and Metallurgy and is a full time employee of Argonaut Resources NL. Mr Owler holds shares and options in Argonaut Resources NL, details of which are disclosed in the Company's 2016 Annual Report. Mr Owler has sufficient experience which is relevant to the style of mineral deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Owler consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information regarding Resource definition and Exploration Potential for the Kroombit deposit is extracted from a report entitled 'Maiden resource estimate announced for Queensland zinc-copper project'. This report was released on 11 June 2009 and is available to view on www.asx.com.au. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

# Tenement Schedule

Table 1: Summary of mining tenements

|          | South Australian Mineral Exploration Licences |            |            |                       |                                 |                  |  |  |  |  |  |
|----------|---|------------|------------|-----------------------|---------------------------------|------------------|--|--|--|--|--|
| Tenement | Granted                                       | Expiry     | Area (km²) | Locality              | Licensee                        | Interest         |  |  |  |  |  |
| EL 5183  | 21/05/2012                                    | 20/05/2017 | 33         | Campfire Bore         | Coombedown<br>Resources Pty Ltd | 10%1             |  |  |  |  |  |
| EL 5212  | 05/11/2012                                    | 04/11/2017 | 481        | Alford                | Kelaray Pty Ltd                 | 100%             |  |  |  |  |  |
| EL 5336  | 04/06/2013                                    | 03/06/2018 | 27         | Myrtle Springs        | Kelaray Pty Ltd                 | 100%             |  |  |  |  |  |
| EL 5614  | 18/08/2014                                    | 17/08/2019 | 295        | Lake Torrens          | Kelaray Pty Ltd                 | 30%              |  |  |  |  |  |
| EL 5220  | 04/11/2014                                    | 03/11/2019 | 27         | Mt Parry              | Kelaray Pty Ltd                 | 100%             |  |  |  |  |  |
| EL 5732  | 18/10/2015                                    | 17/10/2017 | 104        | Sandstone             | Coombedown<br>Resources Pty Ltd | 10% <sup>1</sup> |  |  |  |  |  |
| EL 5798  | 02/06/2016                                    | 01/06/2018 | 997        | Lake Blanche area     | Kelaray Pty Ltd                 | 100%             |  |  |  |  |  |
| EL 5796  | 02/06/2016                                    | 01/06/2018 | 997        | Petermorra Creek area | Kelaray Pty Ltd                 | 100%             |  |  |  |  |  |
| EL 5829  | 16/08/2016                                    | 15/08/2018 | 893        | Lake Callabonna       | Kelaray Pty Ltd                 | 100%             |  |  |  |  |  |
| EL 5937  | 30/03/2017                                    | 29/03/2019 | 794        | West Lake Torrens     | Kelaray Pty Ltd                 | 100%             |  |  |  |  |  |

| South Australian Mineral Exploration Licence Applications |   |  |     |        |                 |      |  |  |  |
|---|---|--|-----|--------|-----------------|------|--|--|--|
| Tenement  | Tenement Granted Expiry Area (km²) Locality Licensee Interest |  |     |        |                 |      |  |  |  |
| ELA 2016/0135   |   |  | 221 | Murdie | Kelaray Pty Ltd | 100% |  |  |  |

|   | Queensland Mining Lease |            |      |          |                 |      |  |  |  |
|---|-------------------------|------------|------|----------|-----------------|------|--|--|--|
| Tenement Granted Expiry Area (km²) Locality Licensee Interest |                         |            |      |          |                 |      |  |  |  |
| ML 5631   | 16/05/1974              | 31/05/2026 | 0.32 | Kroombit | Kelaray Pty Ltd | 100% |  |  |  |

| Queensland Mineral Development Licence |            |            |            |          |                 |          |  |  |  |
|--|------------|------------|------------|----------|-----------------|----------|--|--|--|
| Tenement                               | Granted    | Expiry     | Area (km²) | Locality | Licensee        | Interest |  |  |  |
| MDL 2002                               | 03/08/2016 | 02/08/2021 | 0.64       | Kroombit | Kelaray Pty Ltd | 100%     |  |  |  |

| Zambian Large Scale Prospecting Licences |            |            |            |                           |                            |          |  |  |  |  |
|--|------------|------------|------------|---------------------------|----------------------------|----------|--|--|--|--|
| Tenement                                 | Applied    | Expiry     | Area (km²) | Locality                  | Licensee                   | Interest |  |  |  |  |
| 16121-HQ-LEL                             | 21/07/2011 | 20/07/2018 | 571        | North Western<br>Province | Mwombezhi<br>Resources Ltd | 65%      |  |  |  |  |

|                      |            | Ontari     | io Unpatented | Mining Claims                     |                            |          |
|----------------------|------------|------------|---------------|-----------------------------------|----------------------------|----------|
| Tenement             | Granted    | Expiry     | Area (km²)    | Locality                          | Licensee                   | Interest |
| 4244211 <sup>2</sup> | 27/10/2008 | 27/10/2017 | 1.94          | Crescent Lake -<br>Zigzag         | Canadian Orebodies Inc.    | 100%     |
| 4244212 <sup>2</sup> | 27/10/2008 | 27/10/2017 | 2.56          | Crescent Lake -<br>Zigzag         | Canadian Orebodies Inc.    | 100%     |
| 4244213 <sup>2</sup> | 27/10/2008 | 27/10/2017 | 2.56          | Crescent Lake -<br>Zigzag         | Canadian Orebodies Inc.    | 100%     |
| 4252421 <sup>2</sup> | 09/12/2009 | 09/12/2017 | 2.56          | Crescent Lake -<br>Zigzag         | Canadian Orebodies Inc.    | 100%     |
| 4213186 <sup>2</sup> | 24/09/2009 | 24/09/2017 | 2.56          | Crescent Lake -<br>Zigzag         | Canadian Orebodies Inc.    | 100%     |
| 4213187 <sup>2</sup> | 24/09/2009 | 24/09/2017 | 2.24          | Crescent Lake -<br>Zigzag         | Canadian Orebodies Inc.    | 100%     |
| 4229526 <sup>2</sup> | 24/09/2009 | 24/09/2017 | 1.93          | Crescent Lake -<br>Zigzag         | Canadian Orebodies Inc.    | 100%     |
| 4252441 <sup>2</sup> | 09/12/2009 | 09/12/2017 | 1.33          | Crescent Lake -<br>Falcon Lake    | Canadian Orebodies Inc.    | 100%     |
| 4252442 <sup>2</sup> | 09/12/2009 | 09/12/2017 | 0.64          | Crescent Lake -<br>Falcon Lake    | Canadian Orebodies Inc.    | 100%     |
| 4250593 <sup>2</sup> | 17/07/2009 | 17/07/2017 | 2.56          | Crescent Lake -<br>Falcon Lake    | Canadian Orebodies Inc.    | 100%     |
| 4250594 <sup>2</sup> | 17/07/2009 | 17/07/2017 | 2.56          | Crescent Lake -<br>Falcon Lake    | Canadian Orebodies Inc.    | 100%     |
| 4250595 <sup>2</sup> | 17/07/2009 | 17/07/2017 | 2.56          | Crescent Lake -<br>Falcon Lake    | Canadian Orebodies Inc.    | 100%     |
| 4276304 <sup>2</sup> | 22/03/2016 | 22/03/2018 | 2.53          | Greenbush Lake                    | Canadian Orebodies<br>Inc. | 100%     |
| 4276305 <sup>2</sup> | 22/03/2016 | 22/03/2018 | 2.39          | Greenbush Lake                    | Canadian Orebodies Inc.    | 100%     |
| 4276306 <sup>2</sup> | 22/03/2016 | 22/03/2018 | 2.56          | Greenbush Lake                    | Canadian Orebodies Inc.    | 100%     |
| 4282315              | 01/04/2016 | 01/04/2018 | 2.55          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc.        | 100%     |
| 4282316              | 01/04/2016 | 01/04/2018 | 2.55          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc.        | 100%     |
| 4282317              | 01/04/2016 | 01/04/2018 | 2.52          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc.        | 100%     |
| 4282318              | 01/04/2016 | 01/04/2018 | 2.52          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc.        | 100%     |
| 4282319              | 01/04/2016 | 01/04/2018 | 2.52          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc.        | 100%     |
| 4282320              | 01/04/2016 | 01/04/2018 | 2.55          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc.        | 100%     |
| 4282321              | 01/04/2016 | 01/04/2018 | 2.55          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc.        | 100%     |
| 4282322              | 01/04/2016 | 01/04/2018 | 2.55          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc.        | 100%     |
| 4282323              | 01/04/2016 | 01/04/2018 | 2.51          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc.        | 100%     |
| 4282324              | 01/04/2016 | 01/04/2018 | 2.55          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc.        | 100%     |
| 4282325              | 01/04/2016 | 01/04/2018 | 2.55          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc.        | 100%     |

|          |            | Ontari     | io Unpatented | Mining Claims                     |                     |         |
|----------|------------|------------|---------------|-----------------------------------|---------------------|---------|
| Tenement | Granted    | Expiry     | Area (km²)    | Locality                          | Licensee            | Interes |
| 4282326  | 01/04/2016 | 01/04/2018 | 2.51          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc. | 100%    |
| 4282327  | 01/04/2016 | 01/04/2018 | 2.4           | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc. | 100%    |
| 4282328  | 01/04/2016 | 01/04/2018 | 2.55          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc. | 100%    |
| 4282329  | 01/04/2016 | 01/04/2018 | 2.53          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc. | 100%    |
| 4282330  | 01/04/2016 | 01/04/2018 | 2.42          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc. | 100%    |
| 4282331  | 01/04/2016 | 01/04/2018 | 1.47          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc. | 100%    |
| 4282332  | 01/04/2016 | 01/04/2018 | 2.3           | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc. | 100%    |
| 4282333  | 01/04/2016 | 01/04/2018 | 2.51          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc. | 100%    |
| 4282334  | 01/04/2016 | 01/04/2018 | 2.59          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc. | 100%    |
| 4282335  | 01/04/2016 | 01/04/2018 | 2.52          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc. | 100%    |
| 4282336  | 01/04/2016 | 01/04/2018 | 2.49          | Crescent Lake -<br>North Jackfish | Sunrise Canada Inc. | 100%    |
| 4279256  | 15/04/2016 | 15/04/2018 | 2.53          | Superb Lake                       | Sunrise Canada Inc. | 100%    |
| 4279257  | 15/04/2016 | 15/04/2018 | 2.55          | Superb Lake                       | Sunrise Canada Inc. | 100%    |
| 4279258  | 15/04/2016 | 15/04/2018 | 2.55          | Superb Lake                       | Sunrise Canada Inc. | 100%    |
| 4279259  | 15/04/2016 | 15/04/2018 | 2.55          | Superb Lake                       | Sunrise Canada Inc. | 100%    |
| 4279260  | 15/04/2016 | 15/04/2018 | 2.55          | Superb Lake                       | Sunrise Canada Inc. | 100%    |
| 4279261  | 15/04/2016 | 15/04/2018 | 2.57          | Superb Lake                       | Sunrise Canada Inc. | 100%    |
| 4279262  | 15/04/2016 | 15/04/2018 | 2.56          | Superb Lake                       | Sunrise Canada Inc. | 100%    |
| 4279263  | 15/04/2016 | 15/04/2018 | 2.55          | Superb Lake                       | Sunrise Canada Inc. | 100%    |
| 4279264  | 15/04/2016 | 15/04/2018 | 2.55          | Superb Lake                       | Sunrise Canada Inc. | 100%    |
| 4279265  | 15/04/2016 | 15/04/2018 | 2.55          | Superb Lake                       | Sunrise Canada Inc. | 100%    |

Table 2 - Summary of mining tenements acquired in Quarter

|                       | South Australian Mineral Exploration Licences |            |            |             |                                  |          |  |  |  |  |  |
|-----------------------|---|------------|------------|-------------|----------------------------------|----------|--|--|--|--|--|
| Tenement              | Granted                                       | Expiry     | Area (km²) | Locality    | Licensee                         | Interest |  |  |  |  |  |
| E28/2513 <sup>2</sup> | 06/07/2016                                    | 05/07/2021 | 64         | Torquata    | Loded Dog<br>Prospecting Pty Ltd | 100%     |  |  |  |  |  |
| E15/1484 <sup>2</sup> | 18/07/2016                                    | 17/07/2021 | 12         | Mount Eaton | Loded Dog<br>Prospecting Pty Ltd | 100%     |  |  |  |  |  |

| Western Australian Mineral Exploration Licence Applications |         |        |            |              |                                  |          |
|---|---------|--------|------------|--------------|----------------------------------|----------|
| Tenement  | Granted | Expiry | Area (km²) | Locality     | Licensee                         | Interest |
| E 15/1540 <sup>2</sup>                                      |         |        | 9          | Higginsville | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| E 15/1539 <sup>2</sup>                                      |         |        | 21         | Higginsville | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| P63/2071 <sup>2</sup>                                       |         |        | 1.37       | Hayes Hill   | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| P63/2072 <sup>2</sup>                                       |         |        | 1.27       | Hayes Hill   | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| P63/2073 <sup>2</sup>                                       |         |        | 1.54       | Hayes Hill   | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| E15/1588 <sup>2</sup>                                       |         |        | 61         | Higginsville | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| P63/2077 <sup>2</sup>                                       |         |        | 0.7        | Hayes Hill   | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| E15/1509 <sup>2</sup>                                       |         |        | 3          | Eundynie     | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| E 15/1510 <sup>2</sup>                                      |         |        | 3          | Eundynie     | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| E 63/1773 <sup>2</sup>                                      |         |        | 21         | Hayes Hill   | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| E15/1489 <sup>2</sup>                                       |         |        | 52         | Higginsville | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| P15/6029 <sup>2</sup>                                       |         |        | 1.2        | Higginsville | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| P15/6030 <sup>2</sup>                                       |         |        | 1.2        | Higginsville | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| P15/6031 <sup>2</sup>                                       |         |        | 1.2        | Higginsville | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| P15/6032 <sup>2</sup>                                       |         |        | 1.2        | Higginsville | Loded Dog<br>Prospecting Pty Ltd | 100%     |
| E15/1523 <sup>2</sup>                                       |         |        | 42         | Higginsville | Loded Dog<br>Prospecting Pty Ltd | 100%     |

Table 3 - Summary of mining tenements surrendered in Quarter

No tenements were surrendered in the March 2017 Quarter.

<sup>1</sup> Kelaray holds a 33% interest in Coombedown Resources Pty. Ltd.

<sup>2</sup> Under option agreement

<sup>3</sup> Renewal application

+Rule 5.5

# Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

#### Name of entity

| Argonaut Resources NL |                                   |
|-----------------------|-----------------------------------|
| ABN                   | Quarter ended ("current quarter") |
| 97 008 084 848        | 31 March 2017                     |

| Cor | solidated statement of cash flows              | Current quarter<br>\$A'000 | Year to date<br>(9 months)<br>\$A'000 |
|-----|--|----------------------------|---------------------------------------|
| 1.  | Cash flows from operating activities           |                            |                                       |
| 1.1 | Receipts from customers                        |                            |                                       |
| 1.2 | Payments for                                   |                            |                                       |
|     | (a) exploration & evaluation                   | (346)                      | (941)                                 |
|     | (b) development                                |                            |                                       |
|     | (c) production                                 |                            |                                       |
|     | (d) staff costs (including exploration staff)  | (86)                       | (415)                                 |
|     | (e) administration and corporate costs         | (186)                      | (571)                                 |
| 1.3 | Dividends received (see note 3)                |                            |                                       |
| 1.4 | Interest received                              | 1                          | 2                                     |
| 1.5 | Interest and other costs of finance paid       |                            |                                       |
| 1.6 | Income taxes paid                              |                            |                                       |
| 1.7 | Research and development refunds               |                            |                                       |
| 1.8 | Other (provide details if material)            |                            |                                       |
| 1.9 | Net cash from / (used in) operating activities | (617)                      | (1,925)                               |

| 2.  | Cash flows from investing activities |  |
|-----|--------------------------------------|--|
| 2.1 | Payments to acquire:                 |  |
|     | (a) property, plant and equipment    |  |
|     | (b) tenements (see item 10)          |  |
|     | (c) investments                      |  |
|     | (d) other non-current assets         |  |

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<sup>+</sup> See chapter 19 for defined terms

| Con | solidated statement of cash flows              | Current quarter<br>\$A'000 | Year to date<br>(9 months)<br>\$A'000 |
|-----|--|----------------------------|---------------------------------------|
| 2.2 | Proceeds from the disposal of:                 |                            |                                       |
|     | (a) property, plant and equipment              |                            |                                       |
|     | (b) tenements (see item 10)                    |                            |                                       |
|     | (c) investments                                |                            | 416                                   |
|     | (d) other non-current assets                   |                            |                                       |
| 2.3 | Cash flows from loans to other entities        |                            |                                       |
| 2.4 | Dividends received (see note 3)                |                            |                                       |
| 2.5 | Other (provide details if material)            |                            |                                       |
| 2.6 | Net cash from / (used in) investing activities | -                          | 416                                   |

| 3.   | Cash flows from financing activities  |     |     |
|------|---|-----|-----|
| 3.1  | Proceeds from issues of shares  | 492 | 492 |
| 3.2  | Proceeds from issue of convertible notes                                    |     |     |
| 3.3  | Proceeds from exercise of share options                                     |     |     |
| 3.4  | Transaction costs related to issues of shares, convertible notes or options | (5) | (5) |
| 3.5  | Proceeds from borrowings  |     |     |
| 3.6  | Repayment of borrowings   |     |     |
| 3.7  | Transaction costs related to loans and borrowings                           |     |     |
| 3.8  | Dividends paid  |     |     |
| 3.9  | Other (provide details if material)   |     |     |
| 3.10 | Net cash from / (used in) financing activities                              | 487 | 487 |

| 4.  | Net increase / (decrease) in cash and cash equivalents for the period |       |         |
|-----|---|-------|---------|
| 4.1 | Cash and cash equivalents at beginning of period                      | 426   | 1,318   |
| 4.2 | Net cash from / (used in) operating activities (item 1.9 above)       | (617) | (1,925) |
| 4.3 | Net cash from / (used in) investing activities (item 2.6 above)       | -     | 416     |
| 4.4 | Net cash from / (used in) financing activities (item 3.10 above)      | 487   | 487     |
| 4.5 | Effect of movement in exchange rates on cash held                     | -     | -       |
| 4.6 | Cash and cash equivalents at end of period                            | 296   | 296     |

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

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| 5.  | Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts | Current quarter<br>\$A'000 | Previous quarter<br>\$A'000 |
|-----|---|----------------------------|-----------------------------|
| 5.1 | Bank balances   | 296                        | 426                         |
| 5.2 | Call deposits   | -                          | -                           |
| 5.3 | Bank overdrafts   | -                          | -                           |
| 5.4 | Other (provide details)   | -                          | -                           |
| 5.5 | Cash and cash equivalents at end of quarter (should equal item 4.6 above)   | 296                        | 426                         |

| 6.            | Payments to directors of the entity and their associates                                | Current quarter<br>\$A'000 |
|---------------|---|----------------------------|
| 6.1           | Aggregate amount of payments to these parties included in item 1.2                      | 129                        |
| 6.2           | Aggregate amount of cash flow from loans to these parties included in item 2.3          | -                          |
| 6.3           | Include below any explanation necessary to understand the transaction items 6.1 and 6.2 | ns included in             |
|               |   |                            |
| 7.            | Payments to related entities of the entity and their                                    | Current quarter            |
| 7.            | Payments to related entities of the entity and their associates                         | Current quarter<br>\$A'000 |
| <b>7.</b> 7.1 | · · · · · · · · · · · · · · · · · · ·   |                            |
|               | associates  |                            |

+ See chapter 19 for defined terms 1 September 2016 Page 3

| 8.  | Financing facilities available Add notes as necessary for an understanding of the position   | Total facility amount at quarter end \$A'000 | Amount drawn at<br>quarter end<br>\$A'000 |
|-----|--|--|---|
| 8.1 | Loan facilities  | -  | -   |
| 8.2 | Credit standby arrangements  | -  | -   |
| 8.3 | Other (please specify)   | -  | -   |
| 8.4 | Include below a description of each facility ab<br>whether it is secured or unsecured. If any add<br>proposed to be entered into after quarter end | ditional facilities have bee                 | en entered into or are                    |
|     |  |  |   |
|     |  |  |   |

| 9.  | Estimated cash outflows for next quarter | \$A'000 |
|-----|--|---------|
| 9.1 | Exploration and evaluation               | 20      |
| 9.2 | Development                              | -       |
| 9.3 | Production                               | -       |
| 9.4 | Staff costs                              | 150     |
| 9.5 | Administration and corporate costs       | 105     |
| 9.6 | Other (provide details if material)      | -       |
| 9.7 | Total estimated cash outflows            | 275     |

| 10.  | Changes in<br>tenements<br>(items 2.1(b) and<br>2.2(b) above)                                     | Tenement reference and location | Nature of interest | Interest at beginning of quarter | Interest<br>at end of<br>quarter |
|------|---|---------------------------------|--------------------|----------------------------------|----------------------------------|
| 10.1 | Interests in mining<br>tenements and<br>petroleum tenements<br>lapsed, relinquished<br>or reduced |                                 |                    |                                  |                                  |
| 10.2 | Interests in mining<br>tenements and<br>petroleum tenements<br>acquired or increased              |                                 |                    |                                  |                                  |

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<sup>+</sup> See chapter 19 for defined terms 1 September 2016

#### **Compliance statement**

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

|            | ABill                      |                     |
|------------|----------------------------|---------------------|
| Sign here: | Director/Company secretary | Date: 28 April 2017 |

Print name: Andrew Bursill

#### **Notes**

- 1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

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<sup>+</sup> See chapter 19 for defined terms