

**ASX: ARE****CAPITAL STRUCTURE:**

Issued shares: 443,791,701

Listed options: 38,004,957  
(6c, Mar 2017)Unlisted options: 10,000,000  
(15c, Dec 2015)Unlisted options: 7,000,000  
(10c, Dec 2015)

Cash on hand: \$1.7m

**DIRECTORS:**Patrick Elliott,  
Non-Exec ChairmanLindsay Owler,  
Director/CEOAndrew Bursill,  
Director/SecretaryMalcolm Richmond,  
Non-Exec Director**COPPER FOCUS****Lumwana West, Zambia**

- Flagship project
- Copper, cobalt (bulk tonnage)
- Advanced exploration stage
- Funding by option agreement
- Antofagasta earning 70%
- Argonaut operator

**Torrens, South Australia**

- Copper, gold (large IOCG)
- Access negotiation/ exploration stage
- Pro-rata funding under JV
- Straits Resources Ltd 70%, Argonaut 30%
- Argonaut operator

**Alford, South Australia**

- Copper (IOCG)
- Exploration stage
- Funding via farm-out
- Sandfire Resources NL earning 70%
- Sandfire operator

# Quarterly report

FOR THE PERIOD ENDING 30 SEPTEMBER 2014

Argonaut Resources NL (*Argonaut or the Company*) (ASX: ARE) is pleased to provide the following report on a progressive period for the Company in the three months to 30 September 2014 (*the Quarter*).

## Highlights

### Lumwana West, Zambia

- Argonaut and its partner, Antofagasta, have to date completed 5,220m of diamond core drilling for 22 holes at Argonaut's flagship Lumwana West copper project in Zambia.
- Holes were drilled at five prospect areas plus the Nyungu Deposit (see Figure 2).
- Assays have been received for eight of the 22 drill holes.
  - Results are for holes drilled at West Mwombezhi and Kavipopo prospects and the Nyungu Deposit.
  - Mineralised intervals received to date for drilling at West Mwombezhi and Kavipopo have explained targeted geochemical and geophysical anomalies but have fallen short of returning economic drill intercepts.
  - Drilling results are summarised in Table 1.
- Argonaut collected 6,750 soil samples from the Lumwana West area during the Quarter, predominantly over new, regional targets.
- This soil sampling defined promising new targets in the Kabikupa and Kamafamba areas and significantly extended the known strike of the Mufuka target (see Figure 2).
- The ongoing drilling program is currently targeting soil geochemistry anomalies at the Mufuka and Kabikupa prospects.
- An Overlying Agreement was signed with major Chile-based copper producer Antofagasta in the previous quarter. The Lumwana West project is now fully funded to production:
  - Antofagasta, can earn 70% of the Lumwana West project by spending US\$18.9m on exploration plus the amount required to complete a feasibility study to international standards; and
  - if the project is feasible, Argonaut is either carried into production or bought-out prior to construction.

### Torrens, South Australia

- Parties to the Torrens Joint Venture appointed Argonaut's wholly owned subsidiary, Kelaray Pty Ltd, as manager of the Torrens Joint Venture.

## Corporate

- Argonaut raised \$211,500 in the Quarter through:
  - a \$60,500 placement of 2,750,000 shares and 916,667 listed options to existing overseas shareholders under ASX listing rule 7.1; and
  - the sale of the Company's shareholding in Musgrave Minerals Ltd for \$151,000.
- Argonaut had \$1.7m cash on hand at 30 September 2014.

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# Outlook

- Funding has now been secured for all of Argonaut's major projects.
- A comprehensive program of works is in progress at the Company's flagship Lumwana West project in Zambia.
- Shareholders can expect news flow from results of drilling at Lumwana West.
- A planned asset sale will further strengthen Argonaut's cash position.

## Zambia

### Lumwana West

(Argonaut 90%)

The Lumwana West project is located in the Central African Copperbelt, North-Western Province, Zambia (Figure 1). The area is prospective for large tonnage, low to medium grade copper deposits. There are several major mines nearby to Lumwana West which are hosted in similar geological settings.

Argonaut, via its 90% held subsidiary, Mwombezhi Resources Ltd, has been successful in intercepting broad copper intercepts at the Nyungu deposit and has defined a series of large, prospective targets which are undergoing first pass drill testing.

### 2014 Exploration Program

#### Key points

- The current 2014 drilling program is designed to test:
  - large footprint copper targets defined by surface geochemistry; and
  - interpreted extensions and repetitions of the Nyungu Central copper deposit.
- The current drill program is estimated to comprise 8,500 metres in total plus geological mapping and soil sampling. To date, 5,220m of diamond core drilling for 22 holes has been completed.
- Early drilling results have downgraded the West Mwombezhi and Kavipopo targets.
- Two exciting new drill targets, one of which is being drilled now, have been generated by intensive soil sampling
- This current drilling program is the first phase of the recently executed agreement with Antofagasta.
- Antofagasta can earn a 25% interest in the Lumwana West project during the first phase by funding US\$3.9m of exploration.

This is the first program under the option agreement between Argonaut and a wholly owned subsidiary of Antofagasta plc (*Antofagasta*), dated 28 April 2014 (the *Overlying Agreement*). According to the *Overlying Agreement*, exploration expenditure of US\$3.9m in the first year will earn Antofagasta a 25% interest in the project.

The current 2014 program was jointly planned by Argonaut and Antofagasta and aims to considerably increase the extent of known copper mineralisation at Lumwana West. The focus is on testing major target areas previously defined by Argonaut as well as new targets being progressively generated by an extensive regional soil sampling program.

The drilling program, which will comprise approximately 8,500m, is being progressively revised on the basis of results and interpretations by a technical committee formed under the agreement. To date, 5,220m of diamond core drilling for 22 holes has been completed. Holes have been drilled at the West Mwombezhi, Kavipopo, ZNS, LMW and Mufuka prospects and at the Nyungu deposit (Figure 2). Drilling continued at the Mufuka prospect and an exciting new target named Kapikupa prospect in October.

Early results from the 2014 program have been disappointing. It is interpreted this is largely due to the targeted mineralised systems being structurally underdeveloped. Put simply, the shearing that hosts copper mineralisation of the style targeted was not as strong or extensive as anticipated, hence assays returned lower than expected copper grades.

A summary of intercepts from results received to date is shown in Table 1. Detailed results are shown in Appendix 1.

**Table 1 Summary of 2014 drilling intercepts.**

Target	Hole	From (m)	Interval (m)	Cu (%)
<b>West Mwombezhi</b>	WMDD001	58	3	0.36
	and	63	9	0.29
<b>West Mwombezhi</b>	WMDD002	123	8	0.17
	WMDD005	77	4	0.42
<b>Kavipopo</b>	KVDD001	50	7	0.23
	and	106	1	0.45
	and	193	9	0.27
<b>Nyungu</b>	NYDD049	160	5	0.48

The most positive outcomes from the program conducted in the Quarter are from soil sampling programs which have defined excellent new targets at areas in the centre of the tenement known as Kapikupa and Kamafamba (Figure 2).

Soil sampling at the Kabikupa prospect has returned the strongest copper anomaly found within the project area to date.

Drilling at Kabikupa commenced in October with four holes for approximately 1,000m planned for completion by mid-November.

Over 7,800 soil samples have been collected at Lumwana West since May 2014 and analysis by XRF has been completed on 5,000 of these samples. Current soil sampling anomalies are shown in Figure 2.

Argonaut expects the field program will be paused in mid-November 2014 at the start of the Zambian wet season and recommenced in April/May 2015. Ongoing interpretation of drill core, mapping data and surface sampling data will fine-tune 2015 drill targets.

*Soil sampling at the Kabikupa prospect has returned the strongest copper anomaly found within the project area to date. Drilling at Kabikupa commenced in October...*

### Overlying Agreement

In April 2014, Argonaut announced the execution of the Overlying Agreement with Antofagasta for the exploration and development of the Lumwana West project in Zambia.

The Overlying Agreement covers all phases of the project's development from regional exploration to the completion of a feasibility study and, in the event the project is feasible and Argonaut elects not to fund its pro-rata share of the project, Argonaut will either be carried into production or bought-out at the value of its interest.

### Lumwana West – Project Setting

The Lumwana West project is located on the western lobe of the Mwombezhi Dome in the Central African Copperbelt. The Mwombezhi Dome is one of several domes in an area of the Copperbelt known as the Domes Region. (Figure 1).

The Domes Region is host to the new generation of Copperbelt mines (Figure 1 and Table 2) with copper production in the area set reach 870,000 tonnes per annum by 2015. Nearby mines include Barrick Gold Corporation's Lumwana Mine on the eastern lobe of the Mwombezhi Dome and First Quantum Minerals Ltd's Kansanshi, the largest copper mine in Africa. The Sentinel Mine, currently under construction to the west, is also owned and operated by First Quantum.

*The Domes Region is host to the new generation of Copperbelt mines with copper production set reach 870,000 tonnes per annum by 2015.*

## OVERLYING AGREEMENT – PRINCIPAL COMMERCIAL TERMS

The Overlying Agreement between Antofagasta and Argonaut Resources NL is in five phases. The principal commercial terms are described below.

**Phase I** involves the input by Antofagasta of **US\$5M within one year** in exchange for a 25% interest in the project. The funding is in two parts: US\$3.9M for exploration works underway plus a US\$1.1M placement in Argonaut completed by the companies in the May 2014. Placement funds were used by Argonaut to secure an additional 39% interest in the project via the underlying Lumwana West Joint Venture. This increased Argonaut's interest in the project to 90%.

**Phase II** involves **expenditure of US\$15M by Antofagasta within four years** of the completion of Phase I at a minimum expenditure rate of US\$2.5M per year. Antofagasta can earn an effective 51% interest in the project by completing Phase II.

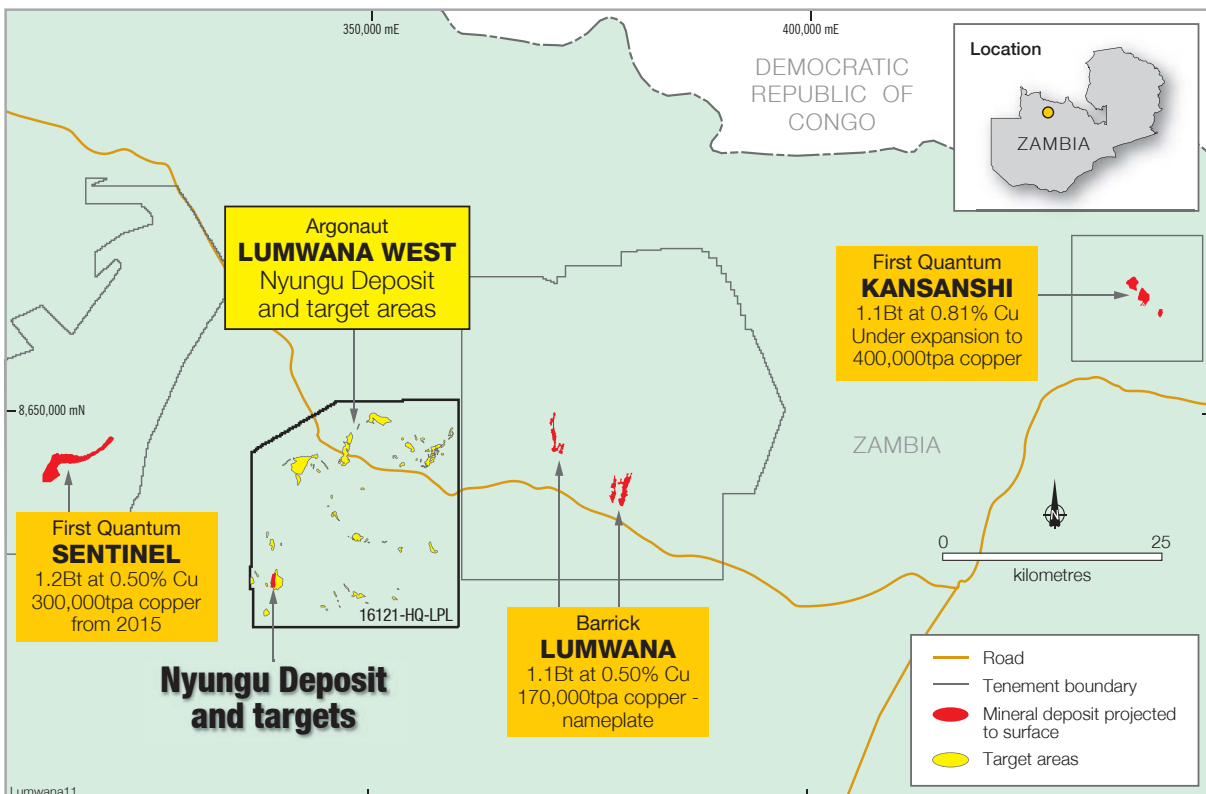
**Phase III** involves the **completion of a feasibility study to international standards**. Antofagasta may conduct additional work necessary to commence the feasibility study, such as a preliminary feasibility study, prior to electing to commence the definitive study. Antofagasta will have up to two years to complete additional work and four years to complete the feasibility study. Antofagasta can earn an effective 70% interest in the project by completing the feasibility study.

**Phase IV** is the period following the delivery of the feasibility study, but prior to a development decision. Argonaut may elect not to contribute during this period provided it reimburses Antofagasta from future dividends.

**Phase V** is the period after a development decision when, if Argonaut decides not to fund its pro-rata share of the project, Antofagasta may elect to **either carry Argonaut into production**, with Argonaut's development costs being funded by 60% of future dividends, **or buy-out Argonaut's** interest for its pro-rata share of the project's net present value<sup>1</sup>.

Antofagasta may elect to stop contributing at certain stages in which case various provisions including standard dilution and drag-along/tag-along rights will apply.

Argonaut will be the operator under the Agreement during Phase I and part of Phase II. Antofagasta may elect to become operator at any stage during Phase II.



**Figure 1:** The Domes Region has an international scale copper endowment and is host to the new generation of mines in the Central African Copperbelt

<sup>1</sup> Using a discount rate of 12%

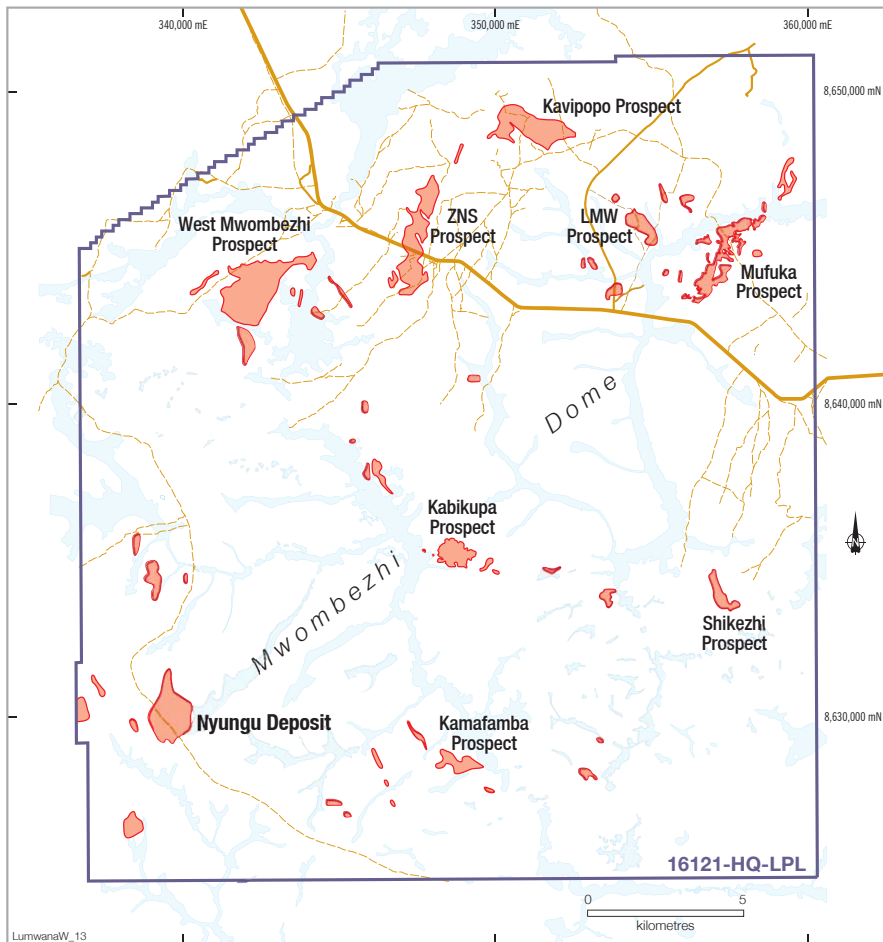
**Table 2: Geologically comparable copper deposits and production in the Domes Region, Central African Copperbelt.**

	Barrick LUMWANA <sup>^</sup>	First Quantum KANSANSHI <sup>#</sup>	First Quantum SENTINEL <sup>#</sup>
<b>Resource*</b>	1.1Bt at 0.50% Cu	1.1Bt at 0.81% Cu	1.2Bt at 0.50% Cu
<b>Reserves</b>	594Mt at 0.56% Cu	504Mt at 0.65% Cu	774Mt at 0.50% Cu
<b>Production</b>	120,000t in 2013 170,000tpa nameplate	271,000t in 2013 Expansion to 400,000tpa	Commissioning mid-2014 300,000tpa commencing

<sup>^</sup> Lumwana Ore Reserve and Mineral Resource at 31 December 2013

<sup>#</sup> Kansanshi and Sentinel Ore Reserve and Mineral Resource at 31 December 2012

\* Measured, Indicated and Inferred Resource estimations combined by weighted average



**Location**



- Licence boundary
- Drainage path (Dambo)
- Road
- Track
- Prospect (+40ppm Cu soil sampling)

**Figure 2: Lumwana West Large-scale Prospecting Licence and prospect locations.**

**The Underlying Agreement**

The Lumwana West Joint Venture, executed in July 2011 (*the Underlying Agreement*) involves large scale prospecting licence 16121-HQ-LPL. Under the terms of the Underlying Agreement, Argonaut's 100% held subsidiary, Lumwana West Resources Ltd, has earned a 90% shareholding in Mwombezhi Resources Ltd, the Zambian registered company which holds 16121-HQ-LPL.

# Australia

## Torrens, South Australia

(Argonaut 30%)

### The Torrens Joint Venture

The Torrens Joint Venture is between Argonaut Resources NL and Straits Resources Limited (ASX: SRQ) and relates to the Torrens Project, EL 4296.

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.

On 27 August 2014, the parties to the Torrens Joint Venture resolved to appoint Argonaut's wholly owned subsidiary, Kelaray Pty Ltd, as manager of the Torrens Joint Venture. In its role as manager Kelaray is working to secure access to the tenement for the purpose of a planned seven-hole drilling program targeting areas which have been geophysically modelled as having the physical properties of large iron oxide-copper-gold deposits.

### Litigation

The Company previously announced that the Full Court of the Supreme Court of South Australia had set aside the decision of 14 January 2011 by the Environment, Resource and Development Court of South Australia (the ERD Court) that Mining Operations (exploration) may not be conducted on EL4296.

A date for the ERD Court retrial has not been set. It is important to note that in overturning the original decision, the Full Court provided considerable guidance for the purpose of an ERD Court retrial including disallowing the original ERD Court Judge from re-hearing the matter.

The Torrens Joint Venture partners remain open to a negotiated settlement with regard to land access for the purposes of proposed drilling activities on Andamooka Island and Lake Torrens.

## Alford, South Australia

(Argonaut 100%)

The Alford Project on South Australia's Yorke Peninsular 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.

The tenement covers arable land which is under crop from April to December, so mechanised exploration activities on the tenement were not undertaken in the Quarter.

### Alford Farm-in Joint Venture

On 9 November 2012, Argonaut announced it had signed a farm-in joint venture letter agreement with Sandfire Resources NL for the exploration of the Company's 100% owned exploration licence 3969, Alford, on the Yorke Peninsula in South Australia.

Under the terms of the letter agreement, Sandfire may earn a 49% interest in the Alford tenement by sole funding \$4,000,000 of exploration within three years (the First Earn-in).

In the event requirements for the First Earn-in have been satisfied, Sandfire then has the right to form a joint venture with Argonaut's subsidiary, Kelaray Pty Ltd, to jointly explore the tenement or to proceed to earn an additional 26% interest in the project by spending a further \$4,000,000 on exploration within an additional three years (the Second Earn-in).

## Kroombit

(Argonaut 100%)

No field based work was undertaken on the Kroombit project during the Quarter.

## Aroona

(Argonaut 100%)

EL4358 and EL5336, Aroona, are subject to a joint venture agreement with Perilya Limited.

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

# Corporate

## Cash and Assets

Argonaut raised \$211,500 in the Quarter through:

- a \$60,500 placement of 2,750,000 shares and 916,667 listed options to existing overseas shareholders under ASX listing rule 7.1; and
- the sale of the Company's shareholding in Musgrave Minerals Ltd for \$151,000.

Argonaut holds 16,734,667 shares and 26,668,000 options in Cuesta Coal Ltd (ASX: CQC).

## Asset Sales

Argonaut sold its shareholding in Musgrave Minerals Ltd in July 2014 for \$151,000. Negotiations to sell another non-core asset are well progressed.

# About Argonaut

Argonaut is an Australian Securities Exchange listed mineral exploration and development company focussed on large copper targets with projects in Zambia, South Australia and Queensland. Argonaut's projects are in the advanced exploration and feasibility stages.

The Company is exploring for copper at its flagship Lumwana West project in Zambia and copper (+/- gold and silver) at its Alford and Torrens projects in South Australia. The Company also owns a zinc-copper deposit at Mt Kroombit in Central Queensland.

Argonaut has a significant investment in Cuesta Coal Ltd which listed on the Australian Securities Exchange in May 2012.

## Lindsay Owler

Director

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, as described on page 9 of the Company's 2014 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.*