ARGONAUT RESOURCES NL
ABN 97 008 084 848

argonautresources.com

ASX: ARE

CAPITAL STRUCTURE:
Issued shares: 2,913 million
Listed options: None
Unlisted options: 65 million
Cash on hand:
$1,349,000 (30 September)
$4,937,000 (28 October)

DIRECTORS:
Patrick Elliott,
Non-Exec Chairman

Lindsay Owler,
Director/CEO

Andrew Bursill,
Non-Exec Director

Malcolm Richmond,
Non-Exec Director

COPPER PROJECTS:
Murdie, South Australia
Copper, gold (large IOCG)
Phase: Permitting
Interest: Argonaut 100%

Torrens, South Australia
Copper, gold (large IOCG)
Interest: Aeris Resources 70%, Argonaut 30%
Agreement Phase: Exploration
Operator: Aeris

Lumwana West, Zambia
Copper, cobalt (shear-hosted)
Phase: Economic Study
Interest: Argonaut 90%
Agreement Phase: Post-Earn-In, Exploration
Operator: Argonaut

GOLD & NICKEL PROJECT:
Higginsville, Western Australia
Oxide and primary gold, nickel
Phase: Exploration
Interest: Argonaut 51%, earning up to 80%
Agreement Phase: Earn-in, Phase Two
Operator: Argonaut

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Lodged by

Quarterly report

FOR THE PERIOD ENDING 30 SEPTEMBER 2020

Argonaut Resources NL (*Argonaut* or *the Company*) (ASX: ARE) is pleased to present the following report for the period to 30 September 2020 (*the Quarter*).

Highlights

Murdie, South Australia (Copper – 100%)

- The consultation phase for the final approval required to commence drilling at Murdie was completed on 10 September 2020. A decision by the Minister is now expected during November 2020.
- The South Australian Government has awarded Argonaut a $320,000 grant towards drilling of iron-oxide copper gold (IOCG) targets at the Murdie copper project.
- Geophysical crews mobilised to the Murdie area after the period and are conducting a ground gravity survey over selected areas to improve the accuracy of modelled drilling targets.
- The Murdie project is 100% held and operated by Argonaut.

Torrens, South Australia (Copper – 30%)

- An updated Program for Environment Protection and Rehabilitation (PEPR) to undertake deep diamond drilling on the surface of Lake Torrens was approved during the Quarter.
- Native Title authority was re-granted for the Torrens licence following the grant of a subsequent exploration licence.
- The Torrens joint venture partners agreed to recommence on-ground exploration activities in the December Quarter and will be conducting a passive seismic survey to assist in refining drill targeting.

Lumwana West (Copper-Cobalt – 90%)

- The scoping economic study of the Nyungu copper-cobalt deposit was re-started during the Quarter. The Company is generating metallurgical data to support various mineral processing scenarios.

Higginsville, Western Australia (Gold – 51%)

- Argonaut completed a program of 37 RC drill holes for a total of 3,426m at the Amorphous gold deposit, Island gold prospect and Birties gold prospect.
- The best intercept was from the Amorphous Gold Deposit which returned 5m at 2.04g/t gold from 37m in drillhole AMRC024.

Corporate

- Argonaut successfully completed a share placement to raise A$2.7 million during the Quarter. The placement was very well supported, and bids greatly exceeded the target of A$2.7 million.
- The placement was undertaken in conjunction with a Share Purchase Plan which was open to existing shareholders of Argonaut. The SPP was closed early and heavily oversubscribed. Together the placement and SPP raised A$5.2 million before costs.

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Outlook

Copper

- The copper price exceeded US$3/lb during the Quarter and is expected to continue to strengthen on the back of increasing Chinese demand. COVID related production cuts, largely in South America, further improve the outlook.
- This firm upwards trajectory which will serve to underpin Argonaut's planned Murdie project copper drilling.
- Medium-term, Argonaut remains well placed to benefit from rising copper prices via world-class copper assets such as Murdie, Torrens and Lumwana West.

Murdie, South Australia

(Copper – Argonaut 100%)

Highlights

- The consultation phase for the final approval required to commence drilling at Murdie was completed on 10 September 2020. A decision by the Minister is now expected during November 2020.
- The South Australian Government has awarded Argonaut a $320,000 grant towards drilling of iron-oxide copper gold (IOCG) targets at the Murdie copper project.
- Geophysical crews mobilised to the Murdie area after the period and are conducting a ground gravity survey over selected areas to improve the accuracy of modelled drilling targets.

The Murdie project is in South Australia near the eastern margin of the Gawler Craton (Figure 1). The project area covers over 1,000 square kilometres of highly prospective Olympic Domain geology and includes over 50 discrete gravity targets.

Argonaut holds a 100% interest in the Murdie project.

Accelerated Discovery Initiative

Funding in the amount of $320,000 was awarded to Argonaut through the ADI program, which forms part of the South Australian Government's Growth State Agenda. The ADI aims to accelerate mineral discovery through innovative exploration and research projects in regional and frontier terrains throughout South Australia.

ADI proposals were assessed and ranked against the merit criteria listed in the ADI Investment Guidelines by an independent expert review panel. Each proposal was scored on its ability to meet as many of the eligibility criteria as possible.

Highly Compelling Targets

Many of the targets at the Murdie project have two important and sought-after qualities:

- they are within or at the margin of the same Donnington Suite granite body that hosts both the Oak Dam and Carrapateena IOCG deposits; and
- the Oak Dam and Carrapateena deposits and Argonaut's targets are defined by 'gravity only' geophysical anomalies.

Gravity-only anomalies don't have an associated magnetic anomaly and can be indicative of IOCG deposits that have been entirely altered from magnetite-dominant, low-grade systems to high-grade, hematite-dominant IOCG systems.

Large, gravity-only anomalies within Donnington Suite granite are the most compelling copper exploration targets in country.

Target Modelling

Argonaut has geophysically modelled an airborne gravity survey (Barrick, 2010) and an aeromagnetic survey (SA Government, 2017). These data were modelled by 3D inversion and 54 distinctive anomalies were defined (Figure 2).

Of these 54 anomalies, eight gravity-only anomalies were selected for 2D modelling. The 2D modelling resulted in the definition of seven anomalies that warrant drill testing. Further 2D modelling is required to assess many of the remaining 3D anomalies.

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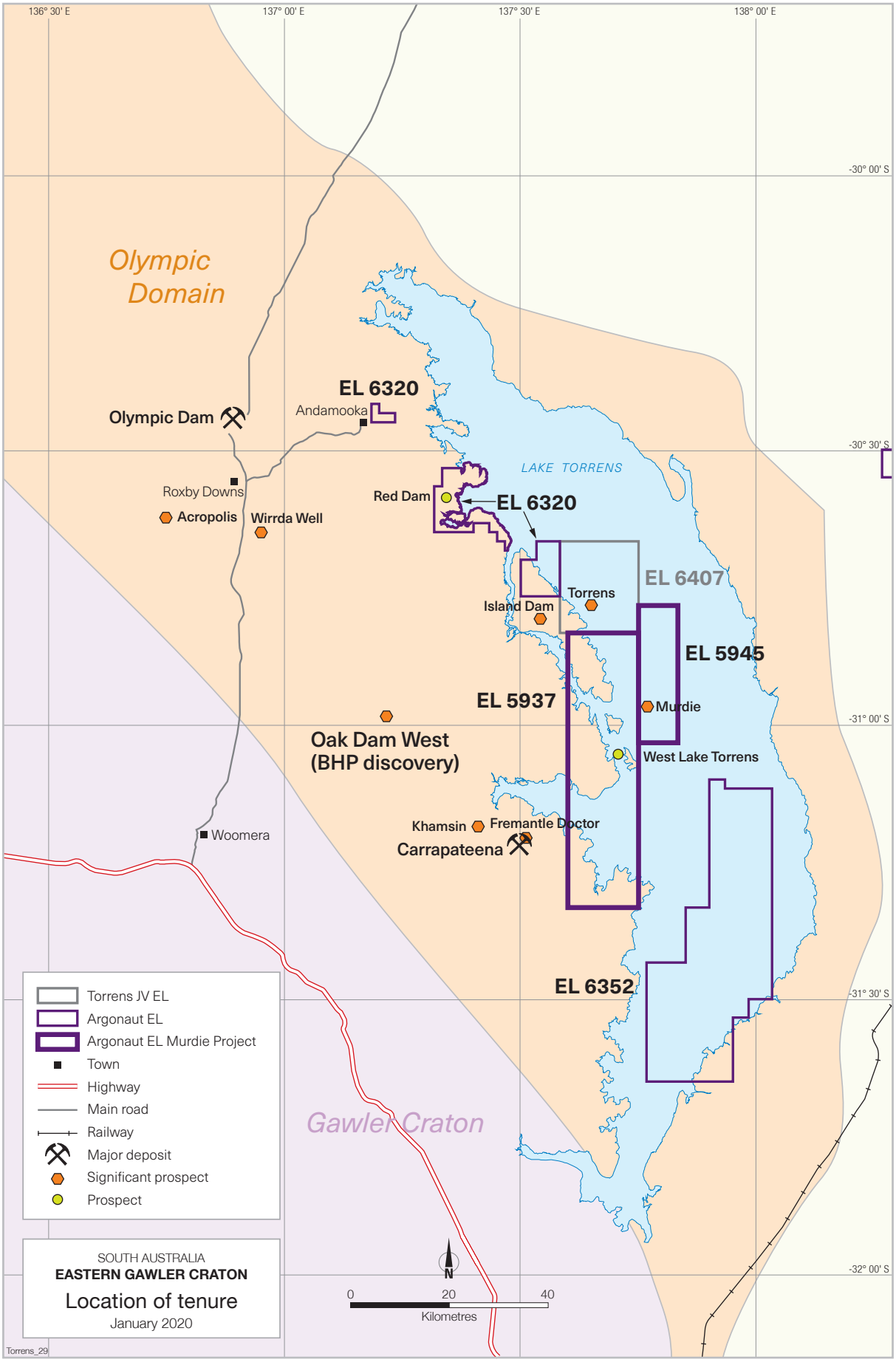


Figure 1 *Lake Torrens exploration licences.*

Ground Gravity Survey

Geophysical crews mobilised to the Murdie area after the period and are conducting a ground gravity survey over selected areas to improve the accuracy of modelled drilling targets.

Lower Cost Drilling

The Murdie drill targets are in three operational domains (Figure 2): onshore, nearshore and offshore. Each of these domains involves different drilling procedures due to different surface and subsurface conditions. Table 1 below summaries these conditions.

Many of the granite-hosted gravity targets at the Murdie project are located at the shoreline of the Lake Torrens (Figure 2), which means that these targets can be drilled without the cost of helicopter support.

Nearshore targets and the most prospective offshore targets can be drilled without intersecting the artesian aquifer that frustrated 2019 drilling efforts at the neighbouring Torrens anomaly.

Table 1 ***Murdie Project operational domains and required drilling techniques.***

	Drilling Techniques		
	Helicopter Supported	Artesian Groundwater	Percussion Pre-Collar
Onshore	**No**	**No**	**Yes**
Nearshore	**No**	**No**	**Yes**
Offshore – No Aquifer	**Yes**	**No**	**No**
Offshore – Aquifer	**Yes**	**Yes**	**No**

Authorisations

Authority under the Aboriginal Heritage Act

In February 2020, Argonaut lodged an application under the South Australian Aboriginal Heritage Act for final authorisation to drill at the Murdie copper project. This application seeks authorisation in similar terms to two authorisations previously granted for the neighbouring Torrens project.

On 11 June 2020, the South Australian Government commenced a consultation process which is required in order to consider Argonaut's application. This consultation process was scheduled to close on 23 July 2020 but was extended by the Minister for Aboriginal Affairs and Reconciliation until 21 August 2020.

The company has been informed the consultation phase was completed on 10 September 2020. A decision by the Minister is now expected during November 2020.

Operational Approval

The 'Exploration Program for Environment Protection and Rehabilitation' for ongoing exploration activities including ground gravity surveys and diamond drilling at exploration licences 5937 and 5945 was approved under the South Australian Mining Act in January 2020.

The approval allows for up to 200 deep diamond drill holes into a string of large and prospective Iron Oxide Copper-Gold (IOCG) anomalies from nearshore and offshore locations on the salt crust of Lake Torrens.

Native Title Access

In 2018, the South Australian ERD Court granted native title authority to enter and undertake mining operations (exploration) within the area of EL5937 and EL5945.

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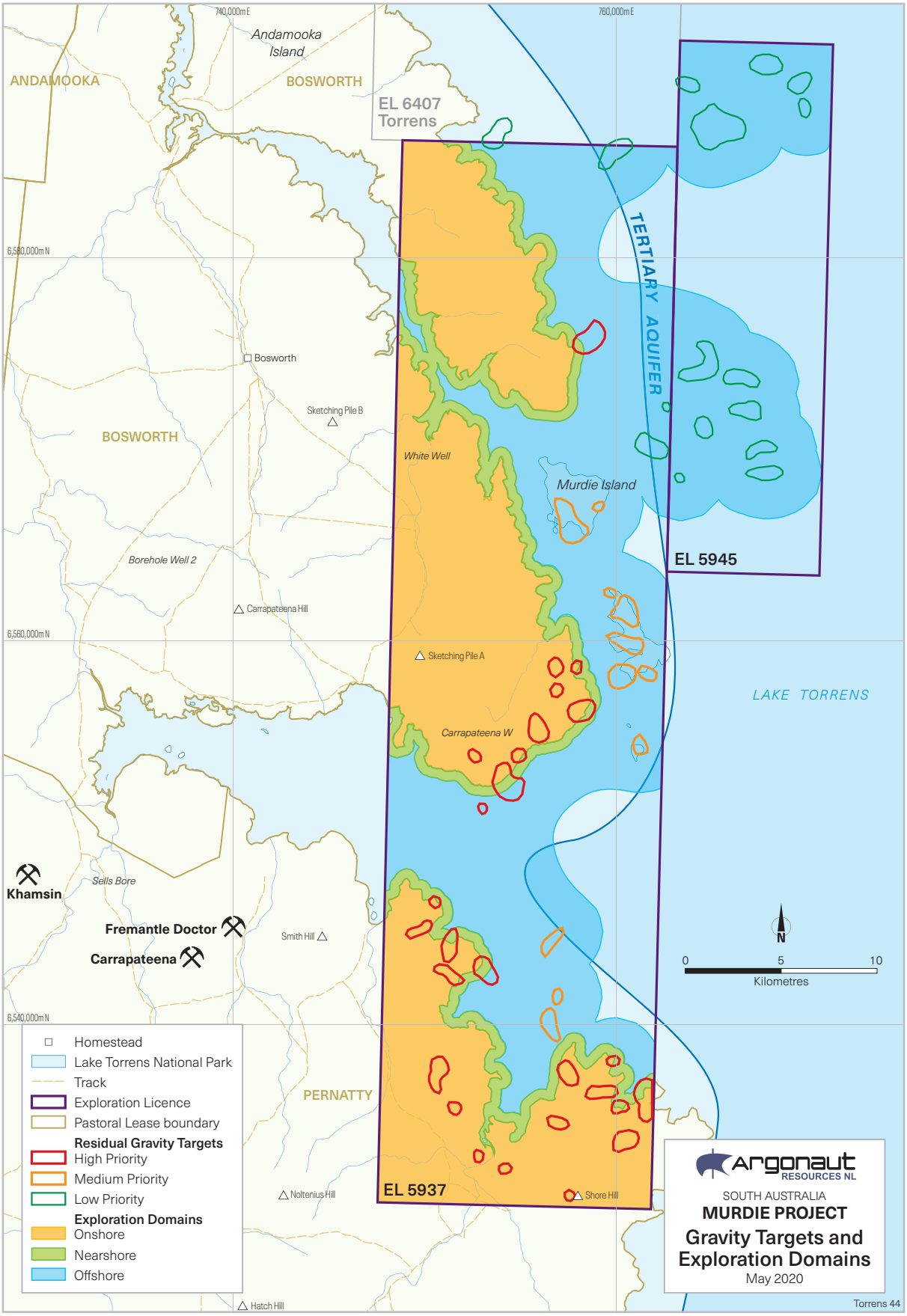


Figure 2 *Murdie Project gravity targets and exploration domains.*

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Torrens, South Australia

(Copper – Argonaut 30%)

Recommencement of Torrens JV exploration

The Torrens joint venture partners have decided to recommence exploration activities at the Torrens Joint Venture project.

During the quarter operational and heritage approvals were awarded to permit on-ground exploration activities to include:

a) Operational approvals were obtained from the Department for Energy and Mining that includes a revised PEPR to reflect on-ground drilling practices and additional exploration activities, passive seismic.

b) In September 2020, the South Australian ERD Court granted native title authority to enter and undertake mining operations (exploration) within the area of EL 6407. This approval was required as the exploration licence EL 5614 expired and the subsequent licence EL 6407 required authorisation.

Next Steps

A low-cost passive seismic survey is planned for the following quarter and will assist in refining geological and geophysical models used for drill targeting.

General Comments

The Torrens anomaly is a particularly attractive set of exploration targets hosted in a geological domain that has persistently rewarded explorers with large, high-grade copper discoveries. The discovery of an IOCG deposit by a listed junior exploration company creates a once-in-a-lifetime opportunity for shareholders. Argonaut continues to work towards this goal.

Exploration in the Olympic Domain has historically been hindered by two factors: the thickness of cover formations, and difficulties securing access. These factors, although frustrating, have preserved exploration targets that would have otherwise been tested.

Statistically, the drill testing of gravity targets in the Olympic Domain has delivered a higher than average discovery rate. It makes commercial sense to invest copper exploration budgets into drilling well defined gravity targets in the Eastern Gawler Craton.

Major, diversified miners and mid-cap copper miners are specifically seeking to increase copper production due to forecast copper supply shortages. There was an underinvestment in copper exploration between 2012 and 2017, consequentially there are relatively few copper deposits available to acquire. Copper discoveries are necessary and copper deposits are in-demand.

The combination of geological prospectivity, access rights and a global appetite for new copper deposits make the Torrens Joint Venture project a compelling investment opportunity.

Torrens Project

The Torrens Joint Venture project is located within the globally recognised Olympic Domain, at the eastern margin of South Australia's Gawler Craton, within 40 kilometres of BHP Group's Oak Dam copper discovery, 50 kilometres of OZ Minerals' Carrapateena copper-gold deposit and 75 kilometres from BHP's Olympic Dam mine. BHP's recent discovery at Oak Dam has confirmed the validity of the Torrens target and the copper endowment of the Eastern Gawler Craton.

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 at Torrens to date has confirmed the existence of a major IOCG mineralising system beneath several hundred metres of sedimentary cover. Further drilling is required to intercept the modelled copper-gold mineralisation. In the event of a discovery, the Torrens anomaly has the scale to host a world-class copper-gold deposit.

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Torrens Joint Venture

The Torrens Joint Venture is between Argonaut Resources NL (30%) and Aeris Resources Limited (ASX: AIS) (70%) and relates to the Torrens Joint Venture project, EL6407. Aeris' subsidiary, Straits Exploration (Australia) Pty Ltd, is the manager of the project.

Argonaut is of the view that its partner Aeris acted in contravention of the Torrens Joint Venture Agreement when discontinued drilling in June 2019. A dispute notice was served by Argonaut's subsidiary, Kelaray Pty Ltd, on Aeris' subsidiary, Straits Exploration (Australia) Pty Ltd.

Red Dam, South Australia

(Copper – Argonaut 100%)

Argonaut holds exploration licence EL6320 located adjacent to the Torrens Project (Figure 1). The 198 square kilometre licence area is in three parts and encompasses the Red Dam IOCG target, previously identified by WMC.

The licence areas were relinquished by BHP prior to the announcement of the Oak Dam discovery.

Argonaut has assessed the relevant, historical drill core and will conduct a ground gravity survey in 2020 to improve resolution for geophysical modelling and target generation.

Lake Torrens South, South Australia

(Copper – Argonaut 100%)

Argonaut holds exploration licence 6352 located southeast of the Torrens and Murdie Projects (Figure 1). The 993 square kilometre licence area covers a portion of southern Lake Torrens. Argonaut now has a commanding 2,501 square kilometre land position.

Lumwana West, Zambia

(Copper-Cobalt – Argonaut 90%)

Highlights

- Copper Exploration Target for the Nyungu deposit of 130 to 180Mt at 0.45 to 0.65% copper for contained copper of between 580 and 1,150kt.
- It is likely that further drilling at Nyungu will increase the size of the deposit.
- A saleable copper concentrate grading 25.6% copper at a recovery 87% was produced in the laboratory prior to the Quarter.
- Concentrate grades of greater than 25% copper were achieved for all four metallurgical samples exported from Zambia to Australia for testing.
- Fresh primary zone ores achieved an average of 88% recovery and transitional zone mineralisation achieved a pleasingly high average of 78% recovery.
- Efficient production of a copper concentrate from transitional zone mineralisation makes strong, positive contribution to project economics.
- The scoping economic study of the Nyungu copper-cobalt deposit was re-started during the Quarter. The Company is generating metallurgical data to support various mineral processing scenarios.

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Lumwana West Project

The Lumwana West Project is 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 in similar geological settings (Figure 3).

Argonaut, via its 90% held subsidiary, Mwombezhi Resources Ltd, has been successful in intercepting broad copper and cobalt intercepts at the Nyungu deposit. Argonaut is working on a series of scoping studies to better understand the economics of a potential mine.

Table 2 summarises elements of a potential mining development at Lumwana West.

Table 2 ***Feasibility factors for a mine development at Lumwana West.***

Jurisdiction	Zambia has a long and ongoing history of large-scale copper mining. Social and governmental pressures favour the development of new mines.
Infrastructure	Lumwana West is located at major electricity and transport corridors (Figure 5).
Resource	The Nyungu copper-cobalt deposit has predictable geometry and scope for significant growth with contined drilling (Table 3).
Mining	Very low stripping ration of 1.5 tonnes of waste rock for every 1 tonne of ore. Resource drilling to grater depths is warranted.
Processing	Fast, high copper recovery from flotation of both transitional and primary copper ore minerals.
Economics	Scoping economic study has commenced.

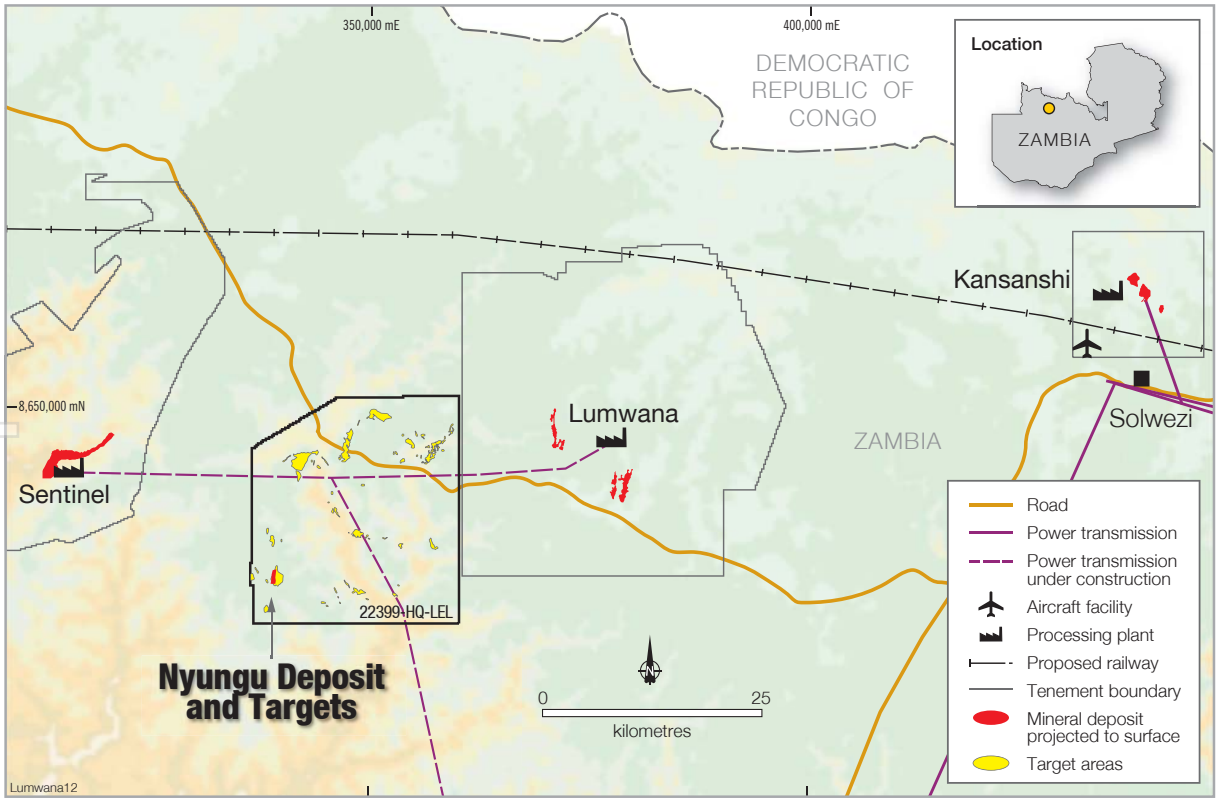


Figure 3 *Lumwana West licence showing the Nyungu copper-cobalt deposit plus nearby mines and infrastructure.*

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Metallurgical Test Work

Argonaut exported metallurgical test samples to Australia for a program of testwork. Mineralogy, comminution and flotation testwork is substantially completed for samples taken from four potential ore types within the Nyungu copper-cobalt deposit.

A saleable copper concentrate grading 25.6% copper at a recovery 87% was produced in the laboratory prior to the Quarter. This copper concentrate is of a specification that can be sold to nearby smelters.

Flotation tests demonstrate that a flotation circuit can achieve high recovery from both transitional zone copper minerals (an average of 78% and up to 88% recovery) and primary zone copper sulphides (an average of 88% and up to 96% recovery). It is unusual and encouraging to achieve such high copper recovery via the flotation of transitional (partially oxidised) mineralisation.

Efficient production of a copper concentrate from transitional zone mineralisation makes strong, positive contribution to project economics.

Various oxidation and leaching tests plus solvent extraction and electro-winning (SX/EW) testing will follow and results from metallurgical studies and the mining study will feed into a scoping economic study.

Mining Study

RPM conducted a preliminary open pit optimisation study on the Nyungu Central and Nyungu South deposits. The modelling was conducted for copper production only using costs from similar mines with highly encouraging results.

Modelling shows excellent deposit geometry via a very low stripping ratio.

- Stripping ratio of 1.5 to 1 for the optimum pit at the February 2018 copper price; and
- Stripping ratio of 2.3 to 1 to a depth of >300m at 150% of the February 2018 copper price, indicating the deposit has a low sensitivity to stripping ratio.

RPM concluded the project had economic potential and warrants further studies.

Further studies including mining scheduling are being undertaken at present.

Economic Study

Argonaut has commenced a scoping economic study into potential processing flowsheets. These flowsheets may involve:

1. Crush > grind > flotation > sale of concentrate
2. Crush > grind > flotation > roasting > leaching > SX/EW > sale of copper metal
3. Crush > grind > flotation > albion process > precipitation > SX/EW > sale of copper metal

The economic study will also consider staged construction of a processing facility. Staging will be relative to the scheduled mining of different ore types.

Copper and Cobalt Exploration Targets

RPM have previously estimated Exploration Targets for both copper and cobalt mineralisation at Nyungu. These are shown below in Table 3.

Table 3 ***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.

* *Copper Exploration Target announced to the ASX by Argonaut on 9 April 2013.*

^ *Cobalt Exploration Target announced to the ASX by Argonaut on 27 March 2017.*

Both Exploration Targets are estimated to JORC 2012 standards.

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Kamapanda, Zambia

(Copper-Cobalt – Argonaut 90%)

During the quarter, operational approvals were granted to conduct exploration activities at the Kamapanda project. A program of regional stream sediment sampling is planned to outline both gold and copper potential.

The Kamapanda project is located in the Central African Copperbelt, North-Western Province, Zambia (Figure 4). The area is prospective for large tonnage, low to medium grade copper-cobalt deposits and alluvial gold.

Kalaba East, Zambia

(Copper-Cobalt – Argonaut 90%)

During the Quarter, operational approvals were granted to conduct exploration activities at the Kalaba East project. The Kalaba East project lies adjacent to ARC Minerals' recent Cheyeza East prospect and Muswema North prospect and west of the 300,000tpa Sentinel copper mine, (Figure 4).

At Cheyeza East ARC Minerals intercepted 18m at 2.35% copper and 39m at 1.47% copper.

Argonaut plans to conduct a regional geochemical sampling program at Kalaba East.

Musangila, Zambia

(Copper-Cobalt – Argonaut 90%)

During the Quarter, Argonaut via its 90% held subsidiary, Sunrise Exploration and Mining Limited has been successful in acquiring the Musangila project (Figure 4) and is currently awaiting operational approvals and consent from Zambian authorities to conduct reconnaissance exploration activities prior to undertaking a confirmatory geochemical sampling program and RC drilling.

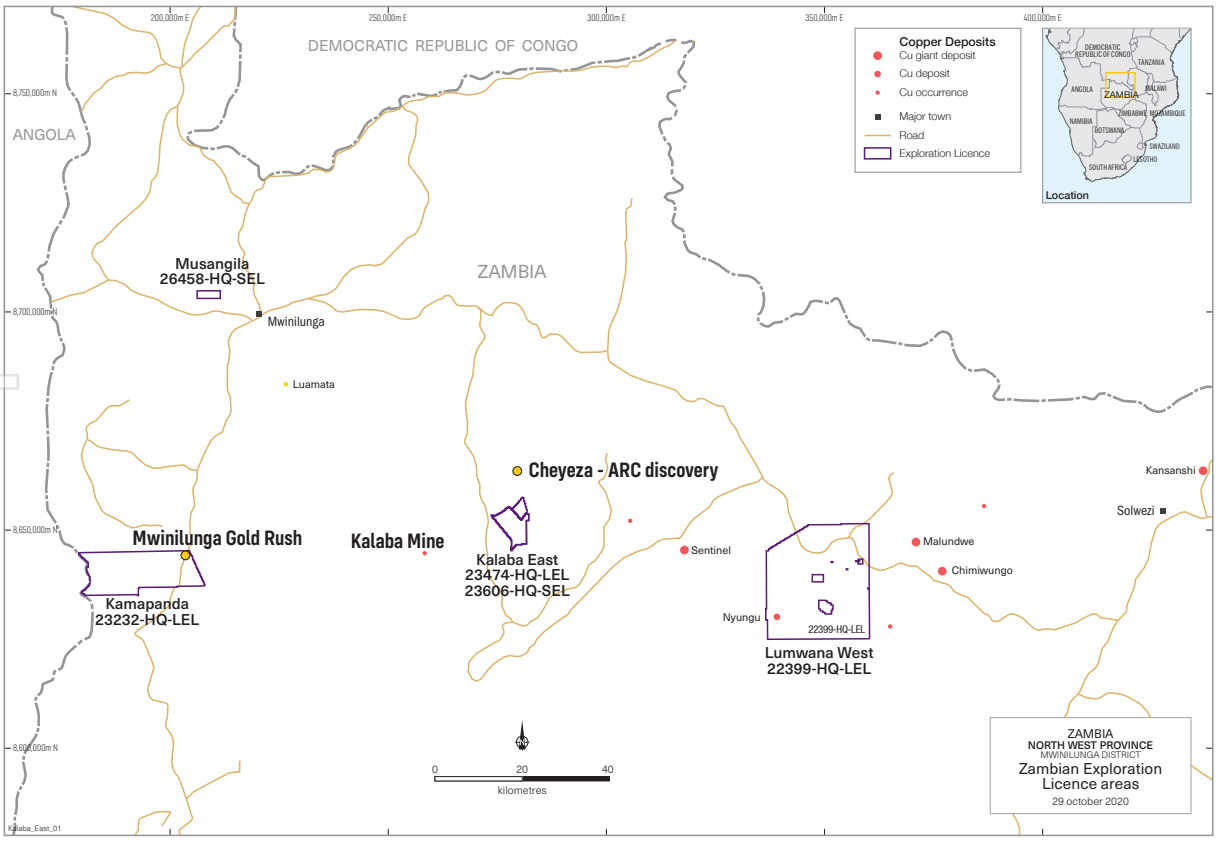


Figure 4 *Exploration licences located within the Northwestern Province, Zambia.*

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Uranium Assets, South Australia and Northern Territory

(Uranium – Argonaut 100%)

Argonaut has assembled a package of prospective, 100% held uranium projects in South Australia and the Northern Territory. Projects were chosen based on a systematic review of uranium deposit-styles and available projects. The review covered most, if not all, uranium opportunities available for pegging in South Australia or Northern Territory. The four projects selected by Argonaut were on open ground and were secured via application to the relevant department.

The projects secured by Argonaut are (also see Summary of Mining Tenements):

- Frome Embayment, SA – Beverly and Honeymoon-style sandstone-hosted, roll front targets:
  - ¬ Frome Downs – 960km^2; and
  - ¬ Curnamona – 947km^2;
- Alligator Rivers Uranium Field, NT – Ranger-style unconformity related targets:
  - ¬ Ranger North-East – 64km^2;
- South Alligator Valley Mineral Field – unconformity related targets near Coronation Hill deposit:
  - ¬ T-Bone – 230km^2.

In addition to the projects already secured, Argonaut has identified potential supplementary exploration projects/ deposits that may be pursued as capital becomes available for uranium exploration.

Argonaut is actively considering potential corporate structures to house and fund these new assets in a way that compliments the Company's existing focus on copper and gold.

Higginsville, Western Australia

(Gold and Nickel – Argonaut 51%, earning up to 80%)

Argonaut completed a program of 37 RC drill holes for a total of 3,426m at the Amorphous gold deposit, Island gold prospect and Birties gold prospect. Final 2020 assay results have been received.

Amorphous Gold Deposit

Argonaut completed 10 RC drill holes at Amorphous for a total of 1,012m.

Drilling from the 2020 drilling program included:

- AMRC024: 5m at 2.04g/t gold from 37m
- AMRC023: 7m at 0.38g/t gold from 57m
- AMRC022: 6m at 0.33g/t gold from 22m
- AMRC025: 2m at 0.92g/t gold from 71m

These results were originally announced to the ASX on 17 September 2020 in an announcement titled "*Higginsville Drilling Program*".

Argonaut first drilled the Amorphous Gold Deposit in 2017. This drilling program significantly increased the potential for a commercial gold deposit at Amorphous by demonstrating improved continuity of gold grades along a strike length of 800m (Figure 5).

Drilling results previously generated by Argonaut at the Amorphous gold deposit included:

- AMRC005: 4m at 1.53g/t gold from 69m
- and 11m at 2.76g/t gold from 77m¬
  - ¬ including 6m at 4.62g/t gold from 81m¬
  - ¬ including 3m at 7.47g/t gold from 82m
- AMRC006: 6m at 2.37g/t gold from 44m
  - ¬ including 3m at 4.38g/t gold from 45m
- AMRC008: 3m at 1.66g/t gold from 56m
- AMRC009: 2m at 1.28g/t gold from 22m
- AMRC015: 4m at 2.36g/t gold from 64m

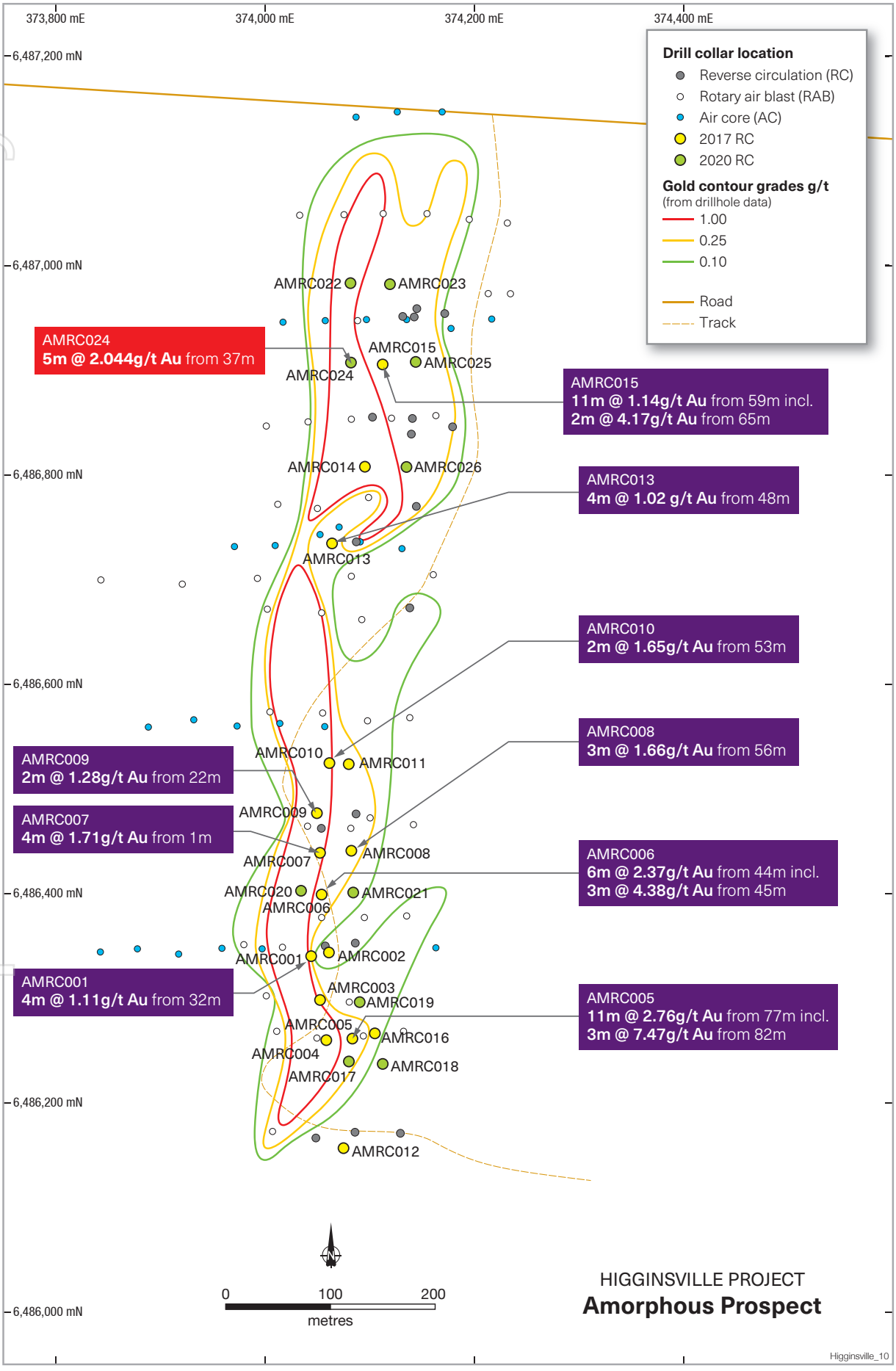


Figure 5 *Amorphous Prospect showing drill collars, 2017 and 2020 intercepts and gold contour grades.*

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Gold mineralisation at Amorphous is typically hosted in an altered shear-zone within an easterly dipping gabbroic unit. Gold grades within the mineralised shear-zone are variable.

A lower than expected dip on the mineralised shear-zone improved conceptual open-pit geometry. The gold mineralisation envelope dips to the east at approximately 60 degrees, rather than 80 degrees as previously interpreted, thus lowering the theoretical stripping ratio.

Previous exploration results were originally announced to the ASX on 21 November 2017 in an announcement titled "*Higginsville Gold Drilling Significantly Increases Potential for Commercial Gold Deposit*"

Island Gold Target

The Island gold prospect is located 9km south of the Higginsville mining camp (+2.5Moz) which sits between the St Ives (+15Moz) and Norseman (+10Moz) gold mining districts in Western Australia (Figure 6). The Island gold prospect is defined by a 1,200m by 400m gold geochemical anomaly and surface rock-chip samples. The anomaly sits over a major structural intersection that may have been a conduit for gold mineralising fluids.

Drilling Results

Argonaut completed 13 RC drill holes at the Island target for a total of 1,352m.

Assays of composite RC chip samples indicate that no significant gold mineralisation was intercepted.

Drilling Incomplete

Four planned drill holes across two gold geochemistry anomalies at the Island target were not drilling during the 2020 RC drilling program due to the surface conditions of Lake Cowan impeding rig access to the planned collars.

These two targets are prospective and warrant drill testing.

Birties Gold Prospect

Argonaut completed 14 RC drill holes at the Birties Gold Target for a total of 1,162m. Highlights of this drilling include: BIRC010: 2m at 0.25g/t gold from 23m.

This result was originally announced to the ASX on 17 September 2020 in an announcement titled "*Higginsville Drilling Program*".

The Birties prospect features a gold geochemistry anomaly that was generated in the early 2010s. The target is defined by a broad geochemical anomaly which is over 1km long and 1km wide.

Nickel Exploration

During 2019, Argonaut investigated the nickel potential of the Higginsville Project. The Higginsville area mineralisation model is typical of Kambalda-style komatiitic nickel sulphide deposits, comprising Ni-Cu-PGE ores. Published mapping, interpretation of the aeromagnetics and review of existing drill logs shows that an ultramafic trend continues through the licence areas. Follow-up EM geophysical surveys and drilling over targets zone may be warranted.

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 earned a 51% interest in the tenement package by 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 was paid by Argonaut progressively under the agreement.
- An issue of ordinary fully paid Argonaut shares valued at $50,000 was issued on execution of the definitive earn-in agreement.

The earn-in agreement is currently in the second phase.

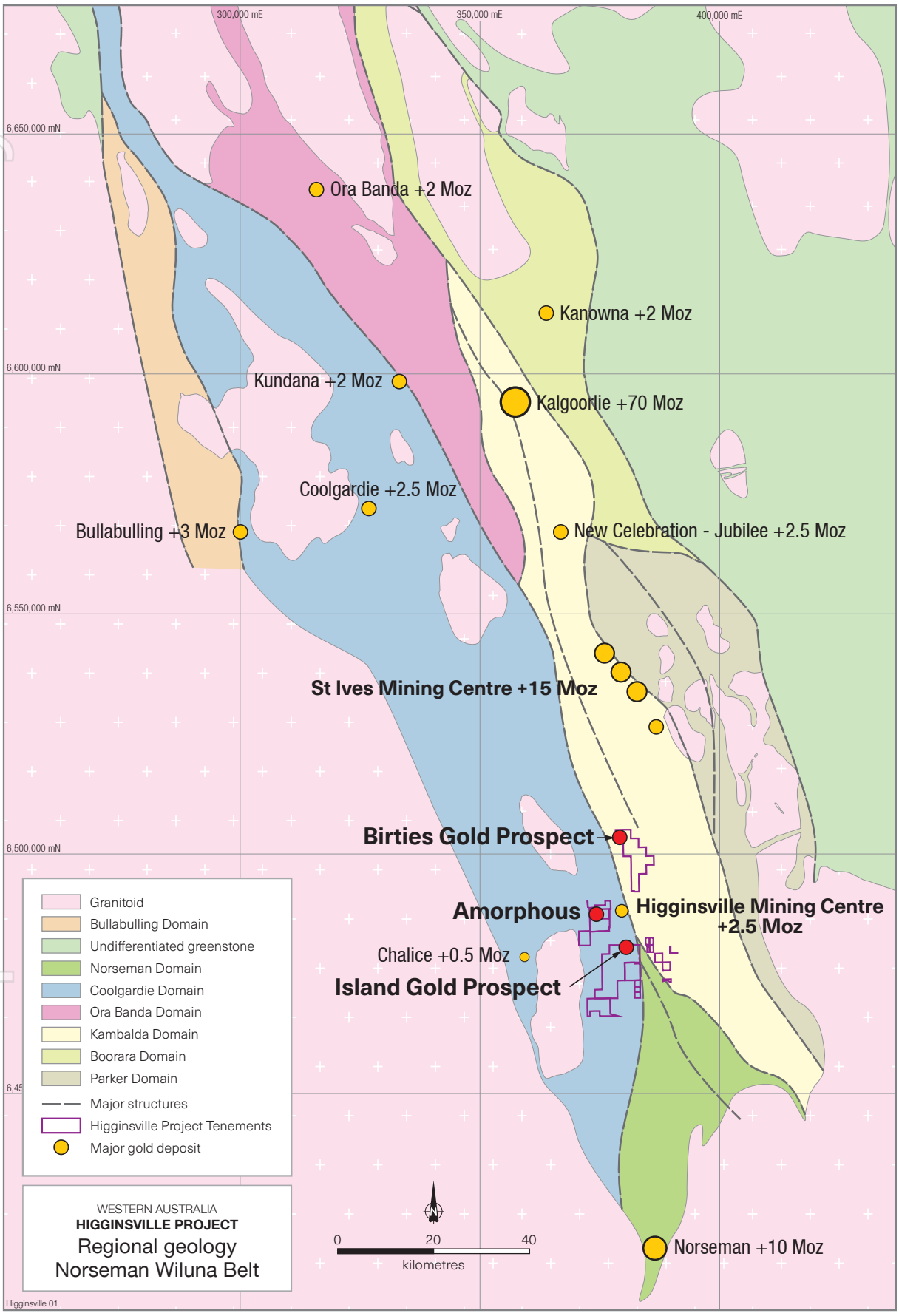


Figure 6 *Higginsville regional geology showing Argonaut exploration licences and major gold deposits.*

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Kroombit, Queensland

(Copper-Zinc – Argonaut 100%)

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% zinc, 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% copper 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.

Argonaut plans to capitalise on its Kroombit holding at a time of higher zinc prices. No field-based work was undertaken at Kroombit during the Quarter. No field-based work was undertaken at Kroombit during the Quarter.

Aroona, South Australia

(Zinc – Argonaut 100%)

EL5336, Aroona, is subject to a joint venture agreement with Perilya Limited.

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

About Argonaut

Argonaut Resources NL is an Australian Securities Exchange listed exploration and development company focused on the Murdie copper project in South Australia and copper development at the at the Nyungu copper-cobalt deposit at the Lumwana West project in North Western Zambia.

Authorised for release by:

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 2019 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

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Table 1 – *Summary of mining tenements*

South Australian Mineral Exploration Licences

Tenement	Granted	Expiry	Area (km^2)	Locality	Licensee	Interest
EL 5998[3]	21/05/2017	20/05/2020	33	Campfire Bore	Coombedown Resources Pty Ltd	10%[1]
EL 6199	04/06/2018	03/06/2020	27	Myrtle Springs	Kelaray Pty Ltd	100%
EL 6407	18/08/2019	17/08/2022	295	Lake Torrens	Kelaray Pty Ltd	30%
EL 5732	18/10/2015	17/10/2020	104	Sandstone	Coombedown Resources Pty Ltd	10%[1]
EL 5937	30/03/2017	29/03/2021	794	West Lake Torrens	Kelaray Pty Ltd	100%
EL 5945	20/04/2017	19/04/2021	221	Murdie	Kelaray Pty Ltd	100%
EL 6320	28/02/2019	27/02/2021	198	Andamooka Station	Kelaray Pty Ltd	100%
EL 6352	24/06/2019	23/06/2021	993	Lake Torrens Area	Kelaray Pty Ltd	100%

Queensland Mining Lease

Tenement	Granted	Expiry	Area (km^2)	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 (km^2)	Locality	Licensee	Interest
MDL 2002	03/08/2016	02/08/2021	0.64	Kroombit	Kelaray Pty Ltd	100%

Zambian Large Scale Exploration Licence

Tenement	Granted	Expiry	Area (km^2)	Locality	Licensee	Interest
22399-HQ-LEL	29/12/2017	28/12/2021	521	North Western Province	Mwombezhi Resources Ltd	90%
23232-HQ-LEL	10/04/2019	09/04/2023	226	North Western Province	Sunrise Exploration and Mining Limited	90%
23474-HQ-LEL	18/12/2018	17/12/2022	41.58	North Western Province	Sunrise Exploration and Mining Limited	90%

Zambian Small Scale Exploration Licence

Tenement	Granted	Expiry	Area (km^2)	Locality	Licensee	Interest
23606-HQ-SEL	18/12/2018	17/12/2022	9.4	North Western Province	Sunrise Exploration and Mining Limited	90%
26458-HQ-SEL	10/06/2020	9/06/2024	9.72	North Western Province	Sunrise Exploration and Mining Limited	90%

Western Australian Mineral Exploration Licences

Tenement	Granted	Expiry	Area (km²)	Locality	Licensee	Interest
E15/1484[2]	18/07/2016	17/07/2021	12	Nawock-Hayes Hill	Loded Dog Prospecting Pty Ltd	51%
P63/2071[2]	24/04/2017	23/04/2021	1.37	Hayes Hill	Loded Dog Prospecting Pty Ltd	51%
P63/2072[2]	24/04/2017	23/04/2021	1.27	Hayes Hill	Loded Dog Prospecting Pty Ltd	51%
P63/2073[2]	24/04/2017	23/04/2021	1.54	Hayes Hill	Loded Dog Prospecting Pty Ltd	51%
E15/1509[2]	03/05/2017	02/05/2022	3	Eundynie	Loded Dog Prospecting Pty Ltd	51%
E 15/1510[2]	08/05/2017	07/05/2022	3	Eundynie	Loded Dog Prospecting Pty Ltd	51%
E 63/1773[2]	08/05/2017	07/05/2022	21	Hayes Hill	Loded Dog Prospecting Pty Ltd	51%
E15/1523[2]	08/05/2017	07/05/2022	42	Higginsville	Loded Dog Prospecting Pty Ltd	51%
E 15/1540[2]	17/05/2017	16/05/2022	9	Higginsville	Loded Dog Prospecting Pty Ltd	51%
P15/6029[2]	04/07/2017	03/07/2021	1.2	Higginsville	Loded Dog Prospecting Pty Ltd	51%
P15/6030[2]	25/05/2017	24/05/2021	1.2	Higginsville	Loded Dog Prospecting Pty Ltd	51%
P15/6031[2]	25/05/2017	24/05/2021	1.2	Higginsville	Loded Dog Prospecting Pty Ltd	51%
P15/6032[2]	25/05/2017	24/05/2021	1.2	Higginsville	Loded Dog Prospecting Pty Ltd	51%
E15/1489[2]	14/08/2017	13/08/2022	52	Higginsville	Loded Dog Prospecting Pty Ltd	51%
P63/2077[2]	26/10/2017	25/10/2021	0.7	Hayes Hill	Loded Dog Prospecting Pty Ltd	51%
E15/1588[2]	01/12/2017	30/11/2022	61	Higginsville	Loded Dog Prospecting Pty Ltd	51%

South Australian Mineral Exploration Licence Applications

Tenement	Applied	Expiry	Area (km²)	Locality	Licensee	Interest
2020/00064	12/06/2020	-	960	Frome Downs	Kelaray Pty Ltd	100%
2020/00065	12/06/2020	-	947	Curnamona	Kelaray Pty Ltd	100%

Northern Territory Mineral Exploration Licence Applications

Tenement	Applied	Expiry	Area (km²)	Locality	Licensee	Interest
EL32445	25/06/2020	-	230.24	T-Bone	Kelaray Pty Ltd	100%
EL32446	25/06/2020	-	63.71	Ranger NE	Kelaray Pty Ltd	100%

Table 2 – Summary of mining tenements acquired in Quarter
No tenements were acquired in the September 2020 Quarter.

Table 3 - Summary of mining tenements surrendered in Quarter
No tenements were surrendered in the September 2020 Quarter.

1 Kelaray holds a 33% interest in Coombedown Resources Pty Ltd.
2 Under option agreement.
3 Undergoing renewal.

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Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Argonaut Resources NL

ABN	Quarter ended ("current quarter")
97 008 084 848	September 2020

Consolidated statement of cash flows		Current quarter $A'000	Year to date 3 months $A'000
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(155)	(155)
	(e) administration and corporate costs	(129)	(129)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	4	4
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	37	37
1.8	Other (provide details if material)	-	-
1.9	**Net cash from / (used in) operating activities**	**(243)**	**(243)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	(528)	(528)
	(e) investments	-	-
	(f) other non-current assets	-	-

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Consolidated statement of cash flows		Current quarter $A'000	Year to date 3 months $A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) 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**	**(528)**	**(528)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(15)	(15)
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	Placement monies received on deposit	965	965
3.10	**Net cash from / (used in) financing activities**	**950**	**950**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	1,170	1,170
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(243)	(243)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(528)	(528)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	950	950

Consolidated statement of cash flows		Current quarter $A'000	Year to date 3 months $A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**1,349**	**1,349**

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 $A'000	Previous quarter $A'000
5.1	Bank balances	24	24
5.2	Call deposits	360	360
5.3	Bank overdrafts	-	-
5.4	Placement monies received on deposit	965	965
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**1,349**	**1,349**

6.	Payments to related parties of the entity and their associates	Current quarter $A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1 *(wages 96)*	96
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

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7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	**Total financing facilities**	-	-

7.5	**Unused financing facilities available at quarter end**	-

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	(243)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(528)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(771)
8.4	Cash and cash equivalents at quarter end (item 4.6)	1,349
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	1,349
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	1.7

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Yes.

The Company completed a share placement on 2 October 2020, raising $2.7 million.

The Company completed a Share Purchase Plan on 15 October 2020, raising $2.5 million.

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Yes.

The Company completed a share placement on 2 October 2020, raising $2.7 million.

The Company completed a Share Purchase Plan on 15 October 2020, raising $2.5 million.

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8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
Yes. The Company completed a share placement on 2 October 2020, raising $2.7 million. The Company completed a Share Purchase Plan on 15 October 2020, raising $2.5 million.	

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

1 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.

Date: 29th October 2020

Authorised by: By the Board
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow 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 cash flow 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.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

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