

ASX: ARE

CAPITAL STRUCTURE:

Issued shares: 6,361 million

Listed options: None

Unlisted options: 30 million

Cash on hand: \$329,000

DIRECTORS:

Patrick Elliott, Non-Exec Chairman

Mick Billing, Non-Exec Director

Lindsay Owler, Director/CEO

Andrew Bursill, Non-Exec Director

**LITHIUM, GOLD AND
NICKEL PROJECT**

**HIGGINSVILLE, WESTERN
AUSTRALIA**

Lithium, gold and nickel

Phase: Exploration

Interest: Argonaut 80%

Operator: Argonaut

COPPER PROJECTS:

MURDIE, SOUTH AUSTRALIA

Copper, gold (large IOCG)

Phase: Exploration

Interest: Argonaut 100%

TORRENS, SOUTH AUSTRALIA

Copper, gold (large IOCG)

Interest: Aeris Resources 70%,
Argonaut 100% (subject to
Ministerial consent)

Agreement Phase: Exploration

**KAMAPANDA, KALABA EAST,
MUSANGILA, ZAMBIA**

Copper, gold

Interest: Argonaut 90%

Agreement Phase: Exploration

Operator: Argonaut

Quarterly report

FOR THE PERIOD ENDING 30 JUNE 2023

Argonaut Resources NL (*Argonaut* or the *Company*) (ASX: ARE) presents the following report for the period to 30 June 2023 (the *Quarter*).

Highlights

Higginsville, Western Australia – Lithium

Drilling of LCT targets completed at Higginsville

- Argonaut completed a 30-hole reverse circulation ("RC") drilling program for a total of 3,246m. The drilling program targeted LCT pegmatites at the Darson prospect near Higginsville.
- A total of 132 Pegmatitic intervals were logged across the 30 drill holes for a cumulative total of 431 metres of logged Pegmatite.
- Lithium intercepts generated by the 30-hole drilling program were low to medium grade.
- Lithium results include:
 - DSRC021: 9m at 0.19% Li₂O from 30m;
 - DSRC011: 6m at 0.23% Li₂O from 3m; and
 - DSRC006: 4m at 0.21% Li₂O from 1m
 - including 1m at 0.43% Li₂O from 1m.
- Ancillary elements Caesium, Tantalum and Rubidium occurred at, or above, levels typically found in commercial, Western Australian Lithium deposits.
- Highlights of Caesium analysis include:
 - DSRC006: 10m at 696ppm Cs₂O from 1m; and
 - DSRC012: 8m at 857ppm Cs₂O from 13m.
- Drilling intercepted particularly high-grade Tantalum in limited drilling at the Darson Central prospect. The highlight of Tantalum analysis is:
 - DCRC003: 3m at 937ppm Ta₂O₅ from 81m.
- Elevated Rubidium was also intercepted at Darson Central. Highlights include:
 - DCRD002: 1m at 0.24% Rb from 59m; and
 - DCRD002: 1m at 0.24% Rb from 62m.

Sampling Program

- Soil sampling generated a new LCT Pegmatite drilling target called Darson West.
- During the Quarter an additional 545 samples were taken in the eastern region and all assays have now been received. Results are being considered.

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¹ Field-based geological logging of RC (percussion drilling) rock chips. Rocks logged as pegmatite are feldspathic igneous rock with a variable texture and crystals up to centimetre-scale. Most logged pegmatite drilling intercepts reported are supported by related pegmatitic surface outcrop or subcrop.

URANIUM PROJECTS

FROME, SOUTH AUSTRALIA

Uranium

Phase: Exploration

Interest: Argonaut 67%

Operator: Orpheus

CUMMINS, SOUTH AUSTRALIA

Uranium

Phase: Exploration

Interest: Argonaut 67%

Operator: Orpheus

MARREE, SOUTH AUSTRALIA

Uranium

Phase: Exploration

Interest: Argonaut 67%

Operator: Orpheus

MOUNT DOUGLAS, NORTHERN TERRITORY

Uranium

Phase: Exploration

Interest: Argonaut 67%

Operator: Orpheus

RANGER NE, NORTHERN TERRITORY

Uranium

Phase: Exploration

Interest: Argonaut 67%

Operator: Orpheus

T-BONE, NORTHERN TERRITORY

Uranium

Phase: Exploration

Interest: Argonaut 67%

Operator: Orpheus

WOOLNER/MARRAKAI, NORTHERN TERRITORY

Uranium

Phase: Exploration

Interest: Argonaut 67%

Operator: Orpheus

Lumwana West, Zambia – Copper-Cobalt

Argonaut is seeking the restoration of 22399-HQ-LEL, Lumwana West

- During the previous period, the Company advised that the Zambian Minister of Mines and Mineral Development, Paul Kabuswe, refused an appeal by Argonaut's 90% held subsidiary, Mwombezhi Resources Ltd, against the grant of a new licence over the Lumwana West area in North-western Zambia.
- An appeal to the Minister of Mines is the first of three forms of relief available to aggrieved parties under the Zambian Mining Act. The second process is an appeal of the Minister's decision to the Mining Appeals Tribunal.
- During the Quarter, Mwombezhi filed an appeal against the Minister's decision to the Tribunal as well as a further application to the Zambian High Court to expedite the expedite the relief sought.
- On 20 June 2023, the Zambian High Court made an order staying the cancellation of the Lumwana West licence and grant of a new licence over the same area, thus protecting Argonaut's interest.
- Legal action by Argonaut is aimed at the reinstatement of the Lumwana West exploration licence to Mwombezhi Resources Ltd.

Torrens, South Australia – Copper

- During the Quarter, Argonaut's 100% held subsidiary, Kelaray Pty Ltd entered into an agreement to acquire a 70% interest in the Torrens project exploration licence (EL 6407) in return for a 2.5% net smelter royalty on future production.
- The Tenement Sale and Purchase Agreement is with Straits Exploration (Australia) Pty Ltd, a subsidiary of Aeris Resources Ltd (ASX: AIS).
- The Agreement is for the acquisition by Kelaray of an additional 70% interest in the Torrens project in South Australia to take its holding to 100%.
- The licence transfer is subject to Ministerial approval, an instrument of transfer has been lodged.
- This agreement sees Argonaut take a commanding land position in the highly prospective Olympic Dam domain near the eastern margin of the Gawler Craton.
- The Olympic Domain hosts several internationally significant Iron Oxide Copper-Gold (IOCG) deposits including Olympic Dam, Carrapateena, Prominent Hill and Oak Dam West.

Murdie, South Australia – Copper

- In August 2022, the South Australian Supreme Court set aside an Aboriginal Heritage Act authorisation granted to Argonaut's subsidiary, Kelaray Pty Ltd, for exploration works at the Murdie project in South Australia. Kelaray subsequently filed an appeal against the decision.
- This appeal was heard by the South Australian Court of Appeal on 11 May 2023.
- The Court of Appeal unanimously allowed Kelaray's appeal and set aside the Supreme Court's orders of August 2022.
- The Murdie authorisation was reinstated to Kelaray and the project now holds all permits necessary to undertake exploration works.

Corporate

- On 30 April 2023 Argonaut's long-serving CEO and Director, Lindsay Owler gave notice under his service agreement with Argonaut. Mr Owler concludes his employment on 31 July 2023.
- On 20 June 2023 Argonaut appointed Michael Robert (Mick) Billing as an Executive Director of the Company, effective immediately.
- The Company directors advise that they continue to work to secure a replacement for the role of Managing Director.
- Subsequent to the Quarter, Argonaut announced a Placement for the issue of approximately 954.3 million new fully paid ordinary shares ("Securities") at an issue price of \$0.0005 per share ("Offer Price") to sophisticated and professional investors ("Placement"). The Placement raised ~\$477,000 (before costs).
- The Company also announces its intention to seek shareholder approval for a consolidation of capital, resulting in one share held for each 100-pre-consolidation shares held ("Consolidation").
- Following the Consolidation, the Company intends to conduct a fully underwritten entitlement offer, at the same effective Offer Price as the Placement on a post consolidation basis of \$0.05 per share. The Entitlement Offer will be offered on a one (1) for one (1) basis, to raise a further ~\$3.65 million before costs associated with the issue.
- Following review of exploration strategy and projects by the board of Argonaut, the Company has elected to shift its strategic direction to focus principally on its Australian uranium assets. Funds raised from the Offer will be directed towards uranium exploration, general working capital and the costs of the Offer.

Outlook

- The Company intends to concentrate future exploration activity to the uranium assets in South Australia and the Northern Territory. The activities described below are contingent on completion of the Capital Restructure and Rights Issue over the coming months.
- Frome Project (SA): the company is well advanced in discussions with the native title holders and has signed a Heritage Survey Agreement that will allow for a process to progress advanced exploration, including drilling activities of prospective areas identified within the Project area. In parallel with undertaking Heritage surveys, the company intends to expand its geochemical and geophysical coverage of the project, including implementation of Radon monitoring and geochemical sampling to detect geochemical dispersion halos as a direct measure of uranium mineralisation and passive seismic techniques to map palaeochannels. The Company has several drill-ready targets in the project area and approvals for these are being advanced as soon as possible.
- Cummins Project (SA): the Company will be focused on engagement with local communities and landowners to gain access for exploration. The Company is targeting sediment or structurally-hosted uranium mineralisation that may be amenable to In-situ Recovery methods and should not require major pit excavation of conventional mining. This project will benefit from enhanced geochemical and geophysical techniques to determine the limits of paleochannels and/or the presence of buried uranium mineralisation.
- Marree Project (SA): the Marree project was recently granted and is considered highly prospective for roll-front, sedimentary-hosted uranium mineralisation associated with Tertiary and/or Permian palaeochannels. The region is situated approximately 70 kilometres northwest of the significantly radiogenic region of the Mount Painter Uranium Field host to the Mount Gee hard rock uranium deposits and Beverley sediment-hosted Tertiary palaeochannel uranium deposits.
- Mount Douglas (NT): uranium mineralisation has been identified in outcrop at Radiometric Anomaly 1 and the intent is to do trenching across the mineralised zone, followed by percussion drilling in due course during the dry season. The project area is extensive and there are several radiometric anomalies that require field reconnaissance. In addition, high quality historical geophysics datasets (such as detailed airborne Radiometrics) have been located and will require processing and interpretation by consultant geophysicists.
- In summary, on completion of the entitlement issue, the Company is well positioned to commence exploration on its uranium projects.

Higginsville, Western Australia

(Lithium, gold and nickel – Argonaut 80%)

Argonaut holds an 80% interest in exploration licence E15/1489 which hosts:

- the Darson pegmatite swarm;
- the Amorphous gold deposit; and
- the Footes Find gold prospect.

Lithium Exploration – Darson Pegmatite Swarm

Drilling Program

Argonaut has completed a 30-hole, 3,246m RC drilling program at the Darson prospect, near Higginsville, WA. The program targeted LCT Pegmatites on the basis of outcrop mapping and soil geochemistry.

Drilling succeeded in intersecting Pegmatitic rocks in all 30 drill holes¹. A total of 132 Pegmatitic intervals were logged across the 30 drill holes for a cumulative total of 431 metres of logged pegmatitic rock (see Table B).

The results were reported to the ASX on 17 April 2023.

Lithium intercepts generated by the 30-hole drilling program are low to medium grade. Ancillary elements such as caesium, tantalum and rubidium occurred at or above levels typically in commercial, Western Australian lithium deposits.

Soil Sampling

During the Quarter, an additional 545 soil samples plus QA/QC samples were completed in the eastern region and all assays have now been received.

The Company progressively extended and infilled soil sampling grids at Darson. These efforts have been rewarded by the delineation of four major target zones (Darson South, Central, East and West).

Recent soil sampling results have revealed a significant new “fishhook-shaped” anomaly at Darson West. The Darson West anomaly is defined by a geochemical signature (RbKTaNb) that indicates primary Pegmatite rock (Rubidium and Potassium) and weathered Pegmatite minerals (Tantalum and Niobium). The Darson West anomaly was tested by two drill holes, mentioned above (Figure 2, Photo 1 and Photo 2). Further drilling of the Darson West anomaly may be warranted.

¹ See Argonaut ASX release titled “Thick pegmatite intercepts at Higginsville” dated 17 April 2023

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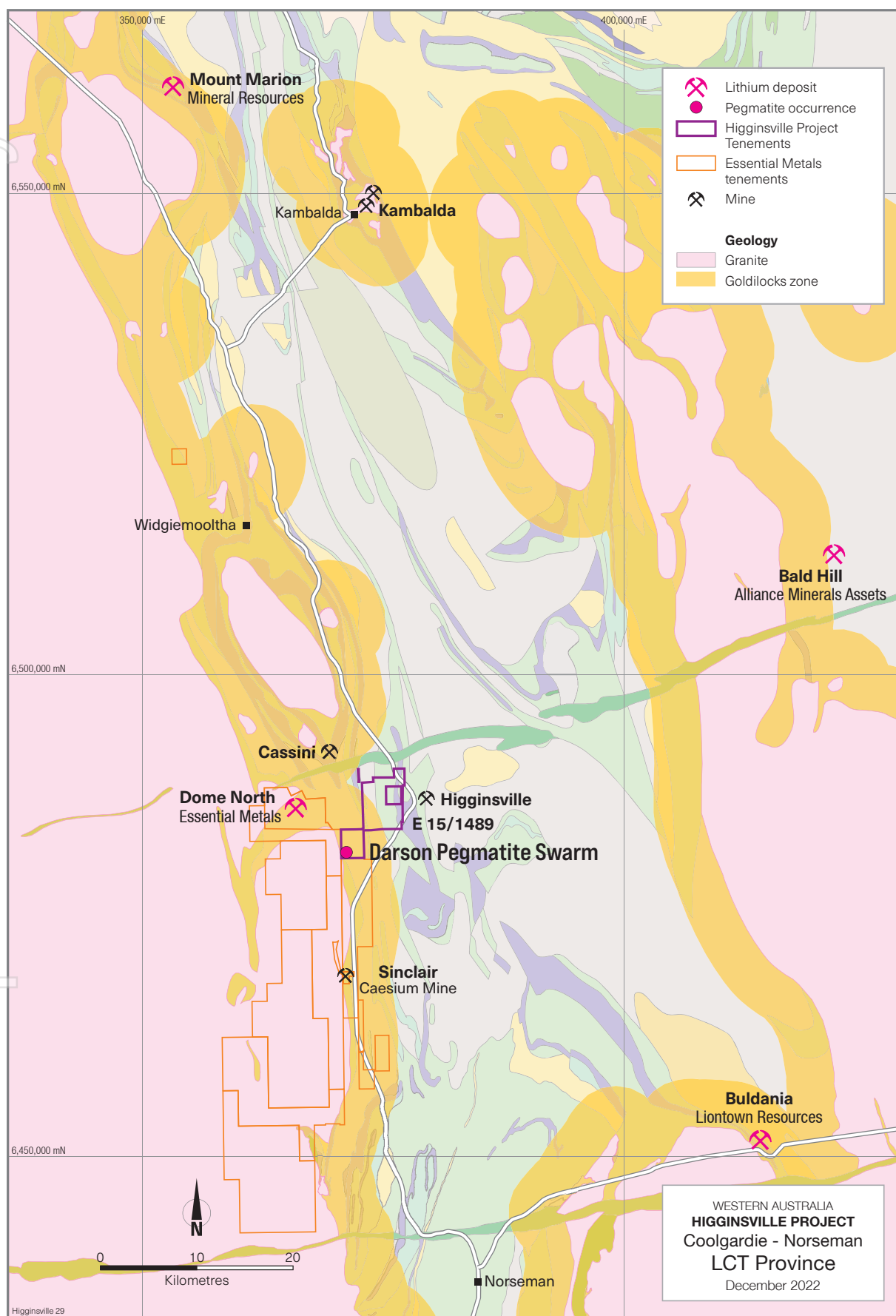


Figure 1 Emerging lithium super-province. Coolgardie-Norseman LCT Province showing major lithium deposits and the “Goldilocks Zone” in relation to the Darson Pegmatite Swarm, Higginsville, WA. After Brand et al 2021.

Lumwana West, Zambia

(Copper-cobalt)

Purported cancellation of exploration licence 22399-HQ-LEL

During January 2022, Argonaut became aware that Large-scale Exploration Licence 22399-HQ-LEL, Lumwana West, was not renewed by the Zambian Government as expected. This licence area contains the Nyungu deposit.

At the time of the purported cancellation, the Company's 90% held subsidiary, Mwombezhi Resources Ltd, was operating in full compliance with all licence conditions and other regulatory requirements.

Argonaut's Zambian lawyers identified procedural errors in both the non-renewal of 22399-HQ-LEL and the grant of a new licence over the Lumwana West area to a newly registered company.

Argonaut had a history of raising and investing significant amounts of money in the rigorous exploration and evaluation of the Lumwana West licence area, particularly the Nyungu deposit. The Company had commenced the fast-tracking of a feasibility study into a commercial mining operation at the site via a team of internationally recognised experts. It would appear to be against the national interests of Zambia to stop this process.

Prior to the period, the Zambian Minister of Mines refused an appeal by Mwombezhi against the grant of a new licence over the Lumwana West area in North-western Zambia.

The Company notes that an appeal to the Minister of Mines is the first of three forms of relief available to aggrieved parties under the Zambian Mining Act. The second process is an appeal against the Minister's decision to the Mining Appeals Tribunal.

On 3 April 2023, Mwombezhi filed an Appeal to the Mining Appeals Tribunal and, on 6 June 2023, Mwombezhi made an application to the Zambian High Court to expedite the relief sought.

On 20 June 2023, the Zambian High Court made an order staying the cancellation of the Lumwana West licence and grant of a new licence over the same area, thus protecting Argonaut's interest.

Legal action by Argonaut is aimed at the reinstatement of the Lumwana West exploration licence to Mwombezhi Resources Ltd. The Company notes that the timeframe for legal processes underway currently underway in Zambia is uncertain and that an outcome is expected in two to 12 months.

Murdie, South Australia

(Copper – Argonaut 100%)

The Murdie project is located in South Australia near the eastern margin of the Gawler Craton. The project area covers 1,015 square kilometres of highly prospective Olympic Domain geology and includes more than 50 discrete gravity anomalies that are located immediately south and east of the Torrens project and east of the Carrapateena mine (Figure 2). These anomalies represent locations with significant volumes of high-density rock that could contain economic Iron-Oxide Copper-Gold (IOCG) deposits.

Exploration Authorisations

Aboriginal Heritage Act

On 25 August 2022, the South Australian Supreme Court set aside the Aboriginal Heritage Act authorisation granted to Argonaut's subsidiary, Kellaray Pty Ltd, on 29 December 2020 by then Premier, Steven Marshall, for exploration works at the Murdie project in South Australia.

Appeal

On 11 May 2023, the Court of Appeal unanimously allowed Kellaray's appeal and set aside the Supreme Court's orders of August 2022. The Court of Appeal found that "The Authorisation granted under section 23 did not impair the practical legal operation of Aboriginal Heritage Act".

As a result of this decision the authorisation for exploration under the Aboriginal Heritage Act has been reinstated and the project again holds all permits necessary to undertake exploration works.

Exploration Planning

Argonaut's drilling authorisations for the Murdie project contain two main options for accessing drill sites on Lake Torrens – access via protective matting and via helicopter. Argonaut has held discussions with relevant contractors regarding the continuation of drilling using both techniques.

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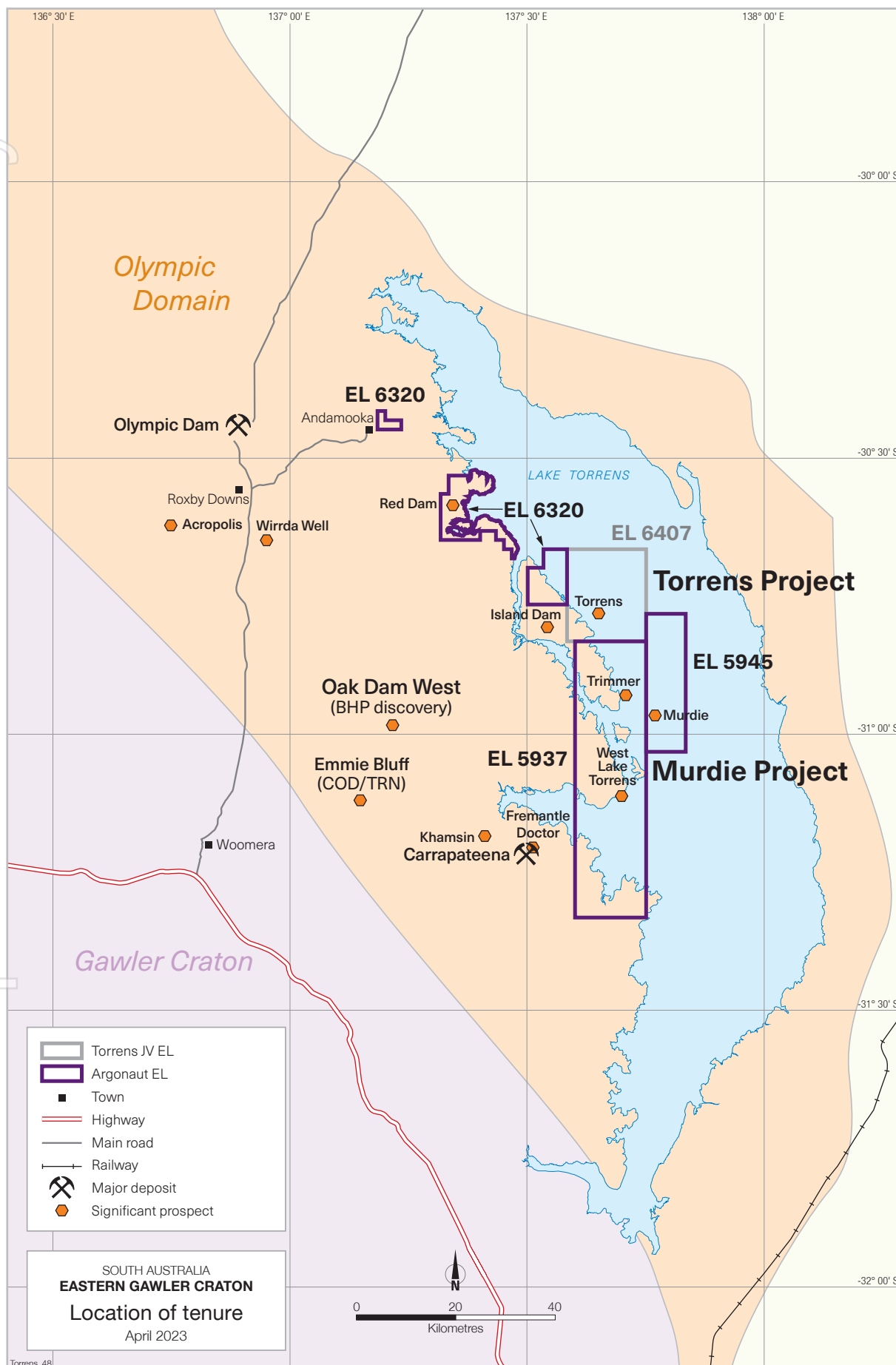


Figure 2 Lake Torrens exploration licences.

Torrens, South Australia

(Copper – Argonaut 100% – subject to Ministerial consent)

Torrens Project – 100% Ownership

During the Quarter, Argonaut announced that its 100% held subsidiary, Kelaray Pty Ltd, has entered into an agreement to acquire a 70% interest in the Torrens project exploration licence (EL6407) in return for a 2.5% net smelter royalty on future production.

The Tenement Sale and Purchase Agreement is with Straits Exploration (Australia) Pty Ltd, a subsidiary of Aeris Resources Ltd (ASX:AIS).

The agreement is for the acquisition by Kelaray of an additional 70% interest in the Torrens project in South Australia to take its holding to 100%.

The licence transfer is subject to Ministerial approval, an instrument of transfer has been lodged.

This agreement sees Argonaut take a very strong land position in the highly prospective Olympic Dam domain near the eastern margin of the Gawler Craton, (Figure 2).

Torrens Project

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.

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. Improved geophysical acquisition, processing and modelling technology has improved the odds of discovery in this environment compared with earlier exploration efforts.

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.

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

The Torrens project is located 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.

Red Dam, South Australia

(Copper – Argonaut 100%)

Argonaut holds exploration licence EL6320 located adjacent to the Torrens Project (Figure 2). 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 conducted a ground gravity survey in 2020 to improve resolution for geophysical modelling and target generation.

Uranium Assets, South Australia and Northern Territory

(Uranium – Argonaut 67%)

Argonaut holds interests in uranium projects in South Australia and the Northern Territory through its 67% owned subsidiary, Orpheus Minerals Limited. Following review of exploration strategy and projects by the board of Argonaut, the Company has elected to shift its strategic direction to focus principally on these Australian uranium assets.

In South Australia there are three key project areas: Frome, Cummins and Marree.

- Frome Embayment, SA – Beverley and Honeymoon-style sandstone-hosted, roll front targets:
 - Frome Downs – 960 km²;
 - Curnamona – 947 km²;
 - Erudina – 987 km²; and
 - Billeroo – 143 km².
- Cummins, SA –
 - Cummins – 952 km².
- Marree, SA – Beverley and Honeymoon-style sandstone-hosted, roll front targets:
 - Mundowdna – 998 km²;
 - Muloorina – 990 km²; and
 - Clayton – 978 km².

In Northern Territory there are four key project areas: Mount Douglas, Woolner, Alligator Rivers Uranium Field and South Alligator Valley Mineral Field.

- Mount Douglas, NT – Ranger-style unconformity related targets:
 - Mount Douglas – 484 km²;
 - Mount Douglas (Ban Ban) – 103 km²; and
 - Mount Douglas (Mary River) – 127 km².
- Alligator Rivers Uranium Field, NT – Ranger-style unconformity related targets:
 - Ranger North-East – 64 km²;
- South Alligator Valley Mineral Field – unconformity related targets near Coronation Hill deposit:
 - T-Bone – 230km².
- Woolner – unconformity related targets near Coronation Hill deposit:
 - Marakai – 458 km²; and
 - Woolner – 473 km².

South Australia – Frome Project

In South Australia there are three key project areas: Frome, Cummins and Marree.

The Frome project is comprised of four highly prospective exploration licences in the Frome Embayment area of South Australia which is arguably the most prospective region in Australia for sandstone-hosted uranium deposits.

The licences at Frome cover sandstone-bearing palaeochannels that contain groundwater that drains from uranium-bearing granite (Figure 3). Previous drilling of these palaeochannels confirms the presence of excellent sandstone aquifers at or near the base of the channels. These sandstone aquifers are 4m to 20m thick (typically 10-12m) and contain the necessary permeable coarse sands.

These basal sandstones have been shown to contain both oxidised, uranium-bearing zones and reduced zones. Work by Orpheus has inferred 12 kilometres of redox front within palaeochannels along which high priority exploration is necessary.

Uranium rich source rocks, a permeable sandstone aquifer to carry the oxidised, uranium bearing groundwater, and the introduction of a reductant along faults from a lower, hydrocarbon-bearing aquifer are all key technical characteristics required in this geological environment for potential economic uranium deposits.

At the Frome project we see the following geological units:

1. The Eyre Formation (Honeymoon and Goulds Dam deposits) and Namba Formation (Beverley deposit) palaeochannels. These units are contained in the Callabonna Sub-basin of the Lake Eyre Basin.
2. The underlying Arrowie Basin, which includes the hydrocarbon-bearing Wilkawillina Limestone unit.
3. The Crocker Well Suite granite (Figure 3) which is an excellent uranium source rock and displays a strong radiometric anomaly where it outcrops.
4. Faults that cut both the Arrowie basin sediments and the overlying Eyre or Namba formations.

Recent work completed at the Frome project includes historical data compilation and assessment, a process which is ongoing. Work has also commenced on securing access to the tenements, initially for early-stage low impact exploration in the near term but also ultimately access consents to enable drilling. Initial contact and discussions have commenced both with pastoralists and station managers in the area and the Traditional Owners, represented by the Adnyamathanha Traditional Lands Association.

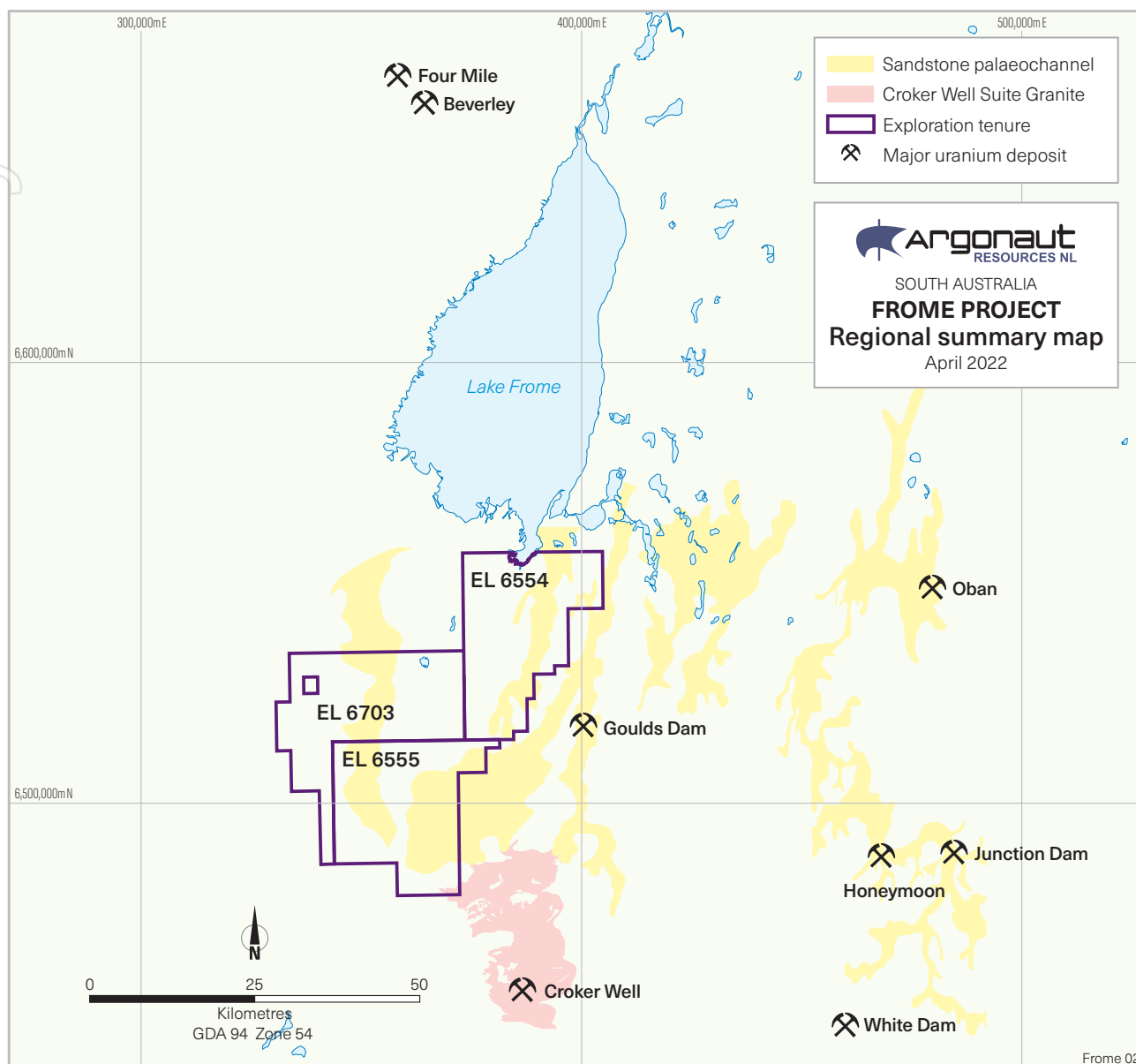


Figure 3 Frome project ELs with interpreted Eyre Formation palaeochannels, extending north from proposed uranium source rocks of the Croker Granite Suite.

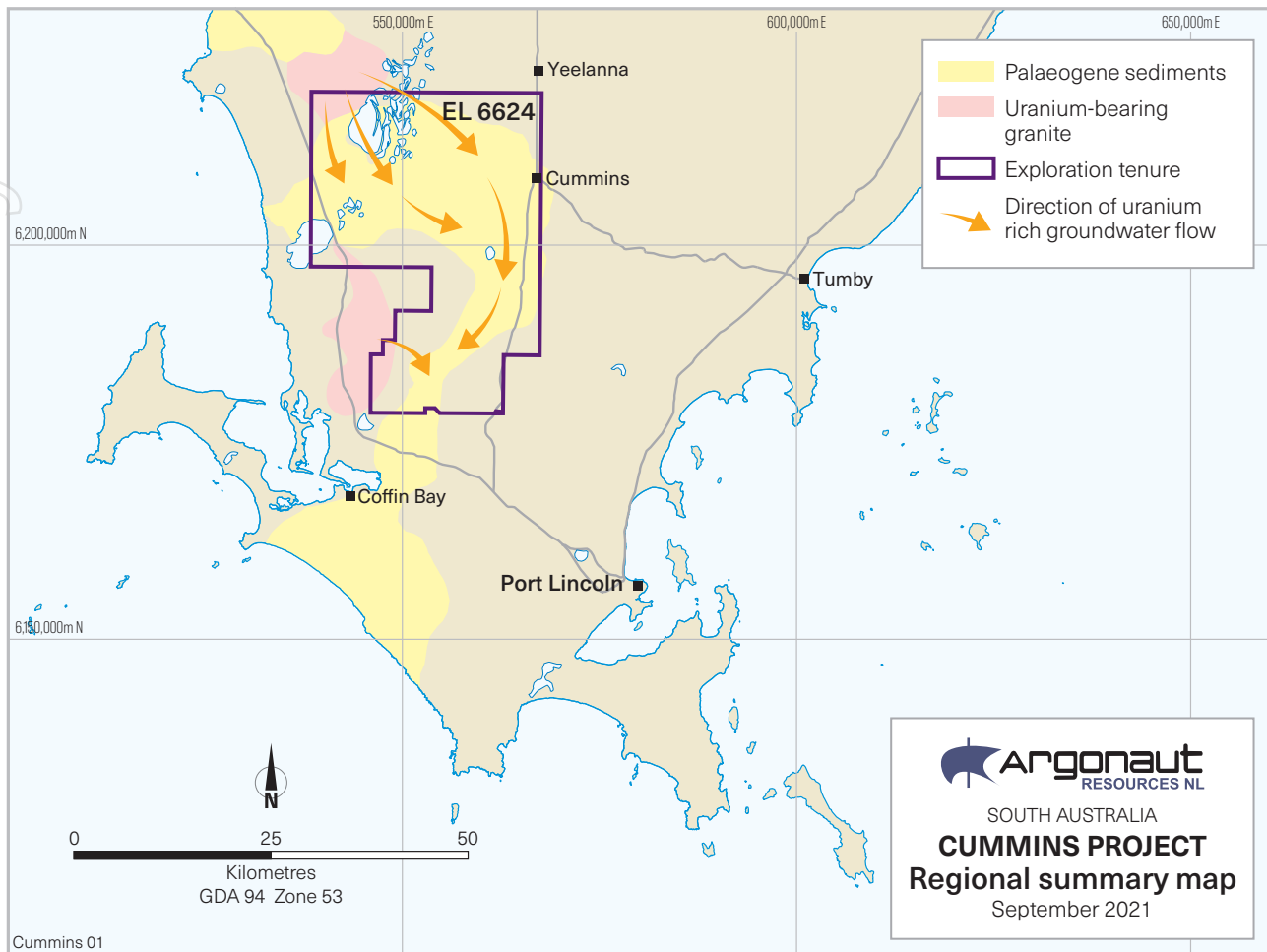


Figure 4 Cummins project conceptual model of uranium-bearing fluid movement from Proterozoic Dutton Suite granites in the north, southward through the Cummins-Wanilla Basin.

South Australia – Cummins Project

The Cummins project comprises a single exploration licence (EL 6624), granted 23 July 2021 for a period of six years. The exploration target is sediment hosted uranium mineralisation developed within Tertiary sedimentary strata of the Cummins-Wanilla Basin on the southern Eyre Peninsula. The Basin is bounded to the east by the uplifted Lincoln Complex granitoids and gneisses that form the Koppio Hills and Marble Range.

Reviewed and interpreted drilling data was combined with the available geophysical datasets to produce a depth to basement model and a plan of interpreted structural features. The Cummins-Wanilla Basin is interpreted to occupy a south-southwest – north-northeast oriented palaeovalley in the south of EL 6624 that follows an arc to the west to form a broader northeast-southwest oriented basin in the northern portion of the EL.

A conceptual model of uranium bearing-fluid movement through the basin, from Proterozoic, uriferous Dutton Suite granites to the north, through the Tertiary sequence of the Cummins-Wanilla Basin is presented in Figure 4.

Work completed during the year includes historical data compilation and review as well as preliminary arrangements for community engagement. Most of the project area is freehold title held by agricultural farmers and consents for entry will be sought after consultations. A presentation to the community (likely in the town of Cummins) is planned for early in the coming year.

South Australia – Marree Project

The Marree project is considered highly prospective for roll-front, sedimentary-hosted uranium mineralisation associated with Tertiary and/or Permian palaeochannels. The region is situated approximately 70 kilometres northwest of the significantly radiogenic region of the Mount Painter Uranium Field host to the Mount Gee hard rock uranium deposits and Beverley sediment-hosted Tertiary palaeochannel uranium deposits (Figure 5).

The mineralisation model at the Marree project comprises both sediment-hosted and silcrete-hosted uranium mineralisation within Tertiary sediments including the Eocene Eyre Formation and Miocene Namba Formation, both of which are known to host uranium mineralisation at Honeymoon and Beverley deposits. Locally, at the nearby Jubilee prospect, uranium mineralisation is contained within silicified sandstone units of the Eyre Formation, at shallow depths of ~25 metres within a palaeochannel feature.

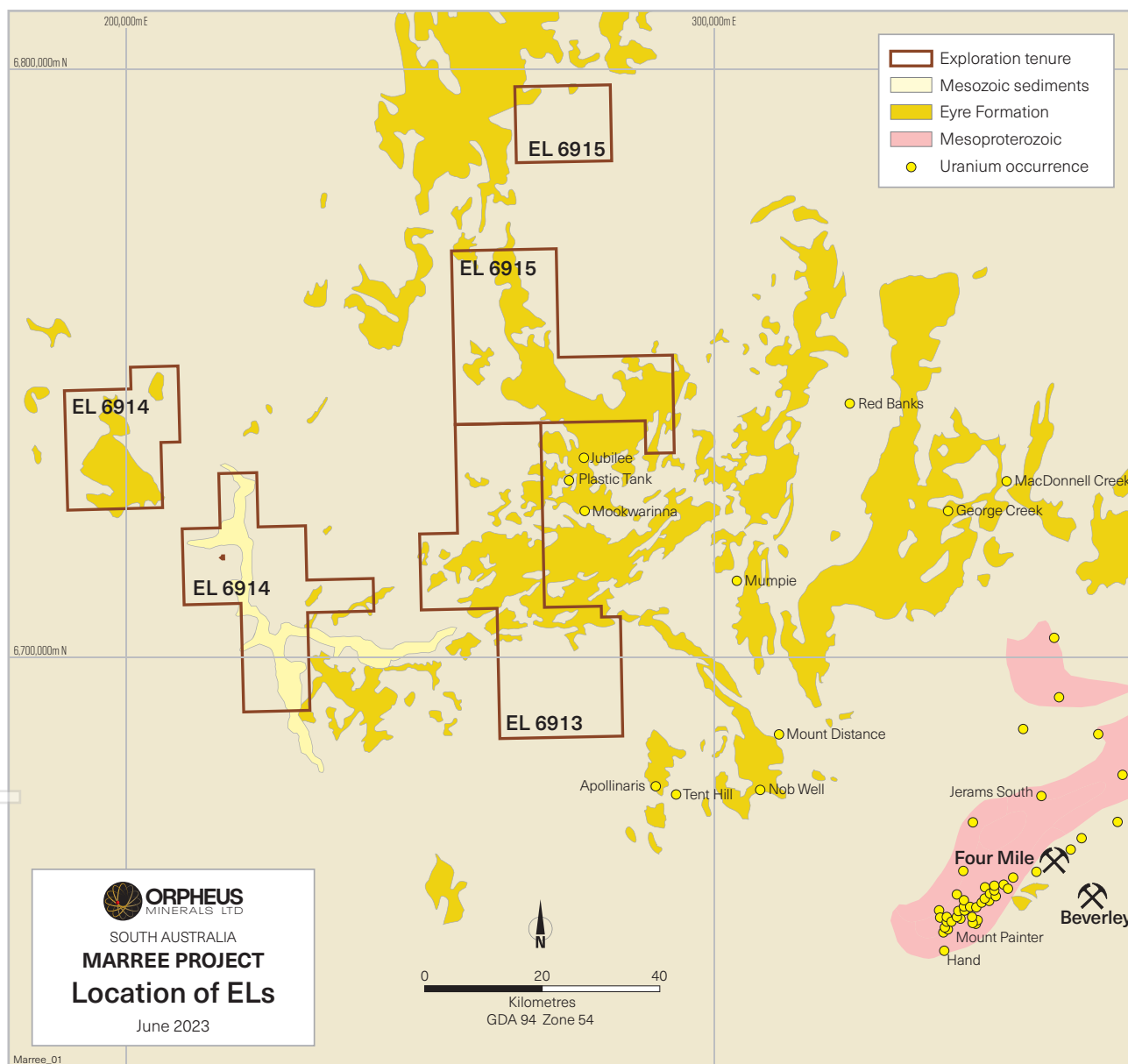


Figure 5 Marree project regional geology of the prospective Eyre Formation, with uranium deposits and occurrences.

Northern Territory – Mount Douglas Project

The Mount Douglas project is located in the eastern flank of the Rum Jungle Mineral Field (RJMF) which was the first major uranium mining and processing centre in Australia. There are several uranium mineral occurrences in the Mount Douglas region, most of which are interpreted to be unconformity-style mineralisation which is the principal target in the project area.

The project area is largely covered by Paleoproterozoic sediments of the Mount Partridge Group (2,050 to 2,000 Ma) in the east, overlain by the South Alligator Group (2,000 to 1,860 Ma), in turn overlain by sediments of the Finnis River Group (1,860 to 1,850 Ma) to the west. The sediments comprise granite intrusions of the Cullen Batholith (1,850 to 1,800 Ma) (Figure 6).

The Mount Douglas area contains a fault-bound outlier of Middle Proterozoic arenite, considered an equivalent of settings associated with unconformity-style uranium mineralisation elsewhere in the Pine Creek Orogen. The project area features a 20km strike length of favourable geology (unconformity at the base of the Kombolgie Basal Conglomerate), uranium anomalism in surface samples and several areas of elevated radiometric responses that require further investigation. Up to 1,089ppm U has been returned from surface sampling of a haematitic ironstone band in the area.

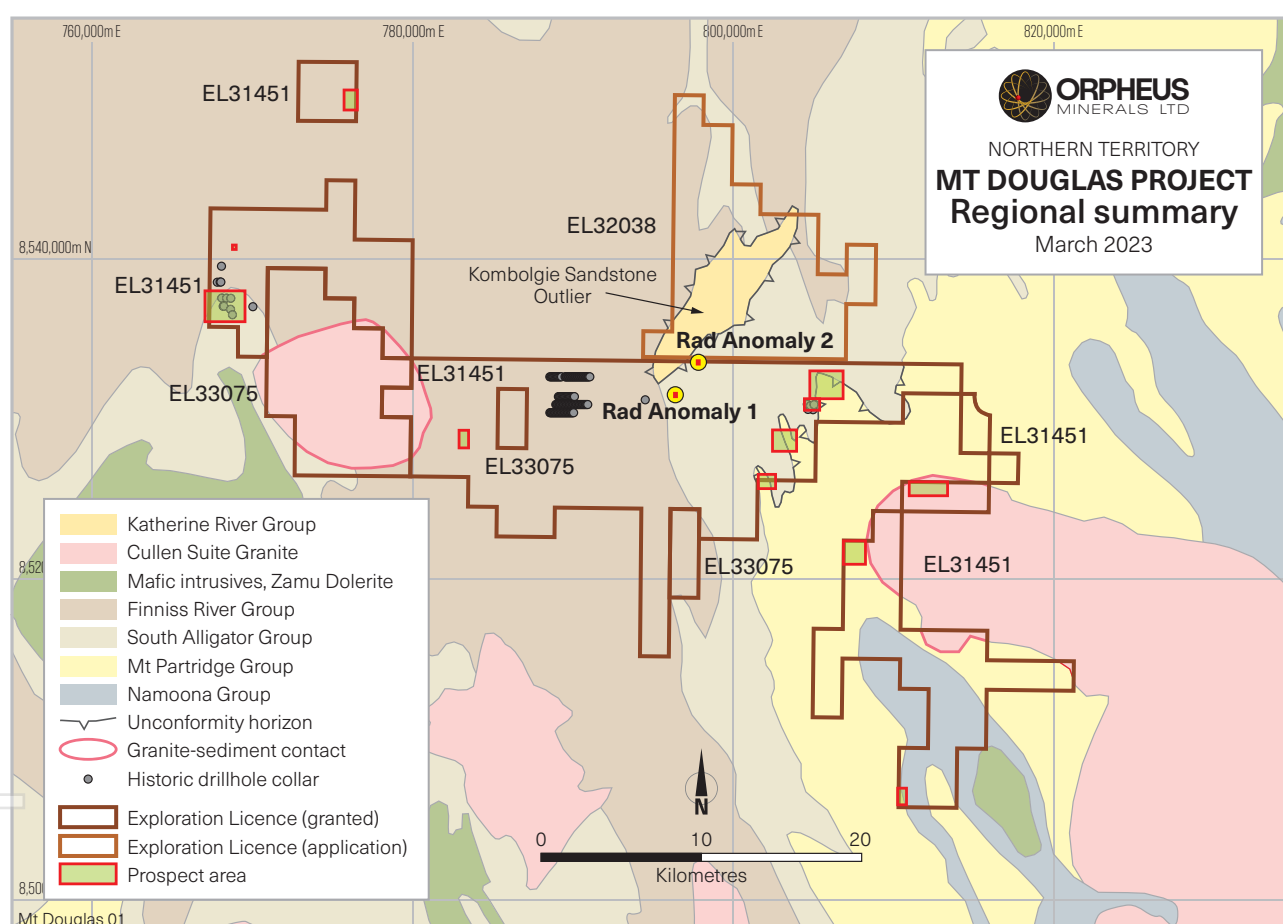


Figure 6 Mount Douglas project regional geology, with historic drill hole locations and identified prospect areas.

Kamapanda, Zambia

(Copper-Cobalt – Argonaut 90%)

The Kamapanda project is located in the Central African Copperbelt, North-western Province, Zambia (Figure 7). The large-scale exploration licence covers an area of 225 square kilometres and extends to the Angolan border. The area is remote, with limited access and is largely underexplored.

A program of regional stream sediment sampling is planned to outline both gold and copper potential. Expenditure at Kamapanda is on hold pending the reinstatement of the Lumwana West licence.

Kalaba East, Zambia

(Copper-Cobalt – Argonaut 90%)

The Kalaba East project is located in the Central African Copperbelt, North-western Province, Zambia (Figure 7). The area is prospective for large tonnage, low to medium grade copper-cobalt deposits.

Argonaut plans to conduct a regional geochemical sampling program at Kalaba East. Expenditure at Kalaba East is on hold pending the reinstatement of the Lumwana West licence.

Musangila, Zambia

(Copper-Cobalt – Argonaut 90%)

The Musangila project is located in the Central African Copperbelt, North-western Province, Zambia (Figure 7). The area is prospective for large tonnage, low to medium grade copper-cobalt deposits and alluvial gold.

Argonaut plans to conduct a geochemical sampling program followed by RC drilling. Expenditure on field activities at Musangila is on hold pending the reinstatement of the Lumwana West licence.

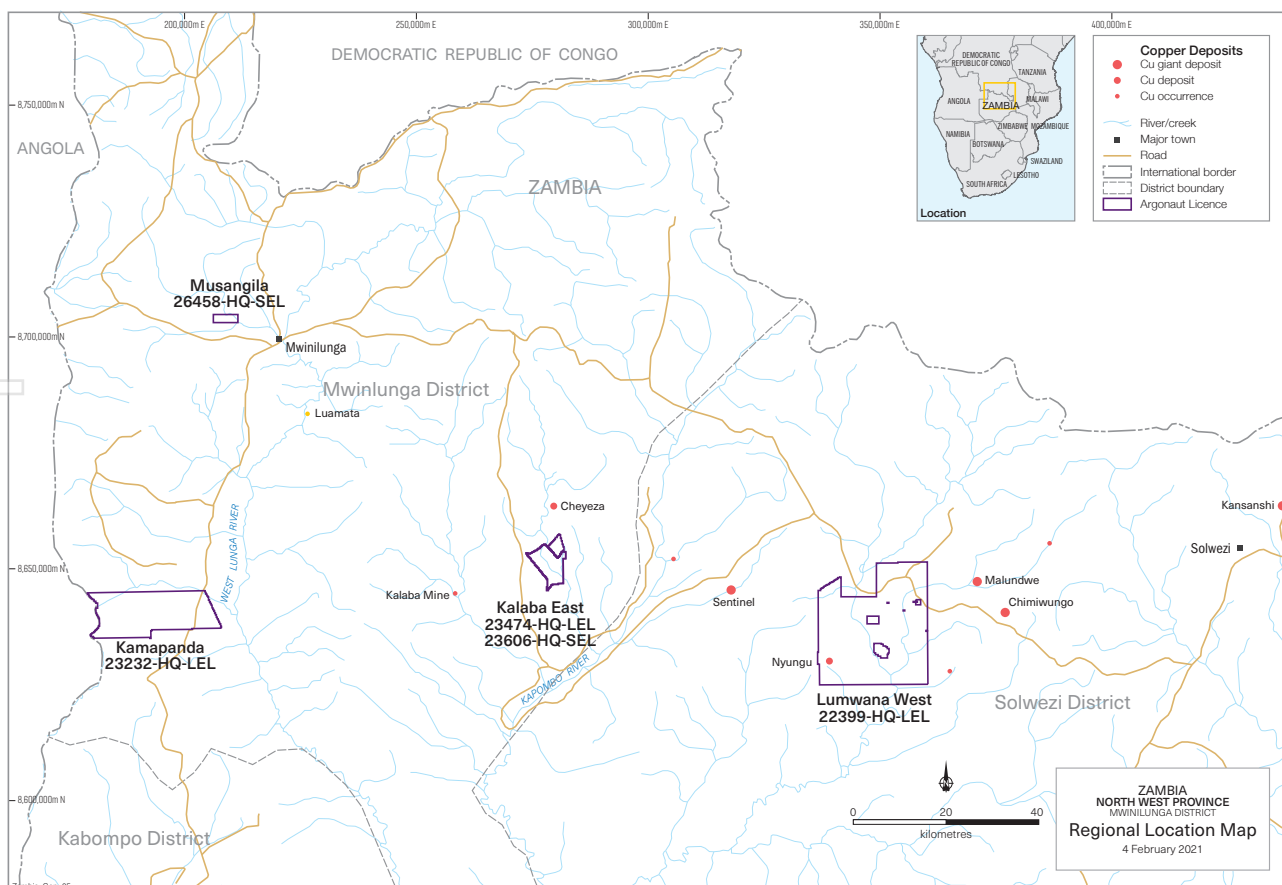


Figure 7 Exploration licences located within the Northwestern Province, Zambia.

Kroombit, Queensland

(Zinc-Copper – 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.

MDL2002 was renewed by the Queensland Government Department of Resources for a further five years to 31 August 2026.

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.

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

Aroona, South Australia

(Zinc – Argonaut 100%)

The Aroona project is prospective for zinc-silicate (willemite) mineralisation in the locally endowed carbonate units of the Wilkawillina Limestone, adjacent to the Aroona fault which hosts numerous willemite occurrences along trend, including the Aroona, Aroona II and Reliance deposits.

Field work to date has been regional in scope and includes mapping, airborne geophysics and minor rock chip sampling targeting the NW Aroona prospect. No drilling has been conducted.

Argonaut holds a 100% interest in EL 6199.

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

Corporate

On 30 April 2023 Argonaut's long-serving CEO and Director, Lindsay Owler gave notice under his service agreement with Argonaut. Mr Owler will step-down from his position on 31 July 2023.

Pat Elliott, Chairman of Argonaut, expressed appreciation for the contribution that Mr Owler has made to the Company since 1997. He particularly recognised the time that Mr Owler had devoted the past 14 months in Zambia working for the reinstatement of the Lumwana West exploration licence to Mwombezhi Resources Ltd.

On 20 June 2023 Argonaut appointed Michael Robert (Mick) Billing as an Executive Director of the Company, effective immediately.

The Company directors advise that they continue to work to secure a replacement for the role of Managing Director.

Subsequent to the Quarter, Argonaut announced a Placement for the issue of approximately 954.3 million new fully paid ordinary shares ("Securities") at an issue price of \$0.0005 per share ("Offer Price") to sophisticated and professional investors ("Placement"). The Placement raised ~\$477,000 (before costs).

The Company also announces its intention to seek shareholder approval for a consolidation of capital, resulting in one share held for each 100-pre-consolidation shares held ("Consolidation").

Following the Consolidation, the Company intends to conduct a fully underwritten entitlement offer, at the same effective Offer Price as the Placement on a post consolidation basis of \$0.05 per share. The Entitlement Offer will be offered on a one (1) for one (1) basis, to raise a further ~\$3.65 million before costs associated with the issue ("Entitlement Offer", together with the Placement the "Offer").

Following review of exploration strategy and projects by the board of Argonaut, the Company has elected to shift its strategic direction to focus principally on its Australian uranium assets. Funds raised from the Offer will be directed towards uranium exploration, general working capital and the costs of the Offer.

Exploration and Evaluation expenditure during the Quarter comprised:

	\$A'000
Drilling	201
Assaying	107
Field costs drilling program	84
Tenement rents and administration	14
Total at 2.2 in Appendix 5B	406

Related party payments for the June 2023 Quarter totalled \$46,000 comprising wages to a director of a subsidiary company.

The Company notes that the payment of Parent Company directors fees and salaries has been suspended since 1 April 2023.

There was no production or development expenditure during the June 2023 Quarter.

This report was authorised for release by the Board of Argonaut Resources NL

Lindsay Owler

Director and CEO

Argonaut Resources NL

COMPETENT PERSON'S STATEMENT

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 2022 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 this 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 (km ²)	Locality	Licensee	Interest
EL 6569	18/10/2020	17/10/2025	104	Campfire Bore / Sandstone	Coombedown Resources Pty Ltd	10% ¹
EL 6199	04/06/2018	03/06/2023	27	Myrtle Springs	Kelaray Pty Ltd	100%
EL 6407	18/08/2019	17/08/2024	295	Lake Torrens	Kelaray Pty Ltd	30%
EL 5937 ²	30/03/2017	29/03/2022	794	West Lake Torrens	Kelaray Pty Ltd	100%
EL 5945 ²	20/04/2017	19/04/2022	221	Murdie	Kelaray Pty Ltd	100%
EL 6320	28/02/2019	27/02/2024	198	Andamooka Station	Kelaray Pty Ltd	100%
EL 6554	07/12/2020	06/12/2025	960	Frome Downs	Trachre Pty Ltd	100% ⁴
EL 6555	07/12/2020	06/12/2025	947	Curnamona	Trachre Pty Ltd	100% ⁴
EL 6624	23/07/2021	22/07/2027	952	Cummins	Trachre Pty Ltd	100% ⁴
EL 6703	3/02/2022	2/02/2028	987	Erudina	Trachre Pty Ltd	100% ⁴
EL 6900	19/01/2023	18/01/2029	143	Billeroo	Trachre Pty Ltd	100% ⁴

SOUTH AUSTRALIAN MINERAL EXPLORATION LICENCE APPLICATIONS						
Tenement	Applied	Expiry	Area (km ²)	Locality	Licensee	Interest
2022/00007	11/02/2022	-	977	Lake Frome	Kelaray Pty Ltd	100%
2022/00103	10/11/2022	-	998	Mundowdna	Trachre Pty Ltd	100% ⁴
2022/00104	10/11/2022	-	990	Muloorina	Trachre Pty Ltd	100% ⁴
2022/00105	10/11/2022	-	978	Clayton	Trachre Pty Ltd	100% ⁴

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	31/08/2026	0.64	Kroombit	Kelaray Pty Ltd	100%

ZAMBIAN LARGE SCALE EXPLORATION LICENCES						
Tenement	Granted	Expiry	Area (km ²)	Locality	Licensee	Interest
22399-HQ-LEL3	29/12/2017	28/12/2021	521	North Western Province	Mwombezi Resources Ltd	90%
23232-HQ-LEL2	10/04/2019	09/04/2023	226	North Western Province	Sunrise Exploration and Mining Limited	90%
23474-HQ-LEL2	18/12/2018	17/12/2022	41.58	North Western Province	Sunrise Exploration and Mining Limited	90%

WESTERN AUSTRALIAN MINERAL EXPLORATION LICENCES						
Tenement	Granted	Expiry	Area (km ²)	Locality	Licensee	Interest
E15/1489	14/08/2017	13/08/2027	52	Higginsville	Argonaut Resources NL	80%

NORTHERN TERRITORY MINERAL EXPLORATION LICENCES

Tenement	Granted	Expiry	Area (km ²)	Locality	Licensee	Interest
EL 31451	08/09/2017	07/09/2023	484.52	Mount Douglas	Trachre Pty Ltd	100% ⁴
EL 33075	3/01/2023	2/01/2029	103.63	Mount Douglas (Ban Ban)	Trachre Pty Ltd	100% ⁴
EL 33088	3/01/2023	2/01/2029	473.23	Woolner	Trachre Pty Ltd	100% ⁴
EL 33089	3/01/2023	2/01/2029	458.81	Marrakai	Trachre Pty Ltd	100% ⁴

NORTHERN TERRITORY MINERAL EXPLORATION LICENCE APPLICATIONS

Tenement	Applied	Expiry	Area (km ²)	Locality	Licensee	Interest
ELA 32445	25/06/2020	-	230.24	T-Bone	Trachre Pty Ltd	100% ⁴
ELA 32446	25/06/2020	-	63.71	Ranger NE	Trachre Pty Ltd	100% ⁴
ELA 32038	22/11/2018	-	127.49	Mount Douglas (Mary River)	Trachre Pty Ltd	100% ⁴

Table 2 Summary of mining tenements acquired in Quarter

There were no tenements acquired in the March 2023 Quarter.

Table 3 Summary of mining tenements surrendered in Quarter

There was one tenement surrendered in the March 2023 Quarter.

ZAMBIAN SMALL SCALE EXPLORATION LICENCES

Tenement	Granted	Expiry	Area (km ²)	Locality	Licensee	Interest
26458-HQ-SEL	10/06/2020	09/06/2024	9.72	North Western Province	Sunrise Exploration and Mining Limited	90%

¹ Kelaray holds a 33% interest in Coombedown Resources Pty. Ltd.

² Undergoing renewal.

³ Licence subject to litigation.

⁴ Argonaut holds a 67% interest in Trachre Pty Ltd via Orpheus Minerals Ltd.

Appendix 5B

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

Name of entity

ARGONAUT RESOURCES NL

ABN

97 008 084 848

Quarter ended ("current quarter")

JUNE 2023

Consolidated statement of cash flows		Current quarter \$A'000	Year to date 12 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	(99)	(595)
	(e) administration and corporate costs	(250)	(1,219)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	7	31
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	261	1,208
1.8	Other (provide details if material)		
1.9	Net cash from / (used in) operating activities	(81)	(575)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities		
	(b) tenements	(42)	(97)
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	(406)	(1,891)
	(e) investments	-	-
	(f) other non-current assets	-	-

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

Consolidated statement of cash flows		Current quarter \$A'000	Year to date 12 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	Net expenses associated with Orpheus Minerals Limited IPO	-	(684)
2.6	Net cash from / (used in) investing activities	(448)	(2,672)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	3,210
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	-	(146)
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	-	3,064

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	858	512
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(81)	(575)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(448)	(2,672)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	3,064

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

Consolidated statement of cash flows		Current quarter \$A'000	Year to date 12 months \$A'000
4.5	Effect of movement in exchange rates on cash held		-
4.6	Cash and cash equivalents at end of period	329	329

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	329	858
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)	329	858

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	46
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>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.</i>		

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

7.	Financing facilities <i>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.</i>	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)	(81)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(448)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(529)
8.4	Cash and cash equivalents at quarter end (item 4.6)	329
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	329
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	0.6
<i>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.</i>		
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?	
Answer: No. There are no further grants from the government expected.		
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?	
Answer: On 3 July 2023 the company made an announcement titled "Capital Re-Organisation and Funding". This announcement covered an immediate cash placement followed by a fully underwritten rights issue.		

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?

Answer: Yes. On 3 July 2023 the company made an announcement titled "Capital Re-Organisation and Funding". This announcement covered an immediate cash placement followed by a fully underwritten rights issue.

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: 31 July 2023

Authorised by: The Board of Argonaut Resources NL
(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.