

**ASX: ARE**

**CAPITAL STRUCTURE:**

Issued shares: 189,800,000

Listed options: None

Unlisted options: 11,000,000

Cash on hand: \$5,300,000

**DIRECTORS:**

Mick Billing, Chairman

Simon Mitchell, Non-exec Director

Richard Willson, Non-exec Director and  
Company Secretary

Todd Williams, Non-exec Director

**URANIUM PROJECTS**

**FROME, SOUTH AUSTRALIA**

Uranium

Phase: Exploration

Interest: Argonaut 100%

Operator: Orpheus

**MUNDAERNO, SOUTH AUSTRALIA**

Uranium

Phase: Exploration

Interest: Argonaut 100%

Operator: Orpheus

**RADIUM HILL SOUTH,  
SOUTH AUSTRALIA**

Uranium

Phase: Exploration

Interest: Argonaut 100%

Operator: Orpheus

**CUMMINS, SOUTH AUSTRALIA**

Uranium

Phase: Exploration

Interest: Argonaut 100%

Operator: Orpheus

**MARREE, SOUTH AUSTRALIA**

Uranium

Phase: Exploration

Interest: Argonaut 100%

Operator: Orpheus

**MOUNT DOUGLAS,  
NORTHERN TERRITORY**

Uranium

Phase: Exploration

Interest: Argonaut 100%

Operator: Orpheus

**RANGER NE,  
NORTHERN TERRITORY**

Uranium

Phase: Exploration

Interest: Argonaut 100%

Operator: Orpheus

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# Quarterly report

FOR THE PERIOD ENDING 31 DECEMBER 2023

Argonaut Resources NL (*Argonaut* or the *Company*) (ASX: ARE) presents the following report for the period to 31 December 2023 (the *Quarter*).

## Highlights

### Commodity Pricing

Global uranium pricing now sits above US\$100/lb, a level not seen since 2007. Argonaut has developed a portfolio of uranium assets and is well placed to commence drill testing of areas that contain uranium mineralisation.

### Company Name Change

The Company received approval at its Annual General Meeting for a name change to Orpheus Uranium Ltd. The change is now expected to be complete during February 2024.

Uranium Projects – all of the uranium projects owned by the Company are held through its wholly owned subsidiary Orpheus Minerals Ltd (Orpheus).

### Frome Project, South Australia – Uranium *Erudina Prospect, Exploration Target Zone*

- Orpheus has identified a highly encouraging, widespread Exploration Target Zone containing significant uranium mineralisation at the Erudina prospect, that extends across a 12 km N-S distance by 7 km E-W, comprising prospective Tertiary sequence stratigraphy located within the Erudina Palaeochannel.
- Historic drilling results include uranium grades of >1,500 ppm equivalent uranium (EqU)<sup>1</sup> contained within porous sands and reduced carbonaceous horizons of the highly prospective Eyre Formation in association with strong reduction-oxidation 'redox' front systems that represent migration of oxidising groundwaters.
- Rotary Mud drilling targeting infill areas within the highly encouraging 12 km Exploration Target Zone at the Erudina prospect and at the Sandyoota Region, located just 12 km northwest of the Goulds Dam Deposit is planned for the first half of 2024.
- A Program for Environment Protection and Rehabilitation (PEPR) for exploration drilling approval was submitted to the Government of South Australia in December 2023.
- A Heritage Survey with members of the Adnyamathanha Traditional Lands Association (Aboriginal Corporation) RNTBC (ATLA) who are the Traditional Custodians of the land within the Frome project is scheduled for February 2024.

### *Passive Seismic Detailed Survey Complete*

- During the Quarter, Orpheus completed a Detailed Passive Seismic Survey across three prospect areas at the Frome project predominately focused on the Exploration Target Zone at the Erudina prospect. A total of 103 line-kilometres comprising 1,057 Horizontal-to-Vertical-Spectral (HVSr) stations were recorded using ten Tromino<sup>®</sup> seismometers supplied by Resource Potentials Pty Ltd who processed the raw data to provide seismic generated data and imaging of the results.
- The passive seismic technique is capable of mapping concealed palaeodrainage features and structures as previously proven from the Passive Seismic Orientation Survey (refer to ASX: ARE announcement 30 October 2023).

<sup>1</sup> Uranium mineralisation at the Erudina prospect has been indicated from gamma logging conducted by Areva Australia Pty Ltd. To date, there has been no Prompt Fission Neutron (PFN) data acquired. Equivalent uranium grades calculated from gamma logs are considered reliable for the estimation of uranium grade, however, do not account for the effects of disequilibrium.

#### **T-BONE, NORTHERN TERRITORY**

Uranium  
Phase: Exploration  
Interest: Argonaut 100%  
Operator: Orpheus

#### **WOOLNER/MARRAKAI, NORTHERN TERRITORY**

Uranium  
Phase: Exploration  
Interest: Argonaut 100%  
Operator: Orpheus

#### **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: Argonaut 100%  
Agreement phase: Exploration

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

Copper, gold  
Interest: Argonaut 90%  
Agreement phase: Exploration  
Operator: Argonaut

## Uranium Projects Granted, South Australia – Uranium

### *Mundaerno Project – Located approximately 12 km south of the Honeymoon Uranium Mine*

- During the Quarter, EL 6958 Mundaerno project was granted. EL 6958 Mundaerno project is located approximately 12 kilometres south of the Honeymoon Uranium Mine, comprises a portion of the headwaters of the highly prospective Yarramba Palaeochannel and is positioned directly on top of Mesoproterozoic granitic rocks that are potential source rocks of the uranium.
- The Yarramba Palaeochannel hosts significant sedimentary-hosted uranium deposits, including: Honeymoon Uranium Mine (36 Mlbs contained  $U_3O_8$ )<sup>2</sup>, Yarramba (Jasons) deposit (11 Mlbs contained  $U_3O_8$ )<sup>3</sup>; held by Boss Energy Ltd (ASX: BOE) and the Saffron deposit (5.4 Mlbs contained  $U_3O_8$ ) held by Marmota Limited (ASX: MEU) as well as other uranium occurrences.
- Orpheus has commenced a Satellite Gas and Thermal Analysis Study. Next steps include identifying the location of the Yarramba Palaeochannel via passive seismic techniques in preparation for drilling.

### *Radium Hill South Project – Competitive Exploration Licence Granted*

- During the Quarter, EL 6960 Radium Hill South project was awarded to Orpheus by the Government of South Australia via a competitive application process.
- The Radium Hill South project contains five (5) exceptional uranium prospects with drill ready targets, located within the Olary Palaeovalley System containing up to five kilometres strike length of Tertiary paleochannels prioritised for geophysical targeting and drilling.
- Key historic drill results for immediate follow-up include:
  - Gairloch: 400 ppm  $U_3O_8$  over 1.9m from 103.8m at the contact between the base of a sand channel and underlying black carbonaceous clay;
  - Jones Dam: 401 ppm  $U_3O_8$  over 2m from 86m in drillhole 06RMCD040 in a strongly anomalous zone over 5.1m, within steely grey sand; and
  - Kinloch Dam: 507 ppm  $U_3O_8$  over 3m from 105m in M64 in sand below a silcrete layer.
- Orpheus has commenced a Satellite Gas and Thermal Analysis Study. Next steps include a detailed review of the existing uranium prospects in preparation for drilling.

### *Satellite Gas and Thermal Analysis Study Underway*

- Orpheus has commenced a Satellite Imagery Gas Study and Thermal Imaging Analysis using Sentinel-2 satellite imagery at the Frome, Mundaerno and Radium Hill South projects. The objective is to detect helium, hydrogen, methane and other gasses emanating at surface that may encourage exploration to assist with possible identification of uranium mineralisation at depth.

<sup>2</sup> Source: <https://bossenergy.com/honeymoon-project>

<sup>3</sup> Source: <https://bossenergy.com/honeymoon-project/exploration>

# Corporate

- Mr Pat Elliott and Mr Andrew Bursill both retired as directors of the Company in October 2023.
- Following the retirement of Mr Elliott and Mr Bursill, Mr Simon Mitchell, Mr Richard Willson, and Mr Todd Williams have been appointed as directors of the Company.
- In December 2023, Argonaut successfully raised \$3.25 million via a share placement to institutional, sophisticated and professional investors at A\$0.09 per share with approximately 36.1 million new fully-paid ordinary shares issued ('Placement'). The Placement proceeds will be used to fund exploration of the Company's uranium projects in South Australia and the Northern Territory, general working capital and the Offer costs.
- Argonaut held the Annual General Meeting securing shareholder approval to change its constitution and company name to Orpheus Uranium Limited.
- During the quarter, Argonaut completed the acquisition of all shares in Orpheus Minerals Limited not already held.



# Uranium Assets, South Australia and Northern Territory

(Uranium – Argonaut 100%)

Argonaut holds interests in uranium projects in South Australia and the Northern Territory. In South Australia there are five key project areas: Frome, Mundaerno, Radium Hill South, Cummins and Marree. In Northern Territory there are four key project areas: Mount Douglas, Woolner, Alligator Rivers Uranium Field and South Alligator Valley Mineral Field, (Figure 1).

## Uranium Assets

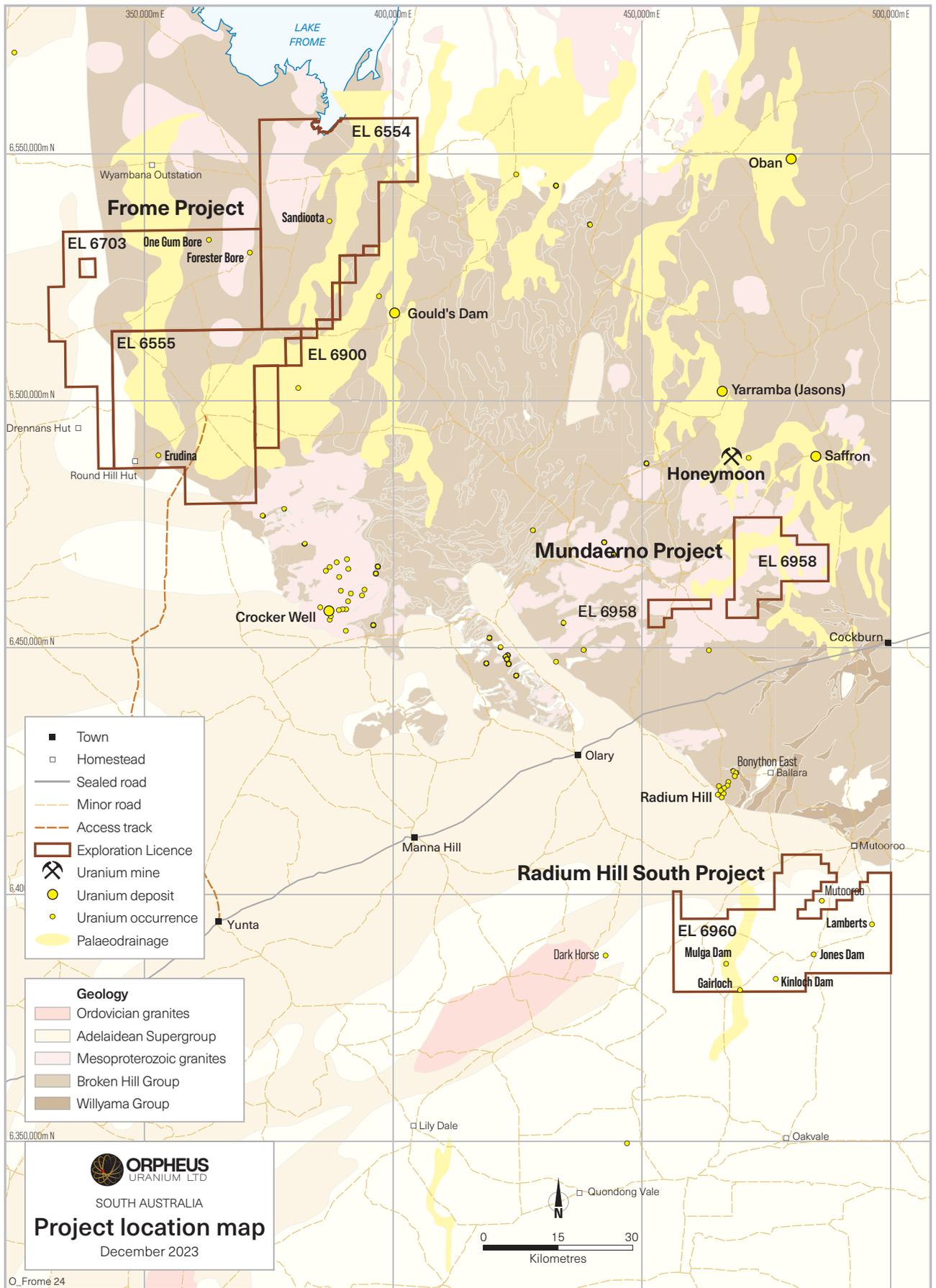
During the Quarter, Argonaut announced the successful grant of two new significant projects considered highly prospective for sedimentary-hosted roll-front and tabular-style uranium mineralisation. The Company will focus future exploration activities on these projects.

- EL 6958 Mundaerno project is located just 12 km south of the Honeymoon Uranium Mine, comprises the headwaters of the Yarramba Palaeochannel, positioned directly on top of Mesoproterozoic granitic rocks that are potential source rocks of the uranium; and
- EL 6960 Radium Hill South project was awarded to Orpheus by the Government of South Australia via a competitive application process and comprises five exceptional uranium prospects with drill ready targets.

These projects, located near the Company's Frome project, combined cover a considerable surface footprint of paleochannels in the highly prospective region of the Frome Embayment in the north, the Southern Curnamona Province and to the south, the northern margin of the Murray-Darling Basin, in the exploration for sedimentary-hosted roll-front and tabular-style uranium mineralisation (Figure 2).



**Figure 1** Location map of uranium assets owned by Orpheus located in South Australia and Northern Territory.



**Figure 2** Project locations and uranium occurrences in the highly prospective region of the Frome Embayment and to the south, the northern margin of the Murray-Darling Basin.

## South Australia – Frome Project

### Erudina Prospect, Exploration Target Zone

Orpheus has identified a highly encouraging, widespread Exploration Target Zone containing significant uranium mineralisation at the Erudina prospect, that extends across a 12 km N-S distance by 7 km E-W, comprising prospective Tertiary sequence stratigraphy located within the Erudina Palaeochannel. For comparison, the Goulds Dam Uranium Deposit extends across an area of approximately 1.4 km N-S and 500 m E-W, refer to scale provided, (Figure 3).

Historic drilling results include uranium grades of >1,500 ppm equivalent uranium (EqU) contained within porous sands and reduced carbonaceous horizons of the highly prospective Eyre Formation in association with strong reduction-oxidation 'redox' front systems that represent migration of oxidising groundwaters. Orpheus has inspected historic drill core and these redox processes are visually evident as iron oxide staining within sands of the Eyre Formation.

Historic results at the Erudina prospect includes:

- 56 drillholes intersected uranium mineralised intervals with anomalous radiometric values over 100ppm EqU across a 12 km N-S strike length:
  - Eyre Formation comprises anomalous radiometric values of >1,500 ppm EqU
  - Namba Formation comprises anomalous radiometric values up to 300 ppm EqU.
- Significant results of Total Gamma, converted to EqU, for immediate follow-up include:
  - 0.7m @ 632 ppm EqU from 180.55m – ER0048
    - incl. 1,495 ppm EqU
    - at the boundary of oxidised coarse-grained sands and reduced sands and clay of the Lower Eyre Formation
  - 0.9m @ 632 ppm EqU from 163.4m – ER0191
    - incl. 1,511 ppm EqU
    - in reduced, medium-grained sands of the Lower Eyre Formation
  - 1m @ 504 ppm EqU from 163.9m – ER0196
    - incl. 1,189 ppm EqU
    - at the boundary of reduced coarse-grained sands and reduced carbonaceous silts of the Lower Eyre Formation
  - 1.4m @ 231 ppm EqU from 158.6m – ER0189
    - incl. 516 ppm EqU
    - in reduced coarse-grained sands of the Lower Eyre Formation
  - 1.3m @ 286 ppm EqU from 164.7m – ER0201
    - incl. 455 ppm EqU
    - in reduced carbonaceous clay of the Lower Eyre Formation

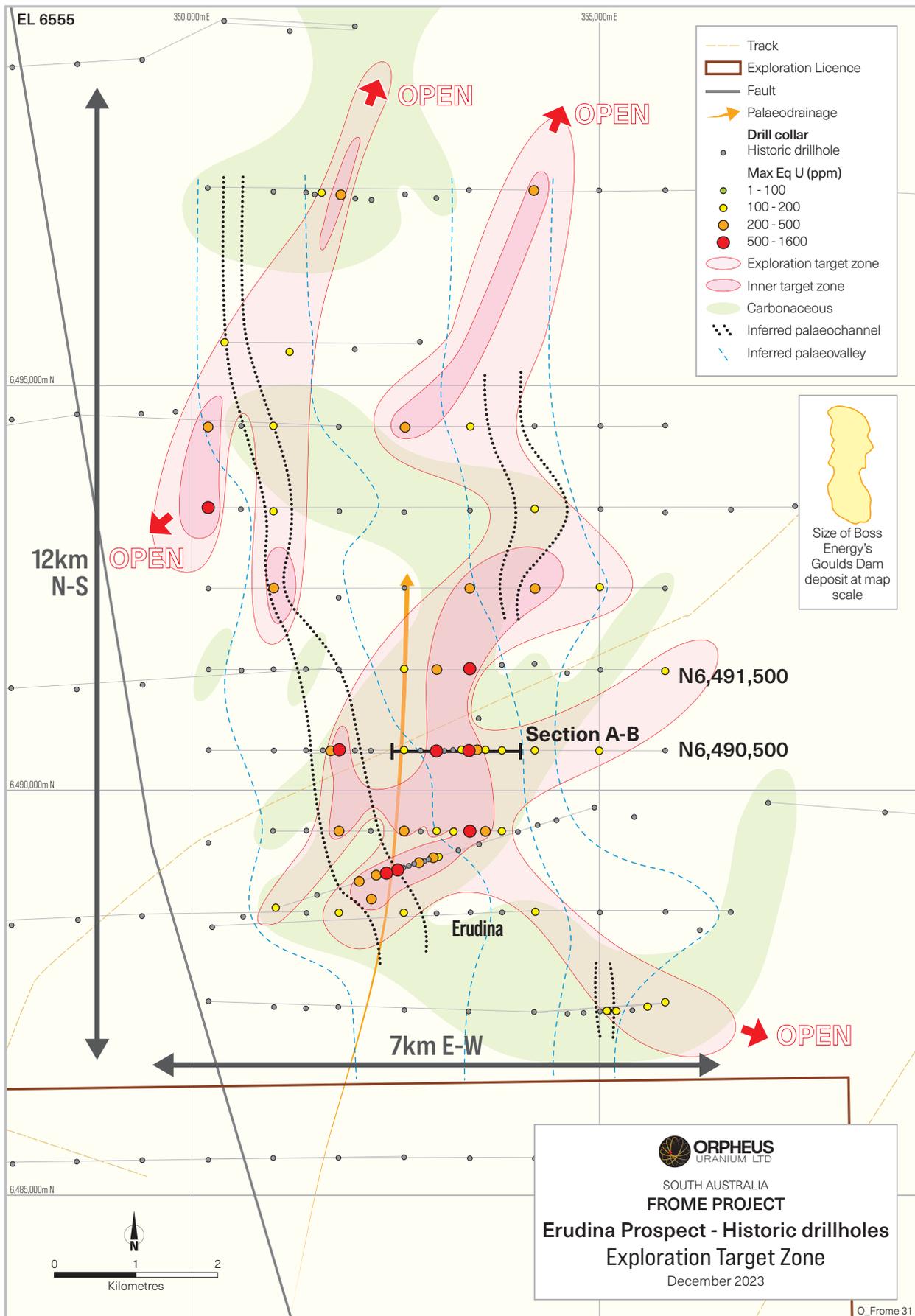
Refer to ASX: ARE announcement 18 December 2023 for further details on the Erudina prospect.

### Detailed Passive Seismic Survey

During the Quarter, Orpheus completed a Detailed Passive Seismic Survey across three prospect areas at the Frome project, including:

- Erudina prospect, Exploration Target Zone known to host uranium mineralisation largely within basal sand units and carbonaceous horizons of the Lower Eyre Formation;
- Curnamona region an area that is situated back toward the radiogenic source rocks of the Crocker Well Granite Suite; and
- Sandyoota region that is situated approximately 12 km northwest of the Goulds Dam Uranium Deposit.

The Detailed Passive Seismic Survey comprised a total of 103 line-kilometres including 1,057 Horizontal-to-Vertical-Spectral (HVSR) stations recorded using ten Tromino® seismometers supplied by Resource Potentials Pty Ltd who processed the raw data to provide seismic generated data and imaging of the results. The passive seismic technique is capable of mapping concealed palaeodrainage features and structures as previously proven from the Passive Seismic Orientation Survey conducted at the Frome project (refer to ASX: ARE announcement 30 October 2023 for further details on the passive seismic technique).



**Figure 3** Erudina prospect, 12 km strike length Exploration Target Zone identified from historic drill results of significant uranium intersects (EqU converted from downhole Total Gamma) acquired by Areva Australia Pty Ltd, outlining carbonaceous zone and inferred palaeochannels and palaeovalleys from the preliminary passive seismic results.

Preliminary passive seismic results at the Erudina prospect indicate two parallel, N-S trending palaeovalleys that contain a deeper incised palaeochannel surrounded by a wider flood and overbank zone, palaeochannels act as migration pathways for dissolved uranium in groundwaters, (Figure 3). Preliminary passive seismic data for E-W Line 10 (6,491,500 Northing), displayed (Figure 4).

Final processing and modelling of the passive seismic data will be complete, January 2024.

Rotary Mud drilling targeting infill areas within the highly encouraging 12 km Exploration Target Zone at the Erudina prospect and at the Sandyoota Region, located just 12 km northwest of the Goulds Dam Deposit is planned for first half of 2024.

A Program for Environment Protection and Rehabilitation (PEPR) for exploration drilling approval was submitted to the Government of South Australia in December 2023.

A Heritage Survey with members of the Adnyamathanha Traditional Lands Association (Aboriginal Corporation) RNTBC (ATLA) who are the Traditional Custodians of the land within the Frome project is planned for February 2024.

## Prospectivity

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 (Figure 5).

The Frome project is located approximately 12 km west of the Goulds Dam deposit held by Boss Energy Ltd who recently announced strong infill drilling results (ASX: BOE announcement 12 September 2023) and two new satellite prospects adjacent to Goulds Dam (Billeroo and Sunrise) (ASX: BOE announcement 28 September 2023)<sup>4</sup>.

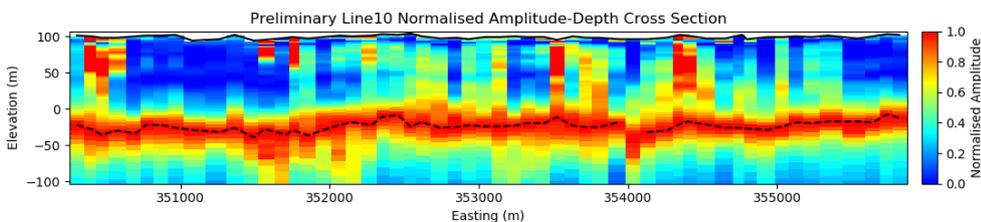


Figure 4 Line 10 (6,491,500 Northing) preliminary section of passive seismic data, Erudina prospect.

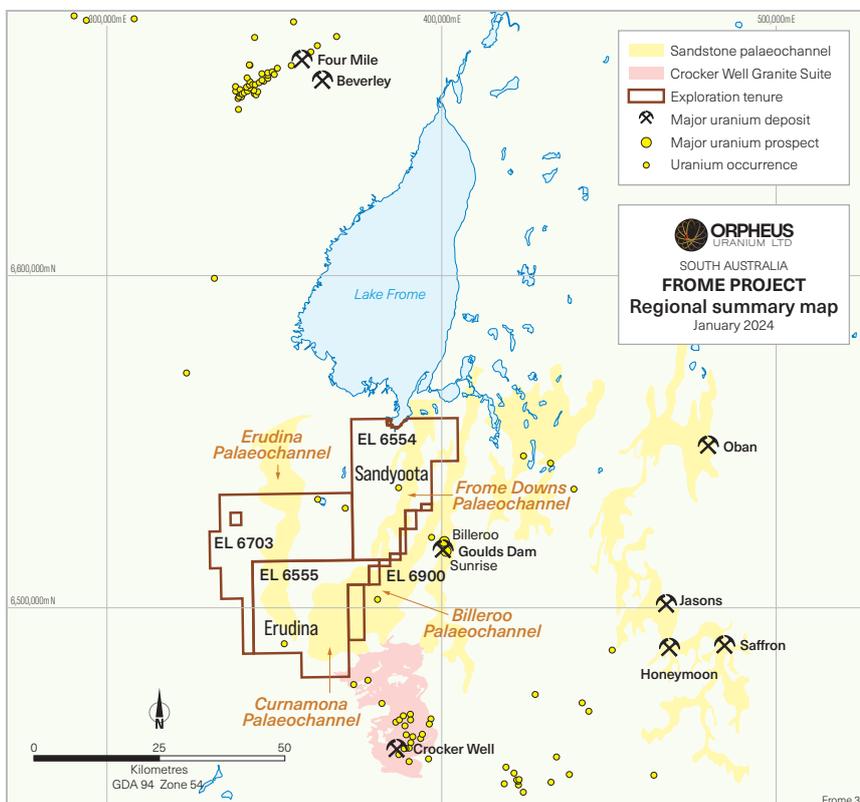


Figure 5 Frome project ELs with interpreted Eyre Formation palaeochannels, extending north from proposed uranium source rocks of the Crocker Granite Suite.

<sup>4</sup> Source: <https://bossenergy.com/investors/asx-announcements>

## South Australia – Mundaerno Project

### Mundaerno Project

The Mundaerno project is considered highly prospective for sedimentary-hosted roll-front and tabular-style uranium mineralisation associated with Tertiary palaeochannels. The project is situated approximately 12 km south of the Honeymoon Uranium Mine and has the same paleochannel feature, the Yarramba Palaeochannel that hosts the Honeymoon Uranium Mine (36 Mlbs contained  $U_3O_8$ ), Yarramba (Jasons) deposit (11 Mlbs contained  $U_3O_8$ ) held by Boss Energy Ltd (ASX: BOE) and the Saffron deposit (5.4 Mlbs contained  $U_3O_8$ ) held by Marmota Limited (ASX: MEU) as well as other uranium occurrences. Refer to Figure 6.

### Prospectivity

Previous exploration for uranium was limited to six wide-spaced drillholes in the 1970s that intersected weathered basement granite followed by a regional drilling campaign in 2011 which consisted of 14 vertical Aircore holes drilled ~500 m apart along several very widely spaced traverses. Drillholes were sited to test an interpreted extension of the Yarramba Palaeochannel and intersected sand, silt and clay beds of the prospective cover sequence, including a basal sandy unit, into weathered basement which yielded a peak uranium value of 130 ppm U. A number of drillholes proposed, to target radiometric anomalies across palaeochannel features remain undrilled due to a downturn in the uranium market at that time.

### Geology

The Mundaerno project is situated in the Southern Curnamona Province comprising Proterozoic metasediment and metavolcanic units of the Willyama Supergroup and Mesoproterozoic granites of the Bimbowrie Suite, including the Mundaerno Suite. Tertiary and Quaternary sediments lie directly on top of gneissic and granitic basement rocks with varying thickness.

### Exploration

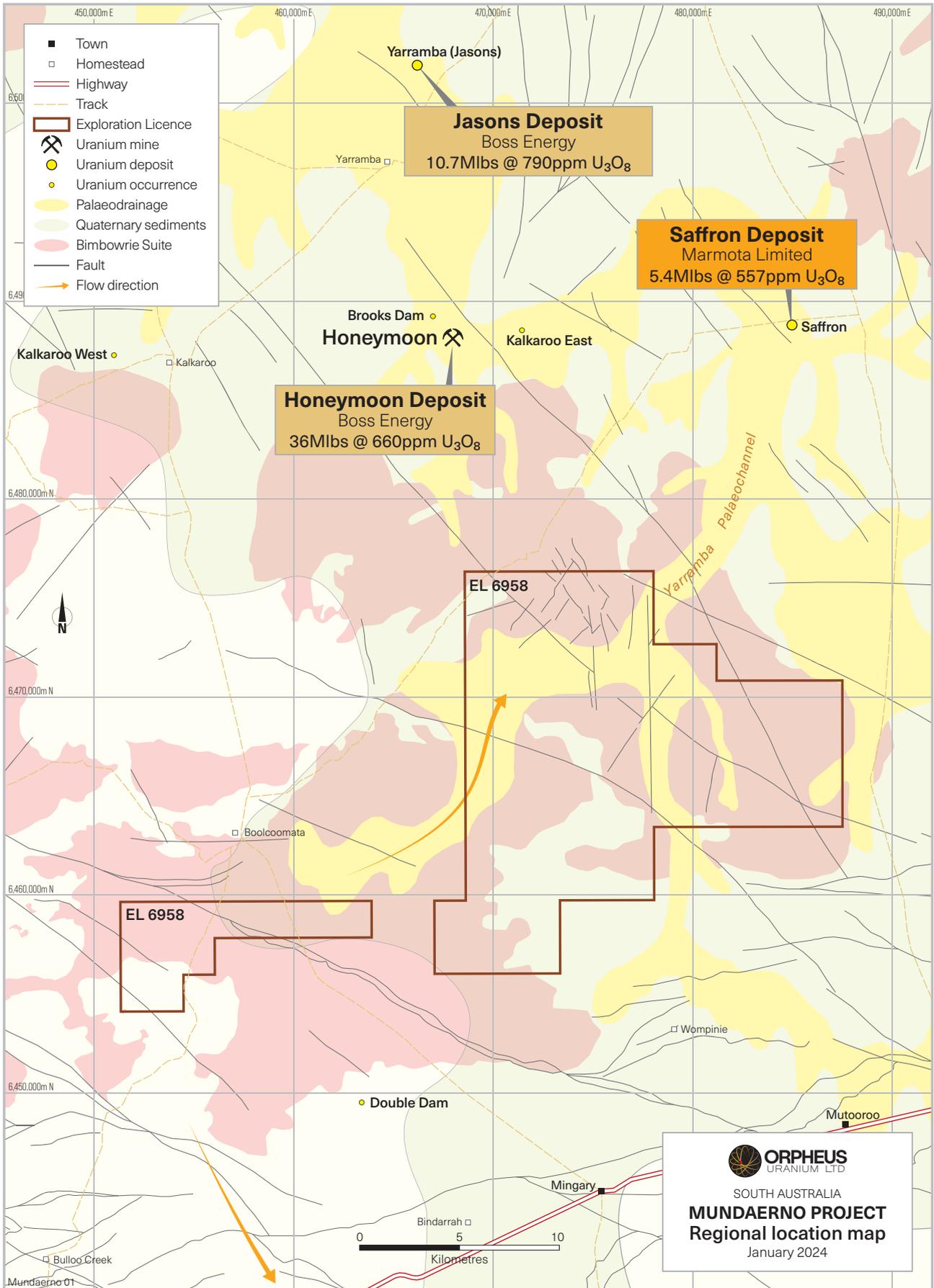
Orpheus' exploration objective is to delineate the margins of the Yarramba Palaeochannel via geomorphological reconstruction of the palaeochannel and palaeovalley surface, to locate suitable trap sites for sedimentary-hosted roll-front and/or tabular-style uranium mineralisation. The work program proposed for the Mundaerno project includes:

- Map the palaeosurface via acquisition of passive seismic, detailed ground gravity and electrical methods;
- Prospect scale geochemical sampling via direct measures of uranium (radon sampling, surface geochemical sampling); and
- Drilling of high priority targets within the Yarramba Palaeochannel.

Orpheus has commenced compiling and interpreting all existing datasets and a Satellite Gas and Thermal Analysis Study is underway.

### Tenure

Orpheus holds a 100% interest in EL 6958 Mundaerno project that comprises two Blocks for a combined area of 294 km<sup>2</sup>. The licence is contiguous with Boss Energy Ltd exploration licence, that hosts the Honeymoon Uranium Mine, situated 12 km to the north of the Mundaerno project (Figure 6).



**Figure 6** Mundaerno project location and nearby uranium occurrences, highlighting the headwaters of the Yarramba Palaeochannel directly underlain by Mesoproterozoic granitic basement, located just 12 km south of the Honeymoon Uranium Mine.

## Radium Hill South Project

The Radium Hill South project is considered highly prospective for roll-front and tabular-style, sedimentary-hosted uranium mineralisation associated with Tertiary palaeochannels. The region is situated approximately 20 kilometres south of the radiogenic region of the Radium Hill Uranium Field and 100 km southeast of the Crocker Well Uranium Field host to the hard rock uranium deposits and further to the north, the Honeymoon and Goulds Dam sediment-hosted Tertiary palaeochannel uranium deposits. Refer to Figures 2 and 7.

### Prospectivity

The mineralisation model at the Radium Hill South project comprises both sediment-hosted and silcrete-hosted uranium mineralisation within Neogene sediments including the Geera Clay, and Paleogene channel sands including the Warina Sand of the Olary Palaeovalley System known to host uranium mineralisation at the uranium occurrences; Mulga Dam, Gairloch, Kinloch Dam, Jones Dam and Lamberts, at depths of approximately 80m-110m located within, sedimentary and structurally-controlled palaeochannel features.

Previous explorer, Mega Hindmarsh Pty Ltd (2005-2014) analysis of its drillhole geophysical logs revealed the presence of previously undetected, north-south trending sedimentary channels and deltaic sequences, which overlie reducing carbonaceous mudstone. These sedimentary facies were found to be very anomalous in uranium, yielding significant gamma log intercept thicknesses of up to 10.7m at Jones Dam and 8m at Gairloch Dam. Mega Hindmarsh Pty Ltd, reported “palaeochannels interpreted to be at least 5 km in length, that offer an excellent target for future investigation”.

Historic significant intercepts from the existing five uranium occurrences located within EL 6960 Radium Hill South project and reported by Mega Hindmarsh Pty Ltd<sup>5</sup> include:

- Mulga Dam
  - 1,350 cps at 95m depth in fluvialite, Lower Miocene carbonaceous clays.
- Gairloch
  - 2,266 cps at 104.1m at the contact between the base of a sand channel and underlying black carbonaceous clay, assay grade obtained by analysis of the drill cuttings from this interval was 400 ppm  $U_3O_8$  over 1.9m from 103.8m.
- Kinloch Dam
  - 507 ppm  $U_3O_8$  over 3m from 105m in M64 in sand below a silcrete layer;
  - 23m averaging 129 cps of radiometrically anomalous sand and clay.
- Jones Dam
  - 401 ppm  $U_3O_8$  over 2m from 86m in drillhole 06RMCD040 in a strongly anomalous zone over 5.1 m, within steely grey sand;
  - 10.7m of radiometrically anomalous sand from 82.7m in drill hole 06RMCD048, associated with peak gamma values of 1,041cps, or 263 ppm  $eU_3O_8$ ;
  - 3.6m of radiometrically anomalous sand from 98.9m in drill hole 06RMCD034, with a gamma maximum of 1,056 cps at 265 ppm  $eU_3O_8$ ;
  - 3.4m of radiometrically anomalous oxidised sand and reduced sand with wood fragments in drill hole 07RMCD026 from 91.5m, includes 0.25m at 382 ppm  $eU_3O_8$ .
- Lamberts
  - Best intercept was 0.7m at 0.073%  $U_3O_8$  at 102.2 m in drillhole WE1.

### Geology

The Radium Hill South project lies approximately 20 km south of the Radium Hill Uranium Field that comprises Willyama Supergroup basement rocks. Epigenetic-style uranium mineralisation occurs in the form of davidite as vein ‘lodes’ within intensely altered shear zones hosted by high metamorphic grade quartzo-feldspathic paragneiss and amphibolite over a strike length of >7 km which has historically been mined to a depth of 290m on nine levels over a strike length of 1,400m<sup>6</sup>. Drainage patterns have formed in a southerly direction toward the Murray-Darling Basin as part of the Olary Palaeochannel System. Sediment-hosted uranium mineralisation is believed to have formed from oxidised groundwaters draining from the Willyama Supergroup basement rocks from the Radium Hill Region. The Tertiary sediments comprise carbonaceous clays and sands suitable for uranium to form sedimentary and/or tabular redox fronts.

Refer to ASX: ARE announcement 9 October 2023 and 7 December 2023 for further details on the Radium Hill South project.

<sup>5</sup> Source: Uranium grades extracted from Open File Report, Envelope 11421 compiled by Mega Hindmarsh Pty Ltd during the period 2005 to 2014, Cronje Dam Project.

<sup>6</sup> Source: [https://minerals.sarig.sa.gov.au/MineralDepositDetails.aspx?DEPOSIT\\_NO=962](https://minerals.sarig.sa.gov.au/MineralDepositDetails.aspx?DEPOSIT_NO=962).

## Exploration

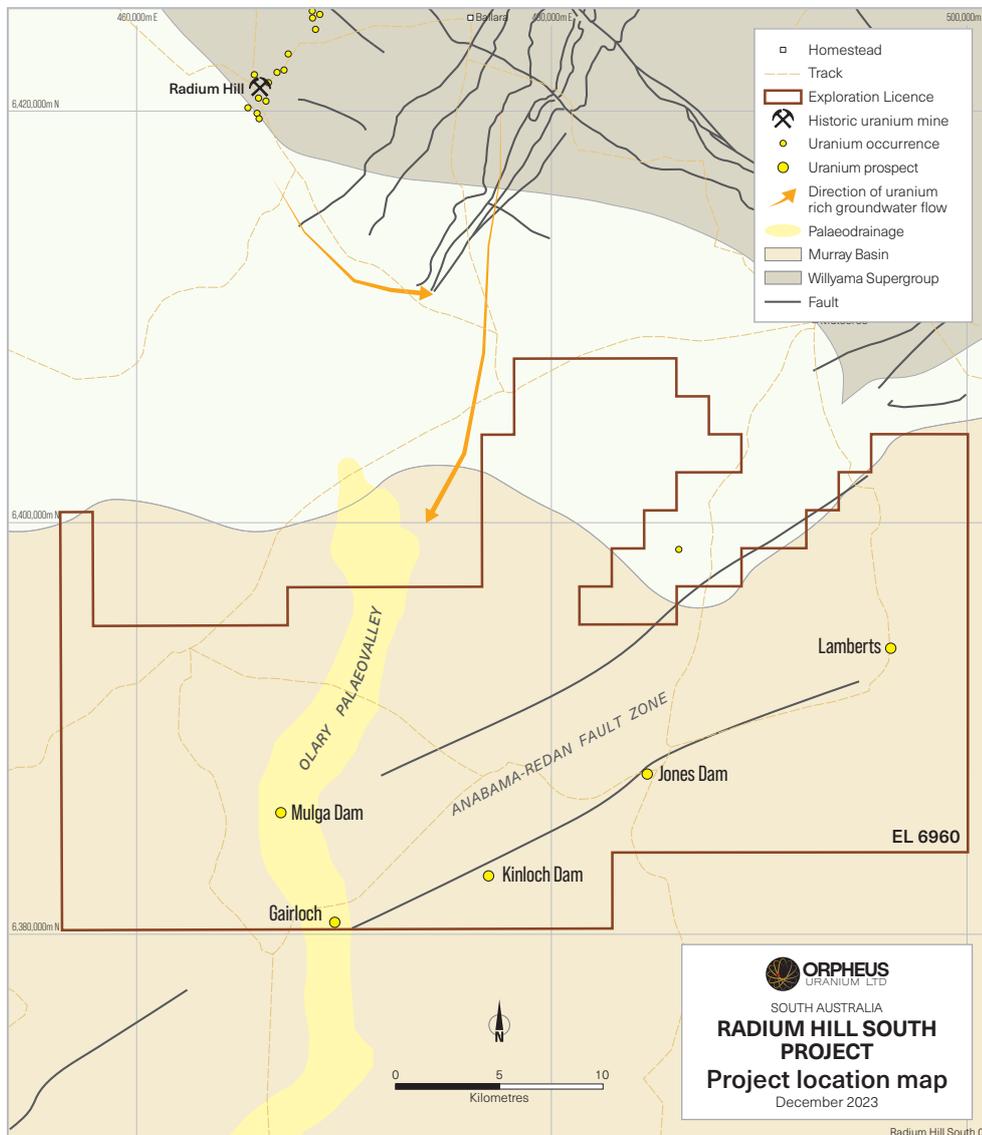
Orpheus' exploration objective is to target sedimentary-hosted roll-front and/or tabular-style uranium mineralisation located within paleochannel drainage features and along the buried escarpment of the northeast-southwest trending Anabama-Redan Fault.

- Orpheus will acquire passive seismic, ground gravity and electrical method surveys to constrain paleochannel margins, map structures, determine the effects of faulting, and basement topography.
- Drilling of high priority targets at the existing five uranium occurrences located within EL 6960 Radium Hill South project; Mulga Dam, Gairloch, Kinloch Dam, Jones Dam and Lamberts.

Orpheus has commenced compiling existing datasets of the five uranium prospects: Mulga Dam, Gairloch, Kinloch Dam, Jones Dam and Lamberts, in preparation toward drilling. A Satellite Gas and Thermal Analysis Study is underway.

## Tenure

Orpheus holds a 100% interest in EL 6960 Radium Hill South project that covers an area of 797 km<sup>2</sup>. EL 6960 Radium Hill South project is located directly north of tenure recently awarded to Boss Energy Ltd (ASX: BOE announcement 3 October 2023).



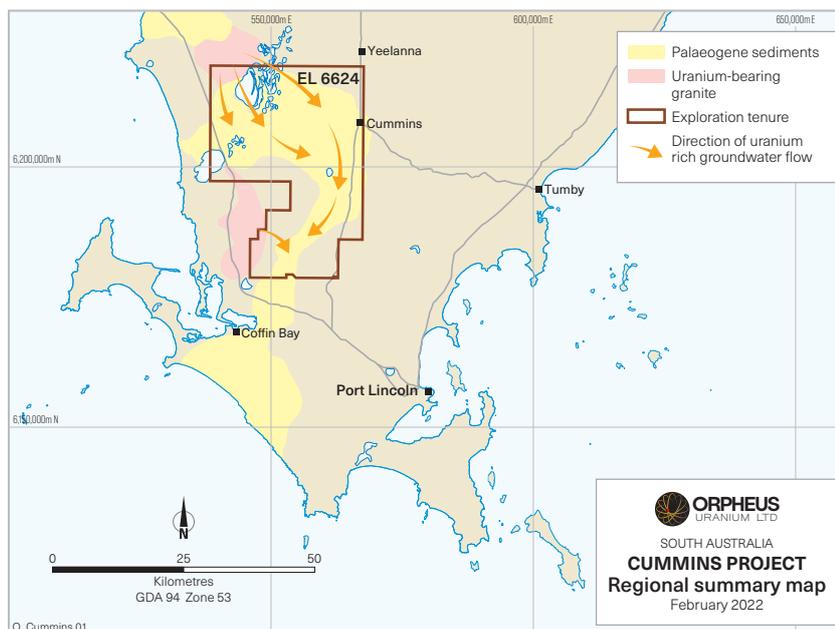
**Figure 7** Radium Hill South project location and uranium occurrences, highlighting the five uranium occurrences located within the competitive licence application that was granted to Orpheus, located 20 km south of the Radium Hill Uranium Field.

## 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 exploration licence.

A conceptual model of uranium bearing-fluid movement through the basin, from Proterozoic, uraniferous Dutton Suite granites to the north, through the Tertiary sequence of the Cummins-Wanilla Basin is presented (Figure 8).

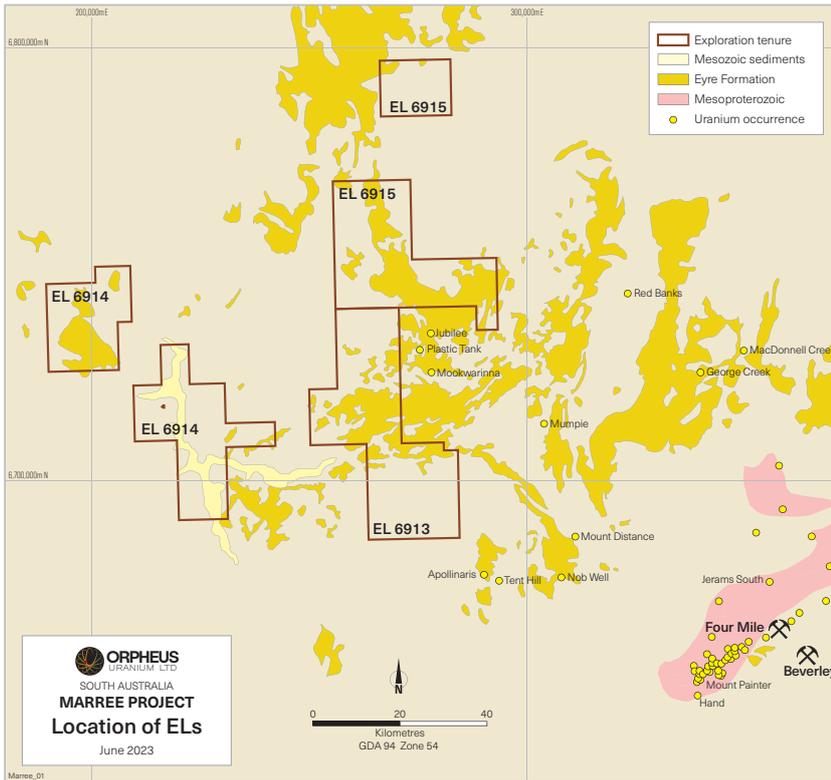


**Figure 8** Cummins project conceptual model of uranium-bearing fluid movement from Proterozoic Dutton Suite granitoids in the north, southward through the Cummins-Wanilla Basin.

## 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 9).

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.



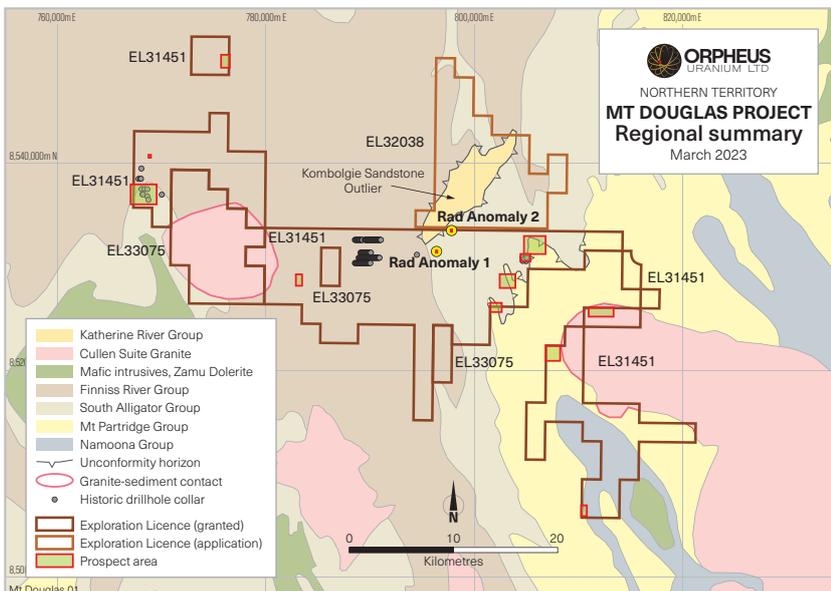
**Figure 9** Marree project regional geology of the prospective Eyre Formation, with uranium deposits and occurrences.

## 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 Finniss 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 10).

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

## 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 many discrete gravity anomalies that are located immediately south and east of the Torrens project and east of the Carrapateena mine (Figure 11). 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*

The Company holds all permits necessary to undertake exploration works at Murdie.

### *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.

## Torrens, South Australia

(Copper – Argonaut 100%)

### *Torrens Project – 100% Ownership*

During the previous Quarter, Argonaut's 100% held subsidiary, Kelaray Pty Ltd received Ministerial Consent from the Government of South Australia, for the transfer of 70% interest in the Torrens project exploration licence EL 6407, previously held by Straits Exploration (Australia) Pty Ltd, a subsidiary of Aeris Resources Ltd (ASX: AIS).

Kelaray now holds 100% interest in the Torrens project in South Australia, subject to the Tenement Sale and Purchase Agreement with Straits Exploration (Australia) Pty Ltd in return for a 2.5% net smelter royalty on future production.

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 EL 6320 located adjacent to the Torrens Project (Figure 11). 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.

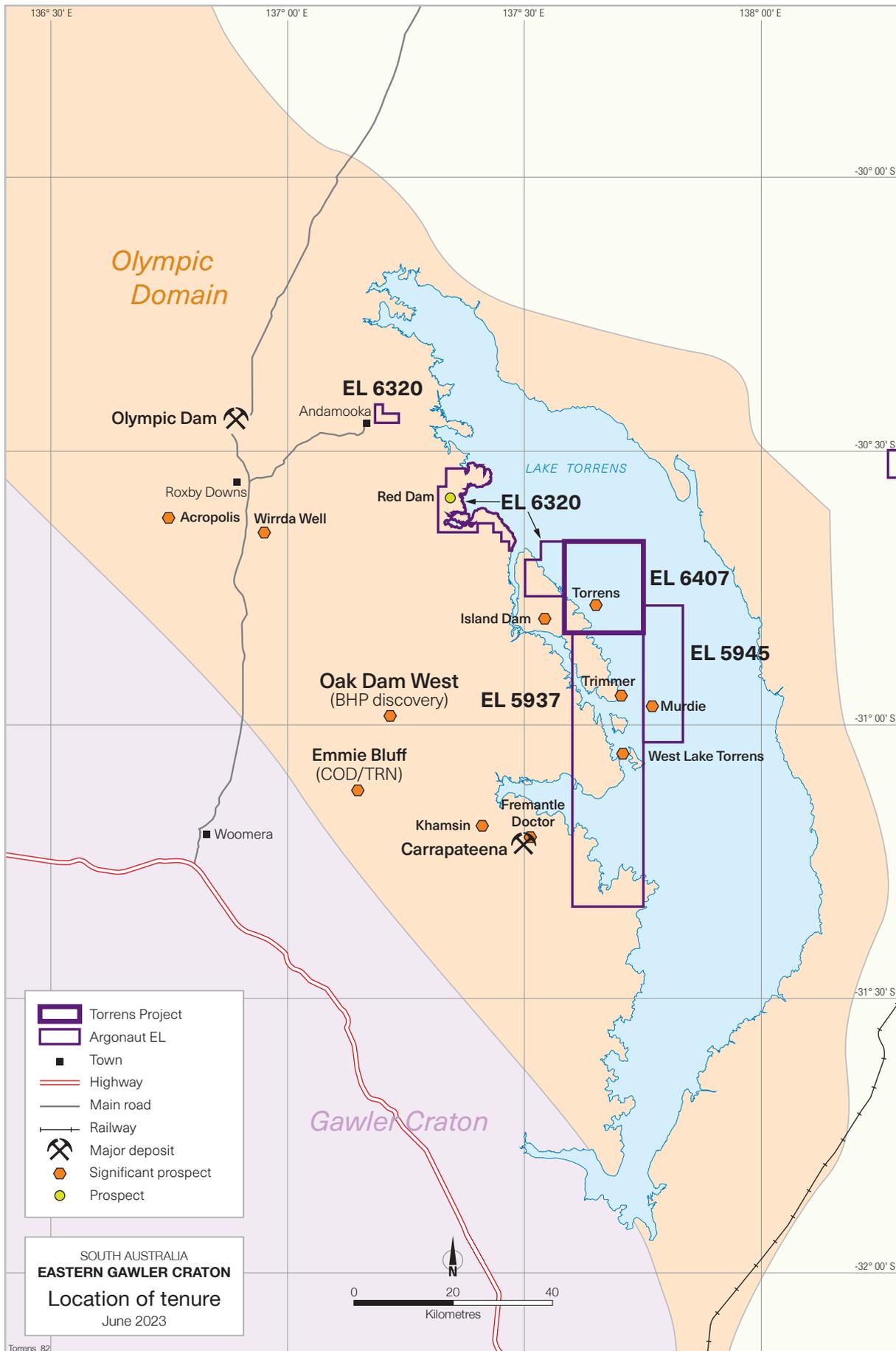


Figure 11 Lake Torrens exploration licences.

## Higginsville, Western Australia

(Lithium, gold and nickel – Argonaut 80%)

Argonaut holds an 80% interest in exploration licence E 15/1489 which hosts:

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

### *Lithium Exploration – Darson Pegmatite Swarm*

#### **Drilling Program**

In April 2023, Argonaut completed a 30-hole, 3,246 m 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 holes. A total of 132 Pegmatitic intervals were logged across the 30 drill holes for a cumulative total of 431 metres of logged pegmatitic rock. The results were reported to the ASX: ARE announcement 17 April 2023.

## 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, Mwombezi Resources Ltd, was operating in full compliance with all licence conditions and other regulatory requirements.

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 Mwombezi Resources Ltd. The Company notes that the timeframe for legal processes currently underway in Zambia is uncertain and that an outcome is expected in two to 12 months.

## Kamapanda, Zambia

(Copper-cobalt – Argonaut 90%)

The Kamapanda project is located in the Central African Copperbelt, North-western Province, Zambia. 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. 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. 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.

## 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.

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.

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

# Corporate

During October the Company successfully raised \$3.66 million via a fully underwritten entitlement issue at A\$0.05 per share with approximately 73.2 million new fully-paid ordinary shares issued.

During December, Argonaut successfully raised \$3.25 million via a share placement to institutional, sophisticated and professional investors at A\$0.09 per share with approximately 36.1 million new fully-paid ordinary shares issued.

Proceeds from both capital raisings will be used to fund exploration of the Company's uranium projects in South Australia and the Northern Territory, general working capital and the Offer costs.

The Company intends to concentrate future exploration activity to the uranium assets in South Australia and the Northern Territory and is now well positioned to commence exploration following successful completion of the Placement.

During the Quarter, Argonaut held the Annual General Meeting securing shareholder approval to change its constitution and company name to Orpheus Uranium Limited. The company name change was approved by shareholders.

Argonaut reported that the Registered Office and Principal Place of Business has changed to 79 King William Road, Unley, South Australia 5061. All other contact details remain unchanged.

Mr Pat Elliott and Mr Andrew Bursill both retired as directors of the Company in October 2023. Both Pat and Andrew have been instrumental in guiding the activities of Argonaut over many years, and we thank them for their contribution.

Following the retirement of Mr Elliott and Mr Bursill, Mr Simon Mitchell, Mr Richard Willson, and Mr Todd Williams have been appointed as directors of the Company.

Exploration and evaluation expenditure during the Quarter comprised:

	\$A'000
Drilling	120
Assaying	2
Field costs drilling program	18
Preliminary passive seismic	16
Tenement expenditure	93
<b>Total at 2.2 in Appendix 5B</b>	<b>249</b>

Related party payments for the December 2023 Quarter totalled \$588,000 which represented current and back payments to existing and retiring directors. The payment to a retired director also included long service and annual leave entitlements. The Company had previously advised that the Director fees and salaries had been suspended since 1 April 2023.

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

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

## **Mick Billing**

Executive Chairman

Argonaut Resources NL

### **COMPETENT PERSON'S STATEMENT**

Sections of information contained in this report that relate to Exploration Results were compiled or reviewed by Miss Bethany Lawrence BScAppGeol(Hons), MAIG, GIA(Aff), CG(Aff) who is a Member of the Australian Institute of Geoscientists and is a full-time employee of Argonaut Resources NL and Orpheus Uranium Limited. Miss Lawrence holds shares in Argonaut Resources NL. Miss Lawrence has sufficient experience which is relevant to the style of mineral deposits under consideration and to the activity which she 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". Miss Lawrence consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

# Tenement Schedule

**Table 1** Summary of mining tenements.

SOUTH AUSTRALIAN MINERAL EXPLORATION LICENCES						
Tenement	Granted	Expiry	Area (km <sup>2</sup> )	Locality	Licensee	Interest
EL 6569	18/10/2020	17/10/2025	104	Sandstone	Coombedown Resources Pty Ltd	10% <sup>1</sup>
EL 5998	21/05/2017	20/05/2028	33	Campfire Bore	Coombedown Resources Pty Ltd	10% <sup>1</sup>
EL 6199 <sup>2</sup>	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	100%
EL 5937	30/03/2017	29/03/2028	794	West Lake Torrens	Kelaray Pty Ltd	100%
EL 5945	20/04/2017	19/04/2028	221	Murdie	Kelaray Pty Ltd	100%
EL 6320 <sup>2</sup>	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%
EL 6555	07/12/2020	06/12/2025	947	Curnamona	Trachre Pty Ltd	100%
EL 6624	23/07/2021	22/07/2027	952	Cummins	Trachre Pty Ltd	100%
EL 6703	3/02/2022	2/02/2028	987	Erudina	Trachre Pty Ltd	100%
EL 6900	19/01/2023	18/01/2029	143	Billeroo	Trachre Pty Ltd	100%
EL 6913	9/06/2023	8/06/2029	998	Mundowdna	Trachre Pty Ltd	100%
EL 6914	9/06/2023	8/06/2029	990	Muloorina	Trachre Pty Ltd	100%
EL 6915	9/06/2023	8/06/2029	978	Clayton	Trachre Pty Ltd	100%
EL 6923	30/08/2023	29/08/2029	977	Lake Frome	Kelaray Pty Ltd	100%
EL 6958	18/12/2029	17/12/2029	294	Mundaerno	Trachre Pty Ltd	100%
EL 6960	18/12/2029	17/12/2029	797	Radium Hill South	Trachre Pty Ltd	100%

QUEENSLAND MINING LEASE						
Tenement	Granted	Expiry	Area (km <sup>2</sup> )	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 <sup>2</sup> )	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 <sup>2</sup> )	Locality	Licensee	Interest
22399-HQ-LEL <sup>3</sup>	29/12/2017	28/12/2021	521	North Western Province	Mwombezhi Resources Ltd	90%
23232-HQ-LEL <sup>2</sup>	10/04/2019	09/04/2023	226	North Western Province	Sunrise Exploration and Mining Limited	90%
23474-HQ-LEL <sup>2</sup>	18/12/2018	17/12/2022	41.58	North Western Province	Sunrise Exploration and Mining Limited	90%

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

WESTERN AUSTRALIAN MINERAL EXPLORATION LICENCES						
Tenement	Granted	Expiry	Area (km <sup>2</sup> )	Locality	Licensee	Interest
E15/1489	14/08/2017	13/08/2027	20.94	Higginsville	Argonaut Resources NL	80%

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

NORTHERN TERRITORY MINERAL EXPLORATION LICENCE APPLICATIONS						
Tenement	Applied	Expiry	Area (km <sup>2</sup> )	Locality	Licensee	Interest
ELA 32445	25/06/2020	-	230.24	T-Bone	Trachre Pty Ltd	100%
ELA 32446	25/06/2020	-	63.71	Ranger NE	Trachre Pty Ltd	100%
ELA 32038	22/11/2018	-	127.49	Mount Douglas (Mary River)	Trachre Pty Ltd	100%

**Table 2 Summary of mining tenements acquired in Quarter.**

There were no tenements acquired in the December 2023 Quarter.

**Table 3 Summary of mining tenements surrendered in Quarter**

There were no tenements surrendered in the December 2023 Quarter.

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

<sup>2</sup> Undergoing renewal.

<sup>3</sup> Licence subject to litigation.

## Appendix 5B

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

Name of entity

ARGONAUT RESOURCES NL (name to change to Orpheus Uranium Limited)

ABN

97 008 084 848

Quarter ended ("current quarter")

DECEMBER 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date 6 months \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation		
(b) development	-	-
(c) production	-	-
(d) staff costs	(46)	(177)
(e) administration and corporate costs	(1,051)	(1,361)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	19	19
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Legal costs recovered	93	163
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(985)</b>	<b>(1,356)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities		
(b) tenements	(16)	(108)
(c) property, plant and equipment	-	-
(d) exploration & evaluation	(249)	(469)
(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 6 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	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(265)</b>	<b>(577)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	6,908	7,385
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	(447)	(481)
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)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>6,461</b>	<b>6,904</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	89	329
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(985)	(1,356)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(265)	(577)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	6,461	6,904

Consolidated statement of cash flows		Current quarter \$A'000	Year to date 6 months \$A'000
4.5	Effect of movement in exchange rates on cash held		-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>5,300</b>	<b>5,300</b>

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	104	89
5.2	Call deposits	5,196	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>5,300</b>	<b>89</b>

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	588
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.*

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

<b>7. Financing facilities</b>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i>		
<i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
<b>7.4 Total financing facilities</b>		-
<b>7.5 Unused financing facilities available at quarter end</b>		-
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.		

<b>8. Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1 Net cash from / (used in) operating activities (item 1.9)	(985)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(249)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(1,234)
8.4 Cash and cash equivalents at quarter end (item 4.6)	5,300
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	5,300
<b>8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	4.3
<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:	
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:	
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:	
<i>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.</i>	

**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 January 2024

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.