

# ASX announcement

13 December 2017

## Airborne Gravity over Giant Torrens Anomaly to Commence January 2018

Argonaut Resources NL (ASX: ARE) (*Argonaut* or the *Company*) is pleased to announce that an airborne gravity survey will be flown in January 2018 over the giant Torrens anomaly in South Australia.

### Highlights:

- The Torrens Joint Venture – Argonaut 30% and Aeris Resources Ltd (ASX: AIS) 70% – has committed to flying an airborne gravity survey over the massive Torrens anomaly.
- This modern gravity data will augment various ground-based gravity surveys dating back as far 1976.
- The aerial gravity data will provide increased resolution for drill targeting.

### Airborne Gravity

The Torrens Joint Venture has contracted a geophysical acquisition contractor to fly a modern, high-resolution airborne gravity survey over the Torrens gravity anomaly. The survey will seek to better define the extent of dense bodies of rock within the broader gravity anomaly. These high-density anomalies may represent iron oxide copper-gold mineralisation that can be targeted for drilling.

Existing gravity data was acquired across several ground-based surveys. The oldest gravity survey was completed in 1976.

Airborne gravity was the preferred option due to its accuracy and the preservation of the salt crust of Lake Torrens. The new data will be homogenous across the entire anomaly and will allow accurate geophysical modelling. The survey is scheduled to be flown in mid-January 2018.

**Argonaut CEO, Lindsay Owler, said “This aerial gravity survey will achieve several things: it will allow us to better target copper mineralisation for drilling; it shows stakeholders that the joint venture is very keen to get underway with a major exploration program; and it demonstrates our commitment to minimising exploration impact on the environment”.**

Argonaut Resources NL  
ABN 97 008 084 848

**Registered Office**  
Suite 2, Level 10  
70 Phillip Street  
Sydney, NSW, 2000, Australia  
T +61 2 9299 9690  
F +61 2 9251 7455  
E [sydney@argonautresources.com](mailto:sydney@argonautresources.com)

**Adelaide Office**  
Level 1  
63 Waymouth Street  
Adelaide, SA, 5000, Australia  
T +61 8 8231 0381  
F +61 8 8231 6092  
E [adelaide@argonautresources.com](mailto:adelaide@argonautresources.com)

For personal use only

## Torrens Approvals

There are three approvals required for drilling at Torrens. Two of these approvals have been granted and the third is expected in January 2018.

### Operational Approval

On 28 November 2017, the Torrens joint venturers announced that the 'Exploration Program for Environment Protection and Rehabilitation' for ongoing exploration activities including aerial and ground gravity surveys and diamond drilling at exploration licence 5614 had been approved under the South Australian Mining Act.

This approval permits the drilling of up to 70 deep diamond drill holes into the giant Torrens anomaly from the salt crust of Lake Torrens. The approval lasts for the term of EL5614 and any subsequent exploration licences.

Authorised drilling is subject to strict environmental controls.

### Native Title Access

In April 2017, Argonaut announced that the South Australian ERD Court granted authority to enter and undertake mining operations (exploration) within the area of EL5614.

The granting of this authority was also a major step towards the recommencement of drilling at Torrens. Native title was the principal reason for a hiatus in exploration that has lasted since March 2008.

### Authority under the Aboriginal Heritage Act

The Torrens joint venture has lodged an application under the South Australian Aboriginal Heritage Act. This application seeks a re-grant of an authorisation given in 2010 for a similar drilling program.

The joint venture expects that the Minister for Aboriginal Affairs and Reconciliation will be in a position to properly consider the application in late January 2018.

## The Torrens Anomaly

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

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

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

## The Torrens Joint Venture

The Torrens Joint Venture is between Argonaut Resources NL (30%) and Aeris Resources Limited (ASX: AIS) (70%) and relates to the Torrens project, EL5614.

In its role as manager of the joint venture, Argonaut's wholly owned subsidiary, Kelaray Pty Ltd, is working to secure access to the licence for the purpose of a planned drilling program targeting areas which have the properties of large IOCG deposits.

## Murdie, South Australia

Argonaut Resources was granted two highly prospective South Australian exploration licences, EL5937 and EL5945 (Figure 1). The licences are contiguous with the Company's Torrens project in South Australia. The licence areas cover a confirmed IOCG target in an area known as Murdie as well as a second anomaly at West Lake Torrens.

The licences cover an area of 1,015 square kilometres and are located immediately south and east of the Torrens project and east of the Carrapateena deposit (Figure 1).

The Murdie and West Lake Torrens targets constitute excellent exploration opportunities in their own right and provide Argonaut with a commanding land holding in the event of a discovery at Torrens.

### Lindsay Owler

Director and CEO

Argonaut Resources NL

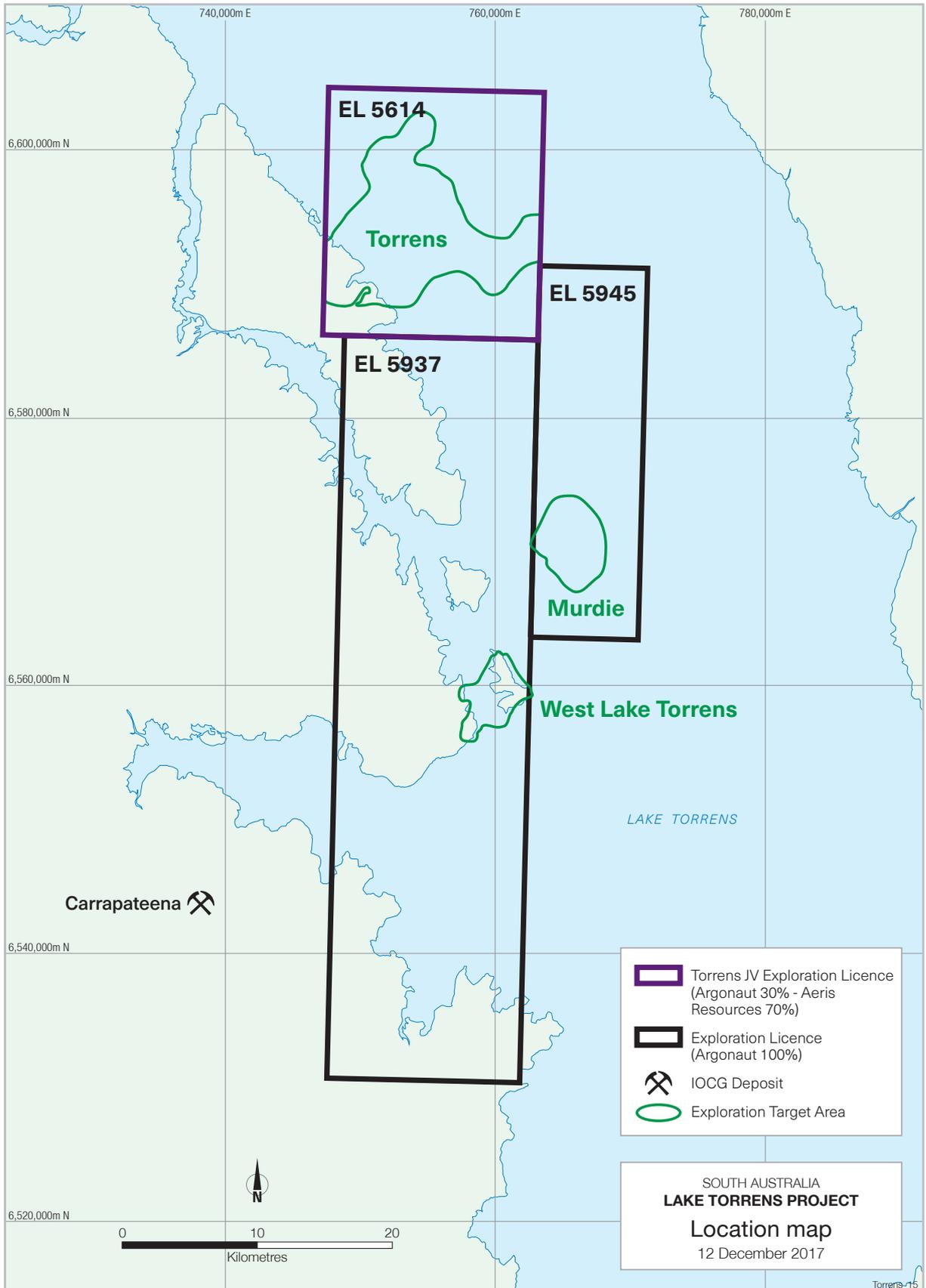


Figure 1 Lake Torrens exploration licences.

For personal use only

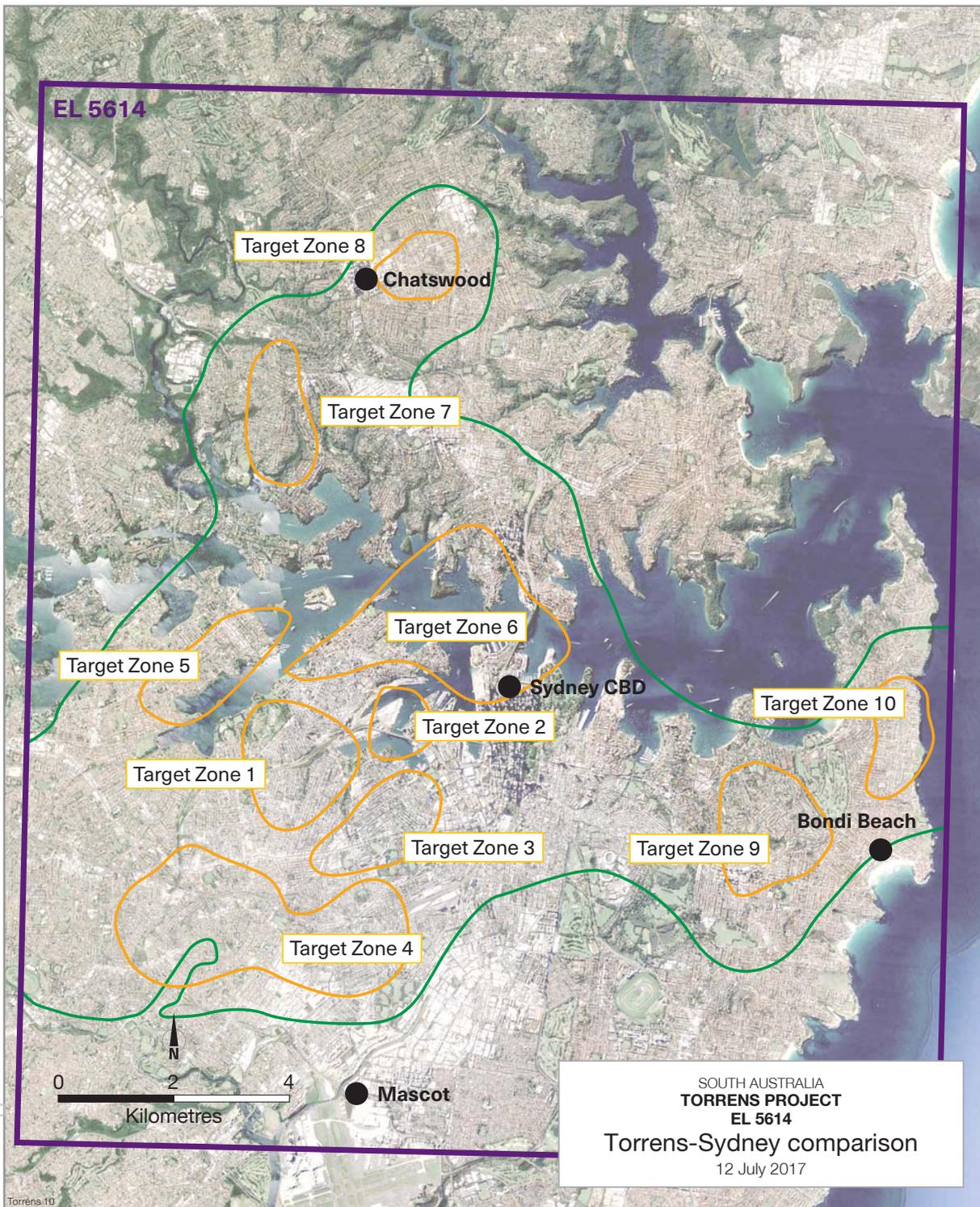


Figure 2 Torrens gravity anomaly (bouguer: green, residual: yellow) overlain on metropolitan Sydney.

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 2017 Annual Report. Mr Owler has sufficient experience which is relevant to the style of mineral deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Owler consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.