

# ASX announcement

4 APRIL 2016

## Lake Blanche Lithium Brine Target

Argonaut Resources NL (ASX: ARE) (*Argonaut* or the *Company*) is pleased to announce it has secured two exploration licences covering Lake Blanche, a salt lake with the potential to host lithium brines and potash in the north of South Australia.

### Highlights

- **Lithium carbonate prices in China** are reported to **have surged from \$8,000/t in September to over \$26,000/t in March 2016.**
- Argonaut has accepted terms offered for the grant of new two exploration licences covering the whole of Lake Blanche, north of the Flinders Ranges in South Australia.
- The lake is prospective for lithium brines due to its distinctive geological and hydrological qualities.
- The lake is also prospective for potash mineralisation.
- The licences cover an area of 2,000 square kilometres and Lake Blanche itself has a surface area of **1,700 square kilometres.**
- The size of the lake suggests it could represent an internationally important lithium source in the event economic concentrations of lithium are found in its brines.

Argonaut notes that the geological and hydrological features unique to Lake Blanche make it a particularly attractive Australian lithium brine target.

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# Lake Blanche, South Australia (Argonaut 100%)

The Lake Blanche exploration licence areas have the potential to host lithium brines and potash.

Lake Blanche is a closed to restricted basin covering an area of 1,700 square kilometres. It has a broad catchment that includes the Mt Babbage and Mt Painter Inliers which are recorded as containing elevated rare elements including lithium and tantalum (Figure 1).

Economic concentrations of lithium in brine generally occur in circumstances where ground waters percolate through neighbouring lithium bearing rocks into a

closed, continental basin that has not been subject to marine flooding throughout its geological history. Lake Blanche appears to fit these requirements.

An arc of lakes, including Lake Blanche, to the north of the Flinders Ranges has been independently defined as prospective by Geoscience Australia in a 2013 report titled 'A Review of Australian Salt Lakes and Assessment of their Potential for Strategic Resources'. Argonaut, having assessed the potential of each lake on merit, determined that Lake Blanche has the best potential for economic lithium grades.

In the event economic concentrations of lithium are contained in Lake Blanche's brines, the lake has the potential to be an internationally significant source.

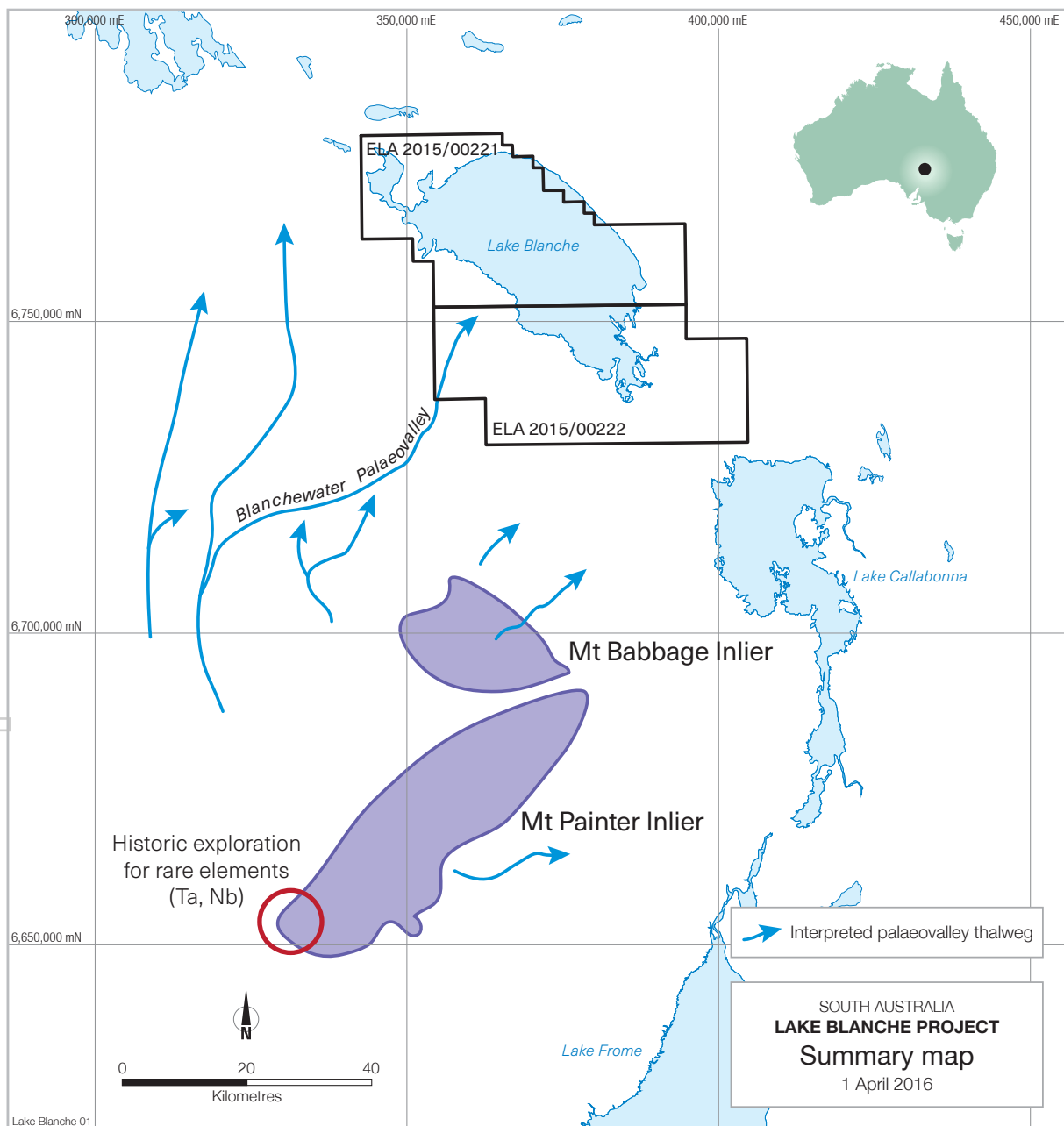


Figure 1 Lake Blanche with exploration licence locations with relevant geological/hydrological features.

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No previous lithium brine exploration has been recorded in the Lake Blanche area although historic brine exploration has been undertaken at Lake Frome, to the southeast.

Lithium brine deposits, particularly those found in Chile, Bolivia and Argentina are often referred to as 'salar' deposits.

## Background

### Crescent Lake Project, Canada (Argonaut acquiring 100%)

On 4 March 2016, Argonaut released details of the acquisition of the Crescent Lake Lithium Project in Ontario, Canada (Figure 2) to the ASX.

Highlights of previous drilling at the Crescent Lake Lithium Project, released to the ASX on 11 March 2016, include:

#### Falcon Lake Area

- **8.1m at 1.48% LiO<sub>2</sub>** from 2.7m in drill hole W-3
- **10.5m at 1.15% LiO<sub>2</sub>** from 34.5m in drill hole W-9
- **14m at 0.99% LiO<sub>2</sub>** from 69.3m in drill hole CO-10-001
- **7m at 1.07% LiO<sub>2</sub>** from 55.3m in drill hole CO-10-002
- **11m at 1.10% LiO<sub>2</sub>** from 39.4m in drill hole CO-10-003

#### Zigzag Area

- **6.1m at 1.08% LiO<sub>2</sub>** from 12.4m in drill hole CO-10-007

Other Crescent Lake Lithium Project highlights include:

- Adjacent **23m and 10m thick pegmatites** at Falcon Lake West deposit.
- **3 to 4 stacked pegmatites over 670m** at the Tebish occurrence.
- The deposits are **hard rock pegmatite deposits** containing **spodumene mineralisation**.

- The areas surrounding these known deposits are yet to be systematically explored.
- There is excellent potential to define deposit extensions and additional deposits.
- The deposits are well located close to the **North American rail network and a major port**.

## Lithium Market

The lithium market is known to be in short supply due to the sharp increase in demand for lithium-ion batteries used in electric cars and domestic power storage systems. Storage of renewable electricity is a major international issue and domestic self-sufficiency via solar panels and lithium-ion storage units has mass consumer appeal.

The sale of all-electric and hybrid vehicles more than quadrupled in China between 2013 and 2014 and Tesla's 'gigafactory' in Nevada hopes to supply lithium-ion batteries for over 500,000 cars within five years.

Industry insiders note that long-term producers have been slow to react to the increased demand. In a recent report, CORMARK Securities Inc noted:

*A lack of production growth from the big four and a series of ramp up issues with the juniors, has led to a tight lithium market with lithium carbonate prices in China surging from \$8,000/t in September to +\$26,000/t today.*

*Beyond the current wave of supply, we forecast a growing supply gap to emerge -40 ktpa LCE (Lithium Carbonate Equivalent) by 2020 and over 100 ktpa LCE by 2025.*

CORMARK Securities Inc, 23 March 2016

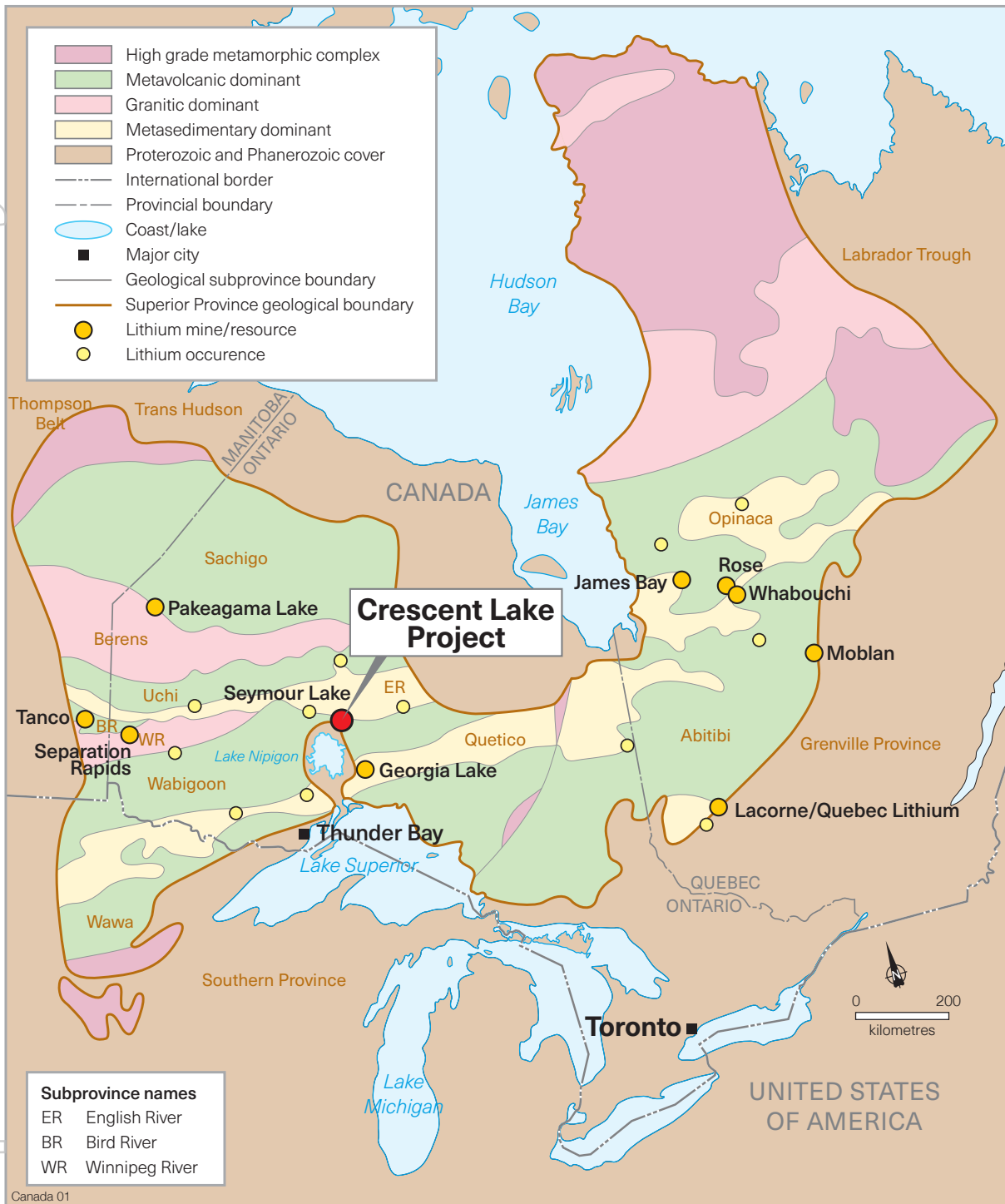
#### Lindsay Owler

Director and CEO

Argonaut Resources NL

Sections of information contained in this report that relate to Exploration Results were compiled or supervised by Mr Lindsay Owler BSc, MAusIMM who is a Member of the Australasian Institute of Mining and Metallurgy and is a full time employee of Argonaut Resources NL. Mr Owler holds shares and options in Argonaut Resources NL, details of which are disclosed in the Company's 2015 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.

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**Figure 2** Geology of the Superior Province, Canada, showing Crescent Lake and regional lithium occurrences.