

ASX announcement

8 JUNE 2016

Argonaut Extends Crescent Lake Lithium Holding

Argonaut Resources NL (ASX: ARE) (*Argonaut* or the *Company*) is pleased to announce it has increased its lithium holding by securing the remainder of the Crescent Lake/Seymour Lake pegmatite swarm in Ontario, Canada.

Highlights

- Argonaut has been granted a **100% interest in 22 Mining Claims in the Crescent Lake area.**
- The claims are within the Crescent Lake/Seymour Lake spodumene pegmatite swarm.
- The claims cover one known spodumene pegmatite occurrence (Figure 1) plus large, under-explored areas of prospective terrain.
- The new claims cover an area of 54km², increasing Argonaut's total holding in the project area to 80km².
- The tenement holding is east of Ardiden Limited's (ASX: ADV) Seymour Lake lithium project and contiguous with the Falcon Lake and Zigzag claims over which Argonaut holds an option to purchase.
- Drilling permits have now been granted and **drilling will commence in approximately one week.**

Crescent Lake Extensions

Crescent Lake is located 250km NNW of Thunder Bay in Ontario, Canada (Figure 2).

On 11 March 2016, Argonaut announced the acquisition of lithium deposits known as Falcon Lake and Zigzag, collectively the Crescent Lake Lithium Project. Pegmatites at Crescent Lake are spodumene bearing. In the subsequent weeks, Argonaut pegged additional claims between Falcon Lake and Zigzag, and to the NW of Falcon Lake (Figure 1). These claims are now registered and are 100% held by Argonaut's Canadian operating subsidiary.

The new claims cover the under-explored area between clusters of known spodumene bearing pegmatites. The Falcon Lake Far West spodumene pegmatite occurrence is located within the new claims (Figure 1).

The new claims cover an area of 54km² and Argonaut now holds or has an option to acquire approximately 80km² of the Crescent Lake/Seymour Lake pegmatite swarm.

Crescent Lake Drilling

In May 2016, Argonaut geologists commenced preparatory exploration works at the Crescent Lake Project in anticipation of statutory drilling approvals. On 6 June 2016, Argonaut announced the grant of Exploration Permits valid for three years. Mobilisation of drilling and earthmoving equipment to the Crescent Lake Lithium Project will occur in approximately one week.

The initial program will be comprised of approximately seven drill holes. The Company anticipates analytical results will be available approximately six week after the completion of each drill hole.

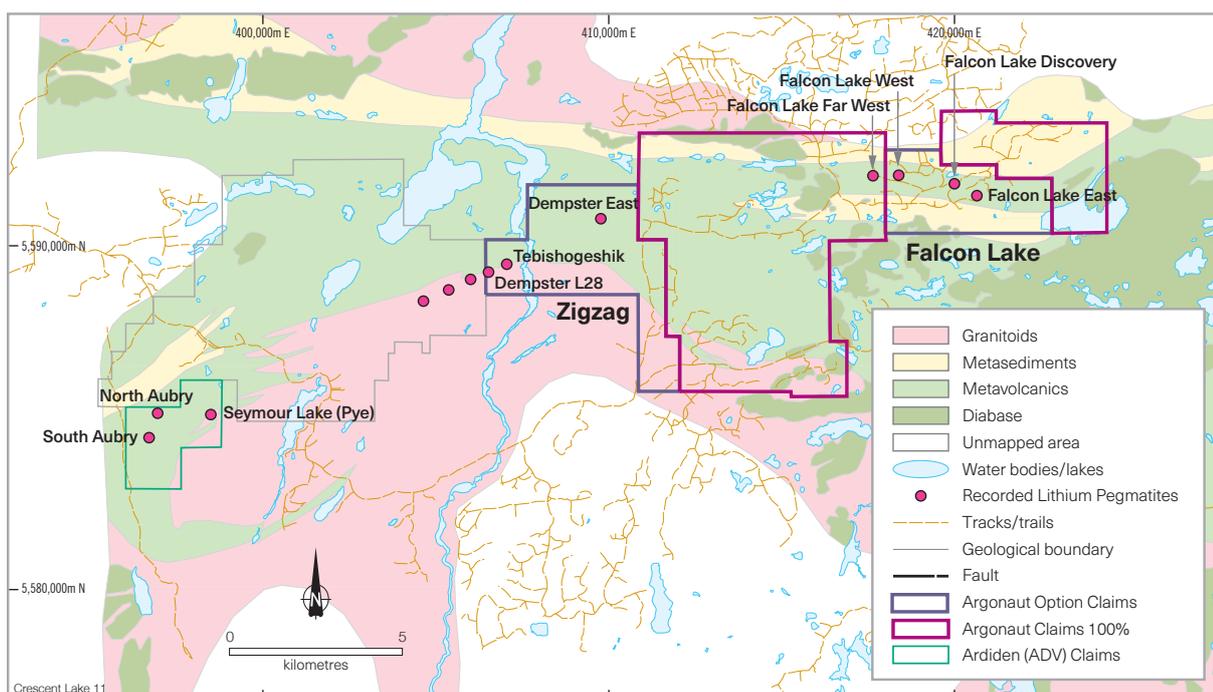


Figure 1: Crescent Lake/ Seymour Lake lithium exploration claims and lithium pegmatite occurrences over geology.



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

Background

Argonaut is focused on fast-tracking development of its lithium assets. The Company now has rights to two Canadian projects and one South Australian lithium exploration target.

Argonaut expects to announce a further acquisition in the coming weeks as well as the commencement of drilling at its flagship Crescent Lake project in Ontario, Canada.



Figure 3 Argonaut lithium project locations.

Crescent Lake Project, Canada (Argonaut acquiring 100%)

On 4 March 2016, Argonaut released details of the acquisition of the Falcon Lake and Zigzag blocks within the Crescent Lake Lithium Project area in Ontario, Canada (Figure 2).

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% Li₂O** from 2.7m in drill hole W-3
- **10.5m at 1.15% Li₂O** from 34.5m in drill hole W-9
- **14m at 0.99% Li₂O** from 69.3m in drill hole CO-10-001
- **7m at 1.07% Li₂O** from 55.3m in drill hole CO-10-002
- **11m at 1.10% Li₂O** from 39.4m in drill hole CO-10-003

Zigzag Area

- **6.1m at 1.08% Li₂O** 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 (Figure 4).
- Three to four stacked spodumene bearing 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.

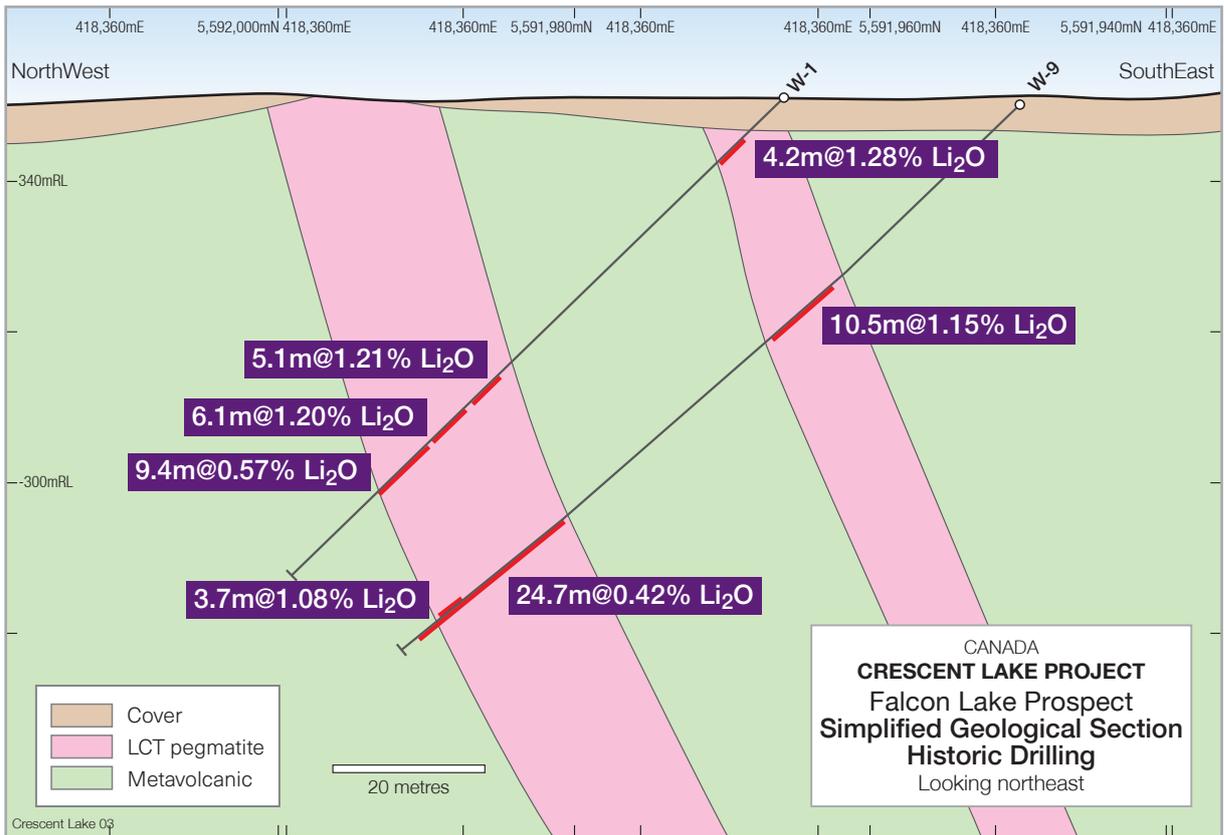


Figure 4: Falcon Lake West geological cross section, Crescent Lake Lithium Project.

Greenbush Lake, Canada (Argonaut 100%)

The Greenbush Lake Project is located approximately 150km north-west of Argonaut’s Crescent Lake Lithium Project in Ontario, Canada (Figure 2) and features a large, outcropping spodumene pegmatite with grades of up to 2.46% Li_2O within an area confirmed as having the requisite geological components for lithium pegmatite emplacement.

The known lithium pegmatite occurrence is 15m wide by 30m in exposed strike length. The actual strike length of the known pegmatite has not yet been determined as the exposure continues under thin sedimentary cover to the north and under lake waters to the south. The pegmatite has not been drilled.

Argonaut purchased a 100% interest in three mineral claims for CAD100,000. The claims are subject to a 2% net smelter royalty.

Three phases of exploration have been undertaken in the area of the lithium occurrence.

1. The Ontario Department of Mines discovered the pegmatite around 1965 and took a chip sample across the full width (50 feet) of the outcrop. Analysis of the chip sample returned 1.25% Li_2O .
2. Placer Development Ltd explored the area for tantalum in 1980. A magnetic survey attempting to define the extent of the pegmatite was unsuccessful, however an assay of the outcrop returned 2.46% Li_2O .
3. Canadian Orebodies Inc. undertook an exploration program in 2009. Highlights of a rock-chip sampling program are shown in Table 1.

Table 1: 2009 Rock-chip sample highlights, Greenbush Lake Project

Description	Li_2O (%)
Outcrop	1.19
Float	1.96
Float	0.85
Float	0.95
Outcrop	1.58

Lake Blanche, South Australia (Argonaut 100%)

On 4 April 2016, Argonaut announced 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.

Lake Blanche is a closed to restricted basin covering an area of 1,700 square kilometres. The licence areas cover almost 2,000 square kilometres. The lake 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 5).

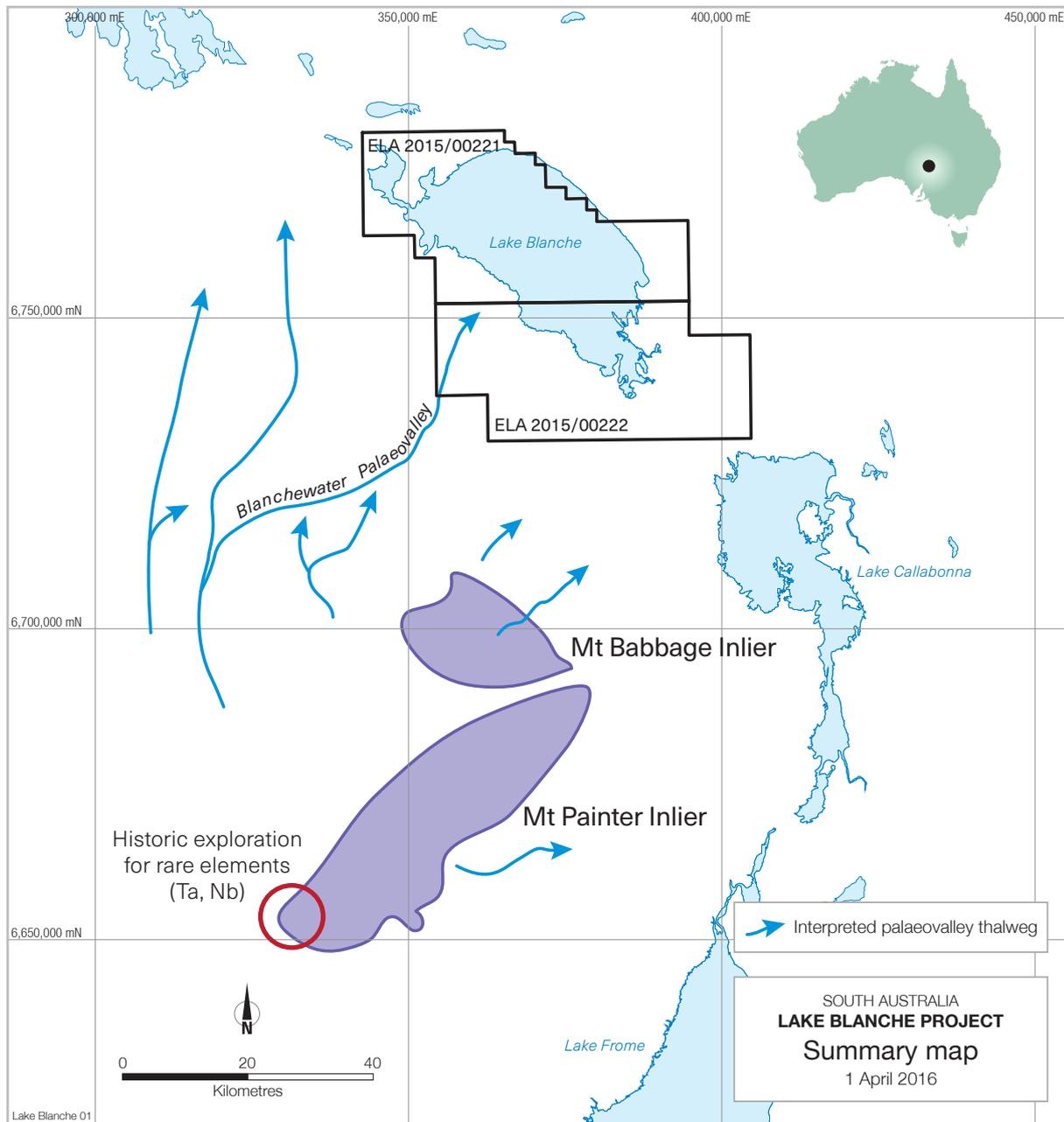


Figure 5: Lake Blanche and exploration licence locations with relevant geological/hydrological features.

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. These geological criteria appear to be met at Lake Blanche.

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.

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.

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 and an announcement to the ASX dated 23 May 2016. 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.