



Adelaide Resources Limited
ABN: 75 061 503 375

Corporate details:

ASX Code: ADN

Cash: \$0.701million
(at 31 Mar 2016)

Issued Capital:
357,922,352 ordinary shares
37,222,104 listed options (ADNO)

Directors:

Colin G Jackson
Non-executive Chairman

Chris Drown
Managing Director

Nick Harding
Executive Director and
Company Secretary

Jonathan Buckley
Non-executive Director

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Fact: Four out of the last ten years have seen double digit increases for the price of lithium carbonate: 2007, 2008, 2009, and 2015. There is little doubt that 2016 will be added to this list.



ASX announcement

30 May 2016

Lithium brine investigation (100% interest), South Australia

Two additional salt lakes with lithium brine potential pegged in South Australia.

Summary

Adelaide Resources has applied for exploration tenure over two further South Australian salt lakes which may have potential for lithium brines. The Lake Florence and Lake Killamperpunna tenement applications add to existing lithium brine portfolio tenements over Lake Acraman and Lake Gilles.

- Exploration licence applications, "Lake Florence" (751 km²) ELA 2016/00062 and "Lake Killamperpunna" (361 km²) ELA 2016/00063 are located east of Lake Eyre.
- There has been no known previous exploration for lithium brines at either lake, however both were identified in a recently published research paper titled "A review of Australian salt lakes and associated mineral systems" as having potential to host lithium enriched brines due to the high concentration of lithium in the lake catchment areas.
- A preliminary, low cost, sampling programme to investigate whether lithium is present at elevated concentrations in the lake brines and sediments is planned.

Chris Drown
Managing Director

Direct enquiries to Chris Drown. Ph (08) 8271 0600 or 0427 770 653.

Introduction

Worldwide, lithium is extracted from two principal sources - hard rock deposits and lithium brines associated with salt lakes.

Presently all of Australia's lithium production comes from hard rock sources. While there are no lithium brine operations in Australia, globally brines accounted for around half of the world's lithium production in 2015, and brine deposits represent a significant source of lithium.

Earlier in 2016 Adelaide Resources announced it had applied for exploration tenements to secure potential hard rock lithium occurrences in the Davenport Ranges in the Northern Territory and in the Coolgardie district in the Western Australian goldfields.

The Company also holds title over parts of Lake Acraman and Lake Gilles, two South Australian salt lakes that may be prospective for lithium brines.

New tenement applications

The Company has now applied for two further tenements that cover salt lakes east of Lake Eyre in South Australia that may have potential for lithium brines.

The two new applications are ELA 2016/00062 "Lake Florence" which covers an area of 751 km² (Figure 1), and ELA 2016/00063 "Lake Killamperpunna" covering 361 km² (Figure 2).

The applications were made in response to a recent research paper published in the Australian Journal Of Earth Sciences

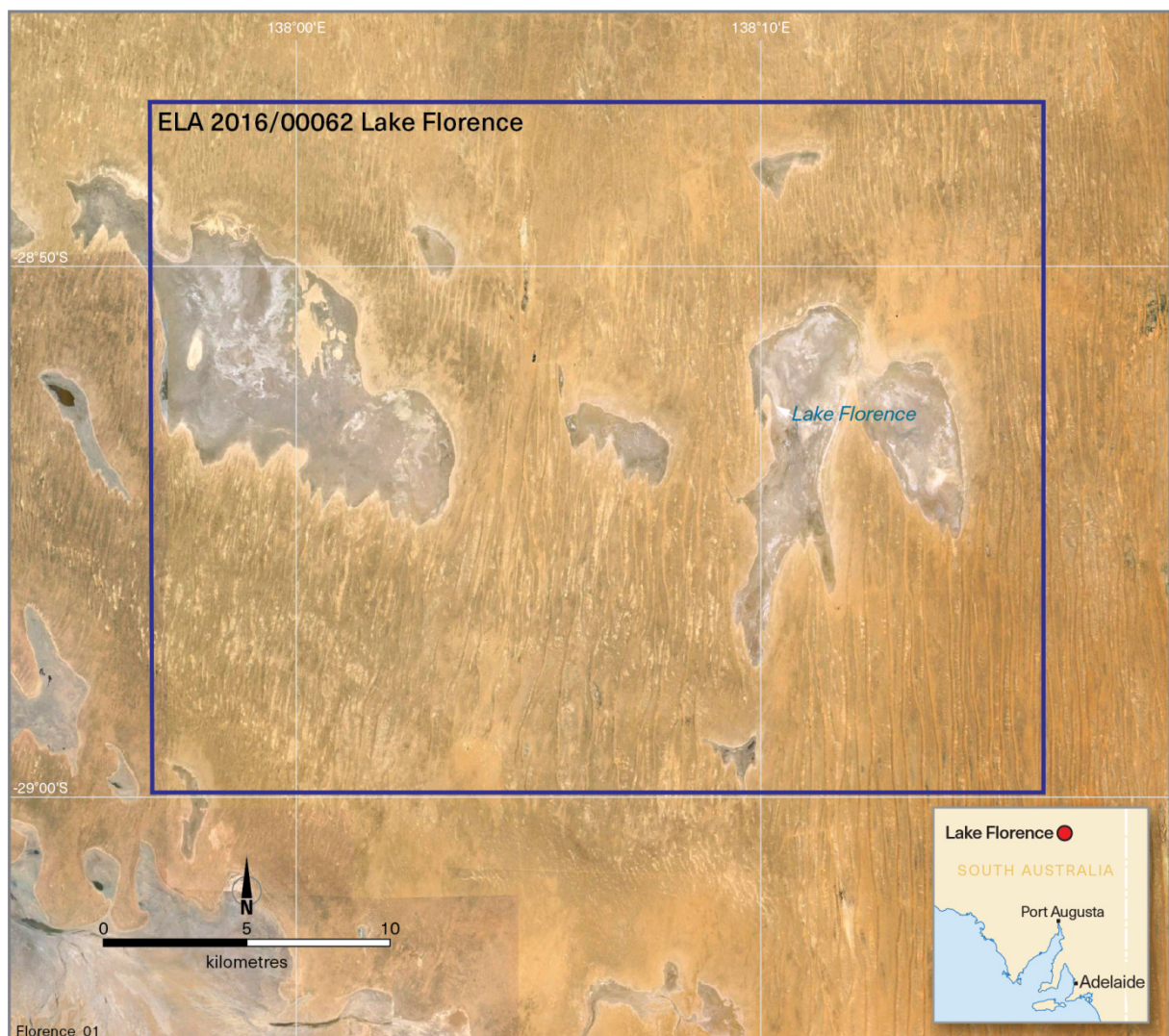


Figure 1: ELA 2016/00062 Lake Florence location plan.

titled “A review of Australian salt lakes and associated mineral systems” by T. P. Mernagh et al. ⁽¹⁾ which reviewed available information for over 1,200 Australian salt lakes to attempt to assess their lithium, potash and boron potential.

The researchers found that the majority of Australian salt lakes have either little or unreliable data. Many datasets in the vicinity of salt lakes only report salinity or total dissolved solids, with no data for constituent cations and anions, and no appreciation of the hydrological and geomorphic evolution of the lakes.

To overcome these limitations the paper’s authors developed mineral systems models to assess the potash, lithium and

boron potential of Australian salt lakes. These models show that an important control on the potential of salt lake systems to form economic deposits is hydrogeological connectivity between leachable source rocks and the lakes.

The assessment of the mineral potential was carried out in two stages. The first stage was based on the presence of favourable source rocks in the salt lakes’ catchments, derived from whole rock, sediment and groundwater geochemical datasets.

The second stage was carried out by analysing available chemical data of groundwater in proximity to the salt lake systems delineated in the first stage.

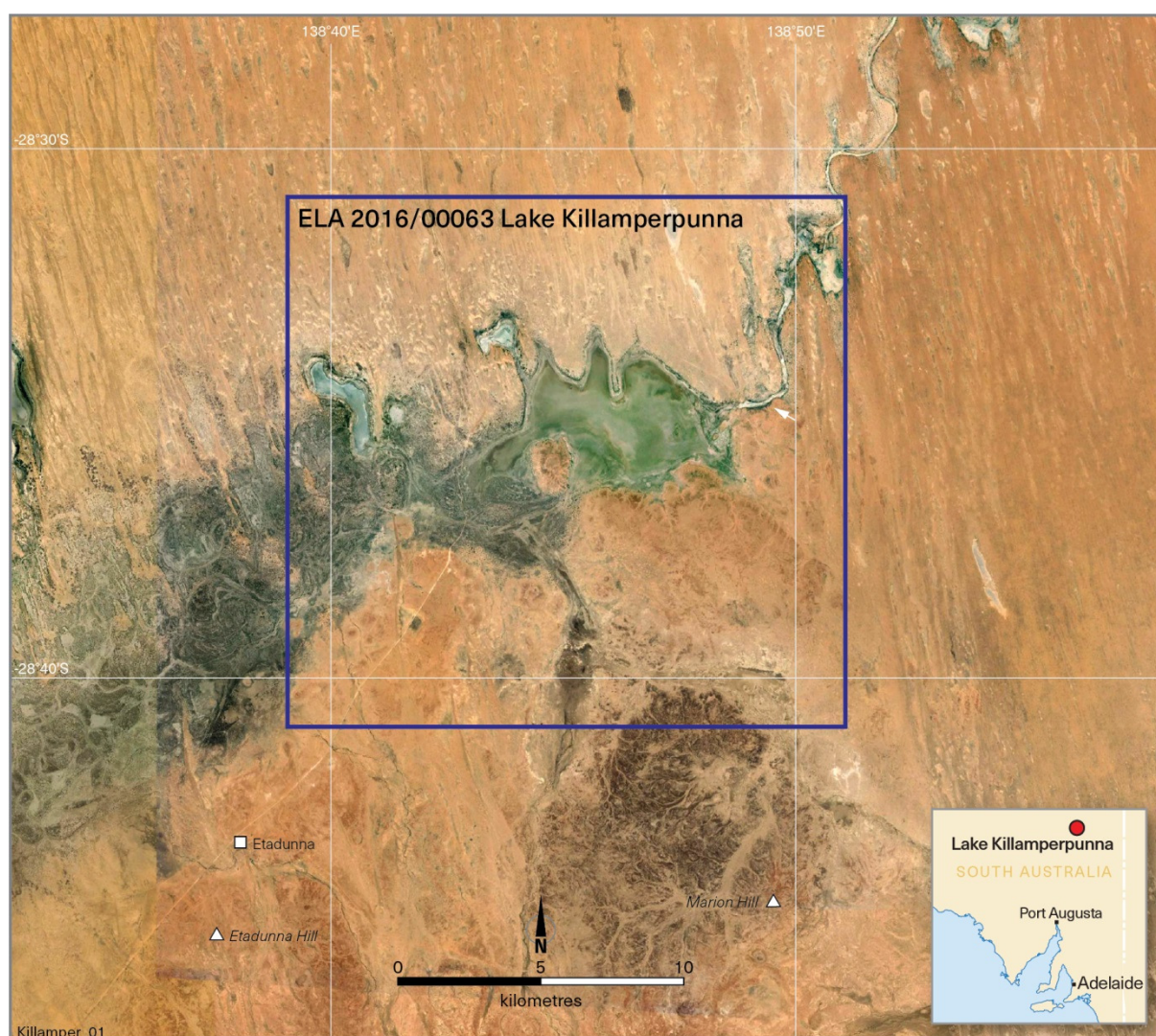


Figure 1: ELA 2016/00063 Lake Killamperpunna location plan.

As a result, the Lake Frome/Central Gawler region in South Australia was identified as a region showing potential for lithium brines and for potash and boron deposits.

There is no recorded past exploration for lithium brines at Lake Florence or Lake Killamperpunna, however the Mernagh et. al. study found that sediments in the catchments of both Lake Florence and Lake Killamperpunna had relatively high lithium concentrations and so have potential to be a good source of lithium.

Next steps

A preliminary programme aimed at sampling and analysing the brine and lake sediments at Lake Florence and Lake Killamperpunna, along with Lake Acraman and recently pegged Lake Gilles, is planned once the tenements are granted and access approvals in place.

Adelaide Resources' lithium exploration programme is complementary to the Company's ongoing gold exploration programmes in the Drummond Basin and on the Eyre Peninsula.

Reference

- ⁽¹⁾ T. P. Mernagh, E. N. Bastrakov, S. Jaireth, P. de Caritat, P. M. English & J. D. A. Clarke (2016): *A review of Australian salt lakes and associated mineral systems*, *Australian Journal of Earth Sciences*, DOI: 10.1080/08120099.2016.1149517

Competent Person Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Chris Drown, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Drown is employed by Drown Geological Services Pty Ltd and consults to the Company on a full time basis. Mr Drown has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Drown consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.