

## Eyre Peninsula lithium potential

### Highlights

- Extensive outcropping pegmatites prospective for lithium mineralisation
- Historic spodumene occurrences reported on Archer tenements
- Elevated tin levels associated with pegmatite
- Lithium exploration complements Archer's Campoona battery grade graphite project
- Sampling and mapping of pegmatites and spodumene occurrences to commence

Archer Exploration has identified multiple occurrences of outcropping pegmatite on the Company's Eyre Peninsula Project which hosts the Company's Campoona battery grade graphite project. The tenement area also contains extensive outcropping pegmatite veins with tourmaline and associated tin mineralisation and historic spodumene occurrences reported to the SA Mines Department (Figure 1 and Figure 2).

The Eyre Peninsula Project is the location of Archer's Campoona battery grade graphite project covers an area of 2,300 km<sup>2</sup>.

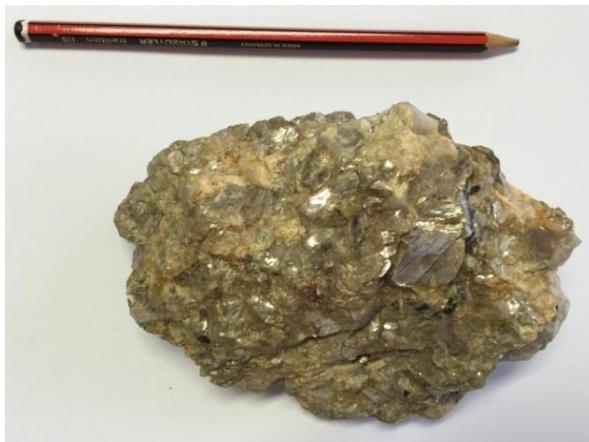


Figure 1: Tin bearing pegmatite.



Figure 2: Tourmaline in pegmatite

During the ongoing geological review of the entire Eyre Peninsula Graphite Project tenement area, the Archer technical team became aware of previously reported spodumene occurrences on the tenement area. The spodumene was reported by a SA Government geological survey with the spodumene confirmed by petrology. No spodumene assay data is available.

The reported presence of spodumene when combined with the presence of extensive outcropping pegmatite bodies and elevated tin and tourmaline levels recorded by Archer (refer to Archer June 2015 Quarterly Report) leads Archer to believe that the larger tenement area may be prospective for lithium mineralisation.

Archer's exploration activities on the Eyre Peninsula have been focussed on the discovery and development of the company's Sugarloaf Agricultural Carbon and Campoona Ultrapure Graphite projects and these projects remain Archer's core focus in the region. During graphite focussed exploration Archer identified numerous pegmatite veins which have not previously been assessed for lithium potential.

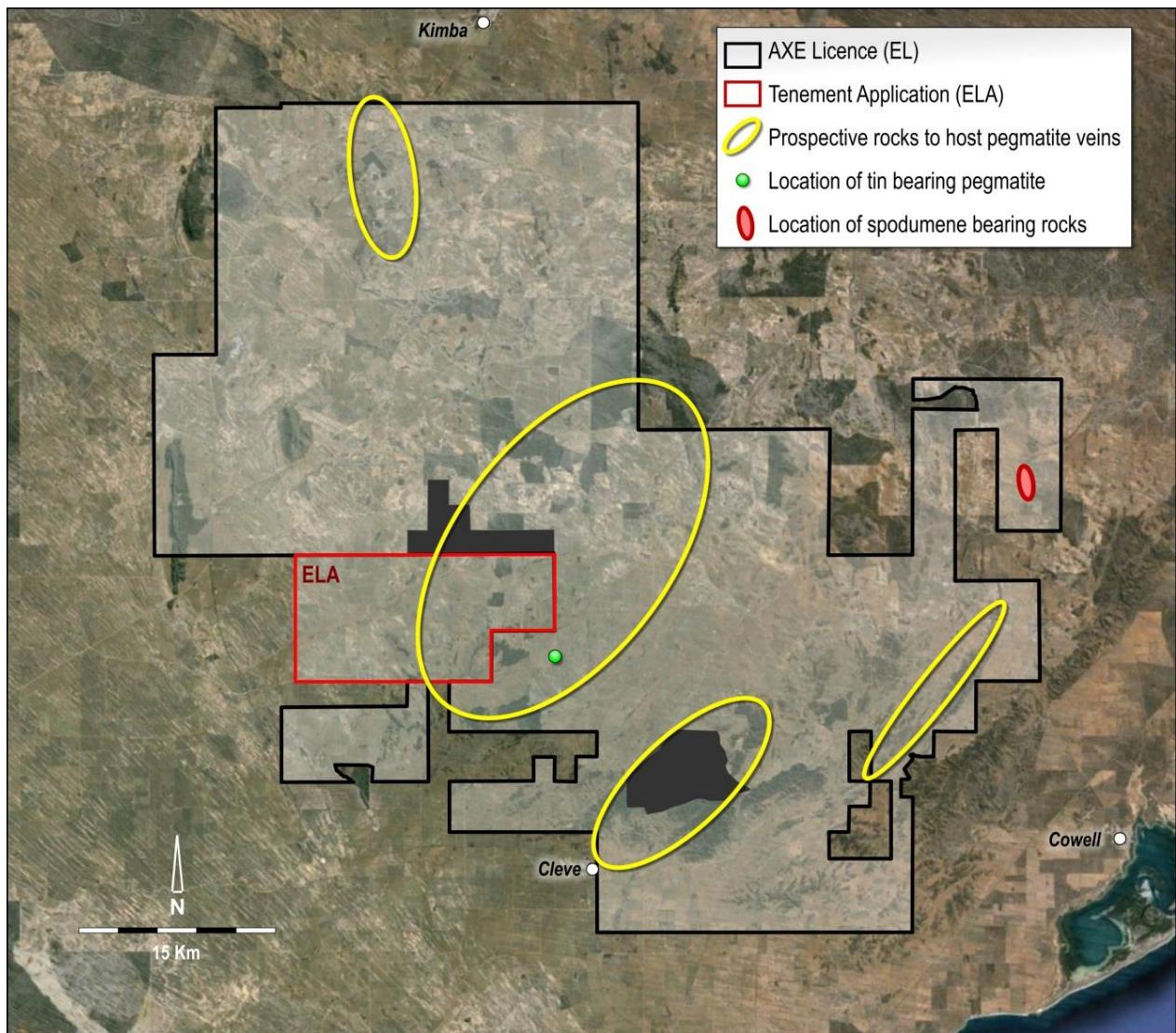
The pegmatite bodies have been well known to Archer and mapped on a sporadic basis as the Company has been focussed on graphite exploration in the immediate area. Previous explorers had been focused on many different rocks types and commodities within the broader Eyre Peninsula Project Area with the pegmatite bodies never tested for lithium.

Fractionation of the pegmatite bodies has been observed in the field with a variety of pegmatites noted (Figure 3).



*Figure 3: Presence of outcropping extensive pegmatites on Archer's Eyre Peninsula Project*

The worldwide demand for lithium ion batteries is exponentially increasing and this growth is forecast to continue. As a result, the demand for lithium and graphite is also increasing. The Company views the exploration for lithium as complementary to its current strategy of developing the Company's Campoona graphite project which is of a quality suitable for use in lithium ion batteries.



*Figure 4: Rocks prospective for lithium bearing pegmatite veins within the Archer tenement area*

Work by Archer in 2015 identified a fractionated pegmatite as a part of ongoing mapping that reported elevated tin (Figure 4). In June 2015 Quarterly Report Archer announced that rock chip sampling of quartz-muscovite pegmatite/greisen reported tin levels of 0.12%. Follow-up sampling (Figure 5) returned multiple tin values above 100ppm.

The reporting of spodumene within the tenement area is significant as spodumene is the main hard rock mineral that is mined as a source of Lithium (Li) (e.g. Greenbushes). Spodumene can occur in pegmatite and aplite rocks and both of these rock types are reported to occur as veins within the Lincoln complex on the Eyre Peninsula.

## Next Steps

Archer is encouraged by these early, initial results and will now formulate a follow-up exploration program to more accurately map and test the fertility of these pegmatite bodies using geochemical and petrological analysis and the location of the historic spodumene occurrences.

This work programme will be carried out concurrently with our continuing focus on bringing into production our low cap-ex magnesite project and the commercialisation of our battery grade graphite projects which also sit on these tenements.



Figure 5: Areal extent of greisen (blue), tin values in ppm and Bartels Gold project (red)

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### Competent Person Statement

Mr Bollenhagen is a Member of the Australasian Institute of Mining and Metallurgy who has more than twenty years' experience in the field of activity being reported. Mr Bollenhagen has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking 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" relating to the reporting of Exploration Results. Mr. Bollenhagen consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

Archer Exploration Limited (ASX code AXE) has 100% ownership of 13 tenements all in South Australia covering more than 4,700 km<sup>2</sup>.

