

ASX Announcement

29th January 2016

# **New ELA Extends Carbon and Graphite Zones**

## Highlights

- Archer has successfully applied for new tenement adjacent to existing project areas
- The new area covers known extensions to Sugarloaf and Central Campoona
- Sugarloaf agricultural and soil remediation testing is continuing
- The Central Campoona extension is expected to provide an additional source of high purity, battery grade graphite

Archer Exploration Limited (ASX: "AXE") is pleased to announce that it has been notified by the SA Department of State Development that the Company's application for a southern extension of Sugarloaf has been successful (ELA 2015/215). The tenement area contains known graphite outcrops so was the subject of competing applications, with Archer's application being selected by the Mineral Exploration Assessment Panel.

Previous exploration by others over the area of the application has identified numerous graphite outcrops and extensions to Central Campoona and Sugarloaf. Archer is confident that upon the grant of the tenement and the completion of early stage exploration that the Company will be able to substantially increase the size of Sugarloaf.

The Sugarloaf project is located on the Company's own farm and next to its proposed graphite processing plant near Cleve on central Eyre Peninsula where a hub of graphite deposits is being developed by Archer to supply the global battery market.

## About Sugarloaf

Testing by Archer has shown that Sugarloaf is not a typical crystalline graphite deposit but a unique form of carbon. Sugarloaf carbon has no defined crystal habit and hence the term **Sugarloaf carbon** now more accurately describes the deposit's gross mineral composition. Chemically, Sugarloaf carbon contains <15 % carbon, >50% silica and multiple trace elements in its bulk structure.

Drilling by Archer at Sugarloaf has supported an Exploration Target of 40 – 70 million tonnes at a grade of 10 -12% TC. (It must be noted that whilst the Exploration Target is large, the potential quantities and grades presented in the Exploration Target are conceptual in nature, there has been insufficient exploration to define an overall Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource).



Archer previously reported (refer to ASX announcement dated 2 September 2015) that the University of Adelaide had conducted a series of three different tests using raw Sugarloaf graphite, including wheat plant trials, to principally examine plant growth, plant nutrient uptake and soil acidity/pH impacts. The first round of findings favoured its optimal use as a soil conditioner and soil remediation agent.



Figure 1: Archer graphite tenements including ELA 2015/15 (shown in red).





Figure 2: Sugarloaf Exploration Target (red) and interpreted extension (blue)

### About Campoona

Tests have shown that Central Campoona contains a similar high purity, graphite suitable for lithium-ion battery anodes as found at Campoona Shaft. This graphite has been shown to perform at equivalent or better levels than commercially available synthetic graphite for lithium-ion batteries. Additional testing will look to further improve the anode performance through spheridisation of Campoona's graphite.

### **Next Steps**

Upon the grant of the tenement, Archer will model and review the existing geological information to determine a revised Exploration Target for Sugarloaf and to identify any extensions to Central Campoona.



For further information please contact:

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The exploration results and exploration targets reported herein, insofar as they relate to mineralisation, are based on information compiled by Mr. Wade Bollenhagen, Exploration Manager of Archer Exploration Limited. 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 is an Australian Stock Exchange listed company with 100% ownership of 16 tenements all in South Australia covering more than 5,000km<sup>2</sup>.

