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ASX ANNOUNCEMENT / MEDIA RELEASE

**New Archer results add to Cleve area on SA's Eyre Peninsula  
as an emerging graphite province**

**Highlights**

- Further graphite identified in samples taken from Archer's 100% owned L505, Wilklow and SS1 targets on EL4277 North Cowell that adjoins Wildhorse Plain.
- Includes very large flake graphite up to 800µm (0.8mm) at Wilklow and up to 350µm at the L505 prospect.
- The additional graphite occurrences reinforce the Cleve Uplands area as an emerging graphite province.
- Large flake graphite to 200µm also recorded at the 405 prospect on Wildhorse Plain.
- Drilling of the Campoona – Campoona South graphite deposits scheduled to begin later this month.

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The potential for a new graphite province in the Cleve area of South Australia's Eyre Peninsula has been further strengthened with new results by Archer Exploration Limited (ASX: "AXE") adding to a suite of similar results released by the Company over the past two months.

Archer is pleased to announce today petrology results for four additional locations on two tenements directly east and southeast of its main Cleve area graphite projects at Sugarloaf, Campoona, Campoona South and Council Pit.

These locations (figure 1) occur on the Wildhorse Plains JV tenement (EL4693) and on Archer's 100% owned North Cowell (EL 4277) tenement that adjoins Wildhorse Plains.

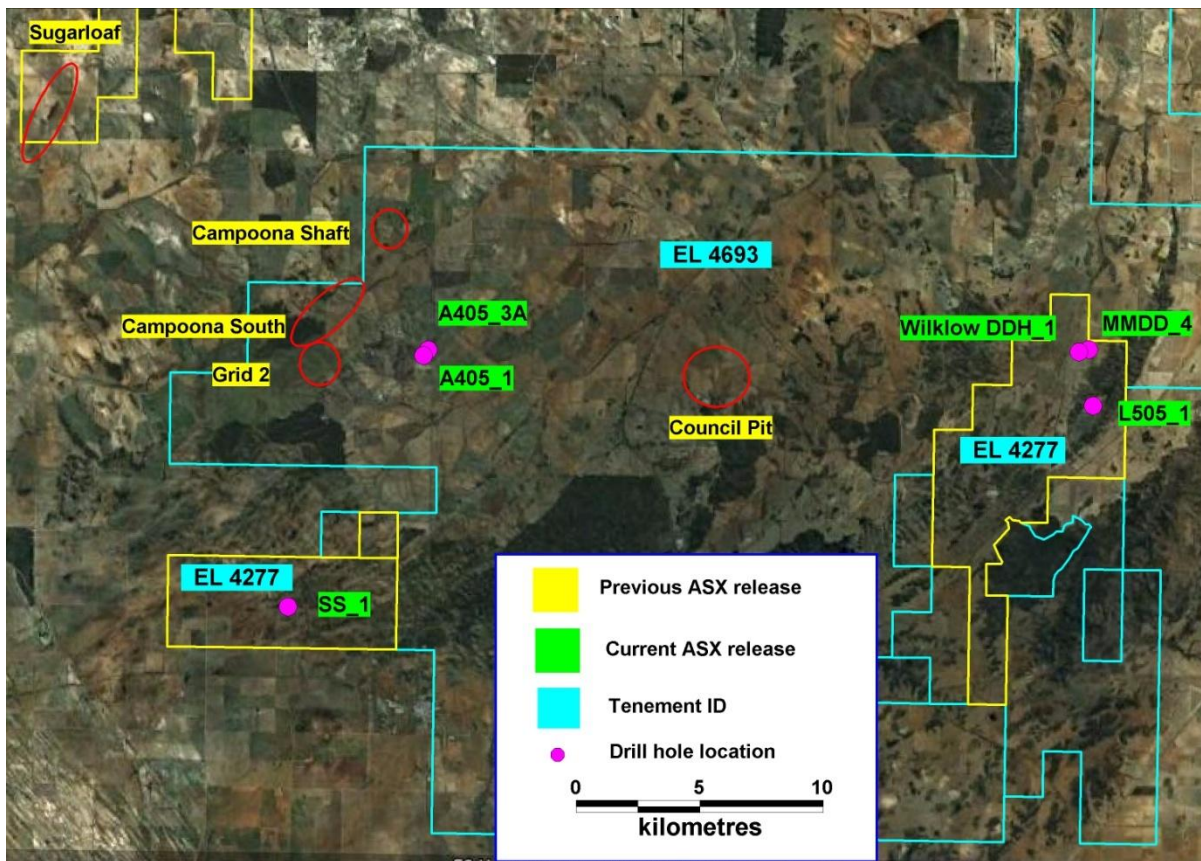
The new results follow a strategy by Archer to initiate an ongoing ranking process for all of the known graphite occurrences on the Company's extensive Cleve Uplands tenements package, by recovering and sampling drill intervals from historic exploration drilling.

Historic drilling usually targeted EM geophysical anomalies thought to reflect hidden base metals (copper, lead, zinc) but when drilled, the source of the conductivity was invariably related to the presence of graphite.

As graphite was not of interest at the time, drill holes were not assayed for carbon.

Where possible, Archer has now been progressively retrieving historic core and drill chips for carbon assaying and petrological examination, to confirm the previously recorded but unassayed graphite mineralisation.

As a part of this process Archer identified anomalous gold mineralisation at the A405 target, as well as the presence of widespread fluorite. Many other locations report levels of non-economic copper, zinc, silver and REE's, all of which assist in building models for regional exploration.



**Figure 1. Locations of recent petrology within EL 4277 North Cowell and EL 4693 Wildhorse Plain**

The Table 1 (below) reports the results of the petrology and summarises visual estimates of graphite abundances, approximate size ranges and “average size” for the additional for locations tested.

**Table 1 Summary of petrology**

Tenement	Sample	Estimated Abundance	Minimum size (µm)	Maximum size (µm)	Average size (µm)
<b>EL4277 North Cowell</b>	L505-1	10%	5 x 30	50 x 350	30 x 100
	SS1	3-5%	-	-	<5 x <20
	Wilklow DDH-1	7-10%	10 x 80	150 x 800	<b>50 x 250</b>
<b>EL4693 Wildhorse Plain</b>	A405-3A	3-5%	5 x 30	20 x 150	10 x 80
	A405-2	5%	5 x 40	80 x 200	40 x 100

A summary of the graphite occurrences is shown in Table 2 below.

**Table 2: Summary of graphite occurrences in five samples described in this report, estimated abundances and estimated size of individual flakes**

L505-1 (78-80m)	Schistose biotite with 10% mostly intergrown graphite.
SS-1 (94-98m)	Crenulated fine quartz, muscovite, biotite schist with <5% ultrafine graphite localised within crenulations.
Wilklow DDH-1 (83.5m)	Granulose gneiss of quartz microcline-altered cordierite, incorporating irregular foliae of biotite ± minor sillimanite, garnet and graphite. Graphite occurs as large random flakes within quartz and biotite, forming 7-10% sample.
A405-3A (30m)	Granitic gneiss including sparse (3-5%) very fine scattered graphite.
A405-2 (41.5 – 45.1m)	Oxidised siderite with intricately intergrown chloritic-clay, minor scattered marcasitic pyrite and 5% individual flakes of graphite.

A brief description of each of the new graphite areas is presented after the table summaries. Please note, the area L501 (a historic uranium target) is being discussed for the first time.

### **North Cowell**

<b>L505-1, (78-80m)</b>	Contorted, distorted and layered quartz, biotite schist. <b>An estimated 10% graphite</b> mostly intergrown within schistose biotite. 10% granular pyrite and rare chalcopyrite scattered along the layering.
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Reflected light microscopy indicates an approximate total of 10% graphite variably as discrete flakes and in poorly defined shreds, mostly intricately intergrown within the distorted schistose biotite, but rarely incorporated within the equally irregular quartz layers. Individual graphite flakes vary from 5µm wide x 30µm long, **to 50µm wide x 350µm long**. These flakes commonly form composite shredded lenses elongate along the schistosity. No other assays have been performed on the core by Archer.

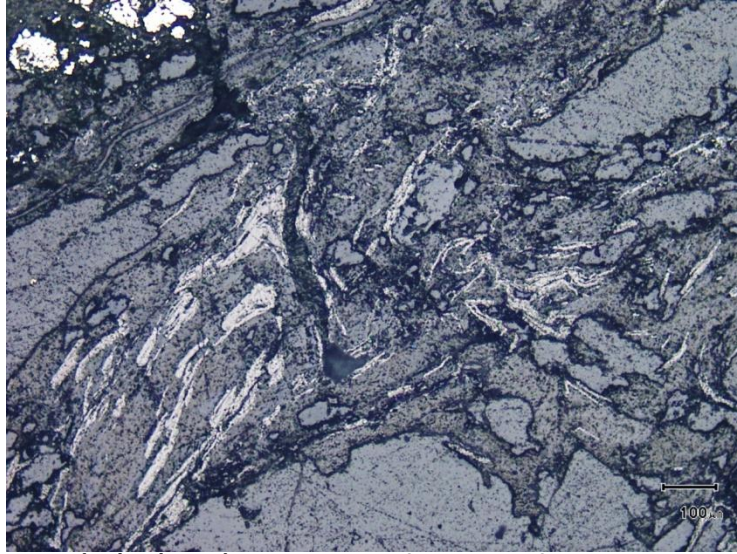


Plate 1. Polished section (PS), (x100). Examples of graphite flakes, as individuals, composite and crenulated.

SS-1, (94-98m)	Crenulated fine quartz, muscovite, biotite schist, accessory small garnets and pyrite. Graphite (<5%) ultrafine localised within several crenulations.
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Rare black and crenulated kernels from 1mm to 3mm maximum dimension, incorporated within several crenulations of the schistose micas are petrographically identified as being “carbonaceous”, being composed of compact ultrafine graphite, **individual flake size <5µm x <20µm**.



Plate 2. TS. OL. (x50). Shows relative concentration of extremely fine graphite in nodes of folded micaceous foliae, between quartz layers.

The assaying highlighted anomalous zinc mineralisation including **22m @ 0.15% Zn** from 78m downhole.

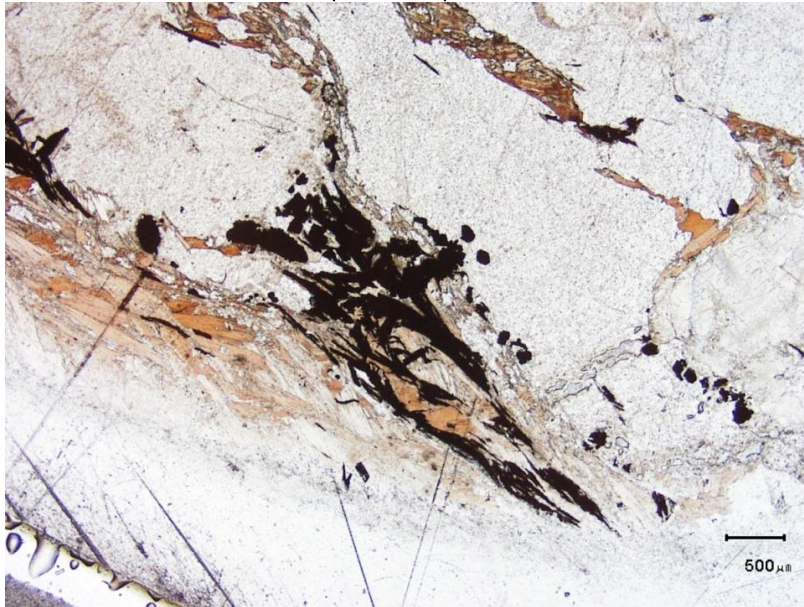
Wilklow  
(83.5m)

DDH-1

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Irregularly medium to coarse granulose gneiss of quartz microcline-altered cordierite, incorporating irregular foliae of biotite ± minor sillimanite garnet and graphite. Graphite as random flakes within quartz and biotite, forming 7-10% of the polished thin section area.

Graphite flakes range in individual size from 10µm x 80µm to shredded composites 150µm wide x 800µm. Average graphite size was estimated as 50µm x 250µm.



Plates 3 and 4. TS. OL. (x20). Examples of mode of occurrence of graphite, mostly within biotite in Fig 3, and randomly in quartz in Fig 4.

## Wildhorse Plain

<b>A405-3A, (101m)</b>	An apparent sheared and comminuted (tectonised) “granitoid” or granitic gneiss. Abundant fine to coarse cataclastic fragments of quartz > K-spar, occur within a schistose altered micaceous alteration matrix, including <u>sparse (3-5%) very fine scattered graphite.</u>
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The minor carbonate is late-stage/interstitial and locally in crosscutting veinlets. The minor graphite occurs as flakes **5µm x 20µm to 20 x 150µm** size, scattered as individuals, also in small loose clusters and rarely in very short foliae, all within the phyllosilicate matrix.



**Plate 5. PS. Higher magnification (x200) to show detail of extremely fine graphite (most of the bright particles), dispersed through the biotite-rich matrix.**

Previous sampling of drillholes at the A405 target area identified

- **11m @ 0.32g/t Au and 7g/t Ag (A405\_2)**
- **5.8m @ 0.48g/t Au and 2.9g/t Ag (A405\_3A)**

Significant epithermal alteration was historically reported during drilling. This is borne out by the reference to a purple tinge was reported in one hole and subsequent sampling by Archer of a nearby pit that identified coarsely crystalline fluorite. It is believed that this occurrence is related to a larger system where fluorite was reported along strike 1.2km NE of A405.

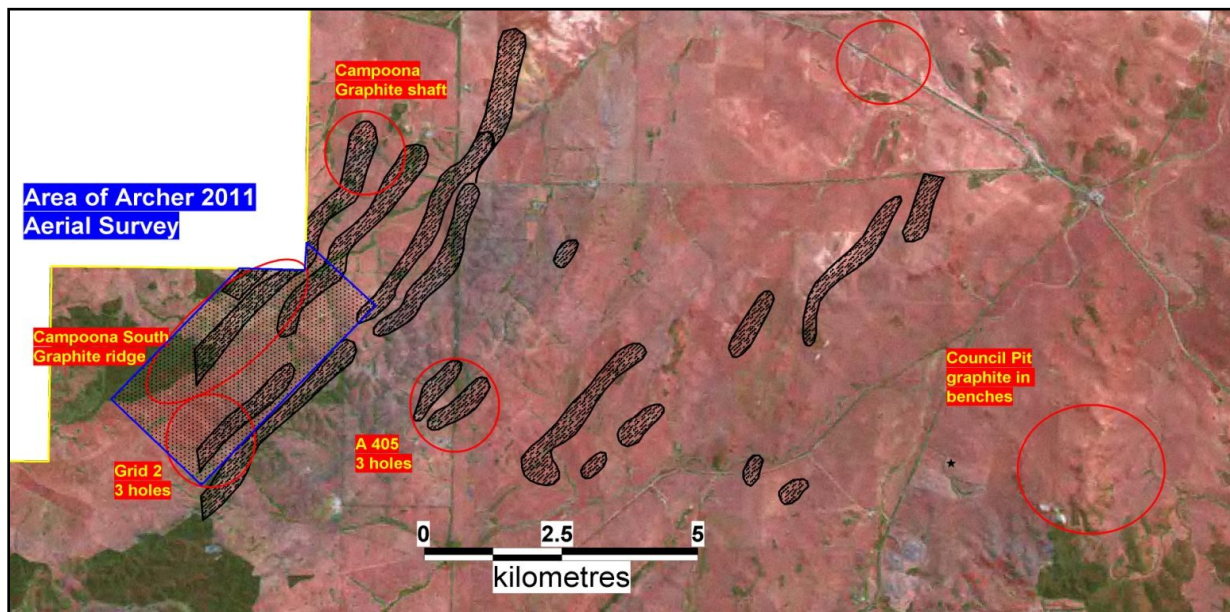
**A405-2, (136-148m)**

Heterogeneous mass of fine patchy oxidised siderite with intricately intergrown chloritic-clays, representing “alteration”, which may be metasomatic and/or supergene. Minor scattered marcasitic pyrite and about 5% individual flakes of graphite.

The minor graphite occurs mostly as individual flakes, with a random/sporadic distribution mostly within chloritic-clays. The abundance is difficult to estimate optically but may form about 5% of this sample. Minimum size is about  $5\mu\text{m} \times 40\mu\text{m}$ , maximum about  $80\mu\text{m} \times 200\mu\text{m}$ , **average about  $40\mu\text{m} \times 100\mu\text{m}$** , generally weakly crenulated.

## EM Survey

In August 2011, AXE announced to the market the results of a close spaced electromagnetic survey completed in early August. The area surveyed is shown in figure 2 below highlighted as the blue rectangular area. The close spaced detailed EM survey was to follow up a 1982 Shell survey of the western part of EL 4693 and in particular to provide quality data to try to determine if there is a correlation between conductivity and the morphology and flake size (that is quality) of the graphite present. ***If successful, this modelling could become a predictive tool to ranking of the numerous graphite prospects and deposits as to graphite morphology and likely economic significance.***



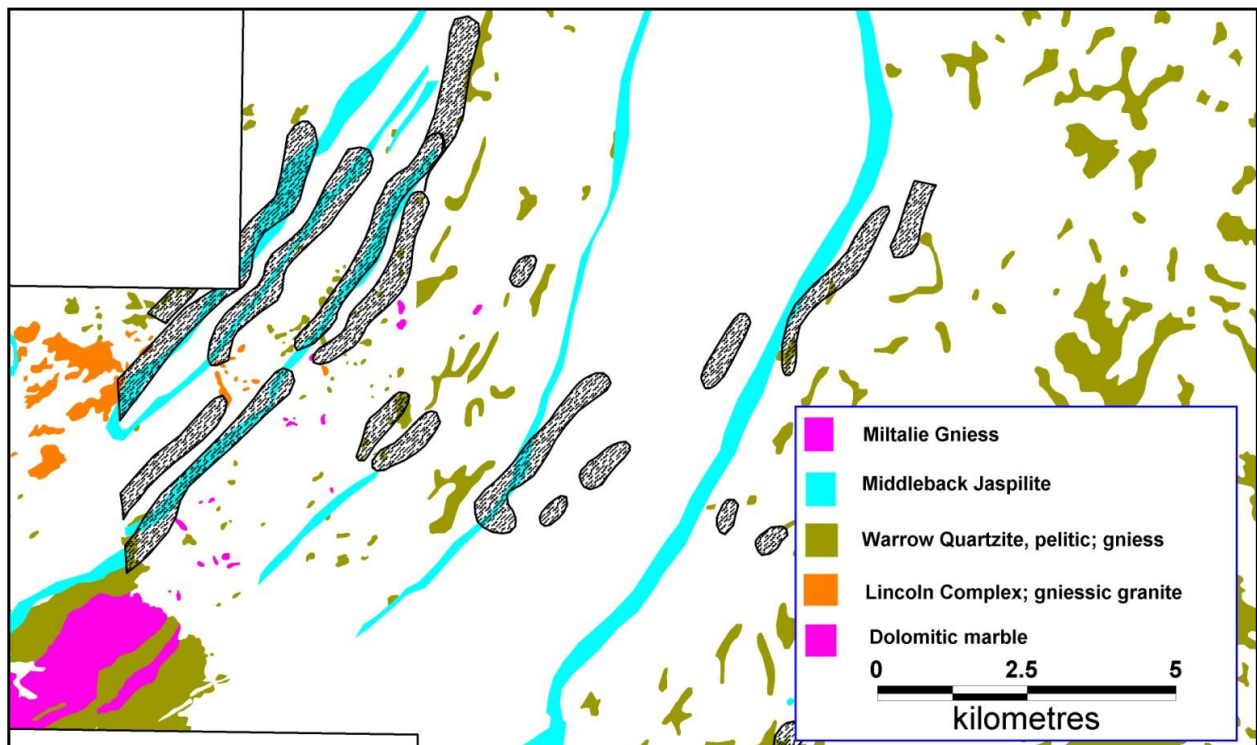
**Figure 2. Historic EM over EL 4693 - dark linear shapes are conductive bodies identified by Shell 1982.**

From figure 2 above, it is possible to make several important observations as follows:

1. The close spaced EM survey closely mirrors the historic wide spaced survey data.
2. Both EM surveys accurately reflect outcropping high grade graphite.

3. The Campoona – Campoona South trend is a significant regional trend.
4. There is at least another +20km of strike of highly conductive rocks within the immediate Campoona – Campoona South trend.
5. The geophysical data supports the observation that that the two occurrences at Campoona South and the Campoona Shaft are one continual graphitic unit. This is supported by the geology and the relationship of the graphite to the Middleback Jaspilites (BIF's) (figure 3) below.
6. The potential for large flake graphite is enhanced by the nearby presence of gneissic granite and the presence of high grade metamorphic mineral assemblages.

In the east (EL 4277), one BIF unit has been mapped by PIRSA, the deformation (pressure and temperature changes the rock has experienced through time) has led to the development of high grade metamorphic mineral assemblages. This rock history and the presence of a large shear zone has resulted in the large flake graphite development observed at Wilklow.



**Figure 3. Location of EM signatures relative to the BIF's (Middleback Jaspilites).**

Figure 3 shows that the Campoona area has been intruded by huge volumes of gneissic granite that have provided the right conditions for the formation of large flake graphite.

### **The next steps**

The Sugarloaf prospect, whilst not having voluminous intrusive granitic gneiss, has been intruded by granite. Archer will test for the presence of large flake graphite at Sugarloaf by recovering samples from holes it drilled in 2008 that reported granitic intrusions proximal to the graphitic schist.

Drilling of the Campoona – Campoona South graphite deposits is scheduled to begin later this month.



For further information please contact:

Mr Greg English  
Chairman  
Archer Exploration Limited  
Tel: (08) 8272 3288

Mr Gerard Anderson  
Managing Director  
Archer Exploration Limited  
Tel: (08) 8272 3288

*The exploration results 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 sixteen years experience in the field of activity being reported. Mr. Bollenhagen consents to the inclusion in the report of matters based on his information in the form and context in which it appears.*