



31st August 2011

General Manager
The Company Announcements Office
Australian Securities Exchange

EXCELLENT CONTINUITY TO THE HIGH GRADE CAMPOONA GRAPHITE OCCURRENCES

Highlights

- **An airborne EM survey at Campoona has indicated excellent continuity of the high grade Campoona South graphite deposit along strike to the north and south under cover and also down-dip.**
- **Modelling and field observations indicate that the Campoona South graphite deposit has a minimum strike length of 2 kilometres and extends to depths of greater than 200 metres vertically below surface. This is highly significant given the very high carbon grade of the outcrop at 25.4% C.**
- **Grid 2, another zone of graphite some 1.2km south of Campoona South, has a very strong conductivity response indicating the presence of significant graphite beneath cover. Drilling by Esso Exploration in the 1980s recorded abundant graphite over down hole intervals exceeding 40 metres.**
- **The strong conductivity response at Grid 2 suggests a minimum strike length of 3 kilometres and that it extends to over 200 metres vertically below the surface.**
- **Drilling is scheduled to start in late September following drilling contractor delays.**

Exploration work by Archer Exploration Limited ("Archer") has identified a number of very promising graphite deposits and graphite prospects on EL3711 Carappee Hill and EL4693 Wildhorse Plain (figure 1) located near Darke Peak on Eyre Peninsula, South Australia.

In July 2011 Archer reported the results of detailed petrological work that identified highly prized large flake graphite at each of the first three graphite occurrences tested on Wildhorse Plain.

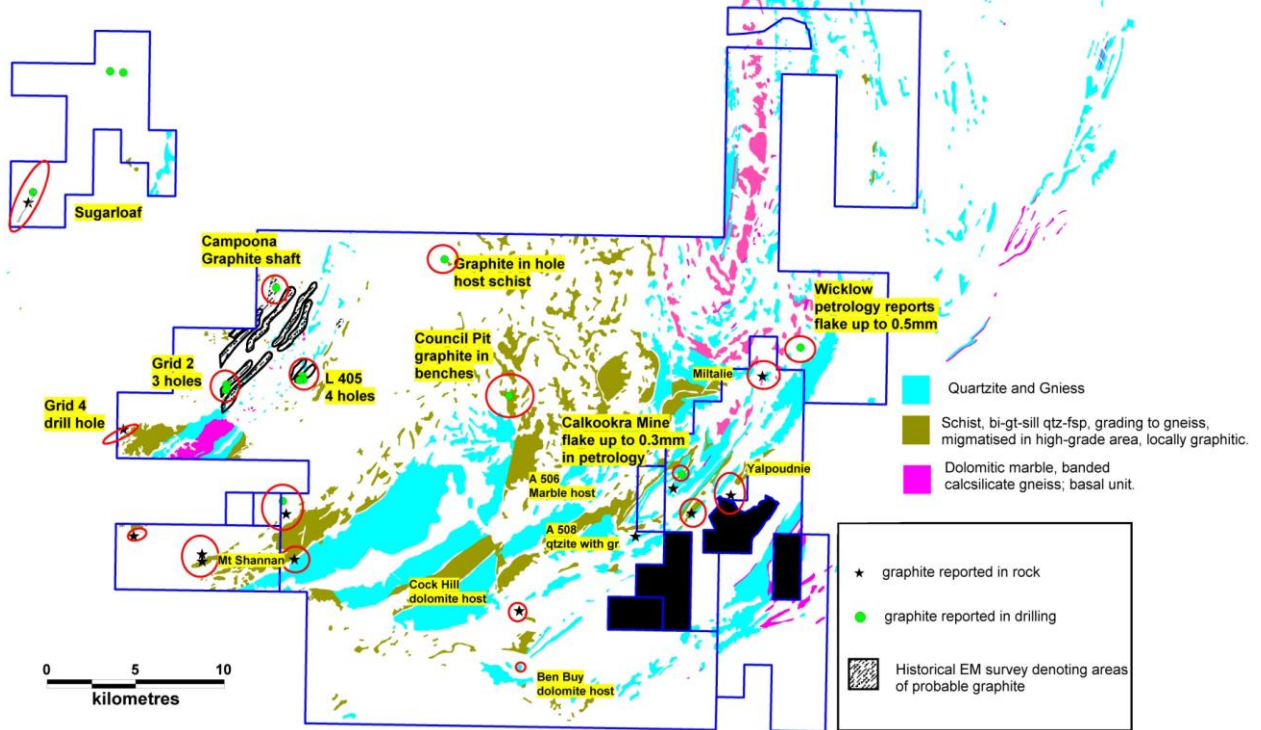


Figure 1 Archer Exploration Limited's numerous graphite deposits and occurrences on EL3711 Carapee Hill and EL4693 Wildhorse Plain near Darke Peak, Eyre Peninsula, South Australia.

Campoona Graphite Shaft samples recorded 30% crystalline graphite ranging to 250µm (US 60 mesh and classified as Large flake graphite) with an average length of 100µm (US 140 mesh).

Campoona South recorded 15 to 20% crystalline graphite ranging to 300µm (US 50 mesh and classified as Extra Large flake graphite) with an average length of 250µm (US60 mesh) within graphite clots up to 4mm in length.

Council pit recorded 15 to 20% crystalline graphite with an average length of 300µm (US50 mesh) and maximum flake size of 1,000µm (US 18 mesh classified as Super Large graphite flake graphite).

To follow up these very promising targets, an airborne electromagnetic geophysical survey was flown over the northwest portion of EL4693 Wildhorse Plain over two days in early August 2011.

Graphite is a highly conductive, that is, it conducts electricity. EM has proven to be very efficient at identifying buried conductive bodies. Previous explorers in the Darke Peak - Cleve area used electromagnetic surveys when searching for buried base metal sulphide deposits (copper, zinc and lead). When these explorers drill tested their buried EM anomalies they invariably intersected graphitic rocks which had provided the anomalous EM signature.

The specific aims of the August 2011 airborne EM survey were to determine the EM signature of the outcropping high grade Campoona South graphite deposit, to determine the potential strike of the graphite north and south under cover and to define the continuity of another graphite body, the Grid 2 occurrence, immediately to the south of Campoona South.

The processed EM data showed strong linear continuity in the conductive rocks. Campoona South (plate 1) which forms a prominent outcropping ridge, supports the conclusion that the pronounced linear conductive features are graphitic in nature. Campoona South recorded 15 to 20% crystalline graphite ranging in size to 300 μ m (US50 mesh and classified as Extra Large Flake graphite) with an average length of 250 μ m (US60 mesh) within graphite clots up to 4mm in length. Samples from the outcrop returned the exceptional high grade of 25.4% C.

In the Campoona area, graphitic units occur as part of the basal sequence of Banded Iron Formations (BIF's). These BIF's can be easily traced along the surface.



Plate 1. Looking North at graphite outcrop along Campoona South

Vertical Extent to Graphitic Bodies

A series of depth slices at 40m, 60m and 100m are shown below (figures 2 to 4). These images show the processed conductivity magnitude of the rocks within the survey. Both Campoona South (outcrop) and Grid 2 (historic drill intercepts) are shown as well as their general trend.

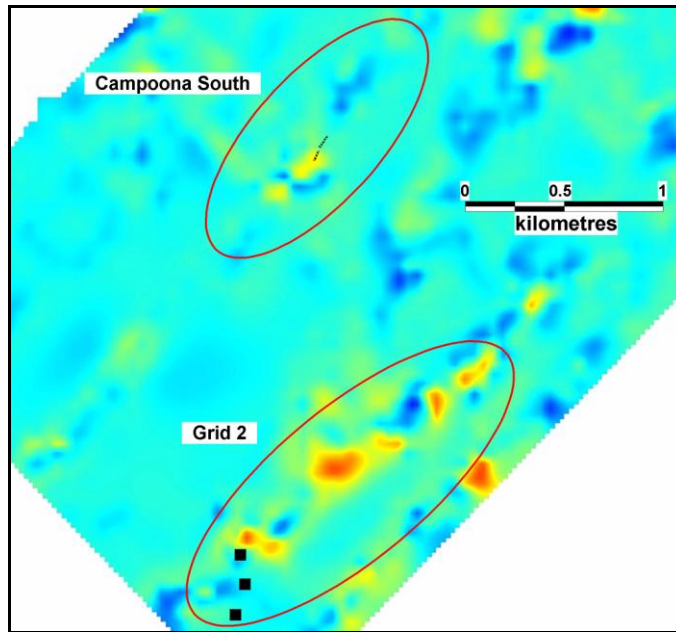


Figure 2 Depth slice from 40m vertically, conductive areas are brightest areas.

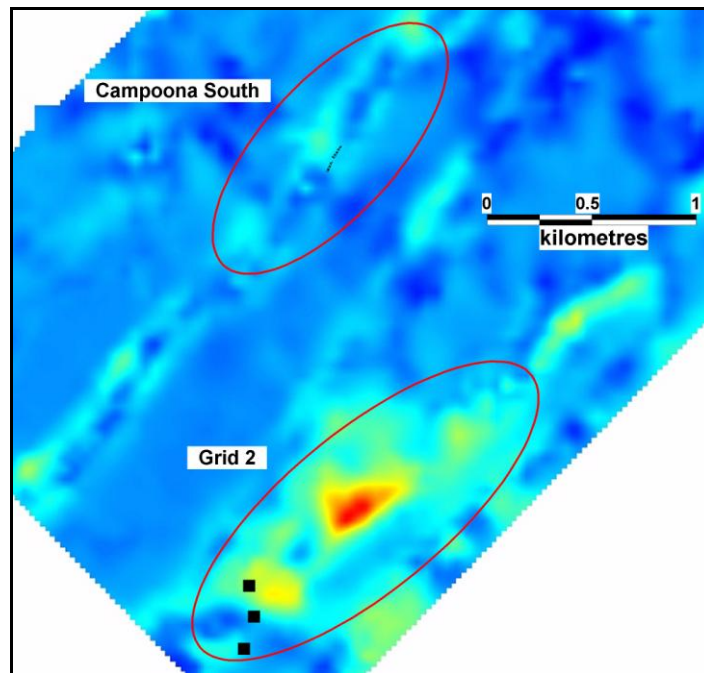


Figure 3 Depth slice from 60m vertically.

From figures 2 and 3, the linear trend of the conductive rocks (graphite) can be seen extending out of the Campoona South area towards the south west. The conductivity of the Grid 2 area remains the same.

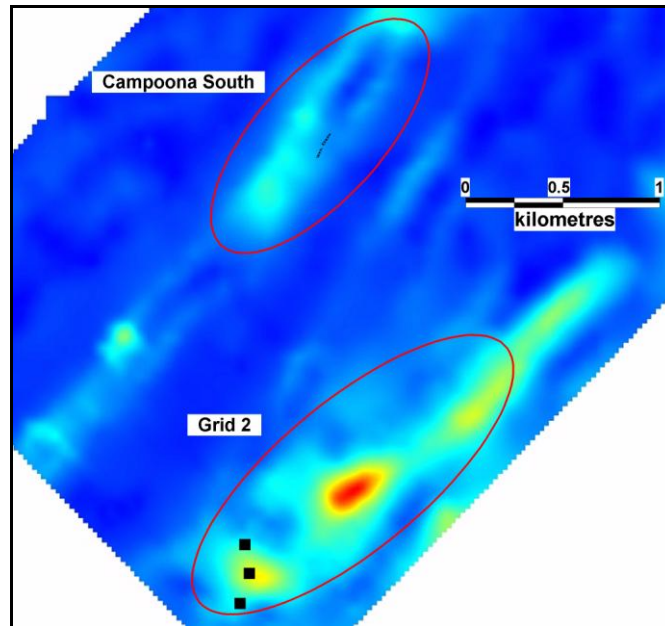


Figure 4 Depth slice from 100m vertically,

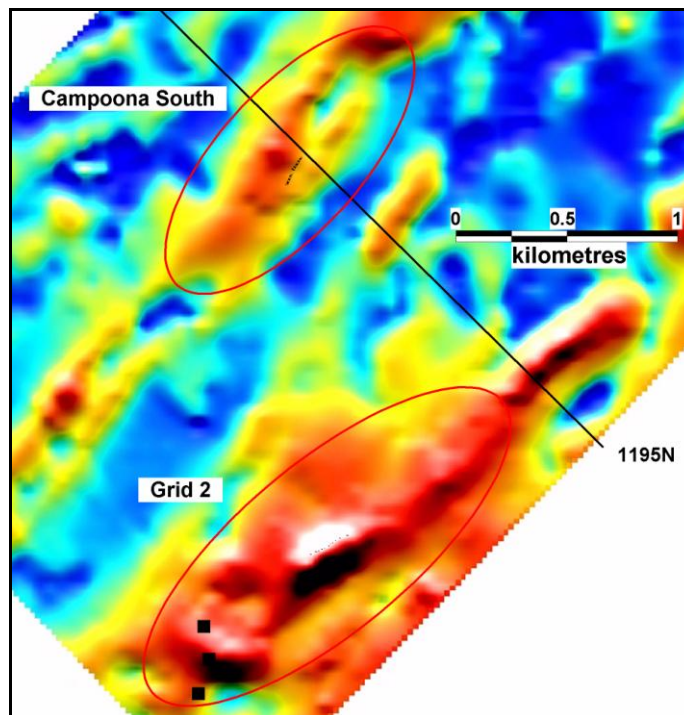


Figure 5. Depth slice from 80m showing the conductive structures, NOT the magnitude of the response. Section line 1195N shown for reference

Figure 5 (above) shows the two conductive structures extending south out of Campoona South and the larger mass extending north from Grid 2.

Also highlighted in Figure 5 is a section line (1195N) taken through Campoona South and Grid 2. Figure 6 below shows the two graphitic bodies in plan section.

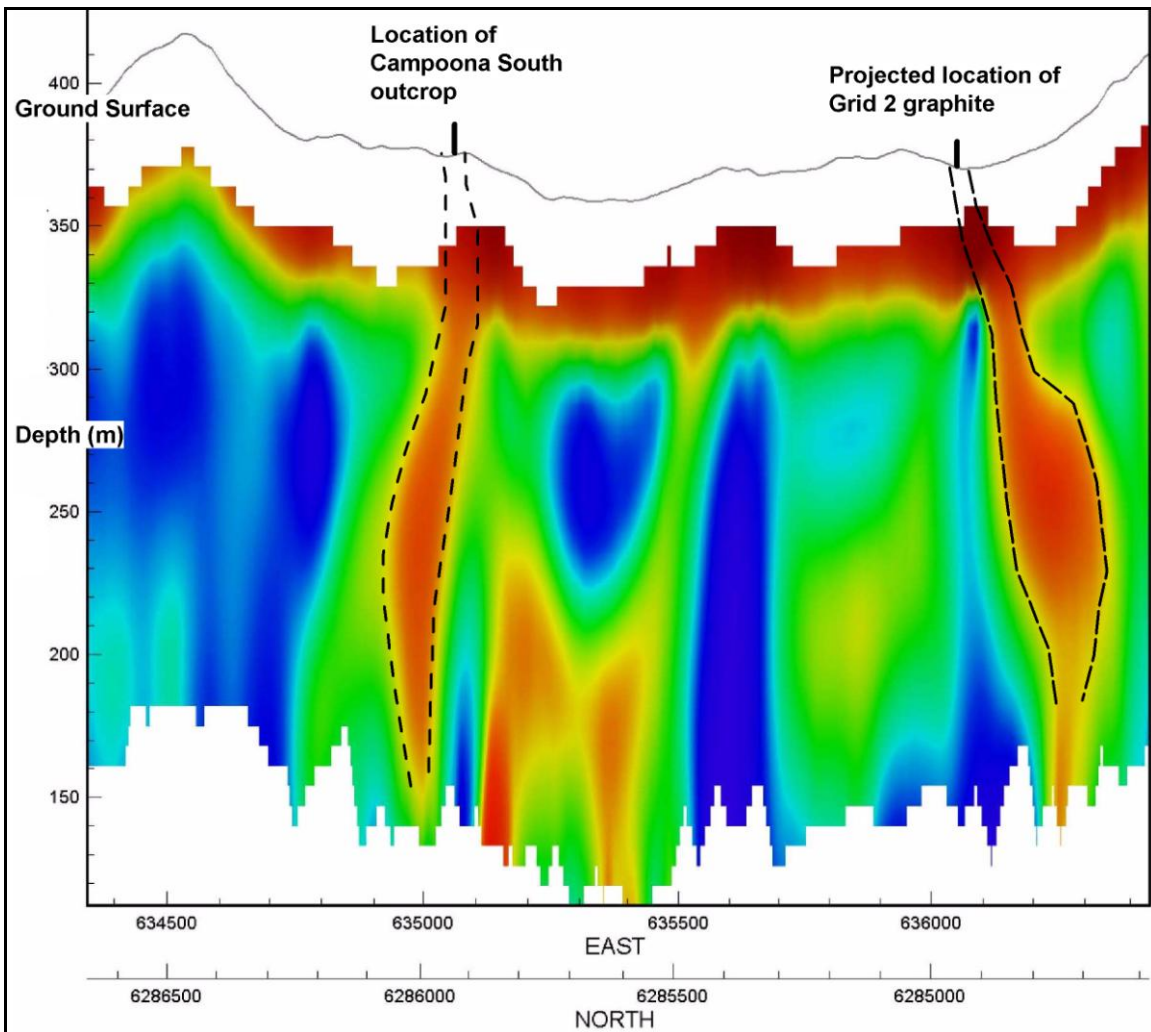


Figure 6 Section representation of the highly conductive Campoona South and Grid 2 graphite, North is on the left of the page. The two graphite deposits are labelled and depth extents highlighted.

Figure 6 shows that both Campoona South and the Grid 2 occurrences are persistent bodies that extend to a depth of at least 200 metres. Moreover these conductive zones can be observed from the north of the EM survey area to the south of the EM survey area, the strike length of over 3km.

Initially Archer planned to commence drilling these two potentially substantive graphite deposits in August 2011, but the contractor suffered delays. That drilling is now scheduled to commence in late September. Due to the presence of crops, this round of drilling will be confined to drilling on access tracks. Despite the limitations of drilling on tracks, this drilling will give sufficient coverage to be able to test the potential of the two graphite deposits.

A second larger drilling campaign is scheduled for early calendar 2012 following the 2011 harvest.

About Graphite

Graphite and diamonds are the only two naturally formed polymers of carbon. Graphite is an excellent conductor of heat and electricity and has the highest natural strength and stiffness of any material. It maintains its strength and stability to temperatures in excess of 3,600°C and is very resistant to chemical attack. At the same time it is one of the lightest of all reinforcing agents and has high natural lubricity.

Traditional Uses for Graphite

Traditional demand for graphite is largely tied to the steel industry where it is used as a liner for ladles and crucibles, as a component in bricks which line furnaces and as an agent to increase the carbon content of steel. In the automotive industry it is used in brake linings, gaskets and clutch materials. Graphite also has a myriad of other uses in batteries, lubricants, fire retardants, and reinforcements in plastics.

Industrial demand for graphite has been growing at about 5 per cent per annum for most of this decade due to the ongoing industrialization in China, India and other emerging economies.

Rapidly Growing Demand for Graphite from “Green Initiatives”

Graphite demand is surging in response to a number of green initiatives including lithium-ion batteries, fuel cells, solar energy, semi-conductors, and nuclear energy. Many of these applications have the potential to consume more graphite than all current uses combined.

The market for graphite exceeds one million tonnes per year with some 600,000 tonnes produced as amorphous graphite powder and 400,000 tonnes of various sized crystalline flake graphite.

China produces around 80 per cent of the world’s graphite supply. Approximately 70% of Chinese production is graphite powder termed amorphous graphite. Chinese graphite is declining in quality and costs are increasing due to the effects of high grading and to tightening labor and environmental standards. The majority of Chinese graphite mines are small and many are seasonal. Easily mined surface oxide deposits are being depleted and mining is moving into deeper and higher cost deposits. China now has a 20% export duty on graphite, as well as a 17% VAT, and has instituted an export licensing system to ensure supply to its domestic economy including its burgeoning steel industry which internally consumes a great deal of graphite. These measures are creating supply concerns for the rest of the world.

The demand for graphite is surging as the world seeks newer and better energy storage solutions to provide clean portable energy, alternative fuel for the automotive industry (the emergence of hybrid electric vehicles) and energy storage solutions for green energy initiatives such as solar energy.

Graphite is in strong demand for use lithium-ion batteries. Lithium-ion batteries are smaller, lighter and more powerful than traditional batteries. They have no memory effect and a very low rate of discharge when not in use. As a result, most portable consumer devices such as laptops, mobile phones, MP3 players and digital cameras use lithium-ion batteries. These batteries are now also being used in power tools.

However, lithium-ion batteries are now being used in hybrid electric vehicles (“HEV”), plug in electric vehicles (“PEV”) and all electric vehicles (“EV”) where the batteries are large and the potential demand for graphite huge. There is twenty times more graphite than lithium in lithium-ion batteries.

While batteries store electrical energy for subsequent use, fuel cells also generate electricity through chemical reactions and therefore need to be periodically “refueled”. Fuel cells can be used in both stationary and mobile applications. Fuel cells use substantially more graphite than lithium ion batteries. Fuel cells have no moving parts, are long lasting, low maintenance, quiet and reliable and produce little or no waste products.

Graphite use is also expected to rise sharply due to its growing use in Pebble Bed Nuclear Reactors (“PBNR”). These reactors are small, modular nuclear reactors. The fuel is uranium imbedded in graphite balls the size of tennis balls. These reactors have a number of advantages over large traditional reactors namely:

- Lower capital and operating costs.
- They use inert gases rather than water as coolants. Therefore, they do not need the large, complex water cooling systems of conventional reactors and the inert gases do not dissolve and carry contaminants.
- These reactors cool naturally when shut down.
- The reactors operate at higher temperatures leading to more efficient use of the fuel and they can directly heat fluids for low pressure gas turbines.

The first prototype is operating in China and the country has firm plans to build 30 by 2020. China ultimately plans to build up to 300 Gigawatts of capacity and PBNRs are a major part of the strategy.

Small, modular reactors are also very attractive to small population centers or large and especially remote industrial applications. Companies such as Hitachi are currently working on turn-key solutions. Researchers at West Virginia University estimate that 500 new 100GW pebble reactors will be installed in the US by 2020 with an estimated graphite requirement of 400,000 tonnes. This alone is equal to the world’s current annual production of flake graphite without taking into account pebble reactor demand from the rest of the world, growing industrial demand and growing demand from other applications such as lithium-ion batteries. It is estimated that each pebble reactor will require 300 tonnes of graphite at start up and 60-100 tonnes per year to operate.

Surging Demand Pushes Graphite Prices

Surging demand has and continues to drive graphite prices higher.

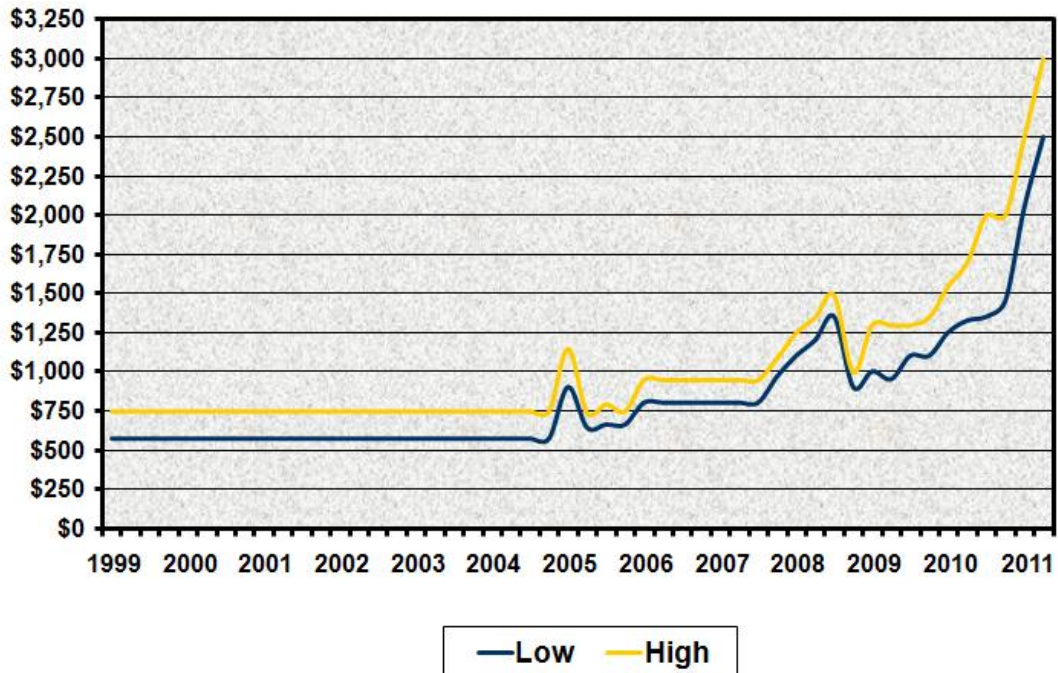
2010 Year End Graphite Prices per Tonne

Amorphous high grade powder grading 99% to 99.9% C, +400 mesh [#]	\$35,000
Large flake graphite, 94% to 97% C, +80 mesh	\$2,500
Large flake graphite grading 90% C, +80 mesh	\$1,375
Fine flake 94% to 97% C, -80 +100 mesh	\$1,795
Fine flake 90% C, -80 +100 mesh	\$1,150
Fine flake 85% to 87% C, -80 +100 mesh	\$1,020
Amorphous graphite 94% to 97% C, +100 mesh	\$1,489
Amorphous graphite 90% C, -100 mesh	\$1,050
Amorphous graphite 80% to 85C	\$850

Source : www.megaagraphte.com

[#] Denotes number of openings per (linear) inch of mesh. 400 mesh is equivalent to a size of 37 microns.

Price Range for +80 mesh, 94-97%C graphite (US\$/tonne)



NB + 80 mesh is 0.177mm

Demand Trends

Refractories remain the largest end use for the graphite market (35%), where flake and amorphous grades are used in various applications. Flake graphite provides good oxidation and corrosion resistance, while improving the structural strength of castable and shaped refractories. Amorphous graphite is applied where a flexible and deformable product is required. The short and medium-term outlook for the refractories industry is very promising - particularly in the steelmaking segment, where global crude output is continuing to rise.

Mobile energy markets, currently the second largest consumer of graphite (25%), are experiencing significant growth especially in batteries where it is intercalated with lithium ions - creating a very stable battery that provides a high energy density.

The production of spherical graphite for Lithium-ion batteries destroys around 60-70% of the feedstock flake graphite. It is estimated that up to 100,000 tonnes of flake graphite (or 25% of total current world production) is already dedicated to Lithium-ion batteries. Exponential growth is predicted for electric cars as the world's economies drive towards green power initiatives. The automotive industry projects that by 2025, 400,000 tonnes of flake graphite (100% of today's world production) would be required to manufacture spherical graphite for Lithium-ion batteries/fuel cells.

In the medium and long-term the Lithium-ion market is facing a huge graphite shortfall which is exacerbated by the lack of graphite exploration and development over the last 20 years.

Of significance is that China produces 70% of the world's graphite which has strategic implications for the long-term, stable sources of supply to the Western World.

Prices appear set for sustained growth on the back of surging demand.

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.