

The Archer Exploration Limited logo features the word "ARCHER" in a white, sans-serif font on a dark teal rectangular background. To the right of the text is a stylized orange and yellow graphic element resembling a lens or a mineral grain.

ARCHER

ARCHER EXPLORATION LIMITED

Archer's Eyre Peninsula Graphite Projects

South Australian Exploration and Mining Conference

11th December 2015

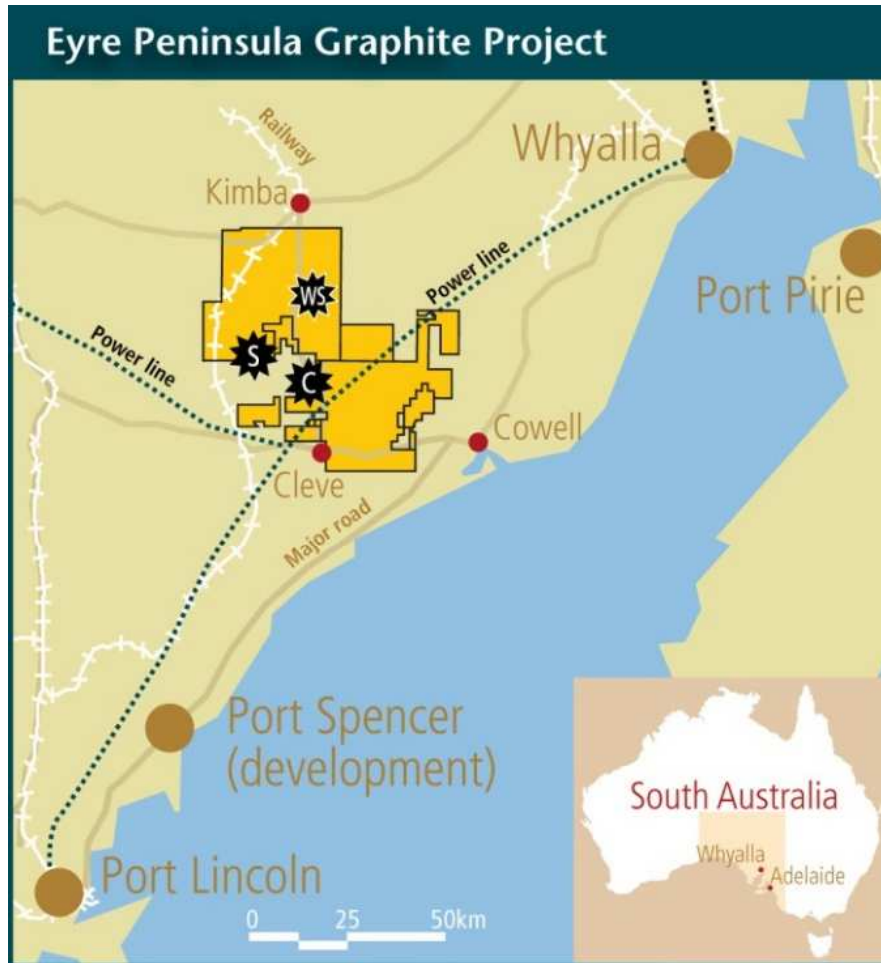
*Gerard Anderson
Managing Director*





Archer Exploration - company overview

FIND \longrightarrow ADD VALUE \longrightarrow MONETISE



Advanced Graphite Projects

- Campoona
- Sugarloaf
- Wilclo South



Priority 1 and 2 targets:

- Graphite
- Magnesite
- Manganese
- Copper
- Gold

100% of 16 tenements in South Australia covering key commodities – graphite, magnesite, manganese, copper and gold



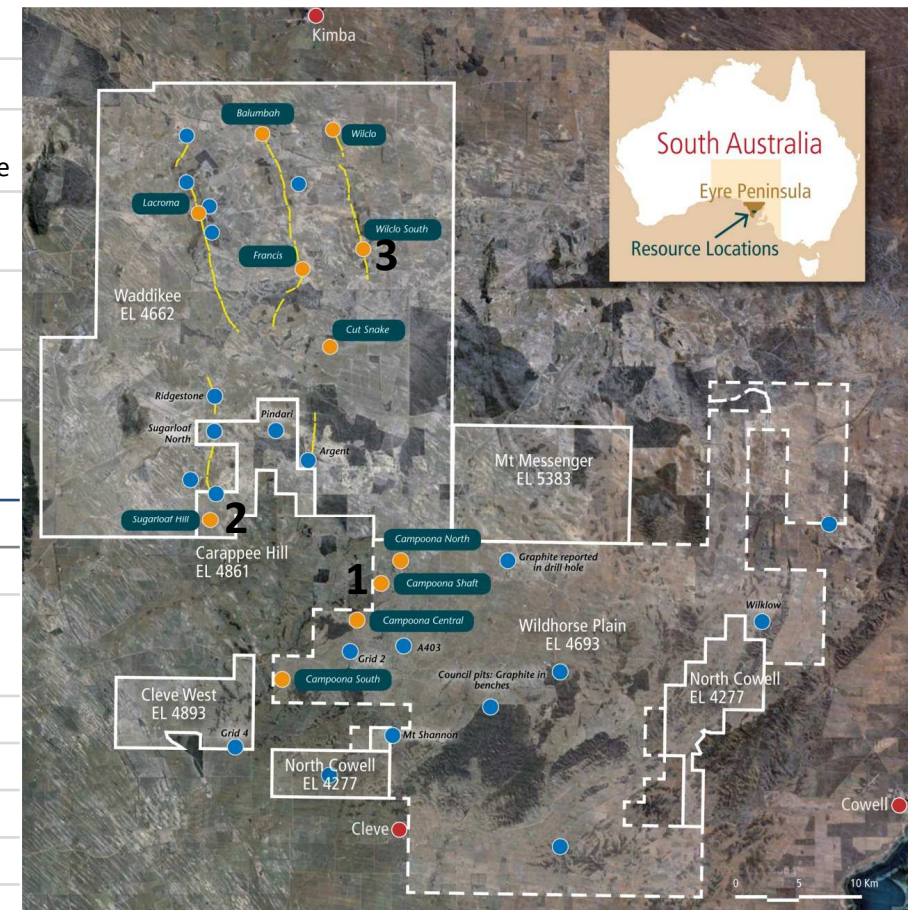
Archer Graphite – 3 deposits and 10 prospects

Tenement holding of 2,154km² on the Eyre Peninsula hosting Australia’s largest 2012 JORC graphite resource

Archers Key Graphite Assets

Location	<ul style="list-style-type: none"> Near Cleve-Darke Peak-Kimba, Eyre Peninsula, South Australia Close to Whyalla and Port Lincoln
Total Area	<ul style="list-style-type: none"> 2,154km²
3 x Deposits	<ul style="list-style-type: none"> Combined JORC 2012 Resources for Campoona Shaft, Central Campoona and Wilclo South of 8.55Mt @ 9.0% Cg for 770,800t of contained graphite
10 x Prospects	<ul style="list-style-type: none"> Campoona South, Campoona North, Wilclo, Balumbah, Francis, Cut-Snake, Argent, Jamieson Tank, Lacroma and Ridgestone
Land Ownership	<ul style="list-style-type: none"> 1,403 acres surrounding the Sugarloaf carbon deposit Binding agreement over sufficient land at Campoona Shaft for mining
Mining Permit	<ul style="list-style-type: none"> Final MLP for Campoona Shaft submitted December 2015

Locations of Resources and Exploration Targets



Key Tenements*

Name	Permit	Interest	Defined Deposits
Wildhorse Plain ²	EL4693	100%	Campoona Project
Waddikee	EL4662	100%	Wilclo South Deposit; Wilclo, Balumbah, Francis, Cut-Snake, Argent, Jamieson Tank, Lacroma and Ridgestone prospects
Carapee Hill	EL4861	100%	Sugarloaf carbon deposit
Mt Messenger	EL5383	100%	Limited exploration on tenement to date
Cleve West	EL4893	100%	1 untested graphite target
North Cowell	EL4277	100%	2 untested graphite targets

* ERA application lodged covering extensions to Central Campoona resource and Sugarloaf

1. Campoona Shaft Resource Announcement 4 August 2014
 2. Archer has 100% of mining rights to all minerals except Uranium
- Source: Company Presentations and ASX Announcements

Presentation outline:

1. Campoona Mining Permit
2. Sugarloaf carbon
3. Waddikee Flake graphite

● Drilled graphite targets	 AXE Licence (EL)
● Un-tested graphite targets	 AXE Joint Venture (EL)
● Town	— Untested linear electromagnetic trends

1. Campoona Graphite – the elements

Mine, processing & water

Development elements

- MC Campoona Shaft - covering the conventional open pit mine
- MPL Sugarloaf - covering the Sugarloaf processing site and TSF
- MLP Water - covering the Pindari Borefield and process water line to Sugarloaf and potable water line from Jamieson Tank to Sugarloaf



“Hub and spoke” development where satellite mines feed a centralised mineral processing facility



Campoona Graphite - community consultation

Longstanding community engagement with excellent community support for project

- Focus group meeting in September 2013.
- Established a Community Consultative Committee (CCC) with community representatives, Archer, invited guests (facilitated)
- CCC meetings held regularly (≈every 2 months) during 2013, 2014 and 2015.
- Provided written publications to the region through mail and internet access, including project newsletters to accompany most CCC meetings.
- Provided written information in the EP Tribune.
- Hosted community open house information day in October 2014.
- Completed technical studies posted on Company website when completed to allow progressive understanding of Project
- Annual Eyre Peninsula Field Days (Cleve)
- Liaised with Cleve Council, local and State government regulators through the life of project



Community Newsletter No.6 (top) and Community Information day poster (right).

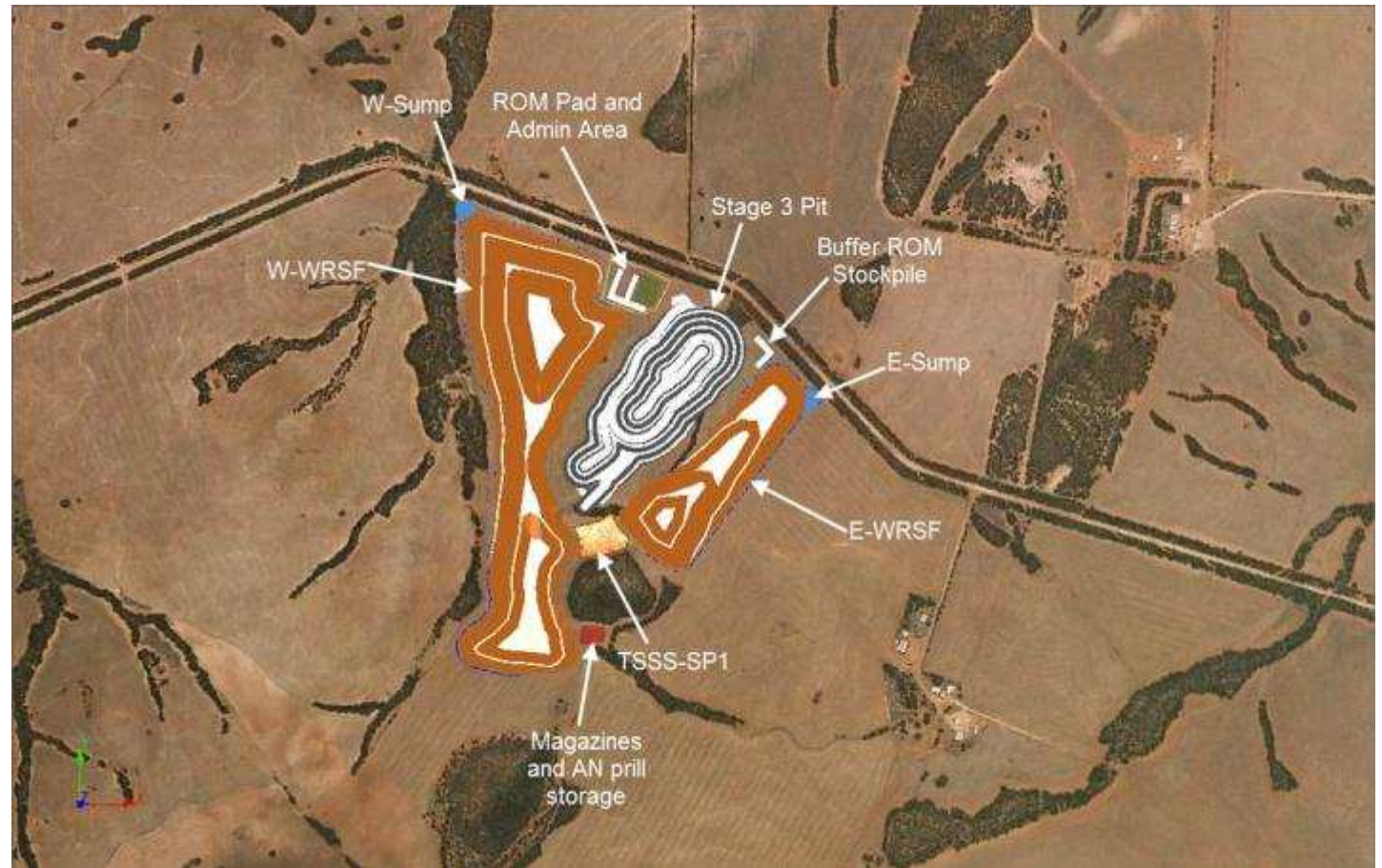


Campoona Graphite - mine

Conventional, largely free dig open pit

Mining

- Compact site ≈ 68 Ha
- Conventional open pit mine largely free dig to 70m bgl
- Campaign day-shift only mining (notionally spring and autumn) to mine up to 140,000tpa of graphite ore grading 10% Cg
- Pit depth 100 metres
- Pit dry - rainfall harvested to augment bore water for dust suppression
- Starter pit west of ridgeline providing natural noise barrier to nearest receptor. E-WRSF constructed first providing further noise attenuation.
- E-WRSF constructed Year 1- 4. Battered to 20° and progressively rehabilitated.
- Trenches and bunds around WRSFs to contain run-off especially to the ephemeral creek west of W-WRSF
- ROM stockpile sized to ensure Sugarloaf supplied between mining campaigns
- Completion of purchase of land will occur on subdivision



Conventional 14-year mining open pit operation

Campoona Graphite – mineral processing

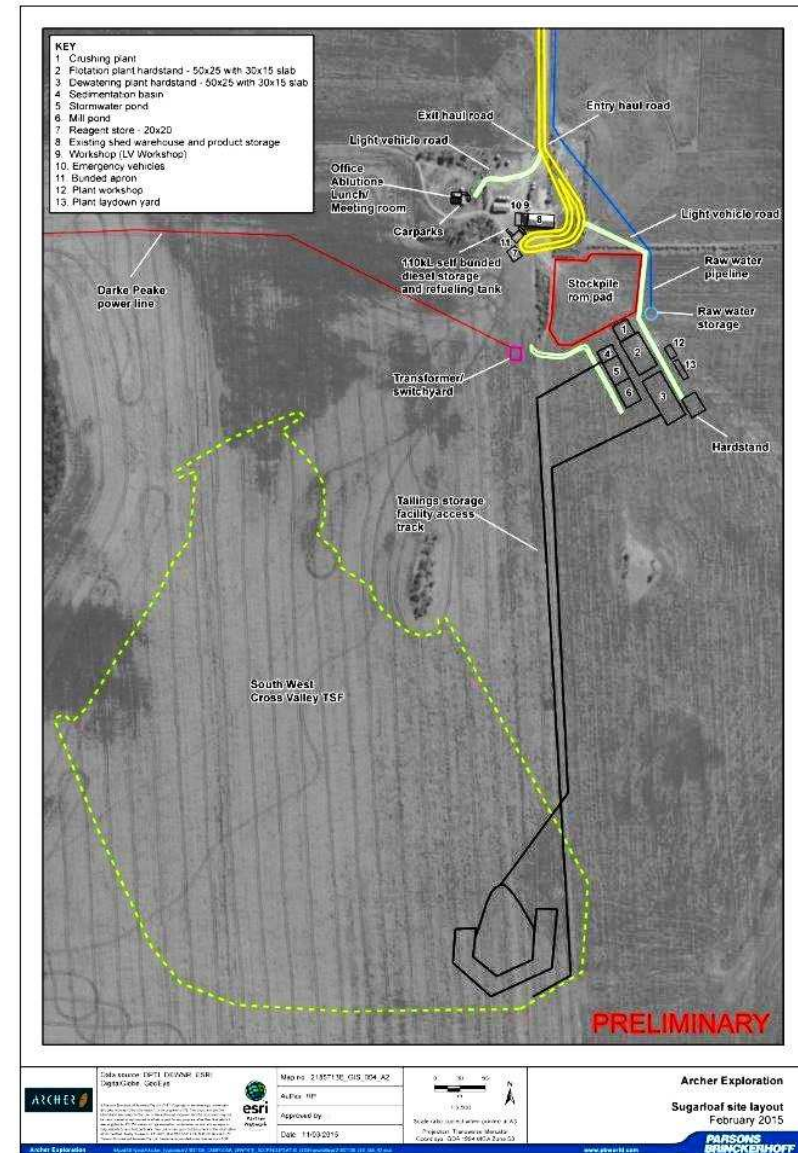
Mineral processing facility to be built on Company-owned land at Sugarloaf 12km west of Campoona

Mineral processing

- Production of up to 10,500 tpa of very high purity graphite
- Process steps:
 - Crushing
 - Blunging
 - Rougher Flotation
 - Concentrate Milling
 - Cleaner/Re-cleaner Flotation
 - Screening
 - Leaching
 - Drying
 - Bagging
- Flotation recovery and concentrate grade improve as pit deepens



Free flowing well ordered froth conditions during bulk flotation resulting in less entrainment and excellent launder flow





Campoona Graphite - infrastructure

Power, water, transport and shipping

Process water

- High yielding fractured rock aquifer at Pindari located 10 kms north of Sugarloaf
- Saline water \approx 22,500 ppm TDS - no other beneficial users
- Two bores to supply initial requirement of 100ML/yr dropping to 60ML/yr with decant recycle

Potable water

- Agreement with SA Water for supply of 40ML/yr rising to 80ML/yr at Archer's election
- Potable water required for final concentrate wash water and site domestic uses

Power

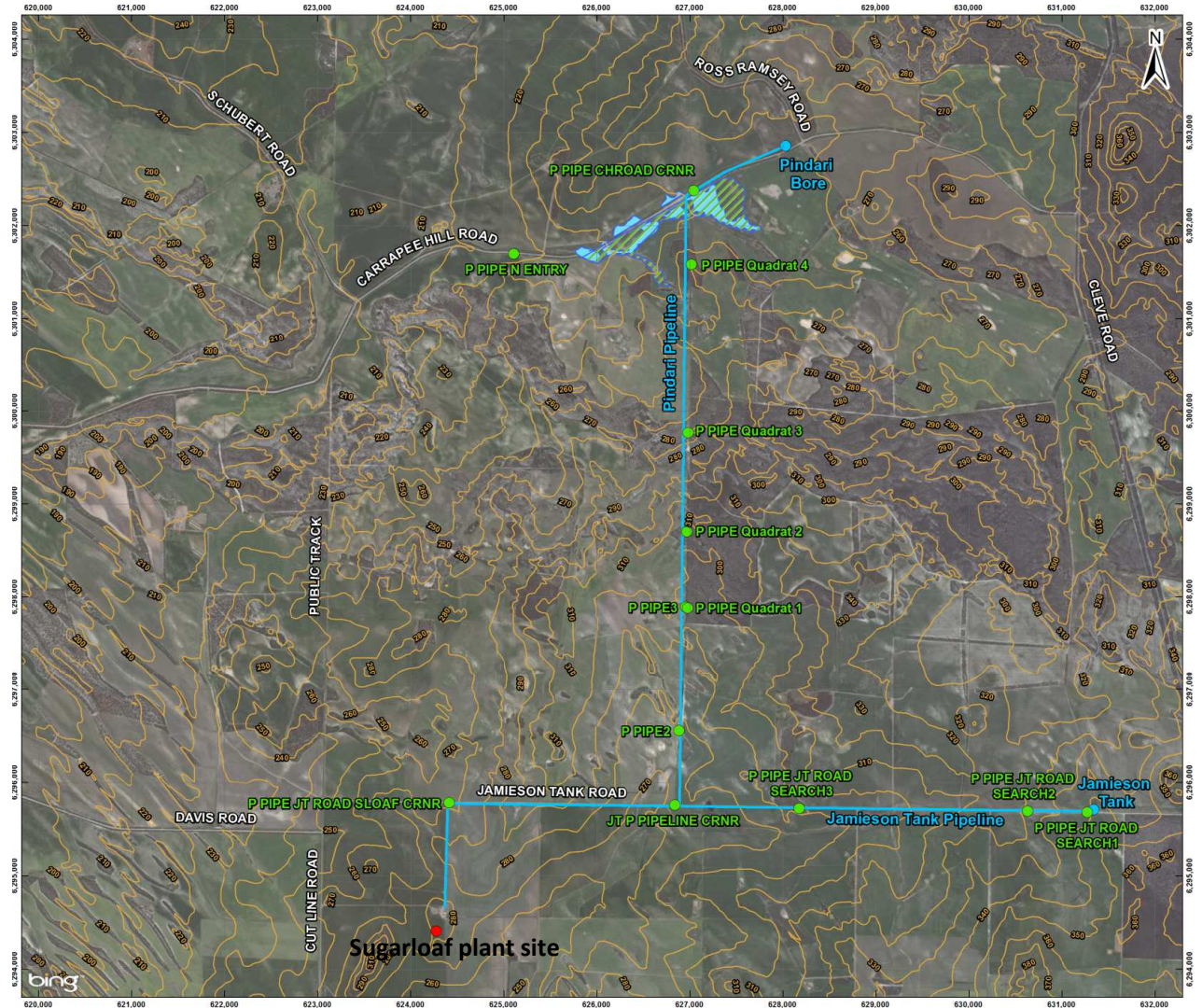
- Electricity demand 0.8 MW
- 11kV line 4.75kms west of Sugarloaf plant

Transport

- Cleve-Kimba road B-Double capable

Port

- Port Adelaide preferred as container capable



Pindari borefield located 7 kms due north of Sugarloaf processing site



Campoona Graphite - product

Archer to produce $\geq 99\%$ Cg natural graphite concentrate

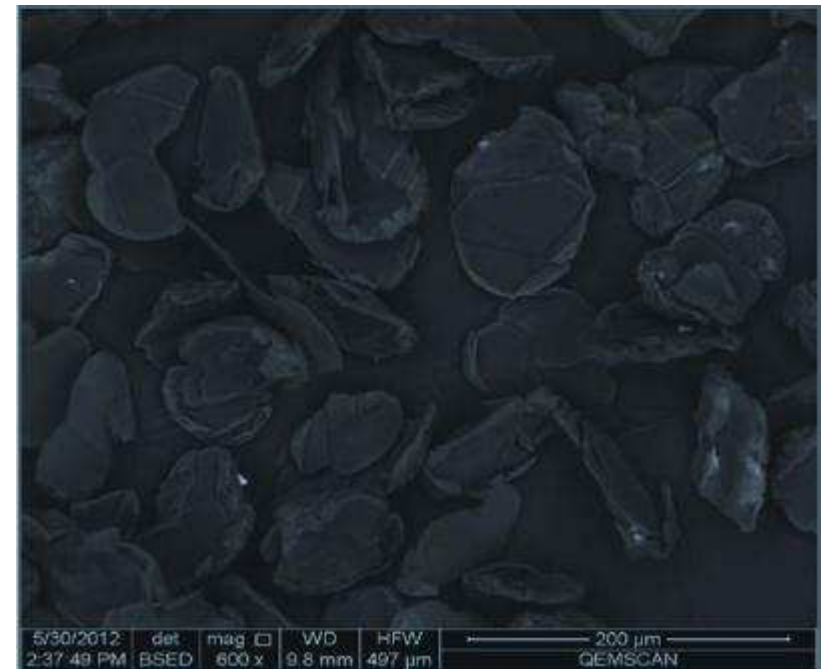
Overview of Campoona Metallurgy Testing

- Since October 2012, Archer has undertaken rigorous metallurgical bench-scale testing of representative diamond drill core samples of Campoona graphite
 - Archer's aim is to produce graphite products grading to 99.5% carbon, matching the world's highest quality natural graphite concentrates
 - Product - P80 38 micron graphite concentrates grading $\geq 99\%$ carbon
- The campaign of metallurgical bench flotation trials demonstrates that the combination of a high-performing graphite flotation followed by acid treatment to remove trace contaminants produces a graphite concentrate product that reports high in the 99+% range
- Bulk floatation tests provided concentrates grading 92% – $>98\%$ Cg (concentrate grades and recoveries increase below upper clay-rich horizon)
- Acid cleaning upgrades concentrates $\geq 99\%$ Cg
- Repeatability of results proven over deposit-wide comprehensive metallurgical testing

Market Overview

- High purity graphite concentrates can be provided to specific market segments – batteries including Li-ion batteries, high quality lubricants, brake pads, ceramics
- Research agreement with Adelaide University focussing on new product opportunities including graphene
- **Interest in off-take agreements is increasing as companies test Campoona graphite**
- Production levels not resource constrained

Highly Crystalline Fine Graphite Concentrate



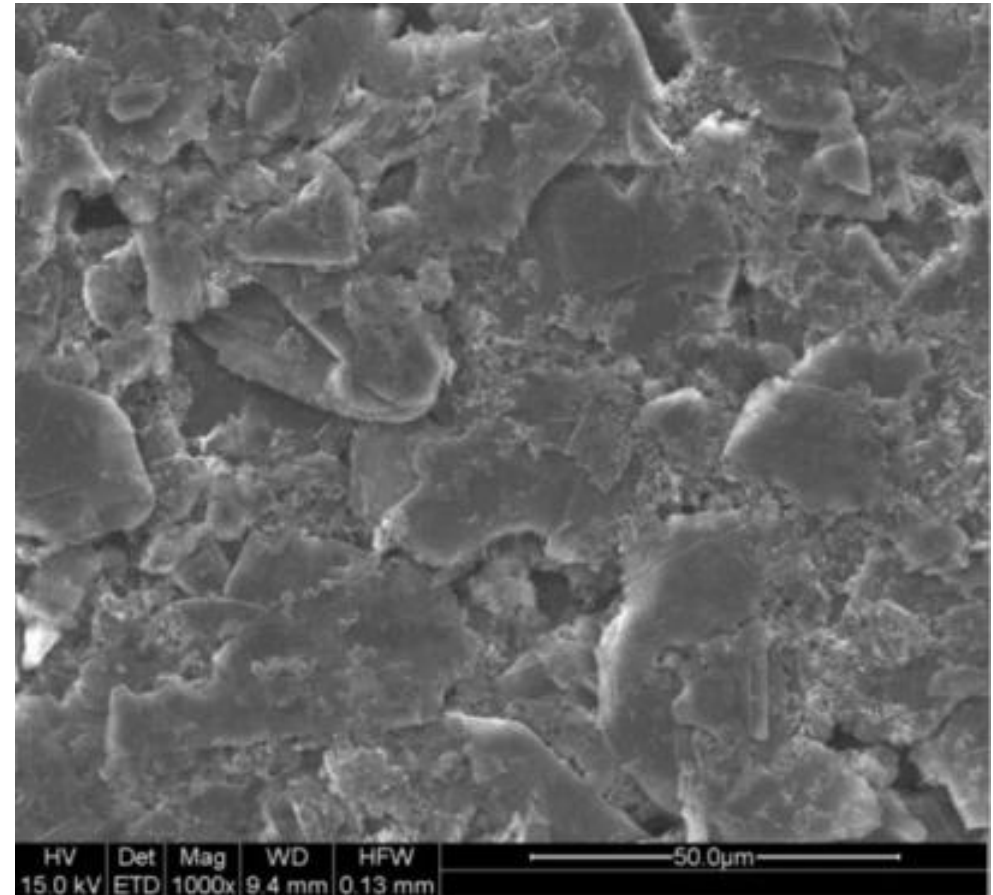
Note: Morphology typical of the fine highly crystalline graphite concentrate (~75 micron) showing very pure crystalline graphite flake. Concentrate processed to remove trace contaminants to achieve a fine natural graphite ($>99\%$ Cg)

Campoona graphite suitable for use in Li-ion batteries

Campoona Graphite – product specifications

Campoona graphite suitable for several applications including batteries and very high quality lubricants

- Production of up to 10,500 tpa high purity graphite - option to start smaller and increase output over time
- Typical specifications are:
 - Carbon 98.5 – 99.5% Cg
 - Sulphur <0.1%
 - Fe < 100ppm
 - Ni, Cu, V < 10ppm
 - Specific gravity 2.35 g/cc
- Application in lithium-ion batteries tested
 - Battery electrodes were prepared from Campoona natural graphite and other commercially available synthetic graphite powders, which were then used to construct coin cells in a half-cell configuration. The performance tests showed that the performance of Campoona graphite in terms of charge capacity, was at least equivalent to that of the commercially available synthetic graphite. (NB Over 30% of Li-ion batteries use synthetic graphite).
- Lithium-ion battery use is expected to increase dramatically:
 - Lithium-ion batteries for storing electricity generated by roof-top photovoltaic systems have the potential to fundamentally change the retail electricity market and to substantially increase demand for high quality graphite. These systems are commercially available now.
 - Electric and electric hybrid vehicles



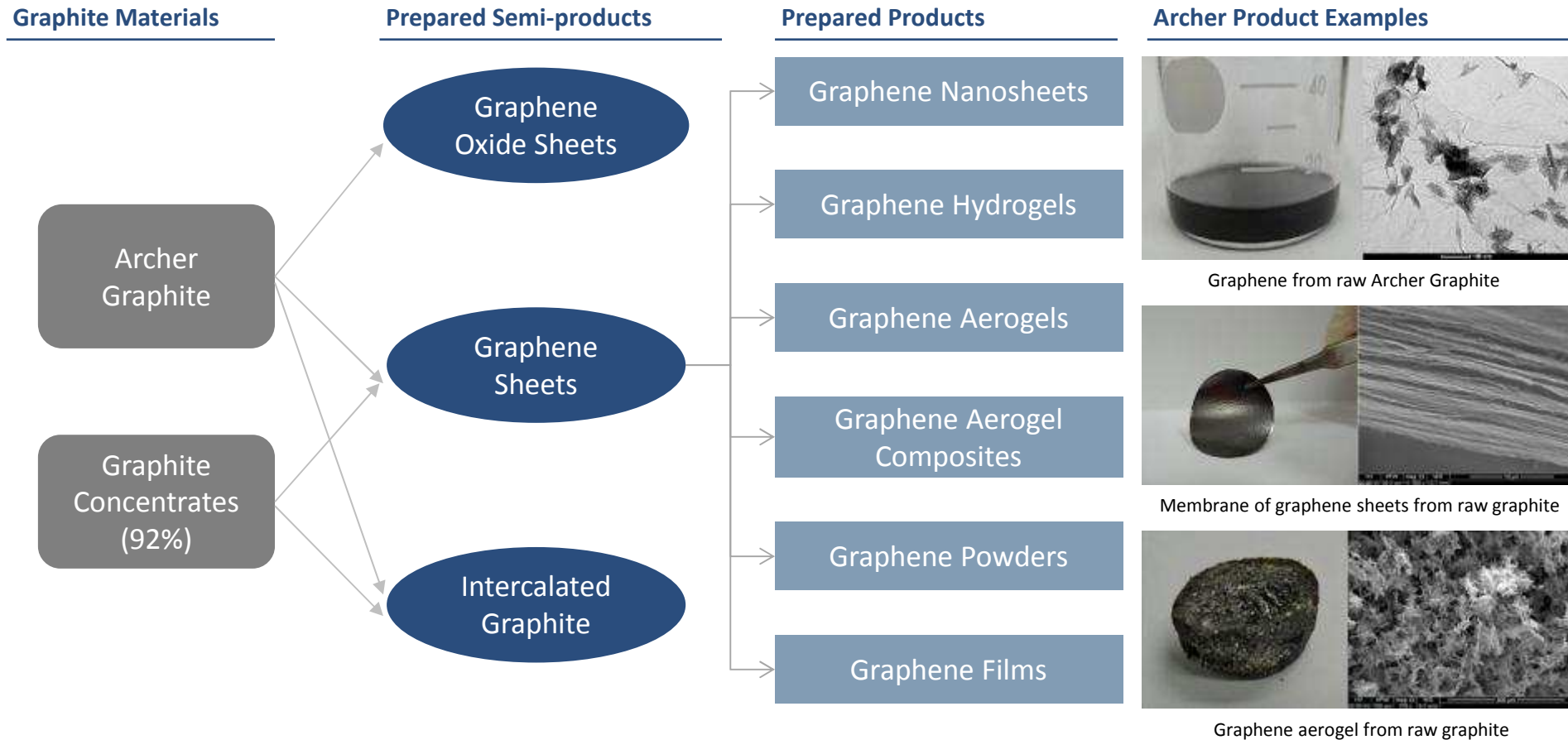
SEM image of 99.5% Cg Campoona graphite

Central Campoona, a faulted off-set of Campoona Shaft, has the same metallurgical performance. Lacroma on EL4662 provides a third future ore opportunity that can be processed through the same plant



Campoona Graphite – >99.9% graphene

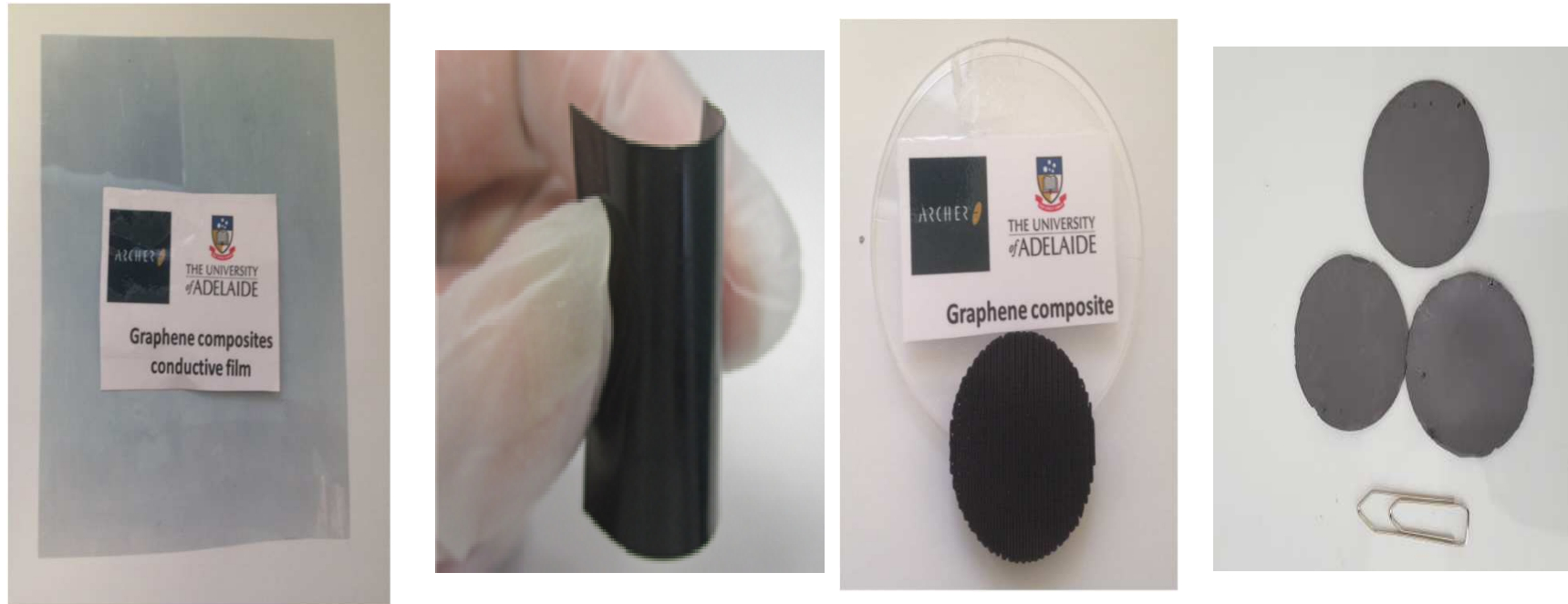
Archer and the University of Adelaide have a two-year research collaboration into graphite and graphene products.



Campoona high grade concentrates can deliver pure >99.9% graphene

Campoona graphite converts to >99.9% graphene

High grade Campoona graphite concentrate enables production of pure graphene



Selected graphene products : graphene conductive film, conductive flexible polymer, graphene composite and electrodes for batteries and supercapacitors

The test results showed:

- High quality graphene prepared from Archer's highly concentrated graphite using a one-step process
- Testing produced several highly valuable graphene products (inks, conductive films, electrodes) all with excellent conductivity performance
- Products have enormous potential applications for solar cells, photovoltaics, wearable/printable electronics, supercapacitors, batteries, sensors etc.
- Several types of electrodes prepared to prove their electrical properties related to battery applications achieved outstandingly low resistivity of 0.5 Ohm/sq which can only be achieved with the highest purity graphene

These graphene-based products have enormous potential applications for solar cells, photovoltaics, printable electronics, supercapacitors, batteries, sensors and many other high-tech applications



Campoona Graphite – Project timetable

PEPR must be submitted within 12 months of Mining Lease approval

Final MLP ready for submission but will be held until off-take agreements signed

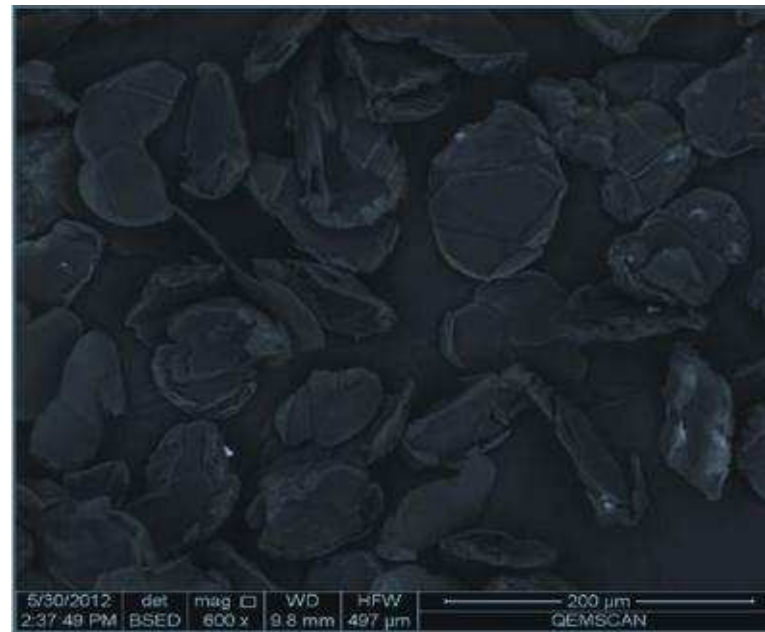
- Current MLP based on production of 10,500tpa of >99% Cg graphite concentrates
- Several parties have tested and are testing Campoona product
- Potential buyers have expressed interest in an aggregate tonnage of 400-500 tpm (4,800 – 6,000 tpa) but no formal agreements signed at this time
- Other parties are still in the evaluation phase
- Archer's >99.9% graphene has enormous potential. Interest received from various organisations - graphene production is currently not covered in MLP
- Once the MLP is lodged the approvals process from then on demands a "linear" time-constrained progression to production and the PEPR must provide final production flowsheets, production capacity and the lodging of "as-built" drawings.
- *"It is also a requirement under Regulation 65(10) of the Mining Regulations 2011 that a compliant PEPR for a granted ML or MPL be submitted to DSD within 12 months of the date of grant of the lease or licence."*
- As the final size of the Project is undecided, lodging of the Final MLP will be withheld until binding off-take agreements have been completed
- Off-take agreements (graphite and graphene) will allow the completion of the PEPR

Underestimate the barriers to entry, take shortcuts in metallurgical testing or in engineering design and your project will most likely go the way of recent entrants

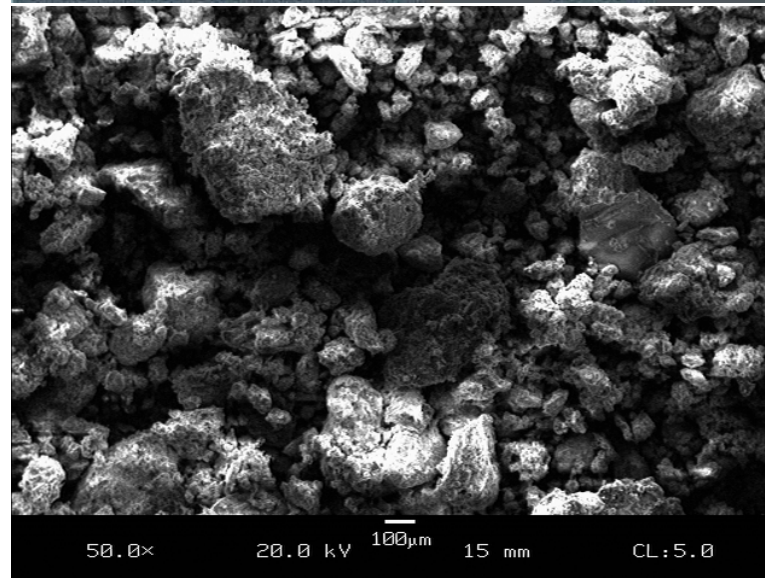
2. Sugarloaf carbon

Unique carbon material with soil conditioning properties

- Initial research included extracting graphene from Sugarloaf carbon to coat superphosphate to slow the release rate of the nutrients. This work was very successful however, the outcome was likely to be cost prohibitive.
- Research then looked at Sugarloaf carbon itself given its unique physical and chemical characteristics that distinguish it from crystalline graphite
- Sugarloaf consists of porous, matted, predominantly non-graphitic carbon with low crystallinity
- Macro- and micro-nutrients occur as both highly soluble and low solubility forms providing immediate release and longer-term release of nutrients
- Raw unprocessed Sugarloaf carbon when added to soils improves soil wettability and aids moisture retention



Crystalline Campoona graphite



Porous carbon accretions from Sugarloaf

Sugarloaf carbon has potential application as soil ameliorator

Sugarloaf carbon

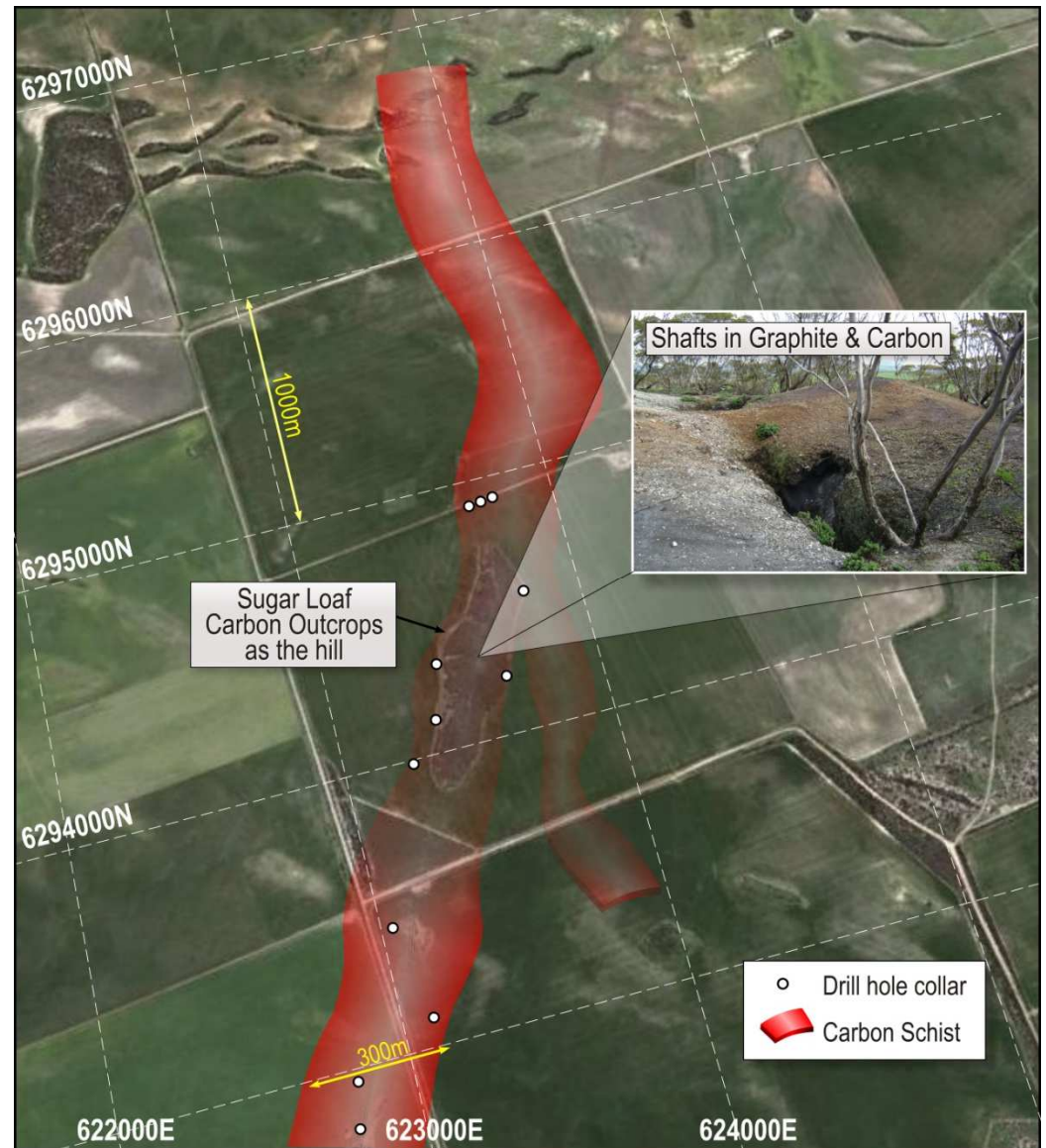
Potential as soil ameliorator

- Sugarloaf carbon improves soil wettability and moisture retention which is critical in sandy soils that predominate on Eyre Peninsula
- Further tests on run-of-mine Sugarloaf carbon are planned to further characterise the soil amelioration properties
- Planned tests will also test upgraded samples of the carbon to quantify its potential to remediate contaminated soils
- If these tests prove successful:
 - Sugarloaf is very large with an **Exploration Target of 40-70 million tonnes** grading 10-12% TC

(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).

- There would be a **ready market at the mine gate**

Sugarloaf carbon has soil amelioration properties important for dryland sandy soils that predominate on Eyre Peninsula and elsewhere in South Australia's main grain growing areas

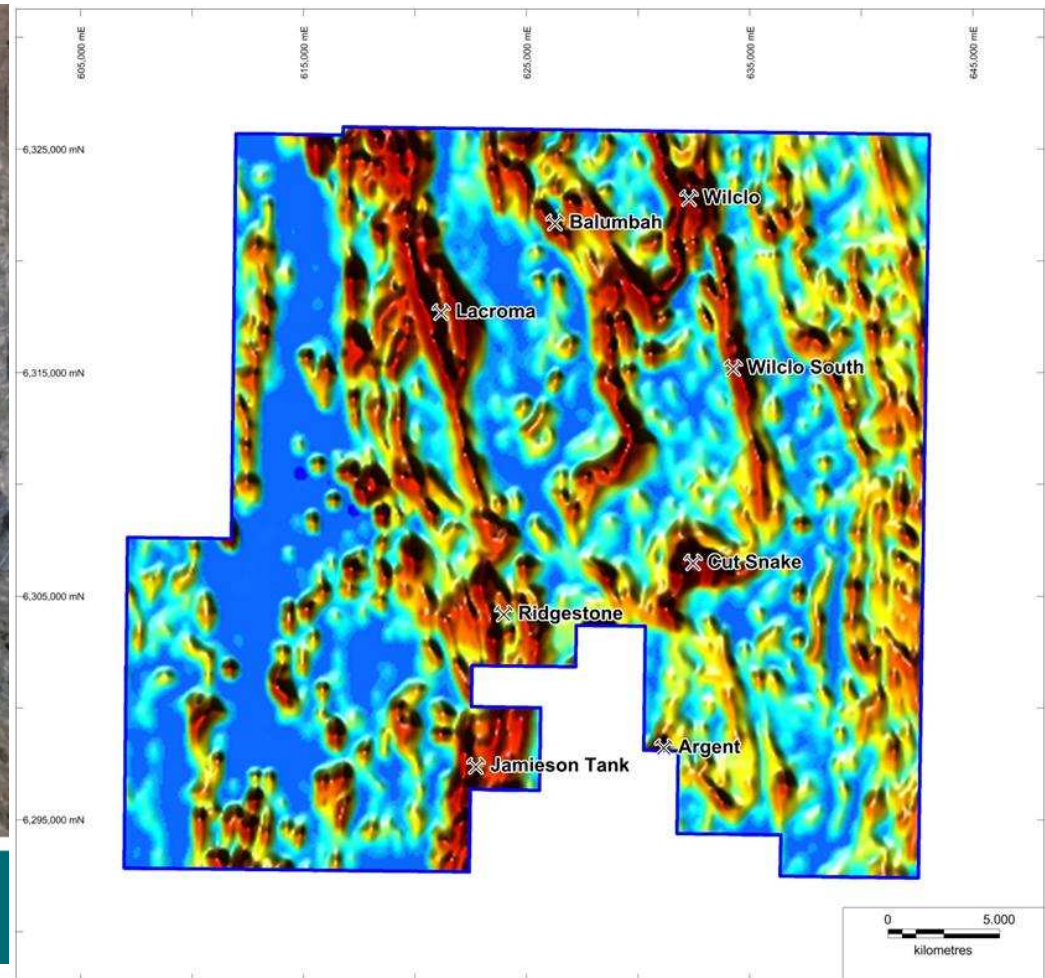
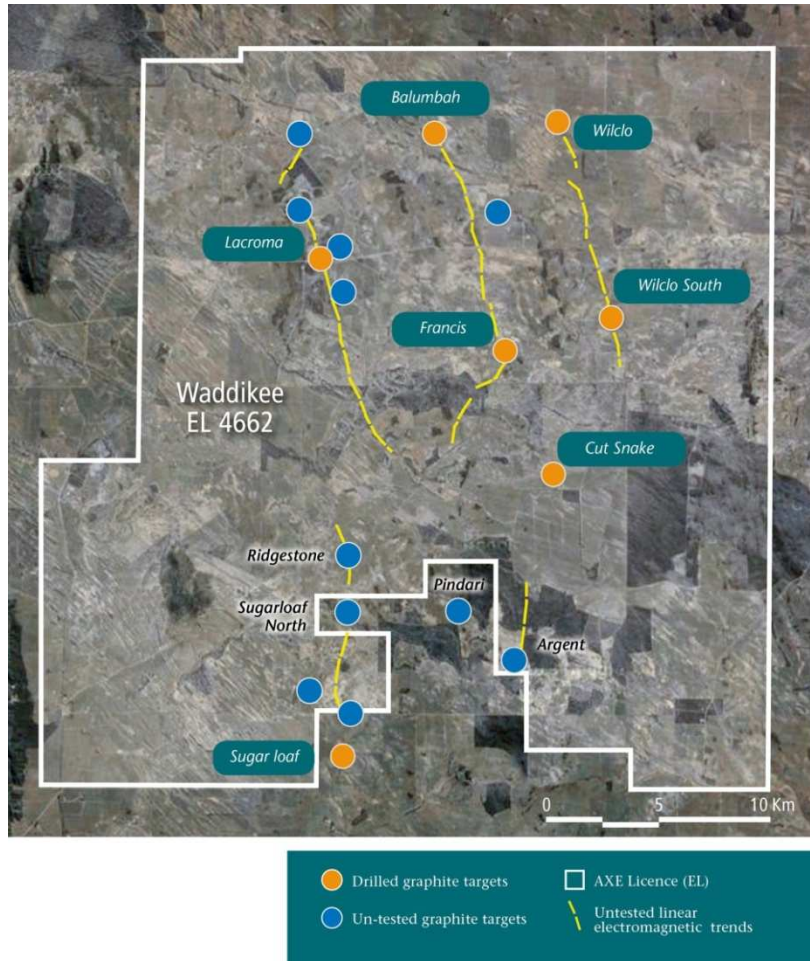


Sugarloaf anti-form showing spatial extent of Exploration Target

3. Waddikee – Flake graphite

Wilclo South JORC 2012 Inferred Resource of 6.28Mt @ 8.8% Cg over a strike of 1.2 kms. Recent drilling extended the deposit’s strike by a further 1.2 kms. Total Wilclo to Wilclo-South strike potential is over 11 kms.

- Large flake graphite was intersected at Wilclo, Wilclo South, Francis, Cut-Snake and Argent prospects adding to flake previously identified at Francis.



Source: Company Presentations and ASX Announcements

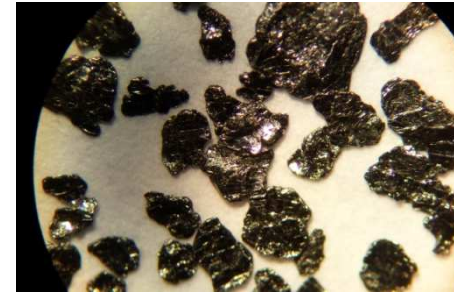
Airborne EM over EL4662 clearly identifies graphite horizons

Waddikee Flake graphite

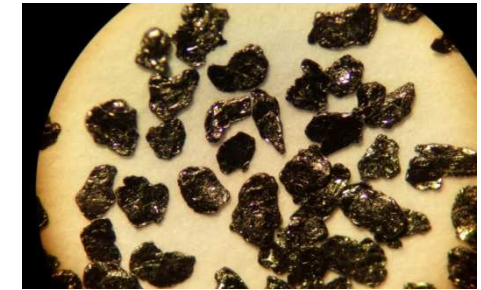
Wilclo South: ≈50% of graphite recovered as Extra Large, Large, Medium and Fine Flake

- The Wilclo South deposit and Francis prospect produced Extra Large, Large, Medium and Fine Flake graphite at grades of 91-92% Cg from basic Halutain superpanner sorting
 - grades to improve with additional standard processing
 - preliminary laboratory tests show excellent flake recovery
 - inferred 42-55% of the graphite recoverable as Flake

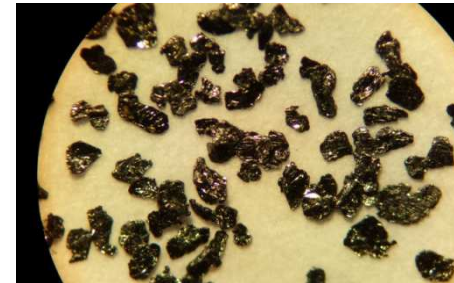
Graphite size (μm)	Grade (% Cg)	Graphite distribution in flake product (%)
Extra large / Jumbo flake +425μm	92.2	5%
Extra large flake +300μm	91.6	10%
Large flake +180μm	91.8	29%
Fine & Medium flake +75μm	92.3	56%



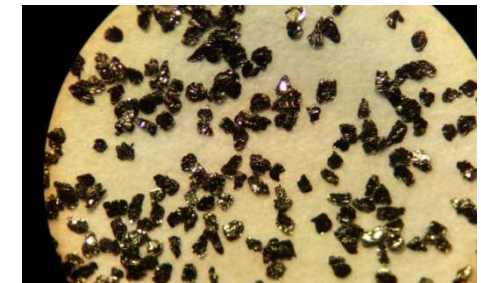
+425μm Extra Large Flake



Extra Large Flake +300μm



Large Flake +180μm



Medium Flake +125μm



Flake aggregates from RC drill hole



Extremely coarse graphite released by knapping Argent outcrop (The square scale grid is 1 mm)



Fine Flake +75μm



Disclaimer

Competent persons statement

The exploration results and Exploration Target 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 styles of mineralisation and types 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.

The information in this report that relates to the Campoona Shaft and Central Campoona JORC 2012 Mineral Resource estimation has been prepared by Mr B. Knell who is a Member of the AusIMM and peer reviewed by Dr. C Gee who is also a Member of the AusIMM (CP). Mr Knell is a full time employee of Mining Plus Pty Ltd and Dr. Gee is a full time employee of Mining Plus Pty Ltd., both have more than five years' experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Knell has consented in writing to the inclusion in this announcement of the Mineral Resource estimation information in the form and context in which it appears. This information was prepared and first disclosed under the JORC Code 2012.

Forward looking statements

The information in this presentation is published to inform you about Archer Exploration Limited and its activities. Some statements in this presentation regarding estimates or future events are forward looking statements.

Although Archer Exploration Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results and outcomes will be consistent with these forward-looking statements.



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Thank you



Appendix 1 - Archer Graphite Summary

Australia's largest JORC 2012 Graphite Resource

Executive Summary

1	Large Position in a Premium Graphite Location	<ul style="list-style-type: none"> 2,154km² of tenements near Cleve-Darke Peak-Kimba on Eyre Peninsula, South Australia Eyre Peninsula is Australia's premier graphite exploration and production region
2	Multiple Discovered Resources ¹	<ul style="list-style-type: none"> Combined JORC 2012 Resources for Campoona Shaft, Central Campoona and Wilclo South of 8.55Mt @ 9.0% Cg to give 770,800t of contained graphite <ul style="list-style-type: none"> – Campoona Shaft Total: 1.65Mt @ 9.2% Cg (151,400t contained graphite) – Central Campoona Total: 0.52Mt @ 11.1% Cg (58,000t contained graphite) – Wilclo South Total: 6.38Mt @ 8.8% Cg (561,400t contained graphite)
3	High Quality Graphite	<ul style="list-style-type: none"> Comprehensive metallurgical tests completed that demonstrate the ability to deliver high purity, high value, crystalline fine graphite (plant to be constructed at Sugarloaf) Campoona Shaft graphite compares very well with synthetic graphite in lithium-ion batteries Large to jumbo Flake recovered from Wilclo South and Francis and further Flake deposits indicated at Wilclo, Cut-Snake, Balumbah and Argent
4	Research Unlocking Product Potential	<ul style="list-style-type: none"> Sugarloaf "carbon" has unique physical and chemical properties that reinforce potential as broad acre, dryland soil conditioner Pure graphene products derived from leached graphite concentrates
5	Exploration & Expansion Upside	<ul style="list-style-type: none"> High quality airborne EM and magnetic coverage across key areas Numerous drilled graphite prospects requiring small amount of additional drilling to reach Resource status High quality EM coverage strongly indicates Prospect continuity
6	Close to Existing Infrastructure Network	<ul style="list-style-type: none"> Power and major road infrastructure all located within the perimeter of the tenements with access to various port options Substantial groundwater aquifer (Pindari) located ≈10km north of Sugarloaf plant site to supply the full process water needs of extended project. Agreement signed with SA Water for the supply of potable water to project. Archer owns land at Sugarloaf and has a legally binding agreement to purchase land at Campoona Shaft

Location



- ✓ Low sovereign risk, good access to infrastructure
- ✓ High quality product
- ✓ Excellent recoveries
- ✓ Combined deposit to support ≈20 year project
- ✓ Predominantly free-dig, open cut mining with low overall strip ratio
- ✓ Final Mining Lease Proposal submitted

1. Reported using a cut-off grade of 5%Cg
Source: Company Website, ASX Announcements & Presentations