ARCHER EXPLORATION LIMITED

Imminent Project Developments

AusIMM Adelaide Branch

Lunchtime Series

21st April 2016

Gerard Anderson
Managing Director

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.

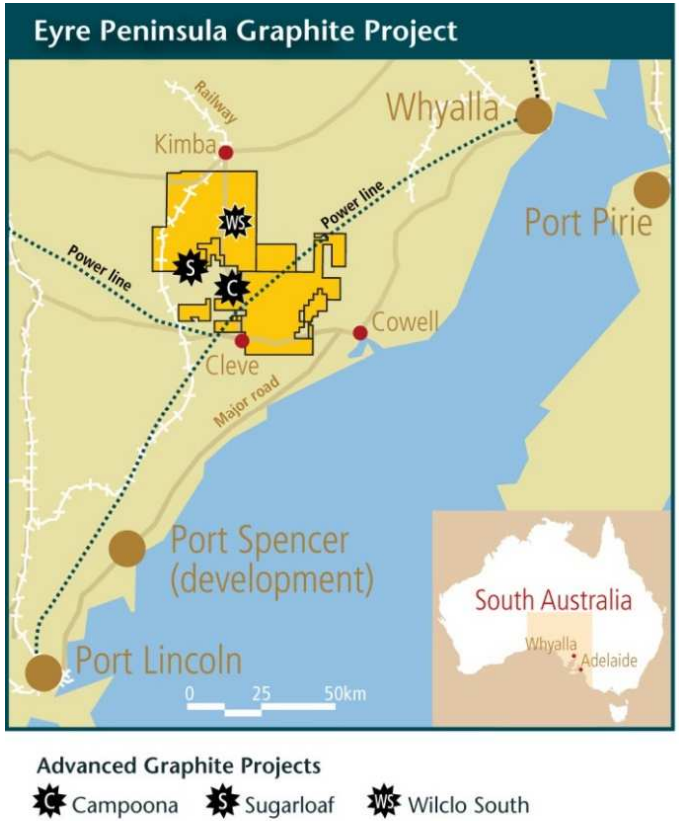
Although Archer Exploration Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results and outcomes will be consistent with these forward-looking statements.

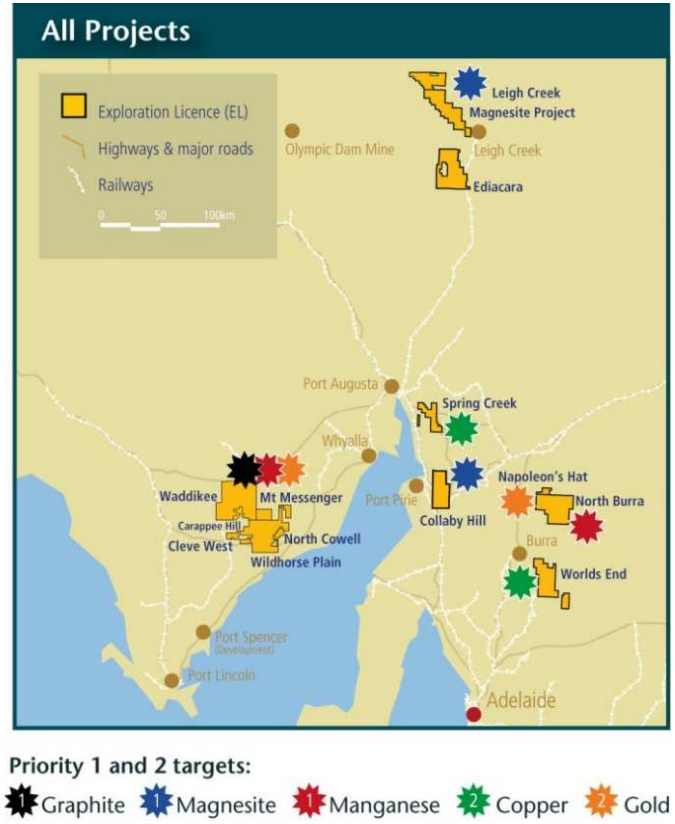
Archer Exploration - company overview

FIND → **ADD VALUE** → **MONETISE**

- Listed August 2007 (ASX:AXE)
- 84.3 million shares on issue plus 2.3 million performance rights (expire 30 June 2016)
- $1.0 million in cash at 31 December
- All tenements 100% owned and located in South Australia
- Major shareholders

Directors & management	21%
Top 20	45%
Top 40	70%





100% of 13 tenements and 2 ELAs in South Australia covering graphite, magnesite, manganese, copper and gold

Archer's imminent development Projects

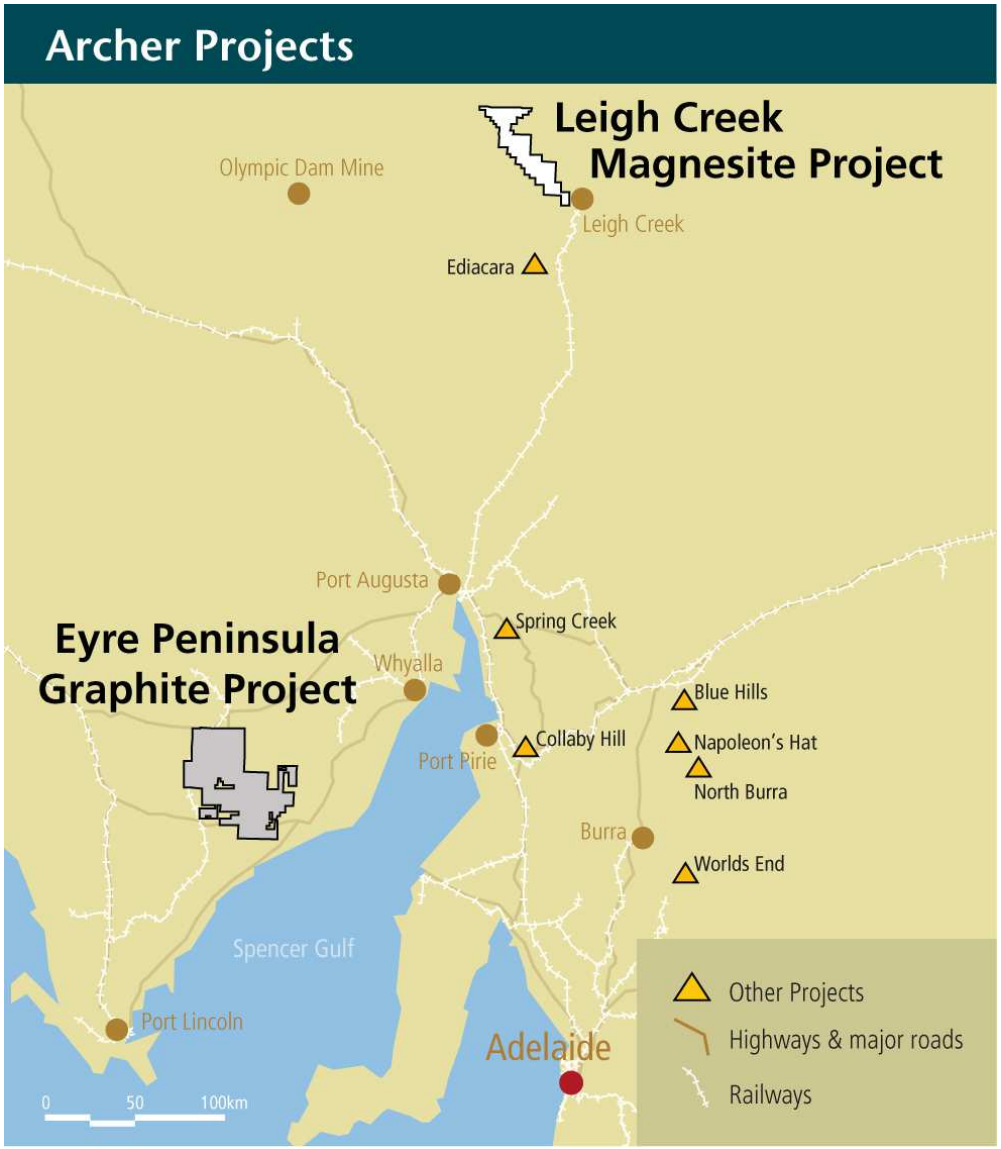
Start small, technically de-risk then grow

Eyre Peninsula Graphite Project

- Campoona Shaft Mining Lease Proposal
- 1,000tpa rising to 10,500tpa of high purity graphite concentrate over a 16-year LOM
- High purity graphite gives >99.9% graphene

Leigh Creek Magnesite Project

- 100% interest in the World's largest cryptocrystalline magnesite deposit with a JORC 1999 Resource 453 Mt grading 41.4% MgO
- Magnesite ($MgCO_3$) + heat = MgO (Magnesia) + CO_2
- Non binding MOU signed for the long-term supply and mining of magnesite at Leigh Creek
- Discussions with third parties to utilise their spare kiln capacity to toll treat Archer's magnesite
- Agreement with a third party would lead to a production trial around September 2016, to make dead burn magnesia (DBM) and caustic calcined magnesia (CCM)
- A successful trial likely to lead to longer-term toll treating agreement



Campoona Shaft Graphite and Leigh Creek Magnesite are not resource constrained and offer very long life production options

Archer Graphite – 3 deposits and 10 prospects

Tenement holding of 2,154km^2 on Eyre Peninsula

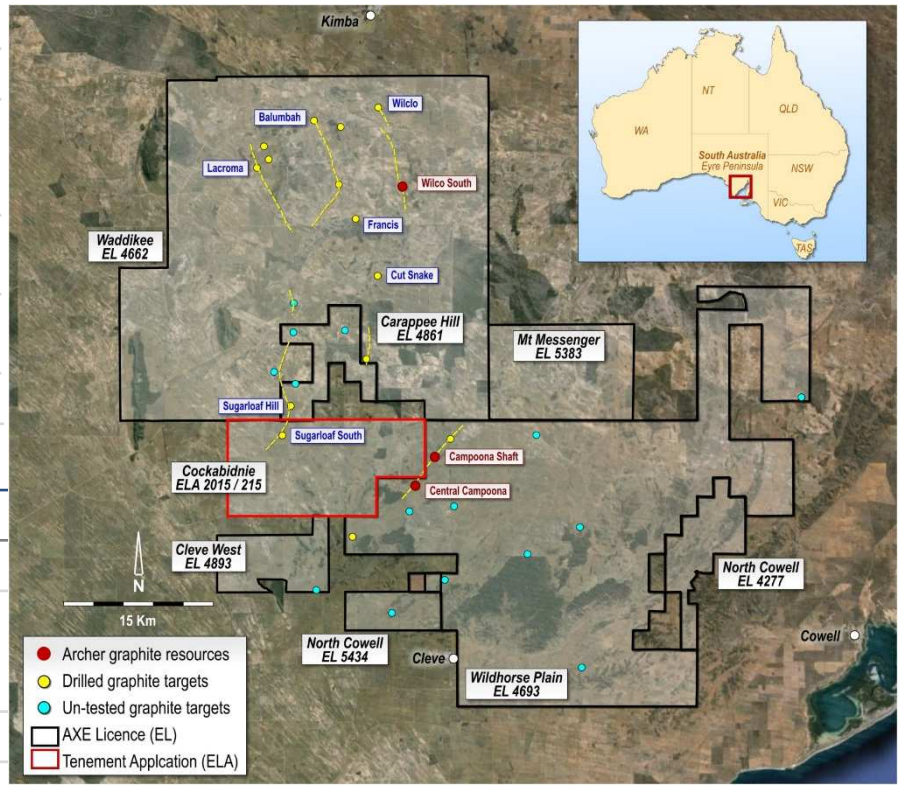
Archer's Key Graphite Assets

Location	▪ Near Cleve-Darke Peak-Kimba, Eyre Peninsula, South Australia ▪ Close to Whyalla and Port Lincoln
Total Area	▪ 2,154km^2
3 x Deposits	▪ 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	▪ Campoona South, Campoona North, Wilclo, Balumbah, Francis, Cut-Snake, Argent, Jamieson Tank, Lacroma and Ridgestone
Land Ownership	▪ 1,403 acres surrounding the Sugarloaf carbon deposit ▪ Binding agreement over sufficient land at Campoona Shaft for mining
Mining Permit	▪ Final MLP for Campoona Shaft submitted December 2015

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

Locations of Resources and Exploration Targets



* ERA application successful covering extensions to Central Campoona resource and Sugarloaf and Archer has accepted conditions for the granting of an EL

1. Campoona Shaft Resource Announcement 4 August 2014
2. Archer has 100% of mining rights to all minerals except Uranium

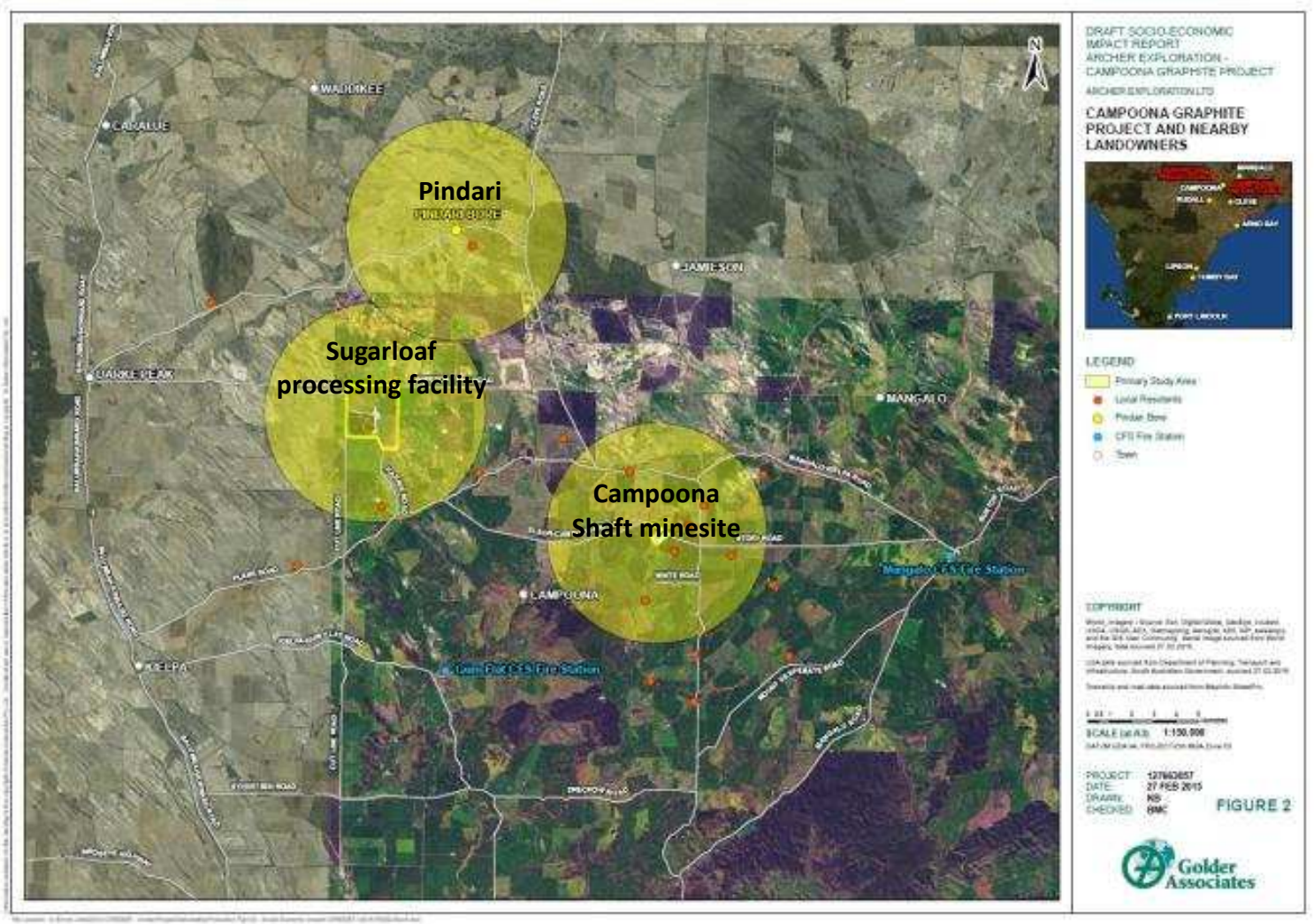
Source: Company Presentations and ASX Announcements

1. Campoona Graphite Project

ML and 2 MPLs

Development elements

- ML Campoona Shaft - covering 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

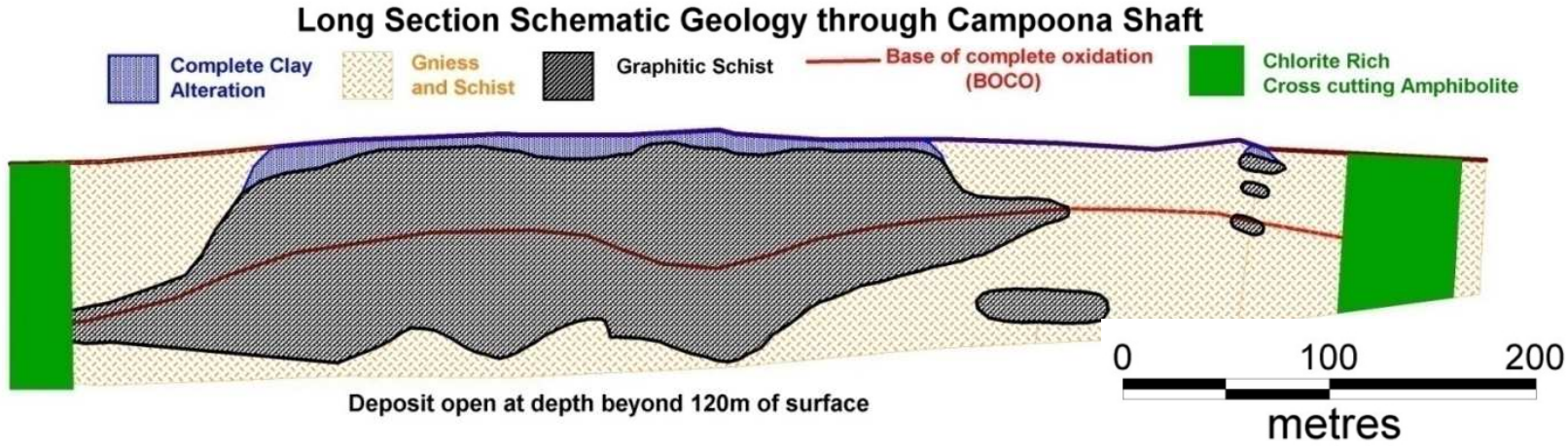
Longstanding community engagement

- Focus group meeting
- Community Consultative Committee (CCC) with community representatives, Archer, invited guests (facilitated)
- CCC meetings held regularly (~every 2 months) during 2013, 2014 and 2015
- Regular Project newsletters sent to every postal address in greater district
- Community open house information day October 2014.
- Technical studies progressively posted on Company website to allow progressive understanding of Project
- Annual Eyre Peninsula Field Days (Cleve)
- Regular liaison with Cleve Council and State government

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

Campoona Shaft Geology

Deep lateritic weathering resulting in excellent liberation of graphite from gangue



- Open cut mining - free dig to at least 70 metres
- Graphitic zones occur within 0.5m of surface
- Complete oxidation is a defining characteristic that enhances liberation of graphite during flotation

Hangingwall contact with highly weathered gneiss passing into clay-rich graphitic schist

Highly weathered graphitic schist representing the graphite deposit above the base of complete oxidation (BOCO)

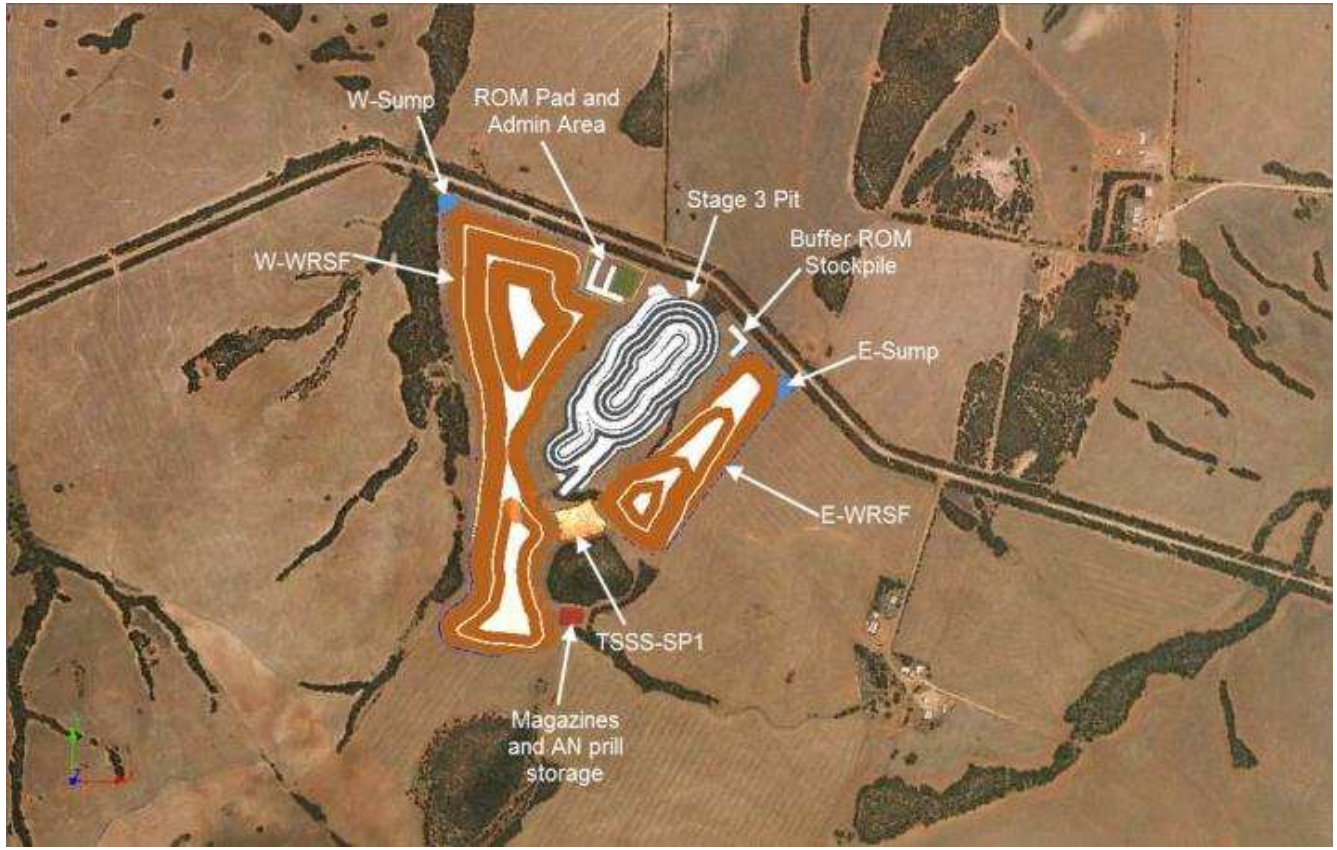
Strongly weathered graphitic schist below BOCO becomes progressively more competent with depth

Campoona Graphite - mine

Conventional, largely free dig open pit mine

Mining

- Compact site ~ 68 Ha
- Conventional open pit mine largely free dig to 70m bgl
- Initial mining of 10,000tpa from drop-cut directly into ore
- Ramp to full scale production of 140,000tpa of ore
- Campaign day-shift only mining (notionally spring and autumn for full scale production)
- Pit dry – rainfall harvested to augment bore water for dust suppression
- Starter pit west of ridgeline providing natural noise barrier
- E-WRSF constructed first, battered to 20^{o} and progressively rehabilitated
- Trenches and bunds around WRSFs to contain site run-off
- ROM stockpile sized to ensure processing ore supply between mining campaigns



Conventional 16-year open pit operation

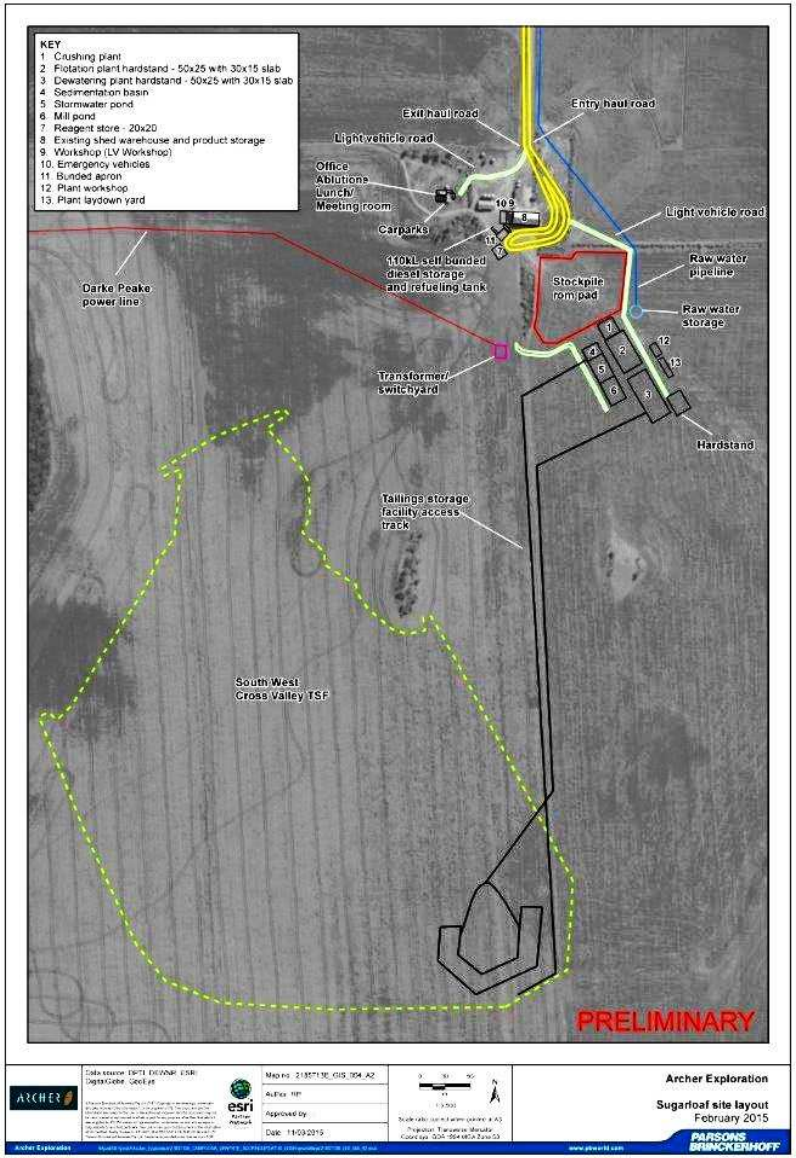
Campoona Graphite – mineral processing

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

Mineral processing

- Initial production of 1,000tpa rising to 10,500tpa (at full capacity) of very high purity graphite
- Process steps:
  - Crushing
  - Blunging
  - Rougher Flotation
  - Concentrate Milling
  - Cleaner/Re-cleaner Flotation
  - Leaching
  - Drying
  - Bagging
  - Graphene production
- 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 7 kms north of Sugarloaf
- Saline water ≈ 22,500 ppm TDS - no other beneficial users
- Two bores to supply full production requirement of 100ML/yr dropping to 60ML/yr with decant recycle

Potable water

- Potable water for final concentrate wash
- Agreement with SA Water for supply of 40 - 80ML/yr

Power

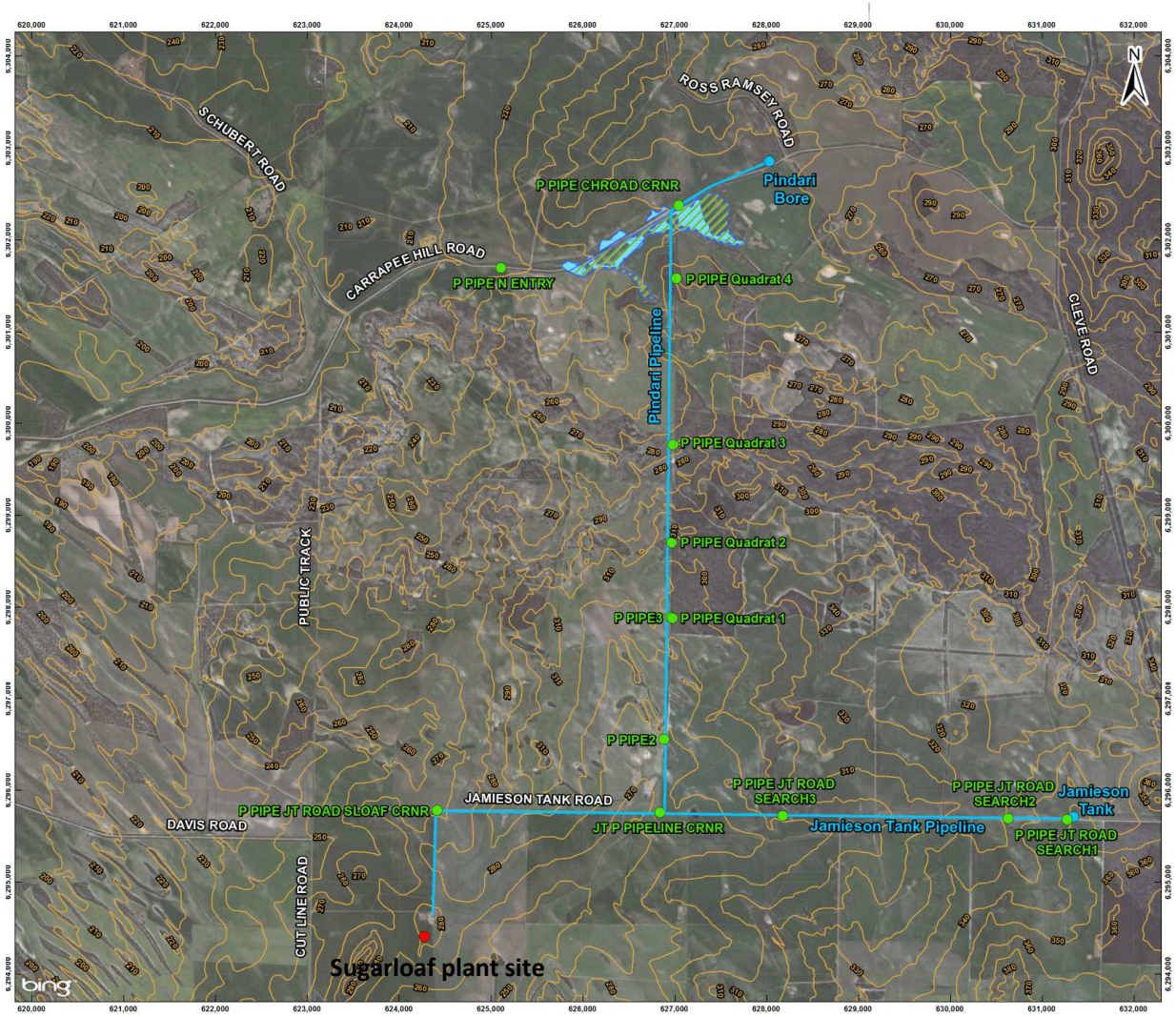
- Electricity demand up to 0.8 MW
- 11kV line 4.75kms west of Sugarloaf plant

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 +99% Cg natural graphite concentrate

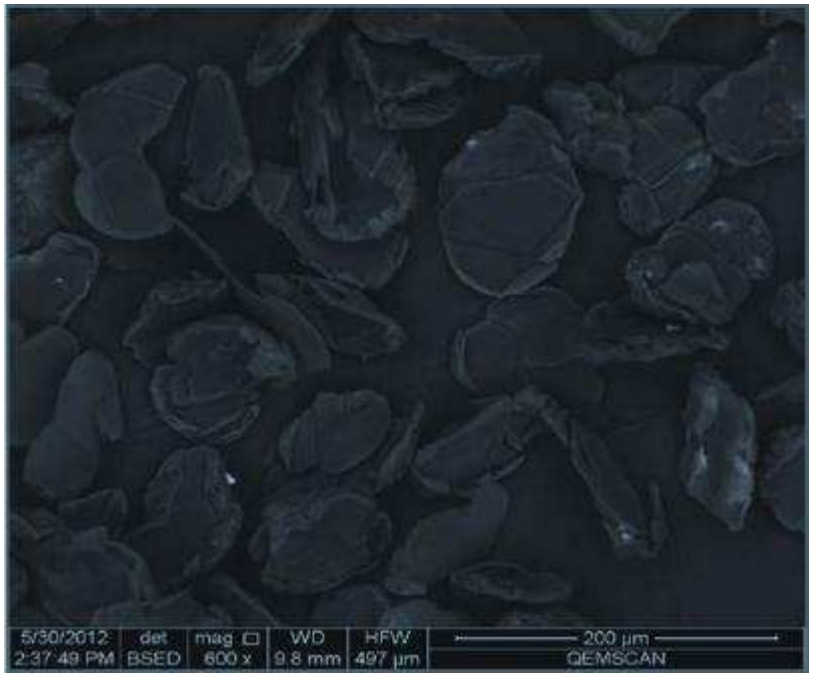
Overview of Campoona Metallurgy Testing

- 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 word's highest quality natural graphite concentrates
  - Product - P80 38 micron graphite grading +99% carbon
  - Micronise to customer requirements
- High-performing graphite flotation followed by acid treatment to remove trace contaminants to deliver +99% graphite concentrates
- Bulk floatation tests provided concentrates grading 92% – >98% Cg (concentrate grades and recoveries increase with depth)
- Acid cleaning upgrades concentrates +99% Cg
- Repeatable results over deposit-wide 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
- Production agreement for graphene nearing finalisation

Highly Crystalline Fine Graphite Concentrate

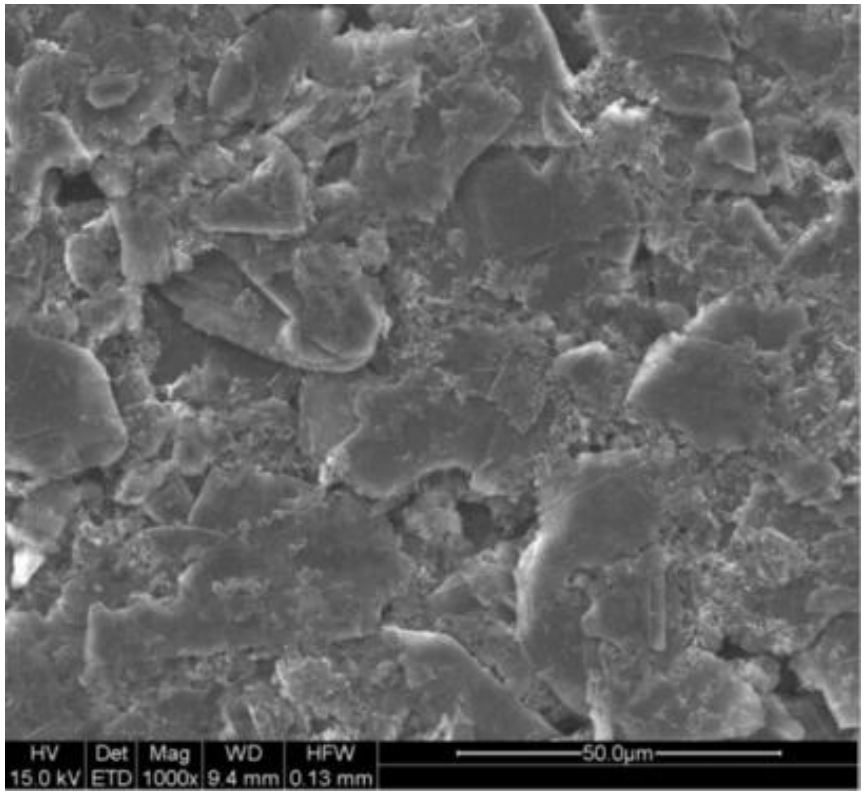


Note: *Morphology typical of the fine highly crystalline graphite concentrate (-75 micron) showing very pure crystalline graphite flake. Concentrate processed to remove trace contaminants to achieve a fine natural graphite (>99% Cg)*

Campoona Graphite – product specifications

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

- Production 1,000tpa rising to 10,500 tpa concentrate
- Typical specifications are:
  - Carbon +99% Cg
  - Sulphur <0.1%
  - Fe < 100ppm
  - Ni, Cu, V < 10ppm
  - Specific gravity 2.35 g/cc
- Application in lithium-ion batteries tested
  - Battery electrodes 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. 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:
  - Batteries for storing electricity generated by roof-top photovoltaic systems have the potential to substantially increase demand for high quality graphite.
  - Electric and electric hybrid vehicles

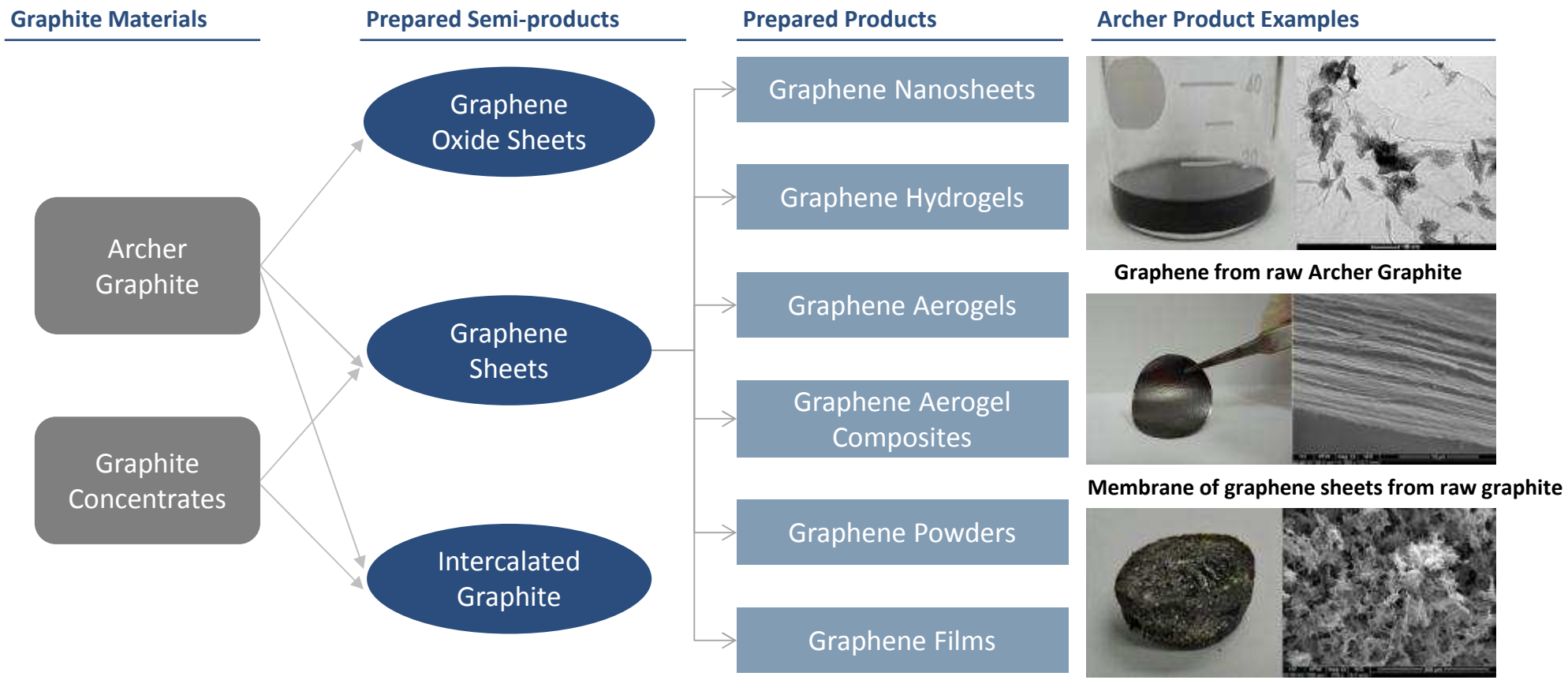


SEM image of 99.5% Cg Campoona graphite

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 - a two-year research collaboration into graphite and graphene products

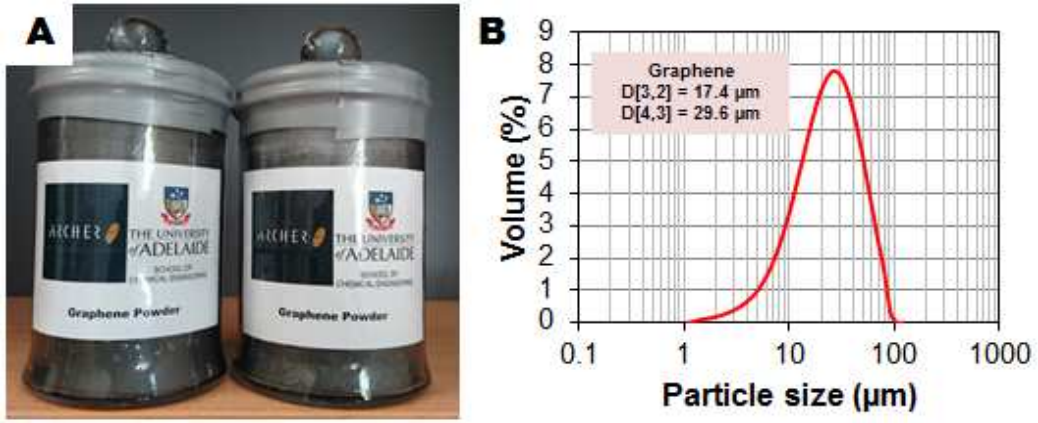


Campoona high grade concentrates exfoliate to give >99.9% graphene

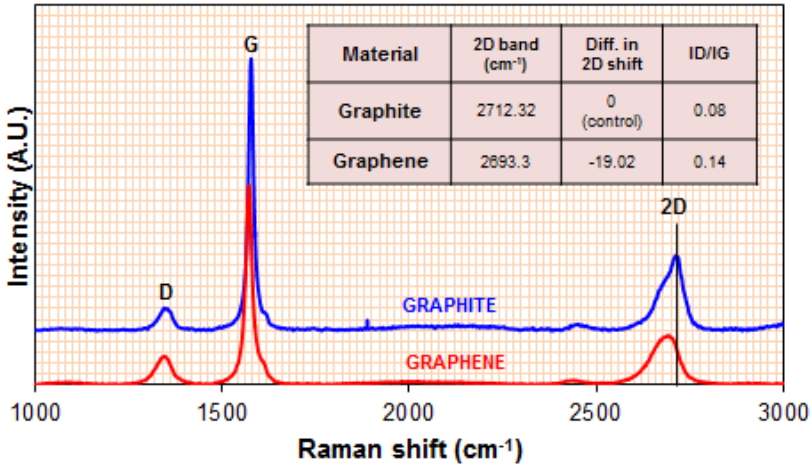
Source: Company Presentations and ASX Announcements

Archer graphene

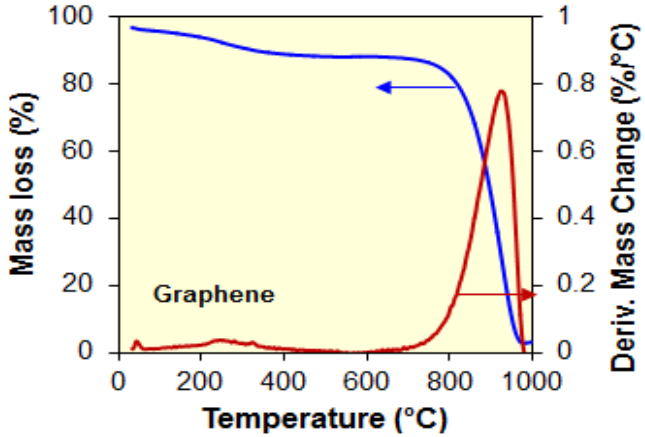
Pure graphene offers enormous commercial opportunities



Summary of characterization results a) Photograph of prepared graphene powder in glass bottles (Total = 240g), b) typical particle size distribution of graphene particles, and c) high resolution SEM images of graphene sheets.



Raman data of graphite and prepared graphene showing typical D, G and 2D bands. Shift of 2D peak confirms the transformation of graphite into graphene.

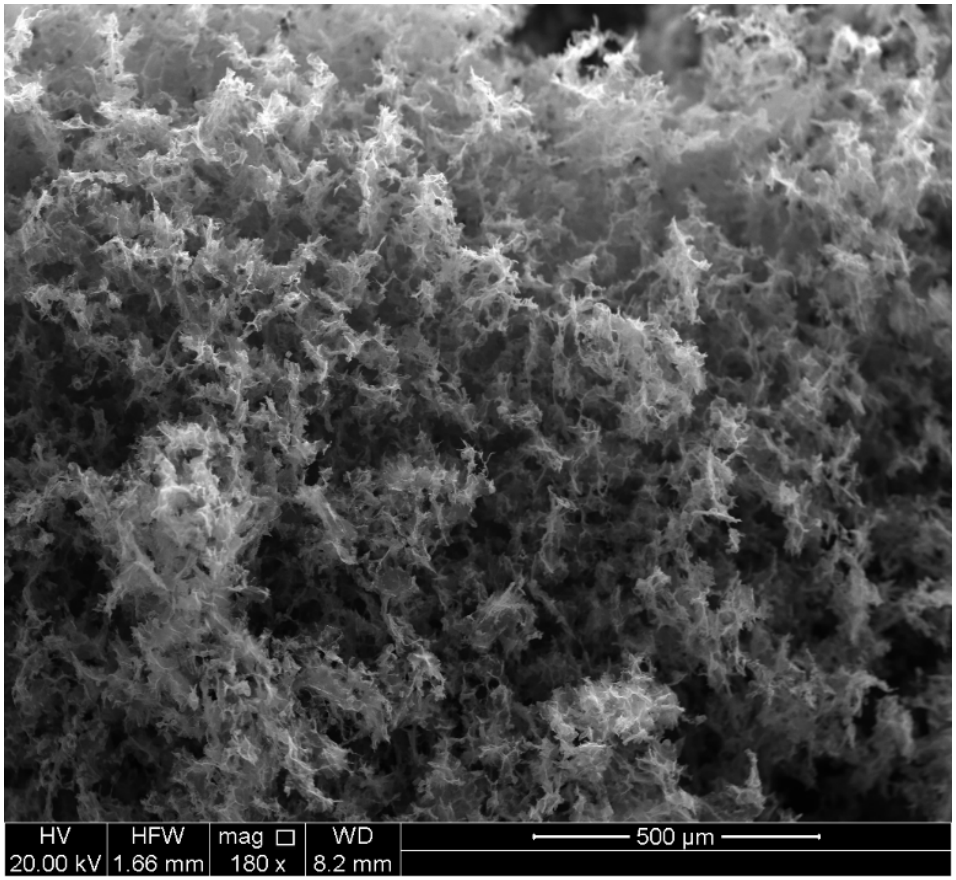


TGA of graphene powder combusted in air at a rate of 20°C/min confirming purity of prepared material

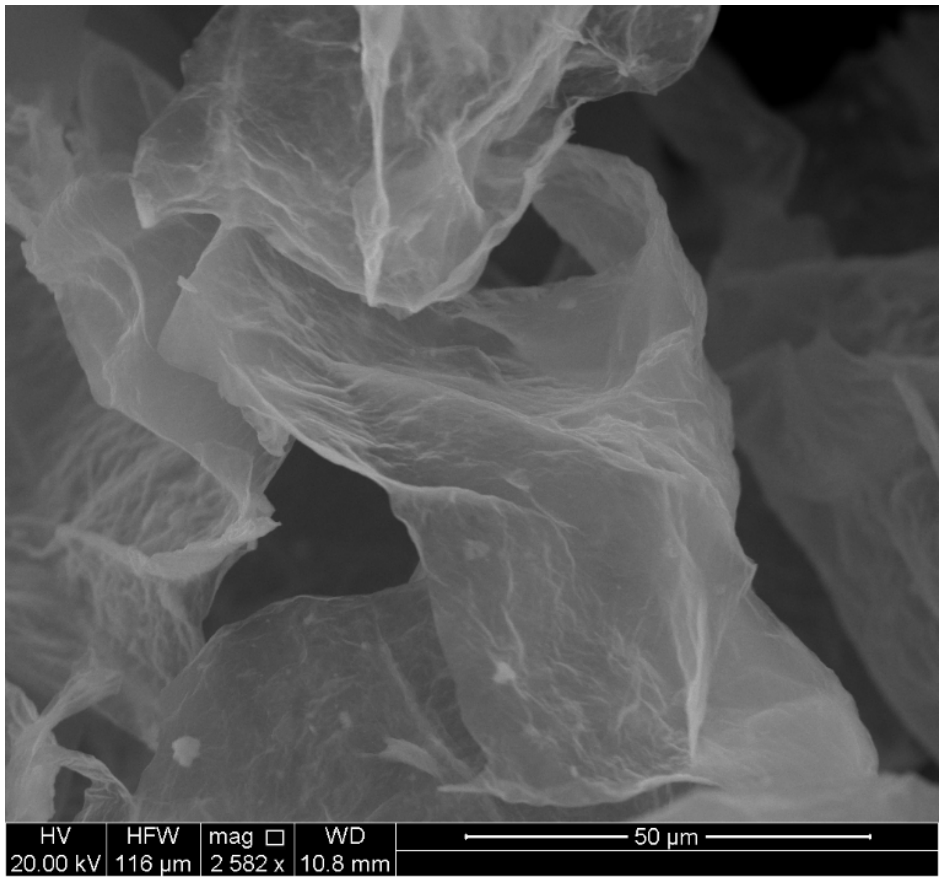
Investigating options for commencement of commercial-scale graphene manufacture

Campoona graphite converts to >99.9% graphene

High grade Campoona graphite concentrate enables production of pure graphene



Graphene aerogel



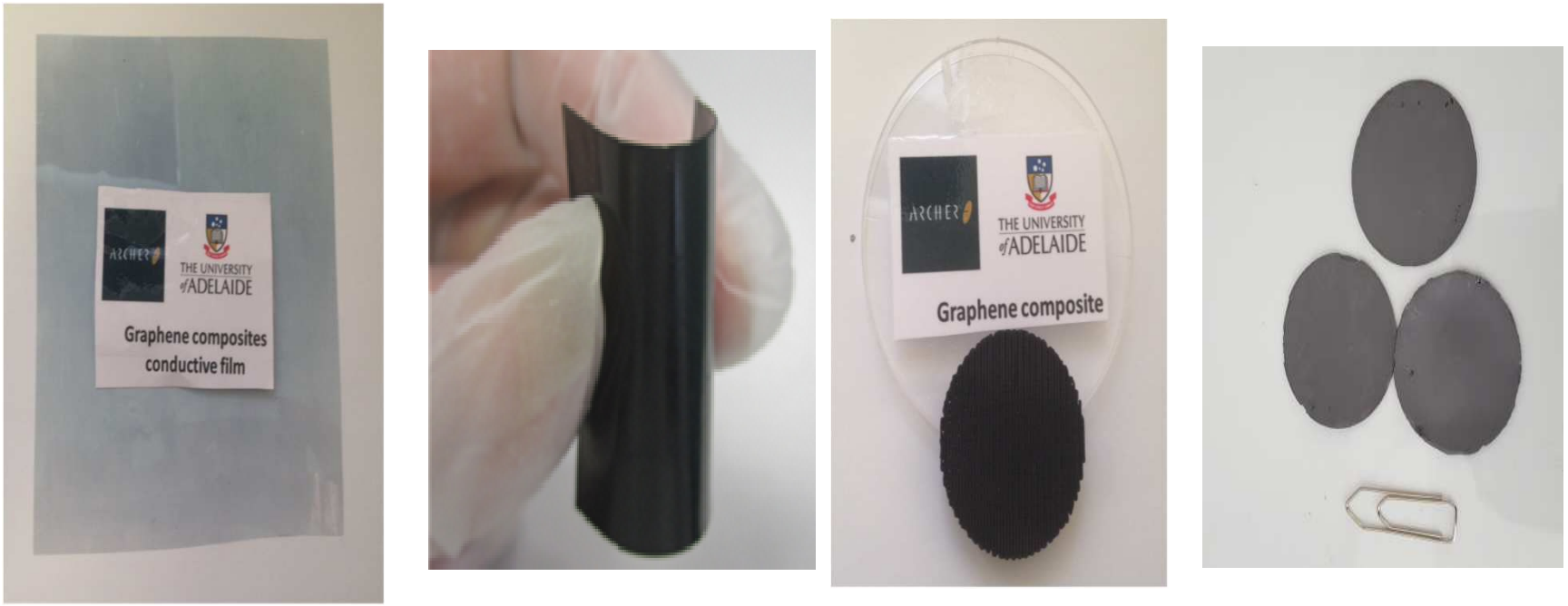
Graphene aerogel close-up

- In discussions on commercial-scale graphene production
- Research-quality graphene products will be fully certified

Product accreditation scope defined

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

- High quality graphene prepared using direct liquid phase mechanical exfoliation
- Graphene products (inks, conductive films, electrodes) all have excellent electrical conductivity performance
- Potential applications in solar cells, photovoltaics, printable electronics, supercapacitors, batteries etc.
- Several types of electrodes prepared to prove their electrical properties related to battery applications achieved resistivity of **0.5 Ohm/sq** which can only be achieved with the highest purity graphene

Archer's pure graphene has enormous potential in applications such as supercapacitors, solar cells, photovoltaics, printable electronics, batteries and sensors

Campoona Graphite – Project timetable

Second iteration of MLP completed to include small scale start-up and the production of graphene

Final MLP ready for submission

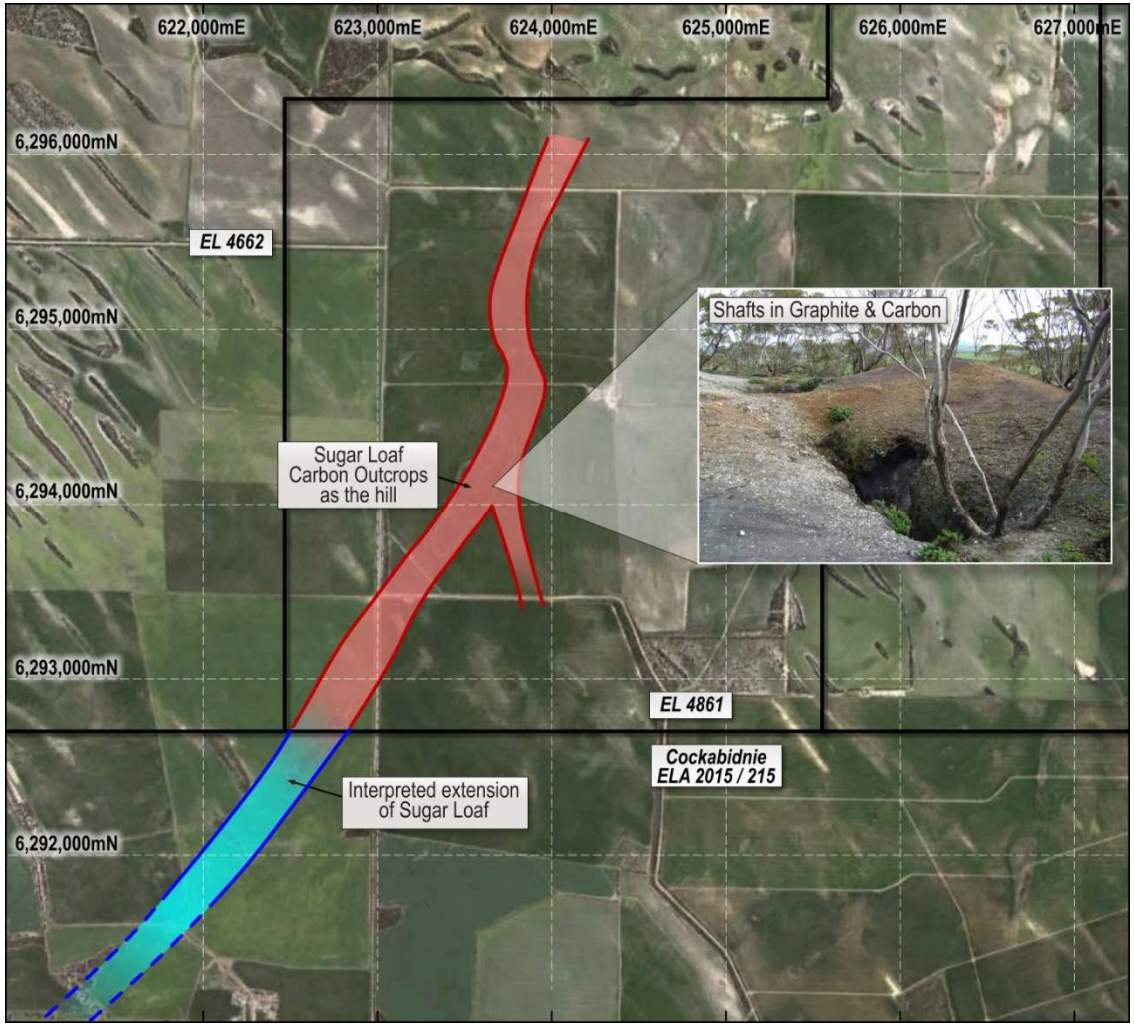
- Current MLP based on small scale production start-up with graphite concentrate output rising to 10,500tpa
- Small scale start-up will enable technical de-risking of the Project with limited capital exposure
- Modularised small scale start-up plant may qualify under State and Federal Government Innovation funding initiatives
- Leached grades +99% Cg
- Several parties have tested and are testing Campoona product
- Archer's >99.9% graphene has enormous potential and discussions underway to commercialise production
- Off-take agreements (graphite and graphene) will allow the completion of the PEPR

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

Sugarloaf carbon

Excellent potential as soil conditioner

- Sugarloaf hosts unique carbon deposit with an exploration target of 40 – 70Mt at 10-12% TC*
- Within 100m of the proposed graphite processing facility
- Provides an ideal resource for bulk use projects
- Successfully awarded ELA with known southern extensions to Sugarloaf and Campoona
- Early test work by UniSA is positive with further test work to follow



* *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.*

Huge Exploration Target likely to get much larger with grant of EL over ELA 2015/215

Sugarloaf carbon

Improves soil wettability and moisture retention

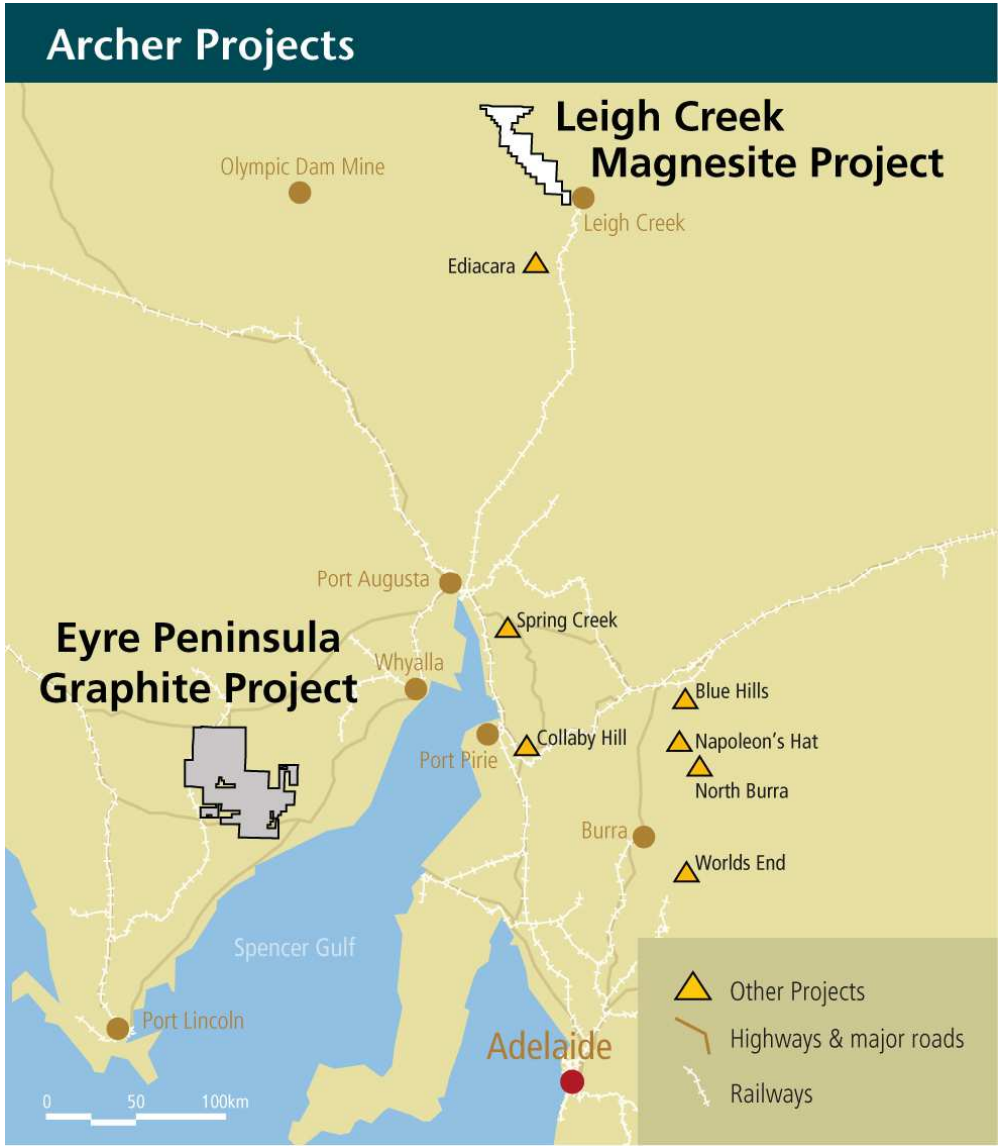
- Initial results from Adelaide University indicate:
  - carbon additions improve soil wettability and the soil's ability to retain moisture
  - presence of trace elements found in fertilisers
  - assists plant growth
- This carbon could be produced at very low cost
  - readily dug, crushed, screened and bagged
- Partners will be sought pending outcomes of further research currently underway at Adelaide University

Looking west from top of Sugarloaf Hill across Archer's farm land

Plant trials being planned to confirm the ability of Sugarloaf carbon to aid plant growth

2. Leigh Creek Magnesite Project

World's largest cryptocrystalline magnesite ($MgCO_3$) deposit

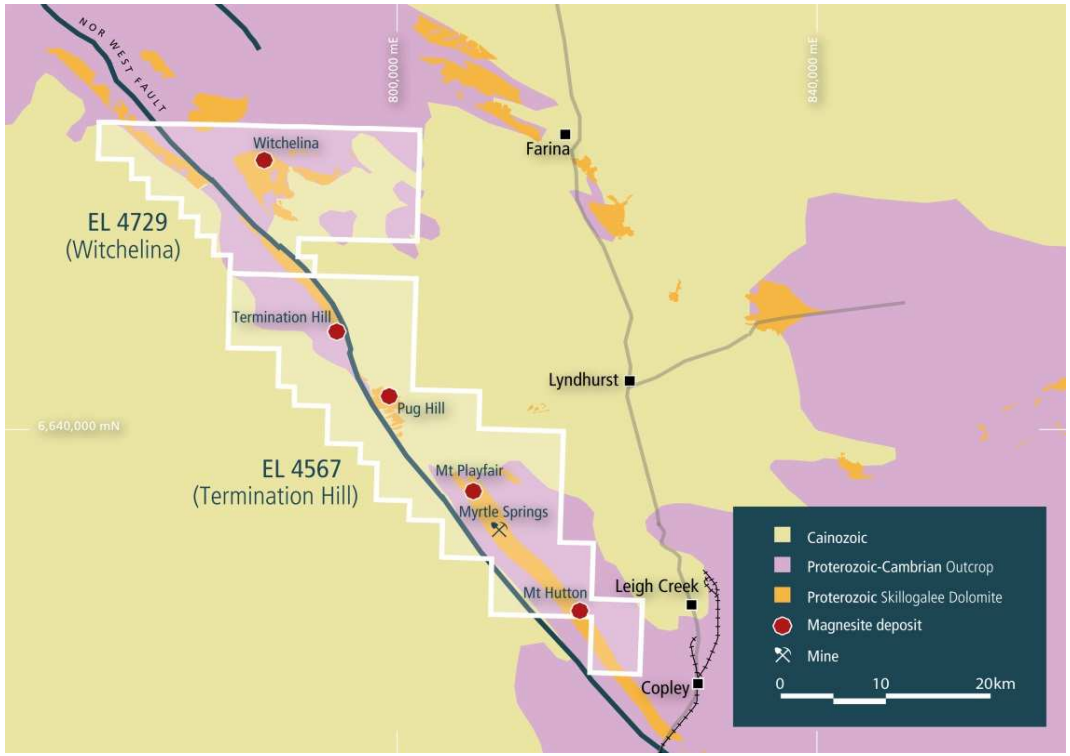


Exhaustively studied project close to development

Leigh Creek magnesite

World's largest cryptocrystalline magnesite deposit

- Exploration Licences EL4567 Termination Hill and EL4729 Witchelina
- Five designated magnesite deposits (Mt Hutton, Mt Playfair, Pug Hill, Termination Hill and Witchelina) extend for 60 kilometres northwest of the township of Leigh Creek
- Magnesite ($MgCO_3$) chemically precipitated as discrete beds within host dolomite ($CaMgCO_3$)
- Stable, quiet depositional environment produced magnesite beds with remarkable uniformity in terms of bed thickness and grade over tens of kilometres



Magnesite beds at neighbouring Myrtle Springs mine

Magnesite beds exhibit remarkable uniformity in terms of thickness and grade

Leigh Creek magnesite resource

Leigh Creek accounts for 48% of World's known cryptocrystalline magnesite resources

Deposit	Measured	Indicated	Inferred	Total	MgO (%)
Mount Hutton South	-	30.0	-	**30.0**	42.0
Mount Hutton	18.3	42.0	53.0	**113.3**	42.9
Mount Playfair	-	21.0	23.0	**44.0**	42.5
Pug Hill		10.0	10.0	**20.0**	42.7
Termination Hill	4.0	5.0	20.0	**29.0**	42.8
Witchelina	23.7	94.0	99.0	**216.7**	40.0
Total	46.0	202.0	205.0	**453.0**	41.4

JORC 1999 Resource

Enormous resource base could support any foreseeable production scenarios for centuries

Magnesite + heat = MgO (Magnesia) + CO_2

Magnesia characteristics

- Magnesia (magnesium oxide or MgO) is a specialist industrial mineral with diverse end market uses
- Magnesia can be produced from the natural mineral magnesite or synthetically from magnesium hydroxide
- The key properties of magnesia are:
  - high melting point of 2,852°C (5,166°F) one of the highest of any mineral
  - physically and chemically stable at high temperatures
  - reactive in its calcined form
  - an alkali
  - a nutrient
- Three broad categories of magnesia products: caustic calcined magnesia (CCM), deadburn magnesia (DBM) and electrofused magnesia (EFM)

CCM

DBM

EFM

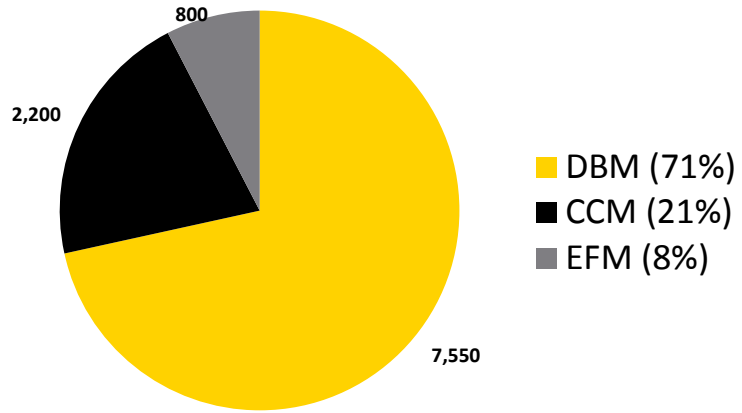
Archer's production focus is on DBM and CCM

Magnesia market

Growth markets

- The magnesia market is split between:
  - refractory applications (DBM and EFM)
  - a variety of chemical applications (CCM)
- DBM is the dominant magnesia product accounting for approximately 71% of global magnesia consumption while CCM and EFM account for 21% and 8% respectively
- High value magnesia supply is limited, originating primarily from cryptocrystalline based magnesia and synthetic based magnesia
- Demand for magnesia is expected to continue growing through 2017, at a rate of 3.6% pa (growth trend rate of the last 12 years = 4.7% pa)

2012 Global Magnesia Demand by Product ('000t)



Global Magnesia Expected Growth Demand

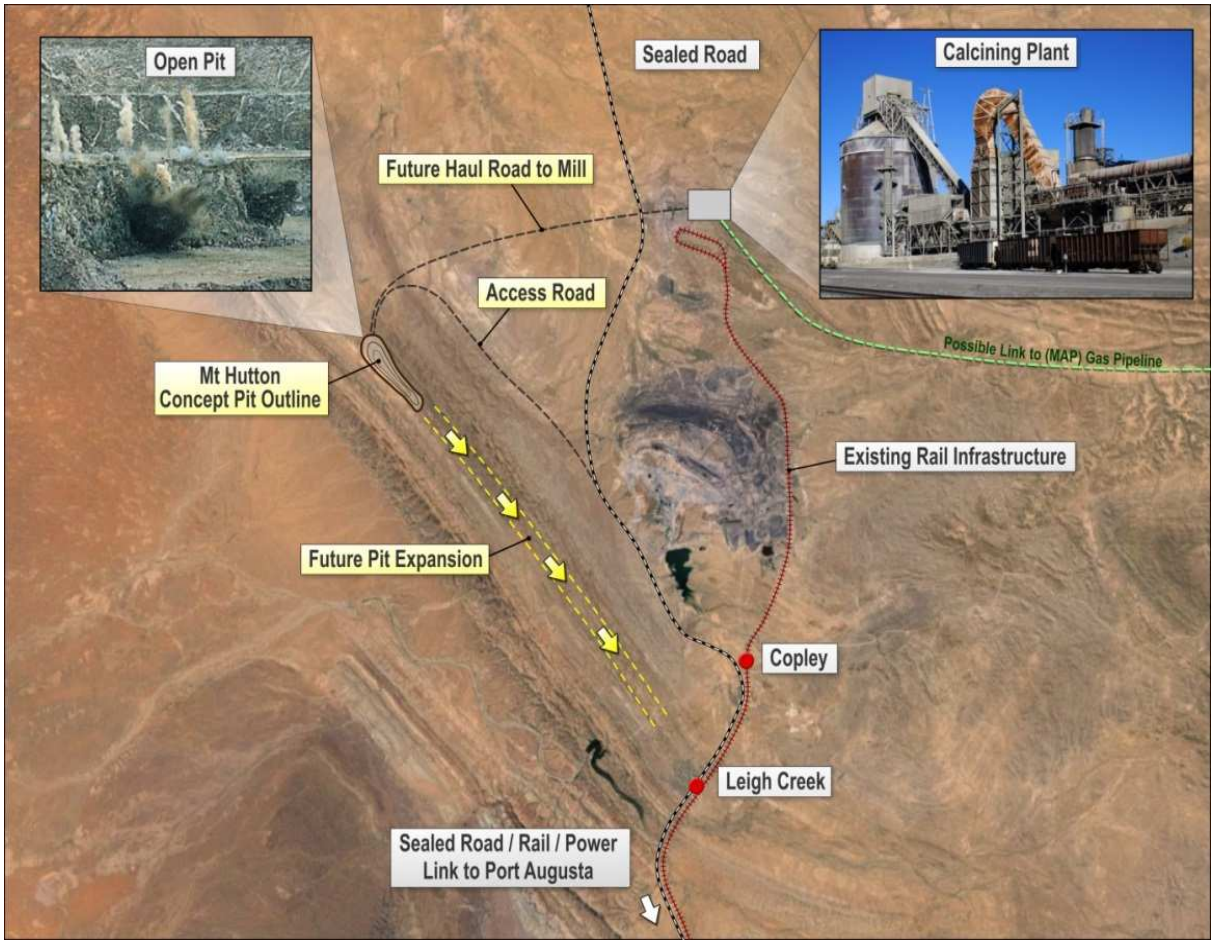
	2017E ('000 t)	Growth (%)
High Value		
DBM	2,197	3.5
EFM	965	3.8
CCM	866	7.6
	4,028	4.4
Low Value		
DBM	6,770	3.5
CCM	1,811	2.5
	8,581	3.3
Total	12,609	3.6

Source: Industry Consultant. Various industry publications

Leigh Creek Project plan

Calcination option using third party kilns

- Shallow ~40m deep open pit undertaken by contract miner
- ROM ore crushed and screened to remove fine silica in form of talc
- Reject fines make excellent road base for haul road construction
- Interburden dolomite backfilled into pit
- Transport screened magnesite by road/rail
- Toll treat magnesite using third parties' spare kiln capacity to produce deadburn magnesia/caustic calcined magnesia products suitable for a range of market applications
- Archer has a completed EMLA/MLP available for Mt Hutton which could be submitted at short notice subject to ground-truth the immediate mine environment to confirm that environmental conditions have not changed since the previous Mineral Lease was granted



Complete historic EMLA could be resubmitted at short notice

Production trial planned Sep 2016

A successful trial likely to open opportunities for longer-term toll treating arrangements

- Non binding MOU signed for the long-term supply and mining of magnesite at Leigh Creek
- Archer is in advanced discussions with third parties to use their spare kiln capacity on a toll treatment basis to make magnesia products
- Calcining trial at this stage is planned for September 2016
- If the processing trial is successful a longer-term contract is in the offing
- Additional calcining capacity has also been discussed and is being investigated
- HoA signed with Leigh Creek Energy – potential source of future gas supply

Magnesite stockpiles from historic trial mining at Mt Hutton

A magnesite operation at Leigh Creek would provide some respite for the beleaguered township

Leigh Creek magnesite summary

Exciting opportunity

- Alinta's decision to close its coalfield has opened opportunities at access existing infrastructure:
  - Town – fully serviced mining township
  - Rail – standard gauge rail line linking Leigh Creek to Port Augusta, Port Pirie and Port Adelaide. Access to rail would greatly improve project logistics
  - Roads – sealed all weather roads to Project turn-off
- Leigh Creek township lying just 20 kilometres from Mt Hutton offers the amenities of a serviced town – housing, airport, school, services etc.
- Securing an agreement to toll treat magnesite offers a very low capital cost entry into the magnesia business
- Exciting near-term prospect for the Company to commence operations

Leigh Creek coal train (source: adelaidenow.com.au)

Town entrance (source: www.roamingtheoutback.com.au

Summary – Two imminent project developments

Eyre Peninsula Graphite Project

- Mining Lease Proposal covering Campoona Shaft deposit completed
- Small scale start-up (nominally Years 1-3) before full scale production of 10,500tpa of >99% Cg graphite concentrate
- LOM 16 years
- Further resources at Central Campoona and Lacroma able to be processed in same process flowsheet which will extend LOM to >>25 years
- Campoona graphite concentrates exfoliate to pure (>99.9%) graphene which has outstanding electrical properties
- Up to 100% of graphite concentrate capable of being converted to graphene
- Several additional graphite deposits and prospects in immediate area

Leigh Creek Magnesite Project

- Archer, through its wholly owned subsidiary Leigh Creek Magnesite Pty Ltd, has a 100% in the World's largest cryptocrystalline magnesite deposit with a JORC 1999 resource aggregating 453 million tonnes grading 41.4% MgO
- Magnesite ($MgCO_3$) + heat = MgO (Magnesia) + CO_2
- Archer's laboratory tests delivered good quality magnesia products
- Discussions with third parties to undertake calcination trials are well advanced
- Product from a trial would be sent to particular end users which have expressed an interest in securing long-term off-take
- Toll treating discussions canvassed longer-term toll treatment agreements once the calcining trial has proven successful
- Archer is making preparations for trial mining

Campoona Graphite and Leigh Creek Magnesite are not resource constrained and offer long-life production options

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Thank you