



ARCHER

ARCHER EXPLORATION LIMITED

Graphite Presentation

June 2015

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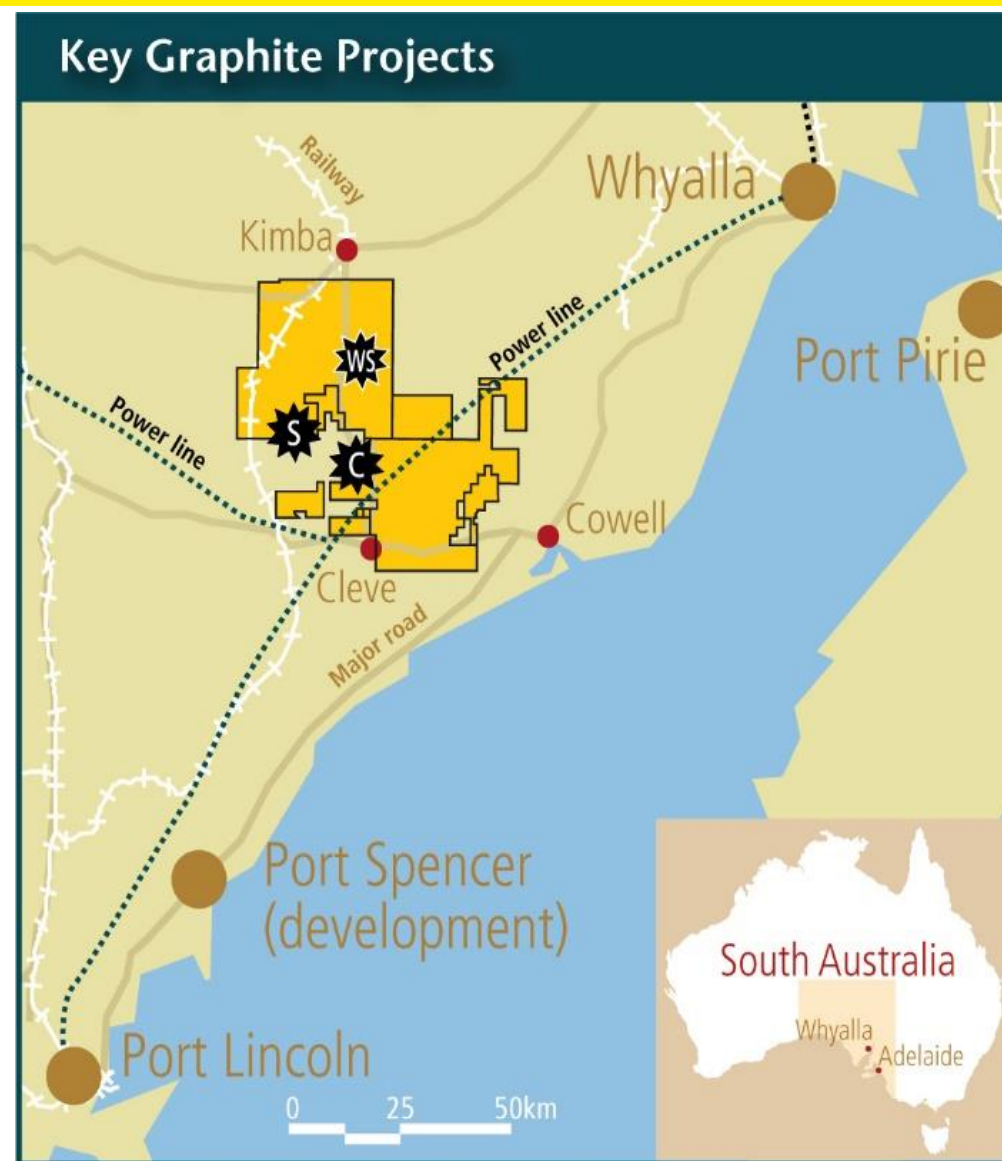
Greg English

Chairman



- Introduction
- Objective – boutique diversified graphite producer
- Pipeline of activity
- Projects
 - Campoona shaft
 - Waddikee flake
 - Sugarloaf
- Graphene research
- Investment case and advantages in product, processing and market

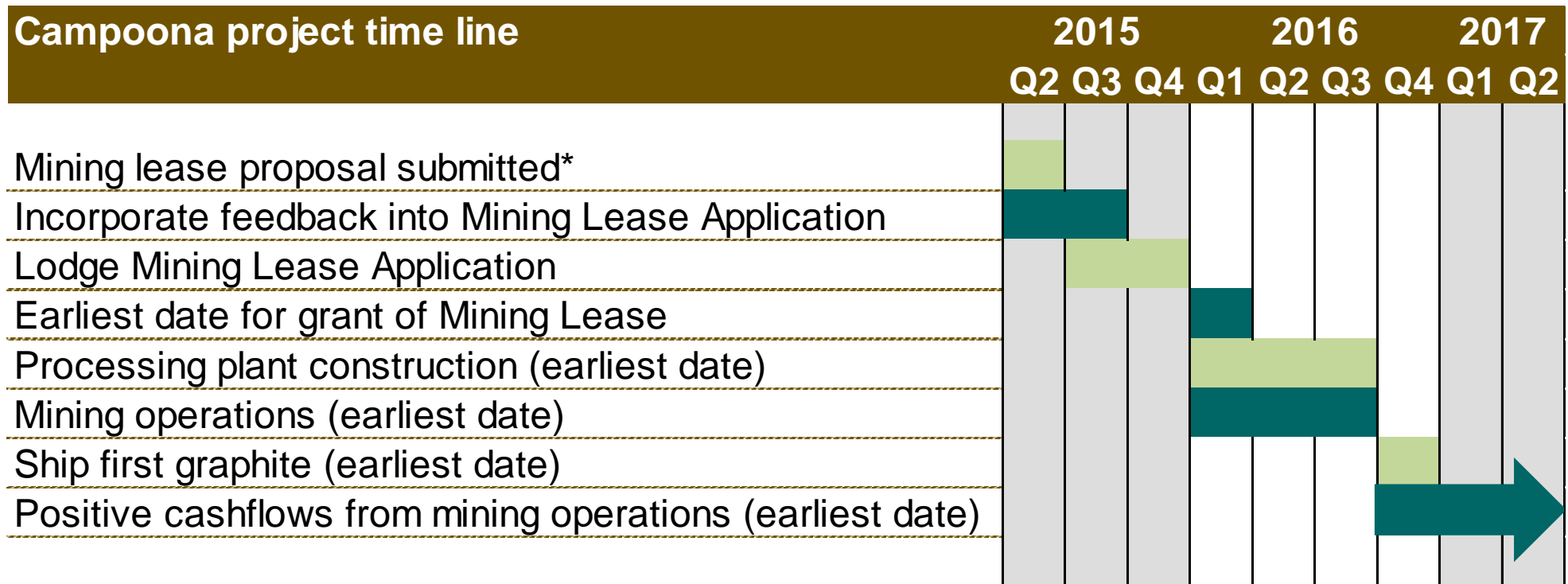
- Australia's largest JORC 2012 graphite resource
- Archer is developing the Campoona Project, one of its three 100% owned graphite projects in South Australia.
- Located in a safe jurisdiction with access to power, water and a skilled workforce.
- Campoona produces an ultra-pure graphite suitable for use in lithium ion batteries.
- Large flake JORC resource at Wilclo South
- Archer graphite used in graphene manufacture with ongoing graphene development.
- Management team has proven mine building and operating experience.



Advanced Graphite Projects

 Campoona  Sugarloaf  Wilclo South

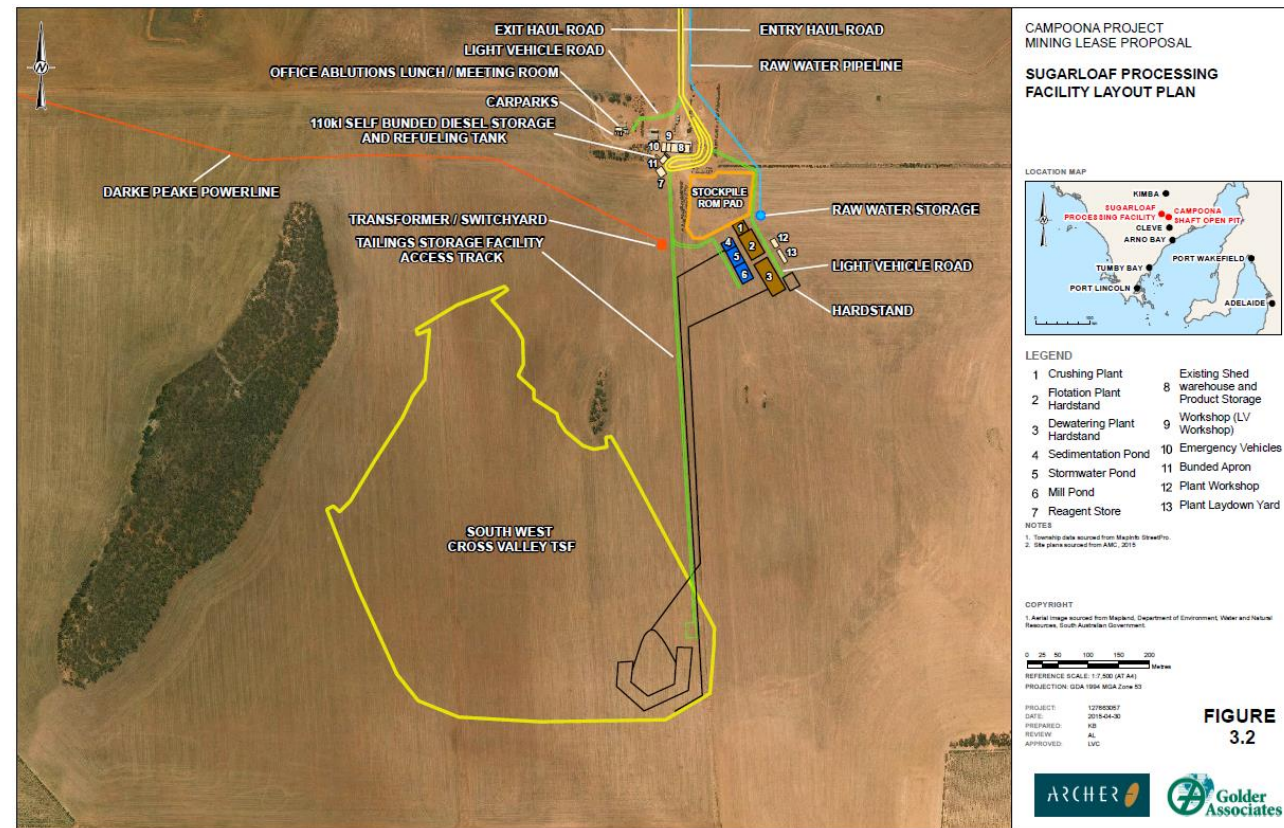
Archer's objective is to manufacture at least 10,000 tonnes per annum of battery grade graphite



*ASX announcement 14 May 2015





Following success at Campoona, Sugarloaf and Waddikee will be prioritised for either second train options for Campoona production or stand alone projects

- Mining is a small part of Archer's graphite business.
- Construction of on site advanced graphite processing facility to create ultra-pure natural graphite.
- Archer ultra-pure natural graphite to replace more expensive synthetic graphite in lithium ion batteries.
- Campoona graphite is valuable.
- Wilclo large flake JORC resource offers new range of products.
- Archer graphite used in the manufacture of graphene.
- "Internet of things" growth will further fuel demand for graphene for its conductivity and other material properties



Site layout of Sugarloaf manufacturing facility

- Graphite use in lithium-ion batteries to grow exponentially in the near future.
- Electric car and home battery market set for unprecedented growth.
- BMW, Mercedes, Toyota etc. already selling electric cars.
- Tesla to start selling lithium batteries to Australian homes in 2016. Battery manufacturers already supplying batteries to domestic market.
- Graphite use in lithium-ion batteries is predicted to at least double every 3 years.
- Campoona graphite is suitable for use in lithium ion batteries.

THE MEGAFACTORIES ARE COMING					
	Capacity	Cost	Location	Battery type	Start-up
	35GWh	\$5bn	Nevada, USA	Lithium-ion	Q1 2017
					
 LG Chem	7GWh*	\$500m*	Nanjing, China	Lithium-ion	Q1 2016
	15GWh*	\$810m*	Anhui, China	Lithium-ion	H1 2016

*Benchmark estimates, not disclosed by company
Source: Benchmark Mineral Intelligence

Objective – boutique diversified graphite producer

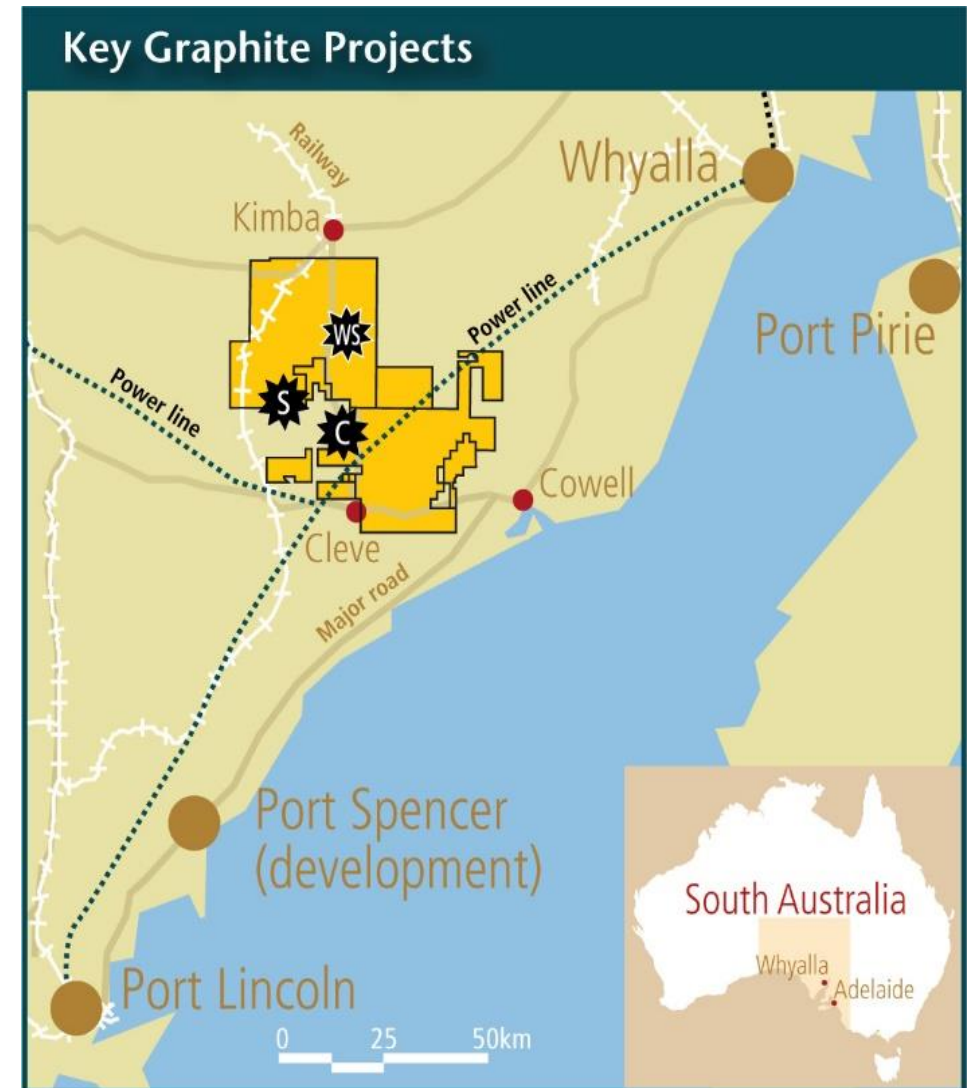
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Archer's objective is to produce 10,000 tonnes per annum of ultra pure Campoona graphite

- Conventional mechanical cell flotation
- High purity, high value crystalline fine graphite
- Testing of indicates suitability for lithium-ion batteries
- Future complimentary developments at Wilclo South (large flake) and Sugarloaf

Area	Resource Category	Tonne s (Mt)	Graphitic Carbon %	Contained Graphite (t)
Campoona Shaft	Measured	0.32	12.7	40,600
	Indicated	0.78	8.2	64,000
	Inferred	0.55	8.5	46,800
Central Campoona	Indicated	0.22	12.3	27,100
	Inferred	0.30	10.3	30,900
Combined	Total Resource	2.17	9.6	209,400

Campoona JORC 2012 Graphite Resources
(5%Cg cut-off grade)



Advanced Graphite Projects

Campoona Sugarloaf Wilclo South

- Draft Mining Lease Proposal submitted 4 May 2015
- Orebody outcrops and is free dig for first 70 metres
- Project is easily scalable to meet demand
- Construction of on-site advanced processing facility
- When combined with Central Campoona Resource project has a + 20 year mine life
- Critical infrastructure available:
 - ✓ water
 - ✓ power
 - ✓ transport
 - ✓ processing site
 - ✓ workforce accommodation and services



Campoona Shaft core samples



Drilling at Campoona in March 2012

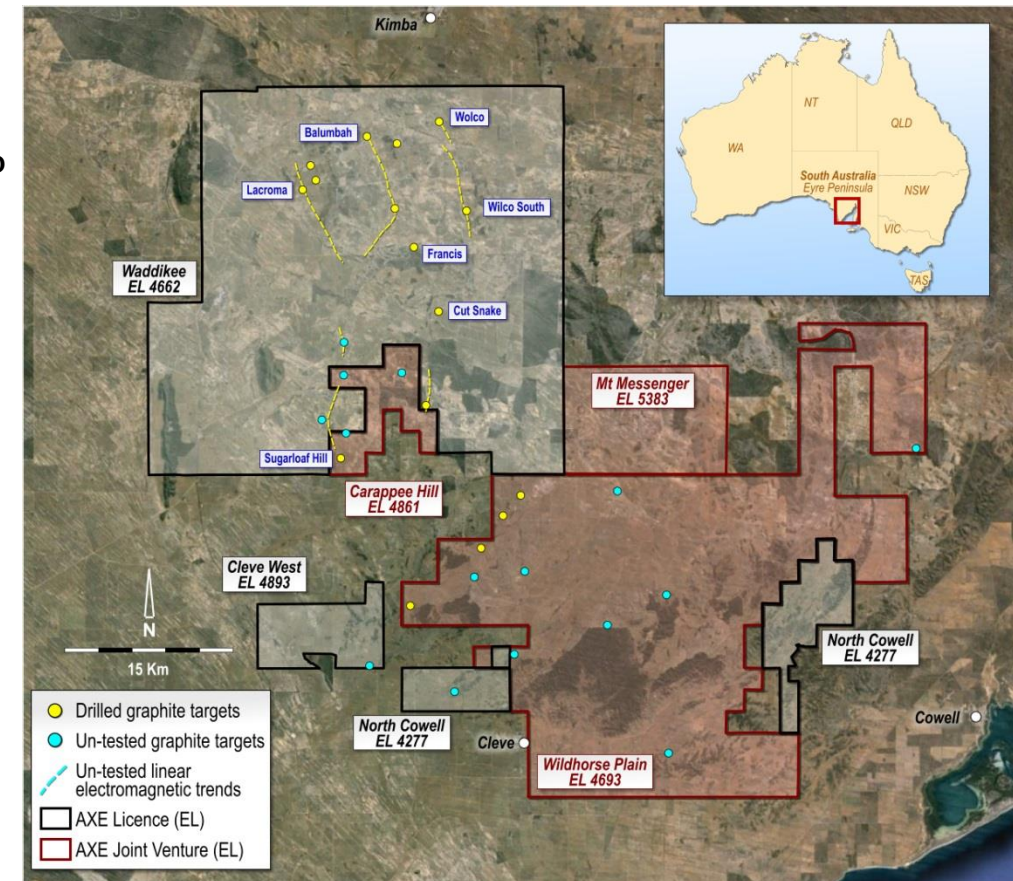
- Campoona Shaft will produce high purity graphite
- Wilclo large flake to be processed at same facility
- Current estimates suggest IRR of greater than 28% based on processing 140,000tpa of ROM graphite ore to produce $\approx 10,700$ tpa high purity concentrate
- At 140,000tpa Campoona Shaft's mine life 14 years:
 - Total cost of upgraded concentrate is A\$1,600 per tonne
 - Capex estimate for plant and mine is approximately A\$36M
 - Estimated revenue is US\$2,500/t (\approx A\$3,250 per tonne)
 - Resources capable of supporting expanded production

Wilclo South

- Extra Large, Large, Medium and Fine Flake graphite at grades of 91-93% Cg.
- Inferred Resource of 6.38Mt @ 8.8% Cg (5% Cg cut-off)
- Only 20% of all graphite targets drilled
- Resource upgrade expected with further drilling
- Flake content \approx 50%

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

Indicative Flake distribution from the oxide profile at Wilclo South

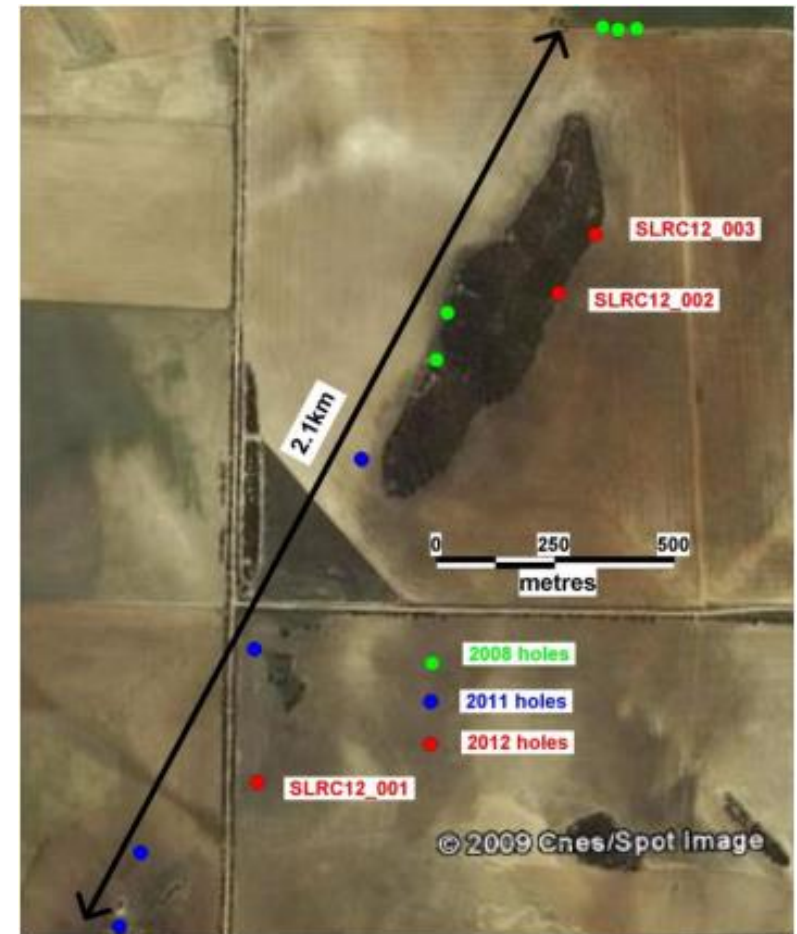


Key graphite deposits and prospects on Waddikee EL4622

- Large highly graphitic schist with an exploration target of 40 – 70Mt at 10-12% Total Carbon
- Graphite readily transformed into graphene products
- Ideal resource for bulk use projects
- Graphite was historically mined from two shafts at Sugarloaf, but records state mining ceased before 1915
- Mineralisation within 100m of graphite processing facility

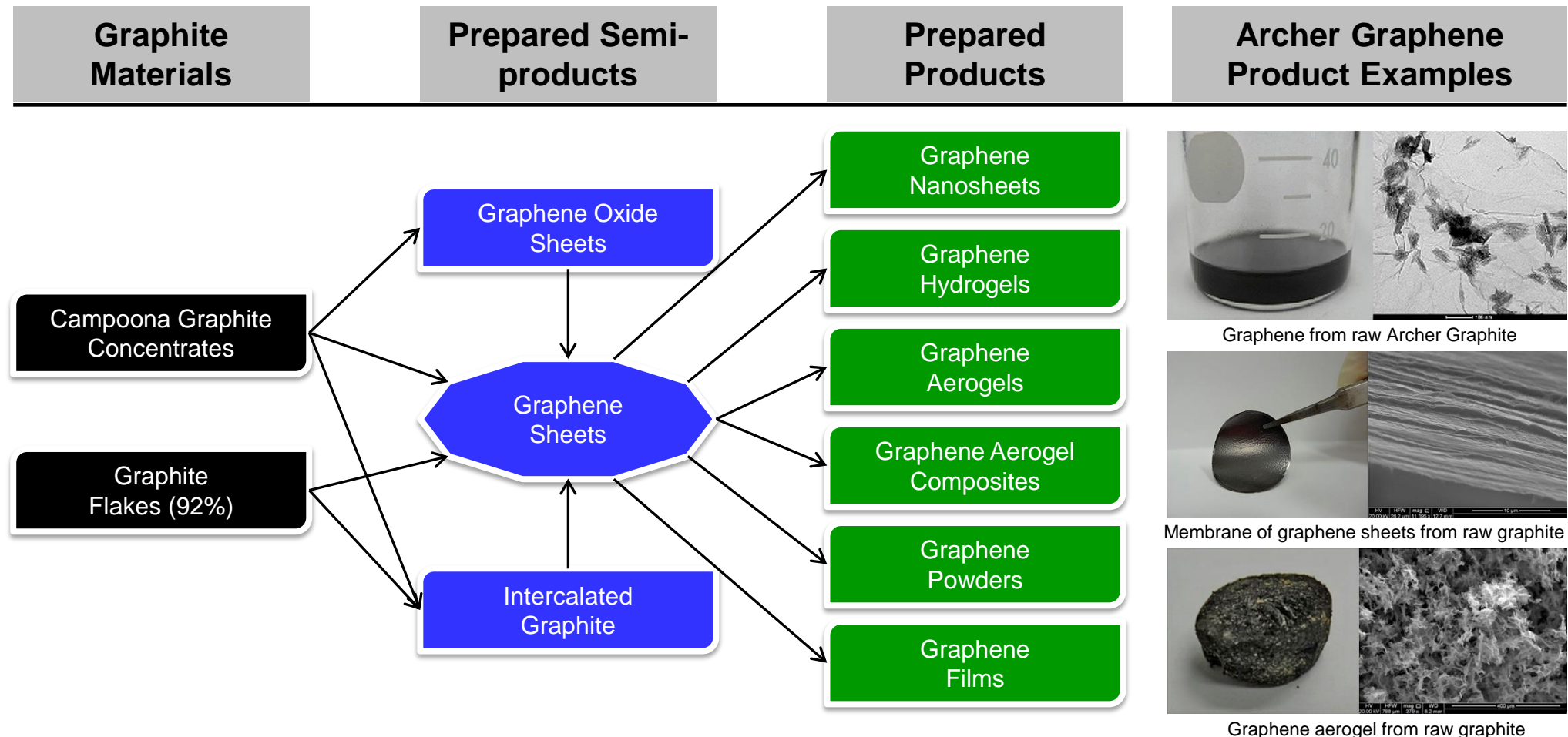


One of the historic mine shafts at the Sugarloaf deposit



Location of all Archer holes drilled at Sugarloaf

Two-year research program with University of Adelaide showing promising results for commercial uses of Archer graphite and graphene related products



- **Campoona**

- ✓ Very high purity graphite suitable for use in lithium-ion batteries.
- ✓ Graphite behaves similar to commercial synthetic graphite for electrical cycling and other features.

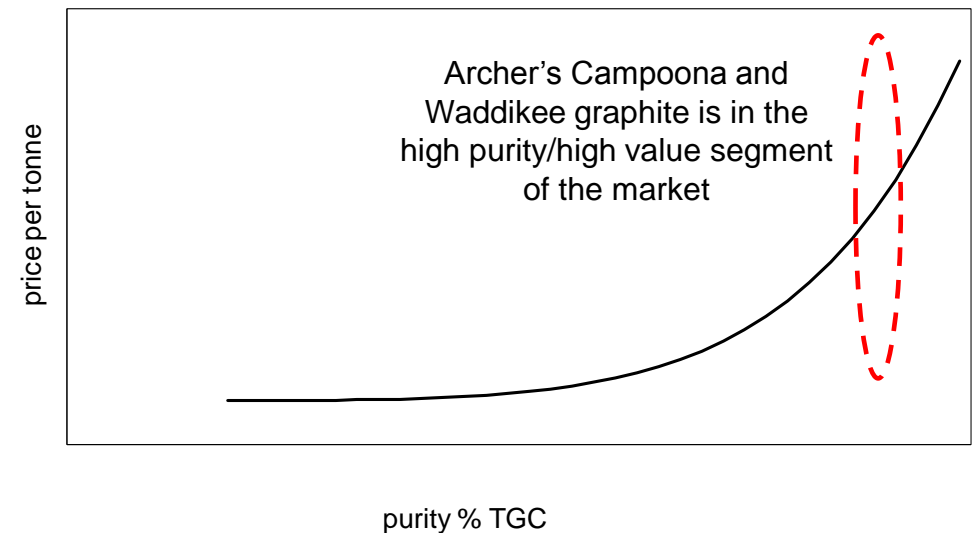
- **Waddikee**

- ✓ The largest portion of Archer's JORC 2012 resource
- ✓ ≈ 50% of graphite occurs as flake graphite

- **Sugarloaf**

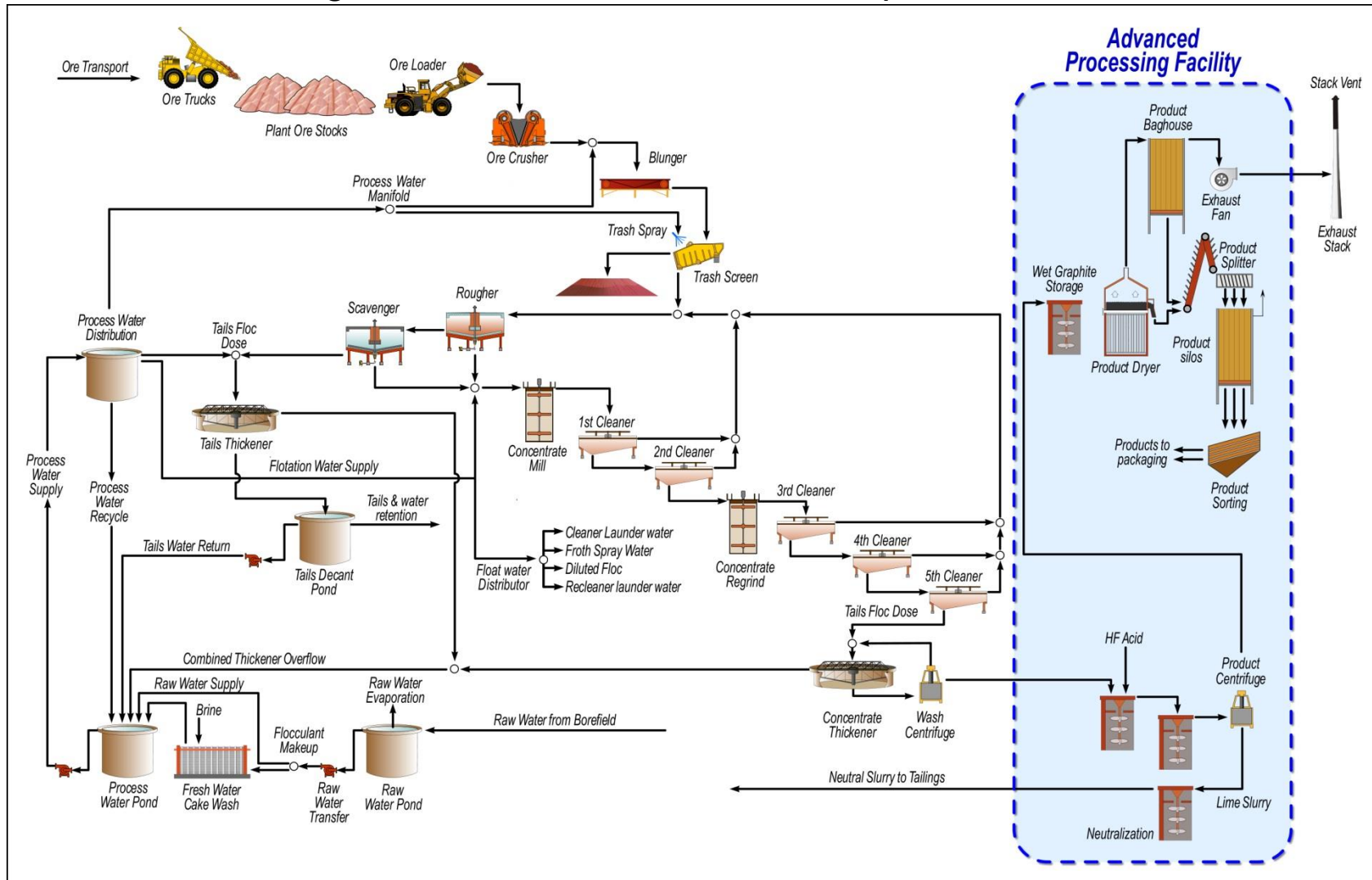
- ✓ Sugarloaf graphite can readily be transformed into graphene and graphene products
- ✓ Currently exploring new commercial uses for the very large Sugarloaf graphite deposit

Graphite price vs purity*



* indicative pricing not to scale

- Plant design will deliver consistent high grade product to meet tight specifications of users
- Sustainable mining with minimal environmental impact



Sugarloaf Processing Facility - Process flow diagram

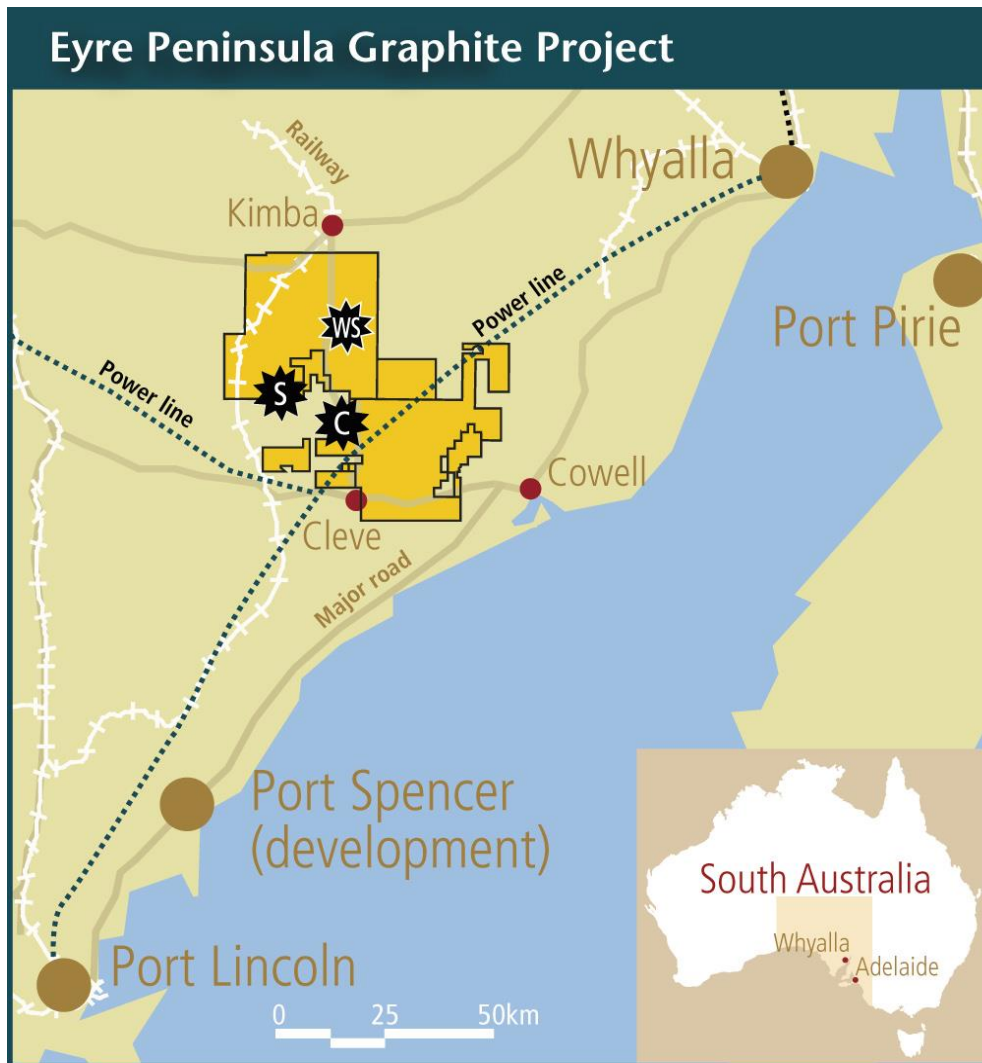
- Graphite pricing is largely based on direct negotiations between the buyer and seller
- Tech Minerals Consulting Group* reported:
 - *"such a product, properly introduced, is likely to be highly sought after by specialist manufacturers and end-users to include battery, polymers, ceramics, and high tech lubricants"*
 - *"prices for flake graphite of 99.0% and higher in particle size ranges from 5 microns to 100 microns will command between A\$2,500 to A\$5,000 per metric tonne"*
- Battery grade graphite will command a higher price for Archer's Campoona product



Free flowing well ordered froth conditions during bulk flotation

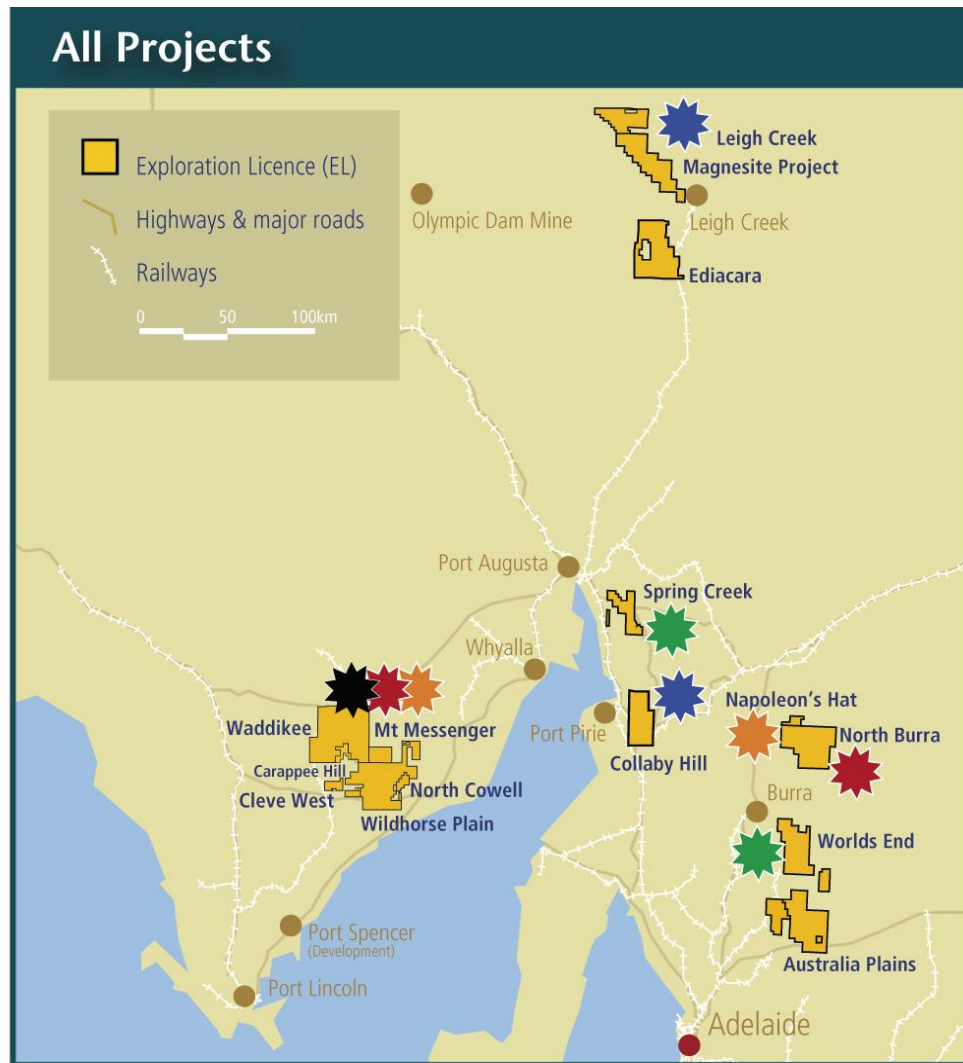
* Tech Minerals Consulting Group included an experienced graphite marketer with extensive experience with major graphite suppliers and purchasers to assess the results and make comment on the likely markets and prices for such concentrates

Portfolio of high quality assets



Advanced Graphite Projects

Campoona
 Sugarloaf
 Wilclo South



Priority 1 and 2 targets:

Graphite
 Magnesite
 Manganese
 Copper
 Gold

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 eighteen 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.