ASX RELEASE: 6 August 2014

Archer Exploration announces Australia's largest JORC 2012 Graphite Resources

ASX Code: AXE

Directors
Greg English
Chairman

Gerard Anderson
Managing Director

Tom Phillips AM
Director (Non-Executive)

Alice McCleary
Director (Non-Executive)

Company Secretary
Craig Gooden

Shares on Issue
83.6 million

Unlisted Options on Issue
2.4 million Performance Rights

Key focus
Campoona and Sugarloaf Graphite Projects (Eyre Peninsula, South Australia). Second tier projects cover magnesite, manganese, copper and gold.

Archer Exploration Limited
ABN 64 123 993 233
Level 1, 28 Greenhill Road
Wayville SA 5034

Telephone +61 8 8272 3288
Facsimile +61 8 8272 3888
www.archerexploration.com.au

- **Australia's largest JORC 2012 graphite resource with 8.55Mt @ 9.0 Cg% (based on cut-off grade of 5% Cg)**
- **Over 770,800 tonnes of contained graphite in Resources**
- **Significant exploration upside with a further 9 graphite prospects, aggregating over 20 kilometres of strike length still to be drill tested and all coinciding with strong linear EM conductors**
- **Scoping study underway based on expanded resource**

Archer Exploration is pleased to announce a combined JORC 2012 Graphite Resource at their Eyre Peninsula Project of **8.55Mt @ 9.0 Cg%**. The Eyre Peninsular Project encompasses Campoona, Sugarloaf and recently acquired Wilclo South areas**.** This result is based on a 5% cut-off grade and utilises the JORC 2012 definition of 'reasonable prospects of eventual recovery' (refer to the appendix for a detailed summary of the updated JORC 2012 report.)

Commenting on the release of the JORC resource, Managing Director, Gerard Anderson said, "*This JORC 2012 Resource of 8.55Mt of graphite is the largest JORC 2012 graphite resource in Australia. With exposure to large flake graphite at Wilclo South and high purity graphite at Campoona, we now have a range of flake sizes across our tenements that allows us to target a wide spread of end graphite users.*"

"*Our access to infrastructure and location in a safe and reliable mining jurisdiction provides us with a competitive position as the project is developed further*" said Mr Anderson.

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

Area	Resource Category	Tonnes (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
Wilclo South	Inferred	6.38	8.8	561,400
Combined	Total Resource	8.55	9.0	770,800

The Wilclo South Mineral Resource estimate represents only a very small strike length (1.4km) of the more than 10km of strong linear EM conductors. There is significant potential for further resource growth. In addition to the Wilclo trend there are 5 other graphite prospects corresponding to strong linear EM conductors aggregating an additional 10km of potential strike that has been the subject of only limited drilling. Mr Anderson went on to say, "*Given our strong financial position, our immediate next step will be to drill test our additional graphite prospects to further build on our resource base and enable a ranking of deposits based on deposit size, graphite sixe distribution and purity of graphite in concentrates*."

Scoping Study

As previously announced, the Company is undertaking a re-design of the process flow sheet for the Sugarloaf processing plant in order to accommodate the large flake graphite product and the high purity graphite expected to be produced from Wilclo South and Campoona respectively.

The expanded graphite resource (**Eyre Peninsula Project**), and the new process flow sheet will now underpin a Scoping Study which will assess the potential viability of the Eyre Peninsula Project.

For further information please contact:

Mr Greg English
Chairman
Archer Exploration Limited
Tel: (08) 8205 3343

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

APPENDIX – SUMMARY OF 2012 JORC RESOURCE REPORT

The Campoona JORC 2012 Resource estimation was conducted by MiningPlus, an independent expert resource consultancy with offices in Australia, Canada and South America. The resources were reported in July 2014, the Executive Summaries, Contents and associated Tables are presented below. The Wilclo South Resource documentation (which has not changed since its reporting) can be found on ASX listed Monax Mining Limited's (MOX) website dated 26th August 2013. It is titled "Maiden Wilclo South Graphite Resource".

Resource Locations

All resources being reported occur on the Eastern side of the Eyre Peninsula, South Australia between the townships of Cleve and Kimba (Figure 1).

Figure 1. Location of Archer's JORC 2012 Resources.

All Resources exist within a 30km radius of the proposed graphite processing facility at Sugarloaf adjacent to the Sugarloaf Graphite Deposit.

JORC 2012 Resource Reporting

The Resources reported are based upon the 'reasonable prospects' aspect of Section 20 (Reporting of Mineral Resources) of the JORC Code, 2012 Edition (www.jorc.org/docs/jorc_code2012.pdf).

Where it is stated that:

"Portions of a deposit that do not have reasonable prospects for eventual economic extraction must not be included in a Mineral Resource."

Assumptions behind 'reasonable prospects for mining' for the Campoona Shaft and Central Resources reporting are presented in Table 1 (below);

Table 1. Assumptions for the reasonable prospects used by Mining Plus

Name/Description	Unit	Amount	Source
Processing Recovery	%	90	Costs for Campoona Resource Estimation_2014.pdf (Archer)
Processing Cost	$/t processed	50.00	Above base of oxidation Costs for Campoona Resource Estimation_2014.pdf (Archer)
Average mining cost	$/t mined	15	Costs for Campoona Resource Estimation_2014.pdf (Archer)
Drill and Blast Cost	$/t mined	1.70	Costs for Campoona Resource Estimation_2014.pdf (Archer)
Royalty as a per cent of Sale Price	%	2	Mining Plus assumption
Mine rehabilitation cost	$/t mined	0.03	Mining Plus assumption
Mining dilution in Whittle	%	5	Mining Plus assumption
Mining recovery in Whittle	%	95	Mining Plus assumption
Overall pit slope	Degrees	48.5	Mining Plus calculation
Cut-off grade	%	2	Applied to Resource before export to Whittle optimisation program

Additional factors applied to the reasonable prospects are as follows;

- Average sale price of AUD $2,100 for products ranging in grade from 94% - >99% Cg.

The factors described above were used to constrain the estimated block models at Campoona Shaft and Central Campoona so that only those cells that "fall inside" the shell (Whittle Shell) are reported as a Mineral Resource. No factors were ascribed to the Inferred Resource at Wilclo South.

The Campoona Resources previously reported to the market by Archer (under JORC Code 2004 Edition) for both Campoona Shaft and Central Campoona were estimates based on block models. No previously reported JORC 2004 Resources had been constrained by 'reasonable prospects'.

The block model represents the geological wireframes comprising cells and sub-cells that have had an estimated Cg% value allocated to them using geostatistical methods.

Grade estimation completed by MiningPlus was based upon the Leco C-IR18 assay method to determine the Cg% (Graphitic Carbon %). Previous releases of the Campoona Shaft (JORC 2004, 6/12/2012) and Central Campoona Resources (JORC 2012, ASX 18/02/2014) were based upon TC% (Total Carbon %) established using Leco C-IR07. The Leco C-IR18 assaying method includes an acidizing stage to remove carbonate and organic carbon resulting in the reporting of graphitic carbon only.

Under the JORC Code 2012 Edition, a Mineral Resource, is that portion of the block model that has *reasonable prospects of eventual recovery*.

Campoona Shaft Resource

Campoona Shaft was estimated by MiningPlus using additional auger holes and selected intervals from geotechnical diamond hole CSGT14_01 (not previously reported). The result is a JORC 2012 Cg% resource, presented below in Table 2.

Table 2. Campoona Shaft 2012 JORC resources.

Cut-off (Cg%)	Resource Category	Tonnes (Mt)	Graphitic Carbon%	Contained Graphite (t)
+2	Measured	0.32	12.7	
	Indicated	0.80	8.0	
	Inferred	1.10	5.9	
	Total	2.22	7.6	169,500*
+5	Measured	0.32	12.7	
	Indicated	0.78	8.2	
	Inferred	5.50	8.5	
	Total	1.65	9.2	151,400*
+10	Measured	0.29	13.0	
	Indicated	0.11	14.0	
	Inferred	0.14	12.8	
	Total	0.54*	13.1	70,600

**Tonnage values are rounded to the nearest '00*

The Resources being reported are shown schematically within the Whittle Shell which demonstrates the "*reasonable prospects*" in Figure 2.

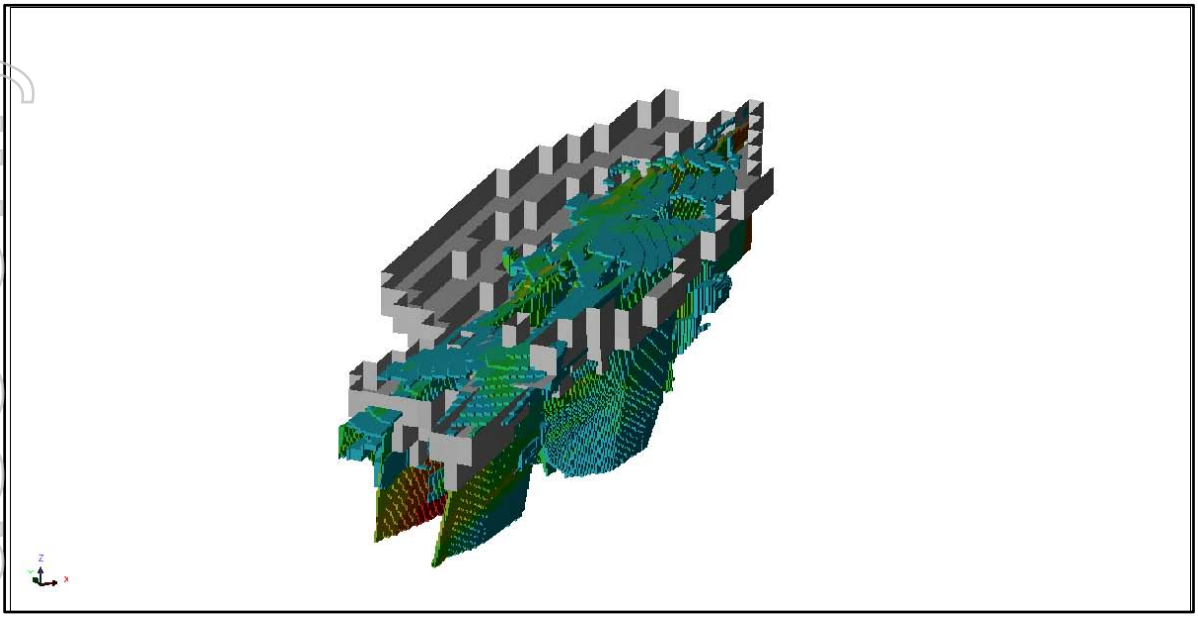


Figure 2. Campoona Shaft resource constrained by Whittle shell (*reasonable prospects*).

Assay results from the auger and geotechnical diamond drill hole have not previously been reported by Archer. Table 3 provides the drill hole details for these holes

Table 3. Additional holes for Campoona Shaft Resource estimation

Hole ID	Easting	Northing	Depth	RL	Dip	Azimuth
CSDDGT_001	637198	6289080	120	366	-50	135
CSDDGT_002	637328.7	6289155	57	359	-50	135
CSDDGT_003	637243.8	6289135	120	367	-50	310
CSAUG14_001	637141.5	6289017	30	363	-90	0
CSAUG14_002	637186.6	6289064	30	365	-90	0
CSAUG14_003	637220.6	6289105	30	368	-90	0
CSAUG14_004	637270.3	6289161	30	364	-90	0

Figure 3 (below) shows the overall drilling density at Campoona Shaft and locations of 2014 holes drilled for technical purposes.

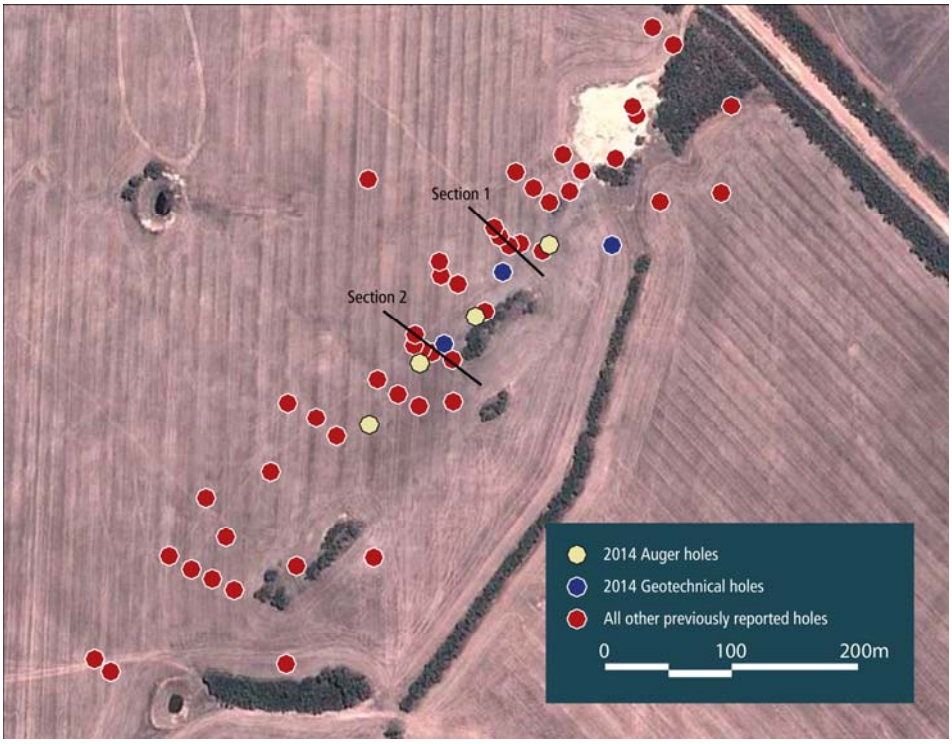
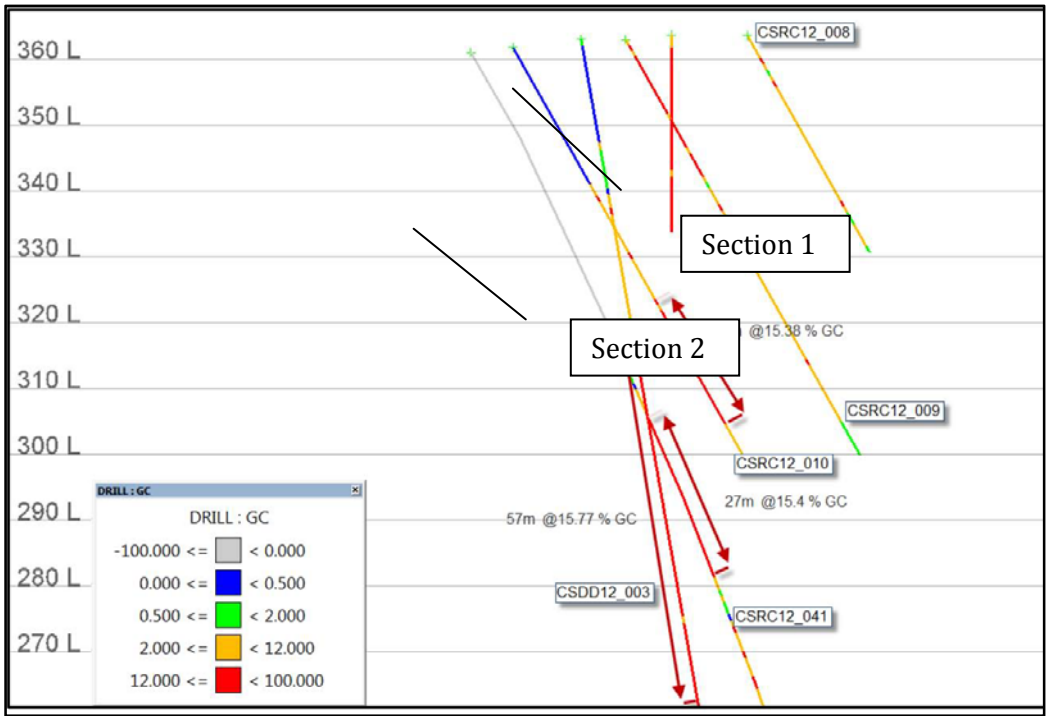
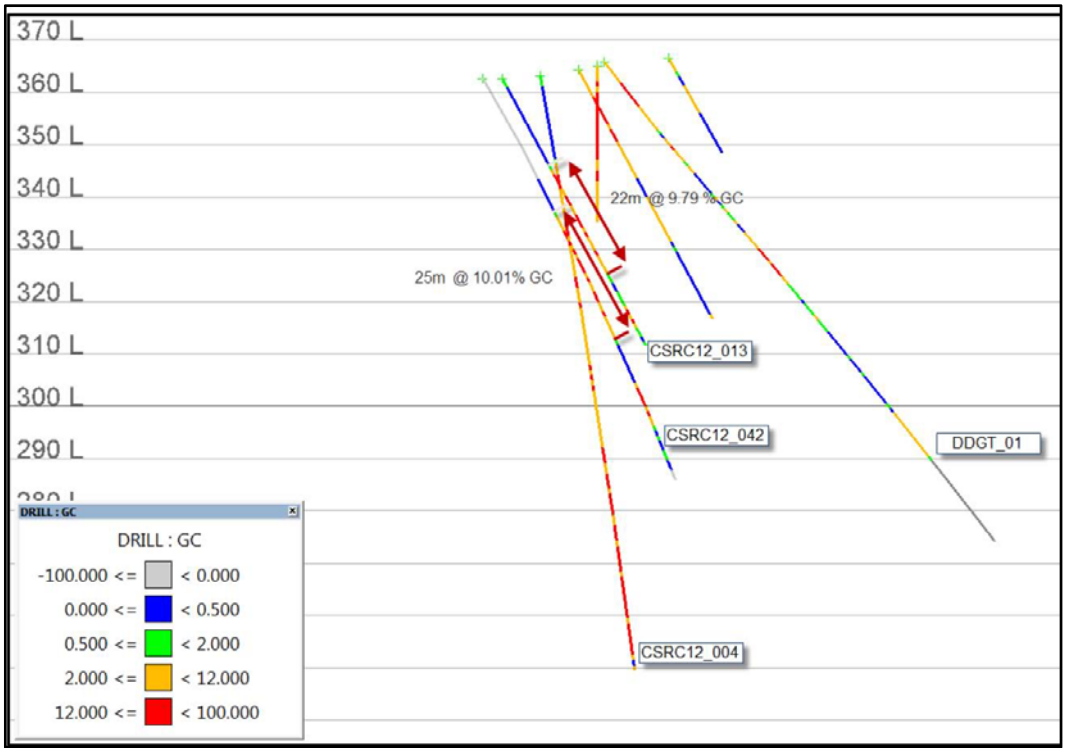


Figure 3. Location of resource holes at Campoona Shaft

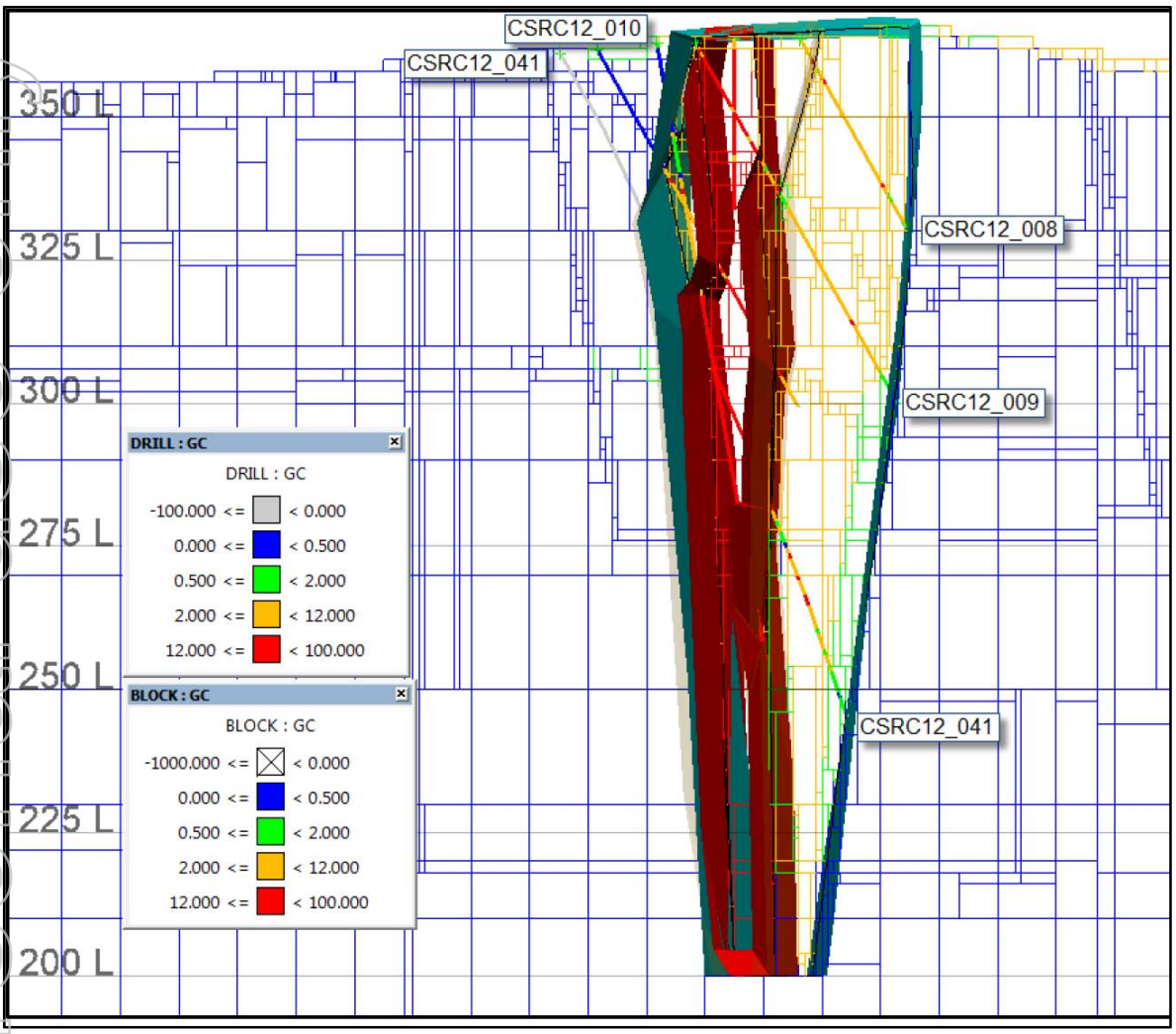
The following sections demonstrate the testing of the graphite deposit with metallurgical diamond holes drilled at steep angles. Section 3 shows the estimated block model cells with the drill holes from Section 1.



Section 1 Campoona Shaft



Section 2 Campoona Shaft



Section 3. Shows Section 1 with wireframes and estimated Cg% block model cells

Central Campoona Resource

Central Campoona resource has been updated from the information previously released to the ASX on 18th February 2014. The updated resource figure (Table 4) reflects the addition of 28 new RC holes and one diamond drill hole drilled as a part of increasing the drill hole density to improve the JORC classification.

Table 4. Central Campoona 2012 JORC resources.

Cut-off (Cg%)	Resource Category	Tonnes (Mt)	Graphitic Carbon %	Contained Graphite (t)
+2	Indicated	0.27	10.7	
	Inferred	0.70	6.2	
	Total	0.97	7.5	72,300*
+5	Indicated	0.22	12.3	
	Inferred	0.30	10.3	
	Total	0.52	11.1	58,000*
+10	Indicated	0.17	14.3	
	Inferred	0.13	14.8	
	Total	0.30	14.5	43,600*

**Contained Graphite Tonnage values are rounded to the nearest '00*

The resources being reported are shown schematically within the Whittle Shell, which demonstrates the "*reasonable prospects*" in Figure 4.

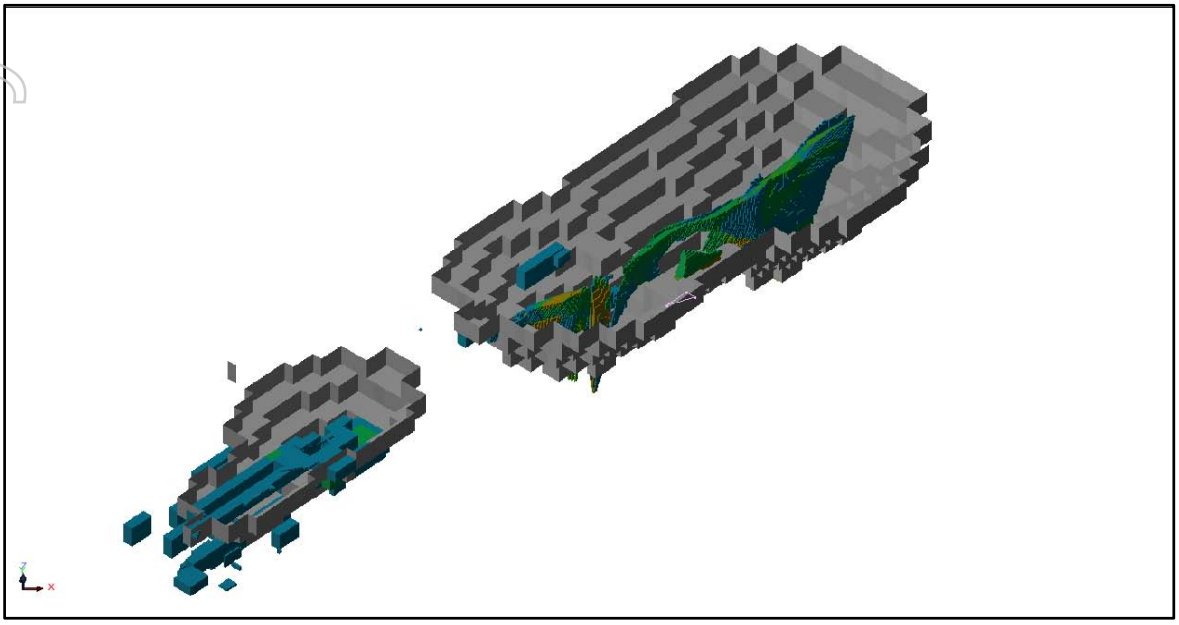


Figure 4. Central Campoona resource constrained by Whittle shell

Figure 5 (below) shows the overall drilling density at Central Campoona that contributed to the updated Central Campoona resources.

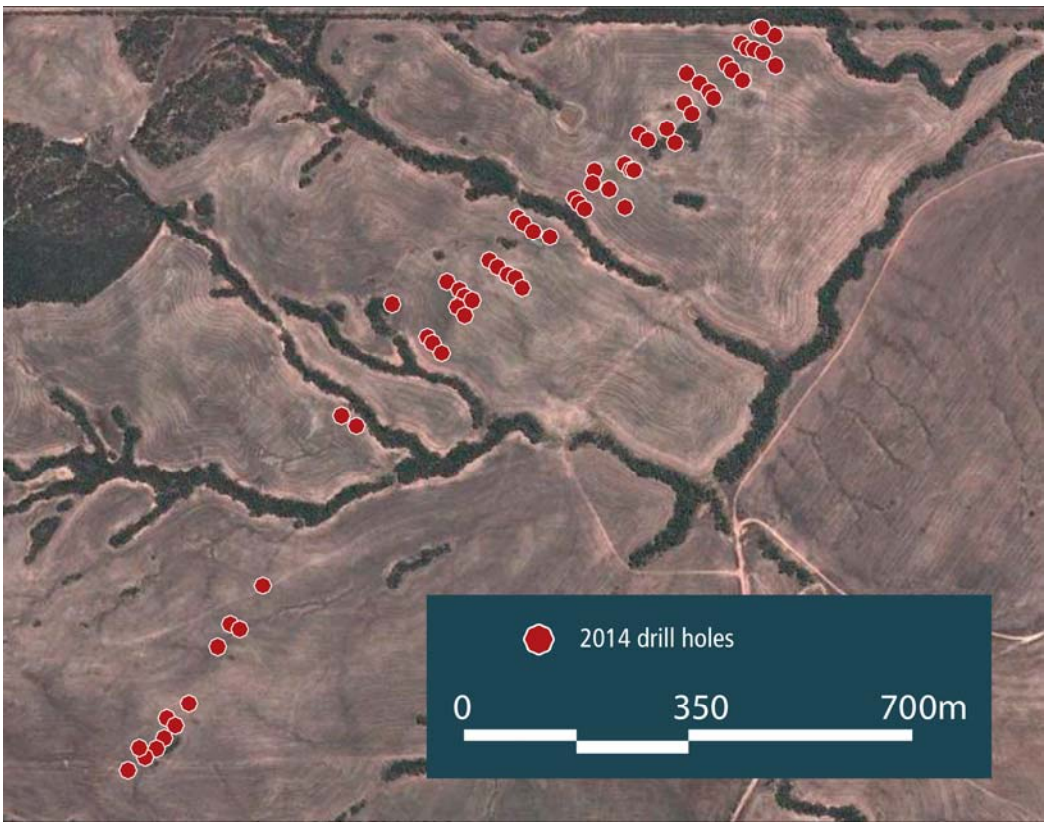
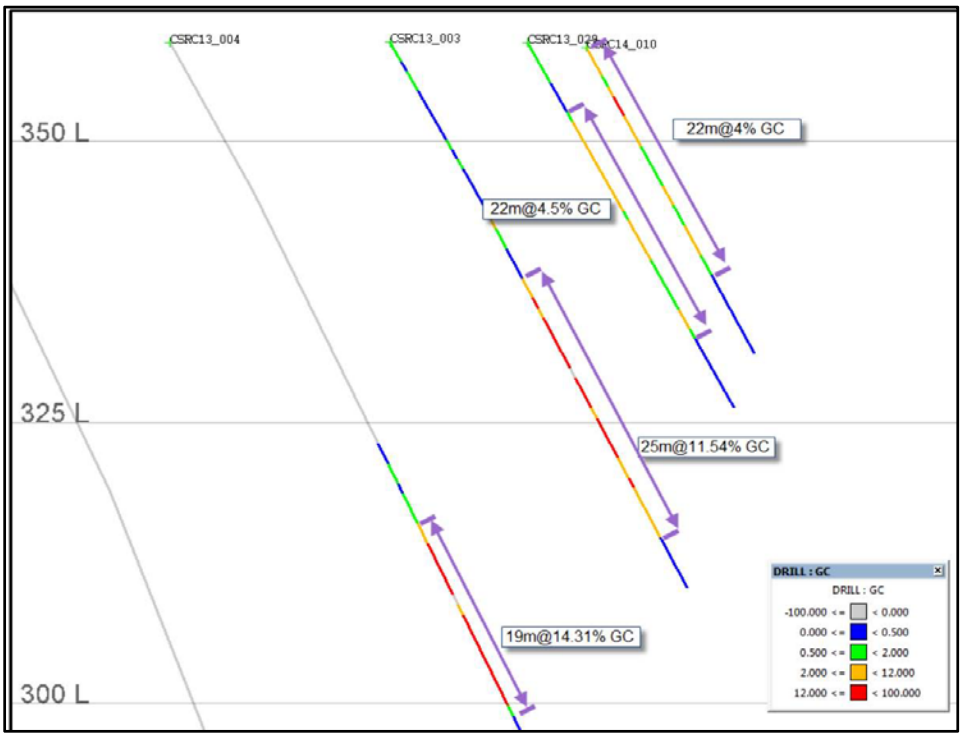
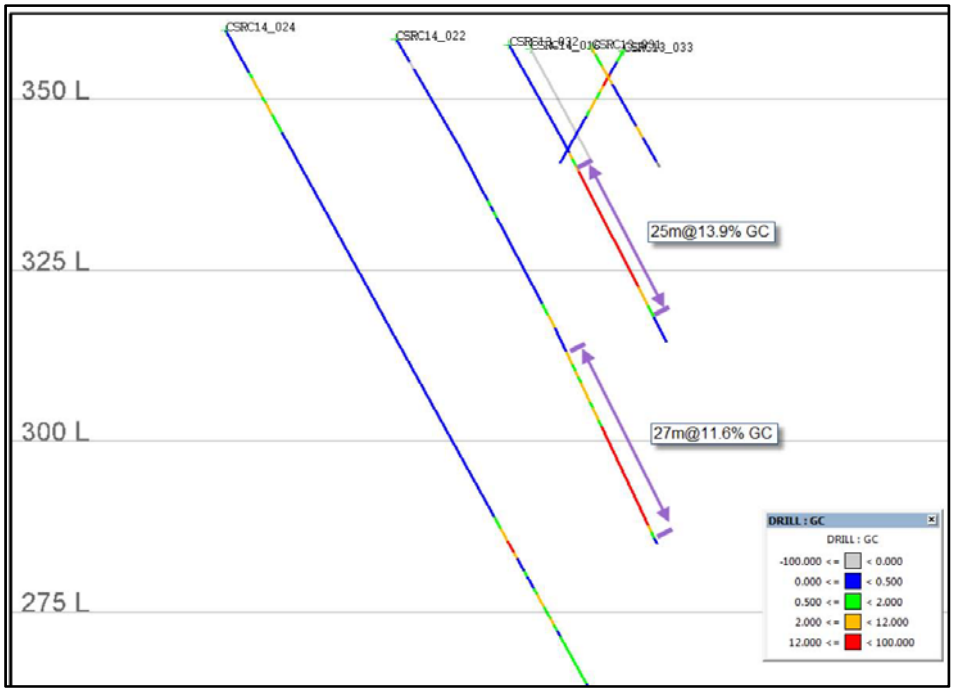


Figure 5. Plan showing location of Central Campoona resource drill holes.

The following sections (4 & 5) demonstrate the testing of the deposit to a depth of 50m below the surface.



Section 4



Section 5

Wilclo South Resource

Wilclo South has not been updated since it was first reported by Monax on the 26th August 2014, it is presented below in Table 5 (below) at a 5%Cg cut off. Archer acquired a 100% interest in the tenement in July 2014.

Table 5. Wilclo South 2012 JORC resource above a 5%Cg cut-off

Cut-off (GC%)	Resource Category	Tonnes (Mt)	Graphitic Carbon %	Contained Graphite (t)
+5	Inferred	6.38	8.8	561,400

**This information was prepared and first disclosed under the JORC Code 2012 (Monax Mining Limited, ASX Announcement 26th August 2013). Archer is not aware of any information or data that materially affects the information included in the market announcement by Monax Mining Limited on the26th August 2013 , and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.*

Additional Prospects

Electro-magnetics (EM) have shown to be a useful tool in identifying graphite and sulphides rich rocks.

The entire Waddikee EL4662 has airborne EM coverage at line spacings of 400m and selected areas of EL 4693 (Wildhorse Plain), EL 4277 (North Cowell), EL 4893 (Cleve West) and EL 4673 (Mt Shannan) have airborne EM coverage at either 100m or 50m line spacings.

Figure 6 (below) shows the extent and signatures of the conductive rocks at a depth of 100m.

All 6 Waddikee graphite prospects (Balumbah, Wilclo, Francis, Lacroma, Ridgestone and Argent) have had limited drilling to test the graphite potential. Archer plans to contact the relevant landowners and commence the approvals process to enable drilling of the prospects to enable ranking based on graphite grade and flake content.

Argent is a high value target due to the flake size of up 2,000 microns (2mm) reported in petrological examinations. Argent which has not been drill tested at this time is located just 7.5km east of the proposed processing facility at Sugarloaf.

Additional resource growth is also expected to come from the Sugarloaf graphite deposit that has an Exploration Target of 40 – 70Mt* @ 10-12% total carbon.
**The potential quantities and grades presented 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*.

The Company's exploration efforts are focussed at Wilclo and no drilling is expected to take place Sugarloaf during the current financial year.

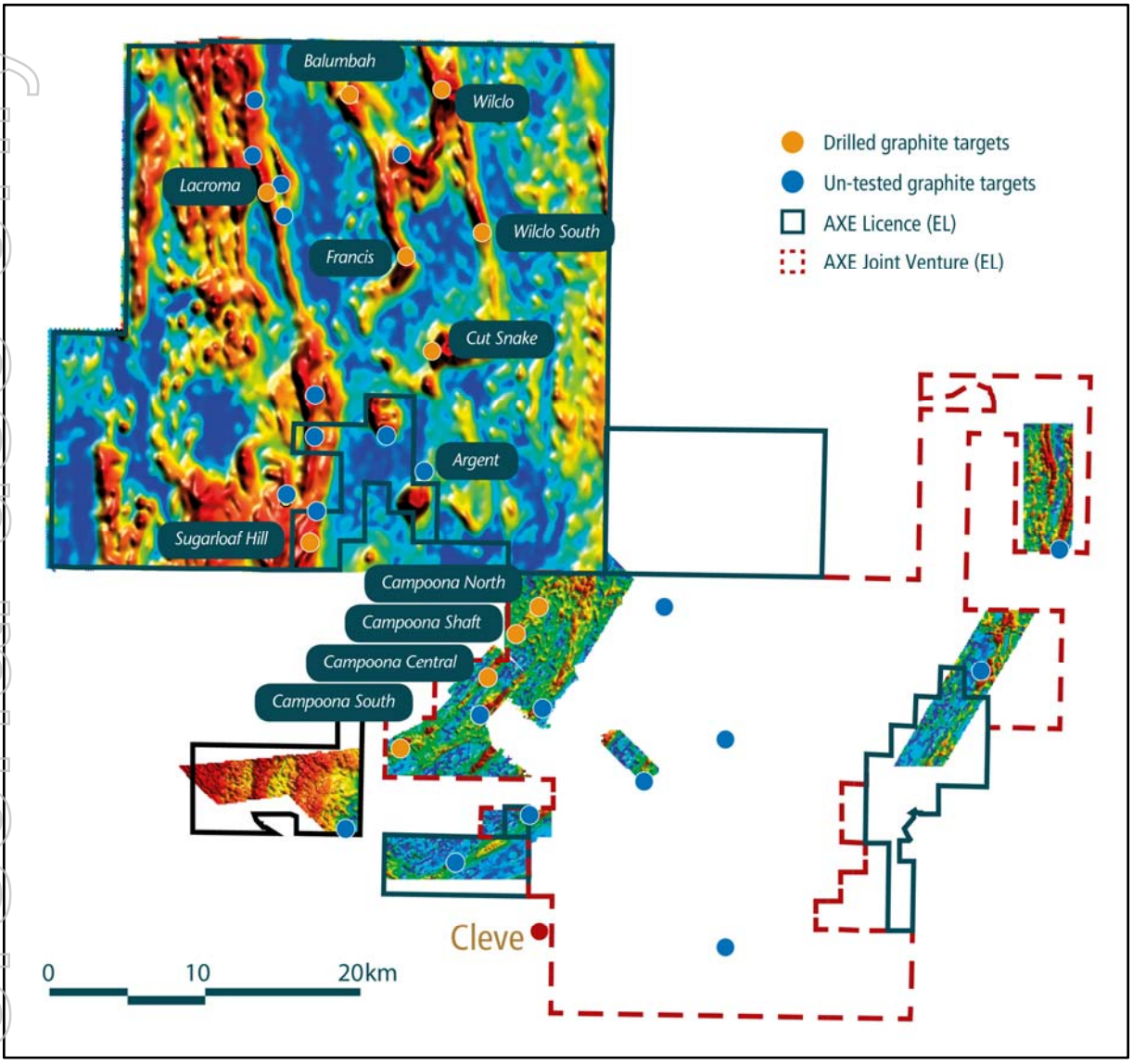
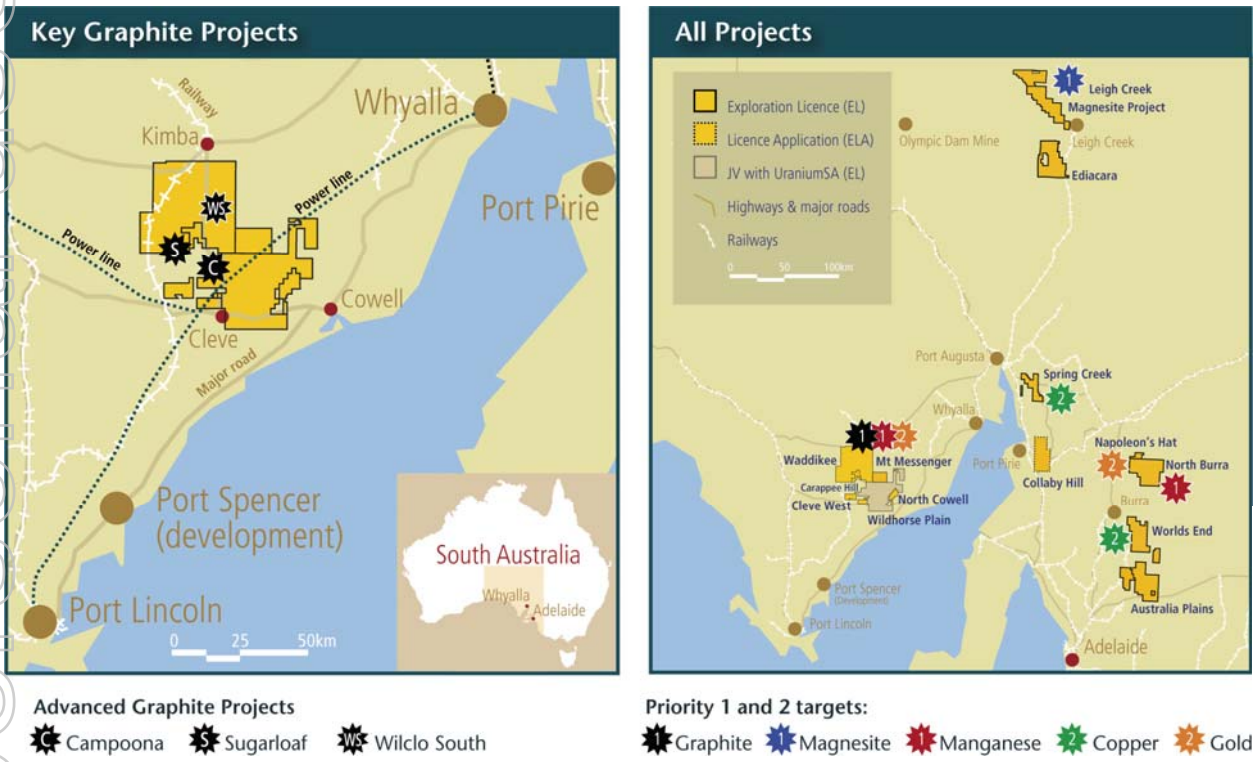


Figure 6 Electromagnetic signatures across Archer tenements, with graphite prospects and drilled targets

About Archer

Archer Exploration Limited is an Australian Stock Exchange listed company with 100% ownership of 15 tenements and one Exploration Licence Application all in South Australia covering 6,053 km^2. Archer also has the rights to all minerals other than uranium on EL4693 covering a further 816 km^2.

Archer plans to submit a Mining Lease Proposal for the Campoona Shaft deposit and Sugarloaf processing facility to the South Australian Government for approval in the fourth quarter of calendar 2014.



The exploration results and exploration targets 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 style of mineralisation and type 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.

Archer Exploration Limited
ABN 64 123 993 233
Level 1, 28 Greenhill Road
Wayville SA 5034

Telephone +61 8 8272 3288
Facsimile +61 8 8272 3888
www.archerexploration.com.au

1 EXECUTIVE SUMMARY

This report documents the procedure used to estimate the Mineral Resource at the Campoona Shaft Graphite deposit. The Mineral Resource estimate presented in this report is based on the mineral resource model effective as of 17th May 2014. The resource statement as presented in this report is effective as of June 2014 and has taken into account factors which satisfy the increased requirements for transparency and materiality as defined in the JORC Code 2012. These include the explicit discussion of the reasonable prospects of eventual economic extraction and provision of Table 1as given in the JORC Code 2012.

The Campoona Shaft Graphite deposit occurs on Exploration Licence 4693 (EL4693). EL4693 is owned by Samphire Uranium Pty Ltd (a subsidiary company of Uranium SA Pty Ltd) and Archer Exploration Limited (Archer) has sole rights to all commodities except uranium.

The graphite mineralisation at the Campoona Shaft deposit has been drilled over a strike length of 600m. It has a strike of approximately 45 degrees and is interpreted to dip steeply (-85°) to the northwest. The mineralisation is located within one main large sheet and five smaller sheets to the southeast. The mineralisation appears to thin at the northwest and southeast extremities of the drilled area, however, the mineralisation remains open at depth.

Fifty three holes have been drilled at the Campoona Shaft deposit and forty one have intersected significant graphite mineralisation. Drilling has been completed on fifteen lines with distances between the lines of 40 to 50m. Two infill lines have been completed in the central part of the deposit with the line spacing decreased to 25m. Drilling on section has been completed at 20 to30m down dip spacings and three drill holes have been drilled down dip for the purpose of obtaining metallurgical samples. Twelve lines of costeans have been sampled every metre along the suboutcrop of the graphite mineralisation.

Graphite assays (Graphitic Carbon - GC) were obtained using the graphitic carbon by LECO method (ALS protocol C-IR18) and 154 SG measurements were made on the diamond drill holes.

Figure 0-1 shows the isometric view of the Campoona shaft deposit that has been modelled using the drilling and sectional interpretations as supplied by Archer. Each wireframe was coded into a rotated block model.

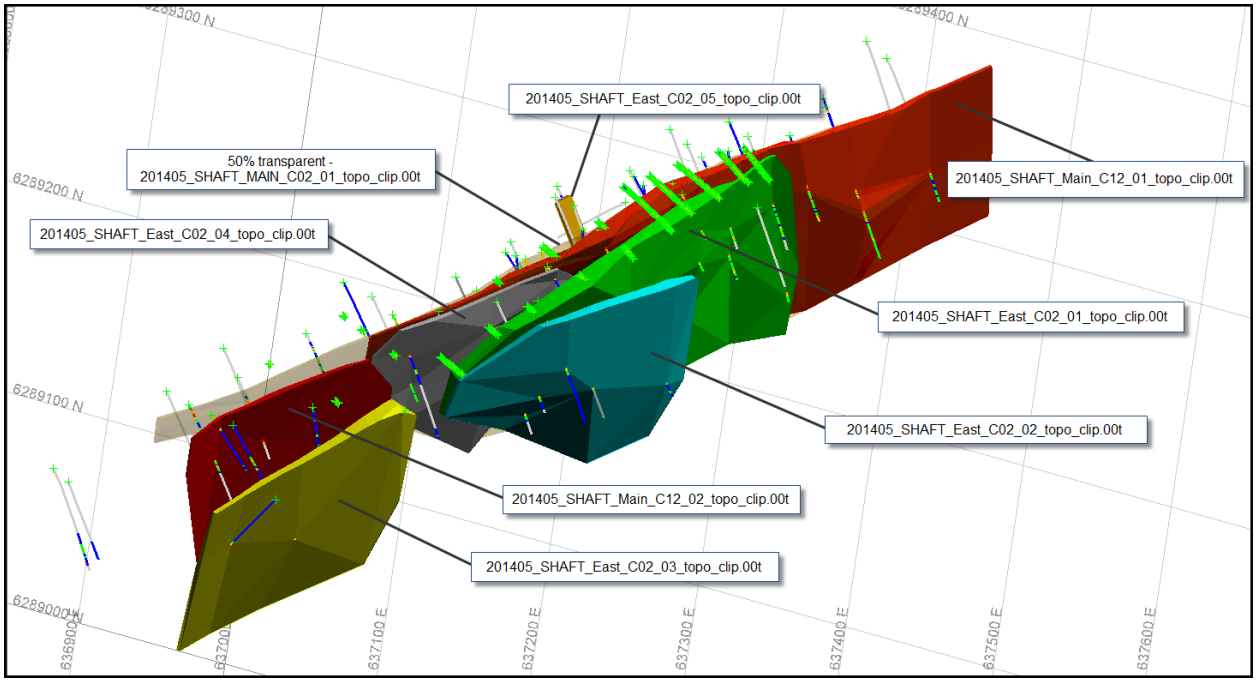


Figure 0-1: Representative isometric view of the Campoona Shaft deposit

.

The Mineral Resource has been estimated using the ordinary kriging (OK) technique to estimate GC grades. Due to the lack of spatial coverage of SG, SG has been assigned to domains rather than estimated for each block in the model. The resource has been classified based upon criteria including geological and grade continuity, the quality of the data and the confidence of the estimation.

The grades estimated by the OK technique are considered an acceptable global representation of the grades as they are all within 8% of the Nearest Neighbour (NN) model estimate

In considering reasonable prospects of eventual economic extraction, a Whittle pit shell was generated using $2100 per tonne of graphite product. All other factors are discussed further in appendix 4.

The estimated resources are reported at cut-off grades of 2.0% GC, 5.0 % GC and 10% GC

Resource Estimate for Campoona Shaft deposit – Resource reported within break-even Whittle pit (generated for$2100 per tonne sale price for graphite)

Table 0-1: Resource at Campoona Shaft deposit at 2.0 % GC cutoff

	Classification	Tonnes	SG	Grade (%GC)
2% Cut-off	Measured	320,000	2.0	12.7
	Indicated	800,000	2.1	8.0
	Inferred	1,100,000	2.2	5.9
	Total	**2,220,000**	**2.1**	**7.6**

Table 0-2: Resource at Campoona Shaft deposit at 5.0 % GC cutoff

	Classification	Tonnes	SG	Grade (%GC)
5% Cut-off	Measured	320,000	2.0	12.7
	Indicated	780,000	2.1	8.2
	Inferred	550,000	2.1	8.5
	Total	**1,650,000**	**2.1**	**9.2**

Table 0-3: Resource at Campoona Shaft deposit at 10.0 % GC cutoff

	Classification	Tonnes	SG	Grade (%GC)
10% Cut-off	Measured	290,000	2.0	13.0
	Indicated	107,000	2.0	14.0
	Inferred	140,000	2.0	12.8
	Total	**537,000**	**2.0**	**13.2**

Cutoff	res_pc_gc	Tonnage	sg
0	6.10	2,898,701.00	2.2
1	6.71	2,608,719.00	2.2
2	7.62	2,224,287.00	2.1
3	8.22	1,992,372.00	2.1
4	8.72	1,798,923.00	2.1
5	9.16	1,629,651.00	2.1
6	9.63	1,439,323.00	2.1
7	10.63	1,092,837.50	2.1
8	11.65	824,374.50	2.0
9	12.60	637,319.50	2.0
10	13.17	540,480.00	2.0
11	13.57	466,437.50	2.0
12	13.87	406,547.50	2.0
13	14.52	275,267.50	2.0
14	15.16	173,823.50	2.0
15	15.60	109,720.00	2.0
16	16.67	14,390.00	2.0
17	17.14	4,140.00	2.0

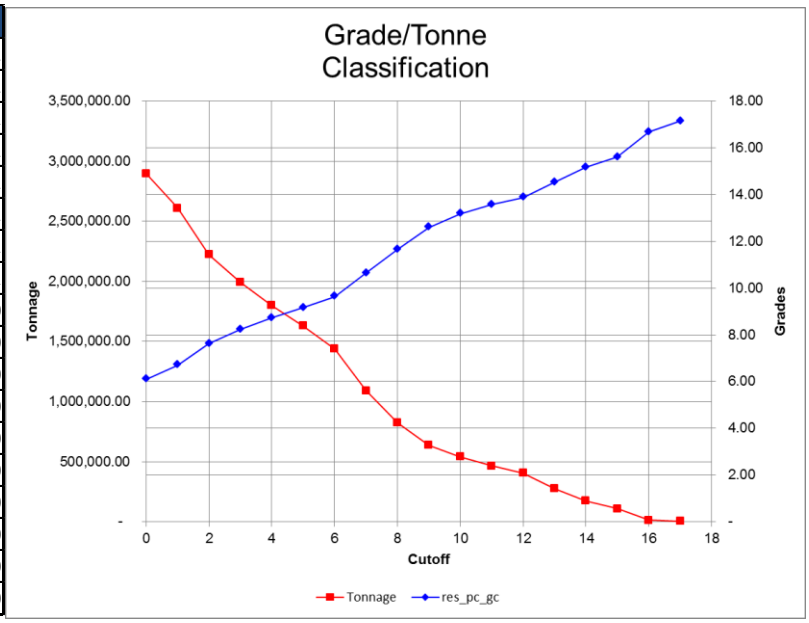


Figure 0-2: Tonnage and grade graph of combined Measured, Indicated and Inferred

Table 0-4: Resource risk classification matrix

Assessment	Risk Level			Comment
	High	Medium	Low	
Data Storage			▲	Can be improved from Excel to a formal database with validation tables, security and user passwords
Assay and QA/QC		▲		QAQC In-house standards used rather than certified custom standards inserted into the sample stream to ensure laboratory integrity. Analysis of GC instead of %C completed.
Recovery			▲	RC drilling to average depths of 150m, with recovery of a dry sample.
Sample Preparation			▲	Sample preparation on site as drilling progresses, with sample capture via cyclone and quartering of entire sample to 1.5KG for dispatch to laboratory.
Collection			▲	RC drilling and DD drilling
Logging			▲	Logging standards used for coding lithological units. Logging is both qualitative and quantitative depending on field being logged.
SG		▲		More DD holes have been measured for SG and cover several domains
Interpretation				
Geological			▲	Interpretation along section lines by Archer (See appendix 4)
Continuity				
Geological			▲	Drill spacing shows good continuity, with consistent thickness and lateral extent
Grade			▲	Sufficient close spaced drilling to show degree of short range variability
Drill spacing				
50 x 20			▲	Infill drilling has increased the confidence in resource classification

Current risk assessment ▲

2 COMPETENT PERSONS STATEMENT

2.1 Qualifications

The Campoona shaft deposit Mineral Resource estimate and associated statement has been completed by Mr B Knell (Principal Consultant, Mining Plus) with assistance from Mr W Bollenhagen (Archer). The resource estimation procedures and results have been reviewed by Dr C Gee (Principal Geology Consultant, Mining Plus) and the results are considered to be a fair and reasonable representation of the amount and grade of the mineralisation present.

Mr Knell is a mining professional, with qualifications in both Mining Engineering and Geology. He has over 19 years experience in the global mining industry, with experience across many minerals and mining methods. He has been involved in significant mining development and major study projects, with extensive experience as a mining consultant. He is a member of the Australasian Institute of Mining and Metallurgy ("AusIMM") and has sufficient experience to qualify as a Competent Person under the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition (JORC Code, 2012 Edition).

Dr Gee is a geologist with more than 40 years experience of which more than 20 years have been in the resource estimation field. He is Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience in a variety mineral commodities to qualify as a Competent Person under the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition (JORC Code, 2012 Edition)

The Mineral Resource quoted in this report is based on information compiled and supplied by Mr W Bollenhagen (Archer). At the time of preparation of this estimate Mr W Bollenhagen is a full-time employee of Archer Exploration Limited.

2.2 Declaration

This Campoona Shaft Mineral Resource, as presented in this report, has been prepared under the guidelines of the JORC Code, 2012 Edition.

I, Brad Knell, confirm that I am the Competent Person for the Report and:

- I have read the understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012).
- I am a Competent Person as defined by the JORC Code 2012 Edition, having five years' experience that is similar to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.
- I am a Member of the AusIMM.
- I have reviewed the Report to which this Consent Statement applies.

Neither the author nor Mining Plus has any material interest or entitlement, direct or indirect, in the securities of Archer Exploration Limited. Mining Plus commenced providing geological services to Archer

Exploration Limited in May 2014. Fees for the preparation of this report are on a time and materials basis.

I verify that the Report is based on and fairly and accurately reflects the form and context in which it appears, the information in my supporting documentation relating to Mineral Resources. Dated this 11th day of July 2014.

Brad Knell

BSc(Hons), MAusIMM

Principal Mining and Geology Consultant, Mining Plus Pty Ltd

Appendix A - TABLE 1

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* .	• The deposit was sampled using Reverse Circulation (RC) and Diamond Drilling (DD) • Sampling is guided by Archers protocols and QAQC procedures • RC samples are collected by a riffle splitter from material recovered by drilling with a face sampling hammer of approximately 130mm. • DD core was cut in quarters using a core saw and quarter core submitted for assay. Some intervals close to the surface were too soft for cutting and representative material was cut from the core in the tray. • All samples were sent to ALS laboratory in Adelaide for preparation and forwarded to either Perth or Brisbane for LECO analyses. • A total of 4,054m of drilling comprise the Campoona Shaft resource, with 2,842 samples submitted for C% analyses from these drilled metres. From those samples, a total of 1,863 samples were re-assayed for GC%, with 200 samples being QAQC (internal standards or duplicates). • All samples are crushed to -4mm and pulverised via LM2 to nominal 90% passing -75pm. • Twelve costeans along the surface outcrop were sampled every metre.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• The Campoona Shaft deposit was sampled by 40 reverse circulation (RC) holes (3,538m) and 6 triple tubed diamond drill (DD-HQ3) holes (516.9m). • RC holes were drilled in an orientation so as to hit the mineralisation as close to orthogonal to the strike direction as possible. • Due to the steep dip of the deposit it is not practical to intersect the deposit orthogonally down dip. • Face sample hammers were used and all samples collected dry and riffle split after passing through the cyclone. • For RC and DD holes down hole surveys were taken at the collar (6m) and at 30m, then every 30m to EOH. • DD holes were drilled for graphite samples to be used for metallurgical extraction. • No core orientation was achieved due to the softness of the ore.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Surface RC sampling was acceptable with no wet sampling in the drilled Shaft area. • The RC rig sampling systems are routinely cleaned to minimize the opportunity for contamination; drilling methods are focused on sample quality and recovery. • DD-HQ3 drilling methods were used to maximize the core recovery, with the tube splits being pumped out. Core runs were limited to 1.5m.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Geological logging is completed for all holes. • Geological logging consisted of coding of intervals with occasional long hand descriptions being undertaken. • Logging is both qualitative and quantitative depending on field being logged. • All diamond core was logged and photographed and stored in sheds. • Diamond drilling recovery information was collected for 5 of the 6 drilled diamond holes. Recovery was greater than 95% in all but the first hole drilled. In this hole 15% of core was lost over the entire length of the hole.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Half core was sampled using a diamond saw, with some intervals close to the surface needing to be cut from the core tray due to softness. • All RC samples are split using a 3 tier riffle splitter mounted under the cyclone, RC samples are drilled dry. • Samples taken from the host rocks and other barren units were taken as 4m composites, if a grade of +1%C was returned then the corresponding single metre intervals was submitted for analyses. No material logged as graphitic schist interval was submitted as composite, all were submitted as single metre samples. • Sample preparation at the ALS laboratory involved the original sample being weighed on submission to laboratory and dried at 80° for up to 24 hours and. Sample is then crushed through to nominal -10mm (DD samples only). Second stage crushing to nominal -4mm (both RC and DD samples). Sample is split to less than 2kg through linear splitter and excess retained. Sample splits are weighed at a frequency of 1/20 and entered into the job results file. Pulverising is completed using LM2 mill to 90% passing 75%pm. The pulverised residue is shipped to ALS in Perth for LECO analysis. • Duplicate analysis has been completed and identified no issues with sampling representatively for estimated holes. • Sample sizes are representative of the grain sizes being assayed for.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• All samples have been analysed by the c-IR07 technique which reports total carbon. All samples above 2% TC have been analysed using the C-IR18 technique which reports total graphitic carbon. The C-IR07 technique has been shown to overestimate total graphitic carbon by approximately 8% on average. • A nominal 0.4g sample is weighed into a ceramic boat with the exact weight being electronically recorded by the LECO inbuilt computer. The sample is combusted in oxygen at 1500-2000 Deg C and the resultant carbon dioxide gas formed is quantified using an infrared detection system. • Multi-elements are analysed on selected intervals to confirm the tenor of the following suite of elements; Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe , Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te. Th, Ti, Tl, U, V, W, Y, Zn, Zr, Dy, Er, Eu, Gd, Ho, Lu, Nd, Pr, Sm, Tb, Tm, Yb. • ALS performs the multi-element analyses under the code ME-MS61, which is a mulit acid digest (with HF) and ICPAES and ICPMS finish. • Internal certified laboratory QA/QC is undertaken by ALS. • Company standards and blanks are inserted at a minimum of 20% frequency rate. • QAQC data analysis has been completed for all drillhole data and demonstrates sufficient accuracy and precision for use in Mineral Resource Estimation.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant intersections have been verified by alternative company personnel. • Drill hole twins exist at the Campoona Shaft, with CSRC12_013 and CSRC12_042 (twinned). CSDD12_002, 003, 004 were drilled at high angles to the mineralisation so that two separate RC holes were intersected. One RC hole intersected close to surface the other RC hole intersected at a deeper RL. • Primary data are captured on paper in the field and then re-entered into spreadsheet format by the supervising geologist, to then be loaded into the Company's database. • No significant adjustments are made to any assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• MGA94 Zone 53 grid coordinate system is used. • All but three of the holes comprising the resource (CS prefixed) have had their surface locations surveyed for Northing, Easting and RL. No co-ordinate transformation was applied to the data. The three holes that were not surveyed by a third party were surveyed by Archer Exploration using hand held GPS and the RL was estimated from a digital elevation model derived from a geophysical survey. • Downhole surveys collected by multi-shot digital camera, for resource holes. • For the Campoona Shaft Resource a digital terrain model was collected contemporaneously with the geophysical survey.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Campoona Shaft (CS prefixed) hole locations are at a nominal 50m (Y) by 20m (X) pattern. Due to the hole angles this results in approximate down-dip intersections at intervals of 40m. • Data spacing and distribution are considered sufficient to establish the degree of geological and grade continuity reported.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Most of the holes are orientated perpendicular to the strike of the mineralisation. • The RC holes were generally drilled at a dip of 60° to define the geology of the deposit. • Some diamond drill holes were drilled along the dip at a dip of 80° in order to give a larger sample for metallurgical testing.
Sample security	• *The measures taken to ensure sample security.*	• All samples were under company supervision from the rig to the Adelaide ALS laboratory. • All residual sample material is stored securely in sealed bags at Archer Exploration Lonsdale, Adelaide storage.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No sampling Audits have been performed.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• All work being reported is from EL 4693 (owned by Samphire Uranium), Pirie Resources (a subsidiary of AXE) has earned rights to 100% of all other commodities excluding uranium. • The tenement is in good standing with no known impositions.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The tenement has had historic exploration conducted over it by companies including Shell, BHP, Aberfoyle, Kerr McGee. The tenement was historically explored for base metals, uranium, diamonds and gold. • One small shaft has been excavated on the strike extent of the Campoona Graphite deposit. No historical production figures are available.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Disseminated flake graphite is widely distributed in the metamorphosed Palaeoproterozoic Hutchison Group rocks of the eastern Eyre Peninsula. • The graphite ore bodies appear to be constrained within a regional shear of graphitic gneiss. The structure has impacted the mineralisation such that shearing has resulted in a series of graphitic units that have higher graphite contents than the precursor host, they can be described as lenses or pods. The structure which hosts the mineralisation has a strike of roughly 13km.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	

HOLE ID	EASTING	NORTHING	RL	DEPTH	Dip	Azimuth
CSAUG_001	637141.5	6289016.7	363.149	30	-90	0
CSAUG_002	637186.6	6289064.1	365.051	30	-90	0
CSAUG_003	637220.6	6289104.7	367.798	30	-90	0
CSAUG_004	637270.3	6289160.9	363.644	30	-90	0
CSDD12_001	637336.8	6289224.0	358.543	71.5	-80	120
CSDD12_002	637300.0	6289199.0	361.583	88	-80	120
CSDD12_003	637251.3	6289156.4	362.989	106.4	-80	120
CSDD12_004	637181.4	6289076.5	363.063	115	-80	120
CSDD12_005	637145.4	6289052.4	359.959	74	-60	120
CSDD12_006	637078.2	6288907.3	370.476	62	-80	120

Criteria	JORC Code explanation	Commentary						
		CSRC12_006	637354.7	6289257.1	355.234	69	-60	130
		CSRC12_007	637351.3	6289264.7	354.824	121	-60	130
		CSRC12_008	637278.5	6289152.1	363.539	38	-60	110
		CSRC12_009	637260.2	6289157.9	362.935	73	-60	110
		CSRC12_010	637243.6	6289163.6	361.703	72	-60	110
		CSRC12_011	637204.8	6289067.9	366.489	21	-60	110
		CSRC12_012	637188.1	6289073.5	364.232	55	-60	100
		CSRC12_013	637174.1	6289078.5	362.559	59	-60	100
		CSRC12_014	637028.2	6288889.0	361.707	97	-60	110
		CSRC12_015	637011.5	6288897.4	359.532	51	-60	100
		CSRC12_016	637068.8	6288830.8	358.97	99	-60	280
		CSRC12_037	637003.0	6288445.0	364	49	-60	120
		CSRC12_038	637072.9	6289035.1	357.19	109	-60	120
		CSRC12_039	637367.9	6289326.2	350.151	121	-60	120
		CSRC12_040	637310.4	6289214.6	361.635	90	-60	120
		CSRC12_041	637239.7	6289169.4	360.994	126.5	-60	120
		CSRC12_042	637175.6	6289088.1	362.593	85	-60	120
		CSRC12_043	637111.8	6289009.1	361.663	99	-60	120
		CSRC12_044	637022.6	6288930.9	362.984	65	-60	120
		CSRC12_045	637095.0	6289023.0	360.6	85	-60	120
		CSRC12_046	637231.0	6289105.0	368.7	133	-60	120
		CSRC12_047	637295.1	6289226.8	359.872	145	-60	120
		CSRC12_048	637284.1	6289190.1	361.583	73	-60	120
		CSRC12_049	637257.7	6289214.5	357.572	114.5	-60	120
		CSRC12_050	637210.1	6289127.6	364.18	90.5	-60	120

Criteria	JORC Code explanation	Commentary
		CSRC12_051 637195.5 6289144.9 361.446 109 -60 120 CSRC12_052 637145.4 6289052.5 359.905 28 -60 120 CSRC12_053 637177.6 6289031.6 364.19 91 -60 120 CSRC12_054 637140.0 6288913.0 374.8 97 -50 300 CSRC12_055 637058.7 6288981.4 360.867 109 -60 120 CSRC12_056 636977.4 6288916.4 355.125 79 -60 120 CSRC12_057 636994.9 6288905.5 357.302 98 -60 120 CSRC12_058 637271.7 6289201.6 359.685 107 -60 120 CSRC12_059 637196.3 6289134.3 362.231 110 -60 120 CSRC12_060 636929.2 6288826.5 351.196 61 -60 120 CSRC12_061 637161.7 6289041.7 361.518 115 -60 120 CSRC12_062 637204.9 6289034.4 367.865 97 -60 120 CSRC12_063 637384.5 6289312.0 351.736 114.5 -60 120 CSRC12_064 636917.0 6288836.8 350.5 79 -60 120 CSRC12_065 637006.8 6288961.6 356.18 103 -60 120 DDGT_01 637198.0 6289080.4 365.756 120 -50 310 DDGT_02 637328.7 6289155.1 359.174 57 -50 130 DDGT_03 637243.8 6289135.0 366.606 120 -50 130 •
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No high grade cuts were applied • No data aggregation was applied • No equivalents were used

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• All drill holes have been drilled perpendicular to the strike of the mineralisation. • Down hole intervals from RC drilling are typically twice (2x) the true width of the mineralisation. • Downhole intervals from DD holes are at least four (4x) the true width of the mineralisation, the reason for this is stated above.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See current release and previous ASX releases.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Not applicable
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Results of Archers Metalurgical programs continue to show the potential for high grade graphite products. See recent ASX releases.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• A review of logging, sampling, assaying and QAQC processes and methods should be considered prior to undertaking further data collection. • Auger drilling may be undertaken to provide a larger bulk sample. • The Campoona structure has been highlighted in ASX releases to be the subject of ongoing regional exploration. • Some of the drill holes have been intentionally drilled down dip which has provided large intersections but with little information with respect to mineralisation/host rock contacts. Additional drilling should be considered to provide further confidence in the position, grade and geotechnical characteristics of the northwest contact of the main mineralised body.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• All original data supplied by Archer Exploration was delivered as an excel spreadsheet. • Digital logging and sampling data was cross checked with hard copy field data. • Digital assay data was cross checked with original data once imported into excel. • Vulcan database validation checks were conducted prior to estimation
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Site visits were regular to ensure that procedures for drill data collection were being performed. The Archer Exploration competent person assisted in the design, logging and surveying of the drill holes.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Mineralisation has been mapped at the surface and a small historic mineral occurrence has been recognised on the outcrop. • Twelve costeans mapped the surface outcrop of the mineralisation. • Archer Exploration provided a geological interpretation which was reviewed and modified prior to estimation. The final wire frames used for estimation maintain the structural architecture interpreted by Archer. • The geological interpretation is relatively simple with the main graphite unit being clearly traceable over a strike distance of at least 600m. The main graphite unit is located on the northwest side of the deposit. Five subordinate graphite units have been interpreted sub-parallel to the main graphite unit. • Additional drilling may further define some thin graphite units which appear discontinuous at the current drilling density. • The mineralisation is easily recognised in core due to the colour contrast between the black graphite and pale brown gneissic host rock. The hanging wall to the ore is preceded by a hematite rich zone likewise the footwall of the ore is started by a hematite rich zone. Within the ore zone there is also a thin (<1m true width) kaolin marker unit. • The larger and thicker graphite units show greater continuity and have been classified accordingly. Only the largest two largest units contain material of Indicate or Measured categories.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Campoona Shaft Resource measures some 600m in length along strike, comprising one major ore zone varying in width from 5m to 25m, as well as 5 other parallel graphite ore bodies that vary in width from 2 to 10m in width. • The ore is present at the surface and is modelled to a depth of upto 150 from the surface and is still open at depth.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Maptek ™ Vulcan™ 8.1.4 software was used for the interpretation, block modelling and grade estimation, Supervisor ™ was used for geo-statistical analysis. • Ordinary kriging was used to estimate the resource. • A total of 8 domains were used to constrain the estimation. 6 representing mineralised units, 1 representing a low grade halo, and one representing the block model extremities. • The mineralised units were interrogated to determine parameters to be used for ordinary kriging. • A parent block size of 10m x 25m x 10m (x,y,z) with sub-blocking to 1m x 2.5m x 2m to better define mineralisation boundaries. • No high grade cutting was applied. • The model was statistically checked against an inverse distance model and the composite drilling database. • The model was visually checked on each interpreted section • At present no deleterious elements are known of and thus were not estimated. • At present recovery of by products is not considered. • No assumptions have been made regarding selective mining units.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis. .
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The resource is reported at a number of cut-offs, being 2%GC, 5%GC and 10%GC, purely for reporting purposes. These cut-offs have no bearing on what could still be considered as economic as extractive research is still ongoing, it is felt that the 5% GC represents a realistic lower cut to the resource at this time.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• For the purpose of satisfying reasonable prospects of eventual economic extraction a preliminary Whittle optimisation was undertaken. Assumptions include: mining recovery of 95%, mining dilution of 5%, processing recovery of 90%, sale price of $2100/t, processing cost of $50 per tonne, average mining cost of $15 per t and, an average pit slope of 48.5 degrees when ramps and batter angles are allowed for. • The reported Mineral Resource occurs within the optimum whittle pit shell generated using these assumptions.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Test work by Archer is being constantly updated to the market, as the extraction process is refined during a scaling up process from bench scale test work to larger volume samples. • In house floatation test have recovered progressively higher grade graphite concentrates with latest results in the high 98 – low 99% TGC range, see Archer Exploration Quarterly Activities Report 31 December 2013. • A wide range of graphene and graphene-related products were readily produced from raw Campoona graphite samples as well as from medium-grade (92% C) graphite concentrates. The research was part of ongoing collaboration between Archer and the University of Adelaide, School of Chemical Engineering (Prof Dusan Losic Nano Research Group), see Archer Exploration Quarterly Activities Report 31 December 2013.
Environmen-tal factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• It is assumed that material probably considered as waste will be of a chemically benign nature; this is assumed from multi-element chemistry reported from drilling. • The material adjacent to the mineralisation at Campoona Shaft is deeply weathered and is dominated by kaolin clays with quartz grains. • Baseline environmental studies have commenced over the resource area and pastoral lands adjacent to the resource.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density was measured from half core samples at regulr intervals down the diamond drill holes. These units were dominated by graphite ore zones, host graphitic gneiss, kaolin weathered zones and hematised zones. • An external laboratory performed bulk density measurements on 95 samples from drill core, using wax coating of the core after drying. Moisture contents of the material were calculated prior to wax coating the core, the average moisture content for the core was 0.6%. • Bulk density was determined using the Archimedes SG technique on non wax coated samples by AXE and Mining Plus for 147 intervals of core throughout the lengths of drill core. Including duplicating the laboratory data to determine variance, if any. It was determined that the non wax coating was sufficient for additional density determinations. • Density was assigned to domains rather than estimated.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The mineral resource for Campoona Shaft has been classified into, Inferred, Indicated and Measured categories. These categories were based upon the following criteria, geological and grade continuity, the quality of the data and the confidence of the estimation. • The Mineral Resource estimate appropriately reflects the view of the Competent Persons.

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Shaft resource was reviewed by Mining Plus and Archer personnel. No external resource review has been completed.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The statement relates to a global estimates of tonnes and grade • Given the very continuous strike of the drilled mineralisation the assumed continuity down dip is considered reasonable for the purpose of evaluation of the economic viability of the deposit. However, significant additional drilling and assaying will be required prior to detailed mine planning and to support final economic viability of the deposit. • The resource is reported total graphitic carbon GC%. • No Production data is available • All future data should be collected using industry best practice methods.

1 EXECUTIVE SUMMARY

This report documents the procedure used to estimate the Mineral Resource at the Campoona Central Graphite deposit. The Mineral Resource estimate presented in this report is based on the mineral resource model effective as of 26th May 2014. The resource statement as presented in this report is effective as of June 2014 and has taken into account factors which satisfy the increased requirements for transparency and materiality as defined in the JORC Code 2012. These include the explicit discussion of the reasonable prospects of eventual economic extraction and provision of Table 1 as given in the JORC Code 2012.

The Campoona Central Graphite deposit occurs on Exploration Licence 4693 (EL4693). EL4693 is owned by Samphire Uranium Pty Ltd (a subsidiary company of Uranium SA Pty Ltd) and Archer Exploration Limited (Archer) has sole rights to all commodities except uranium.

The graphite mineralisation at the Campoona Central deposit has been drilled over a strike length of 1,300m. The northwest 400m is drilled at close spaced 50m by 20m drill holes and shows well developed graphite mineralisation, intersected by pegmatite rich zones. The mineralisation has a strike of approximately 45 degrees and is interpreted to dip steeply (-80°) to the northwest. The mineralisation is located within one main large sheet and two outer lower grade halos. The mineralisation appears to thin at the southeast extremities of the drilled area, however, it remains open at depth and to the northwest. Towards the southeast, the mineralisation is truncated by pegmatites.

One hundred and one drill holes have been drilled at the Campoona Central deposit and fifty one have intersected significant graphite mineralisation. Drilling has been completed on twenty one lines with distances between the lines of 40 to 50m. A number of infill lines have been completed in the northern part of the deposit with the line spacing decreased to 25m. Drilling on section has been completed at 20 to 30m spacing down dip and one diamond drill hole has been drilled down dip for the purpose of obtaining metallurgical samples.

Graphite assays (GC) were obtained using the graphitic carbon by LECO method (ALS protocol C-IR18) and 60 SG measurements were made on the diamond drill hole intersecting the main graphite mineralisation only. Twenty eight new RC holes have been drilled in 2014 and been assayed for GC, as well as the older samples have been re-assayed for GC. Certified standards and blanks have been used in the QAQC procedures.

Figure 0-1 shows an isometric view of the Campoona Central deposit that has been modelled using the drilling and sectional interpretations as supplied by Archer.

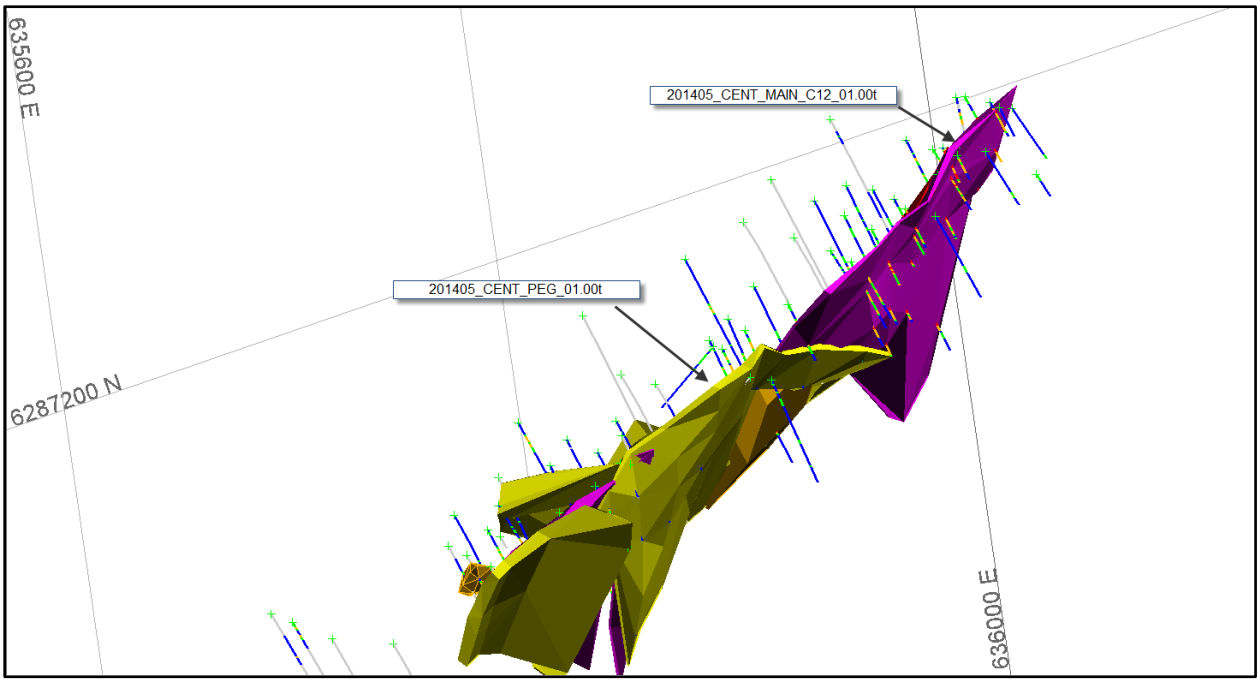


Figure 0-1 Representative isometric view of the Campoona Central deposit

The Mineral Resource has been estimated using the ordinary kriging (OK) technique to estimate GC grades. Due to the lack of spatial coverage of SG, SG has been assigned to domains rather than estimated for each block in the model. The resource has been classified based upon criteria including geological and grade continuity, the quality of the data and the confidence of the estimation.

The grades estimated by the OK technique are considered an acceptable global representation of the grades as they are all within 8% of the nearest neighbour (NN) grade estimate.

In considering reasonable prospects of eventual economic extraction, a Whittle pit shell was generated using $2100 per tonne of graphite product. All other factors are discussed further in appendix 4.

The estimated resources are reported at cut-off grades of 2.0% GC, 5.0 % GC and 10% GC.

Resource Estimate for Campoona Central deposit – Resource reported within break-even Whittle pit (generated for $2100 per tonne sale price for graphite)

Table 0-1 Resource at Campoona Central deposit at 2.0 % GC cutoff

	Classification	Tonnes	SG	Grade (%GC)
2% Cut-off	Measured			
	Indicated	270,000	2.1	10.7
	Inferred	700,000	2.1	6.2
	Total	**970,000**	**2.1**	**7.5**

Table 0-2 Resource at Campoona Central deposit at 5.0 % GC cutoff

	Classification	Tonnes	SG	Grade (%GC)
5% Cut-off	Measured			
	Indicated	220,000	2.1	12.3
	Inferred	300,000	2.1	10.3
	Total	**520,000**	**2.1**	**11.2**

Table 0-3 Resource at Campoona Central deposit at 10.0 % GC cutoff

	Classification	Tonnes	SG	Grade (%GC)
10% Cut-off	Measured			
	Indicated	170,000	2.1	14.3
	Inferred	130,000	2.1	14.8
	Total	**300,000**	**2.1**	**14.5**

Cutoff	res_pc_gc	Tonnage	sg
1	5.57	1,428,212	2.1
2	7.5	974,196	2.1
3	8.74	783,061	2.1
4	10	631,303	2.1
5	11.17	522,207	2.1
6	12.36	433,527	2.1
7	13.19	379,066	2.1
8	13.83	340,619	2.1
9	14.25	314,748	2.1
10	14.5	299,263	2.1
11	14.66	288,018	2.1
12	14.86	270,457	2.1
13	15.18	235,834	2.1
14	15.64	184,885	2.1
15	16.1	130,821	2.1
16	16.65	68,265	2.1
17	17.47	11,557	2.1

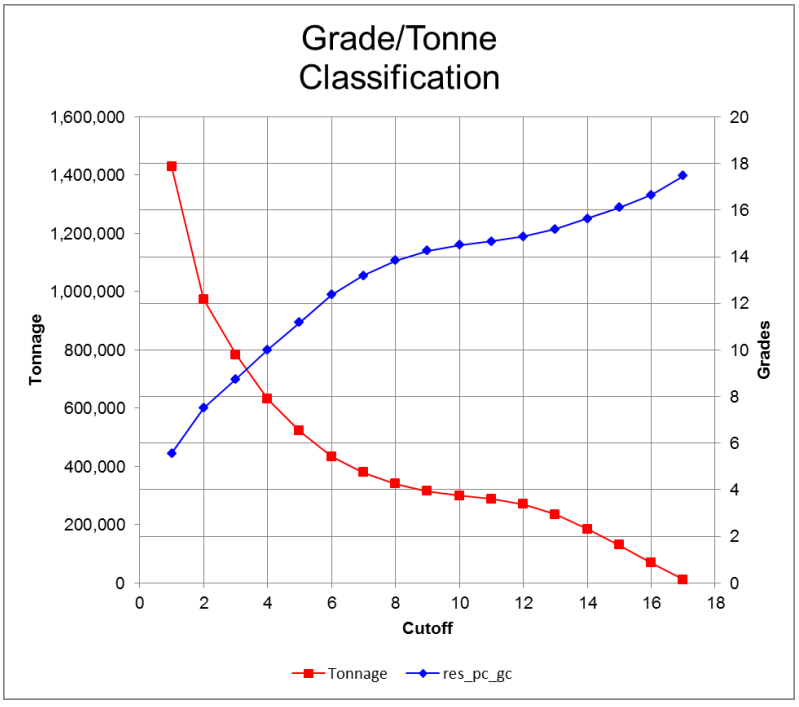


Figure 0-2 Tonnage and grade graph of combined Indicated and Inferred Resources.

Table 0-4 Resource risk classification matrix

Assessment	Risk Level			Comment
	High	Medium	Low	
Data Storage			▲	Can be improved from Excel to a formal database with validation tables, security and user passwords
Assay and QA/QC			▲	QAQC Certified custom standards inserted into the sample stream to ensure laboratory integrity. Analysis of GC instead of %C completed.
Recovery			▲	RC drilling to average depths of 150m, with recovery of a dry sample.
Sample Preparation			▲	Sample preparation on site as drilling progresses, with sample capture via cyclone and quartering of entire sample to 1.5KG for dispatch to laboratory.
Collection			▲	RC drilling and DD drilling
Logging			▲	Logging standards used for coding lithological units. Logging is both qualitative and quantitative depending on field being logged.
SG		▲		Further SG work required for the Central deposit.
Interpretation				
Geological			▲	Interpretation along section lines by Archer (See appendix 4)
Continuity				
Geological			▲	Drill spacing shows good continuity, with consistent thickness and lateral extent
Grade			▲	Sufficient close spaced drilling to show degree of short range variability
Drill spacing				
50 x 20			▲	Infill drilling has increased the confidence in resource classification

Current risk assessment ▲

2 COMPETENT PERSONS STATEMENT

2.1 Qualifications

The Campoona Central deposit Mineral Resource estimate and associated statement has been completed by Mr B Knell (Principal Consultant, Mining Plus) with assistance from Mr W Bollenhagen (Archer). The resource estimation procedures and results have been reviewed by Dr C Gee (Principal Geology Consultant, Mining Plus) and the results are considered to be a fair and reasonable representation of the amount and grade of the mineralisation present.

Mr Knell is a mining professional, with qualifications in both Mining Engineering and Geology. He has over 19 years experience in the global mining industry, with experience across many minerals and mining methods. He has been involved in significant mining development and major study projects, with extensive experience as a mining consultant. He is a member of the Australasian Institute of Mining and Metallurgy ("AusIMM") and has sufficient experience to qualify as a Competent Person under the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition (JORC Code, 2012 Edition).

Dr Gee is a geologist with more than 40 years experience of which more than 20 years have been in the resource estimation field. He is Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience in a variety mineral commodities to qualify as a Competent Person under the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition (JORC Code, 2012 Edition)

The Mineral Resource quoted in this report is based on information compiled and supplied by Mr W Bollenhagen (Archer). At the time of preparation of this estimate Mr W Bollenhagen is a full-time employee of Archer Exploration Limited.

2.2 Declaration

This Campoona Central Mineral Resource, as presented in this report, has been prepared under the guidelines of the JORC Code, 2012 Edition.
I, Brad Knell, confirm that I am the Competent Person for the Report and:

- I have read the understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012).
- I am a Competent Person as defined by the JORC Code 2012 Edition, having five years' experience that is similar to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.
- I am a Member of the AusIMM.
- I have reviewed the Report to which this Consent Statement applies.

Neither the author nor Mining Plus has any material interest or entitlement, direct or indirect, in the securities of Archer Exploration Limited. Mining Plus commenced providing geological services to Archer Exploration Limited in May 2014. Fees for the preparation of this report are on a time and materials basis.

I verify that the Report is based on and fairly and accurately reflects the form and context in which it appears, the information in my supporting documentation relating to Mineral Resources. Dated this 11th day of July 2014.

Brad Knell

BSc(Hons), MAusIMM

Principal Mining and Geology Consultant, Mining Plus Pty Ltd

APPENDIX 1 TABLE 1

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* .	• The deposit was sampled using Reverse Circulation (RC) and Diamond Drilling (DD) • Sampling is guided by Archer's protocols and QAQC procedures. • RC samples are collected by a riffle splitter from material recovered by drilling with a face sampling hammer of approximately 130mm. • DD core was cut quarters using a core saw and quarter core submitted for assay. Some intervals close to the surface were too soft for cutting and representative material was cut from the core in the tray. • All samples were sent to ALS laboratory in Adelaide for preparation and forwarded to either Perth or Brisbane for LECO analyses. • A total of 4,084m of drilling comprise the Campoona Central resource. All samples are crushed to -4mm and pulverised via LM2 to nominal 90% passing -75pm.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• The Campoona Central deposit was sampled by 100 reverse circulation (RC) holes (4,684m) and 1 triple tubed diamond drill (DD-HQ3) holes (60m). • RC holes were drilled in an orientation so as to intersect the mineralisation as close to orthogonal to the strike direction as possible. • Due to the steep dip of the deposit it is not practical to intersect the deposit orthogonally down dip. • Face sample hammers were used and all samples collected dry and riffle split after passing through the cyclone. • For RC and DD holes down hole surveys were taken at the collar (6m) and at 30m, then every 30m to EOH. • DD holes were drilled for graphite samples to be used for metallurgical extraction. • No core orientation was achieved due to the softness of the mineralisation.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Surface RC sampling was acceptable with no wet sampling in the drilled Central area. • The RC rig sampling systems are routinely cleaned to minimize the opportunity for contamination; drilling methods are focused on sample quality and recovery. • DD-HQ3 drilling methods were used to maximize the core recovery, with the tube splits being pumped out. Core runs were limited to 1.5m.

Criteria	JORC Code explanation	Commentary
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Geological logging is completed for all holes. • Geological logging consisted of coding of intervals with occasional longhand descriptions being undertaken. • Logging is both qualitative and quantitative depending on field being logged. • All diamond core was logged and photographed and stored in sheds. • Diamond drilling recovery was greater than 95%.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Half core was sampled using a diamond saw, with some intervals close to the surface needing to be cut from the core tray due to softness. • All RC samples are split using a 3 tier riffle splitter mounted under the cyclone. RC samples are drilled dry. • Samples taken from the host rocks and other barren units were taken as 4m composites, if a grade of +1%C was returned then the corresponding single metre intervals was submitted for analyses. No material logged as graphitic schist interval was submitted as a composite, all were submitted as single metre samples. • Sample preparation at the ALS laboratory involved weighed on submission to laboratory and the original sample being dried at 80° for up to 24 hours. . Sample is then crushed through to nominal -10mm (DD samples only). Second stage crushing to nominal -4mm (both RC and DD samples). Sample is split to less than 2kg through linear splitter and excess retained. Sample splits are weighed at a frequency of 1/20 and entered into the job results file. Pulverising is completed using LM2 mill to 90% passing 75%pm. The pulverised residue is shipped to ALS in Perth for LECO analysis. • Duplicate analysis has been completed and identified no issues with sampling representatively for estimated holes. • Sample sizes are representative of the grain sizes being assayed for.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• All samples have been analysed by the C-IR07 technique which reports total carbon. All samples above 2% TC have been analysed using the C-IR18 technique which reports total graphitic carbon (GC). • A nominal 0.4g sample is weighed into a ceramic boat with the exact weight being electronically recorded by the LECO inbuilt computer. The sample is combusted in oxygen at 1500-2000 Degrees Celsius and the resultant carbon dioxide gas formed is quantified using an infrared detection system. • Multi-elements are analysed on selected intervals to confirm the tenor of the following suite of elements; Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe , Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te. Th, Ti, Tl, U, V, W, Y, Zn, Zr, Dy, Er, Eu, Gd, Ho, Lu, Nd, Pr, Sm, Tb, Tm, Yb. • ALS performs the multi-element analyses under the code ME-MS61, which is a mulit acid digest (with HF) and ICPAES and ICPMS finish. • Internal certified laboratory QA/QC is undertaken by ALS. • Certified standards and blanks are inserted at a minimum of 20% frequency rate. • QAQC data analysis has been completed for all drill hole data and demonstrates sufficient accuracy and precision for use in Mineral Resource estimation.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant intersections have been verified by alternative company personnel. • Drill hole twins exist at the Campoona Central, with CSRC12_028 and CSRC14_004 (twinned). CCDD14_001 was drilled at a high angle to the mineralisation so that three separate RC holes were intersected. One RC hole was intersected close to surface the other RC holes were intersected at a deeper RLs. • Primary data are captured on paper in the field and then re-entered into spreadsheet format by the supervising geologist, to then be loaded into the Company's database. • No significant adjustments are made to any assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• MGA94 Zone 53 grid coordinate system is used. • Holes drilled prior to CSRC12_036 (CSRC12_001 → CSRC12_036) were not routinely surveyed prior to rehabilitation, consequently the collar RL data has been modified to be consistent with the topographic DTM. Where reliable survey data were available, the collar RL data were preserved. • Downhole surveys collected by multi-shot digital camera, for resource holes. • For the Campoona Central Resource a digital terrain model was collected by differential GPS survey.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Campoona Central (CS prefixed) hole locations are at a nominal 50m (Y) by 20m (X) pattern. Due to the hole angles this results in approximate down-dip intersections at intervals of 40m. • Data spacing and distribution are considered sufficient to establish the degree of geological and grade continuity reported.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Most of the holes are orientated perpendicular to the strike of the mineralisation. • The RC holes were generally drilled at a dip of -60° to define the geology of the deposit. CSRC13_042 was drilled at -80° down the dip of the graphite mineralisation. • One diamond drill hole was drilled down dip at a dip of -80° in order to give a larger sample for metallurgical testing.
Sample security	• *The measures taken to ensure sample security.*	• All samples were under company supervision from the rig to the Adelaide ALS laboratory. • All residual sample material is stored securely in sealed bags at Archer Exploration Lonsdale, Adelaide storage.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No sampling Audits have been performed.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• All work being reported is from EL 4693 (owned by Samphire Uranium), Pirie Resources (a subsidiary of Archer) has earned rights to 100% of all other commodities excluding uranium. • The tenement is in good standing with no known impositions.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The tenement has had historic exploration conducted over it by companies including Shell, BHP, Aberfoyle, Kerr McGee. The tenement was historically explored for base metals, uranium, diamonds and gold.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Disseminated flake graphite is widely distributed in the metamorphosed Palaeoproterozoic Hutchison Group rocks of the eastern Eyre Peninsula. • The graphite mineralised bodies appear to be constrained within a regional shear of graphitic gneiss. The structure has impacted the mineralisation such that shearing has resulted in a series of graphitic units that have higher graphite contents than the precursor host, they can be described as lenses or pods. The structure which hosts the mineralisation has a strike of roughly 13km.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Summary of drill holes is not material to the understanding of the report as all holes drilled were surveyed correctly and had down hole surveys conducted.
		• The numbers are not consecutive as drilling has also been conducted at a neighbouring property and those drill holes were drilled in sequence with those drilled at the Campoona Central deposit.
		• CCDD14_001 (1 diamond drill hole)
		• CSRC11_001 → CSRC11_006 (6 reverse circulation drill holes)
		• CSRC12_001→ CSRC12_004 (4 reverse circulation drill holes)
		• CSRC12_017→ CSRC12_036 (20 reverse circulation drill holes)
		• CSRC13_001 → CSRC13_042 (42 reverse circulations drill holes)
		• CSRC14_001 → CSRC14_028 (28 reverse circulations drill holes)

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and*	• No high grade cuts were applied • No data aggregation was applied • No equivalents were used

Criteria	JORC Code explanation	Commentary
	some typical examples of such aggregations should be shown in detail. • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• All drill holes have been drilled perpendicular to the strike of the mineralisation. • Down hole intervals from RC drilling are typically twice (2x) the true width of the mineralisation. • Downhole interval from DD hole is along the dip the mineralisation, to obtain samples for metallurgical testing.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See current release and previous ASX releases.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Not applicable
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Results of Archer's metallurgical programs continue to show the potential for high grade graphite products. See recent ASX releases.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Auger drilling may be undertaken to provide a larger bulk sample. • The Campoona structure has been highlighted in ASX releases to be the subject of ongoing regional exploration. • Some of the drill holes have been intentionally drilled down dip which has provided large intersections but with little information with respect to mineralisation/host rock contacts. Additional drilling should be considered to provide further confidence in the position, grade and geotechnical characteristics of the northwest contact of the main mineralised body.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• All original data supplied by Archer was delivered as an Excel spreadsheet. • Digital logging and sampling data was cross checked with hard copy field data. • Digital assay data were cross checked with original data once imported into Excel. • Vulcan database validation checks were conducted prior to estimation
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Site visits were regular to ensure that procedures for drill data collection were being performed. The Archer Competent Person assisted in the design, logging and surveying of the drill holes.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Archer provided a geological interpretation which was reviewed and modified prior to estimation. The final wireframes used for estimation maintain the structural architecture interpreted by Archer. • The geological interpretation is relatively simple with the main graphite unit being clearly traceable over a strike distance of at least 400m. The main graphite unit is located on the northwest side of the deposit. Two low grade halos have been interpreted parallel to the main graphite unit. • Pegmatite rich zones transect the graphite and have been modelled to constrain the estimation. • Additional drilling may further define some thin graphite units which appear discontinuous at the current drilling density. • The mineralisation is easily recognised in core due to the colour contrast between the black graphite and pale brown gneissic host rock. The hanging wall to the mineralisation is preceded by a hematite rich zone likewise the footwall of the mineralisation is started by a hematite rich zone. Within the mineralised domain there is also a thin (<1m true width) kaolin marker unit. • The larger and thicker graphite units show greater continuity and have been classified accordingly. Only the largest unit contains material of the Indicated category.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Campoona Central Resource measures some 1300m in length along strike, comprising one major mineralised zone varying in width from 5m to 25m along the northwestern 400m of strike. • The ore is present at the surface and is modelled to a depth of up to 150m from the surface and is open at depth.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Maptek ™ Vulcan™ 8.1.4 software was used for the interpretation, block modelling and grade estimation. Supervisor ™ was used for geostatistical analysis. • Ordinary kriging was used to estimate the resource. • A total of 15 mineralised domains were used to constrain the estimation of which 7 representi the main mineralised unit, 7 representi a low grade halos, and one represents the block model extremities. • The mineralised units were interrogated to determine parameters to be used for ordinary kriging. • A parent block size of 10m x 25m x 10m (x,y,z) with sub-blocking to 1m x 2.5m x 2m to better define mineralisation boundaries. • No high grade cutting was applied. • The model was statistically checked against an inverse distance model, nearest neighbour model and the composite drilling database. • The model was visually checked on each interpreted section • At present no deleterious elements are known of and thus were not estimated. • At present recovery of by products is not considered. • No assumptions have been made regarding selective mining units.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis. .
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The resource is reported at a number of cut-offs, being 2%GC, 5%GC and 10%GC, purely for reporting purposes. These cut-offs have no bearing on what could be considered as economic. Extractive research is ongoing and suggests that 5%GC represents a realistic lower cut to the resource.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• For the purpose of satisfying reasonable prospects of eventual economic extraction a preliminary Whittle optimisation was undertaken. Assumptions include mining recovery of 95%, mining dilution of 5%, processing recovery of 90%, Sale price of $2100/t, processing cost of $50 per tonne, average mining cost of $15 per t and;. an average pit slope of 48.5 degrees when ramps and batter angles are allowed for. • The reported resource occurs within the optimum Whittle pit shell generated using these assumptions.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Test work by Archer is being constantly updated to the market, as the extraction process is refined during a scaling up process from bench scale test work to larger volume samples. • In house floatation test have recovered progressively higher grade graphite concentrates with latest results in the high 98 to low 99% TGC range, see Archer Exploration Quarterly Activities Report 31 December 2013. • A wide range of graphene and graphene-related products were readily produced from raw Campoona graphite samples as well as from medium-grade (92% C) graphite concentrates. The research was part of ongoing collaboration between Archer and the University of Adelaide, School of Chemical Engineering (Prof Dusan Losic Nano Research Group), see Archer Exploration Quarterly Activities Report 31 December 2013.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• It is assumed that material probably considered as waste will be of a chemically benign nature; this is assumed from multi-element chemistry reported from drilling. • The material adjacent to the mineralisation at Campoona Central is deeply weathered and is dominated by kaolin clays with quartz grains. • Baseline environmental studies have commenced over the resource area and pastoral lands adjacent to the resource.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• SG was measured from half core samples at regular intervals down the diamond drill hole. • SG was determined using the Archimedes SG technique on non wax coated samples by Archer and Mining Plus for 60 intervals of core. • Previous work under taken at the nearby Shaft graphite deposit included intervals outside the graphite zone and these SG values have been applied at the Central deposit. • SG was assigned to domains rather than estimated.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The mineral resource for Campoona Central has been classified into Inferred, and Indicated categories. These categories were based upon the following criteria: geological and grade continuity, the quality of the data and the confidence of the estimation. • The Mineral Resource estimate appropriately reflects the view of the Competent Persons.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Central resource was reviewed by Mining Plus and Archer personnel. No external resource review has been completed.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The statement relates to a global estimates of tonnes and grade • Given the very continuous strike of the drilled mineralisation the assumed continuity down dip is considered reasonable for the purpose of evaluation of the economic viability of the deposit. However, significant additional drilling and assaying will be required prior to detailed mine planning and to support final economic viability of the deposit. • The resource is reported total graphitic carbon GC%. • No production data are available. • All future data should be collected using industry best practice methods.