

19th July 2013

Quarterly Activities Report Period ended 30th June 2013

HIGHLIGHTS FOR THE QUARTER

EXPLORATION

CENTRAL CAMPOONA

- Drilling at Central Campoona intersected significant graphite intervals including:

Hole ID	Depth From (m)	Depth To (m)	Interval (m)	% TGC
CSRC13_002	19	53	34	10.7
CSRC13_003	24	50	25	12.6
CSRC13_004	48	66	17	17.4
CSRC13_006	28	39	11	12.4
CSRC13_024	9	24	15	13.3
CSRC13_025	27	43	16	15.2
CSRC13_026	12	37	25	12.8
CSRC13_027	15	23	8	10.3
CSRC13_030	0	52	52	13.6
CSRC13_032	18	42	24	16.4

- Regional drilling identified three further graphitic schist occurrences with similar geology to Campoona Central and Campoona Shaft. Significant drill intercepts included:

Hole ID	Depth From (m)	Depth To (m)	Interval (m)	% TGC	Host	Location
WHPRC13_002	39	45	6	12.6	Graphitic schist	Camp_south
WHPRC13_003	0	6	6	7.8	Graphitic schist	Camp_south
WHPRC13_012	71	84	13	9.6	Graphitic gneiss	Camp_shaft
WHPRC13_024	8	17	9	8.1	Graphitic schist	Camp_east
WHPRC13_032	30	38	8	10.9	Graphitic schist	Camp_north

CAMPOONA METALLURGY

- Bench-scale metallurgical testing of Campoona ores has been completed. The rigorous testing regime included 35 bench-scale tests on samples across the length, breadth and depth of the deposit. Key outcomes from the testing are:

- Outstanding fine crystalline natural graphite concentrate grading 95 - >99% TGA* achieved solely from mechanical cell flotation.
**Graphitic carbon completed using Thermogravimetric Analysis accurate to ±1% carbon*
- High grade graphite concentrate grades are repeatable for all three geological horizons of the deposit - the Upper Claystone, Upper BOCO (base of complete oxidation) and Lower BOCO – representing from surface to the base of current drill coverage at 100 metres vertical depth.
- High tech applications that require graphite grading ≥99% TGA typically rely on synthetic graphite. Campoona provides natural graphite at grades to rival synthetic graphite whilst at the same time delivering highly crystalline graphite.
- Such ultra-pure natural graphite concentrates are very rare.
- Campoona is unique in that it can deliver very high quality graphite from a high yielding extractive process.
- In late June 2013 Archer moved to bulk flotation tests. The aim of the bulk flotation tests is to provide up to 15 kilograms of final product which will be delivered to selected prospective customers to evaluate.
- Further improvements in recovered grades are likely as various upgrading techniques remain to be tested.

SUGARLOAF GRAPHITE

- Archer Exploration Limited entered into a legally binding agreement to purchase property at Sugarloaf (“Sugarloaf Property”) which hosts the Company’s Sugarloaf Graphite Project during April 2013. Settlement of the property was completed on 10th May.
- The Sugarloaf Property consists of 568 hectares (1,404.3 acres) of land. Acquisition is an important next step towards developing the Company’s Eyre Peninsula Graphite Projects.

FINANCIAL

- Cash in bank on 30th June 2013 of \$8.56 million.
- \$884,000 spent on exploration during the quarter.

Summary of the June 2013 Quarter Exploration Activities

1. Graphite Exploration

Drilling at the Campoona Central area confirmed the presence of graphite similar to the graphitic schist at Campoona Shaft. Campoona Central is located about 2.8km immediately to the SW of the Campoona Shaft Resource.

Holes were drilled to depths that were approximately 45m vertically below the surface. All holes had collars surveyed, down hole surveys were taken to record any deviations and standard QAQC techniques were applied to facilitate future resource estimation. A comprehensive suite of samples has been collected for metallurgical testing.

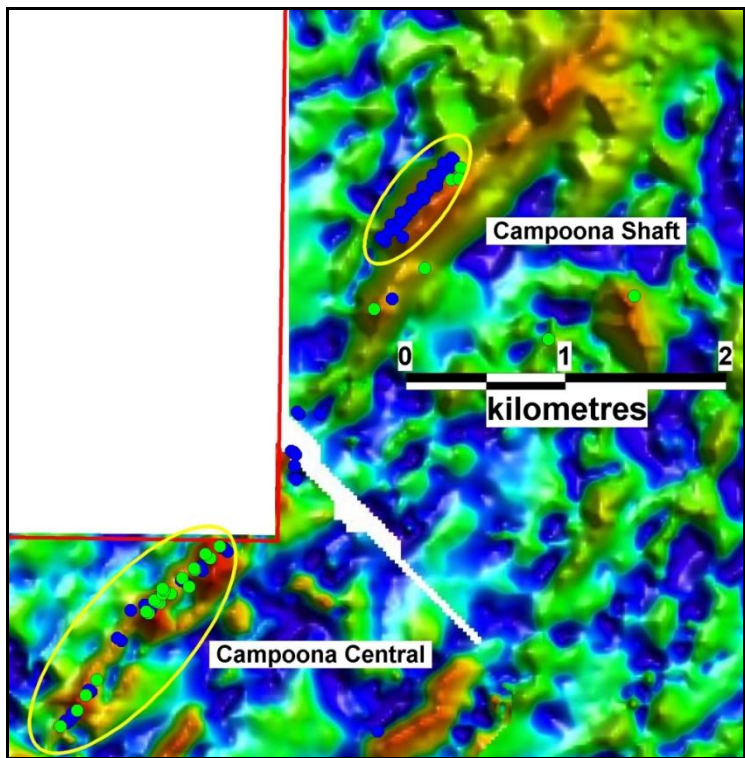


Figure 1. Location of Campoona Central with respect to Campoona Shaft area

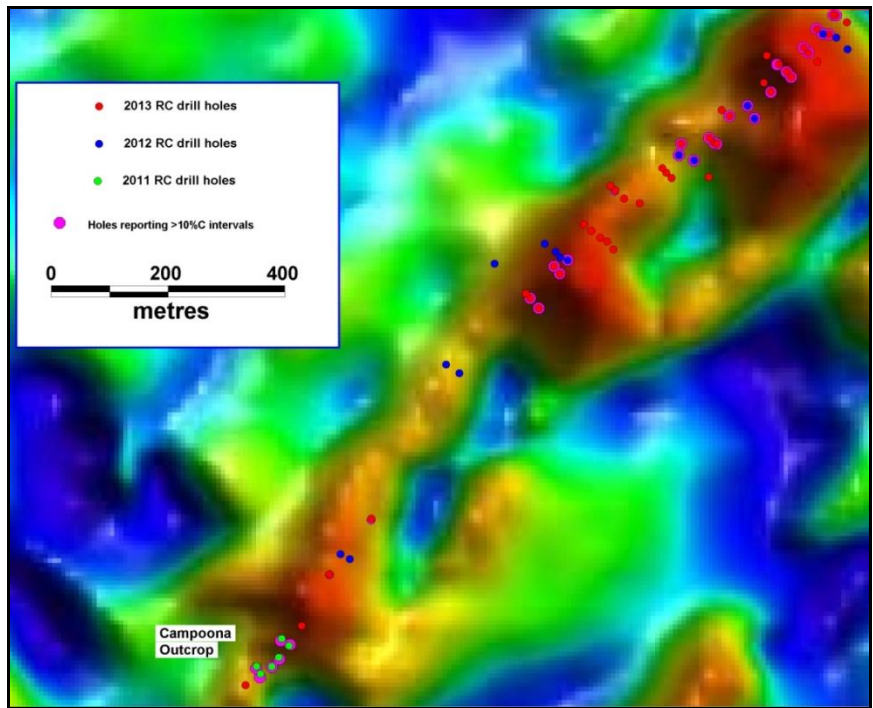
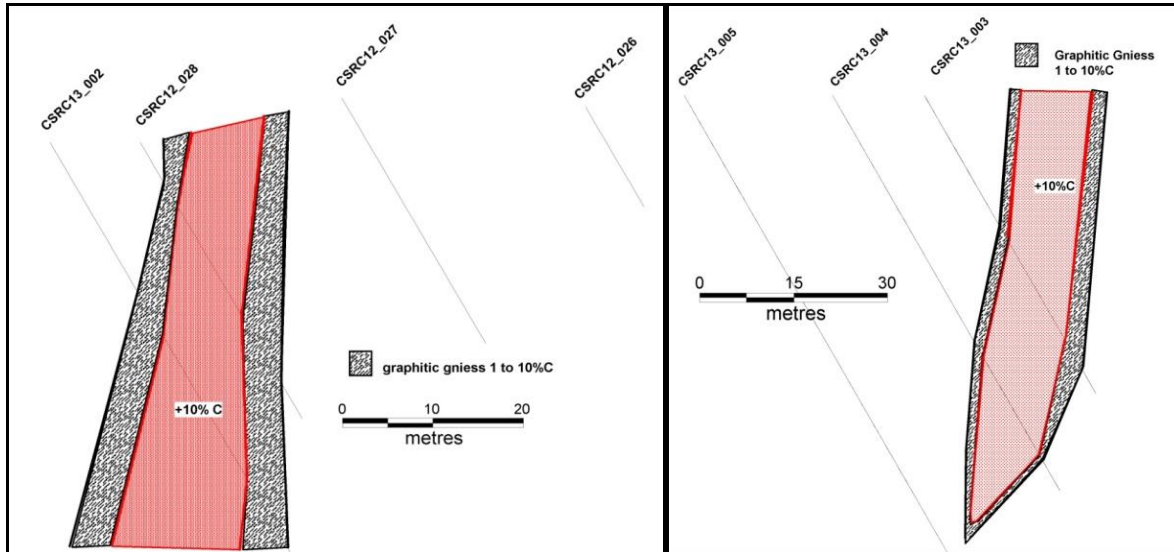


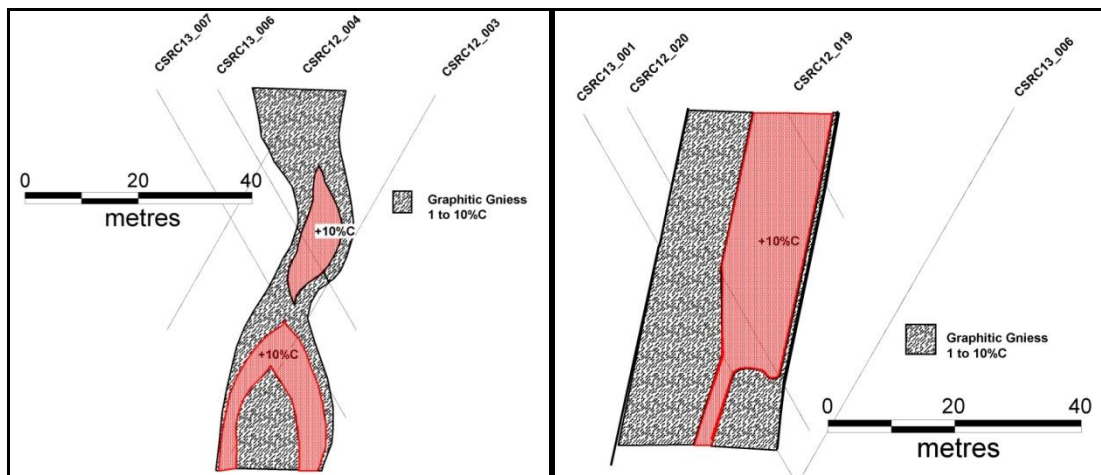
Figure 2. All RC hole locations at Campoona Central with graphitic holes indicated.

The sections below are the first (most northern) sections drilled. Each section is roughly 100m apart.



Section 1 (line 1)

Section 2 (line 3)



Section 3 (line 5)

Section 4 (line 7)

Table 1 below is a report of all significant graphite intervals from the Campoona Central drilling. Most of the significant intercepts are from the northern part of the area. Towards the south the graphite pinches and swells over shorter strike distances and is dislocated by a series of short scale fault offsets.

Table 1. Significant graphite intervals from Campoona Central

Hole ID	Depth From (m)	Depth To (m)	Interval (m)	% TGC
CSRC13_001	42	52	10	8.3
CSRC13_002	19	53	34	10.7
CSRC13_003	24	50	25	12.6
CSRC13_004	48	66	17	17.4
CSRC13_006	28	39	11	12.4
CSRC13_007	53	61	7	4.0
CSRC13_013	10	31	21	3.5
CSRC13_014	24	31	7	7.1
CSRC13_017	22	29	7	5.5
CSRC13_018	62	72	10	3.7
CSRC13_020	0	10	10	2.5
CSRC13_024	9	24	15	13.3
CSRC13_025	27	43	16	15.2
CSRC13_026	12	37	25	12.8
CSRC13_027	15	23	8	10.3
CSRC13_029	10	21	11	8.0
CSRC13_030 [#]	0	52	52	13.6
CSRC13_031	13	15	2	7.7
CSRC13_032	18	42	24	16.4
CSRC13_033	4	10	6	8.4
CSRC13_039	3	8	5	8.5
CSRC13_042	41	55	14	19.2

[#] CSRC13_030 was drilled down the dip of the graphite to collect metallurgical samples representing the weathering changes of the orebody.

Regional Graphite

A total of 59 holes for 3,656m were completed to test regional EM signatures. The drilling successfully identified three new graphitic schist horizons similar to the Campoona Shaft and Campoona Central deposits as well as intersecting high grade graphitic gneiss at Campoona Shaft.

Table 2. Significant Regional graphite intercepts

Hole ID	Depth From (m)	Depth To (m)	Interval (m)	% TGC	Host	Location
WHPRC13_002	39	45	6	12.6	Graphitic schist	Camp_south
WHPRC13_003	0	6	6	7.8	Graphitic schist	Camp_south
WHPRC13_012	71	84	13	9.6	Graphitic gneiss	Camp_shaft
WHPRC13_024	8	17	9	8.1	Graphitic schist	Camp_east
WHPRC13_032	30	38	8	10.9	Graphitic schist	Camp_north

In addition to the high grade graphite intercepts, holes CSRC13_009; CSRC13_026; CSRC13_028; CSRC13_031; CSRC13_039; CSRC13_040 and CSRC13_041 (figures 3&4, below) all reported graphite intervals of less than 5% TGC. All of these areas will require follow up to determine the potential for Campoona-style graphite mineralisation.

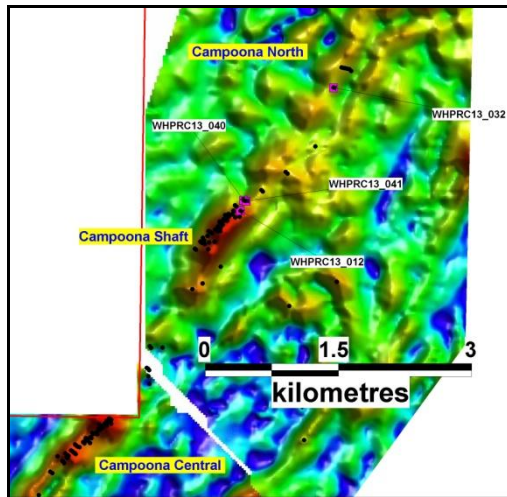


Figure 3. Campoona North holes

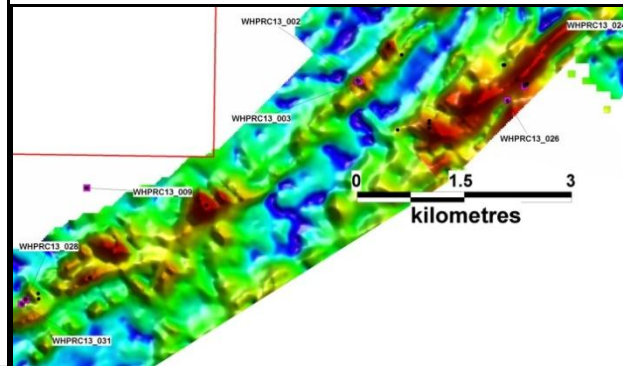


Figure 4. Campoona South holes.

2. CAMPOONA GEOLOGY

DMITRE mapping sites the Campoona Shaft Graphite Deposit within the Mangalo Schist between the Upper and Lower Middleback Jaspilite Equivalents within the Hutchinson Group of early Proterozoic rocks. The Mangalo Schist was formerly known as the Cook Gap Schist Equivalent.

At Campoona the graphite occurs as highly graphitic schist within a low grade graphitic protogneiss. The original sediments were clastic psammitic and pelitic marine sediments of Palaeoproterozoic age. The original source for the carbon is believed to have been from submarine vents. Carbon was encapsulated into the marine sediments. Diagenesis and metamorphism to upper amphibolites facies has converted the carbon to crystalline graphite.

The Campoona Shaft deposit consists of a main northeast striking, steep northwest dipping 20m - 50m thick main graphitic schist zone with narrower discontinuous graphitic footwall zones.

In outcrop the immediate footwall to the Campoona graphite deposits is marked by a 2m wide hematite horizon that is more likely to be related to the oxidation of sulphides rather than being described as a banded iron formation.

The Campoona graphite deposits occur as quartz + graphite + feldspar + muscovite + garnet + tourmaline + cordierite + sillimanite schists and gneisses. Pegmatite sills and dykes occur within the sequence. Conformable and cross cutting late stage amphibolites intrude the sequence.

The graphitic host rocks have been subjected to intense weathering. The base of complete oxidation occurs at a vertical depth of ≈60m - 70m with strong oxidation persisting to the depth of drilling – approximately 100m.

The graphite at Campoona Shaft subcrops or lies below a thin veneer (<2m) of soil cover. The uppermost 5m of the graphite occurs as kaolinite + quartz + graphite + garnet + tourmaline horizon. Muscovite is rarely seen. This horizon has been named the Upper Claystone.

Below the kaolin-rich horizon the graphitic schist occurs as highly weathered, porous quartz + graphite + kaolin +

garnet + tourmaline ± iron oxides (goethite & hematite) rock. All feldspar has been converted to kaolin and quartz occurs as disaggregated often rounded grains. Discrete thin clay-rich zones occur perhaps more as cavity fill than discrete horizons. This horizon has been termed the Upper BOCO (where BOCO is an acronym for Base of Complete Oxidation).

Below 60m – 70m vertical depth the graphitic schist becomes more competent. Here strong weathering persists to at least 100m depth. Feldspars have been converted to illite ± kaolin ± smectite. Sulphides in the form of pyrite occur irregularly in trace quantities.

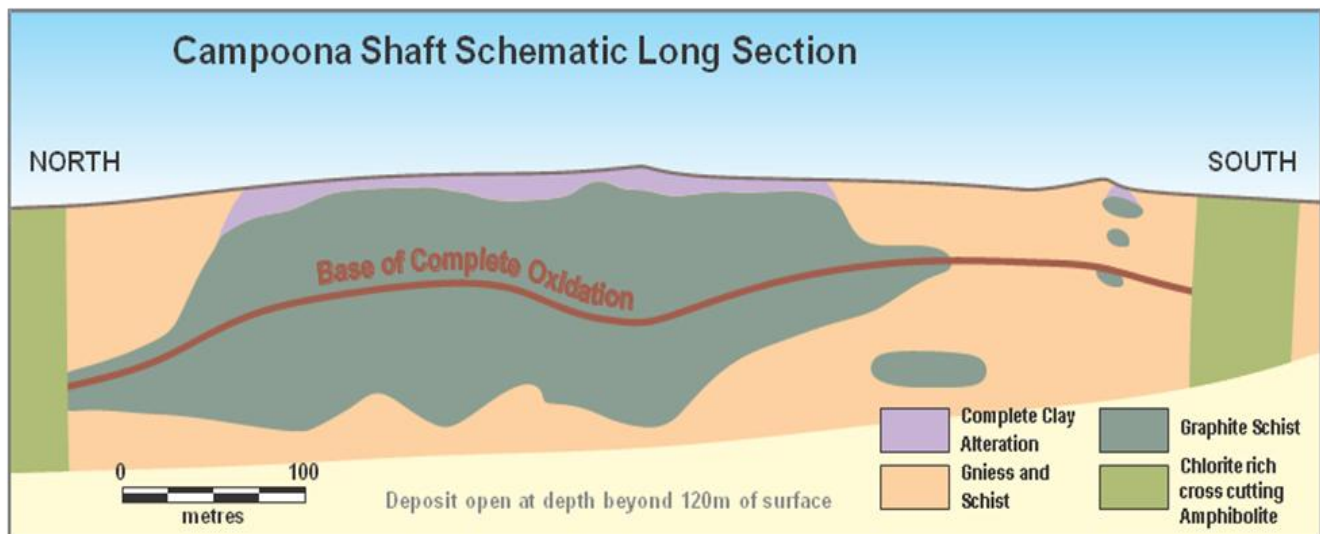


Figure 5. Schematic long section of Campoona Shaft showing main geologic horizons based on the degree of weathering of the host rock unit.

Both Central Campoona and Campoona Shaft occur within a regional shear zone here termed the Campoona Shear. The Campoona Shear, which is up to 16km in length, hosts a number of “pods” of highly graphitic schist. The graphite clearly precedes the shearing. Archer believes that the development of shearing within the highly graphitic pods is as a consequence of the presence of the graphite. Late stage NW trending cross faulting often with attendant amphibolites intrusives has segmented the graphite pods.

The Campoona Shaft and Central Campoona graphite deposits occur as steep westerly dipping north-northeast trending bodies. Central Campoona occurs as a regularly steep dipping almost tabular body that varies in thickness from 10 -15m. Campoona Shaft on the other hand varies from 10 – 50m in true thickness due to pinching and swelling along strike and down dip within the shear. Rafts of low grade (<5%TGC) graphitic gneiss occur within the shear.

The graphite at Campoona varies in crystal size from 30-300µm and averages around 150µm. The average flake size is classified as fine and medium flake. Flake size and crystallinity of the graphite are by-products of metamorphism. The presence of sillimanite indicates high metamorphic temperatures but likely variable pressures.

Prolonged weathering of the host units has lead to strong natural liberation of the graphite from the gangue minerals.

3. CAMPOONA METALLURGY

Since October 2012 the Company has undertaken rigorous metallurgical bench-scale testing of representative samples of Campoona graphite. A total of 35 individual bench-scale tests have been completed testing samples across the length, breadth and depth of the Campoona Shaft deposit.

The metallurgy assessment testing of the Campoona Shaft ore body is now successfully completed.

The bench-scale testing was carried out over several months to determine the recoverable graphite in flake sizes 212-150µm (medium flake size, as per industry standards), 150-75 µm (fine flake size), and -75 µm (amorphous or ultrafine flake size) and to assess the highest levels of such concentrates achievable during recovery. The testing was carried out on graphite ore provided by three diamond drill holes evenly spaced along the length of the elongate deposit and intersecting the full depth of the ore body down to approximately 120 metres depth. Quarter-core composites were assembled to represent two ore types, geologically identified as an upper weathered ore zone of graphitic schist (Upper BOCO) extending down to approx. 60 metres depth, and a lower zone of fresher graphitic schist (Lower BOCO) further extending down to 120 metres depth. In addition, samples of kaolin-rich claystone horizon (Upper Claystone) representing the uppermost horizon of the deposit were taken from sumps dug for the metallurgical diamond drill holes. Combined these samples provided a comprehensive representation of the ore for metallurgical testing.

Mechanical cell flotation was selected as the most effective method for graphite extraction and concentration. This is a simple long-established technique widely used in the graphite industry. Mechanical cell flotation is a well documented technology providing a simple but robust processing method. Although a strict methodology was applied for ore processing in the bench-scale testing, variations in grinding methods for clay removal and for cell operation has allowed each ore type to be processed uniquely. The weathered nature of much of the ore (Upper Claystone and Upper BOCO) meant that primary ball mill grinding was minimal. Initial testing of the Upper Claystone created issues relating to loss of graphite. These initial issues have now been resolved.

Campoona graphite ores host both large and medium sized flake. Staged wet-grinding failed to release significant percentages of market grade flake (94 – 97% C). However, the testing showed that Campoona ores delivered high quality ultrafine concentrate at -75µm sizing from simple mechanical cell flotation to levels in excess of 99% Total Carbon. Such grades for -75µm graphite are rare, if not unique, to the graphite industry. Much of the larger flake is primarily composed of finer flakes of graphite held together by quartz as an intercalated veneer, at times nanometers thick.

The rigorous testing collected and concentrated as much medium and fine flake as possible through step-down grinding and release and passed the tailings from each flotation down to the lower size ranges to allow for a final separation and concentration at the -75µm range. In that range, all concentrates could be produced in excess of 95% C with most at 97% and above at recovery levels ranging from a low of 70% through to 94%. Without stage grinding and fine and medium flake separations, the testing showed that if all the ore was initially reduced to -75µm sizing overall graphite recovery was 85 - 90% for the entire ore body.

Emphasis was placed on improving recoveries while holding concentrates at the 95% - >97% purity level so that there is potential for further improvements focussed on increasing the grade of the concentrate consistently into the realm of >98% - 100% C. This had already been achieved in preliminary testing, trialled on the Upper Claystone ores.

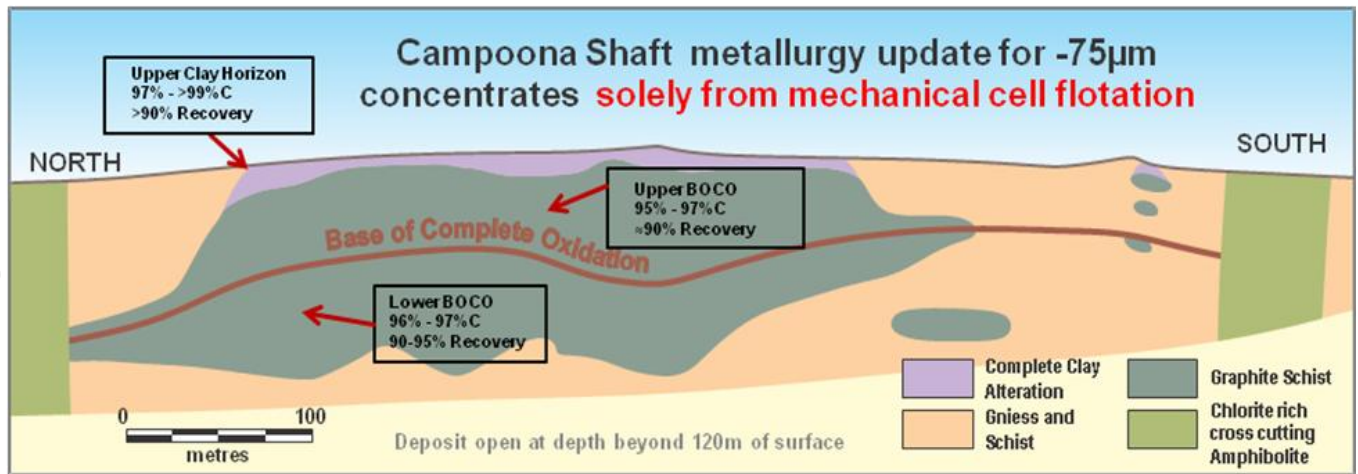


Figure 6. Summary of Campoona Bench-scale tests by geologic horizon.

Subsequent to this assessment, the engineering consulting Parsons Brinkerhoff, has embarked upon a Scoping Study based on these metallurgical methods and their results. A preliminary plant design has been established which will be matched with mining methods, processing, and tailings disposal.

Bulk flotation trials began during the Quarter on larger ore samples. Early results indicate that bulk mechanical cell flotation will closely match performances observed at the bench scale in the assessment tests.



Plate 1. Bulk flotation concentrates closely mirror bench-scale results.

The metallurgical testing indicates that a high-purity ultrafine graphite concentrate can be produced from the ore using traditional and simple processing methods. The same processing method (and equipment) applies to all zones in the ore body. The ore is easily crushed with early and low-cost liberation of graphite. Exceptionally high purity levels can be achieved for the graphite product – levels which come with higher market pricing.

Simple metallurgical processing means that Campoona graphite can be prepared from mechanical float cells typically at $\geq 97\%$ C. The campaign of metallurgical bench flotation trials demonstrates that the combination of a high-performing ultrafine graphite flotation followed by simple acid treatment to remove trace contaminants can deliver graphite concentrates reporting $>99\%$ C.

At grades over 99% both LECO and TGA lack accuracy and formal reporting limits these values to $\pm 1\%$. During the Quarter the Company continued to develop an analytical technique for trace element contents that can properly reflect the high purity of the ultrafine graphite concentrates.

Specific extractive methods have been developed over several months of systematic and rigorous investigative metallurgy. The results achieved show that Archer can focus on the production of ultra-pure graphite that may rival synthetic graphite in purity but is likely to out-perform synthetic graphite due to its well defined crystal habit. Synthetic graphite is expensive to produce and typically trades at prices greater than US\$7,000/t.

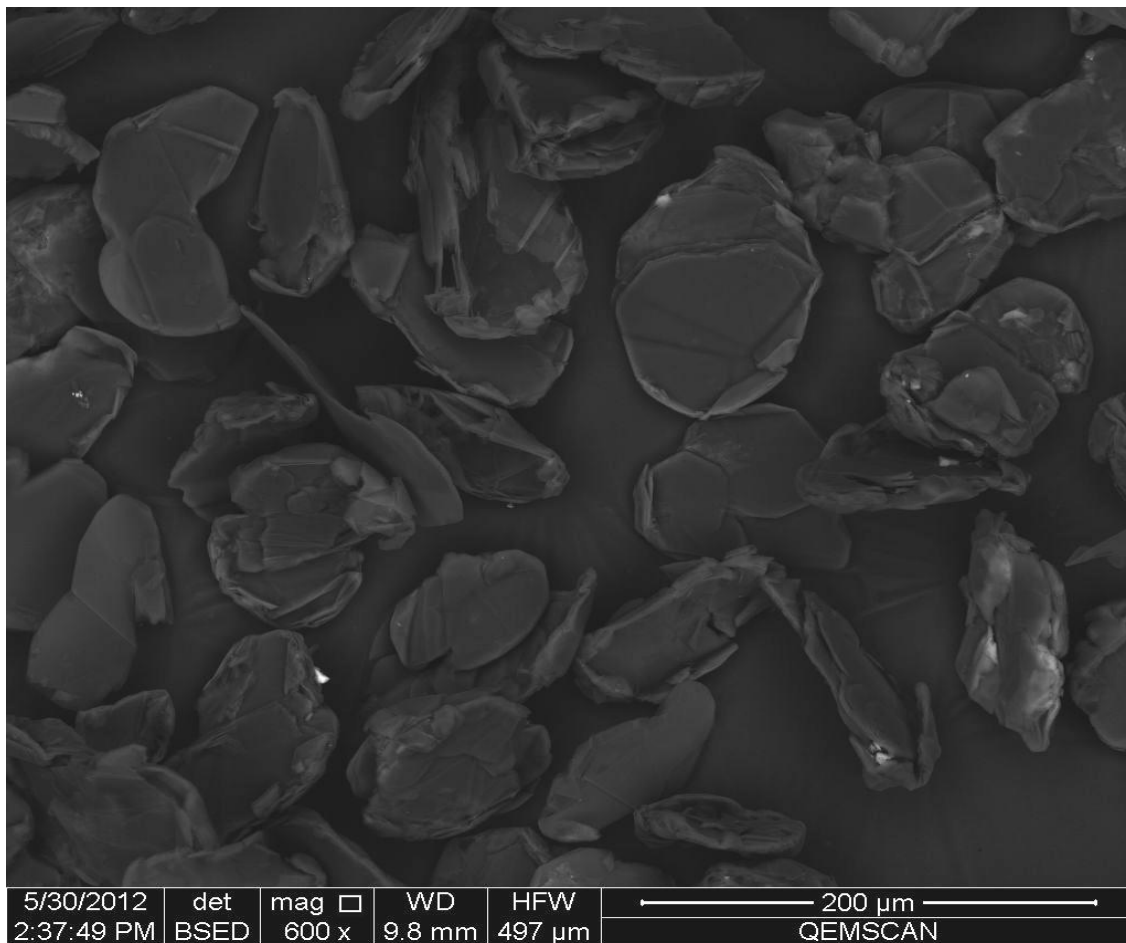


Plate 2. Morphology typical of the ultrafine highly crystalline graphite concentrate (-75 micron) showing very pure crystalline graphite flake. Such concentrate is easily reprocessed to remove trace contaminants to achieve an ultrafine natural graphite flake (eg $>99\%$ TGA).

Natural release of graphite from deep weathering of the host rock means that ultrafine high purity powders can be prepared with minimal release grinding.

The testing points to a clear, low-risk, early-entry option producing high value graphite.

4. SUGARLOAF

Archer completed the purchase of the Sugarloaf Property, located approximately 35km north of the township of Cleve on South Australia's Eyre Peninsula during the Quarter.

The Sugarloaf Property which lies within the Company's Carappee Hill tenement EL 4861, contains the bulk of the Sugarloaf graphite deposit which has an identified Exploration Target of 40-70Mt at 10-12%C*.

** The potential quantities and grades presented as the Exploration Target are conceptual in nature, there has been insufficient exploration to define an overall Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource).*

The Sugarloaf Property consists of 568 hectares (1,404.3 acres) of land with 503 hectares arable and used for winter cropping. The Company intends to appoint farm managers who will continue to operate the land on that basis.

The acquisition of the landholding gives the Company flexibility in conducting ongoing exploration and far greater flexibility for the planned future mining operations.

The purchase of the Sugarloaf Property represents another step toward the Company's plans to further develop its graphite projects on the Eyre Peninsula.

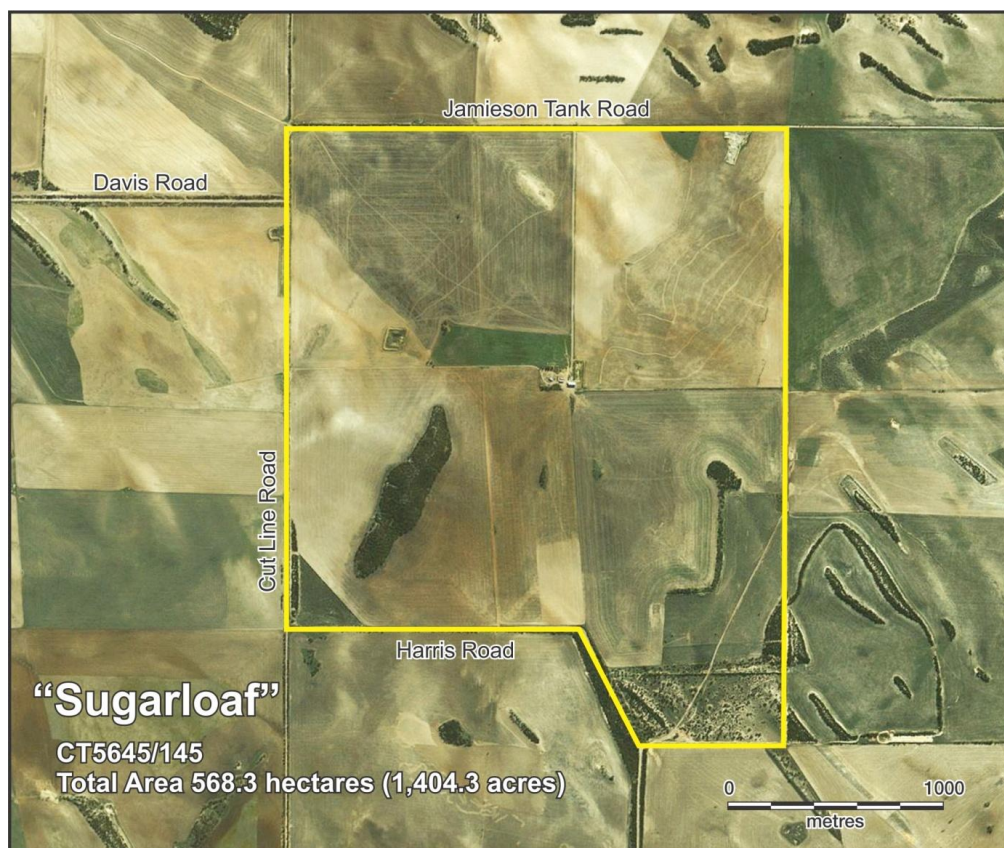


Figure 7: The Sugarloaf Property

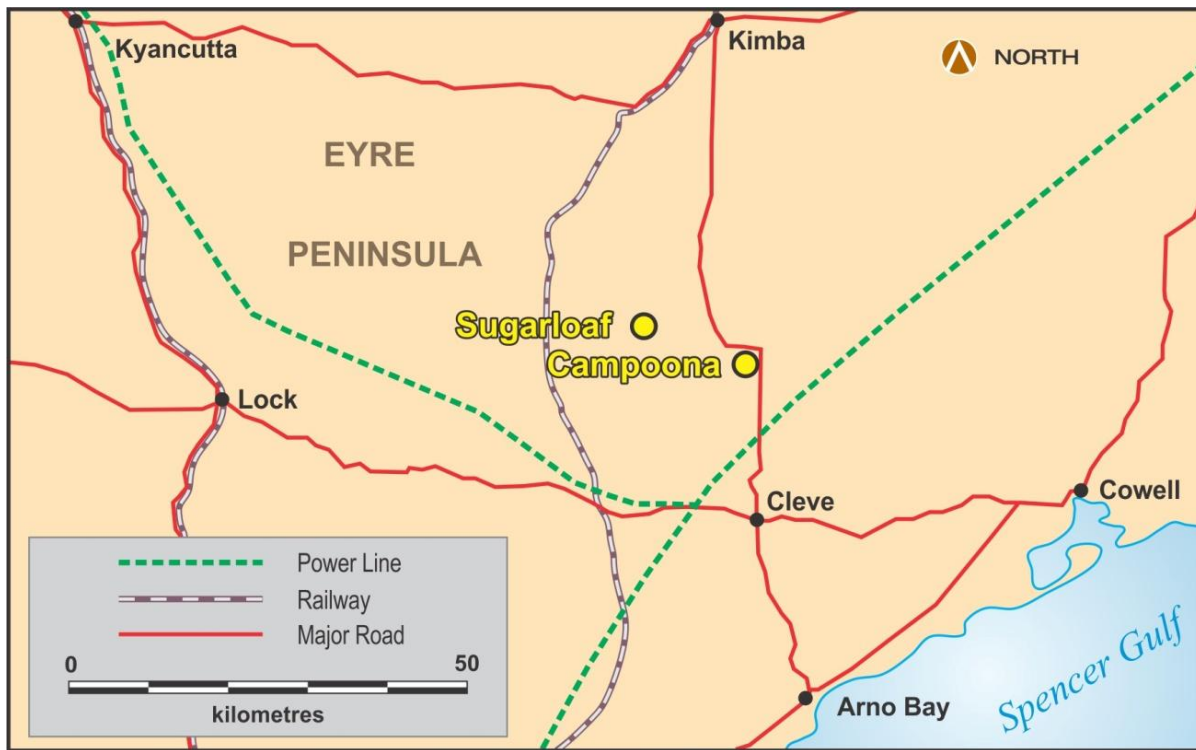


Figure 8. Location of Archer's Campoona and Sugarloaf Graphite Deposits

5. ROBERTSTOWN

A total of 8 RC holes for 592m of drilling were completed during the quarter at the Robertstown copper prospect. Three targets were drilled, from south to north (Figure 9);

- The malachite pit thought to represent spoil including nodular malachite from the main, 230 feet deep historic shaft (2 holes).
- Copper gossan over low EM response (4 holes).
- Quartz (\pm arsenopyrite) vein over EM response (2 holes).

The drilling reported minor but uneconomic copper mineralisation.

No formal records exist with the government covering work performed on EL 4230 and the ELA prior to 1900, however, records do exist with information about the occurrences and mining of copper and base metals back to the 1860's. These records however do not provide exact co-ordinates for the various workings. The drilling demonstrated that the malachite pit was not spoil from the historic shaft and therefore the historic co-ordinates ascribed to the main shaft are in error.

Despite the issues relating to the accuracy of historic records Archer maintains that the area is highly prospective for copper and base metals and the Company applied for and was granted an ELA (2013/00109) over ground that may be host to the historic mines.

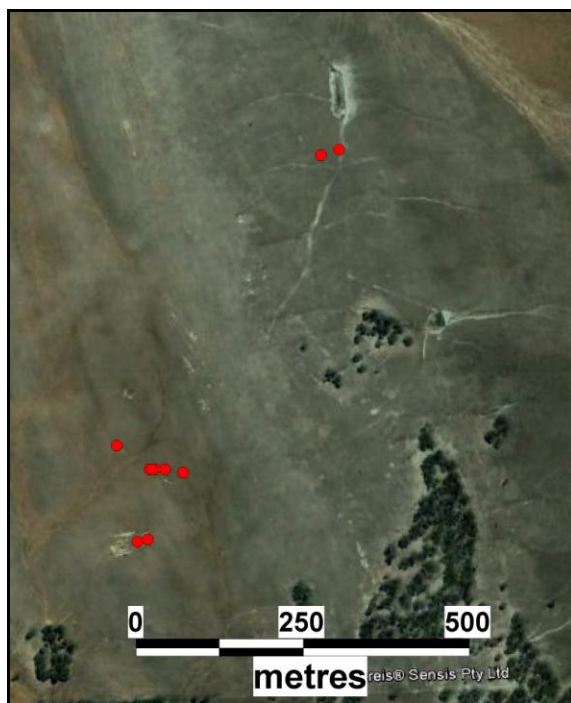


Figure 9. Location of 2013 drill holes at Robertstown

Future work will now be of a low level reconnaissance nature to determine where all the mining operations were located.

6. CASH BALANCE

The Company's cash balance at the end of the quarter was \$8.56 million.

7. ACTIVITIES FOR SEPTEMBER QUARTER

Bulk flotation tests of Campoona ores will continue throughout July 2013 to recover sufficient concentrate for market assessment. Market assessment will continue in the September Quarter.

Archer is planning to complete drilling at Campoona Shaft to provide the geotechnical information required for definitive pit design work. In addition a Winter ecological survey will be completed over both Campoona and Sugarloaf to complement the existing Spring survey as part of a wider work program aimed at delivering a PEPR and Mine Lease Application set for June 2014.

Exploration activities will include field mapping and sampling activities in the epithermal field of EL 4693 and recommence gold exploration in the Burra area.

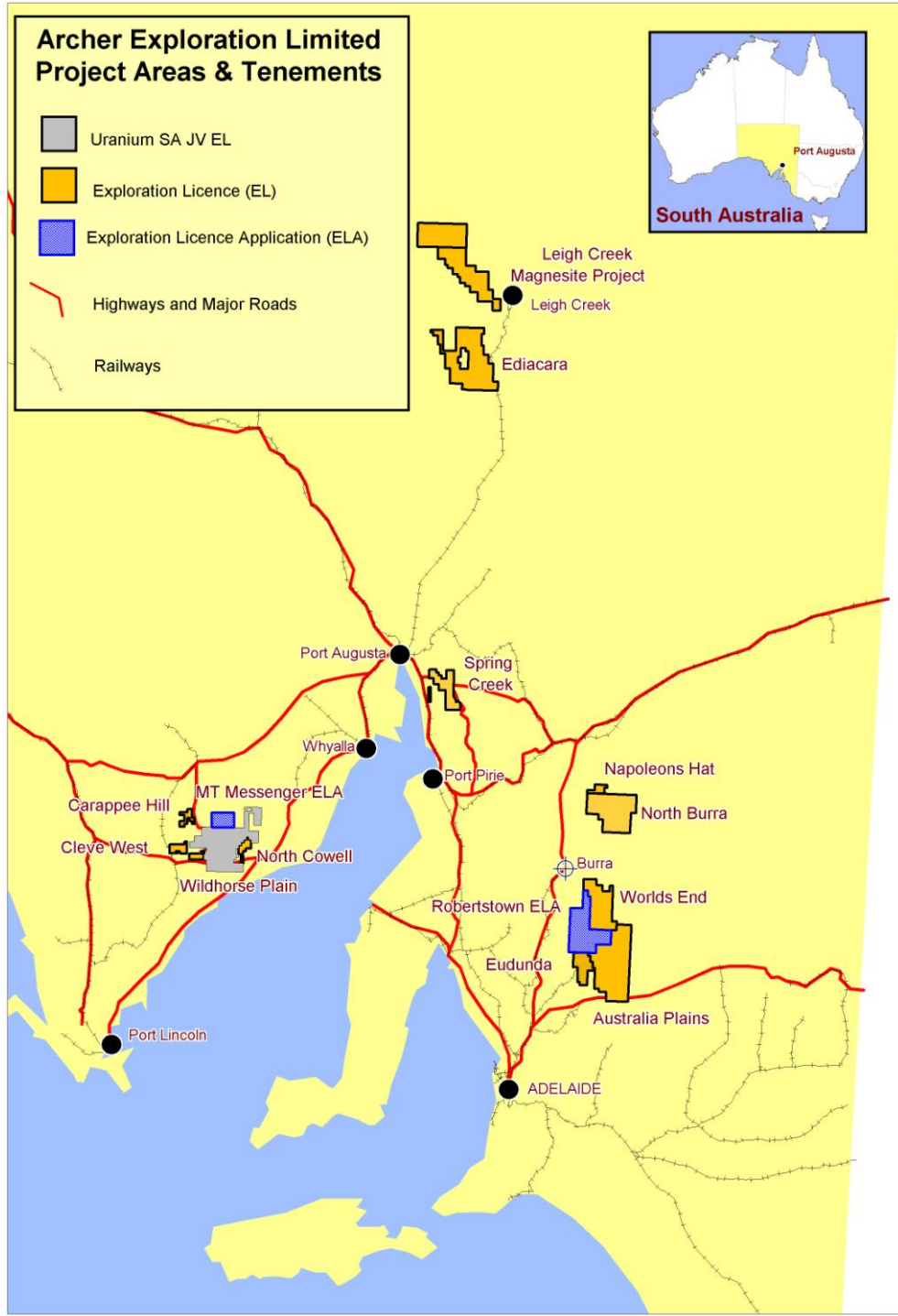
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The exploration results reported herein, insofar as they relate to mineralisation, are based on information compiled by Mr. Wade Bollenhagen, Exploration Manager of Archer Exploration Limited. Mr. Bollenhagen is a Member of the Australasian Institute of Mining and Metallurgy who has more than nineteen 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 2004 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.

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Archer Exploration Tenement Position 30th June 2013