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17th January 2013

Quarterly Activities Report

For the period ended 31st December 2012

HIGHLIGHTS FOR THE QUARTER

EXPLORATION

GRAPHITE

- **Phase 1 Maiden JORC Resource at Campoona of 2.527Mt grading 12.3% TGC with 310,800 tonnes of contained graphite at a lower cut-off grade of 5%TGC.**

- **Environmental fauna and flora baseline studies completed by independent expert consultant Golder & Associates Pty Ltd.**

- **Significant progress made on defining the optimum processing flow sheet for the extraction of high value graphite product. Results to date demonstrate >98%TGC concentrates are reproducible with excellent recoveries. Full metallurgical results expected February 2013.**

COPPER

- **With Archer's strong cash position the Company is now able to fund increased exploration on the Company's non-graphite projects, specifically copper, gold and manganese.**

- **Electromagnetic surveys completed during the quarter have resulted in drill targets at Robertstown, Mimic and North Cowell around the historic Morowie copper workings. Preparation has been completed for initial drill testing in Q1 calendar 2013 of all three copper targets.**

GOLD AND MANGANESE

- **As part of the airborne EM targeting copper, flight excursions were included to cover the Napoleon's Hat gold target near Burra and testing for manganese extending under cover at Ketchowla.**

- **Once data is received from the EM surveys drill targets will be defined and applications made to DMITRE for drilling testing of the surveyed areas.**

FINANCIAL

- **Cash in bank on 31st December 2012 of $11.193 million.**
- **$548,000 spent on exploration during the quarter.**

Summary of the December 2012 Quarter Exploration Activities

1. Graphite Exploration

CAMPOONA METALLURGICAL DIAMOND DRILLING

Assay results for the final two metallurgical diamond drill holes were received in early October 2012. Results included:

Table 1. Metallurgical diamond drill hole results received during Quarter

Diamond Hole ID	From (m)	To (m)	Interval (m)	Assay (TGC)	Lithology
CSDD12_001	16	47	**31**	**14.7%**	Graphitic schist
CSDD12_002	11	88	**77**	**17.2%**	Graphite schist to EOH

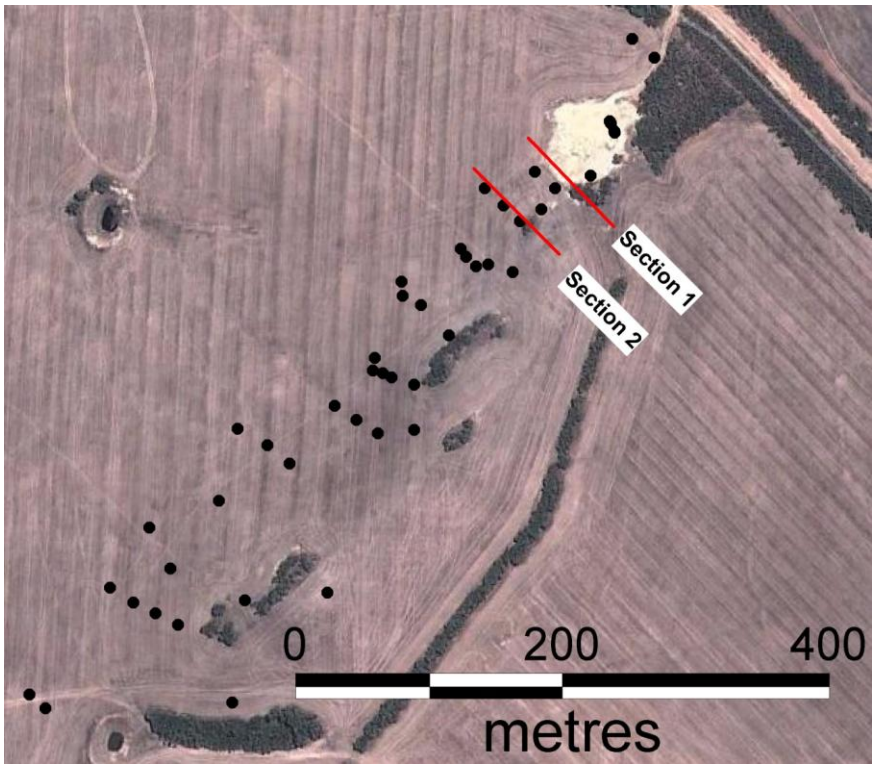

Figure 1. Plan view of Campoona Graphite Deposit showing section locations

Plate 1. CSDD12_001 core from 31.4 – 39.6m within zone of complete oxidation.

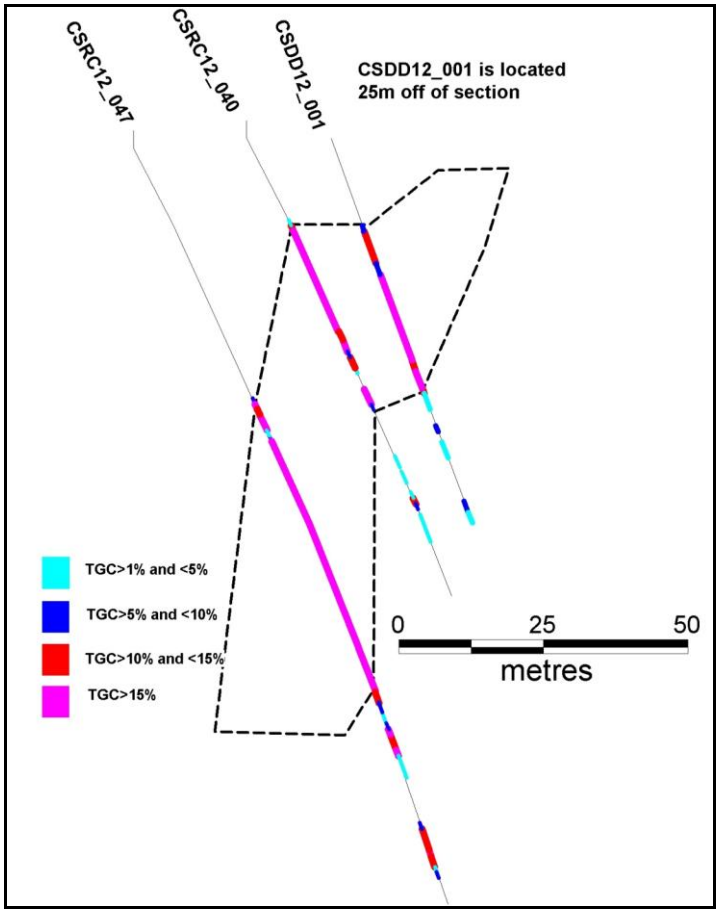

Figure 2. Section 1, Diamond hole CSDD12_001 with assay results

Section 1 shows thick high grade graphite occurring on the hangingwall portion of the deposit.

The graphite is within a steeply dipping envelope. The kink in ore outline shown in Figure 2 is merely an apparent kink as CSDD12_001 has been projected southwards onto the section.

Plate 2. CSDD12_002 weathered graphitic schist from 12.3 – 15.4m

Plate 3. CSDD12_002 weathered but competent graphitic schist from 65.5 – 69.7m

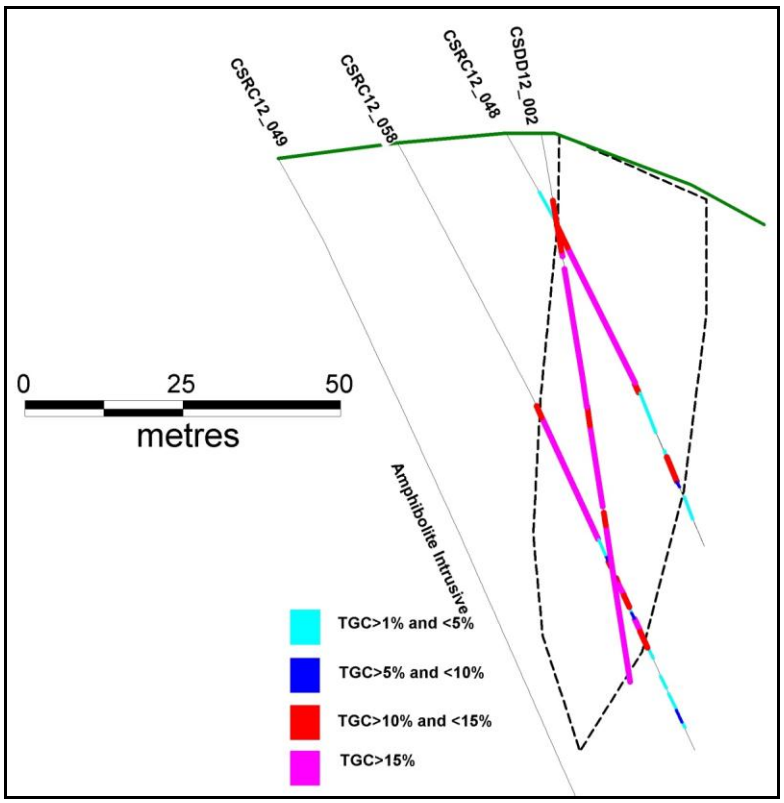

Figure 3. Section 2, Diamond hole CSDD12_002 with assay results

The high angle of the diamond holes were chosen so as to be able to recover a significant volume of material for metallurgical work throughout the graphite profile.

Table 2. Full Campoona Shaft metallurgical diamond drill hole results

Hole ID	From (m)	To (m)	Interval (m)	Assay %TGC	Lithology
CSDD12_001	16	47	**31**	**14.7**	Graphitic schist
CSDD12_002	11	88	**77**	**17.2**	Graphitic schist
CSDD12_003	24	106.4	**82.4**	**15.9**	
incl	24	89	**65**	**14.7**	Graphitic schist to EOH
and	90	106.4	**16.4**	**21.3**	
CSDD12_004	17	115	**98**	**13.3**	
CSDD12_005	28	74	**46**	**12.6**	Graphitic schist & gneiss
incl	32	51	**19**	**16.1**	
and	59	73	**14**	**14.8**	

CAMPOONA MAIDEN JORC RESOURCE

The Campoona Maiden JORC Resource estimation was conducted by MiningPlus, an independent expert resource consultancy with offices in Australia, Canada and South America. Information used in the Resource estimates included five (5) diamond drill holes and thirty seven (37) Reverse Circulation (RC) drill holes completed up to the end of September 2012.

The JORC Resource for Campoona is shown in Tables 3 and 4 below.

Table 3. Campoona JORC Resource (2%TGC lower cut-off grade)

Area	Resource Category	Tonnes (Mt)	Graphite (% TGC)	Contained Graphite (tonnes)
Campoona Shaft	**Measured**	**0.339**	**14.8**	**50,200**
	Indicated	**1.059**	**12.7**	**134,500**
	Inferred	**3.475**	**5.0**	**173,800**
Central Campoona*	**Inferred**	**0.397**	**10.1**	**40,100**
Combined	**Total Resource**	**5.270**	**7.6**	**397,600**

Table 4. Campoona JORC Resource (5%TGC lower cut-off grade)

Area	Resource Category	Tonnes (Mt)	Graphite (% TGC)	Contained Graphite (tonnes)
Campoona Shaft	**Measured**	**0.339**	**14.8**	**50,200**
	Indicated	**1.056**	**12.7**	**134,100**
	Inferred	**0.837**	**10.7**	**89,600**
Central Campoona*	**Inferred**	**0.295**	**12.5**	**36,900**
Combined	**Total Resource**	**2.527**	**12.3**	**310,800**

* ***Central Campoona Resource estimation confined to 200m of known strike of 1,400m***

The Central Campoona graphite pod, located just 2km south of Campoona Shaft, has been drilled on a 200m spacing with on-section drill spacings from 20-40m. Central Campoona has a known strike of 1,400m. Drill density over a length of 200m of the known strike was deemed sufficient to support an Inferred Resource of 0.295Mt grading 12.5%TGC.

CAMPOONA METALLURGICAL RESULTS

Extraction of ultra-fine graphite concentrates (-75 micron) has now provided exceptional purities of concentrates through careful grinding for release and advanced flotation. The techniques now developed can produce graphite concentrates in excess of 98% TGC purity indicating that with the application of further cleaning and polishing techniques that mid-99 to high-99% values may be achievable. Such high values are rare in the production of ultrafine natural graphite of high crystallinity.

The flotation techniques developed for Campoona graphite provide a well established, simple, low-cost and efficient extractive process for the recovery of graphite (flake and ultrafine) during stage grinding of claystone and semi-weathered rock as a rougher-concentrate, which can then be cleaned through successive cleaner stages. Weathering has produced a deposit that is likely to be largely free-dig that will require comparatively little comminution and grinding to achieve graphite liberation.

Although it is expected that medium and fine flake graphite recoveries and concentrates can be improved, the capacity to produce such high concentrates in the -75 micron range opens up a wide range of market opportunities for high-grade concentrates (+95% & +99%) at a generally higher market pricing.

Such high purity concentrates come with significant advantages for the Campoona project:

1. Success in clay removal from the ores will allow both types of ore at Campoona (claystone and semi-weathered rock) to be processed using the same process method and equipment.
2. Medium to fine flake graphite can be recovered in the same process.
3. The high purities reached for ultrafine concentrates means that less emphasis needs to be placed on alternative cleaning and polishing metallurgical techniques.
4. The above results and observations suggest a simpler and shorter processing pathway may be possible, lowering plant costs, simplifying process control, speeding development, etc.
5. The ease of producing high-purity ultrafine graphite concentrates and the significantly higher sales prices they command may allow the mining and processing of lower cut-off grades, larger reserves, and greater selectivity in mining. Many more resources may be available.
6. Bench-scale testing including the extraction of flake graphite will continue through January and February 2013.

ENVIRONMENTAL BASELINE STUDIES

Baseline flora and fauna studies for the Campoona Graphite Project were completed by the independent expert consultancy Golder Associates Pty Ltd. These studies are an important element for any future Program for Environmental Protection and Rehabilitation (PEPR) as required by the Department of Manufacturing, Innovation, Trade, Resources and Energy (DMITRE) prior to the grant of a Mining Lease.

Desktop studies commenced in September 2012 and field surveys completed during November 2012. The timing of the studies ensured data is collected during the Spring period.

NEW EXPLORATION TENEMENT

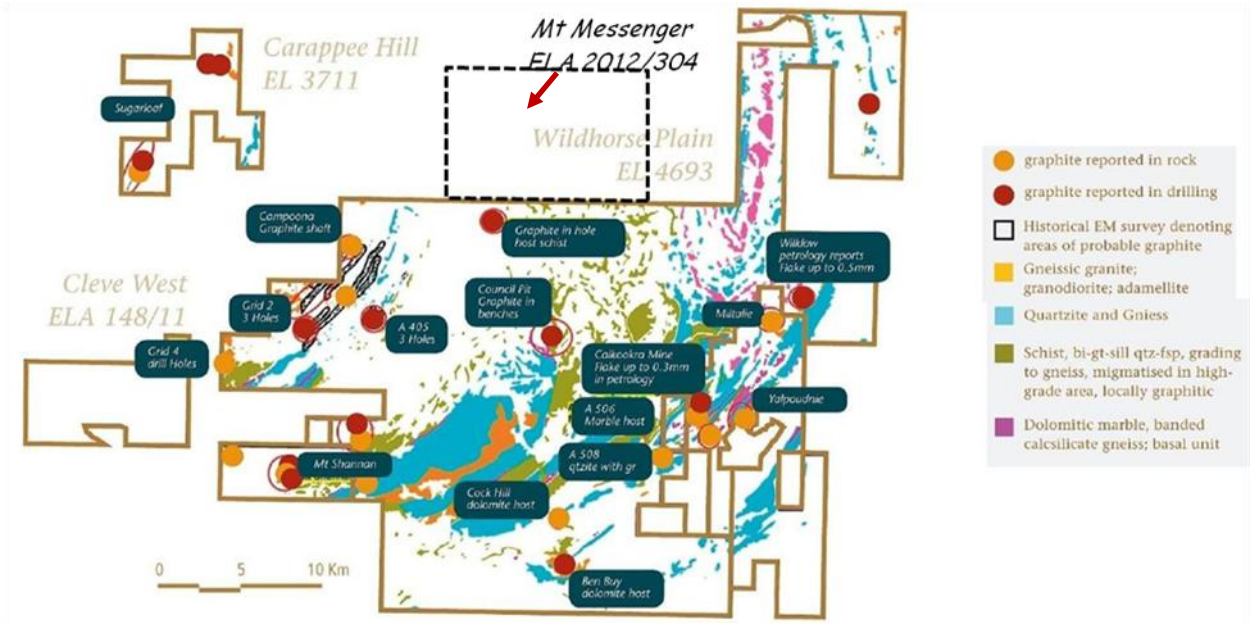

Figure 4. Newly granted ELA2012/304 Mt Messenger

During the Quarter Archer applied for an area of 129 km^2 located immediately north of and adjoining EL4693 Wildhorse Plain. ELA2012/304 Mt Messenger was granted in October 2012.

SUGARLOAF GRAPHITE DEPOSIT

Results for the two metallurgical diamond drill holes drilled in September 2012 were received during the Quarter. The Sugarloaf graphite deposit is located on Carappee Hill EL (3711) near Darke Peak on Eyre Peninsula, South Australia (Sugarloaf is circled in Figure 5 below) and is situated 10km northwest of the Company's Campoona Graphite Project.

Prior to Archer Exploration Limited acquiring the tenement, drilling had recorded numerous intercepts of graphite. As graphite was not a focus, the intervals were never assayed for carbon.

The Company first drilled extensions to Sugarloaf Hill in 2008 to target a co-incident gold-copper anomaly. The drilling north of Sugarloaf Hill recorded abundant graphite but as graphite was not the target, no further action was taken. Anomalous gold was recorded (3m @ 1.0ppm Au).

In 2010 the Company revisited Sugarloaf following substantial increases in the market price for graphite. Archer reviewed the historic drill logs of previous explorers in the area noting that graphitic intervals were recorded in 23 of the 41 historic holes drilled on and around Sugarloaf Hill. Geological logs from these historic drill holes recorded intervals of graphite varying from 4 metres to 61 metres. The locations of the holes indicated the potential for significant graphite over a strike length of at least 2 kilometres.

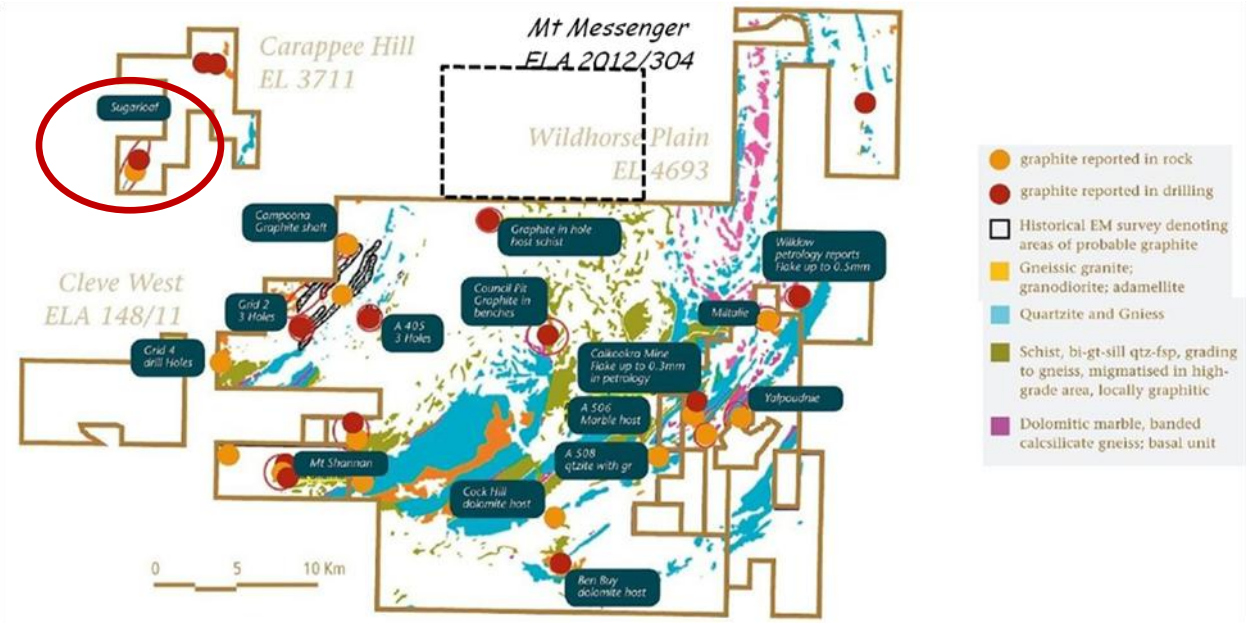

Figure 5. Archer's Cleve Uplands graphite deposits showing the Sugarloaf graphite deposit (circled)

Since 2012 the Company's main focus has been the definition of a JORC Resource at a Campoona Shaft. Despite the focus on Campoona, Archer has continued to appraise Sugarloaf and several other graphite targets that occur in the immediate vicinity. Collectively Archer's has a 1,059km^2 footprint in the emerging Cleve graphite province.

Sugarloaf, Campoona Shaft and Campoona Central are in close proximity to each other. The style and tenor of the graphite mineralisation, the proximity to infrastructure and the favourable jurisdiction gives the Company confidence to continue the development of these projects.

Sugarloaf Exploration Target

Archer has previously reported wide intercepts of highly graphitic schist at Sugarloaf. Drilling in April 2011 supported an exploration target of highly graphitic schist of 24-37Mt*at 10-12%TGC for the western graphite horizon.

Due to the paucity of assay results Archer was reluctant to ascribe a grade range for the graphitic schist. The April 2011 drilling when combined with the 4 holes assayed in 2009 was considered sufficient in terms of assayed intervals to enable an indicative estimate of grade for the exploration target of 10.9% Total Carbon (sample size n=319). The expected grade bounds for the graphite were estimated at between 10-12% TGC.

Drilling in 2012 intersected widespread graphite in what is termed the eastern graphite horizon representing the eastern limb of a broad anticline. Based on this drilling the exploration target has been revised to 40-70Mt* at 10-12%TGC.

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

Sugarloaf Metallurgical Diamond Drilling

A graphite concentrate grade of 82%TGC has been achieved using conventional flotation techniques and standard reagents based on RC drilling.

The Company considered that better quality samples were needed to further metallurgical characterisation of Sugarloaf. Two shallow holes were drilled at Sugarloaf Hill during September 2012 to recover core material for metallurgical test work to determine the processing options to recover graphitic products. The two holes were drilled close to historic mine shafts (circa 1915) on Sugarloaf Hill. The holes (SLDD12_001 and SLDD12_002) were drilled to intersect both weathered and intermediate material for product recovery.

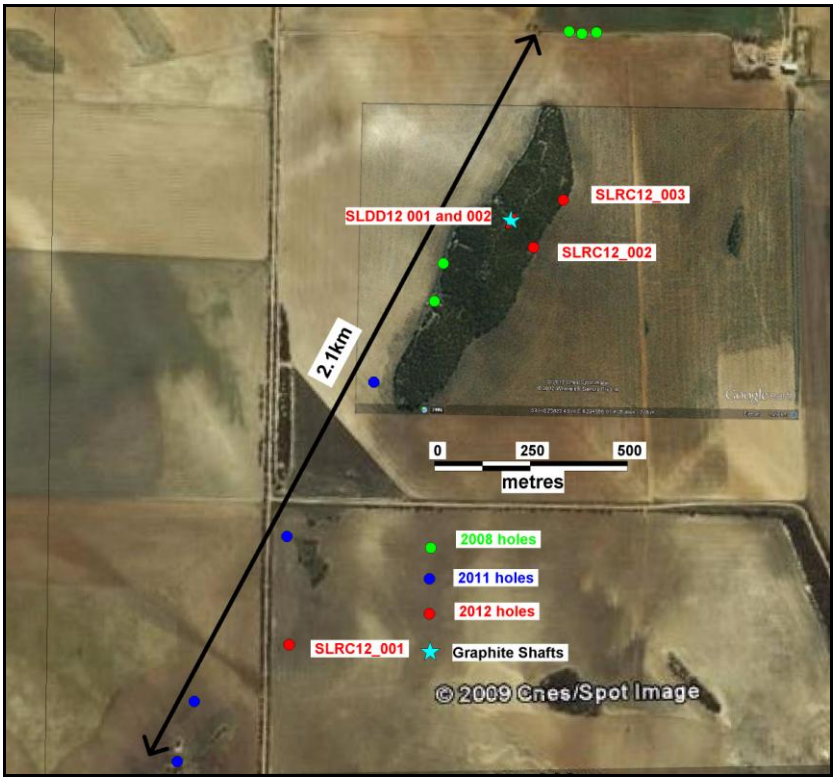

Figure 6. Location of 2012 diamond drill holes (SLDD12_001 and SLDD12_002) with other AXE drilling

Plate 5. Diamond drilling at Sugarloaf Hill

Significant Sugarloaf diamond drill assays include:

Table 5. Sugarloaf metallurgical diamond drill results

Diamond Hole ID	From (m)	To (m)	Interval (m)	Assay TGC	Lithology
SLDD12_001	0	6	**6**	**9.3%**	
and	19	48.5	**29.5**	**11.0%**	Soft porous graphite to EOH
SLDD12_002	0	18	**18**	**5.9%**	
and	24.5	34	**9.5**	**15.4%**	
incl	28	34	**6**	**20.4%**	Terminated in graphite

SLDD12_001

SLDD12_001 was collared 10m north of the Eastern shaft and intersected completely oxidised graphite as mined in the adjacent shaft. The graphite zone from 19m down hole is a second graphite horizon. The hole was abandoned at 48.5m due to circulation losses attributable to the highly weathered nature of the graphite body.

Plate 6. SLDD12-001 core from surface to 4.9m, averaging 9.2%TGC.

Plate 7. SLDD12-001 core from 35 to 38.3m, averaging 14.1%TGC.

SLDD12_002

SLDD12_002 was drilled to intersect graphite exposed at the surface of the Eastern Shaft and to intersect the graphite seen in the Western shaft material at depth. The final 6m of SLDD12_002 reported over 20%TGC in line with grades recorded from the shafts. Drilling was stopped because sufficient sample had been collected for the metallurgical test work.

Plate 8. SLDD12_002 oxidised graphite representing the Eastern shaft, averaging 20.9%TGC

2.0 Copper Exploration

With the completion of the sale of Archer's West Roxby tenements to BHP Billiton for $8 million the Company now has a strong cash position to fund increased exploration on the Company's non-graphite projects, specifically copper, gold and manganese.

Archer has four very promising copper exploration targets at Robertstown, World's End, Spring Creek and North Cowell.

The success of the Wildhorse Plain EM led to the Company flying airborne EM across the Robertstown and World's End (Mimic) copper targets as a precursor to RC drilling.

Initial processing of the data has led to the identification of drill targets at Robertstown and Mimic. Site visits for drill planning and approvals will continue in early 2013 and lead to drill testing of the identified conductive bodies. Historic mining data suggests the targets are most likely polymetallic for copper, silver and lead.

Figures 7, 8 and 9 below show the extents of the aerial surveys and targets. Mimic displays a pronounced conductive body oblique to the main stratigraphy from a depth of 80m.

The Robertstown conductive body is far more subtle and in line with historic mining records which reported mining of lodes up to 10m in thickness.

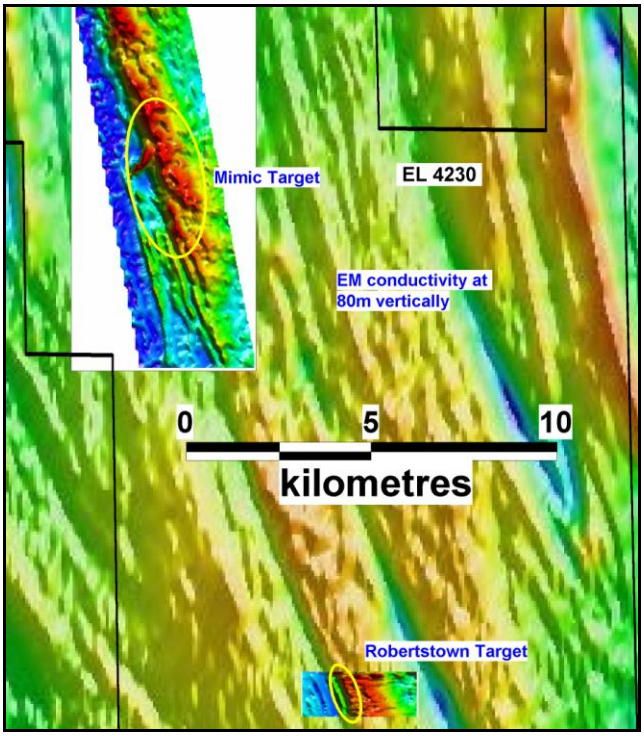

Figure 7. EM data from 80m vertically over magnetic image for EL 4230

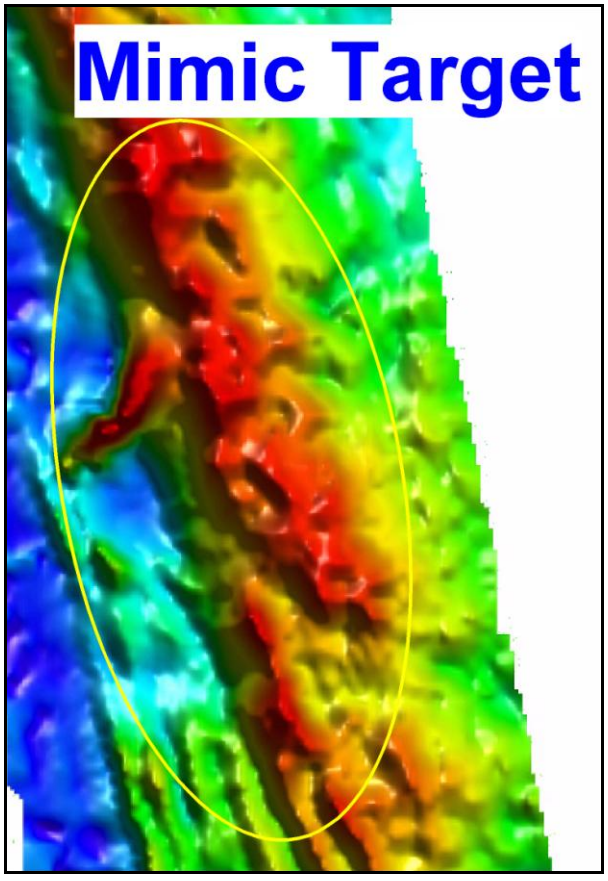

Figure 8. EM response from 80m vertically at Mimic

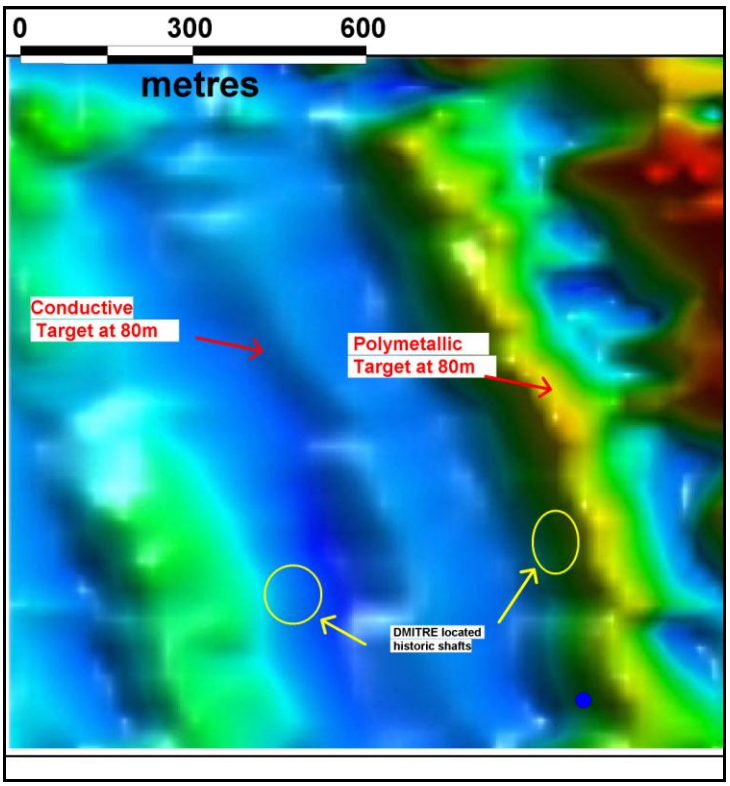

Figure 9. EM conductive bodies at Robertstown from 80m

Previous auger drilling at Robertstown defined a 400m x 60m wide copper soil anomaly. The soil anomaly is supported by rock chip sampling which returned peak assays to 1.75g/t Au and 1.14%Cu from cuprite (Cu_2O) bearing ferruginous gossans.

Mimic is a conceptual target with compelling vectors - structurally identical to the Monster Mine at Burra (86Kt recovered Cu) and is located in a repeat antiform with attendant oblique faulting (Fig 10). Importantly the targets correspond with the NMS9 marker bed in Kooringa Member (host to the Monster Mine copper mineralization). Worlds End is marked with several prominent iron blows.

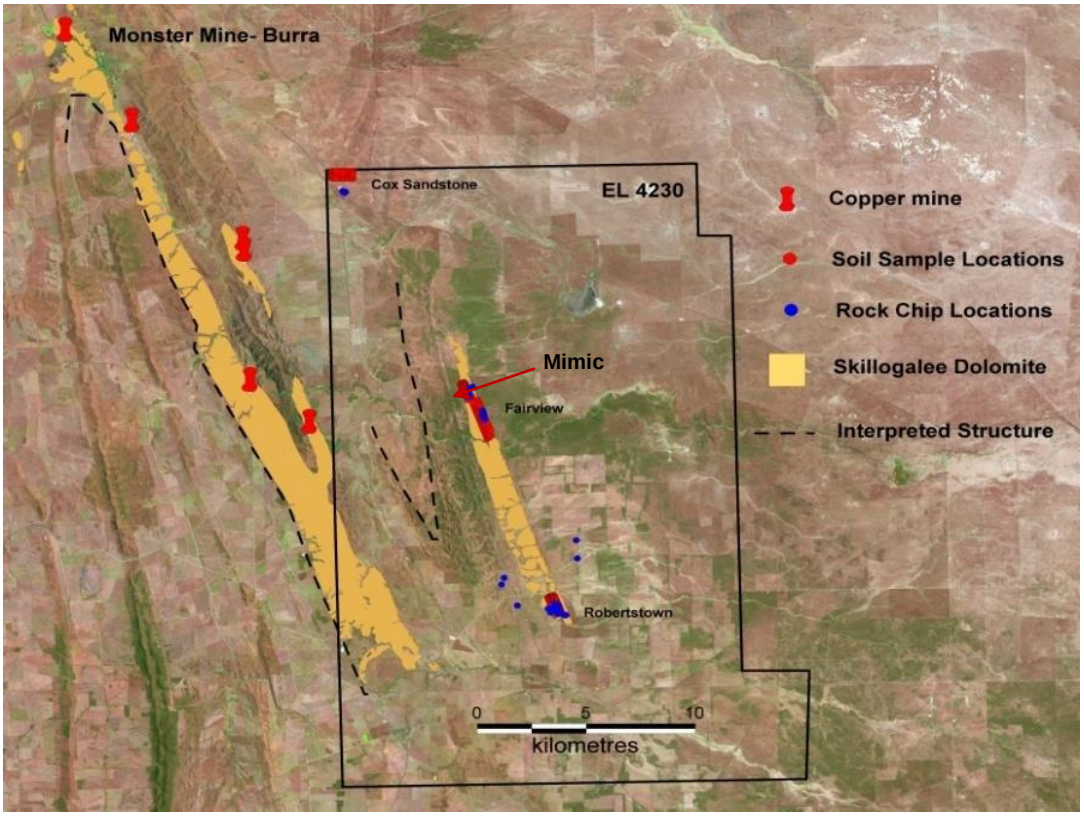

Figure 10. Mimic and Robertstown copper targets

At North Cowell previous rock chip sampling returned highly anomalous copper with assays to 15.1% Cu over a strike of some 3kms (Fig 11). A drill program is planned for Q1 calendar 2013.

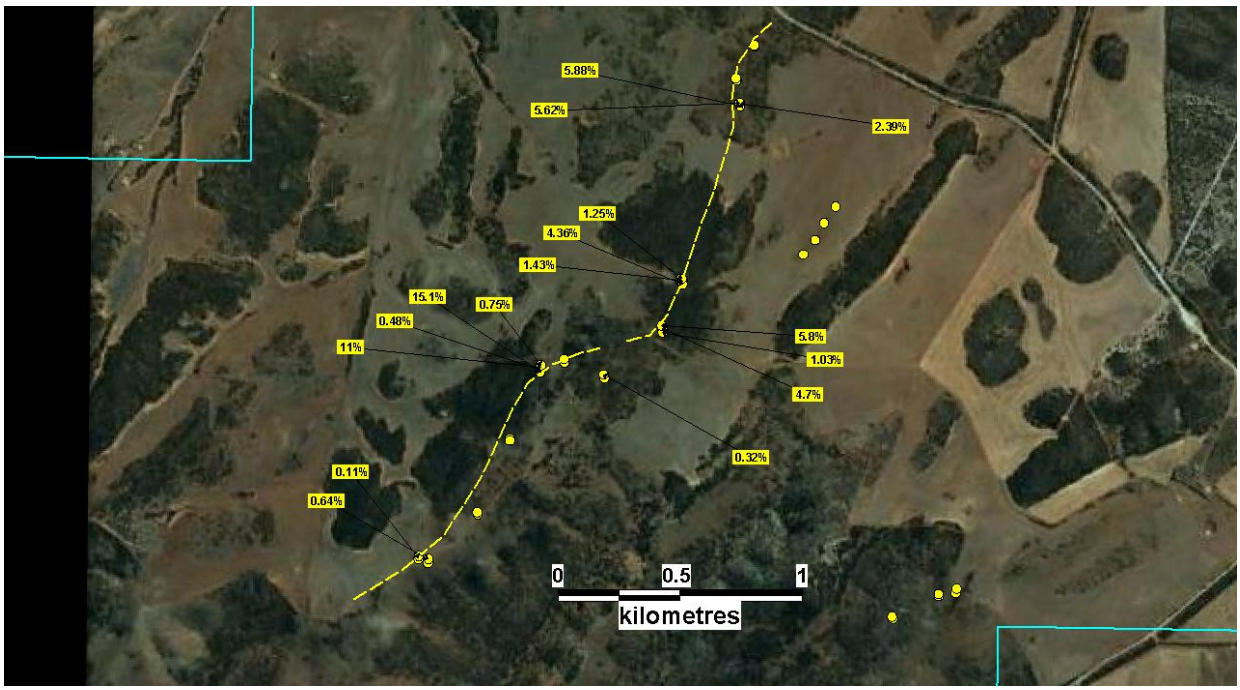

Figure 11. Copper (%) from rock chip sampling

3.0 Gold and Manganese Exploration

As part of the airborne EM targeting copper, flight excursions were included to cover the Napoleon's Hat gold target near Burra and testing for manganese extending under cover at Ketchowla also in the Burra region.
The four areas selected for survey are shown in Fig 12 (below).

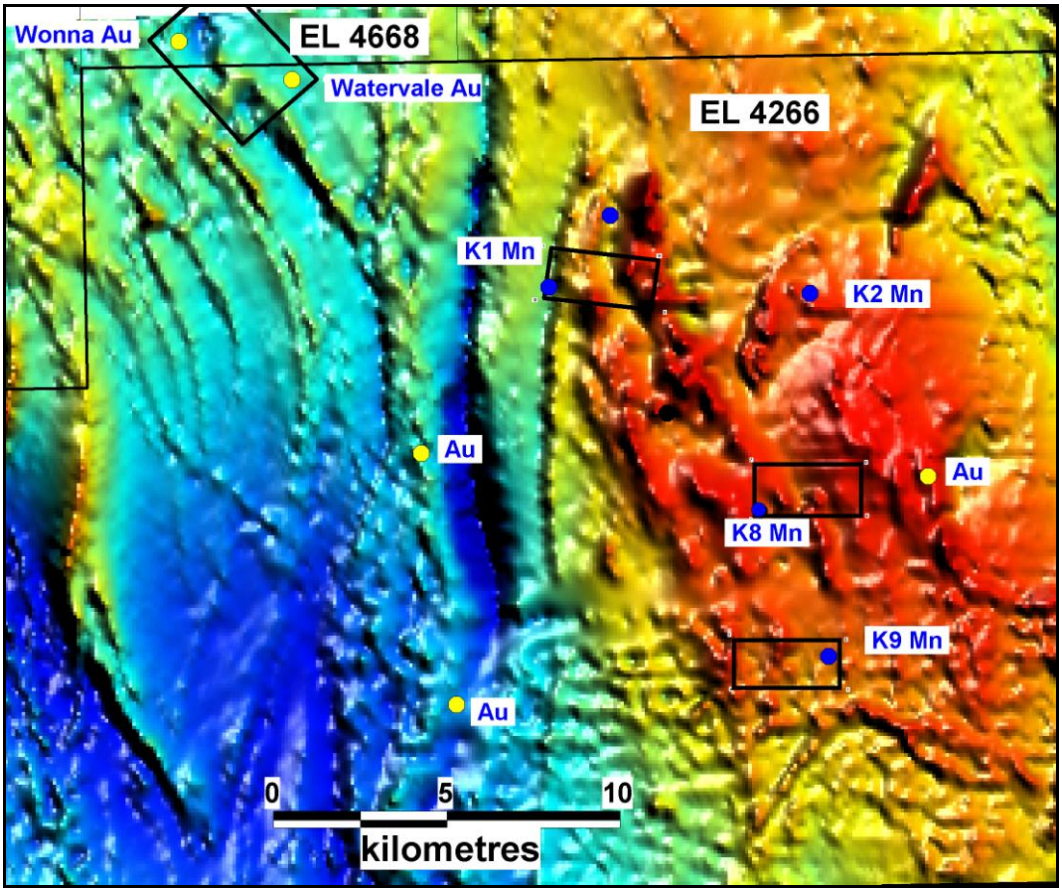

Figure 12. Locations of North Burra EM surveys with local gold and manganese targets over magnetic image

Survey data has been received and processing is ongoing, along with other surveys from Worlds End and Eyre Peninsula. Once processing is completed both gold and manganese targets will be defined for additional drill testing.

4. CASH BALANCE

The Company's cash balance at the end of the quarter was $11.193 million.

5. ACTIVITIES FOR JANUARY QUARTER

- Metallurgical test work on the Campoona Shaft diamond drill samples finalised.
- RC drill testing the northern and southern strike extensions to the Campoona graphite deposit, which comprises a cumulative strike length of 10km.

- Drill test EM signatures that parallel the Campoona structure for graphite.
- Drill test conductive structures at Bartel for gold.
- Initial RC drill testing of the Robertstown, Mimic and North Cowell copper targets.

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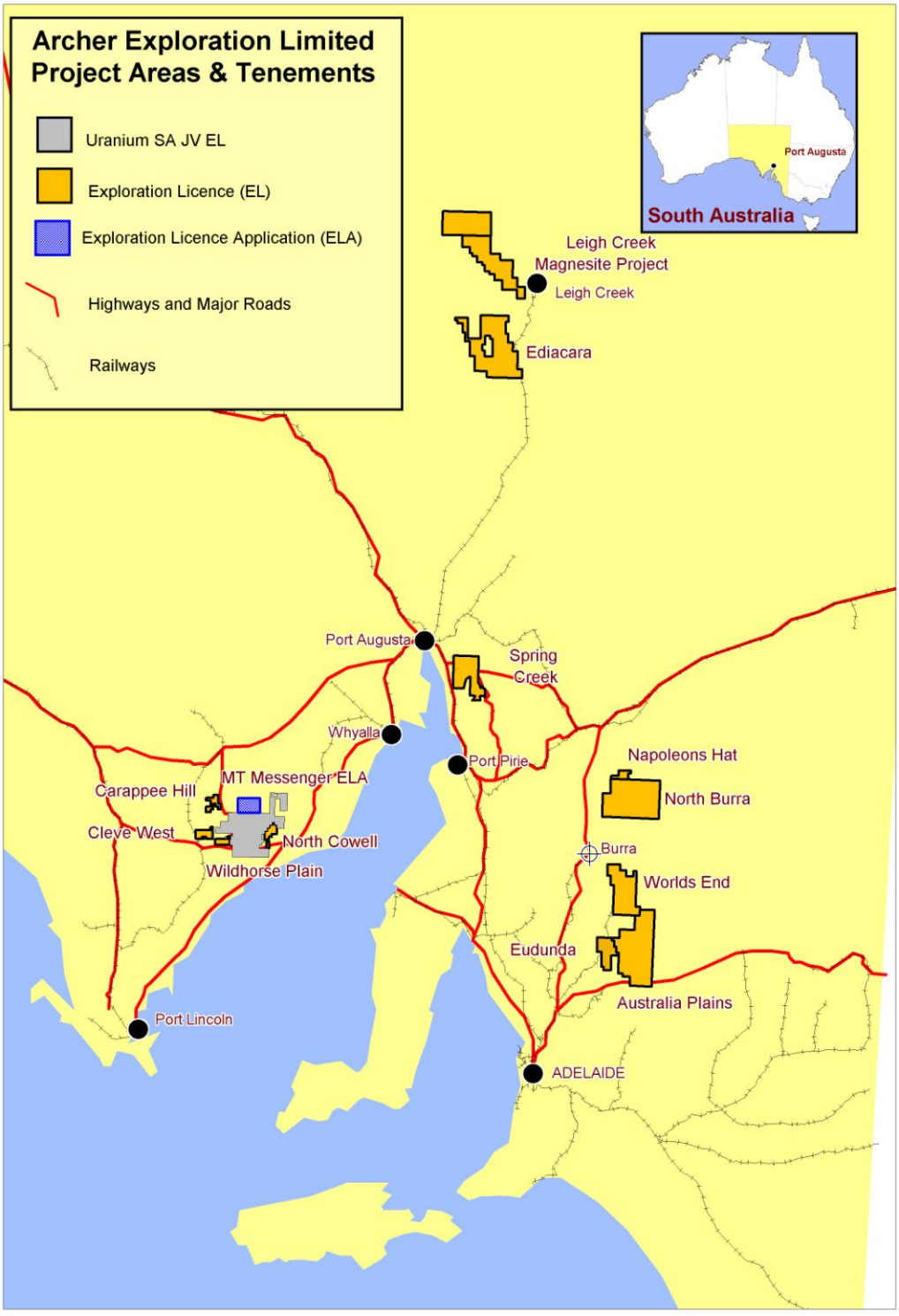
The exploration results reported herein, insofar as they relate to mineralisation, are based on information compiled by Mr. Wade Bollenhagen, Exploration Manager of Archer Exploration Limited. Mr. Bollenhagen is a Member of the Australasian Institute of Mining and Metallurgy who has more than eighteen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



Archer Exploration Tenement Position 31 December 2012