Golden Cross Resources  ASX:GCR

www.goldencross.com.au

Joint Venture Opportunities
August 2014

GCR is a copper-gold exploration company with over 1.5 million ounces of gold within 2004 JORC-compliant Measured, Indicated and Inferred Resources.

GCR has a management team with broad range of exploration experience and skills acquired over 40 years working in Australasia, Asia, North America and Africa.

GCR has two projects in the pre-development stage and a portfolio of ‘drill-ready’ exploration projects for gold and base metals. Some are available for joint venture.

GCR Project Location Map
SUMMARIES – Joint Venture Opportunities

Gawler Craton IOCG Exploration - South Australia

Golden Cross holds tenements within the Gawler Craton in South Australia. The Gawler Craton is host to world-class iron-oxide-copper-gold (IOCG) deposits such as Olympic Dam, Prominent Hill and Carrapateena. Drill-ready magnetic and gravity anomalies have been targeted and three have been drilled returning encouraging indications (trace chalcopyrite & bornite with intense sericite-hematite-chlorite alteration plus breccias) that GCR holds prospective ground in two new potential unexplored IOCG domains. A total of ten holes for 4500 metres will provide follow-up and first-pass testing of the highest priority anomalous zones.

Other Projects

GCR is continuing its exploration efforts in a range of mineralised provinces across Australia searching primarily for gold and copper. GCR has a selection of gold-base metal projects throughout Australia including the porphyry-related gold project at Cargo, a major land position in the Cobar region and it holds the unique Quidong Basin (copper-gold-lead-zinc). GCR is also supported by active joint venturers exploring its tenements in WA, Queensland and NSW.
South Australia – Gawler Craton

IOCG Exploration

Golden Cross holds five granted tenements covering 2,800 km\(^2\) within the northern Gawler Craton in South Australia near Coober Pedy, an excellent base from which to conduct an on-going core drilling program. (Figure 1)

GCR holds six granted tenements covering over 3000 km\(^2\) within the Gawler Craton and is targeting iron-oxide-copper-gold (IOCG) deposits of 150 - 250 million
tonnes at 1.5% copper and 1.5g/t gold, similar to Prominent Hill and Carrapateena. Those deposits were discovered by drilling coincident magnetic and gravity anomalies comparable to those defined by GCR. GCR has continued field work and desk-top studies over the last few months with new and infill gravity surveys, defining high quality new anomalies and providing data for better drill targeting.

The Algebullcullia, Mt Euee and SR11 anomalies may have economic potential. The former has similarities to Carrapateena where the magnetic response is very weak, perhaps suggesting an IOCG system where almost all of the original magnetite has been altered to hematite while adding sulphides. At Mt Euee, the sharper gravity anomaly seems to require an excess mass of some 300Mt but more gravity data (now underway) will improve the drill targeting. The newly recognised Yadmalpi anomaly near MGA 495000E, 6839000N is, following Antakarinja access approval, to be surveyed with closer spaced (200x200m) gravity data.

Other anomalies emerging as being equally prospective, with the right combination of gravity and magnetic responses, are, as noted above, at Yadmalpi, south of Algebullcullia and two new anomalies near Oolgelima Hill, currently being cleared for access by the Arabunna native title owners and shown as red stars in Figure 11.

Gawler Craton IOCG deposits are characterised by extensive hematite-magnetite (iron) alteration and brecciation, and typically comprise disseminated to massive chalcopyrite, chalcocite and bornite copper mineralisation with associated gold. The deposits often include uranium and rare earth elements. Figure 3 shows the location of the Golden Cross tenements and the geophysical targets within them, as well as mines and prospects in the region.

Located within basement granites and volcanic rocks, Gawler Craton IOCG deposits are typically covered by several hundred metres of younger sedimentary sequences and consequently exploration is driven by geophysical means, principally gravity and magnetics. Fifteen iron-oxide-copper-gold (IOCG) deposits targets have been defined by the combination of gravity and magnetic data within the Mount Woods Inlier and the untested (until GCR’s drilling) Coober Pedy and Mabel Creek Rises – domains within the Gawler Craton. The geophysical characteristics of the identified targets are similar to those from the Prominent Hill mine and Carrapateena deposit (development planned). Some targets are “drill-ready”. Others require in-fill ground geophysical (gravity and magnetic) surveys prior to drilling.

The Mount Woods Inlier is a region of shallow Proterozoic basement rocks, although exposure is very limited. It underwent the same thermal and mineralising events that affected the Olympic Domain and IOCG-style alteration is widespread. Several iron mines have also been developed in this terrain, notably the direct shipping iron-copper ore from Cairn Hill and the Peculiar Knob deposit. Rock types comprise meta-
sedimentary rocks intruded by syn- to post-tectonic granitoids. The metasediments are characterised by an intense magnetic response in regional aeromagnetic data, which reflects a combination of magnetite-rich precursor sediments including banded iron formations, magnetite alteration and mafic intrusive bodies. The Inlier is bounded by major shear zones, the most prominent of which is the east-west Karari Fault Zone marking the break with Mount Woods Inlier from the Coober Pedy and Mabel Creek Rises to the north. These two domains have not been explored to the same extent as those to the south but are known (reference: Geoscience Australia) to contain critical elements such as Hiltaba-associated granites and volcanics and mafic intrusions related to the Gawler Range Volcanic event.

Infill gravity surveys were undertaken by GCR over select parts of EL 4427 Oolgelima and defined new magnetic/gravity targets adding to the five previous targets. Of particular interest are the drill targets in Oolgelima Hill South. Anomaly SR11, has a 2 milligal gravity intensity, and a footprint of 1.8 x 1.4 km with the long axis trending SW-NE, coincident with a pronounced magnetic anomaly as shown in Figure 4. A second gravity/magnetic anomaly, SR11 North also meets the criteria for defining IOCG-type mineralisation at depth.

![Figure 2. Gravity contours over regional magnetic (TMI) data with two coincident magnetic and gravity anomalies highlighted, Oolgelima Hill Project, EL 4427.](image-url)
Stuart Range

EL 4496 is centred on the township of Coober Pedy, and targets have yet to be defined by ground magnetic and gravity surveys. These will be matched with favourable structural locations identified from recent GCR-sponsored studies (Figure 3) using regional airborne magnetic and government gravity data.

Recent Geophysical Interpretation – Oolgelima Hill EL 4427

Adelaide Mining Geophysics was retained by GCR late in 2012 to review portions of the GCR’s magnetic and gravity data sets and report on the potential for IOCG and Hillside-styles of mineralisation within the Oolgelima EL.

Model rock prisms were generated and assigned a rock type with magnetic susceptibility and bulk density values applied to each prism. The model data curves were correlated with observed data from the magnetic and gravity surveys. The rock types and magnetic and gravity data were then combined into a single colour image.

Figures 4 to 9 show the plotted results and potential drill targets. More targets will be generated as this work progresses on data within GCR’s other EL’s.
Figures 4 & 5. Residual Density (LHS) & Residual Magnetics (RHS), SR11 Bore, Oolgelima EL 4427, southern portion, eastern side.

Figure 6. A combined geology, residual gravity and magnetics image showing responses at SR11 Bore and SR11 North.

Figure 9 A combined geology, residual gravity and magnetics image showing merged responses at Algebullcullia, Yadmalpi and Mount Euee.
GCR and its consultants have identified a number of coincident magnetic and gravity anomalies which justify a committed drilling program at Ooolgelima Hill East.

Access arrangements with Antakirinja and Arabunna Native Title Claimants in the drill target areas, acceptance of the proposed drilling program, site clearances and a renewal of the Access Deed for the Woomera Prohibited Area (WPA) took up much time during the year. GCR was granted $50,000 in support funding by SA’s DMITRE under the PACE drill funding scheme.

Figure 10. Eastern Ooolgelima EL4427. Gravity and Magnetic responses. North to south: Ooolgelima 2, Ooolgelima 1 and Ooolgelima 3.
Drilling commenced in the Oolgelima EL4427, north east of Coober Pedy in May 2013.

A core drilling program was planned to test three of the six initial targets within the Oolgelima EL (granted in three parts – see Figures 11, 13, 20 & 22) The targets were Algebullcullia, Mount Euee and SR11.

Three holes were completed for a total of 1,412 metres, one at each of the targets set out above.

Whilst no economic mineralisation was intersected, GCR’s geologists remain confident that the company is in highly prospective, untested domains. They have been encouraged by the intensity of hematite alteration, zones of sericite alteration, skarn development and brecciation.
Planning the next phase of drilling will follow a review of all assays, petrographic studies and infill gravity surveys (subject to native title clearance).

![Figure 12. GCR tenements near Coober Pedy showing anomalies drilled and/or selected for more work](image)

The first hole in GCR’s IOCG drilling program, **ALG001** at the Algebullcullia gravity-magnetic anomaly, was completed at 498.4 metres. For geophysical target information please refer to previous ASX announcements. Basement rocks of the Mabel Creek Rise were intersected at 232 metres depth.

Hematite-altered meta-sediments and volcanics were intersected with some sericite alteration. Garnetiferous zones indicate high grade metamorphism and possible skarn development.

Minor magnetite, as disseminations, thin veins and in clots, varied throughout the hole with increased magnetic susceptibility restricted to an interval between 450 and 494 metres.

Weakly elevated copper values are irregularly distributed from 285m down-hole to EOH at 498.4 metres, with a peak value of 419ppm. Further evaluation, including petrography, is underway.
Pyrite, with rare, trace chalcopyrite, occurs as disseminations. While weak hematite alteration is widespread in the Gawler Craton, more intense alteration, and the presence of sericite, provides encouragement. GCR’s geologists are pleased with the outcome of this first hole in what is an untested region in the northern Gawler Craton.

The rig then moved south to the Mount Euee anomaly, still within the Mabel Creek Rise. Basement was intersected at 210 metres and was completed at a total depth of 471.4 metres.

Hole EUE001 is dominated by a foliated, medium grained biotite-chlorite-garnet schist, probably a meta-volcanic without much visual encouragement from 440m to end-of-hole at 471.4m. Broad (~20m) zones dominated by pink quartz-K-feldspar-hematite rock as seen in ALG001 were reported.

Lithologies intersected in EUE001 were generally less altered and copper values were low, peaking at 110 ppm copper. Petrographic studies are underway.
The rig then moved south to drill hole **SRE001** at the SR11 anomaly in the Coober Pedy Rise domain. Basement was intersected at the relatively shallow depth of 75 metres, indicating a basement topographic high requiring re-interpretation of the gravity anomaly. The hole is dominated by two main lithologies from 83m onwards, either:

a) yellow-green sericite/chlorite granofels, fine grained with brick red hematite fragments and veinlets. There is a zone with coarse crystalline pyrite from 164-172m and some hematite rimmed magnetite with possible bornite as shown in the photograph below, or

b) strongly silicified, pink K-feldspar-hematite granofels with pegmatite. This is frequently micro-brecciated, and with darker brown hematite flecks and includes two zones of quartz-matrix breccia.

Significant visible pyrite up to 3% by volume over a 10m intersection from 166 metres associated with hematite (with trace chalcopyrite and bornite) is circled in yellow in the top tray in the photo below. This section is slightly coarser grained with chlorite-sericite alteration and occasional magnetite blebs and stringers.
Hole SRE001. Core tray 165.6m to 169.7m. Red rectangle covers the petrography sample. Yellow circles mark observed pyritic zones with rare, trace chalcopyrite +/- bornite: 1320 ppm Cu.

Hole SRE001. Thin section slab from 166.8 – 166.9m. Plagioclase – clinopyroxene – hornblende – magnetite - biotite + hematite/sericite alteration. Trace chalcopyrite and bornite in pyrite cluster and in quartz-hematite-calcite veinlets.

SRE001 returned a 10 metre zone from 164 – 174 metres (photo above) with elevated copper values, with assays peaking at 1320 ppm. This correlates with observed disseminated pyrite with trace chalcopyrite and bornite in sercite-chlorite altered metavolcanics. A second zone of elevated copper values occurs from 365-369 metres, peaking at 1710 ppm copper.

Not all the core was cut and assayed. Further sampling is planned to close off and fully evaluate the significance of these anomalous copper zones.

Petrographic examination of samples, to clarify lithologies and alteration, is continuing.
Zones of strong silicification correlated with geochemical depletion of most elements of interest.

The following core tray photos from further down-hole display colourful, brecciated textures; the widespread breccia matrix is quartz-dominated and there is some hematitic staining and veinlets throughout this core. There are no obvious visible sulphide minerals and none of the sought-after minerals - specular, steely hematite, barite or fluorite. The silicified rock is non-magnetic.

Could this represent the distal, barren remnants of a major hydrothermal fluid system? Only additional drilling, to establish vectors to potential ore zones, will answer that question.

Further down the hole, around 368 metres, the sericite-chlorite (green) rock in particular has textural characteristics of a skarn assemblage - see photo below: A sample has been sent for petrography.
The last few metres of SRE001 returned strongly altered, foliated, sericite-chlorite-K-feldspar-hematite "granite" gneiss. See photo below.

While no substantial copper-gold mineralisation was intersected in any of the three holes, a number of encouraging features were observed in what are essentially virgin domains in the northern Gawler Craton: the Mabel Creek Rise and the Coober Pedy Rise.

The presence of magnetite-biotite and hematite-sericite alteration demonstrates the impact, on these domains, of the Hiltaba-Gawler Range Volcanics magmatic event which also dominates the Mounts Woods Inlier and Olympic Domain to the south. Airborne magnetic interpretations, apparent in the figures above, show the presence of favourable northwest and northeast trending structures within GCR’s tenements.
At SR11 the gravity anomaly is now known to partly reflect a palaeo-topographic high and there is insufficient massive, steely hematite in the drill core at this location to increase the density sufficiently to create the observed gravity anomaly. However the hematite, sericite, silica and chlorite alteration may provide evidence, with the support of the zones of strong brecciation, for proximity to a venting site and potential mineralisation.

More holes at SR11 are planned to provide geochemical and alteration vectors towards mineralisation. These will be sited after interpretation of the proposed infill gravity survey (200m x 200m) has been completed.

**Quidong** *(All maps, photographs & tables by Dr Neal Reynolds, Director, CSA Australia, from the 2007 Stirling Minerals Prospectus)*

The Company has acquired 100% of the Quidong Base Metals and Gold Project, located near Bombala in the Lachlan Fold Belt of south-eastern NSW. The granted tenement, EL7989, covers approximately 200 km² in area.

![Map of Quidong Project & Lachlan Fold Belt](image)

*Figure 13. Geographical location of the Quidong Project & Lachlan Fold Belt*
QUIDONG BASIN

The Quidong Basin contains widespread occurrences of zinc-lead-silver-barite, copper and gold reflected by high levels of surface anomalism, and numerous economic and sub-economic drill intersections. The basin has been targeted by modern exploration since the 1950’s, however large areas of the basin remain under-explored due to unclear structural controls and varied interpretations of the applicable exploration model. The Basin displays similarities with a variety of carbonate-hosted Pb-Zn deposits, but also elemental associations common with carbonaceous, sediment-hosted gold deposits. The region has a strong zinc and gold association, with subordinate copper, lead and silver.

Early exploration at the Quidong Project established widespread elevated geochemical values for zinc-lead-silver-barite, copper and gold plus a range of trace elements spread over an area of 4 kilometres x 4 kilometres. However, it was not until 1981 that the first significant ore grade intercept was achieved at the main Clarke’s Reef prospect on the eastern side of the Basin. Drilling by subsequent explorers returned intercepts of similar tenor.

On the western side of the basin, 3 kilometres from Clarke’s Reef, a zone 600m long and open along strike, returned high surficial gold grades in rock sampling and trenching, along with some high base metal values. The best result from limited, shallow, follow-up drill testing was 17m @ 0.58 g/t Au. Areas defined by rock sampling along strike remain to be tested.

The central Basin area, 3km wide and lying between Clarke’s and Adam’s zones has been very lightly tested by drilling to date, and represents a prime target for mineralisation in the down dip extensions of mineralised horizons which to date have only been delineated around the outcropping edges of the basin. A combination of favourable stratigraphic horizons intersecting with mineralised structures provides the preferred target for exploration in the central area.

The Quidong Basin presents an opportunity to discover deposits of gold and base metals in an area of strong geochemical anomalism established by historical exploration, and in a region which has been overlooked by recent activity. GCR has compiled the historic database and will commence drilling defined targets as soon as field crews have completed South Australian and Cobar-Canbelego region programs.
EL7989 (formerly ELA 4514), tenement boundary and geology
Summary geology of the Quidong basin showing the principal prospect areas, and the location of previous drilling. A – A' shows the location of the schematic section shown below.
Type outcrop of the Quidong Limestone on the north side of the Delegate River – looking NW

Schematic section across the Quidong Basin showing open fold closures dissected by major northwest-trending faults.

MINERALISATION IN THE QUIDONG BASIN

The Quidong basin is remarkable for the extent of zinc, lead, copper, barite, silver and gold mineralisation and surface anomalism. Mineralisation can be grouped into three broad styles:
1. Laterally extensive disseminated to semi-massive pyritic mineralisation within the Smelter Beds siltstone and calcareous mudstone, often associated with silicification. Pyrite content commonly reaches 5-10% with variable amounts of chalcopyrite, galena and sphalerite. Gold-rich mineralisation at Adams Zone in the northwest of the basin is broadly of this style, here occurring within pyritised silicified limestones of the Quidong Limestone with associated anomalous zinc, lead and copper.

2. Irregular stratabound and fault-controlled bodies of higher-grade semi-massive sulphide within the Smelter Beds. This style is best defined at the Clarke’s Reef where sulphide-rich zones with up to 9.7% combined lead and zinc and 10 g/t silver over 7 metres replace argillaceous limestone and calcareous mudstone within a zone of strong northwest faulting. Gold values are strongly anomalous (up to 0.5 g/t over 1 metre).

3. Fault-hosted mineralisation above the Smelter Beds within the Quidong Limestone and Delegate River Mudstone, dominantly within the NNW- to NW-trending faults but also within dilational cross-faults.

Mineralised zones are generally narrow, but may carry significant lead, copper and gold grades at surface. This style of mineralisation has been mined at the Central Copper Workings and Mel’s.

Exploration has outlined numerous occurrences of mineralisation in the Smelter Beds. Significant lead-zinc mineralisation has been intersected in several drill holes, notably at Clarke’s Reef (QDH1 – 27 metres at 3.56% zinc and 1.62% lead from 133 metres, including 6 metres at 7.2% zinc and 2.4% lead from 141 metres; CRD1 – 15.1 metres at 4.0% zinc and 2.3% lead from 173 metres). Mineralisation occurs as sphalerite, galena and pyrite or pyrrhotite, as replacement of earlier stratabound pyritic zones in reduced dolomitic mudstone, or as patches, disseminations and veins within silicified zones in dolostone and argillaceous dolostone. Zinc-lead mineralisation is associated with high levels of copper and arsenic, elevated silver, bismuth and antimony, and locally strongly enriched gold.
On the north-western side of the basin in the Adam’s Zone, trench sampling has returned encouraging gold grades (best result 7.95 metres at 6.8 g/t gold), although follow up drilling did not intersect comparable grades. Gold is associated with zinc to per cent levels, and lower level enrichment of copper, lead, arsenic, antimony and bismuth.

Central Workings is a typical example of fault-hosted mineralisation in the Delegate River Mudstone. Here copper is associated with high levels of gold, lead and zinc in gossanous zones along the faulted contact of the Delegate River Mudstone and upper Quidong Limestone and within the Delegate River Mudstone itself.

At Clarke’s Reef, Adams and Belmore, porphyritic rhyodacitic sills are spatially associated with mineralisation. These have been strongly fracture veined and affected by skarn-style calc-silicate alteration together with their host rocks. The skarn alteration has been strongly retrogressed and cut by later quartz-carbonate veins. Similar veins in the adjacent sediments host sphalerite-galena-pyrite mineralisation, suggesting that mineralisation postdates porphyry intrusion.

Around the rim of the basin, the Smelter Beds are marked by extensive anomalous geochemistry, and widespread ironstone and gossan occurrences, strongest close to the North West fault zones. It has been suggested that this represents a primary enrichment in iron and base metals during deposition or early diagenesis, reflecting a reduced anoxic sedimentary environment and/or syn-sedimentary hydrothermal input of metals.

On this basis, McQueen (1989) considered the mineralisation to be dominantly syngentic, distal from major volcanic centres, and concluded that all types of mineralisation were related to hydrothermal activity which occurred during and after deposition of pyritic facies.
Tear (2000) compared the stratabound carbonate-hosted mineralisation with Irish-type zinc-lead deposits, while Delta geologists used a Mississippi Valley-Type (MVT) analogue.

While there is clear evidence for concentration of early diagenetic pyrite in reduced Smelter Beds lithologies, the evidence suggest that the base-metal and gold mineralisation was introduced in a later hydrothermal event related to magmatism and with a strong structural control. This is indicated by the:

1. coarse replacement style of mineralisation,

2. polymetallic character of zinc-lead-copper mineralisation with a gold-silver and arsenic-antimony-bismuth association,

3. spatial coincidence with porphyry intrusions,

4. continuity of mineralisation along structures into the overlying Delegate River Mudstone and underlying Tombong Formation sandstones, and

5. occurrence of chalcedonic silica breccias associated with gold-polymetallic mineralisation at Adams Zone and Pine Hill.

Combined with the regional setting within a polymetallic mineralised province which includes VHMS, sediment replacement and epithermal/stockwork deposits, a direct association with Late Silurian to Early Devonian felsic magmatism is indicated.

View south-east across the Quidong Basin from Pine Hill to the Central Workings and Central Ridge

The Quidong mineralisation occurs stratigraphically below the main regional VHMS mineralising event and about sixty kilometres south of any known submarine Silurian volcanics (a prerequisite for VHMS mineralisation) in the Cowra-Yass trough. Quidong does
not show characteristics of a sub-VHMS zone, which is typically a crosscutting stockwork quartz-sulphide vein system with intense chloritic and sericitic alteration. The association at Quidong between zinc- and lead-rich replacement zones in carbonates, copper veining, and gold-pyrite silicified zones shows greatest similarity to mineralisation in a sub-volcanic porphyry-skarn setting related to sub-aerial or shallow submarine volcanism.

Mineralisation at Quidong is interpreted to be part of the regional Late Silurian magmatic and metallogenic event, but occurring in a basin which had closed or filled resulting in shallow marine or sub-aerial rather than deep submarine volcanism. As a result, mineralising fluids did not rise to the sea floor and vent to form VHMS deposits, but reacted within the host unit to form various sediment-replacement and structurally hosted mineralisation styles, which show greater similarity to Mineral Hill in the central LFB than to the VHMS deposits in the eastern LFB such as Woodlawn and Captains Flat.
Summary geology and prospects in the Quidong basin showing Esso and WMC soil zinc geochemistry results
Summary geology and prospects in the Quidong basin showing Esso and WMC soil copper geochemistry results
TARGETS WITHIN THE QUIDONG PROJECT

The Quidong basin hosts extensive mineralisation and alteration which has been explored periodically since the late 1800’s. Exploration has mainly been for base metals, largely guided by an ‘Irish-type’ or MVT model (McQueen, 1989; Tear, 2000). Exploration for gold was limited in scope and extent.

Millennium developed a targeting model which indicated untested potential for large sediment-hosted, structurally-controlled gold deposits in a setting comparable to the Sepon deposit in Laos (Olberg et al., 2006), as well as potential for intrusive-related zinc and copper mineralisation in settings similar to the Mount Garnet district in Queensland (Hartley and Williamson, 1995). The style of gold mineralisation has similarities with Carlin deposits, sensu lato, but occurs around acid-porphyry intrusive centres in a back-arc setting associated with porphyry and high-temperature replacement and skarn styles of mineralisation. The extent of mineralisation at Quidong is indicative of a major hydrothermal gold-mineralising event which, combined with the limitations of previous testing, suggests potential for exploration breakthroughs. Applying this model suggests significant untested potential both at the main prospects and in other poorly tested areas.

CLARKES REEF

Clarke’s Reef is situated where the southern edge of the Quidong outlier is cut by a major NNW-trending structural zone which runs north to the Central Workings, and is herein termed the Central fault zone. Clarke’s is marked by extensive silicification, barite, ironstone and gossan at surface within the Smelter Beds and Quidong limestone. The prospect has been the primary focus for exploration at Quidong, which has included detailed geochemistry, geophysical surveys (IP, TEM, and gravity), and twenty-two drill holes within an area of about 670 x 500 metres. This drilling has delivered the best base-metal drill intersections within the Quidong Project area and indicates extensive moderate to low-grade stratabound zinc-lead mineralisation in the Smelter Beds.

Early percussion and diamond drilling at Clarke’s by Cyprus and Esso returned strongly anomalous intersections, partly or completely oxidised above 30 to 50 metres, but grades were considered sub-economic. CRD1 drilled by WMC in 1981 was the first hole to intersect potentially economic mineralisation and was followed up with two 100 metre step-out holes to the north and one 150 metre down-dip step-out, which intersected weaker mineralisation.

Plagolmin completed four up-dip step-out holes (QDH1 to QDH4) which returned broad mineralised zones with narrower high-grade intersections. Further step-out drilling by Delta (QPH7 and 8 and QDH5 and 6) encountered weak mineralisation up to 450 metres north of the CRD1 intersection.

Drilling and geological mapping indicates complex geology and mineralisation controls which have not been resolved by interpretation to date. Mineralisation occurs in at least two levels in the Smelter Beds, a lower level close to the basal Tombong Beds contact and an upper level above a clean dolomitised limestone horizon. Stratabound-replacement sphalerite and
galena mineralisation is controlled by the northwest trending feeder faults and is associated with silicification and iron dolomite alteration of reduced argillaceous limestone with abundant disseminated pyrite. Base-metal mineralisation post-dates skarn alteration around porphyritic sills. Correlation of lithology and mineralisation between drill holes is poor and cannot be explained by lateral facies variation alone. It probably also reflects structural complexity caused by folding and faulting, and inconsistent logging and poor core recovery in older holes. The prospect is cut by several northwest to north trending faults, and there is evidence for east-northeast trending faults or thrusts.

### Significant drill intersections at Clarke’s Reef

Although the prospect has been extensively drilled, targeting has focused on the stratabound control and not on the critically important fault control. All the best intersections occur close to major faults, and with a fault-controlled model, mineralisation remains open in a number of directions:

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<th>From (m)</th>
<th>To (m)</th>
<th>Length (m)</th>
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<th>Pb %</th>
<th>Cu %</th>
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*Significant drill intersections at Clarke’s Reef*
1. The best intersections in QDH3 and CRD1 occur between two interpreted feeder faults and the northern extension of mineralisation within this Central fault zone is largely untested. CRD3 drilled south of a major NW fault, and QPH7 did not reach the Tombong Beds and may not have tested the mineralised position.

2. The deep sulphide horizon intersected in MQD3 was not tested by QDH3 and is poorly tested south of CRD1 within the Central fault zone.

3. The Smelter Beds down dip of Reid’s Shaft has only been tested shallowly by old percussion holes QB8 and QB20 which had very poor recovery. If the Tombong Formation outcrop between MQD3 and Reid’s Shaft is due to a north-dipping thrust, the target is completely open down-dip.

4. The block southwest of the main Central fault has barely been tested despite having strong ironstones and geochemical anomalism at surface. The down-dip section has only been tested by CRD3 which was complicated by faulting. QB21 was drilled shallowly into gossan.

Further drilling at Clarke’s should be preceded by structural mapping and logging combined with lithostratigraphic interpretation to resolve the geological complexity, as well as additional geophysical (magnetic and IP) surveys.
Figure 12. Summary geology of Clarke’s Reef showing drill-holes, target zones, and location of sections shown below.
Summary cross-sections through Clarke's Prospect. Quoted intersections are shown based on geological significance, not on a specific cut-off grade.
CENTRAL RIDGE AND CENTRAL WORKINGS

The Central Ridge runs northwest from Clarke’s Reef along the Central fault zone for 2.6 kilometres to the Central Workings, the site of small-scale copper mines in the late 19th Century. Geochemical anomalism along the fault trend is sporadic, partly due to cover from old Quaternary river gravels, but strong in the vicinity of the old workings. From 900 metres southeast of the workings, the fault zone juxtaposes Quidong Limestone on the western side against Delegate River Mudstone on the eastern downthrown side. South of this, the fault cuts only Delegate River Mudstone.

The Central Fault is a complex structure with at least two main fault strands. The Central Workings are in Delegate River Mudstone west of an eastern fault strand which downthrows the limestone to the east.

Gossans have yielded a number of high gold values from individual grab samples (maximum 6.7, 5.7, and 3.7g/t Au). Gossanous ironstone occurs in Smelter Beds west of a western fault strand and the overlying Quidong Limestone is cut by an ENE-trending gossanous fault with remnant galena.

The target at Central Workings is replacement gold and base metal mineralisation within favourable argillaceous limestone and calcareous mudstone of the Smelter Beds within or proximal to the fault zone. This target has barely been tested by previous work. Cyprus percussion hole QB11 (91 metres deep) intersected anomalous base metals in gossan above weakly silicified and pyritic Quidong limestone and Esso diamond hole 102-9 (164 metres deep) intersected gossan and mudstone overlying locally pyritic limestone. Both holes were drilled on the less favourable hanging-wall side of the fault. WMC completed one drill hole (CRD5) in the south of the trend, intersecting narrow copper-mineralised zones between 34 and 56 metres. Millennium drill hole MQD1 beneath the Central Workings intersected 30 metres of oxidised mineralised Smelter Beds above Delegate River Mudstone and argillaceous limestone, before passing through the eastern fault strand into Delegate River Mudstone, and was completed at 250.6 metres before reaching the Quidong Limestone and Smelter Beds target zone.

The optimum target is considered to be in the Smelter Beds in the eastern footwall where the main fault strands swing to a more dilational northwest orientation. This position has not been intersected by previous drilling and while it is estimated to be relatively deep (200-500 metres at MQD1), it shallows to the north and warrants drill testing. This should be preceded by additional structural mapping and logging and by detailed gravity surveys to help define structures.
Summary geology of the Central Ridge and Central Workings area showing past drilling and target zones

ADAMS ZONE

The Adams Zone prospect is a c. 600 metre trend of stratabound gossans and anomalous geochemistry within silicified limestone and sandstone on the northern side of the Quidong basin, running west-southwest from a major northwest-trending structure herein termed the Adams fault zone. The gossan is paralleled by a discontinuous porphyry sill with associated skarn alteration.

Cyprus completed three shallow percussion drill holes (11 to 76 metres deep) on the main gossan zone and one at Adams North (700 metres to the northeast). Only low level copper, lead and zinc values were returned and samples were not analysed for gold. WMC soil
sampling defined arsenic anomalism close to the main Adams gossan. Delta rock-chip sampling with gold values up to 8.2 g/t gold in individual grab samples was followed up with nine trenches on the main zone and three on a sub-parallel zone, 150 metres to the northwest. Anomalous gold zones in trenches were generally less than 2 metres wide, but Trench 2 returned 20.8 metres at 2.98 g/t gold at a 0.3 g/t cut-off grade. Base metals were also anomalous and Trench 12 returned 10.4 metres at 0.95% Zn and 0.42 g/t gold. Six percussion drill holes (QPH1 to 6 totalling 330 metres) to depths of 50-68 metres intersected gold values significantly lower than trench sampling, with a best intersection of 3 metres at 1.08 g/t gold from 36 metres in QPH2 beneath Trench 2 at a 0.3 g/t cut-off grade.

QPH6 intersected 17 metres at 0.58 g/t gold (also at a 0.3 g/t cut-off grade). The gold mineralisation is associated with elevated zinc, lead and copper, though generally at sub-1% levels in surface samples. Base-metal data were not available for all drill holes, but levels were variably anomalous with copper values up to 0.25%.

While surface samples may be leached, pyrite occurs at surface and the depth of oxidation is generally very shallow.

**Adam’s Zone summary geology, trenching and drilling**

Lower-level gold values in drilling may reflect surface gold enrichment in trench samples. However, individual pyritic grab samples at surface returned up to 41.9 g/t gold, suggesting that high grades exist in primary sulphide mineralisation but may be irregularly distributed due to a nugget effect. Drill holes intersected only weak pyrite (estimate less than 5% for the highest grade zone in QPH2). In this context, sparse testing of a 600 metre zone by
eight shallow drill holes is inadequate, especially with limited structural understanding. Additional drill testing should be preceded by structural mapping and geophysical surveys (gravity and IP) to help identify major feeder structures and sulphidic replacement bodies.

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<th>To (m)</th>
<th>Length (m)</th>
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<th>Pb %</th>
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**Significant intersections from trenching at Adams**

**PINE HILL**

The area 400-900 metres northeast of Adams around the Central fault zone is herein referred to as Pine Hill and includes the target previously referred to as Adams North. This area on the north side of the Delegate River has had little past exploration despite having returned high gold and base-metal values from reconnaissance rock-chip sampling (best results 3.3, 2.0 and 1.9 g/t Au in individual grab samples). This area is also highlighted by a strong 250 x 140 metre arsenic soil anomaly (above 56 ppm, maximum 185 ppm) west of the Central Fault on the north side of the Delegate River. Arsenic anomalism continues north in the fault zone for 500 metres at lower levels and is partly coincident with lead, zinc and copper anomalism.

This area warrants additional assessment as a priority, initially comprising structural mapping and rock-chip sampling followed by geophysical surveys and drilling.

**SOUTH BASIN**

The South Basin area, 1 to 1.5 kilometres west of Clarke’s Reef, is situated where the southern projection of the Adams fault zone cuts the southern basin margin. The corridor between eastern and western fault strands is strongly anomalous in bismuth, antimony and copper in Delta stream-sediment sampling and moderately anomalous in gold, arsenic, lead and zinc. The eastern fault strand is marked by a strong copper anomaly in WMC soil samples. Limited rock-chip sampling has given results up to 0.28 g/t gold in grab samples.

Drilling by Cyprus (five percussion holes to less than 100 metres depth) and Esso (one diamond hole) intersected significant low-grade base metals within Smelter Beds silicified and dolomitised siltstones, oxidised to c. 50 metres. Best results were 22.9 metres at 0.42% copper from 9.1 metres in QB16 and 12.1 metres at 0.4% Zn in QB27 (intersections provided with no rigorous cut-off criteria). Samples were not analysed for gold.
No work was completed by later operators and the gold potential is untested. Soil and rock-chip geochemical sampling with structural mapping is needed, followed up by geophysical surveys and drilling.

**MELS**

Mel’s is situated on a major fault trend which controls the eastern margin of Clarke’s, 1 kilometre to the south.

The fault zone is marked by strong soil anomalism in zinc and lead where it cuts the Quidong Limestone and Smelter Beds on the southern basin margin. Gossanous faults can be traced 560 metres north to Mel’s Workings where an old shaft occurs in an area of extensive gossanous ironstone in the Delegate River Mudstone outcrop.

Gold values up to 0.88 g/t have been recorded in Delta grab samples at the old workings and from the Smelter Beds in the southern prospect area. Delta stream sediment results show strong bismuth and antimony anomalous along the fault trend.

One Cyprus percussion drill hole in the south of the anomalous trend intersected 7.6 metres at 0.98% Zn (no rigorous cut-off criteria) from surface in gossanous siltstone and further anomalous zinc and lead values in silicified and pyritic siltstone to a total depth of 67.7 metres. Two Esso diamond drill holes (to 304.8 metres and 181.1 metres) were not sampled.

A single, 72-metre, Millennium percussion hole drilled beneath Mel’s Workings intersected manganiferous, oxidised siltstone to 10 metres underlain by Delegate River Mudstone.

The Smelter Beds target at depth (c. 150-350 metres) beneath Mel’s Workings has not been tested, and the halo of antimony-bismuth anomalous in stream sediments suggests gold potential. Although the Esso drill holes have apparently downgraded the southern part of the trend, the stronger zinc-lead-copper soil anomaly along strike 430 metres to the northeast has not been tested.

**PARAGON**

The Paragon prospect is situated along a north-northwest trending fault strand in the east of the basin about 1 kilometre northeast of Mel’s Workings. The area is marked by extensive ironstone and gossan along a faulted contact between Quidong Limestone and Delegate River Mudstone to the east. Delta rock-chip sampling shows several values above 0.5 g/t gold with elevated base metals (best result of 2.64 g/t Au with 1.42% Pb and 0.14% Zn in individual grab samples). Two Cyprus percussion holes intersected weakly anomalous base-metal values in gossanous ironstone overlying ferruginised shale or silicified pyritic siltstone. Samples were not analysed for gold.

The area has not been covered by WMC soil sampling. Further exploration should include gold-focused soil sampling, structural mapping, and geophysical surveys and drilling if results are positive.
PARAGON SOUTHEAST

The edge of the basin 600 metres southeast of Paragon is marked by a coherent high-level zinc anomaly (over 500 ppm with a maximum of 2200 ppm) with lower level lead over 220 metres of strike of the basal Quidong Limestone. Although this does not coincide with an obvious major fault, it may be in the faulted hinge of a complex fold. The area warrants additional field assessment and sampling to determine the significance of the anomalism.

BELMORE

Belmore is situated along the western margin of the basin and was a focus of exploration by Esso in the 1970’s.

Esso soil sampling returned anomalous results over 2 kilometres of Quidong Limestone and Smelter Beds and later detailed WMC soil sampling defined a 620 metre anomalous copper zone which is up to 140 metres wide (over 311 ppm Cu with a maximum of 1060 ppm). Coherent arsenic anomalism is slightly displaced from copper. There is no significant lead or zinc anomalism. Esso rock-chip sampling of gossans gave a best value of 1.85% copper with low zinc and lead (gold was not analysed).

Two Cyprus percussion drill holes intersected only weakly anomalous copper values with up to 5% pyrite. Four Esso diamond drill holes over 700 metres of strike intersected weak chalcopyrite mineralisation in pyritised zones in siltstone and limestone cut by porphyry intrusions. Samples were not analysed for gold, and only one drill hole tested the peak copper anomalous zone defined by later WMC sampling. There is no direct association with a major fault, and observed mineralisation may be a low grade fringe to a system associated with a significant fault east of the drilled zone under Delegate River Mudstone cover. This target is untested.

BELMORE SOUTH

Belmore South lies in the southwest corner of the basin, 1.5 kilometres south of the Belmore drilling. Esso and WMC soil anomalism in base metals is fairly weak, but Cyprus targeted four shallow percussion holes on gossanous zones in the western part of the area and two in the eastern, intersecting significant amounts of pyrite in silicified siltstones, tuffs and limestone. Silver values to 22 g/t are reported in QB17, and QB18 intersected 10.6 metres at 0.25% Zn (no rigorous cut-off criteria), both in the eastern prospect. Esso followed up with one diamond hole in the east which intersected limestone and calcareous mudstone without significant alteration. There has been no significant subsequent work. Stream sediment samples and rock-chip samples with anomalous gold, arsenic and copper suggest some copper-gold potential and some additional follow-up is warranted, initially by soil sampling.

DISCUSSION

The Silurian outlier at Quidong shows an unusual extent and intensity of alteration and mineralisation. The key features of this mineralisation at Quidong are considered to be:
1. Back-arc setting within the LFB approximately contemporaneous with widespread polymetallic VHMS mineralisation in submarine volcanics to the north.

2. Association with acid-porphyritic magmatic centres and related skarns.

3. Replacement-style mineralisation comprising pyrite-pyrrhotite with arsenopyrite, chalcopyrite, galena and sphalerite in reduced impure dolostone and dolomitic mudstone of the Smelter Beds.

4. Strong structural control, mainly by north-trending faults and related antithetic structures, with mineralised faults extending into the Delegate River Mudstone above the Quidong limestone.

5. Association of gold with silver, arsenic, antimony and bismuth in addition to zinc, lead and copper. In detail, mineralisation may be gold, copper, or zinc-lead rich suggesting zonation within a hydrothermal system.

6. Association with silicification including extensive silica-pyrite alteration zones within the Smelter Beds with low gold and base-metal contents.

This setting and style of carbonate-replacement gold mineralisation shows similarities with deposits such as:

Mesel in Indonesia and Sepon in Laos (Garwin et al., 1995; Olberg et al., 2006), as well as shallow-water VHMS deposits with associated stockwork zones such as Eskay Creek in British Columbia. Sepon in particular shares the back-arc setting, association with base-metals, replacement of impure carbonaceous carbonates, dolomite and silica alteration, and proximity to a porphyritic centre with porphyry and skarn mineralisation.

This style of gold mineralisation has similarities with Carlin-type deposits (micron-gold hosted by carbonaceous sediments) in a broad sense but is spatially associated with intrusive centres. Mineralisation of this association in a sediment-dominated sequence may be related to high-heat flow extensional and magmatic events in a back-arc setting, probably at a deep epithermal level.

Although the known mineralisation at Quidong is mostly low grade and previously considered sub-economic, the style and setting of mineralisation combined with the limitations of past testing are considered permissive for the presence of significant gold and base-metal deposits in skarn and replacement settings. There may also be potential for buried porphyry-copper systems. Between its recognition as a mineralised district in the late 1800’s and the mid-1980’s, the area was targeted for its base metal potential. Subsequent exploration for gold was limited in scope and extent, and was compromised by interpretation of the mineralisation as a zinc-lead ‘Irish-type’ or MVT system, initially by McQueen (1989) and subsequently by Delta and Millennium (Tear, 2000).

As a result, exploration for structurally-controlled, sediment-replacement, intrusive-related gold and base-metal mineralisation has been inadequate in terms of extent, methodologies and the targeting model. Exploration has focused on small areas as a follow up to outcropping gossans, to the detriment of assessing the potential of the entire basin. There
has been inadequate recognition of the importance of the northwest structures in localising mineralisation and too much emphasis on drilling down-dip from outcropping gossan. Early drilling was mostly shallow and often had poor recoveries, and geophysical surveys were limited in effectiveness.

Despite these limitations, the work completed to date at Quidong provides a good geochemical and geological database. These data provide a valuable basis for more thorough exploration of the system, once digitally captured and compiled into a coherent database. The key additional element in effective targeting utilising this database will be improved structural mapping and understanding combined with improved geophysical targeting.

IP and EM equipment and processing have advanced significantly since these methods were last applied at Quidong and careful utilisation and interpretation has the potential to make important targeting breakthroughs leading to new discoveries.

The economic potential at Quidong will also be influenced by metal prices. At current and predicted short- to medium-term prices for zinc, the intersections and grades in old drill holes at Quidong have greater economic significance than when originally drilled by WMC and Delta.

CONCLUSIONS

Extensive carbonate-replacement and fault-hosted mineralisation in Late Silurian sediments in the Quidong Basin is spatially related to intrusive rhyodacitic porphyries and contact skarns and occurs within the strongly mineralised Late Silurian metallogenic province of the Lachlan Fold Belt. Mineralisation in this province is related to magmatism in an extensional back-arc setting and includes typical VHMS deposits (such as Woodlawn) as well as hybrid sediment-hosted/VHMS deposits (such as Lewis Ponds) and porphyry-related subvolcanic deposits such as Mineral Hill. Most of these deposits are characterised by an association of precious metals with zinc, copper and lead, similar to the association at Quidong. The metal association and style of mineralisation at Quidong, with replacement and silicification of reduced carbonaceous carbonates and siltstones, show similarities with other sediment-replacement Carlin-like deposits associated with sub-volcanic porphyries such as Sepon in Laos.

Although substantial previous exploration has been completed in the Quidong Basin since the 1970’s, this has been largely focused on sediment-hosted base-metal model ('Sedex', Irish-type or MVT model). Testing for intrusive-related zinc and structurally-controlled gold mineralisation has been inadequate, associated with north-northeast structural zones and preferentially hosted by the reduced, carbonaceous, dolomitised argillaceous limestones and pyritic dolomitic siltstones of the Smelter Beds.

Gold was specifically targeted by Delta, but apparently the connection between gold mineralisation at Adams and zinc-rich mineralisation at Clarke’s was not made and Irish-type zinc models persisted. Mineralisation in structures in the Delegate River Mudstone was considered as leakage along late faults from stratabound zones and structures themselves were not targeted. In addition, some of the previous exploration has been hampered by
difficult drilling and poor recoveries, while electrical geophysical methods have been compromised by the carbonaceous and pyritic host sequence.

The extent of mineralisation at Quidong is indicative of a major hydrothermal mineralising event, and the new targeting model suggests that this event could have generated large sediment-hosted, structurally-controlled gold and base-metal deposits. Combined with the limitations of previous exploration, it is considered that potential exists for exploration breakthroughs and significant gold polymetallic discoveries.
Cargo Gold Project

10.4 million tonnes at 0.84 g/t gold using a 0.5 g/t Au cut-off containing 283,000 ounces of gold. (Near surface Inferred Resource)

GCR’s 100% owned Cargo project is its flagship gold project and lies 12 km west of Newcrest’s Cadia-Ridgeway gold-copper mining operation. It is located within prospective rocks of the Molong Volcanic Belt (MVB), a package of Ordovician calc-alkaline island arc-related volcanics and sediments intruded by calc-alkaline and potassic intrusive complexes.

The MVB is a major component of the Lachlan Fold Belt and contains several porphyry copper-gold deposits: Cadia, Cadia East, Ridgeway and Copper Hill.

- Cargo is a large, concentrically zoned hydrothermal mineralised system truncated on the west by a major regional fault.
- Cargo host rocks are of a similar age and lie in a similar geological setting to those at Cadia-Ridgeway.
- Cargo has radial quartz-sulphide, gold-bearing alteration systems (Figure 11).
- Recent core drilling has intersected, in three holes, 67m @ 1.15 g/t Au, 63m @ 1.15 g/t Au and 55m @ 1.27 g/t Au.

Based on the Golden Cross drilling results, at a 0.5g/t Au cut-off there is exploration potential for additional resources within the interpreted mineralised envelopes adjacent to current Inferred Resource.

Manual calculations, using tightly constrained prisms based on narrow, steeply dipping veins have been completed, using a 1g/t Au cut-off grade and minimum intercepts of 2metres at 1g/t Au. A first-pass total of 748,100 tonnes containing 50,948 oz. Au at a calculated grade of 2.12 g/t gold has been estimated. Further work is required to refine this estimate.

Other small gold-bearing quartz-sulphide systems, peripheral to the Cargo porphyry intrusions, have historical economic drill intersections which require further drilling. These are likely to provide additional, shallow resources.
Cargo mineralised system and 2012 drill hole locations.

Geology

by Andrew Allibone 2008

Spur-Dalcoath Prospect showing vein trends (blue) and drill hole locations (including SD003, SD004 and SD005).
Cargo Resource

Spur-Dalcoath Inferred Resource at a cut-off of 0.5g/t gold

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Total Inferred Resource at a cut-off of 0.8g/t gold (Number of decimal places does not imply precision)

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Total Inferred Resource at a cut-off of 0.2g/t gold (Number of decimal places does not imply precision)

<table>
<thead>
<tr>
<th>Zone</th>
<th>Cut-off grade</th>
<th>Volume (m³)</th>
<th>TONNES (million)</th>
<th>SG</th>
<th>Gold grade g/t</th>
<th>Ounces</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPUR EAST</td>
<td>0.2</td>
<td>3951750</td>
<td>10.3</td>
<td>2.62</td>
<td>0.42</td>
<td>139,000</td>
</tr>
<tr>
<td>SPUR</td>
<td>0.2</td>
<td>6409250</td>
<td>16.8</td>
<td>2.62</td>
<td>0.56</td>
<td>304,000</td>
</tr>
<tr>
<td>DALCOATH</td>
<td>0.2</td>
<td>706000</td>
<td>1.8</td>
<td>2.57</td>
<td>0.42</td>
<td>24,500</td>
</tr>
<tr>
<td>WEST DALCOATH</td>
<td>0.2</td>
<td>513813</td>
<td>1.3</td>
<td>2.59</td>
<td>0.45</td>
<td>19,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>30.3</td>
<td>2.61</td>
<td>0.50</td>
<td>487,500</td>
</tr>
</tbody>
</table>

The bulk of the Spur-Dalcoath drilling was by Reverse-Circulation percussion with samples collected by riffle splitting (80%) and spear sampling (20%).

Quality control was implemented during all drill programs, with the insertion of 33 standard samples, 80 duplicate samples and several inter-laboratory comparisons. Gold assaying was by routine fire assay. The sampling and assaying techniques meet the requirements for Inferred Resource estimation.

H & S Consultants has estimated a resource based on 121 holes for a total of 13,865m from 113 RC and 8 core holes. The nominal drill hole spacing is 25x25m. Assays were composited to 2m intervals within interpreted mineralised envelopes.
Resource blocks of 10mx10mx5m were used.

The dry bulk densities applied were: Oxide=2.3, Transition=2.4 and Primary=2.7. Oxide, Transition and Primary boundaries were modelled from all drill holes within the model area, including those not used for the estimation. Values were assigned using average bulk densities from the geologically similar Copper Hill Oxide, Transition and Primary zones.

The resource estimates were generated using ordinary kriging, the maximum search pass for the Inferred Category was 30x90x90m with the exception of the Dalcoath West lode where the maximum search was 20x60x60m. All passes required a minimum of 6 data points from at least 2 drill holes and within no less than 2 of 8 radial segments.

<table>
<thead>
<tr>
<th>Zone</th>
<th>Core – 2m composites</th>
<th>RC – 2m composites</th>
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</thead>
<tbody>
<tr>
<td>Spur East</td>
<td>23</td>
<td>1230</td>
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<tr>
<td>Spur</td>
<td>256</td>
<td>2515</td>
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<tr>
<td>Dalcoath</td>
<td>91</td>
<td>285</td>
</tr>
<tr>
<td>West Dalcoath</td>
<td>16</td>
<td>112</td>
</tr>
<tr>
<td>Total</td>
<td>386</td>
<td>4142</td>
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</table>

<table>
<thead>
<tr>
<th>SPUR-DALCOATH TOTAL INFERRED RESOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut off grade g/t gold</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>0.1</td>
</tr>
<tr>
<td>0.2</td>
</tr>
<tr>
<td>0.3</td>
</tr>
<tr>
<td>0.4</td>
</tr>
<tr>
<td><strong>0.5</strong></td>
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<td>0.6</td>
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<tr>
<td>0.7</td>
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<td>0.8</td>
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</table>

Number of decimal places does not imply precision

<table>
<thead>
<tr>
<th>Total Inferred Resource at a cut-off of 0.2g/t Au - MATERIAL TYPE</th>
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</thead>
<tbody>
<tr>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>OXIDE</td>
</tr>
<tr>
<td>MATERIAL TYPE</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>OXIDE</td>
</tr>
<tr>
<td>TRANSITION</td>
</tr>
<tr>
<td>FRESH</td>
</tr>
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<tr>
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<th>DESCRIPTION</th>
<th>Cut Off g/t Au</th>
<th>Tonnes (million)</th>
<th>SG</th>
<th>Gold g/t</th>
<th>Ounces</th>
</tr>
</thead>
<tbody>
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<tr>
<td>TRANSITION</td>
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<tr>
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<td>2.8</td>
<td>2.70</td>
<td>1.16</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>4.0</td>
<td>2.60</td>
<td>1.19</td>
<td>154,000</td>
</tr>
</tbody>
</table>

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**Compliance Statements:**

Note: GCR provided the drill hole database, which H&S Consultants has accepted in good faith as being reliable, accurate and complete. GCR also supplied a geological interpretation of the Spur-Dalcoath vein systems, which formed the framework for the resource estimates. H&S has not validated the GCR database or geological interpretation in any detail, so responsibility for these aspects of the resource estimates, including the quality of the data, resides with GCR.

The Resource Estimates were overseen by Mr Arnold van der Heyden a full-time employee of H&S Consultants Pty Ltd., specialists in resource estimation and geostatistics. Mr van der Heyden is a Member of the Australian Institute of Geoscientists (AIG), has more than five
years experience in the field of activity in which he is reporting and consents to his report being incorporated into this announcement in the context in which it appears above.

The information in this report that relates to Exploration Results is based on information compiled by Kim Stanton-Cook, who is a member of the Australian Institute of Geoscientists, is a full-time employee of GCR, and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity 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”. Mr Stanton-Cook consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

More information, including that contained in GCR’s 2013 Annual Report, may be downloaded from

www.goldencross.com.au