Copper Hill Announcement

23 May 2014

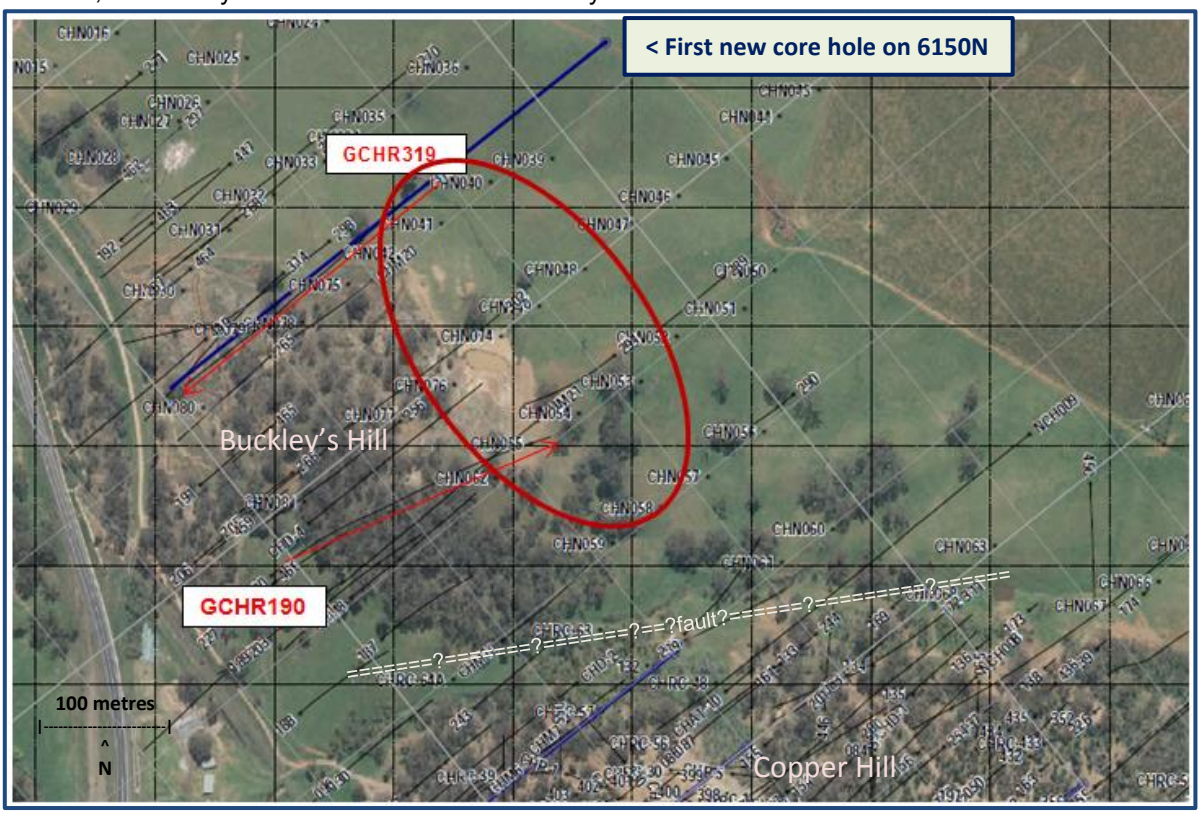
$1.5 million, 5000 metre, Core Drilling Program has commenced

The injection of funds to GCR from its new 19.9% shareholder Heron Resources has enabled GCR to embark on a major new drilling program to discover buried porphyry intrusions and extensions to known mineralisation. The program is based on previous drilling results and recent geological reviews which have provided encouraging new insights into the potential for expanding the Copper Hill and Buckley's Hill deposits.

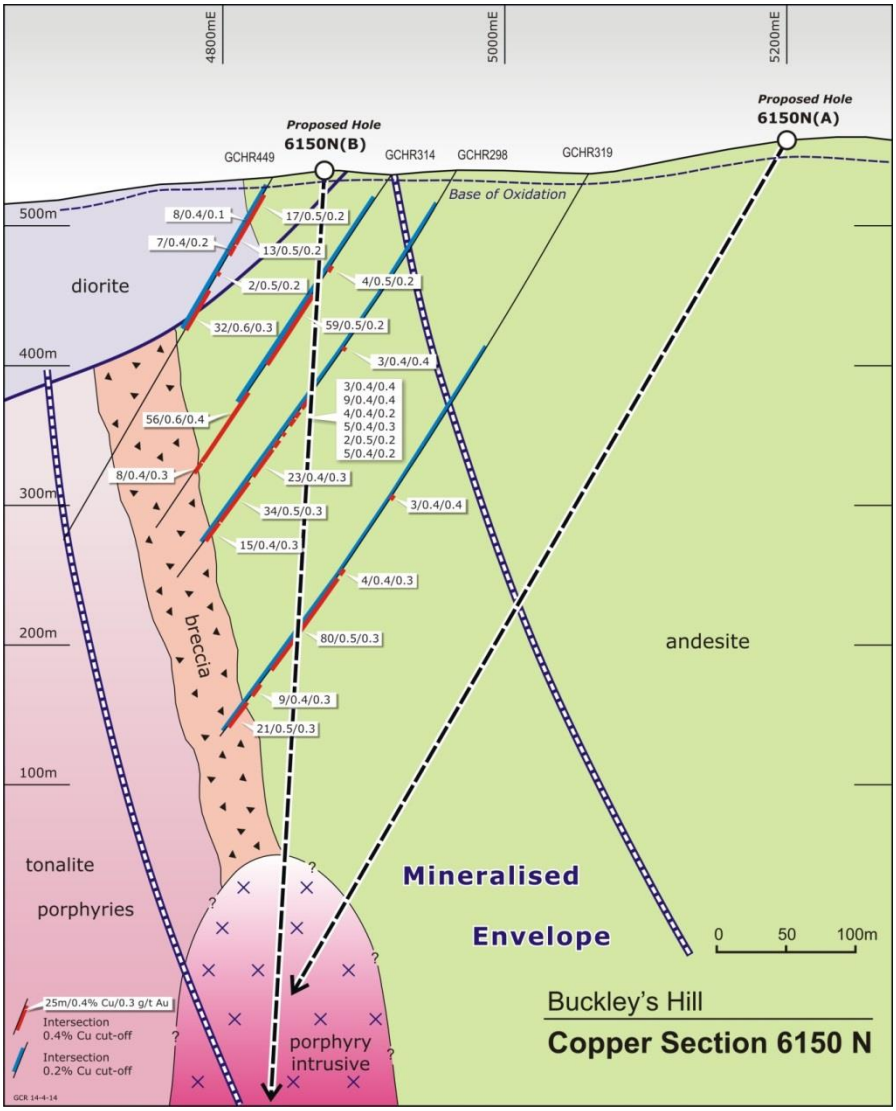
The program will run for two to three months and will include in-fill drilling of the high grade central Copper Hill mineralisation between cross-sections 5300N and 5700N at greater depths, to test for extensions to the high grade carapace mineralisation or deeper mineralised porphyry intrusions. Proposed holes on sections are included in this report.

The first hole has commenced drilling on section 6150N at Buckley's Hill, which lies 500 metres northwest from Copper Hill. Buckley's Hill mineralisation appears to be at a different porphyry system level to Copper Hill and may be separated by an east trending fault. Buckley's Hill maintains higher grades of copper and gold at depth with substantial intersections of 0.4% to 0.6% copper with supporting gold grades of 0.2 g/t to 0.3g/t.

Tonalite porphyry intrusions are exposed in outcrop at Copper Hill. Buckley's Hill is probably down-faulted relative to Copper Hill and accounts for the higher grades intersected at depth. Down-faulting is consistent with the observed exposures of andesitic country rock and the paucity of outcropping intrusions, noted only on the western side of Buckley's Hill.



"Open Zone" between GCHR319 and GCHR190 and showing the trace (blue) of the first hole of the new program on cross-section 6150N at Buckley's Hill and the postulated fault between Copper Hill and Buckley's Hill.



Schematic cross section 6150N showing the targeted porphyry intrusion below Buckley's Hill and the relative location of the breccias with mineralised fragments

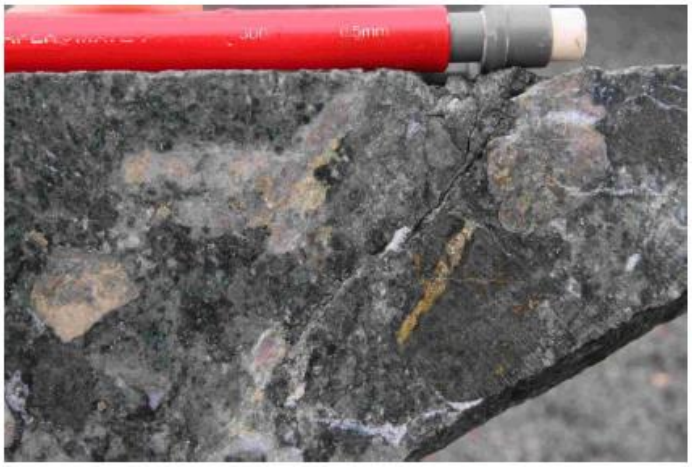
Drilling beneath the higher grade intersections in hole GCHR319 on section 6150N has been the company's priority since the last drilling program in 2011. Golden Cross Resources and its consultants (Stuart Hayward, Doug Menzies and Greg Corbett) have delineated features in the andesite wall rocks of drill holes GCHR314, 319 and 190 which are typical of settings in the vicinity of a targeted porphyry intrusion source and commonly used in porphyry exploration. These features include the strong propylitic wall rock alteration, although the dominance of chlorite-magnetite over epidote-actinolite suggests any porphyry source might be some distance from the existing drill intercepts. Consequently, the new hole will be over 800 metres in length and is designed to test a zone some 200 metres below GCHR319. Other features include the presence of mineralised veins including D veins which are typical of those formed within the wall rocks marginal to porphyry intrusions. Some breccias in all three drill holes contain tonalite intrusion and mineralised clasts interpreted to have been "rucked up" from the deeper, targeted source. Higher intensity potassic alteration occurs in some breccias.

Drill hole GCHR190, which is some 250 metres south of GCHR319 and traversing sections 5950N to 5900N, maintains higher relative copper and gold grades at depth (e.g. 20 metres @ 0.58% copper and 0.3g/t gold and 27metres @ 0.43% copper and 0.23g/t gold within a 222 metre interval [20m to 244m]

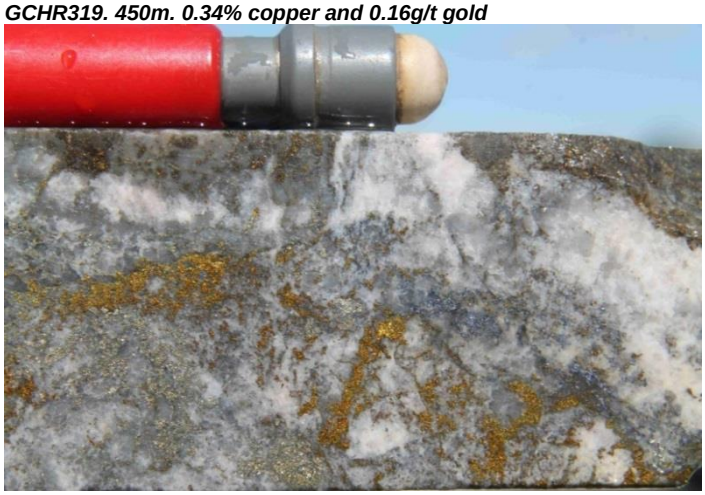
carrying 0.37% copper and 0.16g/t gold). The zone between cross sections 6150N and 5900N has only been tested by shallow drilling. It provides another excellent target for the current program, which will evolve as each hole is completed.

Some photos of the rock types demonstrating the brecciation and veining textures discussed above are set out below:

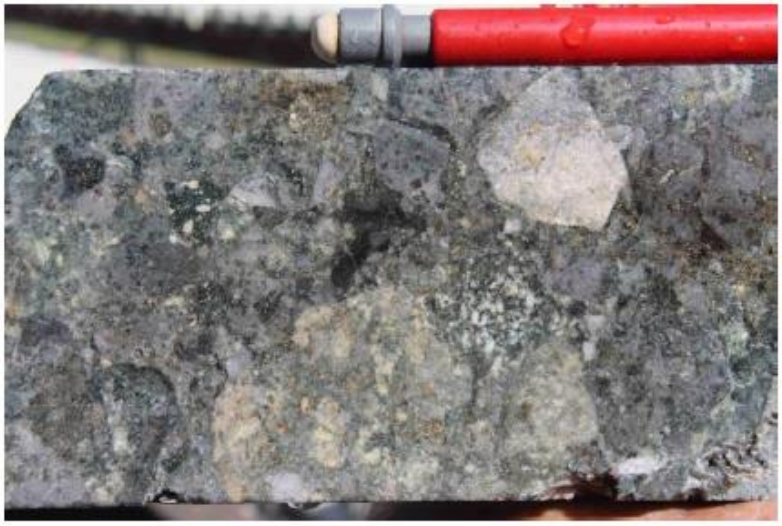
Magmatic hydrothermal breccia with K-feldspar altered clasts and magnetite-chlorite altered matrix. GCHR319. 442.4m. 0.45% copper and 0.24g/t Au.



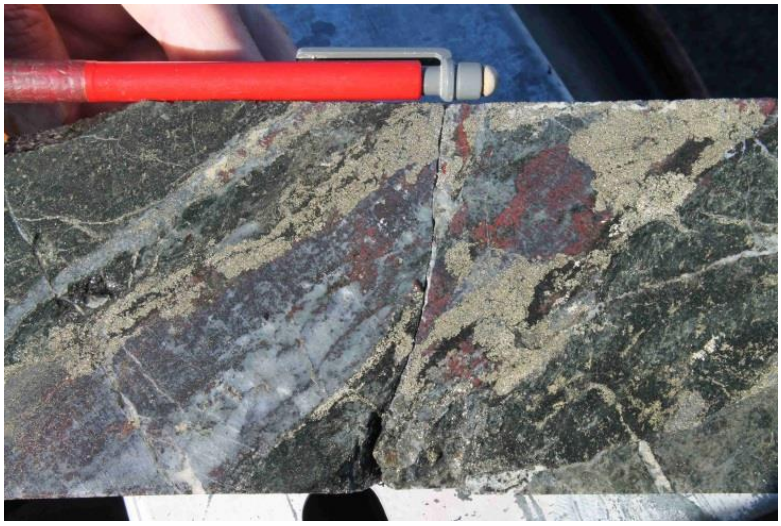
Magmatic hydrothermal breccia with a mineralised clast. GCHR319. 450m. 0.34% copper and 0.16g/t gold



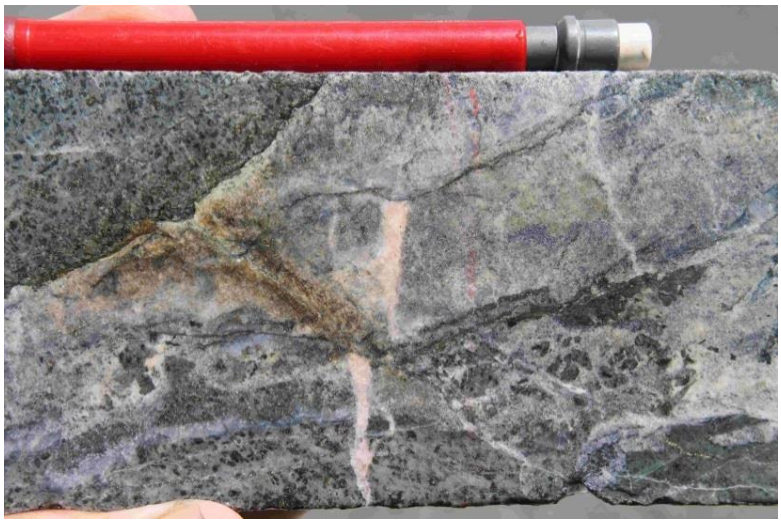
D vein dominated by quartz, chalcopyrite and molybdenite GCHR319, 456.3m. 1.98% copper, 0.24g/t gold, 13.1g/t silver and 1445ppm molybdenum.



Magmatic hydrothermal breccia with magnetite-chlorite altered matrix overprinted by sericite.
GCHR319. 462m. 0.30% copper and 0.30g/t gold

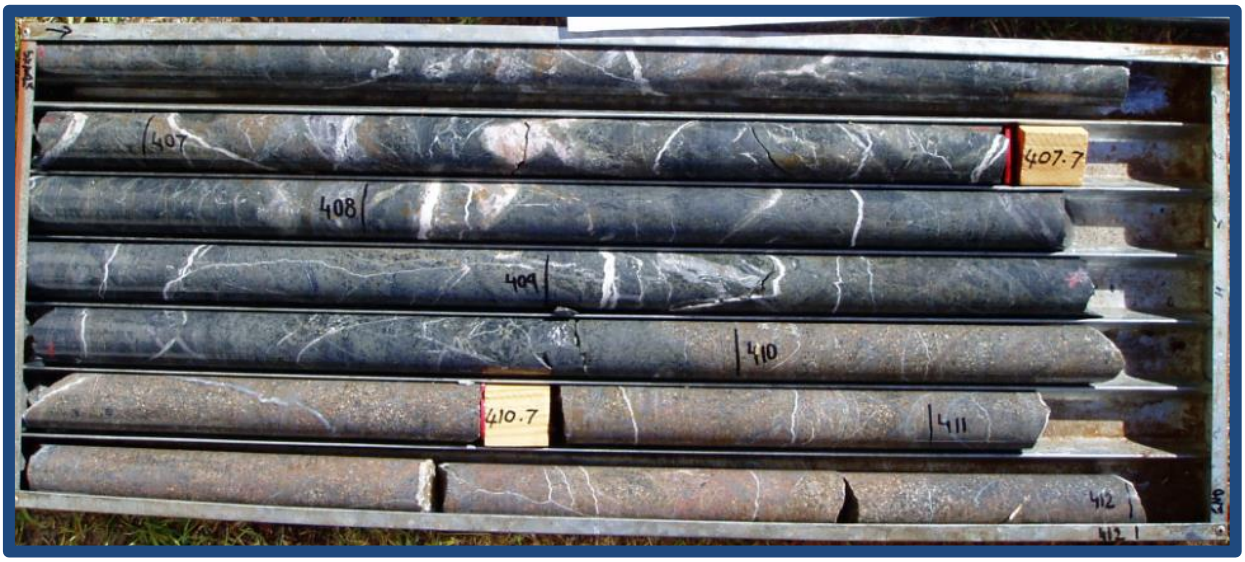


Early prograde vein comprising quartz, hematite, magnetite and pyrite with actinolite-chlorite wall rock alteration selvage -
GCHR314, 76.7m. 0.15% copper and 0.09g/t Au.

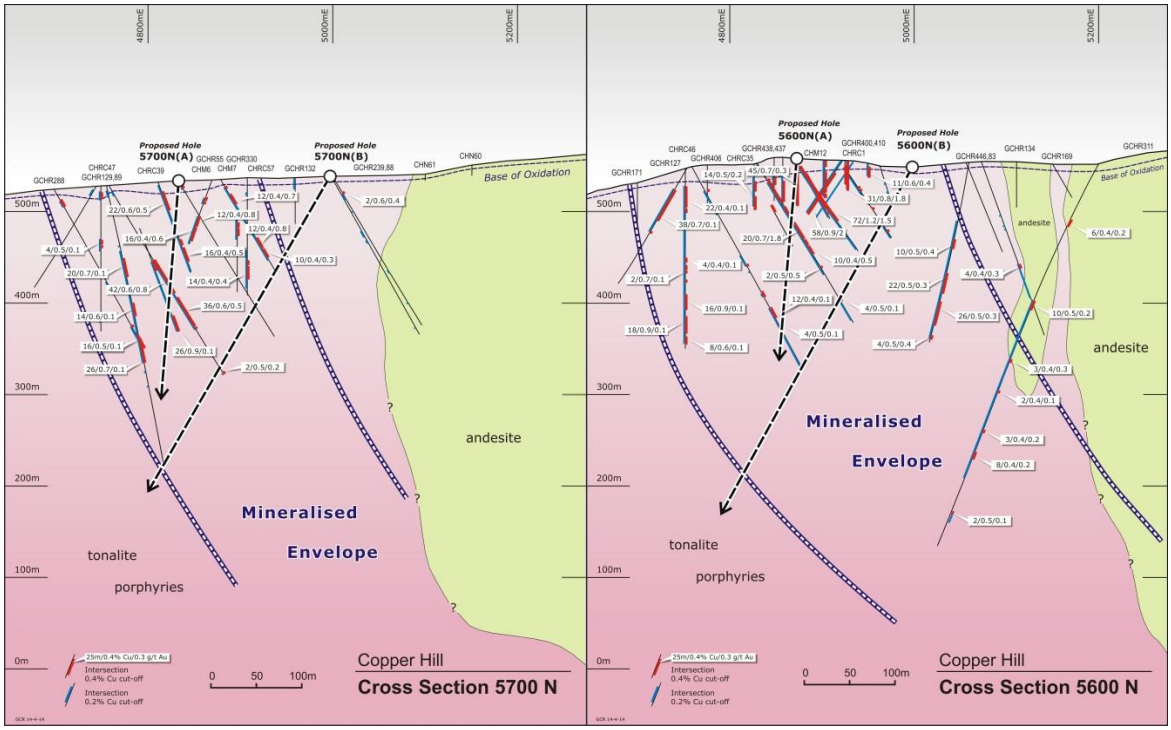


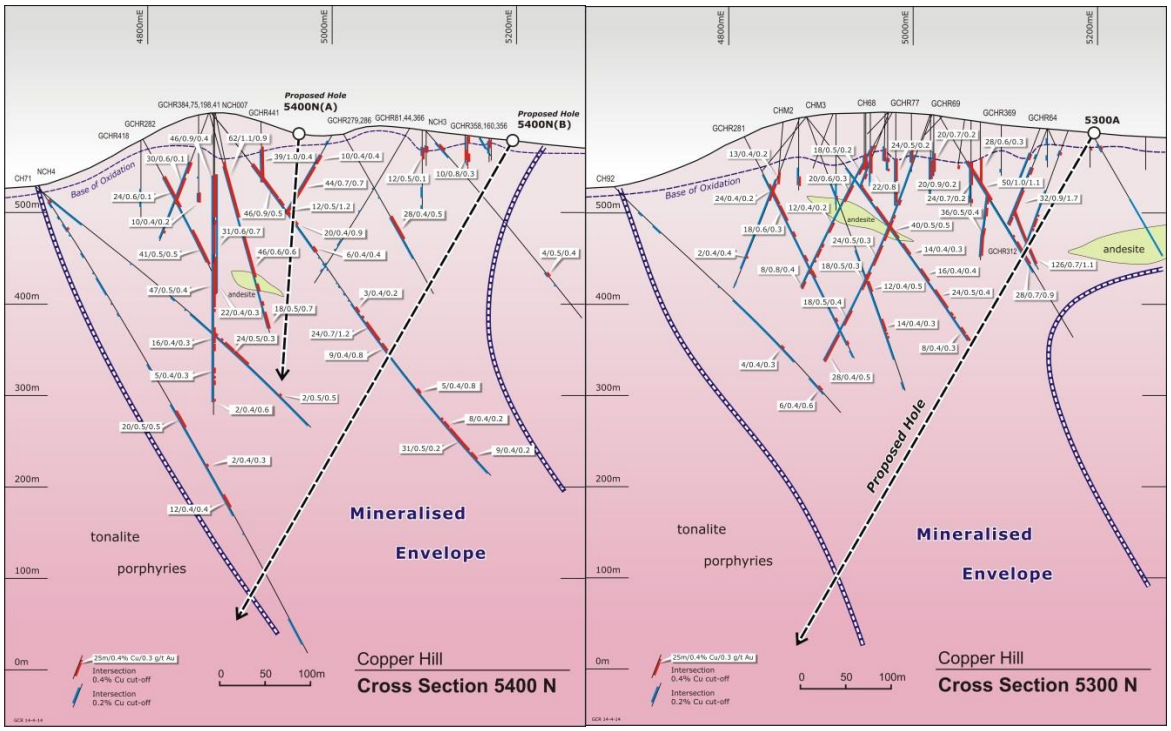
D vein dominated by anhydrite with Mo and late rhodochrosite
GCHR314, 150.2. 0.4% copper, 0.27g/t gold, 3.3g/t silver, 1610ppm molybdenum and 180ppm zinc.

Magmatic hydrothermal breccia comprising K-feldspar alteration including vein-hosted clasts and magnetite altered matrix. Note the 'jig-saw' texture of a typical hydrothermal breccia. GCHR190. 399.7m. 0.65% copper and 0.39 g/t gold.



GCHR190, core interval 406m to 412m. The interval 406m to 410m (grey colour, veined and altered andesitic country rock) returned 0.66% copper and 0.29g/t gold within a 156 metre interval (350m to 506m) carrying grades of 0.37% copper and 0.21g/t gold with no cut-off grade (fully diluted). The interval 410m to 412, a veined, pink, tonalite porphyry, carries 0.27% copper and 0.13g/t gold. GCHR190, from 12m to 506m (494 metres) returned an average copper grade of 0.32% copper. Breccia fragments indicate a mineralised porphyry may also underlie this hole.





Cross-sections 5700N to 5300N showing proposed drill holes to extend the high grade central Copper Hill mineralisation as part of the 5000 metre core drilling program. Enlarge in .pdf.

JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

GCR Copper Hill Project – Planned Drilling Program & Previous Drill Assays

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Reverse Circulation RC 1 metres and 2 metre composite drilling samples were collected via a cyclone and riffle split to ensure representivity. 500g to 1kg samples were bagged in calico bags with numbered sample tags for dispatch to lab. • Core drilling samples using PQ, HQ and NQ-sized core were cut using a diamond saw and half core sent for assay. Broken sections were sampled using best efforts to maintain representative samples. Core losses were recorded and lost core zones given zero grade.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Reverse-Circulation and core drilling (PQ, HQ and NQ) • Core orientation using 'Ace' System
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• RC chip bags weighed and/or visual assessments made of polyweave bag contents. No appreciable variation, indicating significant loss, was logged or noted in the historical records. • Core recoveries at Copper Hill are generally good with better than 95% recoveries logged overall. Core loss given zero grade. • There is no indication or evidence that sample bias occurred
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Logging was carried out at a level commensurate with an advanced exploration program with lithologies, mineralisation, alteration, faults, fractures and other geotechnical aspects noted but not sufficient for mining studies • Logging was both qualitative and quantitative. Half core was retained and all core photographed wet and dry. • Holes listed in Table 1 were logged in detail over their full length.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Core – sawn, half core sent for assay, half core retained • RC chips riffle split. GCHR041 spear sampled. • All necessary steps taken to avoid contamination between RC samples, 1 in 20 samples duplicated for comparative assay.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• All base metal assays tested after crushing to -80#, acid digest and testing by ICP. Pre-2000 analysis by AAS. • All gold assays by 50g Fire Assay • 1 in 25 standards inserted randomly into sample stream and 1 in 20 duplicates • Standard samples prepared by qualified/registered laboratory • All samples tested by ALS Orange with internal checks, matching checks with other ALS labs and annual 'round robin' comparisons with competitor labs. • Acceptable levels of accuracy and precision have been established
Verification of	• *The verification of significant intersections by either*	• No independent verification was carried out

Criteria	JORC Code explanation	Commentary
sampling and assaying	*independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No twinned holes were drilled • Drill logs are hard copy, assays stored as spreadsheets as reported by ALS/SGS then matched to drill hole intervals and stored digitally • No adjustments to assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill hole collar locations by GPS and DGPS, down-hole camera surveys • MGA (GDA) • Topographic control adequate for exploration and Inferred Resource calculations
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Not applicable • Compositing of some RC samples to 2 metre samples was carried out .
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Copper Hill mineralisation is typical of most porphyry-style deposits and is globally homogenous with internal zones comprising higher grade vein systems with variable orientation. Drill azimuths have sufficient variability to ensure bias is unlikely.
Sample security	• *The measures taken to ensure sample security.*	• No specific security measures were taken. The ALS Laboratory is 35 kilometres from Copper Hill and GCR staff transported all samples.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits have been carried out specifically on the sampling techniques and data in this report but procedures followed the techniques set out in a report to GCR by Dr Colin Brooks. Internal QA/QC reviews have been carried out prior to resource estimation studies.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Copper Hill and adjacent deposits are held 100% by GCR under a 33 unit EL 6391 (94.7 square kilometres). • NSW Trade & Investment's Mineral Exploration Assessment Department has granted renewal to 10th March 2016.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Anaconda Australia and Amax were previous explorers. Their work was highly competent using techniques of the time (1960's and early 1970's)
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Porphyry copper-gold

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Drill hole data was reported in GCR's March 2014 Quarterly report.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the*	• Not applicable, except for the use of a 0.4% copper cut-off grade in determining reportable intervals

Criteria	JORC Code explanation	Commentary
	procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Mineralisation in a gross sense is homogenous with irregular breaks due to low grade later intrusions and random barren dykes within a mineralised envelope.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Maps and some sections are included
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Relevant drill hole data has been previously reported in JORC Table 1's since January 2014.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Metallurgical testwork has been carried out, has been previously reported and is not relevant to this report. • Bulk density tests have been conducted • Groundwater testing has been done, has been previously reported and is not relevant to this report. • No deleterious elements have been detected at unacceptable levels
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Planned future work is the continuation of the 5000 metre core drilling program at Copper Hill the subject of this report.

Corporate Directory

Board of Directors

Steve Gemell Chairman
Kim Stanton-Cook Managing Director
Ian Buchhorn Non-Executive Director
Li Xiaoming Non-Executive Director
Suzanne Qiu Non-Executive Director
Jingmin Qian Non-Executive Director
Li Yan Alternate Director for Mr Li Xiaoming.

Company Secretary
Simon Lennon

Exploration Manager
Bret Ferris

Issued Share Capital

Golden Cross Resources Ltd has 1,889 million ordinary shares on issue which are listed on the ASX.

Share Registry
Boardroom Pty Limited
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Sydney NSW 2000

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Fax (61 2) 9279 0664

Registered Office

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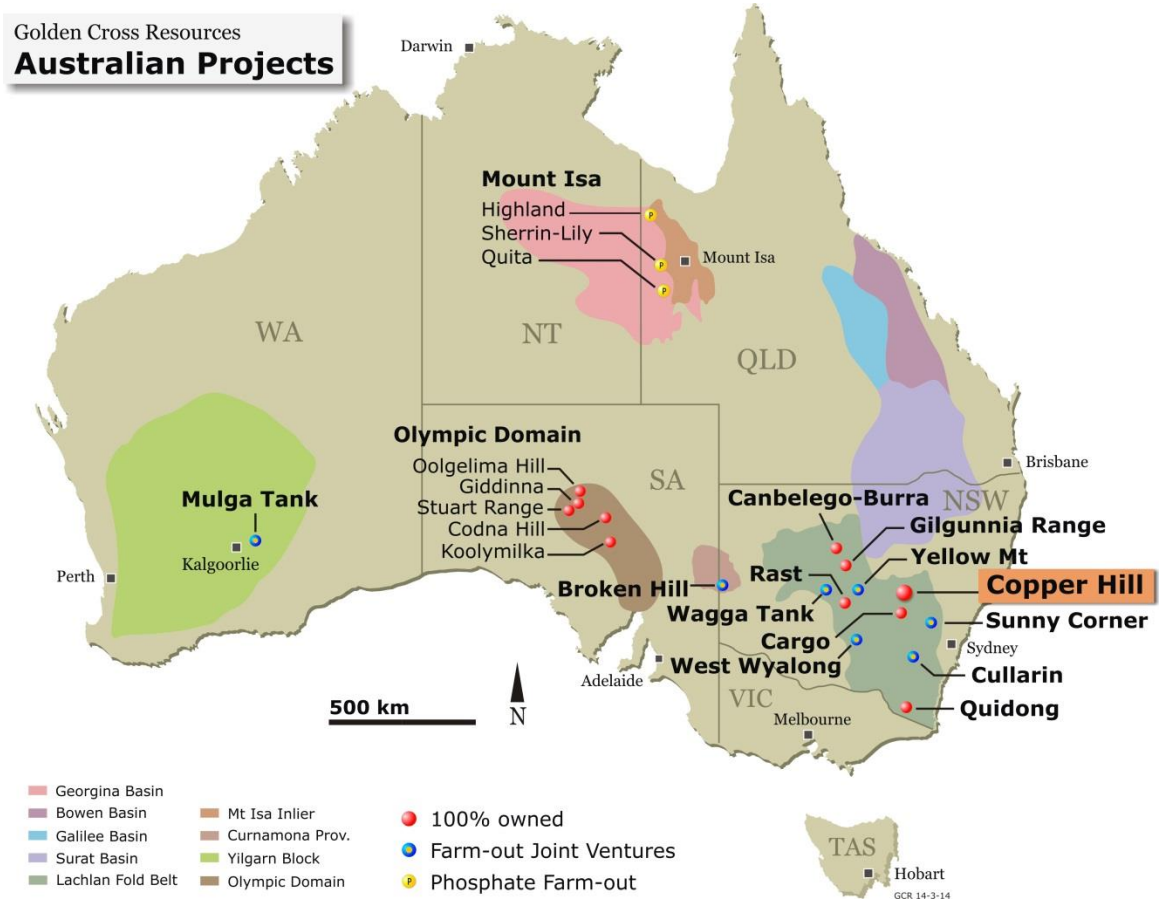
www.goldencross.com.au

Please direct shareholding enquiries to the Share Registry.

About Golden Cross Resources Ltd

Golden Cross Resources (ASX:GCR) is a mineral explorer with a copper-gold focus. GCR has many high quality projects across Australia as well as prospective joint ventures funded and managed by GCR's partners.



GCR's Australian Project Locations

Compliance Statement:

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 styles of mineralisation and types 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.