

## **GOLDEN CROSS RESOURCES LTD**

ABN 65 063 075 178

22 Edgeworth David Ave Hornsby NSW 2077 Phone (02) 9472 3500 Fax (02) 9482 8488

29 July 2014

## **Copper Hill Drilling Update**

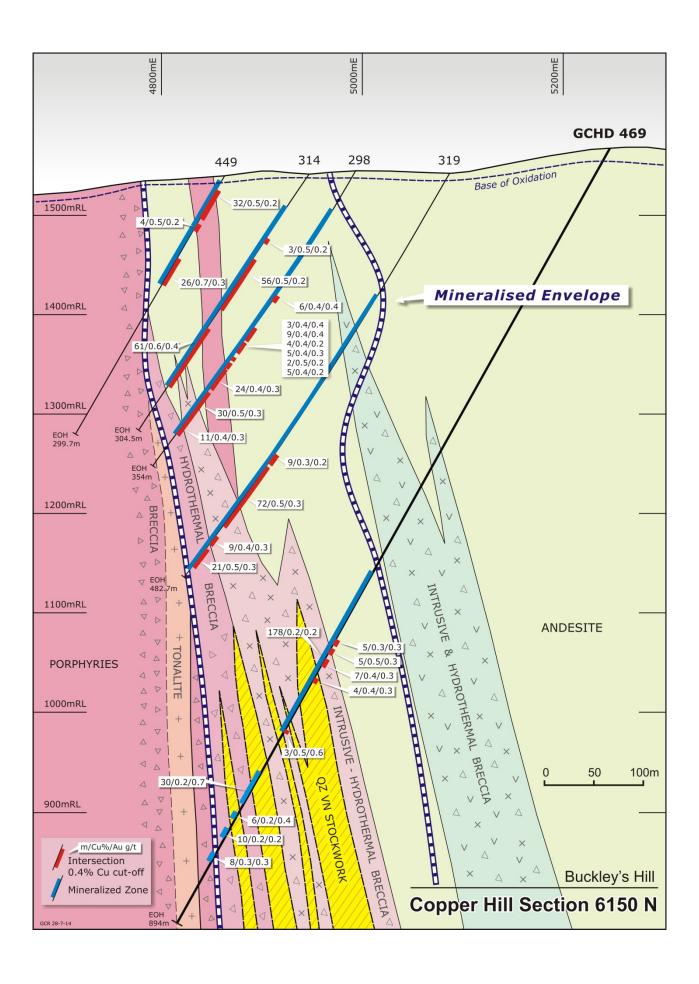
- All assays are now available from GCHD469, the first hole in GCR's current 5000 metre core drilling program
- Intercepts include 178 metres at 0.26% copper and 0.24g/t gold and 30 metres at 0.26% copper and 0.70g/t gold
- Encouraging gold values at depth
- Mineralised breccia fragments indicate deeper porphyry source
- Drill hole GCHD470 at central Copper Hill completed at 366 metres.

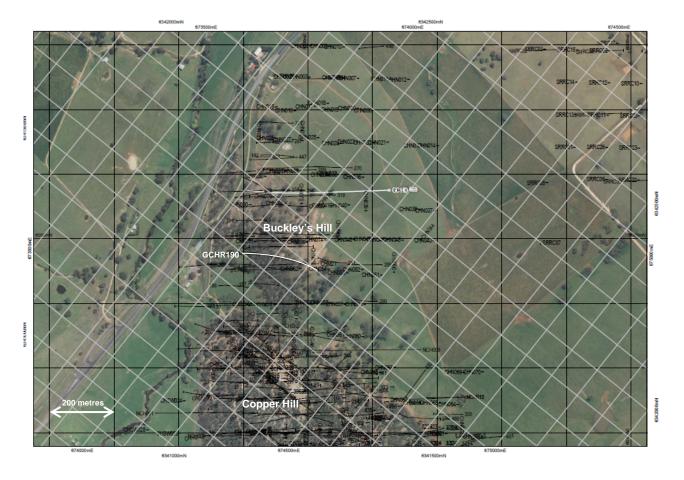
GCHD469 was completed at 894 metres and alteration, zones of brecciation with mineralised breccia clasts, abundant pyrite (potentially gold-bearing) and indications of copper mineralisation continued almost to end-of-hole.

The hole targeted mineralisation at depth beneath Buckley's Hill, 750 metres northwest of Copper Hill. It is the deepest hole ever drilled beneath the Copper Hill system and has provided additional information on the nature of the Copper Hill intrusions at depth. Abundant anhydrite veining, base metal-carbonate veining with pyrite and finely disseminated and veined chalcopyrite were observed from within the mineralised intervals. This porphyry-style mineralisation, along with the additional brecciated quartz-vein stockwork zones and the polymict hydrothermal breccia with higher grade gold zones indicates a porphyry source beneath GCHD469.

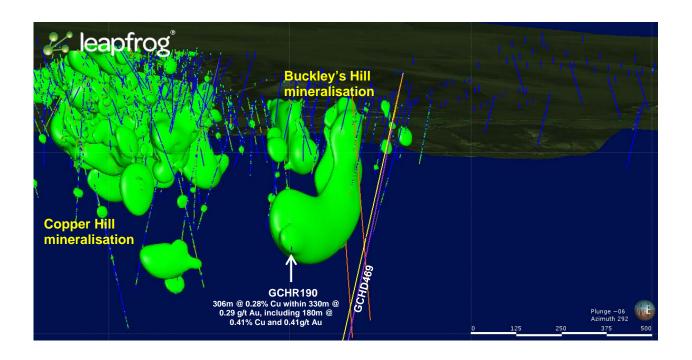
'Target Zone' core sample assays between 480 metres and 894 metres (end-of-hole) have been returned from the ALS laboratory in Orange and results, using a 0.2% copper cut-off grade and maximum internal waste intervals of 10 metres at +0.1% copper, are set out below:

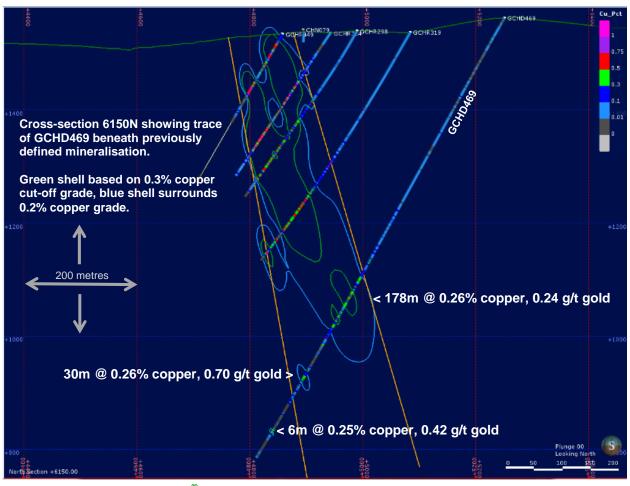
From (m)	To (m)	Interval (m)	Copper %	Gold g/t (ppm)
487	665	178	0.26	0.24
Including, at a 0.4% copper cut-off grade:				
527	530	3	0.45	0.55
555	560	5	0.35	0.29
565	570	5	0.53	0.30
578	585	7	0.41	0.32
602	606	4	0.39	0.30
662	665	3	0.49	0.62
713	743	30	0.26	0.70
754	760	6	0.24	0.42
771	781	10	0.22	0.22
836	844	8	0.35	0.30



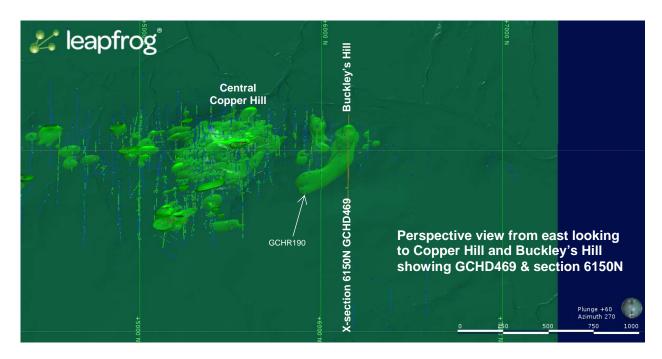


The mineralized sequence intersected in GCHD469 correlates well with the up-dip drill-hole GCHR319 on section 6150N, but with lower copper and higher gold tenor in GCHD469. Mineralisation may continue to the south of GCHD469 in the zone to the north of, and below, previous drill hole GCHR190, and presents a target zone which has not been well tested by either shallow, or deep drilling. This zone is shown in the Leapfrog-generated image below. The view is looking upwards to the northwest, from a viewing point 450 metres below ground.





**Leapfrog Geo**® is a recent software development for geological modelling, allowing rapid creation and testing of alternative geological models.



GCHD470 on cross-section 5600N at Central Copper Hill has been completed at 366 metres with several well-mineralised zones. Assays will be reported over the next few weeks. This five hole program has been designed to test well-mineralised zones defined by historic holes. These will refine geologically-constrained resource models to ensure compliance with JORC-2012 requirements for the next Resource Estimate. In addition,

some Indicated Mineral Resources will be lifted into the Measured Category and some Inferred Mineral Resources into Indicated.

The program will then be reviewed, the budget assessed and the next phase of drilling to further extend Copper Hill's Resources will commence.



GCHD469 cut core: 528 – 529m 0.49% copper 0.66g/t gold, 529m – 530m 0.41% copper 0.43g/t gold, hosted by andesitic country rock with quartz-pyrite-anhydrite veining



GCHD469 cut core: 565m – 570m, 5 metes at 0.53% copper 0.30g/t gold, hosted by andesitic country rock with quartz-pyrite-anhydrite veining, abundant magnetite-chlorite alteration

## JORC Code, 2012 Edition - Table 1 report

Section 1 Sampling Techniques and Data

GCR Copper Hill Project – Buckley's Hill – GCHD469

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul> <li>Core drilling samples using PQ and HQ -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.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>Core drilling ( PQ &amp; HQ )</li> <li>Core orientation using 'Ace' System</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	Core recoveries at Copper Hill are generally excellent. There is no indication or evidence that sample bias occurred
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Logging was carried out at a level commensurate with an advanced exploration/development program with lithologies, mineralisation, alteration, faults, fractures and other geotechnical aspects noted sufficient for mining studies</li> <li>Logging was both qualitative and quantitative. Half core was retained and all core photographed wet and dry.</li> <li>Hole GCHD469 was logged in detail over its full length.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Core – sawn, half core sent for assay, half core retained</li> <li>All necessary steps taken to avoid contamination between samples.</li> <li>Blanks and standards inserted every 20 metres.</li> </ul>
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.	<ul> <li>All base metal assays tested after crushing to -80#, multiple acid digest and testing by ASL method ME-MS61 (48 elements, ultra trace level).</li> <li>All gold assays by 50g Fire Assay, ALS method Au-AA26</li> <li>Standard samples prepared by qualified/registered laboratory</li> <li>All samples tested by ALS Orange with internal checks, matching checks with other ALS labs and annual 'round robin' comparisons with competitor labs.</li> <li>Acceptable levels of accuracy and precision have been established</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>No independent verification was carried out</li> <li>No twinned holes were drilled</li> <li>Drill logs are hard copy, assays stored as spreadsheets as reported by ALS then matched to drill hole interval and stored digitally</li> <li>No adjustments to assay data.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Drill hole collar locations by GPS and DGPS, down-hole Reflex Gyro</li> <li>MGA (GDA)</li> <li>Topographic control adequate for exploration and Inferred Resource calculations</li> </ul>

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Sampled at 2 metre intervals to 400 metres downhole then 1 metre intervals to EOH at 894 metres.</li> <li>No compositing</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Copper Hill – Buckley's Hill are examples of typical 'porphyry-style' mineralisation with mineralisation within porphyritic intrusions and in veins and breccias within the adjacent country rock.</li> <li>GCHD469 was drilled to test extensions, at depth, below previously reported intersections on cross-section 6150N. The orientation of the mineralised zone is based on four higher intersections.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>No specific security measures were taken. The ALS Laboratory is 40 kilometres from Copper Hill and GCR's trained staff prepared and transported all samples.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>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 are made for each new drill hole to consider potential problems and a procedures manual sets out all requirements.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Copper Hill – Molong Project is held 100% by GCR under EL6391 (33 units, 95 square kilometres).</li> <li>NSW Trade &amp; Investment's Mineral Exploration Assessment Department has granted renewal of 33 units (100%) to 10<sup>th</sup> March 2016.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Since 1960's Anaconda, Amax Australia, Le Nickel, Homestake, Cyprus Minerals, Newcrest and MIM Ltd.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Porphyry-style; tonalite-dacite intrusions into andesitic island-arc volcanics with copper-gold in disseminations, sheeted veins, stockworks and breccias</li> </ul>
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	Hole ID Easting Northing mRL Dip Azi(mag) Depth GCHD469 674251 6342033 1,563 -60 218 894.0
Data aggregation methods	<ul> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	0.2% copper cut-off grade in determining reportable intervals with internal dilution of up to 10 metre intervals averaging +0.1% copper
Relationship between mineralisatio n widths and intercept	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	<ul> <li>Mineralised zones are sub-vertical to steeply east dipping in orientation and with a 60 degree inclination the zone has been intersected at 60 degrees and the true width will be approximately 60% of the reported width.</li> </ul>

Criteria	JORC Code explanation	Commentary
lengths	<ul> <li>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').</li> </ul>	
Diagrams	<ul> <li>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.</li> </ul>	Drill sections and figures are included in the report
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>Over I metre intervals: highest copper grade = 0.73% copper, lowest down to background levels ~20ppm, highest gold grade 1.6g/t lowest to 0.01g/t</li> </ul>
	•	
Other substantive exploration data	<ul> <li>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.</li> </ul>	Previously reported
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>This hole is the first in a planned program of 5000 metres of core drilling at Copper Hill. The next five holes will test previously defined zones to support the 2012-JORC requirements for the next Resource Estimate at Copper Hill.</li> </ul>

Compliance Statement. The information in this report that relates to Exploration Results is based on information compiled by Mr. 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.

