



9 July 2014

## **Copper Hill Drilling Update and Burra Copper Mine Drilling Assays**

- Copper Hill: GCHD469, the first hole in GCR's current 5000 metre core drilling program, was completed yesterday at 894 metres. This is the deepest hole yet drilled at Copper Hill. Assays are awaited.
- Burra: Assays for the oxidised zone from Burra core drilling returned.

### **Copper Hill Project:**

GCHD469 is the first hole in a planned 5000 metre core drilling program underway at Copper Hill. The hole was completed at 894 metres and alteration and indications of copper mineralisation continued almost to end-of-hole.

This hole is targeting mineralisation beneath Buckley's Hill, north of Copper Hill. It is the deepest hole ever drilled into the deposit and will provide information on the nature of the Copper Hill intrusions at depth. The hole has been marked by extensive zones of brecciation containing mineralised clasts of porphyritic rocks swept up from a major intrusion beneath the current hole. Abundant anhydrite veining and base metal-carbonate veining with abundant pyrite and some finely disseminated chalcopyrite has been reported by the on-site geologists.

Assays from the country rock up-hole from the target zone have been returned giving background values with occasional anomalous intervals (0.1% to 0.2% copper). 'Target Zone' core samples from 500 metres to 800 metres are at the ALS laboratory in Orange and results will be reported, on receipt, in the coming weeks.

The rig will now move to central Copper Hill to drill GCHD270.

### **Burra Copper Prospect:**

Assay results from the third hole (GCB177) in the Burra program, drilled beneath the old Block 51 mine in May returned an interval of 18 metres (from 20 metres to 38 metres) carrying 0.52% copper, including 8 metres at 0.78% copper.

The remaining core (primary zone) from the hole has been returned to GCR's facility at Coppervale prior to cutting and assaying but is of lower priority than the core being drilled, cut and prepared for assay currently at Copper Hill.

# JORC Code, 2012 Edition – Table 1 report

## Section 1 Sampling Techniques and Data

### GCR Burra Copper Mine Project – Block 51 Drilling Program – Oxide Zone Assays for hole GCB177

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Core drilling samples using 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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>Core drilling ( HQ )</li> <li>Core orientation using 'Ace' System</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Core recoveries at Burra are generally good but some broken, rubbly core was logged in the interval 20 – 26 metres (assaying 0.32% copper). There is no indication or evidence that sample bias occurred</li> </ul>
Logging	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>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</li> <li>Logging was both qualitative and quantitative. Half core was retained and all core photographed wet and dry.</li> <li>Hole GCB177 was logged in detail over their full length.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All base metal assays tested after crushing to -80#, acid digest and testing by ASL method ME-ICP41. <ul style="list-style-type: none"> <li>All gold assays by 50g Fire Assay, ALS method Au-AA26</li> </ul> </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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Drill hole collar locations by GPS and DGPS, down-hole camera surveys</li> <li>MGA (GDA)</li> <li>Topographic control adequate for exploration and Inferred Resource</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Quality and adequacy of topographic control.</li> </ul>	calculations
Data spacing and distribution	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Not applicable</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Block 51 mineralisation is of epigenetic 'vein-type' and has been drilled previously. GCR's geologists are confident the zone has been drilled more-or-less at right angles to the attitude (sub-vertical) of the mineralisation.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>No specific security measures were taken. The ALS Laboratory is 405 kilometres from Canbelego and GCR staff transported all samples.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <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</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary														
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The Burra Copper mine and Block 51 prospect, and adjacent deposits, are held 100% by GCR under a 5 unit EL 7389 (14.4 square kilometres).</li> <li>NSW Trade &amp; Investment's Mineral Exploration Assessment Department has granted renewal to 19<sup>th</sup> August 2015.</li> </ul>														
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Samaust Australia was a previous explorer. Its work was competent using techniques of the time (1960's and 1970's)</li> </ul>														
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Vein-style epigenetic base metal – silver in Cobar Sub-Basin setting</li> </ul>														
Drill hole Information	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>	<table border="1"> <thead> <tr> <th>HoleID</th> <th>Easting</th> <th>Northing</th> <th>RL</th> <th>Dip</th> <th>Azi(mag)</th> <th>Depth</th> </tr> </thead> <tbody> <tr> <td>GCB177</td> <td>438578</td> <td>6501732</td> <td>316.86</td> <td>-60</td> <td>45</td> <td>132.0</td> </tr> </tbody> </table>	HoleID	Easting	Northing	RL	Dip	Azi(mag)	Depth	GCB177	438578	6501732	316.86	-60	45	132.0
HoleID	Easting	Northing	RL	Dip	Azi(mag)	Depth										
GCB177	438578	6501732	316.86	-60	45	132.0										
Data aggregation methods	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Not applicable, except for the use of a 0.2% copper cut-off grade in determining reportable intervals</li> </ul>														
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <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> <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</li> </ul>	<ul style="list-style-type: none"> <li>Mineralisation is sub-vertical in orientation and with a 60 degree inclination the zone will have been intersected at approximately right angles and the reported width of mineralisation will be close to true width.</li> </ul>														

Criteria	JORC Code explanation	Commentary
	length, true width not known’).	
Diagrams	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The reported results are significant only in the sense that the oxide zone may represent the near surface expression of deeper sulphide mineralisation.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <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>	<p>3990</p> <p>3760</p> <p>2760</p> <p>3680</p> <p>2640</p> <p>2900</p> <p>4070</p> <p>3790</p> <p>2130</p> <p>2320</p> <p>9890</p> <p>9690</p> <p>6340</p> <p>5200</p> <p>4070</p> <p>6810</p> <p>13100</p> <p>7450</p> <ul style="list-style-type: none"> <li>The table above shows the grades in parts per million (ppm) for each one metre interval from GCB177 commencing at 20 metres down-hole to 38 metres.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Previously reported</li> </ul>
Further work	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>No further work is planned at this time pending further assays of the primary zone mineralisation.</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.

