



## ASX ANNOUNCEMENT

2 October 2014

### **New Phase of Drilling underway at the Sellheim Gold Project, Queensland**

#### Highlights

- **New phase of drilling has commenced at Sellheim Gold Project to follow-up initial program undertaken Q1, 2014.**
- **Drilling designed to further test copper and gold targets identified in major fault corridor hosting breccia and intrusions.**
- **Project hosted in major gold province with over 20 million ounces mined to date.**
- **Program comprises five holes for approximately 1300 metres of drilling; assays expected November 2014.**

**Silver City Minerals Limited (ASX:SCI)** is pleased to announce that it has commenced drilling at the Company's Sellheim Gold Project in North Queensland. An initial five-hole (1300 metre) program has been specifically designed to test potential gold and copper mineralisation located within a regional fault structure. The focus of the drilling program will be a breccia complex thought to represent the upper portions of a gold and copper-mineralised intrusion.

Previous drilling by SCI in April and May this year encountered gold and copper mineralisation associated with skarn-altered sedimentary rocks and quartz vein-bearing intrusions. Hole 14SH004, drilled to a depth of 537.4 metres, was designed to test a large induced polarisation (IP) anomaly adjacent to an outcropping breccia complex some 450 metres long and 50 metres wide. From 496.9 metres the hole encountered fracture-controlled quartz-magnetite skarn which hosts abundant chalcopyrite and returned an intersection of **11.1 metres at 0.66 g/t gold and 0.28% copper including 2.5 metres at 2.19 g/t gold and 0.6% copper** (ASX Releases 13 May and 19 June 2014).

#### **Sellheim Gold Project Setting**

The Sellheim Gold Project is located 140 kilometres southeast of Charters Towers in North Queensland and forms part of a wider gold province centred on Charters Towers which has historically produced in excess of 20 million ounces of gold. Sellheim is situated close to or within the lower sequence of the Drummond Basin (300 million to 350 million years old) and is intruded by younger granites (250 million to 300 million years old). Both of these geological settings are considered favourable for gold mineralisation in North Queensland (Figure 1).

Silver City believes an intrusion-related (or porphyry) gold model is responsible for the formation of gold mineralisation at Sellheim, drawing analogies from other Queensland deposits such as Mt Leyshon (3.2 million ounces), Kidston (5 million ounces), Mount Wright (1.1 million ounces) and Red Dome (1.3 million ounces).

### **Geological Setting Sellheim**

The breccia complex immediately west of hole 14SH004 represents a north-trending zone of weakness where fractures in a regional structural corridor (fault zone) have allowed mineralising fluids to move within the earth's crust. Tectonic and hydrothermal processes result in the host sedimentary rock being fractured, fragmented and hydrothermally altered. Both tourmaline-quartz and quartz-sericite-gossan alteration types occur within the complex with the quartz-sericite-gossan type predominating. Gossan refers to iron oxides resulting from the weathering of previously abundant sulphide minerals.

The breccia complex displays depletion in principal elements in rock chip samples except where detailed sampling of specific rock components was undertaken. Samples show that gold is hosted in breccia fragments (two samples; 0.25 and 3.96 g/t), cross-cutting quartz-gossan veins (two samples; 1.36 and 0.6 g/t) and in iron-oxide veins (two samples; 1.67 and 0.28 g/t; Figure 2). The general depletion is attributed to extensive weathering and supergene leaching of the once sulphide-rich breccia complex. East of the structure peripheral narrow quartz-gossan veins have returned very high grades (25.0, 12.65 and 9.6 g/t; Figure 2)

Recent geological mapping has also identified a similarly north-trending copper and gold-bearing intrusion (granodiorite) immediately to the north of the breccia complex. At the time of writing SCI had received results for four samples of this rock type. Values returned were; 0.43 ppm, 0.03 ppm, 0.11 ppm and 1.45 ppm gold and 0.37%, 0.03%, 0.23% and 0.46% copper.

The gold and copper-bearing magnetite skarn intersection in hole 14SH004 corresponds to subtle but distinctive magnetic anomaly outlined in an airborne survey conducted in 2006. The breccia complex and the recently identified copper and gold-bearing granodiorite are underlain by a similar anomaly and may suggest more extensive mineralised magnetite at depth (Figure 3).

### **What does this mean for future exploration?**

Geological interpretation suggests the breccia may represent the upper levels of an intrusion-induced hydrothermal alteration zone and that the copper and gold-bearing quartz-magnetite skarn at depth in 14SH004 is proximal to that mineralising intrusion. The current exploration target is the upper, apical portion of this intrusion (possibly a granodiorite) located beneath the breccia. Geological models for this style of deposit indicate that mineralising fluids accumulate in the upper portions of finger-like intrusions and contain gold and copper mineralisation in quartz stockworks, fracture zones, as disseminations or within breccias (Figure 4). SCI drilling will test this concept.

## SILVER CITY MINERALS LIMITED



**Christopher Torrey**  
Managing Director

### **ABOUT Silver City Minerals Limited**

Silver City Minerals Limited (SCI) is a base and precious metal explorer focused on the Broken Hill District of western New South Wales, Australia. It takes its name from the famous Silver City of Broken Hill, home of the world's largest accumulation of silver, lead and zinc; the Broken Hill Deposit. SCI was established in May 2008 and has been exploring the District where it controls Exploration Licences through 100% ownership and various joint venture agreements. It has a portfolio of highly prospective projects with drill-ready targets focused on high grade silver, gold and base-metals, and a pipeline of prospects moving toward the drill assessment stage. The Company continues to seek out quality projects for exploration. It has entered into a Farm-in and Joint Venture Agreement with a private consortium to explore the Sellheim gold project south of Charters Towers and has acquired two tenements to explore for high grade gold and silver in an epithermal system near Rotorua, New Zealand.

### **Competent Person**

The information in this report that relates to Exploration Results is based on information compiled by Christopher Torrey (BSc, MSc, RPGeo.) who is a member of the Australian Institute of Geoscientists. Mr Torrey is the Managing Director, a shareholder and full-time employee of Silver City Minerals Limited. Mr Torrey has sufficient experience relevant to the styles of mineralisation and type of deposits under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Christopher consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

### **CONTACT DETAILS**

#### **Management and Directors**

Bob Besley	Chairman
Chris Torrey	Managing Director
Greg Jones	Non-Executive Director
Ian Plimer	Non-Executive Director
Ian Hume	Non-Executive Director
Yanina Barila	Alternate Director
Ivo Polovineo	Company Secretary
Gordon McLean	Exploration Manager

#### **Registered Office**

Level 1, 80 Chandos Street, St Leonards, NSW  
2065  
PO Box 956, Crows Nest, NSW 1585,  
Australia  
Ph: +61 2 9437 1737  
Fax: +61 2 9906 5233  
Email: [info@silvercityminerals.com.au](mailto:info@silvercityminerals.com.au)  
Web: [www.silvercityminerals.com.au](http://www.silvercityminerals.com.au)

*Note:*

<i>Annexure 1</i>	<i>Diagrams</i>
<i>Annexure 2</i>	<i>JORC Code Table 1</i>

ANNEXURE 1  
Diagrams

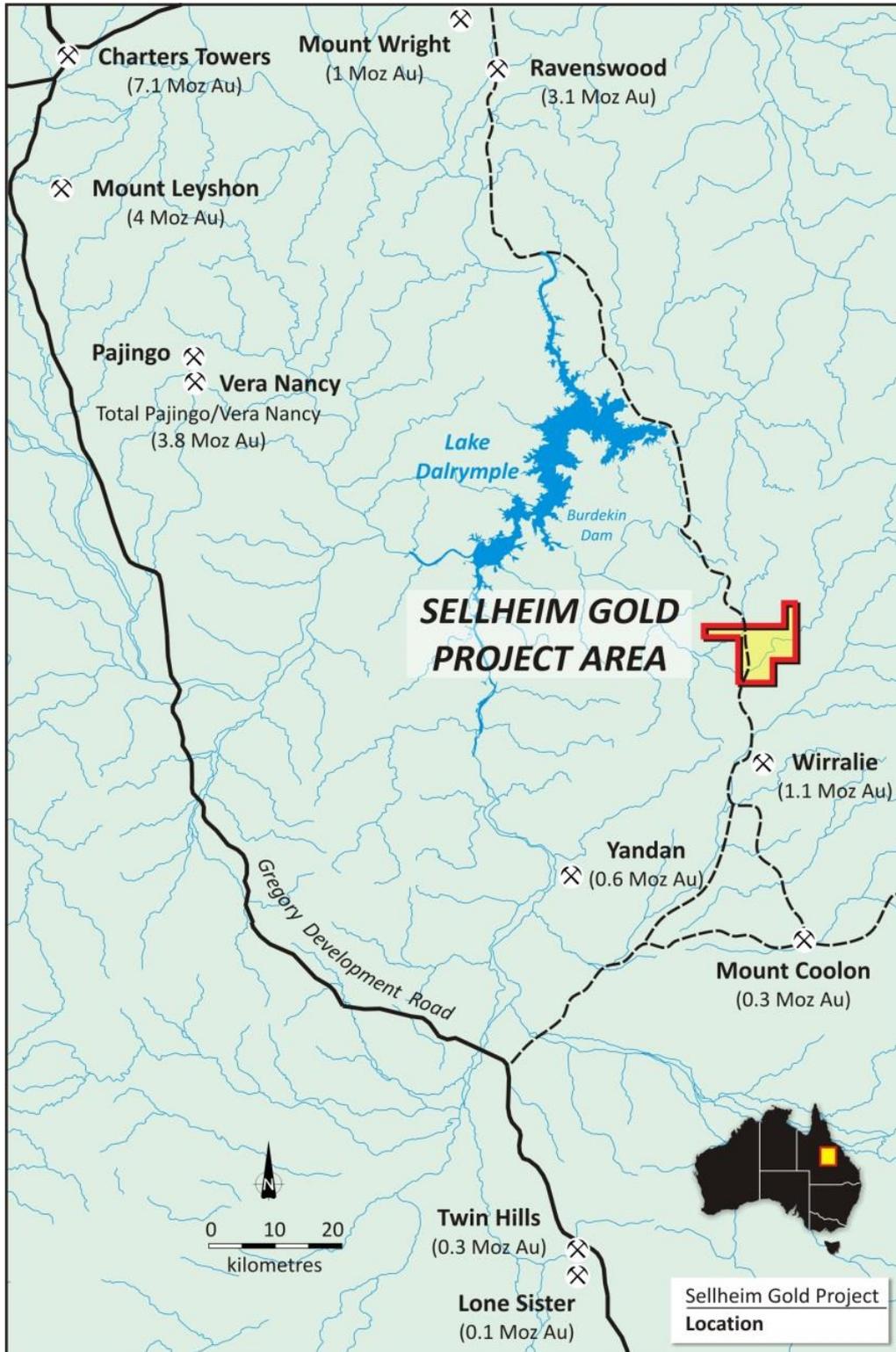


Figure 1. Location of the Sellheim Gold Project.

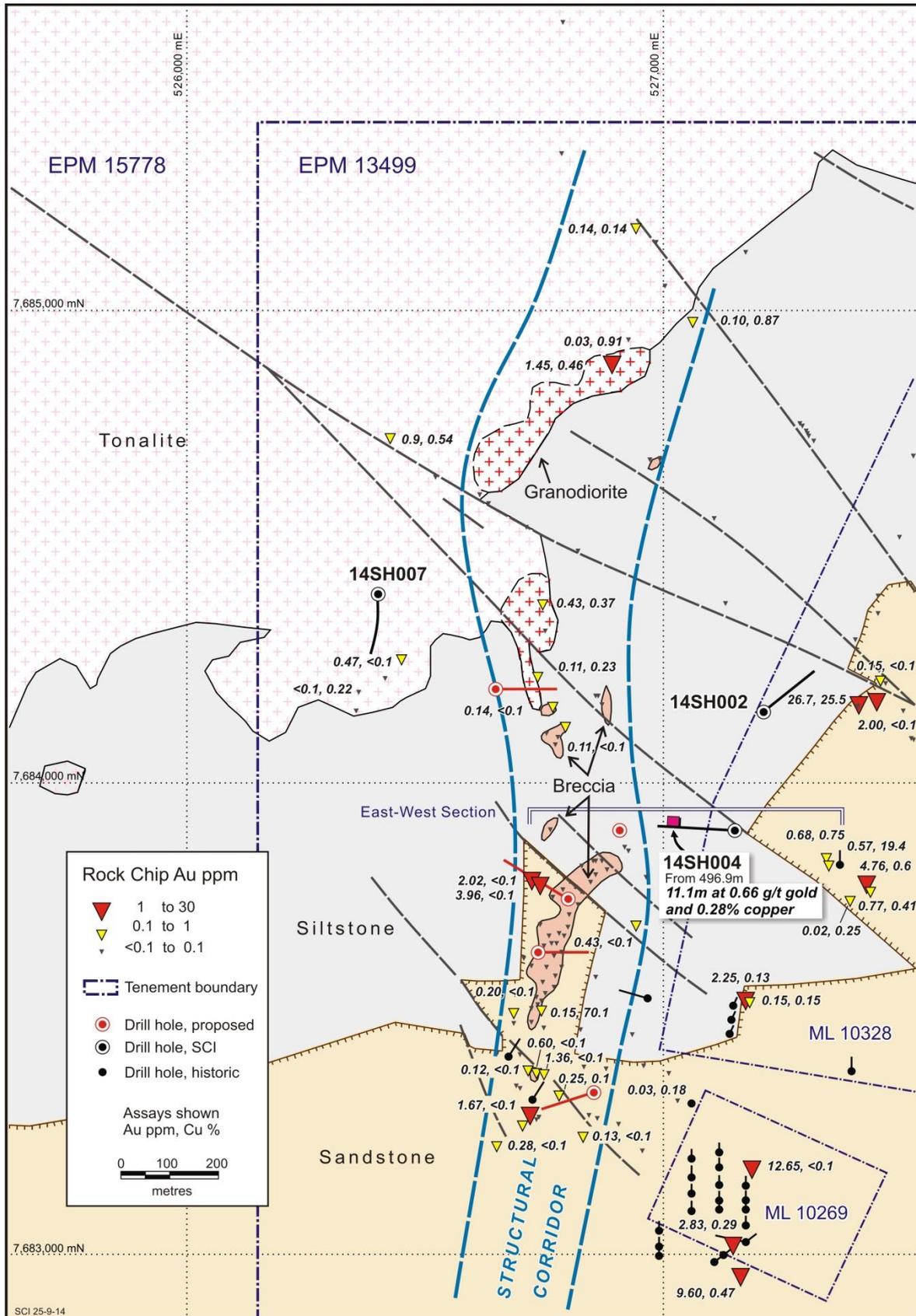


Figure 2. Local geology showing the regional structural corridor within which lie the generally north-trending breccia complex and the copper-bearing granodiorite intrusion. All SCI rock chip samples are shown. Assay values are shown for samples with greater than or equal to 0.1 g/t gold or 0.1% copper. Proposed holes are shown in red.

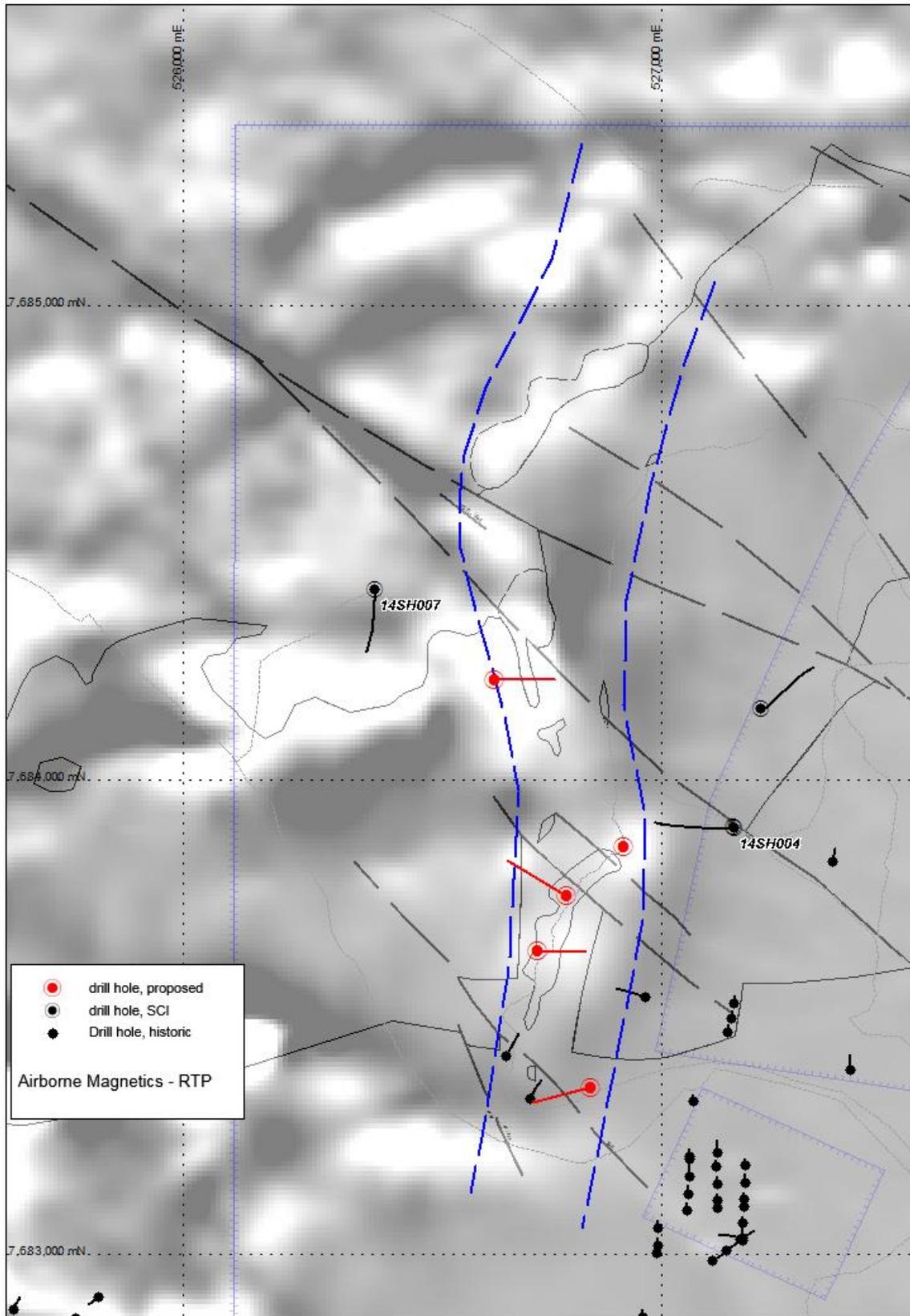


Figure 3. Local geological components superimposed on a reduced-to-pole magnetic image. White areas represent zones of high magnetic susceptibility. Note that both the copper-bearing granodiorite and the breccia complex are underlain by magnetic highs

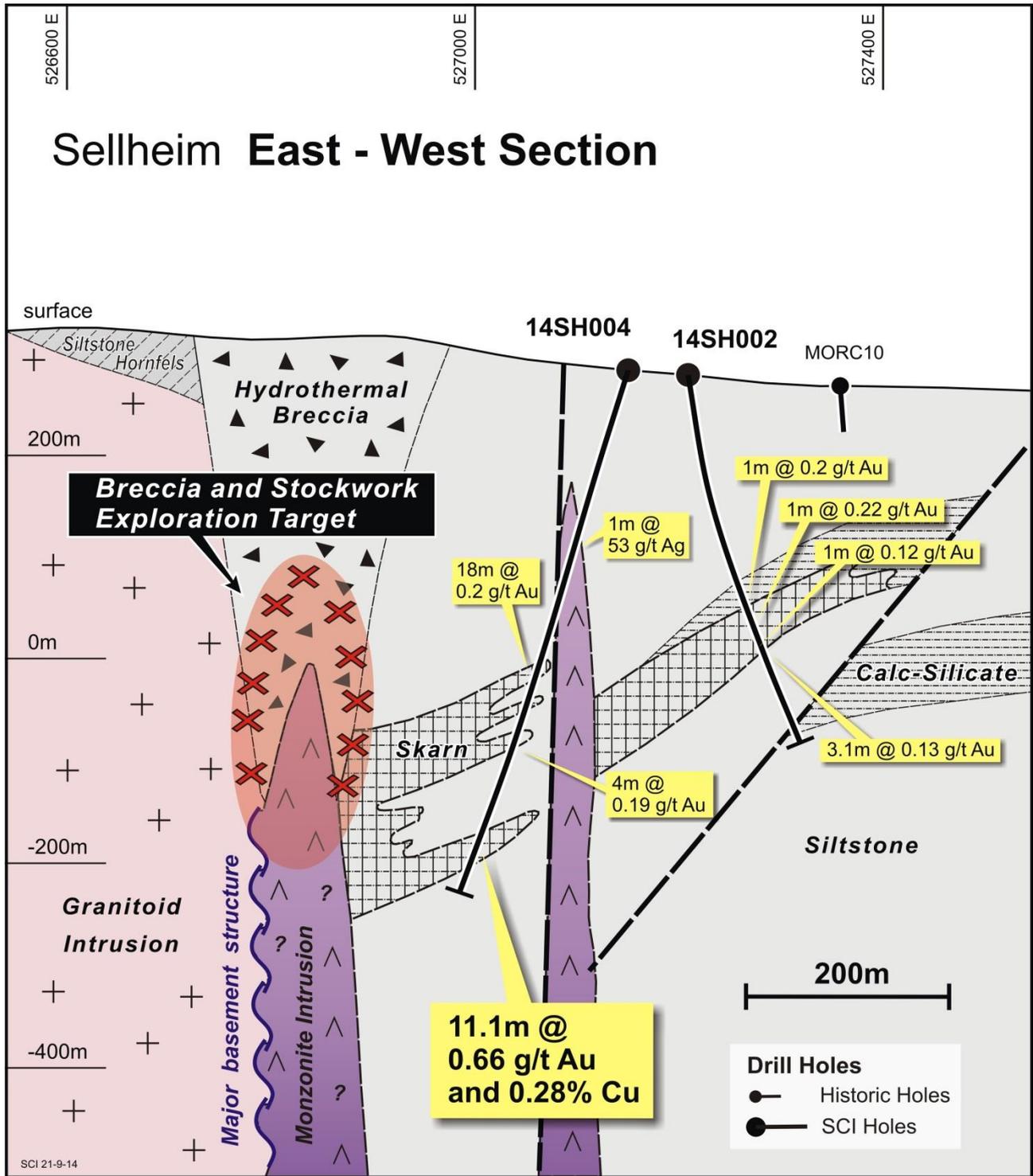


Figure 4. Schematic cross-section (approximate location shown in Figure 2) which shows a geological interpretation based on available outcrop, drill core and rock samples. The target for the upcoming drill program is the apical part of a mineralised intrusion hidden beneath the breccia.

## JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<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> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Rock chip samples collected as both random chips and selected samples depending on location. Nominal sample size is 2kg.</li> <li>Rock chips are highly variable with some samples considered to be representative of the outcrop sampled whereas others were specifically sampled based on geological components in order to ascertain which rock types or components host gold and copper mineralisation. To this end both outcrop and float samples were assessed.</li> <li>Mineralisation in this Public Report has been determined by specific sampling methods in order to gain an understanding on host rocks to mineralisation. Grades should not be considered representative of the rock package as a whole.</li> </ul>
<b>Drilling techniques</b>	<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>No new drilling or drill results are included in this report.</li> </ul>
<b>Drill sample recovery</b>	<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>No new drilling or drill results are included in this report.</li> </ul>
<b>Logging</b>	<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>No new drilling or drill results are included in this report..</li> </ul>
<b>Sub-sampling techniques and sample</b>	<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</li> </ul>	<ul style="list-style-type: none"> <li>No drilling reported.</li> <li>Sampling and subsampling techniques for rocks are considered appropriate for the reconnaissance surveys outlined.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>preparation</b>	<p><i>sample preparation technique.</i></p> <ul style="list-style-type: none"> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No specific quality control measures were undertaken. The analytical laboratory has a quality control assessment in place for analytical work.</li> <li>• No measures were taken to ensure representativeness of rock samples.</li> <li>• Sample sizes are considered appropriate.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Rock samples were prepared using PUL-31; pulverise a split up to 250 gram to 85% passing 75 microns. Gold analyses by method AA26; 50 gram charge fire assay with AA finish. All other elements ME-ICP41 (<a href="http://www.alsglobal.com">www.alsglobal.com</a>).</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No new drilling or drill results are included in this report.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Geochemical sample locations (GDA94 MGA Zone 55) were determined by handheld GPS with an accuracy of +/- 3 metres which is considered an appropriate level of accuracy for regional, early stage target assessments.</li> <li>• Topographic control used is Shuttle Radar Topography Mission (SRTM) data. Individual points are verified by hand held GPS. This is considered sufficient for an early geochemical assessment.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Rock samples reported here are not appropriate for use in Mineral Resource nor Ore Reserve estimates.</li> <li>• Sample compositing has not been undertaken.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No orientation-bias sampling has been identified.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Bagged samples were transported directly to the laboratory by company personnel.</li> </ul>
<b>Audits or reviews</b>	<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 or reviews have been undertaken.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<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>Rock chip sampling has been undertaken on active mining leases (ML 10238 and ML 10269) and within EPM 13499 under a farm-in and joint venture agreement with the owners (ASX Release 30 July 2013). A 1.5% NSR to a third party is attached to the MLs and a 0.5% NSR to the EPM. These are not subject the Native Title. An access agreement with the current landowner is in place.</li> <li>No impediments to operate are known.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration work has been undertaken previously and is considered to be of poor quality with surface geochemical sampling insufficient to test geological features outlined by the Company. Previously reported (ASX Release 30 July 2013)</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Intrusion-related gold deposit</li> </ul>
<b>Drill hole Information</b>	<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>	<ul style="list-style-type: none"> <li>No new drilling or drill results are included in this report.</li> </ul>
<b>Data aggregation methods</b>	<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>No weighted averages are reported</li> <li>No upper cut has been incorporated.</li> <li>No nominal cutoff grade is reported</li> <li>No metal equivalent has been reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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’).</i></li> </ul>	<ul style="list-style-type: none"> <li>• No new drilling or drill results are included in this report.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• See Annexure 1</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Figure 2, Annexure 1 shows copper and gold results for all samples containing copper or gold with greater than or equal to 0.1% copper or 0.1g/t gold. All samples for the map area are shown.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• In addition to the work described in this report SCI undertook a soil sampling survey over the area of interest described in this report. 365 soil samples were assayed for a multi-element suite and results were used in the geological interpretation presented in this report. They are not reported here in detail as results have already been incorporated the existing interpretation and the material focus of this report is the drilling which is about to commence.</li> <li>• The geophysical survey presented here was acquired by a previous explorer using a helicopter on 50 metres spaced traverses.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Work is at an early stage. Drilling, surface geochemical sampling geological assessment will continue.</li> <li>• See Annexure 1 for areas of proposed future drilling.</li> </ul>