

# SILVER CITY MINERALS LIMITED

# ASX ANNOUNCEMENT

13 November 2014

## Silver City Exploration Update

#### **Key Points**

- The Company plans to commence a detailed electromagnetic survey over the Razorback West project near Broken Hill in order to define targets for follow-up drilling.
- Rotary air blast (RAB) geochemical surveys have commenced at the Company's Balaclava, Acacia Vale and Parnell projects near Broken Hill.
- The Company has tested a range of intrusion-related gold targets at its Sellheim project in North Queensland. The work has outlined a large mineral system with extensive zones of hydrothermal alteration and a number of gold and copper intersections. Results however have failed to meet expectations of a large well mineralised copper-gold system. As a consequence the board has decided to withdraw from the farm-in and joint venture agreement.
- > The Company has approximately \$3 million in cash and in the current investment climate will be highly selective in the use of these funds.

**Silver City Minerals Limited (ASX:SCI)** is pleased to provide an update on recent exploration activities from projects in Broken Hill and north Queensland.

#### Broken Hill

Exploration at Broken Hill has, to date, focussed on the discovery of near-surface deposits minable via open pit methods. SCI is close to completing a comprehensive study of its tenement package at Broken Hill with the view to targeting larger, potentially deeper, deposits (Figure 1). The study has focussed on favourable rock sequences, areas of strong bedrock and soil geochemistry and responsive geophysics.

In addition to this study SCI utilised a state-of-the-art electromagnetic survey (Versatile time domain electromagnetic; VTEM) and to the north of Broken Hill at Razorback West, an off-set poledipole induced polarisation (IP) survey. Both are designed to look beneath regolith and bedrock cover for sulphide-enriched bodies at depth. To date the work has outlined a number of prospective zones for immediate follow-up.

#### Razorback West

This project is considered to host the northern extension of the Broken Hill "line-of-lode", offset by a fault known as the Stephens Creek Shear Zone (Figure 2). It is buried beneath a veneer of alluvium and soil in a valley with little more than 10% outcropping rock. The Company has outlined a coincident geochemical, gravity and IP anomaly over 5 kilometres long and 1 kilometre wide. Drilling to date has returned anomalous lead and zinc and has confirmed a favourable rock sequence. In order to further define massive sulphide drill targets within the favourable corridor the Company will conduct ground electromagnetic (EM) surveys and gravity profiling. Work is anticipated to start in late November.

#### VTEM Anomalies

This week the Company commenced initial testing of VTEM anomalies at Acacia Vale and Parnell with a program of shallow RAB drilling to assess geochemistry and rock types beneath alluvial cover

#### Balaclava

Like Razorback West in the north, Balaclava is thought to be located within the southern extension of the Broken Hill "line-of-lode" corridor. Geological targets have been identified in the current study and RAB drilling of these has commenced.



Figure 1. Silver City tenements and projects, Broken Hill.



**Figure 2.** Left hand diagram shows the existing RAB and IP anomalies in relation to the Broken Hill deposits. This, the Razorback West area, is considered to represent the northern extension of the Broken Hill lode corridor, offset to the west by the Stephens Creek Shear Zone. The diagram to the right shows the coincident nature of the IP and gravity anomalies. The new EM survey will cover anomalies extending from those labelled 1 to 4.

#### Sellheim

SCI has been drilling a number of gold-copper targets at its Sellheim Project in North Queensland. The initial drill program, completed in May this year showed that gold and copper mineralisation is hosted in skarn-altered sediments and quartz veins within adjacent intrusive rocks.

A second program completed early in October this year focused on a major north-trending fault structure which hosts gossanous breccias and intrusions with disseminated gold and copper mineralisation. Five reverse circulation holes were completed for a total of 1,266 metres of drilling.

#### Geology

The rock package intersected in the recent drilling includes fine grained siltstone and minor coarser sediments that have been intruded by several types of igneous rock, including tonalite and diorite. The sediments tend to be weakly altered in the vicinity on the intrusions, whereas the intrusions typically carry significant alteration assemblages such as quartz-sericite potassium feldspar-epidote-quartz and actinolite-magnetite-chlorite.

#### Results

Drilling returned two narrow gold intersections within the sedimentary rocks.

- > Hole 14SH008: 3 metres at 1.89 g/t gold from 108 metres.
- > Hole 14SH010: 3 metres at 2.17 g/t gold from 171 metres.

#### Discussion

While the exploration work to date has outlined a large, hydrothermally altered mineral system, results have given insufficient encouragement to continue the project. The Company has withdrawn from the farm-in and Joint Venture agreement.

Note:

Annexure 1Table 1 Drill hole specifications.Annexure 2DiagramsAnnexure 3JORC Code Table 1

#### SILVER CITY MINERALS LIMITED

Christopher Torrey Managing Director

#### **Competent Person**

The information in this report that relates to Exploration Results is based on information compiled by Chris 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 which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a "Competent Person" as defined by the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Torrey consents to the inclusion in this Report of the matters based on this information in the form and context in which it appears.

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

Silver City Minerals Limited (SCI) is a base and precious metal explorer with a strong focus 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 and development. It has been granted tenements in New Zealand to explore for epithermal gold deposits.

#### **CONTACT DETAILS**

#### **Management and Directors**

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

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#### ANNEXURE 1 Drilling

Table 1 Drill Hole Specifications

Hole Number	Easting (metres)	Northing (metres)	Elevation (metres)	Azimuth (degrees)	Declination at Collar (degrees)	RC (metres)	Total Depth (metres)
14SH008	526848	7683351	292	255	-75.0	168	168
14SH009	526740	7683637	352	92	-80.0	270	270
14SH010	526795	7683745	347	290	-60.0	276	276
14SH011	526922	7683851	329	90	-85.0	276	276
14SH012	526651	7684206	329	93	-60.0	276	276

#### ANNEXURE 2 Diagrams



Figure 1. Location of drill holes, Sellheim

# JORC Code, 2012 Edition – Table 1

## **Section 1 Sampling Techniques and Data**

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> <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> <li>RC holes were drilled. 1 metre intervals were collected in plastic bags from the rig cyclone by the drilling contractor. A cyclone splitter enabled 25% collection of a sub-sample. The subsample was collected in a bucket for three contiguous metres then passed through stand-alone riffle splitter to obtain a sample for the laboratory. Nominal sample weight was 3kg. A small sample of each 1 metre interval was collected in industry-standard chip trays for future reference.</li> <li>This sampling regime is considered to be representative at this early stage of investigation.</li> <li>No XRF measurement tools were used.</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>Reverse circulation drilling used an industry standard face-sampling hammer bit 139.7mm in diameter.</li> <li>Downhole surveys were completed approximately every 30 metres using a Reflex survey tool supplied and operated by the drilling contractor</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>	<ul> <li>RC chip were weighed at the drill site and variability noted.</li> <li>No relationship between grade and recovery is observed.</li> </ul>
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>Representative RC chips were geologically logged for each metres drilled to industry standard.</li> <li>All logging is qualitative and of sufficient detail to support future Mineral Resource estimation, mining and metallurgical studies.</li> <li>100% of drilled material was logged for a total of 1,266 metres.</li> <li>Magnetic susceptibilities were measured for each 1 metre sample.</li> </ul>
Sub-sampling techniques and	<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</li> </ul>	• 1 metre intervals were collected in plastic bags from the rig cyclone by the drilling contractor. A cyclone splitter enabled 25% collection

Criteria	JORC Code explanation	Commentary
sample preparation	<ul> <li>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>of a sub-sample. The subsample was collected in a bucket for three contiguous metres then passed through stand-alone riffle splitter to obtain a sample for the laboratory. Nominal sample weight was 3kg. A small sample of each 1 metre interval was collected in industry-standard chip trays for future reference</li> <li>The above techniques are considered to be of high quality, producing representative subsamples and are appropriate for the nature of mineralisation anticipated. The sample size is appropriate to the rock being sampled.</li> <li>The majority of the RC samples were dry and wet samples were recorded.</li> </ul>
Quality of assay data and laboratory tests	<ul> <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> <li>Preparation was by ALS method PUL-23 whereby the sample was crushed to 70% nominal 6mm, then was riffle-split to a maximum of 3kg then pulverized to 85% passing 75 microns</li> <li>Gold analysis was by ALS method Au-AA25 whereby a nominal 30g charge of the prepared sample is assayed by fire assay and atomic absorption spectrometry.</li> <li>Multi-element analysis by ALS method ME-ICP41 (www.alsglobal.com) for 35 elements.</li> <li>The nature and quality of the analytical methods are appropriate to style of mineralisation anticipated and are of industry standard.</li> <li>No handheld analytical tools used.</li> <li>A duplicate sample was collected and a certified standard inserted into the sample sequence nominally every 40<sup>th</sup> composite sample.</li> <li>No significant analytical deviation from standards or duplicates has been encountered.</li> <li>The laboratory also has its own QAQC of systematic standard, repeats and duplicates.</li> <li>No external laboratory checks are appropriate at this early stage of assessment.</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>Verification of intersections has been undertaken by alternative company personnel.</li> <li>Twinning not appropriate at this time</li> <li>All logged data including sample intervals and numbers were recorded manually then entered into an onsite digital data system or entered directly, then backed up.</li> <li>No adjustments have been made.</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 collar 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</li> </ul>

Criteria	JORC Code explanation	Commentary
		is considered sufficient for an early drill assessment.
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>Sufficient numbers of samples have been collected from the drill holes to give a representative geochemical response for the entire hole and serve the purpose of initial investigation. The sample spacing and distribution downhole would be sufficient for future Mineral Resource and Ore Reserve estimation.</li> <li>Should results prove encouraging more detailed sampling may be warranted.</li> <li>Three metre downhole composites have been assayed in this program.</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>Drill hole orientation has been optimized to test the centre both geological and geophysical targets. Effort was made to intersect targets perpendicular to their strike.</li> <li>No orientation-bias has been identified.</li> </ul>
Sample security	The measures taken to ensure sample security.	• Bagged samples were transported directly to the laboratory by company personnel.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been undertaken.

## **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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>All drilling has been undertaken within EPM 13499 under a farm-in and joint venture agreement with the owners (ASX Release 30 July 2013). A 0.5% NSR royalty is attached to the EPM. Areas being drilled 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>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Exploration work has been undertaken previously and is considered to be of poor quality with drilling insufficient to test targets outlined by the Company. Previously reported (ASX Release 30 July 2013)</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	Intrusion-related gold deposit
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> </ul> </li> </ul>	<ul> <li>See Annexure 1.</li> <li>Detailed analytical data is largely excluded from this report on the basis that grades of economic elements are low except for those reported in this document.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>hole length.</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>	
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>	<ul> <li>Industry standard weight-averaging techniques have been used to present data in this report.</li> <li>No upper cut has been incorporated.</li> <li>No nominal cutoff grades have been used.</li> <li>No short lengths of high grade have been aggregated</li> <li>No metal equivalent has been reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<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> <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>	<ul> <li>The relationship between mineralisation intercepts and intercept lengths is unknown.</li> <li>Only downhole lengths are reported, true widths are unknown.</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>	See Annexure 2
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>Assay reported here for holes 14SH008 and 010 are from individual three metre samples. The range of copper values reported in hole 14SH012 are from 38 to 1495 ppm and reporting of copper in this hole is designed to highlight anomalism in a specific rock type.</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>	All available information of significance has been included in this or previous reports.
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>Work is at an early stage. Drilling and geological assessment will continue.</li> <li>Future drill planning is ongoing.</li> </ul>