

# SILVER CITY MINERALS LIMITED

# ASX ANNOUNCEMENT

30 November 2016

# Silver City commences drilling at Wilga Downs copper-gold project, near Cobar, New South Wales

- Initial hole at Wilga Downs has commenced with previous drilling in the area encountering anomalous copper, lead and zinc mineralisation.
- > Three holes completed at Razorback West Project, north of Broken Hill.
- Geophysical surveys identify new conductors at Balaclava, south of Broken Hill.

Silver City Minerals Limited (ASX: SCI) ("Silver City" or "the Company") is pleased to announce that it has commenced drilling at Wilga Downs. Drilling will test coincident geophysical anomalies which might represent copper sulphide mineralisation at depth.

Previous drill holes in the area have encountered anomalous copper, lead and zinc mineralisation. Importantly, this mineralisation is hosted in a mafic volcanic rock similar to that which is associated with copper-gold ore bodies at the Tritton mine located 80 kilometres to the southeast (Figure 1).

The project, located 80 kilometres northeast of Cobar, is part of a farm-in and joint venture agreement with Thomson Resources Ltd (ASX:TMZ).

At Broken Hill, SCI has completed three diamond drill holes for a total of 939.4 metres to test a variety of targets at the Razorback West project and a ground electromagnetic (EM) survey at Balaclava south of Broken Hill.

# Broken Hill

# Drilling at Razorback West

The Razorback West corridor is considered by the Company to be the northern extension of the Broken Hill "line-of-lode", offset by a fault known as the Stephens Creek Shear. The corridor extends for 12 kilometres, is approximately three kilometres wide and is mostly buried beneath a veneer of alluvium and soil in a valley with little more than 10-15% outcropping rock (Figure 2).

The Company outlined a coincident lead-zinc-manganese geochemical, gravity and IP anomalies in the southern part of the corridor. This target zone is over five kilometres long and one kilometre wide. SCI initiated the first ever drilling in 2012 and to date has completed 18 holes. Drill holes

returned anomalous lead, zinc and manganese, and confirmed the presence of the favourable host-rock sequence for Broken Hill type zinc-lead-silver mineralisation.

In order to focus on more significant accumulations of sulphide of the Broken Hill type, the Company undertook both moving loop and fixed loop electromagnetic (EM) surveys. A number of subtle EM conductors were identified.

In the recently completed program, two holes (16RB019 and 16RB021) were designed to test coincident EM conductors and geochemical anomalies. Hole 16RB020 tested beneath lead-zinc mineralisation previously encountered in shallow RC holes. The program will be partly funded by a NSW government grant under the Co-operative Drilling Initiative (Round 2).

# Discussion

Preliminary interpretation of holes 16RB019 and 021 suggest that the EM conductivity is responding to small concentrations of pyrrhotite (iron sulphide) and chalcopyrite (copper sulphide). Minor lead and zinc sulphides were also observed. The metasedimentary rock packages have been tentatively identified as the Freyers Metasediments and the Parnell Formation. The most prospective unit; the Hores Gneiss was not encountered and is interpreted to lie further to the west under alluvial cover.

Hole 16RB020 was designed to test beneath mineralisation encountered in RC holes drilled in 2012; and specifically to test the important part of the rock sequence for the presence of the prospective Hores Gneiss. A zone of disseminated lead and zinc sulphides was identified between 166 to 185 metres.

Tentative geological interpretation of the host metasedimentary package suggests the hole was drilled within the Freyers Metasediments. Like holes 019 and 021, hole 020 suggests the prospective Hores Gneiss horizon lies further westward under alluvial cover.

Samples of core have been despatched for analyses. Results are likely to be received in late December. A detailed evaluation of the data will be completed and reported on receipt of analytical data. Drill hole specifications are outlined below.

Drill Hole	MGA East (m)	MGA North (m)	Elevation (m)	Declination (degrees)	Azimuth (degrees)	Total Depth (m)
16RB019	555150.1	6477949	234.3	-62.5	130	297.9
16RB020	554204.8	6476890	247.3	-60	130	308.0
16RB021	554899.6	6477765	244.4	-57.5	128.5	333.5

# EM Survey at Balaclava

SCI recently completed both moving loop and fixed loop EM surveys over a zone considered to be prospective for Broken Hill type mineralisation. A number of conductors were identified and require ground follow-up. One in particular suggests a shallow, but strong conductor in the northeastern part of the survey area which is coincident with narrow zones of Broken Hill type lode rocks. Further ground checking is required, with the view to drill testing this new anomaly.

# **Reports Relevant to this announcement**

ASX Releases: 3 November 2016, 3 November 2016, 7 September 2016, 19 August 2016. Quarterly Reports: September and June 2016

### 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 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.

#### Caution Regarding Forward Looking Information.

This document contains forward looking statements concerning Silver City Minerals Limited. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes. Forward looking statements in this document are based on Silver City's beliefs, opinions and estimates of Silver City Minerals as of the dates the forward looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future development.

#### **Competent Persons**

The information in this report that relates to Exploration Results is based on information compiled by Chris Torrey (BSc, MSc, RPGeo Mineral Exploration) 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.

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# 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> </ul>	<ul> <li>Diamond core drilling from surface. Half core sampling at nominal 1m intervals chosen visually No hand held instrumentation.</li> </ul>
	<ul> <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>Certified industry standards were inserted nominally every 40<sup>th</sup> sample</li> </ul>
	<ul> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul> <li>Visual determination only as assays are pending</li> </ul>
	<ul> <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>Sampling for base metals is guided by visual record of mineral sulphides in the hole</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>Diamond drilling of both HQ and NQ diameter core. Both triple and normal tube techniques were used.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul> <li>Industry standard recovery measurements used. Core recoveries 98 to 100%</li> </ul>
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	Core drilling, no recovery issues.
	<ul> <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>Unknown relationship as sample assays are not yet available</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> </ul>	<ul> <li>Detail geotechnical, structural and geological log were compiled and would be appropriate for Mineral Resource Estimation, mining studies and metallurgy. Downhole orientation measurements were taken and magnetic susceptibility was measured for the entire hole.</li> </ul>
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	Qualitative logging. All core was photographed.
	I ne total length and percentage of the relevant intersections logged.	100% of 939.4 metres of core was logged
Sub- sampling	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	<ul> <li>Core cut with a diamond saw. Half core submitted for analyses. Nominal 1m</li> </ul>

Criteria	JORC Code explanation	Commentary
techniques and sample preparation		intervals
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling 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>If non-core, whether riffled, tube sampled,</li> </ul>	<ul> <li>The size of the sample is appropriate to the grain size.</li> <li>The sample preparation is appropriate to the sample require for base metal assessment.</li> <li>Half core was sampled and bagged. Chosen core represents rocks visually selected for assessment.</li> <li>No field duplicates or second half core utilized at this early stage of evaluation.</li> <li>core</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>rotary split, etc and whether sampled wet or dry.</li> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	Assays pending
	• 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.	No geophysical tools used
	<ul> <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>Certified industry standards were inserted nominally every 40<sup>th</sup> sample</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	Assays pending
	<ul><li>The use of twinned holes.</li><li>Documentation of primary data, data entry</li></ul>	<ul> <li>Not appropriate at this early stage of assessment</li> <li>All data was recorded directly into</li> </ul>
	<ul> <li>procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul><li>computerized logging system. Backup protocols in place</li><li>No adjustments made</li></ul>
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.	Collars determined Hand held GPS (± 5 metres accuracy) considered appropriate for early stage reporting and Mineral Resource estimation. Downhole survey were undertaken nominally every 30m. using single shot Eastman Camera. Similarly considered appropriate for Mineral Resources reporting.
	<ul> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul><li>GDA 94 MGA Zone 54</li><li>Topographic control used is Shuttle</li></ul>
Data spacing and distribution	Data spacing for reporting of Exploration Results.	<ul> <li>Radar Topography Mission (SRTM) data.</li> <li>Analytical data points downhole will be sufficient to characterize the nature of the rock and its mineralisation. Drill hole spacings are designed to test specific anomalies. All are appropriate for</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <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> </ul>	<ul> <li>exploration results reporting.</li> <li>The drill hole spacing with respect to previous holes allows a good degree of geological and geochemical continuity for Mineral Resource estimation</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> </ul>	<ul> <li>Orientation of drilling has been determined by surface structural and stratigraphic mapping and correlated with earlier drill holes. Holes appear to have been drilled at a high angle to west- dipping bedding though due to the intense deformation of the rocks core to bedding angle change locally downhole.</li> </ul>
	<ul> <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>If it is determined that drill orientation introduces a sampling bias this will be reported. At this early stage of drilling this is unknown.</li> </ul>
Sample security	• The measures taken to ensure sample security.	• Core is cut, labelled and bagged and held in a company store facility until it is dispatch to the laboratory via a freight forwarding company.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	No audits have been completed.

# **Section 2 Reporting of Exploration Results**

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

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.	<ul> <li>Drilling with EL 8077. 100% Silver City Minerals, Native Title is extinguished and an access agreement is in place with the local landowner. The project lies within the headwaters of the Stephens Creek Reservoir and a condition of the licence is that the appropriate authority is notified of work before it commences.</li> </ul>
	<ul> <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>No known impediments</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Surprisingly little exploration has been conducted in this area. Work that has been undertaken by previous explorers is of high quality but locally poorly located.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	Broken Hill type
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> </ul>	<ul> <li>Drill specification table on body of text.</li> <li>Drill assays pending</li> <li></li> </ul>

Criteria	JORC Code explanation	Commentary	
	<ul> <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> <li>All available information is included in this or previous reports.</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> </ul>	<ul> <li>Assays pending</li> </ul>	
	<ul> <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> </ul>	<ul> <li>Assays pending</li> </ul>	
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No metal equivalents reported</li> </ul>	
Relationshi p between mineralisati on widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	Unknown at this time	
	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	Unknown at this time	
	<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>	<ul> <li>Assays pending</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>Assays results pending</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>	<ul> <li>No other data available at this time. Downhole EM surveys are scheduled</li> <li>At Balaclava EM surveys consisted of a 200m moving loop (in-loop) survey followed up by a single fixed loop survey. The surveys were conducted by Fender Geophysics Pty. Ltd. using a Terratem receiver and a TCR coil sensor. Readings were taken to a delay time of 90 milliseconds. The moving loop survey used a 200m single turn transmitter loop with a typical transmit current of 24 amperes. Three component readings were taken with a centred receiver sensor at 100m stations along lines 200m apart. Six lines of 1km length were surveyed to cover an area</li> </ul>	

Criteria	JORC Code explanation	Commentary
		of 1 square kilometre. The fixed loop survey used a 700m by 300m single turn transmitter loop with a typical current of 10 amperes. Three component readings were taken at 50m intervals along line (south-north) on lines 200m apart. Four lines of 500m length were read to cover an area of 0.3 square kilometres.
Further work	The nature and scale of planned further work     (eg tests for lateral extensions or depth     extensions or large-scale step-out drilling).	Unknown at this time
	<ul> <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>	Unknown at this time

### **Annexure 2 Diagrams**



Figure 1. Location of the Wilga Downs project in relation to mines and deposits in the Cobar District



Figure 2. Silver City tenements and projects in the Broken Hill district.



Figure 3. Drill hole locations at Razorback West