



## ASX ANNOUNCEMENT

21 November 2012

### EXPLORATION UPDATE

#### **New drilling and geophysical surveys to commence at Broken Hill**

- **Large induced polarisation (IP) geophysical survey planned to test for sulphides beneath cover at the Razorback West geochemical anomaly.**
- **Downhole electromagnetic surveys (EM) planned at Allendale targeting extensions to massive sulphides encountered in drill holes.**
- **RAB drilling programs commence at two new projects; Yalcowinna Creek and Parnell.**
- **Preliminary exploration at Yalcowinna Creek has identified widespread copper mineralisation.**

Silver City Minerals Limited (**ASX:SCI**) is pleased to announce the commencement of rotary airblast (RAB) drilling at two projects; Yalcowinna Creek and Parnell. In addition geophysical surveys at Allendale and Razorback West are designed to locate sulphide targets for follow-up drilling in 2013 (Figure 1).

#### **Background**

Since listing on the ASX in July 2011, SCI has conducted exploration programs on nine projects completing over 16,000 metres of drilling in the Broken Hill district of western New South Wales, Australia. Drill intersections containing appreciable lead, zinc, silver copper or gold were achieved in five projects. Immediate follow-up is focused on two priority projects; Allendale and Razorback West.

## **Allendale**

### *Geology*

Work at Allendale, approximately 40 kilometres north of Broken Hill, has located lead, zinc, silver and minor copper mineralisation that is hosted in up to five east-dipping lode horizons within a corridor 75 metres wide and at least 450 metres long. The rock package consists of tightly folded and faulted metamorphosed sediments and volcanic rocks with outcropping lode horizons. The lodes, with accompanying sulphides, vary in true thickness from 0.5 to 10 metres.

### *Next Phase of Exploration*

The next phase of exploration at Allendale is designed to search within or close to the corridor for structurally thickened massive sulphide mineralisation. These thickened zones commonly occur on the nose or hinges of folds and often characterise Broken Hill type (BHT) ores at Broken Hill.

SCI plans to use downhole electromagnetic (EM) and magnetometric resistivity (MMR) geophysical surveys to locate larger scale massive sulphide mineralisation for drill testing. The Company anticipates the geophysical surveys will be completed before year end.

### *Joint Venture Agreement*

This project is part of the “CBH” Farm-in and Joint Venture Agreement. SCI currently owns 30% of the project and can earn up to 75% by spending approximately \$1 million on this and seven other Exploration Licences before the end of August 2013. CBH Resources Limited has recently opened the Rasp Mine at Broken Hill. Once SCI earns the remaining interest in the project; CBH will be a joint venture partner and will have off-take rights to lead and zinc concentrates. The project lies within 50 kilometres of Broken Hill and potential exists to truck ore into a central mill.

## **Razorback West**

### *Nature of the Project*

This project, located approximately 15 kilometres northeast of Broken Hill has the potential to host a significant deposit of massive sulphides. Geological, geophysical and geochemical data suggest that a large, low tenor lead-zinc-manganese anomaly identified in several programs of RAB drilling could represent the northern extension of the Broken Hill Line of Lode, albeit offset westward by the Stephens Creek Shear Zone (Figure 2). It is almost 5 kilometres long and varies from 100 to 200 metres in thickness and is largely covered by soil and alluvium. The Line of Lode at Broken Hill has historically produced approximately 280 million tonnes of high grade lead, zinc and silver<sup>1</sup> and has been mined continuously for over 135 years.

A first pass reverse circulation (RC) drilling program comprising a series of shallow holes was completed by SCI (ASX Release 12 July 2012) and revealed broad intersections of low grade zinc mineralisation and disseminated lead and silver (associated with galena; a lead sulphide) in specific sandstone horizons. This drilling encountered garnet-rich rock and “blue quartz” alteration characteristic of sequences that host the Broken Hill deposit.

### *Next Phase of Exploration*

In order to map out the distribution of sulphides in the bedrock beneath the alluvial cover, the Company will conduct a large induced polarisation (IP) survey. This will assist in targeting sulphide zones within the corridor already identified by geochemistry. The IP survey is anticipated to be completed before year end and will be followed-up by drilling early in 2013.

### ***Yalcowinna Creek***

This project is located approximately 40 kilometres northeast of Broken Hill within EL 7319. Historic geological mapping, rock chip sampling and RAB geochemical surveys have identified a strong copper zone associated with north striking gossanous lode rocks over an area of 600 by 150 metres. These dip eastward under thin soil and alluvial cover and 50% of the 60 historic rock chip samples from outcrop have returning values greater than 0.5% copper. Drilling by previous explorers to the south of the outcrops similarly indicates the anomalous horizon dips eastward and hosts anomalous copper in the range of 0.1 to 0.3% over true thicknesses of 20 to 40 metres (Figure 3). The Company believes there is potential for discovery of higher grade, stratigraphically controlled copper deposits similar in style to the lead-zinc-silver deposits which occur in Broken Hill.

Two strong copper anomalies identified in historic RAB surveys occur under soil and alluvial cover to the southeast and south of the outcrop lodes. A new infill RAB drilling program has commenced and will assess the extent of copper anomalism. SCI anticipates this work will be completed before year end. Reverse circulation drilling to test any newly defined targets could commence in the first quarter of 2013.

### ***Parnell***

The historic Parnell Mine is a BHT style occurrence located 15 kilometres north of Broken Hill. Workings dating back as far as the late 1800s have mined an aggregate of almost 1600 tonnes of galena-rich material. Grades recorded from various mining campaigns up to 1971 range from 18 to 33% lead, 120 to 760 g/t silver and 2 to 3% zinc<sup>2</sup>. Known mineralisation is hosted in three lodes within the hinge of a south plunging fold structure. Geological assessments suggests that extensions to mineralisation extend southward beneath a large area of alluvial cover. SCI plans to conduct RAB drilling over this area before the end of the year.

<sup>1</sup> NSW Geological Survey Report 1990/322 (<http://digsopen.minerals.nsw.gov.au>)

<sup>2</sup> Bulletin No. 32 Metallogenic Studies of the Broken Hill and Euriovie Blocks, New South Wales. (<http://digsopen.minerals.nsw.gov.au>)

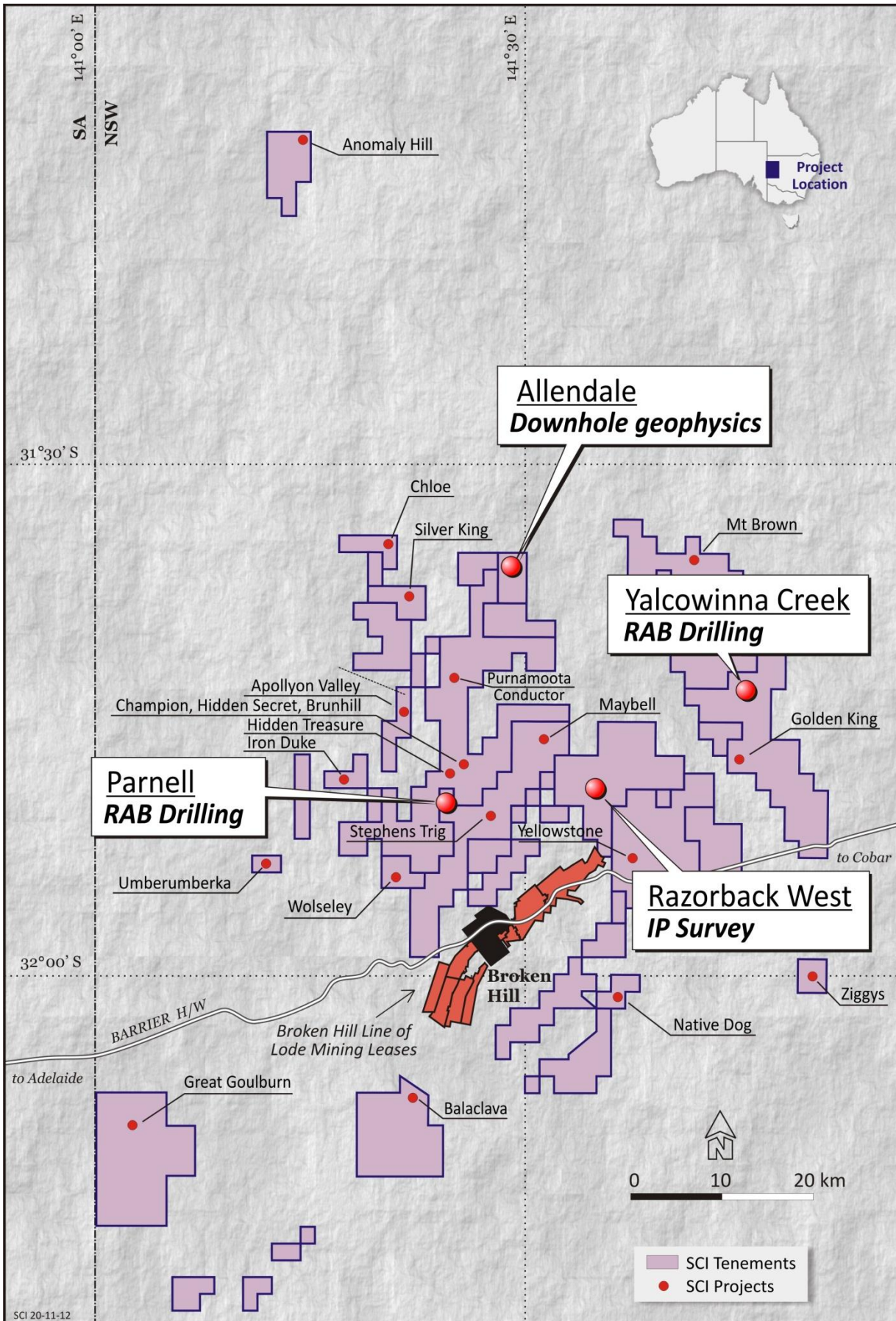


Figure 1. Silver City Minerals tenements highlighting current project activities.

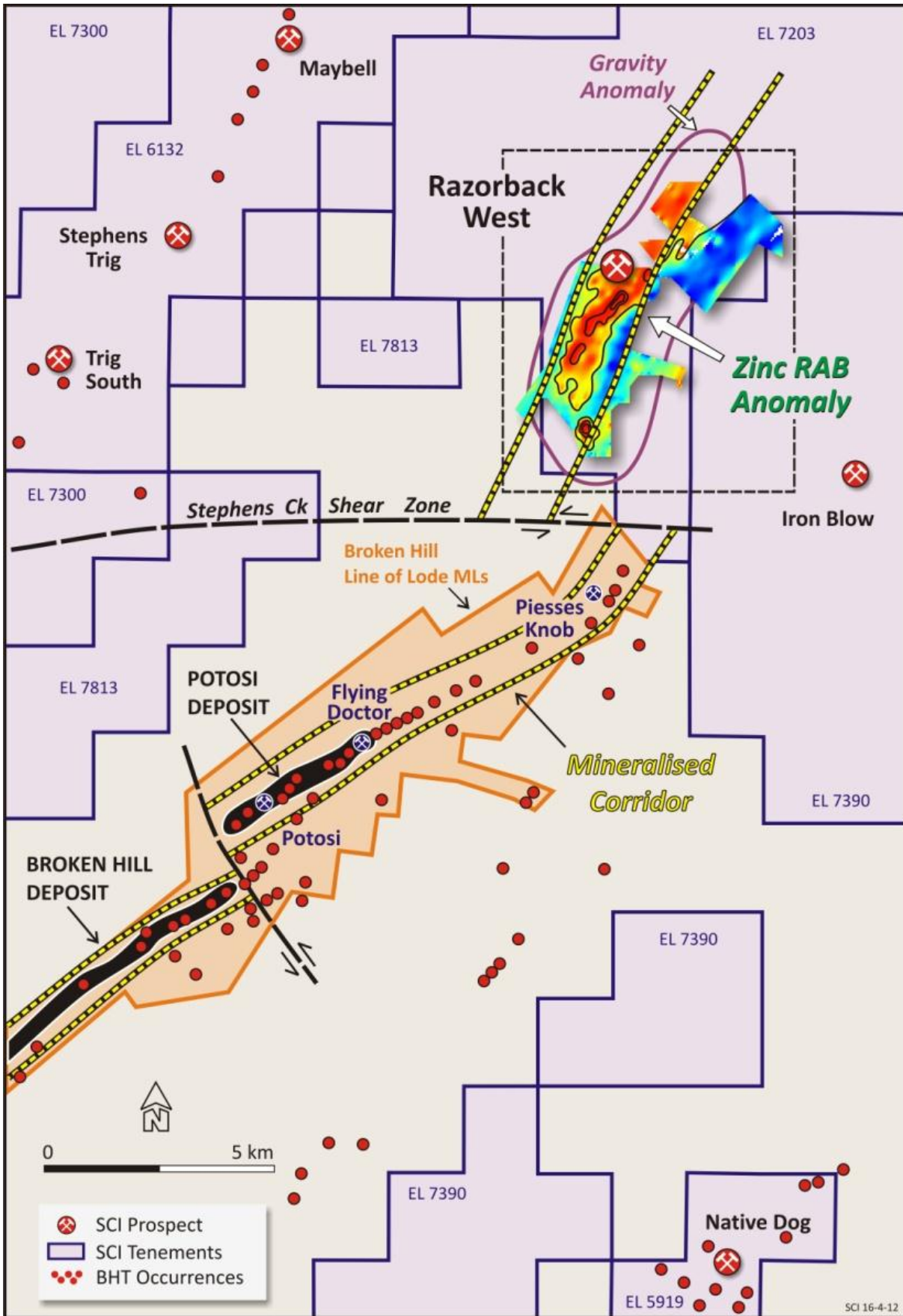


Figure 2. Razorback West geochemical anomaly. Diagram shows the anomaly, located in 100% SCI tenure with respect to the current Broken Hill mining Leases.

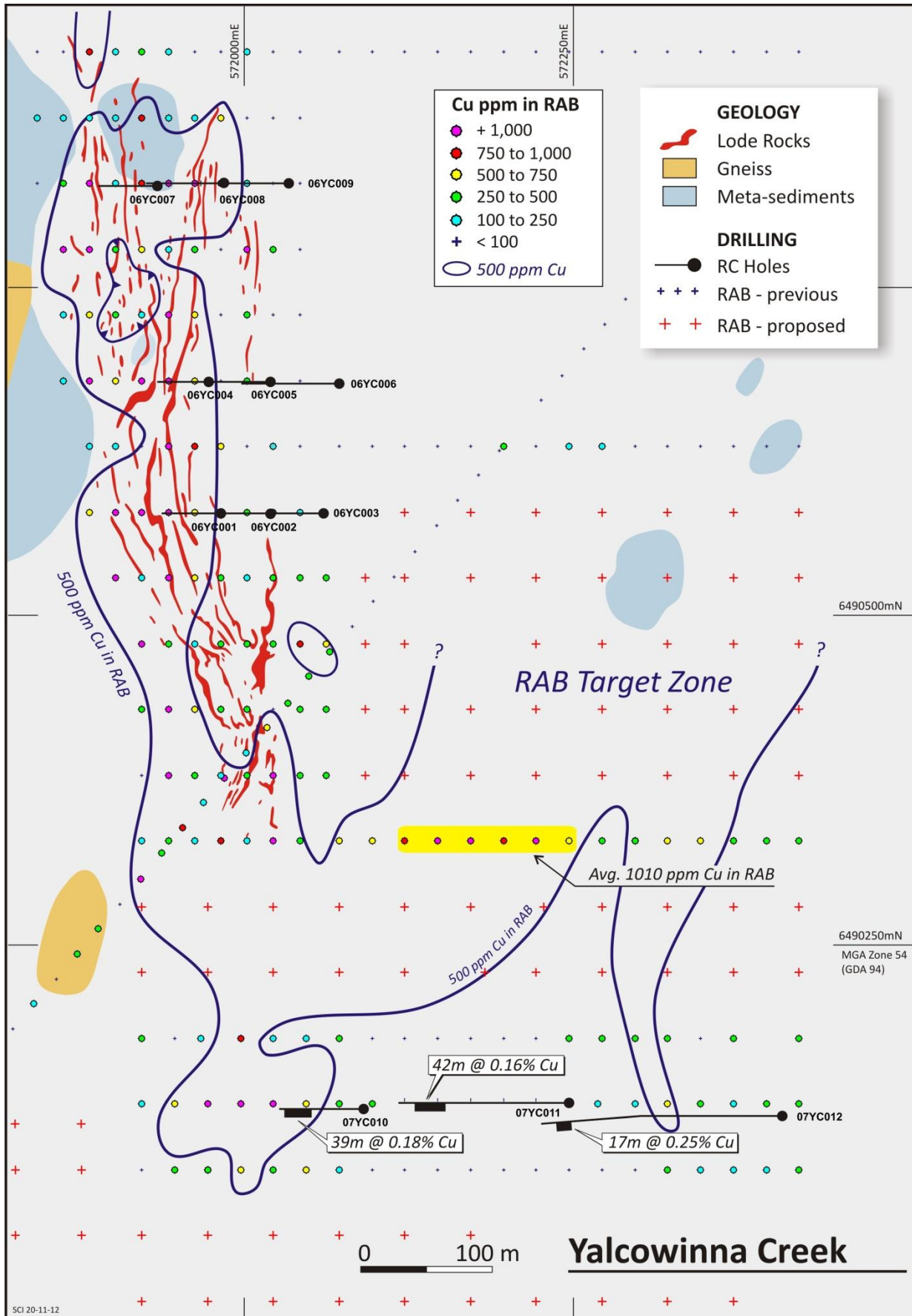


Figure 3. Yalcowinna Creek project.

**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 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 2004 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 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 one of the world's largest accumulations of silver, lead and zinc; the Broken Hill Deposit. SCI was established in May 2008 to explore specifically in the District where it controls Exploration Licences through 100% ownership and various Sale and Joint Venture agreements. It has a portfolio of highly prospective ground with drill-ready targets focused on high grade silver, gold and base-metals, and a pipeline of prospects moving toward the drill assessment stage.

**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)