



## ASX ANNOUNCEMENT

10 May 2016

### **Zinc intersections at Stephens Trig, Broken Hill**

- **5 metres at 5.4% zinc and 0.7% lead in hole SGC019.**
- **Hosted within broader intersection of 32 metres at 1.3% zinc.**
- **Sulphides, predominantly sphalerite, commence at 29 metres down hole.**
- **Near-surface open pit potential.**
- **New undrilled zone at least 300 metres long.**

**Silver City Minerals Limited (ASX: SCI) (“Silver City” or “the Company”)** is pleased to announce results from a shallow drilling program conducted at Stephens Trig, 12 kilometres north of Broken Hill (Figure 1). Five holes (381 metres in total) were completed to test the potential for open-pit mineralisation that might be amenable for trucking to mills in Broken Hill (Table 1).

#### **Results**

The most significant result was returned from hole 16SGC019, the southern-most hole of the program (Table 2). It returned sphalerite-bearing intersections of:

- **32 metres at 1.3% zinc from 14 metres including 5 metres of 5.4% zinc and 0.7% lead in Main Lode. This includes a 1 metre sample from 45 metres containing 8.9% zinc.**
- **2 metres at 2.2% zinc and 1.2% lead from 78 metres in East 2 Lode.**

#### **What does this result mean?**

Hole 16SGC019 is located in an area where no near-surface drilling has taken place (Figure 2). Historic holes, shown on the diagram, test the Main and East 2 mineralisation at depths of greater than 200 metres below surface and give no indication of open pit potential. Hole 19 shows that sulphide-bearing mineralisation occurs in two lodes within 100 metres of surface (within reasonable open-pit depths). This new, potentially open-pittable zone is completely untested by drilling over a strike length of at least 300 metres (Figure 2). Further drilling is required to assess the extent and grade of the zone.

## Background

Stephens Trig lies completely beneath alluvial cover in a low-relief river valley system north of Broken Hill. It was discovered in the early 1990's by a program of RAB and step-out diamond drilling. To date there have been 36 drill holes completed. It is broadly defined by a lead-zinc rotary air blast (RAB) geochemical anomaly which extends for 1.5 kilometres along strike with a further southern extension of over 2 kilometres over the Trig South prospect.

SCI has identified three mineralised lode horizons all of which host appreciable zinc-rich intersections; Main Lode, East Lode and East 2 Lode. Both Main and East 2 lode host a number of mineralised intersections within 100 metres of surface. Work by SCI shows that the shallow, up-plunge positions of the E2 and Main lodes from 100 metres depth to surface, and extending over a strike of 300 metres, have not been sufficiently tested by drilling.

Drilling during this program was designed to test this shallow zone for potential open pit mineralisation. Preliminary economic modelling of up-plunge, hypothetical, lodes has been sufficient to suggest that, if grades and thicknesses are consistent with other intersections in the lodes, there is potential for open pit ore.

Ore-grade material from this zone could be amenable to trucking to one of two beneficiation mills currently operating at Broken Hill. The Stephens Trig project is a joint venture with CBH Resources which owns and operates the Rasp Mine in Broken Hill.

## 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.) and Robert Gordon (BApSci;Hons) who are members of the Australian Institute of Geoscientists. Mr Torrey is the Managing Director, a shareholder and full time employee of Silver City Minerals Limited. Mr Gordon is a Senior Geologist and full time employee of Silver City Minerals Limited. Mr Torrey and Mr Gordon have 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 “Competent Persons” as defined by the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Torrey and Mr Gordon consent to the inclusion in this 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  
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**Annexure 1 Figures**

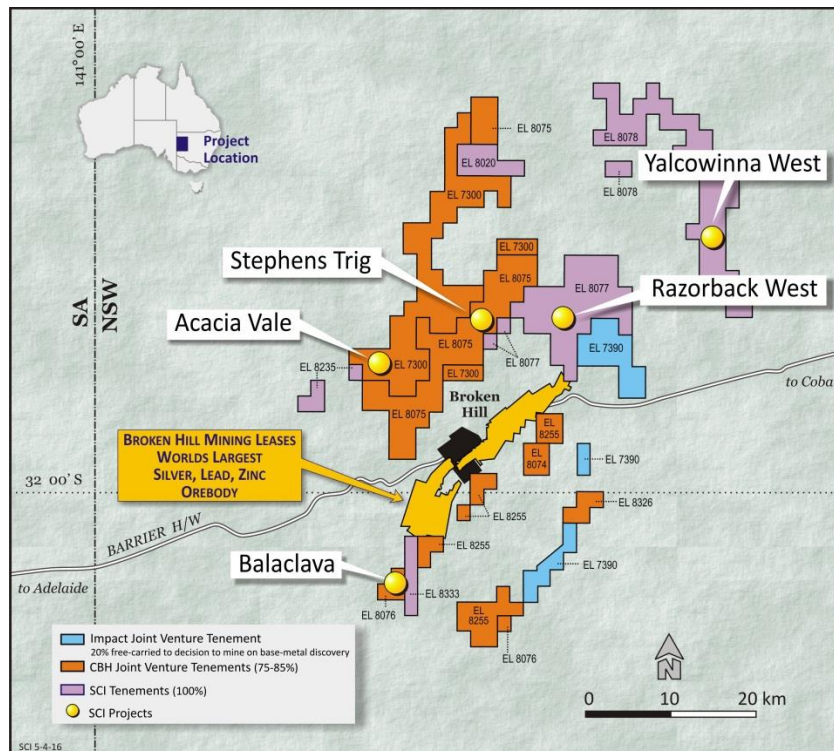


Figure 1. Silver City Minerals tenements and projects

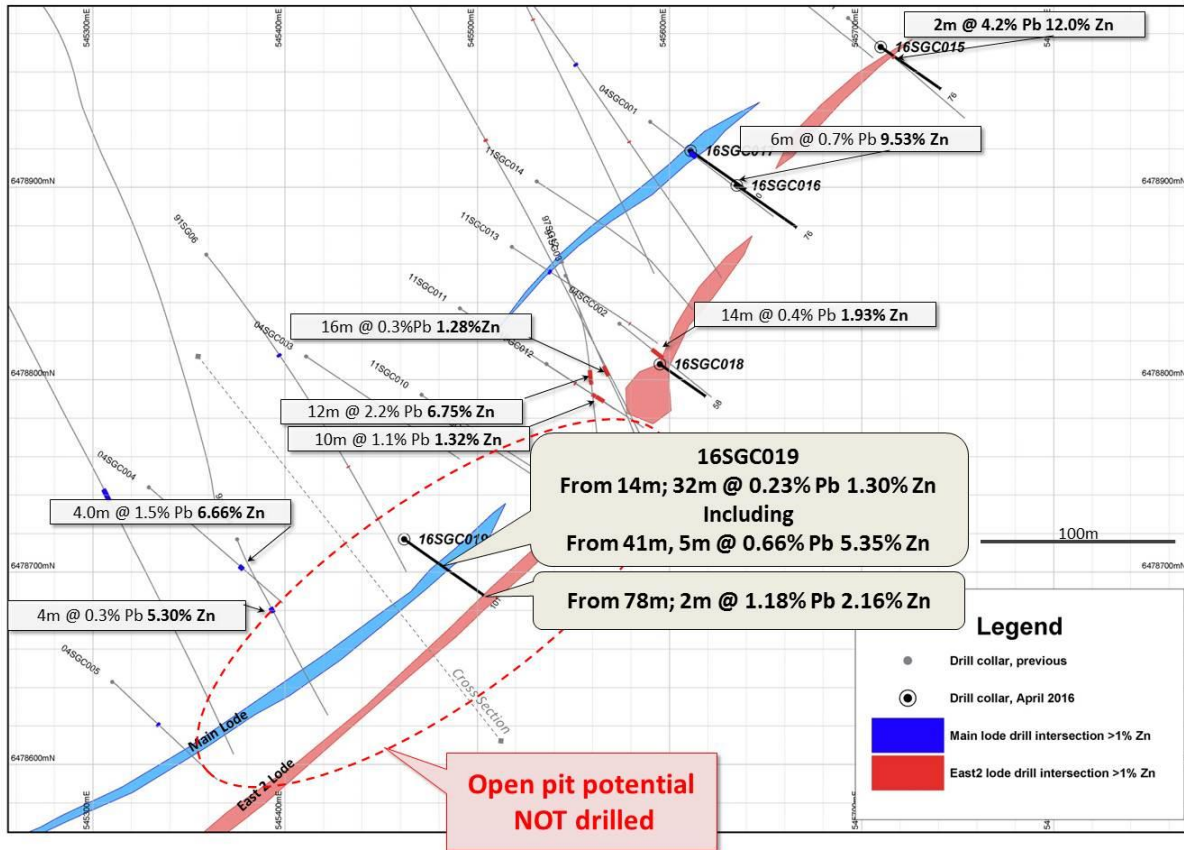


Figure 2. Stephens Trig Drill Plan. Diagram shows the location of historic and recent holes as well as the interpreted position of the Main and East 2 lodes close to surface. Hole 16SGC019 is located in an area where no near-surface zinc-lead sulphide mineralisation has been tested to date

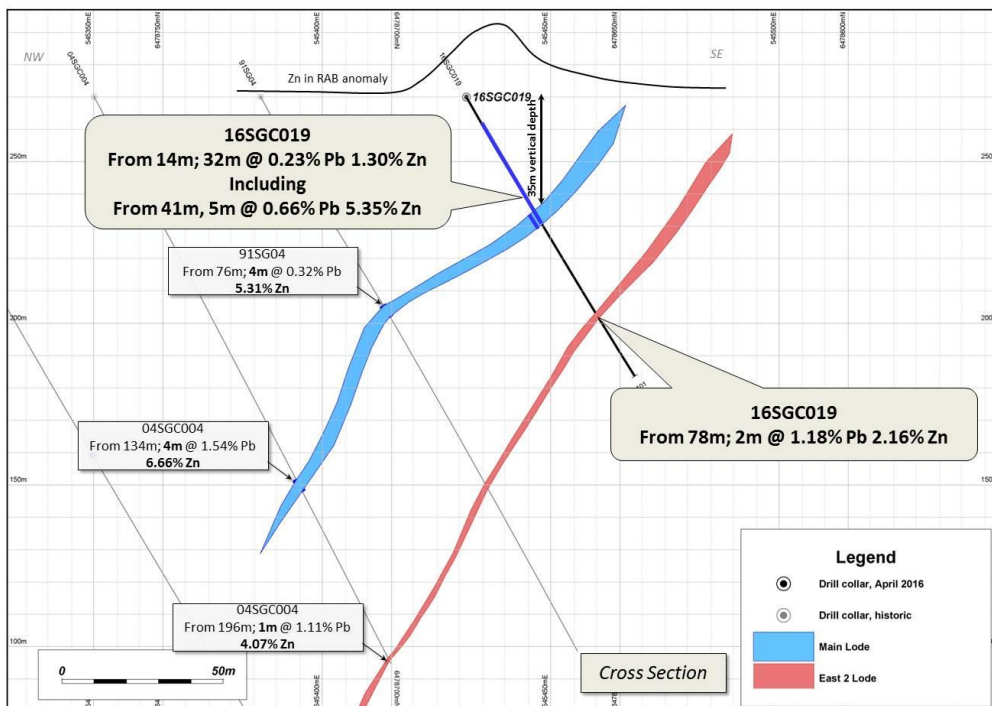


Figure 3. Stephens Trig Cross Section. Diagram shows historic and recent significant intersections of Main Lode and East 2 Lode mineralisation. Hole 16SGC019 confirms the continuity of, and potential for further mineralisation to extend up-dip and laterally at shallow depths.

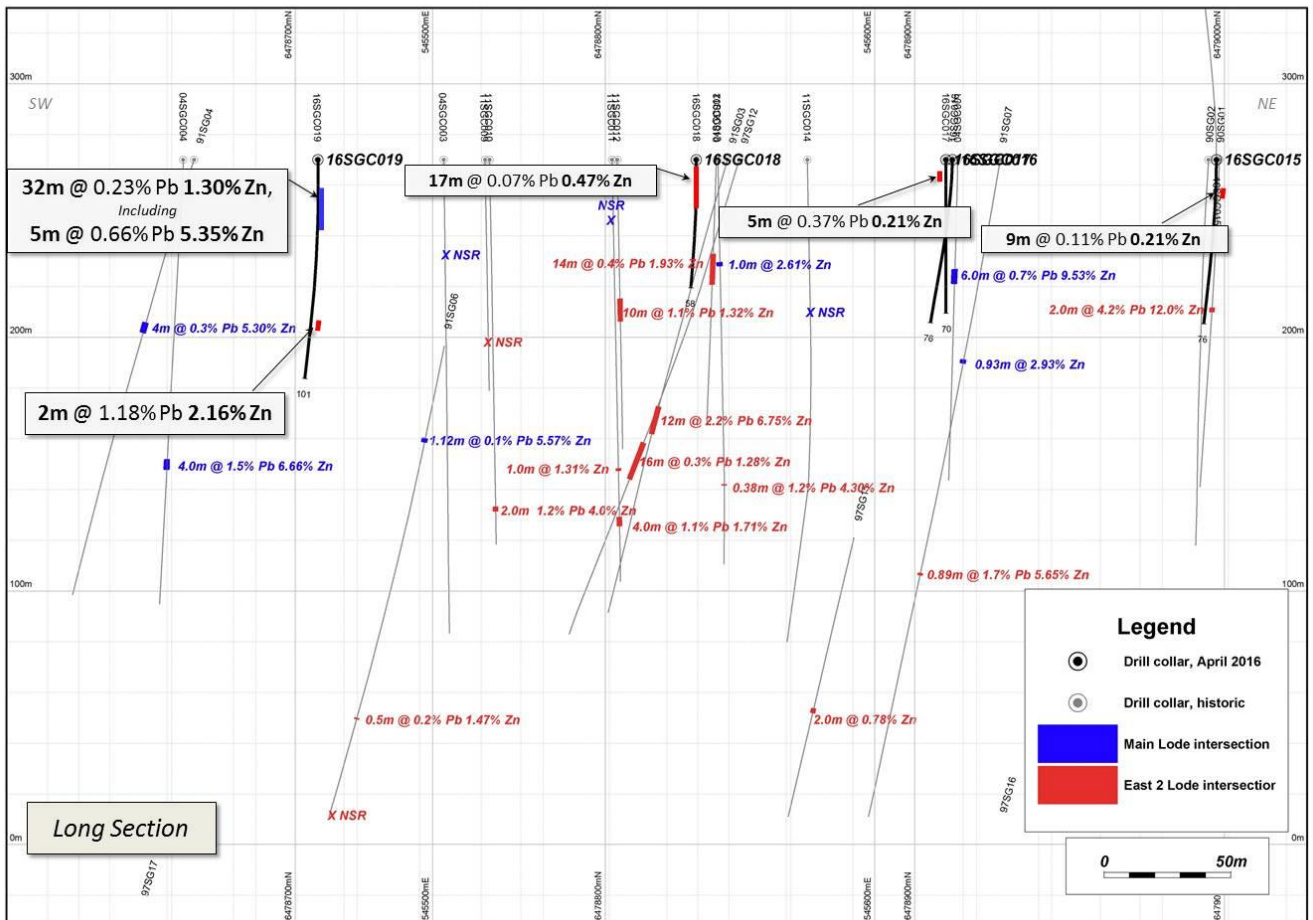


Figure 4. Stephens Trig Long Section. This diagram shows significant intercepts in both historic and current drilling and in particular the lack of shallow drilling near significant mineralisation intersected from both Main and East 2 Lodes in 16SGC019.

Note: Historic intersections depicted in cross-section and long-section have previously been reported in the Company Prospectus 2011 or ASX Release 9 January 2012.

## Annexure 2 Tables

Table 1 Drill Hole Specifications

Drill Hole	MGA East (m)	MGA North (m)	Elevation (m)	Declination (degrees)	Azimuth (degrees)	Total Depth (m)
16SGC015	545715	6478971	270	-60	125	76
16SGC016	545635	6478900	270	-60	128	76
16SGC017	545609	6478915	270	-60	125	70
16SGC018	545596	6478804	270	-60	123	58
16SGC019	545463	6478715	270	-60	122	101

Table 2 Significant Intersections

Drill Hole	From (m)	To (m)	Interval (m)	Lead (%)	Zinc (%)	Cutoff (%Zn)	Comment
16SGC015	12	21	9	0.11	0.21	0.1	partially oxidised
16SGC017	9	14	5	0.37	0.21	0.1	partially oxidised
<i>including</i>	11	12	1	1.11	0.30	1.0	partially oxidised
16SGC018	4	21	17	0.07	0.47	0.1	partially oxidised
<i>including</i>	5	18	13	0.08	0.54	0.5	partially oxidised
16SGC019	14	46	32	0.23	1.30	0.1	partially oxidised above 29m
<i>including</i>	<b>41</b>	<b>46</b>	<b>5</b>	<b>0.67</b>	<b>5.35</b>	1.0	fresh rock
16SGC019	78	80	2	1.18	2.16	1	fresh rock

## Annexure 3

# 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>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Five reverse circulation holes were sampled. 1 metre intervals were collected in plastic bags from the rig cyclone by the drilling contractor. A cyclone splitter enabled collection of a sub-sample in a calico bag. The subsample represents 10 to 12.5% of the total sample, with a nominal weight between 2 and 4 kg. A small sample of the 1 metre interval was collected in industry-standard chip trays for future reference. Selection of samples for laboratory analyses was undertaken using a portable XRF machine calibrated daily.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Reverse circulation drilling used an industry standard face-sampling hammer bit 5.5” (139.7mm) in diameter.</li> <li>• Downhole surveys were completed approximately every 30 to 35 metres using a Reflex survey tool supplied and operated by the drilling contractor</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Recoveries were not recorded, but sample size was noted to be consistent.</li> <li>• No measures taken to maximize recoveries but geological assessment suggest sampling is representative of local rock type.</li> <li>• No relationship between grade and recovery is observed.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core</i></li> </ul>	<ul style="list-style-type: none"> <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 381 metres.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>(or costean, channel, etc) photography.</p> <ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	
<b>Sub-sampling techniques and sample preparation</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 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>No core was sampled.</li> <li>A cyclone splitter was used for RC chips. One metre intervals were collected in plastic bags from the rig cyclone by the drilling contractor. The splitter enabled collection of a sub-sample in a calico bag.</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> <li>Sample duplicates were collected approximately every 20<sup>th</sup> sample from those selected for analysis.</li> <li>Sample size is appropriate to grain size of sampled material.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<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>The nature and quality of the analytical methods are appropriate to style of mineralisation anticipated at this stage in the project and are of industry standard.</li> <li>Duplicate samples were collected nominally of every 20<sup>th</sup> sample submitted laboratory analysis and no significant analytical deviation from duplicates has been encountered.</li> <li>Commercially prepared standards were submitted at a nominal interval of every 20<sup>th</sup> sample with those samples submitted for laboratory analysis and no significant analytical deviation from the published standard values have been encountered</li> <li>No external laboratory checks are appropriate at this early stage of assessment.</li> </ul>
<b>Verification of sampling and assaying</b>	<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>Verification has been undertaken</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>
<b>Location of data points</b>	<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> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Drill collar locations (GDA94 MGA Zone 54) were determined by handheld GPS with an accuracy of +/- 5 metres which is considered an appropriate level of accuracy for regional, early stage target assessments.</li> <li>The prospect area has topographic relief of +/- 2m and all drill collars (historic and current) are normalized to 270m RL. The variation in topographic relief is considered less than the level of elevation accuracy from a hand-held GPS</li> </ul>
<b>Data spacing and</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were collected for the entirety of each hole at a 1</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>distribution</b>	<ul style="list-style-type: none"> <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>metre spacing.</li> <li>The sample spacing and distribution downhole would be sufficient for future Mineral Resource and Ore Reserve estimation.</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>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>Drill hole orientation has been optimized to test lode horizons perpendicular to the orientation of the lode. Reported downhole intersections are considered to approximate true thickness.</li> <li>No orientation-bias sampling has been identified.</li> </ul>
<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>Samples stored in secure facility in Broken Hill, then delivered by a company representative to a freight-forwarding company for transport to the laboratory</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>All drilling has been undertaken on EL 8075 as part of a joint venture agreement with CBH Resources Limited. Areas being drilled are not subject the Native Title. An access agreement with the current landowner is in place.</li> <li>The tenure is secure and currently under renewal application. 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 and reported previously is considered to be of high quality.</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>BHT zinc-lead-silver deposits.</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> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>See Annexure 2.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	
<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>• Industry standard weight averaging has been undertaken in this report. Samples are at continuous 1m intervals hence a simple average has been applied to calculate the reported significant intersections. No upper cuts have been applied. Aggregated drill intersections are reported here to a 0.1% and 1% zinc cutoff.</li> <li>• No short lengths have been aggregated</li> <li>• No metal equivalent has been reported.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<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 length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• Only down hole lengths are reported and these approximate true widths.</li> <li>• The drill holes are interpreted to intersect the mineralisation at between 75 and 90 degrees</li> </ul>
<b>Diagrams</b>	<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>• See Annexure 1</li> </ul>
<b>Balanced reporting</b>	<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>	<ul style="list-style-type: none"> <li>• Both low and high grade samples are presented in this public report.</li> </ul>
<b>Other substantive exploration data</b>	<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>• All available information of significance has been included in this or previous reports.</li> </ul>
<b>Further work</b>	<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>• Work is at an early stage. Drilling and geological assessment will continue.</li> <li>• See Annexure 1 shows possible extensions where future drilling may be required.</li> </ul>