

## Global Geoscience Further Confirms High-Grade Mineralisation at Rhyolite Ridge Lithium-Boron Project

### HIGHLIGHTS

- ▲ Drilling results further confirm near-surface high-grade lithium-boron mineralisation at Rhyolite Ridge Lithium-Boron Project
- ▲ Mineralisation confirmed within and to the south of the current Mineral Resource
- ▲ Drill results indicate likely tonnage increase in the high-grade component of the Resource
- ▲ An updated Mineral Resource estimate is due later this month

**Thursday 5 October 2017** – Australian-based mineral explorer and developer **Global Geoscience Limited** (“Global” or the “Company”) (ASX: GSC) is pleased to announce final assay results from the recently completed drilling program at its 100%-owned Rhyolite Ridge Lithium-Boron Project (“Rhyolite Ridge” or the “Project”) in Nevada, USA.

The drilling program was designed to upgrade and increase the current Indicated and Inferred Mineral Resource of 393 million tonnes at 1640ppm lithium (Li) and 0.51% boron (B), with a focus on increasing the high-grade component (65 million tonnes at 1910ppm Li and 1.59% B).

Highlights from the latest intersections include:

- **26m at 1580ppm Li and 1.93% B from 146m** within a zone of:  
38m at 1780ppm Li and 1.35% B in drill hole SBH-25
- **21m at 1917ppm Li and 1.53% B from 123m** within a zone of:  
43m at 1885ppm Li and 0.81% B in drill hole SBH-29
- **18m at 1565ppm Li and 1.96% B from 113m** within a zone of:  
38m at 1689ppm Li and 1.0% B in drill hole SBH-38
- **18m at 1706ppm Li and 1.67% B from 52m** within a zone of:  
37m at 1878ppm Li and 0.86% B in drill hole SBH-42

An updated Mineral Resource estimate is underway and is expected to be completed later this month. The updated Resource will form an integral part of the Rhyolite Ridge Pre-Feasibility Study (“PFS”).

**Global Geoscience Managing Director Bernard Rowe:** “Global Geoscience is very encouraged by the latest results showing Rhyolite Ridge’s lithium-boron mineralisation has again been demonstrated to be thick and consistent.

The drilling results are likely to increase the high-grade component of the soon to be updated Mineral Resource and come just one week after the Company raised \$30 million through an institutional placement led by Citigroup Global Markets Australia Pty Limited.

Robust drilling results and funding continue to support our confidence in the potential for Rhyolite Ridge to become a major, long-life supplier of lithium and boron.”

## WORK PROGRAM IN PROGRESS

The December quarter work program will continue to focus on work required for the Rhyolite Ridge PFS including:

- ▲ Updated resource estimate;
- ▲ Preliminary mining study including pit design;
- ▲ Optimisation of flotation and acid-leach process steps;
- ▲ Production of a lithium-boron brine for crystallisation testwork;
- ▲ Production of boric acid, lithium sulphate and lithium carbonate; and
- ▲ Progress environmental, ground water and geotechnical studies.

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## ABOUT GLOBAL GEOSCIENCE

**Global Geoscience Limited (ASX:GSC)** is an Australian-based mineral explorer and developer focused on its 100%-owned Rhyolite Ridge Lithium-Boron Project in Nevada, USA. Rhyolite Ridge is a large, shallow lithium-boron deposit located close to existing infrastructure. It is a unique sedimentary deposit that has many advantages over the brine and pegmatite deposits that currently provide the world's lithium. The Rhyolite Ridge Pre- Feasibility Study is well under way.

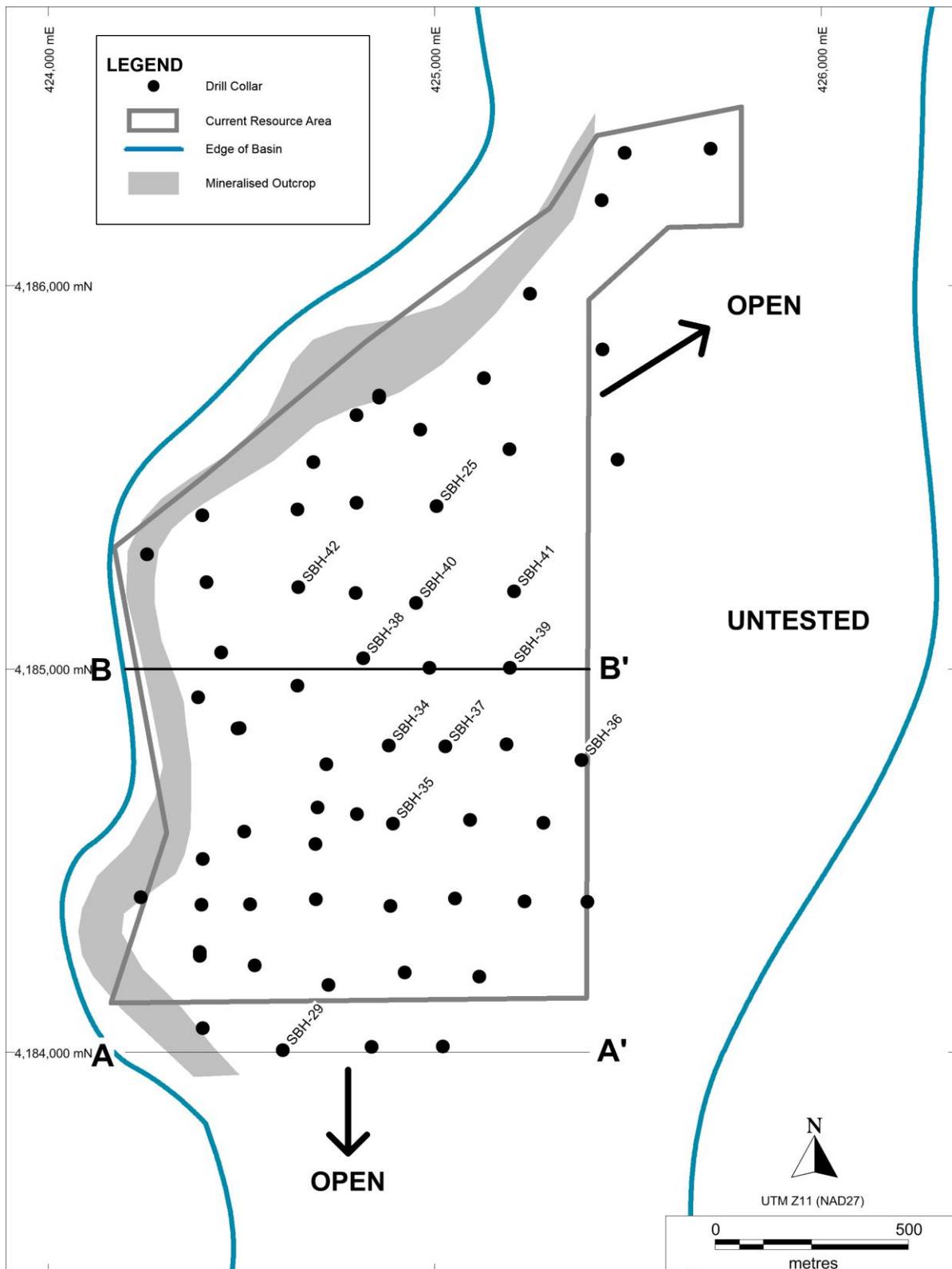
Global Geoscience is aiming to capitalise on the growing global demand for lithium and boron. Lithium has a wide variety of applications, including pharmaceuticals, lubricants and its main growth market, batteries. Boron is used in glass and ceramics, semiconductors and agriculture. Global Geoscience aims to develop the Rhyolite Ridge Lithium-Boron Project into a strategic, long-life, low-cost supplier of lithium carbonate and boric acid. To learn more please visit: [www.globalgeo.com.au](http://www.globalgeo.com.au).

Recent significant intersections from the current drilling program are tabulated below:

Hole Number	From (m)	Intercept (m)	Li (ppm)	Li <sub>2</sub> CO <sub>3</sub> (%)	B (%)
SBH-25	134.1	38.1	1780	0.9	1.35
<i>including</i>	146.3	25.9	1580	0.8	1.93
SBH-29	103.6	42.7	1885	1.0	0.81
<i>including</i>	123.4	21.3	1917	1.0	1.53
SBH-34	112.8	39.6	1784	0.9	0.78
<i>including</i>	129.5	18.3	1844	1.0	1.64
SBH-35	176.8	35.1	1128	0.6	0.54
<i>including</i>	196.6	15.2	1189	0.6	0.98
SBH-36	115.8	21.3	2446	1.3	0.04
	33.5	24.4	498	0.3	1.81
SBH-37	73.2	36.6	1723	0.9	0.65
<i>including</i>	91.4	15.2	1990	1.1	1.51
SBH-38	100.6	38.1	1689	0.9	1.00
<i>including</i>	112.8	18.3	1565	0.8	1.96
SBH-39	131.1	27.4	1963	1.0	0.89
<i>including</i>	140.2	15.2	1941	1.0	1.52
SBH-40	129.5	35.1	1656	0.9	1.05
<i>including</i>	141.7	18.3	1436	0.8	1.95
SBH-41	190.5	36.6	2001	1.1	0.89
<i>including</i>	207.3	18.3	1931	1.0	1.60
SBH-42	36.6	36.6	1878	1.0	0.86
<i>including</i>	51.8	18.3	1706	0.9	1.67

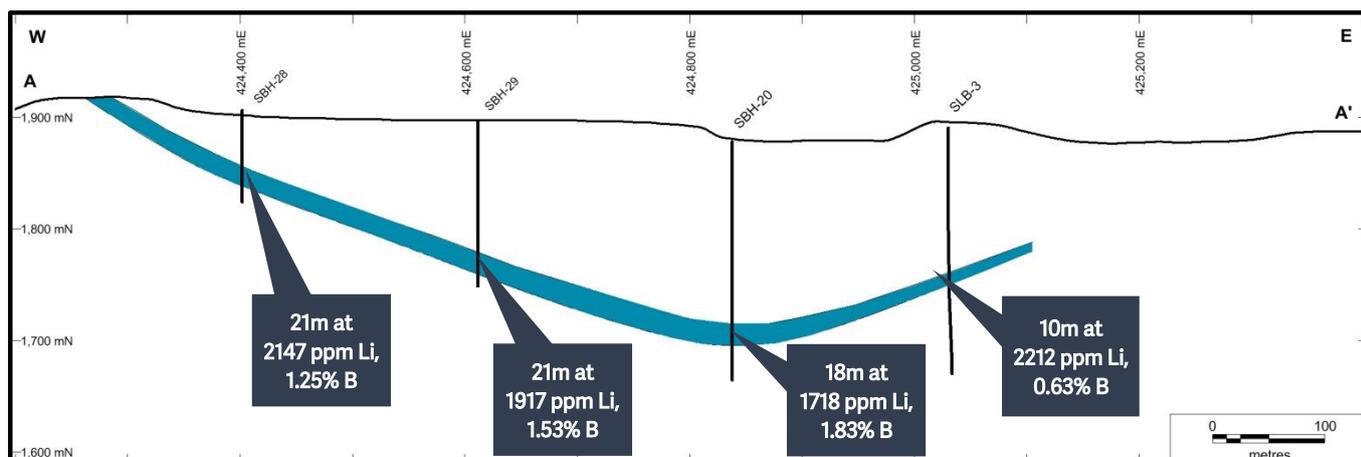
**Note:** All holes are vertical (except SBH-35) and downhole intersections are estimated to be at least 80% of true widths. Intersections have been calculated using a 1,000ppm Li cut-off first, and then applying a 0.5% B cut-off. Lithium content expressed in ppm or % Li can be converted into Lithium Carbonate Equivalent ("LCE") by multiplying by 5.32 (e.g. – 2,000ppm Li is equivalent to 1.06% LCE). Boron can be converted into boric acid by multiplying by 5.72 (e.g. 1.81% boron is equivalent to 10.36% boric acid).

The plan below shows the location of the most southerly drill holes (SBH-20, 28 and 29) in this program which intercepted high-grade lithium-boron mineralisation and are likely to extend the current resource to the south along section 4184000N (Line A-A').



Plan of South Basin Mineral Resource area showing drill hole locations

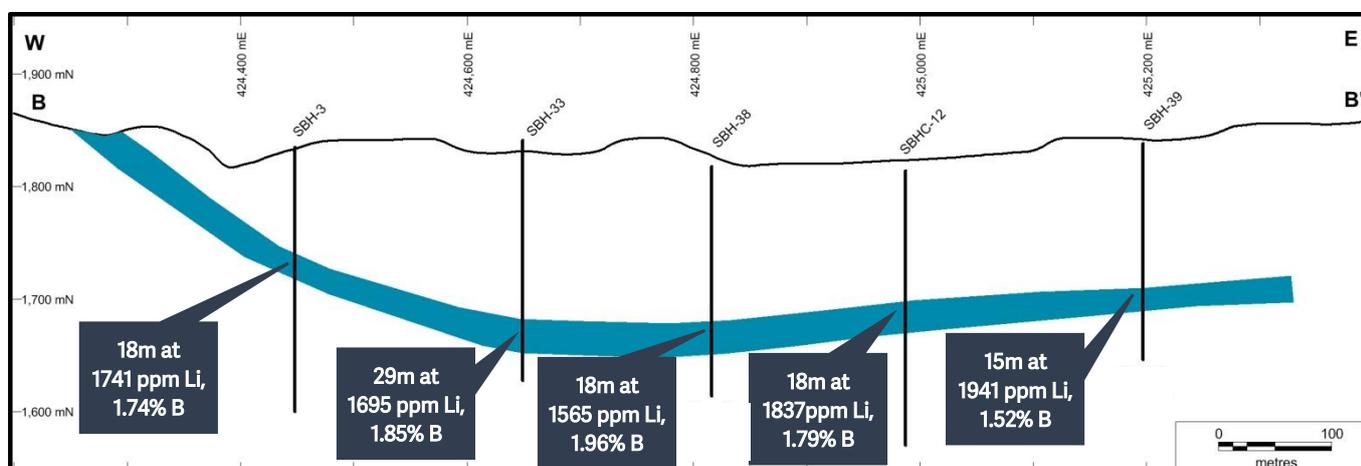
Cross-section 4184000N below is located south of the current resource and shows that drill holes SBH-20, 28 and 29 have intersected a thick section of the upper searlesite (Li-B) zone that extends to surface.



**Cross-Section 4184000N – Looking North**

The host rock for the upper searlesite (Li-B) zone contains low amounts of clay with typically less than 20% carbonate minerals and more than 40% of the sodium borosilicate mineral searlesite.

Drill holes SBH-33, 38 and 39 have intercepted further strong lithium-boron mineralisation within the current resource. This consistent, flat-lying lithium-boron mineralisation is located 1000m north of section 4184000N above and is shown in cross-section 4185000N below.



**Cross-Section 4185000N – Looking North**

## COMPLIANCE STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Bernard Rowe, a Competent Person who is a Member of the Australian Institute of Geoscientists. Bernard Rowe is an employee and Managing Director of Global Geoscience Ltd. Bernard has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 ("JORC Code"). Bernard Rowe consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Information in this report that relates to Mineral Resources is extracted from the announcement titled "Maiden Resource for South Basin at Nevada Lithium-Boron Project" released to the ASX on 10 October 2016. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

## APPENDIX

Hole Number	Northing	Easting	Elevation (m)	Depth (m)	Dip (°)	Azimuth (°)
SBH-25	4,185,424	425,004	1,838	183	-90	0
SBH-29	4,184,005	424,607	1,896	183	-90	0
SBH-34	4,184,799	424,881	1,849	183	-90	0
SBH-35	4,184,595	424,892	1,861	348	-60	283
SBH-36	4,184,761	425,380	1,850	183	-90	0
SBH-37	4,184,796	425,027	1,832	140	-90	0
SBH-38	4,185,026	424,815	1,816	204	-90	0
SBH-39	4,185,002	425,195	1,837	192	-90	0
SBH-40	4,185,171	424,951	1,821	183	-90	0
SBH-41	4,185,201	425,206	1,855	259	-90	0
SBH-42	4,185,212	424,648	1,806	124	-90	0

**Note:** Coordinates are in UTM Zone 11 (NAD27).

# Appendix 1 – Rhyolite Ridge Lithium-Boron, Nevada, USA

## JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<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>• Reverse circulation drilling was used to obtain 1.5m samples. Samples of approximately 10kg were collected and processed to produce a 60g charge for fire assay and ICP analysis. Water was injected during the drilling process such that all samples were collected wet. In all cases the entire hole was sampled.</li> <li>• Industry standard methods were used for the collection, preparation and analysis of the samples.</li> <li>• The drilling, sampling and assaying was undertaken by geologists and technicians contracted to Global Geoscience Ltd. These contractors were supervised by Global Geoscience Ltd employees.</li> </ul>
Drilling techniques	<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>• Drill holes mentioned in this report are RC percussion drilled using a cross-over sub.</li> </ul>
Drill sample recovery	<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>• Holes were logged by an experienced geologist as they were drilled and hand-written logs were completed with lithology and recovery recorded</li> <li>• Overall recoveries were high ensuring samples were representative</li> <li>• No sample bias has occurred as no preferential loss of fine or coarse material has occurred</li> <li>• There is no observed relationship between sample recovery and grade.</li> </ul>

Criteria	JORC Code explanation	Commentary
Logging	<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>• All holes have been geologically logged over their entire length to a level of detail sufficient for a Mineral Resource estimation</li> <li>• The logging is qualitative in nature</li> </ul>
Sub-sampling techniques and sample preparation	<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>• Drill chip samples were wet split using a rotary splitter attached to a cyclone. Buckets were used in conjunction with permeable samples bags to minimize loss of fines.</li> <li>• Approximately 10kg was collected for every 1.5m drill interval.</li> <li>• Duplicate samples were collected every 20<sup>th</sup> sample.</li> <li>• Based on previous exploration in the area for this style of mineralization, the sample size is appropriate.</li> <li>• Samples are considered representative of the in-situ rock</li> <li>• High recoveries indicate samples are representative</li> </ul>
Quality of assay data and laboratory tests	<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>• Samples were analysed by ALS Chemex in Reno, Nevada using aqua regia 2 acid digestion and ICP mass spectrometry</li> <li>• Standards for Li, B, Sr and As and blanks were inserted into the sample batches at about one in every fifteen samples and blanks at the rate of one in fifty</li> <li>• Acceptable levels of accuracy were established</li> </ul>
Verification of sampling and assaying	<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>• Significant intersections have been independently verified by at least two company personnel</li> <li>• Data is stored in digital format in a database</li> <li>• Twin holes have been completed by previous explorers at the South Basin with good correlation</li> </ul>
Location of data points	<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</li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole locations were measured by DGPS and are accurate to within 1m</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>used in Mineral Resource estimation.</i></p> <ul style="list-style-type: none"> <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>• The area of drilling and hole coordinates are shown in UTM Zone 11, NAD27 grid system</li> </ul>
<i>Data spacing and distribution</i>	<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>• Drill holes were generally spaced at 200m</li> <li>• The spacing is considered sufficient to establish geological and grade continuity appropriate for a Mineral Resource estimation</li> <li>• No sample compositing has been applied</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<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>• Drill holes were vertical with one exception (SBH-35, -60 degrees). The holes intersected the mineralisation at between 75 and 90 degrees.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drill rig was manned at all times. Samples were securely stored on-site and then collected from site by ALS and transported to the laboratory by truck</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A review of the sampling techniques and data storage was completed by a consultant geologist</li> <li>• No items of concern were identified</li> </ul>

## 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 style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The tenements (unpatented mining claims) are 100% owned by fully owned subsidiaries of Global Geoscience Ltd.</li> <li>• The unpatented mining claims are located on US federal land administered by the Bureau of Land Management (BLM)</li> <li>• There are no known private royalties over the claims</li> <li>• There are no known impediments to exploration or mining in the area</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration by other parties has been summarised in Company report titled "Global to Acquire Advanced Nevada Lithium-Boron Project" dated 3 June 2016</li> </ul>

Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sediment hosted lithium-boron deposit</li> <li>• Located in the Basin and Range terrain of Nevada</li> <li>• Lithium-boron mineralisation is hosted with Tertiary-age carbonate-rich sediments deposited in a shallow lake environment</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All available information relating to the drill holes is shown in the report.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Grades were calculated by simple weighted averaging</li> <li>• A lower cut-off of 1,000ppm lithium and 5000ppm boron have been applied</li> <li>• No upper cutting was applied as the style and grade of mineralisation does not require it (no high-grade spikes)</li> <li>• No metal equivalent values are being reported</li> </ul>
Relationship between mineralisation widths and intercept lengths	<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>• Drilling generally intersected mineralisation at approximately 75-90 degrees</li> </ul>
Diagrams	<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>• A summary map is included in the report showing the general location of the drilling and other relevant information.</li> <li>• The map includes a scale and location information.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Balanced reporting</i>	<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>The results reported are considered representative and are consistent with previously announced results (drill and rock-chip) from this project</li> </ul>
<i>Other substantive exploration data</i>	<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 relevant information has been disclosed</li> </ul>
<i>Further work</i>	<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>Further work will include: <ul style="list-style-type: none"> <li>Infill and extension drilling (RC and core)</li> <li>Estimation of an updated Mineral Resource</li> <li>Metallurgical testwork</li> <li>Preliminary Feasibility Study (PFS)</li> </ul> </li> </ul>