

## Sampling Testwork Supports Low Cost Processing

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### Highlights

- **Rock chip sampling confirms potential to leach lithium from the Rhyolite Ridge Lithium-Boron Project**
- **>90% of lithium recovered from rock chip samples using a weak-acid leach**
- **Results provide further evidence that the hosted lithium can be extracted without the need for high-cost processing i.e. roasting**

### Summary

Global Geoscience Limited (“Global” or the “Company”) is excited to announce results from the ongoing testing of rock chip samples collected from the Rhyolite Ridge Lithium-Boron project in Nevada. Results from the sampling test work show that >90% of total lithium content can be recovered using a weak-acid digest (leach).

The rock chip sampling was completed as part of the Company’s ongoing exploration program which is focussed on a maiden JORC Resource estimation and metallurgical test work ahead of a decision to commence pre-feasibility study within three to four months.

Global Managing Director, Bernard Rowe, commented, “Global is thrilled to announce the positive results from the analysis of rock chip samples taken from the Rhyolite Ridge Lithium-Boron Project. The results are extremely encouraging and provide further evidence that the hosted lithium can be extracted using a low-cost leaching process route. The high recovery of lithium (>90%) achieved using a weak-acid leach confirms that the contained lithium is not tightly bound within lithium bearing silicate minerals such as hectorite. This is a significant finding for the Company and has the potential to redefine the economics of mining clay-type lithium deposits.

## Rock Chip Sampling

Global recently collected five surface rock chip samples at the Rhyolite Ridge Lithium-Boron Project in Nevada. The five samples were collected from the upper mineralised unit at the south basin and returned results of 1000 to 3000ppm lithium (0.5 to 1.6% Lithium Carbonate Equivalent). These results were reported on 15 June 2016.

The same samples were re-submitted for further analysis using a range of acid strengths. Total lithium content was determined using a strong, hot 4-acid digestion (ME-MS61). A moderate (ME-MS41) and weak (ME-MS41W) strength acid digestion was then used to compare the relative amount of lithium that can be extracted. Greater than 95% of the total lithium content was recovered using the moderate strength acid and greater than 90% was recovered using weak acid.

These data indicate that the lithium is relatively easy to liberate from the minerals that make up the sample and that it is not tightly bound within the lattice of lithium silicate minerals such as hectorite.

Sample Number	Strong Acid <sup>1</sup> ME-MS61 Li ppm	Moderate Acid <sup>2</sup> ME-MS41 Li ppm	Weak Acid <sup>3</sup> ME-MS41W Li ppm	Li Extracted <sup>4</sup> by Weak Acid as % of Total Li
LBR01	1,640	1,650	<b>1,700</b>	<b>100</b>
LBR02	1,720	1,790	<b>1,790</b>	<b>100</b>
LBR04	2,670	2,540	<b>2,570</b>	<b>96</b>
LBR05	1,210	1,220	<b>1,100</b>	<b>91</b>
LBR06	1,280	1,210	<b>1,260</b>	<b>98</b>

1. Strong acid – 4-acid mix, hot, near total digestion of sample
2. Moderate acid – 2-acid mix (aqua regia), hot
3. Weak acid – weak 2-acid mix, room temperature
4. Amount of lithium extracted by weak acid as a proportion of total lithium determined by strong acid

## Future Work

The Company is currently undertaking an exploration program that is focussed on a maiden JORC Resource estimation and metallurgical test work ahead of a decision to commence pre-feasibility study within three to four months. The program includes:

- RC and Core drilling (confirmation, infill and extension) leading to estimation of a Mineral Resource
- Preliminary metallurgical and process studies
- Surface rock chip sampling (outcrop and trench) over the zone of outcropping mineralisation at the north and south basins

## **Contacts**

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## **References**

Global Geoscience Ltd, 2016a. Company Report titled “Global to Acquire Advanced Nevada Lithium-Boron Project” dated 3 June, 2016.

Global Geoscience Ltd, 2016b. Company Report titled “Global Announces Exploration Target at Nevada Lithium-Boron Project” dated 8 June, 2016

Global Geoscience Ltd, 2016c. Company Report titled “Global Announces High-Grade Rock Chip Results from Nevada Lithium-Boron Project” dated 15 June, 2016

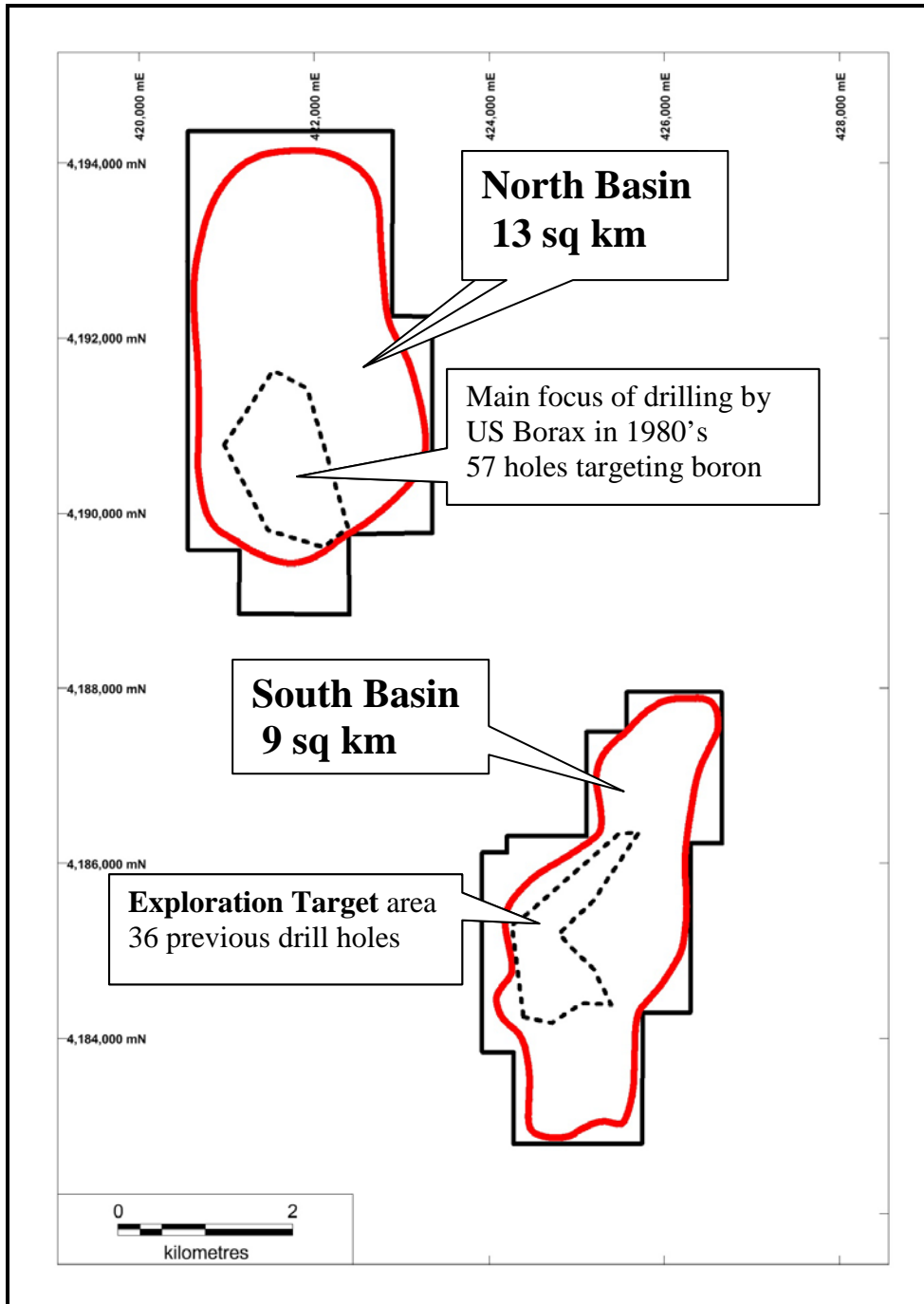
Global Geoscience Ltd, 2016d. Company Report titled “Global completes due diligence and proceeds with Nevada Lithium-Boron Project ” dated 4 July, 2016

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## **Competent Persons Statement**

The information in this report that relates to Exploration Results and Exploration Targets 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’. 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.

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*Figure 1. Map of Rhyolite Ridge Lithium-Boron Project. Tenement outline in black, sedimentary basin outline in red. (Map Projection 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>• <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>• Rock chip samples of approximately 5kg were collected from outcrop as random grab samples and semi-continuous channel samples.</li> <li>• Samples were collected, bagged and given a unique number on site.</li> <li>• Entire samples were submitted to Australian Laboratory Services in Reno, Nevada for preparation and analysis.</li> <li>• Industry standard methods were used for the collection, preparation and analysis of the samples.</li> </ul>
Drilling techniques	<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>• No drill results are being reported in this Report</li> </ul>
Drill sample recovery	<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>• No drill results are being reported in this Report</li> </ul>
Logging	<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</i></li> </ul>	<ul style="list-style-type: none"> <li>• No drill results are being reported in this Report</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No drill results are being reported in this Report</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples were analysed by Australian Laboratory Services in Reno, Nevada using 4-acid, 2-acid aqua regia and weak 2-acid digestion followed by ICP mass spectrometry</li> <li>• Standards and blanks were inserted into the sample batch by the company and acceptable levels of accuracy were achieved</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No drill results are being reported in this Report</li> <li>• No adjustments were made to the assay data</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples sites were located by hand-held GPS unit with accuracy of approximately +/- 5m</li> <li>• Sample location coordinates are reported in the company report titled "Global Announces High-Grade Rock Chip Results from Nevada"</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	Lithium-Boron Project “ dated 15 June, 2016
<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>• Rock chip samples are randomly spaced</li> <li>• The data is not being used to establish geological and grade continuity</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>• Rock chip samples were collected in semi-continuous channels oriented perpendicular to mineralisation wherever possible.</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>• Samples were collected and transported to the laboratory by company personnel</li> <li>• No particular security measures were employed given the type of samples.</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>• No auditing was undertaken as it was not deemed necessary for the type and early-stage nature of the sampling 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
<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 owned by Boundary Peak Minerals LLC.</li> <li>• Global Geoscience has entered into an exclusive option to purchase agreement with the owner. The terms of the agreement are summarized in Company report titled “Global to Acquire Advanced Nevada Lithium-Boron Project” dated 3 June 2016</li> <li>• The unpatented mining claims are located exclusively on US federal land administered by the Bureau of Land Management (BLM)</li> <li>• There are no known impediments to exploration or mining in the area</li> </ul>
<i>Exploration done by other</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 summarized in Company report titled “Global to Acquire Advanced Nevada Lithium-Boron Project”</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>parties</i>		<p>dated 3 June 2016</p> <ul style="list-style-type: none"> <li>Only limited information is available in regard to the results of exploration by other parties</li> </ul>
<i>Geology</i>	<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>Clay-type 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 deposits in a shallow lake environment</li> </ul>
<i>Drill hole Information</i>	<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>No drill results are being reported in this Report</li> </ul>
<i>Data aggregation methods</i>	<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>No weighting or averaging has been used</li> <li>No drill results are being reported in this Report</li> <li>No metal equivalent values are being reported</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<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>No drill results are being reported in this Report</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of</i></li> </ul>	<ul style="list-style-type: none"> <li>No drill results or intercepts are being reported in this Report</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>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>	
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The results reported are considered representative</li> <li>• Rock chip geochemical results are not indicative of grade but do provide an indication of the presence of mineralisation.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All other known exploration data has been reported by the Company in this report and earlier Company reports that are referenced in the report</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Further work is likely to include: RC and core drilling Estimation of a Mineral Resource Preliminary metallurgical and process test work</li> <li>• A drilling permit is required before drilling can commence</li> </ul>