

Global Geoscience Intercepts High-Grade Lithium-Boron Within and Beyond Existing Resource at Rhyolite Ridge in Nevada, USA

HIGHLIGHTS

- ▲ **Initial results from current drilling program confirm additional high-grade lithium-boron mineralisation within the current Indicated and Inferred Mineral Resource of 393Mt at 1640 ppm lithium (Li) and 0.51% boron (B)**
 - ▲ **Drilling further indicates strong lithium-boron mineralisation extends south of the current resource**
 - ▲ **Intersections include:**
 - **17m at 2153ppm Li and 1.18% B** from 87m within a zone of: 40m at 1975ppm Li and 0.53% B in drill hole SBH-19
 - **18m at 1718ppm Li and 1.83% B** from 165m within a zone of: 38m at 1706ppm Li and 0.92% B in drill hole SBH-20
 - **17m at 1856ppm Li and 1.74% B** from 131m within a zone of: 37m at 1876ppm Li and 0.85% B in drill hole SBH-21
 - **17m at 1805ppm Li and 1.95% B** from 122m within a zone of: 38m at 1885ppm Li and 0.89% B in drill hole SBH-22
 - ▲ **Further assay results are expected soon from additional infill and extensional drilling**
 - ▲ **An updated Mineral Resource estimate will be completed in September 2017**
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North Sydney, Australia, 16 August 2017 – Global Geoscience Limited (“Global” or the “Company”) (ASX: GSC) is pleased to announce initial results from the current drilling program at its 100%-owned Rhyolite Ridge Lithium-Boron Project (“Rhyolite Ridge” or the “Project”) in Nevada, USA. Global is advancing Rhyolite Ridge and a Pre-Feasibility Study (“PFS”) for the Project is well underway.

The current 5,000m drilling program is designed to upgrade a portion of the current resource from Inferred to Indicated category. This drilling program will also test for extensions of shallow, high-grade lithium-boron mineralisation outside of the current resource, particularly to the south.

“The confidence gained from this drilling program to upgrade and extend the resource is just one of many work streams underway that are integral to the forthcoming Rhyolite Ridge PFS,” commented Bernard Rowe, Managing Director of Global. “The initial results not only confirm thick zones of consistent, flat-lying lithium-boron mineralization at the Project, but that it extends beyond its current defined resource.”

Significant intersections from the first eight drill holes of the current program are tabulated in the table below:

Hole Number	From (m)	Intercept (m)	Li (ppm)	LCE (%)	B (%)
SBH-16	77.7	24.3	2478	1.3	0.15
	117.4	19.8	1404	0.7	0.02
SBH-17	62.5	25.9	2488	1.3	0.02
SBH-18	93.0	19.8	2323	1.2	0.02
	125.0	30.5	1220	0.6	0.01
SBH-19 <i>including</i>	68.6	39.6	1975	1.1	0.53
	86.9	16.8	2153	1.1	1.18
	140.2	10.7	1367	0.7	0.42
SBH-20 <i>Including</i>	146.3	38.1	1706	0.9	0.92
	164.6	18.3	1718	0.9	1.83
SBH-21 <i>including</i>	114.3	36.6	1876	1.0	0.85
	131.1	16.7	1856	1.0	1.74
SBH-22 <i>including</i>	103.6	38.1	1885	1.0	0.89
	121.9	16.8	1805	1.0	1.95

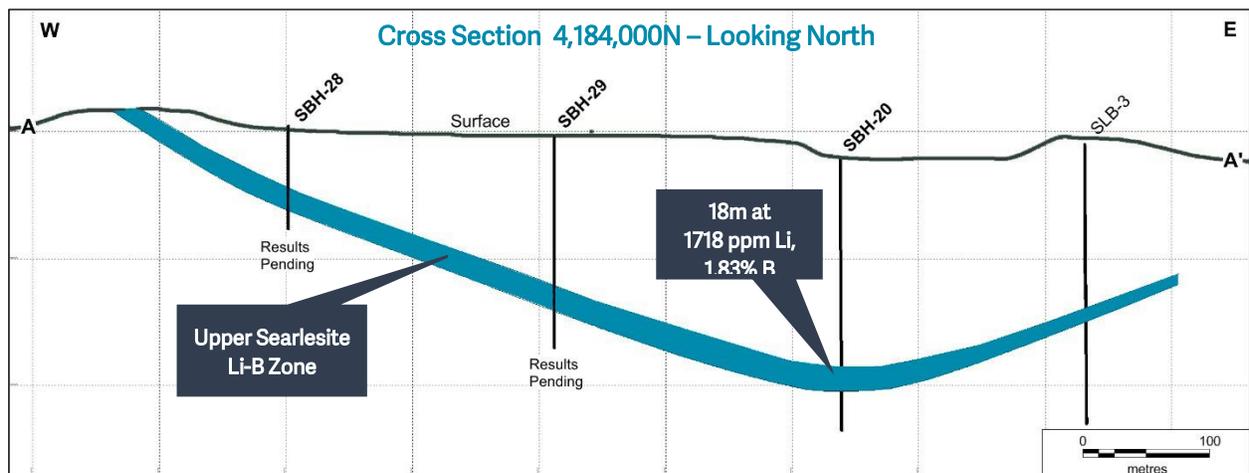
Note: All holes are vertical and downhole intersections are estimated to be at least 80% of true widths. Intersections have been calculated using a 1,000ppm Li cut-off first, and then applying a 0.5% B cut-off. Lithium content expressed in ppm or % Li can be converted into Lithium Carbonate Equivalent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

For comparison, the high-grade upper searlesite (Li-B) zone within the current Rhyolite Ridge Mineral Resource (totalling 393Mt at 1,640 ppm Li and 0.51% B) is included in the table below:

Classification	Tonnage Mt	Li ppm	Li ₂ CO ₃ %	B %	H ₃ BO ₃ %	K ₂ SO ₄ %	Contained		
							Li ₂ CO ₃ kt	Boric Acid kt	Potassium kt
Indicated	24.3	1,820	1.0	1.64	9.4	2.0	240	2,280	500
Inferred	40.3	1,960	1.0	1.57	9.0	2.3	420	3,620	920
Total	64.6	1,910	1.0	1.59	9.1	2.2	650	5,900	1,420

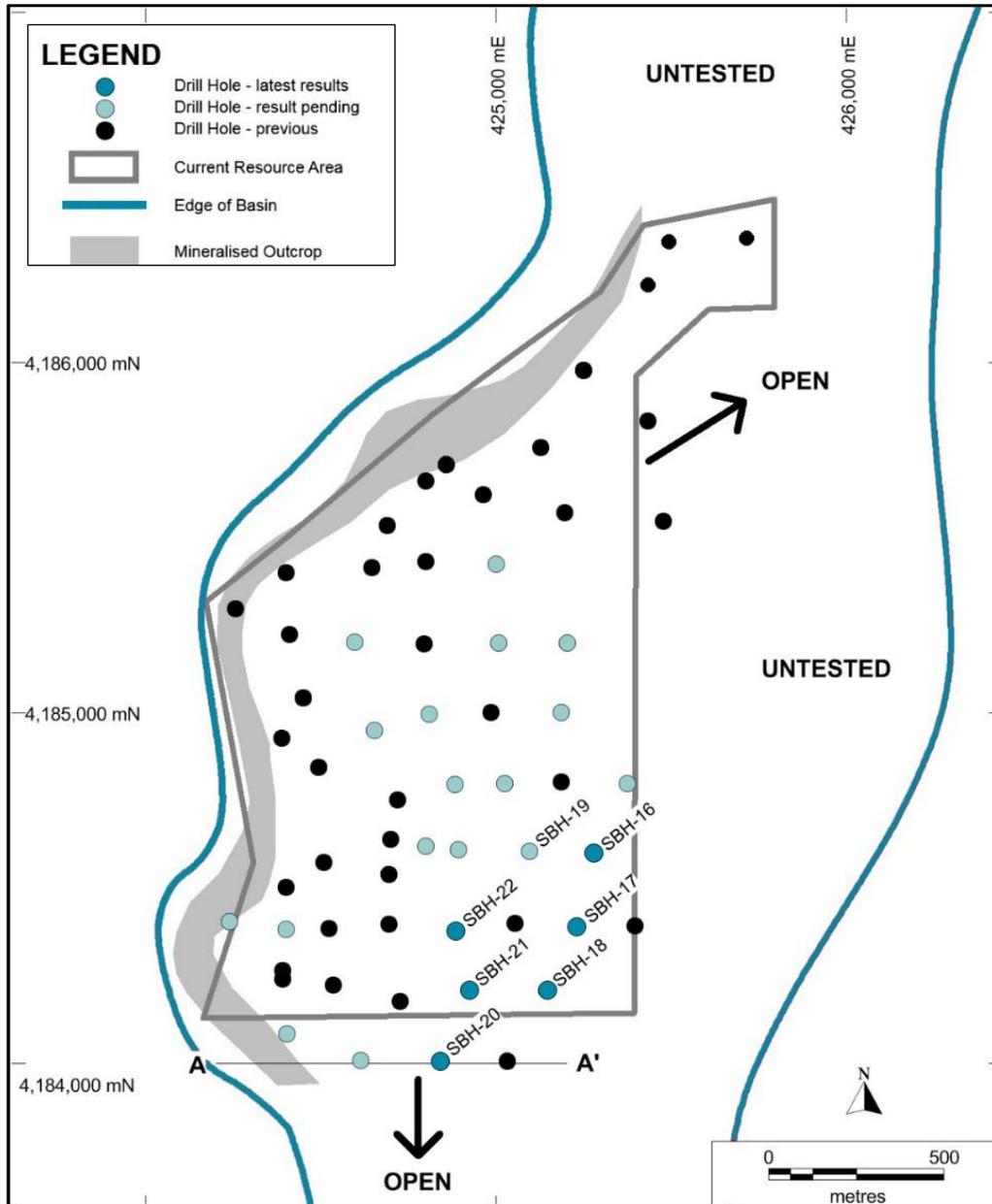
Note: The above Mineral Resource estimate is extracted from the announcement titled "Maiden Resource for South Basin at Nevada Lithium-Boron Project" released to the ASX on 10 October 2016.

The most southerly drill holes (SBH-20, 28 and 29) in this program are likely to extend the current resource to the south. Cross-section 4184000N below shows that the drill holes outside of the current resource have intersected a thick section of the upper searlesite (Li-B) zone that extends to near surface.



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.

The plan below shows the high-grade lithium-boron mineralisation is open to the south of section line 4,184,000N.



Plan of South Basin Mineral Resource area showing drill hole locations

The Mineral Resource remains open to the north, south and east. Assay results from the most easterly drill holes (SBH-16 to 18) in the current drilling program indicate that:

- ▲ The high-grade upper lithium-boron zone has begun to come back closer to the surface, indicating that the maximum depth of this zone is <200m.
- ▲ Lithium grades are increasing and boron grades are decreasing to the east.

WORK PROGRAM IN PROGRESS

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

- ▲ 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;
- ▲ Drilling to upgrade the high-grade Li-B resource to Indicated Resource category;
- ▲ Updated resource estimate;
- ▲ Preliminary mining study including pit design; and
- ▲ Progress environmental, ground water and geotechnical studies.

ABOUT RHYOLITE RIDGE LITHIUM-BORON PROJECT

Global Geoscience's (ASX: GSC) 100%-owned Rhyolite Ridge project is a large, shallow lithium-boron deposit located close to existing infrastructure in southern Nevada, USA. The project lies 25km west of Albermarle's Silver Peak lithium mine and 340km from the Tesla Gigafactory near Reno. Rhyolite Ridge has the potential to become a strategic, long-life and low-cost source of lithium and boron.

Lithium-boron mineralisation is hosted within two sedimentary basins located four kilometres apart: South Basin (9 km²) and North Basin (20 km²). At South Basin, high-grade lithium-boron mineralisation occurs in 20m to 50m thick, sub-horizontal sedimentary layers. The upper-most layer is 20 to 30m thick and outcrops along the western margin of South Basin over a strike length of approximately 3km.

Drilling at South Basin has defined an Indicated and Inferred Resource of 3.4 million tonnes of lithium carbonate and 11.3 million tonnes of boric acid (393Mt at 0.9% Li₂CO₃ and 2.9% H₃BO₃) making it one of the largest lithium and boron deposits in North America. The resource is open in most directions and is likely to increase in size with additional drilling.

The South Basin Resource has a high-grade lithium-boron zone of 65Mt at 1.0% Li₂CO₃ and 9.1% H₃BO₃ containing a total of 650,000 tonnes of lithium carbonate and 5.9 million tonnes of boric acid.

The deposit is amenable to low-cost open pit mining methods and simple acid leaching with low acid consumption. A simple and low-cost flow-sheet is proposed to produce lithium carbonate and boric acid on-site.

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COMPLIANCE STATEMENT

The information in this report that relates to Exploration Results and Mineral Resources 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	Easting	Northing	Elevation (m)	Depth (m)	Dip (°)	Azimuth (°)
SBH-16	4184596	425279	1847	152.4	-90	0
SBH-17	4184389	425232	1850	121.9	-90	0
SBH-18	4184207	425141	1878	164.6	-90	0
SBH-19	4184606	425093	1843	152.4	-90	0
SBH-20	4184010	424838	1878	213.4	-90	0
SBH-21	4184209	424921	1867	170.7	-90	0
SBH-22	4184378	424886	1858	164.6	-90	0
SBH-24	4185523	425320	1841	289.6	-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"> • <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> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <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> 	<ul style="list-style-type: none"> • 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. • Industry standard methods were used for the collection, preparation and analysis of the samples. • 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.
Drilling techniques	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • Drill holes mentioned in this report are RC percussion drilled using a cross-over sub.
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <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> 	<ul style="list-style-type: none"> • Holes were logged by a experienced geologist as they were drilled and hand written logs were completed with lithology and recovery recorded • Overall recoveries were high ensuring samples were representative • No sample bias has occurred as no preferential loss of fine or coarse material has occurred • There is no observed relationship between sample recovery and grade.

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> All holes have been geologically logged over their entire length to a level of detail sufficient for a Mineral Resource estimation The logging is qualitative in nature
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> 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. Approximately 10kg was collected for every 1.5m drill interval. Duplicate samples were collected every 20th sample. Based on previous exploration in the area for this style of mineralization, the sample size is appropriate. Samples are considered representative of the in-situ rock High recoveries indicate samples are representative
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	<ul style="list-style-type: none"> Samples were analysed by ALS Chemex in Reno, Nevada using aqua regia 2 acid digestion and ICP mass spectrometry 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 Acceptable levels of accuracy were established
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Significant intersections have been independently verified by at least two company personnel Data is stored in digital format in a database Twin holes have been completed by previous explorers at the South Basin with good correlation
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations 	<ul style="list-style-type: none"> Drill hole locations were measured by DGPS and are accurate to within 1m

Criteria	JORC Code explanation	Commentary
	<p><i>used in Mineral Resource estimation.</i></p> <ul style="list-style-type: none"> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • The area of drilling and hole coordinates are shown in UTM Zone 11, NAD27 grid system
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <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> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Drill holes were generally spaced at 200m • The spacing is considered sufficient to establish geological and grade continuity appropriate for a Mineral Resource estimation • No sample compositing has been applied
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> • <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> • <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> 	<ul style="list-style-type: none"> • Drill holes were all vertical. The holes intersected the mineralisation at between 75 and 90 degrees.
<i>Sample security</i>	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • 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
<i>Audits or reviews</i>	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • A review of the sampling techniques and data storage was completed by a consultant geologist • No items of concern were identified

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

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

Criteria	JORC Code explanation	Commentary
<i>reporting</i>	<i>practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	with previously announced results (drill and rock-chip) from this project
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> All relevant information has been disclosed
<i>Further work</i>	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <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> 	<ul style="list-style-type: none"> Further work will include: Infill and extension drilling (RC and core) Estimation of an updated Mineral Resource Metallurgical testwork Preliminary Feasibility Study (PFS)