

ASX ANNOUNCEMENT

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Global  
Geoscience

# Global Announces Exploration Target at Nevada Lithium-Boron Project

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## Highlights

- Exploration Target calculated for the Rhyolite Ridge Lithium-Boron Project in Nevada
- Previously published RC drill hole data shows two lenses containing 1200 to 2000ppm Lithium (0.64 to 1.06% Lithium Carbonate Equivalent) and 0.6 to 1.2% Boron
- The two lenses are 20 to 60m thick over a strike length of 2.6km and a down-dip extent of 300 to 800m.
- The lenses are sub-horizontal to shallow-dipping and the upper lens outcrops along the margins of the basin
- The Exploration Target represents approximately 10% of the total surface area considered by the Company to be prospective for Lithium-Boron mineralisation
- The Rhyolite Ridge Project is located in Nevada , USA and is 340km by sealed road from the Tesla Gigafactory near Reno
- Previous exploration includes over 100 drill holes and 450 trench and surface samples

## Exploration Target

Global Geoscience Limited (“Global” or the “Company”) is pleased to announce an Exploration Target of **200 to 300 million tonnes of 1200 to 2000ppm Lithium (Li) (0.64 to 1.06% Lithium Carbonate Equivalent) and 0.6 to 1.2% Boron (B)** for its Rhyolite Ridge Lithium-Boron project in Nevada. The Exploration Target is based on actual exploration results including surface geological mapping, rock chip sampling and 15 Reverse Circulation (RC) drill holes. Potential exists for a target of several times this size in extensions in the south and north basins. Higher-grade zones may exist adjacent to feeder structures.

The potential quantity and grade of the Exploration Target is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

**Lithium content expressed in ppm or % Li can be converted into Lithium Carbonate Equivalent (LCE) by multiplying by 5.32. 2000ppm Li is equivalent to 1.06% LCE**

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## Location

The Project is located 60km southwest of Tonopah and 270km southeast of Reno in Nevada, USA. The Project is 30km west of Albemarle Corporation's Lithium Brine Operation at Clayton Valley, the only operating lithium mine in the USA. The tenements straddle an all weather gravel road that extends 15km from a paved highway and powerlines.



**Figure 1. Location map**

## Deposit Geology and Mineralisation

The Project covers two known Lithium (Li) and Boron (B) deposits that were deposited within a shallow lake environment. This type of lithium deposit is known as “clay-type”. However, these deposits differ from other more typical clay-type (hectorite) deposits making them potentially easier and cheaper to process.

The Stratabound Lithium and Boron mineralisation is hosted in a Tertiary-aged sequence of carbonate-rich fine-grained sediments and minor volcanoclastic rocks. The basin is underlain by Tertiary volcanic rocks and Cambrian sediments.

Upper and lower sedimentary units contain boron and lithium mineralised intersections. The lower unit is 20 to 60m thick and averages approximately 0.14% Li. A barren volcanoclastic, clay poor unit about 40m thick occurs between the two mineralised claystone units. The upper unit is 30 to 50m thick and generally hosts higher grade Li and B mineralisation. Li grades in this unit are typically about 0.18% Li in drill hole.

## Drilling

During 2010 and 2011 a total of 15 RC and 21 diamond drill holes were drilled at the south basin area. The holes were drilled at a nominal spacing of 200-400m at angles of between -60 and -90. Summary results for the RC drill holes are available in public reports. Results for the diamond drill holes are not currently available. Results from earlier (1980's) drilling by US Borax are not currently available to the Company. Significant intersections are presented in Table 1 below.

HoleID	East	North	From (m)	To (m)	Intercept (m)	Li ppm	LCE %	B %
SBH-01	424962	4185622	70.1	106.7	36.6	1778	0.95	1.40
SBH-01			140.2	189.0	48.8	1206	0.64	0.90
SBH-03	424445	4185042	88.4	126.5	38.1	2285	1.22	0.80
SBH-03			164.6	224.0	59.4	1159	0.62	0.60
SBH-04	424488	4184842	91.4	128.0	36.6	1890	1.01	1.20
SBH-04			190.5	211.8	21.3	1246	0.66	0.80
SBH-05	424854	4185713	6.1	33.5	27.4	1493	0.79	1.20
SBH-05			76.2	121.9	45.7	1734	0.92	1.40
SBH-06	424795	4185661	12.2	22.9	10.7	1038	0.55	0.60
SBH-06			64.0	146.3	82.3	1369	0.73	1.10
SBH-07	425127	4185755	54.9	100.6	45.7	1828	0.97	0.90
SBH-07			138.7	182.9	44.2	1619	0.86	0.90
SBH-08	424645	4185414	56.4	106.7	50.3	1345	0.72	0.70
SBH-09	424393	4184248	108.2	157.0	48.8	2021	1.08	0.70
SBH-10	424690	4184544	134.1	179.8	45.7	1710	0.91	1.00
SBH-11	424723	4184175	158.5	198.1	39.6	1752	0.93	1.00
SBH-13	424726	4184750	114.3	167.6	53.3	1654	0.88	1.00
SBH-14	424506	4184573	96.0	132.6	36.6	1803	0.96	1.30
SBH-14			193.5	227.1	33.5	1338	0.71	NSR
SBH-15	425054	4184399	79.2	115.8	36.6	1985	1.06	0.60

*Table 1. Significant Drill Intersections from 15 RC holes  
LCE = Lithium Carbonate Equivalent (Li x 5.32); to convert ppm to % divide by 10,000;  
coordinates in UTM Zone 11, NAD27*

The Company does not currently have information on the drilling method and conditions; sampling methods and representivity; logging; analytical methods; verification of assaying and sampling and drill hole information collection. However, the reported orientation of drill holes (-60 to -90) and the orientation of mineralisation determined from government mapping and a field visit indicates that the drilling generally intersected mineralisation at approximately 75-90 degrees.

The drilling completed by JOGMEC and reported by American Lithium Minerals would appear to indicate a mineralised system with relatively consistent thickness and grade. As complete

reports are not yet available to detail drilling/sampling/assay/quality control/data storage/security/location methods, a JORC compliant Resource cannot be estimated.

## Surface Sampling

American Lithium Minerals Inc and Japan Oil, Gas and Metals National Corporation (JOGMEC) reported summary results for 465 surface and trench samples from both the north and south basins. The average grades of all samples were reported as 1348 ppm Lithium, 4621 ppm Boron and 7000 ppm Strontium. For the south basin only, the average sample grades were reported as 1,537 ppm Lithium, 4,945 ppm Boron and 10,442 pm Strontium. Sample grades ran as high as 3,000 ppm lithium.

## Future Work

Upon completion of due diligence the Company intends to undertake an exploration program to test the Exploration Target described in this report. Work that will be undertaken over the next three to six months will include:

- RC and Core drilling (confirmation, infill and extension) leading to estimation of a Mineral Resource
- Preliminary metallurgical and process studies
- Surface sampling (outcrop and trench) over areas outside of the zone of drilling

## Clay-Type Lithium Deposits

Lithium clay deposits are estimated to contain approximately 7% of global lithium resources (USGS) and certain deposits are estimated to have globally competitive production costs. Similar “clay-type” deposits include Sonora (Bacanora Minerals, Mexico) and Jadar (Rio Tinto Group, Serbia).

The Sonora Lithium Project is an advanced lithium-potassium project in northern Mexico majority owned by Bacanora Minerals (TSX.V:BCN). Bacanora has recently completed a Pre-Feasibility Study (PFS) and has commenced a Feasibility Study that is due for completion in Q1 2017. The lithium mineralisation is hosted within a sequence of carbonate-rich fine-grained sediments and volcanoclastic rock.

The Jadar Lithium Project is an advanced lithium-boron project located in Serbia and owned by Rio Tinto Group. The lithium-boron mineralisation is hosted within a sequence of carbonate-rich fine-grained sediments (marls) and volcanoclastic rock.

## Terms

Global Geoscience has an option to acquire a 100% interest in the Rhyolite Ridge Lithium-Boron Project in Nevada. The option agreement entitles the Company to an exclusivity period expiring on 3 July 2016 in which to conduct due diligence on the Project, and a 12 month option period in which it may exercise the option. Due diligence, including check assaying and compilation and assessment of available drill hole data, is in progress. For further information regarding terms, refer to Company Announcement dated 3 June 2016.

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## **References**

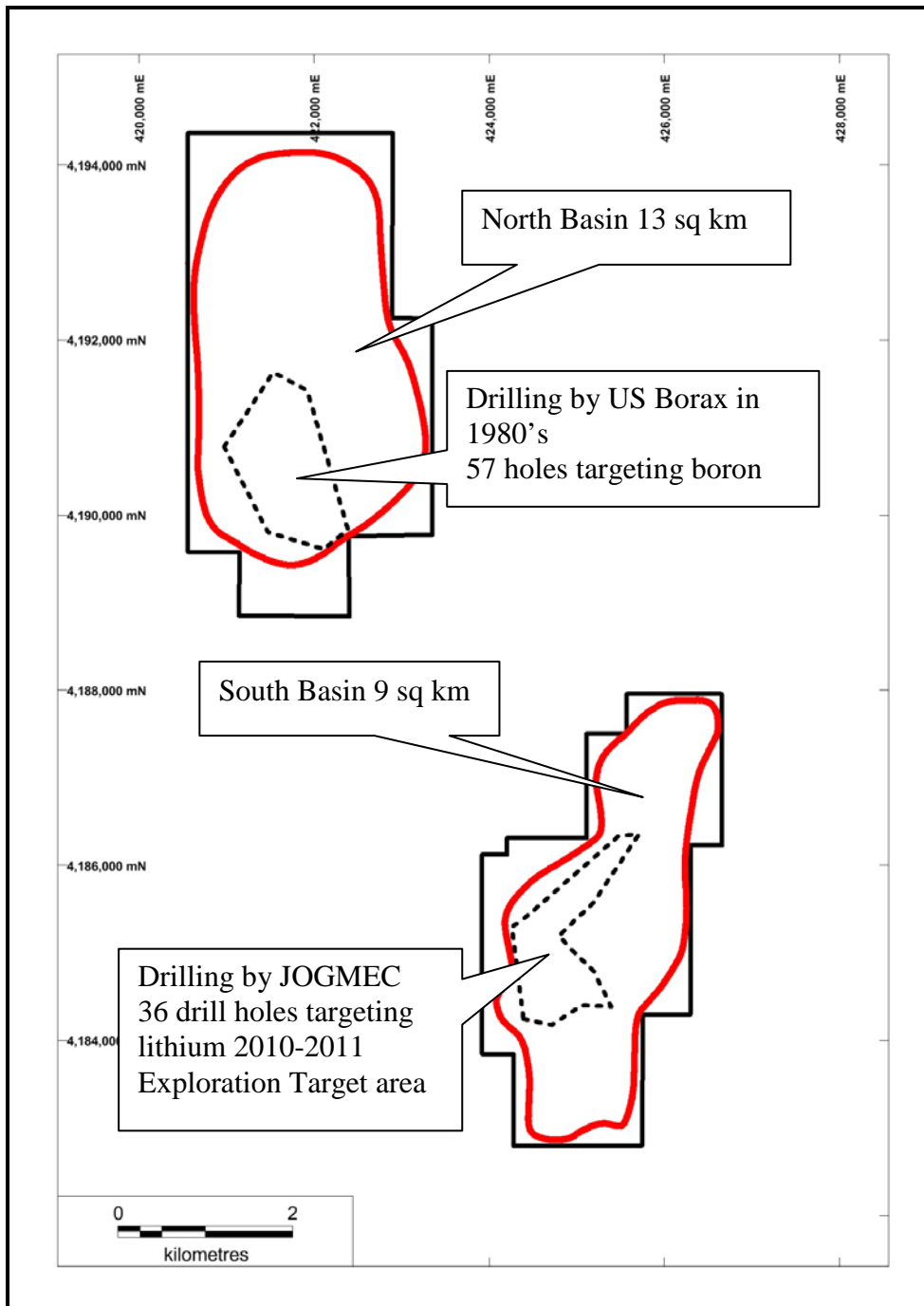
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## **Competent Persons Statement**

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 2. 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>• No details are available for the rock chip sampling undertaken by previous exploration companies</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>• Drill holes mentioned in this report are reverse circulation holes</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 details are available</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 details are available</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>	
Sub-sampling techniques and sample preparation	<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 details are available</li> </ul>
Quality of assay data and laboratory tests	<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 ALS Chemex in Reno, Nevada using aqua regia 2 acid digestion and ICP mass spectrometry and ICP</li> <li>• Standards for Li, B, Sr and As were routinely inserted into the sample batches</li> <li>• No other details are available</li> </ul>
Verification of sampling and assaying	<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 details are available</li> </ul>
Location of data points	<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>• No details are available</li> <li>• The area of drilling and hole coordinates are shown in UTM Zone 11, NAD27 grid system</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Quality and adequacy of topographic control.</i></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>• No details are available for rock samples</li> <li>• RC drill holes were generally spaced at 200-400m</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 angled at between -60 and -90 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>• No details are available</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 details are available</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 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 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 summarized in Company report titled "Global to Acquire Advanced Nevada Lithium-Boron Project" dated 3 June 2016</li> <li>• Only limited information is available in regard to the results of</li> </ul>

Criteria	JORC Code explanation	Commentary
		exploration by other parties
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>• 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>
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 15 RC drill holes is shown in Table 1 of the report.</li> <li>• No other details are available</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>• No details are available</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</li> <li>Soil and rock 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>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>No details are available</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 is likely to include: <ul style="list-style-type: none"> <li>RC and core drilling</li> <li>Calculation of a Mineral Resource</li> <li>Preliminary metallurgical and process test work</li> </ul> </li> <li>A drilling permit is required before drilling can commence</li> </ul>