



31 January 2024

## Spodumene Bearing Pegmatites up to 2.6% Li<sub>2</sub>O and the Planned 2024 Exploration Programme at WSP

- Spodumene bearing pegmatites with assays of up to 2.6% Li<sub>2</sub>O from recent outcrop sampling.
- Exploration to ramp up with exploration budgets approved.
- New high-priority pegmatites to be targeted following data consolidation.
- Strong support from JV partner Mineral Resources Limited (ASX:MIN) as exploration work continues.

Marquee Resources Limited (“Marquee” or “Company”) (ASX:MQR) is pleased to update the market about the ongoing and planned exploration activities at the West Spargoville Project (“WSP” or “The Project”).

During Q4-2023, following on from the completion of a high-resolution aerial magnetics survey (refer ASX release dated 20 Nov 2023), the Company has received results from additional outcrop mapping of high-priority pegmatites with assays up to **2.6% Li<sub>2</sub>O** (23WS0039). These high-priority pegmatites will be targeted with RC drilling upon receipt of relevant approvals. The Company continues to collaborate closely with Joint Venture Partner Mineral Resources Limited (**ASX:MIN**) regarding all facets of the WSP Project and the teams at both MQR and MIN are excited about the 2024 exploration campaign that lies ahead.



Figure 1: Outcropping spodumene (Orange) rich pegmatite from sample location 23WS0044.



## Executive Chairman Comment:

Marquee Executive Chairman, Mr. Charles Thomas, commented:

“We’re looking forward to recommencing drilling after a period of data consolidation from our previous exploration campaigns. We have a much clearer picture of the geological controls on the LCT-pegmatite mineralisation, so it’s exciting to begin preparation for our 2024 exploration campaign.”

“The recent mapping programme has uncovered multiple new mineralised pegmatites and these assay results of up to 2.6%  $\text{Li}_2\text{O}$  reconfirm my view that we are closing in on unlocking the true value of the West Spargoville Project. To have the continued strong support from industry leading company and our JV partner, Mineral Resources Limited (ASX:MIN) in this uncertain time for many junior lithium exploration Companies, also provides us with great confidence that we have a Company making Project and are heading in the right direction at the West Spargoville Project.”

“I look forward to beginning the 2024 drilling campaign in the coming months once we have received all the necessary approvals and will update our shareholders and the wider market as this occurs.”

## Exploration Update & Forward Work Plan

Following completion of aerial magnetic surveying (refer MQR ASX release dated 20 Nov 2023), Company geologists completed a site visit to determine drill rig access for the planned drilling programs. Mapping of pegmatites, using ultraviolet (UV) light, was completed during the early morning with visual spodumene identified at a number of high-priority drilling sites (Figure 1). Rock chip samples of the outcropping, spodumene bearing pegmatites returned significant assay results up to **2.6%  $\text{Li}_2\text{O}$**  (23SW0039) (Table 1 & Figure 2).

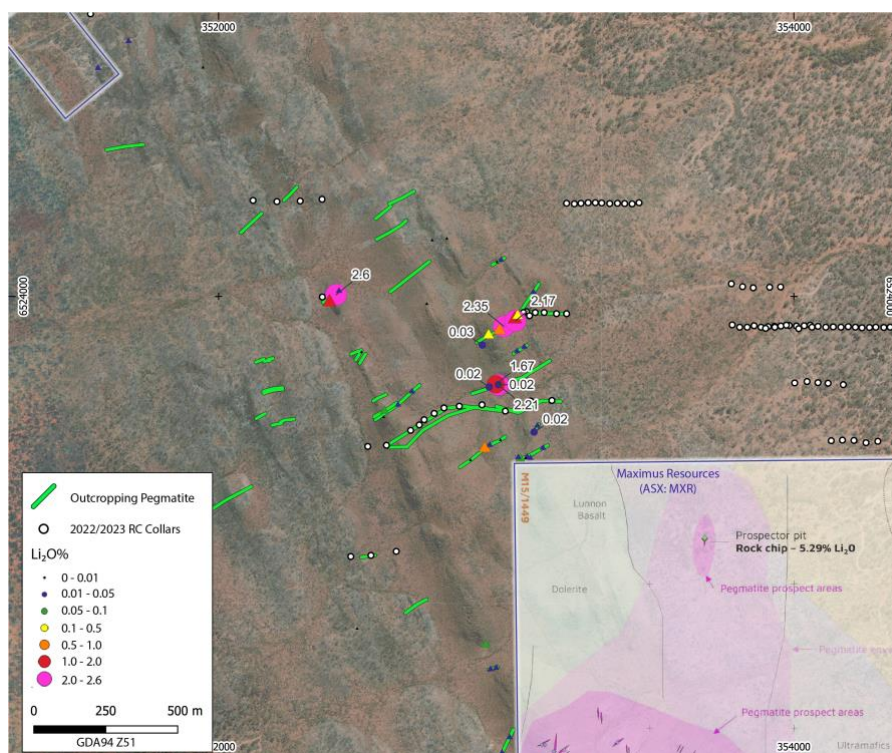


Figure 2: Rock chip sampling results from high-priority pegmatite targets.



Table 1: Rock chip sampling results.

Sample ID	East	North	Log	Provenance	Li_%	Li2O_%	Description
23WS0032	348887	6534867	Pegmatite	Outcrop	0.011	0.02	Coarse quartz, feldspar and mica.
23WS0033	348859	6534902	Pegmatite	Outcrop	0.003	0.01	Coarse feldspar grains from pegmatite.
23WS0034	348674	6534957	Pegmatite	Outcrop	0.007	0.02	Mica rich pegmatite, also contains quartz and feldspar.
23WS0035	348591	6535124	Pegmatite	Outcrop	0.003	0.01	Quartz and feldspar lineations within pegmatite.
23WS0036	348949	6535832	Pegmatite	Outcrop	0.005	0.01	Pegmatite containing quartz, feldspar and mica. Generally fine grained quartz and feldspar with coarser mica up to 15 mm grainsize.
23WS0037	348944	6535835	Pegmatite	Outcrop	0.001	0	Coarse, euhedral feldspar of pegmatite, ~40 mm grain size.
23WS0038	349001	6535827	Pegmatite	Outcrop	0.002	0	Quartz and feldspar pegmatite.
23WS0039	352409	6524006	Pegmatite	Outcrop	1.206	2.6	Spodumene bearing pegmatite with coarse grain spodumene up to 5cm. Minor orange fluorescence under UV.
23WS0040	353097	6523528	Pegmatite	Outcrop	0.007	0.02	Fine quartz and mica with coarse feldspar. Aplitic bands present within specimen.
23WS0041	352917	6523831	Pegmatite	Outcrop	0.014	0.03	Fine quartz and mica with coarse feldspar. Aplitic bands present within specimen.
23WS0042	352973	6523692	Pegmatite	Outcrop	1.026	2.21	White spodumene bearing pegmatite. Fine spodumene crystals ~10 mm long. 3 m wide outcrop extending under cover.
23WS0043	352973	6523693	Pegmatite	Outcrop	0.007	0.02	Oxidised pegmatite adjacent to 23WS0042, as described above.
23WS0044	352964	6523694	Pegmatite	Outcrop	0.776	1.67	Spodumene rich, coarse grain pegmatite outcrop located in creek. 1m wide outcrop extending under cover
23WS0045	352941	6523685	Pegmatite	Outcrop	0.009	0.02	Pegmatite with quartz, feldspar and mica.
23WS0046	352992	6523896	Pegmatite	Outcrop	1.093	2.35	Coarse- and fine-spodumene rich pegmatite, with grain sizes from < 1cm up to 5cm.
23WS0047	353032	6523915	Pegmatite	Outcrop	1.01	2.17	Coarse grained, quartz, feldspar, mica and spodumene bearing pegmatite.

### Next Steps

The Company is preparing for RC drilling at the West Spargoville Project, and progress is being made in the drilling approvals process. Company geologists will complete a passive seismic survey and further mapping and sampling to better define drilling targets. Company geologists alongside representatives from Mineral Resources will be at the WSP site this week completing some of this additional mapping work. The Company aims to commence drilling as soon as possible after the approvals are received.



## The West Spargoville Project

The West Spargoville Project is located in the core of the Southern Yilgarn Lithium Belt, an area that is well known for spodumene deposits that include; the Bald Hill Mine, the Mt Marion Mine, the Buldania Project and Pioneer Dome Project. The world-class Earl Grey deposit and the Mt Cattlin Mine are located further west and south respectively (Figure 3). Marquee entered into an Option Agreement to acquire the West Spargoville Project (refer ASX Release dated 7<sup>th</sup> July 2020 and 9<sup>th</sup> June 2023) which consists of 80km<sup>2</sup> of highly prospective tenure with very limited drilling historically completed on the Project.

Northeast trending structures are the primary structural control on the location of pegmatites at the West Spargoville Project with high-grade lithium bearing pegmatites (Refer MXR ASX Release dated 15 Sept 2016) and recently mapped pegmatites situated along these structures, as observed in magnetics data. This structural trend is analogous to the orientation of spodumene bearing pegmatites at the Dome North Project 40km to the south (Refer ESS ASX Release dated 19 July 2021).

In the Yilgarn Craton, pegmatites are located within 10-kilometres of a common granitic source with proximal pegmatites the least evolved and poorly mineralised, containing only the general rock-forming minerals. More distal and evolved pegmatites may include beryl, beryl and columbite, tantalite and Li aluminosilicates, and pollucite in the most evolved pegmatites. The spatial zonation of pegmatite around a common granitic source is a fundamental starting point for exploration models (London, 2018). In these Archean settings, regional-scale structures control the distribution of pegmatites, being responsible for focusing and transporting fluids and magmas.

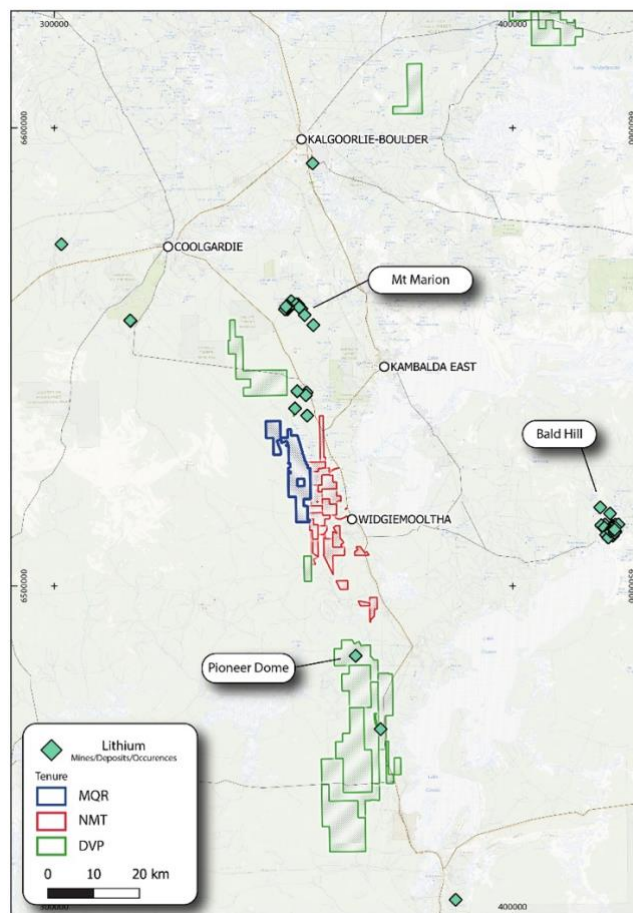


Figure 3: Location of the West Spargoville Project

## References

Bradley, DC, McCauley, AD and Stillings, LL 2017, Mineral-deposit model for lithium-cesium-tantalum pegmatites: United States Geological Survey, Reston, VA, Scientific Investigations Report 2010-5070, 58p.

London, D 2018, Ore-forming processes within granitic pegmatites: Ore Geology Reviews, v. 101, p. 349–383, doi:10.1016/j.oregeorev.2018.04.020.

## COMPETENT PERSON STATEMENT

The information in this report which relates to Exploration Results is based on information compiled by Dr James Warren, a Competent Person who is a member of the Australian Institute of Geoscientists. Dr Warren is the Chief Technical Officer of Marquee Resources Limited. Dr Warren has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the “Australian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Dr Warren consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

## Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of Marquee Resources Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.

This ASX Release has been approved by the Board of Directors.



Charles Thomas – Executive Chairman  
Marquee Resources  
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## JORC Code, 2012 Edition – Table 1 report

### 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>• Mapping and whole-rock sampling was completed on outcropping pegmatite units.</li> <li>• Sampling involved collecting approx. 2kg of rock from in-situ pegmatite material in numbered calico bags.</li> <li>• Sampling was carried out under the Company’s protocols and QAQC procedures as per industry best practice. See further details below.</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 drilling results have been reported in the release.</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</i></li> </ul>	<ul style="list-style-type: none"> <li>• No drilling results have been reported in the release.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>loss/gain of fine/coarse material.</i>	
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 Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <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>	<ul style="list-style-type: none"> <li>• Whole-rock samples were qualitatively logged recording lithology, mineralogy, grain-size structural fabric and other relevant geological information.</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>• Samples were dried and crushed to 70% passing 2mm, riffle split off 1kg, pulverise split to better than 85% passing 75 microns.</li> <li>• This sample preparation technique is considered appropriate for the type and tenor of mineralisation.</li> <li>• The laboratory inserted certified reference material and blanks into the analytical sequence and analysed lab duplicates. These appear to confirm accuracy and precision of the sample assays.</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>• Assaying was completed by ALS Global laboratories, 26 Advantage Way, Wangara WA 6065.</li> <li>• Samples were initially characterised using the ME-MS81 method to determine trace elements and ME-MS81D method for whole-rock analysis and base metals.</li> <li>• ME-MS81: Lithium borate fusion followed by acid dissolution and ICP-AES measurement.</li> <li>• ME-MS81D: Four acid digestion followed by ICP-AES measurement.</li> <li>• For comparison, the samples were then submitted for Sodium peroxide fusion with ICP-MS measurement, method ME-MS89L</li> <li>• Sodium peroxide fusion allows for the complete analysis of samples with resistant minerals. This fusion is ideal when Li and/or B values are required, or for samples that contain a significant proportion of sulphides (&gt; 4%).</li> <li>• Sodium peroxide fusion analysis returned values approx. 5-10% higher lithium grades in mineralised samples and are the values reported in the release.</li> </ul>



Criteria	JORC Code explanation	Commentary
<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>• Data was recorded digitally and in hard copy by on-site Company field staff.</li><li>• All field data is directly recorded in hard copy, then sent electronically to the Chief Technical Officer in the office.</li><li>• Assay files are received electronically from the Laboratory.</li><li>• All data is stored in an Access database system, and maintained by the Database Manager</li><li>• All results have been collated and checked by the Company's Chief Technical Officer.</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><li>• <i>Quality and adequacy of topographic control.</i></li></ul>	<ul style="list-style-type: none"><li>• The coordinate system used is MGA_94 Zone 51.</li><li>• A handheld GPS was used to record the position of the auger holes. Horizontal accuracy was +/- 3 metres.</li><li>• Location accuracy at collars is considered adequate for this stage of exploration.</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>• Data spacing is random and focussed on outcropping pegmatite units.</li><li>• Due to the early stage of exploration, the spacing is appropriate for this stage of exploration.</li><li>• The samples are not appropriate for Mineral Resource estimation.</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>• The stratigraphy within the Project area strikes NNW while interpreted pegmatite dykes strike NE and NW.</li><li>• Sampling was completed along the strike of outcropping pegmatite units</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>• Company samples were kept by the company representatives and submitted directly to the laboratory.</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 audits or reviews have been conducted on the exploration data.</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 sampling occurred on granted tenement E15/1743.</li><li>• Marquee entered into an Option Agreement to acquire the tenement (refer ASX Release dated 7 July 2020) and undertake exploration on the project.</li><li>• The tenement is in good standing.</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>• The area has been subject to historical gold prospecting with several deposits located and mined within the region.</li><li>• The extensive publicly available surface geochemistry database consists of approximately five-thousand data points, within the Project area, made up of predominantly auger soil samples, however less than 10% of the samples were assayed for lithium. By contrast, historical drilling completed within the Project area consists of only 123 wide-spaced RAB holes, with an average depth of 43m, and 16 reverse-circulation drill holes, with an average depth of 78m.</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>• Regionally the geology is dominated by Archean mafic/ultramafic and sedimentary lithologies intruded by granites and pegmatite dykes. Lithium mineralisation associated with LCT Pegmatites is being targeted by the exploration.</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</i></li></ul>	<ul style="list-style-type: none"><li>• Locations of sampling coordinates and appropriate maps have been provided in the body of the text.</li></ul>



Criteria	JORC Code explanation	Commentary
	<i>explain why this is the case.</i>	
<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 data aggregation methods have been used.</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>• The whole-rock results require drill testing to determine if economic mineralisation exists at depth.</li><li>• Due to the nature of the sample media and sampling technique, further drilling is required to determine the relationship between mineralisation and widths.</li></ul>
<i>Diagrams</i>	<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>• Refer to the body of the release.</li></ul>
<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>• Due to the nature of the sampling, the results are to be considered indicative only and not material.</li><li>• The ASX release is considered to represent balanced reporting. Further evaluation of these results is ongoing.</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 available geological, geophysical and geochemical data has been integrated and interpreted by company geologists.</li></ul>