



ASX Code: **SEG**

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Market Announcements Platform  
ASX Limited  
Exchange Centre,  
20 Bridge Street  
Sydney NSW 2000

## SEGUE COMMITS TO NEXT MAJOR PHASE OF EXPLORATION AT PLUMRIDGE NICKEL PROJECT

### HIGHLIGHTS:

- Large-scale, multi-phase gravity survey has commenced at the Plumridge Nickel Project.
- Immediate focus is a detailed gravity survey over the E21 Target (to be completed by end December 2014) to provide high priority drill targets for 1Q 2015.
- New targets identified from detailed airborne magnetic survey over E39/1731.
- Assay results at E21 Target confirm magmatic sulphides (pyrrhotite, pyrite and chalcopyrite).

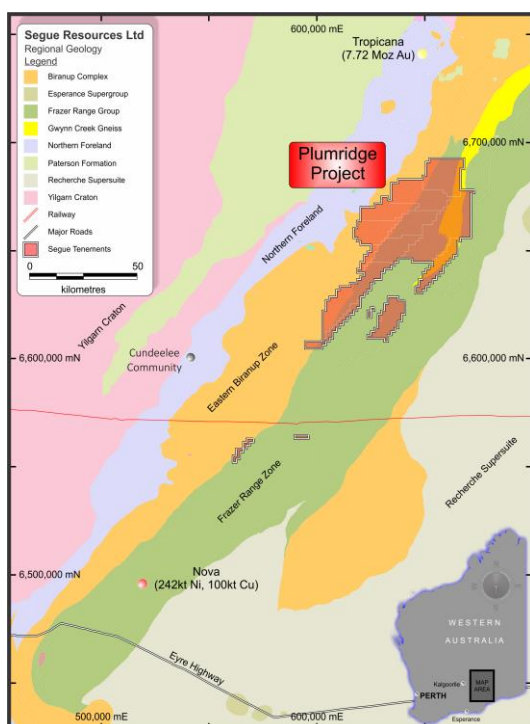


Figure 1 – Plumridge Nickel Project Location Map

### Key Facts:

#### Segue Resources Limited

ASX Code:	SEG
Share price (16/12/14):	0.5¢
52 week range:	0.2¢-1.8¢
Shares on issue:	2,029m
Market cap.:	\$10.1m

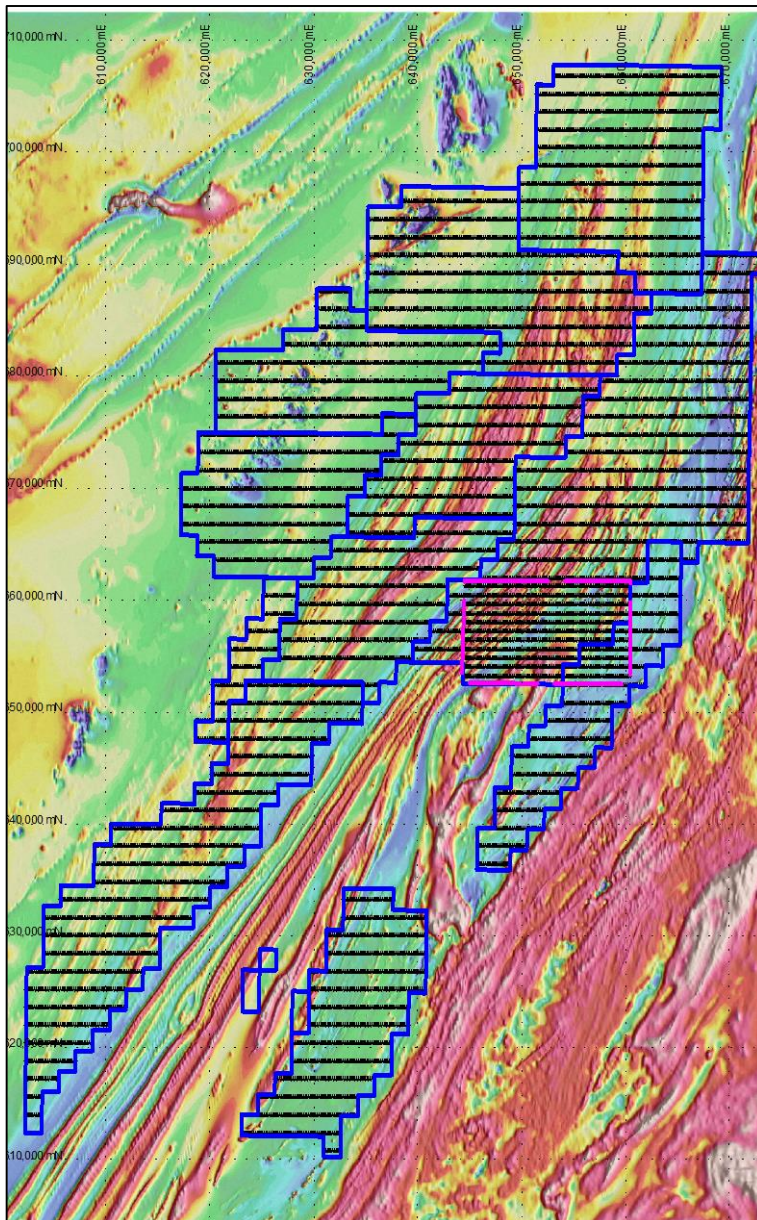
#### Plumridge Nickel Project

Location:	Fraser Range, WA
Primary commodity:	Nickel-copper
Tenement holding	
- 100% interest	2,466km <sup>2</sup>
- 80% interest <sup>1</sup>	641km <sup>2</sup>
Total:	3,013km <sup>2</sup>
1. Segue 80%, Fraser Range Metals Group 20%	

Segue Resources Limited (**Segue** or the **Company**) is pleased to provide an update on the next major phase of exploration at the Company's Plumridge Nickel Project in the Fraser Range Province, Western Australia (**Figure 1**). This work is aimed at generating high priority targets through the collection of project wide, fundamental data sets.

## MAJOR GRAVITY SURVEY COMMENCED

Segue has commenced a large-scale, multi-phase gravity survey for the Plumridge Nickel Project. The survey is designed to provide immediate detailed coverage over key target areas (E21 Target and E28 Target) whilst also collecting regional data across the majority of the project area (**Figures 2 & 3**).



**Figure 2 – Gravity Survey Coverage**

Gravity survey lines (Black lines) - Regional coverage – 1600m x 100m  
Segue tenements (Blue) / Detailed survey (800m x 100m) at E21 Target area (Pink box)

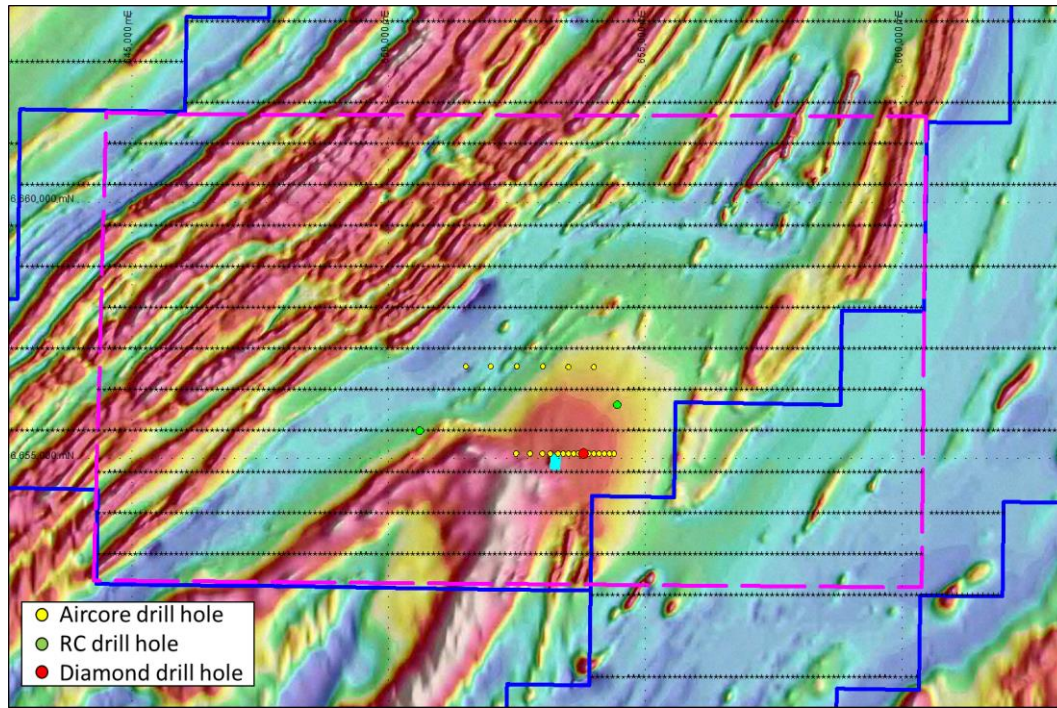
The purpose of the survey is to capture a high quality data set that can be integrated with the existing detailed airborne magnetic data to generate and better define quality targets for follow-up drilling and electromagnetic surveys. The application of 3D Inversion Modeling will be central to this work.

This approach is based on the understanding taken from published data on the Nova Nickel-Copper Deposit (Sirius Resources) that whilst the magnetic data indicates key geological features of interest (e.g. the Nova "Eye"), the intrusions that host the Nova-Bollinger deposits are identified in the gravity data. Electromagnetic surveys can then be focused on priority coincident gravity-magnetic features to produce direct drilling targets.

The program will consist of an immediate detailed survey at the E21 Target on an 800m x 100m station spacing. This information will be used in conjunction with the airborne magnetic data to target the presence of mafic-ultramafic intrusions within the target area. The detailed gravity survey at the E21 Target has commenced and is expected to be completed within two weeks.



The survey will then move to the regional areas (1,600m x 100m) to provide an excellent regional dataset that will be critical to generate the next phase of targets. Infill surveying will be completed as required based on results. The entire survey is expected to be completed by the end of April 2015.



**Figure 3 – Detailed gravity survey at E21 Target**

Commenting on the large-scale gravity survey, Segue's Managing Director, Mr Steven Michael, said:

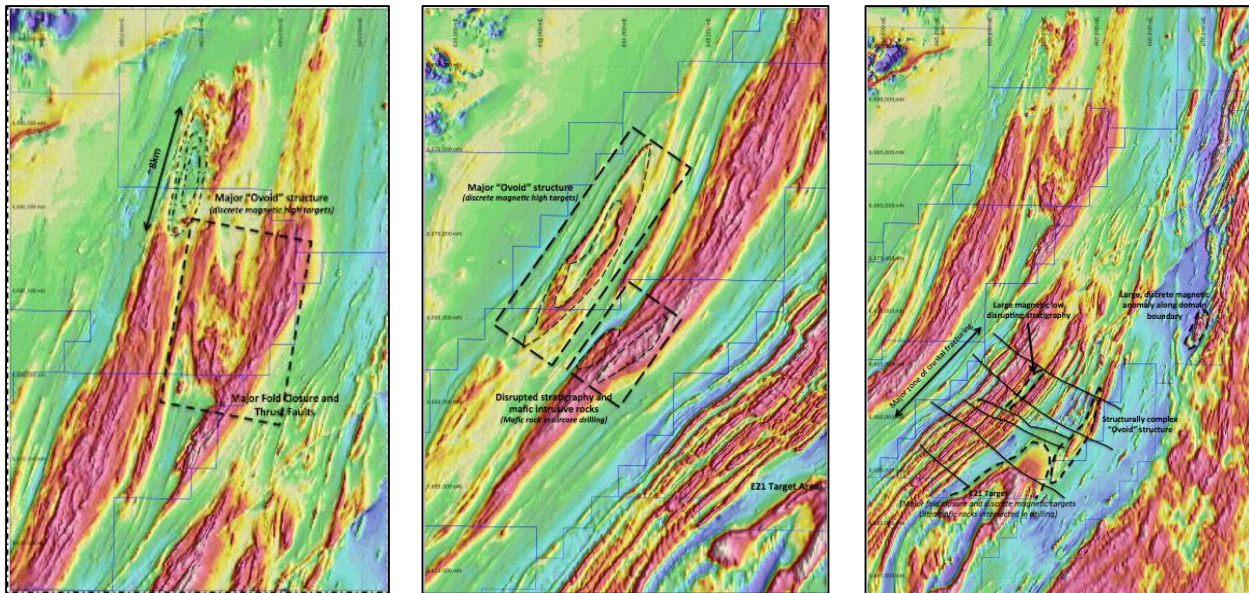
*Segue has commenced a project-wide gravity survey, which will add to the Company's existing datasets and provide an additional level of information for the generation of quality drill targets. Segue has been able to benefit from the current lull in general exploration activity with reduced rates and increased availability of personnel, which will enable the survey to be completed by April 2015.*

*The detailed gravity survey over the E21 Target area will be completed by the end of this year and, when combined with the recently acquired airborne magnetic data, will provide immediate drill targets for 1Q 2015.*

### **AIRBORNE MAGNETIC DATA – NEW TARGETS**

With the completion of the detailed airborne magnetic survey covering E39/1731, the entire Plumridge Project is now covered in high-quality 100 metre line spaced data. This data will continue to form the basis for targeting across the wider project area.

The priority target areas across the project are focused on "ovoid" fold features that are considered to be the preferred sites for mafic-ultramafic intrusions (the host to the targeted nickel-copper sulphide deposits). These areas will be covered as part of the gravity program and reconnaissance programs of aircore drilling will also be undertaken on selected targets. These programs will then form the basis for more targeted exploration (i.e. electromagnetic surveys and reverse circulation (RC) and diamond drilling).



**Figure 4 – Large scale magnetic targets**

## **E21 TARGET**

The E21 Target has been the focus of Segue's recent exploration at the Plumridge Project with the completion of a diamond and RC drilling program (1 Diamond/2 RC) (see announcement 6 November 2014). The results have identified the presence of mafic-ultramafic rocks that host magmatic iron-rich sulphides and are interpreted to potentially be part of a larger intrusive system. As mentioned previously, a detailed gravity survey (800m x 100m for 1,763 stations) has commenced and will be completed by the end of the year.

All assay data has now been returned for the drilling. Results are in line with the pXRF results and confirm the magmatic sulphides are predominantly pyrrhotite and pyrite, with minor chalcopyrite.

For further information visit [www.segueresources.com](http://www.segueresources.com) or contact:

### **Segue Resources Limited**

Mr Steven Michael

*Managing Director*

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### **Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr Peter Langworthy who is a Member of The Australian Institute of Geoscientists. Mr Langworthy has more than five years' experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves". Mr Langworthy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



# JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Ground based Gravity Survey on a 800x 100m grid (E21 target) and 1600x100m grid (Regional) with infill over areas of interest. The gravity survey is being undertaken by Atlas Geophysics Pty Ltd using Scintrex CG5 gravity meters with accuracies better than 0.01 mGal. Position and level data will be acquired with Leica GS14 receivers operating in post processed mode to give horizontal and vertical accuracies greater than 0.05m. GPS control points within the area will be established using the AUSPOS processing facility and static data recorded at 5 second epochs. Gravity control will be established via ties to local Atlas and AFGN stations. 3% of the survey will be repeated to ensure quality and integrity. Preliminary data will be delivered to the client for verification and infill planning every two days or as requested</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling was undertaken.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>No drill sample recovery applicable.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Logging</i>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>No logging undertaken.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>No sub-sampling or sample preparation was undertaken.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>No assays or laboratory tests were undertaken.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No verification of sampling or assaying applicable.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Locations will be measured with a Leica GS14 GPS system with xyz accurate to 1cm.</li> <li>Terrain is very flat, maximum elevation variation &lt;15m.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Line spacing for the survey will be either at 800m or 1600m (N-S) with sample spacing at 100m (E-W). It is anticipated that line spacing could come down to 200m and 50m sample spacing during programs of infill surveying.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Geological structure in the Fraser Range generally runs N-S, the survey being implemented reflects this with a relatively dense sample spacing (E-W) and wide line spacing (N-S).</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>All data is digitally stored by the contractor and relayed to the geophysical consultancy on a regular basis.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Data will be audited by geophysical Consultants Newexco Pty Ltd.</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</i>	<ul style="list-style-type: none"> <li>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</li> </ul>	<p>Tenements E28/1475, E28/2266, E28/2267, E39/1084, E39/1117, E39/1118, E39/1709 &amp; E39/1710 are all owned by Segue (Plumridge) Pty Ltd, a wholly owned subsidiary of Segue Resources</p>

Criteria	JORC Code explanation	Commentary
<i>Tenure status</i>	<p>settings.</p> <ul style="list-style-type: none"> <li>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.</li> </ul>	<p>Ltd. Tenements E28/2317 &amp; E39/1731 are held by Plumridge East Pty Ltd an 80% owned subsidiary of Segue Resources Ltd. All tenements do not intersect any nature reserves, areas with native title or pastoral leases.</p> <ul style="list-style-type: none"> <li>The tenement is wholly within an area with no Native Title, Nature Reserve or Pastoral Leases.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>No nickel exploration has been previously conducted in the area.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Nova Style - Mafic -Ultramafic intrusion related Ni-Cu Sulphides.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Easting and Northings of the survey area are clearly visible on the attached map. No drilling was undertaken and therefore no drill hole information is applicable.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable to the style of exploration undertaken.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable to the style of exploration undertaken.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Attached maps show all relevant information.</li> </ul>
<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>Not applicable to the style of exploration undertaken.</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>Not applicable to the style of exploration undertaken.</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>Next phase of exploration dependent on results of current activities. Could include, aircore, RC and Diamond drilling, and additional geophysical surveys.</li> </ul>