



ASX Code: SEG

6 November 2014

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

## **DRILLING INTERSECTS PROSPECTIVE ULTRAMAFIC INTRUSIONS Pyroxenite intrusions containing magmatic sulphides identified at E21 Target**

- **Diamond hole PD001 was drilled to a total depth of 844 metres to test the priority C1 Fixed Loop Electromagnetic Target (FLEM) at the E21 Target;**
- **PD001 intersected 7 horizons of pyroxenitic intrusive rocks (ultramafic) hosting magmatic sulphides, pyrrhotite and pyrite (iron sulphides) and trace chalcopyrite (copper sulphide), hosted within a sequence of felsic schists and gneissic rocks;**
- **The targeted C1 conductor was drilled at a depth of 631 metres and is interpreted to be a shear zone that intersects a sequence of pyroxenitic rocks (containing sulphides) and graphite bearing (5-10%) schist;**
- **Portable XRF (pXRF) analysis has returned anomalous copper results (laboratory assays are due end of November 2014);**
- **The intersection of the pyroxenitic intrusions hosting sulphides of a clearly magmatic origin is considered highly encouraging. In combination with detailed airborne magnetic data it is interpreted that a larger mafic-ultramafic intrusion is located in the project area; and**
- **Investor conference call with Segue management and geological consultant today.**

Segue Resources Limited (**Segue** or the **Company**) is pleased to announce that the maiden diamond and reverse circulation (**RC**) drilling program at the Plumridge Nickel Project in the Fraser Range Province (**Figure 1**) has been completed and the results of this work are considered highly encouraging.

The drilling program was designed to test four electromagnetic conductors at the E28 Target that lies within tenement E39/1731 (Segue earning 80%/FRMG 20%). The E21 Target covers the northern portion of a large, ovoid magnetic feature that is interpreted to be an intrusion or series of intrusions in a major fold structure within E39/1731 (**Figure 2**). As previously reported (ASX announcement 14 August 2014), Moving Loop Electromagnetic (**MLEM**) and Fixed Loop Electromagnetic (**FLEM**) surveys were undertaken and successfully defined four bedrock conductors (C1, C2, C3 and C4).

The drilling program consisted of an 844 metre pre-collared diamond hole to test the C1 Target, a 196 metre RC hole to test the C2 Target and a 298 metre RC hole to test C4 Target. A decision was made not to drill the remaining target, C3 (see Appendix A for drilling summary).

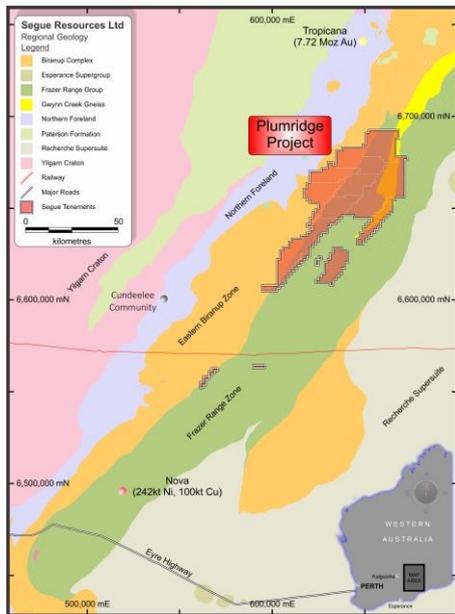


Figure 1 – Plumridge Nickel Project Tenement Map

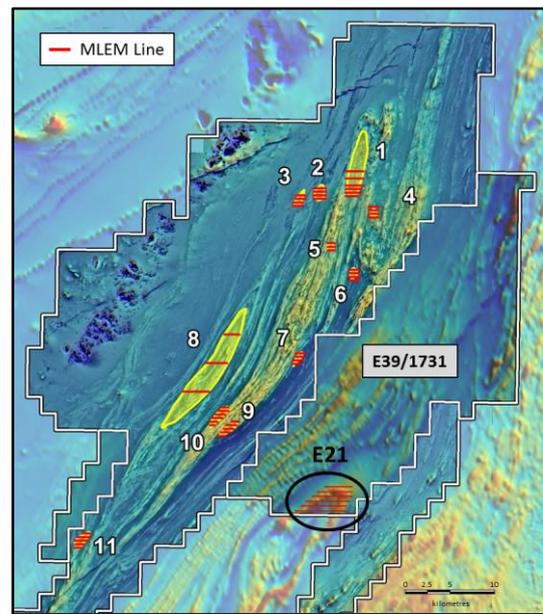


Figure 2 – E39/1731 and E21 Target

## KEY RESULTS

- PD001 intersected 7 horizons (up to 15 metres thick) of pyroxenite (ultramafic intrusive rocks). These rocks confirm the presence in the sequence of the target mafic-ultramafic rocks that are considered the prospective host to nickel-copper sulphides;
- The pyroxenite intrusions contain disseminated sulphides that are magmatic. The sulphides are predominantly pyrrhotite and pyrite (iron sulphides) with trace chalcopyrite (copper sulphide). The sulphides demonstrate that the critical process of sulphur saturation has occurred within the magmatic system (**Figure 3**);

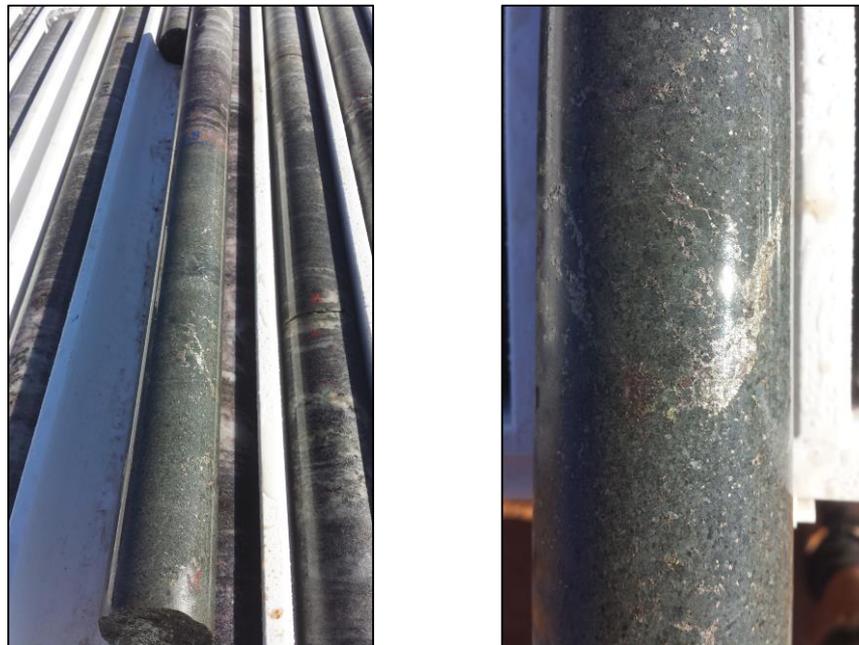
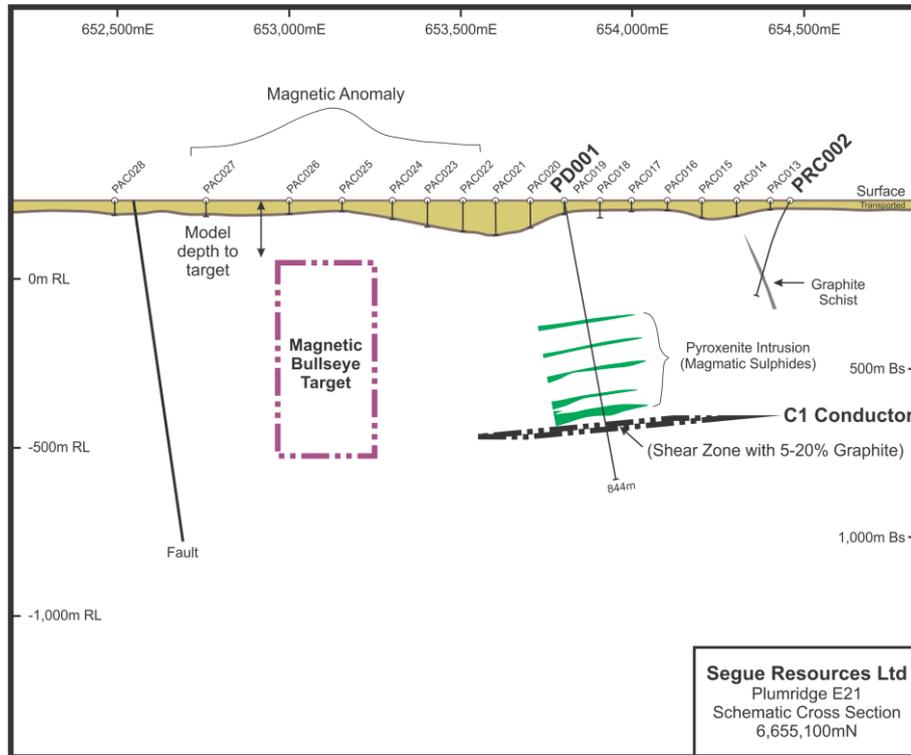


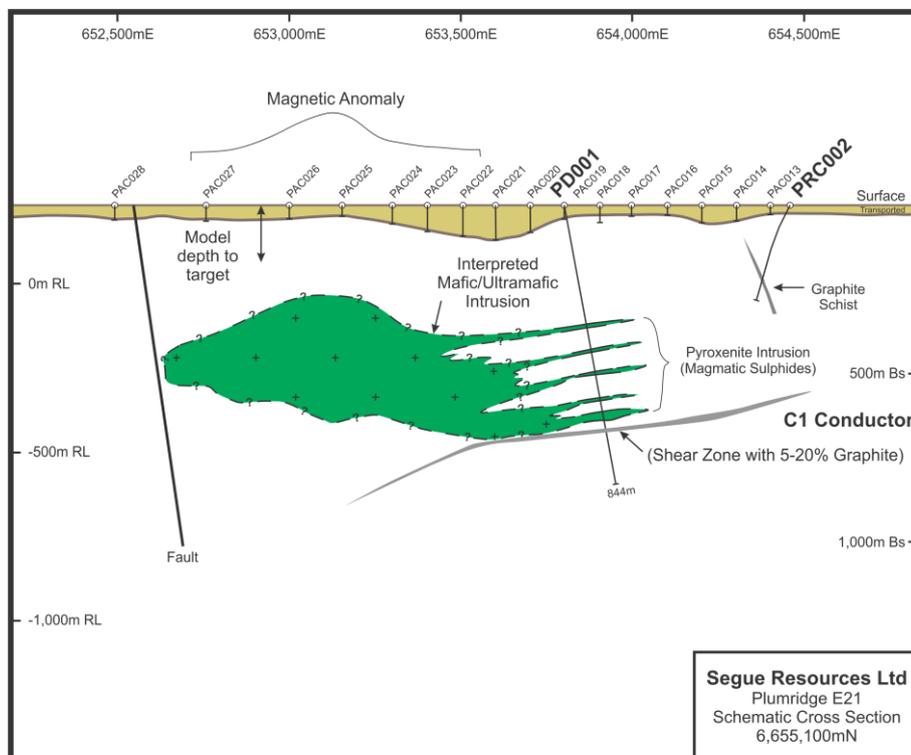
Figure 3 – Diamond core from PD001. Pyroxenite hosting magmatic sulphides

- Preliminary pXRF analyses have returned anomalous copper results. A full set of laboratory assays are expected by the end of November 2014;

- The pyroxenite lenses are interpreted as peripheral sills /dykes to a larger mafic-ultramafic intrusion. At this point the position of the intrusion is being inferred from the recently acquired airborne magnetic data and the fact that the pyroxenites are strongly magnetic. Detailed modelling to better define and locate this position is currently being completed (**Figures 4, 5 and 6**);



**Figure 4 – Schematic cross-section showing the position of PD001 in relation to the pyroxenite intrusions, the conductive shear zone (C1) and the interpreted position of the magnetic body.**



**Figure 5 – Interpreted cross section showing the inferred position of a large-scale mafic-ultramafic intrusion.**

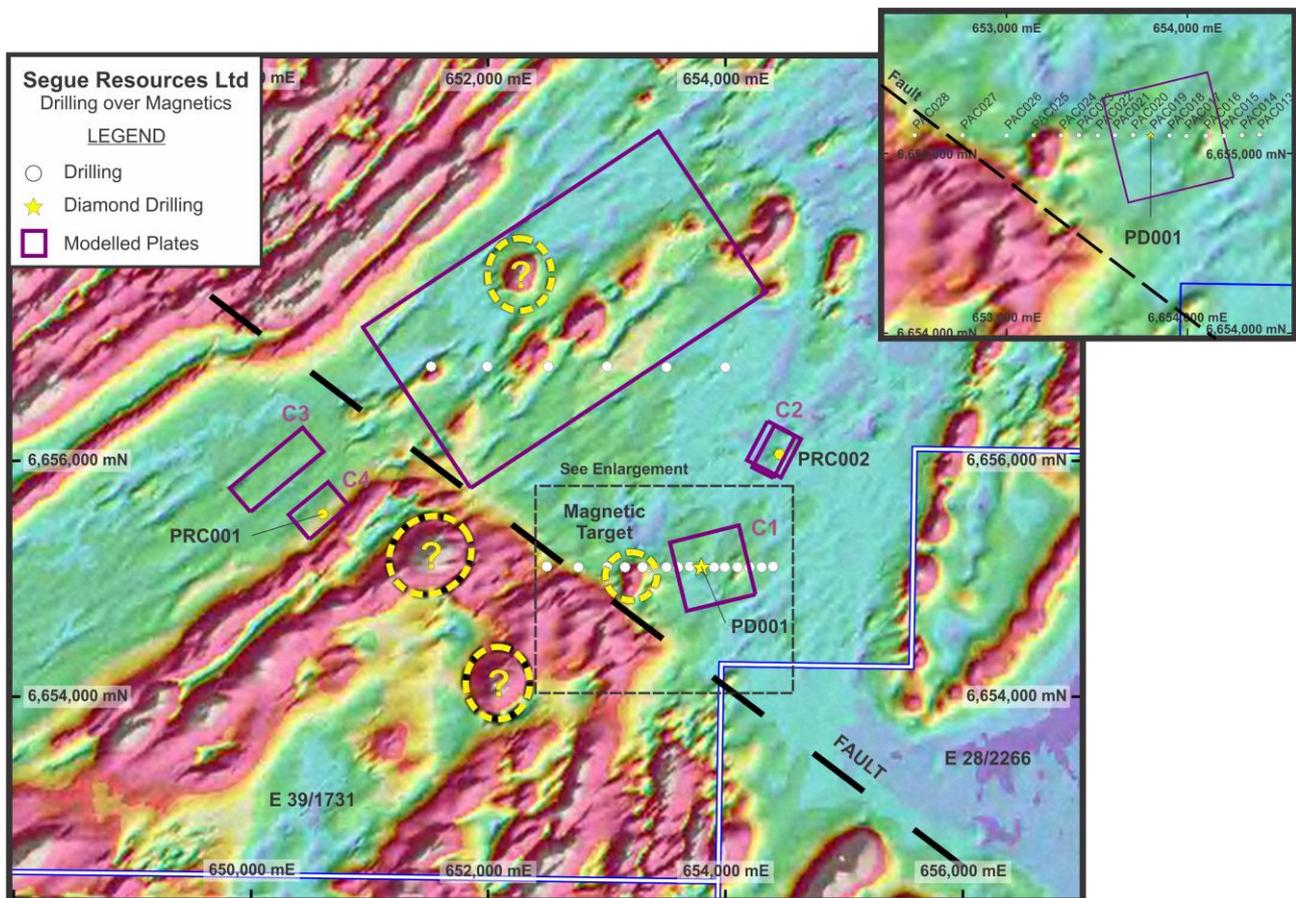


Figure 6 – E21 target showing magnetic image with drilling, modelled conductor plates and magnetic targets.

- The targeted C1 Conductor was intersected, as modelled, at a depth of 631.3 metres. The drill hole intersected a shear zone containing pyroxenitic rocks (containing sulphides) and graphite bearing (5-10%) schist. A downhole electromagnetic survey completed in PD001 confirmed this shear zone as the source of the conductor;
- The C2 and C4 Targets were successfully tested and in each case intersected graphitic schists. A decision was taken not to drill the C3 target.

Commenting on the drilling results, Segue’s Managing Director, Mr Steven Michael, said:

*Segue’s maiden deep drilling programme at the Plumridge Nickel Project has generated some very encouraging results which confirm the E21 Target as being highly prospective for massive nickel-copper sulphide deposits. The drill results and recent detailed aeromagnetic survey have enabled Segue to plan the next phase of exploration which will be conducted over the remainder of 2014.*

*The Company is well funded and will continue to advance its exploration activities at the Plumridge Nickel Project, where Segue holds one of the largest tenement positions in the Fraser Range Province.*

## NEXT STAGE EXPLORATION

PD001 has identified magmatic sulphides hosted by pyroxenitic rocks confirming the potential for a mafic-ultramafic intrusive-hosted magmatic sulphide “event” at the E21 Target. The recently acquired detailed airborne magnetics over E39/1731 show the presence of a distinct “bullseye” magnetic feature approximately 1 kilometre to the west of the drilling. This magnetic target is inferred to represent a larger mafic-ultramafic intrusion with the potential to host nickel-copper sulphides.

The next phase of exploration will include:

- Detailed modelling of the airborne magnetic data to determine the nature and depth of the magnetic target;
- A program of detailed gravity surveying will be undertaken with the aim of identifying more dense intrusive rocks;
- Detailed petrographic analysis of the magmatic sulphides;
- Lithochemical analysis of the rare earth and platinum group elements to determine if any fractionation trends are present; and
- Based on the results of this work the next phase of drilling will be planned.

Over the next 2-3 months, Segue's broader Plumridge Project exploration will focus on advancing the E28 Target where a priority FLEM conductor has been located (ASX announcement 8 October 2014). Consideration will be given to a program of aircore / RC drilling (most likely with additional drilling at the E21 Target) to provide key geological data.

Segue and its geological and geophysical consultants are currently processing and interpreting the newly acquired and merged airborne magnetic data. Interpretation of this dataset will provide the basis for the next set of targets across the project.

## **INVESTOR CONFERENCE CALL**

Segue and its consulting geologist, Mr Peter Langworthy, will be hosting an investor conference call today to discuss the drilling results to date and next stage of exploration at the Plumridge Nickel Project. Dial-in details for the conference call are:

Date: Thursday, 6 November 2014

Time: 3:00 pm (AWST)

Dial in number: +61 2 9007 3187  
1800 558 698 (toll free)

Conference ID: 81003

## **Segue Resources Limited**

Mr Steven Michael

*Managing Director*

T: +61 8 9486 4699

E: [info@segueresources.com](mailto:info@segueresources.com)

## **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.

## Appendix A – Drilling Summary

Hole No	Type	Easting	Northing	Dip	Dip Azimuth	EOH
PD001	RC pre-collar	653,798	6,655,102	-80	105	346.1m
	Diamond	653,798	6,655,102	-80	105	843.5m
PRC002	RC	650,603	6,655,552	-60	140	196m
PRC003	RC	654,456	6,656,057	-65	290	298m

# 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
<b>Sampling techniques</b>	<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>DHEM sytem – DigiAtlantis and Zonge TX system</li> <li>Current – 32 Amp</li> <li>Turn off time – 0ms used</li> <li>Components – B (auv)</li> <li>Datum – MGAZ51GDA94</li> <li>RC drilling – All drill cuttings were collected via a cone splitter. A 1m calico was taken as well as all remaining spoil collected and laid out for 4m composite sampling via tube sampler.</li> <li>Samples were sent to a laboratory where they were pulverised and dissolved with 4 acids and analysed via mass spec.</li> <li>Diamond core is yet to be sampled and assayed.</li> </ul>
<b>Drilling techniques</b>	<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>Reverse Circulation (RC) - 5 5/8inch Hammer</li> <li>Diamond – NQ2 sized core, standard 6m tube. Core was orientated with a Reflex Ori Tool.</li> </ul>
<b>Drill sample recovery</b>	<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</li> </ul>	<ul style="list-style-type: none"> <li>RC – Assesment of recovery was undertaken by a trained geologist at the rig with no significant issues noted. A cyclone-cone splitter was used with dust suppression to ensure recovery and representative sampling with 4m composites collected with a tube sampler. It is unknown at this stage whether sample bias has occurred.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>preferential loss/gain of fine/coarse material.</i>	<ul style="list-style-type: none"> <li>• Diamond – Core recovery assesment was undertaken by a geologist with no issues noted. Core is yet to be sampled at this stage.</li> </ul>
<b>Logging</b>	<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>• Logging was undertaken by a trained geologist with relevent experience in the mineralisation style being explored for with industry standard data collected digitally.</li> <li>• All core and chips were logged</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<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>• Core is yet to be sampled at this stage.</li> <li>• RC chips were split with a cone splitter and composited using a tube sampler, Duplicate samples every ~25<sup>th</sup> sample were taken whilst undertaking sub-sampling with CRM's inserted every ~25<sup>th</sup> sample also.</li> <li>• Sample size was appropriate and representative of the material that was collected.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<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 sent to ALS in Wangara.</li> <li>• Au, Pt, Pd by fire assay and ICP-MS, 50g sample weight (PGM-MS24)</li> <li>• For the following elements - Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr - a mix of Multi-acid digestion with HF (GEO-4A01) and ICPAES and ICPMS (ME-MS61).</li> <li>• Standards and duplicated were inservted at a rate of every ~25 samples</li> <li>• Assays results are still to be returned.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Verification of sampling and assaying</b>	<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>• Significant intersections have been verified by external geological consultants OMNI GeoX Pty. Ltd.</li> <li>• No holes were twinned</li> <li>• All data was stored electronically at point of collection by a trained geologist familiar with the software and later stored in a database.</li> </ul>
<b>Location of data points</b>	<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>• Handheld GPS used for receiver station location. Accuracy ~2m. Coordinates: GDA94/MGA51.</li> <li>• Terrain is very flat, maximum elevation variation &lt;15m.</li> </ul>
<b>Data spacing and distribution</b>	<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>• No results are being reported</li> <li>• No resource is being estimated</li> <li>• Sample compositing has been applied and will be discussed upon release of assay results.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<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>• MLEM line oriented E-W; as close to orthogonal to regional strike as possible.</li> <li>• Drilling was undertaken perpendicular to the interpreted target EM plate. Observations of diamond core imply no sample bias should occur.</li> </ul>
<b>Sample security</b>	<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 transmitted from field to HQ by encrypted satellite system.</li> <li>• Samples were stored on site and later delivered to ALS laboratories by field personnel.</li> </ul>
<b>Audits or reviews</b>	<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>• All data collected and reviewed by independent consultants, OMNI GeoX 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
<b>Mineral tenement and land tenure status</b>	<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 settings.</li> <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>	<ul style="list-style-type: none"> <li>E39/1731 is subject to the Plumridge East Joint Venture. Segue is earning up to an 80% interest in the joint venture.</li> <li>The tenement is wholly within an area with no Native Title, Nature Reserve or Pastoral Leases.</li> </ul>
<b>Exploration done by other parties</b>	<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>
<b>Geology</b>	<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 NiS mineralisation.</li> </ul>
<b>Drill hole Information</b>	<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>Drill hole details can be found within text.</li> </ul>
<b>Data aggregation methods</b>	<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</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable at this moment.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>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></p> <ul style="list-style-type: none"> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<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>Not applicable at this moment</li> </ul>
<b>Diagrams</b>	<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>Attached maps show all relevant information</li> </ul>
<b>Balanced reporting</b>	<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>Not applicable at this moment</li> </ul>
<b>Other substantive exploration data</b>	<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>Not applicable</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>AirCore drilling is planned to test the surface bedrock geochemistry overlying the MLEM conductors.</li> </ul>