



29 January 2016

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

ASX Code: SEG

## QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 DECEMBER 2015

### DECEMBER QUARTER HIGHLIGHTS

- In-fill gravity survey (400m x 200m) completed over four tenements at the Plumridge Nickel Project
- MMG to complete in-fill gravity survey over the remaining tenements in 1H 2016
- Maiden aircore drilling at Salt Creek Project identified mafic intrusions with trace sulphides
- Segue awarded an EIS co-funding grant for five diamond holes at the Salt Creek Project in 2016

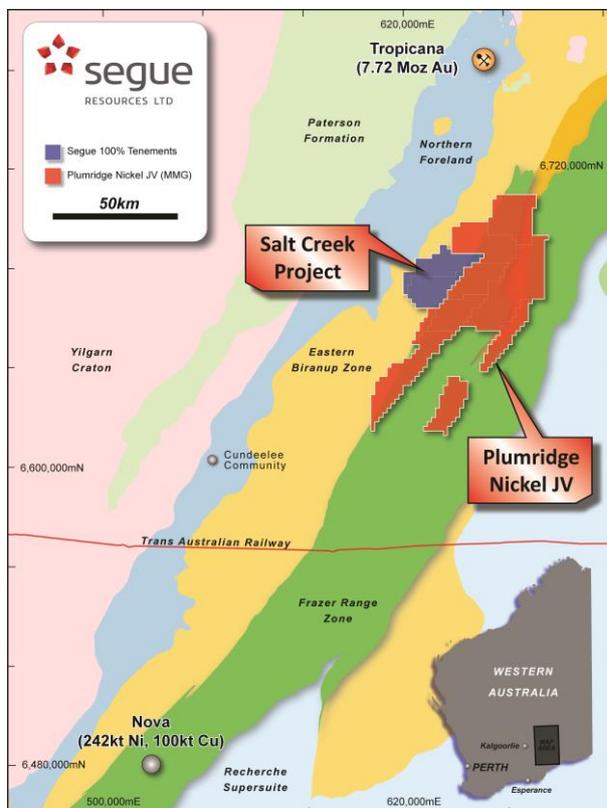


Figure 1: Location map – Plumridge Nickel JV & Salt Creek Project

### Key Facts:

#### Segue Resources Limited

ASX Code:	SEG
Share price (29/1/16):	0.1¢
52 week range:	0.1 - 0.7¢
Shares on issue:	2,666.6m
Market cap.:	\$2.7m

#### Plumridge Nickel Project (100%<sup>1</sup>)

Location:	Fraser Range, WA
Tenement holding:	2,450km <sup>2</sup>

#### Salt Creek Project (100%)

Location:	Eastern Biranup Zone, WA
Tenement holding:	450km <sup>2</sup>

#### Deralinya Nickel Project (70%)

Location:	Fraser Range, WA
Tenement holding:	775km <sup>2</sup>

#### Pardoo Nickel Project (100%<sup>1</sup>)

Location:	Pilbara, WA
Tenement holding:	330km <sup>2</sup>

1. Subject to farm-out joint venture.

## PLUMRIDGE NICKEL PROJECT Fraser Range Province, Western Australia

In September 2015, Segue entered into the Plumridge Nickel Joint Venture (**Plumridge JV**) with international resources company, MMG Limited (**MMG**) (HKEx: 1208, ASX: MMG). Under the Plumridge JV, MMG can earn an initial 51% interest in eight exploration licences through the expenditure of \$6.5m by 31 December 2019, including \$1.5m to be spent before 31 December 2016. MMG can increase its interest to 70% through the expenditure of an additional \$7.5m (total expenditure of \$14m).

During the December quarter, MMG completed a high resolution in-fill gravity survey over four tenements within the Plumridge Nickel JV. The gravity survey consisted of over 6,000 stations on a 400m x 200m grid, to increase the gravity data coverage from 1,600m x 100m (completed by Segue in 2015). The newly acquired gravity data provides a significant increase in detail as shown in Figure 2.

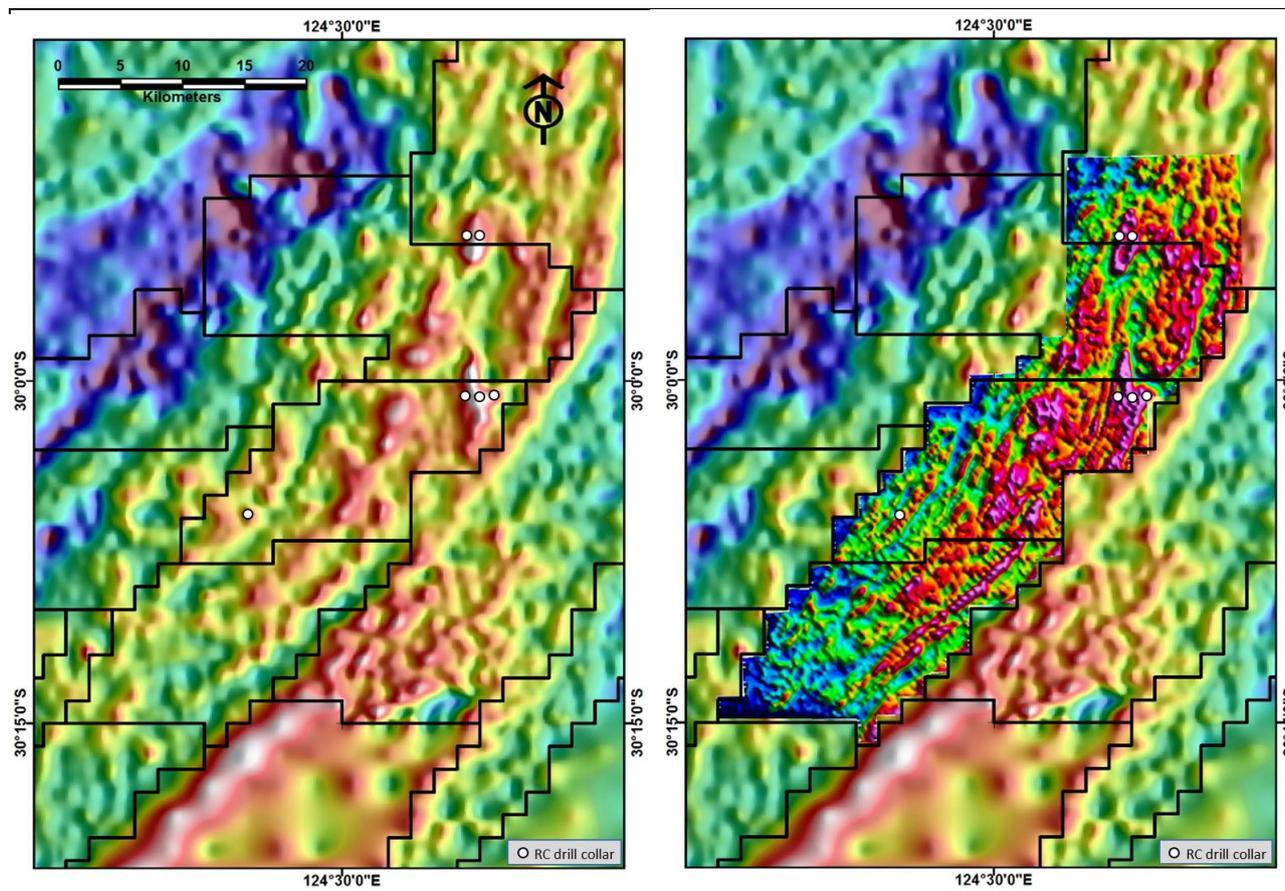


Figure 2: Bouguer 1VD gravity image (Segue 1,600m x 100m on left, MMG 400m x 200m on right)

The detailed gravity data will now be processed, modelled (including 2D and 3D inversion modelling) and interpreted by MMG to assist in identifying prospective intrusions amongst the stratigraphic mafic units.

MMG will undertake Phase 2 of the high resolution ground gravity survey in 1H 2016. Upon completion of the Phase 2 survey, over 90% of the Plumridge Nickel JV tenement package will be covered with high-resolution gravity data. Combined with the high resolution magnetic dataset obtained by Segue in 2013, MMG will be in the best possible position to identify potential Ni-Cu sulphide bearing mafic-ultramafic intrusions. Once identified, intrusions/anomalies will be ranked by integrating and assessing the structural and lithological setting as well as completing 2D/3D models over each target.

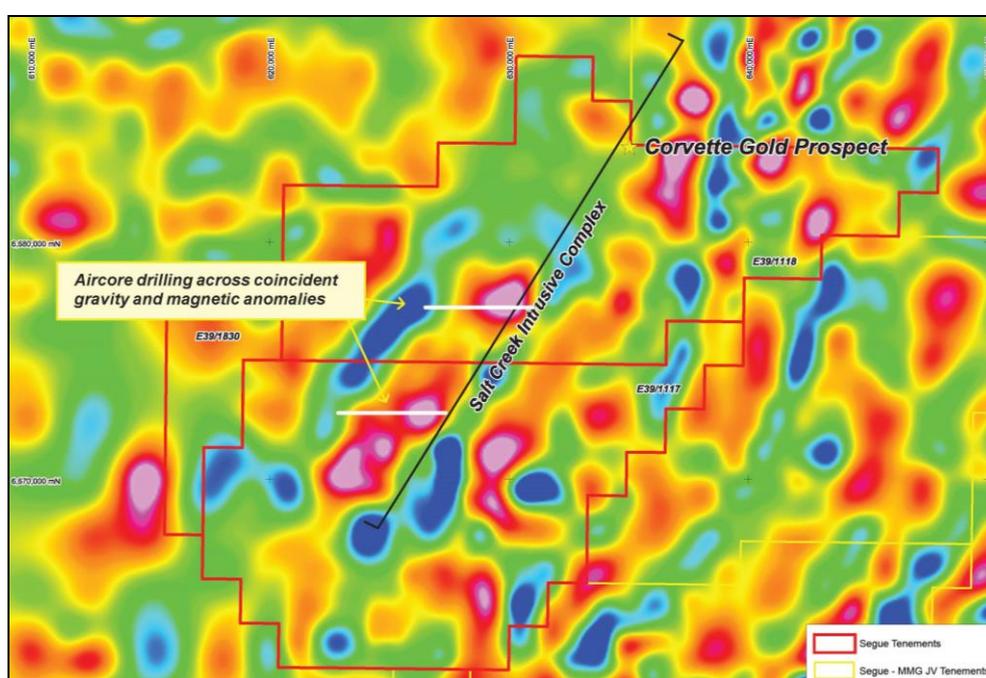
The highest ranked anomalies will be selected for ground EM (moving-loop) to test for any conductive response associated with the anomalies, i.e. direct detection of potential massive Ni-Cu sulphides.

## SALT CREEK NICKEL PROJECT

### Fraser Range Province, Western Australia

The Salt Creek Nickel Project (**Salt Creek Project**) comprises three exploration licences totalling 460km<sup>2</sup> immediately west of the Plumridge Nickel Project in the Fraser Range Province of Western Australia. The Salt Creek Project contains a belt of intermediate-mafic intrusions that are considered prospective for nickel, copper and PGE's, similar to those found at the Nova Bollinger and Nebo Babel nickel-copper deposits. The intrusions do not outcrop and are concealed below recent sedimentary sequences, however they are clearly visible within processed magnetic imagery.

Through existing detailed magnetic surveys and the project scale gravity survey completed by Segue in 2015, two exploration targets were highlighted within the Salt Creek Project. The targets are broad residual gravity anomalies that occur over thickenings of the observed magnetic features. During the quarter, Segue completed a maiden aircore drilling programme across both target areas, with 20 holes completed for 842m on two traverses (**Figure 3**).



**Figure 3: Aircore drilling programme over gravity contours**

The drilling intersected three zones of mafic intrusive rocks that appear to be largely coincident with the targeted gravity highs. The intrusions range from fresh dolerite and gabbro that have undergone variable amounts of metasomatic alteration, to totally altered high metamorphic grade amphibolite (after mafic intrusion). This variation suggests that the Salt Creek Complex in this location has been emplaced in multiple phases over an extended period of time.

Traces of sulphides have been identified in both hand specimen and in petrographic analysis. These sulphides, including chalcopyrite, are interpreted as being of an igneous (magmatic) origin indicating that critical sulphur saturation has been reached as the magma crystallised, and thus confirming the potential of these rocks to form magmatic sulphide deposits.

Segue has been awarded an Exploration Incentive Scheme grant from the WA Department of Mines and Petroleum for the co-funding (up to 50%) of five diamond drill holes at the Salt Creek Project during 2016. The grant will enable Segue to collect diamond core from a number of locations within the Salt Creek Complex to determine the evolution and potential fertility of the mafic and ultramafic intrusions.

## PARDOO NICKEL PROJECT

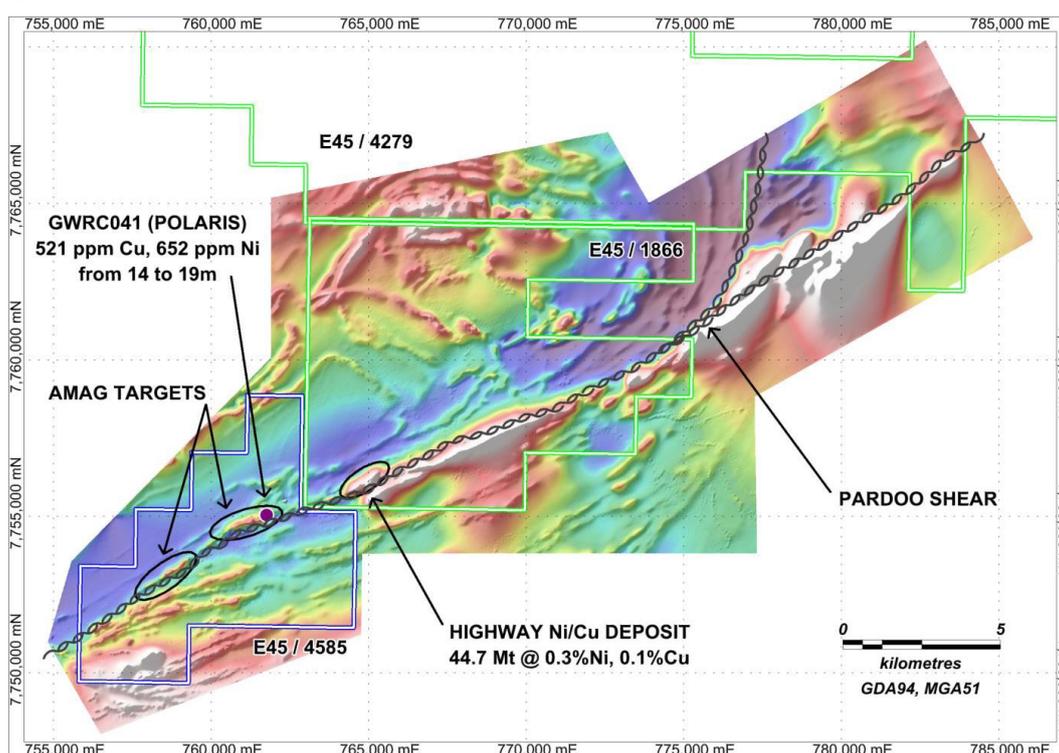
### Pilbara Region, Western Australia

Segue entered into the Pardoo Joint Venture (**Pardoo JV**) with Port Exploration Pty Ltd (**Port**) in August 2015, covering the Company's Pardoo Nickel Project (**Pardoo Project**) in the Pilbara region of Western Australia. On 17 December 2015, Caeneus Minerals Ltd (ASX: CAD) (**Caeneus**) completed the acquisition of Port and has assumed all rights and obligations under the Pardoo JV.

On 23 November 2015, Caeneus announced preliminary results of a recently completed low level aeromagnetic survey over the southwest portion of the Pardoo Project. The survey was flown with 50m line spacing and collected magnetic, radiometric and elevation data. The survey results provide detailed information that will be used by Caeneus for structural and lithological interpretation as well as direct targeting. The radiometric data will be useful for interpreting rock units where cover is thin or absent.

Initial target selection by Caeneus and Southern Geoscience Consultants is based on identifying the potential base of the large layered mafic-ultramafic intrusion where it is in contact with the regional Pardoo Fault. The base of this contact is where magmatic nickel and copper sulphides are interpreted to have accumulated, including the Highway Ni-Cu deposit.

The survey has identified several complex linear magnetic anomalies adjacent to the Pardoo Fault at the interpreted base of the large mafic-ultramafic intrusion (**Figure 4**). These aeromagnetic targets are deemed high priority.



**Figure 4: Aeromagnetic image highlighting the Pardoo Fault/Shear along with the two high priority targets**

Detailed assessment of this large intrusion to delineate high priority Ni-Cu-Pge exploration targets, especially near the base of the intrusion adjacent to the Pardoo Fault, will form the core focus of exploration activities in the short to medium term. These activities are likely to include detailed ground based gravity and moving loop EM surveys followed up by RC and diamond drilling programs.

## **CORPORATE AND FINANCIAL**

### **Placement**

During the quarter, Segue completed a placement of 26,570,049 shares at 0.207¢ per share to raise net proceeds of \$55,000 to Acuity Capital Pty Ltd pursuant to the Controlled Placement Agreement announced on 19 August 2015.

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

### **Segue Resources Limited**

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*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.

## Appendix A – Schedule of Tenements as at 31 December 2015

Tenement ID	Status	Interest at beginning of quarter	Interest acquired or disposed	Interest at end of quarter
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### Plumridge Project

E28/1475	Granted	100%	0%	100%
E28/2266	Granted	100%	0%	100%
E28/2267	Granted	100%	0%	100%
E28/2317	Granted	100%	0%	100%
E28/2385	Granted	100%	(100%)	0%
E28/2387	Granted	100%	(100%)	0%
E28/2388	Granted	100%	(100%)	0%
E28/2390	Granted	100%	(100%)	0%
E28/2391	Granted	100%	(100%)	0%
E28/2392	Granted	100%	(100%)	0%
E28/2393	Pending	100%	(100%)	0%
E39/1084	Granted	100%	0%	100%
E39/1709	Granted	100%	0%	100%
E39/1710	Granted	100%	0%	100%
E39/1731	Granted	100%	0%	100%

### Salt Creek Project

E39/1117	Granted	100%	0%	100%
E39/1118	Granted	100%	0%	100%
E39/1830	Granted	100%	0%	100%

### Deralinya Project

E63/1521	Granted	100%	0%	100%
E63/1522	Granted	100%	0%	100%
E63/1524	Granted	100%	0%	100%
E63/1736	Granted	0%	100%	100%

### Pardoo Project

E45/1866	Granted	100%	0%	100%
E45/4279	Granted	100%	0%	100%

# 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
Sampling techniques	<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>	<p>Ground based Gravity Survey on a 400x 200m grid 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</p>
Location of data points	<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>	<p>Locations measured with a Leica Viva GS14 GPS system, with xyz accurate to 1cm</p>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>	

	<ul style="list-style-type: none"> <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>	Line spacing for the survey is 400m (N-S) with sample spacing at 200m (E-W).
Orientation of data in relation to geological structure	<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>	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)
Sample security	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	All data is digitally stored by the contractor and relayed to MMG Ltd regularly.
Audits or reviews	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	Data will be audited by geophysicists Newexco Pty. Ltd.

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<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>	Tenements E28/1475, E39/1084, E39/1709 & E39/1710 are all owned by Segue (Plumridge) Pty. Ltd. a wholly owned subsidiary of Segue Resources Ltd. All tenements do not intersect any nature reserves, areas with native title or pastoral leases.
Exploration done by other parties	<ul style="list-style-type: none"> <li>• Acknowledgment and appraisal of exploration by other parties.</li> </ul>	No previous nickel copper exploration undertaken by other companies prior to Segue
Geology	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	Nova Style - Mafic -Ultramafic intrusion related Ni-Cu Sulphides

Diagrams

- *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.*

See text for Diagrams

Further work

- *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*
- *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*

Anomalies will be ranked by integrating and assessing the structural and lithological setting as well as completed 2D/3D models over each target. Follow up ground EM (moving loop) will be utilised to test highest ranked anomalies.