



**MATSA**

R E S O U R C E S

LIMITED

ABN 48 106 732 487

**ASX Announcement**

**1<sup>st</sup> December 2015**

## **Diamond Drilling Commenced at Symons Hill**

### **Highlights**

- *Diamond Drilling has commenced today on the first of at least two planned diamond drillholes at Symons Hill Fraser Range.*
- *Drilling will determine whether C11 and VA15 are associated with Nova-Bollinger style Ni-Cu sulphide mineralisation.*
- *A minimum of one diamond hole at each target is to be completed.*
  - *A 650m drillhole to test EM Conductor VA15a under strongly nickel enriched weathered olivine gabbros of **8m @ 0.81% Ni**, at SHG02.*
  - *A 600m drillhole to test EM Conductor C11 adjacent to anomalous bedrock nickel values at SHG10.*
  - *Downhole EM surveys to be carried out to confirm in-hole conductors and to detect off-hole conductors up to 200m away.*
  - *Additional drilling is planned to immediately follow up any encouraging results.*

### **CORPORATE SUMMARY**

#### **Executive Chairman**

Paul Poli

#### **Director**

Frank Sibbel

#### **Director & Company Secretary**

Andrew Chapman

#### **Shares on Issue**

144.15 million

#### **Unlisted Options**

13.94 million @ \$0.25 - \$0.43

#### **Top 20 shareholders**

Hold 51.88%

#### **Share Price on 30 November 2015**

18.5 cents

#### **Market Capitalisation**

\$26.67 million

Matsa is very pleased to report that diamond drilling has recommenced at Symons Hill. Drilling is planned to test EM Conductor targets VA15 and C11 as potential Nova Bollinger style Ni Cu mineralisation. (Figure 1)

A description of EM survey methods is included in Appendix 1. The discovery and EM survey work carried out on these conductors has previously been released to the market. (**Conductor VA15**, MAT announcements to the ASX 22<sup>nd</sup> December 2014 and 31<sup>st</sup> January 2015, **Conductor C11**, MAT announcement to the ASX 23<sup>rd</sup> September 2015).

The programme will consist of a minimum of 2 holes (one per target) for approximately 1,250m of diamond drilling undertaken on a single shift per day basis. It is anticipated that drilling will take approximately 4 weeks to complete. Downhole EM surveys will be carried out on each hole completed in order to confirm any in-hole conductors and to detect off-hole conductors which may have not been intersected.

Matsa Executive Chairman Mr Poli said “We are keen to see the results of this diamond drill programme. We have now spent some 2 years exploring the Symons Hill project and we have not yet found the prize but remain encouraged by the geology of the area and will continue our work diligently and determinedly. We can learn from the recent success of Sandfire Resources at the Monty discovery, who have demonstrated that patience and persistence rewards those who are prepared to give it a go. Matsa believes that the Symons Hill Project is the premier location in the Fraser Range and guts and determination will be rewarded.”

Mr Poli added, “Where there is smoke there is fire, and the Symons Hill project has numerous target areas. We are fortunate in that we have a fantastic cash position which allows us the freedom to continue with our exploration programmes in earnest.”

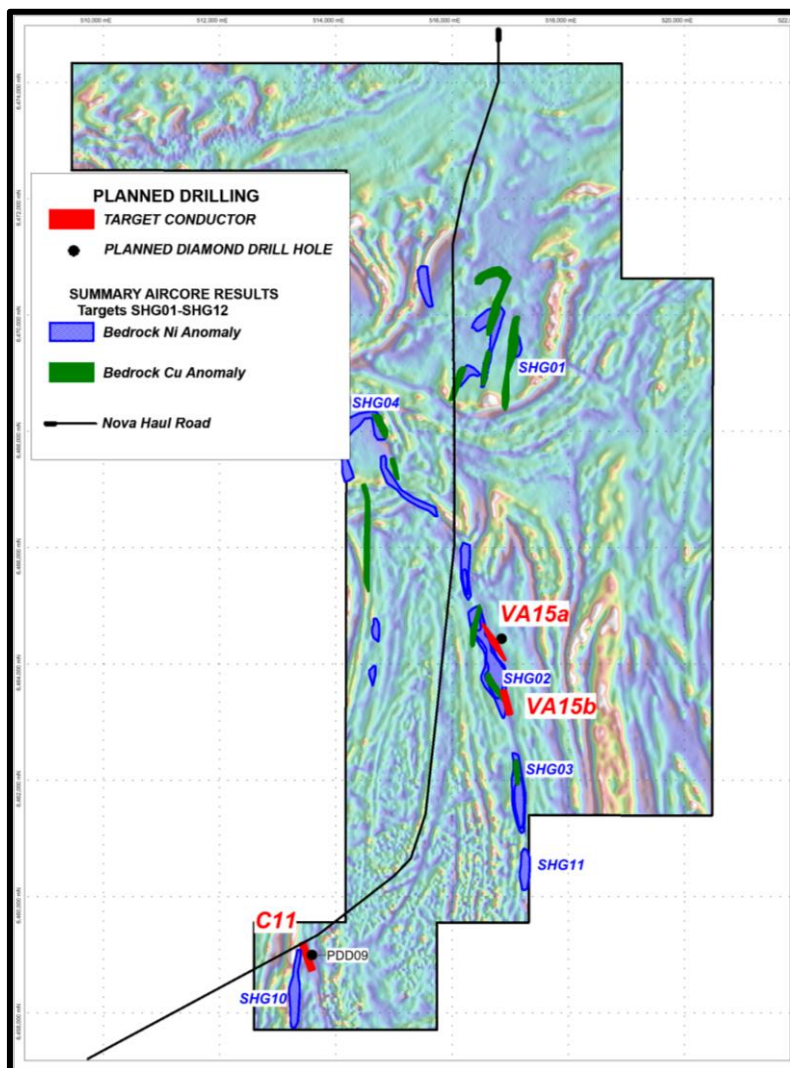


Figure 1: Symons Hill Planned Drilling Dec 2015

## VA 15, Planned Diamond Drillhole PDD02 (Figures 1 and 2)

The VA15 Target was originally discovered by Matsa's 2012 airborne VTEM survey and subsequently confirmed by ground EM surveys including the high powered FLTEM survey which is currently still in progress.

The more recent HPFLEM survey carried out over the VA15 VTEM target was able to better define the target for drilling than earlier EM surveys in 2012 and 2013.

Results of the new HPFLEM survey were modeled and the final interpretation now confirms 2 NNW trending moderate strength (conductance 250-500S) conductors, VA15a and VA15b both dipping steeply towards the NE. These conductors underlie strongly enriched nickel values in weathered olivine gabbros as determined by aircore and shallow RC drillholes of the SHG02 geochemical target (Figure 2). These conductors are interpreted as potential Ni-Cu sulphide mineralisation of Nova Bollinger type. Of particular interest is their close correlation to the anomalous Ni values directly above.

Both conductors are essentially similar, but modelling of the northern anomaly VA15a produced a more robust interpretation and a 650m angled diamond drillhole is planned to test VA15a at a vertical depth of 500m below surface.

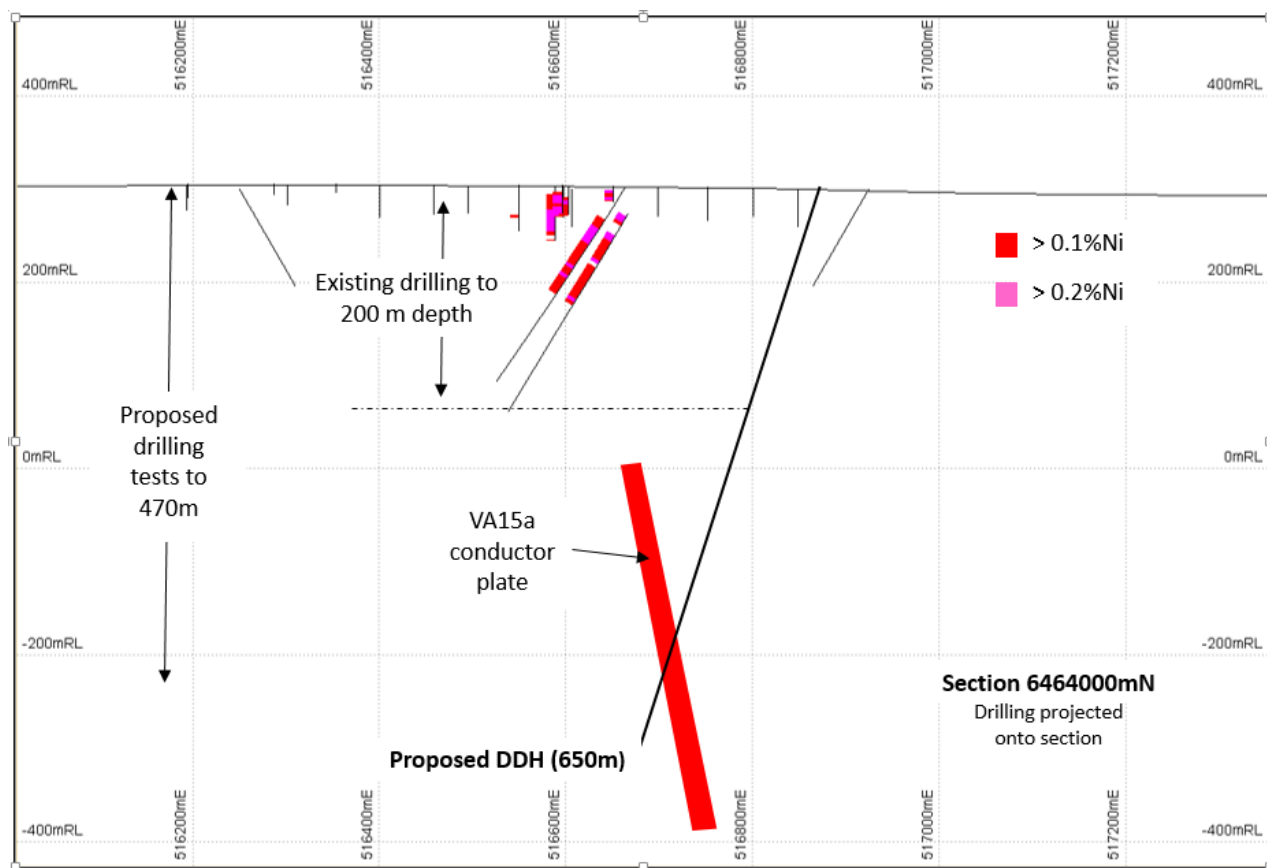
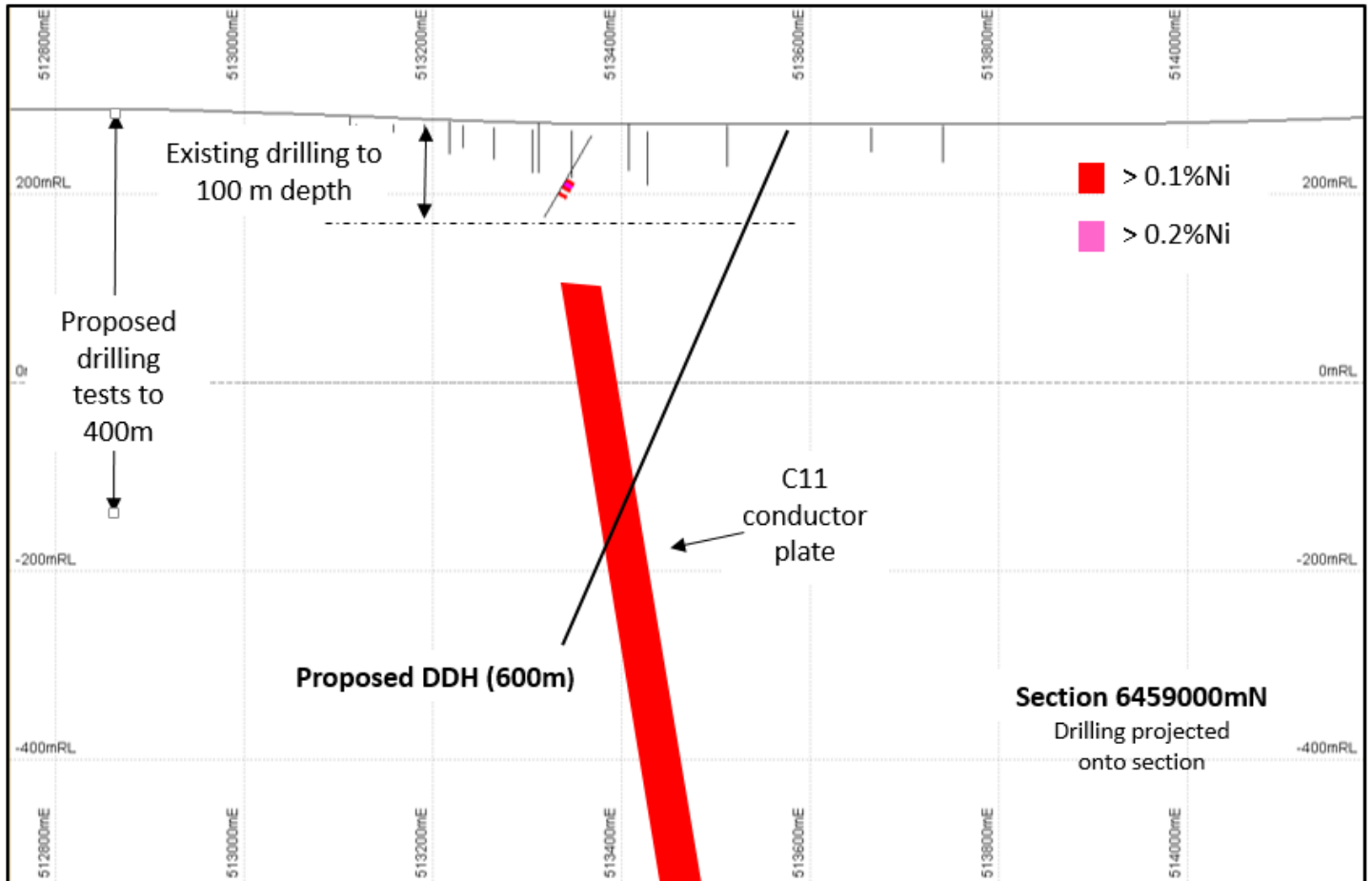


Figure 2: Conductor Plate VA15a (red) on interpretive cross section showing planned drillhole VA15A

## C11 Conductor Planned Diamond Drillhole (Figures 1 and 3)

C11 is a moderate strength (~250-500S) bedrock conductor located under anomalous bedrock Ni values >300ppm Ni in weathered bedrock with nickel values of up to 0.2% Ni in an RC drillhole which intersected mafic ultramafic gabbro (Target SHG10).



**Figure 3: Conductor C11, Interpretive cross section showing planned diamond drillhole trace**

Preliminary modelling indicates that C11 is a steep ENE dipping conductor plate. The conductive source is interpreted to extend approximately 500m along strike and down dip with a vertical depth of ~150-200m to the top of the conductor.

A 600m angled diamond drillhole was designed to intersect all 4 possible conductor plates at vertical depths of between 400m and 500m below surface.

### Symons Hill Project Background

The Symons Hill Project is located within Matsa's 100% owned E69/3070 with an area of 96km<sup>2</sup>. The project is located within the Fraser Range Tectonic zone, 6kms SSW of Independence Group Ltd's (ASX: IGO) Nova nickel mine. Matsa has been actively exploring the project since 2012 with aircore, RC and diamond drilling confirming the presence of nickel anomalous (0.2 – 0.3% Ni) olivine bearing gabbro at targets SHG02, SHG03 and SHG11, which exhibit near surface enrichment in the weathered profile of up to 1.3% Ni.

Matsa commenced a regional, high powered (150-200A) EM survey in December 2014 which has been designed to cover the majority of the Symons Hill Project area. The survey is being carried out as part of a research and development project which is designed to develop and improve state of the art EM equipment to explore for massive sulphide deposits of Nova-Bollinger type, to a depth of >700m below surface.

The survey has been designed to test three successive, prioritised areas with the highest priority assigned to favourable structural/stratigraphic locations based on interpretation of gravity, aeromagnetic, geochemical and drilling data.

**For further information please contact:**

**Paul Poli**  
Executive Chairman

**Phone** +61 8 9230 3555  
**Fax** +61 8 9227 0370  
**Email** [reception@matsa.com.au](mailto:reception@matsa.com.au)  
**Web** [www.matsa.com.au](http://www.matsa.com.au)

### **Exploration results**

*The information in this report that relates to Exploration results, is based on information compiled by David Fielding, who is a Fellow of the Australasian Institute of Mining and Metallurgy. David Fielding is a full time employee of Matsa Resources Limited. David Fielding has sufficient experience which is relevant to the style of mineralisation and the type of ore deposit under consideration and 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, Mineral Resources and Ore Reserves'. David Fielding consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

## Appendix 1: Matsa Resources Limited Symons Hill Project JORC 2012 Table 1

### Section 1: Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<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>• EM survey loops and receiver data points are laid out using handheld GPS units to an accuracy of 3-5m</li> <li>• Topographic control 2-5m accuracy using published maps or Shuttle Radar data is considered to be sufficient for modelling of EM survey results.</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>• Loops are laid out as rectangles measuring approximately 1200x800m in a NS and EW direction.</li> <li>• Receiver data is acquired at 50m intervals along lines spaced at 150m</li> <li>• Survey lines are typically run parallel to the short electrode direction</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>• The Transmitter loops and survey lines are carried out NS and EW.</li> <li>• Geological strike is highly variable but dominated by a NNE “grain” which means that in most cases EM data is acquired at a high angle to geological strike.</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>EL69/3070 which is owned 100% by Matsa Resources Ltd.</li> <li>Located on Vacant Crown Land</li> <li>The License intersects the buffer zones of the Fraser Range and Southern Hills PEC's Exploration to be managed in accordance with a Conservation Management Plan.</li> <li>The project is located within Native Title Claim by the Ngadju people.</li> <li>A heritage agreement has been signed and exploration is carried out within the terms of that agreement.</li> <li>At the time of writing the licence is granted for a 5 year period expiring on 6<sup>th</sup> March 2018</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>Prior work carried out by GSWA in the form of wide spaced helicopter based soil sampling and acquisition of 400m line spacing magnetic and radiometric data.</li> <li>In the late 90s, Gold Partners NL has carried out few wide-spaced aircore drilling on one line along the southeast portion of the tenement. No anomalous assay results have been reported.</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>The target is Nova style Ni Cu mineralization hosted in high grade mafic granulites of the Fraser Complex.</li> <li>Recent results also support potential for magmatic copper only mineralisation in Felsic granulites</li> </ul>
<b>Diagrams</b>	<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>Suitable summary plans have been included in the body of the report.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high</li> </ul>	<ul style="list-style-type: none"> <li>Not required at this stage</li> </ul>

Criteria	JORC Code explanation	Commentary
<p><b>Other substantive exploration data</b></p>	<p><i>grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p> <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>Airborne VTEM (combined magnetic and electromagnetic) carried out in December 2012 by Geotech Airborne Pty Limited. A total of 6 priority targets and 15 second order targets identified and reported on by Southern Geoscience Consultants Ltd. VTEM survey carried out over entire tenement on 200m lines.</li> <li>Prior to December 2012, Comprehensive geochemical survey carried out by Matsa Resources comprising 614 samples mostly at 400m centres on a staggered grid identified targets SH01 to SH05. Infill at 200m x 200m completed over targets SH01 to SH05 in May 2013 for a total of 638 samples.</li> <li>Ground EM 2013, (See Location Plan below) carried out by Bushgum Holdings Pty Ltd, under supervision by Newexco consultants, consisting of both moving-loop (MLEM) and fixed-loop (FLEM) surveys. Data acquisition was achieved using a SMARTem24 8-channel geophysical receiver manufactured by ElectroMagnetic Imaging Technology (EMIT), Bartington 3-component magnetic field sensor (up to 1Hz frequency response) and a Zonge ZT-30 Loop Driver transmitter to power the loop with up to 30A. The MLEM and FLEM surveys are both 400m wide. In the MLEM, the survey lines are spaced 400m apart with receiving stations every 100m inside the loop along an E-W direction. In the FLEM, the receiving stations are 50m apart across 1 km traverse in an E-W direction.</li> <li>Fixed Loop TEM Surveys carried out in February March 2014 by Outer Rim, over VTEM anomalies VA01, VA02, VA15 SURVEY PARAMETERS Configuration : Fixed Loop, Station Spacing : 50 m; Receiver : SMARTem24, Frequency : 2.0833, Component Z,X,Y, Rx Coil : Fluxgate, Rx Area : 10000m2 turn-m; Transmitter : Crone-Ext, Tx Moment : Unknown turn-m, Tx Current : 20 A Turn Off : 0.5 ms</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>Survey Location Plan Attached</p> <p>FLTEM loop sizes ranged from 300x500m to 400x600m, single loop turn. Multiple E-W survey lines were utilised (3) per line at 150m line spacing in order to adequately resolve potential bedrock conductors. All FLTEM surveying was completed with 50m station spacing.</p> <p>MLTEM Survey over Gloucester Corridor between VA15 in the north and VA11 in the South. Survey Parameters/Description:</p> <ul style="list-style-type: none"> <li>□ 30 survey lines, totalling 315 stations approx. 28.5 line kms</li> <li>□ Moving loop (in loop) survey consisting of 200mx200m double turn loops, □ 100m stations, □ 300m line spacings</li> <li>□ Transmitter TX-50 - 75+ amps, Smartem 24 and a 3-component fluxgate sensor (smart fluxgate) Z,X,Y, Crone Coil Z only, □ Time base/Frequency 2Hz, □ 0.5-1ms ramp, □ 3 repeatable readings, 128-256 stacks</li> </ul> <ul style="list-style-type: none"> <li>• Induced polarization (IP) geophysical surveys over geochemical targets SHG01, SHG02 and SHG03. Survey type: Pole/Dipole-dipole (2D) at 100-200m spacing; Receiver: GDD GRX-32 IP receiver; Transmitter: zonge GGT-30; Frequency 0.125 Hz; Data coverage: N=12-16 ~300 to 500m depth of investigation.</li> <li>• Current HPFLEM See location plan for current progress. - high powered fixed loop TEM 800x1200m loops, 100m stations, 150m line spacing, ORE HP transmitter producing ~120-150A, Base Frequency for initial surveys (will change) - 0.5Hz, ZXY components (Z+Up, X+East, Y+North), EMIT SMARTfluxgate B-field sensor Each loop currently consists of 12 survey lines, 192stns and 18.0kms coverage.</li> </ul>