



**ASX Announcement**

**16<sup>th</sup> August 2016**

**RC Drilling to Commence  
Killaloe Gold Targets**

**Highlights**

- *Gradient array IP surveys carried out over anomalies Duke IPO3 and Windy Hill WHO2 have confirmed and defined these gold targets for drilling*
- *A programme comprising approximately 10 RC drillholes for ~1500m planned to commence*
- *Drilling at Duke IPO3 and Windy Hill WH\_IP02 which coincide with anomalous gold values in soil and shallow drilling*
- *Drilling also to be carried out at Shinboner and Cashel gold prospects*
- *The target IP anomalies are interpreted to be typical disseminated sulphide responses with strong chargeability values in a resistive background potentially representing pyritic gold-bearing quartz veins*
- *This programme follows the recently completed drilling programme at Mt Weld where assays are currently awaited*

**CORPORATE SUMMARY**

**Executive Chairman**

Paul Poli

**Director**

Frank Sibbel

**Director & Company Secretary**

Andrew Chapman

**Shares on Issue**

144.7 million

**Unlisted Options**

7.8 million @ \$0.25 - \$0.40

**Top 20 shareholders**

Hold 52.15%

**Share Price on 15<sup>th</sup> August 2016**

27 cents

**Market Capitalisation**

\$39.09 million

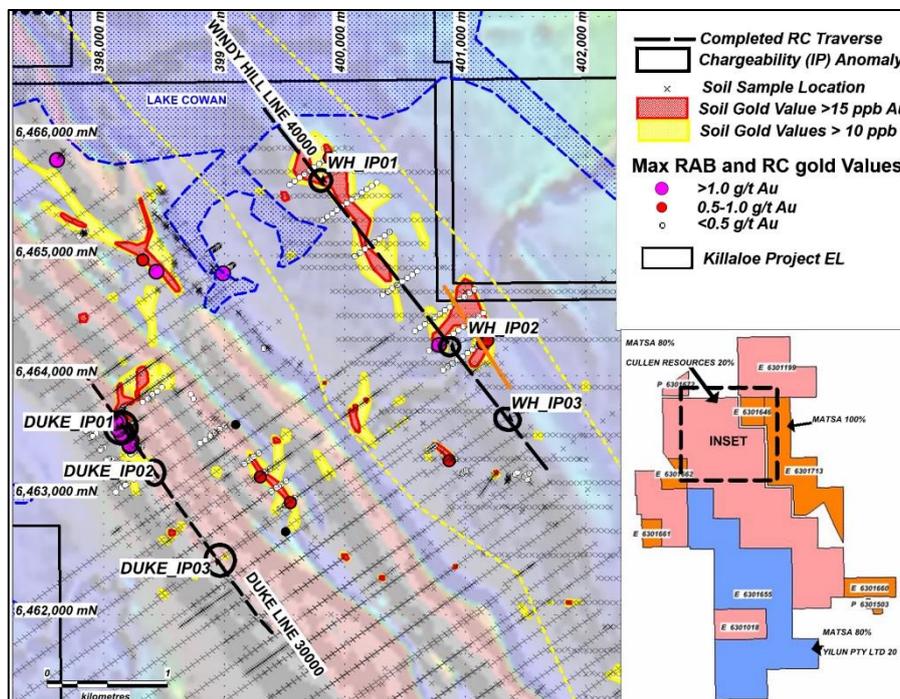
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Matsa is pleased to announce that RC drilling is set to commence at its Killaloe JV project (MAT: 80%, CUL 20%). Drilling has been designed to test a number of gold targets defined by recently completed IP anomalies. IP surveys were carried out in two stages:

- Stage 1, dipole-dipole IP surveys
- Stage 2, gradient array IP surveys

**Stage 1 dipole – dipole IP** were carried out over the Duke, Windy Hill, Cashel and Shinboner prospects. The objective being to explore for disseminated sulphides at depth as a potential vector for primary gold mineralisation beneath widespread anomalous gold values in soil and shallow drillholes (Figure 1). (MAT announcement to ASX 27<sup>th</sup> June 2016)

Strong chargeability anomalies were identified at the **Duke** and **Windy Hill** prospects by survey lines oriented parallel with geological strike (Results and survey parameters were included in MAT announcements to the ASX 5<sup>th</sup> July 2016 and 29<sup>th</sup> July 2016).



**Figure 1: Location and regional geology of Mt Weld Project**

**Stage 2 Gradient array IP (GAIP)** was carried out over the Duke IP03 and Windy Hill IP02 which were selected as the highest priority anomalies from the Stage 1 survey. The purpose of the gradient array surveys was two-fold namely:

- to define the areal extent of selected IP anomalies to finesse drillhole planning; and
- to collect magneto telluric data at the same time as the gradient array data is collected. This is being undertaken as a research project. This previously unused data has the potential to provide important geological information and improve target definition.

General survey parameters of the gradient array survey are presented in Appendix 1.

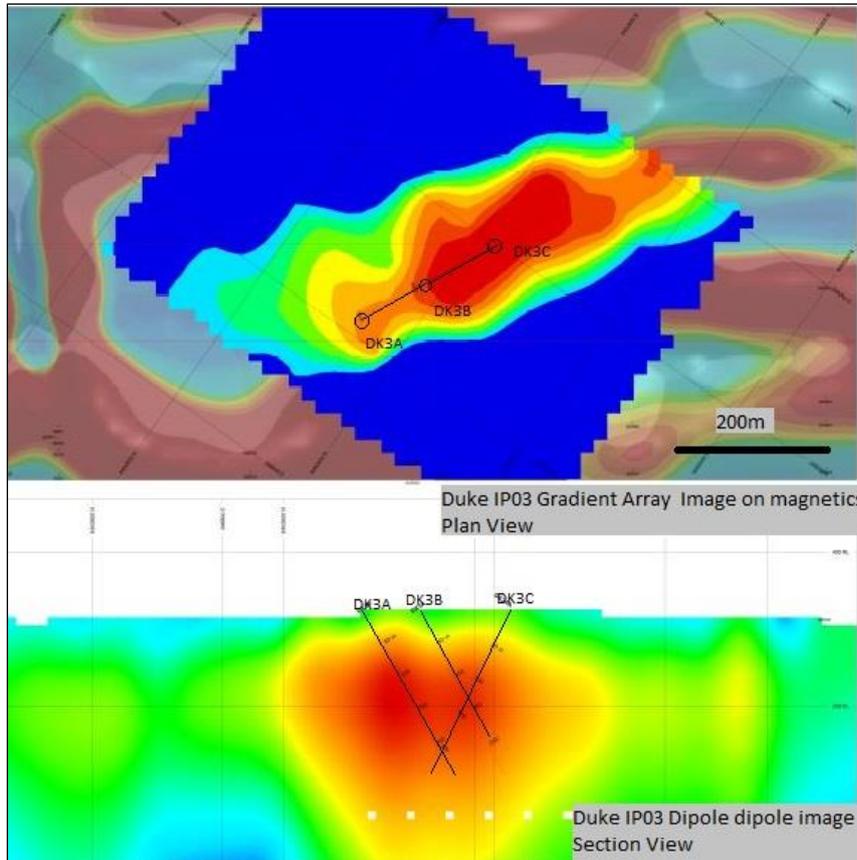
The results of the GAIP surveys supports the dipole-dipole chargeability anomalies at Duke IP03 and Windy Hill IP02 (Figure 2).

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**Gradient array IP survey and planned drilling Duke IP03**

This survey defined Duke IP03 as a NNE trending chargeability anomaly some 400m by 200m in extent and with values up to 14 msec. This confirms the results in the earlier strike parallel dipole-dipole IP survey where chargeability values were of the same order. There has been no previous drilling over this target.

Matsa proposes 3 holes to test this anomaly as shown in Figure 2.



**Figure 2: Duke IP03 Planned Drilling**

Drilling will also be undertaken based on the GAIP survey at Windy Hill as well at Cashel, Shinboner and the historic Duke gold prospects.

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For further information please contact:

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**Competent Person Statement**

*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.*

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## Appendix 1 - Matsa Resources Limited – Killaloe

### 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 (e.g. 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> </ul>	Past drilling by Cullen Resources was described in MAT announcement to the ASX 5 <sup>th</sup> July 2016. All drillholes at Killaloe containing >0.1g/t Au were listed in that report
	<ul style="list-style-type: none"> <li>Measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	Not applicable
	<ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	Not applicable
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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>	Past drilling by Cullen Resources was described in MAT announcement to the ASX 5 <sup>th</sup> July 2016. All drillholes at Killaloe continuing >0.1g/t Au were listed in that report
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	Not applicable
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	Not applicable
	<ul style="list-style-type: none"> <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>	Not applicable
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnical logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	Past drilling by Cullen Resources was described in MAT announcement to the ASX 5 <sup>th</sup> July 2016. All drillholes at Killaloe containing >0.1g/t Au were listed in that report



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Criteria	JORC Code explanation	Commentary
		<p><b>Survey Equipment</b>                      Transmitter: GGT30                      Receiver: GDP322                      Sensor: Porous pots                      At least two readings were acquired at each station in order to ensure data repeatability.                      The IP system is fully calibrated and daily tests were carried out to ensure data quality.</p> <p>All primary analytical data acquired by Zonge during the IP survey were recorded digitally Resources in Perth for independent quality control and evaluation.</p> <p>The data points of Zonge’s IP survey were located using standard GPS positioning.</p> <p>The expected accuracy is +/- 5 metres for easting and northings and 10 metres for elevation coordinates. Elevation values were in AHD.                      The grid system used is Map Grid of Australia (MGA) GDA94 Zone 51.</p> <p>Not applicable</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel. All primary analytical data acquired by the IP contractor during the IP survey were recorded digitally and sent in electronic format to Matsa’s geophysical consultant in Perth for independent quality control and evaluation</li> <li>The use of twinned holes. Not applicable</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Not applicable</li> <li>Discuss any adjustment to assay data. Not applicable</li> </ul>
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> </ul>	<p>The data points of Zonge’s IP survey were located using standard GPS positioning.</p> <p>The expected accuracy is +/- 5 metres for easting and northings and 10 metres for elevation coordinates. Elevation values were in AHD.</p>



## 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 license to operate in the area.</li> </ul>	<p>The Killaloe Project comprises 11 licences. Most previous gold exploration has been carried out on three licences (E63/1018, E63/1199 and P63/1672) under a joint venture between Matsa (80%) and Cullen Resources Limited (20%). Remaining licences are held 100% by Matsa except for E53/1655, which is subject to a joint venture between Matsa (85%) and Yilun Pty Ltd (15%). Exploration of the project is managed by Matsa.) The Project is Located on Vacant Crown Land.</p> <p>A heritage agreement has been signed and exploration is carried out within the terms of that agreement.</p>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>Significant past work has been carried out by other parties for both Ni and Au exploration including, surface geochemical sampling, ground electromagnetic surveys, RAB, AC, RC and DD drilling. Most of the gold exploration referred to at Killaloe was carried out by Cullen Exploration and Matsa Resources.</p>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>The gold target is St Ives or “Polar Bear” type gold mineralisation associated with favourable structures and stratigraphic locations in a volcano sedimentary sequence.</p>
<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>	<p>The coordinate system used to project drill hole collar information is GDA94 Zone 51S</p>
<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 (e.g. 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>	<p>Not applicable</p>

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>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<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 (e.g. 'down hole length, true width not known').</li> </ul>	Not applicable
<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>	Suitable summary plans have been included in the body of the report in support of the proposed drilling programme.
<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 grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	The context of past sampling and drilling against which the IP results are reported has been previously presented
<b>Other substantive exploration data</b>	<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>	High quality aeromagnetic data was acquired by Cullen Exploration. Images used are based on in-house compilation of this survey plus publically available and open file data to achieve the highest resolution possible.
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. 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>	Induced Polarisation surveys and drilling of targets are being proposed on new and existing data within extensions to the S2R gold corridor.