



LIMITED  
ABN 48 106 732 487

**ASX Announcement**

**27<sup>th</sup> June 2016**

## **Significant IP Results at Killaloe Project**

### **Highlights**

- *2 significant Induced Polarisation (IP) anomalies identified along strike at the Duke Prospect within the Killaloe project, proximal to recent S2R Nanook discovery,*
  - Duke IP01 is located at a depth of ~30m to 50m
  - Duke IP02 is located at a depth of ~100-150m.
- *The IP Duke IPO1 anomaly at the Duke prospect is associated with known gold mineralisation at shallow depth >1g/t Au.*
- *The survey will now be extended to the south in order to fully define the Duke IP02 anomaly for immediate drilling.*
- *Only one line completed, a further four gold prospects to be tested under the IP survey following completion of the survey at Duke*

### **CORPORATE SUMMARY**

#### **Executive Chairman**

Paul Poli

#### **Director**

Frank Sibbel

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

Andrew Chapman

#### **Shares on Issue**

144.15 million

#### **Unlisted Options**

8.44 million @ \$0.25 - \$0.40

#### **Top 20 shareholders**

Hold 52.15%

#### **Share Price on 24<sup>th</sup> June 2016**

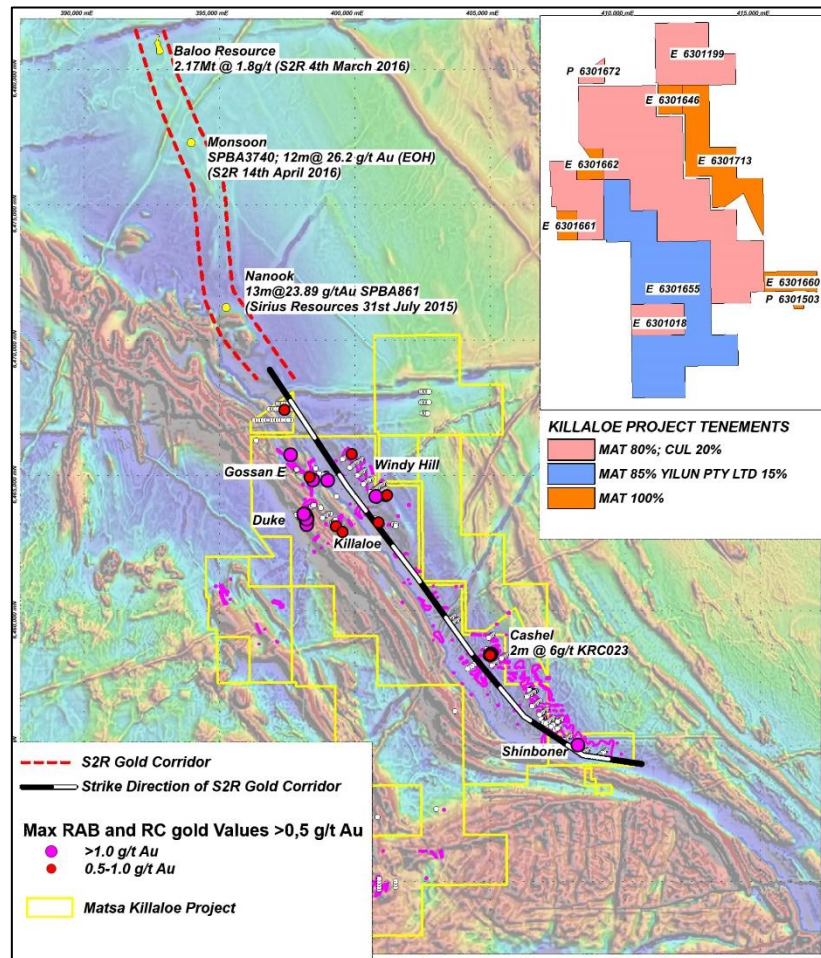
13.5 cents

#### **Market Capitalisation**

\$19.46 million

Matsa is pleased to announce progress made on the Induced Polarisation (IP) survey which commenced earlier this week at Killaloe. The first survey line was completed at the Duke prospect where a number of previous drillholes intersected gold values  $>1\text{g/t Au}$  (Figure 1). (IP survey parameters are summarised in Appendix 1).

The IP survey is being carried out in E63/1018, a joint venture between Matsa Resources Ltd and Cullen Resources Ltd (MAT 80%, CUL 20%). The Duke prospect is one of 5 prospects targeted for IP surveys where anomalous gold has been previously intersected by shallow drill holes. The other prospects include Windy Hill, Cashel, Shinboner North, and Shinboner South (Refer MAT ASX announcements dated 21<sup>st</sup> April 2016, 25<sup>th</sup> May 2016 and 21<sup>st</sup> June 2016).



**Figure 1: Location of Duke and Killaloe project tenements on aeromagnetic image**

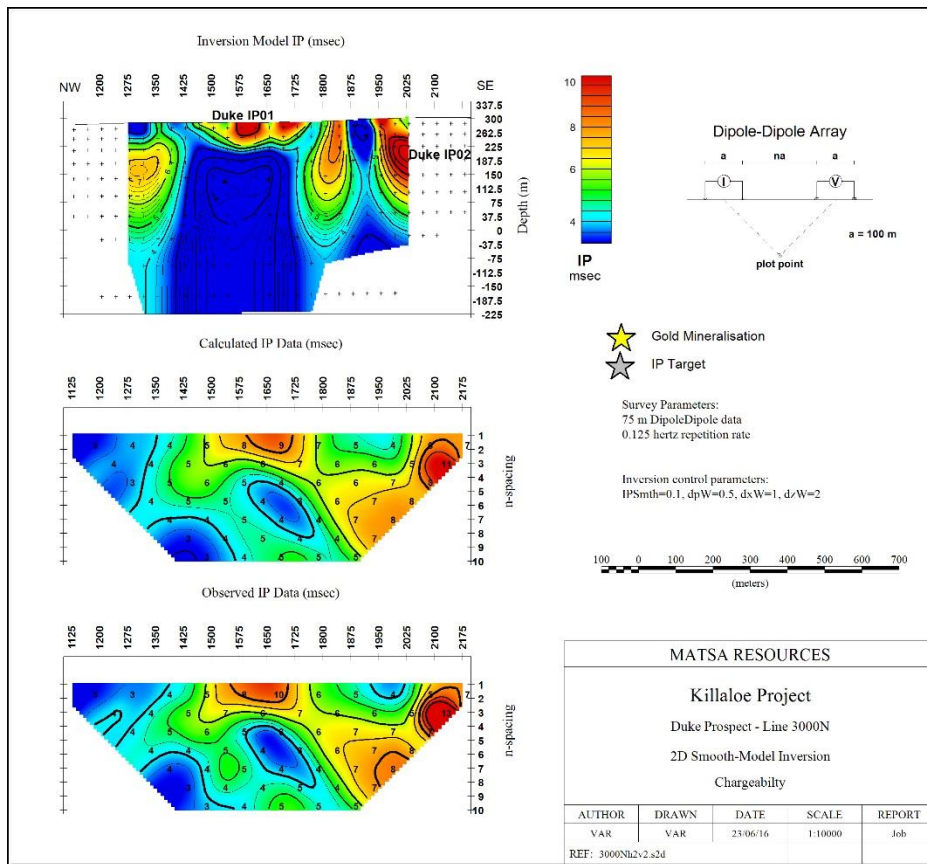
The IP survey is designed to test prospects where anomalous gold is present at surface and in shallow drill holes. The surveys are designed to detect disseminated sulphides as potential primary gold mineralisation associated with these anomalous gold occurrences. Anomalous gold intersections to date have mostly been achieved in weathered rocks at shallow depth and provide strong encouragement for potential gold mineralisation in deeper underlying fresh rock. (Previous drillholes at Duke with  $>0.1\text{ g/t Au}$  are listed in Appendix 2)

## IP Survey Results

The results of IP survey line 3000N at Duke are presented in Figure 2 where two IP responses, Duke IP01 and Duke IP02, are indicated in the IP inversion model in the upper profile, which is derived

from the observed and calculated IP responses shown in the lower two profiles (Figure 2).

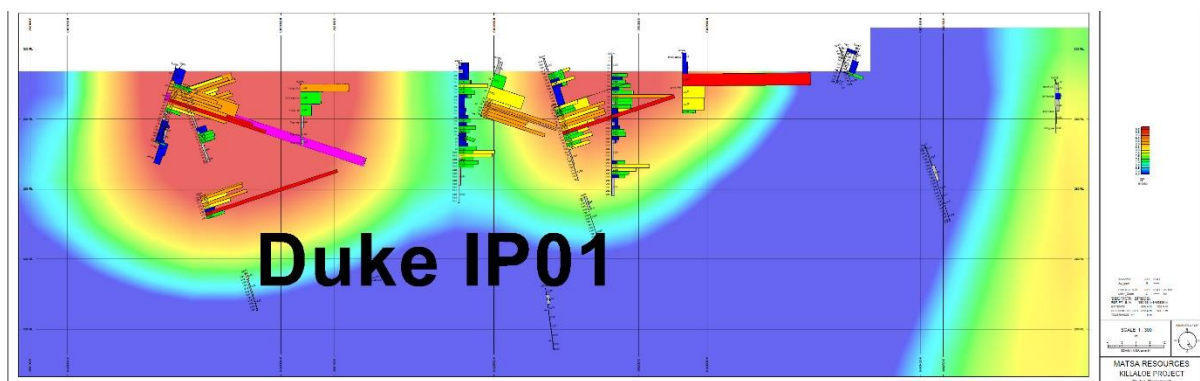
Duke IP01 is located at a depth of ~30m to 50m below surface in the central part of the profile, while Duke IP02 is located to the south at a depth of ~100-150m below surface.



**Figure 2: Duke Prospect Line 3000N, IP/Chargeability Results**

### Target Duke IP01

This anomaly is associated with the known gold mineralisation at the Duke Prospect (Figure 3). The gold mineralisation is associated with high chargeable responses (red being greater than 8 msec and up to 14 msec). The anomalous IP response extends for 250m along the survey line and has a depth extent of approximately 30m to 50m.



**Figure 3: IP Inversion model Duke IP01 showing anomalous gold values in shallow drillholes**

## Target Duke IP02

This anomaly is located south along strike from the Duke gold mineralisation (Figure 2). This IP anomaly has not been tested by any drilling. The IP response is stronger than Duke IP01 and remains open to the south. Initial interpretation has this anomaly at 100m depth. Further IP, extending the line to south, is required to fully model this anomaly and target follow-up drilling.

For further information please contact:

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## 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 – Killaloe Project

### 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>	<ul style="list-style-type: none"> <li>The Killaloe Project comprises 11 licences as summarised in Appendix 2. 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.</li> <li>A heritage agreement has been signed and exploration is carried out within the terms of that agreement.</li> <li></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>Significant past work has been carried out by other parties for gold and Ni including, surface geochemical sampling, ground electromagnetic surveys, RAB, AC, RC and DD drilling.</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>quartz vein style gold mineralisation in a defined structural and stratigraphic corridor extending south from the Polar Bear gold project of S2R.</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</li> </ul>	<ul style="list-style-type: none"> <li>the coordinate system used to project drill hole collar information is GDA94 Zone 51S</li> <li>Past drilling at the Duke prospect was carried out by Cullen Resources Ltd and includes a number of intercepts &gt; 1 g/t Au. A summary of previous drilling results is presented in Appendix 2.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>why this is the case.</i>	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration results summarized are drawn from public information.</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>Only historic intercepts quoted.</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>Planned surveys are shown</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.</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>High quality aeromagnetic data was acquired over part of the area by past workers. Images used are based on in-house compilation of this survey plus publically available and open file data to achieve the highest resolution possible.</li> </ul> <p>In June 2016, Matsa Resources Ltd commissioned Zonge Engineering and Research Organisation (Australia) Pty Ltd to complete a ground-based Induced Polarisation (IP) survey over its Killaloe Duke gold prospect in Western Australia.</p>

Criteria	JORC Code explanation	Commentary
		<p>A single line of 100 metre dipole-dipole IP data was acquired over the known gold mineralisation at the Duke prospect acquired in order to ascertain whether IP could detect the known gold mineralisation (associated with pyrite), and thus be used to target additional mineralisation within the area.</p> <p>At least two readings were acquired at each station in order to ensure data repeatability.</p> <p>Quality assurance and quality control (QA/QC) of the IP data was independently verified by Value Adding Resources in Perth.</p> <p>The survey parameters and geophysical equipment used by Zonge for the Induced Polarisation (IP) survey at the Killaloe Duke gold prospect includes:</p> <p><b>Survey Parameters</b>            Configuration: Dipole-dipole IP in time domain            Survey direction: northwest-southeast            Total number of survey lines: 1            Station interval: 100 metres            Number of receiver dipoles: 7            Base frequency: 0.125 Hertz            Duty cycle: 100%</p> <p><b>Survey Equipment</b>            Transmitter: GGT30            Receiver: GDP-32ii            Sensor: Porous pots</p> <p>At least two readings were acquired at each station in order to ensure data repeatability.</p> <p>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 and sent in electronic format to Value Adding 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>

Criteria	JORC Code explanation	Commentary
		<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>sampling.</p> <p>Experienced geophysicist at Value Adding Resources in Perth independently reviewed all data acquired from the IP survey at the Killaloe Duke gold prospect.</p> <ul style="list-style-type: none"> <li>•</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>• IP surveys are being carried out by Zonge Pty Limited..</li> </ul>



## Appendix 2: Past Drilling Duke Prospect, Assays >0.1 g/t Au

Drillhole	GDA_E	GDA_N	Azimuth	Dip	Au_ppb	Au_ppm	DH_From
BUX25	398178.9	6463550	270	-60	100	0.1	0
BUX25	398178.9	6463550	270	-60	300	0.3	4
BUX25	398178.9	6463550	270	-60	860	0.86	8
BUX25	398178.9	6463550	270	-60	600	0.6	12
BUX25	398178.9	6463550	270	-60	1800	1.8	13
BUX25	398178.9	6463550	270	-60	1400	1.4	14
BUX25	398178.9	6463550	270	-60	1820	1.82	14.5
BUX25	398178.9	6463550	270	-60	1120	1.12	15
BUX25	398178.9	6463550	270	-60	1080	1.08	16
BUX25	398178.9	6463550	270	-60	1600	1.6	17
BUX25	398178.9	6463550	270	-60	1100	1.1	18
BUX25	398178.9	6463550	270	-60	2440	2.44	18.5
BUX25	398178.9	6463550	270	-60	520	0.52	19
BUX25	398178.9	6463550	270	-60	180	0.18	20
BUX86	398123.3	6463624	270	-60	120	0.12	0
BUX86	398123.3	6463624	270	-60	1600	1.6	4
BUX86	398123.3	6463624	270	-60	5640	5.64	8
BUX86	398123.3	6463624	270	-60	1280	1.28	12
BUX86	398123.3	6463624	270	-60	1420	1.42	16
BUX86	398123.3	6463624	270	-60	540	0.54	20
BUX86	398123.3	6463624	270	-60	2440	2.44	24
BUX86	398123.3	6463624	270	-60	140	0.14	28
BUX86	398123.3	6463624	270	-60	200	0.2	32
GOC2	398117.5	6463620	90	-60	100	0.1	0
GOC2	398117.5	6463620	90	-60	900	0.9	5
GOC2	398117.5	6463620	90	-60	1200	1.2	5
GOC2	398117.5	6463620	90	-60	960	0.96	6
GOC2	398117.5	6463620	90	-60	980	0.98	7
GOC2	398117.5	6463620	90	-60	983	0.983	8
GOC2	398117.5	6463620	90	-60	1100	1.1	8
GOC2	398117.5	6463620	90	-60	1250	1.25	9
GOC2	398117.5	6463620	90	-60	600	0.6	10
GOC2	398117.5	6463620	90	-60	800	0.8	10
GOC2	398117.5	6463620	90	-60	720	0.72	11
GOC2	398117.5	6463620	90	-60	1040	1.04	12
GOC2	398117.5	6463620	90	-60	1080	1.08	13
GOC2	398117.5	6463620	90	-60	330	0.33	14
GOC2	398117.5	6463620	90	-60	140	0.14	20
GOC2	398117.5	6463620	90	-60	240	0.24	20
GOC2	398117.5	6463620	90	-60	350	0.35	22
GOC2	398117.5	6463620	90	-60	380	0.38	23
GOC2	398117.5	6463620	90	-60	350	0.35	24
GOC2	398117.5	6463620	90	-60	270	0.27	35
GOC2	398117.5	6463620	90	-60	4000	4	35
GOC2	398117.5	6463620	90	-60	120	0.12	36
GOC2	398117.5	6463620	90	-60	250	0.25	38
GOC2	398117.5	6463620	90	-60	240	0.24	39
GOC2	398117.5	6463620	90	-60	190	0.19	40
GOC2	398117.5	6463620	90	-60	310	0.31	40
GOC2	398117.5	6463620	90	-60	680	0.68	41
GOC2	398117.5	6463620	90	-60	230	0.23	42
GOC2	398117.5	6463620	90	-60	150	0.15	43
GOC5	398174	6463533	90	-60	150	0.15	0

GOC5	398174	6463533	90	-60	1700	1.7	5
GOC5	398174	6463533	90	-60	1160	1.16	7
GOC5	398174	6463533	90	-60	720	0.72	8
GOC5	398174	6463533	90	-60	2656	2.656	9
GOC5	398174	6463533	90	-60	4700	4.7	9
GOC5	398174	6463533	90	-60	1650	1.65	10
GOC5	398174	6463533	90	-60	2350	2.35	10
GOC5	398174	6463533	90	-60	2200	2.2	11
GOC5	398174	6463533	90	-60	1450	1.45	12
GOC5	398174	6463533	90	-60	640	0.64	13
GOC5	398174	6463533	90	-60	1180	1.18	14
GOC5	398174	6463533	90	-60	820	0.82	15
GOC5	398174	6463533	90	-60	1850	1.85	15
GOC5	398174	6463533	90	-60	580	0.58	16
GOC5	398174	6463533	90	-60	450	0.45	17
GOC5	398174	6463533	90	-60	460	0.46	18
GOC5	398174	6463533	90	-60	1180	1.18	19
GOC5	398174	6463533	90	-60	820	0.82	20
GOC5	398174	6463533	90	-60	1000	1	20
GOC5	398174	6463533	90	-60	1120	1.12	21
GOC5	398174	6463533	90	-60	1120	1.12	22
GOC5	398174	6463533	90	-60	640	0.64	23
GOC5	398174	6463533	90	-60	2800	2.8	24
GOC5	398174	6463533	90	-60	350	0.35	25
GOC5	398174	6463533	90	-60	620	0.62	25
GOC5	398174	6463533	90	-60	460	0.46	26
GOC5	398174	6463533	90	-60	660	0.66	27
GOC5	398174	6463533	90	-60	350	0.35	28
GOC5	398174	6463533	90	-60	540	0.54	29