

**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,
  - O Duke IP01 is located at a depth of ~30m to 50m
  - O 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 IPO2 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 24th June 2016

13.5 cents

#### **Market Capitalisation**

\$19.46 million

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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 >1g/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 21st April 2016, 25th May 2016 and 21st June 2016).

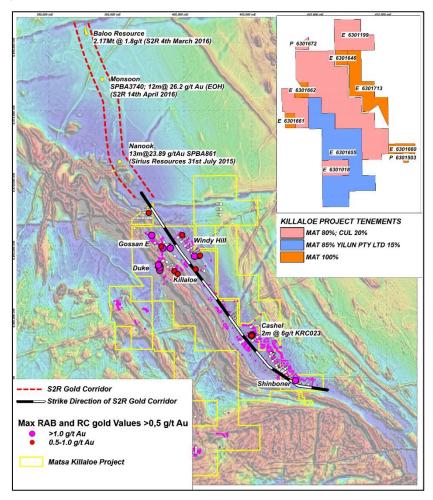


Figure 1: Location of Duke and Killaloe project tenements on aeromagnetic image

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 g/t Au are listed in Appendix 2 – refer ASX announcement date 21 April 2011 for further details)

#### **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  $\sim$ 30m to 50m below surface in the central part of the profile, while Duke IP02 is located to the south at a depth of  $\sim$ 100-150m below surface.

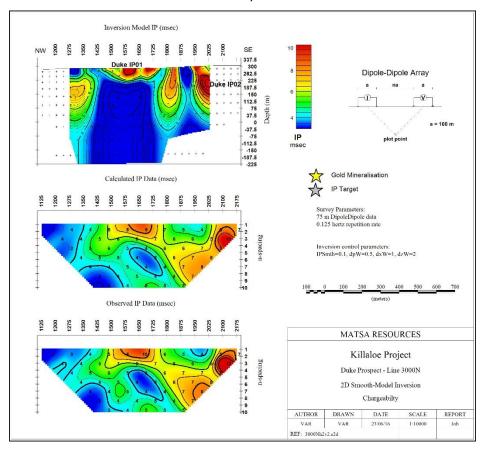


Figure 2: Duke Prospect Line 3000N, IP/Chargeability Results

#### **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.

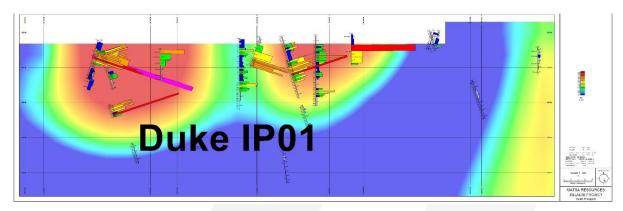


Figure 3: IP Inversion model Duke IP01 showing anomalous gold values in shallow drillholes

#### **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 IPO1 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 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary		
Sampling techniques	<ul> <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> </ul>	<ul> <li>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.</li> </ul>		
	<ul> <li>Measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul> <li>At least two readings were acquired at each station in order to ensure data repeatability.</li> <li>The IP system is fully calibrated and daily tests were carried out to ensure data quality.</li> </ul>		
	<ul> <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 (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>	The survey parameters and geophysical equipment used by the IP Contractor for the Induced Polarisation (IP) survey at the Killaloe Duke gold prospect includes:  Survey Parameters 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%		
Drilling techniques	<ul> <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>	Not Applicable – no drilling conducted		
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	Not Applicable – no drilling conducted		

Criteria	JORC Code explanation	Commentary			
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>				
	<ul> <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>	-			
Logging	<ul> <li>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.</li> </ul>	Not Applicable – no drilling conducted			
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>				
	The total length and percentage of the relevant intersections logged.				
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	Not Applicable – no drilling conducted			
	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>				
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples</li> </ul>				
	<ul> <li>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</li> </ul>				
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>				
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul> <li>Quality assurance and quality control (QA/QC) of the IP data was independently verified by Matsa's geophysical consultant in Perth.</li> </ul>			

Criteria	JORC Code explanation	Commentary			
	<ul> <li>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.</li> </ul>	Survey Equipment     Transmitter: GGT30     Receiver: GDP-32ii     Sensor: Porous pots			
	<ul> <li>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.</li> </ul>	<ul> <li>At least two readings were acquired at each station in order to ensure data repeatability.</li> </ul>			
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul> <li>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> </ul>			
	The use of twinned holes.				
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>				
	Discuss any adjustment to assay data.				
Location of data points	<ul> <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>	<ul> <li>The expected GPS accuracy is +/- 5 metres for easting and northings and 10 metres for elevation coordinates. Elevation values were in AHD.</li> </ul>			
	Specification of the grid system used.	The grid system used is Map Grid of Australia (MGA) GDA94 Zone 51.			
	Quality and adequacy of topographic control.				
Data spacing and distribution	Data spacing for reporting of Exploration Results.	A single line of 100 metre dipole-dipole IP data.			
	<ul> <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> </ul>				
	Whether sample compositing has been applied.				

Criteria	JORC Code explanation	Commentary			
Orientation of data in relation to geological structure	<ul> <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> </ul>	The IP survey at Duke was along the interpreted long axis of mineralisation.			
	<ul> <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>				
Sample security	The measures taken to ensure sample security.	<ul> <li>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> </ul>			
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	None known			

### 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> <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> <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> </ul>			
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <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>			
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <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>			

Criteria	JORC Code explanation	Commentary			
Drill hole Information	<ul> <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> <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> <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>			
Data aggregation methods	<ul> <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 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> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Exploration results summarized are drawn from public information.			
Relationship between mineralisation widths and intercept lengths	<ul> <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 (eg 'down hole length, true width not known').</li> </ul>	Only historic intercepts quoted.			
Diagrams	<ul> <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>	In Announcement			

Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul> <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>	IP Section provides all results.
Other substantive exploration data	<ul> <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>	<ul> <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>
Further work	<ul> <li>The nature and scale of planned further work (eg 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>	The IP survey at Killaloe continues and the IP line at Duke will be extended.

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	0.13	40
GOC2	398117.5		90	-60	680	0.51	
		6463620	90				41
GOC2	398117.5	6463620		-60	230	0.23	42
GOC2	398117.5	6463620	90	-60	150	0.15	43
GOC5	398174	6463533	90	-60	150	0.15	0
	<u> </u>						
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
	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