MATSA RESOURCES LIMITED
ABN 48 106 732 487

ASX Announcement **6th September 2016**

Exploration Update

Highlights

Mt Weld Gold Project WA

- *Preliminary RC drilling programme comprising 5 holes for 1,037m completed over the Wilga South prospect.*
- *Gold mineralisation was confirmed at Wilga South, with a best intercept of 4m @ 0.94 g/t Au from 188m in drill-hole 16MTWRC04*
- *Further drill targets are being developed along the Wilga South RAB gold anomaly which extends a further ~2km to the south*

Lake Carey Gold Project

- *A 1,500m diamond drilling programme has commenced at Lake Carey gold project*
- *Drilling is designed to provide geotechnical, resource definition data and sample material for metallurgical test work*

Phaisali Base Metals Project Thailand

- *Drilling has commenced at the Chang 1 prospect in Thailand with the first drillhole intersecting a variably altered diorite intrusion containing disseminated copper sulphides between 94m and 225m*
- *The 131m disseminated copper sulphides intercept is evidence of a potentially significant copper mineralised system*
- *Core is currently being split for assay*

Killaloe Gold Project WA

- *RC drilling in progress with 3 holes for 450m completed across the Duke IP3 chargeability target*
- *Drilling has intersected komatiite lavas containing sporadic thin quartz veins. No significant sulphides were observed as yet and assays are 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 5th September 2016

24.5 cents

Market Capitalisation

$35.45 million

Matsa is pleased to provide an update on its recent and current drilling programmes which include:

- Results received from the recently completed RC drilling at the Mt Weld gold project;
- Diamond drilling has commenced and is in progress at the Lake Carey gold project;
- Diamond drilling has commenced and is in progress at Chang 1 within the Phaisali base metal project in Thailand; and
- RC drilling is in progress at the Killaloe JV project (Cullen Resources 20%).

Wilga South RC drilling (Mt Weld Gold Project)

Drilling on the Wilga South anomaly was carried out within the Mt Weld project *(Refer MAT announcements to the ASX dated 29th July 2016 and 8th August 2016).*

Five RC drillholes were completed for a total of 1,037m of drilling as summarised in Table 1.

Hole_ID	East	North	Depth	Azimuth	Dip
16MTWRC01	452761	6773814	199	270	-60
16MTWRC02	452718	6773952	211	270	-60
16MTWRC03	452780	6773957	211	270	-60
16MTWRC04	452781	6774057	217	270	-60
16MTWRC05	452738	6774218	199	270	-60

Table 1: Wilga South Completed RC drill holes

Drilling was completed at the Wilga South prospect which is located at the northern end of a continuous ~2km long zone of basement gold mineralisation defined by values between 0.1 g/t Au and 7.2 g/t Au in aircore drilling by previous explorers.

Drill cuttings were sampled at 1m intervals via rotary splitter with bulk rejects bagged and laid out in 1m intervals. A total of 261 composite samples each representing an interval of up to 4m were submitted for gold assay by ALS Perth WA (Appendix 1). Composite sample results >0.01ppm Au are listed in Appendix 2.

Composite assay results have confirmed the presence of a steeply east dipping zone of low grade gold mineralisation along the sheared contact between dolerite and basalt with a best intercept of 4m @ 0.94 g/t Au from 188m in drill-hole 16MTWRC04. It is planned to submit individual 1m samples from each 4m composite sample for assay.

A review of past exploration data is currently underway to develop drill targets within the southern extension of the 2.5km long Wilga gold anomaly and in a number of additional gold anomalies identified from previous drilling.

Hole ID	Sample ID	Au g/t	M From	M To	Remarks
16MTWRC01	109624	0.44	172	174	
	109625	0.81	176	180	
16MTWRC02	109659	0.92	112	116	
16MTWRC04	109769	0.82	128	132	
	109784	0.94	188	192	Waste gap at 192-196m
	109786	0.18	196	200	
16MTWRC05	109827	0.19	140	144	

Table 2: ***Wilga South composite assay intercepts >0.1 g/t Au***

Fortitude Diamond Drilling (Lake Carey Gold Project)

The first of 10 diamond drillholes in a planned 1,500m programme has commenced. The drillholes have been designed to provide additional geotechnical and resource definition data and material for metallurgical test work.

Chang 1 Diamond Drilling (Phaisali Base Metals Project Thailand)

Inaugural diamond drilling has commenced at Chang 1 to test a strongly anomalous IP and soil copper values which coincide with a large complex aeromagnetic anomaly. *(MAT announcement ASX 26th April 2016)*.

Drill hole 16SCDD003 (Location CH101 Figure 1), the first of a minimum of 5 diamond drillholes planned to cross Chang 1 along an EW section, was planned for 200m but was extended to a completed depth of 249.5m.

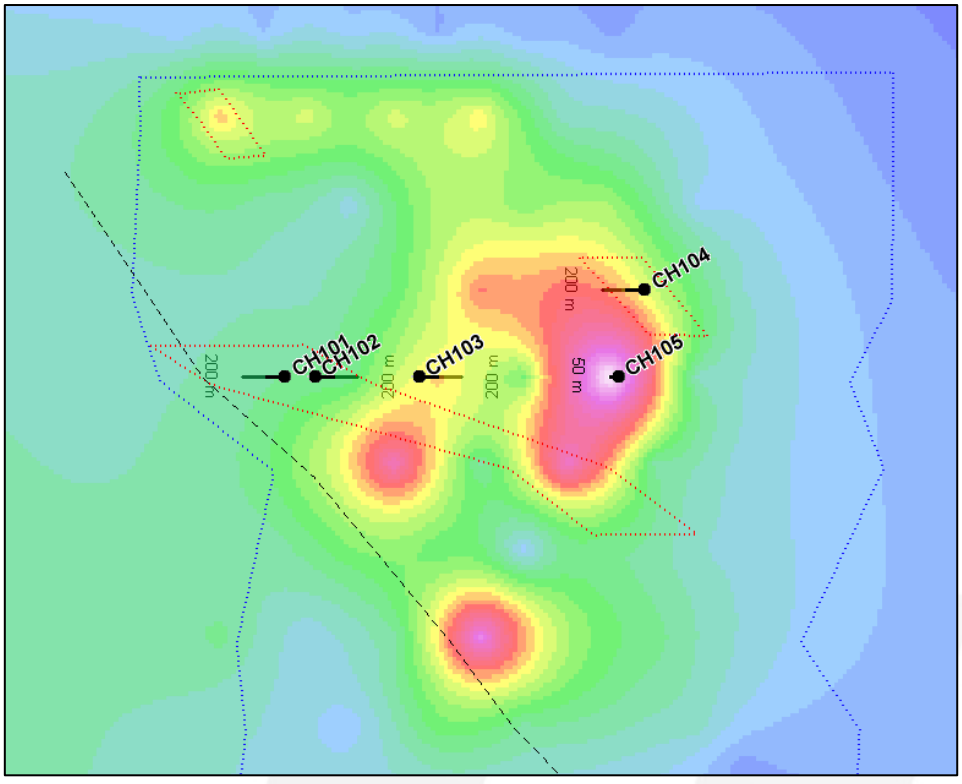

Figure 1: ***Planned diamond drilling on image of soil copper mineralisation (Max 0.1% Cu) and elevated IP chargeability (black dotted lines)***

The drill hole has intersected a variably altered diorite intrusion over its full extent. Copper sulphides are seen from 94 metres coinciding with an increase in alteration which was observed to further increase in intensity from a depth of ~118m downhole. Alteration corresponds to a significant increase in iron oxide (magnetite) together with disseminated chalcopyrite (copper sulphide), pyrite and pyrrhotite (iron sulphides). A number of magnetite, chalcopyrite, pyrite and pyrrhotite veins up to 2cm thick were also observed between 176m and 198m downhole. Assays results are pending.

Sulphide mineralisation, including copper sulphides, appears to be the source of the target IP anomaly. Given the extents of soil copper anomalism over an area of ~ 1km x 1.8km within an even larger complex magnetic anomaly, alteration and mineralisation observed to date is thought to form part of a large and highly prospective copper mineralised system.

Killaloe RC Drilling (Killaloe JV Project)

As previously announced, *(MAT announcement to ASX 15th August 2016)*, RC drilling is currently in progress at the Killaloe project with the first 3 drill holes completed over IP anomaly Duke IP03 *(MAT announcements to ASX 26th June 2016 and 5th July 2016).*

Drilling comprising 3 holes completed to date for a total of 450m is summarised in Table 3.

Hole ID	GDAE	GDAN	Depth	Azimuth	Dip
16KLRC07	398905	6462390	150	54	-60
16KLRC08	398845	6462345	150	54	-60
16KLRC06	398965	6462435	150	54	-60

***Table 3:* RC drillholes completed over target Duke IP03**

Cumulate textured komatiite volcanics displaying weak intermittent quartz carbonate veins, were intersected in all holes. No significant sulphide mineralisation was observed and accordingly the source of the strong coincident chargeability and resistivity anomalies making up IP anomaly Duke IP03 has not been determined.

Drilling and further work at Killaloe is continuing.

For further information please contact:

Paul Poli
Executive Chairman

Phone +61 8 9230 3555
Fax +61 8 9227 0370
Email reception@matsa.com.au
Web www.matsa.com.au

Competent Person

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 – Mt Day Project*

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.*	Matsa RC drilling at Wilga South and Killaloe was carried out according to a standard procedure whereby a 3kg bagged sample is obtained from a rotary splitter at the cyclone and laid out with 1m bagged residues. First pass assays were carried out on composite samples collected by spearing consecutive bagged residues. Composite values >0.1 g/t gold to be validated by submitting individual 3kg rotary split samples for assay.
	• *Measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	
	• *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.*	
Drilling techniques	• *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).*	RC Drilling was carried out by Drilling Australia, using a face sampling hammer system
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	Sample recovery judged by size of bulk residue bags, no issues with poor recovery were observed.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	Not applicable
	• *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.*	No evidence of sample loss through mineralised zone

Criteria	JORC Code explanation	Commentary
Logging	• *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.*	Diamond core and RC chips are typically visually logged for lithology, regolith type, and alteration / mineralisation Typically semi quantitative logging is carried out using inhouse logging codes and percentages.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	
	• *The total length and percentage of the relevant intersections logged.*	The entire drillhole is logged while drilling is in progress to enable hole extensions or in some cases stopping holes.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	RC drilling Composite sampling carried out by use of "spear" to obtain approximately equal ammounts of material from each 1m through the composite interval Typical sample preparation for fire assay and for Aqua Regia digest involved crushing / pulverizing/ screening to P90 passing 75 micron screen
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	Rotary splitter at cyclone used for stage 1, 1m samples, only submitted to obtain final assays through composite intervals containing >0.1g/t gold No requirement for field duplicates was seen Samples approximately 3kg in size appropriate to detecting gold in RC cuttings
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples*	
	• *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*	
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	All assays of RC drill cuttings carried out by ALS global in Kalgoorlie for gold only. Laboratory QA/QC considered adequate for reconnaissance exploration
	• *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.*	Semi-quantitative use made of magnetic susceptibility readings on bulk residues

Criteria	JORC Code explanation	Commentary
	• *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.*	Laboratory in-house QAQC only
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	RC drilling, Composite samples of up to 4 m collected and in the case of significant intersections, 1m rotary split samples submitted to confirm first pass assays. All field records collected via laptop computer and LogChief software No adjustments carried out on assy data
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Handheld GPS used with compass and clinometer based azimuth and dip Locations given in UTM GDA Zone 51 Eastings and Northings in metres Accuracy 3-5m in X and Y, with ~10m in Z
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	Wilga Mt Weld, Drillholes spaced along lines spaced ~100m apart Not applicable, First pass samples of RC cuttings are composite intervals up to 4m downhole
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	Drill lines set up to cross structural stratigraphic rock package as close as possible to right angle. No bias has been recognised
Sample security	• *The measures taken to ensure sample security.*	None recorded
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	No audits carried out

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	• *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.* • *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.*	Tenements Mt Weld and Killaloe described in detail in MAT ASX announcements of 29th July 2016 and 8th August 2016 Tenements Thailand described in MAT ASX announcements
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Drilling data used to define drilling programme at Wilga South was acquired by previous explorers as summarised in MAT report to ASX 8th August 2016.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Structurally controlled orogenic quartz vein hosted gold mineralisation.

Drill hole Information	• *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:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *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.*
		Summarised in a table in the body of the text

Data aggregation methods	• *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.*	No aggregation of data carried out, only individual assays reported

Criteria	JORC Code explanation	Commentary
	• *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	All drill hole intercepts measured in down hole metres.
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.*	Suitable summary plans were included in the body of previous MAT reports to the ASX notably MAT report to the ASX 8th August 2016 (Wilga South) and 5th July 2016 (Killaloe).
Balanced reporting	• *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.*	Not applicable, all results >DL were reported
Other substantive exploration data	• *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.*	Very large body of exploration data from >40 years of previous exploration has been compiled. Data sets include geological mapping, aeromagnetics and drilling
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.*	There are a number of structural locations along and adjacent to the Wilga fault which Matsa believes to be highly prospective for gold

Appendix 2 – Wilga South Assays >0.01ppm Au

Wilga South Drilling Aug 2016				
Hole_ID	SampleID	M From	M To	Au_ppm
16MTWRC01	109581	0	1	0.02
16MTWRC01	109602	84	88	0.02
16MTWRC01	109606	100	104	0.06
16MTWRC01	109612	124	128	0.06
16MTWRC01	109615	136	140	0.03
16MTWRC01	109616	140	144	0.02
16MTWRC01	109618	148	152	0.02
16MTWRC01	109619	152	156	0.02
16MTWRC01	109624	172	176	0.44
16MTWRC01	109625	176	180	0.81
16MTWRC01	109627	184	188	0.02
16MTWRC02	109640	36	40	0.02
16MTWRC02	109642	44	48	0.03
16MTWRC02	109644	52	56	0.03
16MTWRC02	109653	88	92	0.03
16MTWRC02	109656	100	104	0.02
16MTWRC02	109658	108	112	0.07
16MTWRC02	109659	112	116	0.92
16MTWRC02	109660	116	120	0.02
16MTWRC02	109661	120	124	0.02
16MTWRC02	109666	140	144	0.03
16MTWRC02	109670	156	160	0.04
16MTWRC02	109676	180	184	0.02
16MTWRC02	109678	188	192	0.02

Wilga South Drilling Aug 2016				
Hole_ID	SampleID	M From	M To	Au_ppm
16MTWRC02	109683	208	211	0.07
16MTWRC03	109685	4	8	0.02
16MTWRC03	109687	12	16	0.02
16MTWRC03	109690	24	28	0.06
16MTWRC03	109692	32	36	0.03
16MTWRC03	109696	48	52	0.04
16MTWRC03	109697	52	56	0.03
16MTWRC03	109699	60	64	0.02
16MTWRC03	109701	68	72	0.02
16MTWRC03	109704	80	84	0.04
16MTWRC03	109706	88	92	0.04
16MTWRC03	109711	108	112	0.04
16MTWRC03	109712	112	116	0.02
16MTWRC03	109716	128	132	0.02
16MTWRC03	109723	156	160	0.02
16MTWRC03	109729	180	184	0.02
16MTWRC03	109731	188	192	0.02
16MTWRC03	109732	192	196	0.02
16MTWRC03	109733	196	200	0.02
16MTWRC03	109735	204	208	0.03
16MTWRC04	109737	0	4	0.02
16MTWRC04	109738	4	8	0.03
16MTWRC04	109741	16	20	0.03
16MTWRC04	109742	20	24	0.02
16MTWRC04	109744	28	32	0.02

Wilga South Drilling Aug 2016				
Hole_ID	SampleID	M From	M To	Au_ppm
16MTWRC04	109747	40	44	0.02
16MTWRC04	109750	52	56	0.02
16MTWRC04	109753	64	68	0.02
16MTWRC04	109754	68	72	0.03
16MTWRC04	109769	128	132	0.82
16MTWRC04	109770	132	136	0.02
16MTWRC04	109774	148	152	0.02
16MTWRC04	109784	188	192	0.94
16MTWRC04	109786	196	200	0.18
16MTWRC04	109787	200	204	0.04
16MTWRC05	109793	4	8	0.02
16MTWRC05	109812	80	84	0.03
16MTWRC05	109816	96	100	0.07
16MTWRC05	109817	100	104	0.05
16MTWRC05	109820	112	116	0.04
16MTWRC05	109827	140	144	0.19
16MTWRC05	109829	148	152	0.05
16MTWRC05	109830	152	156	0.02