



**ASX Announcement**

**31<sup>st</sup> October 2019**

## **Quarterly Activities Report – 30<sup>th</sup> September 2019**

### **HIGHLIGHTS**

#### **Red October Gold Project**

- *The September quarter was the first full quarter of mining at Red October and importantly, an unaudited operating surplus was achieved with no lost time injuries. Significantly ore grade and AISC achieved mine study estimates*
- *A total of 10,903 tonnes of ore at grade of 5.39 g/t Au for A\$2.73M were delivered to AGAA's Sunrise Dam gold treatment plant*
- *Stoping of ore is scheduled to commence in the coming quarter which is expected to significantly increase ore production*
- *Development confirms the presence of new narrow, high grade lodes in the hanging-wall of the ROSZ*
- *A 13 hole exploration diamond drilling programme commenced in early October*

#### **Fortitude Gold Project**

- *Mining study supports immediate commencement Stage 2 mining*
- *Study outcomes indicate a cash surplus A\$21.8M over 22 months based on production of 54,400 oz gold*
- *Maiden ore reserve declared of 1,029,000 tonnes at 1.8 g/t for 58,100 oz gold. Potential exists for a substantial increase of gold ore reserves in the near term*
- *Total Indicated and Inferred Mineral Resources at Fortitude stand at 5,449,000 tonnes @ 2.0g/t Au (342,600 oz Au)*
- *Mine Manager appointed to the project to drive start-up*

#### **Lake Carey Exploration**

- *Preparations completed for commencement of diamond and RC drilling at Red October surface, Fortitude North, BE1 and Devon*
- *Planning and preparations completed for commencement of IP survey at Linden gold project*

#### **Corporate**

- *Highly successful \$6M capital raising via placement to institutions and sophisticated investors*
- *Cash and liquid investments at 30<sup>th</sup> September 2019 A\$7.98M*

### **CORPORATE SUMMARY**

#### **Executive Chairman**

Paul Poli

#### **Director**

Frank Sibbel

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

Andrew Chapman

#### **Shares on Issue**

216.93 million

#### **Unlisted Options**

~22 million @ \$0.17 - \$0.30

#### **Top 20 shareholders**

Hold 52.78%

#### **Share Price on 31<sup>st</sup> October 2019**

15 cents

#### **Market Capitalisation**

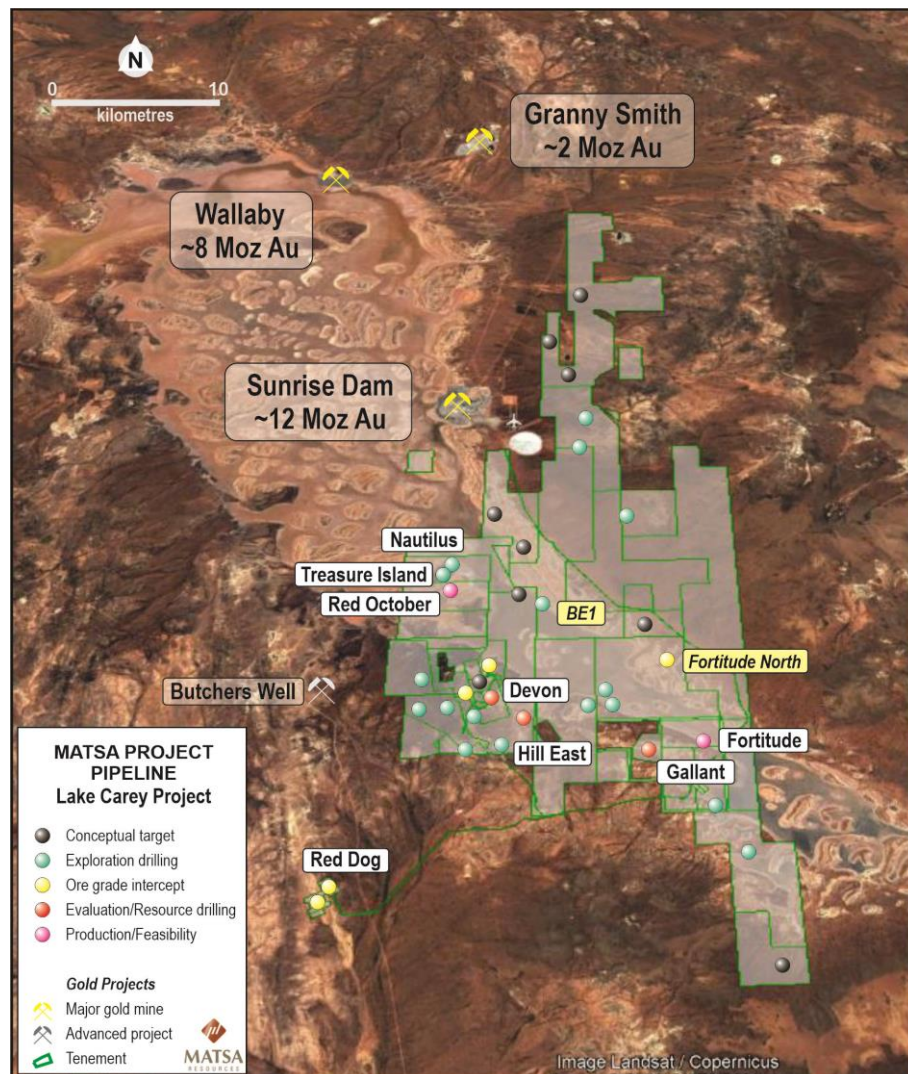
A\$32.54 million

## INTRODUCTION

Matsa Resources Limited (“Matsa” or “the Company” ASX: MAT) is pleased to report on its development, exploration and corporate activities for the quarter ended 30<sup>th</sup> September 2019.

## COMPANY ACTIVITIES

Activities during the quarter have been principally focused on the company’s 563km<sup>2</sup> Lake Carey Gold Project (Figure 1).



**Figure 1: Lake Carey Gold Project**

Activities during the quarter comprised:

- Continued development and first ore production from the company’s high grade underground Red October gold mine (*MAT announcement to ASX 26<sup>th</sup> July 2019*)
- Completion of mining studies and announcement of maiden ore reserve for Fortitude Stage 2 at the Fortitude open pit gold mine (*MAT announcement to ASX 21<sup>st</sup> August 2019*)
- Exploration activities at Lake Carey included re-sampling of historic drill holes, soil sampling and geological mapping

## RED OCTOBER GOLD MINE

Stage 1 mining continued during the quarter for an initial 310.6 metres of drives being developed in order to access and retrieve high grade ore.

### Production and Development Summary

Waste and ore development were undertaken on the N1260 ROSZ and N1290 ROSZ and other ancillary ore development drives eg. Smurfette. The N1277 access to the ROSZ was also commenced to enable South and North development and delineation of the current planned mining block.

The ventilation network was improved from the N1255 to the N1240 with further work being undertaken in preparation for full ventilation prior to stoping.

Drilling indicated a potential second payable zone to the north of the planned stopes, therefore the decision was made to defer stoping in preference to continued development. This has caused a deficit in the scheduled tonnes delivered during the quarter and will extend the initial mine period beyond the original 7 month estimate.

Air-leg mining commenced on high-grade, short-strike zones which has assisted with continued development, while achieving overall profitable grade for the month. Importantly, this was achieved in each of the three months of the quarter with the result that significant tonnes are now ready for stoping once additional ore (potentially) has been accessed to the North.

A summary of the development carried out during the quarter is shown in Table 1. Significantly the grade achieved is in accordance with the original mine study estimate.

Development (m)		Gold Ore		
Waste	Ore	Tonnes	Grade	Ounces*
101.3	209.3	10,902	5.39	1,607

**Table 1: Red October Development September 2019 Quarter**

*\*Estimate only, metallurgical recovery results pending*

### Mining Activities Production

Mining activities comprised development only with stoping planned to commence during the December 2019 quarter.

Production from the Red October gold mine commenced in July 2019 and results from the first quarters production are shown in Table 2. Ore is trucked to the AngloGold Ashanti Australia Ltd's (AGAA) Sunrise Dam treatment facility.

	September 2019 Quarter Actuals
Total Tonnes	10,903
Grade (g/t)	5.39
Metallurgical Recovery (%)	85%*
Production (Oz)	1,607
Average Gold Price (A\$M)	2,183
AISC (A\$ per Oz)	1,277

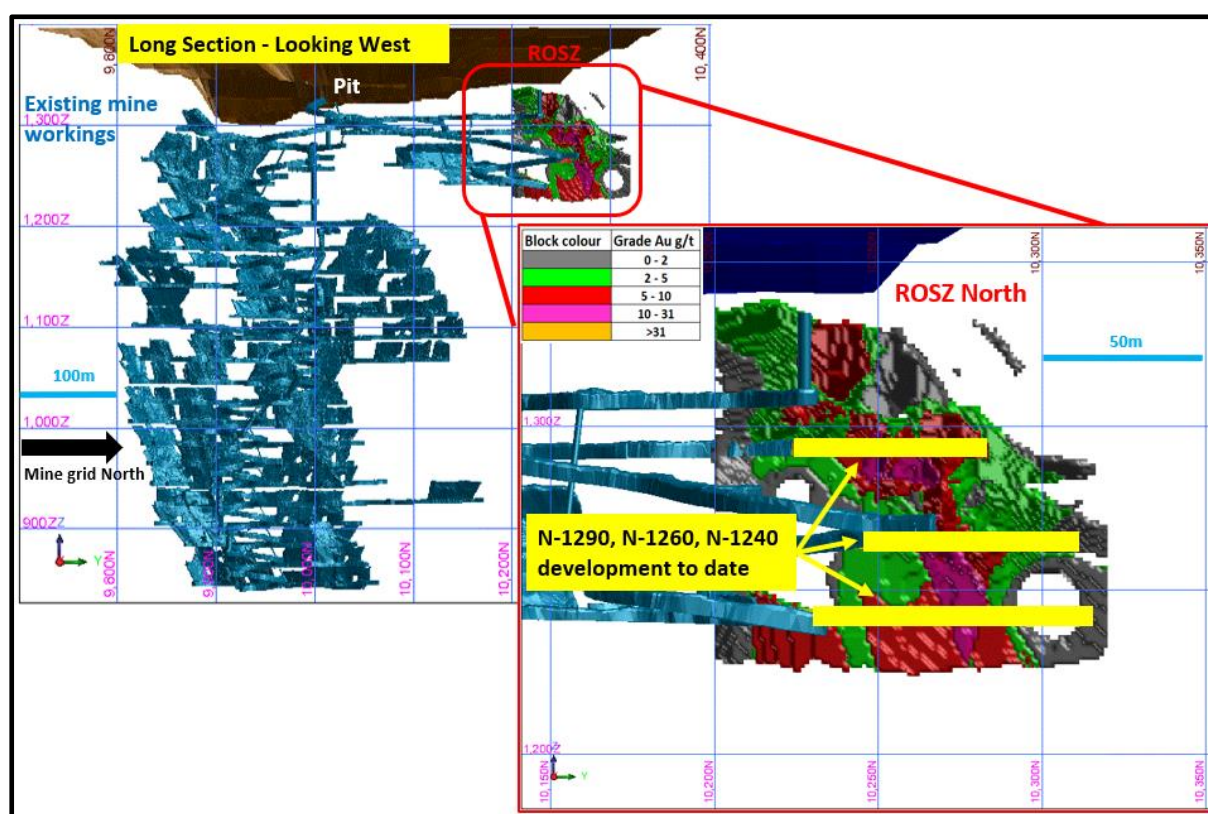
**Table 2: Red October Production Results for the September 2019 Quarter**

*\*Estimate only, metallurgical recovery results pending*

## Mining Activities – ROSZ Development

Development of the N-1240, N-1260 and N-1290 (Figure 2) levels progressed along a high-grade shoot, which was discovered by Matsa's recent drilling during February within the ROSZ North. The new ore zone was discovered during the February-March 2019 grade control drilling campaign, and is currently a high priority mining target in the initial 7 month mine plan.

Additional development levels are currently being planned to enable effective future stoping of this area. Development of these additional levels will provide both high-grade development ore for processing, and better control of stoping techniques to extract the ore efficiently. Exploratory development on the current levels is being carried out to the north to define further high grade shoots (Figure 2).

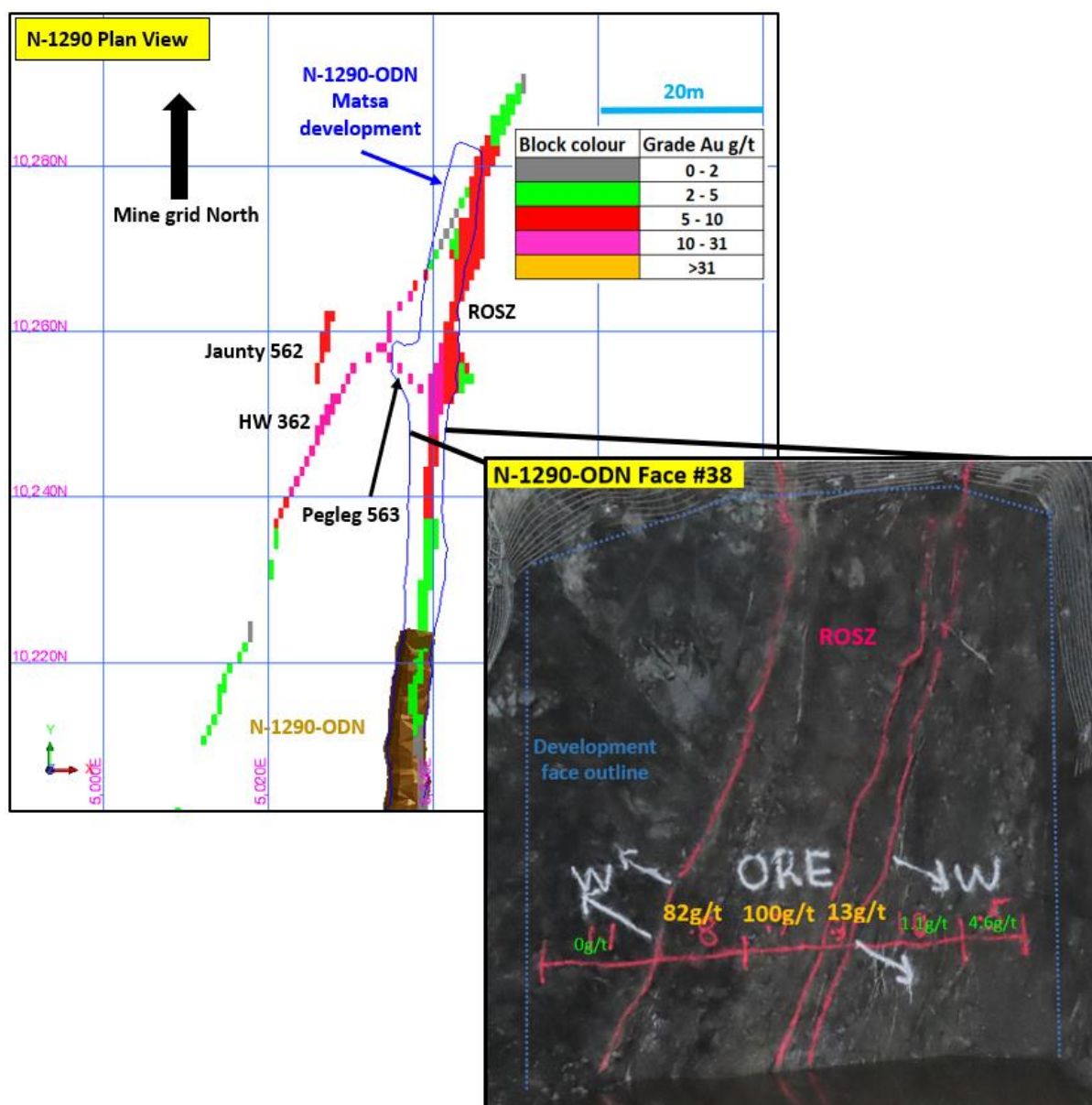


**Figure 2: Long section looking West (mine grid) – ROSZ block model showing grade Au >1g/t**

The N-1290 and N-1260 development of the ROSZ confirmed the tenor and strike extents of the recently discovered high grade shoot. Several cuts yielded grades within the ROSZ greater than 30g/t outperforming the block model on which the drive was developed (Figure 3). The development also confirmed the presence of narrow, high grade lodes in the hangingwall of the ROSZ (Pegleg, Jaunty, HW 362).

**The results to date for this drive are extremely encouraging for future stoping panels in the area and developing hangingwall lodes to add to the mine plan.**

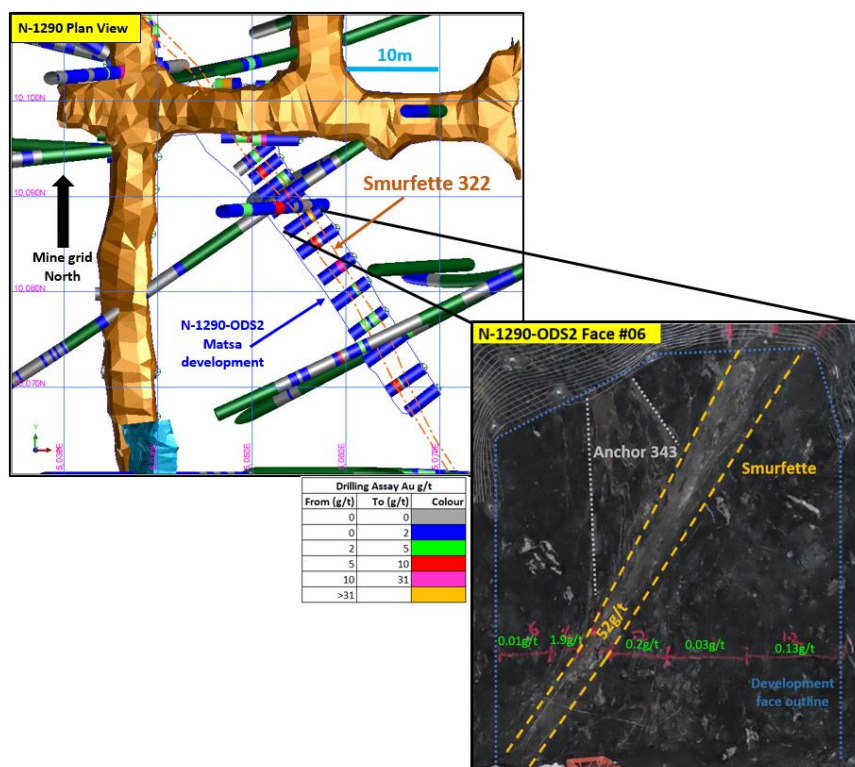




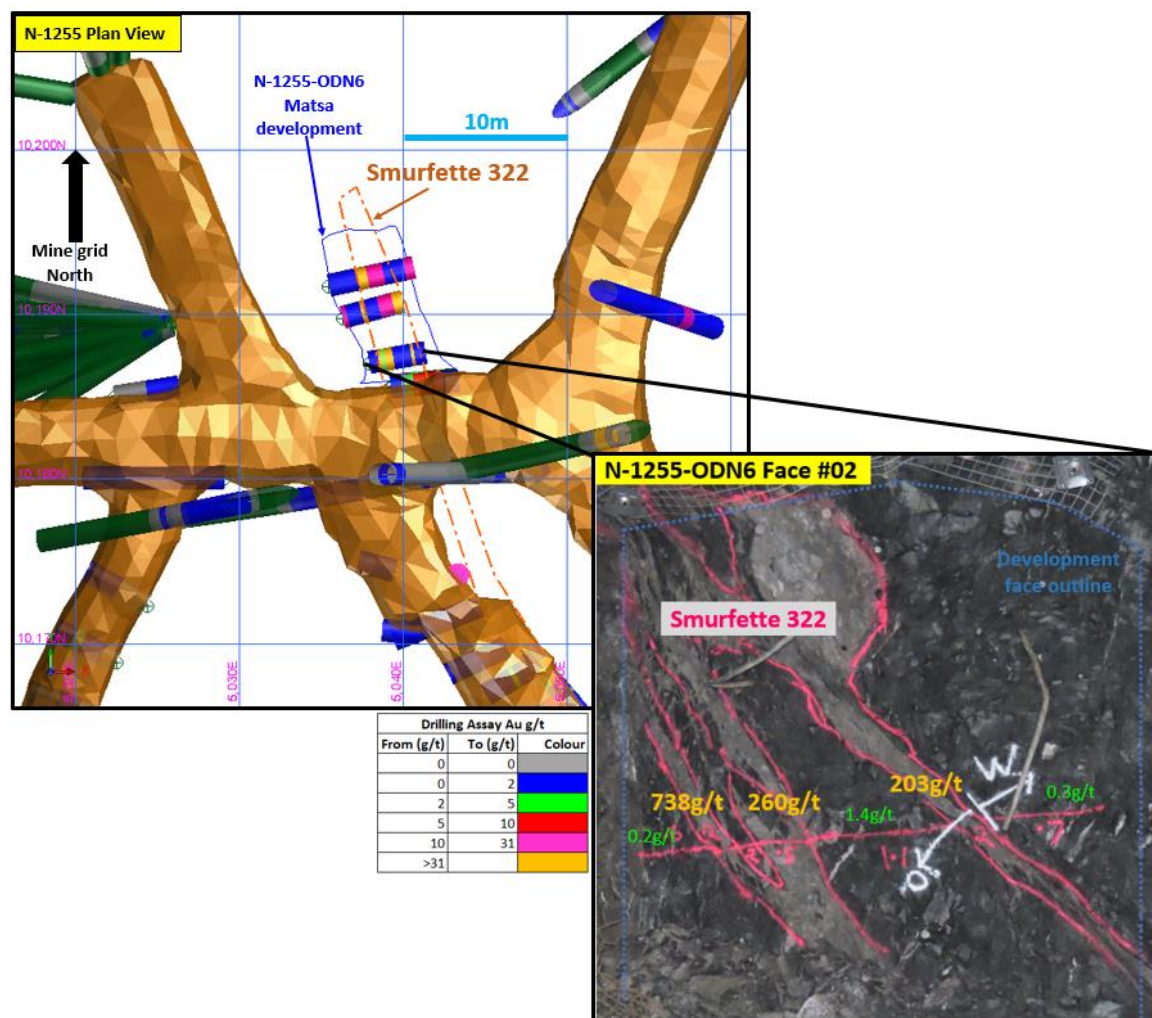
**Figure 3:** N-1290 level ROSZ development during the September 2019 quarter (blue outline), with the block model shown Au >1g/t

## Mining Activities – Smurfette 322 Development

An exercise of wall sampling, interpretation and block model update provided an opportunity for additional areas to be developed during the quarter. The Smurfette 322 lode was developed on the N-1290 and N-1255 levels, with both drives displaying pods of >30g/t high-grade ore. Further development of the Smurfette lode is planned to occur in the future (Figure 4 and Figure 5).



**Figure 4:** N-1290 level Smurfette 322 development during the September 2019 quarter (blue outline), with assays shown Au g/t

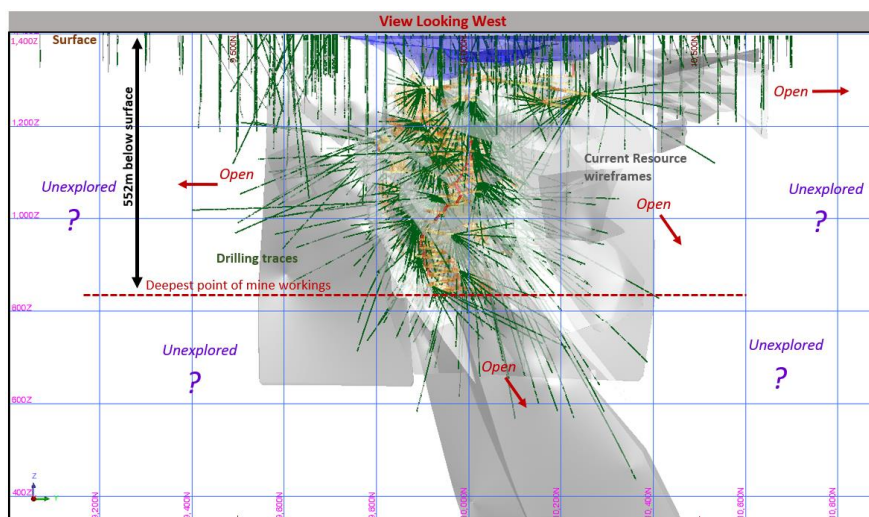


**Figure 5:** N-1255 level Smurfette 322 development during the September 2019 quarter (blue outline), with assays shown Au g/t

## Potential to Extend Mining Beyond Initial Phase

Matsa considers that the Red October resource remains open and under-explored along strike and down-dip. There is evidence of high-grade gold intersections within the existing drilling dataset, both within and outside of the existing mine footprint. This dataset strongly supports the idea that potential exists to continue mining beyond the initial phase both:

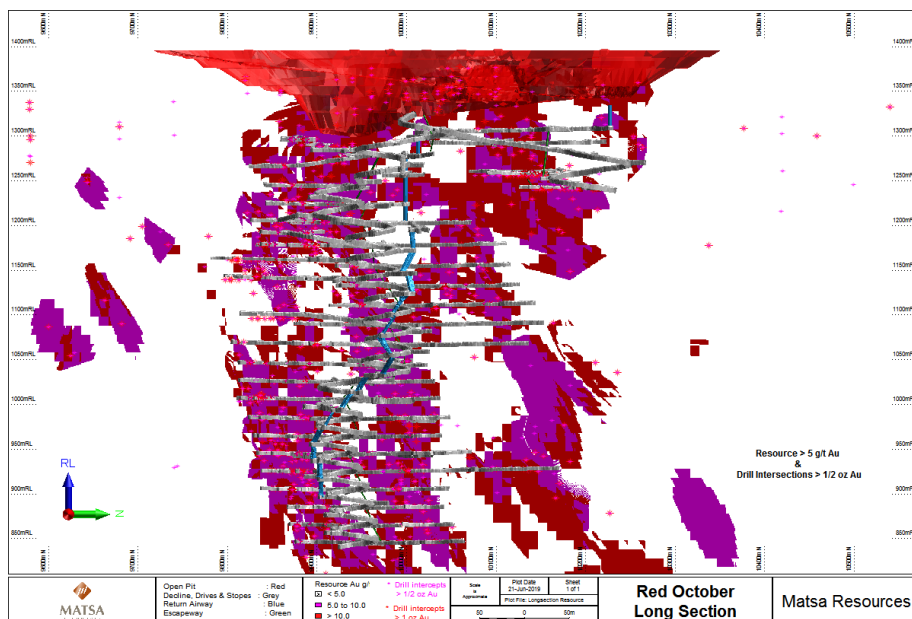
- Within the existing resource wireframes, adjacent to existing workings and further afield (Figure 7)
- Outside the existing resource wireframes where potential is demonstrated by existing high-grade drill results (Figure 8)



**Figure 7: Red October, Longitudinal Section showing existing resource wireframes, drilling and mine workings (RO mine grid co-ordinates)**

A number of new targets have already been identified for future mining as a result of studies undertaken to date. The initial mining operation represents an opportunity for Matsa to fine-tune narrow-vein mining at Red October, and gain a better understanding of geological controls on gold mineralisation.

Exploration drilling both underground and from surface, will define new mineralisation and continue to build the resource base.



**Figure 8: Red October, Longitudinal Projection with summary of high grade gold mineralisation >5g/t Au (RO mine grid co-ordinates) (June 2016 Saracen Resource Model)**



## Red October Gold Mine Background

The Red October gold mine and project area covers 44 km<sup>2</sup> and consists of six granted Mining Leases (ML's), an extensive well-maintained underground mine, a 68-person camp, offices, workshops and exploration base, underground mine equipment and a JORC 2012 compliant Mineral Resource of ~99,000 oz of gold, which importantly includes an underground resource of **85,000 oz @ 13.6g/t Au**.

The Red October mine is a structurally controlled gold deposit located in the Laverton Tectonic Zone which hosts a number of world class gold mines with resources >25M oz of gold which include Sunrise Dam, Granny Smith, Wallaby and Mt Morgans (Figure 1).

## FORTITUDE GOLD MINE

Activities during the quarter included:

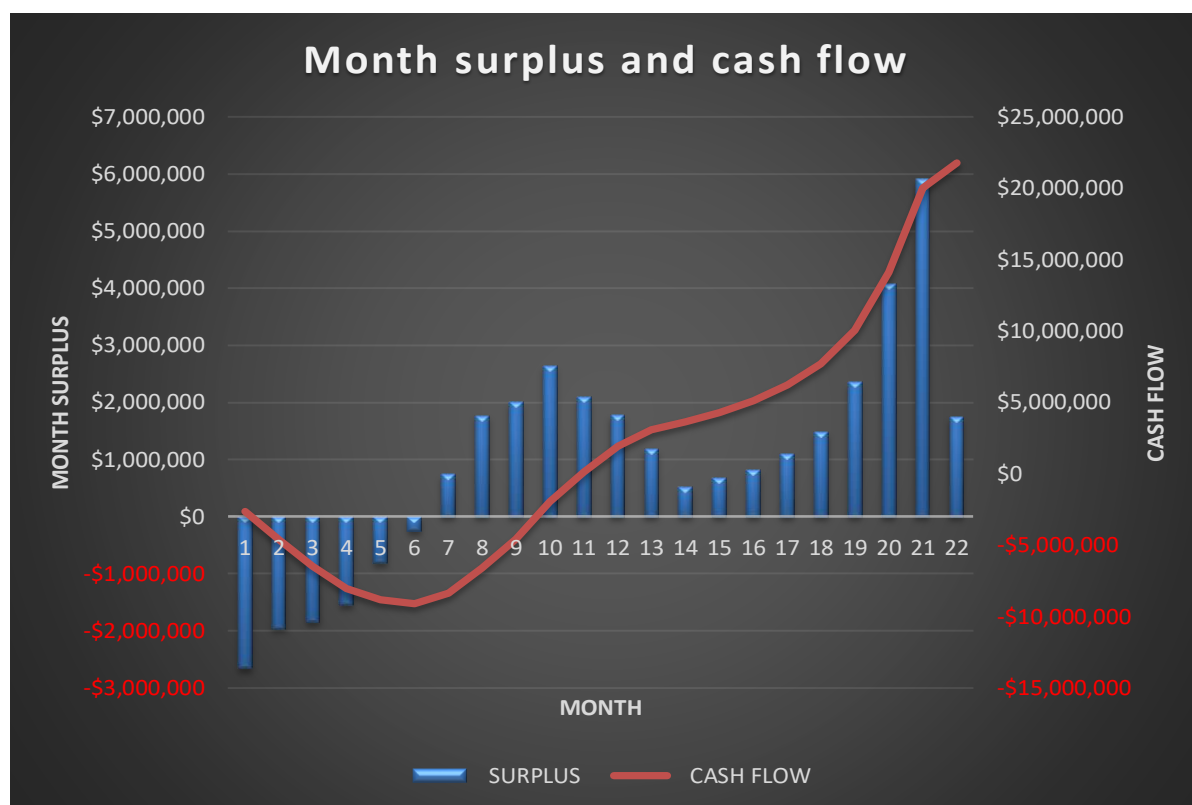
- Completion of a comprehensive mining study which delivered highly encouraging results for recommencement of open pit mining at Fortitude. *(MAT announcement to ASX 21st August 2019)*
- Key personnel appointments have been made for management of the project with the new mine manager Mr Tim Wither having commenced the week of the 7<sup>th</sup> of October, 2019.

### Fortitude Stage 2 Mining Study Key Outcomes

The mining study strongly indicates potential for immediate commencement of Stage 2 mining with the following key outcomes:

- Total Indicated and Inferred Mineral Resources at Fortitude stand at **5,449,000 tonnes @ 2.0g/t Au (342,600 oz Au)**.
- A maiden ore reserve of **1,029,000 tonnes at 1.8 g/t for 58,100 oz gold** was declared with excellent potential for a substantial increase in the near term.
- Total cash surplus **A\$21.8M over 22 months** (Figure 9)
- Total production of **54,400 oz gold at 93% recovery**
- Capital outlay **A\$6.6M** which includes pre-stripping
- Operating **cash cost of A\$1,628/oz gold**
- Assumed average gold price of A\$2,150
- Total material movement 5.85M bank cubic metres (bcm's) at a waste to ore ratio of 14.4
- All statutory and regulatory approvals are in place for the immediate commencement of mining
- A sensitivity analysis indicates that the Fortitude Gold Mine Stage 2 project is robust with potential for improvement to the financial model as new optimisations come to hand. Finalisation of discussions with key parties and completion of the tender process may deliver further improvements.
- Metallurgical test work indicates that Fortitude ore is amenable for treatment at any of the nearby processing facilities, and will deliver very good-to-excellent gold recoveries with no deleterious elements.





**Figure 9: Mining Study Projected Cash Flow (\$AUD)**

Matsa is currently assessing processing options for the treatment of ore from Fortitude, and is in discussions with AGAA, which is currently treating gold ore from Matsa's nearby Red October underground gold mine under a five-year Ore Purchase Agreement between Matsa and AGAA.

Importantly, all regulatory and statutory approvals are already in place which permits immediate commencement of mining activities. Expressions of interest for mining have been called and responses are currently being assessed.

#### Fortitude Mineral Resource Update

CSA Global consultants were contracted to carry out grade estimation for the Fortitude Mineral Resource estimate. The Mineral Resource estimate has been updated to allow for depletion due to the Stage 1 trial mining which was carried out in 2017 (Table 3).

Fortitude Deposit 2019 Mineral Resource Estimate (1 g/t Au cut off)							
Type	Indicated		Inferred		Total Resource		
	Tonnes kt	Au g/t	Tonnes kt	Au g/t	Tonnes kt	Au g/t	Au Oz
Oxide	222	1.9	51	2.1	273	1.9	16,900
Transition	377	1.8	125	2.0	502	1.8	29,700
Saprock	227	1.9	1	2.1	228	1.9	14,100
Fresh	2,119	1.8	2,326	2.1	4,445	2.0	282,000
Total	2,945	1.8	2,503	2.1	5,449	2.0	342,600

**Table 3: Fortitude Gold Project Mineral Resource Estimate**

- \* Figures have been rounded in compliance with the JORC code. Rounding errors may cause the column not to add up precisely.
- \*\* Mineral Resources are reported in situ (undiluted).
- \*\*\* Mineral Resources are reported to a cut-off grade of 1g/t Au.

Sections 1, 2 and 3 JORC tables for the Mineral Resource estimate have been announced in full (**MAT announcement to ASX 21<sup>st</sup> August 2019**)

## Competent Persons Statement

*The information in this report that relates to Mineral Resources has been compiled by Matthew Cobb, who is a full-time employee of CSA Global Pty Ltd, and Richard Breyley who is a full time employee of Matsa Resources Limited. Dr Cobb is a Member of both the Australian Institute of Geoscientists and the Australian Institute of Mining and Metallurgy. Mr Breyley is a member of the Australian Institute of Mining and Metallurgy. Both Dr Cobb and Mr Breyley have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activities which they are undertaking to qualify as a Competent Persons as defined in the JORC Code (2012). Dr Cobb and Mr Breyley consent to the disclosure of this information in this report in the form and context in which it appears.*

## Cautionary Statement

This belief is expressed in good faith and believed to have a reasonable basis.

The material in this announcement is intended to be a summary of current and proposed activities, selected geological data, as well as Mineral Resource estimates and Ore Reserves. This data is based on information available at the time.

It does not include all available information and should not be used in isolation as a basis to invest in the Company.

This announcement includes information and graphics relating to a conceptual mining study, completed Mineral Resource estimate and a scoping study and includes “forward looking statements” which include, without limitation, estimates of gold production based on mineral resources that are currently being evaluated.

While the Company has a reasonable basis on which to express these estimates, any forward looking statement is subject to risks, uncertainties, assumptions and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements.

Risks include, without limitation, gold metal prices, foreign exchange rate movements, project funding capacity and estimates of future capital and operating costs.

The Company does not undertake to release publicly any revisions to forward looking statements included in this report to reflect events or results after the date of this presentation, except as may be required under applicable securities regulations.

Any potential investor should refer to publicly available reports on the ASX website and seek independent advice before considering investing in the Company.

## Fortitude Gold Mine Stage 2 Ore Reserves

The total Ore Reserve for the Fortitude Stage 2 mining study is 1,029,000t @ 1.8g/t (58,100 oz Au). The entire Ore Reserve is classified as Probable under the JORC 2012 code (Table 4).

Fortitude Deposit 2019 Ore Reserve Stage 2 Mining Operation (1 g/t Au cut-off)							
Type	Proven		Probable		Total		
	Tonnes	Au	Tonnes	Au	Tonnes	Au	Au
	t	g/t	t	g/t	t	g/t	Oz
Oxide	0	0	141,000	1.8	141,000	1.8	8,000
Fresh			611,000	1.8	611,000	1.8	36,200
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1,029,000</b>	<b>1.8</b>	<b>1,029,000</b>	<b>1.8</b>	<b>58,100</b>

**Table 4: Fortitude Stage 2 Gold Mine Ore Reserve Statement**

- \* Figures have been rounded in compliance with the JORC code. Rounding errors may cause the column not to add up precisely.
- \*\* Ore Reserves are reported inclusive of marginally economic material and diluting material delivered for treatment (diluted).
- \*\*\* Ore Reserves are reported to a cut-off grade of 1g/t Au.

Dilution parameters applied to the Mineral Resource estimate as modifying factors for Reserve calculation include a mining loss of 5% and dilution of 10% at zero grade. This is considered appropriate for the open pit operation.

The reported Ore Reserve estimations are considered representative on a global scale.

### Competent Persons Statement

*The information in this report that relates to Ore Reserves has been compiled by Franciscus Sibbel who is a non-executive director of Matsa Resources Limited. Mr Sibbel is a Fellow Member of the Australian Institute of Mining and Metallurgy. Mr Sibbel has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activities which they are undertaking to qualify as a Competent Persons as defined in the JORC Code (2012). Mr Sibbel consents to the disclosure of this information in this report in the form and context in which it appears.*

### Mine Design and Scheduling

The study demonstrates that under the current market conditions, Fortitude can be economically mined (Table 5). Individual aspects of the study included:

- A geotechnical assessment was completed by Peter O'Bryan and Associates
- An optimisation study was completed by Orelogy using a gold price of A\$1,700 per ounce and industry based costs.

Stage 2 Pit Reserves	Oxide	Transitional	Fresh	Total
Ore tonnes (000's)	141	277	611	1,029
Ore grade (g/t Au)	1.8	1.6	1.8	1.8
Waste bcm				5,447,000
Total bcm				5,853,000
Contained ounces gold	8,000	13,900	36,200	58,100

**Table 5: Fortitude Stage 2 Mine Production**

## Programme for Upcoming Quarter

- Complete planned geotechnical diamond drill hole into the west wall and input findings into final pit wall configuration
- Commence metallurgical test program
- Recommence dewatering and set up for Triennial Water Licence Report
- Review mining contractor responses received during the current quarter, to develop short list and develop contract format and preliminary costs for use in optimisation re-run.

## Fortitude Project Background

Matsa's Fortitude deposit is located in the southern portion of the prolific Laverton Tectonic Zone (LTZ). The deposit is located just 25km south of AngloGold Ashanti Australia Ltd's Sunrise Dam Gold Mine (10Moz), 60km south of Gold Fields Ltd's Granny Smith Gold Mine (11.6Moz) and 12 km southeast of Matsa's Red October Gold Mine (0.342Moz).

Gold mineralisation at Fortitude is associated with the Fortitude Fault, a north-northwest striking shear which extends the length of the project. Ductile shearing and mineralisation is contained within an intermediate volcanic unit adjacent to relatively undeformed mafic rocks.

Gold mineralisation forms continuous steeply dipping quartz lodes along the Fortitude Shear and is accompanied by pervasive wallrock siderite-sericite-silica alteration and vein quartz (locally +/- carbonate) with pyrite +/- arsenopyrite in the deeper sulphide zones.

Vein intensity, siderite/sericite alteration and sulphide minerals are indicative of better Au grade.

The Fortitude deposit was discovered in 1998 during regional exploration by Aurora Gold Ltd.

## LAKE CAREY EXPLORATION

Exploration at Lake Carey during the quarter comprised the following:

- Completion of 2km long experimental seismic line along section of recent diamond drilling Fortitude North
- Geological mapping and sampling Linden
- Collection of 1,337 samples from historic aircore and RC drill holes
- Ultrafine soil geochemical sampling for a total of 290 samples
- Design of exploration programme including diamond and RC drilling and IP surveys to commence in the December quarter



## Fortitude North Seismic Survey

A single seismic survey line was carried out as part of Matsa's MRIWA 514 research project at Lake Carey. The seismic line was carried out over a distance of 2km approximately centred on diamond drill hole 19FNDD001 which was drilled as part of the seismic research project. The objective of the M514 research project is to develop new seismic acquisition and processing methodologies that will enable efficient and inexpensive application of high-resolution seismic surveys in difficult surface conditions such as found at salt lakes such as Lake Carey.

The key new technology being tested is the use of Distributed Acoustic Sensing (DAS) cables, which were compared with standard geophone technology. The introduction of DAS in Seismic surveys has the potential to:

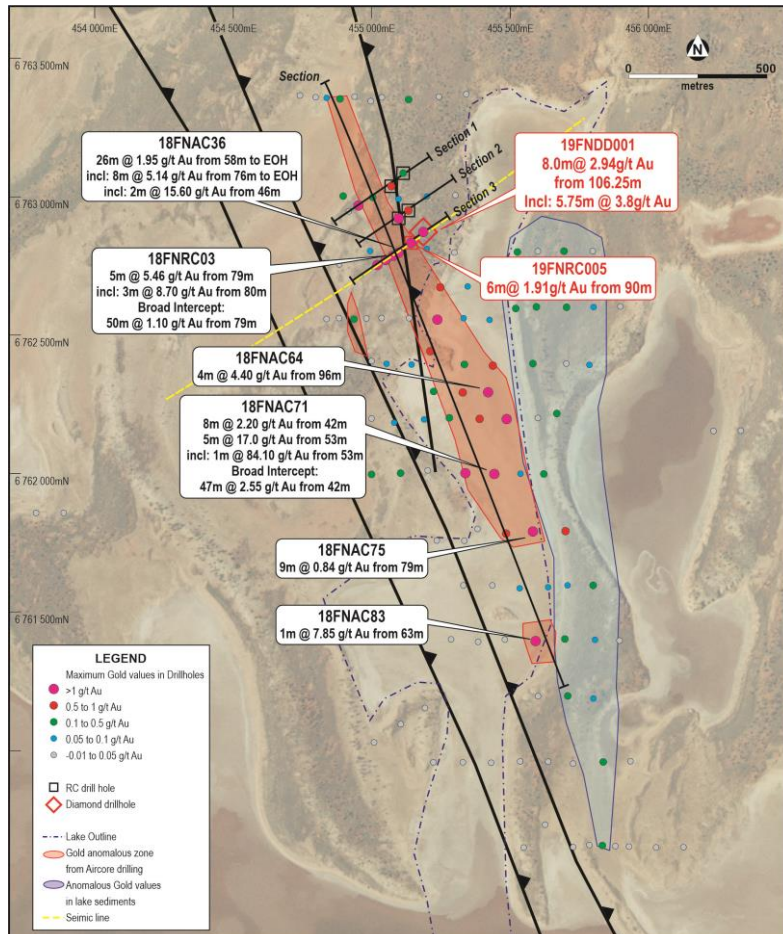
- Cut survey costs by an order of magnitude
- Increase data density by an order of magnitude
- Significantly increase data quality of both borehole and surface seismic images

The research component of the survey was to specifically investigate:

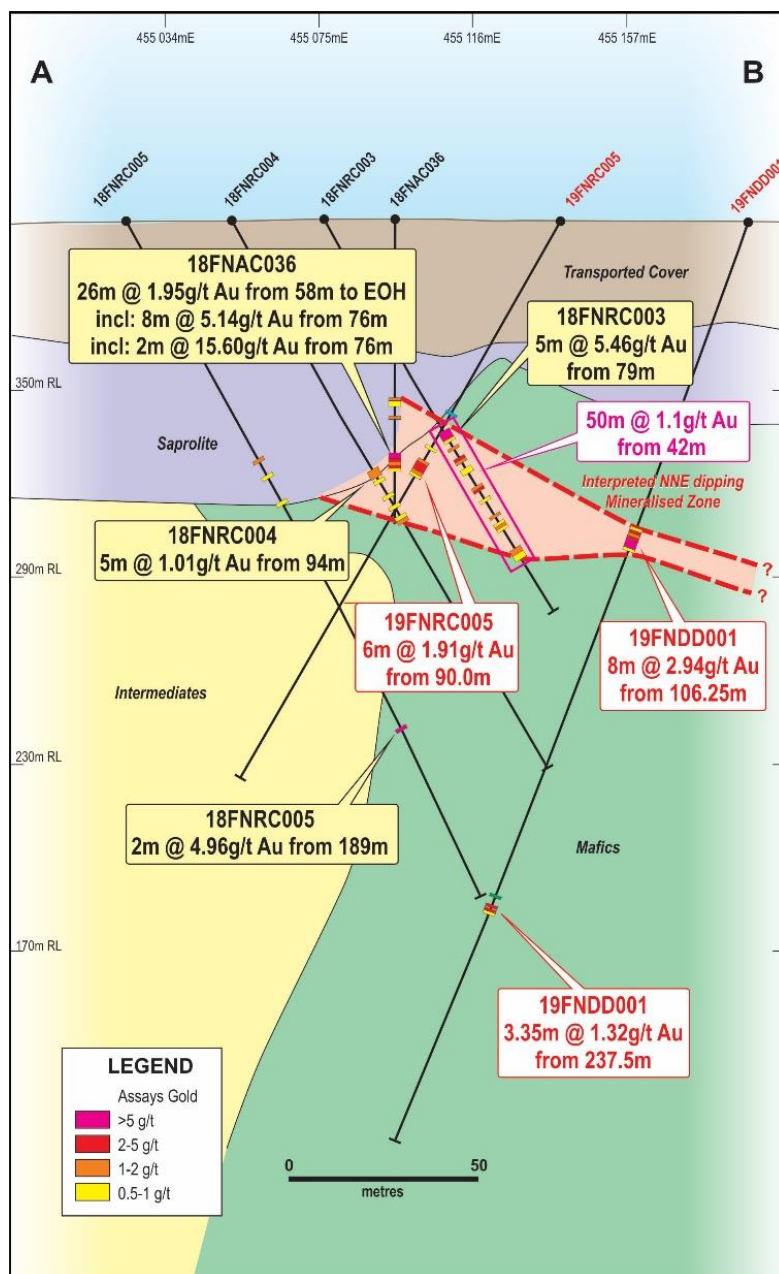
- Performance of DAS in a hypersaline environment through a comparative study with modern nodal recording systems
- Performance of different types of fiber optic cables in terms of directivity and image clarity
- Implementation of DAS in high ambient noise levels e.g. wind, rain, moving machinery

Acoustic logging was carried out on drill core from drill hole 19FNDD001 using a hand-held acoustic logger, to calibrate the results of the seismic survey response using actual acoustic velocities.

Results of the survey are currently awaited.



**Figure 10: Fortitude North Summary and R&D Seismic Survey line**



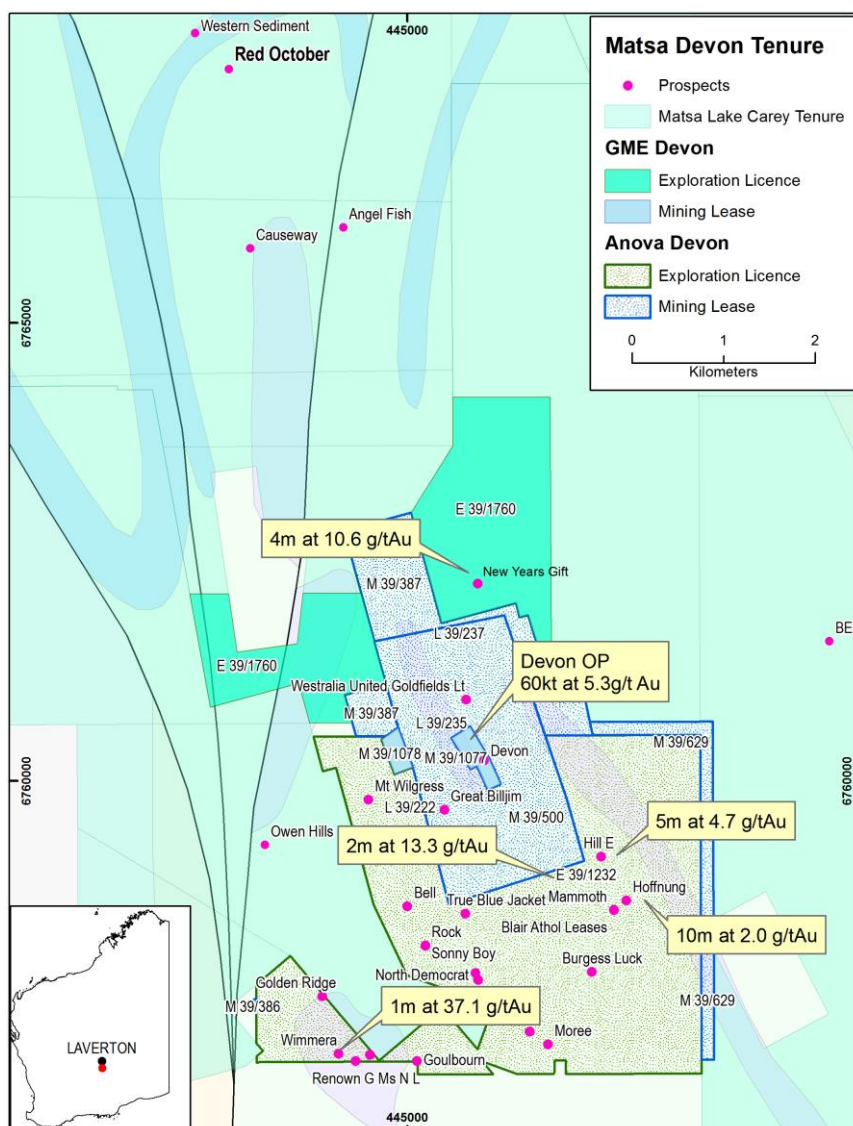
**Figure 11: Fortitude North Interpretive Cross Section along Seismic Survey Line**

## Fortitude North Next Steps

Diamond drilling using a lake diamond drilling rig is planned over the southern 1.5km extent of the Fortitude North basement gold target which is overlain by a small salt lake (Figure 10 and 11).

## Linden Project Exploration

Matsa completed the acquisition of the Devon gold mine and the surrounding area and the adjacent New Years Gift exploration licence from GME Resources in January 2019 (*MAT announcement to ASX 13 December 2018*). Strategically, Matsa separately acquired an option over adjacent tenements held by Anova Metals Ltd (AWV) in late 2018 (*MAT announcement to ASX 14 November 2018*).



**Figure 12: Summary of the Linden Project and Significant Drill Results**

Exploration during the quarter has been focused on geological mapping and rock chip sampling taking advantage of the reasonably well exposed geology at surface, to prioritise areas for further drilling. Rock chip sampling is summarised in Figure 13.

The geology of the Linden project includes a large volume of ultramafic and basaltic volcanic rocks with minor sediments which have been strongly folded and disrupted by a complex array of mostly NNW trending faults. The volcanic rocks are intruded by a variety of felsic and intermediate porphyry dykes and sills and small granite bodies. Examination of mullock piles adjacent to old workings, shows gold mineralisation to be commonly associated with quartz veins, in and adjacent to felsic porphyry bodies in strongly sheared ultramafic and mafic volcanics. Typically, mineralisation is associated with strongly disseminated pyrite.

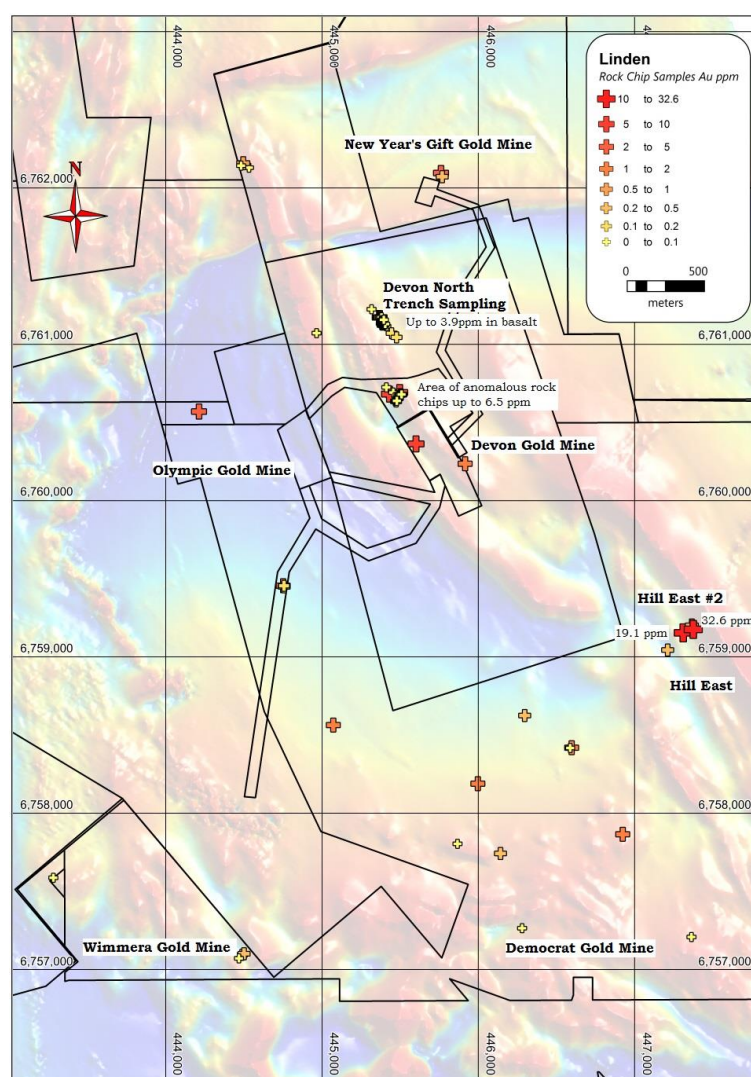
The Linden project includes the Devon mine and a significant number of historic gold workings in the northern part of the Linden goldfield (Figure 12). Potential is seen for near term development of historic mines including Devon and Hill East.

At Devon, open pit mining completed in 2016 produced 47,032t at 5.3g/t Au for 7,398oz Au (*GME announcement to ASX 18<sup>th</sup> December 2016*). M39/1077 which contains the Devon mine is surrounded by a much larger mining lease held by Anova Metals Ltd, which Matsa holds an option to purchase (Figure 12). Matsa now controls both mining leases and is in a position to fully evaluate Devon and the adjacent Olympic/Danube prospects. The previous impediments of competing owners are no longer an obstacle as Matsa now owns all relevant leases in their entirety.



The Devon mine is currently on care and maintenance and offers Matsa a potential near-term opportunity for further open pit and possibly underground mining. A geological model has been constructed based on previous drilling, and a 7 hole RC drilling programme is proposed during the December 2019 quarter, to evaluate the resource potential at Devon which remains open at depth (Figure 13).

Previous drilling has also identified several areas of shallow (<30m depth) gold mineralisation adjacent to the historic Hill East gold mine. Geological mapping and sampling have been integrated with past drilling to define 5 targets for further drilling. A programme of 17 shallow RC drill holes is proposed over the Hill East project during the December 2019 quarter (Figure 12).



**Figure 13: Linden Project, rock chip sample locations**

A feature of the historic Linden goldfield is drilling by previous explorers was mostly focused in the immediate vicinity of historic gold mines. The degree of geological and structural complexity coupled with widespread gold mineralisation at Linden makes this project highly prospective for new substantial gold discoveries. This was amply demonstrated during the quarter where rock chip sampling returned gold values up to 3.9 g/t Au in an area of scree cover 500m north of the Devon Mine, with no evidence of old workings or nearby drill holes (Figure 13).

At Devon and other historic gold workings, gold mineralisation is commonly associated with disseminated pyrite. An induced polarisation (IP) survey is proposed in order to detect the presence of disseminated pyrite and has the potential to detect extensions to known gold deposits as well as to discover new gold mineralisation in this highly prospective and mineralised area.



## Resampling of historical drill holes

During the quarter, historic drill sites along prospective structural corridors have been visited and resampled for a total of 1,337 samples (Figure 14, Table 6). Sampling has been prioritised over areas where anomalous drill intercepts were reported by previous explorers and in some cases along strike from significant gold mineralisation outside Matsa's project area eg. the Jubilee gold mine NE of Sunrise Dam.

The sampling procedure involves careful collection of drill fragments representing the least weathered material, usually the lowermost or "Bottom of Hole" (BOH) samples in aircore drilling. These fragments are commonly easy to recognise even on rehabilitated drill sites, as they form a residual surface lag accumulation.

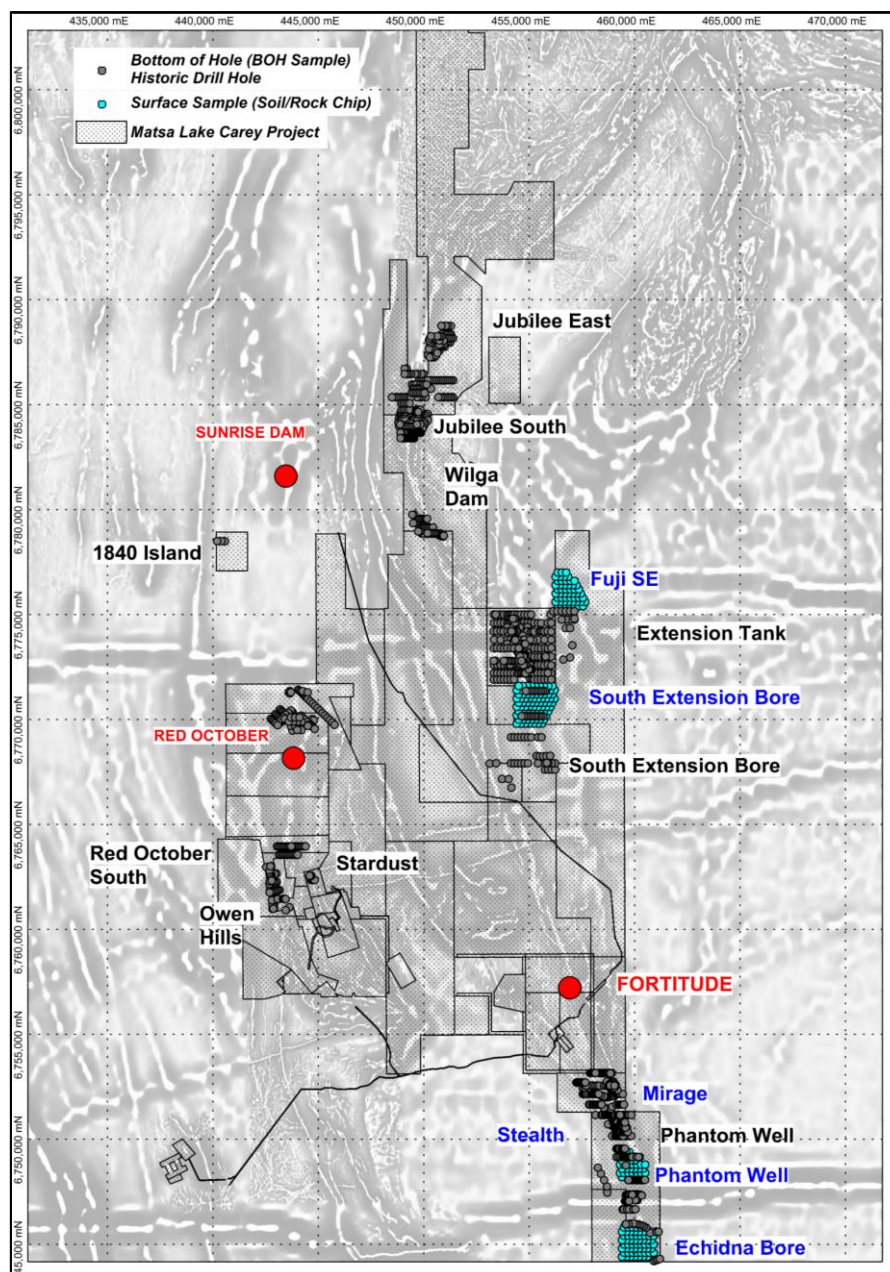
Sampling has been carried out to overcome limitations in historic drilling namely:

- Most historic drilling is either in the form of aircore or RAB and penetrates to refusal being the top of unweathered basement rocks. This only provides a test of younger cover and weathered basement
- Most drill holes were assayed for gold only.

Multi-element assays and mineralogical determinations on fresh basement rocks can be used to identify zones of hydrothermal alteration, potentially leading to discovery of previously unrecognised primary gold mineralisation. Interpreted zones of hydrothermal alteration will then be prioritised for deeper drilling. Results are expected during the December 2019 quarter.

Prospect	Sample-type	No-Samples
Jubilee East	BOH	76
Jubilee South	BOH	220
Wilga Dam	BOH	47
Extension Tank	BOH	333
South Extension Bore	BOH	58
Stealth	BOH	142
Mirage	BOH	156
Phantom Well	BOH	67
Echidna Bore	BOH	60
Owen Hills	BOH	51
Red October South	BOH	32
Star Dust	BOH	8
Nautilus	BOH	84
1840 Island	BOH	3

**Table 6: Lake Carey Project, bottom of hole samples September 2019 Quarter**



**Figure 14: Lake Carey Project, Bottom of Hole and Ultrafine Soil Sampling**

## Ultrafine Soil Sampling

Basement lithologies over most of the Lake Carey project are concealed by younger cover ranging in thickness from a few centimetres of windblown sand to >50m of lake sediments. Even minimal cover can mask the geochemical dispersion of gold in bedrock and residual soil reducing the effectiveness of conventional soil and auger sample geochemistry.

During the quarter, Matsa has carried out a number of small grid-based soil-sampling programmes in areas of semi-residual soil and interpreted shallow (<2m) cover for a total of 290 samples over 7 prospects (Table 7). These samples are to be submitted for the recently developed ultrafine fraction assay technique developed by CSIRO. This assay technique includes a preparation stage where sand and silt are removed leaving only the clay fraction for acid digest and assay.

Results are expected during the December 2019 quarter.

Prospect	Sample Type	Number of
Stealth	Ultra-fine Soils	30
Mirage	Ultra-fine Soils	16
Fuji South	Ultra-fine Soils	53
South Extension Bore	Ultra-fine Soils	86
Phantom Well	Ultra-fine Soils	37
Echidna Bore	Ultra-fine Soils	68

**Table 7: Lake Carey Project, Ultrafine Soil Samples September 2019 Quarter**

## **SYMONS HILL (Nickel Fraser Range)**

No activity carried out during the quarter.

## **CORPORATE**

In September the Company completed a \$6 million placement via the issue of 40 million shares at \$0.15 per share (incl. a free 1 for 4 unlisted option exercisable at 25c within 18 months). The capital raising was heavily oversubscribed and highly successful and has brought a number of new institutional and sophisticated investors to Matsa's share register.

The funds from the capital raising will be used to commence:

1. An extensive and immediate new underground exploration diamond drill programme within the Red October underground gold mine
2. New drilling programmes at Fortitude North, Red October near mine surface and Devon gold mine and surrounds
3. Increased regional exploration where numerous targets are being developed
4. Commence works on Fortitude Stage 2 gold mine

In late July the Company sold an 80% interest in the Lake Rebecca gold project in the eastern goldfields, 150km ENE of Kalgoorlie, Western Australia to Bulletin Resources Limited for consideration of \$125,000 with a following 1% NSR royalty. This allows the Company to focus on the Lake Carey gold project but retain a non-contributing 20% interest in an interesting gold exploration project.

Cash and liquid assets total approximately A\$7.98M as at 30<sup>th</sup> September 2019. Cash and liquid assets do not include any stockpiled gold ore which could be classed as inventory on hand awaiting delivery to AGAA.

A A\$5M loan facility drawn down to A\$4M is available to the Company.

Please refer to Appendix 5B for further details.

**For further Information please contact:**

**Paul Poli**  
**Executive Chairman**

**Andrew Chapman**  
**Director**

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## **Competent Person Statement**

*The information in the report to which this statement is attached that relates to Exploration Results and Mineral Resources related to the Red October Resource Estimate is based upon information compiled by Mr Daniel Howe, a Competent Person who is a member of the Australian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Daniel Howe is a full-time employee of Saracen Mineral Holdings Limited. Daniel Howe has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Daniel Howe consents to the inclusion in the report of matters based on his information in the form and context in which it appears.*

## **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.*



**MATSA RESOURCES LIMITED**

**SCHEDULE OF TENEMENTS HELD AT 30 SEPTEMBER 2019**

<b>Tenement</b>	<b>Project</b>	<b>Interest at Beginning of Quarter</b>	<b>Interest at End of Quarter</b>	<b>Change During Quarter</b>
E 69/3070	Symons Hill	100%	100%	
E 09/2162	Glenburg	100%	100%	
E 52/3339		100%	100%	
E 28/2600	Lake Rebecca <sup>3</sup>	100%	20%	Sale of 80% interest
E 28/2635		100%	20%	Sale of 80% interest
E 39/1287	Lake Carey	100%	0%	Tenement expired
E38/2945		100%	100%	
E 39/1837		100%	100%	
E 39/1863		100%	100%	
E 39/1864		100%	100%	
E 39/1957		100%	100%	
E 39/1958		100%	100%	
E 39/1980		100%	100%	
E 39/1981		100%	100%	
P 39/5652		100%	100%	
E 38/2938		90% <sup>2</sup>	90% <sup>2</sup>	
E 39/1796		90% <sup>2</sup>	90% <sup>2</sup>	
E 39/1752		100%	100%	
E 39/1770		100%	100%	
E 39/1803		100%	100%	
E 39/1812		100%	100%	
E 39/1819		100%	100%	
E 39/1834		100%	100%	
E 39/1840		100%	100%	
E 39/1889		90% <sup>1</sup>	90% <sup>1</sup>	
E 39/2015		100%	100%	
L 39/247		100%	100%	
L 39/260		0%	100%	Granted during the quarter
L 39/267		100%	100%	
L 39/268		100%	100%	
M 39/1		100%	100%	
M39/1099		100%	100%	
M39/1100		100%	100%	
M39/38		100%	100%	
M 39/1065		100%	100%	
M 39/1089		100%	100%	
M 39/286		100%	100%	
M 39/709		100%	100%	

**MATSA RESOURCES LIMITED**

**SCHEDULE OF TENEMENTS HELD AT 30 SEPTEMBER 2019**

<b>Tenement</b>	<b>Project</b>	<b>Interest at Beginning of Quarter</b>	<b>Interest at End of Quarter</b>	<b>Change During Quarter</b>
M 39/710		100%	100%	
P 39/5293		100%	100%	
P 39/5669		100%	100%	
P 39/5670		100%	100%	
P 39/5694		100%	100%	
P 39/5841		100%	100%	
E 47/3518	Paraburdoo	100%	100%	
E 39/1760	Devon	100%	100%	
L39/222		100%	100%	
L 39/235		100%	100%	
L 39/237		100%	100%	
M 39/1077		100%	100%	
M 39/1078		100%	100%	
P 39/6116		0%	100%	Granted during the quarter
P 39/6117		0%	100%	Granted during the quarter
E 39/1897	Zelica	100%	0%	Sold during the quarter
L 39/261		100%	0%	Sold during the quarter
M 39/1101		100%	0%	Sold during the quarter
L 39/273	Red October	100%	100%	
M 39/411		100%	100%	
M 39/412		100%	100%	
M 39/413		100%	100%	
M 39/599		100%	100%	
M 39/600		100%	100%	
M 39/609		100%	100%	
M 39/610		100%	100%	
M 39/611		100%	100%	
M 39/721		100%	100%	
SPL 80/2558	Siam Project	100%	100%	

All tenements are located in Western Australia apart from the Siam Project which is located in Thailand.

<sup>1</sup> = Joint venture with Raven Resources Pty Ltd

<sup>2</sup> = Joint venture with Bruce Legendre

<sup>3</sup> = Joint venture with Bulletin Resources Limited

+Rule 5.5

## Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

### Name of entity

MATSA RESOURCES LIMITED

### ABN

48 106 732 487

### Quarter ended ("current quarter")

30 September 2019

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	1,639	1,639
1.2 Payments for		
(a) exploration & evaluation	(484)	(484)
(b) development	-	-
(c) production	(1,668)	(1,668)
(d) staff costs	(304)	(304)
(e) administration and corporate costs	(220)	(220)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	1	1
1.5 Interest and other costs of finance paid	(143)	(143)
1.6 Income taxes paid	-	-
1.7 Research and development refunds		
1.8 Other – Other income	45	45
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(1,134)</b>	<b>(1,134)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	(98)	(98)
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) other non-current assets	-	-

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (3 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	125	125
	(c) investments	441	441
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other – Bond Deposits	(1)	(1)
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>467</b>	<b>467</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of shares	6,000	6,000
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	(228)	(228)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(34)	(34)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>5,738</b>	<b>5,738</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	901	901
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,134)	(1,134)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	467	467
4.4	Net cash from / (used in) financing activities (item 3.10 above)	5,738	5,738
4.5	Effect of movement in exchange rates on cash held	-	-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>5,972</b>	<b>5,972</b>



<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	5,922	851
5.2	Call deposits	50	50
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>5,972</b>	<b>901</b>
	Shares held in listed investments*	<b>2,012</b>	<b>1,830</b>
	<b>Total cash and liquid investments at end of quarter</b>	<b>7,984</b>	<b>2,731</b>

\* Market value at 30 September 2019 (Previous quarter 30 June 2019)

**6. Payments to directors of the entity and their associates**

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

<b>Current quarter \$A'000</b>
216
-

**7. Payments to related entities of the entity and their associates**

- 7.1 Aggregate amount of payments to these parties included in item 1.2
- 7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

<b>Current quarter \$A'000</b>
-
-

8. <b>Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
8.1 Loan facilities	5,000	4,000
8.2 Credit standby arrangements	-	-
8.3 Other (please specify)	-	-
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

On 8 August 2017 Matsa entered into a secured \$4M loan facility split equally between two separate parties. The loan attracts a 12% per annum interest rate and is repayable by 31 July 2020. On 6 May 2019 a variation to the loan increased the facility to \$5M. At 30 June 2019 the Company had drawn down \$4M of the facility.

9. <b>Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Exploration and evaluation	800
9.2 Development	-
9.3 Production	2,500
9.4 Staff costs	194
9.5 Administration and corporate costs	950
9.6 Other (provide details if material)	-
<b>9.7 Total estimated cash outflows</b>	<b>4,444</b>

\*Estimated proceeds from sale for the quarter are estimated to be \$4.1M

10. <b>Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	<b>Tenement reference and location</b>	<b>Nature of interest</b>	<b>Interest at beginning of quarter</b>	<b>Interest at end of quarter</b>
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	See attached schedule of tenements			
10.2 Interests in mining tenements and petroleum tenements acquired or increased	See attached schedule of tenements			

### Compliance statement

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- This statement gives a true and fair view of the matters disclosed.

Sign here:   
(Director/Company secretary)

Date: 31 October 2019

Print name: Andrew Chapman

**Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.