MATSA RESOURCES LIMITED
ABN 48 106 732 487

ASX Announcement **22nd February 2017**

Trial Mining Study Fortitude Gold Project

Highlights

- *Mining study shows a trial mining operation is economically viable at a gold price of A$1,600*
  - *All in sustainable cash cost (AISC) of $1,140/oz)*
  - *Cash surplus $5.2M over 12 months*
  - *Total production 185,000t @ 2.2g/t (12,100 oz)*
  - *Capital outlay $1.2M*
  - *Total Material movement 1.1M bcm's at a strip ratio of 10.8*
- *Final statutory and regulatory approvals expected within 1 month, with intention to commence trial mining at Fortitude in Q2 2017*
- *Indicated Mineral Resource upgrade by 12% to 3,084kt @ 1.9g/t (188,400oz)*
- *Total Indicated and Inferred Mineral Resources stand at 5,589kt @ 2.0g/t (354,600oz)*
- *Ongoing study into a large scale operation currently in progress*

CORPORATE SUMMARY

Executive Chairman

Paul Poli

Director

Frank Sibbel

Director & Company Secretary

Andrew Chapman

Shares on Issue

144.7 million

Unlisted Options

17.02 million @ $0.25 - $0.30

Top 20 shareholders

Hold 54.34%

Share Price on 21 February 2017

23 cents

Market Capitalisation

$33.28 million

Matsa Resources Limited ("Matsa" or "the Company" ASX: MAT) is pleased to report the results of a study of trial mining the Fortitude deposit. The study shows that a trial mine is economically viable with a potential cash surplus of $5.2M over a period of 12 months with a capital investment of only $1.2M. A sensitivity analysis indicates that such a proposal is robust with limited downside risk from reductions in the gold price, realised grade or variations in mining costs.

Summary

Matsa has completed a study into a trial mine at the Fortitude deposit. The trial mine becomes cash flow positive after month 3 (Refer Figure 1), and has the following positive financial summary:

- Capital outlay **$1.2M**
- Maximum cash exposure **$1.9M**
- Cash surplus **$5.2M** after 12 months
- Gold price **A$1,600**
- Production 185,000t @ 2.16g/t (**12,100 oz**)
- Total movement of 1.1M bcm's
- Strip ratio 10.8

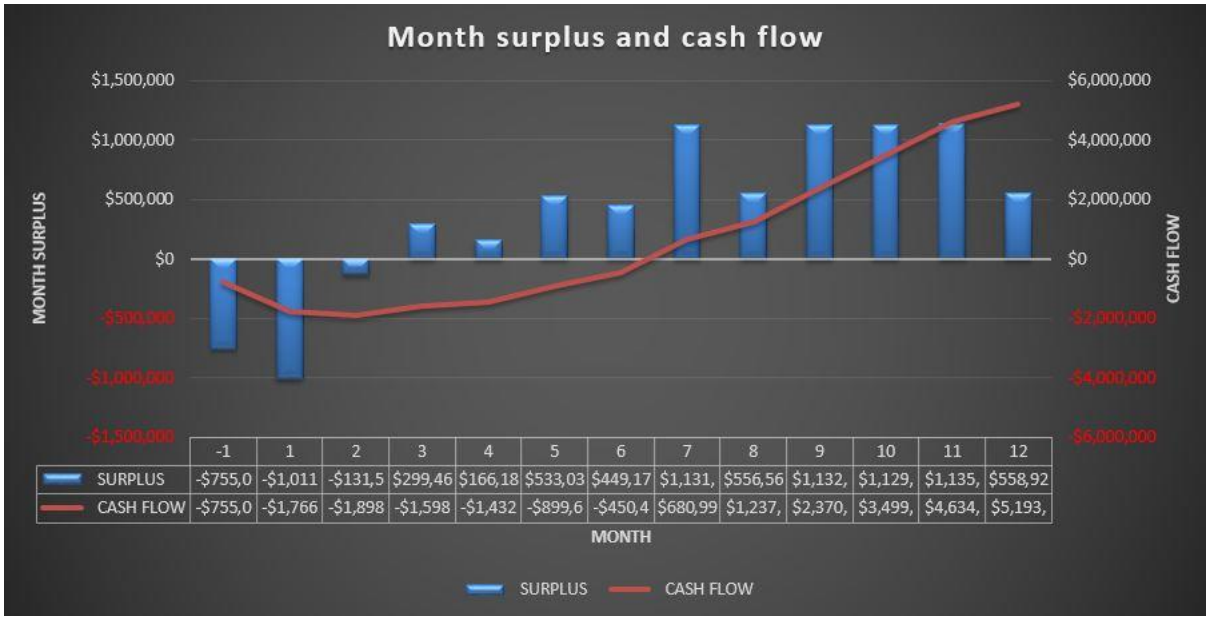

Figure 1:** **Mining Study Projected Cash Flow

Regulatory and statutory approvals are expected to be finalised within a month, which could enable Matsa to capitalise on this opportunity in the short term.

Upon completion of drilling in 2016 and subsequent modelling, the Indicated Mineral Resource at Fortitude has been upgraded by 12% to 3,084,000t @ 1.9g/t (188,400 oz) from 2,758kt @ 1.9g/t (172,000 oz). The total Indicated and Inferred Mineral Resource estimate for Fortitude now stands at 5,589,000 @ 2.0g/t (354,600 oz).

Fortitude Deposit 2017 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
Transported	3	1.8	0	0.00	3	1.8	200
Oxide	357	2.2	53	2.1	410	2.2	28,300
Transition	378	1.8	125	2.0	503	1.8	29,800
Saprock	227	1.9	1	2.1	228	1.9	14,100
Fresh	2,119	1.8	2326	2.1	4,445	2.0	282,200
Total	**3,084**	**1.9**	**2,505**	**2.1**	**5,589**	**2.0**	**354,600**

***Table 1:* Mineral Resource Statement**

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 publically available reports on the ASX website and seek independent advice before considering investing in the Company.

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 Ltd's Sunrise Dam Gold Mine (7.7Moz), 60km south of Gold Fields Ltd's Granny Smith Gold Mine (11.6Moz) and 12 km southeast of Saracen Mineral Holdings Ltd's Red October Gold Mine (0.57Moz).

The Fortitude deposit was discovered in 1998 during regional exploration by Aurora Gold Ltd. The project was acquired by Midas Resources Ltd in 2002 who divested it to Fortitude Gold Pty Ltd in 2014.

The bulk of historic work was completed by Aurora and Midas who drilled 523 RC, AC and diamond drill holes into the deposit area. Also completed was a number of prefeasibility and feasibility studies into a heap-leach/dump leach operation and the viability of constructing a 600tpa CIL treatment plant.

Matsa purchased the Fortitude project from the receivers of Fortitude Gold Pty Ltd in 2016 (*refer to the ASX announcement of 21st July 2016*). Matsa subsequently completed an audit of the Resource figures and the Mineral Resource estimate was confirmed as a JORC 2012 compliant Mineral Resource (*refer to the ASX announcement of 1st September 2016*). Matsa subsequently commenced a diamond drilling program to provide drill core for metallurgical, geotechnical and resource definition purposes (*refer to the ASX announcements of 15th November 2016 and 14th December 2016*).

Matsa also completed the required heritage, hydrogeological, flora, fauna, community consultation and geotechnical studies in order to complete a mining proposal which was lodged with the Department of Mines and Petroleum in December 2016.

Study Scope

A mining study at Fortitude was commenced in July 2016 to evaluate the technical and financial viability of mining the Fortitude deposit. This trial mining study evaluates only the financial and technical viability of commencing a trial mining operation at Fortitude using a small articulated mining fleet.

The mining study into a large scale mining operation remains in progress.

Geology and Mineralisation

Gold mineralisation at Fortitude is associated with the Fortitude Shear Zone, a north-northwest striking shear which extends the length of the project. Ductile shearing and mineralisation is focussed 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 (Refer Figure 2).

***Figure 2:* Diamond Drill Core from 16LCDD004**

Mineral Resource Update

Matsa has updated the Mineral Resource estimate for Fortitude based on drilling completed in 2016. This update has resulted in:

- A 12% increase in Indicated Resources from 2,758kt @ 1.9g/t (172,000 oz) to 3,084kt @ 1.9g/t (185,000 oz)
- An increase in grade and decrease in tonnes for Inferred Resources from 3,530kt @ 1.9g/t (213,000 oz) to 2,505kt @ 2.1g/t (170,000 oz)

The decrease in tonnage of Inferred Resources from the previously announced resource statement (*refer to the ASX announcement of 1st September 2016*) is a result of the conversion of Inferred Resources to Indicated and a geological re-interpretation of the model.

Total Indicated and Inferred Mineral Resources for the Fortitude gold project now stands at 5,589kt @ 2.0g/t for 354,600 oz (Refer Table 2).

Fortitude Deposit 2017 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
Transported	3	1.8	0	0.00	3	1.8	200
Oxide	357	2.2	53	2.1	410	2.2	28,300
Transition	378	1.8	125	2.0	503	1.8	29,800
Saprock	227	1.9	1	2.1	228	1.9	14,100
Fresh	2,119	1.8	2326	2.1	4,445	2.0	282,200
Total	**3,084**	**1.9**	**2,505**	**2.1**	**5,589**	**2.0**	**354,600**

Table 2: 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 are presented in Appendix 1.

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.

Matsa completed a 21 hole diamond drilling program in 2016 for 2,257.7m. The results from the drilling were reported on 15th November 2016 and 14th December 2016. The purpose of the diamond drilling was to:

- Infill and convert Inferred Mineral Resources in the potential mining area to Indicated Mineral Resources.
- Provide diamond drill core for metallurgical test work.
- Provide diamond drill core for bulk density determination.
- Geotechnical assessment.

CSA Global consultants were contracted to carry out grade estimation for the Fortitude Mineral Resource estimate. The estimate was based on geological constraints and bulk densities provided by Matsa. Three domains were interpolated. Two primary lodes were domained striking 330^0 and 350^0 and steeply dipping towards the northeast. The supergene domain is more variable, striking between 330^0 and 360^0 and shallow dipping towards the northeast.

Top cuts applied for the estimate range from 20g/t to 40g/t. The chosen method of estimation was ordinary kriging (ok) using a two pass search strategy where the number of samples required being reduced for the second pass. Detailed commentary on all assumptions and methods used in the Mineral Resource estimate can be located in Appendix 1.

Mine Design and Scheduling

The study demonstrates that under the current market conditions, Fortitude can be economically mined by 3 trial pits.

A geotechnical assessment was completed by Peter O'Bryan and Associates from which the wall design criteria were selected. Due to the shallow nature of the pits, all walls have been designed at 55^0 with 5m berms every 10 vertical metres.

An optimisation study was completed by Orelogy for the purpose of mining the oxide ore horizon using small scale mining equipment. The optimisation studies were based on Probable Ore Reserves only. The results from this optimisation were used by Matsa to design three small pits, using small articulated 6 wheel drive trucks. Ramps widths are designed to 12m for dual lane and 7m for single lane. The ramp gradient is 1:7.

Trial Pit Reserves	North	Central	South	Total
Ore tonnes	117,000	55,000	13,000	185,000
Ore grade	2.1	2.2	2.3	2.2
Waste bcm	643,000	288,000	71,000	1,000,000
Total bcm	701,000	316,000	78,000	1,100,000

***Table 3:* Mine Production by Pit**

The pits have been scheduled to be mined to completion within 8 months on double shift, producing 12,100 ounces of gold at an All In Sustainable Cost (AISC) of A$1,140 per recovered oz. The ore tonnes mined are hauled to an external treatment facility for processing at 15,000 to 20,000 tonnes per month. Ore haulage commences in month 2 and continues to month 12 when the ore stockpiles on site are exhausted.

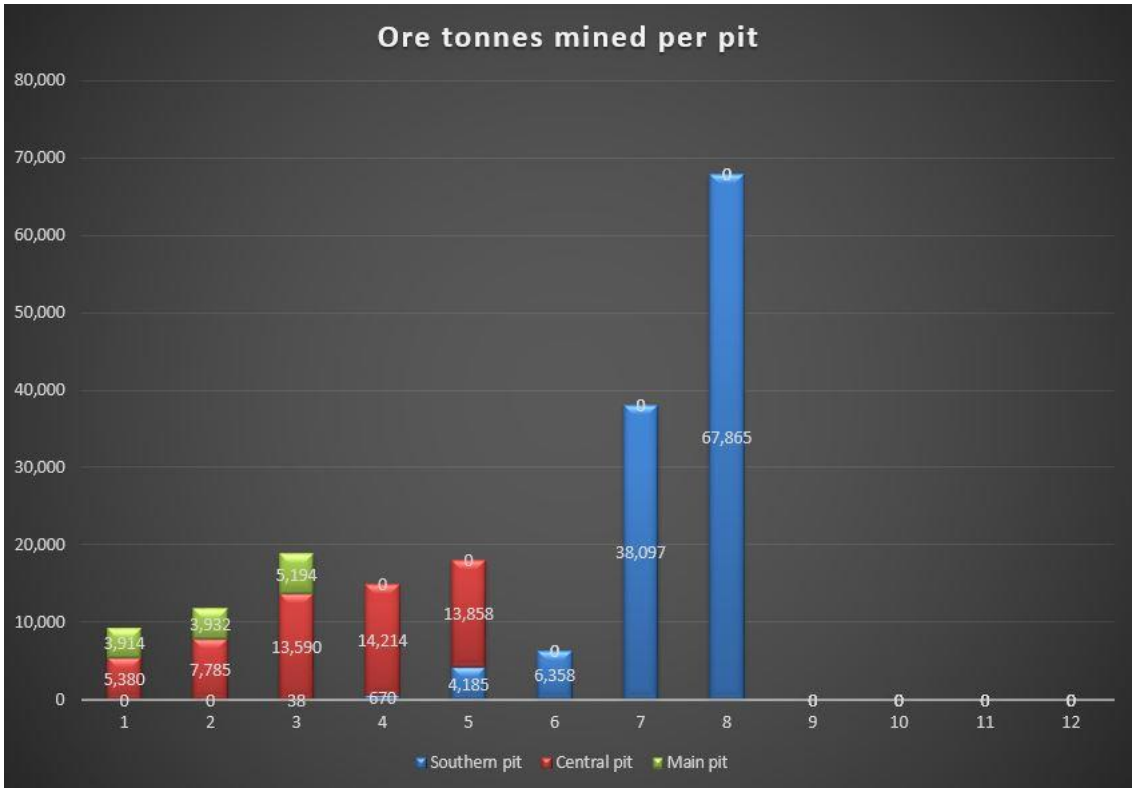

Figure 3: ***Ore Tonnes Mined per Pit per Month***

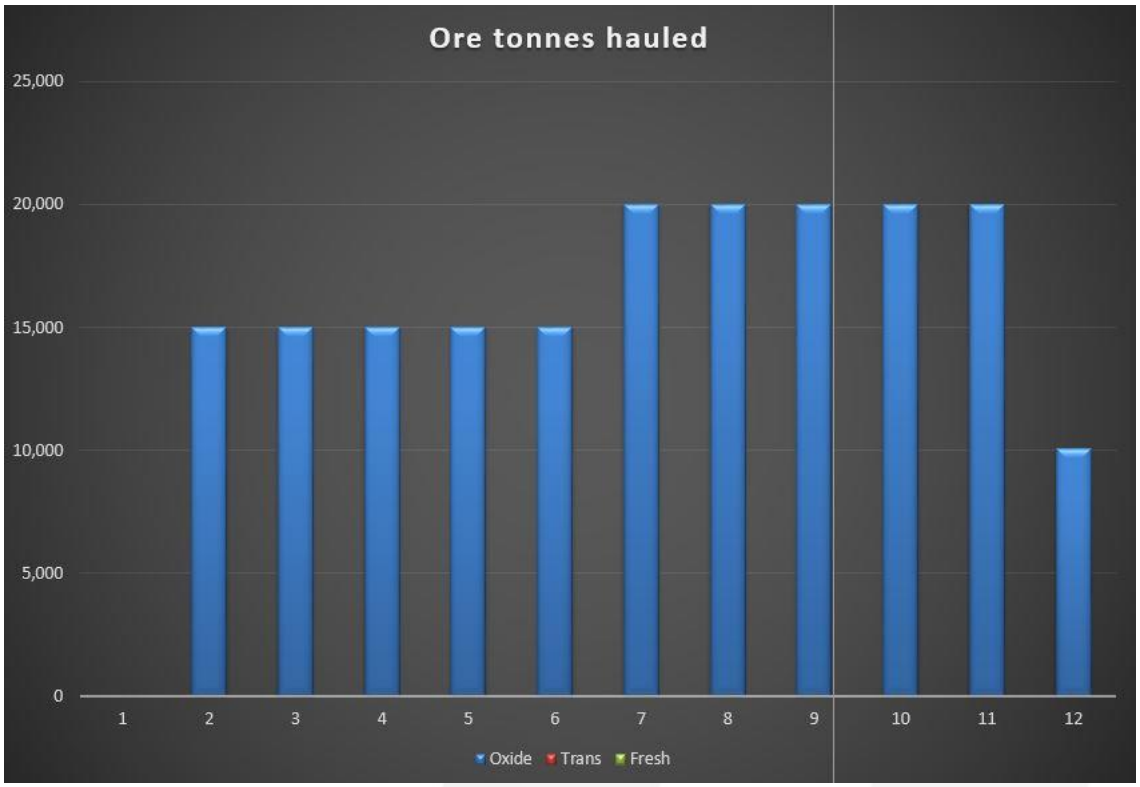

Figure 4: ***Ore Haulage Profile***

Ore Reserves

The total Ore Reserve for the Fortitude trial mining study is 185,000t @ 2.2g/t (12,900 oz Au). The entire Ore Reserve is classified as Probable under the JORC 2012 code.

Fortitude Deposit 2017 Ore Reserve Trial Mining Operation 2017 (1 g/t Au cut-off)							
Type	Proven		Probable		Total		
	Tonnes t	Au g/t	Tonnes t	Au g/t	Tonnes t	Au g/t	Au Oz
Oxide	0	0	185,000	2.2	185,000	2.2	12,900
Total	**0**	**0**	**185,000**	**2.2**	**185,000**	**2.2**	**12,900**

***Table 4:* 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 dilution of 115% and a mining recovery of 99%. This is considered appropriate given that the ore body is oxide, does not require blasting and the ore bodies width and configuration being matched to the mining equipment.

Competent Persons Statement

The information in this report that relates to Ore Reserves has been compiled by Jon Pluckhahn who is a full time employee of Matsa Resources Limited. Mr Pluckhahn is a Member of the Australian Institute of Mining and Metallurgy. Mr Pluckhahn 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 Pluckhahn consents to the disclosure of this information in this report in the form and context in which it appears.

Metallurgy

The test work programme scope included detailed head assays, basic comminution characterisation testing and gravity-cyanidation testing under conditions encompassing the potential treatment plants, including cyanidation testing under a range of applicable grind sizes. Test work was undertaken on composite samples derived from part diamond drill core intervals selected to spatially represent Upper Oxide, Oxide, Transition and Fresh ore types. In general, the outcomes of the programme results received to date are very encouraging and include:

- Detailed head assays demonstrated no significant levels of potentially deleterious elements and relatively low sulphide contents
- Comminution characterisation test work demonstrated relatively soft to moderate competency, hardness and abrasiveness characteristics including Bond Ball Mill Work Index values ranging from 8.6 kWh/t to 14.6 kWh/t
- Slurry rheology testing was undertaken on the oxide ore type samples and indicated that no viscosity issues are expected from these samples under the tested conditions
- Gravity Au recovery at the tested 180 µm P_{80} grind size demonstrated good (27%) to high (57%) Au extraction to intensive cyanidation solution under the tested conditions
- Cyanidation of the combined gravity tail samples exhibited very good (89.8%) to excellent (98.2%) Au recoveries (including gravity) at 36 hours and excellent Au extraction kinetics which allowed for similar 24 hour Au recoveries (including gravity) which ranged between very good (89.8%) and excellent (97.5%) values for all tested ore types
- Moderate cyanide consumption and typical lime addition values were reported

The results demonstrate suitable characteristics for treatment via any of the potential nearby toll treatment operator's processing facilities with moderate comminution demands, very good to excellent gravity and cyanidation Au recoveries, moderate reagent requirements and no significant deleterious elements. Some grind size and leach residence time dependencies to Au recovery have been shown and the reported technical relationships can be assessed along with commercial related aspects to obtain maximised economic utilisation of the Fortitude deposit.

Processing

Matsa is currently in negotiation with a number of nearby processing plants for the treatment of ore and has a non-binding ore purchase offer. Treatment costs used in the mining study fall within the range currently being negotiated in commercial confidence.

It is expected that a binding contract will be entered into soon after the completion of metallurgical test work.

Infrastructure

The Fortitude deposit is located in close proximity to multiple fully established mining operations complete with processing facilities. There is an established haul road connecting Fortitude to the nearby operations.

There is a series of dewatering bores which have been drilled and developed to enable the dewatering of the final pits ahead of mining.

The infrastructure required for the mining of the trial pits are:

- Equipping dewatering bores with the dewatering pipeline network and the sediment and discharge water management ponds
- Construction of the site road networks and refurbishment of existing haul roads
- Set up an administration complex which will include the office, crib, ablution and 1st aid room

Approvals and Permitting

During the mining study, Matsa lodged all necessary applications with the appropriate authorities. There is no foreseeable impediment to full approval for the mining operation being received in the near future. Below is a summary of Fortitudes approval status:

- 5C License to take water – Department of Water – Approved
- 26D License to construct wells – Department of Water – Approved
- Native Vegetation Clearing Permit – Department of Environmental Regulation – Approved
- License to discharge water – Department of Environmental Regulation – Pending
- Mining Proposal – Department of Mines and Petroleum – Pending
- Works approval – Department of Environmental Regulation – Pending

It is anticipated that all approvals will be received by 30th March 2017.

Land Tenure and Social Heritage

The Mineral Resource and proposed mining area covers 3 granted mining leases which do not expire until 2029. Matsa Gold Pty Ltd (a wholly owned subsidiary of Matsa) is the 100% owner of the tenements which are located on the Mt Weld pastoral lease.

Harmony Australia Ltd holds a 1.5% net smelter royalty for production in excess of 250,000oz of gold. This royalty will not be triggered by this proposal. No other 3rd party royalties apply apart from the normal state government royalties.

There are no native title claims over the area. The archaeological and anthropological survey located one heritage site outside of the operational envelope and will be easily protected. The traditional owners have been extensively consulted and have given their approval for the mining project.

There are no impediments to obtaining a license to operate.

Capital Costs

The total estimated capital setup costs are $1.2M. The major capital items are the development of the pit dewatering system ($480k), the site clearing and topsoil management ($410k) and the administration office complex ($150k). These capital cost items are based on quotes sourced through market suppliers and rates supplied by mining contractors on pre-tender submissions.

Operating Costs

Operating costs have been based on unit mining costs supplied by mining contractors from pre-tender submissions. Mining costs are yet to be finalised by contract.

Negotiations are underway with multiple nearby ore treatment facilities. Treatment costs used in the mining study fall within the range currently being negotiated in commercial confidence.

Diesel fuel costs are based on a $0.70/litre fully rebated fuel price.

Ore haulage costs have been based on quotes from a local haulage contractor.

Financial Modelling

Financial modelling was undertaken using monthly schedules and cash flows. A flat gold price of A$1,600/ounce was used for the project. The operation has a maximum cash exposure of $1.9M.

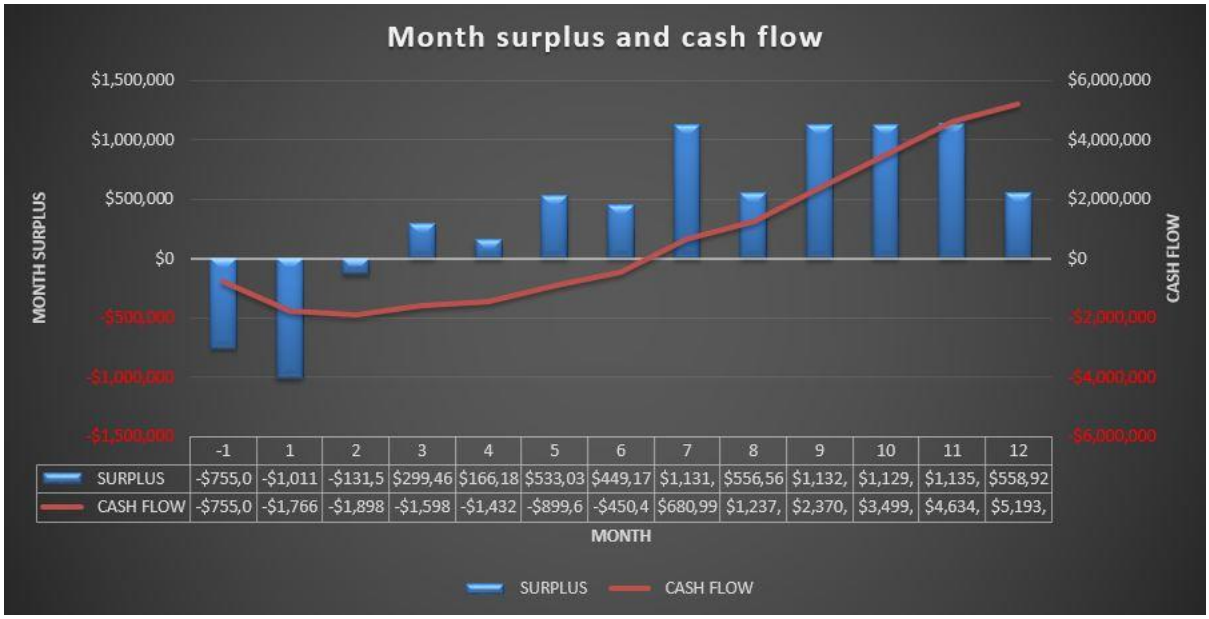

Figure 5: ***Mining Study Projected Cash Flow***

Funding Requirements

Matsa is a well funded and diversified mineral exploration and mining company. Matsa has a market capitalisation of $33.28M and cash and liquid assets of approximately $9 million as at 31st December 2016.

Matsa has the financial capacity to internally fund the capital and maximum cash requirements of this project.

Opportunities

The mining study represents an opportunity for Matsa to create a significant low risk cash surplus. By opening up the ore deposit there is also the opportunity to learn the detailed geological controls of the mineralisation to assist in further exploration and development of the Fortitude deposit which is still open down plunge and down dip.

A further mining study is currently in progress to develop the deposit on a large scale basis. Should that study prove viable, the scale of operations could be upgraded. The trial mining scenario does not impact detrimentally on any future operation.

Risks

A key number of risks that are normal for this type of operation have been identified, such as:

- Reduction in the $A gold price will negatively impact on revenue
- Confidence in the geological model, particularly for high nugget affect supergene domains
- Finalization of a toll treating/ore purchase agreement with a nearby mill under acceptable and reasonable terms
- Achieving the assumed unit cost mining rates as used in the study

For further information please contact:

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Appendix 1 - Matsa Resources Limited – Fortitude Gold Deposit

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.*	The sampling methodology below is for Matsa drilling only. DD holes – After the core was oriented, marked up and logged the geologist marked up the sample intervals which honored geological contacts or a 1m sample interval if no geological contact was observed. Where the core was unconsolidated it was split (halved) using a paint scraper along the orientation line with the left side of the core being sampled and the right side retained. In competent core the core was quartered using an Almonte core saw with the lower left side of the core (looking down hole) being sampled. The sampling methodology below is known for Midas drilling only. RC sampling procedures adopted by Midas varied pre- and post- 2005. Prior to 2005 (FTRC001 – FTRC153) 1m bulk samples were collected from the cyclone using plastic bags. A 5m composite was then collected in a calico bag using a metal scoop. Upon receiving assays, the plastic bags containing the bulk samples within the mineralised zones were routinely re-split using a Jones riffle splitter to obtain a 2-3kg sample (1/8th split) for submission. Post 2005 drilling (FTRC154 – FTRC266) the bulk sample was collected for 1m sample intervals in plastic bags, while sub- samples were collected in calico bags at the time of drilling by splitting the bulk 1m sample through a Jones riffle splitter to get a 1/8th split. Sampling of AC cores – Drill cuttings were collected every metre in a plastic bag. 4m composite samples were collected by using a trowel or ridged plastic spear, and the approximate 2kg sample was and sent for analysis. Upon receipt of assays the bulk sample within each plastic bag in the mineralised zone was then re-sampled using on 1m intervals by scooping the sample from the bag. DD holes - Once the core was correctly matched, orientation marks were drawn onto the drill core and then propagated along the entire length. The core was then marked for sampling by the geologist, to either 1m length or by geological definitions. The core was cut lengthways in a manner to preserve the orientation line. Sampling of ½ core was then completed.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	For diamond drilling core was orientated marked up and logged prior to being marked up for sampling by the geologist. Any core loss was logged for entering into the database. Core was either halved or quartered the entire sample portion being collected in a calico bag for submission to the laboratory. For RC drilling completed by Midas 1 meter bulk samples were split using a jones riffle splitter or a rig mounted splitter beneath the cyclone. The resulting 2-3kg sample was collected in a calico bag for submission to the laboratory.
	Aspects of the determination of mineralisation that are	The entire nominated sample was sent to the lab,

Criteria	JORC Code explanation	Commentary
	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.	crushed, riffle split to <3kg (if required) and pulverised to produce a 30-50g charge for fire assay or aqua-regia Au determination.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic etc) and details (e.g. core diameter, triple of standard tube, depth of diamond tails, face-sampling bit or other type, whether core is orientated and if so, by what method, etc).*	A total of 25 diamond holes, 12R C/DD holes, 187 RC holes and 93 AC holes were used in the resource estimation. RC holes were completed using a standard face sampling hammer. The core diameter for diamond drilling completed by Matsa was HQ3 triple tube. Previous companies used a combination of HQ and PQ core diameters. Core was oriented using a Reflex digital core orientation tool, orientation methods by previous companies are unknown.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Core recoveries were recorded on a per run basis and entered into the geotechnical database. Zones of "nil recovery" were logged by the geologist and assigned a grade of <0.01ppm Au for resource calculation. Recoveries from RC and diamond drilling completed by Midas and Aurora were not provided.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Diamond drilling completed by Matsa was carried out by HQ3 triple tube to maximise recovery.
	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 relationship between recovery and grade has been observed.
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.*	All core, RC and AC chips were logged by either Matsa, Aurora or Midas geologists. Diamond drilling completed by Matsa was logged for RQD's and 6 holes were logged in detail by a geotechnical consultant. Geological and geotechnical logging was completed to an appropriate level of detail required for Mineral Resource estimation, geotechnical studies, metallurgical studies and mining studies.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	DD core has been wet and dry photographed after metre marking and orientation was completed. Qualitative geological logging was completed using a standard set of codes. These codes are considered suitable for use in defining and modelling of the deposit geology.
	The total length and percentage of the relevant intersections logged.	All drill holes utilised for the Mineral Resource Estimate have been logged.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	The subsampling technique below is for Matsa only. Where the core was unconsolidated it was split (halved) using a paint scraper along the orientation line with the left side of the core being sampled and the right side retained. In competent core the core was quartered using an Almonte core saw with the lower

Criteria	JORC Code explanation	Commentary
		left side of the core (looking down hole) being sampled. For Midas, ½ core was sampled. No information exists for the core sub-sampling for Aurora.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	For RC drilling, mineralised sample splits from the 1m samples are obtained by Jones riffle splitter or rig mounted splitter to obtain a 2 – 3kg sample for submission. For AC drilling mineralised sample splits are obtained by metal scoop from the 1m sample bags. The size of the sample is not recorded but is assumed to be similar to the RC sampling. Wetness information has not been captured in the database.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples taken by Matsa were submitted to ALS laboratories in Kalgoorlie. Samples were dried and crushed to a nominal 6-10mm through a jaw crusher. Samples over 3kg were riffle split to below 3kg and pulverized. Pulverising reduced the particle size to 90% passing 75µm. 300-400g were sub-sampled from the pulveriser bowl as an analytical pulp. The majority of sampling completed by Midas was submitted to either Ultra Trace or Genalysis Laboratories in Perth. Both laboratories abide by a generic sample preparation process where drill samples are initially dried in an oven at temperatures of approximately 105^0C, before crushing using a jaw crusher to achieve a product of a maximum 3mm size. Samples exceeding 3kg were split to obtain a volume that would fit in the LM5 pulveriser bowl with single pass. The crushed sample is then pulverised for a specified time in order to achieve a nominal 80% to 95% passing 75 micron size. A 250g sub-sample was then collected and placed in a pulp envelope for analysis. The sample preparation techniques are accepted routine procedure for the style and nature of gold mineralisation at Fortitude.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	QAQC procedures adopted by Matsa included the insertion of appropriate certified standards and course blanks into the sample sequence preferentially in the ore zones as well as the use of laboratory repeats. 5% of samples were also submitted to an umpire laboratory, 2.5% of these were randomly selected and 2.5% selected by the geologist. Midas QAQC protocols involves submission of standards, blanks, and field duplicate samples. Laboratory repeat analyses have also been supplied to Runge and a large number of pulp samples were also submitted to a secondary laboratory for independent checks. In general all certified standards and blanks returned the expected results within an acceptable error. Laboratory repeats and umpire laboratory results had reasonable repeatability with no obvious bias as would be expected from a gold deposit with a moderate – low nugget affect.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half	Matsa did not undertake any second half sampling of drill core as the samples were required for metallurgical

Criteria	JORC Code explanation	Commentary
	sampling.	test work. 802 duplicate samples were taken by Midas. A scatter plot showed reasonable repeatability with some outliers as expected in lode gold deposits. There was no inherent bias observed.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The split/cut sample size of 2-3kg to be pulverised with 200-300g sub samples are appropriate for 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.*	Matsa submitted all samples to ALS in Kalgoorlie for analysis by fire assay with a 30g charge. Ultra Trace laboratories was the major provider of assay services to Midas. Assay methods were either Fire Assay or Aqua Regia, with 40g charge used in both methods. ALS laboratories were the principal provider of assay services during the Aurora phase of drilling, while Genalysis laboratories also provided assay services. Analysis was conducted using either Fire Assay or Aqua Regia, with both methods using a 50g charge. Genalysis also conducted both Fire Assay and Aqua Regia analysis, using a 25g charge for the Fire Assay, and a 10g charge for Aqua Regia. Fire assay and aqua-regia analysis methods for gold are appropriate gold analysis methods for ore deposits of this type. Both methods can be considered near total.
	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.	Not Applicable.
	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.	QAQC procedures adopted by Matsa included the insertion of appropriate certified standards and course blanks into the sample sequence preferentially in the ore zones as well as the use of laboratory repeats. 5% of samples were also submitted to an umpire laboratory, 2.5% of these were randomly selected and 2.5% selected by the geologist. Midas QAQC protocols involves submission of standards, blanks, and field duplicate samples. Laboratory repeat analyses have also been supplied to Runge and a large number of pulp samples were also submitted to a secondary laboratory for independent checks. In general all certified standards and blanks returned the expected results within an acceptable error. Laboratory repeats and umpire laboratory results had reasonable repeatability with no obvious bias as would be expected from a gold deposit with a moderate – low nugget affect.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	No verification of significant intersections was carried out by either independent or alternative company personnel.
	The use of twinned holes.	Six out of the 93AC holes in the resource area have been twinned by RC holes. Intercepts and grades from both hole types are similar, with the AC having slightly lower mean grade.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data entry, verification and storage procedures are not formally documented. All hard copy sample cut sheets and assay files are retained for database validation.
	Discuss any adjustment to assay data.	Not applicable.

Criteria	JORC Code explanation	Commentary
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.*	Matsa All drill holes were surveyed using a Sokkia GSR2650 LB differential GPS which has an accuracy of +/-10cm both vertically and horizontally. Down hole surveys were carried out by Gyro Australia Pty Ltd using an SDI high speed true north seeker keeping gyro. Midas All drill holes used in the resource estimate have been accurately surveyed by contract surveyors using an RTK GPS instrument. Downhole surveys have been conducted by the drilling company at regular intervals using either a single shot or a gyro tool for RC and DD holes. Downhole survey of AC holes was not done.
	Specification of the grid system used.	Midas and Aurora used the AMG84_51 grid system. Matsa used the MGA94_51 grid system.
	Quality and adequacy of topographic control.	A high accuracy (method unknown) topographic DTM supplied by Midas has been used.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Drill spacing of approximately 25m (along strike) by 25m (on section) was considered adequate to establish both geological and grade continuity. Towards the edges of the deposit the drill spacing widens to either 50m (along strike) by 25m (on section) or 50m (along strike) by 50m (on section).
	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.	Data spacing and distribution has been sufficient to permit delineation and to confirm grade continuity of the narrow lodes and supergene domains.
	Whether sample compositing has been applied.	Samples were composited to 1m downhole lengths.
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.*	The orientation of bulk of the drilling is approximately perpendicular to the strike of the steeply dipping mineralisation and is unlikely to have introduced any significant sampling bias.
	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.	Not applicable.
Sample security	*The measures taken to ensure sample security.*	Samples were delivered directly to ALS laboratories in Kalgoorlie by Matsa personnel. The chain of custody was not broken by any 3rd parties.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits or reviews of sampling techniques were undertaken..

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 Mineral Resource covers 2 granted mining leases M39/710 and M39/1065. Both tenements expire in 2029. Matsa Gold Pty Ltd is the 100% owner of the tenements which are located on the Mt Weld pastoral lease. Harmony Australia Ltd hold a 1.5% net smelter royalty for production over 250,000oz. There is no native title claim over the area. One mapped heritage site in the area will not impact on mine planning or production.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	There are no known impediments to obtaining a license to operate in the area.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Exploration drilling was conducted by Aurora Gold Limited (Aurora) between October 1998 and February 2002. Midas Resources Limited (Midas) acquired the project from Aurora in October 2002. Midas has drilled in excess of 380 drill holes both in and around Fortitude to test for extensions to the Fortitude system. Matsa acquired the project in 2016 and has drilled 21 diamond holes for 2,257.7m.
Geology	*Deposit type, geological setting and style of mineralisation.*	The Lake Carey Project of which the Fortitude deposit forms a part is situated on the Fortitude Shear, which along with the Bindah Shear located just west, forms a narrow corridor of ESE trending greenstones which are bounded to the east and west by granitoid terrane. As the Fortitude-Bindah system extends north the greenstone pile thickens and lies host to numerous large gold mineralisation systems. To the south the Fortitude-Bindah system appears to attenuate and eventually terminate against granitoids of the Eastern Gneiss Terrane. The greenstone sequence located within the Fortitude tenement is comprised of highly foliated felsic to intermediate volcanic rocks with relatively undeformed mafic volcanic units to the east and west in contact with granite. The whole greenstone package varies in width from <2km at the southern end of the tenement to approximately 8km at the northern end. Major north to north- northwest trending shear zones occur within the greenstones and the granite to the east, in particular along geological contacts. The main structural features are the Fortitude Shear along the eastern intermediate-mafic contact and the more north- westerly trending Bindah Shear, along the western intermediate-mafic contact Gold mineralisation is typically associated with the Fortitude Shear Zone, a north-northeast striking dextral shear which extends the length of the Lake Carey tenement. To the north, it horsetails into the Wilga fault system and in the south it continues into the Kirgella Gneissic Dome. Gold mineralization is also associated with the Bindah Shear, particularly at the old Bindah Mine to the southwest. The Fortitude deposit is hosted within sheared felsic to intermediate volcanic rocks and minor ultra mafics,

Criteria	JORC Code explanation	Commentary
		and is covered by up to 10m of lacustrine clays and aeolian sands surrounding Lake Carey. Gold mineralisation occurs within a steeply dipping shear system, and is associated with pervasive carbonate-sericite-silica alteration along with pyrite-arsenopyrite mineralisation. Remobilisation of gold has also resulted in the formation of flat lying zones of supergene mineralisation within the regolith. Weathering extends to a depth of 60-80m.
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.*	Not applicable, the company is not reporting exploration results.
	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.	Not applicable, the company is reporting a Mineral Resource based on historic drilling information. A summary of the drilling information has been provided in Section1.
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.*	Not applicable, the company is not reporting exploration results.
	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.	Not applicable, no intercepts have been reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable, no metal equivalent results have been used.
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').*	Mineralisation styles tend to change from narrow vertical lodes in the north, to shallow dipping supergene-hypogene mineralisation in the south. The shear hosted lode mineralisation strikes at roughly between 330° and 350° and is vertical to very steeply dipping to the east north-east. The supergene mineralisation is somewhat more variable with strike roughly between 330° and north - south and the lenses are generally flat lying or shallow dipping to the east north-east. The orientation of the drilling is approximately perpendicular to the strike and dip of the shear hosted mineralisation and is unlikely to have introduced any significant sampling bias.
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.*	Not applicable.
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.
Other substantive	*Other exploration data, if meaningful and material, should*	Not applicable.

Criteria	JORC Code explanation	Commentary
exploration data	*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.*	
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	The mineralisation at Fortitude is open and plunges towards the north. Further drilling is warranted to test for potential underground resources.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Not applicable.

Section 3 Estimation and Reporting of Mineral Resources (Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	The database used to generate the Mineral Resource estimate was supplied to CSA Global by Matsa as a validated Surpac database. Use in Surpac requires the passing of a set of routine validation steps checking for sample overlaps, sample duplications, missing downhole and missing collar survey data.
	Data validation procedures used.	Historic data was validated during importation into the Matsa database and found to be clean. Sections were plotted and validated against historic hard copy sections. Planned drill holes were ground trothed against historic collars in the field. Matsa is satisfied that the drill hole database has been thoroughly validated.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	CSA Global staff have not visited site. Matsa staff have made numerous visits to site throughout the conduct of exploration campaigns during 2016 and closely supervised the 2016 resource definition, metallurgical and geotechnical drilling programs.
	If no site visits have been undertaken indicate why this is the case.	Not Applicable.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The geological interpretation of the Fortitude deposit was completed by Matsa. The model is well constrained by a long history of discovery and mining of similar deposits within the region. Structural and geological data collected from diamond drill core adequately characterizes the mineralization style to permit a high degree of confidence in the interpretation of the Fortitude deposit. The Competent Persons are satisfied that the geological model is robust and correlates well to field observations and drill hole data.
	Nature of the data used and of any assumptions made.	Detailed geological logging, including alteration and oxidation state data, along with logged intensity of shearing and quartz vein content were used, in conjunction with chemical assays, in order to develop the geological interpretation.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Narrow Archaean Lode Gold deposits with a supergene expression and a low grade halo are a common style of mineralization encountered in the Eastern Goldfields of Western Australia. Their morphology and petrogenesis are well characterized, and do not readily offer materially different interpretations. The Competent Persons do not consider that an alternative interpretation of the Fortitude deposit is likely to yield material differences to the Mineral Resource estimate.
	The use of geology in guiding and controlling Mineral Resource estimation.	The Fortitude deposit is hosted by the Fortitude Shear, which represents the sheared contact between undifferentiated intermediate rocks and greenschist facies mafic / ultramafic rocks. The modelling of geology, along with the presence and intensity of quartz veining is a strong guide to the interpretation of the extents of mineralization.

Criteria	JORC Code explanation	Commentary
	The factors affecting continuity both of grade and geology.	Continuity of grade along strike and at depth is controlled by the presence / absence of the host shear fabric, intensity of quartz veining, and the degree of chemical alteration the host rocks have undergone. Each of these characteristics may be traced between drill holes using visual characteristics.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The Fortitude Mineral Resource is contained within an area defined by a strike length of 1,490 m and 200 m across strike, along an azimuth of 350. The deposit is bounded by the extents 456,807 mE to 457,570 mE and 6,756,451 mN to 6,757,880 mN. The deposit lies within 375 m of the surface, and is open at depth, and potentially to the north along strike.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	The Mineral Resource has been completed using 3 individual statistical domains built using a nominal 0.2 g/t Au cutoff grade. Samples were composited to 1 m intervals base on assessment of the raw input sample intervals. Hi grade cuts ranging from 20 to 40 g/t Au were applied to the mineralization domains following statistical analysis. Analysis was completed using GeoAccess software. Quantitative Kriging Neighbourhood Analysis was undertaken using Supervisor software, to assess the effect changing key neighbourhood parameters had on the block grade estimates. Kriging Efficiency and Slope of Regression were assessed for a variety of block sizes, minimum and maximum input samples, search dimensions and discretization grids. A two pass search strategy was used where the minimum number of samples required for estimation was reduced in the second pass. For blocks not informed after two passes, the Sichel mean grade for that particular statistical domain was assigned. Ordinary Kriging (OK) was the chosen method of interpolation for the grades of mineralized zones and the low grade halo. All grade estimation was undertaken in Surpac 6.6.2 software.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	A previously published Mineral Resource estimate was completed in 2012. Statement of this resource is publicly available and, after consideration for updated drilling data and re-interpretation of mineralized lodes, grade and tonnage values for this previous estimate compare reasonably to the current estimate.
	The assumptions made regarding recovery of by-products.	No by or co-products have been considered.
	Estimation of deleterious elements or other non-grade variables of economic significance (eg. sulphur for acid mine drainage characterisation).	No deleterious elements were recorded within the available assay data, and none have been considered in this Mineral Resource estimate.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Blocks of dimensions 5 x 20 x 5 m were used to subcell to a minimum size of 1.25 x 5 x 1.25 m. This block size was selected on the basis of quantitative analysis using data from the most well informed primary mineralised domain. Dimensions represent approximately half the drill hole spacing in the X and Y dimensions for well informed regions of the model.
	Any assumptions behind modelling of selective mining units.	No assumption of selective mining unit has been made as part of the Mineral Resource estimate.
	Any assumptions about correlation between variables.	The model considers only one variable; Au and so no correlations have been considered.

Criteria	JORC Code explanation	Commentary
	Description of how the geological interpretation was used to control the resource estimates.	Mineralisation domain boundaries were treated as hard boundaries for the purposes of selection of input samples data. These boundaries were created on the basis of logged geology, alteration and says values.
	Discussion of basis for using or not using grade cutting or capping.	High grade cuts were sued to limit undue influence of extreme outliers values in the dataset described above.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The Mineral Resource estimate was validated visually via qualitative comparison on screen between estimated block grades in drill hole assays in section, and also via swath plots generated in the X, Y and Z directions.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages have been determined on a dry in-situ basis. No moisture values were reviewed.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	The Mineral Resource has been reported at a cutoff grade of 1 g/t Au. The Competent Persons consider this reasonable when considering the style of deposit, its proximity to processing infrastructure and the assumption of open pit mining methods being employed.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	Mining optimisation studies conducted on historic Mineral Resource estimates for the Fortitude deposit show that it is amenable to open pit mining at grade similar to those reported within this MRE. Open pit mining is considered the most appropriate method of extraction to consider in any future studies. Both the Competent Persons believe that there is a likely prospect of economic extraction. A minimum downhole intercept width of 2m has been applied. No other considerations were made. Detailed assumptions regarding dilution and minimum mining widths should be included in any future optimisation and Mine Planning work conducted by Matsa during any Ore reserve estimation.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Historic and current metallurgical test work underway is indicating good recoveries of greater than 92% through a regular CIL processing plant.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	No considerations regarding waste and process residue disposal have been made as part of this MRE. Given the proximity of the deposit to existing processing infrastructure, it is likely that such infrastructure will be used for processing and will include residue disposal options.

Criteria	JORC Code explanation	Commentary
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	CSA Global used fixed density values, assigned on the basis of regolith classification of the material within the model. Fresh material was given a value of 2.8, Slightly weathered material; 2.7, transitional oxide material 2.4, fully oxidized material and transported (colluvial) material; 2.0. 128 bulk density measurements were undertaken representing all ore types. Bulk density determination was carried out by ALS laboratories using the wax immersion method on dried core for oxidised rocks to account for voids, vugs and porosity. In transitional and fresh rocks bulk densities were analysed by both the water immersion method and the wax immersion method (ALS). The wax immersion method was given priority when assigning the bulk density to the various rock types.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	The wax immersion method on dried core carried out by ALS laboratories adequately accounts for voids, vugs and porosity.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	The average bulk density rounded to 1 decimal place was used for all material types except for oxide where a lower value was chosen. This is to account for any possible bias in sample selection.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource was classified as Indicated and Inferred, taking into account the geological understanding of the deposit, the density and quality of input data (including drill hole spacing) and kriging estimation statistics.
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	Both the Competent Persons consider that the classification is appropriate when consideration is given to all of the above factors.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The classification appropriately reflects the view of both Competent Persons.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	Internal Audits were conducted by CSA Global which verified methodology and parameters used in the generation of the Mineral Resource estimate.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	The Mineral Resource accuracy is communicated through the classification assigned to the deposit. The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource statement relates to a global estimate of in-situ tonnes and grade.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The deposit has not, and is not currently being mined.

Section 4 Estimation and Reporting of Ore Reserves (Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	*Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.*	The Fortitude Mineral Resource estimate 2017 (fortitude)ok_final20170130.mdl) was prepared by CSA Global Consulting using databases and geological interpretation supplied by Matsa.
	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	Mineral Resources are inclusive of Ore Reserves.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	The competent person is a full time employee of Matsa and conducts routine site visits as part of his working duties.
	If no site visits have been undertaken indicate why this is the case.	Not applicable.
Study status	*The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.*	The trial mining study is a pre-feasibility level study.
	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	The trial mining study is a pre-feasibility study with a level of confidence of +/-20%. The mine is technically and economically viable and Modifying Factors have been considered.
Cut-off parameters	*The basis of the cut-off grade(s) or quality parameters applied.*	A cutoff grade of 1g/t Au is based on an economic assessment and current market parameters.
Mining factors or assumptions	*The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design)*	The reported "trial mining study" was a pre-feasibility study. Input factors into optimization have a level of confidence of +/-20%. The economic outcome is based on detailed mine designs.
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	The selected mining method of typical open pit truck and shovel is appropriate for this type and configuration of mineral deposit.
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	Pit slopes of 55^0 are based on a detailed geotechnical assessment by external consultants. No further pre-production drilling is required. Grade controls costs have been applied on a per tonne of ore basis.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	The Fortitude Mineral Resource estimate 2017 (fortitude_ok_final20170130.mdl) for pit optimization. Pit optimizations were carried out with appropriate slope angles, dilution, recovery, mining costs and metallurgical factors.
	The mining dilution factors used.	Open pit mining dilution of 115% was used
	The mining recovery factors used.	Recovery factor of 99% was used
	Any minimum mining widths used.	A minimum mining width of 15m was used
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	Inferred Mineral Resources have not been used for the mining study
	The infrastructure requirements of the selected mining methods.	Site establishment will require the installation of 3 dewatering bores, administration complex and the refurbishment of a haul road.
Metallurgical factors or assumptions	*The metallurgical process proposed and the appropriateness of that process to the style of*	Ore will be processes at nearby CIL processing facilities. This process is appropriate for this style of mineralisation.

Criteria	JORC Code explanation	Commentary
	mineralisation.	
	Whether the metallurgical process is well-tested technology or novel in nature.	CIL technology is well tested and widely used.
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	3 oxide, 1 transitional and 1 fresh composite was selected for metallurgical test work. The selection was made such that the material was spatially representative of the entire deposit at a grade similar to the overall mined grade.
	Any assumptions or allowances made for deleterious elements.	Not applicable. No deleterious elements were identified in the test work.
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	Not applicable. No bulk sample or pilot scale test work was undertaken.
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	The Ore Reserve estimate has been based on mineralogical and metallurgical factors designed to meet any ore purchase or toll treating agreements with nearby 3rd party plants.
Environmental	*The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Matsa has completed detailed flora and fauna, waste rock characterization and hydrogeological studies. Waste rock will be stored in nearby waste dumps constructed to form a stable landform. The project does not require the construction of a tailings storage facility. Waste rock characterization test work indicates the waste material mined is non acid forming (NAF). There are no known environmental impediments to the commencement of mining.
Infrastructure	*The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	The project is located nearby significant mining infrastructure and processing plants. An existing haul road connects the project to nearby mines. The mine would be developed as a FIFO operation with the workforce residing in Laverton.
Costs	*The derivation of, or assumptions made, regarding projected capital costs in the study.*	The costs have been derived from direct quotes received from suppliers and pre-tender submissions by contractors.
	The methodology used to estimate operating costs.	Operating costs have been derived from unit rates received in pre-tender submissions by contractors.
	Allowances made for the content of deleterious elements.	Not applicable.
	The source of exchange rates used in the study.	Not applicable, all costs have been quoted in Australian dollars.
	Derivation of transportation charges.	Ore haulage costs have been derived from quotes provided by local contractors.
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	Matsa is currently in negotiation with a number of nearby processing plants for the treatment of ore and has a non-binding ore purchase offer. Treatment costs used in the mining study fall within the range currently being negotiated in commercial confidence.
	The allowances made for royalties payable, both Government and private.	WA government royalties are included. No other royalties apply for this project.
Revenue factors	*The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.*	Revenue factors are based on forecast production rates, head grades and predicted metallurgical recoveries from the mine schedule. A flat gold price of A$1,600/ounce was used based on the current market price.

Criteria	JORC Code explanation	Commentary
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	
Market assessment	*The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.*	Not applicable. No detailed market assessment was undertaken or is required for gold.
	A customer and competitor analysis along with the identification of likely market windows for the product.	Not applicable for gold sales.
	Price and volume forecasts and the basis for these forecasts.	Not applicable.
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	Not applicable.
Economic	*The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.*	Not applicable, no NPV has been reported.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	Not applicable, no NPV has been reported.
Social	*The status of agreements with key stakeholders and matters leading to social license to operate.*	Matsa has completed significant consultation with the traditional owners, local shires and station owners. There is no native title claim over the area. There are no social impediments to the commencement of mining.
Other	*To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:*	
	Any identified material naturally occurring risks.	No material naturally occurring risks have been identified.
	The status of material legal agreements and marketing arrangements.	Matsa is currently in negotiation with a number of nearby processing plants for the treatment of ore. Matsa is required to go to tender on the mining and ore haulage contracts.
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	All government approvals are expected to be finalized by 30th March. Matsa has already received approvals for the NVCP, license to construct water bores and license to take ground water. The mining proposal, licenses to discharge ground water and works approval are expected before 30th March 2017.
Classification	*The basis for the classification of the Ore Reserves into varying confidence categories.*	Probable Ore Reserves are based on Indicated Mineral Resources subject to economic viability.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The estimate appropriately reflects the view of the competent person who has signed a JORC consent form to that effect.
	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	No applicable, no Probable Ore Reserves have been derived from Measured Mineral Resources.
Audits or reviews	*The results of any audits or reviews of Ore Reserve estimates.*	The Ore Reserve estimate, data, economic evaluation and pre-feasibility study have been comprehensively reviewed by Matsa senior management.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the*	The relative accuracy and confidence in the Ore Reserve estimate is consider high. Geostatistical and statistical procedures used in the Resource were completed by qualified external consultants.

Criteria	JORC Code explanation	Commentary
	relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	All currently reported Ore Reserve estimations are considered representative on a global scale.
	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.	Appropriate modifying factors for dilution and ore loss have been applied based on the experience of the competent person.
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Not applicable, there is no historic production data at Fortitude.