



## Strong Maiden Ore Reserve for Fungoni Heavy Mineral Sands Project

***Proved Ore Reserve of 12.3Mt grading 3.9% total heavy mineral from surface***

### HIGHLIGHTS

- Fungoni feasibility study pit design contains a Proved Ore Reserve of 12.3Mt grading 3.9% total heavy mineral (THM) for approximately 480,000 tonnes of contained heavy mineral
- Ore Reserve underpins an initial 6.2 years of operations at a planned 2Mtpa mining rate
- Orebody at surface, free-dig unconsolidated sands well suited to conventional open pit dry mining using excavator and truck; resulting in low operating costs
- Measured and Indicated Mineral Resources used in defining the Proven Ore Reserves

Strandline Resources (ASX: STA) is pleased to announce the maiden Ore Reserve for its high grade Fungoni Mineral Sands Project located close to Dar es Salaam in Tanzania.

The Ore Reserve forms the basis for the Fungoni Definitive Feasibility Study (DFS), and has been classified in accordance with the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code").

The mining study confirms the mine plan is technically and economically robust under a range of reasonable product pricing scenarios. The Ore Reserve estimate is underpinned by detailed mine design, pit optimisation and strategic scheduling studies.

The Fungoni JORC Mineral Resource estimate of 22Mt at an average 2.8% THM, classified 41% Measured and 59% Indicated, was announced on 02 May 2017. The Ore Reserve estimate focussed on the higher-grade upper domains of the resource and has resulted in a very efficient conversion rate of 79% from resource to reserve for the contained heavy mineral (HM).

The orebody contains a high-unit value heavy mineral assemblage and with multiple stages of advanced beneficiation and separation, the Project produces a highly marketable suite of mineral sand products.

There is potential to increase the Fungoni reserves and extend the years of operation by further optimising the mine pits as product pricing improves.

The Ore Reserve estimate was prepared and signed off by AMC Consultants Pty Limited (AMC) and a range of independent specialist consultants appointed by Strandline.

Strandline Managing Director Luke Graham said: "This maiden Ore Reserve provides further evidence of the strength of Fungoni, demonstrating that the Project is underpinned by an economically compelling initial mine life with scope for growth.

"The mining study also confirms Fungoni boasts an exceptional, high-unit value mineral sands reserve, conventional open pit dry mining and a cost-efficient and practical operating plan."

## Summary of Ore Reserves Statement

The resources considered for mining were based on the JORC 2012 Mineral Resource Estimate (see ASX announcement of 02 May 2017). Mineral Resources were converted to Ore Reserves as at October 2017, based on the pit designs, recognising the level of confidence in the Mineral Resource estimation, and reflecting modifying factors.

The financial assumptions used to determine the Ore Reserve estimate were:

- Ilmenite price – US\$238.79/t in product.
- Leucoxene price – US\$323.11/t\* in product.
- Rutile price – US\$1082.01/t in product.
- Zircon price – US\$1078.46/t contained zircon in zircon-monazite rich product.
- Monazite price – US\$1127.80/t contained monazite in zircon-monazite rich product.

\*Leucoxene is planned to be distributed 90% into the ilmenite stream and 10% into the rutile stream. Price is reflective of this split.

Product prices, grades, recoveries, and costs provided in the Estimation Report were used to identify economically mineable blocks to be included in the Ore Reserve estimate. The basis of the estimate and related assumptions has been performed to a  $\pm 10$ -15% level accuracy as appropriate for a DFS level:

- Pricing assumptions for ilmenite, rutile and zircon were obtained from TZMI's independent assessment (May 2017) of the Fungoni suite of products and forward price assumptions for the LOM. Zircon pricing was then adjusted to take into account downstream handling costs. Monazite pricing has been assumed from Strandline's own market intelligence including an adjustment for downstream handling costs.
- Process flowsheet, product grades and recoveries assumptions were obtained from metallurgical testwork and engineering evaluation performed on a bulk Life of Mine (LOM) sample and a low grade and high grade bulk sample to stress test the preferred process flow sheet.
- Mining, tailings and slimes management cost assumptions were determined from first principles for the mining plan based on contract mining using a conventional open pit dry mining method appropriate to commercialise the reserves.
- Processing cost assumptions were determined by taking into account the physical flows and unit consumptions determined from the mining study, metallurgical testwork and engineering design.
- Support services costs were developed from first principles and quotations from suppliers as applied to the engineering design.
- Transport and logistics cost assumptions were obtained from contractor quotations as applied to the transporting of the products and material in the planned form.
- General and administration cost assumptions were developed from first principles for manning schedules, labour work rosters, materials, equipment and other administration related costs such as communications, IT, consultants and recruitment.
- Financial modelling was prepared and tested by varying revenue, cost and macro-economic factors. These factors include commodity price, operating and capital cost, production volume, along with economic discount factors. An AUD/USD exchange rate of 0.75 was assumed for the LOM, based on consensus forecasts.

The Ore Reserve estimate as at 5 October 2017, reported in accordance with the JORC Code 2012 Edition<sup>1</sup>, is stated in Table 1, and reported to a nominal cut-off grade of 1.5%THM, with all internal waste within the mineralized zone included in the Ore Reserve.

<sup>1</sup>Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, The JORC Code 2012 Edition. Effective 20 December 2012 and mandatory from 1 December 2013. Prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australasian Institute of Geoscientists and Minerals Council of Australia (JORC).

The Ore Reserve is the part of the Mineral Resource which can be economically mined by open cut mining methods. All of the mineralized horizon was included within the ore horizon, therefore no additional dilution of the Mineral Resource model was included.

All the Mineral Resources intersected by the open pit mine designs, classified as Measured were classed as Proved Ore Reserves after consideration of all mining, metallurgical, social, environmental, statutory and financial aspects of the Project. There are no Mineral Resources intersected by the open pit mine designs, classified as Indicated Mineral Resources, and is summarised in Table 1 below.

**Table 1: Fungoni Project Ore Reserve**

<b>ORE RESERVES SUMMARY FOR FUNGONI PROJECT</b>						
<b>Deposit</b>	<b>Mineral Resource Category</b>	<b>Ore</b>	<b>Slimes</b>		<b>Heavy Mineral</b>	
		(Mt)	(t)	(%)	(kt)	(%)
<b>FUNGONI</b>	Proved	12.3	2.3	19	480	3.9
<b>FUNGONI</b>	Probable	-	-	-	-	-
	Total <sup>(3)</sup>	12.3	2.3	19	480	3.9

The sections in this report that relate to the Strandline Ore Reserves are based on information compiled under the direction of Mr Adrian Jones. Mr Jones is a Member of the Australasian Institute of Mining and Metallurgy and is employed by AMC. Mr Jones has sufficient experience relevant to the style of mineralization and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.

Non-mining modifying factors for the Ore Reserve estimate are drawn from contributions provided by various sources. Significant contributors to this report are identified in Table 2, together with their area of contribution.

**Table 2: List of Experts for the Fungoni Project Ore Reserve**

<b>Modifying Factors</b>	<b>Responsible Group</b>	<b>Responsible Person/s</b>
Land access and community	ERC Consultants	Dr Mike Yhdego
Environmental	Kiv Five Consultants	Jones Mushi
Geology & Mineral Resource	IHC Robbins	Greg Jones
Geotechnical, tailings and water management	Knight Piésold	Brett Stevenson
Mining and Ore Reserve	AMC Consultants	Adrian Jones
Metallurgy	GR Engineering Services	Bill Gosling
Process plant & mine infrastructure	GR Engineering Services	Bill Gosling
Product transportation infrastructure	GR Engineering Services	Bill Gosling
Marketing/product sales/financial analysis	Strandline Resources	Tony Brazier

Each of the individuals named in Table 2 has consented to the application of their study findings for the purpose of estimating an Ore Reserve.

### **Mining and Processing Development as Applied to the Reserves Determination:**

The mining and related earthmoving activities will be delivered under a contract mining arrangement, where the mining contractor will be responsible for delivering and feeding ore to the Mobile Feed Unit (MFU) as per the mine plan and also performing the necessary management of tailing returns and in-pit slimes dams, relocation of slimes from the surface dams, top soil replacement, haul road maintenance, bench and drainage maintenance, in pit dewatering and re-contouring of the completed pit area.

Strandline will be responsible for statutory duties, technical services, geology and mine planning, potable water, power and communication systems.

Initially, the mineralised topsoil and vegetation will be removed by clear and grub activities. A number of shallow open pits will be dry mined by an excavator and truck fleet. Run-of-Mine ore is hauled up to 750 metres to the MFU located close to the pit exit. The MFU prepares the ore ready for processing and the ore is pumped in a slurry form to the processing plant facilities. The MFU is relocated twice during the LOM (in year 4 and 5) as the mine plan advances generally from the south to north through the deposit.

Knight Piésold Pty Limited performed the geotechnical investigations and interpretations relating to the mining study to a DFS level. Ground condition typically comprises very loose and loose sand, with variable silt content to 5 metres depth. Pit slopes at a vertical to horizontal ratio of 1:3 (1V:3H), with a 2 metre wide bench every 4 metre of vertical height were used in pit optimization and pit design.

Grade control of the ore has been defined through the mine optimisation and planning process to achieve the target feed head grade to the plant. Grade control actions include:

- Pre-mining grade control drilling;
- Geological team working ahead of the mining face with laboratory analysis onsite; and
- Front end loader material selection at the feed point to the MFU.

GR Engineering Services were integral in developing the design and costs associated with multiple stages of advanced process beneficiation and mineral separation on site using modern technology to produce three saleable high-quality industrial mineral products including a combined zircon and monazite product, rutile product (+95% TiO<sub>2</sub>) and ilmenite product (+58% TiO<sub>2</sub>).

The process and non-process infrastructure related to the Project is based on a modular relocatable design concept which facilitates simple construction and de-commissioning ready for relocation and use in the next project, and also serves to de-risk in-country implementation and construction.

The products will be exported via bulk and container form from the Dar es Salaam port approximately 25km from the Fungoni site.

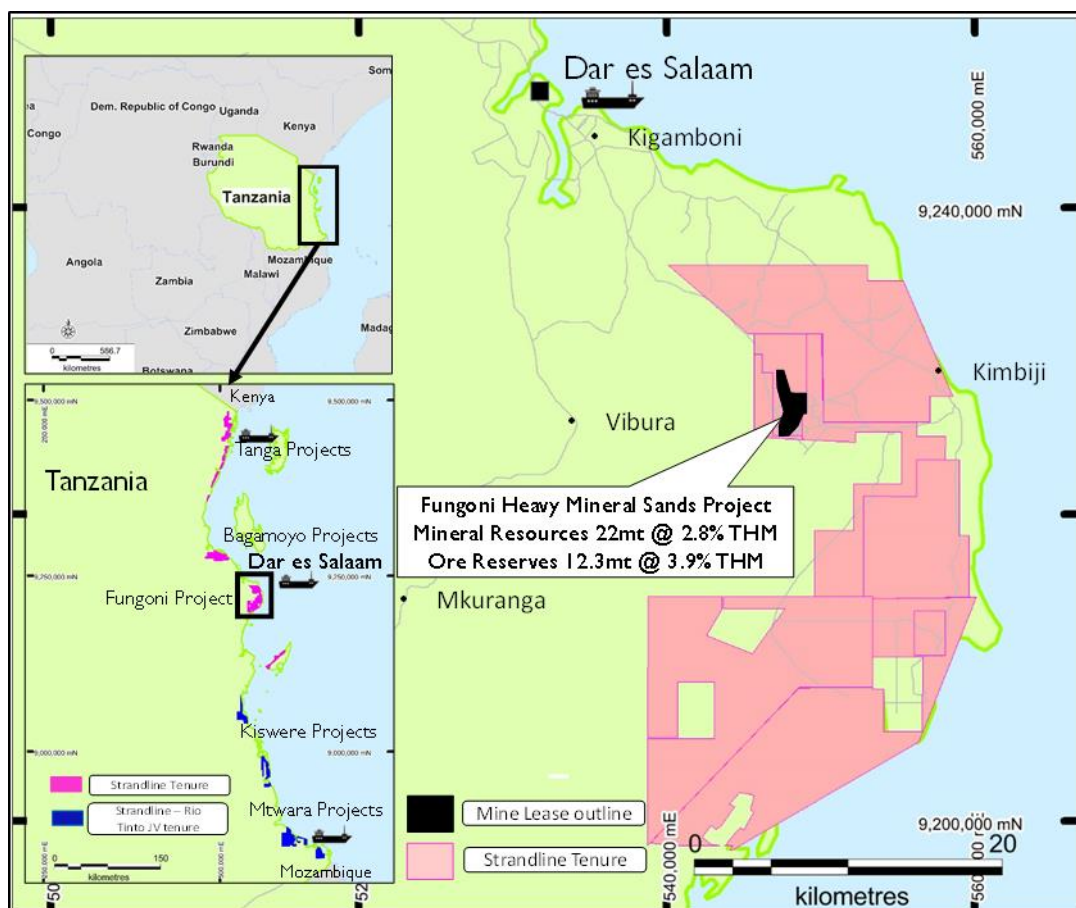


Figure 1 The Fungoni Project is favourably located close to Dar es Salaam Port Infrastructure and supporting industries



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## About Strandline

Strandline Resources Limited (ASX: STA) is a Tanzanian-focused mineral sands developer positioned within the world's major zircon and titanium producing corridor in South East Africa. Strandline has a dominant mineral sands position with a series of 100% owned projects spread along 350km of the Tanzanian coastline.

Strandline's strategy is to develop and operate quality, low cost, high margin, expandable mining assets with market differentiation. Leveraging off the exploration success in recent years, the Company's focus is to continue its aggressive exploration and development strategy to progress economically attractive projects based on high unit value titanium and zircon products.

## Competent Person Statement

The information in this report that relates to the Fungoni Ore Reserves is based on information compiled under the direction of Mr Adrian Jones. Mr Jones is a Member of the Australasian Institute of Mining and Metallurgy and is employed by AMC. Mr Jones has sufficient experience relevant to the style of mineralization and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code.

Non-mining modifying factors for the Ore Reserve estimate are drawn from contributions provided by various sources. Significant contributors to this report are identified in Table 2 together with their area of contribution.

## Forward Looking Statements

This report contains certain forward looking statements. Forward looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside of the control of Strandline. These risks, uncertainties and assumptions include commodity prices, currency fluctuations, economic and financial market conditions, environmental risks and legislative, fiscal or regulatory developments, political risks, project delay, approvals and cost estimates. Actual values, results or events may be materially different to those contained in this announcement. Given these uncertainties, readers are cautioned not to place reliance on forward looking statements. Any forward looking statements in this announcement reflect the views of Strandline only at the date of this announcement. Subject to any continuing obligations under applicable laws and ASX Listing Rules, Strandline does not undertake any obligation to update or revise any information or any of the forward looking statements in this announcement to reflect changes in events, conditions or circumstances on which any forward looking statements is based.

## Annexure 1 - JORC Code, 2012 Edition – Table 1 (Section 4)

### Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul style="list-style-type: none"> <li>The Fungoni mineral sands deposit is located 25 km south of Dar es Salaam in Tanzania.</li> <li>The Mineral Resource for the Fungoni deposit was estimated and reported by Greg Jones of IHC Robbins (IHCR) in March 2017 and reported by Strandline Resources Limited (Strandline) to the Australian Stock Exchange on 2/05/2017 (<a href="http://www.strandline.com.au/irm/PDF/2326_0/HighValueFungoniMineralResourceContinuestoExpand">http://www.strandline.com.au/irm/PDF/2326_0/HighValueFungoniMineralResourceContinuestoExpand</a>)</li> <li>The mineral resource model is a 3-dimensional block model reported at a cut-off grade of 1% total heavy minerals (THM).</li> <li>The majority of the Fungoni mineral resource is situated within an arcuate shaped depression at the base of a ten-metre rise. The higher-grade domains of the mineral resource are defined by more dominant valuable minerals such as zircon, ilmenite and rutile in addition to kyanite / sillimanite.</li> <li>Mineral Resources are reported inclusive of Ore Reserves.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person is Mr Adrian Jones, Principal Mining Engineer from AMC Consultants Pty Ltd (AMC), who visited the site on 5 to 10 June 2017 for familiarization with the deposit, site topography, environmental conditions, and local infrastructure and for discussions with project personnel.</li> <li>No major impediments to the development of the deposit were recognized during the site visit.</li> </ul>
Study status	<ul style="list-style-type: none"> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Fungoni Definitive Feasibility Study (DFS) is currently in progress to develop a detailed understanding of the technical and other parameters required for the development of the project. AMC completed a mining study to a DFS level of accuracy to identify production requirements and mining costs.</li> <li>The Competent Person is satisfied that the level of study is appropriate to support Ore Reserves.</li> </ul>
Cut-off	<ul style="list-style-type: none"> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>Initial mine planning work was completed on a 1.5% THM cut-off</li> </ul>

Criteria	JORC Code explanation	Commentary
parameters		grade. However, waste bands within the deposit are minor and subsequent mine planning and ore reserve estimation was completed on the basis of including all material within the mineralized horizon.
Mining factors or assumptions	<ul style="list-style-type: none"> <li>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).</li> <li>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.</li> <li>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	<ul style="list-style-type: none"> <li>Pit optimization was completed on the mineral resource model to define the economic limits of open pit mining. A 132% revenue factor pit shell was used as the basis for pit design because of the relatively flat pit optimization curve and to capture the upside of any increase in metal prices. Five separate pits were designed and subdivided into panels for scheduling.</li> <li>Ore is proposed to be excavated from open pits with an average depth of 12 m and a maximum depth of 22 m using a mining contractor fleet of 45-t class excavators and 40-t articulated dump trucks. No overburden is present and therefore no pre-strip is required. No drill and blast is required. Ore is hauled to mobile feed units (MFUs) for transport to ore processing facilities, which are moved three times during the mine life.</li> <li>Geotechnical assessment was completed by Knight Piésold Pty Ltd (KP) from data from six air cored boreholes and twenty manually excavated test pits. Pit slopes at a vertical to horizontal ratio of 1:3 (1V:3H), with a 2-m wide bench every 4 m of vertical height were used in pit optimization and pit design, based on effective dewatering being undertaken to ensure that no water pressure will build up in the cut slopes. The suggested slope angle is subject to confirmation of the groundwater conditions and undertaking stability analysis. Grade control is not required due to the visible difference in ore and waste.</li> <li>Major assumptions used for pit optimization were pit slopes defined by geotechnical analysis, processing recoveries defined from metallurgical test work, product prices supplied by Strandline and operating costs derived from DFS studies.</li> <li>Mining dilution of 0% was assumed, as all material within the mineralized horizon is treated as ore and the selective nature of mining operations and visual difference between ore and waste is expected to result in minimal dilution.</li> <li>Mining recovery of 100% was assumed, as all material within the mineralized mining was treated as ore and edge losses are expected to be minimal.</li> <li>No minimum mining widths were used as the deposit is relatively</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>tabular and flat lying.</p> <ul style="list-style-type: none"> <li>Inferred Mineral Resources were treated as waste in all mine planning and ore reserve estimation work.</li> <li>Mineral processing infrastructure required for the project will include MFUs to take feed from the pit and transfer sized feed to the wet concentration plant (WCP), before final separation into component product streams in the mineral separation plant (MSP).</li> <li>Mining infrastructure will include office accommodation, mobile plant workshops and warehouse. This infrastructure will be supplied by the mining contractor.</li> <li>Support services infrastructure will include office accommodation, fixed plant workshop, warehouse, mine industrial area, power generation and distribution infrastructure, and a water supply dam. This infrastructure is owned by Strandline.</li> </ul>
<p><i>Metallurgical factors or assumptions</i></p>	<ul style="list-style-type: none"> <li><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li><i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li><i>Any assumptions or allowances made for deleterious elements.</i></li> <li><i>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.</i></li> <li><i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<ul style="list-style-type: none"> <li>The metallurgical processes for the project were developed by GR Engineering Services (GRES) from metallurgical test work and analysis. The processing rate was assumed at 2.0 Mt/yr run-of-mine ore. The source of product recoveries were obtained from the metallurgical test work program. WCP recoveries were assumed at 82.91% for heavy minerals, 94.98% for ilmenite, 87.46% for leucoxene, 79.8% for rutile, 95.52% for zircon, 97.82 % for monazite and 45.97% for light heavies. MSP recoveries were assumed at 99.52% for ilmenite, 99.21 for zircon into concentrate, 99.46% for monazite into concentrate, 78.06% for leucoxene to product, 88.59% for rutile to product and 97.60% for light heavies into concentrate. Leucoxene product was distributed to ilmenite and rutile product with following ratio: 90 % leucoxene product diverted to Ilmenite, 10 % leucoxene product diverted to Ilmenite. Tails from MSP spread by weighted average between leucoxene, rutile and Ilmenite product.</li> <li>The technology proposed is industry standard and comprises MFUs in close proximity to the pits to separate unsuitable coarse feed, a WCP to remove heavy minerals from the ore feed and a MSP to separate heavy minerals into separate saleable products.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Slimes in the feed is controlled by blending in-pit to smooth slimes grades and THM grade to provide consistency in mill feed presentation.</li> <li>A 3 t metallurgical sample at an average life-of-mine grade was submitted for mineral processing evaluation to develop the process flowsheet design for input into the DFS.</li> <li>Planned recoveries of ilmenite, zircon and rutile are based on achieving marketable levels of contaminants.</li> </ul>
Environmental	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Environmental and social impact assessments have been undertaken within the Fungoni Project area since 2016, in accordance with Tanzanian regulatory requirements. Tanzanian's environmental regulator, the National Environmental Management Council (NEMC) set the guidelines and requirements of the Environmental Impact Assessment (EIA).</li> <li>The EIA for the Fungoni Project was approved by the Ministry of State, Vice President's Office – Union and Environment and the EIA Certificate was received in July 2017.</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Fungoni Project is located 25km from the major port city of Dar es Salaam. As such roads to support transport routes, major port access for both bulk and container products and project supplies, good skilled and semi-skilled labour resources and support services are all readily available in close proximity to the Project. Due to its close proximity to a major city accommodation is also readily available. A major water aquifer has been identified to exist beneath the Fungoni deposit and access to this water has been provided by the relevant government authority. A bore field has been included in the Project costs. Although grid supplied power is available Strandline have taken the position of providing its own power to ensure reliability (using diesel fuelled power plant). This has been costed into the reserves determination.</li> </ul>
Costs	<ul style="list-style-type: none"> <li><i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li> <li><i>The methodology used to estimate operating costs.</i></li> <li><i>Allowances made for the content of deleterious elements.</i></li> <li><i>The source of exchange rates used in the study.</i></li> </ul>	<ul style="list-style-type: none"> <li>Mining capital costs are minor due to the use of an earthmoving contractor. Processing and infrastructure capital costs were derived from designed engineering drawings and unit costs.</li> <li>Operating costs were derived from first principle estimates of mining equipment productivity, operating and maintenance costs, manning numbers and labour costs, unit costs of</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>Derivation of transportation charges.</i></li> <li><i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></li> <li><i>The allowances made for royalties payable, both Government and private.</i></li> </ul>	<p>operating the installed processing equipment, and with a margin applied for those components contracted out.</p> <ul style="list-style-type: none"> <li>Product pricing for ilmenite rutile and zircon are based on TZMI pricing forecasts. Monazite pricing was based on Strandline's own market research obtained through discussion with a number of potential customers. Products produced have been confirmed from metallurgical test work and these market evaluations to be highly desirable and will be readily accepted by the market. The test work carried out to prove up the processing circuit has been tested for the LOM base case and stress tested at ore grade extremes.</li> <li>Costs were generally sourced in United States dollars (US\$). Any Australian dollar costs were converted to US\$ using an exchange rate of US\$0.75 to the Australian dollar.</li> <li>Transport charges were determined from competitive quotations received from multiple service providers.</li> <li>The process circuit to produce the products already evaluated by the market was a pilot plant configuration of the actual process assumed for the reserves determination. It demonstrated robustness to meet the specifications required by the market. Therefore, no penalties were applied to the product pricing.</li> <li>An allowance of 4.3% of revenue was made for Government royalties inclusive of 0.3% local government levy and the new proposed 1% "export clearance and inspection levy".</li> </ul>
Revenue factors	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></li> </ul>	<ul style="list-style-type: none"> <li>Ilmenite, leucoxene, and rutile will be sold as final products, with the remainder of the concentrated minerals sold as a high-grade zircon concentrate.</li> <li>Product prices were assumed to be: Ilmenite US\$238.79/t in product, Rutile US\$1082.01/t in product, Zircon US\$1078.46/\$/t contained zircon in concentrate, and Monazite US\$1127.8/\$/t contained monazite in concentrate.</li> </ul>
Market assessment	<ul style="list-style-type: none"> <li><i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li> <li><i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li> <li><i>Price and volume forecasts and the basis for these forecasts.</i></li> </ul>	<ul style="list-style-type: none"> <li>The supply and demand analysis for the Fungoni key products was undertaken by TZMI, internationally recognised as one of the most reliable provider of market intelligence information for the global mineral sands industry. The mineral sands commodities the Fungoni project is planned to supply are predicted to be heading into a supply deficit.</li> <li>Consumption of the key products is expected to generally grow</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	<p>in accordance with world GDP over time. Many existing competitors' operations are in a very mature phase with some approaching mine completion. This supports the forecasting of a deficit for the Fungoni products. Pricing for the titanium (ilmenite and rutile) and zircon products has been sourced from TZMI's pricing forecast. Monazite pricing has been based on data obtained from prospective customers for this product.</p> <ul style="list-style-type: none"> <li>The Fungoni material is timed to reach the market during a period when demand and subsequent pricing is expected to be favourable to the supplier.</li> <li>The proposed Fungoni products have been tested by multiple potential customers. Feedback has confirmed that the product is very fit for market and in line with TZMI's assessment and price expectation for the products.</li> </ul>
Economic	<ul style="list-style-type: none"> <li>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.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul style="list-style-type: none"> <li>The Project NPV and IRR have been calculated at the time mine development first commences 01 January 2018. The NPV has been calculated using project related costs only and does not consider Strandline's corporate costs.</li> <li>Strandline compiled the financial model for the Project in consultation with Argonaut Securities Pty Ltd and applied the inputs required to produce the net present value (NPV) in the study. The inputs and assumptions were sourced from the DFS costs which were obtained from first principles, actual quotations from suppliers and contractors and specialists' estimation data bases as deemed appropriate for a DFS.</li> <li>Product pricing was obtained from the TZMI pricing forecast as relevant for the Fungoni suite of products. The NPV for the project is expected to be between US\$36M and US\$48M depending on sensitivities applied. NPV was determined on a "Real Pricing" basis, i.e. inflation was not applied. A discount rate of 10% was applied for NPV calculations.</li> <li>The NPV is mostly sensitive to product prices and product recoveries.</li> <li>The positive NPV confirms the economic justification for extraction of the Ore Reserve.</li> </ul>
Social	<ul style="list-style-type: none"> <li>The status of agreements with key stakeholders and matters leading to social licence to operate.</li> </ul>	<ul style="list-style-type: none"> <li>Strandline has undertaken environmental and social impact assessments in accordance with Tanzanian regulatory requirements, including land access compensation and</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>resettlement planning and community consultation.</p> <ul style="list-style-type: none"> <li>The Project is predicated on low impact mining, progressive rehabilitation to pre-mining state and the ability to return the rehabilitated land back to the original landholder as soon as practical after mining. This method of land access is well proven in the mineral sands sector whereby the Miner effectively leases the land for the period of disturbance.</li> <li>Land access is substantially advanced. A baseline survey of assets and project affected persons (PAP's) has been completed for the Fungoni Project. The village executives and key stakeholders as well as key government ministers have been extensively consulted with strong support for the project evident. Strandline's approach is to develop an appropriate land access agreement ("land access compensation and mining rights agreement") with the land holders; as preferred by the Tanzanian authorities to the more typical straight out land acquisition method.</li> <li>Commitments have been made to the local community in the EIA, Mining License application and community consultation process to include high local content, up-skilling of the local workforce, and support local community social improvement programs such as health and education.</li> </ul>
Other	<ul style="list-style-type: none"> <li><i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></li> <li><i>Any identified material naturally occurring risks.</i></li> <li><i>The status of material legal agreements and marketing arrangements.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>A comprehensive risk assessment on the project was undertaken and no material naturally occurring risks were identified that were likely to impact on the project.</li> <li>Product offtakes are in progress with several reputable potential customers. It is evident that the products are being well received.</li> <li>As stated previously the Environmental Impact Assessment certificate has been received from the authorities. The mining License application has recently been submitted.</li> <li>Strandline states that they have reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the DFS.</li> <li>Although land access compensation and resettlement action planning is progressing positively, formal agreements with the landholders have not been finalised.</li> </ul>

Criteria	JORC Code explanation	Commentary
Classification	<ul style="list-style-type: none"> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<ul style="list-style-type: none"> <li>Ore Reserves classified as Proved were derived from Measured Mineral Resources and those classified as Probable were derived from Indicated Mineral Resources.</li> <li>The classification reflects the Competent Persons view of the deposit.</li> <li>No Probable Ore Reserves were derived from Measured Mineral Resources.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<ul style="list-style-type: none"> <li>There have been no reviews of the Ore Reserve.</li> </ul>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>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 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.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person considers that the classification of the Ore Reserves fairly reflects the underlying confidence in the Modifying Factors used to estimate the Ore Reserve.</li> <li>While the project is sensitive to product prices, it is relatively insensitive to changes in operating costs, confirming the Competent Persons opinion in the robustness of the Ore Reserve.</li> <li>Drill spacing and the nature of the estimation process indicates that estimates are a global estimate.</li> <li>There have been no production results from the project to compare against forecast production and cost estimates.</li> </ul>