



## ANCUABE SCOPING STUDY RESULTS HIGHLIGHT PREMIUM PRODUCT WITH ROBUST ECONOMICS

Triton Minerals Limited ('Triton' or the 'Company') is pleased to announce the results of a Scoping Study (Study) for a proposed open pit mine and graphite process plant at the Ancuabe Graphite Project in north eastern Mozambique. BatteryLimits, CSA Global and Knight Piésold, all internationally recognised consultants with experience in both graphite and East African mining projects, contributed to the Scoping Study.

The project economics demonstrate a robust project with upside potential through optimised mine planning, coarser grind size and process optimisation.

### Scoping Study Parameters – Cautionary Statements

The Scoping Study referred to in this announcement has been undertaken to determine the potential viability of an open pit mine and graphite processing plant, constructed adjacent to the Ancuabe T12 and T16 deposits, and to reach a decision to proceed with more definitive feasibility studies.

The Scoping Study is a preliminary technical and economic study of the potential viability of the Ancuabe T12 and T16 deposits. Internationally recognised technical consultants have conducted the Scoping Study, which is based on low-level technical and economic assessments that are not sufficient to support the estimation of ore reserves. Further evaluation work and appropriate studies are required before Triton will be able to estimate any ore reserves or to provide any assurance of an economic development case.

Approximately 55% of the Life of Mine (LOM) production target is in the Indicated Mineral Resource category and 45% is in the Inferred Mineral Resource category. The Company has concluded it has reasonable grounds for disclosing a production target with 55% of Mineral Resources in the Indicated Mineral Resource category.

This is because of a continued and significant investment in exploration drilling and that Triton has demonstrated a high conversion rate of Inferred Mineral Resources to Indicated Mineral Resources. Triton considers it reasonable for this high level of conversion to continue because the Inferred and Indicated Mineral Resources are contiguous across a large proportion of the T12 and T16 deposits and that the T12 and T16 deposits are open in a number of directions. In addition, the Company has several other prospects which are yet to be drilled outside the T12 and T16 deposits.

Further, the mine plan is based on processing the Indicated Mineral Resources at the T16 Deposit followed by the Indicated Mineral Resources at T12 before commencing in year 10 processing Inferred Mineral Resources at T16. The reason for the sequence is that the T16 deposit is a thicker and shallower deposit. Under this mining plan no T12 Inferred Mineral Resource will be processed. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

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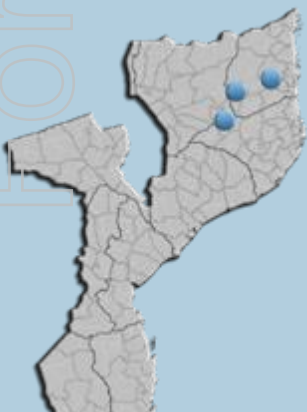
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### Scoping Study Parameters – Cautionary Statements (Continued)

The Scoping Study is based on the material assumptions outlined elsewhere in this announcement. These include assumptions about the availability of funding. While Triton considers the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range of proposed feasibility studies and potential mine development outcomes indicated in the Scoping Study, additional funding will likely be required. Investors should note that there is no certainty that Triton will be able to raise that funding when needed. It is also possible that such funding may only be available on terms that dilute or otherwise affect the value of existing Triton shares. It is also possible that Triton could pursue other 'value realisation' strategies such as sale, partial sale, or joint venture of the project. If it does, this could materially reduce Triton's proportionate ownership of the project.

The Company has concluded it has a reasonable basis for providing the forward-looking statements and to expect that it will be able to fund the development of the project. Triton recognises that exclusion of some of the Inferred Mineral Resources from the mine plan reduces the potential returns for the Ancuabe Graphite Project. This will be addressed in the next and final stage of drilling, which commences this month.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

### Scoping Study Outcomes

The Ancuabe Graphite Project is **technically** and **financially** viable. Study highlights:

- Positive returns for all scenarios (Indicated Mineral Resource only and Indicated + Inferred Mineral Resource based mine plans) (ASX release 10 April 2017);
- **Annual production** up to 60,000 Tonnes Per Annum (tpa) graphite concentrate;
- **Payback** period (based on sensitivity analysis) **between 2.7 and 4.8 years**;
- **Net Present Value (NPV)** (based on sensitivity analysis) **between US\$128 M and US\$246 M**;
- **Indicated resources** for at least **9 years' operation**, with a potential mine life of 17 years;
- Scoping Study outcome excludes optimisation of mine plan, capital and operating costs; and
- Study provides a strong foundation for the feasibility studies that have commenced.

The Scoping Study was led by supervising engineer BatteryLimits, with the resources and mining studies undertaken by CSA Global and water and tailings studies undertaken by Knight Piésold. All consulting groups have graphite and East African project experience.

The Scoping Study was based on the updated Mineral Resource estimate released to the ASX on 10 April 2017. The Indicated + Inferred Mineral Resource estimate for the Ancuabe Graphite Project comprises 27.9 million tonnes (Mt) grading 6.0% Total Graphitic Carbon (TGC), for 1.68 Mt of contained graphite. The total Indicated Mineral Resource at Ancuabe stands at 9.2 Mt at 6.0% TGC for 0.55 Mt of contained graphite.

The Study considered multiple mine plan options however a conservative mine plan based on processing all Indicated Mineral Resources prior to the processing of any Inferred Mineral Resources is presented in this announcement. Drilling has commenced at Ancuabe aimed at converting key Inferred Mineral Resources to Indicated Mineral Resource category. It is the intention of the Company to process the T16 deposit first which, if successfully converted, would significantly increase the returns of the Ancuabe Graphite Project. However there is no guarantee that the drilling programme will result in the conversion of Inferred Mineral Resources to Indicated Mineral Resource.

A summary of the key findings and sensitivity analysis for the Scoping Study are shown in the table below. This is based on the Indicated + Inferred Mineral Resource and mine plan, processing 0.9 – 1.1 million tonnes per annum (Mtpa) of graphite mineralisation.

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Graphite concentrate basket price	US\$1,369/t graphite concentrate FOB Pemba
Payback period	Between 2.7 and 4.8 years
Discounted NPV	Between US\$128 M and US\$246 M US\$75 M based on Indicated Mineral Resource only
Discount rate	10%
Life of Mine (LOM)	Initial estimate of 17 years
Pre-production capital cost	Approx. US\$83 M
Operating cost (LOM)	Approx. US\$601/t graphite concentrate FOB Pemba
Annual production	Up to 60,000 tpa graphite concentrate

*Note: In respect to any Inferred Mineral Resources there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources from these Inferred Mineral Resources or that the production target itself will be realised.*

Capital estimates shown in the table above have been prepared by independent consultants, with substantial recent experience in the region. The capital estimate a 15% contingency (based on direct costs.)

Metallurgical testwork to date has shown an average of ~59% large or jumbo flake size (~32% Jumbo) and an average concentrate purity on average of 97.5% Total Carbon (TC). The basket price was determined on this basis.

Feasibility studies are underway and are expected to be completed in late 2017.

Key components of the Scoping Study and the material assumptions applied in the Study are included in the section titled “Material Assumptions” in this announcement. The information includes preliminary mine designs and estimated mine production schedules, metallurgical recoveries from test work and costs based on comparison with similar operations and estimates provided by BatteryLimits, CSA Global and Knight Piésold.

The proportion of Inferred Mineral Resources is included on the basis that, amongst other factors, Inferred Mineral Resources have already been converted to Indicated at a high level of conversion, the Inferred Mineral Resources and Indicated Mineral Resources are contiguous across a large proportion of the deposits, drilling has commenced at T12 and T16 with the intention to continue converting Inferred Mineral Resources to Indicated Mineral Resources, and that the T12 and T16 deposits are open in a number of directions.

The Inferred Mineral Resources are not a determining factor in the Company’s decision to proceed. The Company would proceed on the basis of the Indicated Mineral Resources alone.

### **Next steps**

Triton Minerals has commenced discussions on offtake and marketing through its cornerstone investor, Shandong Tianye, which is located in Jinan in the province of Shandong, one of the main regions for graphite production in China.

The Company has also commenced metallurgical and product testwork for feasibility studies. Drilling at Ancuabe will commence for the third and final phase this month focussing on the T16 deposit, in conjunction with Fixed Loop Electromagnetic Surveys (FLEM) of key targets.

Technical investigations to support other aspects of feasibility studies, including water and geotechnical investigations, process equipment selection investigations and continued environmental base line studies will also commence in Q2 2017.

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## Managing Director Comment

*“The highly successful completion of the major mineral resource upgrade and Scoping Study is a major step forward in establishing the new Triton as a supplier of premium flake graphite with high concentrate levels to the expandable and battery markets globally. This is a critical milestone in our strategy for fast tracking the development studies of Ancuabe. We have now commenced feasibility studies which we plan to complete in late 2017.”*

*“The results of the Scoping Study demonstrate the robustness of the Ancuabe Graphite Project with anticipated strong operating margins and near term payback. Our key advantages to other projects include proximity to road, port and power infrastructure, historical high grade production in the region and a very favourable mix of flake size distribution and high TGC concentrate grades.*

*All studies to date reaffirm our belief that the larger Ancuabe deposit is a potential long term supplier of large flake, high grade graphite concentrate.”*

## Project Background

In May 2016, Triton completed a Maiden JORC 2012 Inferred Mineral Resource at the Ancuabe T12 deposit in north eastern Mozambique. Currently, the Company, through its wholly owned subsidiary Triton United (domiciled in the United Arab Emirates) has an 80% interest in Grafex Limitada (domiciled in Mozambique), the registered license holder of three discrete graphite exploration projects comprising eight exploration licenses (Licenses) located in Mozambique’s northern Cabo Delgado province. Two of the eight Licenses, 5934L and 6357L remain under application and have not been formally granted. The Mineral Resource was recently updated to Indicated + Inferred, for the T12 and T16 deposits (ASX Release 10 April 2017).

The Company believes the exceptional flake size and concentrate levels from metallurgical testwork to date, combined with the proximity to port, road and power infrastructure, and location within a proven graphite producing region, provides Triton with a competitive advantage in terms of logistics, and sound basis to secure premium sales prices in a highly competitive market.

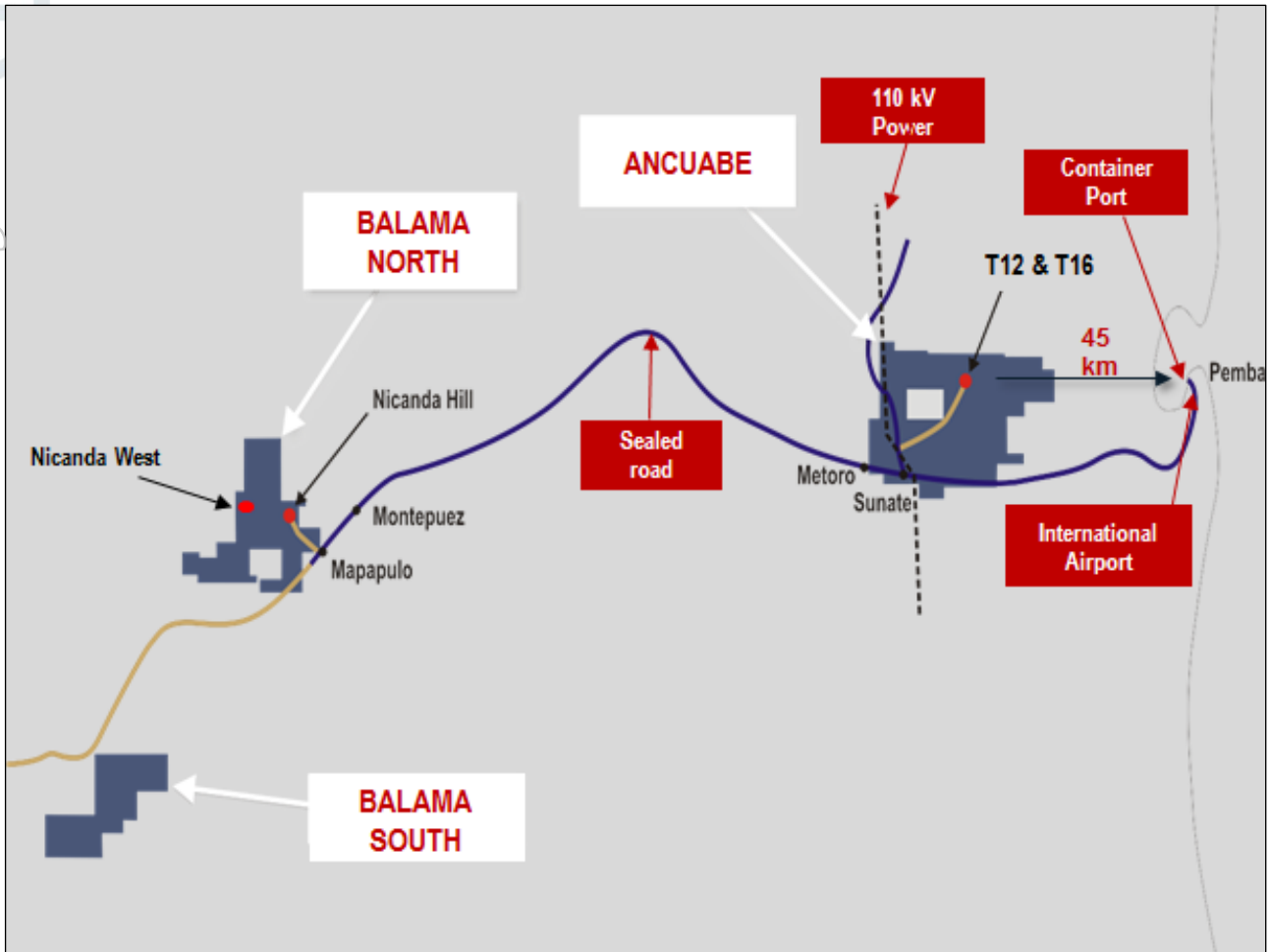
The Triton Board has resolved to fast track the development of the project to capitalise on the project’s world class large-flake high grade concentrate graphite and the forecast high growth in the expandable graphite market, especially in China. Feasibility studies are currently underway with completion estimated in late 2017.

## Scoping Study Background

The Ancuabe Graphite Project is located in the Cabo Delgado province in north eastern Mozambique. Compared to all other ASX listed projects in Mozambique, the Ancuabe Graphite Project is located closest to existing infrastructure and port.

The project area is accessible by road from Pemba and Montepeuz along a tarred highway, approximately 75km west of Pemba and 18km east of the town of Ancuabe. The project area is accessed from the Pemba-Lichinga highway via a turnoff at the Sunate village. Approximately 4km north of the turnoff is a track to the east that follows the provisional power and haul road corridor for approximately 14km to the proposed project site.

The project is predominantly located on Licence 5336, which is held by Grafex Limitada, a Mozambican registered company in which Triton, via Triton United, is registered as owning an 80% share.



The Ancuabe Graphite Project facilities have been located between the T12 and T16 deposits, with planned major infrastructure including an on-site power station, raw water dam and tailings storage facility. The process plant design is based on maximising water recycling for the project.

Graphite mineralisation from the mine is intended to be processed through a conventional three stage crushing plant, rod mill grinding circuit and rougher-cleaner flotation process, with three stages of attritioning. The graphite concentrate will be thickened, filtered and dried prior to separation and bagging of up to five size fractions for export.

A small camp is proposed to house personnel not located within bussing distance from the project operations.

The Ancuabe Graphite Project Scoping Study was based on a production rate of up to 60,000 tpa graphite carbon concentrate, from graphite mineralisation sourced from the Ancuabe T12 and T16 deposits.

The project is based on a JORC 2012 Mineral Resource Estimate of (Indicated + Inferred) 27.9 Mt at 6.0% TGC for 1.7 Mt contained graphite, of which 9.2 Mt at 6.0% TGC for 553,000 tonnes contained graphite is Indicated (ASX release 10 April 2017). It is anticipated that the graphite mineralisation will be mined by open pit methods and the LOM strip ratio (waste tonnes to graphite mineralisation tonnes) will range between 1.1 to 3.7.

Based on metallurgical testwork completed to date, the Ancuabe Graphite Project will produce a graphite concentrate with an average grade of approximately 97.5% total carbon (TC) (including ASX releases 17 May 2016, 19 December 2016 and 23 February 2017). The Scoping Study has been based on producing up to five graphite flake size fractions.



## Products and pricing

Annual production basis	Up to 60,000 tpa graphite concentrate
Production per size fraction	
+500 micron	2,710 – 3,780 tpa
-500+300 micron	10,150 – 14,160 tpa
-300+180 micron	11,010 – 15,360 tpa
-180+150 micron	4,515 – 6,300 tpa
-150+75 micron	7,310 – 10,200 tpa
-75 micron	7,310 – 10,200 tpa
Product pricing*	
+500 micron	US\$2,877/t graphite concentrate
-500+300 micron	US\$2,125/t graphite concentrate
-300+180 micron	US\$1,499/t graphite concentrate
-180+150 micron	US\$1,000/t graphite concentrate
-150+75 micron	US\$736/t graphite concentrate
-75 micron	US\$571/t graphite concentrate
Basket price	US\$1,369/t graphite concentrate FOB Pemba

\*The basket price was determined based on evaluation of recent projects and key data from long term forecasts from Benchmark Minerals, Stormcrow and Industrial Minerals Research.

## Key Components of the Scoping Study

### 1. Mineral Resource Estimate

Triton announced to the ASX a maiden T16 JORC 2012 Indicated + Inferred Mineral Resource on 10 April 2017. The Company also announced the Maiden T12 JORC 2012 Indicated Mineral Resource on 10 April 2017.

Deposit	Classification	Tonnes (Mt)	TGC %	Contained Graphite ('000s t)
T12	Indicated	8.1	5.8	467
T16		1.2	7.4	86
	Indicated total	9.2	6.0	553
T12	Inferred	11.4	4.9	553
T16		7.2	7.9	573
	Inferred Total	18.6	6.0	1,126
All	Indicated + Inferred	27.9	6.0	1,679

Note: The Mineral Resource was estimated within constraining wireframe solids defined above a nominal 3% TGC cut-off. The Mineral Resource is reported from all blocks within these wireframe solids. Differences may occur due to rounding.

### 2. Metallurgical Testwork

Testwork has been conducted at IMO Metallurgy (Perth) comprising thirteen unoptimized flotation tests for the T12 and T16 deposits at the Ancuabe Graphite Project (including ASX releases 17 May 2016, 19 December 2016 and 23 February 2017). ALS Metallurgy and Townend Minerology have undertaken XRD and petrographic

investigations for all flotation samples and various other samples across the two deposits.

### 3. Mining Study

For the Scoping Study, a mining schedule was developed for the T12 and T16 deposits. At this stage, a commissioning period is included, but ramp up was not addressed in the mining schedule.

Mining will commence at T16, from the Indicated Mineral Resources. Mining will then commence at T12, with Inferred Mineral Resources stockpiled in order to access the Indicated Mineral Resources. Once the mining of Indicated Mineral Resources is completed at T12, the Inferred Mineral Resources at T16 will be mined. This provides a mine life of approximately 17 years. In total, there is currently approximately 9 years of Indicated Mineral Resources in the mine plan.

The Study considered multiple mine plan options however a conservative mine plan based on processing all Indicated Mineral Resources prior to the processing of any Inferred Mineral Resources is presented in this announcement. Drilling has commenced at Ancuabe aimed at converting key Inferred Mineral Resources to Indicated Mineral Resource category. It is the intention of the Company to process the T16 deposit first which, if successfully converted, would significantly increase the returns of the Ancuabe Graphite Project. However, there is no guarantee that the drilling programme will result in the conversion of Inferred Mineral Resources to Indicated Mineral Resource.

Due to the low initial strip ratio at T16 materials for the tailings storage facility wall and raw water dam wall construction will also be sourced from within the proposed containment areas. Prior to completion of mining operations at T16, pre-strip mining will commence at T12. Overall, the LOM strip ratio will range between 1.1 and 3.7.

Mining will be by conventional open pit methods, and for the Scoping Study 120t excavators and 40t trucks were proposed for graphite mineralisation and waste movement.

### 4. Process Plant and Infrastructure

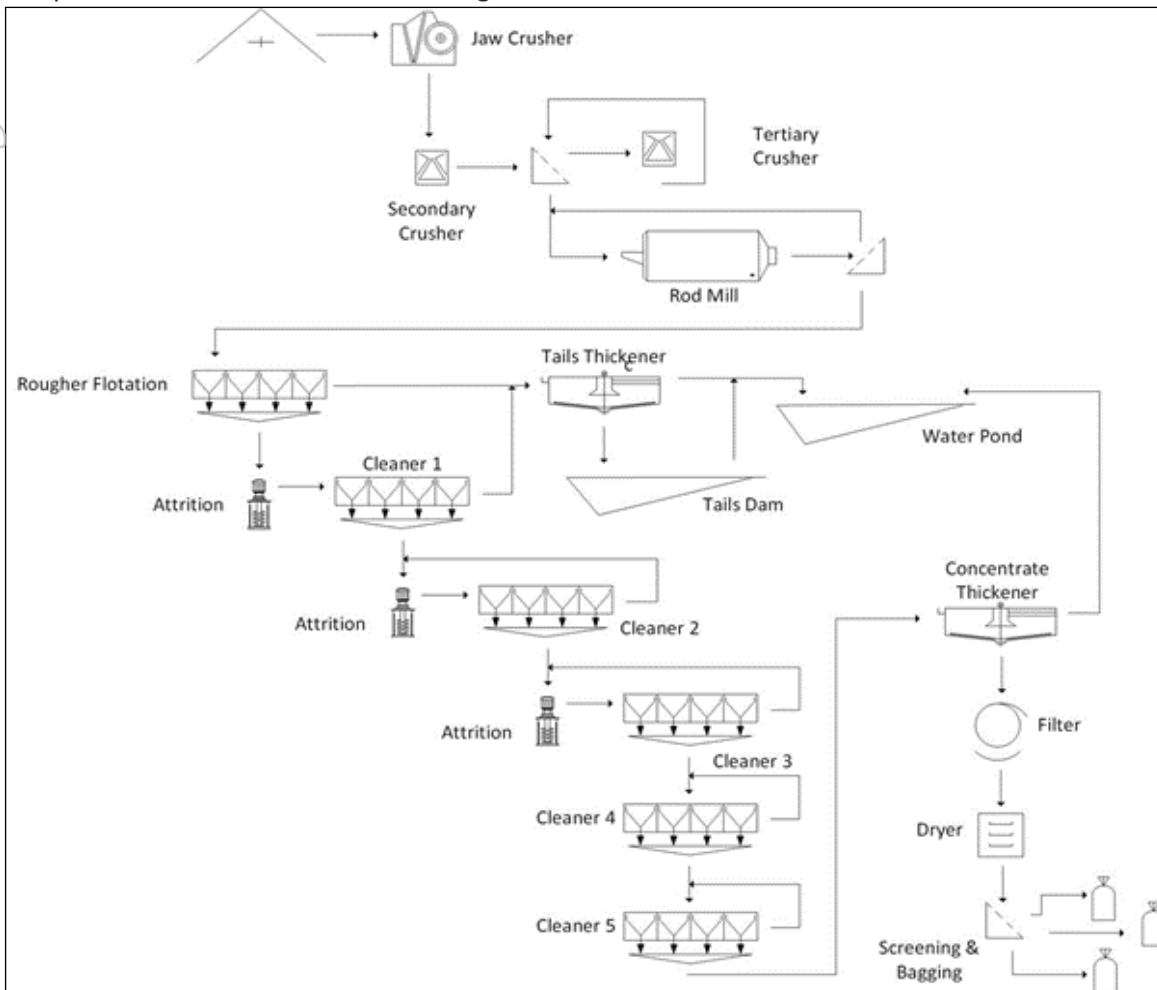
The Ancuabe Graphite Project process plant throughput will range 0.9 to 1.1 Mtpa, to produce up to 60,000 tpa graphite concentrate (variation based on grade), with an average grade of 97.5% TC.

The flowsheet is based on metallurgical testwork undertaken with samples from the T12 and T16 deposits by weathering extent (oxide/transition and fresh) (including ASX releases 17 May 2016, 19 December 2016 and 23 February 2017). The proposed facilities for the Ancuabe Graphite Project in the Scoping Study comprise:

- Run of mine (ROM) pad
- Tertiary crushing circuit
- Rod mill feed bin and grinding circuit
- Rougher flotation
- Three stages of attritioning and five stages of cleaner flotation
- Concentrate and tailings thickening
- Concentrate filtration
- Concentrate drying, classification and bagging
- Reagents
- Power station
- Water and air systems
- Tailings storage facility
- Raw water dam
- Laboratory

- Workshop, warehouse, offices, crib and ablution facilities

The process flowsheet is shown in the figure below.



## 5. Environmental and Social Permitting Requirements

The Ancuabe Graphite Project environmental permitting process is well underway, with dry and wet season studies completed.

Minimal physical displacement is expected, as the majority of the site is absent of inhabitants and dwellings. However, one of the dam options may require the resettlement of a small number of households and associated machambas. Economic displacement is unlikely to be required, as communities will retain direct access to the natural resources surrounding the project site, and to date no cultivation takes place in the project areas.

Preparations for the remaining specialist studies to support the Environmental Social and Health Impact Assessment, and development of the Environmental Management Plan process have commenced.

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## 6. Financial Evaluation

The key inputs to the financial evaluation are shown in the table below for the Ancuabe Graphite Project. The capital and operating cost estimates are presented in US dollars, with no allowance for escalation, to an accuracy of +/-35%.

Total tonnes mined & processed	17 Mt
Total tonnes moved	63 Mt
LOM strip ratio	Between 1.1 and 3.7 (average 2.7)
LOM TGC grade	4.9 to 7.0% (average 6.1%)
Annual production	Up to 60,000 tpa graphite concentrate
Annual average production grade	97.5% TC
Product size distribution (average)	
+500 micron	6%
-500+300 micron	24%
-300+180 micron	26%
-180+150 micron	10%
-150+75 micron	17%
-75 micron	17%
Product pricing	See above
Basket price	US\$1,369/t graphite concentrate FOB Pemba
Operating cost (LOM)	Approx. US\$601/t graphite concentrate FOB Pemba

### Capital cost estimate

The total pre-production capital cost for the Ancuabe Graphite Project is approximately US\$83 M, including contingency, as shown in the table below.

Area	Total	Proportion
Mining	US\$5 M	5%
Process plant	US\$36 M	43%
Tailings storage facility	US\$4 M	5%
Raw water dam	US\$1 M	1%
Power station	US\$3 M	4%
Other infrastructure	US\$11 M	13%
Indirects	US\$10 M	13%
Owners costs	US\$4 M	5%
Contingency	US\$9 M	11%
<b>Total</b>	<b>US\$83 M</b>	<b>100%</b>

Sustaining LOM capital expenditure associated with grid power connection and tailings storage facility wall lifts will be approximately US\$9 M and US\$32 M respectively.

### Operating cost estimate

The estimated LOM average operating cost for the Ancuabe Graphite Project is shown in the table below.

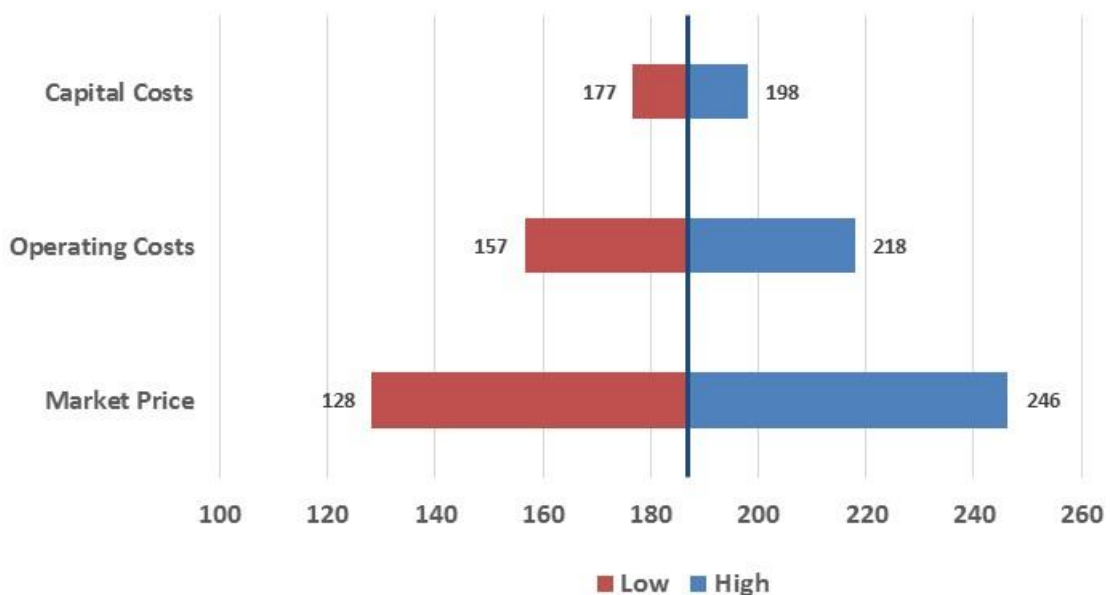
Area	Total	US\$ /product	Proportion
Mining	US\$8 M	210	35%
Labour	US\$5 M	151	25%
Power	US\$3 M	76	13%
Reagents & consumables	US\$4 M	98	16%
Product logistics	US\$2 M	66	11%
<b>Total (FOB Pemba)<sup>(1)</sup></b>	<b>US\$33 M</b>	<b>601</b>	<b>100%</b>

(1) Excludes royalties at 3% gross revenue.

## Financial analysis

Project Life (Indicated + Inferred Mineral Resource based mine plan)	years	17
LOM Graphite Mineralisation	Mt	17
LOM Concentrate produced	Mt	0.95
LOM EBITDA	US\$ M	663
LOM Average EBITDA Margin	%	50
LOM Pre-Tax Net Cash Flows (before discounting)	US\$ M	539
Pre-Tax NPV at discount rate of 10%	US\$ M	187
Pre-Tax NPV based on Indicated Mineral Resource only	US\$ M	75
Payback period from first production	years	3.4

## Financial sensitivities



Parameter	Low	High
Base NPV US\$ M	187	187
Market Price (-/+ 10%) US\$ M	128	246
Operating Costs (+/- 10%) US\$ M	157	218
Capital Costs (+/- 10%) US\$ M	177	198

## 7. Preliminary Schedule

The project development schedule indicates that the Project could be constructed by Q2 2019 provided that funding and relevant project approvals can be secured by the end of Q1 2018. Partial funding would facilitate an earlier commitment to long lead items.

Activity	2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Ancuabe Graphite project												
Drilling												
Technical investigations												
Feasibility studies												
Project approvals												
Commencement												
EPCM												
Commissioning												

## Bibliography

1. Triton Minerals Ltd - Maiden Inferred Mineral Resource Estimate for the Ancuabe Project. ASX announcement, 17 May 2016. Triton Minerals, Perth, Australia.
2. Triton Minerals Ltd - Metallurgical testwork confirms potential of Ancuabe as premium flake graphite source. ASX announcement, 19 December 2016. Triton Minerals, Perth, Australia.
3. Triton Minerals Ltd - Maiden Ancuabe T16 metallurgical testwork confirms premium flake graphite. ASX announcement, 23 February 2017. Triton Minerals, Perth, Australia.
4. Triton Minerals Ltd - Major resource upgrade at Ancuabe. ASX announcement, 10 April 2017. Triton Minerals, Perth, Australia.

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## Competent Persons' Statements

### Mineral Resource Estimate

The information in this announcement that relates to in situ Mineral Resources for Ancuabe T12 and T16 is based on information compiled by Mr. Grant Louw under the direction and supervision of Dr Andrew Scogings, who are both full-time employees of CSA Global Pty Ltd. Dr Scogings takes overall responsibility for the report. Dr Scogings is a Member of both the Australian Institute of Geoscientists and Australasian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2012). Dr Scogings consents to the inclusion of such information in this announcement in the form and context in which it appears.

### Metallurgy

The information in this document that relates to interpretation of metallurgical test-work and process plant design for a Scoping Study level assessment is based on information compiled or reviewed by Ms Lisa Park who is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM). Ms Lisa Park is a full-time employee of Triton Minerals Limited, and consents to the inclusion in this document of the matters based on her information in the form and context in which it appears.

### Mining Study

The information in this document that relates to mine design for a Scoping Study level assessment is based on information compiled or reviewed by Mr Karl van Olden who is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM). Mr Karl van Olden consents to the inclusion in this document of the matters based on his information in the form and context in which it appears. Mr Karl van Olden is a full-time employee of CSA Global Pty Ltd and provided the mine plan schedules, capital cost and operating cost estimates in the Scoping Study for the mine and associated infrastructure.

### Scoping Study

The information in this document that relates to the process plant and infrastructure design for a Scoping Study level assessment is based on information compiled or reviewed by Mr David Pass who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr David Pass consents to the inclusion in this document of the matters based on his information in the form and context in which it appears. Mr David Pass is a full-time employee of BatteryLimits and provided the capital and operating cost estimates in the Scoping Study for the process plant and associated infrastructure.

### Forward Looking Statements and Disclaimers

This announcement includes forward-looking statements that are only predictions and are subject to risks, uncertainties and assumptions, which are outside the control of Triton Minerals Limited.

Actual values, results, interpretations or events may be materially different to those expressed or implied in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward-looking statements in the announcement as they speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and ASX Listing Rules, Triton Minerals Limited does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement or any changes in events, conditions or circumstances on which any such forward-looking statements is based.

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## Material Assumptions

Material assumptions used in the estimation of the production target and associated financial information are set out in the following table

Criteria	Commentary
<b>Study status</b>	The production target and financial information in this release are based on a Scoping Study. The Scoping Study referred to in this announcement is based on low-level technical and economic assessments and is insufficient to support the estimation of Ore Reserves or to provide assurance of an economic development case at this stage or to provide certainty that the conclusions of the Scoping Study will be realised.
<b>Mining factors or assumptions</b>	<p>Mining will be by conventional open pit methods, and for the Scoping Study 120t excavators and 40t trucks were proposed for graphite mineralisation and waste movement.</p> <p>5 metre benches were allowed in the mineralized zone in order to minimize all loss and dilution.</p> <p>A 95% graphite mining recovery and 10% dilution have been used. These are considered appropriate after assessing the favorable geometry of the mineral resource. The fully diluted LOM graphite grade will be 5.6% TGC.</p> <p>Due to the limited available geotechnical information preliminary slope angles of 40 degrees were used.</p> <p>Mining operations were based on contract mining with allowances for workshops, laydown areas, washdown bays and fuel supply.</p> <p>Mining will commence at T16, from the Indicated Mineral Resources. Mining will then commence at T12, with Inferred Mineral Resources stockpiled in order to access the Indicated Mineral Resources. This provides a mine life of approximately 17 years. In total, there is currently approximately 9 years of Indicated Mineral Resources in the mine plan.</p>
<b>Metallurgical factors or assumptions</b>	An average flotation recovery of 90% TC has been used, based on an analysis of the results across the weathering zones and deposits. Following metallurgical testwork of existing and new flowsheet applications for graphite, the Company has adopted a process flowsheet very similar to that used successfully in a previous graphite mining operation in Africa. Further attritioning optimisation of this flowsheet in order to preserve natural flake sizes has been proven in test work by the Company. The combined use of the proven flowsheet application and the optimised attritioning regime have resulted in flake size retention into concentrate amongst the best in the industry.
<b>Environmental</b>	An Environmental Scoping Document has been prepared by independent environmental consultants Coastal Environmental Services, based out of South Africa. Both Dry and Wet Season studies have been completed.
<b>Infrastructure</b>	A review of the available infrastructure was undertaken in the Study. The infrastructure required to support the mine and process plant includes; Onsite power generation with future conversion to grid power; raw water supply from a catchment dam; two cell tailings facility; buildings including offices, workshops, warehouse, laboratory, crib room and ablutions, and small accommodation camp.
<b>Capital Costs</b>	<p>Capital estimates have been developed using a combination of enquiry to suppliers, benchmark projects and consultant databases. The costs presented have a base date of Q1 2017, are presented in United States Dollars.</p> <p>Capital costs were prepared by BatteryLimits, CSA Global, and Knight Piésold for the operation of the mine and process plant:</p> <ul style="list-style-type: none"> <li>The cost of the processing plant, which includes all infrastructure related to processing the ROM graphite mineralisation and disposing of</li> </ul>

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	<p>the tailings.</p> <ul style="list-style-type: none"> <li>The cost of mine support infrastructure, including explosives, in pit power and pumping.</li> <li>The cost for the mobilisation of the mining contractor.</li> <li>Indirect project costs, such as engineering costs, freight and contingency.</li> </ul> <p>The capital costs do not make provision for the following:</p> <ul style="list-style-type: none"> <li>Mine closure and environmental costs.</li> <li>Social responsibility costs.</li> </ul> <p>The costs presented are real costs and are exclusive of escalation.</p>																								
<b>Operating Costs</b>	<p>The Operating Costs have been defined as the cost of all ongoing mining, processing and operational activities. Operating costs were prepared by BatteryLimits, CSA Global, and Knight Piésold and comprise:</p> <ul style="list-style-type: none"> <li>The cost of mining the graphite mineralisation and waste material from the open pit, including the cost of man power, consumables and bulk supply.</li> <li>The cost of processing the graphite mineralisation to saleable products, including the cost of man power, grid power, consumables and bulk supply.</li> <li>The cost of shared services for the support of the operation, including the cost of on- site labour, infrastructure, camp costs and bulk supply.</li> <li>The cost of transporting the graphite mineralisation to the point of sale</li> <li>Head office costs.</li> </ul> <p>Operating costs have been determined through database costs, quotes and estimations based on similar operations.</p> <p>The operating costs do not make provision for the following:</p> <ul style="list-style-type: none"> <li>Social responsibility costs.</li> </ul> <p>The costs presented are real costs and are exclusive of escalation.</p>																								
<b>Revenue factors</b>	<p>Revenue is a function of graphite prices. The Company has established the characteristics of the expected final product through test work programs in Perth. Price forecasts have been assumed from an examination of other studies, discussion with end users and market forecasts.</p> <table border="1"> <thead> <tr> <th>Product Size Fraction</th> <th>Product Split for Basket Price</th> <th>Graphite Concentrate Price</th> </tr> </thead> <tbody> <tr> <td>+500 micron</td> <td>6%</td> <td>US\$2,877/t</td> </tr> <tr> <td>-500+300 micron</td> <td>24%</td> <td>US\$2,125/t</td> </tr> <tr> <td>-300+180 micron</td> <td>26%</td> <td>US\$1,499/t</td> </tr> <tr> <td>-180+150 micron</td> <td>10%</td> <td>US\$1,000/t</td> </tr> <tr> <td>-150+75 micron</td> <td>17%</td> <td>US\$736/t</td> </tr> <tr> <td>-75 micron</td> <td>17%</td> <td>US\$571/t</td> </tr> <tr> <td>Basket price</td> <td></td> <td>US\$1,369/t FOB Pemba</td> </tr> </tbody> </table> <p>The Consensus Forecast is derived from discussions with industry end users, analysts and traders related to the latest supply and demand forecasts considering the potential future growth of the battery and expandable products market in the medium term.</p> <p>Risks associated with these assumptions are that the product split is not</p>	Product Size Fraction	Product Split for Basket Price	Graphite Concentrate Price	+500 micron	6%	US\$2,877/t	-500+300 micron	24%	US\$2,125/t	-300+180 micron	26%	US\$1,499/t	-180+150 micron	10%	US\$1,000/t	-150+75 micron	17%	US\$736/t	-75 micron	17%	US\$571/t	Basket price		US\$1,369/t FOB Pemba
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	<p>achieved and/or that the price assumptions are not met by the prevailing graphite market. The Company has based these assumptions on publicly available market forecasts by expert industry analysts and has taken a conservative position on both sets of assumptions.</p> <p>Exchange Rates used for the Study as follows:</p> <ul style="list-style-type: none"> <li>• US\$1.00 = A\$1.32</li> <li>• US\$1.00 = 67.64 MZN</li> <li>• US\$1.00 = 13.74 ZAR</li> <li>• US\$1.00 = € 0.92</li> <li>• US\$1.00 = 6.77 CNY</li> </ul> <p>Government Royalties of 3% were applied.</p>																																																																																																																					
<p><b>Schedule and Timeframe</b></p>	<p>Drilling and Technical investigations will be undertaken in Q2 and Q3 2017 to support feasibility studies and the environmental approval process until the end of 2017</p> <p>The project development schedule indicates that the Project could be constructed by Q2 2019 provided that funding and relevant project approvals can be secured by the end of Q1 2018. Partial funding would facilitate an earlier commitment to long lead items.</p> <table border="1"> <thead> <tr> <th>Activity</th> <th colspan="4">2017</th> <th colspan="4">2018</th> <th colspan="4">2019</th> </tr> <tr> <th>Ancuabe Graphite project</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>Drilling</td> <td></td> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Technical investigations</td> <td></td> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Feasibility studies</td> <td></td> <td></td> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Project approvals</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Commencement</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="background-color: yellow;"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>EPCM</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> <td></td> <td></td> </tr> <tr> <td>Commissioning</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="background-color: yellow;"></td> <td></td> </tr> </tbody> </table>	Activity	2017				2018				2019				Ancuabe Graphite project	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Drilling													Technical investigations													Feasibility studies													Project approvals													Commencement													EPCM													Commissioning												
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<p><b>Market Assessment</b></p>	<p>The international graphite market is expected to expand significantly over the next 5 years. The Company has assumed, at this time, that the product will be sold.</p>																																																																																																																					
<p><b>Funding</b></p>	<p>To achieve the range of outcomes indicated in the Scoping Study, funding in the order of US\$90 M will likely be required for capital works, pre-production operating costs and contingency. It is anticipated that the finance will be sourced through a combination of equity and debt instruments from existing shareholders, new equity investment and debt providers from Australia and overseas.</p> <p>The Company has sufficient cash on hand at the date of this announcement to undertake the next stage of drilling that is underway to further define the Ancuabe T16 and T12 deposits and technical investigations to complete the next stages of feasibility studies.</p> <p>The Triton Board believes that there is a reasonable basis to assume that funding will be available to complete all feasibility studies and finance the pre-production activities necessary to commence production on the following basis:</p> <ul style="list-style-type: none"> <li>• Triton’s Board and executive team have a strong financing track record in developing resources projects;</li> <li>• The Company has a proven ability to attract new capital. Despite an extremely challenging environment following the Voluntary Administration during 2016, the Company demonstrated its ability to raise finance with a private placement that raised AUD\$6.3 M (AUD Australian dollars) in September 2016 followed by a fully underwritten entitlement offer that raised AUD\$7.9 M in November 2016;</li> </ul>																																																																																																																					

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	<ul style="list-style-type: none"> <li>• The Company is confident that it will continue to increase the Mineral Resource Estimate beyond what is currently the basis of the Study. Additionally, the Study outcome excludes optimisation of capital and operating costs;</li> <li>• Triton's majority shareholder has been strongly supportive of the Company's strategy since initial investment in September 2016 and continues to support the rapid development of the Ancuabe Graphite Project;</li> <li>• The proportion of equity funding modelled from the total funding requirement is relatively modest compared to recent capital raisings for ASX companies at a similar stage of development];</li> <li>• The Company has 50 M options which are exercisable at AUD\$0.10c (to acquire one fully paid ordinary share) before 30 June 2018 and if exercised would raise AUD\$5 M in cash. These funds would be applied to finalising feasibility studies and pre-production operating costs; and</li> <li>• The Company is in preliminary discussions with several potential debt and equity providers.</li> </ul>
<b>Economic</b>	A discount rate of 10% has been used for financial modelling. This number was selected as a generic cost of capital and considered a prudent and suitable discount rate for project funding and economic forecasts in Africa. The model has been run as a life of mine model and includes sustaining capital and closure costs. The Study outcome was tested for key financial inputs including: Basket Price, Capital and Operating Costs. All these inputs were tested for variations of +/- 10%.
<b>Social</b>	The Company has embarked on several exercises in relation to the local communities in the area. General acceptance of the project is good. No material risks have been identified in this regard.
<b>Other</b>	There are several other material risks to the Ancuabe Graphite Project including tax, compliance sovereign, price, competition, and insolvency which are common risks of all international mining projects.
<b>Classification</b>	<p>Classification of the Mineral Resource estimates considered the level of geological understanding of the deposit, quality of samples, density data and drill hole spacing.</p> <p>The Mineral Resource was classified as Indicated and Inferred according to the principles contained in the JORC Code 2012 edition.</p> <p>Material that has been classified as Indicated was considered by the Competent Person to be sufficiently informed by adequately detailed and reliable geological and sampling data to assume geological and grade continuity between data points.</p> <p>Material that has been classified as Inferred was considered by the Competent Person to be sufficiently informed by geological and sampling data to imply geological and grade continuity between data points.</p> <p>The Competent Person considers that metallurgical testwork to date indicates that flake graphite concentrate quality, and potentially favourable logistics to Pemba Port, support the classification of the T12 and T16 deposits as Industrial Mineral Resources in terms of Clause 49.</p>
<b>Audit or reviews</b>	The mining component of the Scoping Study was internally reviewed by CSA Global. No material issues were identified by the reviewers. All Study inputs were prepared by Competent Persons identified in this announcement.

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