

## QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING 30 JUNE 2017

### HIGHLIGHTS

- **Offtake, financing and project partner progressed through the appointment of a strategic advisor in China and the mobilisation of technical and commercial expertise by Triton's largest shareholder Shandong Tianye**
- **Scoping Study confirms Ancuabe is a robust project with strong economics**
- **Definitive Feasibility Study (DFS) and Environmental, Social and Health Impact Assessment (ESHIA) underway and scheduled to be completed in December 2017**
- **Independent metallurgical testwork undertaken in Germany and China confirmed Ancuabe graphite is a high-quality product for expandable graphite and lithium-ion battery markets**
- **Independent expandable testwork of Ancuabe T16 graphite returned exceptional expansion rates of 429-500mL/g, making it ideally suited for expandable graphite**
- **Completed metallurgical testwork options analysis**
- **Mineral resource and mine planning drilling underway**
- **In July 2017, a strategic placement to cornerstone investor Shandong Tianye signed to raise A\$1.23m**

Triton Minerals Ltd (ASX: TON) (**Triton** or the **Company**), provides its Quarterly Activities Report for the three months ended 30 June 2017 (the **Quarter**).

### ANCUABE GRAPHITE PROJECT – MOZAMBIQUE

#### Scoping Study

On 10 May 2017, Triton announced the results of the Scoping Study, which demonstrated that 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).
- **Annual production** up to 60,000 tonnes per annum (tpa) graphite concentrate.
- **Indicated resources** for at least **9 years' operation**, with a potential mine life of 17 years.
- **Payback period** (based on sensitivity analysis) **between 2.7 and 4.8 years**.
- **Net Present Value (NPV)** (based on sensitivity analysis) **between US\$128m and US\$246m**.

- Scoping Study outcome excludes optimisation of mine plan, capital and operating costs, presenting potential upside efficiencies to be evaluated in the DFS.

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 recommenced at Ancuabe in April 2017 aimed at converting 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.

### Definitive Feasibility Study

On completion of the Scoping Study the Triton Board approved an immediate transition to DFS on an accelerated timeline. The DFS is scheduled to be completed in December 2017. Triton has engaged a team of recognised expert consultants to assist with the DFS:

- Resource definition, sterilisation and geotech drilling – Major Drilling
- Metallurgy – IMO Perth and ALS Metallurgy
- Geology & Mining – CSA Global
- Tailings, water & geotech – Knight Piésold
- Engineering – Lycopodium

A site and Port visit by CSA Global (mining), Lycopodium and Knight Piésold was completed in May 2017 with positive feedback from the project team on plant location and infrastructure.



## Key Study highlights of the Quarter:

- Major Drilling mobilised in April and have maintained excellent drill rates, completing mine geotech and site sterilisation drilling on schedule. No material issues were encountered and the final phase of mineral resource and remaining site geotech drilling now underway. The drilling will be completed in early August 2017.
- Engineering options studies completed including power, plant capacity and major equipment type selection. This has allowed the project definition to be completed and the process design criteria to be finalised ahead of the next engineering phase.
- Metallurgical parameterisation testwork (grind size, reagents, flotation time, attrition time, additivity and locked cycle testwork) completed in preparation for DFS Engineering. This has enabled the mass balancing and inputs to the DFS process design criteria to be completed. Graphite product testwork continued with emphasis on supporting customer testwork.
- Tailings testwork with Knight Piésold commenced.
- ESHIA social and community site studies completed, site hydrology investigations continuing. Remaining specialist studies in progress.
- Permitting processes associated with community and land are continuing with further site investigations underway. Early works construction planning for 2018 has commenced and evaluations of the project development plan have identified early works requirements for the water supply as being on the critical path.



## Metallurgy

Fundamental metallurgical testwork to complete the flowsheet definition was undertaken in the Quarter. Key parameters investigated include:

- Primary grind size
- Attrition time
- Collector and frother reagents
- pH target and reagents

The parameterisation testwork was undertaken with four resource composites:

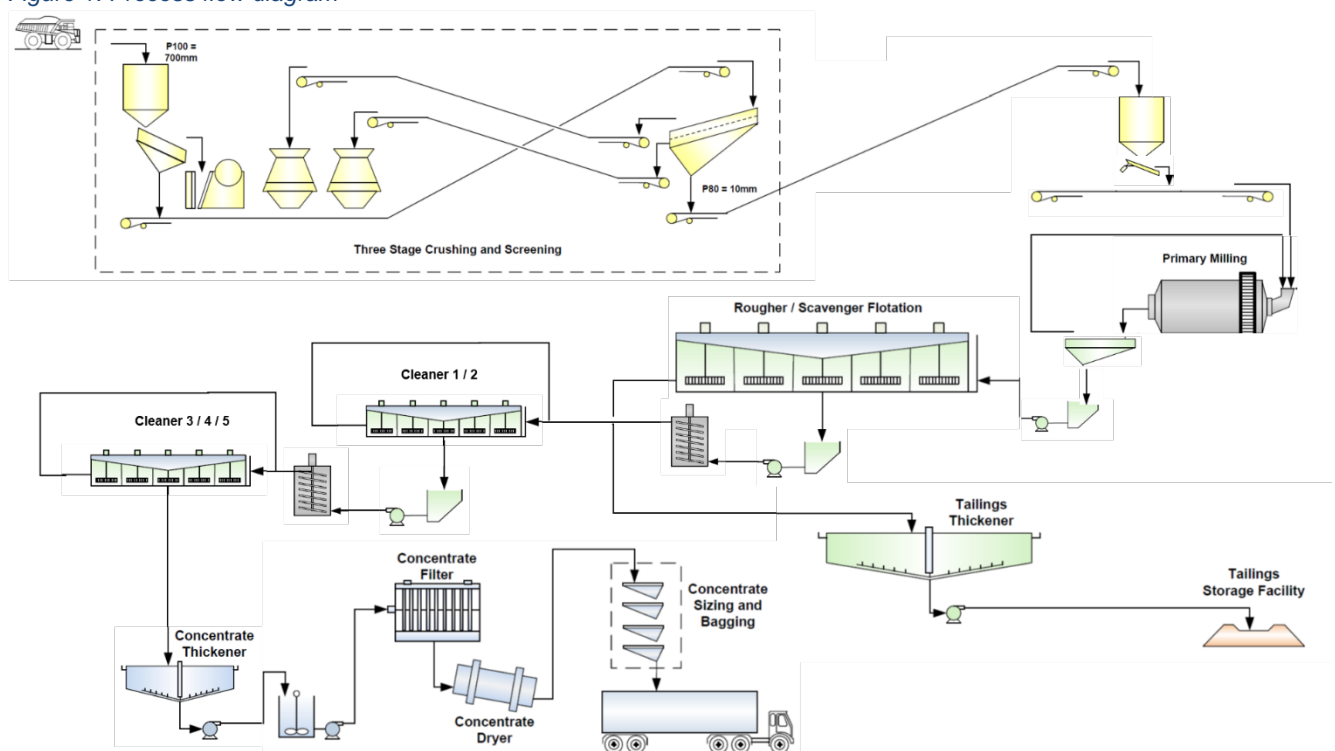
- T12 oxide/transition
- T12 fresh
- T16 oxide/transition
- T16 fresh

Resource composite definition was based on the major ore types identified for the deposits. The four composites were defined to investigate potential variations in metallurgical performance based on reagents and physical parameter set points. In addition the four composites support the flexibility to commence in either the T12 or T16 mineral resources.

On completion of the parameterisation testwork, evaluations were undertaken to confirm the basis of the process flow design for the DFS.

Metallurgical testwork during this quarter has resulted in minor flowsheet updates that are shown in the figure below.

Figure 1: Process flow diagram



Locked cycle, settling and filtration testwork will be undertaken in July 2017 to finalise the mass balances and projected graphite recoveries for the DFS. On completion of the DFS definition, additional (DFS level) variability testwork will commence.

## **Offtake Marketing and Financing**

During the Quarter discussions were undertaken in China regarding potential offtake and project financing. Although preliminary at this stage, significant interest has been expressed due to the high quality nature of the Ancuabe graphite and growing market demand in China.

Offtake, financing and project partner discussion are ongoing and have been strengthened through the appointment of a strategic advisor in China and the mobilisation of technical and commercial expertise by Triton's largest shareholder Shandong Tianye.

## **CORPORATE AND FINANCE OVERVIEW**

### **Key Personnel Commenced**

Ana Cruz was appointed Regional Operations Manager based in Pemba, Mozambique. Ana is a Mozambican citizen with extensive experience in commercial operations, logistics and human resources with major organisations in Mozambique.

### **Corporate Information**

At 30 June 2017, the Company had cash at bank of \$3.4 million and 657,805,299 shares on issue.

In addition, the Creditors Trust holds approximately \$1.1m, of which the surplus (less costs) will be returned to the Company following finalisation of employee claims disputed by the Administrator.

After the end of the Quarter, Triton announced a share placement to Shandong Tianye of \$1.2m.

### **Expenditure**

The Pro-forma appendix 5B – Statement of Consolidated Cash Flows is provided in a separate report.

### **ASX Announcements**

The Quarterly Report should be read in conjunction with all announcements made by the Company to the ASX, including the financial statements for the year ending 31 December 2016 which contain further details about Material Business Risks. These announcements can be found on the following link:

<http://www.tritonminerals.com/investors/asx-announcements/>

### **Schedule of Tenements (ASX Listing Rule 5.3.3)**

As at 30 June 2017, the Triton Group held an 80% interest in Grafex Limitada, the holder of the following interests in exploration tenements:

LICENCE	PROJECT	PROSPECT/ DEPOSIT	JV PARTNER	LOCATION	STATUS	CHANGE IN QTR	INTEREST
EL5966	Balama Nth	Nicanda Hill	Grafex Lda	Mozambique	Granted	No change	80%
EL5365	Balama Nth	Cobra Plains	Grafex Lda	Mozambique	Granted	No change	80%
EL5304	Balama Sth	-	Grafex Lda	Mozambique	Granted	No change	80%
EL5380	Ancuabe	T20	Grafex Lda	Mozambique	Granted	No change	80%
EL5336	Ancuabe	T12, T16	Grafex Lda	Mozambique	Granted	No change	80%
EL5305	Ancuabe	-	Grafex Lda	Mozambique	Granted	No change	80%
EL6357	Ancuabe	T18, T19	Grafex Lda	Mozambique	Approved - Pending grant	No change	80%
EL5934	Ancuabe	T10, T11	Grafex Lda	Mozambique	Approved - Pending grant	No change	80%

### Competent Persons' Statements

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.

Information in this presentation that relates to Mineral Resource estimates for Ancuabe is extracted from the ASX announcement dated 10 April 2017, titled 'Major Resource Upgrade at Ancuabe'. The Company confirms it is not aware of any new information or data that materially affects the information included in the ASX announcement, and all material assumptions and technical parameters underpinning the estimates in the ASX announcement continue to apply and have not materially changed.

The information in this release that relates to metallurgical test work is based on information compiled and / or reviewed by Mr Peter Adamini who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Adamini is a full-time employee of Independent Metallurgical Operations. Mr Adamini consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not necessarily limited to, statements concerning Triton's planned exploration program and

other statements that are not historic facts. When used in this document, the words such as “could”, “plan”, “estimate” “expect”, “intend”, “may”, “potential”, “should” and similar expressions are forward-looking statements. Although Triton believes that its expectations reflected in these are reasonable, such statements involve risks and uncertainties, and no assurance can be given that actual results will be consistent with these forward-looking statements.

**For further information visit [www.tritonminerals.com](http://www.tritonminerals.com) or please contact:**

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