

Triton Minerals Ltd

ASX: TON

ABN: 99 126 042 215

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 Non-Executive Chairman

Peter Canterbury
 Managing Director

Patrick Burke
 Non-Executive Deputy Chairman

Paula Ferreira
 Non-Executive Director

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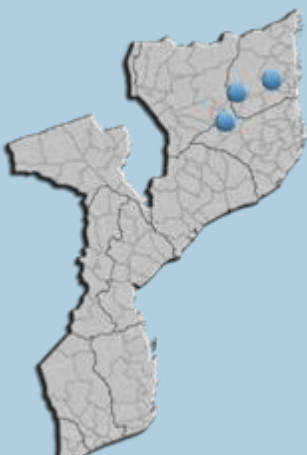
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Mozambique, Africa



31 January 2017

QUARTERLY ACTIVITIES REPORT

For the period ending 31 December 2016

Triton Minerals Ltd (ASX: TON) (**Triton** or the **Company**), provides its Quarterly Activities Report for the three months ended 31 December 2016 (the Quarter).

HIGHLIGHTS

- New strategic focus on the rapid development of the Ancuabe Graphite Project in Mozambique
- Positive metallurgical test-work on T12 shows world class flake size distributions as well as high Total Carbon (TC) grades across all size fractions in un-optimised flowsheet
- 5,000 metre drilling campaign at Ancuabe completed during the quarter
 - Coarse flake graphite intersected in first holes drilled at T16
 - first Assays on T16 received in January returned highest ever grades
- Exploration Targets identified – indicates significant resource growth potential
- Reinstated to official quotation following a successful entitlements offer that raised approximately \$7.9m and exit from Voluntary Administration
- Appointment of key senior executives

ANCUABE GRAPHITE PROJECT – MOZAMBIQUE

On 17 May 2016, Triton announced a Maiden Inferred Mineral Resource estimate for the Ancuabe T12 deposit of 14.9Mt grading 5.4% Total Graphitic Carbon (TGC) for 798,000t of contained graphite.

Drilling

VTEM data had previously highlighted a number of high-conductance targets outside of T12. Follow-up exploration drilling during the Quarter focused on improving confidence in the T12 Mineral Resource and drill testing other VTEM targets including T13, T14 and T16.

The drill program comprised 68 holes for 5,265m including 26 Reverse Circulation (RC) holes for 2,136 m and 42 Diamond Drill (DD) holes for 3,129 m at T12, T13, T14 and T16. The drilling included two pairs of twin RC and DD holes. A total of 42 holes was drilled at T12 (10 RC and 32 DD), 2 RC holes at T13, 4 RC holes at T14 and 20 holes at T16 (10 RC and 10 DD).

Logging of the core from T16, which was targeted due to the occurrence of coarse flake graphite in outcrops, has confirmed coarse-grained flake graphite near surface as well as at depth. Examples of coarse flake graphite in drill core are shown in Figures 2 and 3. It is cautioned that visual estimates of flake size provide no definitive information regarding the quality of liberated graphite flakes that may be extracted by metallurgical processes.

Samples from both RC and DD were transported to Bureau Veritas in South Africa for assay, and composite core material from T12 and T16 was also shipped to Australia for metallurgical test work scheduled for early 2017.

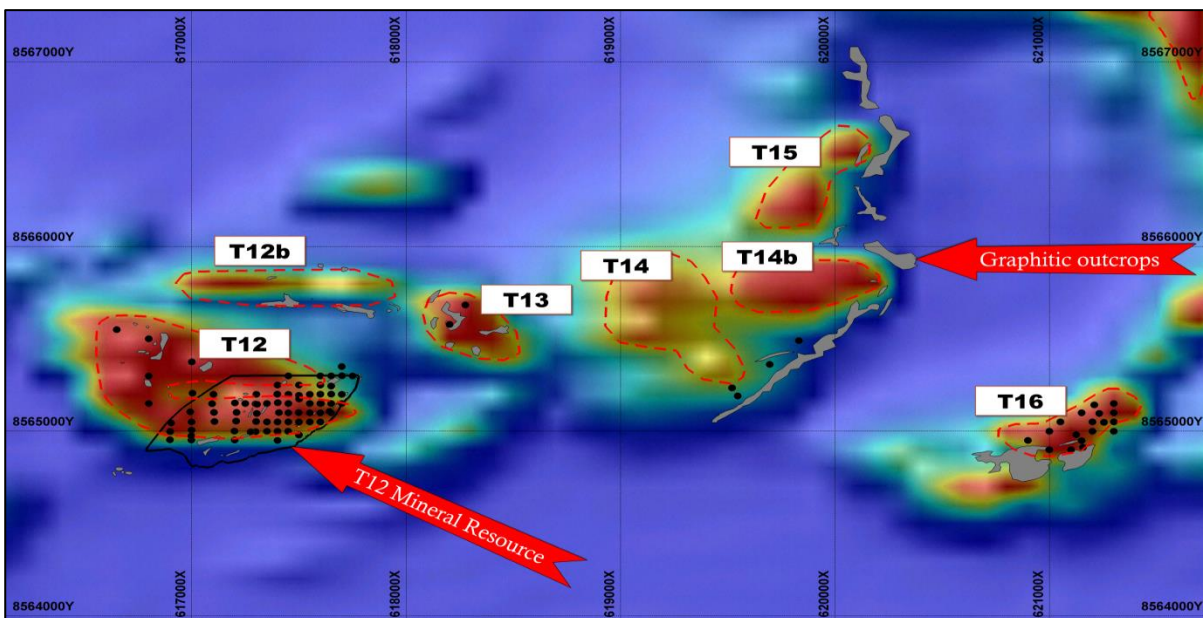


Figure 1: VTEM targets T12 to T16 showing drill collars as at 9th December 2016. Graphitic outcrops and rubble mapped in 2015 and September 2016 (pale grey polygons). Map grid 1,000 m x 1,000 m

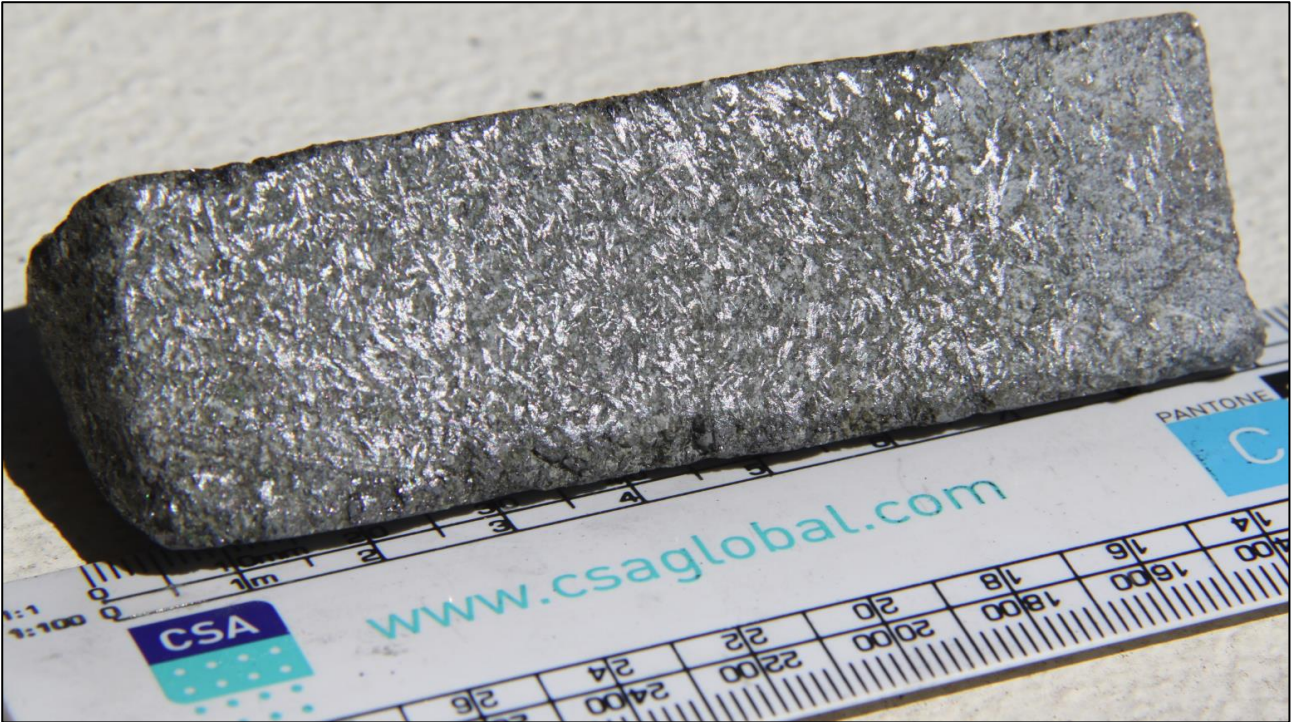


Figure 2: Example of coarse flake graphite in quarter NQ drill core from IVD034 at T16, at approximately 50 metres downhole. Sample length 8.5 cm



Figure 3: Example of coarse flake graphite in quarter NQ drill core from IVD034 at T16, at approximately 58.5 metres downhole. Sample length 10 cm

Petrography and Metallurgy

A batch of 5 composite core samples was selected from a group of 7 samples initially collected from T12 during a site visit by CSA Global representatives in August 2016. The purpose of testing these samples was to confirm that the various graphitic layers (or mineralisation domains) were amenable to processing by standard flotation methods, and to assess the effect of weathering on graphite product quality.

Triton also commissioned Townend Mineralogy to perform thin-section petrographic studies on five graphitic intersections from drill holes IVD007, IVD010 and IVD011 on the T12 deposit.

The study demonstrated that the graphitic gneisses are medium to coarse grained and that the gangue minerals are predominantly quartz and feldspar, with minor amounts of mica, amphibole, pyroxene, calcite and sulphide minerals. The gangue minerals are generally discrete and, apart from mica are not significantly intergrown with graphite, which has important implications for graphite liberation characteristics. The graphite flakes are often more than 1 mm in length (refer to Figure 4 for example of T12 graphite in thin section).

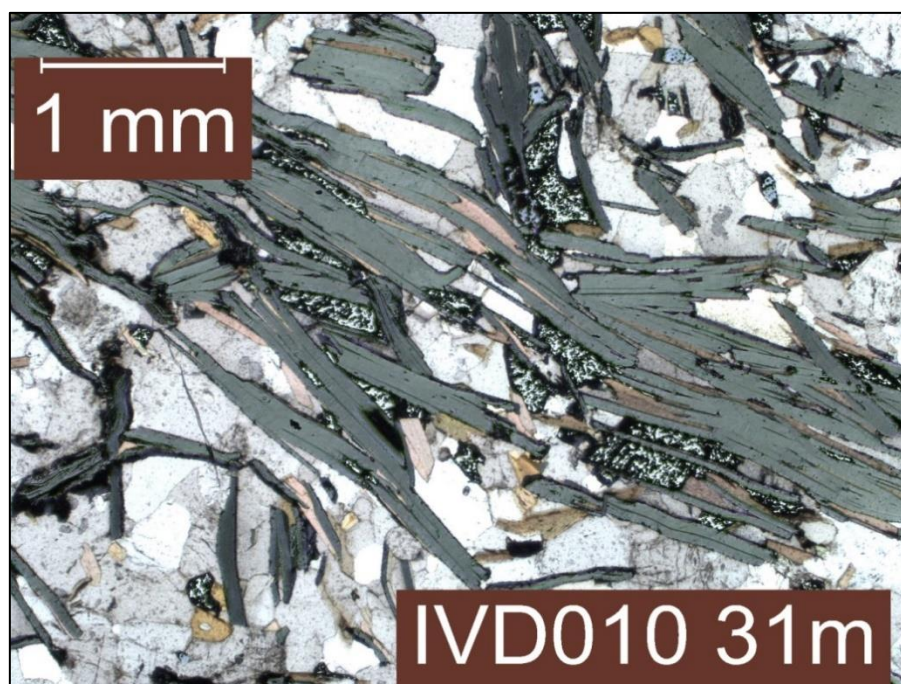


Figure 4: Photomicrograph of graphite (greenish grey) and biotite mica (brown) in a thin section from Composite 5

The flotation test work, based on a standard graphite process flowsheet developed in the Perth Laboratory of Independent Metallurgical Operations (IMO), demonstrated that a range of high purity graphite flakes can be extracted. The process flowsheet included rougher flotation, followed by several attrition and cleaner flotation stages. Key metallurgical highlights announced on 19 December 2016 include:

- Head grades of between 3.5% and 9.0% TGC (between 3.65% and 9.10% TC);
- Approximately 60% to 77% of graphite flakes >150 micron;
- Approximately 25% to 40% of graphite flakes >300 micron;
- Overall concentrate grades between 97.2% and 98.4% TC;
- Recoveries greater than 92% for four of the five composites tested; and
- No discernible difference in graphite purity from oxidised, transitional or fresh weathering domains.

It was noted by IMO that the process testing was not optimised, with further scope for a coarser initial grind and preservation of large flakes. Flotation tests were performed under open circuit conditions with the recoveries detailed above excluding graphite from intermediate tailings streams. Recoveries could improve with the inclusion recycling of intermediate tailings streams during locked cycle testing.

Ancuabe Exploration Target and Assay Results

On 16 December 2016, following a review of Ancuabe VTEM data, and supported by drilling of three targets, the Company announced an Exploration Target estimate of approximately 25 to 40 million tonnes grading approximately 5% to 8% Total Graphitic Carbon (TGC), mainly to the east of T12. This Exploration Target excludes the Inferred Mineral Resource at T12. It is noted that an Exploration Target is conceptual in nature with insufficient exploration results received at this time to estimate a Mineral Resource on these targets. It was also uncertain at the time of this announcement whether further exploration results will result in the estimation of a Mineral Resource.

The Company received its first assays in January 2017 from drilling performed at the new Ancuabe T16 deposit during the Quarter. The assays returned the highest ever grades seen at Ancuabe, over significant thickness from near surface. Standout results from RC drilling included: 45 m at 9.7% TGC from 12 m downhole (IVC027) – including 22 m at 11.4% from 35 m downhole; 19 m at 8.1% TGC from 78 m downhole (IVC026); 17 m at 7.5% TC from 25 m downhole (IVC028); 14 m at 7.91% TGC from 22 m downhole (IVC026); 5 m at 5.6% Total Graphitic Carbon (TGC) from 1 m downhole (IVC025)

CORPORATE AND FINANCE OVERVIEW

Reinstatement to Official Quotation

On 6 December 2016, Triton was reinstated to the ASX following the completion of a successful entitlement offer that raised approximately \$7.9m and the Company's exit from Voluntary Administration.

Key Personnel Appointed

On 13 December 2016, the Company appointed Mr David Edwards to the newly created role of Chief Financial Officer and Company Secretary effective 3 January 2017. Mr Edwards is a Chartered Accountant with significant experience in the energy and resource sectors and brings outstanding skills in corporate governance, strategy and business planning, debt and equity markets, investor relations, joint venture management and operations.

Following the end of the reporting period the Company appointed Ms. Lisa Park to the position of General Manager of Studies and Metallurgy, a key role as the Company progresses its flagship Ancuabe Graphite Project in Mozambique. Ms. Park is a highly-credentialed process engineer with broad experience across commodities and geographies, having held previous roles with US listed engineering business AECOM, Fluor Australia, MMG Limited, Worley Parsons and Lycopodium. Ms. Park brings an outstanding background in developing and delivering processing solutions for the mining industry. She holds a Bachelor of Engineering (Chemical) from the University of Melbourne, a Masters of Applied Finance and is a Graduate of the Australian Institute of Company Directors. Ms Park commenced on 23 January 2017.

These appointments combined with the appointment of Managing Director Peter Canterbury in September 2016 completes the executive team for the implementation of the fast track feasibility studies at Ancuabe that the Company is targeting in 2017.

Corporate Information

As at 31 December 2016 the Company had cash in bank of \$6.8 million and 657,804,633 shares on issue. In addition to the cash held in the Company the creditors trust holds in excess of \$1.1 million, the surplus (less costs) of which will be returned to the company following finalisation of employee claims disputed by the Administrator.

Competent Persons' Statements

The information in this announcement that relates to Exploration, Exploration Results for Ancuabe and Mineral Resources for the Ancuabe Project is based on information compiled by Dr Andrew Scogings, who is a full-time employee of CSA Global Pty Ltd and consultant to Triton. 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.

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.

Bibliography

1. Triton Minerals Ltd (2016a). Maiden Inferred Mineral Resource Estimate for the Ancuabe Project. ASX announcement, 17 May 2016. Triton Minerals, Perth, Australia.
2. Triton Minerals Ltd (2016b). Drilling expands Ancuabe graphite picture. ASX announcement, 8 December 2016. Triton Minerals, Perth, Australia.
3. Triton Minerals Ltd (2016c). Significant resource growth potential identified at Ancuabe. ASX announcement, 16 December 2016. Triton Minerals, Perth, Australia.
4. Triton Minerals Ltd (2016d). Metallurgical testwork confirms potential of Ancuabe as premium flake graphite source. ASX announcement, 19 December 2016. Triton Minerals, Perth, Australia.

For further information visit www.tritonminerals.com or please contact:

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ADDITIONAL INFORMATION

Summary of Tenements (ASX Listing Rule 5.3.3)

As at 31 December 2016, the Triton Group held a 80% interest in Grafex Limitada the holder of the following interests in exploration tenements:

TENEMENT	PROJECT	PROSPECT/ DEPOSIT	JV PARTNER	LOCATION	STATUS	CHANGE IN QTR	INTEREST
EL5966	Balama North	Nicanda Hill	Grafex Ltd	Mozambique	Granted	No change	80%
EL5365	Balama North	Cobra Plains	Grafex Ltd	Mozambique	Granted	No change	80%
EL5304	Balama South	-	Grafex Ltd	Mozambique	Granted	No change	80%
EL5380	Ancuabe	-	Grafex Ltd	Mozambique	Granted	No change	80%
EL5336	Ancuabe	-	Grafex Ltd	Mozambique	Granted	No change	80%
EL5305	Ancuabe	-	Grafex Ltd	Mozambique	Granted	No change	80%
EL6357	Ancuabe	-	Grafex Ltd	Mozambique	Approved - Pending grant	No change	80%
EL5934	Ancuabe	-	Grafex Ltd	Mozambique	Approved - Pending grant	No change	80%

Table 1: Table of the significant details relating to the status of Company's tenement holding.