

ASX ANNOUNCEMENT

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Projects:MozambiqueBalama NorthGraphite-VanadiumAncuabeGraphiteBalama SouthGraphite

Project Locations



Holder of the world's largest known combined graphite-vanadium resource

TRITON MOZAMBIQUE GRAPHITE PROJECTS UPDATE



NICANDA HILL

- Triton accelerates the development program
- Costean sampling returns encouraging results samples of up 22% TGC
- RC and diamond drilling program commences in support of DFS
- Early works program due to commence shortly

ANCUABE

- 2D modelling of the VTEM survey data underway
- Initial drill program due to begin in June 2015
- CES engaged to commence environmental baseline studies in June 2015

BALAMA SOUTH

• 50kg graphite bulk sample obtained for initial metallurgical testing

Triton Minerals Limited (ASX: TON, **Triton**, **Company**) is pleased to provide the following update in relation to ongoing work being undertaken at the Nicanda Hill, Ancuabe and Balama South projects.

Triton Minerals' Managing Director & CEO Brad Boyle said: "Triton feels these latest results continue to confirm the very high quality of the Nicanda Hill graphite deposit, as the trench samples demonstrate over 100m of continuous high grade mineralisation at the surface within the Mutola zone.

Funds raised by the recent \$12 million Placement position Triton to continue with the rapid development at Nicanda Hill, with additional drilling and early works programs now underway.

Triton considers the initial drilling program at Ancuabe, which is seeking to define further economic resources of the high grade graphite mineralization, to be another important step in the creation of the full graphite product range of TMG."



NICANDA HILL

Triton has now commenced the Definitive Feasibility Study (DFS) drilling program at Nicanda Hill and has commenced planning for the proposed mine-site for pre-development early-works programs.

The drilling program will provide Triton with geotechnical, metallurgical and hydrological information, which represent crucial inputs to the DFS, which is currently underway and on schedule for completion by the end of the fourth quarter in 2015.

The DFS drilling program will also include sterilisation drilling at a number of locations around the Nicanda Hill deposit prior to construction of the site camp, access and haul roads, tailings dam facility and plant site, to ensure that no additional economic graphitic resources are inadvertently excluded. Drilling for a supplemental process water supply will also be completed during this program.

Triton confirms additional drilling has also been planned to confirm the resource interpretation and establish the optimum grade control pattern within the limits of the Years 1 to 10 design pit.

The Company advises the grade control test area is centred on the area of the trench or Costean_N4, which will likely be one of the first areas at Nicanda Hill scheduled for mining. The samples from the costean consisted of 2m composites obtained from along the entire length of the trench. The encouraging results recently received from Costean_N4 are summarised in Table 1 and Figure 1 below.

The costean was positioned to provide confirmation of the drilling-based resource interpretation of the high grade Mutola Zone.

ID	Northing	Easting	Azimuth	Dip	From (m)	To (m)	Interval (m)	%TGC
Costean_N4	17402	6270	280	0	0	114	114	12.8
includes					16	108	92	14.7
includes					32	86	54	16.0
and					96	108	12	19.5

Table 1. Significant intersections from sampling of Costean_N4

(Note: samples were collected from a hand dug channel at the base of the trench to ensure that the samples that were collected were in situ ie. to avoid contamination and smearing of samples)

The results obtained from the costean confirm, exactly as predicted by the graphite resource model, the presence of a continuous high grade graphitic mineralisation, averaging 12.8% Total Graphitic Carbon (TGC), over a 102m horizontal width at surface (ie. no overburden).

Within this high grade graphite zone, the Mutola Zone shows continuous graphitic mineralisation of 92m grading 14.7% TGC with no intrusions, providing zero internal dilution. The costean samples also identified a number of locations where the graphite grades exceeded 20% TGC.



Triton considered these results and observations from the Costean_N4 to be encouraging, as the higher graphite grades and the substantial widths of the graphitic material containing zero internal dilution, are all located at surface and are easily extracted.

The Company feels these latest results continue to significantly confirm the robustness of the original resource model competed by independent geological consultants, Optiro back in October 2014 defining the world's largest known graphite and vanadium deposit at Nicanda Hill.



Figure1. Plan view of Costean_N4 sampling results and grade control test area





Figure 2. Excavation of Costean_N4 showing graphitic mineralisation at surface. Bulldozer is at approximately 6240E which is the eastern (footwall) contact of the Mutola Zone.

The results of the additional drill program will be combined with all previous drilling information in order to provide an update of both the global graphite resource and the likely graphite resource that will be targeted for mining in the first ten years of graphite production.

Another key objective of the additional drilling program is to provide sufficient information to underpin an upgrade in resource classification of material significance and thus, hopefully, form the basis of developing a substantial quantity of proven graphite reserves and will provide a more accurate basis for the DFS.

Implementation of this accelerated development strategy is consistent with Triton's plans to commence production at Nicanda Hill, subject to receiving Government approvals and permits, towards the end of 2016. The preliminary concept for the Nicanda Hill site layout is shown in Figure 3 below.





Figure 3. Proposed Nicanda Hill Graphite Mine – preliminary site layout

Triton confirms the Environmental, Social, Health Impact Assessment (ESHIA) being undertaken by Coastal and Environmental Services (Pty) Ltd (**CES**) is on schedule, with the completion of the wet season baseline studies program and the subsequent report that has now been filed with the Mines Department. The dry season baseline field program will commence in early June 2015.

ANCUABE

Triton verifies that a total of 1,189 line kms of helicopter-borne VTEM data was captured over the Ancuabe project area during the 2014 survey program. The data from this survey highlighted several high priority areas that are located just north of AMG's, GK graphite operation (refer to Figure 4).



The initial bulk sampling taken from Target Area 1, as announced by Triton on 29 April 2015, has produced very encouraging metallurgical results, with predominantly large to jumbo graphite flake sizes being recovered with grades of up to 98.7% TGC. The final flotation sizing results are expected to be received by Triton shortly.

Triton confirms that preparations are currently underway to commence an initial drill testing of selected targets. The required environmental management plan (EMP) process that allows Triton to undertake ground-disturbing activities for such as drilling, has now been completed.

Southern Geoscience Consultants based in Perth, has been contracted by the Company to undertake 2D modelling of the VTEM survey data. Triton expects that this modelling will provide more accurate locations for the proposed initial drilling program at Ancuabe, which the Company aims to commence in June 2015.



Figure 4. Ancuabe prospect areas

CES have also been contracted by Triton to undertake the Environmental, Social, Health and Impact Assessment (ESHIA) for Ancuabe and will commence the dry season baseline sampling program in June 2015.



BALAMA SOUTH



Figure 5. Overview of the Balama and Ancuabe exploration license areas

As previously announced by Triton on 31 July 2014, the initial limited reconnaissance mapping program conducted on Balama South, exploration license 5304, located numerous occurrences of large flake graphite mineralisation and the presence of vanadium hosting roscoellite (refer to Figure 6).

Triton confirms that an initial 50kg bulk sample has now been collected from the western target areas of the Balama South project.

The Balama South graphitic material located to date by the Company, appears to be visually similar to some of the Ancuabe graphitic material obtained during the recent sampling program and the initial metallurgical characterisation tests, yet to be conducted by Mintek (Johannesburg), will serve as a basis for the ongoing project assessment and subsequent drill targeting.



Triton verifies that the Balama South project area is also well located with respect to road infrastructure and water resources and, subject to further results, may be developed as either as a stand-alone operation or may become a satellite operation to supplement the proposed Nicanda Hill graphite mine.



Figure 6. Balama South graphite mineralisation sample

CONCLUSIONS

The latest assay results from Nicanda Hill continues to confirm the very high quality nature of TMG.

Should Triton be able to demonstrate economic quantities of large and jumbo flake graphite at Ancuabe and Balama South projects, it could complement the TMG products range and provide the Company with the potential to produce large volumes of high grade (high value) graphite in the full range of flake sizes, thereby accommodating a wider range of end-user requirements.



Triton is rapidly working towards establishing TMG as a new global graphite-industry benchmark, by aiming to offer the world's lowest cost and most diversified graphite product range together with the longevity of a reliable supply **of high quality flake graphite**.

Regards

Brad Boyle CEO & Managing Director Triton Minerals Ltd



For further information, please contact:

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Competent Person's Statement

The information in this report that relates to Exploration Results on the Balama North Project is based on, and fairly represents, information and supporting documentation prepared by Mr. Alfred Gillman, who is a Fellow of Australian Institute of Mining and Metallurgy (CP Geol). Mr. Gillman is a Non-Executive Director of the Company. Mr. Gillman has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves (the JORC Code)'. Mr. Gillman consents to the inclusion in this report the exploration results and the supporting information in the form and context as it appears.

The information in this announcement that relates to Exploration Results on the Balama North Project is extracted from the reports entitled ASX Release "Nicanda Hill Maiden JORC Resource – 1.457 Billion Tonnes at 10.7% TGC and 0.27% V_2O_5 ", created 21 October 2014 and is available to view on www.tritonmineralsltd.com.au. The reports were issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The information in this announcement that relates to Exploration Results on the Ancuabe Project is extracted from the reports entitled ASX Release "Extraordinary Metallurgical Results - Ancuabe Project", created 29 April 2015 and is available to view on www.tritonmineralsltd.com.au. The reports were issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The information in this announcement that relates to Exploration Results on the Balama South Project is extracted from the reports entitled ASX Release "Graphite Outcropping Located at Balama South", created 31 July 2014 and is available to view on www.tritonmineralsltd.com.au. The reports were issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not necessarily limited to, statements concerning Triton Minerals Limited'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 Minerals Limited 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.



Appendix 1

Balama North project (includes License 5966) and Balama South project (includes License 5304) operated under Agreement between Triton Minerals and Grafex Lda. Information pertaining to field mapping and sample collection data and assay results.

Criteria	JORC Code explanation	Commentary		
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	The Nicanda Hill prospect is located on the Balama North Project. Samples were collected from a hand dug channel at the base of the trench to ensure that the samples that were collected were in situ ie. to avoid contamination and smearing of samples. Sampling was at 2m intervals. At Balama South rock chips samples of 0.5kg to 2kg were collected from various outcrops and aggregated into a single bulk sample		
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Samples were collected from a hand dug channel at the base of the trench to ensure that the samples that were collected were in situ ie. to avoid contamination and smearing of samples.		
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	Samples were collected along 2m marked intervals with in situ rocks extracted at approximately 20cm intervals within each 2m interval. Thus typically 10 smaller samples were collected from each 2m interval and then aggregated into a single sample.		
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Geological logging is carried out on each for the full mineral assemblage that can be identified in hand specimen, in addition to texture, structure and estimates of graphite flake content and size. The mineralogy, textures and structures are recorded by the geologist into a digital data file at the drill site, which are regularly submitted to the Perth office for compilation and validation.		
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of rock samples includes recording lithology, mineralogy, mineralisation, weathering, colour and other features of the samples. Geological descriptions of the minera volume abundances and assemblages are semi-quantitative.		
	The total length and percentage of the relevant intersections logged	All drillholes are logged in full.		
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	n/a		
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Rock samples aggregated into single sample for assay		



For all sample types, the nature, quality and appropriateness of the sample preparation technique.The nature, quality of costean sampling is considered appropriate and normal practiceQuality control procedures adopted for all sub- sampling stages to maximise representivity of samples.Samples were collected from a hand dug channel at th of the trench to ensure that the samples that were coll were in situ ie. to avoid contamination and smearing or samples. Samples were collected along 2m marked inte with in situ rocks extracted at approximately 20cm inte with in each 2m interval. Thus typically 10 smaller samp were collected from a hand dug channel at the of the trench to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.Samples were collected from a hand dug channel at the of the trench to ensure that the sample shat were coll were in situ ie. to avoid contamination and smearing or samples. No field duplicates were taken.Quality of assay data and laboratory testsMeasures to ensure appropriate to the grain size of the material being sampled.Sample sizes are considered adequateQuality of assay data and laboratory testsThe analytical techniques used to analyse all samples for Graphitic Carbon, Total Sulphur, and Total Carbon is or Combustion Infrared Detection instrument. Detection I the complex care enscription of the preservation of the preservat	lected f ervals ervals oles ated into e base lected
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The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. The nature, quality and appropriateness of the assay grades. In addition, selected samples will be analysed for multi element abundances using a fused disc digested in a for digest with ICP/OES or ICP/MS finish The acids used are hydrofluoric, nitric, perchloric and hydrochloric acids, s for silica based samples. The method approaches total dissolution of most minerals.	n a Leco limits for orted i- our acid e suitable
For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	ient
Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	s due to
Verification of sampling and assayingThe verification of significant intersections by either independent or alternative company personnel.Mr S. Plunkett, a consultant for Triton, has visually veri geological observations of the reported results. All sam undertaken by trained geological staff on site.	
The use of twinned holes. Not applicable	
Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.Sample information is recorded at the time of sampling electronic and hard copy form. Assay data is received to SGS in electronic form and compiled into the Company database. Secured electronic print files have been pro-	from r's digital
the Company for verification purposes.	



Criteria	JORC Code explanation	Commentary		
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Collar locations for all sample points and costean location were surveyed with a differential GPS.		
	Specification of the grid system used.	The grid system for Balama North Project area is World Geodetic System (1984 Spheroid and Datum; Zone 37 South). A local mine grid has been established which 35 degrees west of true north.		
	Quality and adequacy of topographic control.	Topographic surface is based on the differential GPS coordinates of surrounding drill holes.		
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Costean sample spacing of 2m		
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The current data spacing and distribution is insufficient for the purpose of estimating a mineral resources for Nicanda Hill prospect.		
	Whether sample compositing has been applied.	Samples were collected along 2m marked intervals with in situ rocks extracted at approximately 20cm intervals within each 2m interval. Thus typically 10 smaller samples were collected from each 2m interval and then aggregated into a single sample.		
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The deposit is drilled towards the south east (magnetic grid) a approximately -60° to intersect the mineralised zones approximately orthogonal to the interpreted dip and strike of the geological units. Several characteristic geological units have been delineated in several drill holes giving a higher degree of confidence in the attitude and orientation of the graphite mineralisation.		
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Local increased graphite abundances are observed proximal to small-scale folding and thin tonalite veins. The orientation of these folds and veins is generally parallel to the attitude of the graphitic schist and mineralisation. Thus, the current drilling is not expected to produce any biased samples.		
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by Triton. Samples are stored at a secure yard on the project prior to shipping to SGS in South Africa. Any visible signs of tampering of the samples are reported by the lab. A chain of custody has been maintained for the shipment of the samples to South Africa.		
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Not considered necessary at this stage for a single costean or single bulk sample		



Criteria	JORC Code explanation	Commentary		
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Nicanda Hill Prospect are located wholly within Exploration Licences EL5365 and EL5966 respectively within the Cabo Delgado Province of Mozambique. Balama South comprises a single EL 5304. All licences are held by Grafex Limitada (Grafex), a Mozambican registered company. Triton Minerals entered into a Joint Venture (JV) agreement in December 2012 with Grafex to earn up to an 80% interest in Grafex's portfolio of graphite projects. In late 2013 Triton increased their holding in the projects to 60% by taking a direct equity interest in Grafex. EL5365 is valid until 29/10/2017 and EL5966 is valid until 19/06/2018.		
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	All statutory approvals have been acquired to conduct exploration and Triton Minerals has established a good working relationship with local stakeholders		
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No previous systematic exploration has been undertaken at the Nicanda Hill or Balama South Prospects. The Company has acquired the data from an airborne electromagnetic surver that covers Licences 5966 and 5365. This data has been reprocessed and interpreted with some results included in this release. Small scale exploratory pits dug for ruby and/or graphite exploration have been identified. Data or reports disclosing the results of this work have not been located.		
Geology	Deposit type, geological setting and style of mineralisation.	The graphite deposit is hosted within Neoproterozoic rocks of the Xixano Complex in north-eastern Mozambique. The Xixa complex is composed dominantly of mafic to intermediate orthogneiss with intercalations of paragneiss, meta-arkose, quartzite, tremolite-rich marble and graphitic schist. Graphit mineralisation is hosted within fine grained graphitic schists underlain and overlain by felsic gneiss rock types. Mineralisation occurs as series of multiple stacked tabular northeast-southwest striking lodes moderately dipping to th northwest.		

JORC Table 1 - Section 2 Reporting Of Exploration Results