

# FURTHER POSITIVE DRILLING RESULTS FROM NICANDA HILL

## HIGHLIGHTS:

- Additional mineralogical investigations confirm the substantial presence of large flake graphite (>170µm).
- Mineralogical study confirms 23% of the flake graphite in the samples were larger than 212µm.
- Head grades of up to 28% Total Graphitic Carbon (TGC) and 0.50% V<sub>2</sub>O<sub>5.</sub>
- Significant graphite intersections with the weighted average graphite carbon, include
  - o 86m at 10.2% TGC (GBNC0031), including
    - 33m at 15.4% TGC
    - 20m at 16% TGC
  - o 122m at 10.0% TGC (GBNC0036), including
    - 66m at 12.2% TGC
    - 18m at 14.3% TGC
    - 22m at 13.5% TGC
  - o 124m at 10.3% TGC (GBNC0038), including
    - 70m at 12.0% TGC
  - o 78m at 10.8% TGC (GBND0008), including
    - 32.8m at 15.4% TGC
    - 9m at 25.2% TGC
- Diamond drill hole (GBND0035) drilled to 475m, visual logging confirms strong graphite mineralisation from close to surface and finishing in graphite mineralisation and remains open.
- All drill holes continue to show substantial visible flake graphite and roscoellite from surface to end of hole, with most open at depth.

**Triton Minerals Limited** (ASX: TON, "Triton", "the Company") is pleased to confirm receipt of further assays and mineralogical results for the Nicanda Hill prospect.

Triton Minerals Managing Director Brad Boyle said "Diamond drilling has again confirmed the world class potential of the Balama North project. To intercept substantial graphite mineralisation down to depths of **475m** in single drill hole, with the mineralisation open at depth, combined with high grade graphite intercepts of up to **34.1%** TGC, are again very exciting results.

The identification of a possible hydrothermal breccia zone and the confirmation that there is a substantial presence of large flake graphite throughout the 6.2km mineralisation footprint at various depths is very encouraging for Triton.



Further, the continued intersections of high grade graphitic and vanadium mineralisation in the mineralisation footprint reinforces the Company's belief that the Nicanda Hill prospect will become one of the world's largest multi-element projects. These latest drill results continue to provide a solid foundation for the initial large JORC 2012 resource at Nicanda Hill."

# ADDITIONAL MINERALOGICAL RESULTS

The Company confirms that mineralogical and assay test work from SGS South African laboratory have returned encouraging results in line with previous studies, with head grades of up to **28%** TGC, being obtained from the various samples. Further, these tests also confirm the strong presence of Vanadium within the graphitic samples, obtaining grades up to **0.50%** V<sub>2</sub>O<sub>5</sub> (Table 1 in Appendix 3).

The bulk sample used in the latest assay and mineralogical test work program at the SGS South African laboratory was obtained from several locations along the entire length of the mineralisation footprint. These samples were acquired from a number of locations and from various depths, including surface samples to drill core taken from up to 100m down hole on the Nicanda Hill prospect. These samples provide a more representative example of the type of graphitic material found across the whole of the mineralisation footprint.

The Company verifies that more detailed metallurgical and mineralogical investigations are progressing in conjunction with the graphite flotation test work program, as Triton is focused on refining the flotation methods for optimising the overall graphite recovery, final graphite concentrate grades and product size distribution.

Triton verifies that vanadium recovery test work also continues on the graphite flotation tailings. Initial analysis of the graphitic material confirms the vanadium is present in a flake form, which may lend itself to being beneficiated through the standard flotation methods. These initial vanadium tests found the high grade vanadium concentrate was being recovered from a full range of vanadium flake sizes.

Triton plans to undertake a detailed vanadium test work program focused on testing the flotation and other methods for optimising the overall vanadium recovery from the graphite tailings and the final vanadium concentrate grades.

### **GRAPHITE FLAKE DISTRIBUTION**

Additional mineralogical investigations of the latest graphitic samples have provided more encouraging results and reconfirmed the substantial presence of large flake graphite (greater than 170um) throughout the Nicanda Hill prospect.



Triton reconfirms the mineralogical tests from various in situ samples obtained from across the mineralisation footprint, have again verified a range of graphite flake sizes from fines through to jumbo flake.

The Company verifies from the latest mineralogical test results, they show on average the graphite flake size distribution from the latest samples are as follows; **23%** of the graphite samples are very large flake which are **212µm** or larger, 36% are greater than 106µm (medium to large flake), 17% are greater than 75µm (medium flake), and 24% are less than 75µm (small flake) in size. These latest results are outlined below in Table 1.

Graphite Flake Sizes	Flake Distribution
+400um	7.3%
+212um	15.9%
+106um	36%
+75um	17.1%
-75um	23.7%

Table 1. Mineralogical Flake size distribution of the graphite as obtained from samples at Nicanda Hill.

The Company again notes the ratio of graphite flake sizes is unlikely to remain constant throughout the whole of the mineralisation footprint. However, given the wide-spread nature of the sampling, Triton believes these results are more representative of the type and sizing of the graphitic material found at the Nicanda Hill prospect.

Triton considers these additional in-situ flake size distribution results are very promising and will continue further test work to obtain a more detailed understanding of the physical characteristics of graphitic material throughout the 6.2km mineralisation footprint, in order to identify the most prospective areas for future mining activities, taking into account various graphite grades and flake sizing of the material identified to date.

Triton will continue working on an expanded metallurgical and mineralogical work program focused on testing the very large area of near-surface oxidised graphitic material which could potentially provide the Company with better overall graphitic grades and larger flake recovery.

Based on initial observations, the graphitic material in the northern prospects of the mineralisation footprint appears to host better graphite flake and grade within the weathered zone. Triton feels that if the metallurgical and mineralogical test work confirms these observations then the weathered zone in the northern prospects could possibly become the primary focus for Triton in the first 2-5 years of proposed graphite production.

Finally, the strong vanadium assay results has again increased Triton's confidence in the Nicanda Hill prospect, as a very large multi-element project and these results also underscore the potential importance of vanadium with respect to the overall future economics of the project when in production.



## SIGNIFICANT ASSAY RESULTS

Triton has now completed the initial exploratory drilling program on the Nicanda Hill prospect, with sixty one (61) RC drill holes and thirty six (36) diamond drill holes finished, for a total 16,348m drilled.

Diamond hole GBND0035 located just south of drill section N4, was drilled to a total depth of 475m. Visual logging has confirmed the strong presence of graphite schist along the entire length of the drill hole, with narrow intervals of non-graphitic tonalite gneiss. The graphitic mineralisation was identified from close to surface, with the drill hole finishing in graphite mineralisation and remains open at depth.

The Company also notes the positive indications of a possible hydrothermal breccia zone, identified at depth within the northern section of the mineralisation footprint (Figure 1). This possible hydrothermal breccia zone, also appears to confirm the extension of the HG1 zone. This is potentially a significant observation as it may be one of the controlling factors influencing the creation of the enriched graphite mineralisation zone in the northern part of the mineralisation footprint at Nicanda Hill.

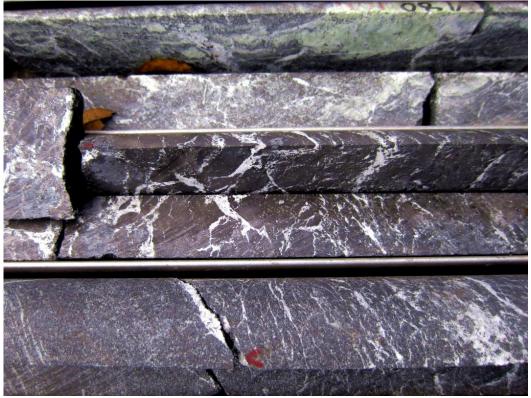


Figure 1. Diamond drill core from Nicanda Hill showing a possible hydrothermal breccia zone.

The Company again verifies that nearly all of the RC and diamond drill holes have finished in strong graphitic mineralisation and are open at depth. Triton confirms during this drilling program the average hole depth for the RC drill holes are 150m and 200m for the diamond drill holes.



The significant drill results for the RC and diamond drill holes that have been received by Triton for this latest part of the drilling program are shown in more detail in Table 2.

Hole ID	East	North	RL	Total Depth (m)	Dip	Azimuth	From (m)	To (m)	Interval (m)	GrC% (5% cut off)
GBND0004	477620	8542631	512	162	-60	125	63.1	78.0	14.9	10.6
GBND0006	477533	8543027	501	242	-60	125	11.8	32.5	20.7	11.8
GBND0006							42.4	63.0	20.6	10.2
GBND0006							172.9	199.1	26.3	11.2
GBND0007	477708	8542583	518	113	-60	125	2.8	12.9	10.2	11.8
GBND0008	477550	8542559	512	135	-60	125	2.5	80.2	77.7	10.8
GBND0008						includes	3.5	36.3	32.8	15.4
GBND0008						includes	5.4	19.4	14.0	20.1
GBND0008						includes	10.7	19.4	8.7	25.2
GBND0008						includes	15.2	16.2	1.0	34.1
GBND0009	477469	8542606	508	200	-60	125	56.8	68.1	11.3	17.8
GBND0009							79.4	98.3	18.9	13.0
GBND0009							113.7	145.3	31.6	10.6
GBNC0031	478383	8543692	515	150	-60	125	0.0	86.0	86.0	10.2
GBNC0031						includes	0.0	50.0	50.0	13.0
GBNC0031						includes	30.0	50.0	20.0	16.0
GBNC0036	478547	8544291	489	150	-60	125	8.0	130.0	122.0	10.0
GBNC0036						includes	10.0	76.0	66.0	12.2
GBNC0036						includes	10.0	28.0	18.0	14.3
GBNC0036						includes	52.0	76.0	24.0	13.3
GBNC0038	478379	8543898	500	192	-60	125	8.0	132.0	124.0	10.1
includes						includes	18.0	88.0	70.0	12.0
GBNC0041	479395	8544955	476	150	-60	125	62.0	96.0	34.0	10.0
GBNC0041							126.0	162.0	36.0	12.9
GBNC0041							136.0	160.0	24.0	16.3
GBNC0042	479224	8545956 <b>Table 2</b> Si	472	150	-60	125	6.0	22.0	16.0	11.2

 Table 2. Significant graphite intersects in drilling at Nicanda Hill

In most cases mineralisation extends from either surface or shallow depths to the end of hole.

Using a 5% TGC cut off, RC drill hole GBNC0031, located on drill section N12 returned high grade mineralisation of **86m** at **10.2%** TGC, which included **32.8m** at **15.4%** TGC and **20m** at **16%** TGC.

Also of note is RC drill hole GBNC0036, located on drill section N7, returned **122m** at **10.0%** TGC, which included **66m** at **12.2%** TGC, **18m** at **14.3%** TGC and **22m** at **13.5%** TGC.

Whilst, RC drill hole GBNC0038, also located on drill section N7, returned **124m** at **10.1**% TGC, which included **70m** at **12.0**% TGC. Finally, diamond drill hole GBND0008, located on drill section S2, returned **78m** at **10.8**% TGC, which included **32.8m** at **15.4**% TGC, **9m** at **25.2**% TGC and **1m** at **34.1**% TGC (Figure 2).

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9 October 2014

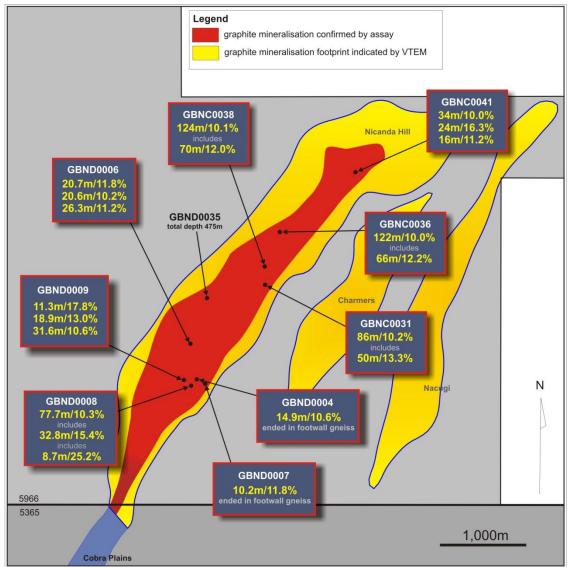


Figure 2. Plan showing significant drilling results at Nicanda Hill on License 5966

These strong drill results continue to reaffirm Triton's overall belief in the potential of the Nicanda Hill prospect and that the graphite mineralisation intensifies and strengthens towards the north of the mineralisation footprint and with less internal dilution from a reduced number of gneiss (non-graphitic) bands.

These results continue to indicate the strong presence of graphite and vanadium and Triton is confident of further high grade interceptions.

In a recent site visit by Triton's CEO/MD, the strong presence of both graphite and roscoellite vanadium in the northern section of the mineralisation footprint was highlighted when a number of graphitic samples were inspected (Figure 3.)





Figure 3. Drill core (left) and rock chip (right) samples from Nicanda Hill prospect on License 5966.

Triton confirms about 45% of RC and Diamond drilling assay results have now been received from the SGS South African laboratory and the Intertek Genalysis laboratory. A full-suite ICP (multi-element) analysis including vanadium on all samples continues in laboratories in both South Africa and Australia.

Triton confirms these latest RC and Diamond drill holes continue to show substantial visible flake graphite and roscoellite from surface to the end of hole with many holes over 200m deep and open at depth.

The assay and visual drilling results continue to confirm strong graphite and vanadium occurrences over substantial thicknesses across the entire mineralisation footprint. Based on these results Triton is confident of further high grade intercepts on the Nicanda Hill prospect during future drilling campaigns.

## **CONCLUSIONS**

The Company is encouraged by the continued excellent results and remains extremely confident that the Nicanda Hill prospect will become one of largest high-grade graphite and vanadium projects in the world.

These latest mineralogical results are very encouraging for Triton, as they have confirmed the substantial presence of large flake throughout the mineralisation footprint.

These latest drill results reaffirm the presence of multiple high grade graphite zones that are continuous and extend along the entire length of the mineralisation footprint for several kilometres from surface to depths in excess of 400 vertical metres.



The combined exploration and drilling data received to date continues to both enhance the geological robustness of the flagship Nicanda Hill prospect and support the rapid advancement towards another JORC 2012 compliant resource by the end of 2014.

Triton is optimistic of continued exploration success and looks forward to providing further exploration updates to the market as the information becomes available.

Regards

Brád 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 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.

#### **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 (Licence 5966 & 5365) Operated under Agreement between Triton Minerals and Grafex Lda. Information pertaining to drill data.

JORC Table 1 - Section 1 Sampling Techniques and	d Data
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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. The new drill results included in this report were obtained from Reverse Circulation (RC) and Diamond drilling. The nominal hole spacing of the current program is 100m x 400m. Diamond drill holes will be interspersed within the planned drill grid to provide qualitative information on structure and physical properties of the mineralisation. Holes were drilled -60 degrees towards UTM south east to optimally intersect the mineralised zones.				
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Drillhole locations were picked up by differential GPS (with nominal error of +- 0.5 metres) and reported using the World Geodetic System (1984 Spheroid and Datum; Zone 37 South). Downhole surveys of the RC and Diamond holes were measured using a Reflex single shot downhole survey tool. The collar surveys were validated with the use of a compass and inclinometer. RC samples have been collected using a riffle splitter to obtain a 1/8 <sup>th</sup> sample, which is split and combined to produce 2m composite samples. Efforts are taken to keep the RC drill sample material dry during drilling to avoid any bias. Wet samples are dried before riffle splitting and recorded to monitored results for bias.				
	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	Reverse circulation drilling was used to obtain 1m samples collected in a large bag and passed through a 3-tier riffle splitter to generate 1/8 <sup>th</sup> samples (approximately 3kg) contained in a labelled calico bag and the residual 7/8 <sup>th</sup> is retained at the drill site in the large bag. Where wet samples are encountered, the 3kg sample is allowed to dry before passing through the second stage (50:50) riffle splitter described below. The 3kg RC samples are split using a 50:50 splitter with one half combined with the half split of the next consecutive 1m sample to produce a 2m composite sample. This sample will be pulverised (total prep) by the lab to produce a sub sample for assaying. In addition, select RC samples will be submitted for multi-element analysis (55 elements) by sodium peroxide fusion with an ICP-AES finish. The diamond drill core samples are prepared as quarter core using diamond impregnated blade core saw. Samples generally are defined on the basis of geological contacts and range in drill hole intersections of 1.5 to 3m, with most approximately 2m.				
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).	The reverse circulation drill rig uses a 5.5 inch size hammer. Hole depths range up to a maximum depth of 222m (rig capability limit). The diamond drill holes are drilled with a PQ core size collar (typically around 30m deep) and HQ3 (61.1mm diameter) core size to the end of hole. Core is oriented using the Reflex ACTII tool.				



9 October 2014

Criteria	JORC Code explanation	Commentary			
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	The condition and a qualitative estimate of RC sample recover was determined through visual inspection of the 1m sample bags and recorded at the time of sampling. A hard copy and digital copy of the sampling log is maintained for data verification. Generally drill core recovery is above 95% below the base of oxidation. Core recovery is measured and compared directly with drill depths to determine sample recoveries.			
	Measures taken to maximise sample recovery and ensure representative nature of the samples	Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. RC samples were visually checked for recovery, moisture and contamination. Water entrainment into the sample is minimized through the use of additional high pressure air supply down hole. Wet samples are recorded as these generally have lower sample recovery.			
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Comparisons of RC and Diamond drill sample material on the neighbouring Cobra Plains deposit showed no statistically significant bias associated with the RC drill technique. Extensive diamond drilling will be carried out as part of this program to confirm the QAQC paramters of the sample material. Similar statitistical assessments of the sample result bias will be undertaken for the current drill program.			
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 holes 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. Geotechnical logging is carried out on all diamond drillholes for recovery, RQD and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is stored in the structure table of the database. 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 RC and Diamond drill holes includes recording lithology, mineralogy, mineralisation, weathering, colour an other features of the samples. RC Chip trays and diamond c trays are photographed. Geological descriptions of the mine 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	lf core, whether cut or sawn and whether quarter, half or all core taken.	Diamond core (HQ3) will be cut into quarter core onsite using a diamond impregnated blade on a brick saw. Quarter core samples generally 2 metres or less in core length will be submitted to the lab labelled with a single sample name. Each approximately 2m sample will be crushed and a 300g split will be taken. For pulverisation. Samples are generally defined according to geological unit boundaries. A batch of duplicate samples to sampled quartered core will be submitted to the same lab to investigate if any statistical bias is associated with the quarter compared to half core. The results of this study will be used to determine the appropriate sample methodology for future drill holes.			

9 October 2014

Criteria	JORC Code explanation	Commentary			
	lf non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples are collected on the rig using two riffle splitters. The majority of samples are dry. Two metre composite samples are generated by taking the 1m samples from the drill cyclone into a large bag and passing this material through a 3- tier riffle splitter to generate 1/8 <sup>th</sup> samples (approximately 3kg) contained in a labelled calico bag and the residual 7/8 <sup>th</sup> is retained at the drill site in the large bag. The 3kg RC samples will be split using a 50:50 splitter to and one half is to be combined with the half split of the consecutive 1m sample, producing a 2m composite sample. were generated for drilled intersections with visible graphite (>0.5% graphite). Where wet samples are encountered, the 3kg sample produced from the 1/8 <sup>th</sup> splitter is left to dry before passing through the 50:50 splitter. The typical composite sample size is 3 to 4kg.			
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<ul> <li>The sample preparation of the diamond core samples follows industry best practice in sample preparation involving oven drying (105°C), coarse crushing of the diamond core sample down to ~2 mm, split (500g) and pulverizing to a grind size of 85% passing 75 micron. The sample preparation for RC samples is identical, without the coarse crush stage.</li> <li>Field QC procedures involve the use of two certified reference material assay standards, along with certified blanks, and insertion of field duplicates.</li> <li>Certified standards are inserted at a rate of 1 in 25 (DD, RC and rock chip samples), duplicates were inserted at a rate of 1 in 20 and blanks are inserted at a rate of 1 in 50. QAQC samples are submitted with the rock chip samples.</li> </ul>			
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.				
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Field duplicates are taken on 2m composites for RC, using a riffle splitter. Field duplicates are taken as quarter core splits for diamond core.			
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The drill sample sizes are considered to be appropriate to correctly represent mineralisation at the Balama North project based on the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and percent value assay ranges for the primary elements.			
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The analytical techniques to be used to analyse all samples for Graphitic Carbon, Total Sulphur, and Total Carbon on a Leco Combustion Infrared Detection instrument. Detection limits for these analyses are considered appropriate for the reported assay grades. In addition, selected drill samples will be analysed for multi- element abundances using a fused disc digested in a four acid digest with ICP/OES or ICP/MS finish The acids used are hydrofluoric, nitric, perchloric and hydrochloric acids, suitable for silica based samples. The method approaches total dissolution of most minerals.			
	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.	No geophysical tools were used to determine any element concentrations.			

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9 October 2014

Criteria	JORC Code explanation	Commentary			
	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.	The RC and diamond core samples are submitted to the lab with blind certified standards (4 per 100 samples), blanks (2 per 100 samples) and field duplicates (5 per 100 samples). These QAQC samples represent 11% of the unknown samples analysed. Twinned RC and diamond holes provided a means of evaluating any bias associated with sampling and drill technique. From the Cobra Plains drilling, field duplicate datasets showed strong correlation coefficients (0.92 for the diamond samples and 0.98 for RC samples), indicating good repeatability of grades between paired samples. Sample preparation checks for fineness will be carried out by the laboratory as part of their internal procedures to ensure the grind size of 85% passing 75 micron was being attained. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, and repeats as part of their in house procedures. Repeat analysis for samples reveals that precision of samples is within acceptable limits. A selection of the 1/8th riffle split samples have been submitted for umpire assays to SGS and an independent laboratory Intertek Genalysis (Perth) as independent checks o the assay results. Umpire laboratory campaigns using oth South Afrian and Australian laboratories has been implemented as a routine.			
/erification of campling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Simon Plunkett, an independent geological consultant for Triton, has visually verified the geological observations of mos of the reported RC and Diamond drill holes and this has then been reviewed and confirmed by Optiro. The geological of all drill chips and core is undertaken by by trained geological staf on site.			
	The use of twinned holes.	Three RC holes were twinned with diamond holes at the neighbouring Cobra Plains deposit to investigate sample bias related to the RC drill and sampling methods. The mineralisation zones within the holes show a reasonable correlation. Though the grade graphs suggest that the diamond holes are reporting higher graphitic carbon grades than the RC holes.			
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Sample information is recorded at the time of sampling in electronic and hard copy form. Assay data is received from SGS in electronic form and compiled into the Company's digit database. Secured electronic print files have been provided t the Company for verification purposes.			
	Discuss any adjustment to assay data.	No adjustments or calibrations are made to any assay data.			
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.	The din and azimuth of all UU holes is measured by the drill			

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9 October 2014

Criteria	JORC Code explanation	Commentary			
	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).			
	Quality and adequacy of topographic control.	Topographic surface for drill section is based on the differentia GPS coordinates for the drill holes.			
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The nominal drillhole spacing is 100 m on drill lines spaced 400m apart. The drill lines have a bearing of 120° (UTM grid northeast).			
	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. On completion of the current drill program and the receipt of all necessary data, the Company will undertake an estimation of the resource for the Nicanda Hill prospect.			
	Whether sample compositing has been applied.	Samples have been composited to a maximum of two metres for RC samples. Most diamond core samples are taken as approximately 2m lengths of quarter core, with few samples of upto 3m in length of core for zones of low graphite. Diamond core sample breaks corresponding to geological boundaries.			
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. Near continuous sampling of all geological units bearing graphite is routinely undertaken.			
	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 small-scale folding and thin tonalite veins. The orientation of these folds and veins is generally parallel to the attitude of th graphitic schist and mineralisation. Thus, the current drilling 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.	A QAQC review of the sampling data from the drill holes at Cobra Plains was carried out by Optiro as part of the resource estimate for the Cobra Plains deposit. This deposit is located to the southeast of Nicanda Hill. The Cobra Plains database was considered by Optiro to be of sufficient quality to carry out that resource estimation. A review of sampling techniques is currently being undertaken by Optiro as part of a resource estimate for Nicanda Hill. The QAQC samples inserted with the reported RC chip samples returned values within the expected value ranges. On this basis, the reported drill assay results are considered representative and suitable for assessing the graphite grades of the intersected graphite mineralisation.			



9 October 2014

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 Cobra Plains Deposit and the Nicanda Hill Prospect are located wholly within Exploration Licences EL5365 and EL59 respectively within the Cabo Delgado Province of Mozambique. Both licences are held by Grafex Limitada (Grafex), a Mozambican registered company. Triton Minera entered into a Joint Venture (JV) agreement in December 20 with Grafex to earn up to an 80% interest in Grafex's portfo of graphite projects. In late 2013 Triton increased their hold in the projects to 60% by taking a direct equity interest in Grafex. EL5365 is valid until 29/10/2017 and EL5966 is vali 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 Cobra Plains or the Nicanda Hill Prospects of the Balama North Project. The Company has acquired the data from an airborne electromagnetic survey that covers Licences 5966 an 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. The Cobra Plains graphite deposit is hosted within Neoproterozoic rocks of the Xixano Complex in north-eastern Mozambique. The Xixano complex is composed dominantly o mafic to intermediate orthogneiss with intercalations of paragneiss, meta-arkose, quartzite, tremolite-rich marble and graphitic schist. Graphite mineralisation is hosted within fine grained graphitic schists underlain and overlain by felsic gneis rock types. Mineralisation occurs as series of multiple stacked tabular northeast-southwest striking lodes moderately dippin to the northwest. Graphite mineralisation outcrops at surface and has been intersection at down hole depths of up to 428.55m below surface. Graphitic mineralisation is interprete to be continuous between the Cobra Plains and the Nicanda Hill Prospects of the Balama North Deposit, based on the interpretation of the airborne electromagnetic survey data an drill results. Occurrences of vanadium mineralisation noted ir the samples is thought to be associated with quartz muscoviti <u>+</u> roscoelite schists.		
Geology	Deposit type, geological setting and style of mineralisation.			
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul></li></ul>	Refer to Appendix 2 below.		

# JORC Table 1 - Section 2 Reporting Of Exploration Results



9 October 2014

Criteria	JORC Code explanation	Commentary			
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	No top cut applied Minimum composite width = 6m Maximum internal dilution = 2m Weighted average grades calculated using the Surpac High Grade reporting function using the above parameters			
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	The significant weighted average graphite carbon (TGC) intersections reported were calculated as core-length weighted assay intercepts. The intersection calculations were made applying a maximum internal dilution of 2m for material below the GrC cutoff grade and a minimum composite width of 2m. Significant intercepts are reported at cutoff grade of 10% GrC.			
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	V2O5 is calculated from V% using a factor of 1.786			
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The graphite schists and tonalite gneiss units dip moderately northwest based on outcrop exposures and measured structure in the oriented diamond drill holes. All GNBC drill holes are inclined -60° to the southeast to intersect the mineralised zones approximately orthogonal to the interprete dip and strike of the geological boundaries. The reported intersections are considered to be near to true intercept widths.			
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to previous Company announcements.			
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Refer to Table 1 in Appendices 2 and 3 for more details.			
Other substantive         exploration data         Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.		Selected core samples from all diamond drill holes are measured for bulk densities. This, and additional data from future drill holes will be used to estimate average densities for rock types. Multi element assaying was conducted on selected zones in the diamond drill holes TMBD0005 and TMBD006. Geotechnical logging is routinely carried out on all diamond drillholes for recovery, RQD and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is stored in the structure table of the database. Regional scale mapping has been carried out in the area to identify outcrop of graphitic material. This mapping is ongoing.			
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	Drill testing using reverse circulation and diamond drilling is now complete for 2014 on Nicanda Hill prospect to determine the grade continuity and width of the graphitic units. Exploration activities are expected to resumed in April 2015.			

# **APPENDIX 2**

Table 1. Completed drill holes as at 8 October 2014 on the Balama	North project on License 5966.
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HOLEID	x	У	Z	Depth (m)	Azimuth	Dip	Туре
GBND0001	477632	8543201	501	373	120	-60	DD
GBND0002	477608	8542754	509	185	120	-60	DD
GBND0003	477536	8542681	515	156	120	-60	DD
GBND0004	477621	8542632	513	162	120	-60	DD
GBND0005	477171	8543003	494	429	120	-60	DD
GBND0006	477530	8543026	505	220	120	-60	DD
GBND0007	477709	8542583	519	113	120	-60	DD
GBND0008	477550	8542559	513	135	120	-60	DD
GBND0009	477469	8542606	509	200	120	-60	DD
GBND0010	477319	8542458	510	218	120	-60	DD
GBND0011	477403	8542407	513	153	120	-60	DD
GBND0012	477161	8542093	514	153	120	-60	DD
GBND0013	477671	8542897	511	211	120	-60	DD
GBND0014	476992	8542186	504	207	120	-60	DD
GBND0015	476846	8541809	510	177	120	-60	DD
GBND0016	476760	8541393	544	150	120	-60	DD
GBND0017	478116	8543846	495	279	120	-60	DD
GBND0018	476564	8541049	515	152	120	-60	DD
GBND0019	478290	8543742	500	200	120	-60	DD
GBND0020	478477	8543866	505	200	120	-60	DD
GBND0021	478563	8543866	510	200	120	-60	DD
GBND0022	477847	8543521	508	250	120	-60	DD
GBND0023	478133	8543371	601	275	120	-60	DD
GBND0024	478174	8543288	582	93	120	-60	DD
GBND0025	478004	8543439	537	245	120	-60	DD
GBND0026	478629	8544249	503	267	120	-60	DD
GBND0027	478721	8544169	550	167	120	-60	DD
GBND0028	478752	8544047	579	162	120	-60	DD
GBND0029	478935	8544285	558	111	120	-60	DD
GBND0030	478818	8544381	501	189	120	-60	DD
GBND0031	478844	8544811	475	327	120	-60	DD
GBND0032	478796	8544607	482	255	120	-60	DD
GBND0033	479028	8544937	474	252	120	-60	DD
GBND0034	479132	8545108	469	278	120	-60	DD
GBND0035	477714	8543546	494	475	120	-60	DD
GBNC0001	477882	8542824	523	72	120	-60	RC
GBNC0002	477694	8542701	514	114	120	-60	RC
GBNC0003	477628	8542973	507	153	120	-60	RC
GBNC0004	477719	8543151	506	117	120	-60	RC
GBNC0005	477548	8543251	497	222	120	-60	RC
GBNC0006	477460	8543298	494	150	120	-60	RC

HOLEID	х	у	Z	Depth (m)	Azimuth	Dip	Туре
GBNC0007	477367	8543354	491	108	120	-60	RC
GBNC0008	477784	8542657	517	84	84 120		RC
GBNC0009	477518	8542801	505	150	120	-60	RC
GBNC0010	477431	8542854	502	291	91 120		RC
GBNC0011	477346	8542902	498	118 120		-60	RC
GBNC0012	477259	8542957	497	90			RC
GBNC0013	477447	8543077	499	150			RC
GBNC0014	477358	8543125	495	150	120	-60	RC
GBNC0015	477274	8543183	492	150	120	-60	RC
GBNC0016	477290	8543413	489	150	120	-60	RC
GBNC0017	477980	8543001	545	125	120	-60	RC
GBNC0018	477625	8542499	519	90	120	-60	RC
GBNC0019	477490	8542361	518	100	120	-60	RC
GBNC0020	477238	8542511	506	150	120	-60	RC
GBNC0021	476971	8542657	506	150	120	-60	RC
GBNC0022	477144	8542557	506	130	120	-60	RC
GBNC0023	477057	8542607	506	108	120	-60	RC
GBNC0024	477249	8542044	522	82	120	-60	RC
GBNC0025	477076	8542138	510	84	120	-60	RC
GBNC0026	477788	8543572	495	150	120	-60	RC
GBNC0027	477702	8543625	489	114	120	-60	RC
GBNC0028	478041	8543894	491	150	120	-60	RC
GBNC0029	478207	8543794	500	150	120	-60	RC
GBNC0030	477951	8543941	487	150	120	-60	RC
GBNC0031	478383	8543693	507	150	120	-60	RC
GBNC0032	479199	8544610	499	102	120	-60	RC
GBNC0033	479111	8544658	494	150	120	-60	RC
GBNC0034	478936	8544761	479	186			RC
GBNC0035	478739	8544412	490	200 120		-60	RC
GBNC0036	478548	8544291	490	150	120	-60	RC
GBNC0037	478215	8544017	491	150	120	-60	RC
GBNC0038	478379	8543898	500	192	120	-60	RC
GBNC0039	478308	8543972	495	150	120	-60	RC
GBNC0040	479393	8544954	477	150	120	-60	RC
GBNC0041	479224	8545056	472	162	120	-60	RC
GBNC0042	479048	8545154	466	138	120	-60	RC
GBNC0043	476904	8542236	501	165 120		-60	RC
GBNC0044	477004	8541715	514	110 120		-60	RC
GBNC0045	476917	8541764	514	150 120		-60	RC
GBNC0046	476784	8541838	507	216 120		-60	RC
GBNC0047	476852	8541343	523	102	120	-60	RC
GBNC0048	476475	8541097	513	218	120	-60	RC
GBNC0049	476392	8541148	510	156	120	-60	RC
GBNC0050	476684	8541441	513	200	120	-60	RC
GBNC0051	476591	8541494	510	144	120	-60	RC

HOLEID	Х	Y	Z	Depth (m) Azimuth		Dip	Туре
GBNC0052	476819	8542288	498	82	120	-60	RC
GBNC0053	476732	8542339	494	42	120	-60	RC
GBNC0054	477792	8542875	517	144	120	-60	RC
GBNC0055	479018	8544709	484	150	120	-60	RC
GBNC0056	478885	8544560	486	150	120	-60	RC
GBNC0057	479116	8544880	478	150	120	-60	RC
GBNC0058	479312	8545002	476	150	120	-60	RC
GBNC0059	479508	8545350	469	150	120	-60	RC
GBNC0060	479593	8545298	471	149	120	-60	RC
GBNC0061	479710	8545015	468	132	120	-60	RC
GBNC0062	479792	8544955	466	102	120	-60	RC

# **APPENDIX 3**

**Table 1.** Weighed average grades for graphite and vanadium pentoxide for mineralogical samples obtained from the Nicanda Hill prospect on License 5966.

Hole ID	East	North	RL	Total Depth (m)	Dip	Azimuth	Average TGC %	Average V <sub>2</sub> O <sub>5</sub>
GBND0006	477533	8543027	501	242	-60	120	16.1	0.34
GBND0014	477358	8543125	495	150	-60	120	28	0.50
GBND0015	476846	8541809	510	177	-60	120	15.8	0.34
GBND0020	478477	8543866	505	200	-60	120	10.4	0.34
GBNC0031	478383	8543693	507	150	-60	120	12.9	0.43
TMBD0005	477889	8543043	552	177	-55	130	16.9	0.36
TMBD0006	477787	8543166	515	186	-55	128	15.3	0.48