

# MULTIPLE HIGH-GRADE GRAPHITE ZONES CONFIRMED AT NICANDA HILL

### **HIGHLIGHTS:**

- Additional drilling results have delineated newly identified hanging wall higher grade zones
- Selected significant interesections of weighted average graphite carbon (GrC), include:
  - o 34m at 9.5% GrC in GBNC0005
  - o 80m at 10.3% GrC in GBNC0006
  - o 24m at 12.2 GrC in GBNC0006
  - o 30m at 11.6% GrC in GBNC0006
  - o 24m at 9.1% GrC in GBNC0007
  - o 16m at 10.3% GrC in GBNC0009
- Drilling is now focused on testing the continuity of the multitude of interpreted high grade zones
- Drilling to date has demonstrated the continutity and consistency of graphite mineralisation over a strike length of 2.5km between drilled holes and trenches
- The horizontal width of the graphite mineralization at surface is expanded to 1,000m and still remains open to the northwest
- The drilling results continue to correlate strongly with the VTEM survey data
- Second diamond drill rig mobilized to support and accelerate operations at Nicanda Hill
- Refined scoping study now extended to include Nicanda Hill

**Triton Minerals Limited** (ASX: TON, "Triton", "the Company") is extremely pleased to confirm additional assay results from the RC drilling program, has now verified newly identified high grade zones of the graphite mineralisation at Nicanda Hill.

Triton Minerals Managing Director Brad Boyle said "The identification of even more high grade zones to the west of the orginal HG1 zone, whilst maintaining an overall average of 11% graphite carbon, is a very encouraging result for the Company.

Further, the drilling has also expanded the horizontal width of the graphite mineralization zone to an exceptional 1,000m. These are very exciting results for Triton and they continue to show the world class potential of the Balama North project."



#### **SIGNIFICANT ASSAY RESULTS**

Triton has completed twenty six (26) RC drill holes and eight (8) diamond holes in the current drilling program on the Nicanda Hill prospect that has been designed to test the width and potential continuity of the interpreted graphitic zone as suggested by the conductive zones identified in VTEM data (Figure 5 below)

The additional assay results for RC drill holes GBNC0004 to GBNC0009 have been received and are shown in Figures 1 and 2 and Table 1.

Significantly, at a 5%GrC cut off, GBNC0006 has returned **80m** at **10.3%**GrC. Within this 80m intersection are three high grade intervals at a 10%GrC cut off, which include 24m at 12.2%GrC. The geological unit from which returned the intercept of 24m at 12.2%GrC has been designated as the **HG2 zone** (Figure 1).

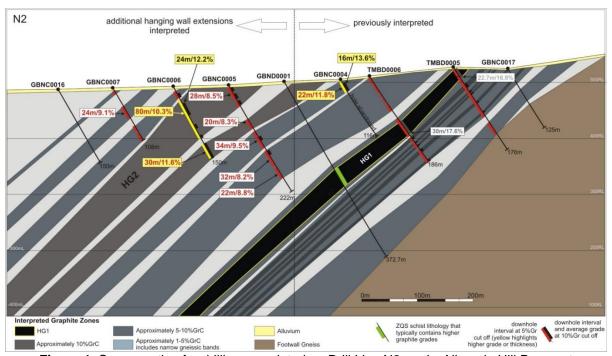


Figure 1. Cross section for drilling completed on Drill Line N2 on the Nicanda Hill Prospect

#### **POTENTIAL OF THE HG2 ZONE**

HG1 was intersected by diamond drill holes TMBD0005 and TMBD0006 that were completed in November 2013. At a 10%GrC cut off, these holes reported 30m at 17.6%GrC and 22.7m at 16.9%GrC respectively (Figure 1). With the additional drilling information from the 2014 drilling campaign, the continuity of the zone became apparent.



The latest assay results have now confirmed the presence of HG2 which is located about 400m across strike to the north west from HG1. HG2 has an interpreted true thickness of 80m with grades, to date, averaging approximately 10%GrC.

As preveiously announced, diamond drill hole GBND0001 on section N2, has intersected the identical rock type that defines HG1 at a point that is 145m down dip from TMBD0006. The HG1 zone in GBND0001 is developed over a downhole interval of 34m from 181m. Assay results are pending.

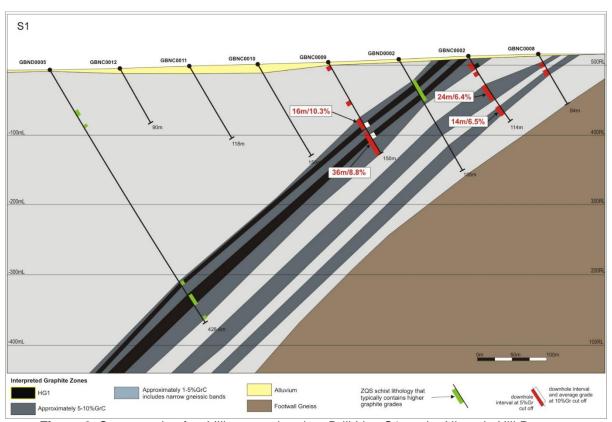
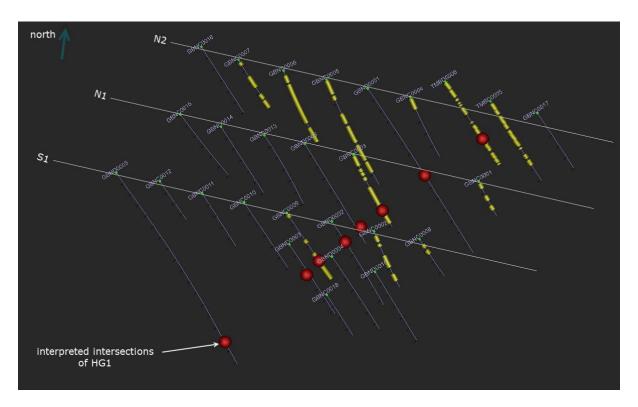


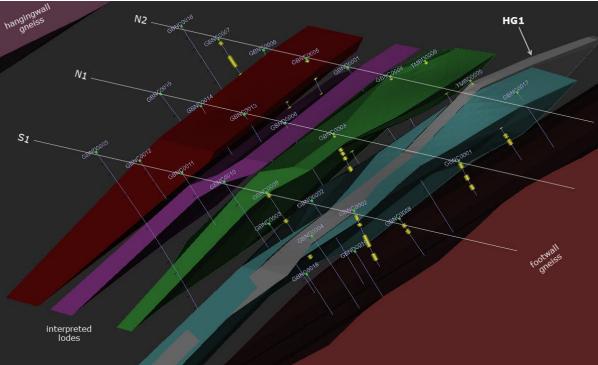
Figure 2. Cross section for drilling completed on Drill Line S1 on the Nicanda Hill Prospect

As previously announced HG1 has also been intersected in diamond drillhole GBND0003 (S1.5) from 33m to 77m downhole (Figure 4). Assays are pending. This intersection confirms the geological continuity of HG1 is over a strike length of 540m. Based on the drilling to date Triton expects that HG2 will show a similar continuity.

The modeled section of Nicanda Hill is shown in Figure 3. Additional footwall and hangingwall lodes are likely to be included but this will be subject to obtaining additional drilling results.







**Figure 3.** Oblique view from above and towards to north-west of 3D model of Nicanda Hill based on results to date (yellow bars show intercepts at 5%GrC cut off). Top diagram: drilling only, Bottom diagram: interpreted geology shown.



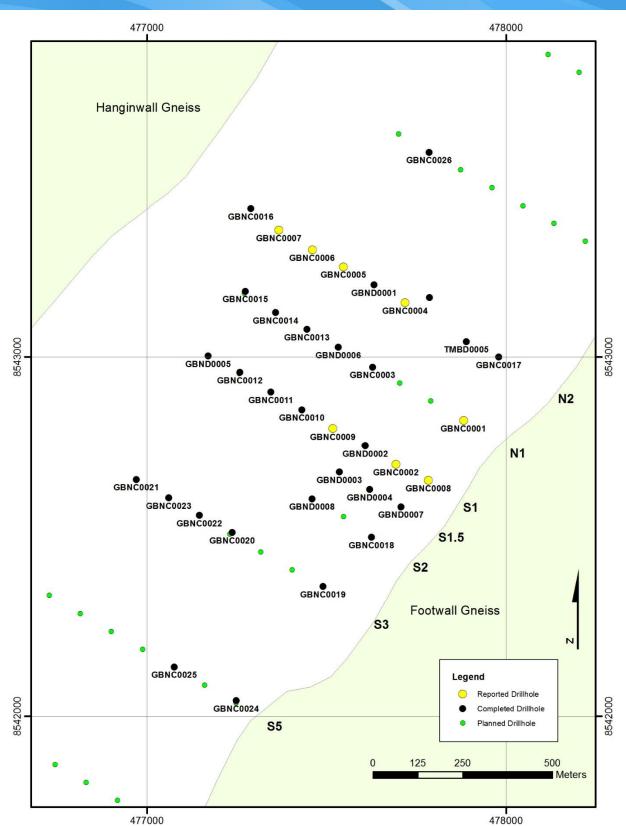


Figure 4. Nicanda Hill prospect drillhole location plan



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Drill Section	Drill Type	Hole Id	Northing	Easting	RL	Total Depth	Azimuth/Dip	Cut Off Graphite	From (m)	To (m)	Interval (m)	%GrC
	1,60					(m)		C%	(,	(,	(,	
N2	RC	GBNC0001	8542824	477882	523	72	150/-60	5	5	15	10	7.75
								5	30	40	10	6.24
								5	50	60	10	7.24
S1	RC	GBNC0002	8542701	477694	514	114	150/-60	5	9	21	12	9.78
								5	25	31	6	6.96
								5	49	73	24	6.44
								5	87	101	14	6.49
N2	RC	GBNC0004	8543151	477719	506	124	150/-60	5	3	25	22	11.78
N2	RC	GBNC0005	8543251	477548	496	222	150/-60	5	2	30	28	8.53
								5	34	42	8	12.93
								5	71	91	20	8.29
								5	97	131	34	9.51
								5	137	169	32	8.20
								5	173	195	22	8.76
N2	RC	GBNC0006	8543298	477460	494	150	150/-60	5	10	24	14	10.33
								5	28	108	80	10.28
								5	119	149	30	11.58
N2	RC	GBNC0007	8543354	477367	491	108	150/-60	5	6	12	6	9.01
								5	38	62	24	9.11
								5	78	88	10	5.86
								5	92	108	16	7.27
S1	RC	GBNC0008	8542657	477784	517	84	150/-60	5	13	19	6	8.54
								5	25	33	8	7.49
S1	RC	GBNC0009	8542801	477518	505	150	134/-60	5	4	10	6	7.41
								5	62	68	6	8.55
								5	92	108	16	10.28
								5	114	150	36	8.77
S1	RC	GBNC0002	8542701	477694	514	114	150/-60	10	15	21	6	11.97
N2	RC	GBNC0004	8543151	477719	506	124	150/-60	10	9	25	16	13.56
N2	RC	GBNC0005	8543251	477548	496	222	150/-60	10	14	20	6	10.67
								10	34	42	8	12.93
								10	109	117	8	12.91
								10	139	147	8	10.78
N2	RC	GBNC0006	8543298	477460	494	150	150/-60	10	16	24	8	11.45
								10	36	60	24	12.22
								10	80	88	8	12.30
								10	102	108	6	14.03
								10	119	147	28	11.83
S1	RC	GBNC0009	8542801	477518	505	150	134/-60	10	102	108	6	13.47
								10	120	126	6	13.53

Table 1. Significant Intersections

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The latest drilling results continue to support the Company's belief that the graphite mineralisation potential continued down dip to the northwest to considerably greater depths than already intersected in GBND0005 (428.6m total hole depth).

Triton confirms that assay results for the diamond holes have unfortunately been delayed and the Company will be provide these results to market once they become available.

### **KEY POINTS**

- The reported results have identified multiple high grade graphite zones of substantial widths along the entire length of all drillholes completed to date.
- Further, these results continue to verify the continutity and consistency of previously identified high grade zones.
- The assay results to date are demonstrating average grades 13.7% graphitic carbon at a 10% cut off.
- The horizontal width of the graphite mineralization at surface is expanded to an exceptional 1,000m and still remains open to the northwest.
- These latest observations dramatically expand the known mineralisation zone and demonstrates good continuity and consistency in the graphite mineralisation over a considerable distance.
- The drilled graphite mineralization intersections correlate strongly with the zone of high electrical conductivity defined by the VTEM survey data.

#### ONGOING EXPLORATION

Presently the drilling has demonstrated a width of over 1,000m of graphite mineralisation at surface (extended with GBNC0016) and over 400m vertically. Additional holes are planned to the northwest of hole GBNC0016, to close off the zone of graphite mineralisation on drill line N2.

The deep intersections of graphite mineralisation in GBND0001 and GBND0005 lends further support to this interpretation. Graphite mineralisation to these depths exceed the Company's original target expectations and the Company is excited by the fact that the zone still remains open to the northwest.

Furthermore, the Company is yet to drill on of the ridge of Nicanda Hill, which recent survey data confirms has an elevation of more than 90m above the collars of the drilled holes.



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To date the trenching and drilling at Nicanda Hill Prospect has demonstrated graphite mineralization over 2.5km between drill line S5 and Trench 2 (Figure 5). The Company is looking to extend the known extents of the graphite mineralisation on the Nicanda Hill prospect with further drill testing of the 5km long high electrical conductivity zone, defined by the VTEM survey data.

These drilling results continue to expand the depths and width of the defined graphite mineralization zone on the Nicanda Hill prospect, with the zone still remaining open to the north, south and west.

With the identification of the multiple high grade graphite zones, the drilling program has now been refined to focus on the interception and delination of these zones.

A systematic multi-element assaying program will also commence in order to assess the potential for economic concentrations of vanadium as is suggested by the multiple occurrences of vanadium hosting roscoelite (K(V3+,AI,Mg)2AISi3O10(OH)2) mineralization in the drill samples returned to date.

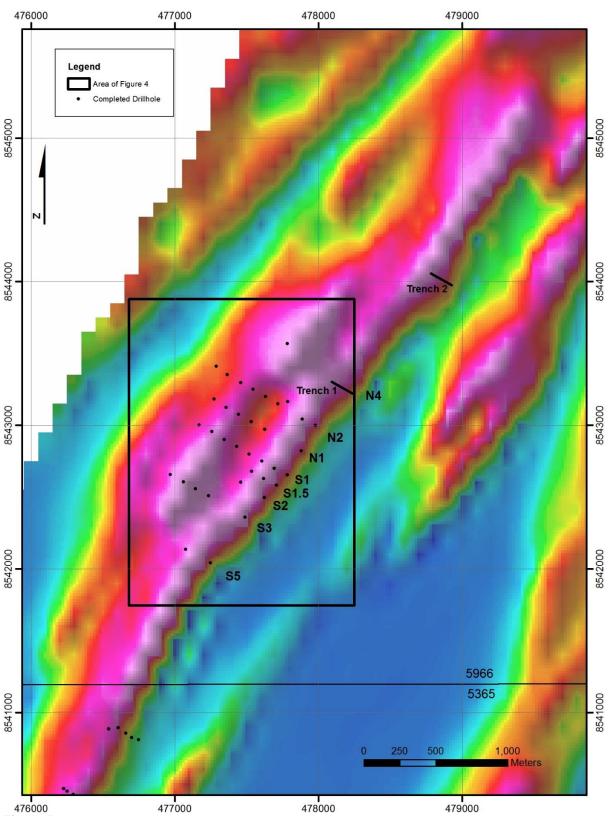
The Company confirms that the second diamond drill rig has arrived at site and is engaged to provide additional drilling support in the current drilling program at Nicanda Hill, to ensure that the key exploration objectives are achieved in a timely fashion.

#### **SCOPING STUDY**

Due to strong drilling results currently being obtained, Triton confirms that the refined scoping study, which was initially focused on the Cobra Plains deposit alone, has now been extended by the Company to include the Nicanda Hill prospect.

Further, Triton verifies that the Balama North scoping study will now be escalated to be based on, if not entirely, on a high proportion of an indicated resource as classified by the JORC 2012 guidleines.





**Figure 5.** Location of completed RC and Diamond drill holes on the Nicanda Hill Prospect. Base image is the 50m conductivity depth slice from the VTEM survey overlain by elevation contours highlighting the topographic high of Nicanda Hill and the ridge east of Cobra Plains. The drill lines N1, N2 and S1 are presented in Figures 1, 2 and 4.



#### **IMPLICATIONS**

These drilling results continue to demonstrate that the Balama North project can potentially host a market leading and world class high grade graphite deposit and could become one of the **largest high-grade graphite projects in the world**.

The strategy of testing the full stratigraphic width and downdip extensions enables the Company to assess the scale of the deposit in order to better plan for resource-conversion drill spacing and the targeting of higher quality mineralization that may amenable to open pit extraction. As such, the drilling program will be modified to accelerate the conversion from the expected future inferred JORC resource to indicated JORC resource, in the areas that would most likely support mining activities.

Triton is extremely confident of continued exploration success and is looking forward to providing further exploration updates to the market, as the information becomes available.

Regards

Brad Boyle Managing Director Triton Minerals Ltd



### 7 July 2014

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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 Member of Australian Institute of Mining and Metallurgy. 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 Balama North project is extracted from the reports entitled ASX Release "High Grade Graphite Discovery at Nicanda Hill" created 22 January 2014 and ASX Release "Exceptional Graphite Interceptions At Nicanda Hill" created 19 May 2014, ASX Release "Significant High-Grade Graphite Intersected At Nicanda Hill" created 23 June 2014 and are available to view on <a href="www.tritonmineralstd.com.au">www.tritonmineralstd.com.au</a> 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**

**Table 1**. Drill holes information GBNC0001 to GBNC00026, GBND0001 to GBND0008 and TMBD0005 and TMBD0006.

Hole_ID	Drill Type	North	East	RL	Total Depth (m)	Dip	Azimuth
GBND0001	DD	8543201.0	477632.0	501.2	372.7	-60	126
GBND0002	DD	8542753.5	477608.3	508.8	184.8	-60	126
GBND0003	DD	8542680.7	477536.3	515.0	155.6	-60	126
GBND0004	DD	8542631.7	477620.9	512.9	161.7	-60	126
GBND0005	DD	8543003.1	477170.5	493.9	428.6	-60	126
GBND0006	DD	8543027.6	477533.9	501.6	242.5	-60	126
GBND0007	DD	8542583.4	477708.9	518.9	113.4	-60	126
GBND0008	DD	8542605.0	477460.0	500.0	110.0	-60	126
GBNC0001	RC	8542823.7	477881.9	522.6	72.0	-60	150
GBNC0002	RC	8542701.2	477693.8	513.8	114.0	-60	150
GBNC0003	RC	8542972.8	477628.1	506.5	153.0	-60	150
GBNC0004	RC	8543151.2	477719.2	505.9	124.0	-60	150
GBNC0005	RC	8543251.1	477547.6	496.5	222.0	-60	150
GBNC0006	RC	8543298.3	477460.4	493.9	150.0	-60	150
GBNC0007	RC	8543353.8	477367.4	490.9	108.0	-60	150
GBNC0008	RC	8542656.6	477784.2	517.3	84.0	-60	150
GBNC0009	RC	8542800.8	477518.0	504.7	150.0	-60	134
GBNC0010	RC	8542853.6	477431.1	501.8	150.0	-60	150
GBNC0011	RC	8542902.2	477345.8	498.0	118.0	-60	150
GBNC0012	RC	8542957.0	477259.1	496.6	90.0	-60	150
GBNC0013	RC	8543077.4	477446.6	498.8	150.0	-60	126
GBNC0014	RC	8543124.7	477358.3	495.4	150.0	-60	126
GBNC0015	RC	8543183.1	477274.0	492.4	150.0	-60	126
GBNC0016	RC	8543413.3	477289.7	489.0	150.0	-60	126
GBNC0017	RC	8543000.5	477980.2	535.1	125.0	-60	126
GBNC0018	RC	8542498.7	477625.1	518.5	90.0	-60	126
GBNC0019	RC	8542361.2	477490.3	518.0	100.0	-60	126
GBNC0020	RC	8542511.2	477237.6	505.5	150.0	-60	126
GBNC0021	RC	8542659.0	476970.0	524.0	150.0	-60	126
GBNC0022	RC	8542559.6	477146.7	502.3	150.0	-60	126
GBNC0023	RC	8542608.4	477061.4	498.0	108.0	-60	126
GBNC0024	RC	8542043.9	477249.3	521.6	82.0	-60	126
GBNC0025	RC	8542137.7	477076.3	510.4	84.0	-60	126
GBNC0026	RC	8543570.9	477787.0	500.0	150.0	-60	126
TMBD0005	DD	8543043.0	477889.0	552.0	176.5	-55	136
	DD	+		542.0			134
TMBD0006	טט	8543166.0	477787.0	542.0	185.6	-55	134





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## **Appendix 2**

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

Criteria	ection 1 Sampling Techniques and 1  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 mineralization. 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 1/8th samples (approximately 3kg) contained in a labelled calico bag and the residual 7/8th 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, facesampling 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.



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 recovery 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 and other features of the samples. RC Chip trays and diamond core trays are photographed. Geological descriptions of the mineral 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.	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.



Criteria	JORC Code explanation	Commentary
	If 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 1/8th samples (approximately 3kg) contained in a labelled calico bag and the residual 7/8th 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 1/8th 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.	The sample preparation of the diamond core samples follows industry best practice in sample preparation involving oven drying ( $105^{\circ}$ C), coarse crushing of the diamond core sample down to $^{\sim}$ 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.
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	Field QC procedures involve the use of two certified reference material assay standards, along with certified blanks, and insertion of field duplicates.  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.
	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 multielement 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.



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 will be submitted for umpire assays to SGS and an independent laboratory as independent checks of the assay results. Umpire laboratory campaigns using other laboratories is yet to be undertaken.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Carl Young of Model Earth Geological Global Services, a consultant for Triton, has visually verified the geological observations of most of the reported RC and Diamond drill holes. The geological of all drill chips and core is undertaken by by trained geological staff 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 digital database. Secured electronic print files have been provided to 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.	Collar locations for all GNBC and GBND holes were surveyed with a differential GPS.  The drillholes with the prefix TMB (drilled in 2013) were surveyed by hand-held GPS (nominal error of 5 metres). Drill holes were oriented at the collar using sighting pegs installed with the use of a magnetic compass and GPS. The dip of all RC holes is recorded for the collar only and no downhole surveys were taken.  The dip and azimuth of all DD holes is measured by the drll company using a Reflex singleshot downhole survey tool. Readings were taken at the completion of the hole at an interval spacing of 30 m on the diamond holes, and at the collar and end of hole on the RC holes. Stated accuracy of the tool is is +-1°.  Downhole survey measurements considered to be poor quality are coded as 'Priority 2' and are e excluded from the drill location calcuations.
	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).



Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	Topographic surface for drill section is based on the differential GPS coordinates for the drill holes.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The nominal drillhole spacing is $100\mathrm{m}$ on drill lines spaced $400\mathrm{m}$ apart. The drill lines have a bearing of $120^{\mathrm{o}}$ (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) at 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 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.	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. No reviews or audits of sampling techniques were undertaken by Optiro or any other external consultant.  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.



## 7 July 2014

## JORC Table 1 - Section 2 Reporting Of Exploration Results

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 EL5966 respectively within the Cabo Delgado Province of Mozambique. Both 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 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 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 Cobra Plains graphite deposit is hosted within Neoproterozoic rocks of the Xixano Complex in north-eastern Mozambique. The Xixano complex is composed dominantly of 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 gneiss rock types. Mineralisation occurs as series of multiple stacked tabular northeast-southwest striking lodes moderately dipping to the northwest. Graphite mineralisation outcrops at surfaces and has been intersection at down hole depths of up to 428.55m below surface. Graphitic mineralisation is interpreted 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 and drill results. Occurrences of vanadium mineralisation noted in the samples is thought to be associated with quartz muscovite $\pm$ roscoelite schists.
Drill hole Information	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:  • easting and northing of the drill hole collar  • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar  • dip and azimuth of the hole  • down hole length and interception depth  • hole length.	Refer to Appendix 1 – Table 1.



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 = 2m 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 (GrC) 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. Two sets of significant intercepts are reported at cutoff grades of 5% and 10% GrC.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used for reporting exploration results.
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 interpreted 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 Figure 1 to 5 in the body of the text.
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.	Assays for all drill holes except GBNC0003 and the upper part of GBNC005 are outstanding.
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	Further drill testing using reverse circulation and diamond drilling is underway on the Nicanda Hill prospect to determine the grade continuity and width of the graphitic units.  Exploration activities resumed in April 2014.