

21 October 2014

NICANDA HILL MAIDEN JORC RESOURCE – 1.457 BILLION TONNES AT 10.7%TGC AND 0.27% V₂O₅

HIGHLIGHTS:

- Maiden Mineral Resource of 1.457 Bt at 10.7% TGC and 0.27% V₂O₅, containing 155.9 Mt of graphite and 3.93 Mt of V₂O₅.
- The Nicanda Hill Deposit comprises:
 - Indicated Mineral Resource: 328 Mt at 11.0% TGC and 0.26% V2O5
 - Inferred Mineral Resource: 1,129 Mt at 10.6% TGC and 0.27% V2O5
- Nicanda Hill is the world's largest known combined Graphite-Vanadium deposit
- Hydrothermal (Motula) zone averages nearly 12% TGC
- Graphite mineralisation open along strike and at depth
- Triton to rapidly advance Nicanda Hill towards production
- Triton seeking to become market leader in low-production-cost, high-grade graphite

Triton Minerals Limited (ASX: TON, **Triton**, **the Company**) is pleased to announce the maiden JORC 2012 Mineral Resource estimate for the Nicanda Hill graphite deposit at the Balama North project in Mozambique.

The total Mineral Resource estimate comprises 1,457 Million Tonnes (**Mt**) at an average grade of 10.7% Total Graphitic Carbon (**TGC**) and 0.27% Vanadium Pentoxide (V_2O_5) classified as either Inferred Mineral Resources or Indicated Mineral Resources in accordance with the guidelines of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code**, **2012 Edition**).

Triton Minerals Managing Director and CEO Brad Boyle said "This is a tremendous result for the Company, as Triton has successfully defined the largest graphite and vanadium deposit in the world – only 6 months from the commencement of drilling at Nicanda Hill.

It was evident from the drilling data received to date, that it confirmed the geological continuity at Nicanda Hill and together with the consistency of the graphite grades provided Triton the opportunity to undertake and complete an initial mineral resource estimate well ahead of schedule, with the remaining data to be used to upgrade the classification of the initial mineral resource estimate.



This impressive result has confirmed the true world class potential of the Balama North project. Triton is now one step closer to becoming a market-leading low-cost graphite and potential vanadium producer."

Classification	Tonnes	Grade	Contained Graphite	Grade	Contained V ₂ O ₅
	(Mt)	(TGC%)	(Mt)	(V2O5%)	(Mt)
Indicated	328	11.0	36.1	0.26	0.85
Inferred	1,129	10.6	119.7	0.27	3.05
Total	1,457	10.7	155.9	0.27	3.93

 Table 1: Nicanda Hill October 2014 Mineral Resource Estimate Table (reported using block model zero cut-off grade). Note that some of the numbers may not equate fully due to the effects of rounding.

Competent Person's Statement

The information in this report that relates to Mineral Resource estimate at the Nicanda Hill deposit on Balama North project is based on, and fairly represents, information and supporting documentation prepared by Mr Mark Drabble, who is a Member of the Australasian Institute of Mining & Metallurgy. Mr Drabble is not a full-time employee of the Company. Mr Drabble is employed as a Consultant from Optiro Pty. Ltd. Mr Drabble 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 Drabble consents to the inclusion in this report the exploration results and the supporting information in the form and context as it appears.

The minerals resource estimate was carried out by independent resource consultants Optiro Pty Ltd, of Perth, Western Australia (**Optiro**).

The maiden Mineral Resource estimate ranks Triton's Nicanda Hill deposit as the largest graphite and vanadium deposit in the world (Figure 1).

The classified Mineral Resource is significant in both size and average graphite grade, along with vanadium mineralisation. The region also has the potential to define additional mineral resources.

Using a block model reporting cut off grade of zero (0%), which incorporates all internal dilution within the modeled mineralized domains, a total Mineral Resource estimate of 1.457 Billion tonnes is reported at an average grade of 10.7% TGC containing 154.4 Mt of graphitic carbon.

A minimum reporting cut off of zero is quoted, as Triton considers that a 10% TGC average graphite grade is considered appropriate for proposed economic extraction of the graphite material.



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Comparison of Flake Graphite Deposits Globally

Figure 1. Comparison between Nicanda Hill deposit and other selected global deposits. The information used for the comparisons was obtained from publically available resource data for graphite projects identified around the world. Information sourced from the ASX and TSX-V websites and the websites for each company displayed in the graph.

In addition to the graphite, the Mineral Resource estimate reports an average grade of 0.27% V_2O_5 , which means the deposit contains 3.93 Mt of V_2O_5 , thus making it one of the largest Vanadum deposits in the world.

*Cut Off TGC %	Indicated Tonnes	TGC%	V ₂ O ₅ %	Inferred Tonnes	TGC%	V ₂ O ₅ %	Total Tonnes	TGC %	V ₂ O ₅ %
0	328,000,000	11.0	0.26	1,129,000,000	10.6	0.27	1,457,000,000	10.7	0.27
10	234,000,000	11.7	0.28	674,000,000	11.7	0.28	908,000,000	11.7	0.28
12.5	56,000,000	13.8	0.31	160,000,000	13.7	0.34	216,000,000	13.7	0.33
15	9,000,000	15.9	0.34	19,000,000	15.7	0.36	28,000,000	16.0	0.35

Table 2. Nicanda Hill deposit and details of the graphite tonnage in the Indicated and Inferred classifications at various cut off grades from 0% to 15% (numbers rounded to significant figures)* Block model reporting cut off.



When applying the various graphite grade cut offs, there is significant increase in the average TGC and V_2O_5 grades, whilst still maintaining very large tonnages (Table 2).

These results demonstrate the high quality of the Nicanda Hill deposit. With the successful definition of the Mineral Resource estimate and the identification of multiple high grade mineralised zones which outcrop at surface, Triton is in a strong position to rapidly advance the Nicanda Hill deposit towards production. The Company will now look in the near future to become a market leader and one of the lowest cost graphite and vanadium producers in the world.

Triton notes this Mineral Resource estimate far exceeds the Company's original exploration expectations. Nicanda Hill has rapidly progressed from concept stage to classified Mineral Resource in record time. The Nicanda Hill drilling program, which commenced in April 2014, was originally designed as exploration but due to the strong and consistent drilling results, quickly developed into a resource definition drilling program.

The Company confirms that about 50% of drill assays from the Nicanda Hill drill program have been received from the laboratories and used in the Mineral Resource grade estimation. The mineralised wireframes have been interpreted on the basis of logged geological observations and assay results. Where assays are still outstanding visual estimates of graphite content are applied along with lithology to constrain the mineralised widths of each domain.

During drilling Triton found that there was an excellent correlation of assay results to the visual estimates which supported the interpreted wireframes. The areas awaiting results are the northern and southern extents of the model.

Data received to date have revealed the extraordinary geological continuity and consistency of grade within both the hydrothermal zone and graphitic schist-controlled domains of the deposit, as was originally suggested by the geophysical imagery.

The Company found the drilling data confirmed the geological continuity and the consistency of the graphite grades across the mineralised footprint at the Nicanda Hill deposit. These strong results then provided Triton the opportunity to undertake and complete an initial mineral resource estimate for Nicanda Hill approximately 6 months early.

The Company intends to update the Mineral Resource once the remaining drill assays results are received and analysed in the coming months. These results are expected to infill and confirm the northern and southern extents of the models.

Triton confirms the Mineral Resource estimate has been defined within the original 6.2km long mineralised footprint at Nicanda Hill, which has not been fully drill tested and remains open at depth and in all directions (Figure 2).



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Figure 2. Plan showing the boundaries of the Indicated and Inferred Resources, the mineralised footprint and the Mutola high grade zone at Nicanda Hill deposit on Licenses 5966 and 5365.

Further, the Company has yet to drill test the other key and highly prospective areas on the Balama North project, being the Charmers, Black Hills, Nacugi Trend and Western prospects. Triton considers that these satellite prospects may encompass additional and substantial high grade graphite deposits.

The Inferred Mineral Resource estimate for the graphite mineralisation at the Nicanda Hill deposit is continuous over 5.6kms (Figure 3) and extends to depths of up to 350m. The Indicated Mineral Resource estimate is continuous along a 3.2kms strike and extends to depths of approximately 100m from surface.



This Mineral Resource estimate contains numerous high-grade graphite zones (>15%TGC) that outcrop, including the key hydrothermal zone – named the Mutola zone (formerly HG1).

The Nicanda Hill deposit is overlain by a thin horizon of overburden sediments averaging 2 metres thick. Over Nicanda Hill itself, there is little if any overburden. The hills, which rise up to 100m above the surrounding plain, host part of the Mineral Resource on the western flank. The top 100m of the model, which rises above the adjacent topographic surface, reports approximately 150Mt of graphitic carbon at an average grade of 11.1%TGC.



Figure 3. Overview aerial image of the Nicanda Hill deposit showing the boundaries of the mineralised footprint, indicated and inferred resources and the Mutola high grade graphite zone.

MUTOLA ZONE

The primary focus for the Company going forward will be further definition of the high grade graphite zones and in particular the Mutola zone. This graphite-enriched quartz + carbonate zone has now been identified along the entire strike length of the Nicanda Hill deposit, some 5.6kms (Figures 2-4) and is readily identifiable in drillcore and RC chips due to the textures and alteration.

Geological data obtained to date suggest that the hydrothermal Mutola Zone formed along either a primary sedimentological horizon or foliation plane leading to enrichment of graphite and vanadium. The average true thickness of the Mutola zone is about 30m and is clearly identifiable along the entire strike length of the mineralisation zone, either outcropping or extending to within 1-2m of the surface.



The confirmation that the Mutola zone is continuous at surface along the entire length of the deposit provides Triton a number of options and flexibility, including the ability to selectively target the higher grade graphite and vanadium domains within the Mutola zone, which will assist in optimising or reducing the cost of graphite production.



Figure 4. Nicanda Hill illustrative overview of graphite grade iso-surfaces, highlighting the high grade graphite of the Mutola zone (denoted by the black colour in the image).

The Company confirms that, based on the drill data received to date, the Mutola Zone and parts of other northern prospects contain approximately 26 Mt of graphitic resource, at an average graphite grade of 15.8%. This zone extends from surface to a depth of about 200m.

Further assays results are expected to upgrade this zone towards the north. Due to the consistency of tonnage and graphite grade both at and near the surface, the Mutola Zone is an attractive and immediate target for definition of early open pit resources.

Because of these features the Mutola zone and adjacent better grade schist units have now become the primary focus for rapid development by the Company and are the most likely location for future mining development.



GRAPHITE FLAKE DISTRIBUTION

As reported by Triton on 9 October 2014, mineralogical investigations to date confirmed the presence of large flake graphite (greater than 170µm) throughout the Nicanda Hill prospect.

The mineralogical tests from various in situ samples obtained from across the mineralisation footprint, verified a range of graphite flake sizes from fines through to jumbo flake (Table 3). These tests demonstrated that on average **23%** of the graphite samples were very large flake which are **212µm** or larger.

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

Table 3. Mineralogical Flake size distribution of the graphite as obtained from samples at Nicanda Hill.

Triton notes that if the graphite flake size distribution remains fairly constant, then Nicanda Hill deposit could potentially host up to 335 Mt of the large flake graphite (**212µm** or larger).

This, combined with the previously announced metallurgical test work (16 September 2014), which confirmed flotation methods readily produce graphite concentrate of up to **97.3%** TGC from the sample, means that Triton is well positioned to take advantage of the premium prices paid for such high quality large flake graphite material.

IMMEDIATE DEVELOPMENT STRATEGY

With the successful definition of the initial Mineral Resource estimate at the Nicanda Hill deposit, Triton is well positioned and dedicated to the rapid development of the Nicanda Hill deposit towards graphite production.

Triton is aiming to complete the Scoping Study on Nicanda Hill shortly, in order to obtain a better understanding of the economics and potential of the graphite deposit. Once the Scoping Study is complete, Triton will be positioned to apply for a mining concession at Nicanda Hill and continue to advance off-take discussions with various parties from Europe, China, Japan and North America.

The Company has already commenced various pre-feasibility study activities including additional metallurgical and mineralogical studies. Triton is currently liaising with a number of specialised mining consultants in order to undertake a definitive feasibility study at Nicanda Hill as soon as practicable.



The Company will seek to undertake pilot plant production testing on large bulk samples. The use of a pilot plant would assist Triton to complete the definitive feasibility study and advance the project towards production.

MINERAL RESOURCE ESTIMATION

The resource is hosted by a sequence of metamorphosed graphitic schists with minor intercolated gneissic intrusive units, and a biotite altered footwall gneiss. The stratigraphic package dips at 45-50 degrees towards the north west. The modelled mineralised domains form continuous tabular bodies over strike lengths of up to 5.6km and appear to reflect the original primary bedding chracateristics of the pre-existing sediments.

The model is based on a combination of deep drill holes (maximum depth of 475m) and shallow reconnaissance drill holes, namely fifty nine (59) RC drill holes and thirty six (36) diamond drill holes completed, for a total 16,135m drilled. These drill holes were designed to confirm the position of the various mineralised zones and to test the full width of these zones. All 95 of the completed drillholes were utilised in developing the geological model and estimation constraints.

A total of 46 holes for which assays were reported, were used in the grade estimation, and visual estimates of graphite occurrence and grade were used to constrain the mineralized wireframe interpretations. These have proven to be robust and have required little change as the deposit has been drilled. When all assays for the remaining 51 holes are received the model will be updated. This update is expected to infill and upgrade the confidence of the northern and southern ends of the initial classified resource.

These drill holes are nominally spaced 100m apart on drill lines that are approximately 400m apart, with some infill lines on 200m and 100m spacing. Holes were drilled at - 60 degrees towards the southeast to optimally intersect the mineralised lodes.

The DD holes were drilled with PQ core size from surface to a maximum depth of 36m and HQ3 core size to end of hole. The diamond core samples were taken as quarter core on geological intervals (0.33m to 2.7m). Samples were crushed, dried and composited prior to pulverisation (total prep) to produce a sub sample for analysis of Graphitic Carbon, Total Sulphur, and Total Carbon by Leco Combustion Infrared Detection.

Composite samples were made by the laboratory from a 300g split of the coarse crush material of two consecutive samples of quarter core intervals, which combined do not exceed 2.7 metres in core length.





RC drilling was carried out using a 5.5 inch hammer to produce 1m samples. Single metre or 2 metre composite samples were submitted for analysis. Composite samples were created from consecutive 1 metre intervals with visual graphite abundances greater than 0.5%. All submitted samples were collected using the spear sub sampling technique at the drill site and have a minimum weight of 2.5 kilograms. The RC samples were pulverised (total prep) to produce a sub sample for assaying as described above. Certified standards, blanks and field duplicate samples were inserted with the drill samples to monitor bias and for quality control.

The grade estimate is constrained within three-dimensional wireframes of interpreted mineralised domains. The wireframes were created by joining sectional interpretations of mineralisation polygons based upon geological knowledge of the deposit, derived from drill core logs, assays and geological observations on surface.

The Inferred Mineral Resource Estimate covers an area of 5.2 km strike, 750 m across strike and a projected depth of 350 m below surface. Ordinary kriging was used for the grade estimation in the Mineral Resource model. Unsampled intervals of internal waste (gneiss) have been included within the mineralisation wireframes, where these intrusive gneisses are too narrow to exclude.

The block model was constructed using a grid rotated +45 degrees relative to UTM grid and consists of 10 mE by 100 mN by 10 mRL parent block size with sub-celling to 2.5 mE by 10 mN by 2.5 mRL for domain volume resolution. All estimation was completed at the parent cell scale.

A nominal modelling grade cut-off grade of 9.0 % graphitic carbon was used to define the outer parametres of mineralised domains (wireframes). The results reported only include the resource material contained within the defined wireframes (at various cut offs ranging from 0% to 15%). All graphitic mineralisation outside of the defined wireframes has not reported. This modelling cut off grade represents a clear inflexion in the log probability curve of the whole assay data set and also corresponds with continuous interpreted geological zones defined within the wireframes.

The drill holes files were flagged according to the mineralisation domains they intersected and statistical analysis of the data followed. This study resulted in the application of a 2m composite length to all drill hole data. A variographic analysis of the domained drill hole data provided variogram parameters for the grade interpolation by ordinary kriging methods. Composited sample grades for TGC were interpolated into the block model TGC domains.

Block grade interpolation was validated by means of swath plots, overlapping histograms of sample and block model data, and comparison of mean sample and block model TGC grades for each domain. Cross sections of the block model with drill hole data superimposed were also reviewed.





Density data was statistically analysed to determine the appropriate density value to apply to the model. The Mineral Resource Estimate used a bulk density for the block model which was estimated from density measurements carried out on 312 core samples and a density of 2.7 t/m³ was assigned. No orientation based sampling bias has been identified in the data at this point and no assumptions have been made regarding by products or metallurgical extraction considerations.

The Mineral Resource estimate is classified as either Indicated or Inferred, and has been reported in accordance with the JORC (2012) Code, with geological, sampling and product quality evidence sufficient to assume geological and grade continuity between the points of observation and sampling. Classification of the Mineral Resource estimates was carried out taking into account the robustness of the geological understanding of the deposit, the quality of the sampling and density data, together geostatistical parameters relating to both drill hole and sample spacing (neighbourhood analysis and kriging variance). Petrographic analyses and metallurgical considerations of flake size distribution and shape, product purity and recoverability were also given due consideration in classification.

The mineralised domains have demonstrated sufficient geological and grade continuity to support the definition of Inferred Mineral Resources, and the classifications applied under the 2012 JORC Code.

CONCLUSIONS

The definition of the world's largest Mineral Resource estimate for graphite and vanadium at Nicanda Hill demonstrates the true world class potential and the overall prospectivity of the Balama North project, to host both multiple high grade graphite and vanadium deposits.

Triton now looks to rapidly advance the Nicanda Hill deposit in order to commence graphite production as soon as practicable. Triton now aims to become a global market leader and the eminent source of high-quality and low-production-cost graphite material.

THIS ANNOUNCEMENT EFFECTIVELY CEASES THE TRADING HALT REQUESTED BY THE COMPANY ON 17 OCTOBER 2014. THE COMPANY IS NOT AWARE OF ANY REASON WHY THE ASX WOULD NOT ALLOW TRADING TO RECOMMENCE IMMEDIATELY.

Regards

Brad Boyle CEO & Managing Director Triton Minerals Ltd



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Competent Person's Statement

The information in this report that relates to Mineral Resource estimate at the Nicanda Hill deposit on Balama North project is based on, and fairly represents, information and supporting documentation prepared by Mr Mark Drabble, who is a Member of the Australasian Institute of Mining & Metallurgy. Mr Drabble is not a full-time employee of the Company. Mr Drabble is employed as a Consultant from Optiro Pty. Ltd. Mr Drabble 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 Drabble 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 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.

The information in this announcement that relates to Exploration Results on Balama North project is extracted from the reports entitled ASX Release "Balama North Project Update" created 5 March 2014, ASX Release "Positive Metallurgical Results For Nicanda Hill" created 16 September 2014, ASX Release "Further Positive Drilling Results From Nicanda Hill" created 9 October 2014 and is available to view on www.tritonmineralsltd.com.au The reports were issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

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.

JORG TUDIE 1 - Section 1 Sumpling Techniques and Data

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 on lines ranging from 100m to 400m strike spacing. Diamond drill holes were drilled 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 NavCom Land-Pak SF- 3040 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 EZ-Shot 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 Jones type riffle splitter to obtain a 1/8 th 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 th samples (approximately 3kg) contained in a labelled calico bag and the residual 7/8 th is retained at the drill site in the large bag. If 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 were 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. Samples are dried, weighed, crushed and split to give 300g for pulverisation to produce a sub sample for assaying. In addition samples were submitted for multi-element analysis (55 elements) by sodium peroxide fusion with an ICP-AES finish. The diamond drill core samples were cut into quarter core using a diamond impregnated blade core saw. Samples were defined on the basis of geological contacts and range from 1.5 to 3m, averaging 2m in length.
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 ranged up to a maximum depth of 222m (rig capability limit). The diamond drill holes were 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 RD digital device. Quoted accuracy is better than 1 ^o from 0 to +-88 ^o dip



Criteria	JORC Code explanation	Commentary
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	The condition and qualitative estimates of RC sample recovery were 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. Diamono core recovery averages above 95%.
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 to record the mineral assemblage 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 fo 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 of 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) is 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) were submitted to the lab labelled with a single sample name. Each sample is crushed and a 300g split is taken for pulverisation. Sample intervals are generally defined according to geological boundaries. Duplicate quarter core samples are routinely submitted to the same lab (on a ratio of 5 per 100 samples).

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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. One metre composite samples are generated by passing the samples from the drill cyclone through a 3-tier riffle splitter to generate 1/8 th samples (approximately 3kg) contained in a labelled calico bag (the residual 7/8 th is retained at the drill site in the large bag). The 1m samples are split using a 50:50 splitter and one half is combined with the 50:50 split of the consecutive 1m sample, producing a 2m composite sample. Where wet samples were encountered, the 3kg sample produced from the 1/8 th splitter was 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 ~2 mm, split (300g) and pulverising 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 four 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, and 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.	Samples were analysed 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 were 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 acid, 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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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 15% of the unknown samples analysed. From the Nicanda Hill drilling, field duplicate datasets showed a moderately strong correlation coefficients (0.89), indicating good repeatability of grades between paired samples. A batch of 82 pulps was submitted for umpire assays to SGS and an independent laboratory Intertek Genalysis (Perth) as independent checks of the assay results. Umpire laboratory campaigns using other South African and Australian laboratories has been implemented as a routine. Of the 323 field duplicates submitted, 22 failed at a 25% error, and of the 82 Umpire samples submitted, 15 fail at 10% error. These batches were redone. Sample preparation checks for fineness were 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.		
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Mr. Simon Plunkett, an independent geological consultant for Triton, has visually verified the geological observations of most of the reported RC and Diamond drill holes and this has then been reviewed and confirmed by Optiro. The geological logging of all drill chips and core is undertaken by trained geological staff on site.		
	The use of twinned holes.	No twin holes have been drilled at Nicanda Hill to date.		
	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 Nav-Com Land-Pak differential GPS. Drill holes were oriented at the collar using sighting pegs installed with the use of a magnetic compass and GPS. The dip and azimuth of all DD holes is measured by the drill company using a Reflex EZ-Shot single shot 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 $+0.5^{\circ}$ azimuth and $+-0.2^{\circ}$ dip. Downhole survey measurements considered to be poor quality are coded as 'Priority 2' and are e excluded from the drill location calculations.		
	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.	The topographic surface is based on the differential GPS coordinates of the drill hole collars.		
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The nominal drillhole spacing is 100 m on drill lines spaced from 100m to 400m apart (average distance 400m). The drill lines have a bearing of 120° (UTM grid northeast).		

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Criteria	JORC Code explanation	Commentary
	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 considered sufficient for the purpose of carrying out a Mineral Resource estimate for the Nicanda Hill prospect. The mineralisation is tabular and new drilling correlates very well with the interpreted mineralised domains. Identified mineralogical features enabled high confidence correlation of specific domains.
	Whether sample compositing has been applied.	Samples have been composited to a maximum of two metres for RC samples. Most diamond core is sampled in approximately 2m intervals of quarter core, with a few samples of up to 3m in zones of either less visible graphite or gneissic intervals. Diamond core sample intervals correspond 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. The correlation of geological units defined by characteristic mineralogy provides a high 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 increases in graphite abundance 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 analysis of the sampling data from the drill holes at Nicanda Hill was carried out by Maxwell Geosciences, who manage Triton's drillhole database. The QAQC samples were inserted with the reported RC chip and diamond core samples at a ratio of 1:16 (field duplicates), 1:9 (lab pulp checks), and 1:80 (umpire samples). Two CRM standards (GGC01 and GGC05) and two blank material standards (AMIS0405 and AMIS0439) were used during the drilling program at Nicanda Hill. Of the 234 CRM standards submitted, six fail outside of 3 standard deviations. GGC01 assay results returned a mean bias of -0.29% ,and GGC05 assay results returned a mean bias of -2.52%. A total of 106 blanks were submitted of which thirteen AMIS0405 blanks failed outside 3 standard deviations. Batches with failed standards and blanks were re-submitted. On this basis, the reported drill assay results are considered representative and suitable for assessing the graphite grades of the intersected graphite mineralisation.



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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 201 with Grafex to earn up to an 80% interest in Grafex's portfolio of graphite projects. In late 2013 Triton increased their holdin 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 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.
Geology	Deposit type, geological setting and style of mineralisation.	The Nicanda Hill graphite deposit is hosted within Neoproterozoic rocks of the Xixano Complex in north-eastern Mozambique. The Xixano complex is composed dominantly or 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 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 in the samples is thought to be associated with quartz muscovite <u>+</u> 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 	Refer to Appendix 2 below.

JORC Table 1 - Section 2 Reporting Of Exploration Results



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 graphitic carbon (GrC) cut-off grade and a minimum composite width of 2m. Significant intercepts are reported at cutoff grade of both 5% and 10% GrC.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	V_2O_5 is calculated from V % using a factor of 1.786 based on the following formula: $V_2O_5 = V \times 1.786$ Atomic weight vanadium is 50.94, AW Oxygen is 16; Total units in V2O5 is 181.8; V in V2O5 is 101.88/181.8 = 0.56; V to V2O5 is V x 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 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 Figures 2-4
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.	Triton ensures that balanced reporting of exploration take place.
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.	A total of 312 core samples from diamond drill holes were measured for bulk densities using the Archimedes (dry/wet weights) and immersion methods. This was used to estimate average densities for rock types. Multi element assaying at Nicanda Hill was conducted on 1,021 samples from RC and diamond drill holes. Metallurgical test work and petrographic sample analysis was also carried out on diamond core and other samples. 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.



Criteria	JORC Code explanation	Commentary
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 the Nicanda Hill prospect. Exploration activities are expected to resume in April 2015.



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JORC Table 1 - Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary				
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	I-pads with customized Quick Office spreadsheets are used for recording logging, spatial and sampling data at Nicanda Hill. Data transfer from the field to Perth office is electronic via e- mail. Logging, spatial and sampling data is verified and validated in Perth by Maxwell Geoservices who provide database management services. Sample numbers are unique and sampled bags are hand written in the field and accompanied by a sample ticket with the printed sample number.				
	Data validation procedures used.	Manual data validation checks are run by Perth office.				
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Mark Drabble (Principal Consultant – Optiro) carried out a site visit to the Nicanda Hill deposit on October 3 rd -5 th , 2014. Mark inspected the deposit location, costeans and drill collars, along with diamond core from a number of holes plus RC chips. A review of procedures and protocols was also carried out.				
	If no site visits have been undertaken indicate why this is the case.	Not applicable				
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The confidence in the geological interpretation of the Nicanda Hill deposit is considered to be good. The global geological setting is a series of graphitic schists with narrow intercalated gneissic intrusions within a dominantly amphibolite facies metamorphic terrane. Graphite mineralisation occurs within fine grained schistose units as series of multiple stacked tabular northeast-southwest striking lodes. The correlation of higher grade graphitic carbon assays with quartz-carbonate hydro thermal alteration has defined the hydrothermal Mutola zone which exhibits continuity along the strike length of the deposit with and average width of 30m. The footwall gneiss unit is characterized by distinctive biotite alteration.				
	Nature of the data used and of any assumptions made.	Assay data has been used to generate mineralisation domains based on a nominal 9% Graphitic Carbon cut-off grade. This cut off value, which coincided with good geological continuity, was selected on the basis of a clear inflexion point on the probability curve of all assay data. Unsampled intervals of internal waste (gneiss) have been included at an assigned value of 0.1% GrC within the mineralisation wireframes, where intrusive gneisses are too narrow to exclude. Rock type subdivisions applied in the interpretation process are based on geological logging. Mineralogy has been used to assist interpretation of the lithological subdivisions using quartz carbonate alteration in the high grade graphitic schists and muscovite/ biotite alteration to define the footwall gneiss unit.				
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The Nicanda Hill deposit is generally tabular in geometry, with consistent moderate dip and intercalated sub parallel relationships between the graphitic schists and gneissic units.				
	The use of geology in guiding and controlling Mineral Resource estimation.	Geological controls and relationships were used to define the Mutola Zone dip and strike continuity. The footwall gneiss contact was used to control the dip of the stratigraphic package, and the diamond core foliation angles concurred with the overall moderate NW dip. Mineralised domains and gneissic intrusives were modelled in Leapfrog Geo 3D and found to be generally subparallel.				



Criteria	JORC Code explanation	Commentary			
	The factors affecting continuity both of grade and geology.	Unsampled intervals of internal waste (gneiss) have been included within the mineralisation wireframes, where intrusive gneisses are too narrow to exclude. A default value of 0.1% Graphitic carbon was assigned to unsampled intervals to account for the presence of barren material (internal waste) within the mineralised domains.			
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource	The Nicanda Hill deposit consists of a continuous graphitic schist package that extends more than 6km and joins up with the Cobra Plains prospects (2km strike). This Mineral Resource is confined to the Nicanda Hills Prospect and covers an area of 5.6 km along strike, 1.5km across strike and a projected depth of 500 m below surface.			
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Grade estimation using Ordinary Kriging (OK) was completed for Nicanda Hill. Datamine Studio 3 software was used to estimate graphitic carbon, total carbon, sulphur, titanium, vanadium and zinc. Drill grid spacing ranges from 100 m to 400 m. Drillhole sample data was flagged using domain codes generated from three dimensional mineralisation domains and oxidation surfaces. Sample data was composited per element to a two metre downhole length using a best fit-method. There were consequently no residuals. Intervals with assays pending were excluded from the compositing routine. Sample intervals coded as NS (Not Sampled) in the assay file were assigned nominated background waste values to account for unsampled waste intervals captured within the mineralization wireframes. The presence of outliers was determined using a combination of top-cut analysis tools (grade histograms, log probability plots, CVs and disintegration analysis). Outliers were evident in vanadium and zinc samples only so top-cuts were only applied to these. No outliers were identified in graphitic carbon, total carbon, sulphur and titanium sample populations and these did not have any top-cuts applied. As stated above, it was noted that unsampled intervals were present internal waste zones which were to narrow and not able to be wireframed separately. In order to account for the present of internal waste units, these unsampled intervals were assigned assay values as described in in the body of the report. Variography of the mineralised domains were modelled for all elements using normal scores transformations. Variography has been carried out within the plane of the orebody (approximate strike of 035° and approximate dip of 40° to the northwest). The dip plane variogram fans were examined to identify the presence of a plunge component. No plunge component was identified. Variogram analysis was carried on Domain 100 (Mutola Zone) and on the remaining domains combined (Domain 200 to 1500). Nugget values are low to moderate (0.05 to 0.39). Separate v			



Criteria	JORC Code explanation	Commentary			
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	This is the maiden Mineral Resource for the Nicanda Hill deposit. No previous mining activity has taken place in this area.			
	The assumptions made regarding recovery of by- products.	No assumptions have been made regarding by products.			
	Estimation of deleterious elements or other non- grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	The non-grade element estimated is sulphur (S%). Sulphur is considered a deleterious element in some graphite deposits and may bear and impact on metallurgical processing.			
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	A single block model for Nicanda Hill was constructed using an 15 mE by 200 mN by 15 mRL parent block size with subcelling to 2.5 mE by 10 mN by 2.5 mRL for domain volume resolution. All estimation was completed at the parent cell scale. Kriging neighbourhood analysis was carried out for Nicanda Hill in order to optimise the block size used. Discretisation was set to 8 by 8 by 8 for all domains. The size of the search ellipse per domain was based on variogram models. Three search passes, with increasing search distances and decreasing minimum sample numbers, were employed. The first pass used the ranges of the variogram and a minimum of 8 and maximum of 32 samples. In the second pass the search ranges were increased to double the ranges of the variogram, maintaining a minimum of 8 samples. In the third pass the search ellipse was increased to triple the ranges of the variogram and the minimum number of samples was decreased to 4. Approximately 1% of blocks were not filled with graphitic carbon grades during the estimation process. These blocks were left as 'un-estimated'. Not all blocks that were filled with graphitic carbon, approximately 4.5% of blocks were not filled for total carbon, 18% blocks were not filled for sulphur, 21% of blocks were not filled for sulphur, 21% of blocks were not filled for sulphur, 21% of blocks were not filled for tanium, 36% of blocks were not filled for vanadium, and 21% of blocks were not filled for zinc. Average grades (per domain) were applied to these unestimated blocks for total carbon, sulphur, titanium, sulphur, vanadium and zinc. Hard boundaries were used for Domain 100, and soft boundaries were used for all other domains, with the exception of vanadium which was estimated with hard boundaries applied between all estimation domains.			
-	Any assumptions behind modelling of selective mining units.	No selective mining units were assumed in this estimate.			
	Any assumptions about correlation between variables.	A moderate to strong correlation between graphitic carbon and vanadium (0.7) is evident.			
	Description of how the geological interpretation was used to control the resource estimates.	The comparison of lithology and mineralisation wireframes showed generally good correlation, but some zones were coded with gneissic material based on the dominant lithology observed in the interval. The use of Lith2 to validate some intersections resolved most issues. Geological modelling of the graphitic and biotite schist units in Leapfrog Geo 3D software produced models that intercalated well with the mineralisation wireframes.			



Criteria	JORC Code explanation	Commentary			
	Discussion of basis for using or not using grade cutting or capping.	Statistical analysis showed the populations at Nicanda Hill to have a low coefficient of variation and no outlier values that required top-cut values to be applied to graphitic carbon, total carbon, sulphur or titanium. Top-cuts were applied to vanadium and zinc to reduce the effect of outliers. A top cut of 4000 ppm vanadium and 4200 ppm zinc was assigned to Domains 100 to 1500. A top cut of 3000 ppm zinc was assigned to the mineralized waste domain.			
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Validation of the block model carried out a volumetric comparison of the resource wireframes to the block model volumes. Validating the estimate compared block model grades to the input data using tables of values, and swath plots showing northing, easting and elevation comparisons showed that the estimate honoured the raw data, though considering the data spacing there is evidence of smoothing as a result of the kriging process. Infill drilling will be required to decrease this data smoothing and improve estimation confidence Visual validation of grade trends and distributions was carried out. No mining has taken place; therefore no reconciliation data is available.			
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnages are estimated on a dry basis.			
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied	A nominal modelling grade cut-off grade of 9.0 % graphitic carbon was used to define the outer parametres of mineralised domains (wireframes). This modelling cut off grade represents a clear inflexion in the log probability curve of the whole assay data set and also corresponds with continuous interpreted geological zones defined within the wireframes.			
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Mining of the Nicanda Hill deposit will be by surface mining methods involving standard truck and haul mining techniques. The geometry of the deposit will make it amenable to mining methods currently employed in many surface operations in similar deposits around the world. No assumptions on mining methodology have been made.			

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Criteria

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Metallurgical factors or assumptions Initial mineralogical and assay test work from SGS South African laboratory have returned head grades of up to 28% TGC. The strong presence of Vanadium within the graphitic samples, obtaining grades up to 0.50% V_2O_5 has also been confirmed. The bulk sample used was made up of samples acquired from a number of locations and from various depths, such as surface samples and drill core taken from up to 100m down hole. These samples are considered to provide a representative example of the type of graphitic material found at the Nicanda Hill prospect.

Commentary

Average graphite flake size distribution from the initial samples are as follows; 23% of the graphite samples are very large flake which are 212 μ m or larger, 36% are greater than 106 μ m (medium to large flake), 17% are greater than 75 μ m (medium flake), and 24% are less than 75 μ m (small flake) in size. The Table below was reported in an ASX announcement 09 October, 2014.

Graphite flake size	Flake distribution					
+400um	7.3%	23.2%				
+212um	15.9%					
+106um	36%					
+75um	17.1%					
-75um	23.7%					

Petrographic analysis of 31 polished thin sections by Paul Ashley Petrographic and Geological Services states the following characteristics for the graphite mineralogy: "It has a typical flaky morphology (although there is some bending and locally, strong contortion), with particle size ranging from <0.05 mm to 0.7 mm, although the majority of samples appear to have a maximum grainsize of 0.3 - 0.4 mm. An average grainsize is in the range 0.1 - 0.2 mm appears to be typical.

The amount of graphite varies between samples, from an estimated 5% to 25% in several samples. Graphite commonly occurs in intergranular sites with respect to quartz, mica, sulphide and feldspar grains, but it is also commonly poikiloblastically enclosed in several phases, especially the micas, locally in calc-silicates, sulphides and microcline. However, individual graphite grains are mostly free of inclusions of other minerals".

No assumptions have been made and these will form part of a scoping study.

metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.

The basis for assumptions or predictions regarding

Environmental factors or assumptions Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made

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Criteria	JORC Code explanation	Commentary			
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	Bulk density has been estimated from density measurements carried out on 397 core samples from both the Cobra Plains and the Nicanda Hill drill programs. Density measurements were derived using the weight in air – weight in water method on diamond drill core samples. Optiro reviewed density statistics of the available density data by lithology code and further split by oxidation. Sample histograms indicated the presence of outliers in both the gneiss and the schist datasets. Outlier samples were removed from the datasets and the average density recalculated. A density value for overburden material was assumed. The density ranges used in this resource estimate are listed below: Gneiss - weathered 2.60 g/cm ³ Undifferentiated Schist - weathered 2.31 g/cm ³ Undifferentiated Schist - fresh 2.72 g/cm ³ Overburden - 1.9 g/cm ³			
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit,	The host geology comprises high grade metamorphic rocks that have undergone amphibolite to granulite facies deformation. Core photos indicate that the ground conditions are very good, with little loss of material due to vugs or discontinuities.			
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Density values were assigned using oxidation dtms and mineralisation wireframes. All material within mineralisation wireframes was assumed to be schist for the purpose of assigning density values.			
Classification	The basis for the classification of the Mineral Resources into varying confidence categories	The Mineral Resource classification at Nicanda Hill is based on confidence in the good geological and grade continuity, along with 400 m by 100 m spaced drillhole density in the core of the deposit (with some 200m and 100m spaced lines). Estimation parameters including Kriging efficiency and search passes have been utilised during the classification process. Indicated Mineral Resources were defined on a combination of sampled drillholes, kriging efficiency of >0.4, search pass 1 and good confidence in grade and geological continuity. Inferred Mineral Resources were defined using a combination of sampled and geologically constrained wireframes, search pass 1 and 2 and good continuity of geology. Approximately 59% o the Inferred Mineral Resources are considered to be extrapolated.			
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The input data is comprehensive in its coverage of the geology of the mineralisation. The drill programme was being completed as the resource estimate was commissioned. All but 4 drillholes had been logged for geology and visual graphitic carbon estimates and 51 drillholes had outstanding assays at the time of the estimate so the geology was used to constrain the interpreted resource intersections. TON notes that the visual estimates of graphite mineralisation had excellent correlation to the returned assays as the programme progressed with minor adjustment of the mineralisation domains required. The definition of mineralised zones is based on a good level of geological understanding to produce a geologically driven model of mineralised domains. Key reference markers are the hydrothermal Footwall gneiss (biotite zone) This model is not considered to favour or misrepresent in-situ mineralisation and will continue with further infill drilling to support the maiden Mineral Resource.			

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Criteria	JORC Code explanation	Commentary		
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the view of the Competent Persons.		
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	This is the maiden Nicanda Hill Mineral Resource estimate.		
	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC Code (2012 Edition)		
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used	The statement relates to global estimates of tonnes and grade. The confidence intervals have been based on estimates at the parent block size.		
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available	No production data is available.		

APPENDIX 2

Table 1. Drill Holes used for the Mineral Resource estimation at Nicanda Hill on License 5966 in the

 Balama North project.

Hole_id	х	у	z	max_depth	Azimuth	Dip	hole_type
GBNC0001	477882	8542824	523	72	125	-60	RC
GBNC0002	477694	8542701	514	114	125	-60	RC
GBNC0003	477628	8542973	506	153	125	-60	RC
GBNC0004	477719	8543151	506	124	125	-60	RC
GBNC0005	477548	8543251	496	222	125	-60	RC
GBNC0006	477460	8543298	494	150	125	-60	RC
GBNC0007	477367	8543354	491	108	125	-60	RC
GBNC0008	477784	8542657	517	86	125	-60	RC
GBNC0009	477518	8542801	505	150	125	-60	RC
GBNC0010	477431	8542854	502	291.32	125	-60	RC/DD
GBNC0011	477346	8542902	498	118	125	-60	RC
GBNC0012	477259	8542957	497	90	125	-60	RC
GBNC0013	477447	8543077	499	150	125	-60	RC
GBNC0014	477358	8543125	495	150	125	-60	RC
GBNC0015	477274	8543183	492	150	125	-60	RC
GBNC0016	477290	8543413	489	150	125	-60	RC
GBNC0017	477980	8543001	535	125	125	-60	RC
GBNC0018	477625	8542499	518	90	125	-60	RC
GBNC0019	477490	8542361	518	100	125	-60	RC
GBNC0020	477238	8542511	506	150	125	-60	RC
GBNC0021	476972	8542660	496	150	125	-60	RC
GBNC0022	477147	8542560	502	150	125	-60	RC
GBNC0023	477061	8542608	498	108	125	-60	RC
GBNC0024	477249	8542044	522	82	125	-60	RC
GBNC0025	477076	8542138	510	84	125	-60	RC
GBNC0026	477788	8543572	495	150	125	-60	RC
GBNC0027	477702	8543625	489	114	125	-60	RC
GBNC0028	478041	8543894	491	150	125	-60	RC
GBNC0029	478207	8543794	500	150	125	-60	RC
GBNC0030	477951	8543941	487	150	125	-60	RC
GBNC0031	478383	8543693	507	150	125	-60	RC
GBNC0032	479199	8544610	499	102	125	-60	RC
GBNC0033	479111	8544658	494	150	125	-60	RC
GBNC0034	478936	8544761	479	186	125	-60	RC
GBNC0035	478739	8544412	490	200	125	-60	RC
GBNC0036	478548	8544291	490	150	125	-60	RC
GBNC0037	478215	8544017	491	150	125	-60	RC
GBNC0038	478379	8543898	500	192	125	-60	RC
GBNC0039	478308	8543972	495	150	125	-60	RC
GBNC0040	479396	8544956	477	150	125	-60	RC
GBNC0041	479224	8545056	472	162	125	-60	RC
GBNC0042	479048	8545154	466	138	125	-60	RC
GBNC0043	476904	8542236	501	165	125	-60	RC
GBNC0044	477007	8541717	520	110	125	-60	RC
GBNC0045	476919	8541764	515	170	125	-60	RC
GBNC0046	476784	8541838	507	216	125	-60	RC
GBNC0047	476852	8541343	523	102	125	-60	RC
GBNC0048	476475	8541097	513	218	125	-60	RC
GBNC0049	476392	8541148	510	156	125	-60	RC
GBNC0050	476684	8541441	513	200	125	-60	RC
GBNC0051	476591	8541494	510	144	125	-60	RC

Hole_id	x	У	z	max_depth	Azimuth	Dip	hole_type
GBNC0053	476732	8542339	494	42	125	-60	RC
GBNC0054	477792	8542875	517	144	125	-60	RC
GBNC0055	479018	8544709	484	150	125	-60	RC
GBNC0056	478885	8544560	486	150	125	-60	RC
GBNC0057	479116	8544880	478	150	125	-60	RC
GBNC0058	479312	8545002	476	150	125	-60	RC
GBNC0059	479508	8545350	469	150	125	-60	RC
GBNC0060	479593	8545298	471	149	125	-60	RC
GBND0001	477632	8543201	501	372.65	125	-60	DD
GBND0002	477608	8542754	509	184.81	125	-60	DD
GBND0003	477536	8542681	515	155.6	125	-60	DD
GBND0004	477621	8542632	513	161.65	125	-60	DD
GBND0005	477170	8543003	494	428.55	125	-60	DD
GBND0006	477534	8543028	502	242.48	125	-60	DD
GBND0007	477709	8542583	519	113.44	125	-60	DD
GBND0008	477550	8542559	513	134.52	125	-60	DD
GBND0009	477469	8542606	509	200.43	125	-60	DD
GBND0010	477319	8542458	510	185.5	125	-60	DD
GBND0011	477403	8542407	513	152.5	125	-60	DD
GBND0012	477161	8542093	514	152.58	125	-60	DD
GBND0013	477671	8542897	511	210.94	125	-60	DD
GBND0014	476992	8542186	504	206.63	125	-60	DD
GBND0015	476846	8541809	510	176.53	125	-60	DD
GBND0016	476767	8541387	518	152.44	125	-60	DD
GBND0017	478116	8543846	495	278.59	125	-60	DD
GBND0018	476564	8541049	515	152.43	125	-60	DD
GBND0019	478289	8543742	503	206.56	125	-60	DD
GBND0020	478481	8543868	506	153.88	125	-60	DD
GBND0021	478564	8543819	513	140.42	125	-60	DD
GBND0022	477875	8543523	502	301.34	125	-60	DD
GBND0023	478139	8543370	574	272.33	125	-60	DD
GBND0024	478174	8543288	582	92.53	125	-60	DD
GBND0025	478004	8543439	537	248.39	125	-60	DD
GBND0026	478629	8544249	503	266.63	125	-60	DD
GBND0027	478721	8544169	550	166.74	125	-60	DD
GBND0028	478752	8544047	579	161.53	125	-60	DD
GBND0029	478935	8544285	558	110.63	125	-60	DD
GBND0030	478818	8544381	501	188.4	125	-60	DD
GBND0031	478844	8544811	475	326.53	125	-60	DD
GBND0032	478796	8544607	482	254.63	125	-60	DD
GBND0034	479132	8545108	469	275.53	125	-60	DD
GBND0035	477714	8543546	494	467.5	125	-60	DD
TMBD0005	477888	8543045	530	176.54	125	-60	DD
TMBD0006	477784	8543168	510	185.62	125	-60	DD