

Resource Drilling update: Cascades zone delivering exceptional widths



11 August 2016

HIGHLIGHTS

- Cascades zone is returning very wide zones of graphite mineralisation, currently up to 200m at the central zone.
- Cascade drillhole logging indicates higher grades of mineralisation compared to the Ulanzi zone, with coarse flake size and a deeper weathering profile
- Drilling programme expanded to incorporate wider graphitic zones into resource envelope
- Infill drilling of Ulanzi completed mid July 2016 with incoming assay results confirming 2015 drill results. Updated resource expected in September 2015

Black Rock Mining Limited (ASX:BKT) (“Black Rock Mining” or “the Company”) is pleased to provide an update on the resource drilling programme at its Mahenge Project.

Twenty holes drilled at Cascades to date indicate a significantly broader 200m wide zone of graphitic mineralisation at the Central zone, triple the typical 70m widths at Ulanzi. This is an exciting development as it indicates that the Cascades zone is most likely made up of 2 to 3 larger, more coherent NS trending structures as opposed to the 6-10 narrower NS trending structures indicated by surface mapping in 2015.

Detailed drill hole logging indicates consistent zones of higher grade graphite mineralisation with coarse overall flake size >0.5mm and a significantly deeper weathered or oxidized profile. Drilling is demonstrating good potential to significantly increase the 12.3mt Inferred Cascades Resource announced in February this year.

The 41 hole Ulanzi infill programme was completed mid July at 50m x 50m spacing, which is expected to deliver an updated resource predominantly in the Measured and Indicated Resource Category.

Managing Director Steven Tambanis commented: *“Cascades drilling is delivering significantly wider zones of mineralisation than at Ulanzi. Detailed logging indicates consistent coarse flake size and potential for higher grades compared to Ulanzi. The current close-spaced drill programme is returning consistent mineralised intervals, which should see straightforward conversion into Measured and Indicated Resource classification. We keenly await assay results.”*

The deeper weathering profile up to 70m below surface enhances potential for low cost free-digging and lower cost processing. Cascades is shaping up to be by far the best graphite zone at Mahenge and metallurgical testing will be underway by the end of August.”

Cascades infill drill programme

Cascades drilling commenced in mid July 2016. All 16 holes drilled to date began in graphitic mineralisation indicating that the western lode is a single, coherent structure up to 200m in width at the central zone. This is an exciting development for cascades as a single, wide zone has easier mining potential than the number of discrete zones that were interpreted in 2015.

Observations from detailed drill hole logging of over 1,700m of RC samples at Cascades indicate:

1. Coarse average flake size, particularly to the south of the Cascades structure
2. Higher overall graphite grades are expected than the 9.34% average intervals from the 2015 programme
3. More pervasive weathering within the central zone (RC142 and RC143 are oxidised for their entire intervals) provides potential for substantial portions of soft, free-digging material with lower milling costs
4. The 20 holes drilled to date (including 4 drilled in 2015) have the potential to increase the resource beyond the current 12.3Mt Cascades Inferred resource announced in February this year

To follow up on this highly positive development, the drilling programme has been extended to the east to define this substantially wider zone of mineralisation. This will require an additional 3,000m of drilling during August with delivery of a resource expected in October. Drill samples are progressively being sent for assay with first results expected in early September.

Surface samples have been collected for preliminary metallurgical test work with results expected by mid September. A diamond drill rig is mobilising at Cascades for detailed metallurgical sampling.

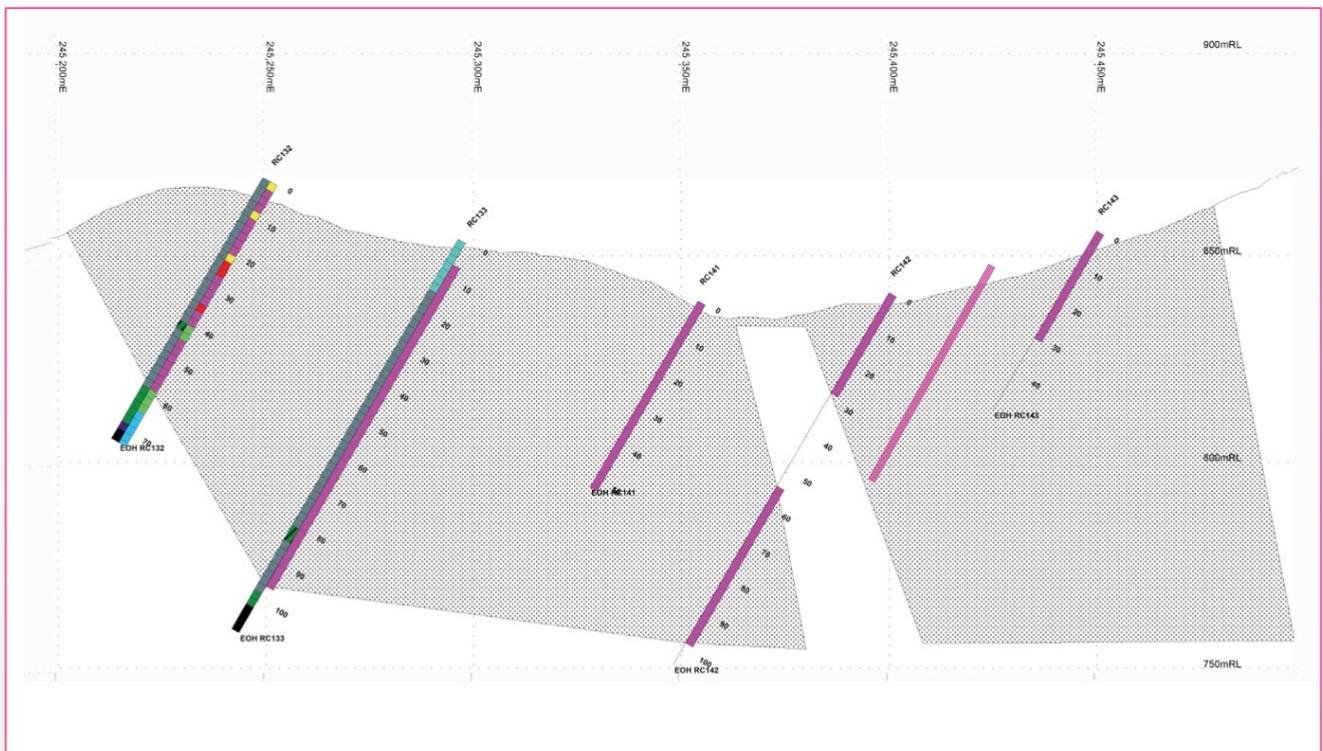


Figure 1. Section along 9,041,800 line. Five holes along this section have all started in graphite and RC142 and RC143 are oxidized along their entire down hole length. Drilling will continue to define the easterly extent of mineralisation.

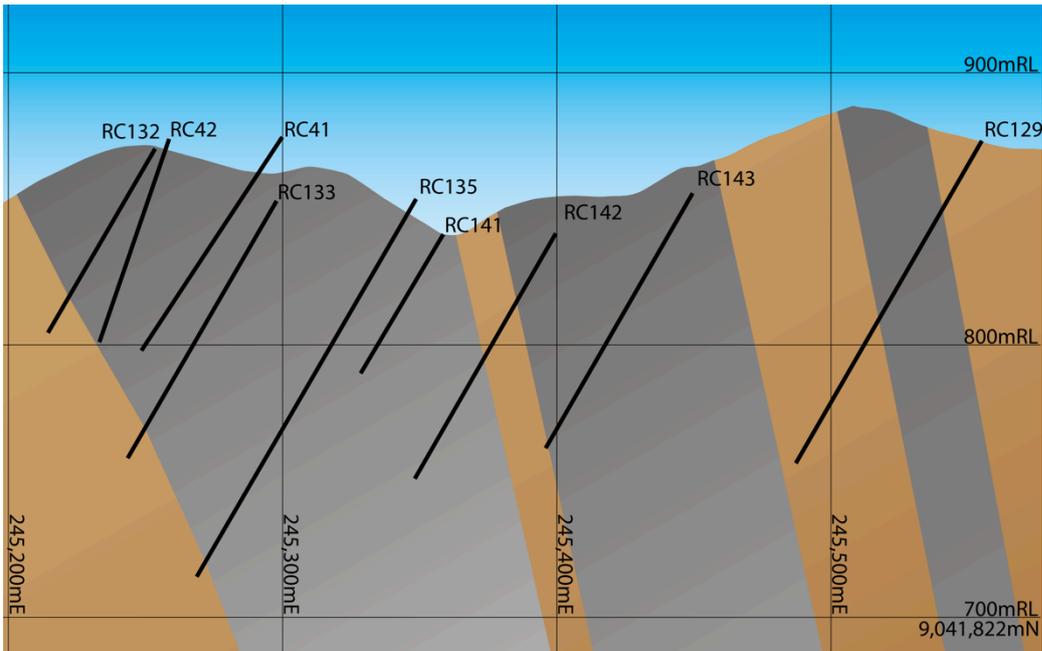


Figure 2. Composite section including drillholes on and 40m to the north of line 9,041,800. Graphitic mineralisation (grey) tends to be in three parallel lodes with the western lode being significantly wider. The three graphitic structures offer potential to be mined as one overall pit with well defined waste zones at low strip ratios and a high proportion of free digging material.

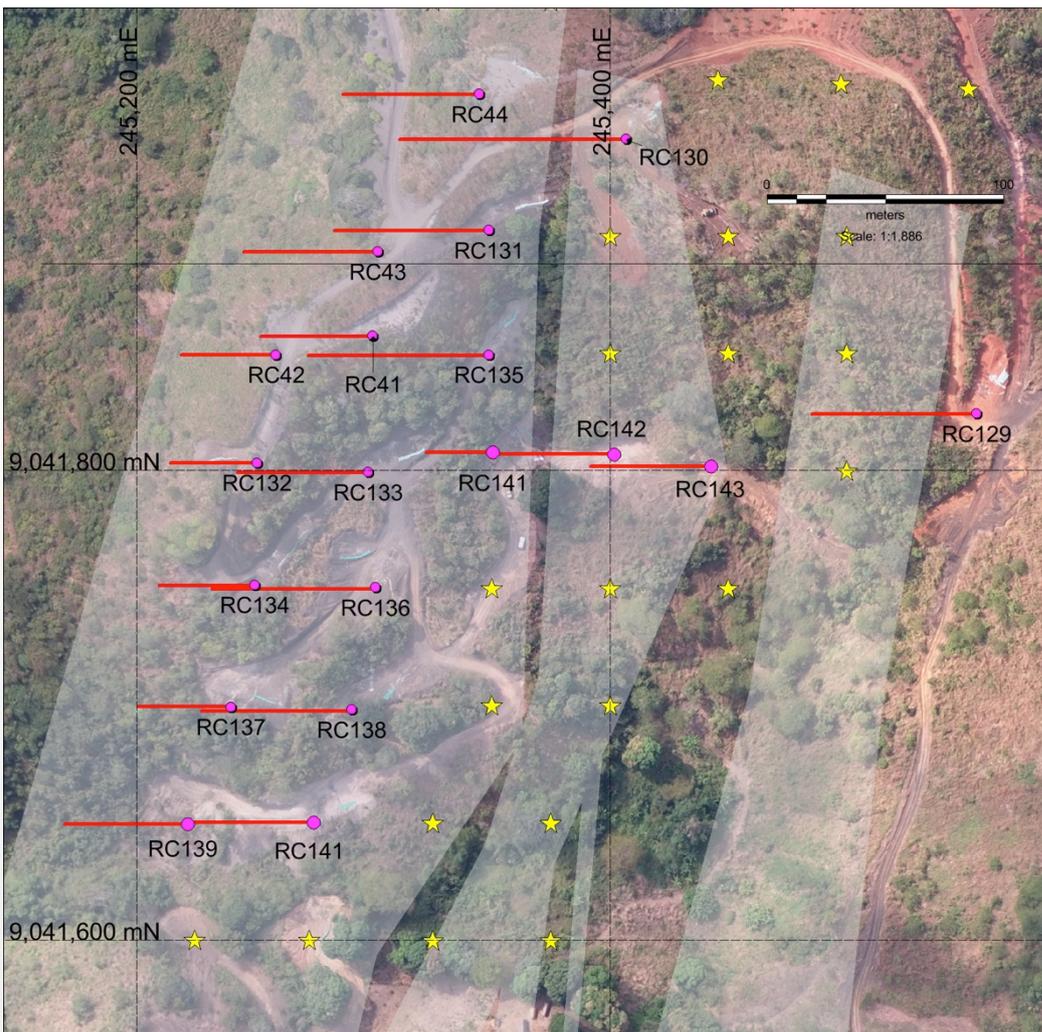


Figure 3. Cascades overlay showing drillholes over interpreted surface mineralisation (pale grey). The western lode is over 200m wide at the 9,041,800 northing. Red lines are drill traces projected to surface and yellow stars are planned hole collars.

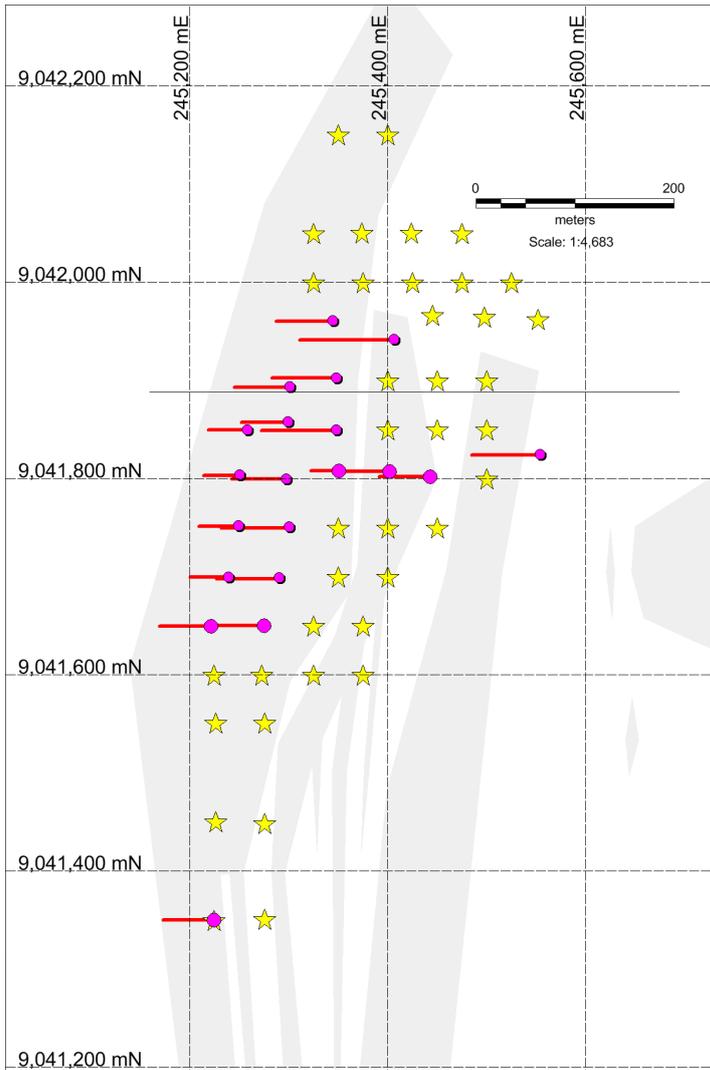


Figure 4. Cascades surface geology (grey) showing interpreted lode structures. Pink circles represent completed holes. Yellow stars are proposed drillhole collars. Note that mineralisation is located on top of steep ridges, lowering potential strip ratios (waste:ore) for mining. Weathering profile is up to 70m below surface, enhancing free-digging potential for mining.



Photo 1. Drilling RC140 towards footwall at bottom of hole. Graphite being flushed out of hole with water. A diamond hole will be drilled along this line for metallurgical sampling and to compare RC Vs diamond drill method grades.

Ulanzi drill programme

Resource drilling at Ulanzi was completed in Mid July 2016. Assay results from 19 of the 41 RC holes have been returned with slightly higher grades than for the 2015 programme. Results confirm continuity of mineralisation along the 2.5km drilled portion the of 5km long Ulanzi structure.

The revised Ulanzi resource will be announced in September 2016 with the expectation of delivering most of this resource in the Measured Category.

| Ulanzi drilling summary | Holes | Metres |
|--------------------------------|--------------|---------------|
| 2015 RC holes | 43 | 3,212 |
| 2015 Diamond Holes | 6 | 775 |
| | | |
| 2016 RC holes | 41 | 2,916 |
| 2016 Diamond Holes | 7 | 480 |
| | | |
| RC: Total holes and metres | 84 | 6,128 |
| Diamond: Total holes, metres | 13 | 1,255 |

Table 1. Ulanzi drilling summary.

Diamond drilling Programme - Ulanzi and Cascades

Diamond core drilling at Ulanzi is to collect representative composite samples for metallurgical flowsheet optimisation. The last of the seven planned diamond holes is nearing completion with the diamond rig then going to Cascades to drill four holes across the newly discovered wide zones of graphitic schists.

At Cascades four diamond holes are currently planned for a total of 500m.

Summary

The Cascades prospect is returning the most exciting results to date from the Company's Mahenge Project:

- Broadest mineralised zones drilled to date at Mahenge with >200m width at the central zone.
- Flake size is consistently coarse (>0.5mm) and up to 5mm from the southern portion
- Grades appear to be higher than Ulanzi – based on drill hole logging – assays are awaited
- Up to 70m deep weathering profile suggests that significant portions of this mineralisation may be free-digging, which implies low cost mining and processing.
- Mineralisation is on top of or adjacent to steep ridge structures. This provides potential for low strip ratios

The Cascades drill programme has been extended to determine the size potential of the area. Drilling is expected to significantly increase the resource tonnage from Cascades over and above the 12.3Mt Inferred Resource announced in February this year.

The Ulanzi infill programme was completed by mid-July with assays to date confirming the grade continuity of the structure. Close spaced drilling should be sufficient to reclassify the Ulanzi resource into the Measured and Indicated Category. The Ulanzi resource is expected to be announced in September 2016 and the Cascades resource in October 2016.

For further information please contact:

Mr. Steven Tambanis

Managing Director

Office: +61 8 9320 7550

Email: st@blackrockmining.com.au

Mr. Gabriel Chiappini

Director

+61 8 9320 7550

Email: gabriel@blackrockmining.com.au

About Black Rock Mining

Black Rock Mining Limited is an Australian based company listed on the Australian Securities Exchange. The Company owns graphite tenure in the Mahenge region, Tanzania, a Country that hosts world-class graphite mineralisation. The Company announced a maiden JORC compliant resource of 131mt @ 7.9% TGC for 10.4m tonnes of contained Graphite in February 2016, making this one of the largest JORC resources Globally. A positive scoping study in March 2016 led into the current Pre Feasibility Study which is expected to be released in October 2016. The Company intends to complete a Definitive Feasibility study by March 2017.

An infill drill programme is nearing completion to convert the majority of this resource into Measured and Indicated Classification. The updated JORC resource for Ulanzi is expected in September 2016 and a JORC resource for Cascades is expected in October 2016.

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Steven Tambanis, who is a member of the AusIMM. He is an employee of Black Rock Mining Limited. Steven Tambanis 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 2004 and 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Steven Tambanis consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.



Photo 2. Diamond drillers at Ulanzi showing completed core from DD21.



Photo 3. RC rig at Cascades on western ridge. Note extensive weathered graphitic outcrop on right hand side of image.



Photo 4. Outcropping weathered/oxidised graphitic mineralisation from photo 3, above.

Appendix 1: JORC mineral resource statement (February 2016)

| Prospect | Category | Tonnes (Millions) | TGC (%) | Contained TGC (Millions tonnes) |
|------------|------------------|-------------------|------------|---------------------------------|
| Ulanzi | Indicated | 35.0 | 8.3 | 2.9 |
| | Inferred | 45.5 | 8.7 | 4.0 |
| | Sub-total | 80.5 | 8.5 | 6.9 |
| Epanko Nth | Indicated | 17.6 | 6.4 | 1.1 |
| | Inferred | 20.8 | 5.9 | 1.2 |
| | Sub-total | 38.4 | 6.1 | 2.3 |
| Cascade | Indicated | - | - | - |
| | Inferred | 12.3 | 9.5 | 1.2 |
| | Sub-total | 12.3 | 9.5 | 1.2 |
| COMBINED | INDICATED | 52.5 | 7.7 | 4.0 |
| | INFERRED | 78.6 | 8.1 | 6.4 |
| | TOTAL | 131.1 | 7.9 | 10.4 |

Appendix 2: Cascades drillhole summary. Holes RC41-RC44 were previously reported in 2015. RC129 onwards are from the 2016 drill programme.

| Hole | Easting | Northing | Dip | Azi | Depth m | Graphite | | | TGC interval | including |
|------|---------|----------|-----|-----|---------|----------|-----|----------|--------------|------------|
| | | | | | | from | to | interval | | |
| RC41 | 245300 | 9041857 | 57 | 270 | 94 | 0 | 88 | 88 | 88m@ 9.68 | 44m@ 11.09 |
| RC42 | 245259 | 9041849 | 71 | 270 | 79 | 4 | 64 | 60 | 60m@ 10 | 22m@ 11.46 |
| RC43 | 245302 | 9041893 | 75 | 270 | 112 | 2 | 100 | 98 | 98m@ 8.92 | 40m@ 10.18 |
| RC44 | 245345 | 9041960 | 63 | 270 | 114 | 2 | 100 | 98 | 98m@ 9.04 | 62m@ 10.07 |

Metres 399

| Hole | Easting | Northing | Dip | Azi | Depth m | Graphite | | | TGC interval | including |
|-------|---------|----------|-----|-----|---------|----------|-----|----------|----------------|-----------|
| | | | | | | from | to | interval | | |
| RC129 | 245555 | 9041824 | 60 | 270 | 136 | 30 | 74 | 44 | assays awaited | |
| RC130 | 245407 | 9041941 | 60 | 270 | 187 | 2 | 176 | 174 | assays awaited | |
| RC131 | 245349 | 9041902 | 60 | 270 | 130 | 0 | 120 | 120 | assays awaited | |
| RC132 | 245251 | 9041803 | 60 | 270 | 73 | 0 | 60 | 60 | assays awaited | |
| RC133 | 245298 | 9041799 | 60 | 270 | 109 | 6 | 96 | 90 | assays awaited | |
| RC134 | 245250 | 9041751 | 60 | 270 | 80 | 2 | 68 | 66 | assays awaited | |
| RC135 | 245349 | 9041849 | 60 | 270 | 161 | 0 | 152 | 152 | assays awaited | |
| RC136 | 245301 | 9041750 | 60 | 270 | 136 | 6 | 120 | 114 | assays awaited | |
| RC137 | 245240 | 9041699 | 60 | 270 | 76 | 4 | 70 | 66 | assays awaited | |
| RC138 | 245291 | 9041698 | 60 | 270 | 125 | 2 | 116 | 114 | assays awaited | |
| RC139 | 245224 | 9041651 | 60 | 270 | 69 | 0 | 60 | 60 | assays awaited | |
| RC140 | 245275 | 9041649 | 60 | 270 | 112 | 0 | 104 | 104 | assays awaited | |
| RC141 | 245357 | 9041801 | 60 | 270 | 58 | 0 | 52 | 52 | assays awaited | |
| RC142 | 245400 | 9041801 | 60 | 270 | 102 | 54 | 98 | 44 | assays awaited | 0-28m |
| RC143 | 245450 | 9041792 | 60 | 270 | 109 | 0 | 68 | 68 | assays awaited | |
| RC144 | 245224 | 9041350 | 60 | 270 | 109 | 24 | 94 | 70 | assays awaited | |

Metres 1,772

Total metres 2,171

Appendix 3: JORC Tables

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| Criteria | JORC Code explanation | Commentary |
|------------------------------|---|--|
| Sampling techniques | <ul style="list-style-type: none"> Nature and quality of sampling (eg 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information. | <ul style="list-style-type: none"> All samples are individually labelled and logged Diamond drill sampling consisted of quarter core sampling of diamond core on a 2m sample interval. RC samples were riffle split on an individual 1m interval then composited as two x 1m samples which were submitted to the laboratory |
| Drilling techniques | <ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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). | <ul style="list-style-type: none"> Both diamond core (HQ, PQ single tube) and reverse circulation (5.5" face sampling) drilling methods have been used. All core is oriented using a spear or ACE back-end orientation device |
| Drill sample recovery | <ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. | <ul style="list-style-type: none"> Diamond Drill sample recoveries have been measured for all holes and found to be acceptable. Method was linear metre core recovery for every meter drilled. RC recoveries were estimated by measuring the weight of every 1m interval. Grade /recovery correlation was found to be acceptable. Twin hole comparison of RC vs Diamond indicates that no sample bias has occurred for graphite |
| Logging | <ul style="list-style-type: none"> 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. | <ul style="list-style-type: none"> Pits and trenches were logged for geology and structures, Photographs were also recorded for the trench samples All drill holes have been comprehensively logged for lithology, mineralisation, recoveries, orientation, structure and RQD (core). All |

| Criteria | JORC Code explanation | Commentary |
|---|--|---|
| | <ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. | <p>drill holes have been photographed. Sawn diamond core has been retained for a record in core trays. RC chips stored in both chip trays and 1-3kg individual metre samples as a record.</p> |
| Sub-sampling techniques and sample preparation | <ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. | <ul style="list-style-type: none"> The pit and trench samples were not sub sampled Diamond core samples were halved with one half then quartered. A quarter core sample was taken for laboratory analysis. The remaining quarter core sample is retained for a record and a half core sample retained for metallurgical testwork. RC samples were collected for every down-hole metre in a separate RC bag. Each metre sample was split through a three-tier riffle splitter and a 1.5kg sample taken of each metre. Two one-metre samples, totaling 3kg in weight were composited for assay submission. Field duplicates were taken to test precision up to the compositing and splitting stage Samples sizes for the all medium ie trenches, pits DD and RC drilling was appropriate for this style of graphite mineralisation |
| Quality of assay data and laboratory tests | <ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. | <ul style="list-style-type: none"> The samples were sent to Mwanza in Tanzania for preparation and pulps were then sent to Brisbane for carbon analysis: Total Graphitic Carbon (TGC) C-IR18 LECO Total Carbon. Graphitic C is determined by digesting sample in 50% HCl to evolve carbonate as CO₂. Residue is filtered, washed, dried and then roasted at 425C. The roasted residue is analysed for carbon by high temperature Leco furnace with infra red detection. Method Precision: ± 15% Reporting Limit:0.02 – 100 % Some of the samples were analysed for Multi-elements using ME-ICP81 sodium peroxide fusion and dissolution with elements determined by ICP. Some of the samples were analysed for Multi-elements using ME-MS61 for 48 elements using a HF-HNO₃-HClO₄ acid digestion, HCl leach followed by ICP-AES and ICP-MS analysis. Some of the samples were analysed for Multi-elements using ME-MS81 using lithium borate fusion and ICP-MS determination for 38 elements. All analysis has been carried out by certified laboratory – ALSchemex. TGC is the most appropriate method to analyse for graphitic carbon and it is total analysis. ALSchemex inserted its own standards and blanks and completed its own QAQC for each batch of samples. No failures were noted |

| Criteria | JORC Code explanation | Commentary |
|--|---|--|
| | | <ul style="list-style-type: none"> • <i>BKT inserted certified standard material, blank or duplicate at a rate of one in twenty samples.</i> • <i>Approximately 1/40 sample pulps were re-submitted from the primary Laboratory (ALSICHEMEX) to a secondary Laboratory (SGS) in Johannesburg, South Africa. No Bias or issues with accuracy or precision were observed between the two data sets.</i> • <i>Based on the QA/QC strategy employed by BKT for the duration of the exploration programs at Mahenge BKT is satisfied the TGC results are accurate and precise and no systematic bias has been introduced</i> |
| Verification of sampling and assaying | <ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> | <ul style="list-style-type: none"> • <i>The data has been manually updated into a master spreadsheet and a GIS database, considered to be appropriate for this exploration program.</i> • <i>Drill intersections have been checked by a consultant geologist as part of the data validation process and errors corrected prior to resource estimation</i> • <i>Twin holes were used to compare diamond Vs RC drilling. Correlation of results was excellent</i> • <i>There has been no adjustment of assay data</i> |
| Location of data points | <ul style="list-style-type: none"> • <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> | <ul style="list-style-type: none"> • <i>A handheld GPS was used to identify the positions of the pits in the field</i> • <i>The handheld GPS has an accuracy of +/- 5m</i> • <i>The datum is used is: WGS84, zone 37 south</i> • <i>Drill collars have been surveyed with a DGPS for sub-metre accuracy for the x/y position and the Ulanzi, Cascade and Epanko north prospects have been surveyed with a high resolution aerial drone to generate an accurate contour map and high resolution photo image. This high definition topographic survey has been used to provide the z component for the drill collars</i> • <i>The locations and RLs of the trenches have been checked using the detailed aerial/topo survey and modified accordingly for both x/y and z components</i> • <i>BKT is satisfied the location of trenches, pits and drill holes have been located with a high degree of accuracy</i> |
| Data spacing and distribution | <ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral</i> | <ul style="list-style-type: none"> • <i>Data spacing and distribution is considered to be appropriate for the estimation of a Mineral Resource.</i> |

| Criteria | JORC Code explanation | Commentary |
|--|--|---|
| | <p><i>Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> <i>Whether sample compositing has been applied.</i> | <ul style="list-style-type: none"> <i>The company has used 100 x 100 or 100 x 50 or 50 x 50 grid spacing which has been sufficient to show geological and grade continuity</i> <i>The drill spacing is appropriate for Resource Estimation</i> <i>No further sample compositing has been applied post the sub-sampling stage</i> |
| Orientation of data in relation to geological structure | <ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i> | <ul style="list-style-type: none"> <i>Drilling is oriented perpendicular to mineralisation or as close to perpendicular to mineralisation as possible.</i> <i>The orientation of the drill direction has not introduced a sample bias</i> |
| Sample security | <ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> | <ul style="list-style-type: none"> <i>The samples were taken under the supervision of an experienced geologist employed as a consultant to BKT</i> <i>The samples were transferred under BKT supervision from site to the local town of Mahenge where the samples were then transported from Mahenge to Dar es Salaam and then transported to Mwanza where they were inspected and then delivered directly to the ALSChemex process facility.</i> <i>Chain of custody protocols were observed to ensure the samples were not tampered with post-sampling and until delivery to the laboratory for preparation and analysis</i> <i>Tamper proof plastic security tags were fastened to the samples bags. No evidence of sample tampering was reported by the receiving laboratory</i> <i>Transport of the pulps from Tanzania to Australia was under the supervision of ALSChemex</i> |
| Audits or reviews | <ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> | <ul style="list-style-type: none"> <i>Trenching and drilling information collected by BKT has been evaluated for sampling techniques, appropriateness of methods and data accuracy by an external geological consultant</i> |

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|-------------------------|---|---|
| Mineral tenement | <ul style="list-style-type: none"> <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint</i> | <ul style="list-style-type: none"> <i>The sampling was undertaken on granted license PL 7802/2012</i> <i>It has an area of 150km², following renewal in early 2016</i> |

| Criteria | JORC Code explanation | Commentary |
|--|---|--|
| and land tenure status | <p>ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</p> <ul style="list-style-type: none"> 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. | <ul style="list-style-type: none"> The license is 100% owned by BKT Landowners of nearby villages are supportive of the recently completed sampling and exploration program. |
| Exploration done by other parties | <ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. | <ul style="list-style-type: none"> Previous explorers completed some limited RC drilling and rockchip sampling but the original data has not been located apart from what has been announced via ASX release by Kibaran Resources during 2011 and 2013 |
| Geology | <ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. | <ul style="list-style-type: none"> The deposit type is described as gneiss hosted flaky graphite. The mineralisation is hosted within upper amphibolite facies gneiss of the Mozambique Mobile Belt. Over 95% of the exposures within the tenement comprise 3 main rock types that include alternating sequences of: <ul style="list-style-type: none"> Graphitic gneiss – feldspar and quartz rich varieties. Marble and, Biotite and hornblende granulites. Less common rock types include quartzite |
| Drill hole Information | <ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> 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. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. | <ul style="list-style-type: none"> All drill hole information has been retained and compiled into a drilling database. At this early stage of exploration only the assay data has been released together with hole length, a plan locality map of drill holes and down hole intervals. |
| Data aggregation methods | <ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 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 | <ul style="list-style-type: none"> Exploration results have been reported as weighted averages allowing up to 2m of internal waste and minimum grades at 5% TGC No maximum or top- cutting was applied during the calculation of drill holes intersects |

| Criteria | JORC Code explanation | Commentary |
|---|--|--|
| | <p><i>such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> | |
| Relationship between mineralisation widths and intercept lengths | <ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> | <ul style="list-style-type: none"> <i>Drill hole results are reported as down-hole metres.</i> <i>Sufficient drilling, mapping and trenching has been completed at the main prospects to understand the orientation of mineralised lodes. A range of drill holes angles were used during the exploration program with the majority drilled at -60° (refer to Appendix 1)</i> |
| Diagrams | <ul style="list-style-type: none"> <i>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.</i> | <ul style="list-style-type: none"> <i>Figures show plan location of drill holes, appropriately scaled and referenced.</i> <i>Refer to images in the main body of the text</i> |
| Balanced reporting | <ul style="list-style-type: none"> <i>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.</i> | <ul style="list-style-type: none"> <i>All drill holes have been reported in their entirety.</i> <i>All drilling results have been reported in past Exploration announcements</i> |
| Other substantive exploration data | <ul style="list-style-type: none"> <i>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.</i> | <ul style="list-style-type: none"> <i>1 in 10 samples from the first drill programme were assayed for deleterious elements using a 40 element ICP method. No deleterious elements were observed, with background (low) levels of uranium and thorium.</i> <i>758 bulk density measurements using the water displacement method from the oxide (limited) transitional and fresh zones.</i> <i>The samples for the bulk density measurements were taken from diamond drill core.</i> <i>Every diamond hole drilled used in this Resource Estimate has had intervals tested for bulk density generating a high quality dataset.</i> |
| Further work | <ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> | <ul style="list-style-type: none"> <i>Resource drilling is completed at Ulanzi and ongoing at Cascades</i> <i>Ongoing metallurgical testwork – flotation and particle size optimization</i> <i>Additional bulk density testwork is planned, particularly focused on the oxide and transition material.</i> |

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|----------------------------------|---|--|
| Database integrity | <ul style="list-style-type: none"> 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. Data validation procedures used. | <ul style="list-style-type: none"> The drillhole database was compiled by BKT as Excel spreadsheets. Maps, lithology, drill holes, trenches and test pit samples were also supplied for use in GIS format (Mapinfo/Discover) and Excel spreadsheets. The drillhole database was converted to MS Access and linked to Geovia Surpac™ (industry standard resource modelling and estimation software). No material errors were identified in the database supplied in visual checks and through the Surpac connect processes. Normal data validation checks were completed on import to spreadsheets and tabfiles. A “Datashed” database has been established to manage the 2016 infill drill programme. This incorporates the entire 2015 database |
| Site visits | <ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. | <ul style="list-style-type: none"> Steven Tambanis, Competent Person, has regularly worked on site from July 2014 to May 2016, covering all aspect of work from early exploration through to the completion of drilling in December 2015 The independent resource geologist has sent a representative to site to review drilling and sampling practices in August 2016 in preparation for the new resource estimates planned for September and October 2016. |
| Geological interpretation | <ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. | <ul style="list-style-type: none"> The confidence in the geological interpretation is considered robust for the purposes of reporting an Inferred Resource. Graphite is hosted within graphitic gneisses of the Mahenge Scarp. These graphite rich zones generally strike NS and dip to the east at 60-80° and are interpreted to originate from graphitic sedimentary units of the Mahenge Scarp. The geological interpretation is supported by geological mapping and drill hole logging and mineralogical studies completed on drill programme. A weathered zone (oxide and transition) of reasonably uniform depth (averaging 25m) was interpreted based on the geological logs and coded into the block model. No alternative interpretations have been considered at this stage. The graphitic gneiss units are known to be continuous in strike length |

| Criteria | JORC Code explanation | Commentary |
|--|---|---|
| Dimensions | <ul style="list-style-type: none"> 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. | <p>for up to 22km</p> <ul style="list-style-type: none"> The modelled mineralized zone for Ulanzi has dimensions of 2,500m (surface trace striking 020) with four zones averaging in thickness of between 50-60m and ranging between 400m and 760m RL (AMSL). The modelled mineralized zone for Epanko has dimensions of 1,025m (surface trace striking 000) averaging in thickness of between 55-80m and ranging between 640m and 1,025m RL (AMSL). The modelled mineralized zone for Cascade has dimensions of 525m (surface trace striking 020) averaging in thickness 70m and ranging between 700m and 900m RL (AMSL). |
| Estimation and modelling techniques | <ul style="list-style-type: none"> 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. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. | <ul style="list-style-type: none"> Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac™ software for TGC (%) Drill spacing typically ranges from 50m to 100m. Drillhole samples were flagged with wireframed domain codes. Sample data was composited for TGC to 2m using a best fit method with a minimum of 50% of the required interval to make a composite. These were combined with 2m spaced trench samples plus individual 50m by 50m spaced base of test pit assays. Potential influences of extreme sample distribution outliers were investigated to determine whether they needed to be reduced by top-cutting on a domain basis. The investigation used a combination of methods including grade histograms, log probability plots and statistical tools. Based on this, it was determined that no top cuts were required. Directional variograms were modelled by domain using traditional variograms. Nugget values for TGC are low (around 15%) and structure ranges up to 270m. Block model was constructed with parent blocks of 10m (E) by 25m (N) by 10m (RL) and sub-blocked to 5m (E) by 12.5m (N) by 5m (RL). All estimation was completed to the parent cell size. Discretisation was set to 5 by 5 by 2 for all domains. Three estimation passes were used with differing distances at Epanko vs. Ulanzi and Cascade. This was done due to a tighter drill spacing at Epanko. At Ulanzi and Cascade, the first pass had a limit of 150m, the second pass 300m and the third pass searching a large distance to fill the blocks within the wireframed zones. At Epanko, the first pass had a limit of 75m, the second pass 150m and the third pass searching a large distance to fill the blocks within the wireframed |

| Criteria | JORC Code explanation | Commentary |
|---|--|--|
| | | <p>zones. Each pass used a maximum of 24 samples, a minimum of 8 samples and maximum per hole of 5 samples.</p> <ul style="list-style-type: none"> • Search ellipse sizes were based primarily on a combination of the variography and the trends of the wireframed mineralized zones. Hard boundaries were applied between all estimation domains. • Validation of the block model included a volumetric comparison of the resource wireframes to the block model volumes. Validation of the grade estimate included comparison of block model grades to the declustered input composite grades plus swath plot comparison by easting, northing and elevation. Visual comparisons of input composite grades vs. block model grades were also completed. • No previous resource estimations exist for this deposit. |
| Moisture | <ul style="list-style-type: none"> • Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. | <ul style="list-style-type: none"> • Tonnes are estimated on a dry basis |
| Cut-off parameters | <ul style="list-style-type: none"> • The basis of the adopted cut-off grade(s) or quality parameters applied. | <ul style="list-style-type: none"> • Grade envelopes have been wireframed to an approximate 4 to 5% TGC cut-off allowing for continuity of the mineralised zones. Based on visual and statistical analysis of the drilling results and geological logging of the graphite rich zones, this cut-off tends to be a natural geological change and coincides with the contact between the graphite rich gneiss and the other adjacent country rocks (i.e. garnet gneisses and occasional marbles). |
| Mining factors or assumptions | <ul style="list-style-type: none"> • 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. | <ul style="list-style-type: none"> • As graphite mineralisation is consistent along strike, has consistent widths and outcrops on steep ridges or ridge slopes (indicating low strip ratios), open pit mining methods are assumed |
| Metallurgical factors or assumptions | <ul style="list-style-type: none"> • The basis for assumptions or predictions regarding 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. | <ul style="list-style-type: none"> • BatteryLimits Pty Ltd has managed a comprehensive metallurgical test work programme in Perth, using BV laboratories to conduct the test work. Rock types sampled consist of oxide and primary mineralisation at Epanko north and Ulanzi. These samples (taken as diamond core) are considered to be representative of the mineralised zones • All rock types tested from both lodes have returned high quality |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | <i>concentrates with coarse flake sizing and high purities.</i> |
| Environmental factors or assumptions | <ul style="list-style-type: none"> <i>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.</i> | <ul style="list-style-type: none"> <i>Environmental monitoring is underway and detailed environmental factors will be assessed as part of a Pre Feasibility study should the project progress to this stage.</i> |
| Bulk density | <ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i> | <ul style="list-style-type: none"> <i>The Company has completed specific gravity testwork on 757 drill core samples across the Epanko and Ulanzi deposits using Hydrostatic Weighing (uncoated).</i> <i>Of these 757 samples, 373 are from within the modelled mineralised domains, primarily from fresh material (354 samples) and transition (19 samples).</i> <i>Statistical analysis of the samples and comparison against depth and TGC grade identified a subjective relationship between bulk density (BD) and TGC grade. As such, the BD used for fresh material was the average for the deposits (90% confidence interval) at 2.73 g/cm³ (with a standard deviation of 0.05).</i> <i>For the modelled oxide/transition zone (19% of the reported tonnage), there were only 19 samples available. Whilst the analysis of these samples produced the same BD as the fresh material, it was decided to use a slightly reduced BD of 2.6 g/cm³. It is planned to increase the number of measurements on transition material samples in the next phase of work.</i> <i>For the modelled oxide zone (4% of the reported tonnage), there were no BD measurements completed to date. It is planned to complete a representative number of measurements on oxide material samples in the next phase of work using appropriate measuring techniques for the material type. For this resource, an oxide BD of 1.9 g/cm³ has been assumed.</i> |
| Classification | <ul style="list-style-type: none"> <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of</i> | <ul style="list-style-type: none"> <i>The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralised zones, drilling density, confidence in the underlying database and the available bulk density information. Maximum drill spacing for Inferred Resource</i> |

| Criteria | JORC Code explanation | Commentary |
|---|--|---|
| | <p><i>input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></p> <ul style="list-style-type: none"> • <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> | <p><i>classification is 100m (northing) by 50-75m (easting). Coarser drill spacing is categorised into the Inferred Resource category.</i></p> <ul style="list-style-type: none"> • <i>All factors considered; the resource estimate has in part been assigned to Indicated with the remainder as Inferred Resources.</i> • <i>The result reflects the Competent Person's view of the deposit.</i> • <i>The 2016 infill drilling programme is designed to increase drilling density to allow the calculation of Measured and Indicated resources</i> |
| Audits or reviews | <ul style="list-style-type: none"> • <i>The results of any audits or reviews of Mineral Resource estimates.</i> | <ul style="list-style-type: none"> • <i>Whilst Mr. Barnes (Competent Person for the February 2016 Mineral Resource Statement) is considered Independent of the Company, no third party review has been conducted.</i> |
| Discussion of relative accuracy/confidence | <ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> | <ul style="list-style-type: none"> • <i>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</i> • <i>The statement relates to global estimates of tonnes and grade.</i> |