Epanko Bankable Feasibility Study Confirms Economic Viability

Kibaran Resources Limited (ASX: KNL), ('Kibaran' or the 'Company') is pleased to announce the results of the Bankable Feasibility Study ('BFS' or 'Study') for its 100% owned Epanko Graphite Project ('Epanko' or the 'Project') located in Tanzania. The BFS has confirmed the viability of a conventional open cut mine and conventional flotation processing plant.

The BFS has been delivered both on schedule and within budget. Results support Kibaran's strategy of being one of the first listed graphite focussed companies to progress to production.

Study Highlights

- **Epanko technically and commercially viable with no identified impediments for a positive decision to mine**
- **Key BFS Results**
  - **Pre-tax NPV_{10} of US$197.4m**
  - **Pre-tax IRR of 41.2%**
  - **Capital Expenditure of US$77.5m**
  - **Annual EBITDA of US$33.6m for 15 years**
  - **Mine life of 25 years**
  - **Strip ratio 1:1 (LOM)**
  - **Maiden Proved and Probable Ore reserves of 10.9 Mt at 8.6% TGC**
- **Annual production of 40,000tpa of high grade graphite flake concentrate for first 15 years**
- **Mining licence granted with environmental approvals in place**
- **All plant, associated equipment and infrastructure designed to Australian standards**
- **Processing plant and associated infrastructure designed to accommodate an upgrade in production, in line with future increased global demand**
- **Initial production supported by existing offtake and sales agreements**
- **Debt financing discussions commenced**

Mr Andrew Spinks, Managing Director commented "Completion of the BFS is a significant milestone for our Company and shareholders. The study is based on a realistic development strategy and supported by strategic partnerships in European markets. The positive BFS result enables the Company to advance Epanko to production and in parallel further progress its second 100% owned graphite project at Merelani East and advance the strategic downstream value add opportunities we have announced to date."

Mr Spinks added further "The milestone places the company in an enviable position, as it will provide access to further strategic partnerships in the European, Japan and US markets. The emerging battery market will have a significant positive impact on our future graphite sales, given our current sales agreements are solely based on the traditional refractory and expandable markets. The next few months is an exciting time as we deliver on our specific milestones for the broader development strategy for the Company."

BANKABLE FEASIBILITY STUDY

GR Engineering Services Ltd (ASX:GNG), ('GR Engineering') completed the BFS based on the upgraded Mineral Resource estimate undertaken by CSA Global Pty Ltd ('CSA Global') and outstanding results from the metallurgical test work. Conservative pricing estimates for flake graphite fractions were adopted by Kibaran using both current pricing and forecast demand by Roskill. The BFS capital and operating cost estimates are to a level of accuracy of ±10%.

The BFS assessed the viability of an initial mining operation producing 40,000tpa of high grade, large flake graphite. The BFS economics are supported by offtake and sales agreements, based on pricing FOB Dar es Salaam.

The BFS is based on a 440,000tpa flotation processing plant treating predominantly oxide ore and producing 40,000tpa of graphite concentrate. The Study addressed in detail; processing plant design and metallurgical recovery, infrastructure requirements, capital and operating costs, social and environmental issues, mining and processing operations, financial analysis, implementation, as well as risks and opportunities. All financial numbers are reported in US dollars.

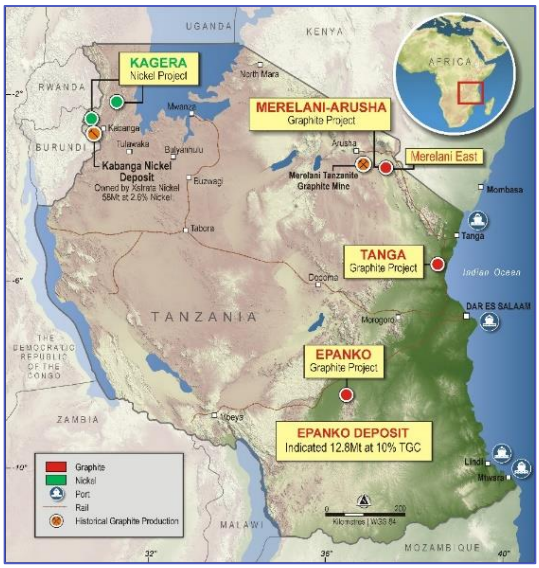


Figure 1: Project Locations

STUDY TEAM

The BFS was managed by GR Engineering utilising industry leading experts in relevant disciplines including:

GR Engineering Services	*Study Manager and Engineering Design*
CSA Global	*Mineral Resource and Geology*
Knight Piésold	*Hydrology and Infrastructure*
ECG Engineering	*Power and Electrical Engineering*
Independent Metallurgical Operations	*Metallurgy*
Intermine Engineers	*Mining and Ore Reserves*
George Orr & Associates	*Geotechnical Mine Design*
MTL Consulting	*Environment*
Trinity Promotions	*Social and Community*

All of the consultants have previously worked on African based projects and the majority are engaged under various exclusivity arrangements. The Study also had significant technical input from Mr Christoph Frey, Kibaran's Specialist Graphite Consultant.

FINANCIALS

Table 1 below summarises the key financial and physical parameters over the Life of Mine (LOM). Annual concentrate production for the first 15 years is 40,000tpa, with the remaining 10 years averaging 31,300tpa.

Table 1: Financial Summary (US$)

Items		Parameters (LOM)
Plant Throughput	(tpa)	434,000
Plant Recovery	(%)	93.3
Feed Grade	(%)	8.6
Carbon Grade	(%)	96.3
Production Concentrate	(tpa)	36,400
Base Price Assumption	(US$/t)	1,446
Cost per Tonne of Concentrate	(US$/t)	570
Mine Life	(Yrs)	25
Pre-Production Capital	(US$m)	77.5
Strip Ratio	(W:O)	1:1
Discount Rate	(%)	10
Payback	(Yrs)	**2.7**
EBITDA/Annum (Avg)	(US$m)	**30.3**
Pre-tax IRR	(%)	**41.2**
Pre-tax NPV	(US$m)	**197.4**

CAPITAL COST

The total establishment capital cost of the Project is US$77.5m, including all pre-development and pre-production expenditure, first fill consumables, insurance spares and contingency. Table 2 provides the capital cost estimates of the Project.

Table 2: Capital Cost Estimate

CAPITAL ITEM	(US$m)
Mining	2.4
Process Plant	45.1
Infrastructure	10.9
EPC	11.0
Contingency (10%)	6.2
Owners Cost	1.9
Total	**77.5**

OPERATING COSTS

Life-of-mine project FOB cash operating costs are forecast to be $570/t concentrate, before the payment of a 3% royalty and taxes to the Government of Tanzania.

Table 3: Operating Cost Estimate (excluding royalties and taxes)

ITEM	ESTIMATE (FOB US$/t)
Mining	117
Processing[1]	277
Transport and Freight to Port (FOB)	102
General & Administration	74
Total Cost per tonne of concentrate	**570**

***Note 1**: Power generation is by diesel generators for the first 2 years of production and then by grid power from the Ifakara substation.*

ORE RESERVES

The Proved and Probable Ore Reserve estimated as part of BFS is based on and inclusive of the Measured and Indicated Mineral Resource.

Table 4: Ore Reserve Statement >5% TGC

JORC Classification	Tonnage (Mt)	TGC Grade (%)	Contained Graphite (t)
Proved	8.0	8.3	659,000
Probable	2.9	9.6	279,000
Total	**10.9**	**8.6**	**938,000**

Notes for Table 4 & 5:
Tonnage figures contained within tables have been rounded to nearest 100,000. % TGC grades are rounded to 1 decimal figure. Abbreviations used: Mt = 1,000,000 tonnes. Rounding errors may occur in tables.

The Ore Reserve has been reported at a 5% cut-off grade due to a reduction in the economic cut-off grade determined by the BFS.

MINERAL RESOURCE

A significant portion of the Mineral Resource estimate has been classified as Measured and Indicated (M+I). 62% of the Mineral Resource estimate is now M+I, totalling 14.5 Mt at 9.8% TGC for 1.4 Mt of contained graphite. 46% of the M + I Mineral Resource estimate is now classified as Measured.

The total Mineral Resource estimate stands at 23.3 Mt grading 9.4% total graphitic carbon (TGC) for 2,194,600 tonnes of contained graphite. The resource estimate was carried out by CSA Global and was based on data sets compiled from drilling, trenching and other geological activity undertaken in late 2014. The Mineral Resource estimate was reported in June 2015 and has been classified in accordance with the JORC (2012) Code and is shown in Table 5.

Table 5: Mineral Resource Estimate for Epanko Deposit >8% TGC, June 2015

JORC Classification	Tonnage (Mt)	TGC Grade (%)	Contained Graphite (t)
Measured	6.6	9.7	635,800
Indicated	7.9	10.0	785,300
Inferred	8.8	8.7	773,500
Total	**23.3**	**9.4**	**2,194,600**

A substantial amount of graphite mineralisation exists within the Mineral Resource between 5% and 8% TGC. When adopting a lower TGC cut-off grade of 5%, consistent with the cut-off grade used to report the Ore Reserves, the total Mineral Resource is 89.2 Mt @ 7.4% TGC for 6,614,300 tonnes of contained graphite. This includes a Measured Mineral Resource of 17.6Mt @ 7.8% TGC and an Indicated Mineral Resource of 23.5Mt @ 7.7% TGC. The BFS has determined that a 5% reporting cut-off grade is reasonable, support for which was not available when the Mineral Resource was reported (ASX announcement 11th June 2015).

METALLURGY

Detailed BFS testwork delivered significant metallurgical improvements in comparison to metallurgical parameters utilised in the Scoping Study. The results highlighted;

- Very high proportion of large flake graphite with 85.7% of the flake distribution greater than >106 micron
- Exceptional final average carbon concentrates of 96.3%

The final process flow sheet was delivered by GR Engineering based on the metallurgical testwork carried out as part of the Study. This resulted in a conventional flotation plant, the capital cost of which is based on a two-stage liberation process to separate the graphite. The flowsheet shown in Figure 3 below was developed by GR Engineering in conjunction with IMO Pty Ltd and comprises rougher flotation, two liberation stages, cleaner flotation, dewatering, drying and screening prior to bagging for export.

The average carbon concentrate reported is 96.3% TGC and is a marked increase from the Scoping Study. Final graphite concentrate size analysis on a percent retained basis is shown in Table 6.

Table 6: Flotation Results

FLAKE SIZE DISTRIBUTION				
Name	**Microns (µm)**	**Mesh Size**	**Portion Retained (%)**	**Carbon Grade (%)**
Jumbo	>300	>48	20.0	97.1
Large	>180	>80	35.4	96.7
Medium	>106	>150	30.3	96.2
Small	>75	>200	7.4	95.3
Fine	<75	<200	6.9	92.6
			100%	**96.3%**

Note: Micron (µm) and Millimetre (mm). 1mm = 1000µm and fixed carbon content determined by Loss on Ignition method (LOI).

Testwork was based on a bulk master composite samples from the 7 HQ3 diamond holes (refer announcement dated 30 September 2014) centred at E904301 and N9035298.

Ultra high purity can be reached easily in a single one step process. Importantly, extremely low impurities were recorded confirming that there is no limitation on the applications and uses of Epanko flake graphite.

Figure 2: High Grade Concentrate - Final cleaner concentrate from an initial rougher cleaner test

The testwork also demonstrated a superior quality graphite product. The metallurgical characteristics are considered exceptional and give Epanko significant competitive and commercial advantages:

- Expansion rates for Jumbo (+50 mesh) flake is 490 ml/g which is up to 30% higher than graphite produced in China
- Ultra high purity of 99.98% Carbon achievable
- Ash melting point of 1,305°C is up to 150°C higher than graphite produced in China
- Very low percentage of fine flake (< 75 micron) with only 6.9% reporting to this size fraction
- Extremely high percentage of large flake provides higher basket prices and revenue from sales

PROCESS DESIGN

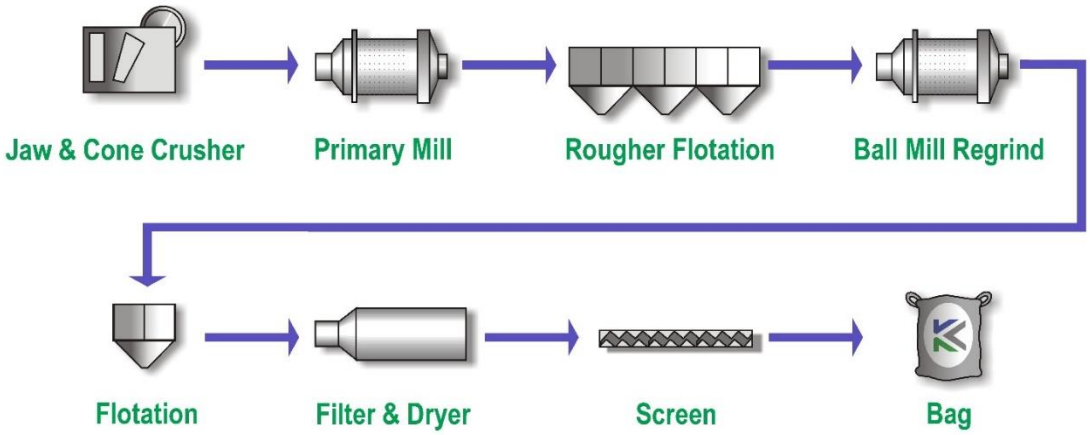


Figure 3: Schematic Process Design

The processing plant will include a two stage crushing circuit that will deliver product to a storage bin. Ore will be reclaimed from the storage bin and delivered to a single stage rod mill operating in closed circuit with a screen. The undersize from the mill product screen will report to a flotation circuit for recovery of the graphite using a circuit comprising rougher, scavenger, primary cleaner and secondary cleaner flotation stages. Graphite concentrate will be filtered and dried. Dry graphite concentrate will be screened into various product sizes and bagged for shipping. Flotation tailings will report to the tailings thickener and then be pumped to the tailings storage facility.

Figure 4: Example of Primary Mill and Secondary Regrind Mill selected for Epanko

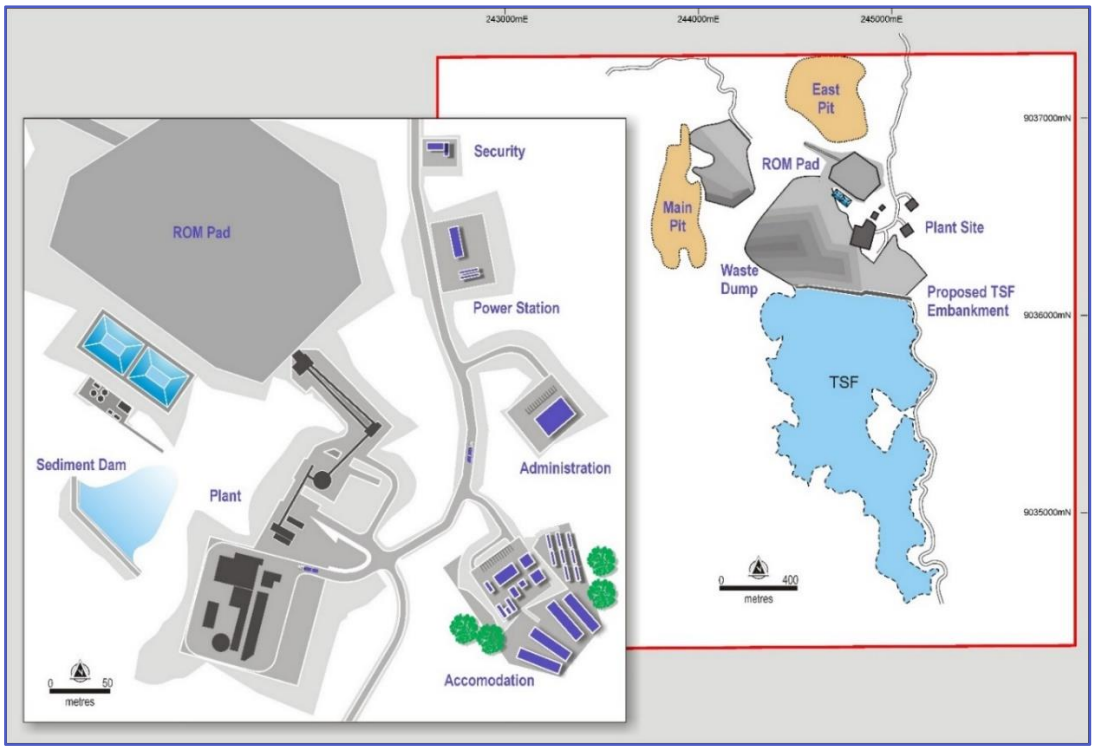


Figure 5: Mine Layout & Process Plant

INFRASTRUCTURE

Power

The Project will utilise diesel generated power for the first 2 years of production whilst the Rural Energy Agency of Tanzania constructs a new substation at Ifakara. During the second year of production, the Company will construct a 33kV power line from the Ifakara substation to Epanko. Power costs will then be reduced from 28.8 cents/kwh to 9 cents/kwh. The capital cost of the power line is estimated to be US$8.5m which will be funded out of cashflow.

Water

The Study has determined a positive water balance for the processing plant. Water supply for the project will come from a combination of mine water, borefield groundwater, tailings return water and runoff within the TSF catchment area.

Tailings Storage Facility (TSF)

The TSF will comprise a valley-type storage formed by a multi-zoned earth fill embankment. The facility will be built as a single cell to store the total amount of tailings (10.3 Mt). Prior to commissioning of the process plant a starter embankment will be built with a tailings storage capacity for the first 14 months.

Transport

For the purpose of the BFS the only transport option considered was direct trucking of graphite concentrate to the port of Dar es Salaam. The Project is located 120km south of the Ifakara rail siding, future studies will determine potential of this rail option as the preferred route. Costs for transport were developed based on current transport costs in Tanzania.

Mining Licence

The Mining Licence has been granted by the Ministry of Energy and Minerals (refer announcement dated 15 July 2015).

GRAPHITE PRICING

The portion of very large size flake and high carbon grades has a significant advantage, as at present there is a shortage of this product in the graphite market. The basket price for graphite product used in the BFS is US$1,446/t of concentrate which is based on the value of each sizing as detailed in Table 7.

The pricing model is based on FOB Dar es Salaam and based current graphite pricing with forecast demand for larger flake with reference to the Company's offtake and sales partners and 'Natural & Synthetic Graphite Market Outlook to 2020' from Roskill Information Services.

Table 7: Basket Price Model

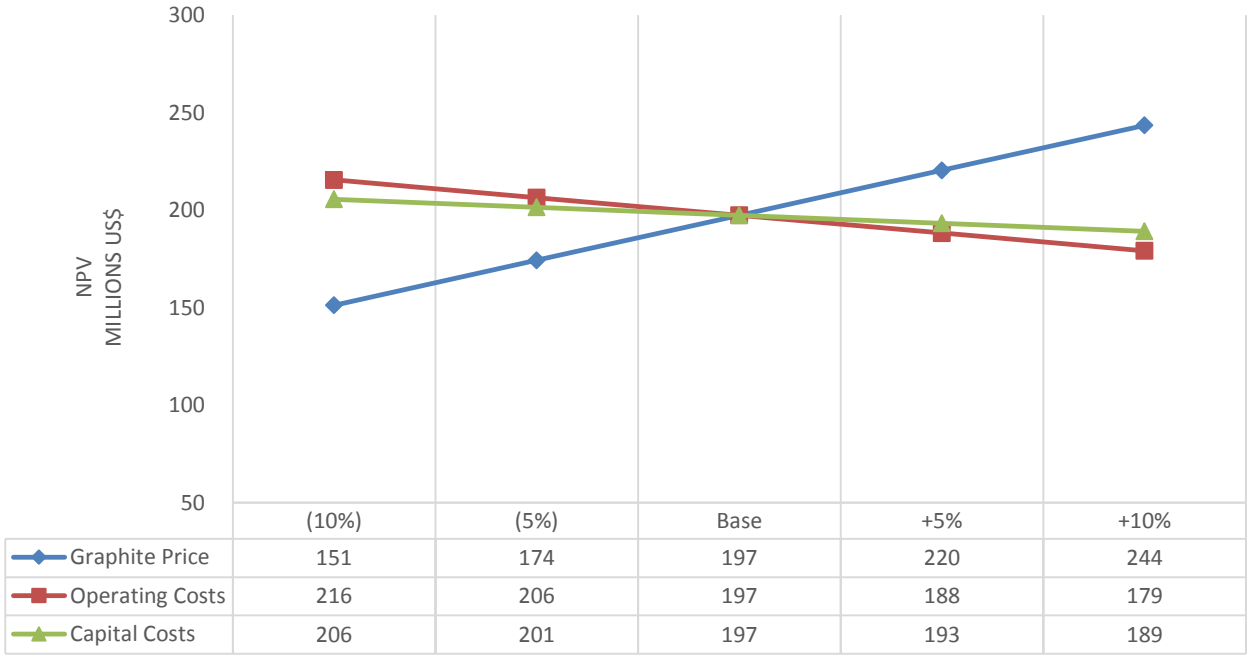
FLAKE SIZE	FOB PRICE BASIS AND CALCULATION (US$/t)					
Name	**Microns**	**Mesh**	**Price (US$/t)**	**Retained (%)**	**Grade**	**Basket Price**
Super Jumbo	> 500	>35	2,800	20.0	97.1	560
Jumbo	> 300	>48				
Large	>180	>80	1,400	35.4	96.7	496
Medium	>150	>100	950	30.3	96.2	288
	> 106	>150				
Small	> 75	>200	840	7.4	95.3	62
Fine	< 75	<200	580	6.9	92.6	40
						US$1,446

Pricing for premium quality large flake graphite is forecast to substantially increase due to a shortage of supply and an increase in demand. Demand for spherical graphite is also expected to increase significantly.

Kibaran has taken a conservative approach to pricing by not factoring in excessive potential future demand driven increases.

SENSITIVITY ANALYSIS

The following figure presents the sensitivity analysis based on +/- 10%.



	(10%)	(5%)	Base	+5%	+10%
Graphite Price	151	174	197	220	244
Operating Costs	216	206	197	188	179
Capital Costs	206	201	197	193	189

Figure 6: Sensitivity Analysis based on +/- 10%

OFFTAKE AND SALES AGREEMENTS

Kibaran reached a major milestone in December 2013 with the signing of a binding off-take and partnership agreement with a leading European graphite trader. Under the terms of this agreement, the European graphite trader guarantees the purchase of 10,000 tonnes of graphite concentrate per year from Kibaran, for an initial period of five years with the option to renew for a further five years.

During October 2014, Kibaran announced that it had executed a Letter of Intent ("LOI") with German company ThyssenKrupp Metallurgical Products GmbH, a subsidiary of ThyssenKrupp, to develop an exclusive, long-term commercial agreement for the sale of Kibaran's natural flake graphite products.

The LOI was for the sale of a minimum of 20,000tpa of natural flake graphite in Russia, Korea and the EU 27 (including Turkey) for a 10 year period. ThyssenKrupp Metallurgical Products will also endeavour to assist Kibaran to obtain debt or equity funding for developing the graphite projects.

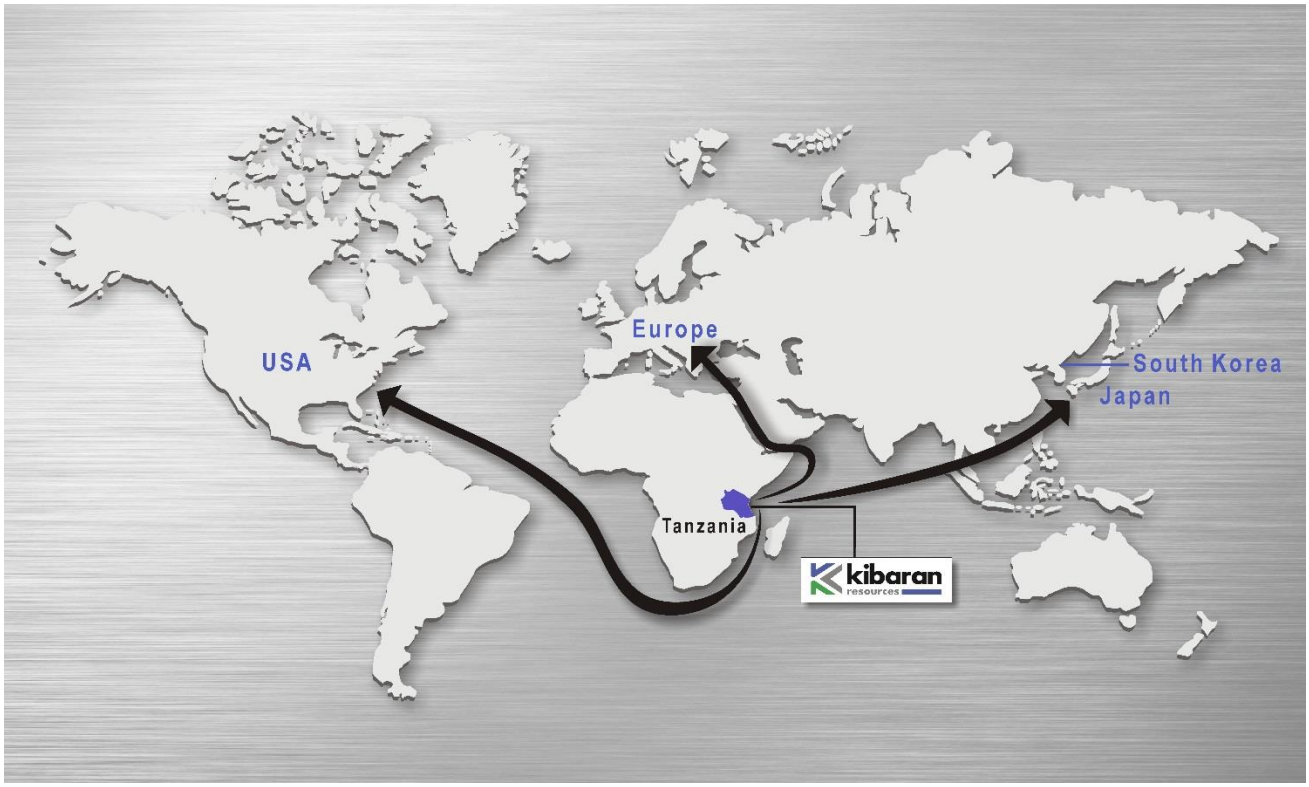


Figure 7: Kibaran Key Markets

MINING

Intermine Engineering Consultants completed pit optimisations, staged mine designs and LOM mine scheduling for the feasibility study.

Results of the study show that mining will occur for the first 16 years containing an initial Ore Reserve of 10.9Mt at 8.6%TGC. The LOM strip ratio is 1:1. Mining will be conducted on a 5 day dayshift only basis with total movement of 57,000bcm a month utilising an 80t excavator and 40t articulated trucks. Mining will be from the Eastern and Western deposits located within 1km of the ROM pad. The Western deposit consists of mining a strike length of 850m along the top of the hill to a depth of 180m and the Eastern deposit sits within a small valley and will be mined to a depth of 120m.

At both deposits there is a substantial Inferred resource that is a continuation of the Measured and Indicated resource that is not used in the study.

Mining costs have been derived utilising a mining contractor. Quotes were obtained from Ausdrill using initial haulage profiles and dump locations. Dilution and ore loss factors are based on the mining of broad zones of graphite mineralisation inclusive of the weathering profile and the need for drill and blast in fresh rock. Geotechnical parameters provided by Chris Orr and Associates used for optimisation and designs are adequate for the initial stages of the mine plan but further geotechnical investigation will be necessary to cover the LOM plan.

The mine schedule is formulated to target a ROM feed that falls within the limitation of 440,000t per year mill throughput with a maximum of 40,000t of concentrate output. From the Ore Reserve, only material over an 8%TGC cut-off will be fed to the plant for the first 16 years after which stockpiled lower grade material will be reclaimed and processed. There is 6.5Mt at 9.9% TGC of high grade feed sourced from 68% Proved and 32% Probable Ore Reserve over this period (refer Ore Reserve Table 4). The pre-strip will be limited to total movement of 180,000bcm over 4 months to establish the Eastern deposit, the ROM pad, haulage roads and diversion bunds and drains. The Eastern deposit will be the main source for high grade plant feed with the Western deposit starting as a feed source after 6 months of processing.

FUTURE EXPANSION

Whilst the Epanko production rate has been set at 40,000tpa of concentrate, the process plant has a name plate throughput capacity of 480,000tpa and as such is capable of producing additional product. Kibaran has developed an expansion strategy that can cater for anticipated future increases in demand for premium quality large flake graphite. The Epanko deposit can easily support a production rate of 100,000tpa of concentrate, with the expansion capital being funded from cashflow. The additional footprint required for the expansion has been allowed for in the design layout.

IMPLEMENTATION SCHEDULE

First production will commence 17 months from the completion of project financing. The schedule is outlined below.

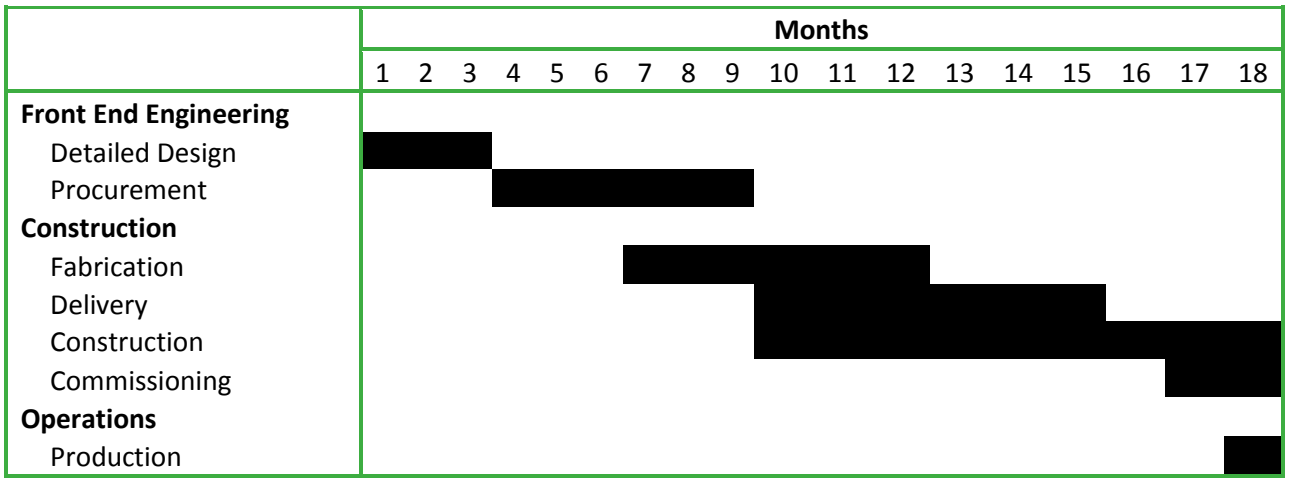


Figure 8: Implementation Schedule

JORC CODE, 2012 EDITION – TABLE 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.*	The Epanko deposit was sampled by reverse circulation (RC) holes, diamond core drilling and trenching. Sampling is guided by Kibaran's protocols and QA/QC procedures RC samples are collected by a riffle splitter using a face sampling hammer diameter approximately 140 mm. All samples were sent SGS laboratory in Johannesburg for preparation and LECO analyses. All samples are crushed using LM2 mill to –4 mm and pulverised to nominal 80% passing –75 µm. Diamond core (if competent) is cut using a core saw. Where the material is too soft it is left in the tray and a knife is used to quarter the core for sampling. Trenches were sampled at 0.5m intervals, these intervals were speared and submitted for analyses.
Drilling techniques	• *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).*	RC holes were drilled in a direction so as to hit the mineralisation orthogonally. Face sample hammers were used and all samples collected dry and riffle split after passing through the cyclone. Diamond drilling was drilled as triple Tubed HQ diameter core.
Drill sample recovery	• *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.*	The RC rig sampling systems are routinely cleaned to minimize the opportunity for contamination; drilling methods are focused on sample quality. Diamond drilling (triple Tubed HQ diameter core) was used to maximise sample recovery when used. The selection of RC drilling company, having a water drilling background enables far greater control on any water present in the system, ensuring wet samples were kept to a minimum. No relationship exists between sample recovery and grade.
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	Geological logging is completed for all holes and representative across the deposit. Logged data is both qualitative and quantitative depending on field being logged. All drill holes and all intervals were logged.
Sub-sampling techniques and sample preparation	• *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.*	All RC samples are split using a riffle splitter mounted under the cyclone, RC samples are drilled dry. A small fraction of samples returned to the surface wet. All samples were submitted for assay. Diamond core was cut on core saw and quarter core submitted for analyses. Sample preparation at the SGS laboratory involves the original sample being dried at 80° for up to 24 hours and weighed on submission to laboratory. Crushing to nominal –4 mm. Sample is split to less than 2 kg through linear splitter and excess retained. Sample splits are weighed at a frequency of 1/20 and entered into the job results file. Pulverising is completed using LM2 mill to 90% passing –75 µm. QAQC protocols were followed, including the use of field duplicate samples to test the primary sampling step for the RC drilling. Sample sizes are considered appropriate with regard to the grain size of the sampled material.
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.* • *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.*	Drill samples were sent to the SGS Laboratory at Mwanza (Tanzania) for sample preparation, with the pulps sent to SGS Johannesburg for assaying. The following methodology is used by SGS for Total Graphitic Carbon (TGC) analyses. Total carbon is measured using LECO technique. The sample is combusted in the oxygen atmosphere and the IR used to measure the amount of CO2 produced. The calibration of the LECO instrument is done by using certified reference materials. For the analysis of Graphitic Carbon, a 0.3g sample is weighed and roasted at 550oC to remove any organic carbon. The sample is then heated with diluted hydrochloric acid to remove carbonates. After cooling the sample is filtered and the residue rinsed and dried at 75oC prior to analysis by the LECO instrument. The analyses by LECO are done by total combustion of sample in the oxygen atmosphere and using IR absorption from the resulting CO2 produced. Laboratory certificates were sent via email from the assay laboratory to Kibaran. The assay data was provided to CSA in the form of Microsoft XL files and assay laboratory certificates. The files were imported into Datamine. Standards are inserted at approximately a 10% frequency rate. In addition, field duplicates, laboratory duplicates are collectively inserted at a rate of 10% QAQC data analysis has been completed to industry standards.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	Senior Kibaran geological personnel supervised the sampling, and alternative personnel verified the sampling locations. Two RC holes were twinned with diamond drill holes. Primary data are captured on paper in the field and then re-entered into spreadsheet format by the supervising geologist, to then be loaded into the company's database. No adjustments are made to any assay data.
Location of data points	• *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.* • *Specification of the grid system used.*	Sample locations picked up by hand held GPS. UTM Zone 37 South was the grid system used. No coordinate transformation was applied to the data.

Criteria	JORC Code explanation	Commentary
	• *Quality and adequacy of topographic control.*	Downhole surveys collected by multi-shot camera. Topographic DTM was from a LIDAR survey flown in 2015. .
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	Spacings are sufficient for estimation and reporting of a Mineral Resource. Drill hole locations are at a nominal 50 m (Y) by 25 m (X) spacing. Data spacing and distribution are sufficient to establish the degree of geological and grade continuity. No compositing has been applied to exploration data.
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.* • *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.*	Most holes have been orientated towards an azimuth so as to be able intersect the graphitic mineralisation in a perpendicular manner. Drill pad accessibility has required an adjustment to drill hole orientation to a few holes. RC holes were drilled at variable dips to define the geology and contacts of the deposit. Some holes were drilled vertical to test geological contact positions.
Sample security	• *The measures taken to ensure sample security.*	Samples were stored at the company's secure field camp prior to dispatch to the prep lab by contacted transport company, who maintained security of the samples.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	Sampling procedures were independently reviewed by CSA Global as part of the preparation of the Mineral Resource estimate. Kibaran senior geological personnel reviewed sampling procedures on a regular basis. All drill hole results were collated and stored within a Datashed database. A random selection of assays from the database was cross referenced against the laboratory certificates.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The tenements are 100% owned by Kibaran wholly owned subsidiary and are within granted and live prospecting licenses. The Mahenge project consists of PL 8204/2012.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Historical reports exist for the project area as the region was first recognised for graphite potential in 1914 and 1959. No recent information exists.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Project is hosted within a quartz–feldspar-carbonate graphitic schist, part of a Neoproterozoic metasediment package, including marble and gneissic units. Two zones of graphitic schist have been mapped, named the East Zone and the West Zone.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *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.*
		Sample and drill hole coordinates are provided in market announcements dated 14th July and 21st July 2014.

Data aggregation methods	• *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 such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No high-grade cuts were necessary. Aggregating was made for intervals that reported over 1% TGC (Total graphitic carbon). The purpose of this is to report intervals that may be significant to future metallurgical work. There is no implication about economic significance. Intervals reporting above 8% TGC are intended to highlight a significant higher grade component of graphite, there is no implication of economic significance. No equivalents were used.
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 (eg 'down hole length, true width not known').*	All RC holes have been orientated towards an azimuth so as to be able intersect the graphitic mineralisation orthogonally. Given dip variations are mapped down hole length are reported, true width not known from the exploration results.
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.*	See main body of report.
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.*	Results are presented previous announcements, such as 21st July 2014.

Criteria	JORC Code explanation	Commentary
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.*	Field mapping was conducted early in the geological assessment of the license area to define the geological boundaries of the graphitic schist with other geological formations. Geological mapping of trenches cut across the strike of the host geological units provided important information used to compile the Mineral Resource estimate. Details of metallurgical testwork are detailed in the body of this report, and in Section 3 of this Table.
Further work	• *The nature and scale of planned further work (eg 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.*	No further drilling is planned at present. Diagrams are presented in the ASX announcement dated 21 July 2014.

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.* • *Data validation procedures used.*	Data used in the Mineral Resource estimate is sourced from a database. Relevant tables from the data base are exported to MS Excel format and converted to csv format for import into CAE Studio 3 (Datamine) software for use in the Mineral Resource estimate. Validation of the data import include checks for overlapping intervals, missing survey data, missing assay data, missing lithological data, and missing collars. Every 10th assay value was cross checked against the laboratory certificates.
Site visits	• *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.*	The Competent Person (Mineral Resources) visited site in March 2014. The RC drilling rig was in operation and the CP was able to review drilling and sampling procedures. Outcrop showing mineralisation was examined and geologically assessed. Planned drill sites were examined and assessed with respect to strike and dip of the interpreted geological model. Trenches were examined and a re-enactment of sampling procedures was presented by the Kibaran geological staff. Sample storage facilities were inspected. There were no negative outcomes from any of the above items, and all samples and geological data were deemed fit for purpose, and could be included in the Mineral Resource estimate.
Geological interpretation	• *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.*	There is a high level of confidence in the geological interpretation within the Measured and Indicated resource areas, based upon lithological logging of diamond drill core, and RC chips. Trenches cut orthogonal to the strike of the geology demonstrated the geometry of the deposit, and clearly showed graphitic mineralisation. Deposit scale geological mapping provide a geological framework for the interpretation. Drill hole intercept logging and assay results (RC and diamond core), structural interpretations from drill core and geological logs of trenches have formed the basis for the geological interpretation. Assumptions were made on depth and strike extension of the graphitic schists, using drill hole and trench sample assays as anchor points at depth and at intervals along strike. Geological mapping also support the geological assumptions built into the Mineral Resource. No alternative interpretations were considered because the exposed geology in outcrop support the current interpretation. Graphitic mineralisation is hosted within a graphitic schist, which is mapped along it's strike continuity within the license area. Grade (total graphitic carbon, TGC) is assumed to be likewise continuous with the host rock unit. Metallurgical characteristics, principally flake size, has been observed to be of a consistent nature when observed in outcrop, trench exposure and diamond drill core at numerous locations within the license area. The interpretation of the mineralisation domains is based upon a pre-determined lower cut-off grade for TGC. A variation to the cut-off grade will affect the volume and average grade of the 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 Epanko Mineral Resource estimate is approximately 1,750 m in strike, 290 m in plan width and reaches 350 m depth 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.* • *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.*	Datamine Studio 3 software was used for all geological modelling, block modelling, grade interpolation, MRE classification and reporting. GeoAccess Professional and Snowden Supervisor were used for geostatistical analyses of data. The TGC interpretations were based upon a lower cut-off of 5% TGC and geological interpretations of mineralised outcrop and trenches, and logging of diamond drill core and RC chips. The Mineral Resource model consists of 13 zones of TGC mineralisation, with 11 zones in the Western Lode and 2 zones in the Eastern lode. Mineralisation domains were encapsulated by means of 3D wireframed envelopes. Domains were extrapolated along strike or down plunge to half a section spacing or if a barren hole cut the plunge extension before this limit. Top cuts were not used to constrain extreme grade values because the TGC grade distribution did not warrant their use. All samples were composited to 1m intervals, following a review of sample length distribution that most sample lengths were 1m. All drill hole data (RC and Diamond) and trench assays were utilised in the grade interpolation. A Quality Assurance study of the RC drilling coupled with a 3 hole due diligence and twin drilling programme confirmed the RC drill holes could be used with the diamond core samples as part of the grade interpolation. A statistical study of the trench

Criteria	JORC Code explanation	Commentary
	• *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.*	assay data similarly demonstrated a similar population to the conventional drilling sample assay results. A block model with parent cell sizes 25m x 25m x 25m was constructed, compared to typical drill spacing of 50m x 25m. Grade estimation was by Ordinary Kriging (OK) with Inverse Distance Squared (IDS) estimation was concurrently run as a check estimate. A minimum of 4 and maximum of 16 composited samples were used in any one block estimate for the Eastern Zone, and 6 – 25 samples for the Eastern Zone. A maximum of 5 composited samples per drill hole were used in any one block estimate. Cell Discretisation of 5 x 5 x 5 was used. Grade interpolation was run within the individual mineralisation domains, acting as hard boundaries. The current Mineral Resource was checked against the previously reported Mineral Resource (July 2014) and showed an increase in global tonnage with a slight decrease in TGC % grade. This is due to a refined topographic DTM which has resulted in tonnage changes where the resource model cuts the surface. No depletion of the Mineral Resource due to mining activity was required due to no mining having occurred historically. The Mineral Resource was projected to and truncated at the northern boundary of the license area. No by products were modelled. No selective mining units were assumed in this model. The grade model was validated by 1) creating slices of the model and comparing to drill holes on the same slice; 2) swath plots comparing average block grades with average sample grades on nominated easting, northing and RL slices; and 3) mean grades per domain for estimated blocks and flagged drill hole samples. No reconciliation data exists to test the model.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	A reporting cut-off grade of 5 and 8% TGC was previously used to report the Mineral Resource, and is in line with other reported Mineral Resources in East Africa, and recent economic modelling.
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.*	It is assumed the deposit, if mined, will be developed using open pit mining methods. No assumptions have been made to date regarding minimum mining widths or dilution. The largest mineralisation domains in plan view have an apparent width of over 80m which may result in less selective mining methods, as opposed to (for example) mining equipment that would need to be used to mine narrow veins in a gold mine.
Metallurgical factors or assumptions	• *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.*	Metallurgical testwork completed on composited samples from 7 diamond drill holes (drilled in 2014) provided further data related to flake distribution and product purity. This is discussed in the body of this announcement. The recovered flake graphite is clean, with no visible natural mineral impurities. The graphite concentrate is amenable to standard metallurgical recovery processes. The recovered product is considered marketable, with a binding offtake and partnership agreement with a major European graphite trader announced on 23rd December 2013. As announced on 7th July 2014, metallurgical testwork has yielded results exceeding 99.9% carbon from a simple one step process after flotation, with extremely low levels of impurities also reported.
Environmen-tal 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.*	The Environmental and Social Impact Assessment (ESIA) certificate , required for the Mining Licence application has been received
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.* • *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.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Density values based upon weathering profile and location (Eastern or Western Zone) were applied to the Mineral Resource, and were based upon density measurements from samples sourced from several of the diamond drill holes. Density values of 1.86, 2.23 and 2.80 t/m^3 were applied to the oxide, transitional and fresh weathering domains respectively for the Mineral Resource located in the Western Zone. Density values of 1.61, 2.23 and 2.80 t/m^3 were applied to the Eastern Zone.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie 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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	Classification of the Mineral Resource estimates was carried out taking into account the geological understanding of the deposit, QAQC of the samples, density data and drill hole spacing. Metallurgical results related to flake size and sample purity, as well as marketing agreements in place supported the classification, as per Clause 49 (JORC 2012). The Mineral Resource is classified as Measured, Indicated and Inferred, with geological evidence sufficient to confirm geological and grade (and quality) continuity (for Measured) between points of observation where data and samples are gathered. The Inferred classification level was applied to the volumes where

Criteria	JORC Code explanation	Commentary
		geological evidence is sufficient to imply but not verify geological, grade and quality continuity. All available data was assessed and the competent person's relative confidence in the data was used to assist in the classification of the Mineral Resource. The current classification assignment appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	No audits or reviews of the current Mineral Resource estimate have been undertaken, apart from internal reviews carried out by Kibaran technical staff.
Discussion of relative accuracy/ confidence	• *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 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.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	An inverse distance estimation algorithm was used in parallel with the ordinary Kriged interpolation, with results very similar to the Kriged results. No other estimation method or geostatistical analysis has been performed. The Mineral Resource is a local estimate, whereby the drill hole data was geologically domained above nominated TGC cut-off grades, resulting in fewer drill hole samples to interpolate the block model than the complete drill hole dataset, which would comprise a global estimate. Relevant tonnages and grade above nominated cut-off grades for TGC are provided in the introduction and body of this report. Tonnages were calculated by filtering all blocks above the cut-off grade and sub-setting the resultant data into bins by mineralisation domain. The volumes of all the collated blocks were multiplied by the dry density value to derive the tonnages. The graphite metal values (g) for each block were calculated by multiplying the TGC grades (%) by the block tonnage. The total sum of all metal for the deposit for the filtered blocks was divided by 100 to derive the reportable tonnages of graphite metal. No production data is available to reconcile results with.

Section 4 Estimating and Reporting of Ore Reserve

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Mineral Resource model for the Epanko deposits have been developed by David Williams of CSA Global and Associates and the Ore Reserve is based on this model. The stated Mineral Resource is inclusive of the Ore Reserve.
Site visits	• *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.*	A site visit was not undertaken by the Competent Person as a site visit would not materially affect the determination of the Reserve
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	Studies undertaken and the modifying factors applied to enable the Mineral Resource to be converted to an Ore Reserve are based on a Feasibility level estimation of costs and parameters.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	The cut-off grade applied is based on the profitability of the resource block after modifying factors and the metallurgical and mass recovery are applied to the insitu TGC grade. Processing costs where changed from Year 3 onwards to reflect lower power costs due to the connection to grid power. The cut-off grade for Yrs 1 & 2 is 4.8% TGC and 4.3% for Yr 3 onwards. However a higher grade of 8% TGC has been used to ensure the concentrate production target of 40kt per year is met with a ROM throughput limit of 440kt per year.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	Mining dilution is 3.0% extra tonnes with a dilutant grade of 3% TGC. Ore loss applied is 3.0%. Geotechnical parameters applied to the designs are based on preliminary investigations by Chris Orr and Associates. There will be a requirement for further geotechnical investigations to cover the extent of the walls within the current staged designs. Minimum mining widths have been considered in the staged designs. The Ore Reserve has been determined contained by a LOM pit design. The resource has been estimated into 5m x 5m wide x 5m vertical blocks and is representative of the mining method to be utilised. The optimisation was undertaken using only Measured and Indicated resource categories. Infrastructure consisting of the main haulage roads to access the top of the western ridge and also the start of the eastern mining area have been preliminarily designed. As equipment is mobile other infrastructure is not detrimental in determining the Reserve. The Inferred resource has not been reported in the Ore Reserve.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding*	Processing will consist of a grinding, flotation and concentrator to produce a high quality product. The process is a proven method for the extraction of the graphene to a concentrate. Metallurgical factors applied are 93.36% for TGC metallurgical recovery with a final concentrate grade of 96.3%.

Criteria	JORC Code explanation	Commentary
	metallurgical recovery factors applied. • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	Met recoveries are based on test work by the study Bulk sample test work and the location of that sample has been reported
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Environmental certificate has been received Waste rock characterisation studies assessed the waste rock is chemically inert. There are two locations where waste rock will be stored. In the western area at the exit from the mining area in the valley floor and in the eastern area the waste dump will be integrated into the TSF. Overall finished slopes of 15 degrees have been used and will be rehabilitated progressively. No fatal flaws with regards the environment have been identified.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	Land acquisition, purchase and rental agreements for the areas affected by mining and siting of process plant and infrastructure are currently being finalised through the RAP process The concentrate will be transported by a public road before connecting to the main road network at Mahenge Labour and accommodation for the majority of the workforce will be available in the major regional centre of Mahenge. The camp is being built on site for senior staff.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	Mining and blasting costs are based on preliminary haulage parameters and monthly total movement targets that were formulated by Ausdrill. The mining costs will need to further refined to accommodate variable haulage distances to the ROM and waste dump locations from the LOM stages. Other costs for mine administration and ancillary costs have been determined by Kibaran. Processing costs include allowances for crushing, beneficiation, processing, administration and transport. These costs have been costed by GRES. Deleterious elements are not a factor. The exchange rate is based on $US1 = 1,818 TZS. Quotes for transport have been used. Royalties have been included as government takes 3% value of saleable concentrate.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	The concentrate price of US$1,446/t is based on a basket price as determined by the percentage of size fractions and carbon content.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	The Study was supported by 2 offtake and sales agreements. Pricing for graphite is determined by flake size and carbon content. Pricing model has been included in the study
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	The optimisation NPV has been calculated using a discount rate of 10%. Inflation has not been included in the optimisation. Kibaran will use the Reserve output and LOM schedule for further financial modelling. Sensitivities of +/- 10% were assessed.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	Kibaran has engaged in local stakeholder negotiation and was covered as part of the the ESIA certificate the company received.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	No natural occurring risks have been identified that will affect the project operation. A mining licence over the mine area has been granted.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent*	Measured and Indicated Resource within the LOM designs have all been converted respectively to a Proved and Probable Ore Reserve.

Criteria	JORC Code explanation	Commentary
	Person's view of the deposit. • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	The result appropriately reflects the Competent Person's view of the deposit. No Probable ore reserve has been derived from a Measured Mineral Resource.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	The reserve estimate has been reviewed internally by CSA Global and Kibaran personnel and is considered to appropriately reflect the results of the application of the modifying factors to the Mineral Resource.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *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.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.*	The study was undertaken to a +/- 10% accuracy. The Competent Person has a good level of confidence in the Ore Reserve estimate based on the costs and parameters used in the determination of the Reserve. All relevant modifying factors are determined to be acceptable to this method of mining. Further investigation into geotechnical parameters and load and haul profiles and unit costs as a result of the completed as mining progresses over the 16year LOM plans.

For further information, please contact:

Managing Director
Andrew Spinks
Kibaran Resources
P: + 61 8 6380 1003

The information in this report that relates to Exploration Results is based on information compiled by Mr Andrew Spinks, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy. Andrew Spinks is employed by Kibaran Resources Limited. Mr Spinks 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 Exploration Results, Mineral Resources and Ore Reserves". Andrew Spinks consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources is based on information compiled by Mr David Williams, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy. David Williams is employed by CSA Global Pty Ltd, an independent consulting company. Mr Williams 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 Exploration Results, Mineral Resources and Ore Reserves". David Williams consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Ore Reserve has been compiled by Mr Steve O'Grady. Mr O'Grady, who is a Member of the Australasian Institute of Mining and Metallurgy, is a full time employee of Intermine Engineering and produced the Mining Reserve estimate based on data and geological information supplied by Mr Williams. Mr O'Grady has sufficient experience that is relevant to the estimation, assessment, evaluation and economic extraction of Ore Reserve that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr O'Grady consents to the inclusion in this report of the matters based on his information in the form and context that the information appears.