

## Merelani - Strategic Graphite Province

### HIGHLIGHTS:

- Exploration Target of between 60Mt and 200Mt of graphitic schist, grading between 9.0% and 12.0% TGC at 100% Kibaran owned Merelani Prospect located 15km east of Richlands' historical graphite mine.
- Strategic consolidation of historical graphite mine and Kibaran's graphite project supports Merelani being a World Class graphite province.
- MoU with AIM listed Richland to consolidate graphite assets extended to finalise terms for a binding agreement.

Kibaran Resources Limited (ASX: KNL) is pleased to report that independent consultants have identified a substantial Exploration Target (as defined under JORC 2012) for Kibarans' Merelani Prospect.

The Merelani province in Tanzania is a unique geological setting and is the only known occurrence of the rare gemstone, Tanzanite. The geological setting provides an explanation for the occurrence of such large flake graphite in the region.

The Merelani graphite mine commenced operations in 1995 and produced 6,776 tonnes of graphite.

Graphite sales via an offtake agreement were through Harbison-Walker Refractories, located in the USA. Mineralisation was initially identified to be sufficient for a 40 year operation at a production rate of 15,000 tonnes per annum of high-grade, large flake graphite of 97-98% carbon. The last shipment of remaining stockpiled concentrate in 1998, included a percentage of 99% carbon which was produced through natural attrition and not chemical treatment.

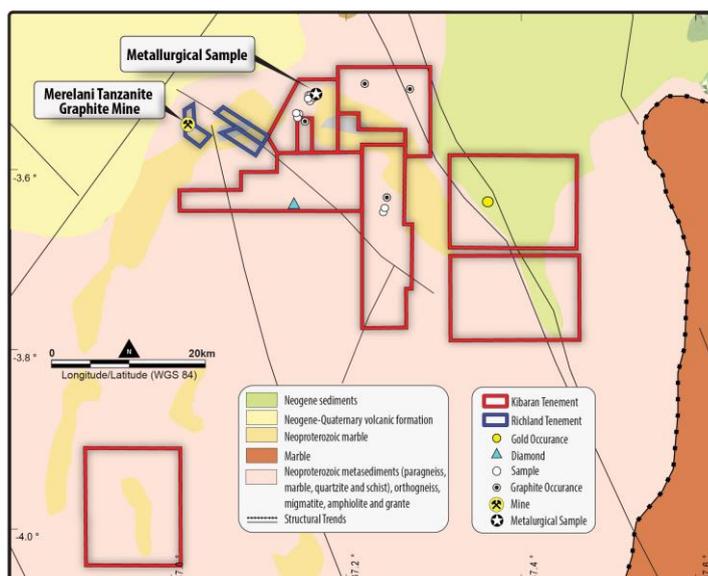
**It's important to note that the current graphite market and the company's binding offtake agreement is seeking 94-97% carbon and a high distribution of large flake greater than 180 micron.**

The Merelani graphite mine represents the largest historical production of graphite in East Africa and only a fraction of the occurrence was mined prior to mine closure. Kibaran has recently announced a 90 day extension to the Merelani MoU with Richland and both parties are now finalising terms for a binding agreement to recommence graphite production (refer announcement dated 5 May 2014).

Independent geological group CSA Global Pty Ltd, have estimated a sizeable Exploration Target of between 60Mt and 200Mt of graphitic schist, grading between 9.0% and 12.0% total graphitic carbon ("TGC"), above a cut-off of 5% TGC within the Kibaran graphite prospect which is located 15km to the east of the historical graphite mine.

The potential quantity and grade of the exploration target is conceptual in nature and there has been insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will result in the determination of a Mineral Resource calculated in accordance with the JORC code.

The estimate is based on exploration and geological work which Kibaran completed at the Merelani Project.



### GEOLOGICAL TARGETS AT MERELANI

Tonnage and grade ranges were determined from a 3D block model which incorporates grade based graphitic schist domains for the interpreted zones.

An RC drilling programme (2,000m) has been designed to test the validity of the exploration target, The timing of this programme will likely be in conjunction with the drilling planned at the historical graphite mine once the agreement has been finalised.

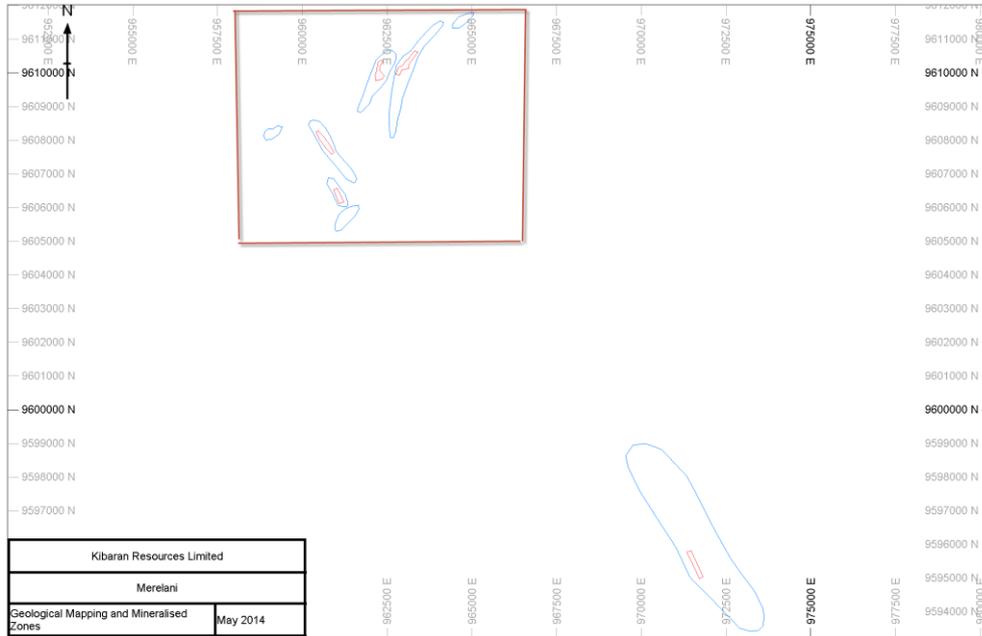


Figure 1. Geological mapping of graphitic schists (blue) and interpreted zones of mineralisation (red). Highlighted area shown in Figure 2.

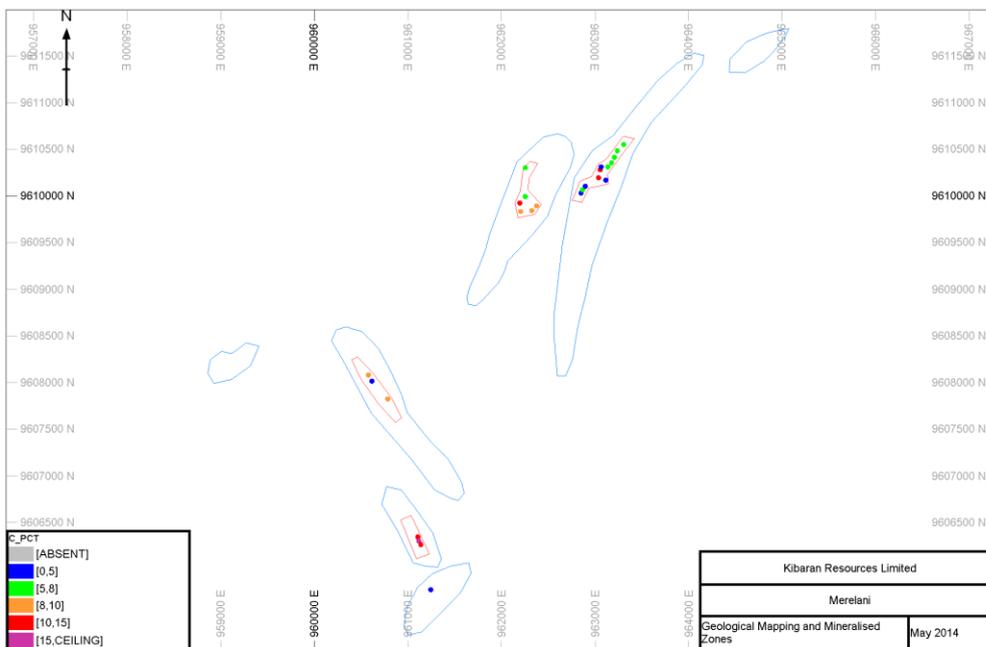


Figure 2. Geological mapping of graphitic schists (blue) and interpreted zones of mineralisation (red). Sample location and TGC grades as per legend. Highlighted area from Figure 1.

Table 1. Sample locations and results (TGC %) previously reported.

Sample_ID	Eastings	Northings	Elevation	TGC (%)
AMP_06	962260	9609990	987	6.3
AMP_07	962260	9610300	1027	7.7
AMP_08	962330	9609840	1055	8.2
AMP_09	962380	9609890	1038	9.0
AMP_10	962855	9610031	1027	7.9
AMP_11	962855	9610031	1027	4.7
AMP_12	962873	9610062	995	4.0
AMP_13	962873	9610062	995	6.3
AMP_14	962902	9610102	994.8	4.0
AMP_15	963041	9610193	982.4	12.5
AMP_16	963121	9610165	934.8	7.0
AMP_17	963121	9610165	934.8	3.4
AMP_18	963060	9610280	984.2	12.4
AMP_19	963070	9610310	980	9.6
AMP_20	963070	9610310	972	3.7
AMP_21	963140	9610310	972	5.5
AMP_22	963180	9610350	967	5.2
AMP_23	963210	9610410	966.9	5.9
AMP_24	963240	9610480	960.3	7.3
AMP_25	963310	9610550	952.2	6.0
AMP_26	963300	9592700	960	6.0
AMP_27	962210	9609830	1010	8.8
AMP_28	962200	9609920	1006	12.7
AMP_29	960790	9607820	1030	9.2
AMP_30	960620	9608010	1013	4.4
AMP_31	960580	9608080	1000	7.6
AMP_32	960580	9608080	1067	8.5
AMP_33	961110	9606340	1067	12.1
AMP_34	961120	9606300	1064	9.0
AMP_35	961120	9606300	1064	18.1
AMP_36	961140	9606260	1070	10.0
AMP_37	971600	9595400	1223	2.1

*Samples were taken from outcropping graphite locations. Samples were analysed by LECO for total graphite carbon by independent commercial laboratory SGS, Johannesburg. Samples were ignited at 600 degrees, then leached with HCL and the residue was analysed by LECO.*

**JORC Code, 2012 Edition – Table 1**  
**Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Grab samples of graphitic schist were taken at selected locations inside host rock unit.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling has occurred to date</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling has occurred to date.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were logged as graphitic schist, and will not be used to support any future Mineral Resource estimate.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>No sub-sampling of samples occurred at site, or prior to dispatch to assay lab.</li> <li>No QAQC procedures were employed in association with the grab samples.</li> <li>Sample sizes were considered appropriate for the material being sampled.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Total carbon is measured using LECO technique. The sample is combusted in the oxygen atmosphere and the IR used to measure the amount of CO<sub>2</sub> produced. The calibration of the LECO instrument is done by using certified reference materials.</li> <li>For the analysis of Graphitic Carbon, a 0.3g sample is weighed and roasted at 550°C 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 75°C 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 CO<sub>2</sub> produced.</li> <li>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.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Senior Kibaran geological personnel supervised the sampling, and alternative personnel verified the sampling locations.</li> <li>No drilling has occurred to validate the current samples.</li> <li>Sample coordinates and other data recorded on field sheets, entered into spreadsheets.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Sample locations picked up by hand held GPS.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>WGS84 Zone 36 South</li> <li>No topographic survey has been conducted to date.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Sample lines spaced between 100m and 500m</li> <li>No Mineral Resource has been estimated with the available data.</li> <li>Grab samples so no compositing conducted.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling can be considered biased as the sample locations were selected by the Senior Geologist.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were stored at the company's secure field camp prior to dispatch to the prep lab by contact transport company, who maintained security of the samples.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews of sampling or results have been conducted to date.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The tenements are 100% owned by Kibaran wholly owned subsidiary and are within granted and live prospecting licenses.</li> <li>The Merelani project consists of PL 8204/2012, PL 7907/2012, PL 7913/2012, PL 7914/2012, PL 7915/2012, PL 7917/2012, PL 7906/2012, PL 7918/2012</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>No other exploration has occurred to date</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Merelani Prospect is hosted within a quartz-feldspar-carbonate graphitic schist, part of a Neoproterozoic metasediment package, including marble and gneissic units. Eight zones of graphitic schist have been mapped, hosting observed graphitic mineralisation assumed to be of economic interest. The mapped graphitic schist have strike lengths of between 7.5km and 25km, with average widths of 50m to 200m. Graphitic mineralisation of interest to Kibaran is not uniformly distributed through the schists, and geospatial limits to mineralisation will only be defined by drilling.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:             <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Sample coordinates are provided in body of report.</li> <li>Samples are surface grab samples and not drill hole samples, therefore information related to drillholes is not relevant.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No data aggregation methods were employed.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>Surface grab samples therefore comparison between sample lengths and width of mineralisation is not possible at this early stage of evaluating the deposit.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Collar plan of grab samples provided in body of report. This report deals with an Exploration Target</li> </ul>

Criteria	JORC Code explanation	Commentary
	collar locations and appropriate sectional views.	and not reporting exploration results, and information regarding sub-surface geology is assumed.
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Results presented in report.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Field mapping was conducted first to define the geological boundaries of the graphitic schist with other geological formations.</li> <li>No other sampling, test work or analyses has been conducted to date.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>RC drilling is planned to be completed to test the exploration target</li> </ul>

### About Kibaran Resources Limited:

Kibaran Resources Limited (ASX: KNL or “Kibaran”) is an exploration company with highly prospective graphite and nickel projects located in Tanzania.

The Company’s primary focus is on its 100%-owned Epanko deposit, located within the Mahenge Graphite Project. Epanko currently has an Inferred Mineral Resource Estimate of 14.9Mt, grading 10.5% TGC, for 1.56Mt of contained graphite, defined in accordance with the JORC Code. This initial estimate only covers 20% of the project area. Metallurgy has found Epanko graphite to be large flake and expandable in nature.

Kibaran also has rights to the Merelani-Arusha Graphite Project, located in the north-east of Tanzania. Merelani-Arusha is also considered to be highly prospective for commercial graphite.

Graphite is regarded as a critical material for future global industrial growth, destined for industrial and technology applications including nuclear reactors, lithium-ion battery manufacturing and a source of graphene.

In addition, the Kagera Nickel Project remains underexplored and is located along strike of the Kabanga nickel deposit, owned by Xstrata, which is considered to be the largest undeveloped, high grade nickel sulphide deposit in the world.

<sup>1</sup> “This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.”



For further information, please contact:

#### Company Secretary

Robert Hodby

Kibaran Resources

P: + 61 8 6380 1003

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Andrew Spinks, who is a Member of The Australasian Institute of Mining and Metallurgy included in a list promulgated by the ASX from time to time. Andrew Spinks is a director of Kibaran Resources Limited and 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 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.