

**ASX Code: BSN** 

TO: COMPANY ANNOUNCEMENTS OFFICE

**ASX LIMITED** 

DATE: 30 SEPTEMBER 2014

#### PRESENTATION DOCUMENT - PENCIL HILL

The Directors of Bisan Limited ("the Company") have received a presentation document prepared by Pencil Hill Limited.

The presentation is a summary of the graphite exploration activities recently conducted at the "Pencil Hill" project in Botswana.

Due-diligence exploration activities conducted include two diamond drill holes completed and trenching which is still in progress and the Directors of the Company await the results from the independent laboratory analysis before deciding as to whether the Company should proceed with the investment.

The acquisition will be subject to all shareholder and regulatory approvals being obtained.

## Pat Volpe Chairman

The information in this presentation that relates to Exploration Results is based on, and fairly represents, information and supporting documentation compiled by Mr Nico Scholtz who is a Professional Geologist with the South African Council for Natural and Scientific Professions (SACNASP). Mr Scholtz is a consulting Geologist appointed by Bisan to conduct the exploration required by Bisan on the Pencil Hill project. Mr Scholtz 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'. Mr Scholtz consents to the inclusion in the attached presentation of the matters based on his information in the form and context in which it appears.

JORC Code 2012 Edition Table 1 – Sampling Techniques and Data for

- (1) Trenching was released to the ASX on 10<sup>th</sup> September 2014
- (2) Drilling was released to the ASX on 20th August 2014

Are attached to the bottom of this presentation and were also prepared by Mr Sholtz.

# Pencil Hill Graphite "exploration update"

Groundbreaking Graphite Discovery in Botswana

## Disclaimer

### Securities Disclaimer

This presentation is for informal purposes only and does not constitute an offer to sell, or solicitation to purchase, any securities. Such Offer can be made only through proper subscription documentation and only to investors meeting strict suitability requirements. Any failure to comply with these restrictions may constitute a violation of applicable securities laws.

### Forward Looking Statements

Various statements in this presentation constitute statements relating to intentions, future acts and events. Such statements are generally classified as "forward looking statements" and involve known and unknown risks, uncertainties and other important factors that could cause those future acts, events and circumstances to differ materially from what is presented or implicitly portrayed herein. The company gives no assurances that the anticipated results, performance or achievements expressed or implied in these forwards looking statements will be achieved.

### **Competent Person**

The information in this report that relates to Exploration Results is based on, information and supporting documentation compiled by Mr Nico Scholtz who is a Professional Geologist with the South African Council for Natural and Scientific Professions (SACNASP). Mr Scholtz is a consulting Geologist appointed by Bisan Limited to conduct the exploration required by Bisan on the Q-Pene (Pty) Ltd "Pencil Hill" project. Mr Scholtz 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'. Mr Scholtz consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. The releveant JORCCode 2012 Table 1: sampling techniques and data for trenching and drilling is attached.

## Overview

- First exploration company focused on unlocking the graphite potential of the mineral-rich landscapes of Botswana.
- Bisan can acquire a 30% interest with an investment of \$2m, equivalent to a market capitalization for Pencil Hill of ~\$6.6m
- Bisan has first right of refusal to acquire up to 51% pre-IPO
- The acquisition is subject to exploration due diligence by Bisan
- If Bisan decision to invest will be subject to shareholder and regulator approvals.

# Why Graphite?

Major global growth commodity of the 21st century.

- ✓ Long term global demand expected to **double** in the next eight years
- ✓ Growing number of applications in technology, industrial and new energy markets
  - ✓ Essential component of lithium ion batteries (smart phones, tablets, electric cars...)
  - ✓ Fuel cells
  - ✓ Vanadium redox batteries
  - ✓ Nuclear energy
- ✓ Application to graphene

"the world's next super material"



## Graphite Market

- USA, Europe and Japan are almost entirely dependent on imported graphite
- China produces 75% of the world's supply, but most of its resources are low grade

### China now the biggest importer of graphite, has closed stateowned enterprises, imposed export duty<sup>1</sup>

• Tesla US\$5b battery "gigafactory" will require up to six new graphite mines, **increasing demand by up to 152**%

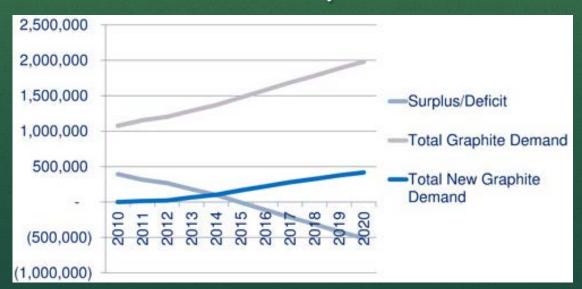
• Opportunities for commercial-scale graphite miners other than China to service the **significant global demand** 

# Strategic Mineral

The British Geological Survey listed Graphite, along with Antimony and Rare Earth Elements, as most at risk of a global supply disruption. Graphite had a relative supply risk index<sup>1</sup> of 8.1, compared with 9.5 for REEs, the highest value on the index

# Robust Demand for Graphite

- Annual graphite demand is expected to increase by 50% from 1.1 million tonnes to 1.5 million tonnes by 2020 based on the **steel market** alone
- Demand from batteries and high-tech applications are projected to be dramatic
- Lithium-ion batteries are projected to more than double the demand for graphite to about 2.6 million tonnes by 2020



Demand for graphite could double by 2020

Source: Beat the Market, 2012, "Graphite... Set to go critical in 2012", http://www.beatthemarketstockpicks.com/2012/01/graphite-set-to-go-critical-in-2012.html

# Pricing

- Graphite prices are a function of 2 factors:
  - Flake size (large flake: +80mesh)
  - Purity (high carbon: +94%)

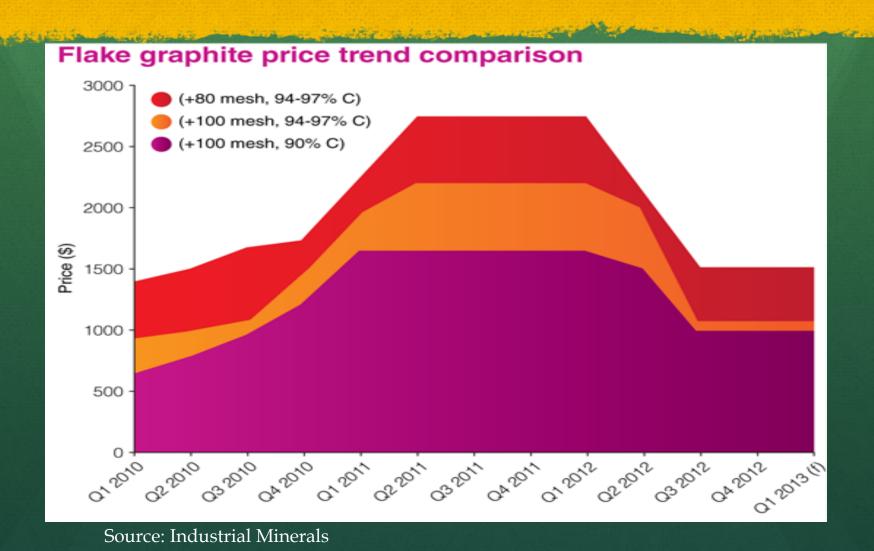
Visual observations on in situ graphite mineralization from trenching at Pencil Hill Project shows flake size equaling approx. 1mm in size

Type of Natural Graphite	Mesh Size	Average Price (\$/tonne Jan 2013)
Small Flake (95%-98%)	-100 to +140 Mesh (0.149mm to 0.105mm )	\$900-\$1,200
Medium Flake (95%-98%)	-80 to +100 Mesh (0.177mm to 0.149mm)	\$1,050-\$1,400
Large Flake (95%-98%)	+80 Mesh (0.177mm)	\$1400-\$1,800
Jumbo Flake (95%-98%)	+50 Mesh (0.297mm)	>\$1,600
Battery Grade Flake ( <b>99.9</b> %)	+80 Mesh (0.177mm)	\$5,000-\$20,000

- A "+" before the mesh indicates the particles are retained by the sieve,
- A "-" before the mesh indicates the particles pass through the sieve, and
- Typically, 90%+ of the particles will lie within the indicated range

Source: Industrial Minerals

## Flake Graphite Price Trend



# Advanced Graphite Projects

As at 17 September 2014

Project	Owner	Market Cap
Balama East, Balame West (Mozambique)	Syrah Resources Limited (ASX: SYR)	\$775m
Balama North (Mozambique)	Triton Minerals Limited (ASX: TON)	\$108m
Uley Main Road (Australia)	Valence Industries Limited (ASX: VXL)	\$108m
McIntosh (Australia), Geuman, Samcheok, Taehwa (Korea)	Lamboo Resources Limited (ASX: LMB)	\$85m
Nunasvaara, Raitajarvi (Sweden)	Talga Resources Limited (ASX:TLG)	\$59m
Nachu (Tanzania)	Uranex Limited (ASX:UNX)	\$46m
Epanko (Tanzania)	Kibaran Resources Limited (ASX: KNL)	\$39m
Duwi (Malawi)	Sovereign Metals Limited (ASX:SVM)	\$25m
Campoona, Wilclo South (Australia)	Archer Exploration Limited (ASX: AXE)	\$17m
Yalbra* (Australia) *Joint Venture	Montezuma Mining Company Limited (ASX: MZM)	\$11m
Yalbra* (Australia)	Buxton Resources Limited (ASX: BUX)	\$10m

# Pencil Hill Prospecting Licence



# Pencil Hill Highlights

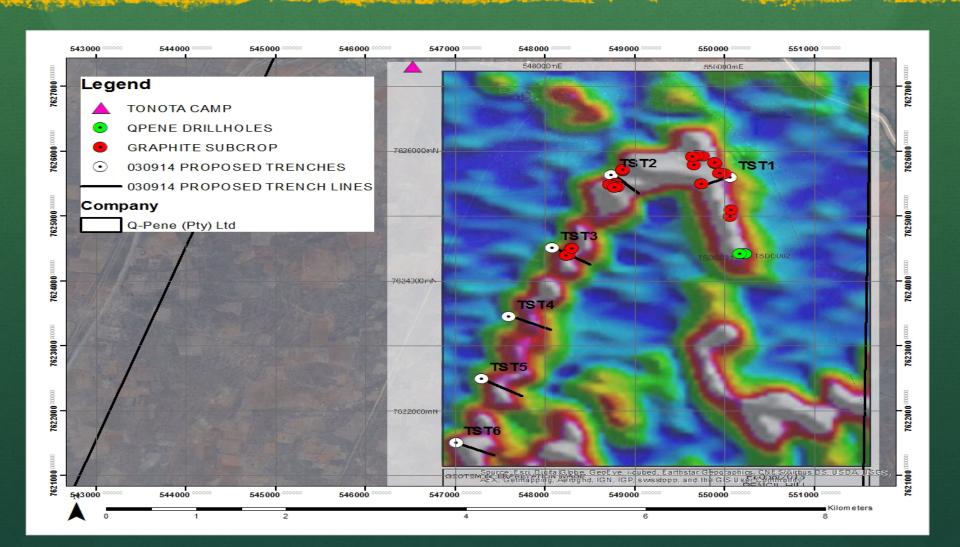
- > The Prospecting Licence covers an area of 830km<sup>2</sup>
- > Potential strike of 25km within the licence area.
- Pencil Hill has discovered significant visual graphite mineralization in the two Drill Holes

("Hole One" and "Hole Two") completed.

- Visual graphite mineralization in three trenches completed from six planned
- Trenches 1km apart



# Pencil Hill Geotem Graphite anomaly



## Hole One and Hole Two

## Hole One:

- 95m of visual graphite
  - 5m visible from 8m depth
  - 90m visible from 15m depth

### Hole Two:

86m of graphite from 35m depth

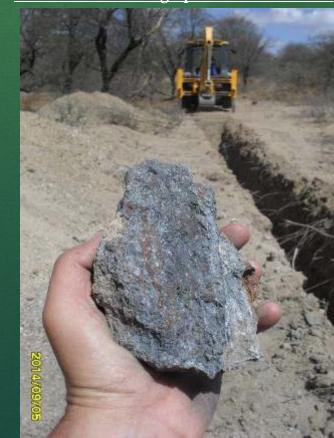
Five core samples have been sent to an independent laboratory to study flake size, while the other intersects are being tested for Total Graphitic Carbon (TGC)



# Trenching

- Six trenches planned (3 completed) 1km apart to test EM anomaly
  - TST001: 83m of visual graphite
    - 11 graphite intersections from 28m for 83m
    - Thickness varying from <1m to 10m</li>
  - TST002: 101m of visual graphite
    - 8 graphite intersections from 23m for 101m
    - Thickness varying from <1m to 20m
  - TST003: 5m of visual graphite in the trench
    - 2 graphite intersections from 133m to 191m
    - Thickness varying from 2m to 3m
  - <u>TST004</u>: yet to commence
  - <u>TST005</u>: yet to commence
  - <u>TST006:</u> yet to commence

TS002 near-surface graphite mineralization



## Trenches and Drill Sampling

Trenches will be channel sampled horizontally along base over graphite horizons. Trench and drill samples will be sent to an independent laboratory for TGC assays.



## JORC Code, 2012 Edition – Table 1 report template Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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> <li>Trenching results reported in this release are from trenches being excavated by JCB. Trenches are 1 m wide and no deeper than 3 m. Channels are cut horizontally at bottom of trenches and 1 m samples are taken only over graphite interceptions. Samples are not longer than 1 m lengths but may be shorter than 1 m depending on the graphite interception length. No other exploration tools are used.</li> <li>Trench start, finish and deflection points are being captured by handheld GPS (WGS 84, UTM zone 35S).</li> <li>Graphite is visually recognized in trenches, it is micaceous, has a dark grey streak, a sub-metallic luster and is lightweight.</li> <li>Sampling is in process.</li> </ul>
Drilling techniques	<ul> <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>	Trenches are being excavated by JCB testing Geotem anomalies
Drill sample recovery	<ul> <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>	Samples are taken in one meter intervals over graphite lithologies at bottom of trenches.
Logging	Whether core and chip samples have been geologically and	All trenches are being logged geologically.

Criteria	JORC Code explanation	Commentary
	<ul> <li>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</li> </ul>	<ul> <li>Logging of trenches includes recording lithology, mineralogy,</li> </ul>
	<ul> <li>costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	mineralisation, weathering, colour and other features of the host rock.  Geological descriptions of the mineral occurrence and abundances are semi-quantitative.  • Complete trenches are logged
Sub- sampling techniques and sample preparation	<ul> <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> <li>n/a</li> <li>Trenches are sampled in 1 m wide horizontal channels across graphite interceptions.</li> <li>Duplicates and field blanks will be inserted at every 20th sample. QAQC samples will be submitted with trench samples.</li> <li>Duplicate samples will be graphite interceptions that are split by riffler.</li> <li>The sample sizes are considered to be appropriate and represent mineralisation at the Pencil Hill project based on the style of mineralisation, the thickness and consistency of the intersections and the sampling methodology.</li> <li>Sample sizes are appropriate to grain size of material sampled.</li> </ul>
Quality of assay data and laboratory tests	<ul> <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</li> </ul>	<ul> <li>The analytical techniques for assaying trench samples include Graphitic Carbon, Total Sulphur, and Total Carbon on a Leco Combustion Infrared Detection instrument. Detection limits for these analyses are considered appropriate for the reported assay grades.</li> <li>n/a</li> <li>Trench samples will be submitted to the lab with blanks (2 per 40 samples) and field duplicates (5 per 100 samples). Sample preparation checks for fineness will be carried out by the laboratory.</li> </ul>

Criteria	JORC Code explanation	Commentary
	of accuracy (ie lack of bias) and precision have been established.	Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, and repeats as part of their in house procedures. A selection of the riffle split samples will be submitted to an independent laboratory as independent checks of the assay results.
Verification of sampling and assaying	<ul> <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> <li>All procedures are verified by Nico Scholtz an independent geological consultant.</li> <li>n/a</li> <li>All data is stored in database format which is generated by on site project geologist and sent to the independent consultant on a regular basis. In addition, the consultant is being updated on a daily basis wrt exploration activities.</li> <li>n/a</li> </ul>
Location of data points	<ul> <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> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Trench start, finish and deflection points are being captured by handheld GPS (WGS 84, UTM zone 35S).</li> <li>The grid system Pencil Hill Project area is World Geodetic System (1984 Spheroid and Datum; Zone 35 South).</li> <li>Flat terrain, no DTM compiled yet</li> </ul>
Data spacing and distribution	<ul> <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> <li>The reported trenches are planned to be spaced approx 1,000 m apart covering the Geotem anomaly and are first pass reconnaissance trenches only.</li> <li>The data spacing of trenches are adequate to test the Geotem anomaly only, only after additional drilling has been completed and modelled can be ascertain grade continuity.</li> <li>No sample compositing has been applied.</li> </ul>

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul> <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> <li>Samples are taken perpendicular on dip and therefore achieve our objectives of assessing the Geotem anomaly wrt graphite mineralization. In addition, all structural readings on insitu rock will be performed if suitable dip and strike planes can be located.</li> <li>No bias.</li> </ul>
Sample security	The measures taken to ensure sample security.	Samples are stored on site on a secure enclosure prior to shipping to SGS. A guard is assigned to the yard day and night.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	All procedures are verified by Nico Scholtz

Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <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> <li>Pencil Hill Project are located within PL058/2013 in the Central District, Botswana granted to Q-Pene Pty Limited</li> <li>At this time the tenements are believed to be in good standing. There are no known impediments to obtain a license to operate and Q-Pene has established a good working relationship with local stakeholders.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Minimal data was acquired from Botswana Metals Limited from their base metals exploration. None was on graphite exploration</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	The Pencil Hill graphite deposit is hosted within the Kgarimacheng Formation. This unit includes ultramafic schists, serpentinites, amphibolites, quartzites, semi-pelitic gneisses and meta-arkoses. Graphite mineralisation is hosted within graphitic shists with intercalating marbles and mafic amphibolites intruded by felsic gneiss.

Criteria	JORC Code explanation	Commentary
		and doleritic bodies.
Drill hole Information	<ul> <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> <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>	A summary Table of the completed and planned trenches is included in this announcement.
Data aggregation methods	<ul> <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> <li>n/a</li> <li>We can only report on this once the assays results have been received.</li> <li>No metal equivalent values are used.</li> </ul>
Relationship between mineralisati on widths and intercept lengths	<ul> <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> <li>Graphite intercept widths are regarded as true widths, but will only be reported in detail once assays are received.</li> <li>Mineralisation dip is steep varying from vertical to 080.</li> <li>n/a</li> </ul>

Criteria	JORC Code explanation	Commentary
Diagrams	<ul> <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 collar locations and appropriate sectional views.</li> </ul>	Plan view maps of the reported trenches are included into this announcement.
Balanced	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades	The reported trenches are the first of the planned trenching campaign  and approximately will be reported as approximately
reporting	and/or widths should be practiced to avoid misleading reporting of Exploration Results.	and assay results will be reported as soon as received.
Other substantive exploration data	<ul> <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>	No other exploration data is applicable at this stage.
Further work	<ul> <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> <li>Further work will be determined upon a full analysis and interpretation of results.</li> </ul>

## JORC Code, 2012 Edition – Table 1 report template Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

	on apply to all succeeding sections.)	
Criteria	.IORC Code explanation	Commentary
Sampling echniques	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.	The drill results included in this report wer obtained from Diamond drilling. Diamond holes were drilled 50m apart East-West direction to provide quantitative information on structure, physical properties and extent of mineralization. Holes were drilled -60 degrees towards UTM West.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Drilhole locations were picked up using a Differentilal GPS and reported using World Geodetic System (1984 Spheroid and Datum Zone 35 south)
	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.	Diamond core samples are prepared as half core using diamonf impegnanted blade core saw. Sampling is based on geological contacts and generally sampled at 1m interval
Drilling	Drill type (eg core, reverse circulation,	The Diamond drill holes were drilled with HQ

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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).

Core size collar (Pre collar to around 20mbdepth) and NQ core size to the end of hole. Core is orientated using spear method

## Drill sample recover

Method of recording and assessing core and chip sample recoveries and results assessed.

Core Recovery below the limit of oxidation is about 95 %. Core recoveries are measured and compared with drill depths to sample sample recoveries at every run.

Measures taken to maximise sample recovery and ensure representative nature of the samples.

From the core barrel, core is reconstructed on core trays and the orientation marked. Depth are checked against the depth given on the core blocks and rod count are carried out by drillers and technicians on site.

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. Extensive Diamond and RC drilling will be carried out as part of the program to confirm QAQC parameters of the sample material.

Logging

Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Geological logging is carried out on holes for the full mineral assemblage that can be identified in hand specimen, in addition to texture, structure and estimates of graphite

Content.

Geotechnical logging is carried out on all diamond drill holes for recovery, RQD and core physical properties. Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is stored

in the structure table of the database.

The mineralogy, textures and structures are recorded by the geologist into a digital data file at the drill site, which are sent to main office in Phikwe for validation and archiving.

Whether logging is qualitative or quantitative in nature.

Logging of RC and Diamond drill holes includes recording lithology mineralogy mineralisation

Criteria

JORC Code explanation

Commentary

Sub- sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	Diamond core will be cut into half core using a diamond impregnamted core cutter. Half core is sampled at 1 m interval or less will be submitted to the lab labeled.
sample preparatio n	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	The sample preparation of the diamond core samples follows industry best practice in sample preparation involving oven drying (105oC), coarse crushing of the diamond core sample down to ~2 mm, split (500g) and pulverizing to a grind size of 85% passing 75 micron  Duplicates and field blanks are inserted at every 20 <sup>th</sup> sample. QAQC samples are
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	submitted core samples.  Field duplicates are taken as half core splits.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	The drill sample sizes are considered to be appropriate to correctly represent mineralisation at the Pencil Hill project based on the style of mineralisation, the thickness and consistency of the intersections, the sampling methodology and percent value assay ranges for the primary elements.
	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	

Quality of and laboratory tests

The nature, quality and assay data 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 (eq standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.

The analytical techniques to be used to analyse all samples for Graphitic Carbon, Total Sulphur, and Total Carbon on a Leco Combustion Infrared Detection instrument. *Detection limits for these analyses are considered appropriate for the reported assay* grades.

In addition, selected drill samples will be analysed for multielement abundances using a fused disc digested in a four acid digest with ICP/OES or ICP/MS finish The acids used are hydrofluoric, nitric per chloric and hydrochloric acids, suitable for silica based samples. The method approaches total dissolution of most minerals

No any other tools were used to determine any element concentration.

Diamond core samples are submitted to the lab with blanks (2 per 60 samples) and field duplicates (5 per 100 samples). These QAQC samples represent 11% of the unknown samples analysed.

Sample preparation checks for fineness will be carried out by the laboratory as part of their internal procedures to ensure the grind size of 85% passing 75 micron was being attained. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, and repeats as part of their in house procedures. Repeat analysis for samples reveals that precision of samples is within acceptable limits. A selection of the 1/8th riffle split samples will be submitted assays to SGS and an independent laboratory as independent checks of the assay results.

Verificati on of	The verification of significant intersections by either	The data were examined by the independent consultant Nico scholtz,
sampling and	independent or alternative company personnel.	No twinned holes were drilled.
assaying	The use of twinned holes.	The primary data were audited and verified and then stored in a SQL relational data base.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	No data have been adjusted.
	Discuss any adjustment to assay data.	

Locatio n of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and	Drill holes were located using handheld GPS receivers with an accuracy of +/- 3m. The data were recorded in longitude/latitude WGS84.
	other locations used in Mineral Resource estimation.	The grid system Pencil Hill Project area is World Geodetic System (1984 Spheroid and Datum; Zone 35 South).
	Specification of the grid system used.	The terrain is largely flat.
	Quality and adequacy of topographic control.	

Criteria	JORC Code explanation	Commentary
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.	The reported drill holes were drilled at 50m spacing and are first pass reconnaissance drilling only.  No sample compositing has been applied.

Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The drill lines are oriented at approximately 90 degrees to the strike of the mapped and geophysical I anomaly.
	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.	Drill holes are inclined at -60 degrees and orientation of holes does not take into account the orientation of structures.
Sample security	The measures taken to ensure sample security.	Samples are stored on site on a secure enclosure prior to shipping to SGS. A guard is assigned to the yard day and night.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The data were examined by the independent consultant Nico Scholtz,

The QAQC samples inserted will be analyzed and interpreted to qualify the mineralization

**Section 2 Reporting of Exploration Results** (Criteria listed in the preceding section also apply to this section.)

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.	Pencil Hill Project are located within PL058/2013 in the Central District, Botswana granted to QPene Pty Limited
	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.	At this time the tenements are believed to be in good standing. There are no known impediments to obtain a license to operate and QPene has established a good working relationship with local stakeholders.

Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Minimal data was acquired from Botswana Metals Limited from their base metals exploration. Non was on graphite exploration

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	The Pencil Hill praphite deposit is hosted within the rocks of the Kgarimacheng Formation. This is ultramafic schists, serpentinites, amphibolites, quartzites, semipelitic gneisses and meta-arkoses. Graphite mineralisation is hosted within graphitic shists and marbles within mafic amphibolites underlain and overlain by felsic gneiss and doleritic bodies. Graphatic mineralisation continuity along the amphibiltes and magnetic highs will be defined on the next program

Drill	A summary of all information	A summary Table of the drill holes is attached.
hole	material to the understanding of	
Informa	the exploration results including a	
tion	tabulation of the following	
	information for all Material drill	
	holes:	
	easting and northing of the drill	
	hole collar	
	elevation or RL (Reduced Level	
	<ul> <li>elevation above sea level in</li> </ul>	
	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,	

Data aggrega tion method s	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.

Only original data are reported with no weighting averaging or grade truncations.

Relations These relationships are hip particularly important in the

between reporting of Exploration

mineralis Results.

ation If the geometry of the

widths mineralisation with respect to the

and drill hole angle is known, its intercept nature should be reported. lengths 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').

The inclined drill holes are nominal recoinssance drill program to varying dip direction of the identified magnetic body.

Criteria	JORC Code explanation	Commentary
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.	Plan view maps of the reported drill holes are included into this announcement.
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.	The reported drill holes are the first two of the drilling campaign. The samples are being prepared for shipping to SGS
Other substantive	Other exploration data, if meaningful and material, should be reported including (but	5 selected samples will be shipped to SGS for fake size investigation, Multi element assaying

## exploration data

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.

will be conducted on selected intervals.
Geotechnical logging is routinely carried out on all diamond drillholes for recovery, RQD and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is stored in the structure table of the database
Regional mapping is ongoing.

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.

Further work will be determined upon a full analysis and interpretation of results.