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ASX RELEASE

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SOVEREIGN METALS LIMITED

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MALINGUNDE: THE WORLD'S LARGEST REPORTED SAPROLITE-HOSTED GRAPHITE RESOURCE

Sovereign Metals Limited ("the Company" or "Sovereign") is pleased to report the **maiden JORC Mineral Resource Estimate** from the Malingunde Project in Malawi.

The Mineral Resource Estimate confirms the global significance of the Malingunde graphite deposit and provides the basis for a potentially **low capex and very low opex** natural flake graphite operation **focused on the soft saprolite (clay)-hosted component**.

Saprolite Mineral Resource Estimate (Indicated + Inferred)**:**

28.8Mt @ 7.1% TGC (4.0% TGC cut-off)

including ***High Grade Component:***

8.9Mt @ 9.9% TGC (7.5% TGC cut-off)

HIGHLIGHTS:

- Malingunde confirmed as world's **largest reported soft saprolite-hosted graphite resource**[1].
- 8.9Mt @ 9.9% TGC high-grade component to provide the focus for upcoming Scoping Study.
- **80%** of the total saprolite and 80% of the high grade component is in the **Indicated Mineral Resource category**.
- All soft saprolite is within 30m of surface and will be **free-digging with very low strip ratios**, which should equate to **much lower life-of-mine mining costs**.
- The saprolite material does not require primary crushing or grinding which will result in **substantially reduced processing costs** compared to hard rock deposits.
- Additional and substantial exploration potential exists within the a very large 3,788km^2 ground package, containing numerous other saprolite prospects discovered but not yet drilled out.

Dr Julian Stephens, Sovereign's Managing Director commented, "The maiden Mineral Resource estimate has significantly exceeded our expectations and confirms Malingunde as a world-class graphite deposit. The discrete, high-grade component of the resource will provide the focus for the Company's upcoming Scoping Study. Given this exceptional resource base, the Company can now progress completion of the Scoping Study, leveraging the project's inherent advantages including its potential to be a very low opex and low capex operation with best-in-class margins."

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Introduction

Saprolite-hosted graphite deposits are sought after as they generally have lower capex requirements and low operating costs compared to hard rock graphite mines.

Sovereign explored the Malingunde area in 2015 and 2016, resulting in the discovery of the world's largest reported saprolite-hosted graphite resource.

Beneficial features of the Malingunde deposit include:

- A high-grade core @ ~10% TGC which will provide the focus for the upcoming Scoping Study;
- Very soft, free-digging material for the life of mine and a very low strip ratio will equate to very low mining costs;
- No requirement for primary crushing and grinding, significantly reducing capital requirements and operating costs;
- Proximity to Malawi's capital means access to existing infrastructure – rail, water, power & labour;
- Best in class concentrates in terms of flake size and concentrate grade will equate to premium concentrate pricing.

The above features collectively show that Malingunde has the potential to be a world-class asset which will have low capital requirements, low operating costs and high revenues per tonne of concentrate, likely resulting in a high margin operation.

Mineral Resource Estimate

The Malingunde Mineral Resource Estimate ("MRE") was undertaken by CSA Global and is reported in accordance with the JORC Code (2012 Edition).

At a 4% TGC lower cut-off grade, the MRE (Indicated + Inferred) comprises:

- 28.8Mt of saprolite @ 7.1% TGC;
- 17.0Mt of saprock @ 7.0% TGC;
- 19.3Mt of fresh rock @ 7.0% TGC.

The total Mineral Resource is 65.1Mt @ 7.1% TGC (saprolite, saprock & fresh rock; Indicated 80% + Inferred 20%).

At an increased 7.5% TGC lower cut-off grade, the saprolite-only resource is 8.9Mt @ 9.9% TGC (also Indicated 80% + Inferred 20%).

The saprolite component of the Mineral Resource all occurs within 30m of the natural ground surface. The Company's intention is to focus the upcoming Scoping Study on the high-grade saprolite Mineral Resource only. This 8.9Mt of high-grade material is expected to provide feed material for a significant mine life to be considered in the study.

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The Competent Person and the Company believe there are reasonable prospects for eventual economic extraction of the Mineral Resource. Consideration was given to the relatively shallow nature of the mineralisation making it amenable to open pit mining, existing infrastructure near to the project, including rail, power, labour and water. Metallurgical testwork carried out to date on flake size distribution and purity are considered by the Competent Person and the Company to be favourable for product marketability.

MALINGUNDE MINERAL RESOURCE ESTIMATE *(4.0% CUT-OFF GRADE)*						
	Indicated		Inferred		Total	
	Tonnes (Mt)	Grade (% TGC)	Tonnes (Mt)	Grade (% TGC)	Tonnes (Mt)	Grade (% TGC)
Saprolite	23.0	7.1%	5.7	7.3%	**28.8**	**7.1%**
Saprock	12.8	7.0%	4.2	7.1%	17.0	7.0%
Fresh Rock	-	-	19.3	7.0%	19.3	7.0%
Total	35.9	7.0%	29.2	7.1%	65.1	7.1%

MALINGUNDE MINERAL RESOURCE ESTIMATE *(7.5% CUT-OFF GRADE)*						
	Indicated		Inferred		Total	
	Tonnes (Mt)	Grade (% TGC)	Tonnes (Mt)	Grade (% TGC)	Tonnes (Mt)	Grade (% TGC)
Saprolite	7.1	9.6%	1.8	10.8%	**8.9**	**9.9%**
Saprock	3.8	9.4%	1.2	10.0%	5.0	9.5%
Fresh Rock	-	-	5.7	9.6%	5.7	9.6%
Total	10.9	9.5%	8.6	9.9%	19.5	9.7%

Table 1. Malingunde maiden JORC Mineral Resource Estimate at 4.0% and 7.5% TGC cut-off grades

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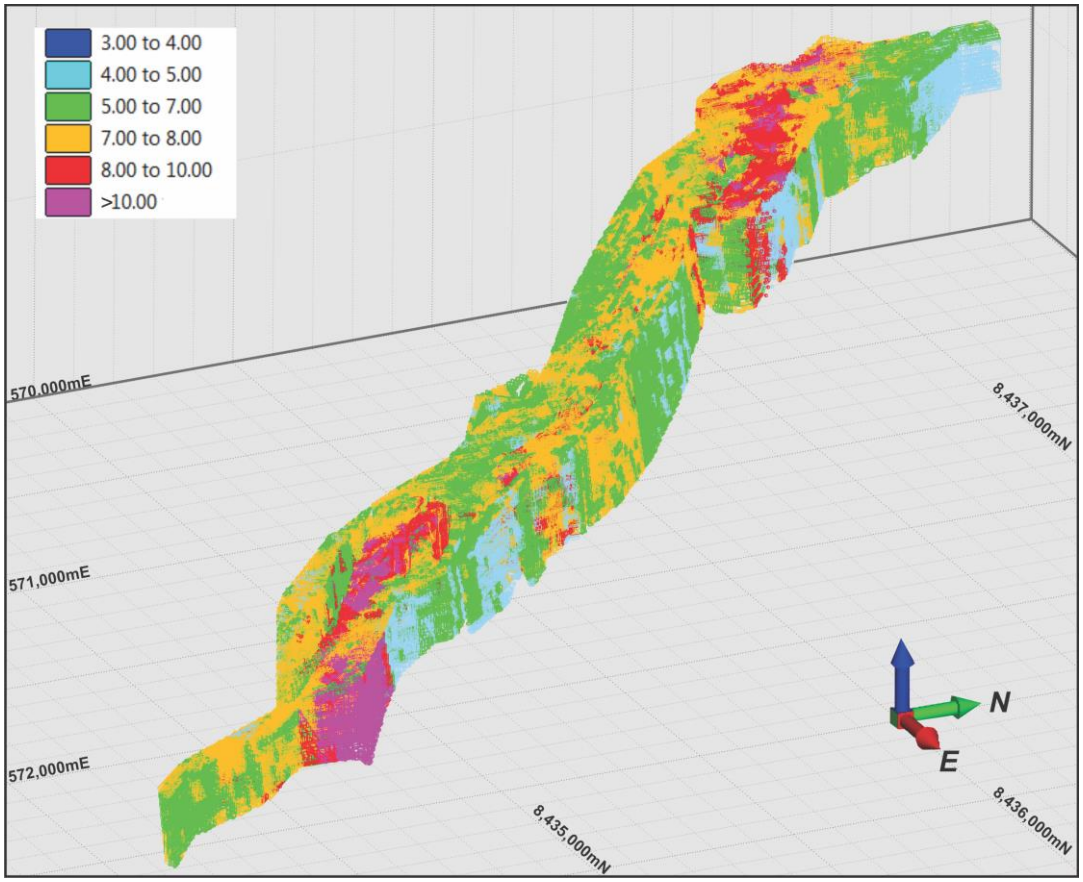

Figure 1. Oblique 3D view of Malingunde MRE block model

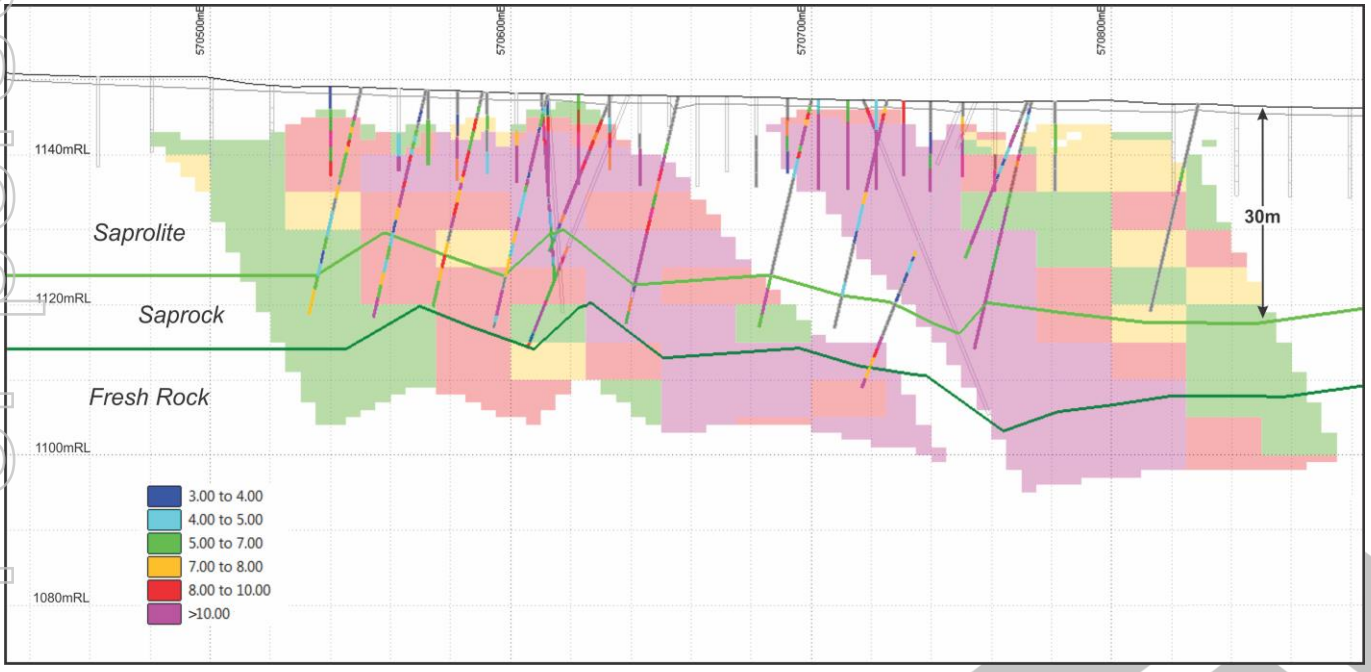

Figure 2. Cross-section 8,437,000mN showing MRE blocks and with TGC grade ranges

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Summary of Resource Estimate and Reporting Criteria

The following is a summary of the pertinent information used in the Mineral Resource Estimate ("MRE") with full details provided in Table 1 included as Appendix A.

Geology and Geological Interpretation

The Malingunde area is underlain by Neo-Proterozoic to Cambrian semi-pelitic paragneisses of the Mchinji Group. Lithologies include kyanite, biotite, garnet, pyrrhotite and graphite bearing gneisses and schists.

Malingunde flake graphite deposit strikes north-west, dipping between 25° and 50 degrees° to the north-east. It is currently modelled as three zones of mineralisation, with a depth extent of 50 m, a strike length of 4,500 m and a plan width varying between 50 and 230 m.

Malingunde occurs in a topographically flat area west of Malawi's capital known as the Lilongwe Plain. Here, a deep tropical weathering profile is preserved. A typical profile from top to base is generally ferruginous pedolith ("FERP", 0-4m), mottled zone ("MOTT", 4-7m), pallid saprolite ("PSAP", 7-9m), saprolite ("SAPL", 9-25m), saprock ("SAPR", 25-35m) and fresh rock ("FRESH" >35m). For the purposes of the MRE, all units from saprolite and above are included under the heading "saprolite". This is justified because all are soft and free-dig, and all have consistent and similar metallurgical characteristics.

Within the Malingunde deposit itself, high-grade graphite gneisses are interlayered and separated by biotite and locally kyanite bearing gneisses. Two discrete, internal high grade graphite zones exist and appear to be slightly oblique to the overall trend of the mineralisation (Figure 1).

Further high-grade saprolite-hosted graphite mineralisation has been discovered in hand auger drilling along strike over 1km to the south-east of the resource area and is yet to be followed up. Regionally, the Company controls a large, prospective ground package totalling 3,788km^2 within which six additional saprolite-hosted prospects have been located.

Drilling and Sampling Techniques

The MRE is based upon data obtained from 13 diamond core ("DD") drill holes (432.39 m), 170 aircore ("AC") holes (3,352 m) and 212 hand auger ("HA") holes (1,499 m) drilled across the three deposits. Five (5) pairs of AC/DD and eight (8) pairs of AC/HA twinned holes are included in the drilling totals.

HA holes are located on east-west transects across the entire strike of the modelled deposit spaced nominally at 200 m x 20 m with infill spaced at 10 m along section. AC holes were generally drilled at 200 m x 20 m along existing HA transects with infill of 100 m x 20 m over the northern and southern portions of the deposit. DD holes were drilled on existing HA transects spaced between 200 m and 400 m north-south along the strike extent of the deposit. All HA holes were drilled vertically whilst the majority of the AC and DD holes were angled, designed to intersect broadly orthogonal to the shallow-moderate east dipping mineralisation.

The majority of HA and all AC/DD drill hole collars were surveyed using a differential global positioning system ("DGPS") to centimetre accuracy. All DD holes were down-hole surveyed using a Reflex Ez-Trak multi-shot survey tool at 30m intervals down hole. Owing to their shallow depths (maximum 12 m), HA holes were not downhole surveyed. AC holes were not routinely down-hole surveyed, however 9 holes (5%) were surveyed to verify the amount of downhole deviation.

HA and AC drill samples were geologically logged, recording relevant data to a set template at 1m intervals. DD core was geologically logged based on geological intervals. DD core was also geotechnically logged and digitally photographed.

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DD core (PQ3) was quarter cut and sampled according to geological intervals. HA samples were composited on geological intervals (2-3m) in the field, and submitted for Total Graphitic Carbon (TGC) analysis. AC samples were sampled at 1-metre in the SOIL, FERP, MOTT weathering zones and composited nominally at 2-metres in the PSAP, SAPL, SAPR, FRESH weathering zones. Field quality assurance procedures were employed, including the use of analytical standards, coarse blanks and duplicates.

Sample Analysis Method

Samples were shipped to Intertek sample preparation laboratory in Johannesburg or Perth. Upon receipt of the sample, the laboratory prepared ~100g pulp samples for shipment (in the case of Johannesburg) to Intertek Perth where they were analysed. A 0.2g charge is analysed for TGC using an Eltra carbon analyser resistance furnace.

Classification Criteria

Classification of the MRE was carried out taking into account the geological understanding of the deposit, quality of the samples, bulk density data and drill hole spacing, supported by metallurgical test results that indicate general product marketability.

The MRE is classified as a combination of Indicated and Inferred, with geological evidence sufficient to assume geological and grade continuity in the Indicated volumes. 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.

Resource Estimation Methodology

TGC wireframe interpretations were based upon a lower cut-off of 4% TGC, which is equivalent to the graphitic gneiss domain boundary, from geological logging of HA/AC/DD drill holes.

The Mineral Resource block model consists of 3 zones of TGC mineralisation, with 1 major zone and 2 minor zones, with respect to strike extent. Mineralisation domains were encapsulated by means of 3D wireframed envelopes. Domains were extrapolated along strike or down plunge to half a section spacing. Internal waste units were modelled within the graphitic gneiss mineralisation envelopes to define barren domains.

No top cutting was applied to constrain extreme grade values because the TGC grade distribution does not warrant their use.

All drill hole assay samples were composited to 2 m intervals. All assayed HA/AC/DD drill hole intervals were utilised in the grade interpolation.

Grade estimation was by ordinary kriging ("OK"). A minimum of 8 and maximum of 16 composited samples were used in any one block estimate for all domains. A maximum of 5 composited samples per drill hole were used in any one block estimate. The PSAP, SAPL, SAPR and the top portion of the FRESH domain (pseudo transitional material) were combined into one estimation domain. The FERP and MOTT weathering zones were estimated as a separate single domain.

The grade model was validated by 1) creating slices of the model and comparing to drill hole samples on the same slice; 2) swath plots comparing average block grades with average sample grades on nominated easting, northing and RL slices; 3) mean grades per domain for estimated blocks and flagged drill hole samples; and 4) cross sections with block model and drill hole data colour coded in like manner.

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Cut-off Grades

The MRE has been reported using lower cut-off grade of 4.0% and 7.5% TGC, which is consistent with the grade used to report previous MREs for this style of mineralisation.

Mining and Metallurgical Methods and Parameters

No selective mining units were assumed in this resource model. No depletion of the Mineral Resource due to mining activity was required due to no mining having occurred historically.

Sovereign have announced several sets of metallurgical results to the ASX (7th September 2016; 23rd November 2016; 27th February 2017 and 20th March 2017), relating to flake size distribution and purity of graphite concentrate. Metallurgical testwork is ongoing.

Sovereign engaged SGS Canada to conduct an initial bench scale laboratory flotation testwork program on drill samples obtained from the Malingunde flake graphite deposit. The main objective was to investigate the metallurgical response of shallow saprolitic mineralization (PSAP+SAPL) and the testwork was performed on two master composites samples produced from fifteen drill holes of located in the northern and central part of the deposit. The majority of the testwork was performed using two master composite samples described as ‘north composite’ and ‘southern composite’ from shallow auger drill samples. The testwork was largely based on the flowsheet previously developed for weathered material from Sovereign’s Duwi and graphite deposit, located 40 km to the north-east.

In addition two separate master composites of the “mottled zone” (MOTT) using intervals from the same HA drill holes were produced and tested using the same flowsheet conditions as the saprolite master composites.

A subsequent variability tetwork program was undertaken on the PQ3 diamond drill core to evaluate the metallurgical response of the FERP, PSAP+SAPL (upper saprolite), SAPL (lower saprolite) and SAPR weathering domains.

The flotation testwork on auger and diamond drill core samples demonstrated that generally between about 50% and 80% of the liberated flakes were larger than 150 µm, and that final overall concentrate grades were in the range of 97% to 99% Carbon.

The flake size distribution and purity are considered to be favourable for product marketability.

Property testing of final concentrates produced from the metallurgical tests were undertaken by a specialty laboratory in Germany indicate that the potential products from Malingunde should be suitable for expandable graphite markets.

Competent Person Statement

The information that relates to Mineral Resources is based on, and fairly represents, information compiled by Mr David Williams, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr 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 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 Williams consents to the inclusion of the matters based on his information in the form and context in which it appears.

The information that relates to Exploration Results is extracted from announcements on 29 August 2016, 12 October 2016, 26 November 2016, 18 January 2017, 21 February 2017 and 15 March 2017. These announcements are available to view on www.sovereignmetals.com.au. The information in the original announcements that related to Exploration Results were based on, and fairly represents, information compiled by Dr Julian Stephens, a Competent Person who is a member of the Australasian Institute of Geoscientists (AIG). Dr Stephens is the Managing Director of Sovereign Metals Limited and a holder of shares, options and performance rights in Sovereign Metals Limited. Dr Stephens has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken, 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'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Forward Looking Statement

This release may include forward-looking statements, which may be identified by words such as "expects", "anticipates", "believes", "projects", "plans", and similar expressions. These forward-looking statements are based on Sovereign's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Sovereign, which could cause actual results to differ materially from such statements. There can be no assurance that forward-looking statements will prove to be correct. Sovereign makes no undertaking to subsequently update or revise the forward-looking statements made in this release, to reflect the circumstances or events after the date of that release.

Footnote 1

The Malingunde Mineral Resource is understood by the Company to be the largest known saprolite-hosted flake graphite deposit in the world that has been reported under recognised western Mineral Resource reporting codes (i.e. JORC, NI 43-101, SAMREC).

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Appendix 1: JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling Techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	Hand Auger (HA), Air-core (AC) and Diamond core (DD) drilling form the basis of the Mineral Resource Estimate (MRE) and are described below: **HA** drilling was employed to obtain samples vertically from surface at nominal 1-metre depth intervals, with samples composited on geologically determined intervals. Composite samples were riffle split on site. HA drilling was completed as a number of phases during 2015 and 2016. A total of 212 HA holes (1,499 m) were used in the MRE. **AC** drilling (angled and vertical) was employed to obtain bulk drill cuttings at nominal 1-metre depth (downhole) intervals from surface. All 1-metre samples were collected in plastic bags directly beneath the sample cyclone underflow. The entire individual 1-metre sample was manually split at the drill site using conventional riffle splitters. A total of 170 AC holes (3,352 m) completed during 2016 were used in the MRE. **DD** drilling (angled and vertical) was designed to obtain representative large diameter (PQ3) core for geological, geotechnical and metallurgical testwork purposes. Subsequent to completion of all geological and geotechnical logging and sampling (whole core samples removed laboratory bulk density and strength testing) drill core was either manually hand split or sawn using a circular saw and sampled as ¼ PQ3 core. Upon completion of laboratory bulk density and strength testing of the whole core intervals the entire core was submitted to the laboratory. A total of 13 DD holes (432.39 m) completed during 2016 were used in the MRE. All **HA**/**AC**/**DD** assay sample splits were submitted to either Intertek Johannesburg or Intertek Perth for assay sample preparation. Total Graphitic Carbon (TGC) analysis of all assay pulps samples was performed by Intertek Perth.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	All **HA**/**AC**/**DD** drilling and sampling activities were supervised by a suitably qualified Company geologist who was present on site during the drilling of holes. All **HA** and **AC** holes were geologically logged at a nominal 1-metre interval by the geologist at the drill site. **DD** holes were geologically logged on a geological intervals basis. Geotechnical logging was completed for each core run interval. All mass reduction (field and laboratory splitting) of samples were performed within Gy's Sampling Nomogram limits relevant to this style of mineralisation. Field duplicate splits of HA/AC samples and quarter DD core were undertaken nominally every 20th sample to assess sampling errors. **HA:** The auger spiral and rods are cleaned between each metre of sampling to avoid contamination. **AC:** The sampling cyclone was routinely cleaned out between each drill hole. Sample recovery was quantitatively assessed throughout the duration of the drilling program. A program of field replicate splitting of selected (~5%) mineralised intervals was completed at the conclusion of the drill program to assess the sampling repeatability **DD:** core recovery was closely monitored during drilling particularly through the mineralised zones. Standard industry drilling mud mixtures were employed to improve core recovery especially through the softer upper clay rich pedolith and saprolith horizons.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Flake graphite content is visually estimated as volume % for each 1-metre HA/AC bulk drill samples and DD core logging interval during geological logging by a Company geologist. A nominal lower cut-off of 4% TGC assay has been applied to define zones of 'mineralisation'.

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Criteria	JORC Code explanation	Commentary
Drilling Techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	**HA:** drilling was performed manually by Sovereign employees using a conventional hand auger employing a combination of 62mm and 50mm diameter spiral auger flight and 1-metre long steel rods. Each 1m of drill advance is withdrawn and the contents of the auger flight removed. An additional 1-metre steel rods is attached and the open hole is re-entered to drill the next metre. This is repeated until the drill holes is terminated or reaches a maximum depth of 12m. The auger spiral and rods are cleaned between each metre of sampling to avoid contamination. **AC:** conventional blade bit aircore drilling was employed to obtain all drill cuttings from surface. Drilling was completed using a P900 truck mounted rig with and separate truck mounted air compressor. Drilling was completed using standard 3-inch or 4-inch diameter/3m length drill rods equipped with inner tubes. Drilling was performed with standard face discharge aircore blade bits. The nominal drill hole diameter for 3-inch and 4-inch holes is 85mm and 114mm respectively. The nominal inner tube inside diameter for 3-inch and 4-inch holes is 37mm and 45mm respectively. Drilling of all 3-inch holes employed a 2-stage compressor rated at 300CFM:200PSI run continuously on high stage. All 4-inch holes were drilled employing a 2-stage compressor rated at 900CFM:350PSI with high-stage generally run below about 15m downhole. **DD:** conventional wireline PQ triple tube (PQ_3) diamond drilling (DD) was employed to obtain all drill core. Drilling was undertaken with an Atlas Copco Christensen CT14 truck mounted drilling rig. The nominal core diameter is 83mm and the nominal hole diameter is 122mm. Coring was completed with appropriate diamond impregnated tungsten carbide drilling bits. Drill runs were completed employing either a 1.5m or 3.0m length PQ_3 core barrel. Core from all drilling runs was orientated using a Reflex ACTIII Electronic Orientation device. The orientation and marking of the bottom of hole (BOH) orientation line along the core was completed whilst the core was still within the drilling split. Core was transferred from the drilling split into PVC splits which were then wrapped with plastic layflat material, securely sealed and placed into core trays.
Drill Sample Recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	**HA:** sample recovery was monitored visually during removal of the sample from the auger flights. **AC:** sample recovery was recorded for all holes. The 1-metre drill samples collected in plastic bags from directly beneath the cyclone underflow were individually weighed and moisture content (dry/damp/moist /wet/saturated) recorded prior to further splitting and sampling. The outside diameter of the drill bit cutting face was measured and recorded by the driller prior to the commencement of each drill hole. Each 1-metre sample interval was separately geologically logged using standard Company project specific logging codes. Logging of weathering and lithology along with drill hole diameter, recovered sample weight, moisture content and dry bulk density measurements of PQ diamond core allow the theoretical sample recovery to be assessed. Analysis of the calculated sample recoveries indicate an average recovery of greater than 75% for all mineralised (>=4% TGC) intervals. **DD:** drilling core recovery was recorded for each drill run by measuring the total length whilst still in the drilling splits prior to being transferred into core trays. Downhole depths were validated against core blocks and drill plods during each shift. Holes MGDD0001, MGDD0004 and MGDD0005 were re-drilled due to core loss within a number of mineralised zones. An overall core recovery of 92% was achieved for all sampled core.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	**HA:** drill holes were terminated where they intersected the upper (perched) water table (approx.. 7-8m) **AC:** drill bit type (face discharge) used were appropriate for the type of formation to maximise amount of drill cutting recovered. Drill bits were replaced where excessive wearing of the tungsten cutting teeth had occurred. Adequate CFM/PSI of compressed air was used to maximise the drying of sample prior to recovering up the drill string. A number of the 2016 PQ diamond core holes were twinned by aircore holes to assess the representivity of AC drill samples. Where the ingress of water in deeper sections of holes resulted in wet samples (usually at the Saprolite/Saprock interface) the drill hole was terminated. **DD:** core recovery was closely monitored during drilling particularly through the mineralised zones. Standard industry drilling mud mixtures were employed to improve core recovery especially through the softer upper clay rich material of the Pedolith and Saprolith zones. Other measures such quantity of water, amount of rotation and drill bit types that are appropriate to soft formation drilling were considered and employed during drilling when required. At the completion of each drill run the steel splits containing the core were pumped out of the retrieved core tube. Core was then carefully transferred from the drill split into plastic sleeves (layflat) which were secured in rigid PVC splits. The layflat was securely bound and sealed (to preserve moisture) with tape prior to transferring PVC splits into plastic core trays.
	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.	Twin hole comparison of AC/HA and AC/DD drill hole TGC assay grades indicates that no sample bias exists. There does not appear to be any relationship between sample recovery and the visual graphite content.
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.*	**HA/AC/DD:** drill holes were geologically logged by a suitably trained Company geologist using standard Company code system. All geological logging was initially recorded using a standard A4 paper template and later digitally entered into customised Company MS Excel spreadsheets utilising functional validation tools. Excel files are checked and loaded to MS Access by the Database Administrator. Upon loading into the Access database further validation is performed. **HA/AC:** holes were geologically logged nominally at 1-metre intervals. Reference samples of each 1-metre intervals were collected and stored in plastic chip trays for future reference. **DD:** holes were logged on a geological interval basis. In addition all holes were geotechnically logged by trained Company geologists to ISRM standards. DD holes MGDD0008-0013 were geotechnecnically logged by a consulting geotechnical engineer. All drill core was photographed prior to sampling and images were digitally catalogued. This information is of a sufficient level of detail to support appropriate Mineral Resource estimation, preliminary mining studies and metallurgical testwork.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging is both qualitative and quantitative. Geological logging includes but is not limited to lithological features, estimated graphite content and flake characteristics. The logging and reporting of visual graphite percentages (on a volumetric basis) is semi-quantitative. A reference to previous logs and assays is used as a guide. Geotechnical logging of DD core is both qualitative and quantitative.
	The total length and percentage of the relevant intersection logged	100% of the HA/AC/DD drill hole sample intervals have been geologically logged.

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Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Quarter PQ3 DD core is manually split and/or cut using a motorised diamond blade core saw and sampled for laboratory analysis.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	**HA:** 1-metre samples are composited on geological intervals and then riffle split at 50:50 using a standard Jones riffle splitter. Wet samples are first air dried and then manually broken up prior to compositing or splitting. **AC:** Individual 1-metre drill samples were manually split in entirety using either a 3-tier (87.5:12.5) or single tier (50:50) riffle splitter or a combination thereof to facilitate mass reduction of the drill sample to produce an assay split. Additional compositing of the assay off-split was controlled by geological logging. Mineralised (>=3% visual TGC content) off-splits obtained from the "soil" (SOIL), "ferruginous pedolith" (FERP) and "mottled zone" (MOTT) weathering horizons were not composited, whereas mineralised splits of the underlying "pallid saprolite" (PSAP), "saprolite" (SAPL) and saprock (SAPR) weathering units were composited nominally at 2-metres. Unmineralised (=<3% visual TGC) 1-metre splits were composited nominally at 4-metres. All bulk rejects splits of the original 1-metre intervals were transported to a secure undercover storage facility in Lilongwe. All 1-metre wet samples were removed from the drill site without splitting and relocated to the Company's premises in Lilongwe. The wet samples were transferred into large metal trays and sun dried. Samples were subsequently manually broken up and thoroughly homogenised prior to splitting 50:50 with a single tier riffle splitter. One off-split was submitted to the laboratory for assay. The other off-split (i.e. the material not sent for assaying) of each individual 1-metre interval were returned to original sample bag, cable tied and placed in storage for future reference.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	**HA samples:** sample preparation is conducted at Intertek's laboratory in Johannesburg. Each entire sample is crushed to nominal 100% -3mm in a Boyd crusher then pulverised to 85% -75µm in a LM5. Approximately 100g pulp is collected and sent to Intertek Perth for TGC analysis. **AC samples:** sample preparation was conducted at either Intertek in Perth or Johannesburg. The entire submitted sample (=< ~3kg) is pulverised to 85% -75µm in a LM5. Approximately 100g pulp is collected and sent to Intertek-Genalysis Perth for chemical analysis. **DD samples:** all sample preparation was conducted at Intertek Perth. Each entire sample is crushed to nominal 100% -3mm in a Boyd crusher then pulverised to 85% -75µm in a LM5.The entire submitted sample (=< ~3kg) is pulverised to 85% -75µm in a LM5. Approximately 100g pulp is collected and sent to Intertek-Genalysis Perth for chemical analysis.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	**HA/AC/DD:** All sampling was carefully supervised. Ticket books were used with pre-numbered tickets placed in the laboratory sample bag and double checked against the hardcopy sample register. Field QC procedures involve the use of certified reference material assay standards, blanks, duplicates, replicates for company QC measures, and laboratory standards, replicate assaying and barren washes for laboratory QC measures. The insertion rate of each of these averaged better than 1 in 20.
	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.	All mass reduction (field and laboratory splitting) of samples were performed within Gy's Sampling Nomogram limits relevant to this style of mineralisation. Field duplicate splits of HA/AC samples and quarter DD core were undertaken nominally every 20th sample to assess sampling errors. A program of field replicate splitting of selected (~10%) "mineralised" AC intervals was completed at the conclusion of the drill program. In addition, a number of air core holes were drilled to "twin" existing HA and DD holes, to assess the representivity of the AC drill samples. The results of these programs indicate there are no significant sampling errors.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	All mass reduction of HA/AC/DD drill samples undertaken during field sampling and laboratory sample preparation were guided by standard sampling nomograms and fall within Gy's safety limits for the style of mineralisation being sampled.
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.*	The analytical and laboratory procedures are considered to be appropriate for reporting graphite mineralisation, according to industry best practice. Each entire sample was pulverised to 85% -75µm. Approximately 100g pulp is collected for analysis at Intertek Perth. A sample of 0.2g is removed from the 100 gram pulp, first digested in HCl to remove carbon attributed to carbonate, and is then heated to 450°C to remove any organic carbon. An Eltra CS-2000 induction furnace infra-red CS analyser is then used to determine the remaining carbon which is reported as Total Graphitic Carbon (TGC) as a percentage.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No non-laboratory devices were used for chemical analysis.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicate, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Field QC procedures involve the use of certified reference material (CRM) assay standards, blanks, duplicates and replicates for company QC measures, and laboratory standards, repeat assaying and barren washes for laboratory QC measures. The insertion rate of each of these averaged better than 1 in 20. Performance of the primary laboratory across all assay batches were within acceptable tolerance levels and that there is no appreciable bias.
Verification of sampling & assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Significant mineralisation intersections were verified by alternative company personnel. An independent resource consultant conducted a site visit during December 2016 during the AC drilling program. All drilling and sampling procedures were observed by the consultant during the site visit.
	The use of twinned holes.	A number of AC holes were drilled to "twin" existing HA and DD holes as verification of sampling and assaying.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All data is initially collected on paper logging sheets and codified to the Company's templates. This data was hand entered to spreadsheets and validated by Company geologists. This data was then imported to a Microsoft Access Database then validated both electronically and manually. Assay data is provided as .csv files from the laboratory and loaded into the project specific drill hole database. Spot checks are made against the laboratory certificates.
	Discuss any adjustment to assay data.	No adjustments have been made to assay data.

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Criteria	JORC Code explanation	Commentary
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.*	**HA/AC/DD** All collars have been picked-up by the Company's consulting surveyor, using a Leica GPS System 1200 in RTK mode to define the drill-hole collar coordinates to centimetre accuracy. Down-hole surveying of all DD holes was undertaken on selected holes to determine drill hole deviation. Surveys were carried out using a Reflex Ez-Trak multi-shot survey tool at nominal 30m intervals. Downhole surveying using the same method was also completed for selected AC holes. Results indicate that no significant deviation occurs over the relatively short length of the AC holes. HA holes were drilled to a maximum depth of 12 and were not downhole surveyed.
	Specification of the grid system used.	WGS84 (GRS80) UTM Zone 36 South
	Quality and adequacy of topographic control.	The Company's consulting surveyor used a Leica DGPS System 1200 in RTK mode to accurately locate the x, y, z of drill collars. Previous checking of Hand Auger holes with the Shuttle Radar Topographic Mission (SRTM) 1-arc second digital elevation data has shown that the Leica GPS System produces consistently accurate results. Given the low topographic relief of the area it is believed that this represents high quality control.
Data spacing & distribution	*Data spacing for reporting of Exploration Results.*	**HA:** drill holes are located across the entire strike and width of the modelled deposit with spacing on a nominal 200m x 20m spacing with infill of 10m along section. **AC:** drill holes were generally drilled at 200m x 20m along existing HA transects with infill of 100m x 20m over the northern and southern areas of the deposit. **DD:** holes were drilled on existing HA transects spaced between 200 and 400m along the strike extent of the deposit between 8,435,400mN to 8,437,200mN.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The data spacing is sufficient for the estimation of a Mineral Resource (see Section 3 of JORC Table 1)
	Whether sample compositing has been applied.	No sample compositing has occurred.
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*	No bias attributable to orientation of sampling upgrading of results has been identified.
	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.	No bias attributable to orientation of sampling upgrading of results has been identified. Flake graphite mineralisation is conformable with the main primary layering of the gneissic and schistose host lithology.
Sample security	*The measures taken to ensure sample security*	Samples are securely stored at the Company's compound in Lilongwe. Chain of custody is maintained from time of sampling in the field until sample is dispatched to the laboratory.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data*	It is considered by the Company that industry best practice methods have been employed at all stages of the exploration.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement & 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 environment settings.*	The Company owns 100% of 3 Exclusive Prospecting Licences (EPLs) in Malawi. EPL0355 granted in 2015 for 2 years, EPL0372 granted in 2016 for 2 years, EPL0413 granted in 2014 for 3 years. All EPLs are renewable for two additional periods of 2 years each upon expiry. All drilling was located on EPL0372.
	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 in good standing and no known impediments to exploration or mining exist.
Exploration done by other parties	*Acknowledgement and appraisal of exploration by other parties.*	No other parties were involved in exploration.
Geology	*Deposit type, geological setting and style of mineralisation*	The graphite mineralisation occurs as multiple bands of graphite gneisses, hosted within a broader Proterozoic paragneiss package. In the Malingunde and Lifidzi areas specifically, a deep topical weathering profile is preserved, resulting in significant vertical thicknesses from near surface of saprolite-hosted graphite mineralisation.
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 northings 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; and hole length*	No new exploration results are included in this release.

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Criteria	JORC Code explanation	Commentary
	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	All drill holes within the resource area have previously been reported in releases to the ASX providing collar easting, northing, elevation, dip, azimuth, length of hole, and mineralised intercepts as encountered.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high-grades) and cut-off grades are usually Material and should be stated.*	No new exploration results are included in this release. All drill holes within the resource area have previously been reported.
	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.	No new exploration results are included in this release. All drill holes within the resource area have previously been reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used in this report.
Relationship between mineralisation widths & intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	Preliminary interpretation of mineralised zones in aircore holes supported by DD (2016) orientated core measurements suggests that mineralised zones are shallow-moderate east dipping.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Flake graphite mineralisation is conformable with the main primary layering of the gneissic and schistose host lithology. AC drill hole inclination of -60 degrees are generally near orthogonal to the regional dip of the host units and dominant foliation and hence specific drill hole intercepts for -60 degree holes may only approximate true width. The averaged strike of mineralised zones is approximately 160° grid whereas all -60 inclined aircore holes were orientated at grid east.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'.	Not Applicable, refer to explanation directly above.
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 the drill collar locations and appropriate sectional views.*	See Figures 1 and 2 within the main text of this 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.*	No new exploration results are included in this release. All drill holes within the resource area have previously been reported.
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.*	No additional meaningful and material exploration data has been excluded from this report that has not previously been reported to the ASX.
Further work	*The nature and scale of planned further work (e.g. test for lateral extensions or depth extensions or large-scale step-out drilling).*	The next phase of exploration is to complete additional resource infill, extensional and step-out Aircore/ Reverse Circulation 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.	See Figure 2 within the main text of this report.

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 used in the Mineral Resource estimate is was sourced from an MS Access database. The database is maintained by Sovereign. Relevant tables from the database were exported to csv format, and then imported into Datamine Studio RM software for use in the Mineral Resource estimate.

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Criteria	JORC Code explanation	Commentary
	Data validation procedures used.	Validation of the data import include checks for overlapping intervals, missing survey data, missing assay data, missing lithological data, and missing collars.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person (Mineral Resources) visited the project in December 2016. The aircore drilling rig was in operation and the Competent Person reviewed drilling and sampling procedures. Planned drill sites were examined and assessed with respect to strike and dip of the interpreted geological model. Sample storage facilities were inspected. Discussions were held with the Sovereign geological staff regarding all drilling and sampling procedures and outcomes. Selected diamond drill core was inspected, with all weathering types pertinent to the Mineral Resource reviewed. There were no negative outcomes from any of the above inspections, and all samples and geological data were deemed fit for use in the Mineral Resource estimate.
	If no site visits have been undertaken indicate why this is the case.	Not applicable, site visit was undertaken.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	There is a reasonably high level of confidence in the geological interpretation, based upon lithological logging of diamond drill core, aircore chip samples and hand auger samples. Multi-spectral satellite imagery and airborne geophysical data provided guidance for the strike continuity of the deposit. Drill hole intercept logging and assay results (aircore, hand auger and diamond core), structural interpretations from drill core and geological logs of aircore and hand auger drill data have formed the basis for the geological interpretation. The drilling mostly targeted the SAPL and SAPR weathering horizons, with limited sampling below the upper level of the fresh rock (FRESH) domain.
	Nature of the data used and of any assumptions made.	Assumptions were made on depth and strike extension of the gneiss, using drill hole assays as anchor points at depth and at intervals along strike. Geological mapping also supports the geological model. Seven weathering domains were modelled and support the grade interpolation and Mineral Resource classification.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	No alternative interpretations were considered because the geophysical models and diamond core support the current interpretation.
	The use of geology in guiding and controlling Mineral Resource estimation.	Graphitic Graphite mineralisation is hosted within a graphitic gneiss, which is mapped along it's strike length within the project area and within the license area. Grade (total graphitic carbon, TGC%) is assumed to be likewise continuous with the host rock unit. Mineralised waste and non-mineralised waste zones were modelled within the graphitic gneiss.
	The factors affecting continuity both of grade and geology.	The graphitic gneiss is open along strike and down dip. The interpretation of the mineralisation domains is based upon a pre-determined lower cut-off grade for TGC, which is equivalent to the graphitic gneiss domain boundary. A variation to the cut-off grade will affect the volume and average grade of the domains, however there are no geological reasons identified to date to support higher grade TGC domains within the graphitic gneiss.
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.	Malingunde mineralised bodies strikes north west, dipping between 25° and 50 degrees° to the north east. It is currently modelled as three zones of mineralisation, with a depth extent of 50 m, a strike length of 4,500 m and a plan width varying between 50 m and 230 m.
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.	Datamine Studio RM software was used for all geological modelling, block modelling, grade interpolation, Mineral Resource classification and reporting. GeoAccess Professional and Snowden Supervisor (V8.7) were used for geostatistical analyses. All samples were composited to 2 m intervals. All drill hole assay data (diamond, aircore and hand auger) were utilised in the grade interpolation. A block model with parent cell sizes 25 m (E) x 50 m (N) x 5 m (RL) was constructed for Malingunde, compared to typical drill spacing of 50 m x 100 m. Grade estimation was by ordinary kriging (OK) with inverse distance squared (IDS) estimation run as a check estimate. A minimum of 8 and maximum of 16 composited samples were used in any one block estimate for all domains. A maximum of 5 composited samples per drill hole were used in any one block estimate. Cell discretisation of 3 x 3 x 3 was used. The pallid saprolite, saprolite, saprock and top of fresh rock domain (pseudo transitional material) were combined into one estimation domain.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Inverse distance squared (IDS) estimation was run as a check estimate of the ordinary kriging (OK) grade estimation. No depletion of the Mineral Resource due to mining activity was required due to no mining having occurred historically. This Mineral Resource is the maiden MR reported for Malingunde.
	The assumptions made regarding recovery of by-products.	No by-products were modelled.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No estimation of deleterious elements or non-grade variables of economic significance were modelled.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Grade estimation was by ordinary kriging (OK) with inverse distance squared (IDS) estimation run as a check estimate. A minimum of 8 and maximum of 16 composited samples were used in any one block estimate for all domains. A maximum of 5 composited samples per drill hole were used in any one block estimate. Cell discretisation of 3 x 3 x 3 was used. The pallid saprolite, saprolite, saprock and top of fresh rock domain (pseudo transitional material) were combined into one estimation domain. The ferruginous pedolith (FERP) and mottled zone (MOTT) were combined into a separate estimation domain.
	Any assumptions behind modelling of selective mining units.	No selective mining units were assumed in this model.
	Any assumptions about correlation between variables.	TGC grade was the only variable estimated.

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	Description of how the geological interpretation was used to control the resource estimates.	TGC interpretations were based upon a lower cut-off of 4% TGC, which is equivalent to the graphitic gneiss domain boundary, from logging of diamond drill core and aircore chips. The Mineral Resource block model consists of 3 zones of TGC mineralisation, with 1 major zone and 2 minor zones, with respect to strike extent. Mineralisation domains were encapsulated by means of 3D wireframed envelopes. Domains were extrapolated along strike or down plunge to half a section spacing. Waste domains (total=31) were modelled within the graphitic gneiss envelopes to excise barren zones of gneiss.
	Discussion of basis for using or not using grade cutting or capping.	Top cuts were not used to constrain extreme grade values because the TGC grade distribution did not warrant their use.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The grade model was validated by 1) creating slices of the model and comparing to drill hole samples on the same slice; 2) swath plots comparing average block grades with average sample grades on nominated easting, northing and RL slices; 3) mean grades per domain for estimated blocks and flagged drill hole samples; and 4) cross sections with block model and drill hole data colour coded in like manner. 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.	Visual analysis of the drill analytical results demonstrated that the lower cut-off interpretation of 4% TGC corresponds to a natural break in the grade population distribution. The lower cut-off of 4% TGC is approximately equivalent to the graphitic gneiss domain boundary, from logging of diamond drill core and aircore chips.
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 up to 250 m 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.	Sovereign have announced several sets of metallurgical results to the market (7th September 2016; 23rd November 2016; 27th February 2017 and 20th March 2017), relating to flake size distribution and purity of graphite concentrate. Sovereign are continuing with further test work. Sovereign engaged SGS Canada to conduct an initial bench scale laboratory flotation testwork program on drill samples obtained from the Malingunde flake graphite deposit. The main objective was to investigate the metallurgical response of shallow saprolitic mineralization and the testwork was performed on composites from fifteen drill holes of which most are located in the northern part of the deposit. The majority of the testwork was performed using two master composite samples described as 'north composite' and 'southern composite' from shallow auger drill samples. The testwork was largely based on the flowsheet previously developed for weathered material from Sovereign's Duwi graphite deposit. The flotation testwork on auger and diamond drill core samples demonstrated that generally between about 50% and 80% of the liberated flakes were larger than 150 µm, and that final overall concentrate grades were in the range of 97% to 99% Carbon. The flake size distribution and purity are considered by the Competent Person (industrial minerals) to be favourable for product marketability. Property testing conducted at a specialty laboratory in Germany indicates that the potential products from Malingunde should be suitable for expandable graphite markets. The Competent Person recommends additional variability flotation testing to investigate different geological and weathering domains and to improve confidence in product quality across the deposit.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	A large portion of the Mineral Resource is confined to the saprolitic weathering domains, and any sulphide minerals have been oxidised in the geological past. Therefore acid mine-drainage is not anticipated to be a significant risk when mining from the oxidised domain. Acid-mine drainage would be considered if mining of the fresh-rock domain was to be undertaken in the future. No major water courses run through the resource area, although a fresh water dam is located at the southern end of the deposit, which may continue along strike under the water body. No Mineral Resources are reported within the dam limits. The Malingunde deposit is located within a farming area and has villages located along the strike of the deposit. Sovereign holds regular discussions with local landholders and community groups to keep them well informed of the status and future planned directions of the project. Malingunde is in a sub-equatorial region of Malawi and is subject to heavy seasonal rainfall, with rapid growth of vegetation in season.

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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.	Density was calculated from 69 billets of core taken from across the deposit, with density measured using wax coated immersion method performed by Intertek Perth. Density data was loaded into a Datamine drill hole file, which was flagged against weathering horizons and mineralisation domains.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vughs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	All bulk density determinations were completed by the waxed immersion method.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	An average density value of 1.7 t/m3 was determined for the soil domain, 1.8 t/m3 for the ferruginous pedolith (FERP) domain, 1.8 t/m3 for the mottled zone (MOTT) domain, 2.0 t/m3 for the pallid saprolite (PSAP) domain, 2.0 t/m3 for the saprolite (SAPL) domain, and 2.2 t/m3 or 2.3 t/m3 for the saprock (SAPR) rock profile, dependent upon the depth of the profile. A value of 2.4 t/m3 or 2.7 t/m3 was assigned to the transitional / fresh rock profile, dependent upon the depth of the profile. A small data population did not allow for discernible differences in density between the waste and mineralisation zones to be determined.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	Classification of the Mineral Resource estimates was carried out taking into account the geological understanding of the deposit, quality of the samples, density data and drill hole spacing, supported by metallurgical test results that indicate general product marketability. The Mineral Resource is classified as a combination of Indicated and Inferred, with geological evidence sufficient to assume geological and grade continuity in the Indicated volumes.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	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.
	Whether the result appropriately reflects the Competent Person's view of the deposit	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 CSA Global and Sovereign.
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.	An inverse distance estimation algorithm was used in parallel with the ordinary kriged interpolation, with results very similar. No other estimation method or geostatistical analysis has been performed. 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.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The 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.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No production data is available to reconcile model results.