ASX ANNOUNCEMENT 23 NOVEMBER 2017

EXPANDABLE LARGE FLAKE GRAPHITE AT MCINTOSH

Hexagon Resources Ltd (ASX: **HXG**) is delighted to provide a further update on the latest results from its current material test work program and the impact on its product development strategy for its flagship, Western Australian, McIntosh Graphite Project.

The testing has returned strong results, highlighting the flake size and the potential of the McIntosh concentrate as a viable product in the expandable graphite market.

Highlights include:

1. 220% Expansion Factor for +60 Mesh (+250 micron) sized flake achieved in first-ever test work for McIntosh flake graphite resource; this is considered to be "well above average" and a highly marketable attribute.

Figure 1: Example of expansion calculation; weight of material (left) and volume (right)

2. Flake sizing analysis reported recently indicated more than 78% of concentrate flake was larger than 60 Mesh (250 microns) (refer ASX Report 7 November 2017).
3. Synthesis of expandable McIntosh flake graphite did not require the use of exotic chemicals or complicated treatments; only standard reagents were utilised to achieve expansion outcomes. Higher expansion factors are considered likely with optimisation of pre-conditioning process and reagents.
4. Successful first expansion tests firmly establish Hexagon's McIntosh concentrate as a viable product in the expandable graphite market.

5. This result is another major advancement of understanding the properties of McIntosh flake graphite as Hexagon continues product development work aimed at optimising the value and profitability of production and diversifying its product portfolio into various premium priced market segments leveraged to the rapidly growing battery and high-tech sectors.
6. Benchmark Minerals reports 20-30% price increases this year for flake graphite across various size classifications for the standard 94-95% total graphite grade range. Higher purity, larger flake concentrate is expected to achieve significant price premiums.

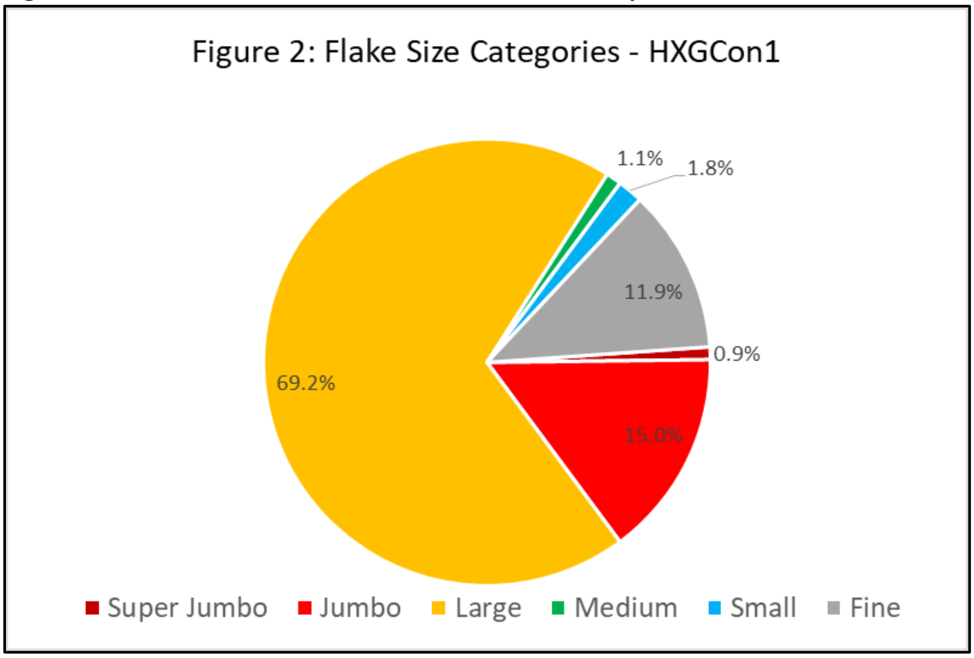
1. BACKGROUND

On 7 November, 2017 Hexagon reported on the large flake endowment of its deposits as assessed from both petrographic analysis of drill core and screen size analysis of graphite concentrate both highlighting the high proportion of Large to Super-Jumbo sized flake as shown in Figure 2. It was also able to report confirmatory work on the high-purity of its graphite material, lack of known deleterious elements and likely suitability for advanced segments of the battery market.

This announcement is a continuation of test work outcomes arising from the recently formed partnership with a US company, referred to as "NAmLab[1]", which specialises in graphite-battery technologies; from research, to test work and commercial manufacturing. NAmLab has been certified by the US Department of Defense to be ISO 9001:2008 compliant in Quality Systems and importantly, has a commercial production arm.

Hexagon is in the product development phase through test work to characterise optimal end use opportunities for McIntosh graphite concentrate with particular focus on higher purity products. There are many niche markets that this test work is assessing, with a view to diversify Hexagon's product range further and increase its exposure to premium graphite pricing opportunities.

Figure 2: Flake Size Distribution in Concentrate Sample.



[1] Hexagon Resources does not wish to disclose the name or specific location of the laboratory testing facilities in order to maintain its competitive advantage. For competitive reasons graphite companies do not typically disclose details of the laboratories doing their product test work.

2. EXPANSION TEST WORK OUTCOMES

2.1 Expansion Test Results

Test work was undertaken on a sample of McIntosh flake graphite concentrate (HXGCon1) generated from batch test work completed in 2016 on a 100kg composite sample of drill core from the Emperor deposit.

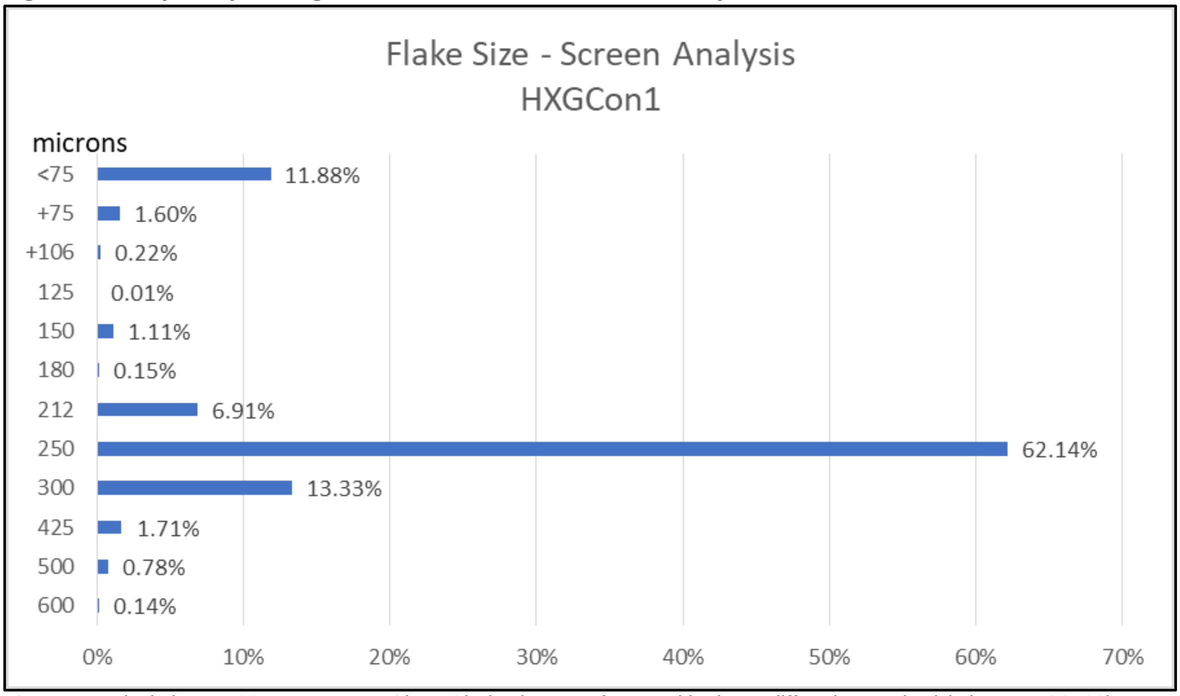
The Results are summarised in Table 1 below. The Expansion Volume for a plus 60 Mesh (+250 µm) sized flake had an approximate value of 160mL, while for a +80 mesh it amounted to a low 24mL. Expansion factors typically correlate to flake size and for the Emperor deposit there is a clear demarcation between +60 and +80 mesh sizes i.e. between 180 and 250 µm in terms of both expansion volumes and flake size abundance (Refer to Figure 3). This is important for optimising the primary process flow sheet and based on the flake size test work reported previously highlights the opportunity to recover a large proportion of the overall graphite flake to this product.

Table 1: Expansion Test Work Results from NAmLabs

Sample ID (HXGCon1)	Initial Mass (g)	Final Mass (g)	Expansion Volume (mL)	BET Surface Area (m^2/g)	Volatiles Content[1] (g)	Weight% Volatiles[2]	Expansion Coefficient[3] (mL/g)
+60 Mesh	1.0008	0.7275	160	21.63	0.2733	27.31%	219.93
+80 Mesh	1.0040	0.7740	24	9.41	0.2300	22.91%	31.01

1. $Volatiles\ Content = Initial\ Mass - Final\ Mass.$
2. $\%Volatiles = \frac{Volatiles\ Content}{Initial\ Mass} \times 100;$
3. $Expansion\ Coefficient = \frac{Expansion\ Volume}{Final\ Mass}.$

Figure 3: Frequency Histogram from Flake Size Screen Analysis*



Screen Analysis by RX-29 Ro-Tap Test Sieve Shaker/cross referenced by laser diffraction method (Microtrac S3500).

The resultant product from the expansion test has an appearance of vermiform, accordion-looking structures, commonly referred to as "graphite worms".

The BET surface area of +60 mesh expanded graphite was registered at 21.63 m^2/g, which puts McIntosh flake in line with a number of competitor materials on the expandable graphite market. NAmLabs commented that it is very confident that the Expansion Coefficient and BET surface area could be easily increased in the future as a result of optimisation of flake concentrate sizing and graphitic carbon content as well as fine-tuning the composition of the intercalant acids.

2.2 Test Work Methods

The objective of this test work was to examine McIntosh graphite flake for thermal expansion properties and quantifying through calculation of an Expansion Coefficient.

Two sub-samples were recovered from the HXGCon1 sample; one with flake size plus 60 Mesh (250 µm) and the other plus 80 Mesh/minus 60 Mesh (180 to 250 µm).

Each sample was subjected to a process commonly referred to as intercalation which in the context of work reported herein is defined as "insertion" of SO_4^{2-} and NO_{3-} anions from Sulphuric and Nitric acid respectively, in-between graphene layers of the graphite particle. These acids are standard, low cost commodity chemicals and no exotic chemicals or additional heat treatment was required to achieve the intercalation. The resultant acid intercalated material was dried in a convection oven at 200°C. This temperature is low enough to not volatilise the acid within the graphite structure, but it is sufficient to drive off all surface moisture, rendering a fully dry free flowing product. Intercalation resulted in the creation of a new intermediate graphite "macromolecule" with anions between the graphene layers which are maintained in parallel alignment by weak Van der Waals bonds, ready and primed for the next phase.

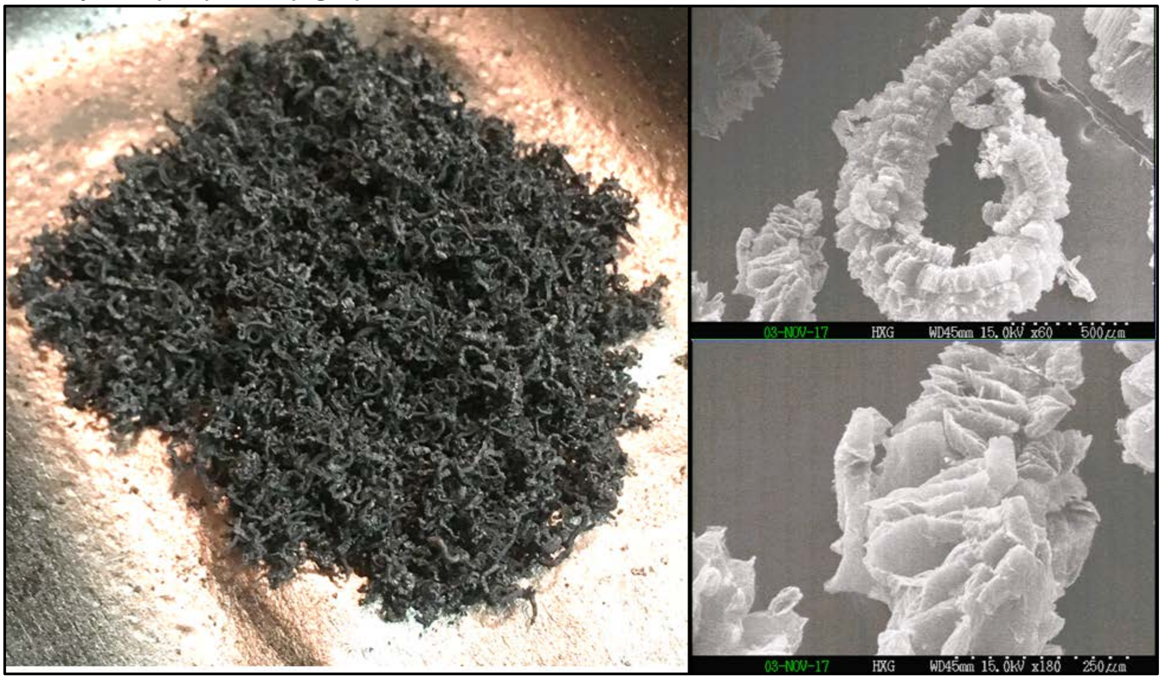
Figure 4. Dry acid intercalated +60 Mesh McIntosh graphite prior to heat expansion.

For each of the two samples, approximately 1 gram of dried-intercalated graphite was weighed out on to a grafoil tray (Figure 4) to thermally expand in a muffle furnace. The rapid heat shock at approximately 950˚C leads to in-situ gasification and an "explosion" or "popping" of the graphite macromolecule (refer Figure 5). This expansion process occurs in seconds leading to the creation of the expanded graphite or graphite worms as shown in Figure 6.

Figure 5: Acid intercalated graphite being expanded in a furnace at 950˚C.

Thereafter the expanded graphite was transferred into a 250 ml graduated cylinder to observe how much volume 1 gram of intercalated graphite would occupy as shown in Figure 1. The approximate expansion volumes are summarised in Table 1. Figure 6, below shows optical and scanning electron microscopy (SEM) images of expanded graphite worms produced from a +60 Mesh (+250 µm) McIntosh flake.

Figure 6: Expanded graphite "worms" produced from +60 mesh fraction of HXGCON 1 precursor flake: optical (left), SEM (right).



3. WHAT IS EXPANDABLE GRAPHITE

Expandable graphite is an intermediate product made from natural crystalline flake graphite concentrate. It is generally marketed as either a raw expanded light, fluffy material or with some further processing as a foil.

Expandable graphite is utilised in a wide range of applications due to its dramatically improved thermal and electrical conductivity, soft and ductile nature and its resistance and resilience with respect to:

- High temperatures;
- Corrosive chemicals;
- Compression; and
- Radiation.

This makes it highly sought after in the automotive, petrochemical, chemical, nuclear, electronics, metal castings and building industries. For example expanded graphite is utilised in high temperature gaskets and seals; fillers in chemically resistant composites (e.g. chemically inert countertops); and as active pigments in fire retardant paints in range of applications from apartment buildings, industrial complexes to ships and mobile plant. Expanded graphite is also used in advanced battery applications either in a lower purity form as an external heat sink and in an ultra-high pure form (>99.95% TGC), used in the cathode portions of a battery cell.

In a high purity form the price ranges into the thousands to tens of thousands of dollars per tonne due to its added-value benefits compared to flake and synthetic graphite. Niche markets that use this higher purity form of expanded graphite include: specialty paints and coatings, cathodes of alkaline Zinc/Manganese Dioxide primary batteries, cathodes of Lithium-ion and Lithium primary batteries, zinc-air (hearing aid) cells and negative electrodes of lead-acid batteries.

4. COMMENTARY

Prior to this test work with NAmLabs there was no evidence that McIntosh flake could be intercalated and expanded. Reviewing the historical data, the Company's current management considered that this was possible and these results now prove that.

This is an excellent follow-up on the recent test work reports (refer 7 November 2017) demonstrating a major endowment of Large to Super Jumbo sized flake at the Emperor deposit as indicated from both concentrate analysis and examination of the drill core. This expansion test work showed excellent expansion factors of 220% for material equal to or coarser than 60 Mesh (250 µm) and the flake sizing analysis indicates that at Emperor at least, this comprises 78% of the flake material recovered to a high grade concentrate.

Importantly, intercalation was made possible with standard, low-cost commodity chemicals, namely Sulphuric and Nitric acid. No exotic chemicals or additional heat treatments were required during the intercalation process. This demonstrated ability of McIntosh flake to be turned into expandable graphite in the presence of low-cost chemicals provides a clear path for establishing Hexagon as a potential cost leader in the industry sector.

Hexagon's Managing Director, Mike Rosenstreich said: "These expansion results, just like the flake size results, are exactly what we had been aiming to achieve. They further endorse our positive outlook in terms of product specification and revenue assumptions. The next piece of the puzzle we are currently working on is purity; there is tremendous value uplift across a range of flake products for higher purity specifications achieved in an environmentally friendly process.

Our product development strategy is coming together with positive new test work outcomes driving the marketing strategy toward product diversification and premium priced products. Our objective is to define a portfolio of high-purity graphite products targeted at the advanced battery sectors as well as other high-end graphite applications. These results, which apply to such a large proportion of our flake size distribution, give huge operational flexibility to optimise our product mix and specifications in the most cost effective and high-margin focussed manner."

5. COMPETENT PERSONS' ATTRIBUTIONS

Exploration Results and Mineral Resource Estimates

The information within this report that relates to exploration results, Exploration Target estimates, geological data and Mineral Resources at the McIntosh Project is based on information compiled by Mr Shane Tomlinson and Mr Mike Rosenstreich who are both employees of the Company. Mr Rosenstreich is a Fellow of The Australasian Institute of Mining and Metallurgy and Mr Tomlinson is a Member of the Australian Institute of Geoscientists. They both, individually have sufficient experience relevant to the styles of mineralisation and types of deposits under consideration and to the activities currently being undertaken to qualify as a Competent Person(s) as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and they consent to the inclusion of this information in the form and context in which it appears in this report.

Metallurgical Test Work Outcomes

The information within this report that relates to metallurgical test work outcomes and processing of the McIntosh material is based on information provided by a series of independent laboratories. Mr Rosenstreich (referred to above) managed and compiled the test work outcomes reported in this announcement. A highly qualified and experienced researcher at NAmlabs planned, supervised and interpreted the results of the test work. Mr Noel O'Brien provided overview and technical guidance on the planning of the programs and the interpretation of the results generated. Mr O'Brien is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr O'Brien and the NAmLabs principals have sufficient experience relevant to the styles of mineralisation and types of test work under consideration and to the activities currently being undertaken to qualify as a Competent Person(s) as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and have consented to the inclusion of this information in the form and context in which it appears in this report.

For further information please contact:

Mike Rosenstreich
Managing Director
Hexagon Resources Limited
Miker@hexagonresources.com
+61 8 6244 0349

David Ikin
Senior Account Director
Professional Public Relations
David.ikin@ppr.com.au
+ 61 408 438 77

Appendix 1: JORC Table 1 Summary

- The majority of the samples in the reported test work originate from the Emperor Deposit.
- Geology – interpretation was undertaken based on a combination of geological logging data from drill holes, surface mapping and modelled conductive plates from the VTEM survey of 2014.
- Drilling method – the drilling method used is a combination of reverse circulation "RC" and diamond. The mineralisation for Emperor is defined by 9 RC drill holes for a total of 1,134 m, 21 diamond drill holes for a total of 2,940.5 m and 9 RC precollar / diamond tail holes for 1,369.3 m. The mineralisation for Longtom is defined by 37 RC drill holes for a total of 4,146 m, 1 diamond drill hole for a total of 54.9 m and 4 RC precollar / diamond tail holes for 620.6 m. The mineralisation for Wahoo is defined by 26 RC drill holes for a total of 2,023 m and 11 diamond drill holes for a total of 1,257.8 m. The mineralisation for Barracuda is defined by 35 RC drill holes for a total of 2,883m and 3 diamond drill holes for a total of 294.0m.
- Sampling – one-metre drill chip samples were collected throughout the RC drill programme in sequentially numbered bags. Core samples from diamond drill holes were collected based on geology and a minimum interval of 1m and a maximum of 2m.
- Sub-sampling - analysis was undertaken at ALS laboratory where samples initially undergo a coarse crush using a jaw crusher to better than 70% passing 6mm. Samples exceeding 3 kg were spilt using a Jones Riffle Splitter 50:50. Pulverising was completed to 85% passing 75µm in preparation for analysis.
- Sample analysis method – all samples were sent to ALS for preparation and for Total Graphitic Carbon (TGC), Total Carbon and Total Sulfur (S) analyses. A 0.1 g sample is leached with dilute hydrochloric acid to remove inorganic carbon. After filtering, washing and drying the remaining sample is roasted at 425°C to remove organic carbon. The roasted residue is analysed for carbon using a high temperature LECO furnace with infrared detection for percentage units.
- Duplicate analysis and analysis of Certified Reference Material (standards) and blanks was completed and no issues identified with sampling reliability or contamination.
- Estimation methodology – grade estimation was undertaken using Surpac software to model graphitic mineralisation using a nominal 3% TGC cut-off grade and to estimate TGC by ordinary kriging at Emperor, Longtom and Wahoo and inverse distance (cubed) at Barracuda.
- Resource Classification – classification is based on confidence in geological and grade continuity using the drilling density, geological model, modelled grade continuity and conditional bias measures (slope of the regression and kriging efficiency) as criteria. Indicated Mineral Resources are defined where the drill spacing is sufficient to assume geological and grade continuity and where diamond drill samples have been assessed for graphite quality. As a general rule, drill spacing of 40 m by 40 m or less resulted in an Indicated classification for Emperor and Wahoo and areas with broader spacing are classified as Inferred. For Longtom drill spacing of approximately 25 m by 100 m or less resulted in an Indicated classification and areas with a broader spacing are classified as Inferred. The results from metallurgical test work at the McIntosh project have been considered for Mineral Resource classification. The likelihood of eventual economic extraction was considered in terms of possible open pit mining, likely product specifications, possible product marketability and potentially favourable logistics to port and it is concluded that graphite at the McIntosh Project is an Industrial Resource in terms of JORC Code Clause 49.
- Cut-off parameters – the Mineral Resource is reported above a 3% TGC cut-off grade.
- Mining modifying parameters – planned extraction is by open pit mining and mining factors such as dilution and ore loss have not been applied.
- Metallurgical methods - no metallurgical assumptions have been built into the resource model. Data from mineralogy and preliminary metallurgical test work has been considered for Mineral Resource classification. The latest mineralogical examination of drill samples indicates that graphite occurs across a range of sizes from fine to very large flake, with the majority (80%) being in the size range of 150 to greater than 450 microns. Results of metallurgical test work on core samples collected from Emperor and Wahoo indicate a potentially saleable product into the advanced battery market, such as lithium Ion batteries. Recent screen size

analysis of concentrate indicates 84% of the graphite flake is greater than 180 microns. The convergence of these two data sets indicates the presence of predominantly larger flake material at the Emperor Deposit. ALS recently completed pilot processing program of a 2.5 tonne bulk composite sample collected from diamond core drilling at Emperor and generated 100kg of concentrate to provide samples for potential offtake companies. This material achieved a high graphite grade of 97.6% TGC but because it was targeting a flake size of c. 106 microns, this sample was not representative of the potential recoverable flake size distribution. This is because at that time the Company's marketing focus was solely on a product for the lithium ion battery anode market and the perceived optimum feed size for those plants of c. 106 microns.

The latest expansion, assaying and sizing work was undertaken at an ISO 9001:2008 compliant and US Government accredited laboratory in the US, highly experienced in graphite applications and test work, utilising conventional assaying and sizing techniques.

The test work currently being undertaken comprises two distinct programs:

I. What is referred to as the "Upstream" test work is aimed at understanding the broad mineralogical associations, textures and flakes size distributions around the Mineral Resources to create a geometallurgical model. Such a model will provide geological and spatial context for further sampling and processing test work.

II. What is referred to as the "Downstream" test work is to examine the downstream or secondary processing responses to develop a marketing strategy based on the technical attributes of the material and to match it with end-users requirements.

- **Appendix 2: JORC Table 1 Emperor Resource**

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	**1. Reverse Circulation** • RC drilling used high pressure air and a cyclone with a rotary splitter. • Samples were collected at one-metre intervals. • Approximately 50% of samples were not submitted for assay due to the visual non-mineralised nature of the material collected. All graphitic intervals were submitted for analyses. • Duplicate and standards analysis were completed and no issues identified with sampling reliability. • Samples were sent to the ALS laboratory in Perth for assay preparation and then sent to ALS in Brisbane for Total Graphitic Carbon (TGC) analyses. • All samples were pulverised to better than 85% passing 75µm with a 10 g aliquot taken for assay. • Sampling was guided by Hexagon's protocols and QA/QC procedures. • RC drilling samples of 3 to 5 kg weight were shipped to the laboratory in plastic bags; samples were pulverised and milled for assay. **2. Diamond Drilling** • Drill samples in this program were collected based on geology, varying in thickness from 0.1 m to 2 m intervals. Sampling was completed so samples could be composited to one metre intervals within the geological units. • Core samples were quarter split HQ3 core using a diamond bladed saw and sent to the ALS laboratory in Perth for assay preparation and then sent to ALS in Brisbane for Total Graphitic Carbon (TGC) analyses. • All samples were pulverised to better than 85% passing 75µm with a 10 g aliquot taken for assay. • Duplicate samples, CRM standards and blank material were used during the drill programs. Duplicates collected after each 50 samples. Standards were inserted for samples ending in *00,*20,*40,*60 and *80 and blanks for samples ending in *01,*21,*41,*61 and *81.Sampling was guided by Hexagon's protocols and QA/QC procedures.
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).*	**1. Reverse Circulation** • RC drill holes (total of 2,154 m from 18 holes) – completed with face sampling hammers and collected through a cyclone. Sample recovery was estimated at a percentage of the expected sample, sample state recorded (dry, moist or wet), samples tested with 10:1 HCl acid for carbonates and graphite surface float. • RC drilling was completed by Egan drilling using an X400 drill rig and United Drilling Services using a DE840 drill rig. **2. Diamond Drilling** • Diamond drill holes (total of 2,940.5 m for 21 holes) – collected HQ_3 core using a 3m core barrel and drilled by Terra Drilling using a Hanjin Powerstar 7000 track mounted rig. Core orientation was recorded using a Reflex EZ Shot instrument. • RC pre-collars were drilled with HQ_3 diamond tails for a total of 1,369.3 m from 9 holes.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	**1. RC Drilling** • A face sampling hammer was used to reduce contamination at the face. • 1 m drill chip samples, weighing approximately 2 kg were collected throughout the drill programme in sequentially numbered bags. • Split samples were recovered from a cyclone and rig-mounted cone splitter. The sample recovery and physical state were recorded. • Every interval drilled is represented in an industry standard chip tray that provides a check for sample continuity down hole. **2. Diamond drilling** • Core recovery was excellent. Recoveries were measured for each run between core blocks and measurements recorded. Core was photographed and logged for RQD and geology.

		• Analysis from one pair of twin holes drilled at Hexagon's Longtom resource (an adjacent and similar style graphite deposit) noted a lower graphite content in the RC samples when compared with diamond core. Insufficient work has been completed on comparing RC and diamond methods to rule out drilling by RC.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All RC and diamond drilling (100%) was logged for geology in the field by qualified geologists. Lithological and mineralogical data was recorded for all drill holes using a coding system developed specifically for the Project. Primary and secondary lithologies are recorded in addition to texture, structure, colour, grain size, alteration type and intensity, estimates of mineral quantities, graphite intensity and sample recovery. The oxidation zone is also recorded. • No adjustments have been made to any assay data • Geological logging is qualitative in nature. • Diamond drilling logging also recorded recovery, structure and geotechnical data. • Diamond core was orientated using the Reflex orientation tool. • Core was photographed both dry and wet.
Sub-sample techniques and sample preparation	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	**1. RC Drilling** • All samples marked with unique sequential sample number • RC drilling samples were bagged at the drill site in calico bags with a second outer plastic bag to prevent loss of fines. The sample sizes are considered to be appropriate to the grain size of the material being sampled. • 1m RC drilling samples were submitted to either Actlabs Canada or ALS laboratories in Perth. The samples were riffle split on a 50:50 basis, with one split pulverised and analysed for Total Graphitic Carbon (TGC), Total Carbon (TC) and Total Sulphur (TS) using a LECO Furnace, and the other split held in storage. • For RC samples, standards and field duplicates were inserted at an approximate rate of 1 in every 20 samples collected. Duplicate assay results exhibit good correlation with the original assays and no consistent bias is evident. • Sample preparation: 1. Coarse crush using a jaw crushed to better than 70% passing 6mm. 2. For samples exceeding 3kg received mass, riffle split using a Jones Riffle Splitter 50:50 3. Pulverise up to 3kg of coarse crushed material to better than 85% passing 75µm particle size 4. Small aliquot (~10g) taken for assay. **2. Diamond Drilling** • Diamond drill core was cut into half core (used for metallurgical testing) and the remaining half sawn into quarter core using diamond blade core-saw. Quarter core was used for samples and duplicates. Core cutting was carried out under consignment at Westernex in Perth. • Duplicate assay results exhibit good correlation with the original assays and no consistent bias is evident. • Sample preparation: 1. Coarse crush using a jaw crushed to better than 70% passing 6mm. 2. For samples exceeding 3 kg received mass, riffle split using a Jones Riffle Splitter 50:50 3. Pulverise up to 3 kg of coarse crushed material to better than 85% passing 75µm particle size 4. Small aliquot (~10 g) taken for assay. • Sampling procedures and sample preparation represent industry good practice:
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.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• The assaying and laboratory procedures used are industry standard and are appropriate for the material tested. • Sampling was guided by Hexagon's protocols and QA/QC procedures. • For RC samples, standards and field duplicates were inserted at an approximate rate of 1 in every 20 samples collected. • Field duplicates were inserted into diamond core samples at a rate of 4 every 100 samples, standards at a rate of 4 every 100 samples and blanks at 2 every 100 samples.

		• Statistical analysis of standards, blanks and duplicates during the QAQC process showed that the data was satisfactory. • No issues were identified with sampling reliability
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Hexagon QA/QC checks show that all samples are within acceptable limits. No adjustments to assay data have been made based on the analysis of duplicates, standards and blanks. • Standards from ALS laboratory were found to be acceptable. • Duplicate analysis was completed and no sampling issues were identified. • CSA verified several graphite intersections in core and RC chip samples during a visit to Hexagon's warehouse during January 2015. • During a site visit in October 2015, a geological consultant from CSA verified that the diamond drilling, geological logging and sampling practices were of industry standard. The consultant also verified graphite intersections in core samples. • Analysis from one pair of twin holes drilled at Hexagon's Longtom resource noted a lower graphite content in the RC samples when compared with diamond core. It is suggested that RC samples are biased due to the loss of fine material. The majority of samples used in the estimation for Emperor are diamond core. • The Hexagon database is hosted in a SQL backend database, ensuring that data is validated as it is captured and exports are produced regularly. Assay results are merged into the database from the lab certificates limiting transcription or mapping errors from occurring. • No adjustments have been made to the results.
Location of Data points	• *Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• 45 drill hole collars were surveyed using Differential GPS by a surveyor from Savannah Nickel mines for the 2015 program and a contract surveyor (MNG survey) from Broome. The degree of accuracy of drill hole collar location and RL is estimated to be within 0.1 m for DGPS. 3 collars were surveyed using a handheld Garmin 62S and Garmin 76c Global Positioning System (GPS) with a typical ±5 m accuracy. Topography from contours generated from a LiDAR survey was used to validate collar points and assign RL values to the 3 holes surveyed by GPS that had an RL >2 m different to the topography. • Downhole surveys completed for all holes where possible (48 holes). EZshot survey data was used where downhole surveys were not successful. All holes used in the resource have been downhole surveyed using a gyro by ABIM Solutions. • Topographic control was adequate for the purposes of Mineral Resource estimation. • The map projection used is the Australia Geodetic MGA 94 Zone 52.
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.*	• Drill spacing on an approximate 40 m by 40 m grid throughout the majority of the deposit, dropping to 40 m across strike by 80 m along strike to the south of the deposit. • Geological interpretation and mineralisation continuity analysis indicates that data spacing is sufficient for definition of a Mineral Resource.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Holes generally drilled dipping at -60° targeting the fold hinge and limbs. • Diamond drill core has been orientated using a Reflex ACE tool 9Act II), with α and β angles measured and positioned using a Kenometer. MapInfo software was used to calculate dip and dip direction for each structure. • The relationship between the drilling orientation and the orientation of key mineralised structures is not considered to have introduced a sampling bias.

Sample Security	• *The measures taken to ensure sample security.*	• Unique sample number was retained during the whole process • RC and diamond samples were placed into calico bags and then into self-sealing plastic bags prior to being put into bulka bags. The bulka bags were then transported by road. RC samples were sent to the ALS laboratory in Brisbane for preparation and analysis and diamond core samples were sent to ALS in Perth for preparation and then to ALS in Brisbane for analysis. A small amount of core samples were sent to Actilabs. • Drill core transported to Westernex was secured on pallets with metal strapping and transported to Perth by road train. • The sample security is considered to be adequate.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Sampling techniques and data collected methods have been audited by CSA during a site visit in October 2015 • Field data is managed by an independent data management consultancy Rocksolid Solutions. • All data collected was subject to internal review

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Drilling at the Emperor deposit occurred on exploration leases E80/3864 and E80/4841. These tenements are held by McIntosh Resources Pty Ltd who is a wholly owned subsidiary of Hexagon Resources. Hexagon Resources are the managers of exploration on the project.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The East Kimberley has been largely explored for base metals and diamonds with no active previous exploration for graphite. Graphite had been noted by Gemutz during regional mapping in the Mabel Downs area for the BMR in 1967, by Rugless mapping and RAB drilling in the vicinity of Melon Patch bore, to the east of the Great Northern Highway in 1993 and has been located during nickel exploration by Australian Anglo American Ltd, Panoramic Resources Ltd and Thundelarra Resources Ltd over the last 20 years.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The McIntosh Project graphite schist horizons occur in the high grade terrain of the Halls Creek Mobile Zone of Western Australia. The host stratigraphy is the Tickalara Metamorphic which extend for approximately 130 km along the western side of the major Halls Creek Fault. The metamorphic rocks reach granulite metamorphic facies under conditions of high-temperature and high pressure although the metamorphic grade in the McIntosh Project area appears to be largely upper amphibolite facies with the presence of key minerals such as sillimanite and evidence of original cordierite. • Hexagon has identified potential graphite schist horizons based on GSWA mapping and EM anomalism over a strike length in excess of 15 km within the project area, with potential for an additional 35 km strike length of graphite bearing material from lower order EM anomalism.

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 drillholes:*
	  • *easting and northing of the drillhole collar*
	  • *elevation or RL (elevation above sea level in metres) of the drillhole collar*
	  • *dip and azimuth of the hole*
	  • *down hole length and interception depth*
	  • *hole length.*
		• 21 diamond drill holes for 2,940.5 m and 18 RC drill holes for 2,154 m and 9 RC precollar diamond tail (RD) holes for 1,369.3 m completed at the Emperor deposit. Hole locations tabulated in an Appendix to this announcement report.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques,*	• Data compiled in Excel and validated in Datashed by an external data management consultancy.

	maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	• RC samples were all 1 m in length, diamond core samples vary between 1m and 2 m samples. • Metal equivalents are not reported as this is an industrial mineral project where the mineral properties define grade (e.g. flake size and purity). • A nominal 3% Total Graphitic Carbon cut-off has been applied in the determination of significant intercepts
Relationship between mineralisation widths and intercept lengths	• *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.*	• Mineralised widths at Emperor are estimated to be typically between 5 m and 70 m, compared with RC samples of 1m width. There is a very close relationship between the graphitic schist unit and Total Graphitic Carbon (TGC%) assays. The presence of graphitic schist is clearly evident in both the RC chips and diamond drill core so that the assay widths can be clearly related to the geological logs. • The graphitic schist horizon has been interpreted as an anticlinal fold. Angled drill holes (generally 60º) have targeted the mineralised unit with the priority to intersect the limbs perpendicular to the strike of the graphitic schist horizon, although in some areas this was not possible and holes were drilled down dip. However interpreted EM data and the width of intersections where holes were drilled perpendicular to the unit have allowed for a good indication of unit thickness to be made and applied in areas where the information is not available.
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 drillhole collar locations and appropriate sectional views.*	• Not relevant as Mineral Resource being reported.
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.*	• Exploration results are not being reported for the Mineral Resources area.
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.*	• The September 2014 VTEM Supermax survey over the McIntosh Flake Graphite Project covered a total of 642 line kilometres and identified a total of 12 high-priority anomalies. Five of these were previously identified by induced polarisation (IP) and historical electromagnetic (EM) techniques and confirmed to be flake graphite schist by geological field mapping, petrographic analysis, rock chip sampling and exploration drilling. • VTEM geophysical work was carried out by Geotech Limited with the data validated and processed by Southern Geoscience Consultants (SGC). • Test work and petrographic examinations to gather data on the mineralogy, flake size distributions and elemental associations are being undertaken and reported progressively. The methods comprise petrographic examination-including systematic flake length estimates, screen sizing analyses, assaying (as above). Samples were selected from within the current resource across low to high TGC and S grade ranges. Samples were collected from locations representing the limbs and fold hinge. • Metallurgical test work is underway and being reported progressively on McIntosh concentrate material produced from previous test work. This work examines downstream processing opportunities based on understanding the technical attributes of the flake comprising the concentrate material. This includes simulating downstream processing for battery anode material (Spheroidisation) to generate battery related parameters. As well, tests were completed assessing flake size in the concentrate, flake morphology, purity and particle size distribution and other aspects. Test work has also been completed indicating that flake coarser then 60 Mesh is amenable to expansion (220% expansion factor) opening up new downstream opportunities. • This work is being undertaken by several different laboratories and test work facilities in Australia and oversea

		that have been reviewed and assessed for their experience by Hexagon.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Further diamond core drilling has been recommended to twin and verify existing RC holes at Emperor. This core is planned to be assayed for TGC and examined petrographically to assess graphite flake characteristics. • Additional dry density work on core to be carried out on mineralised and background domains. • Estimate S% content into resource model • Program to assess moisture content of Emperor material. • Multi-element analysis of mineralisation and waste material. • Continuation of the test work programs gathering mineralogical data to formulate a geometallurgical model, primary processing test work to improve the Stage 1 process flow sheet and continue the downstream processing test work on material derived from the stage 1 process flow sheet.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	• Primary data was captured into spreadsheet format by the supervising geologist, validated and subsequently loaded into Hexagon's database. • Database extracted as an .mdb access file from Datashed and validated before importing into Surpac. • Additional data validation by Optiro; included checking for out of range assay data and overlapping or missing intervals.
Site Visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	• Numerous site visits were completed by S. Tomlinson during the 2015 and 2016 drilling period. The diamond and RC drill rigs were inspected, sampling procedures checked, RC chips and diamond core logged.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	• Geological interpretation based on lithology logging, structural logging, geochemical sampling, prospect scale surface mapping and modelled VTEM data collected during the 2014 VTEM Supermax survey. • Drill coverage to ~40 m by 40 m. • Mineralisation wireframe produced based on soft 3% TGC cut-off grade delineating ore/waste boundary. Internal dilution in the main mineralised envelope has been modelled as two domains. Further modelling of mafic intrusive bodies have also been modelled. • The base of oxidation and mafic intrusives were also modelled as part of the Emperor resource. • Confidence in the grade and geological continuity is reflected in the Mineral Resource classification.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Emperor resource extends 480 m north-northwest to south-southeast. The mineralisation occurs within an anticline of the hosting graphite schist units ranging in thickness between 5 m and 70 m. • Mineralisation is open along strike and at depth along the fold limbs.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur*	• The resource was modelled using Geovia's Surpac v6.7 modelling software. • Drill hole sample data was flagged from interpretations of the top and base of the mineralisation horizon. • Samples were composited to 1 m down hole length. • Top grade cuts were not required (low coefficient of variation and no outlier grades) • Statistical analysis was completed to investigate low correlation variances, boundary conditions between domains, and fresh/oxide. • TGC mineralisation continuity was interpreted from variogram analyses to have a horizontal range of 170 m (north-west to south-east). • The maximum extrapolation distance is 20 m along strike and 20 m across strike. • Grade estimation was into parent blocks of 40 mE by 20 mN by 5 mRL. Block size was selected based on kriging neighbourhood analysis. • Total Graphitic Carbon (TGC) estimated by Ordinary Kriging (OK) for mineralised domains (1 to 4) at the parent block scale.

	for acid mine drainage characterisation). • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	• The search ellipses were oriented within the plane of the mineralisation. • Three estimation passes were used; the first search was based upon the variogram ranges in the three principal directions; the second search was two times the initial search and the third search was four times the initial search, with reduced sample numbers required for estimation. • Aproximately70% of the block grades were estimated in the first pass for domain 1 (main envelope) and 49% for domain 4. • The estimated TGC block model grades were visually validated against the input drillhole data, comparisons were carried out against the drillhole data and by northing, easting and elevation slices. • There is no production data and so no reconciliation has taken place. • Sulphur will be estimated into the model, as sulphide minerals have the potential to affect metallurgical processes for recovering graphite. The available metallurgical testwork results indicate that the sulphide minerals do not present any issues in recovering graphite. Sulphur is not correlated with TGC.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The Emperor deposit is above the water table. Down hole dipping during the 2015 field season did not intercept water. • Moisture content has not been tested
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Mineral Resource is reported above a 3% TGC cut-off grade to reflect current commodity prices and open pit mining methods.
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.*	• It is assumed that extraction will be by open pit mining and that the mineralisation is economic to exploit to currently modelled depths. • Mining factors such as dilution and ore loss have not been applied. • No assumptions about minimum mining widths or dilution have been made.
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.*	• A range of test work results have now confirmed graphite concentrate grades of between 97 and 99% TGC produced from a process of crushing and grinding material from the McIntosh project. See results in metallurgical test work conducted by ALS Global in Adelaide. Refer to announcement released 18 January 2016, 31 May 2017 and 6 November, 2017 as examples. • Metallurgical testwork on Emperor material shows that the sulphides present are easily liberated from the graphite by flotation. • The results from metallurgical testwork have been considered for Mineral Resource classification.
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.*	• No assumptions have been made regarding waste and process residue • Environmental studies are being completed as part of the McIntosh Pre-Feasibility study.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc),*	• Dry density was assigned a value of 2.85 t/m^3 (fresh) and 2.65 t/m^3 (oxide) based on 25 dried core samples and water emersion technique carried out by SGS. • Geophysical gamma density data was also obtained but has not been included in the resource.

	moisture and differences between rock and alteration zones within the deposit. *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *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).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Mineral Resources have been classified on the basis of confidence in geological and grade continuity using the drilling density, geological model, modelled grade continuity and conditional bias measures (slope of the regression and kriging efficiency) as criteria. • The results from metallurgical testwork have been considered for Mineral Resource classification. The likelihood of eventual economic extraction was considered in terms of possible open pit mining, likely product specifications and possible product marketability. • Measured Mineral Resources - none defined. • Indicated resources have been defined in the centre of the deposit where material was estimated in the first pass estimation. Drill spacing for indicated material is generally 40 m by 40 m. • Inferred material occurs in the northern and southern limits of the deposit where drilling data is sparser (to 40 m by 80 m), but still sufficient to assume continuity of mineralisation. Confidence for the resource in these areas is also from the VTEM survey completed over the area. • The classification considers all available data and quality of the estimate and reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• CSA carried out a site visit in 2015.
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.* • *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.*	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC Code (2012 Edition). • The Mineral Resource is a global estimate of tonnes and grade. • Relative tonnages and grade above the nominated cut-off grades for TGC are provided in this announcement. Volumes of the collated blocks sub-set by mineralisation domains were multiplied by the dry density value to derive the tonnages. The contained graphite values were calculated by multiplying the TGC grades (%) by the estimated tonnage. • No production data is available to reconcile results with.