

ASX Release

25 May, 2017

Updated McIntosh Graphite Mineral Resource

Hexagon Resources Limited (ASX: HXG) is pleased to report an updated Mineral Resource estimate for the McIntosh Flake Graphite Project, located in Western Australia, of 21.3 million tonnes grading 4.5 % Total Graphitic Carbon (TGC).

This represents a 3% increase in terms of tonnes and contained graphite and a 10% improvement in the proportion of material classified as Indicated from Inferred compared to the Mineral Resource estimate reported to ASX on 15 February 2017.

The updated Mineral Resource estimate was carried out by Hexagon to include additional drilling results obtained from the Emperor deposit, since the February report, and re-interpretation and estimation of the Longtom deposit using a 3% TGC cut-off grade. All four reported resource models (Table 1 and Figure 1) at the McIntosh Project have been verified by Optiro Pty Ltd, a leading, independent resource and mining consultancy group with experience in assessing graphite resources.

Hexagon's Managing Director, Mike Rosenstreich commented "This upgrade is part of the ongoing initiative by the Company to increase the scale and longevity of the project and provides a solid basis for the current mining plans that underpin Hexagon's stage-one pre-feasibility study (PFS) and also gives Hexagon's team "ownership" of all the Mineral Resource estimates, which importantly underwent detailed independent scrutiny. We continue to focus on the PFS and expect to provide a report of key PFS outcomes next week."

Table 1. McIntosh Flake Graphite Project Mineral Resource as at May 2017 reported by deposit and above a 3% TGC cut-off grade.

Deposit	JORC Classification	Material Type	Tonnes (Mt)	TGC %	Contained Graphite (Kt)
Emperor	Indicated	Oxide	-	-	-
		Primary	8.2	4.3	352
	Inferred	Oxide	-	-	-
		Primary	5.3	4.5	235
	Indicated + Inferred	Oxide + Primary	13.4	4.5	587
Longtom	Indicated	Oxide	0.7	4.7	34.2
		Primary	3.5	5.0	173.4
	Inferred	Oxide	-	-	-
		Primary	1.3	5.2	66.9
	Indicated + Inferred	Oxide + Primary	5.5	5.0	274.3
Wahoo	Indicated	Oxide	0.1	4.2	3.5
		Primary	1.1	4.2	44.3
	Inferred	Oxide	0.1	4.1	3.4
		Primary	0.5	4.2	22.4
	Indicated + Inferred	Oxide + Primary	1.7	4.2	70.1
Barracuda	Inferred	Oxide	0.2	4.5	11.1
		Primary	0.5	4.4	21.1
	Inferred	Oxide + Primary	0.7	4.4	32.2
Total	Indicated + Inferred	Oxide + Primary	21.3	4.5	963.6

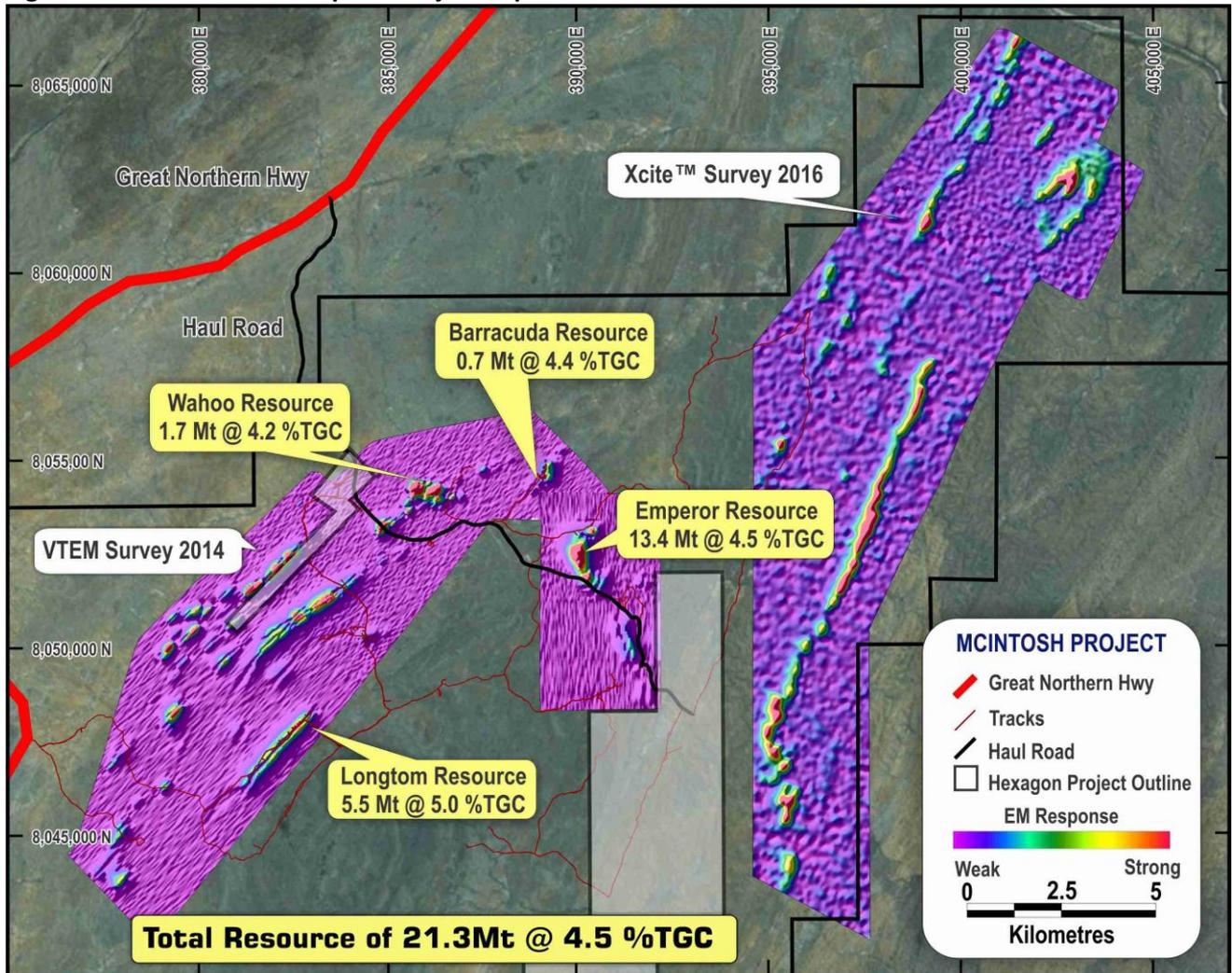
Note: Rounding may result in differences in totals for tonnage and grade



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 the McIntosh Project contains an Industrial Resource in terms of JORC Code 2012 Clause 49.

A range of products is being considered by Hexagon. Metallurgical testwork completed to date indicates a flake graphite concentrate produced from the McIntosh resource is amenable for sale into the lithium ion battery market. Please refer to reports; *Excellent Stage 1 Lithium Ion Battery Results From McIntosh And \$2m Placement*, 6th October 2016 and with respect to potential graphene markets, *Outstanding Graphene and Graphite Bulk Scale Results Markets*, 3rd May 2016. Metallurgical testwork has been completed on samples from the Emperor and Wahoo deposits, and diamond drill samples from the Longtom and Barracuda deposits indicate similar geological and mineralisation characteristics.

Figure 1. McIntosh Flake Graphite Project deposit locations and resource.



Competent Person

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.



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JORC Table 1 Summary

- 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 testwork has been considered for Mineral Resource classification. Mineralogical examination of samples indicates that graphite occurs across a range of sizes from fine to large flake, with the majority (70%) being in the small to large size range. Results of metallurgical test work on core samples collected from Emperor and Wahoo indicate a potentially saleable product into the Lithium Ion battery market. ALS is currently producing a 100 kg concentrate from a 2.5 tonne bulk composite sample collected from diamond core drilling at Emperor to provide samples for potential offtake companies. This work is currently incomplete, but from a simple flotation process used to date indicates the potential for a saleable concentrate.



Appendix 1: JORC Table 1 Emperor Resource

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<p>1. Reverse Circulation</p> <ul style="list-style-type: none"> 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. <p>2. Diamond Drilling</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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). 	<p>1. Reverse Circulation</p> <ul style="list-style-type: none"> 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. <p>2. Diamond Drilling</p> <ul style="list-style-type: none"> Diamond drill holes (total of 2,940.5 m for 21 holes) – collected HQ₃ 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 HQ₃ diamond tails for a total of 1,369.3 m from 9 holes.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<p>1. RC Drilling</p> <ul style="list-style-type: none"> 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. <p>2. Diamond drilling</p> <ul style="list-style-type: none"> 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



		<p>when compared with diamond core. Insufficient work has been completed on comparing RC and diamond methods to rule out drilling by RC.</p>
Logging	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>1. RC Drilling</p> <ul style="list-style-type: none"> • 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: <ol style="list-style-type: none"> 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. <p>2. Diamond Drilling</p> <ul style="list-style-type: none"> • 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: <ol style="list-style-type: none"> 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	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent</i> 	<ul style="list-style-type: none"> • Hexagon QA/QC checks show that all samples are within acceptable limits. No adjustments to assay data have been



	<p>or alternative company personnel.</p> <ul style="list-style-type: none"> • 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. 	<p>made based on the analysis of duplicates, standards and blanks.</p> <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • 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.



		<ul style="list-style-type: none"> • 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 reviews or	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>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.</i> <p><i>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.</i></p>	<ul style="list-style-type: none"> • Drilling at the Emperor deposit occurred on exploration leases E80/3864 and E80/4841. These tenements are held by McKintosh 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	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i> <ul style="list-style-type: none"> • <i>easting and northing of the drillhole collar</i> • <i>elevation or RL (elevation above sea level in metres) of the drillhole collar</i> • <i>dip and azimuth of the hole</i> • <i>down hole length and interception depth</i> • <i>hole length.</i> 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Data compiled in Excel and validated in Datashed by an external data management consultancy. • 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	<ul style="list-style-type: none"> • <i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i> • <i>If it is not known and only the down hole lengths are reported, there</i> 	<ul style="list-style-type: none"> • 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



	<p><i>should be a clear statement to this effect.</i></p>	<p>both the RC chips and diamond drill core so that the assay widths can be clearly related to the geological logs.</p> <ul style="list-style-type: none"> The graphitic schist horizon has been interpreted as an anticlinal fold. Angled drill holes (generally 60°) 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	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Not relevant as Mineral Resource being reported.
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Exploration results are not being reported for the Mineral Resources area.
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> 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).
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> 	<ul style="list-style-type: none"> 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

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <i>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.</i> <p><i>Data validation procedures used.</i></p>	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> <i>Nature of the data used and of any assumptions made.</i> <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 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. 	<ul style="list-style-type: none"> 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. 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. Approximately 70% 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	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> A 99% graphite concentrate was 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. Metallurgical testwork on Emperor material shows that the sulphides present are easily liberated from the graphite by flotation.



	<p><i>the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous.</i></p>	<ul style="list-style-type: none"> The results from metallurgical testwork have been considered for Mineral Resource classification.
Environmental factors assumptions	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>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.</i> <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<ul style="list-style-type: none"> Dry density was assigned a value of 2.85 t/m³ (fresh) and 2.65 t/m³ (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.
Classification	<ul style="list-style-type: none"> <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <i>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).</i> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> CSA carried out a site visit in 2015.
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> 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.

Appendix 2 – Table 2: Drill holes at Emperor contributing to the Mineral Resource Estimate

Hole ID	Hole Type	Grid_ID	East	North	RL	Max Depth
T6GDD164	DD	MGA94_52	389967	8052593	406.0	130.7
T6GDD165	DD	MGA94_52	389908	8052581	408.5	138.24
T6GDD166	DD	MGA94_52	390034	8052444	415.6	81.2
T6GDD167	DD	MGA94_52	389994	8052435	410.3	183.25



T6GDD168	DD	MGA94_52	390118	8052458	415.2	155.53
T6GDD169	DD	MGA94_52	390063	8052286	405.8	135
T6GDD170	DD	MGA94_52	389943	8052750	397.7	99.2
T6GDD171	DD	MGA94_52	389954	8052668	399.9	95.05
T6GDD172	DD	MGA94_52	389918	8052662	403.8	90.3
T6GDD173	DD	MGA94_52	389881	8052655	405.1	141.2
T6GDD174	DD	MGA94_52	390057	8052686	401.9	135.2
T6GDD175	DD	MGA94_52	389986	8052514	414.6	114.2
T6GDD176	DD	MGA94_52	389949	8052509	411.8	171.2
T6GDD191	DD	MGA94_52	390014	8052359	406.7	159.5
T6GDD192	DD	MGA94_52	390004	8052642	405.0	99.2
T6GDD193	DD	MGA94_52	389940	8052547	411.1	201.3
T6GDD194	DD	MGA94_52	389977	8052476	412.6	179
T6GDD195	DD	MGA94_52	389908	8052709	400.3	102.3
T6GDD196	DD	MGA94_52	389860	8052611	403.5	167.83
T6GDD197	RD	MGA94_52	389904	8052537	406.8	201.27
T6GRC091	RC	MGA94_52	390175	8053039	396.7	126
T6GRC092	RC	MGA94_52	390126	8053062	393.9	78
T6GRC093	RC	MGA94_52	390329	8053148	401.6	132
T6GRC094	RC	MGA94_52	390458	8053197	392.4	78
T6GRC121	RC	MGA94_52	390051	8052952	393.0	168
T6GRC122	RC	MGA94_52	390126	8053017	394.6	132
T6GRC123	RC	MGA94_52	390360	8053132	399.6	96
T6GRC124	RC	MGA94_52	390344	8053158	401.2	120
T6GRC125	RC	MGA94_52	390284	8053279	401.4	90
T6GRC159	RC	MGA94_52	389947	8052591	407.7	126
T6GRC161	RC	MGA94_52	389899	8052621	407.1	162
T6GRC203	RC	MGA94_52	390138	8052492	414.9	192
T6GRC204	RC	MGA94_52	390057	8052523	411.2	138
T6GRC207	RC	MGA94_52	390052	8052563	407.4	138
T6GRC208	RC	MGA94_52	389852	8052692	402.8	152
T6GRC209	RC	MGA94_52	390013	8052675	404.7	60
T6GRC210	RC	MGA94_52	389967	8052713	398.1	60
T6GRC211	RC	MGA94_52	389873	8052791	397.9	106
T6GRD162	RC	MGA94_52	389861	8052613	403.4	53
T6GRD198	RD	MGA94_52	390119	8052377	414.2	198.6
T6GRD199	RD	MGA94_52	390158	8052464	414.2	192.6
T6GRD200	RD	MGA94_52	389934	8052464	407.3	192.6
T6GRD201	RD	MGA94_52	389971	8052389	403.5	189.63
T6GRD202	RD	MGA94_52	389979	8052343	402.7	183.04
T6GRD205	RD	MGA94_52	390099	8052529	411.4	183
T6GRD206	RD	MGA94_52	390023	8052281	401.8	158.85
T6GTD001	DD	MGA94_52	389858	8052607	403.4	159.8



Appendix 3 - JORC Table 1 Longtom Resource

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<p>1. Reverse Circulation</p> <ul style="list-style-type: none"> RC drilling used high pressure air and a cyclone with a rotary splitter. Samples were collected at one-metre intervals. Approximately 54% 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 10g 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. <p>2. Diamond Drilling</p> <ul style="list-style-type: none"> 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. Sampling was guided by Hexagon's protocols and QA/QC procedures.
Drilling Techniques	<ul style="list-style-type: none"> 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). 	<p>1. Reverse Circulation</p> <ul style="list-style-type: none"> RC drill holes (total of 4,146 m from 37 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. <p>2. Diamond Drilling</p> <ul style="list-style-type: none"> Diamond drill holes (total of 54.9 m for 1 hole) – collected HQ₃ core using a 6m core barrel and drilled by Mt Magnet Drilling using a truck mounted modified Mole top drive diamond rig. Core orientation was recorded using a Reflex EZ Shot instrument. RC pre-collars were drilled with HQ₃ diamond tails for a total of 620.6 m from 4 holes.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<p>3. RC Drilling</p> <ul style="list-style-type: none"> A face sampling hammer was used to reduce contamination at the face. 1 m drill chip samples, weighing approximately 2kg 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. <p>4. Diamond drilling</p> <ul style="list-style-type: none"> 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 the resource 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.



<p>Logging</p>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • All RC and diamond drilling 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.
<p>Sub-sample techniques and sample preparation</p>	<ul style="list-style-type: none"> • 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. 	<p>1. RC Drilling</p> <ul style="list-style-type: none"> • 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 ALS laboratories in Brisbane. 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: <ol style="list-style-type: none"> 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 (~10g) taken for assay. <p>2. Diamond Drilling</p> <ul style="list-style-type: none"> • 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. A small number of samples were also sent to Actlabs in Canada for analysis. • Duplicate assay results exhibit good correlation with the original assays and no consistent bias is evident. • Sample preparation: <ol style="list-style-type: none"> 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 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:
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data 	<ul style="list-style-type: none"> • 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.



	<p>entry procedures, data verification, data storage (physical and electronic) protocols.</p> <ul style="list-style-type: none"> Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Duplicate analysis was completed and no sampling issues were identified. 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 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All drill hole collars were surveyed using Differential GPS by a registered surveyor. The degree of accuracy of drill hole collar location and RL is estimated to be within 0.1m for DGPS. Downhole surveys were taken at the end of drilling the hole using EZshot and EZTrac cameras 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drill spacing on an approximate 40 m by 80 m grid throughout the majority 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Holes generally drilled dipping at -60° perpendicular to the target graphitic schist unit at an orientation of 140°. 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	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> 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 Actlabs in Canada for analysis. The sample security is considered to be adequate.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. <p>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.</p>	<ul style="list-style-type: none"> Drilling at the Longtom deposit occurred on exploration lease E80/3928. This tenement is held by McKintosh 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	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i> <ul style="list-style-type: none"> • <i>easting and northing of the drillhole collar</i> • <i>elevation or RL (elevation above sea level in metres) of the drillhole collar</i> • <i>dip and azimuth of the hole</i> • <i>down hole length and interception depth</i> • <i>hole length.</i> 	<ul style="list-style-type: none"> • 1 diamond drill hole for 54.9 m, 37 RC drill holes for 4,146 m and 4 RC precollar diamond tail (RD) holes for 620.6 m completed at the Longtom deposit. Hole locations tabulated and reported in the body of the report.
Data aggregation methods	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Data compiled in Excel and validated in Datashed by an external data management consultancy. • RC samples were all 1 m in length, diamond core samples vary between 1 m 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	<ul style="list-style-type: none"> • <i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i> • <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.</i> 	<ul style="list-style-type: none"> • Mineralised widths at Longtom are estimated to be typically 25 m, compared with RC samples of 1 m 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 a steeply dipping unity with thin bands of internal waste. Angled drill holes (generally 60°) have targeted the mineralised unit with the priority to intersect the graphitic schist unit. The interpreted EM data has also allowed for a good indication of unit thickness to be made and applied in areas where the information is not available.
Diagrams	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Not relevant as Mineral Resource being reported.
Balanced reporting	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Exploration results are not being reported for the Mineral Resources area.
Other substantive exploration data	<ul style="list-style-type: none"> • <i>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</i> 	<ul style="list-style-type: none"> • 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



	<p>test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</p>	<p>geological field mapping, petrographic analysis, rock chip sampling and exploration drilling.</p> <ul style="list-style-type: none"> VTEM geophysical work was carried out by Geotech Limited with the data validated and processed by Southern Geoscience Consultants (SGC).
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). 	<ul style="list-style-type: none"> Further RC drilling to improve domaining and increase the definition of the internal dilution is required. The increase in drilling data would also allow for an increase in confidence in the resource model and subsequently a resource upgrade. Test EM anomalies along strike for graphite mineralisation potential. 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 Longtom material.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> 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. <p>Data validation procedures used.</p>	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. 	<ul style="list-style-type: none"> Drilling data collected for the Longtom resource was completed by previous Lamboo / Hexagon Employees.
Geological interpretation	<ul style="list-style-type: none"> 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. <p>The factors affecting continuity both of grade and geology.</p>	<ul style="list-style-type: none"> 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 80 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. The base of oxidation is also modelled as part of the Longtom resource. Confidence in the grade and geological continuity is reflected in the Mineral Resource classification.
Dimensions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The Longtom resource extends approximately 800 m north-east to south-west. The mineralisation follows steeply dipping unit of the hosting graphite schist unit and has a width of approximately 25 m. Mineralisation is open along strike and at depth.
Estimation and modelling techniques	<ul style="list-style-type: none"> 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 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 	<ul style="list-style-type: none"> 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 140 m (north-east to south-west). The maximum extrapolation distance is 140 m along strike and 108 m down dip. The interpreted EM plates show that mineralisation extends in these areas. Grade estimation was into parent blocks of 40 mE by 10 mN by 5 mRL. Block size was selected based on kriging neighbourhood analysis. Estimation of TGC was carried out using ordinary kriging at the parent block scale. The search ellipses were oriented within the plane of the mineralisation. Two 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.



	<p><i>selective mining units.</i></p> <ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Approximately 95% of the block grades were estimated in the first pass. • 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	<ul style="list-style-type: none"> • Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> • The Longtom 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	<ul style="list-style-type: none"> • The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • A 99% graphite concentrate was 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. • Metallurgical test work on material from the nearby (and geologically similar) deposit Emperor shows that the sulphides present are easily liberated from the graphite by flotation. • The results from metallurgical test work have been considered for Mineral Resource classification.
Environmental factors or assumptions	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<ul style="list-style-type: none"> • Dry density was assigned a value of 2.70 t/m³ (fresh) and 2.40 t/m³ (oxide) based on core samples sent to Actlabs and UltraTrace Laboratories for SG test work. Both laboratories used the standard weight in water/weight in air method to estimate the SG.
Classification	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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.



	<p><i>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).</i></p> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<ul style="list-style-type: none"> • 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 upper portion of the deposit where there is sufficient drill spacing of approximately 25 m by 50 m spacing) to assume continuity of mineralisation between sections. The simple nature of the structure and mineralisation morphology has resulted in a high geological understanding of the deposit with high confidence in the resource which is reflected with the classification. • Inferred material occurs in the lower section of the deposit where drill spacing is approximately 200 m along strike, 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.
<p>Audits or reviews</p>	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> • The resource estimate has been peer reviewed by independent consultants Optiro
<p>Discussion of relative accuracy/confidence</p>	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • 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 the body of this report. 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.



Appendix 4 – Longtom Drill hole locations

Hole ID	Hole Type	Grid_ID	East	North	RL	Max Depth
T1GDD089	DDH	54.9	MGA94_52	382903	8048063	423.9
T1GRC073	RC	48	MGA94_52	382882	8048074	423.5
T1GRC074	RC	198	MGA94_52	382883	8048080	423.6
T1GRC076	RC	126	MGA94_52	382419	8047484	417.3
T1GRC077	RC	96	MGA94_52	382772	8047957	423.2
T1GRC078	RC	120	MGA94_52	382974	8048192	419.8
T1GRC079	RC	96	MGA94_52	382994	8048176	419.4
T1GRC080	RC	72	MGA94_52	382898	8048064	423.9
T1GRC081	RC	102	MGA94_52	382917	8048119	422.8
T1GRC082	RC	120	MGA94_52	382836	8047970	424.0
T1GRC083	RC	78	MGA94_52	382731	8047867	421.6
T1GRC086	RC	180	MGA94_52	382806	8048009	423.5
T1GRC087	RC	198	MGA94_52	382884	8048154	422.4
T1GRC090	RC	174	MGA94_52	381897	8046889	430.0
T1GRC095	RC	90	MGA94_52	382700	8047880	422.1
T1GRC096	RC	162	MGA94_52	382672	8047909	422.3
T1GRC097	RC	72	MGA94_52	382359	8047544	414.9
T1GRC098	RC	174	MGA94_52	382328	8047569	413.0
T1GRC099	RC	60	MGA94_52	382160	8047293	416.1
T1GRC100	RC	102	MGA94_52	382137	8047313	416.3
T1GRC101	RC	84	MGA94_52	381947	8047052	415.0
T1GRC102	RC	144	MGA94_52	381913	8047080	415.0
T1GRC103	RC	60	MGA94_52	381740	8046811	417.5
T1GRC104	RC	120	MGA94_52	381711	8046835	416.3
T1GRC126	RC	132	MGA94_52	382585	8047776	421.4
T1GRC127	RC	138	MGA94_52	382560	8047796	421.6
T1GRC128	RC	90	MGA94_52	382464	8047659	414.8
T1GRC129	RC	84	MGA94_52	382479	8047647	414.8
T1GRC130	RC	90	MGA94_52	382248	8047427	415.0
T1GRC131	RC	138	MGA94_52	382221	8047451	416.9
T1GRC132	RC	114	MGA94_52	383036	8048235	417.6
T1GRC133	RC	150	MGA94_52	383020	8048256	418.0
T1GRC134	RC	132	MGA94_52	382952	8048158	422.1
T1GRC135	RC	90	MGA94_52	382882	8048030	425.1
T1GRC136	RC	66	MGA94_52	382789	8047946	424.2
T1GRC137	RC	78	MGA94_52	382754	8047900	423.3
T1GRC138	RC	60	MGA94_52	382645	8047813	421.2
T1GRC139	RC	108	MGA94_52	382631	8047837	421.7
T1GRD075	RCD	150	MGA94_52	382852	8048087	423.4
T1GRD084	RCD	150.4	MGA94_52	382826	8047912	422.8
T1GRD085	RCD	160.2	MGA94_52	382957	8048208	419.8
T1GRD088	RCD	160	MGA94_52	382810	8048012	423.6
T1GDD089	DDH	54.9	MGA94_52	382903	8048063	423.9
T1GRC073	RC	48	MGA94_52	382882	8048074	423.5
T1GRC074	RC	198	MGA94_52	382883	8048080	423.6
T1GRC076	RC	126	MGA94_52	382419	8047484	417.3
T1GRC077	RC	96	MGA94_52	382772	8047957	423.2



Appendix 5 – JORC Table 1 Wahoo Resource Estimate

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<p>1. Reverse Circulation</p> <ul style="list-style-type: none"> 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. <p>2. Diamond Drilling</p> <ul style="list-style-type: none"> 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 (bricks sand) 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	<ul style="list-style-type: none"> 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). 	<p>1. Reverse Circulation</p> <ul style="list-style-type: none"> RC drill holes (total of 2,023 m from 26 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. <p>2. Diamond Drilling</p> <ul style="list-style-type: none"> Diamond drill holes (total of 1,257.8 m for 11 holes) – collected HQ₃ 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.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<p>1. RC Drilling</p> <ul style="list-style-type: none"> A face sampling hammer was used to reduce contamination at the face. 1 m drill chip samples, weighing on average 4.8 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. <p>2. Diamond drilling</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • All RC and diamond drilling 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	<ul style="list-style-type: none"> • 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. 	<p>1. RC Drilling</p> <ul style="list-style-type: none"> • 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. • 1 m RC drilling samples were submitted to either Actlabs 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: <ol style="list-style-type: none"> 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. <p>2. Diamond Drilling</p> <ul style="list-style-type: none"> • 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: <ol style="list-style-type: none"> 1. Coarse crush using a jaw crushed to better than 70% passing 6 mm. 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 (~10 g) taken for assay. • Sampling procedures and sample preparation represent industry good practice:
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The assaying and laboratory procedures used 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	<ul style="list-style-type: none"> • The verification of significant intersections by either independent 	<ul style="list-style-type: none"> • Hexagon QA/QC checks show that all samples are within acceptable limits. No adjustments to assay data have been



	<p>or alternative company personnel.</p> <ul style="list-style-type: none"> • 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. 	<p>made based on the analysis of duplicates, standards and blanks.</p> <ul style="list-style-type: none"> • 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 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	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 37 drill hole collars were surveyed using Differential GPS by a surveyor from Savannah Nickel mines. The degree of accuracy of drill hole collar location and RL is estimated to be within 0.1 m for DGPS. • Downhole surveys completed for all holes where possible (33 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 resource estimation. • The map projection used is the Australia Geodetic MGA 94 Zone 52.
Data spacing and distribution	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Drill spacing on an approximate 40 m by 40 m grid across 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	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Holes generally drilled dipping at -60° perpendicular to the graphitic schist units. • 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	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • 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. • 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	<ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> 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. <p>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.</p>	<ul style="list-style-type: none"> Drilling at the Wahoo deposit occurred on exploration lease E80/3906. This tenement is held by McKintosh 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	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 11 diamond drill holes for 1,257.8 m and 26 RC drill holes for 2,023 m completed at the Wahoo deposit.
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Data compiled in Excel and validated in Datashed by an external data management consultancy. RC samples were all 1 m in length, diamond core samples vary between 1 m 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Mineralised widths at Wahoo are estimated to be typically between 5 m and 15 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 modelled graphitic schist units have been interpreted as the west limb of a syncline feature striking north-east. Angled drill holes (generally 60°) have targeted the mineralised unit with the priority to intersect perpendicular to the strike of the graphitic schist horizon. 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	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Not relevant as Mineral Resource being reported.
Balanced reporting	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Exploration results are not being reported for the Mineral Resources area.
Other substantive exploration data	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • 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).
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> 	<ul style="list-style-type: none"> • Further diamond core drilling has been recommended to increase confidence in the Wahoo resource and upgrade the classification accordingly. • 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 Wahoo material. • Multi-element analysis of mineralisation and waste material

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> • <i>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.</i> <p><i>Data validation procedures used.</i></p>	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> 	<ul style="list-style-type: none"> • Numerous site visits were completed by S. Tomlinson during the 2105 and 2016 drilling period. The diamond and RC drill rigs were inspected, sampling procedures checked, RC chips and diamond core logged.
Geological interpretation	<ul style="list-style-type: none"> • <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> • <i>Nature of the data used and of any assumptions made.</i> • <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> • <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<ul style="list-style-type: none"> • 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 a mafic intrusive were also modelled as part of the Wahoo resource. • Confidence in the grade and geological continuity is reflected in the Mineral Resource classification.
Dimensions	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • The Wahoo resource consists of multiple graphite units over an area extending 300 m west southwest. The mineralisation follows the bedding of the hosting graphite schist units ranging in thickness between 5 m and 15 m. • Mineralisation is open to the south west.
Estimation and modelling techniques	<ul style="list-style-type: none"> • <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including</i> 	<ul style="list-style-type: none"> • The resource was modelled using Geovia's Surpac v6.7 modelling software.



	<p><i>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.</i></p> <ul style="list-style-type: none"> • <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> • <i>The assumptions made regarding recovery of by-products.</i> • <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i> • <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> • <i>Any assumptions behind modelling of selective mining units.</i> • <i>Any assumptions about correlation between variables.</i> • <i>Description of how the geological interpretation was used to control the resource estimates.</i> • <i>Discussion of basis for using or not using grade cutting or capping.</i> • <i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i> 	<ul style="list-style-type: none"> • 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 40 m (west southwest). • 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. • Estimation was carried out using ordinary kriging at the parent block scale. • 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. • Around 90% of the block grades were estimated in the first pass. • 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	<ul style="list-style-type: none"> • <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i> 	<ul style="list-style-type: none"> • The Wahoo deposit sits 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	<ul style="list-style-type: none"> • <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • A 99% graphite concentrate was 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. • Metallurgical testwork on material from the McIntosh Project 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 assumptions	<ul style="list-style-type: none"> • <i>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</i> 	<ul style="list-style-type: none"> • No assumptions have been made regarding waste and process residue • Environmental studies are being completed as part of the McIntosh Pre-Feasibility study.



	<p><i>impacts of the mining and processing operation.</i></p>	
Bulk density	<ul style="list-style-type: none"> • <i>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.</i> • <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<ul style="list-style-type: none"> • Dry density was assigned a value of 2.85 t/m³ (fresh) and 2.65 t/m³ (oxide) based on 25 dried core samples and water emersion technique carried out by SGS. The samples were from the nearby and geologically comparable Emperor deposit. • Geophysical gamma density data was also obtained but has not been included in the resource.
Classification	<ul style="list-style-type: none"> • <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> • <i>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).</i> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<ul style="list-style-type: none"> • 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 upper portion of the deposit where there is sufficient drill spacing of approximately 40 m by 40 m to assume continuity of mineralisation between sections. The simple nature of the structure and mineralisation morphology has resulted in a high geological understanding of the deposit with high confidence in the resource which is reflected with the classification. • Inferred Resources have been defined where the drill spacing is greater than 40 m by 40 m, but still sufficient to assume geological continuity. This is based on the confidence in the drill spacing and the VTEM survey that mineralisation is continuous throughout the resource. • The classification considers all available data and quality of the estimate and reflects the Competent Person's view of the deposit.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> • The resource estimate has been peer reviewed by independent consultants Optiro
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • 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 the body of this report. 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.



Appendix 6 – Wahoo Drill hole Data

Hole ID	Hole Type	Grid ID	Easting	Northing	RL	Depth of hole
T4GDD177	Diamond	MGA94_52	386,425	8,054,157	398.2	171.2
T4GDD178	Diamond	MGA94_52	386,426	8,054,157	398.2	159.0
T4GDD179	Diamond	MGA94_52	386,393	8,054,184	395.8	108.3
T4GDD180	Diamond	MGA94_52	386,347	8,054,127	395.3	111.2
T4GDD181	Diamond	MGA94_52	386,348	8,054,126	395.4	157.4
T4GDD182	Diamond	MGA94_52	386,354	8,054,121	395.5	66.3
T4GDD183	Diamond	MGA94_52	386,317	8,054,151	394.1	60.2
T4GDD184	Diamond	MGA94_52	386,263	8,054,087	395.7	123.3
T4GDD185	Diamond	MGA94_52	386,262	8,054,088	395.7	147.3
T4GDD186	Diamond	MGA94_52	386,505	8,054,197	398.6	78.3
T4GDD187	Diamond	MGA94_52	386,507	8,054,196	398.6	75.3
T4GRC215	RC	MGA94_52	386,235	8,054,112	396.0	90.0
T4GRC216	RC	MGA94_52	386,202	8,054,138	396.4	60.0
T4GRC217	RC	MGA94_52	386,190	8,054,093	395.1	82.0
T4GRC218	RC	MGA94_52	386,234	8,054,112	396.0	90.0
T4GRC219	RC	MGA94_52	386,200	8,054,139	396.5	60.0
T4GRC220	RC	MGA94_52	386,188	8,054,095	395.2	90.0
T4GRC221	RC	MGA94_52	386,157	8,054,121	397.1	58.0
T4GRC222	RC	MGA94_52	386,293	8,054,162	393.5	74.0
T4GRC223	RC	MGA94_52	386,262	8,054,188	394.7	60.0
T4GRC224	RC	MGA94_52	386,365	8,054,154	397.1	88.0
T4GRC225	RC	MGA94_52	386,333	8,054,183	395.2	76.0
T4GRC226	RC	MGA94_52	386,308	8,054,205	392.8	28.0
T4GRC227	RC	MGA94_52	386,362	8,054,209	393.7	54.0
T4GRC228	RC	MGA94_52	386,334	8,054,231	393.3	22.0
T4GRC229	RC	MGA94_52	386,457	8,054,178	399.1	124.0
T4GRC230	RC	MGA94_52	386,417	8,054,212	397.2	100.0
T4GRC231	RC	MGA94_52	386,300	8,054,104	396.0	77.0
T4GRC232	RC	MGA94_52	386,284	8,054,115	396.3	55.0
T4GRC233	RC	MGA94_52	386,466	8,054,170	398.9	149.0
T4GRC234	RC	MGA94_52	386,395	8,054,128	398.1	112.0
T4GRC235	RC	MGA94_52	384,959	8,053,173	397.5	100.0
T4GRC236	RC	MGA94_52	384,929	8,053,197	397.3	70.0
T4GRC237	RC	MGA94_52	385,010	8,053,272	395.6	46.0
T4GRC238	RC	MGA94_52	385,035	8,053,251	395.4	94.0
T4GRC239	RC	MGA94_52	384,892	8,053,151	397.8	64.0
T4GRC240	RC	MGA94_52	384,916	8,053,131	398.2	100.0



Appendix 7 – JORC Table 1 Barracuda Resource Estimate

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<p>1. Reverse Circulation</p> <ul style="list-style-type: none"> RC drilling used high pressure air and a cyclone with a rotary splitter. Samples were collected at one-metre intervals. Approximately 54% 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. <p>2. Diamond Drilling</p> <ul style="list-style-type: none"> 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 (brickies sand) 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	<ul style="list-style-type: none"> 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). 	<p>1. Reverse Circulation</p> <ul style="list-style-type: none"> RC drill holes (total of 2,883 m from 35 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. <p>2. Diamond Drilling</p> <ul style="list-style-type: none"> Diamond drill holes (total of 294 m for 3 holes) – collected HQ₃ core using a 3 m 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.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<p>1. RC Drilling</p> <ul style="list-style-type: none"> 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. <p>2. Diamond drilling</p> <ul style="list-style-type: none"> 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



		<p>been completed on comparing RC and diamond methods to rule out drilling by RC.</p>
Logging	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • All RC and diamond drilling 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	<ul style="list-style-type: none"> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>1. RC Drilling</p> <ul style="list-style-type: none"> • 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 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: <ol style="list-style-type: none"> 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. <p>2. Diamond Drilling</p> <ul style="list-style-type: none"> • 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: <ol style="list-style-type: none"> 1. Coarse crush using a jaw crushed to better than 70% passing 6 mm. 2. For samples exceeding 3 kg 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 (~10 g) taken for assay. • Sampling procedures and sample preparation represent industry good practice:
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • The assaying and laboratory procedures used 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	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> 	<ul style="list-style-type: none"> • Hexagon QA/QC checks show that all samples are within acceptable limits. No adjustments to assay data have been



	<ul style="list-style-type: none"> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<p>made based on the analysis of duplicates, standards and blanks.</p> <ul style="list-style-type: none"> • 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 Joondalup 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 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	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • 34 drill hole collars were surveyed using Differential GPS (4 by Whelans and 31 by a surveyor from Savannah Nickel mines for the 2015 and 2106 programs). The degree of accuracy of drill hole collar location and RL is estimated to be within 0.1 m for DGPS. 4 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 (29 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 Exploration Target estimation. • The map projection used is the Australia Geodetic MGA 94 Zone 52.
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Drill spacing on an approximate 20 m by 50 m grid throughout the deposit area, increasing to 100 m along strike in the target area. • 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	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Holes drilled generally dipping at -60° perpendicular to the sub-vertical graphitic schist unit • 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	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • 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. • 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	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> 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
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Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. <p>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.</p>	<ul style="list-style-type: none"> Drilling at the Barracuda deposit occurred on exploration lease E80/3864. This tenement is held by McKintosh 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	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 3 diamond drill holes for 294 m and 35 RC drill holes for 2,883 m (38 drill holes in total) were completed at the Barracuda deposit.
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Data compiled in Excel and validated in Datashed by an external data management consultancy. RC samples were all 1 m in length, diamond core samples vary between 1 m 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Mineralised widths at Barracuda are estimated to be typically between 5 m and 20 m, compared with RC samples of 1 m 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 a sub vertical unit striking north, north-east. Angled drill holes



		<p>(generally 60°) have targeted the mineralised unit with the priority to intersect perpendicular to the strike of the graphitic schist horizon.</p> <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Not relevant as Mineral Resource being reported.
Balanced reporting	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Exploration results are not being reported for the Mineral Resources area.
Other substantive exploration data	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • 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).
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> 	<ul style="list-style-type: none"> • Initial diamond core drilling has been recommended to twin and verify existing RC holes at Barracuda. These cores are planned to be assayed for total graphitic carbon and have been examined petrographically to assess graphite flake characteristics. • Further diamond core drilling has been recommended to twin and verify existing RC holes at Barracuda. 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 Barracuda material.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> • <i>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.</i> <p><i>Data validation procedures used.</i></p>	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> 	<ul style="list-style-type: none"> • A site visit was completed by S. Tomlinson in 2015 where the drill hole collar locations were observed as well as outcropping graphite mineralisation. The drill hole locations were in positions as per the database and outcropping graphite was comparable to resource interpretation.
Geological interpretation	<ul style="list-style-type: none"> • <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> • <i>Nature of the data used and of any assumptions made.</i> • <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> • <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<ul style="list-style-type: none"> • 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 ~50 m by 20 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 was modelled as part of the Barracuda resource. • Confidence in the grade and geological continuity is reflected in the Mineral Resource classification.
Dimensions	<ul style="list-style-type: none"> • <i>The extent and variability of the Mineral Resource expressed as</i> 	<ul style="list-style-type: none"> • The Barracuda resource extends 300m south-west to north-east. The mineralisation follows the bedding of the hosting



	<p>length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</p>	<p>graphite schist units ranging in thickness between 5 m and 20 m.</p> <ul style="list-style-type: none"> Mineralisation is open along strike and at depth along the fold limbs.
Estimation and modelling techniques	<ul style="list-style-type: none"> 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 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. 	<ul style="list-style-type: none"> 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. Sample length was composited to 1 m down hole length. Top grade cuts were not applied Total Graphitic Carbon (TGC) estimated by Inverse Distance cubed (ID³) for mineralised domains. Statistical analysis was completed to investigate evaluate the estimated grades to composite grades. TGC mineralisation continuity was interpreted to cover 100 m (3 drill lines). The maximum extrapolation distance is 20 m along strike and 20 m across strike. Grade estimation was into parent blocks of 30 mE by 20 mN by 5 mRL. Block size was selected based on kriging neighbourhood analysis. Estimation was carried out using ID³ at the parent block scale. The search ellipses were oriented within the plane of the mineralisation. Two estimation passes were used for domain 1; the first search was 100 m along the major axis with the second search three times the initial search. One estimation pass was completed for domain 2 with a radius of 100 m along the major axis. Around 90% of the block grades were estimated in the first pass. 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	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> The Barracuda deposit sits 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	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A 99% graphite concentrate was 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. Metallurgical testwork on material from the McIntosh Project 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. <p>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</p>	<ul style="list-style-type: none"> Dry density was assigned a value of 2.85 t/m³ (fresh) and 2.65 t/m³ (oxide) based on 25 dried core samples and water emersion technique carried out by SGS. The samples were from the nearby and geologically comparable Emperor deposit. Geophysical gamma density data was also obtained but has not been included in the resource.
Classification	<ul style="list-style-type: none"> 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). <p>Whether the result appropriately reflects the Competent Person's view of the deposit.</p>	<ul style="list-style-type: none"> 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. Metallurgical testwork data confirms data obtained from the adjacent prospect. Measured Mineral Resources - none defined. Indicated Resources – none defined. Mineral Resources at the Barracuda deposit have been classified as Inferred and are defined within area where the drill spacing is at least 20 m by 50 m and there is confidence in the geological and grade continuity. Confidence for the resource in these areas is also provided by 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	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> The resource estimate has been peer reviewed by independent consultants Optiro
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 the body of this report. 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.



Appendix 8 – Barracuda Drill hole Data

Hole ID	Hole Type	Grid ID	Easting	Northing	RL	Depth of hole
T5GDD188	Diamond	MGA94_52	389281.207	8054641.3	392.945	108.2
T5GDD189	Diamond	MGA94_52	389296.918	8054728	382.726	95.6
T5GDD190	Diamond	MGA94_52	389300.949	8054539.5	392.961	90.2
T5GRC105	RC	MGA94_52	388857.552	8054129.6	393.401	120
T5GRC106	RC	MGA94_52	388876.1	8054114.5	393.722	156
T5GRC107	RC	MGA94_52	388910.157	8054216.2	394.056	96
T5GRC108	RC	MGA94_52	388974.622	8054299.4	391.966	66
T5GRC109	RC	MGA94_52	389099.936	8054444.5	391.279	48
T5GRC110	RC	MGA94_52	388777.751	8054048.5	395.322	54
T5GRC111	RC	MGA94_52	389038.821	8054359.6	390.262	72
T5GRC112	RC	MGA94_52	389053.016	8054492.5	389.958	78
T5GRC113	RC	MGA94_52	388720.214	8053979.6	397.058	72
T5GRC114	RC	MGA94_52	388646.948	8053923.9	400.791	60
T5GRC115	RC	MGA94_52	389054.615	8054511	388.877	102
T5GRC116	RC	MGA94_52	389214.725	8054494.1	385.32	66
T5GRC117	RC	MGA94_52	389232.954	8054501.2	386.502	84
T5GRC118	RC	MGA94_52	389237.371	8054498.4	385.962	66
T5GRC119	RC	MGA94_52	388604.106	8053881.5	401.623	60
T5GRC120	RC	MGA94_52	388564.892	8053841.9	401.826	48
T5GRC140	RC	MGA94_52	389070.576	8054496.5	389.289	84
T5GRC141	RC	MGA94_52	389068.588	8054412.9	391.792	42
T5GRC142	RC	MGA94_52	389077.822	8054394.4	390.354	117
T5GRC143	RC	MGA94_52	389049	8054349	399	96
T5GRC144	RC	MGA94_52	388983.19	8054280	392.986	108
T5GRC145	RC	MGA94_52	388928.287	8054204.9	393.913	108
T5GRC146	RC	MGA94_52	388892.963	8054162.2	393.369	132
T5GRC147	RC	MGA94_52	388891.926	8054107	392.334	90
T5GRC148	RC	MGA94_52	388830.72	8054086.7	394.874	78
T5GRC149	RC	MGA94_52	388789.665	8054035.6	396.582	78
T5GRC150	RC	MGA94_52	389159.279	8054496.7	386.237	60
T5GRC151	RC	MGA94_52	389214.759	8054500.6	385.157	84
T5GRC152	RC	MGA94_52	389223.037	8054545.7	386.085	90
T5GRC153	RC	MGA94_52	389230	8054646	401	72
T5GRC154	RC	MGA94_52	389247	8054731	398	60
T5GRC155	RC	MGA94_52	389259.52	8054807.8	380.18	66
T5GRC156	RC	MGA94_52	389259	8054959	400	48
T5GRC157	RC	MGA94_52	389172.634	8054481.1	386.86	144
T5GRC158	RC	MGA94_52	388754.029	8053992.2	397.134	78