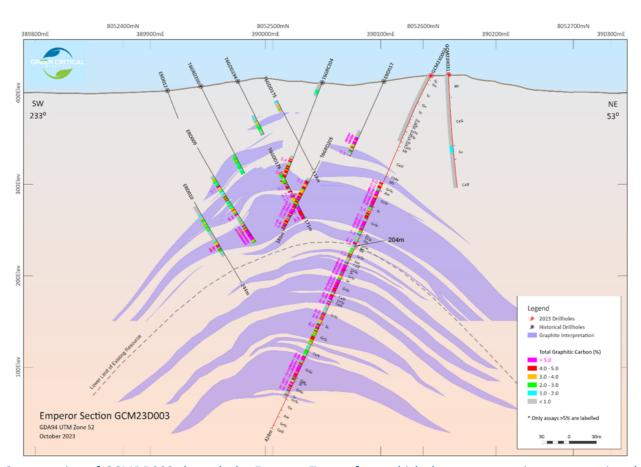


### AMENDMENT - TEST WORK INDICATES POTENTIAL OF HIGH PURITY EMPEROR CONCENTRATE SUITABILITY FOR SPG - BATTERY ANODE

Green Critical Minerals Limited is providing an amended version of the ASX announcement released 21st November 2023.

The following is a summary of the additional information that has been provided in the attached amended ASX release:

1. The following cross section of GCMDD003 was provided:



Cross section of GCMDD003 through the Emperor Target from which the two composites representing the upper or known Emperor resource (128m to 204m downhole) and the lower 'new' discovery or extension below it (204m to 388m) was collected for this study being reported on to determine the flake size, purity etc.

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2. More detail has been provided in the "Simple Flowsheet – High Purity" section of the announcement regarding carbon recovery and the quality of the potential product as follows:

"The recoveries were calculated by determining the total carbon content in each product stream. The recovery into the graphite concentrate was then determined by dividing the total carbon units in the concentrate by the sum of the total carbon units in all flotation products. This approach is considered conservative since all total carbon units reporting to the 1st to 6th cleaner tailings are considered final tailings. In a closed-circuit operation, these streams are circulated, and additional graphite flakes are typically recovered into the final concentrate.

The -100 mesh size fraction is the most challenging product to upgrade to high total carbon grades and a concentrate grade of 95% C(t) is considered the standard grade specification. The ability to upgrade the Emperor mineralization to over 97% C(t) into a -197 product may represent an opportunity to target a premium application that will yield a higher revenue on a per tonne basis. Alternatively, applications for -195 product specifications may also be accessible for the Emperor graphite concentrate."

- 3. Expansion of the **Next Step for Emperor Deposit** as follows:
  - Perform a marketing analysis to determine premium markets for the high-grade -197 graphite concentrate. This marketing analysis will identify potential markets for an Emperor graphite concentrate to facilitate an economic analysis. While EV battery application yields the highest revenue opportunity, the stringent quality requirements will also result in higher capital and operating costs. Graphite concentrate markets with lower entry requirements may be more suitable initially as associated capital costs required to get to market are significantly lower. Also, the high concentrate grade of 97% C(t) in the -197 concentrate may open opportunities for markets not accessible for -195 products. The results of the marketing analysis will support the development of a financial model and the development of the project execution strategy.
  - Conduct ore sorting test work to increase the feed grade to the mill thus potentially reducing capital and operating costs. Ore sorting is commonly conducted to reject valueless gangue minerals at a coarser crush size, thus eliminating the need to process this material through the main concentrator. As a result, the feed grade to the concentrator increases, which in turn will lead to reduced capital and operating costs for each tonne of graphite concentrate. While ore sorting will result in additional operating costs, they are typically only 5-10% of the processing cost of the full concentrator. Also, ore sorting will result in reduced overall recoveries since the coarse gangue minerals typically contain small amounts of graphite. Barren bands of gangue minerals have been identified in the Emperor resource, which suggests that ore sorting may be applied successfully.
  - Explore opportunities from current test work now showing the Emperor flake may be a suitable feedstock for the in demand lithium ion battery industry. A Downstream value add test work program will be developed to test the suitability of Emperor flake for making SPG (spherical purified graphite), which is needed to make Battery anode material. The program is envisioned to include carbon coating of the SPG and battery trials to evaluate the full value add process. The results of the full program represent the full value chain from ore to final SPG. While this work will be conducted on a relatively small sample and will have to be validated on a larger scale in the future, it will provide

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a first assessment of the suitability of the Emperor graphite for battery anode material. The results will also be used to support a preliminary economic assessment of the full value chain.

- Alternative battery applications to EV battery anode material will be investigated to accelerate offtake agreements. The qualification process for battery anode materials to be used in electric vehicles takes several years, while the qualification process for battery anode material in other applications such as alkaline batteries or batteries in power tools tend to be noticeably faster.
- Provide purified material to battery anode producers for test work and offtake negotiations. This
  step will be performed using a larger sample once initial work demonstrating the entire value chain
  from ore to CSPG was successful and an initial economic analysis produced encouraging results.
- Develop a financial model assuming a phased and modular approach to develop the McIntosh resource with reduced initial nameplate capacity to minimize the capital cost of the project. A phased approach will also allow GCM to develop relationships with customers and to establish market credibility. Different development strategies will be explored such as selling only a flotation concentrate initially and then add an value add process such as micronizing, spherodizing, purification, and coating in a second phase. Also, the capacity of the plant could be expanded in phases starting off with a lower production rate and adding modules to increase capacity as the project is generating a cash flow.
- Update the JORC resource following the new depth extension to Emperor resource.
- 4. The JORC table has been amended to focus on the metallurgical test work.

#### **Authorisation**

The provision of this announcement to the ASX has been authorised by the board of directors of Green Critical Minerals Limited.

Green Critical Minerals confirms that it is not aware of any new information or data that materially affects the exploration results contained in this announcement.



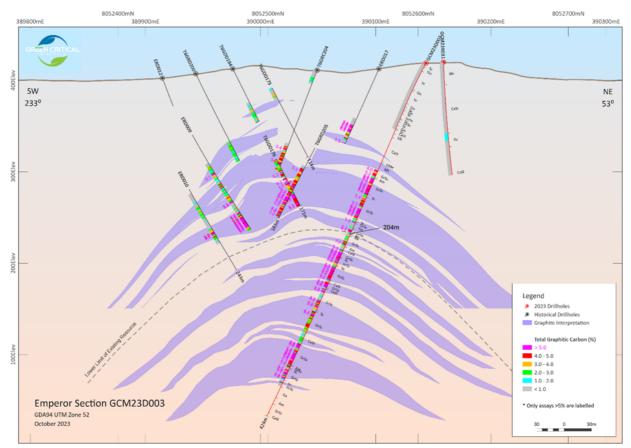
# UPDATED - TEST WORK INDICATES POTENTIAL OF HIGH PURITY EMPEROR CONCENTRATE SUITABILITY FOR SPG - BATTERY ANODE

#### **Highlights**

- ALS Metallurgical test work conducted on Emperor diamond drilling core has produced graphite concentrate grades over 97% C(t) by simple flotation on two bulk samples.
- These high purities were further supported by very **high graphite recoveries of 96%** from both samples, which will have a favourable impact on operating cost.
- It is expected that introducing an attrition and cleaning stage into the currently simple flow sheet may further increase the purity.
- Metallurgical test work conducted on the two bulk composites submitted to ALS has confirmed most of the flakes have dimensions between **45-150µm**.
- The preferred starting flake size for battery anode material (SPG) is <150μm (<100 mesh), which is then micronised down to smaller particles between 5-45μm before being shaped and then purified into spherical purified graphite (SPG).</li>
- The high purity nature of the Emperor deposit and its flake size distribution allow GCM to target the SPG anode market with the company's flagship Emperor deposit, just as Chinese graphite export restrictions come in to play in Dec 2023 highlighting the critical need for sovereign supplies of battery grade graphite.
- The McIntosh Graphite Project is well situated in Western Australia being close to key end user markets and only 280km by sealed highway to a deep-water port. The location also benefits from strong government support for the development of critical mineral deposits.



Green Critical Minerals Ltd ("GCM" or "the Company") which holds earn-in rights for up to 80% of the McIntosh Graphite Project (see announcement on 15 June 2022) is pleased to announce the promising preliminary metallurgical test work results from the Emperor Resource at the McIntosh Graphite Project, with all test work being conducted on material sourced from diamond core drilled by GCM in 2023. The two bulk samples used came from diamond drill hole GCM23D003, the assay results of which was the subject of ASX Announcement dated 1 November 2023 as shown in the cross-section taken from that report.



Cross section of GCMDD003 through the Emperor Target from which the two composites representing the upper or known Emperor resource (128m to 204m downhole) and the lower 'new' discovery or extension below it (204m to 388m) was collected for this study being reported on to determine the flake size, purity etc.

#### ALS METALLURGICAL TEST WORK

The ALS results demonstrate a significant milestone, with the ability to upgrade to **concentrate grades over** 97% C(t) by simple flotation with high recoveries 96%, highlighting high purity of the McIntosh flake, which present promising marketing opportunities, particularly for the specialised EV battery sector. Further treatment using another attrition stage and cleaner flotation may further increase the purity of the product. Future testwork will optimize the process from ore to a finished product to maximize the value of the McIntosh mineralization. The program will include testwork to transform the flotation concentrate to SPG.



The latest testing, conducted at the ALS facility in Perth used samples from drill hole GCM23D003 at the McIntosh Graphite Project. Two composites representing the upper or known Emperor resource (128 m to 204 m downhole) and the lower 'new' discovery or extension below it (204 m to 388 m) was created using coarse assay rejects as summarised in Table 1. The graphitic carbon content in these composites was recorded at 3.69% C(g) and 3.33% C(g) respectively, showcasing the Projects capacity to yield a substantial graphite resource at a decent grade. Furthermore, the detection of significant titanium levels hints at the presence of valuable rutile, aligning with previous mineralogical studies.

Table 1: Composites for Metallurgical Testing at ALS

Sample	From (m)	To (m)	Interval (m)	Estimated Total weight (kg)
GCM Composite 1	128	204	76	342
GCM Composite 2	204	388	184	828

#### **BATTERY ANODE MATERIAL POTENTIAL**

The preferred starting flake size for battery anode material (SPG) is <150 $\mu$ m (100 mesh), which is then micronised to smaller particles between 5-45 $\mu$ m before being shaped into spherical graphite, converting coarse flakes (>150 $\mu$ m) into required smaller particles sizes (5-45 $\mu$ m) is expensive as additional grinding is energy intensive, adding additional cost to processing to convert the coarse flakes into smaller particles.

At the Emperor deposit, metallurgical test work has confirmed that most of the flakes have dimensions between 45-150 $\mu$ m (Figure 1) classifying it as fine. This characteristic presents an exciting opportunity to target the SPG anode market with the company's flagship Emperor deposit.

As evidence in the charts, approximately 6% of the concentrate mass reported to the size fractions greater than 150 microns. The size distribution of the two concentrates was almost identical, which suggests that the flake size distribution of the known Emperor resource and the new discovery are similar.



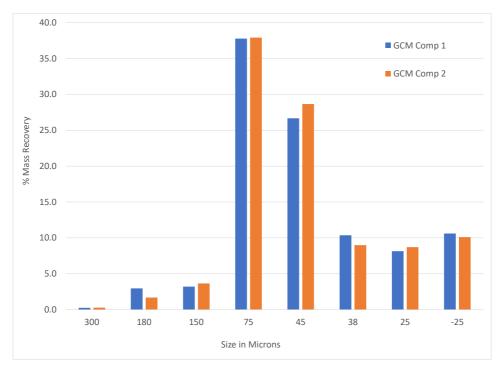


Figure 1: Mass Distribution of Graphite Concentrate

#### **DOWNSTREAM TESTWORK**

The company intends to perform downstream metallurgical testing on the Emperor flake to further investigate its battery anode potential, opening the door to the SPG market which is expected to have significant growth. The need for this critical mineral is further extrapolated by the largest exporter of graphite in the world (China) implementing export controls from the start of Dec 2023. Having a sovereign critical mineral project as recognised by the <u>Australian Government Department of Industry, Science, Energy & Resources</u> with suitability to SPG battery anode close to end use markets in Asia has not come at a better time.

#### SIMPLE FLOWSHEET - HIGH PURITY

The contents of the coarse reject bags were combined, homogenised, and two 2.25 kg sub-samples were split for chemical analysis and for a flotation test charge.

The two composites were subjected to cleaner flotation tests employing the flowsheet that is depicted in Figure 2. The flowsheet consists of a rougher flotation of the  $P_{100}$  = 3.35 mm material followed by a grind to  $P_{80}$  of 500 microns and scavenger flotation. The combined rougher and scavenger concentrate was then subjected to three stages of stirred media milling (SMM) with intermittent cleaner flotation. The third SMM



discharge was upgraded in three stages of cleaner flotation to produce the final concentrate. A summary of the results of the cleaner flotation tests is presented in Table 2.

The combined concentrate for GCM Composite 1 and GCM composite 2 graded 97.1% C(t) and 97.6% C(t), respectively, at very high open circuit total carbon recoveries of over 96% (*Table 2*). The recoveries were calculated by determining the total carbon content in each product stream. The recovery into the graphite concentrate was then determined by dividing the total carbon units in the concentrate by the sum of the total carbon units in all flotation products. This approach is considered conservative since all total carbon units reporting to the 1<sup>st</sup> to 6<sup>th</sup> cleaner tailings are considered final tailings. In a closed-circuit operation, these streams are circulated and additional graphite flakes are typically recovered into the final concentrate.

The -100 mesh size fraction is the most challenging product to upgrade to high total carbon grades and a concentrate grade of 95% C(t) is considered the standard grade specification. The ability to upgrade the Emperor mineralization to over 97% C(t) into a -197 product may represent an opportunity to target a premium application that will yield a higher revenue on a per tonne basis. Alternatively, applications for -195 product specifications may also be accessible for the Emperor graphite concentrate.

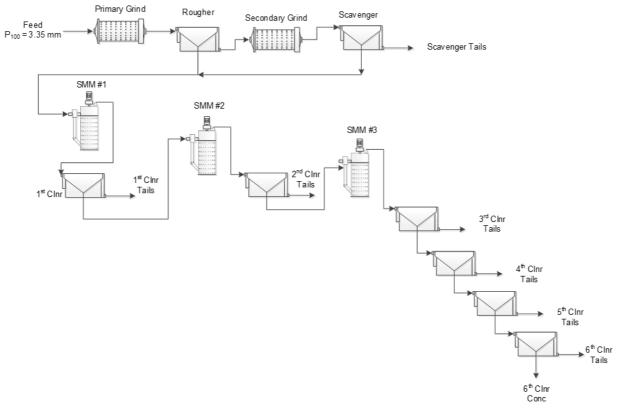


Figure 2: Cleaner Flotation Flowsheet



Table 2: Summary of Cleaner Flotation Tests

Composite	Mass Recovery %	C(t) Grade %	C(t) Recovery %
GCM Comp 1	4.08	97.1	96.7
GCM Comp 2	3.60	97.6	96.5

The two 6<sup>th</sup> cleaner concentrates were submitted for a size fraction analysis. The total carbon grades of the various size fractions are presented in Figure 3. Note, the plus 150 microns size fractions were combined for chemical analysis due to the limited sample mass.

The total carbon grades of the various size fractions exceeded 94.5% in all products. GCM Composite #2 produced slightly higher grades for most size fractions, which confirms the analysis results for the combined concentrates.

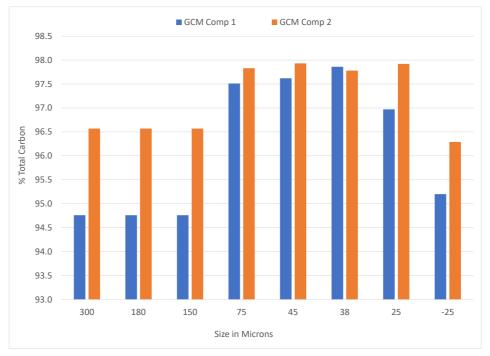


Figure 3: Total Carbon Profile of Graphite Concentrate

The results obtained by ALS are in agreement with the findings of SGS. While the intermediate concentrate produced in the SGS work yielded a higher mass recovery into the plus 150 micron size fractions of 15% compared to 6% in the ALS test, the SGS work concluded at an intermediate concentrate grading 50% C(t), thus requiring further grinding and cleaner flotation. The coarser size fractions of the intermediate

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concentrate yielded low grades of 18% to 30% C(t), which indicates that most of these larger particles were predominantly gangue minerals and that a final plus 95% C(t) concentrate will contain only a small percentage of 150-micron flakes.

The ALS work demonstrated that despite a finer flake size distribution, the Emperor mineralisation can be upgraded to a high-grade concentrate grading greater than 97%. Even the smallest size fraction of minus 25 microns yielded a grade of over 96% C(t). While traditional battery anode material feed stock limits the amount of minus 45 microns material, the high grades of the minus 45-micron product provide attractive marketing options.

#### PROJECT LOCATION ADVANTAGE

The McIntosh Graphite Project (Figure 4) is well situated in Western Australia being close to key end user markets and only 280km by sealed highway to a deep-water port. The location also benefits from strong government support for the development of critical mineral deposits. This governmental backing is crucial, providing a stable and supportive framework for operations and grants through the Critical Mineral Fund. The McIntosh project, therefore, not only stands out for its geographic and infrastructural advantages but also for being in a jurisdiction that values and promotes mining activities.

The synergy of these factors makes the McIntosh Project an attractive proposition for battery anode end users, who increasingly prioritize responsible sourcing from stable, reputable countries known for their good environmental practices.

Another key advantage of the McIntosh Project is its proximity to clean energy sources, particularly the Ord River Hydropower facility. This proximity aligns perfectly with the growing global emphasis on sustainable mining practices and responsible sourcing. The use of hydropower for the project's energy needs significantly reduces the carbon footprint, making the end product more appealing to environmentally conscious consumers and industries.





Figure 4 - Location of the McIntosh Project

#### The McIntosh project location advantage:

- ✓ Tier 1 Location Western Australia
- √ 12km to Great Northern Highway via Sealed Roads
- ✓ Proximity to Clean Energy Ord River Hydropower
- ✓ Proximity to Port 280km to Deep Water Port of Wyndham
- ✓ Close proximity to key end users in Asia
- ✓ Strong government support for development of critical mineral deposits

Battery anode end users are attracted by supply from stable, reputable countries with good environmental practices (Responsible Sourcing).



#### **NEXT STEPS FOR EMPEROR DEPOSIT**

- Perform a marketing analysis to determine premium markets for the high-grade -197 graphite concentrate. This marketing analysis will identify potential markets for an Emperor graphite concentrate to facilitate an economic analysis. While EV battery application yields the highest revenue opportunity, the stringent quality requirements will also result in higher capital and operating costs. Graphite concentrate markets with lower entry requirements may be more suitable initially as associated capital costs required to get to market are significantly lower. Also, the high concentrate grade of 97% C(t) in the -197 concentrate may open opportunities for markets not accessible for -195 products. The results of the marketing analysis will support the development of a financial model and the development of the project execution strategy.
- Conduct ore sorting test work to increase the feed grade to the mill thus potentially reducing capital and operating costs. Ore sorting is commonly conducted to reject valueless gangue minerals at a coarser crush size, thus eliminating the need to process this material through the main concentrator. As a result, the feed grade to the concentrator increases, which in turn will lead to reduced capital and operating costs for each tonne of graphite concentrate. While ore sorting will result in additional operating costs, they are typically only 5-10% of the processing cost of the full concentrator. Also, ore sorting will result in reduced overall recoveries since the coarse gangue minerals typically contain small amounts of graphite. Barren bands of gangue minerals have been identified in the Emperor resource, which suggests that ore sorting may be applied successfully.
- Explore opportunities from current test work now showing the Emperor flake may be a suitable feedstock for the in demand lithium ion battery industry. A Downstream value add test work program will be developed to test the suitability of Emperor flake for making SPG (spherical purified graphite), which is needed to make Battery anode material. The program is envisioned to include carbon coating of the SPG and battery trials to evaluate the full value add process. The results of the full program represent the full value chain from ore to final SPG. While this work will be conducted on a relatively small sample and will have to be validated on a larger scale in the future, it will provide a first assessment of the suitability of the Emperor graphite for battery anode material. The results will also be used to support a preliminary economic assessment of the full value chain.



- Alternative battery applications to EV battery anode material will be investigated to accelerate offtake agreements. The qualification process for battery anode materials to be used in electric vehicles takes several years, while the qualification process for battery anode material in other applications such as alkaline batteries or batteries in power tools tend to be noticeably faster.
- Provide purified material to battery anode producers for test work and offtake negotiations. This
  step will be performed using a larger sample once initial work demonstrating the entire value chain
  from ore to CSPG was successful and an initial economic analysis produced encouraging results.
- Develop a financial model assuming a phased and modular approach to develop the McIntosh resource with reduced initial nameplate capacity to minimize the capital cost of the project. A phased approach will also allow GCM to develop relationships with customers and to establish market credibility. Different development strategies will be explored such as selling only a flotation concentrate initially and then add an value add process such as micronizing, spherodizing, purification, and coating in a second phase. Also, the capacity of the plant could be expanded in phases starting off with a lower production rate and adding modules to increase capacity as the project is generating a cash flow.
- Update JORC resource following the new depth extension to Emperor resource.

#### **Competent Person Statement**

The information in this report that relates to the metallurgical activities are based on information compiled by Oliver Peters, who is a Member of the Professional Engineers of Ontario and the Principal Metallurgist and President of Metpro Management Inc. Oliver Peters has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Oliver Peters consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **Authorisation**

The provision of this announcement to the ASX has been authorised by the board of directors of Green Critical Minerals Limited.

Green Critical Minerals confirms that it is not aware of any new information or data that materially affects the exploration results contained in this announcement.

#### **Forward Looking Statements**

Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of Green Critical Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.

# Appendix 1: JORC Code, 2012 Edition - Table 1 JORC Code, 2012 Edition - Table 1 report template Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralization that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralization types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Diamond Drilling (DD) drilling at the McIntosh Project was supervised, and samples were collected by, geologists from APEX Geoscience Australia Pty Ltd (APEX), which is an independent geological consultancy.</li> <li>For DD samples, HQ core was logged and marked up and cut in half 1cm below the cut line by ALS (Perth). Samples were collected at one metre intervals down the hole.</li> <li>Samples from the drilling was sent to ALS laboratories (Perth), for sample preparation and analysis, with graphitic carbon determined by digesting the sample in a 50% HCl to evolve carbonate as CO<sub>2</sub>. Residue is filtered, washed, dried and then roasted at 425C. The roasted residue is analysed for carbon by oxidation, induction furnace and infrared spectroscopy (ALS code C-IR18) and total carbon and sulphur analysis by induction IR (ME-IR08).</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>The DD drilling was conducted by DDH1 of Canning Vale WA, using a Sandvik DE880 truck mounted drill rig. All diamond core was HQ in size.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Sample recovery and sample condition is recorded for all drilling.</li> <li>Sample recovery was excellent and core competent for all DD holes completed.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul> <li>The diamond holes had a quick log performed, noting the lithology and the visual graphite abundances. The DD hole's core was sent to Core Explore technologies in Bassendean WA for GeoCore X10 analysis which measures geotechnical features, lithology and density values.</li> <li>Comments on estimates of visual mineralisation: Graphite</li> </ul>

Criteria	JORC Code explanation	Commentary
	The total length and percentage of the relevant intersections logged.	mineralisation is visually estimated on a metre by metre basis and vary from weak, moderate to strongly mineralised, similar to how alteration is recorded. This estimate is used as a guide only due to the variable nature of mineralisation and actual mineralisation was determined using laboratory analytical techniques at a certified laboratory. The graphite occurs in bands concordant with foliation in the schist. Identification of the mineralisation is completed on site by APEX geologists.
	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>The HQ diamond core was cut into half at ALS core cutting facility in Perth. Half core was taken for sampling purposes and single pass crushed to 90% passing 3.1mm. The crushed material was then split 50:50. Half reserved for metallurgical purposes, and the other half then pulverised in preparation for C-IR18 analysis. GCM inserted blanks samples (1.4%) and duplicate samples (7%) at random into the diamond core sample stream to test lab repeatability and verify lab assay accuracy.</li> <li>The sample sizes and analysis size are considered appropriate to correctly represent the mineralisation based on the style of mineralisation, sampling methodology and assay value ranges for the commodities of interest.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>The diamond core was cut in half and 1m samples sent to the ALS laboratory (Perth) for crushing, splitting and pulverising prior to analysis via C-IR18 analytical method. Graphitic carbon was determined by digesting the sample in n 50% HCl to evolve carbonate as CO<sub>2</sub>. Residue is filtered, washed, dried and then roasted at 425C. The roasted residue is analysed for carbon by oxidation, induction furnace and infrared spectroscopy (ALS code C-IR18) and total sulphur analysis by induction IR (S-IR08). The other portion of the crushed core was transferred to ALS Metlabs (Perth) for the metallurgical testwork.</li> <li>The analytical methods and procedures are appropriate for this style of mineralisation.</li> <li>ALS inserts its own quality control standards and blanks at set frequencies and monitors the precision of the analyses. ALS performs repeat analyses at random intervals to test lab accuracy.</li> <li>Laboratory procedures are within industry standards and are appropriate for the commodity of interest.</li> <li>GCM inserted blanks and duplicate samples at random in the diamond core sample stream to test lab repeatability and verify lab assay accuracy.</li> </ul>

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Consultant geologists, from APEX Geoscience Australia Pty Ltd were involved in the logging of the Diamond drilling core, its logging, marking up, cut lines, metre markings. APEX was involved in the whole process including drill hole supervision, The entire chain of custody was supervised by APEX.</li> <li>The drill hole data was logged using MX Deposit software and imported into a database for long term storage and validation.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>DD drill hole locations are picked up using a handheld Garmin GPS, considered to be accurate to ± 5 m.</li> <li>Downhole surveys were completed at 30 m stations (and start and end of hole) using a downhole gyroscopic survey tool (AXIS). The holes were largely straight thus far.</li> <li>All coordinates are recorded in MGA Zone 52 datum GDA94. Topographic control is provided by the two previously completed VTEM surveys and handheld GPS elevations.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The drilling conforms with historical drilling lines and visibly mineralised surface mineralisation.</li> <li>The completed drill spacing in conjunction with the historic RC drilling is spaced close enough to confirm continuity of mineralisation and is sufficient to support the definition of a mineral resource, and the classifications applied under the 2012 JORC code.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>GCM23DD003 was drilled at 231° which is just off the optimal orientation of 258° that is perpendicular to mineralisation.</li> <li>This purpose of this sampling was to provide bulk composite samples for metallurgical testwork.</li> <li>The diamond core was cut in half and 1m samples sent to the ALS laboratory (Perth) for crushing, splitting. A portion was pulverized for assaying and the other portion of the crushed core was transferred to ALS Metlabs (Perth) for the metallurgical testwork as described in the body of this report.</li> <li>This rest of this section is not relevant.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>The sample security consisted of the diamond core trays, strapped on pallets and loaded for transport directly from site via Bruce Avery Transport. Bruce Avery Transport then delivers the samples to the laboratory. The chain of custody for samples from collection to delivery at the laboratory is handled by APEX Geoscience Australia personnel.</li> <li>The sample submission forms were sent by email to the lab, where the sample counts and numbers will be checked by laboratory staff.</li> </ul>

Criteria	JORC Code explanation	Commentary
Audits reviews	or • The results of any audits or reviews of sampling techniques and dat	<ul> <li>No formal audits or reviews have been performed on the project, to date.</li> </ul>

### Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>These tenements are held by McIntosh Resources Pty Ltd who is a wholly owned subsidiary of Hexagon Energy Materials Limited (HXG).</li> <li>Green Critical Minerals Ltd (GCM) has the right to earn up to an 80% interest in McIntosh from Hexagon Energy Materials Limited (HXG)</li> <li>HXG entered into a joint venture arrangement with Mineral Resources Ltd (MRL) who are the managers of exploration on the project.</li> <li>There are no known impediments.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>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 Thunderlarra Resources Ltd over the last 20 years.</li> </ul>
Geology	Deposit type, geological setting and style of mineralization.	<ul> <li>The McIntosh Project graphite schist horizons occur in the high grade metamorphic terrain of the Halls Creek Mobile Zone of Western Australia.</li> <li>The host stratigraphy is the Tickalara Metamorphics which extend for approximately 130 km along the western side of the major Halls Creek Fault.</li> <li>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.</li> <li>Hexagon has identified graphite schist horizons and accompanying aerial EM anomalies over a strike length in excess of 15 km within the granted tenements, with potential for another 35 km strike length of</li> </ul>

Criteria	JORC Code explanation	Commentary
		graphite schist in EL applications. The McIntosh target areas contain graphite and include seven (7) identified exploration target areas – Mackerel, Cobia, Wahoo, Barracuda, Emperor, Rockcod and Trevally.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>GCM23DD003 was drilled at 231° which is just off the optimal orientation of 258° that is perpendicular to mineralisation.</li> <li>This purpose of this sampling was to provide bulk composite samples for metallurgical testwork.</li> <li>The diamond core was cut in half and 1m samples sent to the ALS laboratory (Perth) for crushing, splitting. A portion was pulverized for assaying and the other portion of the crushed core was transferred to ALS Metlabs (Perth) for the metallurgical testwork as described in the body of this report.</li> <li>This rest of this section is not relevant.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	The results being reported are for a metallurgical test, not drilling results. This section is not appropriate or material.
Relationship between mineralization widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>The results being reported are for a metallurgical test, not drilling results. This section is not appropriate or material.</li> </ul>
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	<ul> <li>An appropriate previously released section has been included in this report showing the Green Critical Minerals (GCM) diamond core GCM23DD003 alongside historical Hexagon and recent GCM drilling.</li> <li>Complete the metallurgical testwork on the half core of hole GCM23D003 from which two composites representing the upper or known Emperor resource (128m to 204m downhole) and the lower 'new' discovery or extension below it (204m to 388m). This study is to determine the flake size, purity etc.</li> <li>The cross-section of the hole and location of the two composited samples being reported on as above is included in the body of the</li> </ul>

Criteria	JORC Code explanation	Commentary
		report.
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul> <li>The results being reported are for a metallurgical test, not drilling results. This section is not appropriate or material.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	The results being reported are for a metallurgical test, not drilling results. This section is not appropriate or material.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	This is a preliminary report of metallurgical testwork in progress. The testwork will continue.