PRELIMINARY METALLURGICAL TEST WORK MCINTOSH GRAPHITE PROJECT

Green Critical Minerals Ltd ("**GCM**" or "**the Company**") which holds the earn-in rights for up to 80% of the McIntosh Graphite Project located in Western Australia (see announcement on 15 June 2022), wishes to provide an update on preliminary Metallurgical test work results from the Emperor Deposit.

A 250Kg composite sample was taken from two historical core holes at the Emperor Deposit (Figure 1) provided by the previous owners and sent to SGS Lakefield (**SGS**) to perform the Company's own metallurgical test work studies. Preliminary results from this first set of test work indicate that the flake size distribution used in the 2017 PFS (and announced by the previous owners of the Project on 31 May 2017) is different to the sample material sent by GCM to SGS. Screen Size Analysis of the cleaner concentrate has not at this stage indicated the same flake size distribution as previously reported in past studies (Table1).

The SGS flotation test work received to date is preliminary and still ongoing. Out of an abundance of caution, and in-light of the Company's proposed issue of securities from the recently announced Placement (refer to ASX release 2 August 2023), the Company has decided to release an update on the preliminary results received to date.

At this stage, SGS has only performed a single polishing stage followed by three stages of cleaner flotation to achieve approximately 51% C(t) concentrate grade. Test work will progress with the upgrading process using additional polishing and cleaner stages to achieve >95% C(t) final concentrate grade.

Once the next stage of testing is complete by SGS, GCM will follow up with further Metallurgical test work based on its own core samples from its recently completed 2023 drilling campaign to more accurately test and better understand flake size distribution across the Emperor Deposit. These recently acquired samples from the 2023 drilling will better test for variability of flake size across the deposit including the higher-grade eastern limb which potentially has a different flake size distribution again.

The Company will update the market once it receives the completed final test work results and the progress of the new test work that is to be conducted on its own drill core samples.

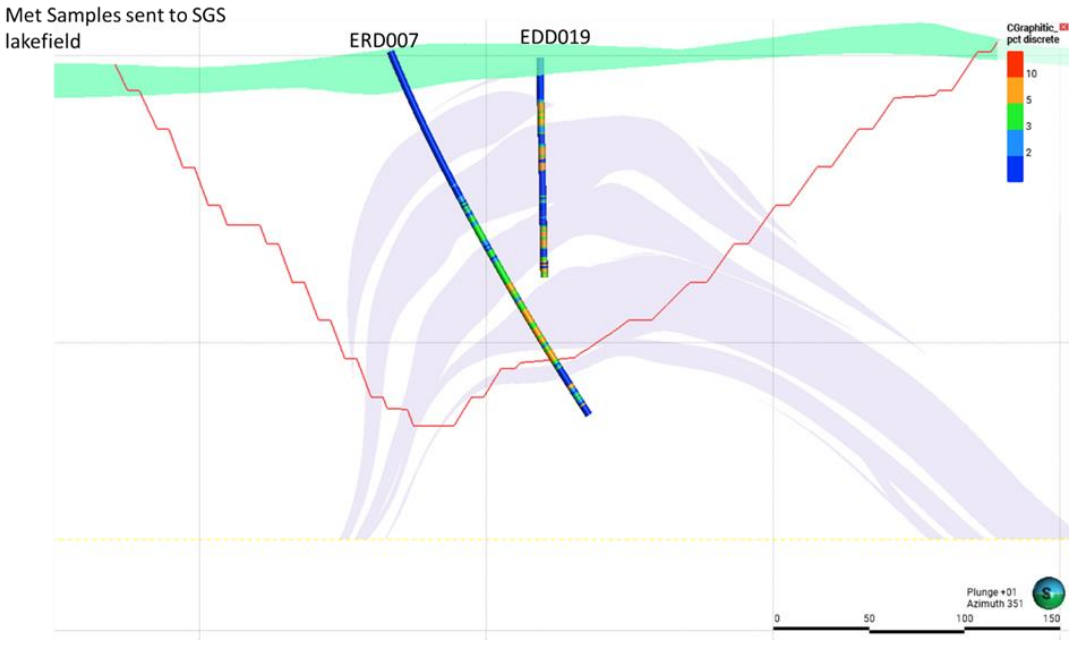

Figure 1 Long Section Hole Location of ERD007 and EDD019

Test Work Update

- Composite samples were prepared using a method designed to preserve coarse flake including careful stage crushing to minimize the generation of fines.
- Flash and rougher flotation tests were conducted at feed sizes of P_{100} = 3.35 mm to P_{80} = 239 µm
- Carbon recovery in the flash/rougher flotation concentrate was high at approx. 99% with low tailings grade.
- A flash flotation at P100 = 3.35 mm followed by a regrind of the flash flotation tailings to P80 = 239 micron were used for cleaner flotation tests and the cleaner concentrate grade was relatively low (circa 51%). The flowsheet that was employed in these tests is presented in Figure 2.
- The 3rd cleaner concentrate represents an intermediate product and further regrind and cleaner flotation stages will be evaluated to achieve a final concentrate grading at least 95% C(t).

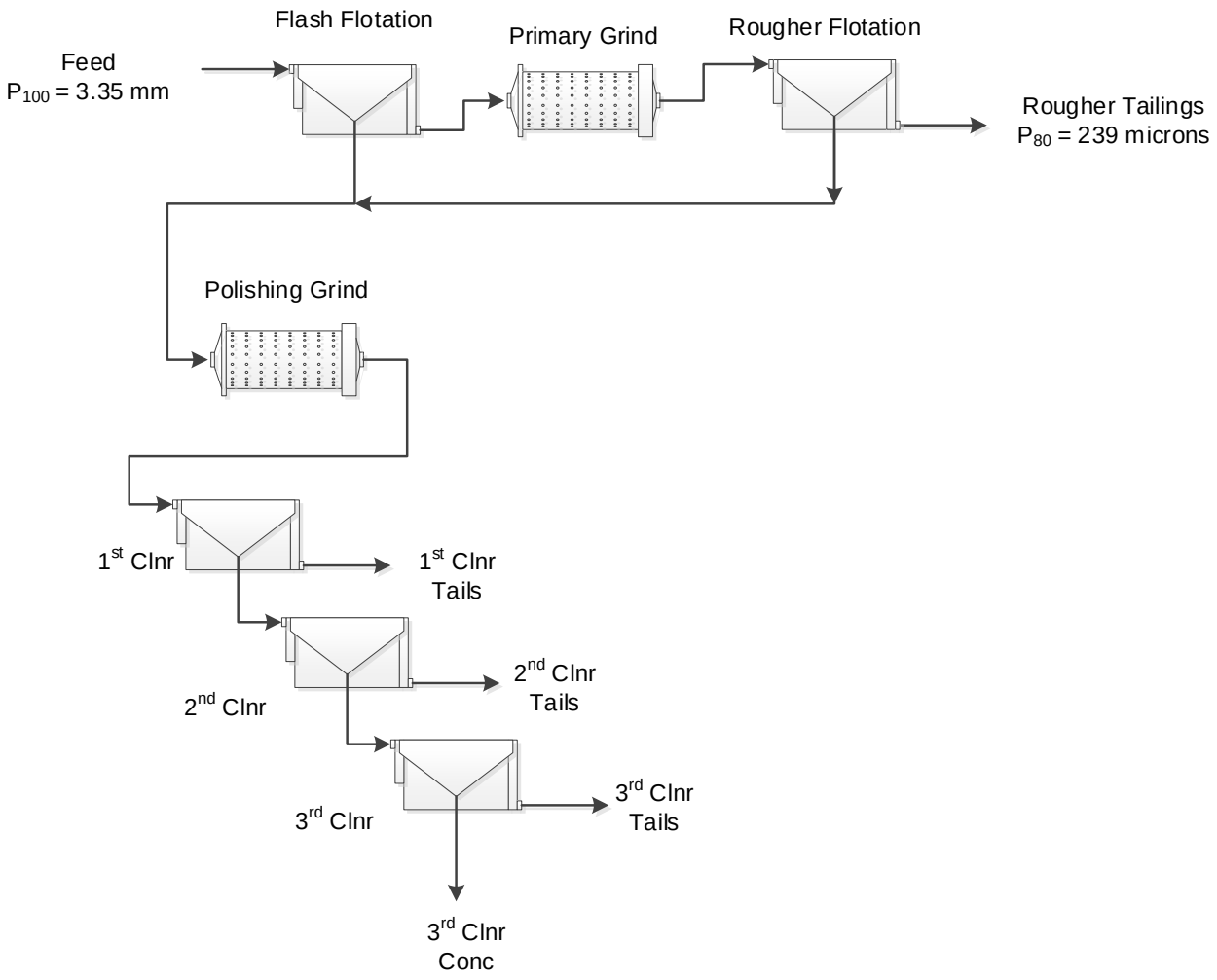

Figure 2: Flowsheet with Flash/Rougher and Primary Cleaning Circuit

Product Concentrate		Weight g	Weight %	Assays % C(t)	Distribution % C(t)
+48 mesh	+300 µm	0.3	0.3	21.2	0.1
+80 mesh	+180 µm	3.6	3.3	31.8	2.0
+100 mesh	+150 µm	4.5	4.1	36.2	2.9
+325 mesh	+45 µm	66.2	61.0	49.7	58.4
-325 mesh	-45 µm	34.0	31.3	60.7	36.6
Total Concentrate		108.6	100.0	51.9	100.0

Table 1: Third Cleaner Concentrate Screen Size Analysis

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 mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. 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.

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 factor.

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	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralization that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralization types (eg submarine nodules) may warrant disclosure of detailed information.*	• HQ Diamond Drilling core remnants from historical drilling campaigns were removed from storage and sampled. • The core was inspected with respect to available assays and geological interpretation to select intervals that were sufficiently complete. Sampling was broad with minimal internal selectivity assumed. • Previous sampling campaigns had removed 1/4core. This work removed ½ core segments where ¾ core was still available. • Samples prevenance was recorded by interval and weights of sample recorded.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diametre, 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).*	• Circa 60mm diamond drill core was sampled.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• The metallurgy sampling campaign was conducted on core remnants which had already been cut and sampled. It is, therefore, unable to be assessed for core recovery.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• The core was logged historically and the detail and appropriateness was reviewed and considered fit for purpose. • The logging is qualitative in nature. Photography, and X-CRT scanning, was performed on all intervals selected for metallurgical sampling. • All relevant intersections (circa 120m) were logged,

Criteria	JORC Code explanation	Commentary
	• *The total length and percentage of the relevant intersections logged.*	photographed, and X-CRT scanned.
	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *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.*	• The core had previously been sawn in half. One of these halves had been sawn again into quarters. Previously, ¼ had been removed for assaying, with minor intervals having more than ¼ removed for other testwork. This current sampling removed the remaining piece of half core, where available, generally leaving ¼ core in the tray. Samples were composited downhole into plastic buckets at run lengths that filled a nominal 20kg bucket for shipping. At destination all material was crushed and resampled to form a single master composite • Only core was sampled • The sample sizes and quality are considered appropriate to correctly represent the mineralisation. • Multiple sub-splits were taken from the master composite to trial different processing paths, and reconciled head grades of the sub split agree within acceptable limits indicating the sampling and splitting was acceptable • The sample sizes are appropriate to the grain size of the graphite being sampled.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Preliminary assay results and procedures using in-house methods at a commercial laboratory are being reported. The techniques are considered total. Visual microscopic inspection confirmed the method findings. This is appropriate for the testwork and context being reported. • No 'geophysical tools' were used. • QAQC has not been analysed. GCM is relying on the ability of a recognised commercial laboratory in conducting its analysis competently.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Selection of the interval was proposed by independent consultants and accepted and reviewed by GCM staff prior to sampling. • Twinned holes have not been used. • The selected interval were entered into an excel sheet and weighed and marked off as composited. • No adjustment has been made to assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Collars were surveyed using Differential GPS. Downhole survey is a mixture of electronic multishot and north seeking gyro. This is fit-for-purpose for this metallurgical testwork. • MGA94 Zone 52 grid is used. • Lidar topography was used for collar validation. This is fit-for-purpose for this metallurgical testwork.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The metallurgical sample was taken from two drillholes 150m apart. • The data spacing and distribution is not in itself sufficient to support Mineral Resource or Ore Reserve estimates – however, no such estimate is being reported in this release. • The sampling was composited downhole into circa 20kg samples, and these samples were subsequently subsplit and the subsplits composited into a master composite.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• This purpose of this sampling is to provide bulk composite samples for metallurgical testwork. This section is not relevant.
Sample security	• *The measures taken to ensure sample security.*	• The sample was taken from material that had been held in long term storage across multiple project operators. It is difficult to rely on sample security under these circumstances. •
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• The results are of a preliminary nature. No formal audits or reviews have been performed on the results being reported.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *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.*	• These tenements are held by McIntosh Resources Pty Ltd who is a wholly owned subsidiary of Hexagon Energy Materials Limited (HXG). • Green Critical Minerals Ltd (GCM) has the right to earn up to an 80% interest in McIntosh from Hexagon Energy Materials Limited (HXG) • HXG entered into a joint venture arrangement with Mineral Resources Ltd (MRL) who are the managers of exploration on the project. • There are no known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The East Kimberley has been largely explored for base metals and diamonds with no active previous exploration for graphite. Graphite had been noted by Gemutz during regional mapping in the Mabel

Criteria	JORC Code explanation	Commentary
		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.
Geology	• *Deposit type, geological setting and style of mineralization.*	• The McIntosh Project graphite schist horizons occur in the high grade metamorphic terrain of the Halls Creek Mobile Zone of Western Australia. • The host stratigraphy is the Tickalara Metamorphics 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 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 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	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• EDD019: Easting = 389965Northing= 8052635 RL= 401Dip=89 Azimuth=116 Hole Length= 114.9 Sampled Interval =21m to 40m and 45m to 60m .
		• ERD007: Easting = 389907 Northing= 8052500 RL= 406Dip=67 Azimuth=79 Hole Length= 216.8 Sampled Interval =88m to185m .

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of*	• The results being reported are for a metallurgical test, not drilling results. This section is not appropriate or material.

Criteria	JORC Code explanation	Commentary
	such aggregations should be shown in detail. • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralization widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralization with respect to the drill hole 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 (eg 'down hole length, true width not known').*	• The results being reported are for a metallurgical test, not drilling results. This section is not appropriate or material.
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.*	• See section in body of report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• The results being reported are for a metallurgical test, not drilling results. This section is not appropriate or material.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• The results being reported are for a metallurgical test, not drilling results. This section is not appropriate or material.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• This is a preliminary report of testwork in progress. The testwork is continuing.