

FIRST DRILL PROGRAMME COMPLETED AT NORTH BARKLY PROJECT

HIGHLIGHTS

- 14 reconnaissance holes were drilled at widely separated locations.
- The total metres drilled was 955m, less than planned, due to difficult ground conditions.
- The main objective of testing the rare earth enrichments in weathered Mesozoic cover has been achieved.
- The drillholes also sampled the extensively base metal anomalous sediments at the base of the cover. This will help guide exploration of the interpreted large IOCG systems at depth and encountered in previous drilling by others.
- The initial assays are expected in mid to late September.

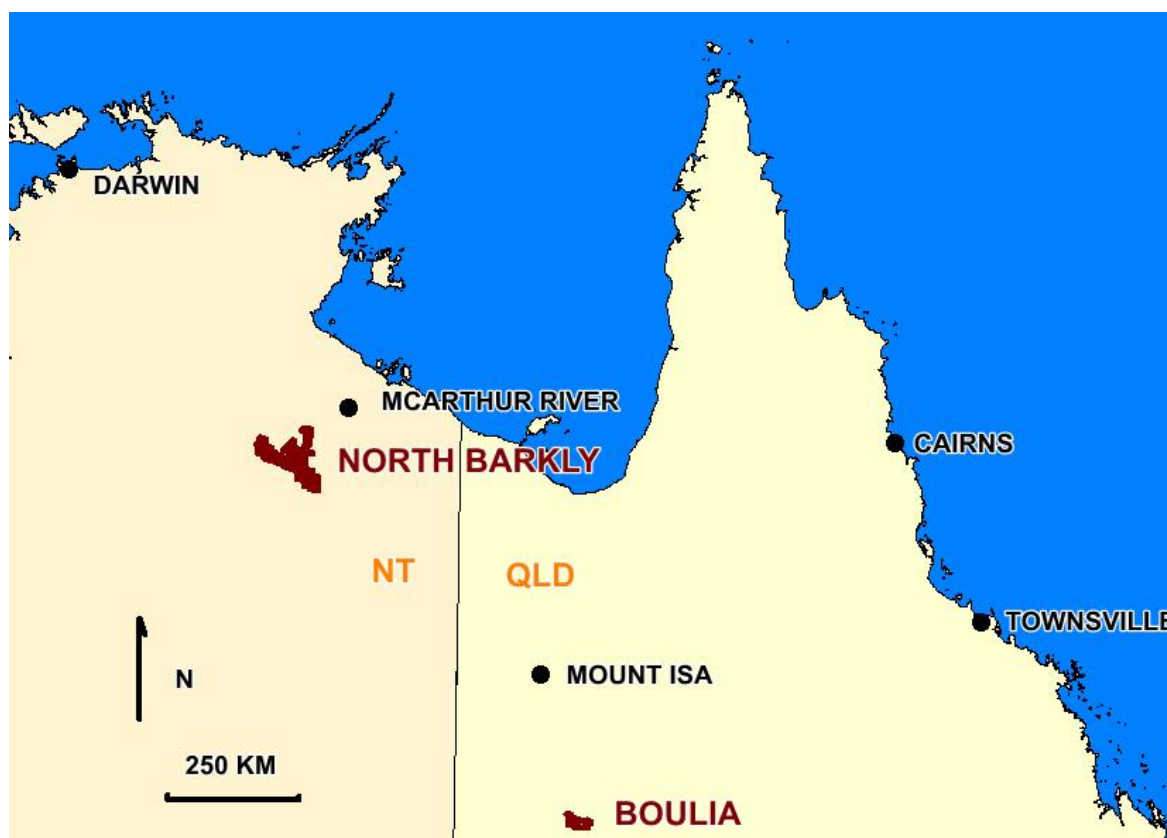


Figure 1 - Location of North Barkly Project

The proposed 15-hole reconnaissance drilling programme was stopped after 14 holes due to a breakdown which would have impacted costs, without achieving much additional benefit.

Drilling within the deeply weathered laterite and Mesozoic cover sequences was fast but difficult due to loose running sands and changes in drilling technique were made to accommodate this. The initial three holes were drilled by reverse circulation percussion, and the remainder by air core.

Most of the drillholes reached the base of the cover, and some recovered chips from the top of the underlying McArthur basin sequences. The aircore drilling technique could not penetrate the harder rocks below this depth (Figure 2).

The main objectives of testing rare earth enrichments in the upper cover and the widespread base metal anomalism in the base of the cover were achieved.

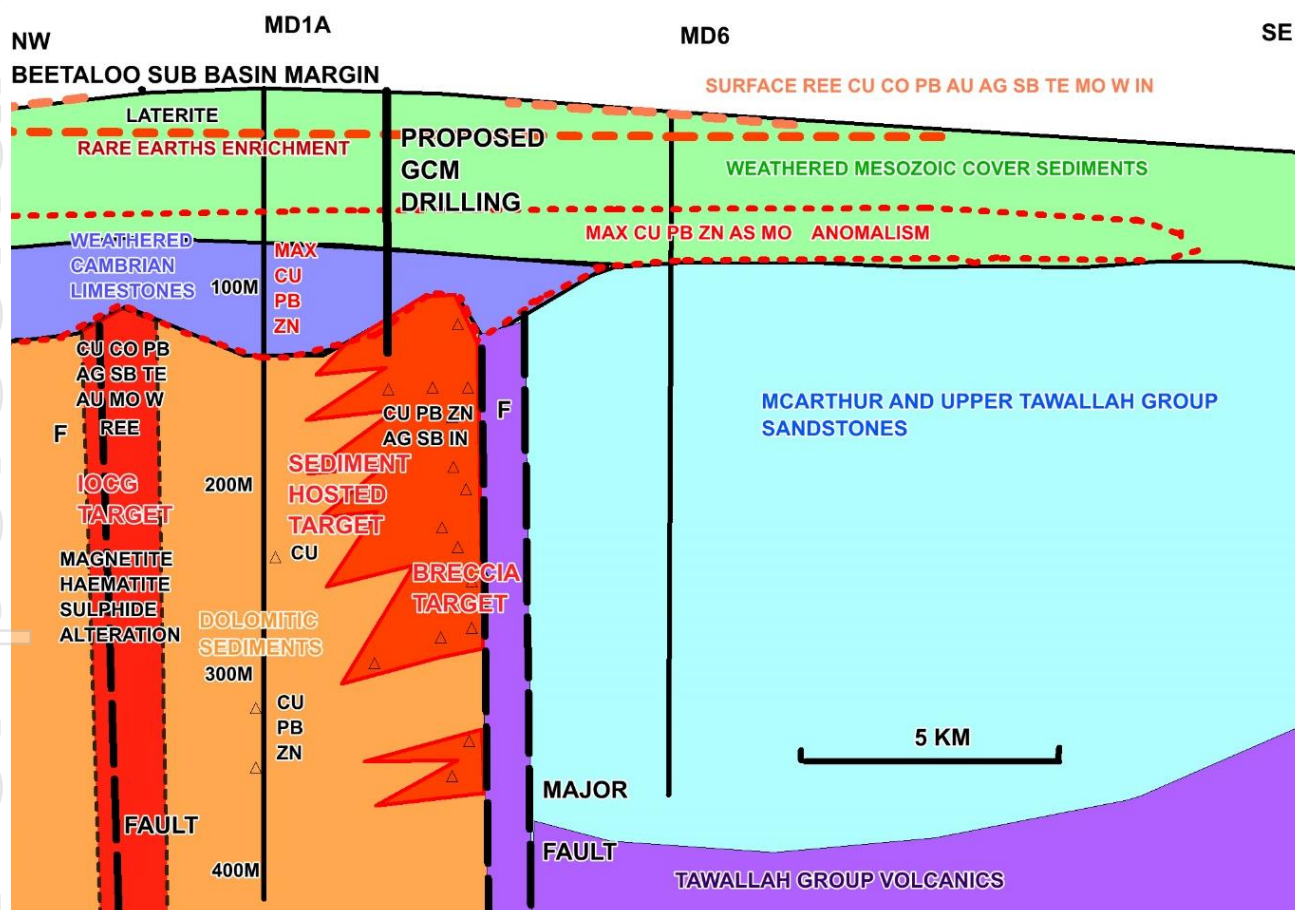


Figure 2 - Schematic Section – N Barkly Drilling (no definite Cambrian limestones were intersected).

Two traverses of drilling were conducted along existing tracks. A 25 km north south traverse along the boundary of EL 33128 and EL 33130, and a shorter 6 km traverse to the east with closer spaced drilling. The longer traverse is to provide an overall coverage of the main laterite plateau, including shallow magnetic bodies modelled by GCM (Figure 4). The shorter traverse (NBG003 – NBG008) was designed to provide more reliable interpretations of the geology and mineralisation.

The 120-metre deep weathering profile makes geological interpretations difficult, and it is anticipated that the multi-element analyses will assist in this respect.

The holes were sampled at 1 metre intervals, and these are held in secure storage at ALS Mt Isa until multi-element analysis is available on composited 4 metre sample. The assay results of these composite samples will determine further analysis of selected 1 metre samples.

The first results are expected mid-September. The potential remains for major mineralisation within interpreted and previously drilled IOCG systems under shallow cover. It is anticipated that the base metal analyses from the basal cover will provide useful targeting information.

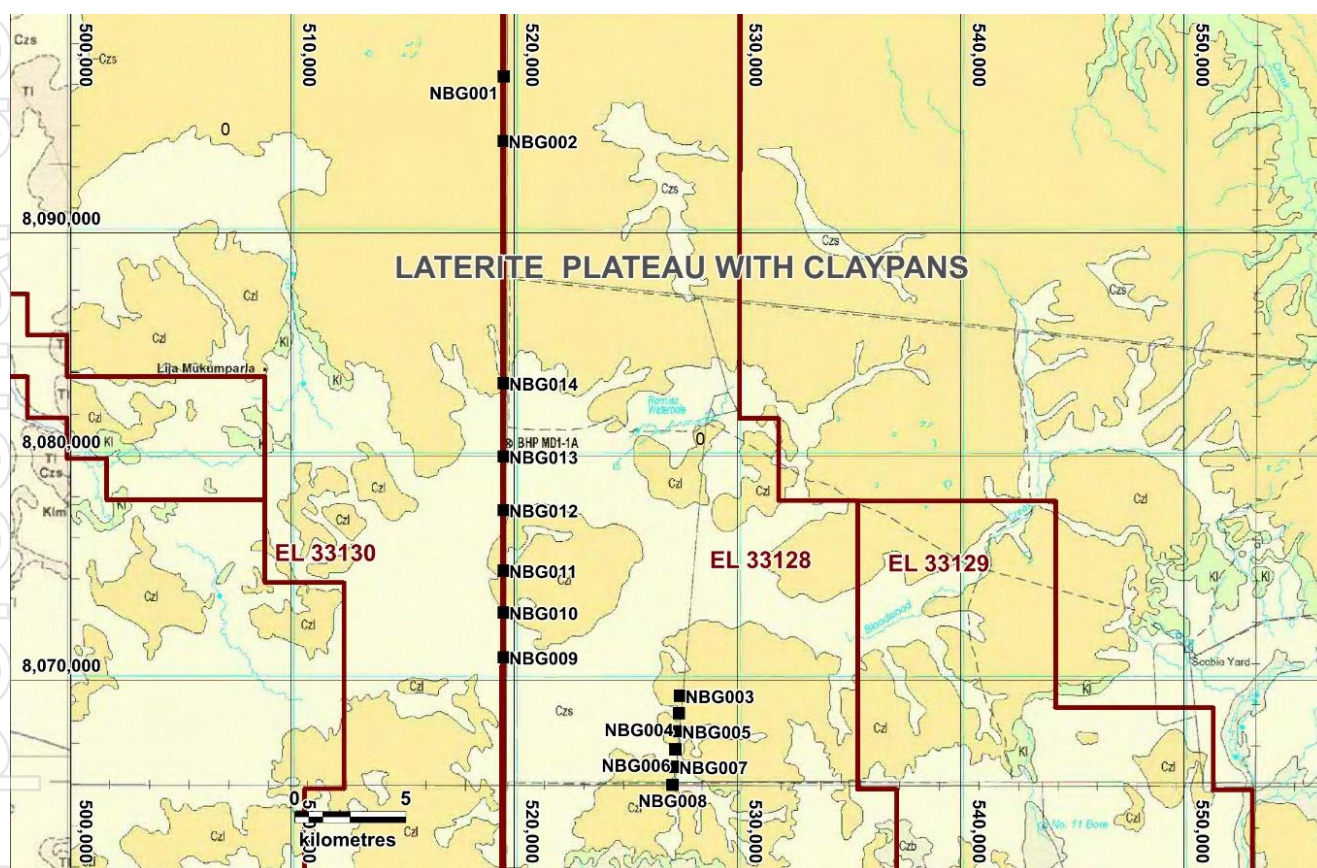


Figure 3 - Drill Locations on Geology (Wallhallow 250,000 Sheet)

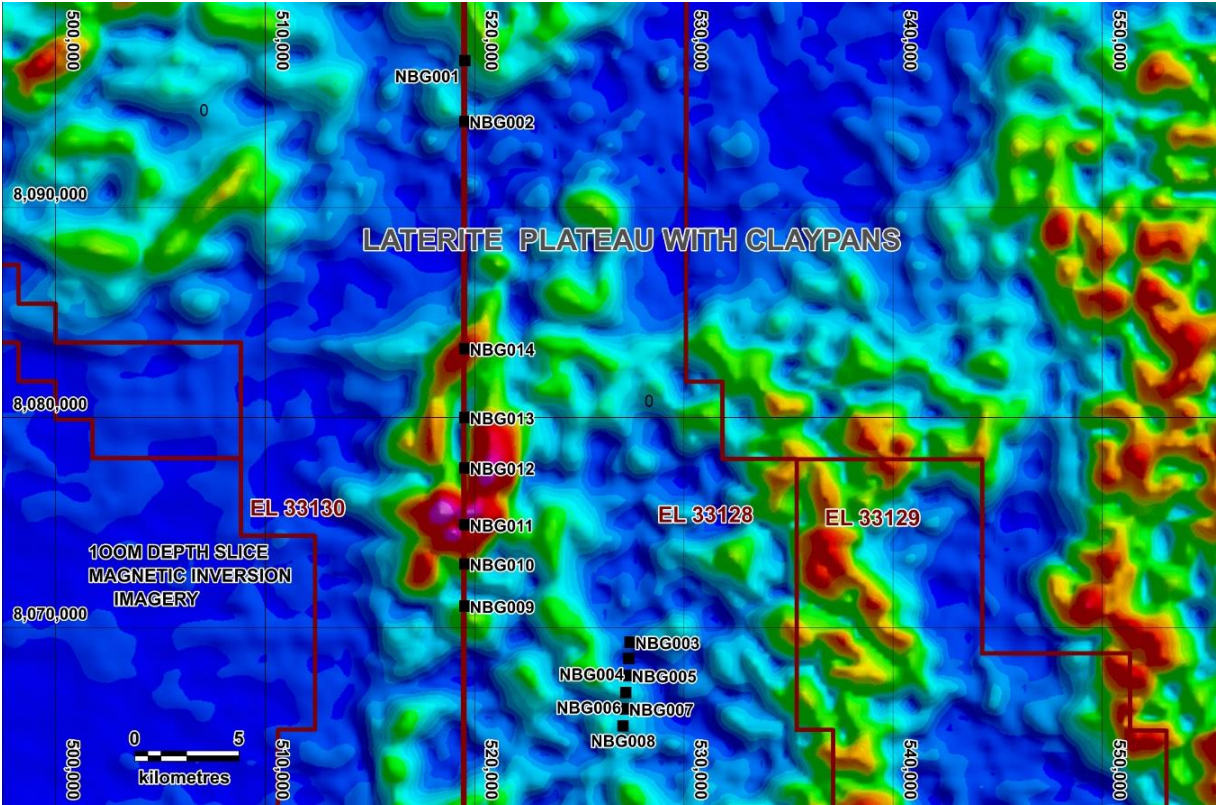


Figure 4 - Drill Locations on Magnetics (100m depth slice). Note the strong shallow response centred on drillhole NBG011



Figure 5 - North Barkly Drilling – Arriving at the drilling rig by Helicopter



Hole no	Pad no	East	North	RL	TD	Date	Hammer	Air Core
NBG001	MLG014	519525	8097010	253m	70m	2-3.8.23	Y	
NBG002	MLG015	519526	8094113	259m	85m	4.8.23	Y	
NBG003	MLG008	527433	8069295	266m	40m	7.8.23	y	
NBG004	MLG009	527372	8068511	267m	60m	8.8.23		Y
NBG005	MLG010	527297	8067711	262m	74m	8.8.23		Y
NBG006	MLG011	527230	8066900	264m	73m	9.8.23		Y
NBG007	MLG012	527161	8066104	266m	77m	9.8.23		Y
NBG008	MLG013	527098	8065312	268m	68m	10.8.23		Y
NBG009	MLG007	519544	8071005	263m	78m	10.8.23		Y
NBG010	MLG006	519550	8073005	265m	42m	11.8.23		Y
NBG011	MLG005	519544	8074885	268m	97m	12.8.23		Y
NBG012	MLG004	519541	8077611	272m	95m	13.8.23		Y
NBG013	MLG003	519542	8080011	269m	72m	13-14.8.23		Y
NBG014	MLG002	519542	8083293	278	24m	14.8.23		Y
Total					955m			

Table 1 – Drilling Details

Competent Person Statement

The information in this release that relates to exploration results is based on information compiled by Mr Neil Wilkins M.Sc. Exploration and Mining Geology, who is a Member of The Australian Institute of Geoscientists. Mr Wilkins is employed by Ascry Pty Ltd, which provides consultancy services to GCM. Mr Wilkins has previously worked in the North Barkly Project area and has more than five years' experience which is relevant to the styles of mineralisation and types of deposit mentioned in this report 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, Minerals Resources and Ore Reserves' (the JORC Code). This public report is issued with the prior written consent of the Competent Person as to the form and context in which it appears. Mr Wilkins holds shares in Green Critical Minerals Limited.



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 For exploration Target

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 style="list-style-type: none"> 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 mineralisation 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 mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> No final analyses announced. Samples are taken at 1m intervals by means of spearing the drill return sacks with a tube to produce 1m samples of 1 to 2kgs. Composite samples are taken by spearing 4 consecutive drill return sacks to produce 1 to 2 kg of composite samples representing 4m intervals. The composite samples are sent to ALS in Mount Isa for standard crushing and pulverising, followed by multi element ME-MS analyses in Perth. THE DRILLING IS NOT FOR RESOURCE ESTIMATION. It is to establish whether potentially economic levels of rare earths or other enrichments are present.
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> Reverse circulation and air core
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. 	<ul style="list-style-type: none"> 1m samples recovered in large number sacks, recoveries generally visibly good apart from an interval of running sands.
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. 	<ul style="list-style-type: none"> This is first pass exploration drilling not used for resource estimation. All chips are logged.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sampled by spearing with a tube. This is appropriate for non resource drilling. The rare earths are believed to be finely distributed, so no nugget effect is anticipated. Duplicate samples are being taken, and higher grade intervals will be re-assayed.
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. 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. 	<ul style="list-style-type: none"> All 4m composite samples are to be analysed for multi-elements by ME-MS-L-REE. High values will be reanalysed, and duplicates will be analysed.
Verification of sampling and assaying	<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 entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> No drilling results as yet.
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sites are recorded electronically and on paper by hand held GPS. Not resource drilling.
Data spacing	<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 	<ul style="list-style-type: none"> Not Resource drilling, and these exploration holes are too widely spaced to indicate a high degree of continuity

Criteria	JORC Code explanation	Commentary
and distribution	<ul style="list-style-type: none"> classifications applied. Whether sample compositing has been applied. 	
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. 	The enrichments are normally sub horizontal and the holes are vertical, so intercept widths are interpreted as close to true widths.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples are kept secure on site and driven directly to ALS by company personnel.
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"> No audits or reviews can be conducted until further drilling results are available.

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 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. 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. 	<ul style="list-style-type: none"> The announcement refers to 100% Green Critical Minerals Ltd (GCM) granted ELs 33128, 33129, and 33130, as well as EL applications 33229, 33230, 33467 and 33468. The applications mainly cover a mix of freehold leasehold and solely in the case of 33468 Aboriginal land. There are no known security issues with the tenure at this time, however EL application 33468 may involve protracted negotiations to secure tenure. The drilling is within EL33128, with the main traverse being close to the boundary with EL33130.

Criteria	JORC Code explanation	Commentary
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"> There has been airborne EM by BHP (1993) and also by Geoscience Australia (2018) – Tempest wide spaced survey – EM and drilling details are available for download by the public. CRs 1993-191, 1994-139, 1995-181, 1996-210. Geoscience Australia (GA) has conducted wide spaced geochemical sampling throughout the region, as part of the North Australian Geochemical Survey. Stream sediment sampling with gold anomalous results draining the project is reported on the public NT geochemical database – CR1995-0365, CR1984-0247. and CR1989-0751 CRA explored for diamonds and drilled RC collared corehole RK2 into the magnetic alteration bodies of interest and the logs are publicly available in CR1995-0520. The hole had haematite magnetite biotite chlorite silica pyrite alteration in sediments to the base of the hole. This is indicative of IOCG alteration as previously announced.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> An ionic clay hosted rare earths deposit within a Tertiary laterite weathering profile. At Depth - Iron Oxide Copper Gold (IOCG) deposits containing copper gold rare earths molybdenum and other elements in association with haematite or magnetite alteration and replacements. At Depth- Mt. Isa (McArthur) Style zoned Co Cu Pb Zn, associated with basin margin faulting.
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 drill holes: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No previous IOCG targeted drilling No previous rare earths drilling. Drilling by BHP in 1994 and as previously reported.
Data aggregation methods	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> No final drilling analyses available

Criteria	JORC Code explanation	Commentary
	<p>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.</p> <ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation 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'). 	<ul style="list-style-type: none"> Intercept widths are close to true. Vertical holes were drilled through what is normally a sub horizontal enrichment.
Diagrams	<ul style="list-style-type: none"> 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 style="list-style-type: none"> As shown in attached figures and tables
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> As shown.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<p>Geoscience Australia and NT Geological Survey public magnetic data has been modelled by Geodiscovery Geophysical consultants to produce imagery. The depth slice imagery displays the magnetism of rocks at varying depths. The geological interpretation is by Neil Wilkins M.Sc who has had several years of mineral and petroleum experience across the McArthur Basin.</p>
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The company plans to conduct further drilling. Future work may include either aircore, RC or diamond drilling.