



FLOW SHEET OPTIMISATION TEST WORK COMMENCED FOR THE McINTOSH GRAPHITE PROJECT

- Positive preliminary metallurgical test work performed in late 2023 with the test work results announced 21 November 2023, including:
 - Target purity of 95% C(t) may be achieved with fewer number of regrind stages or mills with lower energy requirements.
 - Purity targets of 95-98% C(t) achieved with high recoveries (>90%) for the ~30% <45 micron (-325 mesh) flake.
- The encouraging test work results from that preliminary test work program has identified various market and product opportunities for the McIntosh project which have previously not been considered.
- These results identify the potential to optimise the process flow sheet, thus reducing capital and operating costs.
- The present metallurgical test work program has commenced following analysis of the preliminary test work, with the objective to evaluate regrind optimisation opportunities within the process flow sheet.
- In parallel various development activities supplementary to this new metallurgical test work program have commenced.

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 continuation of the initial metallurgical optimisation test work program from late 2023. This test work program will be completed with graphitic ore 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.

Flow Sheet Optimisation Test Work

ALS Metallurgy Pty Ltd have been commissioned to conduct this process flow sheet optimisation test work, as a follow-on program from that reported on 21 November 2023. This program will use a blended composite ('**Blended Composite**') comprising both GCM Composite 1 and GCM Composite 2 (see announcement 21 November 2023). The test work program will use 2kg charges and consider various regrind options.

This test work program will be completed with preliminary results expected during the March quarter.



Next Steps Update

GCM reported in the 21 November 2023 announcement the various next steps it will be taking to progress the McIntosh project. GCM is pleased to advise numerous activities are underway, and the information and results from those commenced to be used to inform future activities.

The immediate focus for GCM is to further its understanding of the various market options and products available from the McIntosh project. GCM has therefore prioritised commencement of:

- This initial flow sheet optimisation test work program, with a specific focus on the regrind component.
- Commenced the marketing analysis to identify potential concentrate and downstream products and markets, including the lithium-ion battery market.
- Initiated the development of a metallurgical test work program to support design and marketing activities for concentrate and downstream products.
- Commenced activities to support a JORC mineral resource update.

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 Minerals 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.