

ASX Announcement

29 August 2023

# ADDENDUM TO ASX ANNOUNCEMENT OF 22 AUGUST 2023

Critical Minerals Group Limited (**ASX: CMG**, **Critical Minerals Group** or the **Company**) provides the attached JORC Table (Sections 1 and 2) intended to accompany the ASX announcement of 22 August 2023 titled "Encouraging metallurgy testing results for V2O5 and HPA received as Lindfield Project Scoping Study nears completion".

This announcement has been approved for release by the board of the Company.

## For more information:

Scott Winter
Chief Executive Officer
info@criticalmineralsgroup.com.au
(07) 5555 5055

# **Competent Person Statements**

The information in this announcement that relates to metallurgy and metallurgical test work is based on, and fairly represents, information compiled by Adrian Buck, a Competent Person, who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Adrian Buck is the Principal Geologist – Australia for John T Boyd Company. Adrian Buck has sufficient experience with the style of processing response and type of deposit under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves'. Adrian Buck consents to the inclusion of the matters based on their information in the form and context in which it appears.

The information in this announcement that relates to the exploration results, exploration targets and mineral resources for the Company's "Lindfield Project" was first reported by the Company in the Company's prospectus dated 25 May 2022 and ASX announcements dated 22 February 2023, 13 March 2023 and 16 May 2023.

The Company confirms that it is not aware of any new information or data that materially affects the exploration results, exploration targets and mineral resources, and that all material assumptions and technical parameters underpinning these continue to apply and have not materially changed.



Where the Company refers to exploration results or mineral resources in this announcement (referencing previous releases made to the ASX), it confirms that it is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the exploration results or mineral resources estimate in that announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not materially changed from the original announcement.

## **Forward-Looking Statement**

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements. Although the Company believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

# **About Critical Minerals Group Limited**

The Company is building its position in the vanadium market, holding a tenement in north-west Queensland near the town of Julia Creek which is its flagship project known as the "Lindfield Project". In addition, the Company holds a tenement for the "Whinmoor Project" and has applied for tenements for the "Lara Downs Project" and "Lindfield North Project" all within close proximity to the Lindfield Project. The Company further holds tenements for the "Figtree Creek Project" and "Lorena Surrounds Project", both exciting greenfield copper-gold projects near the Queensland town of Cloncurry that support the Company's focus on critical mineral opportunities.

The Company aims to develop and produce mineral deposits that will enhance the global energy transition that is currently underway. The rising standard of living of a growing global population is likely to continue to drive demand for critical minerals for years to come, particularly during the phase of decarbonisation and electrification. The world will need to find a way to meet this growing demand for such minerals, and the Company is well-positioned to meet this new economy mineral demand as the world turns towards a more renewable future.

## JORC CODE, EDITION 2012 - TABLE 1. CHECKLIST OF ASSESSMENT AND REPORTING CRITERIA

Criteria	Section 1 Sampling Techniques and Data  JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. 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 mineralisation 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 mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>November 2022 exploration samples have been taken from diamond core drilling only. Recovery of core is recorded in the drill hole lithological logs which are recorded by suitably qualified geologists present at the time of drilling.</li> <li>Geophysical logs were used to correct the recorded depths of Toolebuc Formation roof and floor intersections.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>November 2022 drilling has been either open hole, partly diamond cored or fully diamond cored.</li> <li>Surface soil and soft ground was cased with 6-inch PVC casing, typically to a depth of 6 m.</li> <li>Diamond core intervals were drilled by conventional drilling method, typically over 4.5 m length runs.</li> <li>Core size has been 4C (100 mm), to provide ample material for metallurgical test work.</li> <li>Holes were drilled vertically; verticality logs were runs to confirm deviation.</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>November 2022 drill chips and core were assessed, logged and photographed on site by suitably qualified geologists.</li> <li>Linear recovery was recorded for each core run, comparing length of core recovered versus drill depth</li> <li>Core recoveries were generally better than 95% however core recoveries approximately 75% have been recorded in some softer weathered mineralized zones.</li> <li>Core required for analysis was sampled at the core storage facility from core storage boxes, after longitudinal core cutting.</li> <li>There is no known relationship between sample recovery and the assay results received from the laboratory.</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> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>November 2022 core and chip samples have been logged in detail that supports estimation of mineral resources.</li> <li>Geological logging was completed to the CoalLog – Australian Coal Logging Standard, as developed by Australian Coal Association Research Program (ACARP) and adopted by Australasian Institute of Mining and Metallurgy (AusIMM). The logging system is well suited to stratified sedimentary deposits.</li> <li>Logging has been quantitative for recording depth.</li> <li>Geologist's visual interpretation of geological characteristics and grain size has been used to differentiate rock types.</li> <li>Qualitative records include percentages of lithologies where interbedded intervals have been encountered, degree of weathering and rock strength.</li> <li>A digital photographic record is maintained for drill core and chip samples.</li> <li>Geological logging data is stored in an Isis Vulcan database.</li> </ul>
Sub-sampling techniques and sample preparation	<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>November 2022 samples were taken across the entire Toolebuc Formation interval to characterise mineralisation for the complete formation. Roof and floor samples were also routinely taken for characterisation of dilution materials.</li> <li>Core required for laboratory analysis was sampled at the core storage facility from core storage boxes after longitudinal core cutting. Full sections (continuous and contiguous) of the quarter core diameter of each sample were taken.</li> <li>Core sample intervals were selected as either in smaller increments that represent ply boundaries or lithological units.</li> <li>Sample preparation was carried out by Mitra PTS Pty Ltd (Mitra) laboratories in Gladstone, using Australian Standards laboratory procedures. Mitra Gladstone is accredited by the National Association of Testing Authorities (NATA; NATA corporate accreditation No: 14525, corporate site No: 14569.</li> <li>Once the core boxes were received by Mitra, cores were longitudinal cut, then ¼ core sampled by laboratory technicians under direction by the Project geologist. Samples were weighted and entered into a sample tracking system. Samples were then dried and crushed to ensure that 70% of the sample is below 6 mm, then a 250 g split riffled off with the remained stored as reserve. The 250 g splits were then milled to 75 µm. Pulp samples were split for each of the different analytical methods, with the pulp reject retained and stored.</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>November 2022 samples were analysed by Bureau Veritas (BV), ALS (ALS) and Mitra.</li> <li>BV Adelaide completed inductively coupled plasma – optical emission spectroscopy (ICP-OES) and inductively coupled plasma – mass spectroscopy (ICP-MS) by analytical methods (MA100, MA101, MA102). Samples were digested and refluxed with a mixture of Acids, including: Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids.</li> <li>Each sample was duplicate tested by BV Adelaide by ICP-OES and ICP-MS by analytical methods (LB100, LB101, LB102). An aliquot of sample is accurately weighed and fused with lithium metaboral at high temperature in a Pt crucible. The fused glass is then digested in nitric acid.</li> <li>Mitra Gladstone completed moisture and density testing by analytical methods (AS1038.1, AS1038.3, AS1038.17, AS1038-12.1.1).</li> <li>External laboratory checks were completed with a 10% subset of samples duplicate tested by ALS</li> </ul>

• External laboratory checks were completed with a 10% subset of samples duplicate tested by ALS Brisbane by ICP-OES and ICP-MS by analytical methods (ME-MS41, ME-MS81).

## TABLE 1 - Continued

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
		<ul> <li>The quality of exploration assay results has been monitored by duplicate testing by a second analytical methods and duplicate testing by second laboratory.</li> <li>Blank and Certified Reference Materials (CRMs) have been included in sample batches to monitor accuracy.</li> <li>Downhole geophysical logging was completed by Weatherford with service and equipment to the American Petroleum Institute (API) standards Q1 and 14A, and logs recorded to international Logging Ascii Standards (LAS). The parameters surveyed are appropriate for use in conjunction with lithological data to determine Toolebuc Formation roof and floor locations.</li> </ul>
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>There are strong visual indicators of the Projects mineralized interval observed in drill core, significant assays are visually verified against drill hole photographs.</li> <li>Where anomalous results are detected, it is standard practice for the laboratory to retest the sample.</li> <li>Twinned hole testing has been included in the exploration program.</li> <li>Adjustments were made to the reported assay data; where Lab reported vanadium results as element or ppm it was converted to oxide weight percent using standard practices.</li> <li>A correction factor was applied to the November 2022 LB101 assay results, to align to the November 2022 LA101 assay results. The correction factor was applied based on QAQC establishing LB101 were under reporting vanadium grades by approximately 7%, like due incomplete digestion of resistive minerals. Refer 2023 MRE section 11.4.</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>November 2022 drillhole collar survey was completed by Diverse Surveys Pty Ltd using Leica GS18 equipment.</li> <li>Collar locations are stored in grid datum GDA94 projected onto MGA94 zone 54.</li> <li>Holes were drilled vertical; verticality logs were runs to confirm deviation.</li> <li>The topography model was created from local survey points and 38m regional SRTM elevation dataset.</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>Within the current exploration area, historical drill hole spacing is between 1000 m to 2000 m. November 2022 drill holes were drilled to reduce the drill hole spacing to 1000 m.</li> <li>The drill hole spacing are considered appropriate for the confidence classification.</li> <li>November 2022 compositing of grade data was calculated by thickness weighted averages from individual sample results across ply and working section intervals.</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>Drill holes have been equally spaced across the deposit. This drilling pattern is considered appropriate due to the shallow dipping nature of the formation. The locations of the drill holes have been sited to achieve maximum understanding of the exploration area.</li> <li>The drill hole pattern to date is not expected to introduce any bias to the resource estimate.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Core samples are place into core trays, labelled, sealed and secured for transport by the Project geologists. Appropriate consignment notes are used in the process.</li> <li>Drill core samples are assigned unique sample identification numbers during sampling. Sample numbers, hole numbers, depth intervals and Project are written on the sample bags and a sample id tag is include within the bag. A "Sample Manifest" is recorded during sampling and provides the basis of the sample Chain of Custody. The full sample manifest is sent to the laboratory with sample shipments to make certain that all samples were received by the laboratory.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No audits or review of the sampling techniques and results from the November 2022 exploration program have been performed.</li> </ul>
(Criteria listed in the preced	ling section also apply to this section.)	
	Section 2 Reporting of Exploration Results	
Criteria  Mineral tenement and	JORC Code explanation	Commentary  The Lindfield tenure covers 205 km2
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>The Lindfield tenure covers 295 km2.</li> <li>The project is held under Exploration Permit for Minerals (EPM) 27872, by Vantech Minerals Pty Ltd, which is 100% owned by CMG.</li> <li>To the extent known the tenement is in good standing.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Exploration drilling for the project has been compiled from previous parties' exploration reports, including: Pacminex 1971, CSR 1974-1981, Fimiston 1999, Intermin 2005-2006, and Intermin-Xtract 2007. Details of previous drilling have been included in previous CMG announcements.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Lindfield Project's vanadium mineralisation is strata-bound in the Toolebuc Formation, which is a flat-lying, laterally continuous, limestone and siltstone layer. Primarily syngenetic enrichment is</li> </ul>

• 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:

Drill hole Information

flat-lying, laterally continuous, limestone and siltstone layer. Primarily syngenetic enrichment is considered as the source of anomalous levels of vanadium in the Toolebuc Formation. Secondary

 Appropriate summaries of drill hole statistics are provided in this report. Maps showing the location of the drill holes are presented throughout the 2023 MRE.

vanadium enrichment is interpreted to occur as the Toolebuc shales weather.

were made from drill hole core samples from LIND006 and LIND007. Composite samples for the TLBA, TLBB and TLBD were 38.5 kg, 37.8 kg and 27.7 kg respectively. Each composite sample was crushed to 3 mm and split into 1 kg subsamples. Initial composite testing involved a rough reverse float, that was followed by a more complex rougher/cleaner/scavenger flotation test. Composite tests on the previously excluded low-grade TLBA limestone showed positive mass rejection and leach performance results, and achieved 1.5% V2O5 leach feed grades. Amenable beneficiation results for the TLBA

• Further work is recommended. Conceptual exploration program is included in 2023 MRE Chapter 17.

support considering the material in future MREs as a separate metallurgical domain.

### **TABLE 1** - Continued

Criteria	JORC Code explanation	Commentary
	<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>	<ul> <li>Intercepts of the V2O5 mineralised zone, based on a sample cut-off grade of 0.30% V2O5. Minor portions of plys less than 0.30% V2O5 (wt%) were included, on the basis of close association with higher grade intervals.</li> <li>Intercepts of the HPA mineralised zone, based on the V2O5 working section, as HPA represent a byproduct of the vanadium process flow sheet.</li> </ul>
	<ul> <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>The upper TLBA limestone portion of the deposit is typically below the 0.30% V2O5 cut-off grade, and was excluded from the June 2023 MRE. Subsequent metallurgical testing on the TLBA suggests it is readily amenable to processing and should be considered in future MREs as a separate metallurgical domain.</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>	<ul> <li>November 2022 sample results compositing was calculated by thickness weighted averages from individual samples across ply and working section intervals.</li> </ul>
Relationship between mineralisation widths and	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	<ul> <li>All drilling is vertical, intersecting the flat lying orebody at approximately 90 degrees, and is therefore assumed to unbiased due to orientation.</li> </ul>
intercept lengths	<ul> <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>All holes were intended to be drilled vertically. Verticality logs were runs to confirm deviation.</li> <li>The down hole deviation was assessed as negligible.</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.	Plans and tabulation of drill hole information have been included throughout the 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>Summaries of the drill hole data are provided in 2023 MRE Chapter 7 and 12</li> <li>Plans of the data set are provided in the report.</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>	<ul> <li>Regional and localized gravity and magnetic surveys have been completed over the project area. The Wilna Mines structural interpretations and GSQ regional magnetic structural interpretation has been incorporated into the geological model.</li> <li>Metallurgical composite tests have continued subsequent to the June 2023 MRE. Composite samples</li> </ul>

#### 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.