

13 October 2025

Mt Edon Rubidium – ECU testwork confirms high Rb extraction and optimisation pathway

Highlights

ECU hydrometallurgical test work achieved up to 89% rubidium extraction from a representative Mt Edon sample under roast–leach conditions

Variability and optimisation program to expand across multiple samples for representivity

Discussions planned with ECU regarding process economics and potential beneficiation to reduce feed volumes

ECU workbook and mass-balance data to inform next-phase locked-cycle and recovery tests

Overview

Morella Corporation Limited (ASX: 1MC) (“Morella” or “the Company”) is pleased to report that hydrometallurgical test work conducted by Edith Cowan University (ECU) has delivered strong initial results for rubidium extraction from the Mt Edon Project, Western Australia.

The study assessed different standard ore extraction routes. Testing confirmed that rubidium can be effectively leached under optimised roast–leach regimes using a salt blend, achieving extraction efficiencies approaching 90%.

Morella Managing Director James Brown said:

“These test results are an important validation of Mt Edon’s potential to deliver a technically robust and commercially relevant rubidium product. Achieving nearly 90% extraction under optimised roast–leach conditions provide a strong foundation for the next phase of process optimisation and economic assessment with ECU. We are encouraged by ECU’s results and will now move toward variability testing and scoping-level economic inputs to support the project’s advancement within Morella’s broader critical minerals portfolio.”

Mt Edon Project

The Mt Edon Project is located approximately 5 km southwest of Paynes Find in the Mid-West region of Western Australia. It comprises granted exploration licences (E59/2092, E59/2778 and E59/2055) covering highly fractionated rare-metal pegmatites within the southern portion of the Paynes Find Greenstone Belt, adjacent to the Everest Metals rubidium project. These pegmatites are enriched in rubidium and lithium, hosted primarily within microcline-dominant feldspar zones.

Mapping¹ and drilling² have confirmed multiple stacked pegmatite bodies up to 80 metres wide and

¹ Morella ASX Release – Lithium targets identified at Mt Edon project in Western Australia – 23 June 2022

² Morella ASX Release – Drilling at Mt Edon Reveals Rubidium Discoveries – 5 December 2024

extending more than 600 metres in strike. Assay results from previous drilling programs returned rubidium values up to 0.59 % Rb₂O in microcline-rich material.

Metallurgical test work completed by ECU has demonstrated that rubidium can be effectively extracted from this mineralisation under optimised roast-leach conditions, providing a strong technical basis for ongoing process development.

Mt Edon represents one of Australia's more advanced rubidium-focused exploration projects and forms a key part of Morella's strategic critical-minerals portfolio, complementing its broader lithium and battery-metal asset base.

Two of the Mt Edon Project's three tenements (E59/2092 and E59/2055) are held under a joint venture between Morella Corporation Limited (ASX:1MC) and Elevra Lithium Limited (ASX:ELV, formerly Sayona Mining Limited), with Morella holding a 51% interest in the pegmatite mineral rights. The material tested was sourced from E59/2092 held by the joint venture.

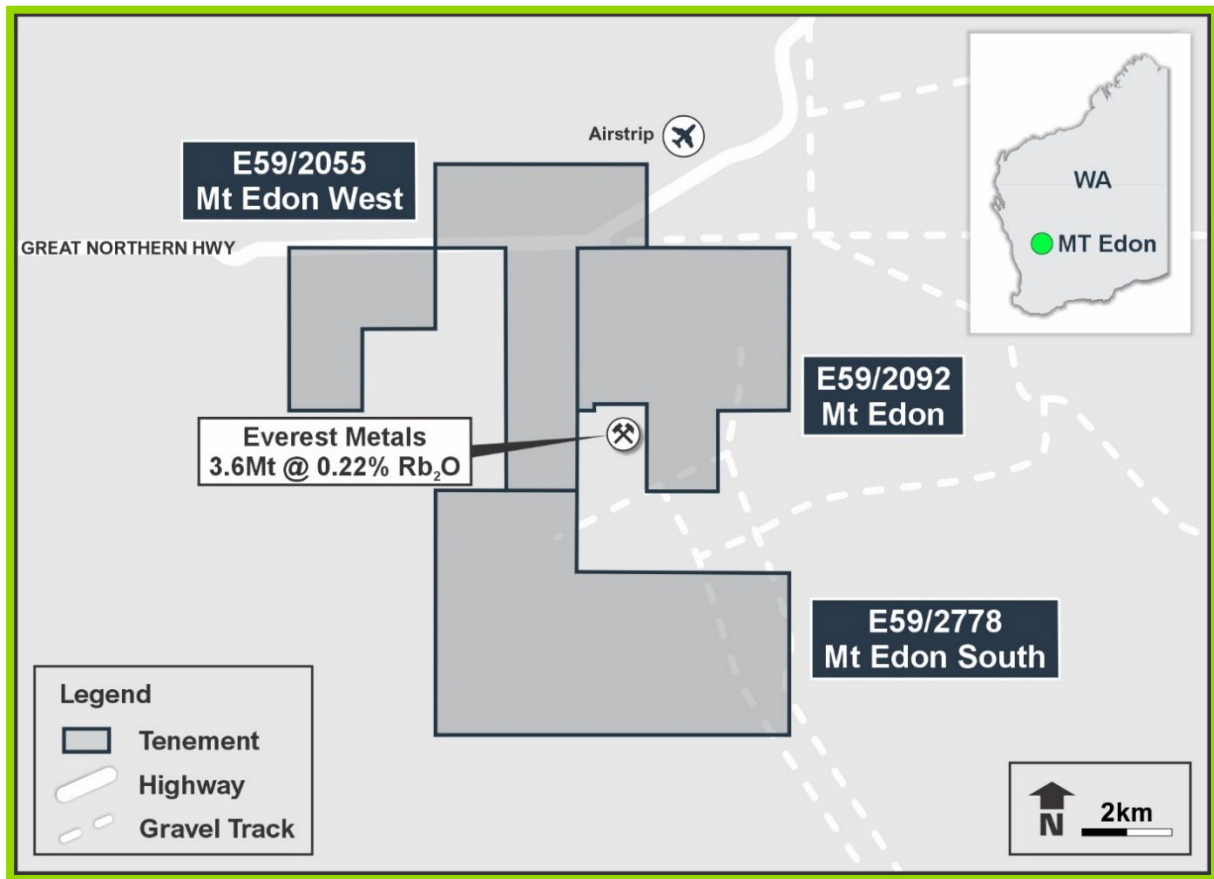


Figure 1: Mt Edon Project

ECU Test Work Summary

ECU tested multiple leach processes with variations in temperature and reagents with the best result achieving 89.3%Rb and 92.6%K extraction.

The results indicate a strong correlation between feldspar composition, crystallinity and extraction efficiency, indicating that Mt Edon's rubidium is largely hosted in microcline rather than mica phases such as lepidolite. This relationship will guide the next stage of sampling and test design.

ECU's program also demonstrated that reagent optimisation and process temperature adjustments can materially improve efficiency while reducing reagent costs. Further testing will explore reagent ratios, residence time, and pre-concentration options to refine overall process economics.

Independent technical feedback described the program as a strong first step that has established a technically viable route to Rb extraction, warranting further optimisation and representivity work.

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Next Stage – Optimisation and Representivity

Building on the strong initial extraction results, Morella and ECU will now advance a structured optimisation and variability program designed to translate laboratory success into scalable process parameters.

The next phase of work will include:

- Variability and representivity testing across multiple Mt Edon pegmatite zones to confirm consistency of extraction performance and assess mineralogical influences on recovery.
- Locked-cycle optimisation tests to evaluate process stability, reagent consumption, and recovery repeatability under continuous operating conditions.
- Downstream recovery trials aimed at producing rubidium-rich intermediate products through different extraction methods.
- Assessment of beneficiation and upgrading options (e.g., optical or density separation) to reduce ore feed volumes and improve processing efficiency.
- Scoping-level economic assessment, incorporating mass-balance data, reagent costs, and indicative operating parameters, to determine potential processing pathways and capital intensity.

This next phase will also involve close collaboration with ECU's process engineering team to align the emerging metallurgical model with scale-up requirements and downstream market specifications.

About rubidium

Rubidium (Rb) is a rare alkali metal that typically occurs in association with lithium and caesium-bearing pegmatites. It is primarily used in specialty glass, electronics, atomic clocks, and medical imaging systems, with growing interest in its potential applications within emerging energy storage and defence technologies.

Global rubidium supply is extremely limited, with most production derived as a by-product from lepidolite and pollucite deposits. Due to its scarcity and strategic uses, rubidium is classified as a critical mineral in several jurisdictions, including the United States and the European Union.

Mt Edon's high-grade, microcline-hosted rubidium mineralisation positions Morella to participate in this developing critical-minerals market and to explore opportunities for downstream product development alongside its broader lithium portfolio.

Contact for further information

[Investors](#) | [Shareholders](#)

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This announcement has been authorised for release by the Board of Morella Corporation Limited.

About Morella Corporation Limited Morella (ASX:1MC) is an exploration and resource development company focused on advancing a portfolio of critical minerals across Tier 1 jurisdictions in Australia and the United States of America. With active exploration underway in lithium, rubidium, and now titanium, Morella is committed to securing raw materials essential for clean energy transition and high-value industrial applications.

Forward Looking Statements and Important Notice This announcement may contain some references to forecasts, estimates, assumptions and other forward-looking statements. Although Morella believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved where matter lay beyond the control of Morella and its Officers. Forward looking statements may be affected by a variety of variables and changes in underlying assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to differ materially from those expressed herein.

Competent Person's Statement The information in this report that relates to metallurgical test work and process development is based on information compiled by Mr Aaron Debono, who is a Member of the Australasian Institute of Mining and Metallurgy and a Principal Metallurgist with NeoMet Engineering Pty Ltd. Mr Debono has sufficient experience that is relevant to the style of mineralisation and type of processing under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves'. Mr Debono consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results is based on information compiled by Mr Henry Thomas, who is a Member of the Australasian Institute of Mining and Metallurgy and is the Exploration Manager employed by Morella Corporation. Mr Henry Thomas has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Mineral Resources'. Mr Henry Thomas consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

JORC CODE, 2012 EDITION – TABLE 1

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"> Metallurgical test work samples referred to this announcement were derived from a Reverse Circulation (RC) drilling program carried out in 2024 The metallurgical samples were collected from holes: MER019, MER021, MER028, MER030, and MER031. RC drill hole chip samples were collected in one-metre intervals from the beginning to the end of each hole. Each sample was split directly using a cone splitter into numbered calico bags.
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"> Not applicable as no drilling, drill sampling, or drill assaying conducted or reported.
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"> Not applicable as no drilling, drill sampling, or drill assaying conducted or reported.
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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Not applicable as no drilling, drill sampling, or drill assaying conducted or reported.
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"> All samples used for the metallurgical test work were selected from the RC one-metre bulk split from the 2024 drill program. Sample preparation followed standard protocols with industry best practice and appropriate for the analysis being undertaken. The size of the samples is considered appropriate.

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Criteria	JORC Code explanation	Commentary
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 sample test work was undertaken at ECU's Mineral Recovery Research Centre. Assays were carried out using ICP-MS, ICP-OES and XRD (PAN analytical) for mineralogical studies. Scanning Electron Microscopy (SEM) combined with Energy-Dispersive X-ray Spectroscopy (EDS) was used to characterise the sample. ALS-laboratory, a certified laboratory in Perth, WA was utilised for assay validation using ICP-MS (ME-MS85 method). Assay procedures are considered appropriate, and QA/QC of assay data was monitored. The metallurgical testing and results are preliminary in nature. Standards are not considered relevant to the metallurgical test works. No geophysical tools or handheld instruments were utilised in the sample analysis.
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"> Not applicable as no drilling, drill sampling, or drill assaying conducted or reported. The analysis of samples was provided by the laboratory. QA/QC data were checked.
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"> Not applicable as no drilling, drill sampling, or drill assaying conducted or reported.
Data spacing and distribution	<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 classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Not applicable as results reported are of metallurgical test works, though they were selected with an attempt to be representative. No mineral compositing has been conducted.
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. 	<ul style="list-style-type: none"> Not applicable as results reported are of metallurgical test works, though they were selected with an attempt to be representative.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> All metallurgical samples were collected by Morella Corporation staff.

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Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> All samples were collected in sample bags with sample number identification on the bag. Industry standard sample security and storage procedures were undertaken.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> No audits or reviews of the data have been conducted at this stage.

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Section 2 Reporting of Exploration Results

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

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"> Two tenements E59/2092 and E59/2055 are jointly held by Morella Corporation and Sayona Mining with a JV agreement to Morella controlling 51% of the pegmatite mineral rights of the project. The third tenement E59/2778 is fully held by Morella Corporation. No Native Title Claim or National Parks fall within the tenement area Tenure is in good standing.
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"> Previous exploration conducted by several other parties including Jays Exploration, Hawkstone Minerals, Pancontinental, Haddington Exploration and Sayona Mining. This work comprised predominantly surface exploration techniques, geophysics, geochemistry, and mapping. Previous small-scale mining evident predominantly for feldspar in the eastern portion of E59/2092. Haddington International Resources conducted the only previous drilling program consisting of 14 drill hole targeting a single pegmatite as described.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Regional geology consists of partly foliated to strongly deformed and recrystallised granitoids intruding Archean ultramafics and felsic to mafic extrusives. Isolated belts of metamorphosed sediments are present with regional metamorphism attaining greenschist and amphibolite facies. Late pegmatite dykes intrude the mafic and felsic volcanics in a juxtaposed position to regional orientation.
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"> Not applicable as no drilling, drill sampling, or drill assaying conducted or reported.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. 	<ul style="list-style-type: none"> Not applicable as no drilling, drill sampling, or drill assaying conducted or reported. No metal equivalent values are used.

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Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. The assumptions used for any reporting of metal equivalent values should be clearly stated 	
Relationship between mineralisation widths and intercept length	<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"> Not applicable as no drilling, drill sampling, or drill assaying conducted or reported.
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"> Appropriate information has been included in this release.
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"> Balanced reporting has been completed.
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. 	<ul style="list-style-type: none"> The metallurgical testing and results are preliminary in nature. All meaningful data and information considered material and relevant has been reported. No additional exploration data to report.
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"> Metallurgical test work for extraction and purification of rubidium is continuing at ECU's Mineral Recovery Research Centre (MRRC) Further resource drilling is planned for the first quarter of CY 2026.

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