

24 JULY 2024

SUCCESSFUL RECOVERY OF RUBIDIUM FROM MT EDON CRITICAL MINERAL PROJECT

Highlights

- Edith Cowan University Mineral Recovery Research Centre (MRRC) complete phase 1 Mt Edon rubidium extraction test works
- MRRC laboratory results develop a technically viable direct rubidium extraction method and support for next step rubidium purification processing into final rubidium products
- Development of grant application commenced for scale up pilot plant processing
- Mt Edon maiden JORC Resource imminent
- Further infill drilling planned in Q4 2024

Everest Metals Corporation Ltd (ASX: EMC) (“EMC” or “the Company”) is pleased to announce the initial results of successful extraction of Rubidium from the Mt Edon mineralised material in a small-scale laboratory setting.

EMC’s Executive Chairman and CEO Mark Caruso commented:

“These initial results demonstrate technically viable high recovery 75±10% of Rubidium by Direct Extraction method. Next phase purification works are ongoing into final products. We thank MRRC for their excellent progress which was completed ahead of schedule. The laboratory test work underpins the commencement of an assessment of a variety of Global Critical Mineral processing grants available as development funding for next Phase Pilot Plant scale up.”

THE RESEARCH & DEVELOPMENT AGREEMENT

On 26 February 2024 Edith Cowan University (“ECU”) and EMC executed a Research Agreement (“Agreement”) for studies in relation to the Extraction of Rubidium from Mt Edon pegmatite¹. The research activities undertaken at ECU’s Mineral Recovery Research Centre (“MRRC”) were estimated to take place over a 10-12 month period.

The first stage of the collaboration between EMC and MRRC involved a small-scale laboratory demonstration of all the processing steps in the recovery of Rubidium. The Direct Rubidium Extraction (“DRE”) test work and studies utilised advanced processes such as ion exchange. The project focuses on extracting the Rubidium from Mt Edon ore using a Direct Rubidium Extraction technology. Due to the increasing need for sustainable and environmentally friendly extraction processes, these studies aim to develop a state-of-the-art extraction technique that maximise the recovery of Rubidium and mica. By selecting suitable Cations (a positively charged ion) and optimising operating conditions, the project aims to achieve maximum Rubidium extraction by utilising a cost effective and environmentally friendly method. This approach leverages cutting-edge technologies, innovative methodologies, and industry best practices to ensure a sustainable and profitable extraction process. The process encompasses purification and refining, ultimately leading to the conversion into a final product such as Rubidium salt, metal and potentially mica.

Under the Research agreement any intellectual property (“IP”) rights deriving from the project will be owned by EMC. As part of this study, critical assessment of the feasibility and potential enhancements of the Direct Rubidium Extraction method will be done. This will allow EMC and ECU to jointly apply for the Cooperative Research Centres Projects (“CRC-P”) Grants, Australian Research Council’s (“ARC”) Linkage Program, etc. to scale up the process technology.

The Company expenditure for this project will be eligible for Federal Government Research and Development (“R&D”) Tax Incentive.

Details of Test work

Two process methods of non-destructive and destructive were used to extract Rubidium and Lithium. Various test work was conducted by ECU’s MRRC with results demonstrating acceptable levels of both Rubidium and Lithium in the leach liquor. During process development, special attention is given to potential by-products and to industrial minerals such as quartz, mica and feldspar which may be recovered during mineral concentration, leaching and purification.

Associate Professor Amir Razmjou, the ECU team lead, stated, *“The Rubidium extraction process is progressing well ahead of plan, and we are excited to move toward purification of the Rubidium in the next step.”*

In the non-destructive method, the structure of muscovite remained unchanged. Two sets of acidic and non-acidic experiments were performed, and X-Ray diffraction analysis (XRD) was conducted on the samples before and after the tests to explore the structure of the solid powder. In non-acidic tests, low acid concentrations of the sample were prepared to enhance Rubidium extraction. In this stage of the project, multiple tests were performed and most of the experiments repeated two or more times. Inductively Coupled Plasma Mass Spectrometry (ICP-MS) was used for assay.

¹ ASX: EMC; [EMC To Advance Mt Edon Critical Mineral Project Through Rubidium And Industrial Mica Product Development](#), dated 27 February 2024

Five different chemical compounds were utilised in this set of tests. Some of these chemicals were used only during the non-acidic experiments. Since this set of experiments was conducted without acid, the impact of time of chemicals reacting with the sample and temperature were also investigated for the sake of optimisation.

During acidic tests, all chemical compounds were used with different concentrations of acids whilst maintaining a similar methodology. The effect of different concentrations of acid and various temperature ranges were examined in this stage. The results indicated that with the application of acid the maximum achievable Rubidium extraction is about 41%. Unwanted cations showed different behaviours while using different chemicals as their extraction depended on the presence of various ions within the solution. In most cases, lithium ions were extracted in a low quantity that is manageable.

In the destructive method, the muscovite structure was deteriorated to gain the maximum extraction of Rubidium. Different acid types and different concentrations of acids were utilised in this phase. Several tests were also conducted in this stage and repeatability of the results were checked to attempt to achieve the same results again. The maximum Rubidium extraction achieved in this stage demonstrates repeatability within a range of $75 \pm 10\%$.

Due to the different cations available in the muscovite structure, the colour of the leaching liquid could change based on the concentration of different cations available within the sample. Figure 1 shows some of these samples as a visual representative of different cations.

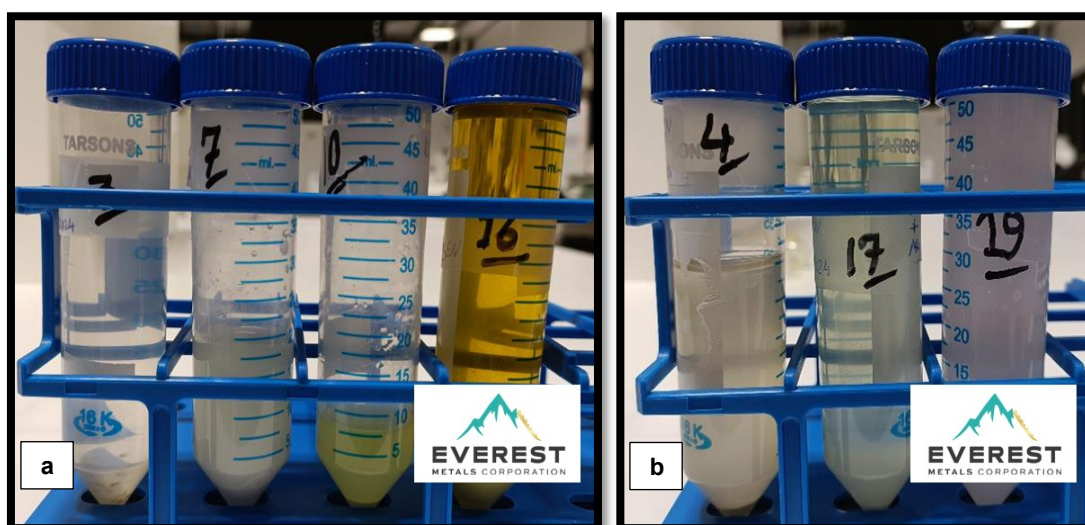


Figure 1: Effect of different tests on the colour of the solution, representative of different extraction levels, a) acid leaching, b) acid and salts mixture leaching

Next steps

Additional test work is currently underway. EMC anticipates reporting results from the various ongoing extraction and purification tests in the December 2024 quarter. The outcome of these tests will offer essential technical and performance data, facilitating a scoping study with a view to then constructing a pilot-scale plant.

The recent mineralogical studies indicated that muscovite (White Mica) can source the highest

average Rubidium contents within its structure, averaging 7,600 ppm Rubidium (0.67% Rb). The next highest average Rubidium contents are from K-feldspar with ~5,000ppm Rb². The Company is continuing geometallurgical testing and mineralogical studies to characterise the mineral assemblage of rubidium-bearing minerals at the Mt Edon pegmatite, alongside extraction metallurgical testing at ECU’s MRRC through the Direct Rubidium Extraction method.

Project Development

EMC has established a phased approach to advance the development of rubidium (Rb) production from its Mt Edon Critical Mineral Project. The Company expects to release a maiden JORC Mineral Resource at Mt Edon in August 2024. An environmental scoping study has been undertaken and fauna and flora baseline surveys planned EMC is planning environmental studies, including Flora and Fauna assessments, and is preparing the necessary documentation for the Mining Proposal. The Company aims to obtain all required approvals by the end of 2025.

	2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Resource Drilling		████████████████████						
Mineral Resource			████████████████████					
Rb Extraction testwork	██							
Off take negotiations/ agreements				██				
Environmental Studies			██					
Ore Reserve & Feasibility Study					██			
Mining Proposal						██		

Figure 2: Mt Edon Critical Mineral Project Milestone

ENDS

This Announcement has been authorised for market release by the Board of Everest Metals Corporation Ltd.

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² ASX: EMC announcement; [Mt Edon World Class Rubidium Critical Mineral Project - Update](#), dated 1 July 2024

Competent Person Statement

The information related in this announcement has been compiled and assessed under the supervision of Dr. Amir Razmjou, Associate Professor of Edith Cowan University. Dr. Razmjou is a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Dr. Razmjou is engaged as a consultant by Everest Metals Corporation Ltd. He has sufficient experience that is relevant to the information under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Dr. Razmjou consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this report related to geology of Mt Edon and exploration results is based on information compiled and approved for release by Mr Bahman Rashidi, who is a member of the Australasian Institute of Mining and Metallurgy (AusIMM) and a Registered Professional Geoscientist (RPGeo) in the field of Mineral Exploration and Industrial Minerals with the Australian Institute of Geoscientists (AIG). Mr Rashidi is chief geologist and a full-time employee of the Company. He is also a shareholder of Everest Metals Corporation. He has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activity, he is undertaking to qualify as a Competent Person in accordance with the JORC Code (2012). The information from Mr Rashidi was prepared under the JORC Code (2012). Mr Rashidi consents to the inclusion in this ASX release in the form and context in which it appears.

Forward Looking and Cautionary Statement

This report may contain forward-looking statements. Any forward-looking statements reflect management's current beliefs based on information currently available to management and are based on what management believes to be reasonable assumptions. It should be noted that a number of factors could cause actual results, or expectations to differ materially from the results expressed or implied in the forward-looking statements.

The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken based on interpretations or conclusions contained in this report will therefore carry an element of risk. This report contains forward-looking statements that involve several risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information.

Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this report. No obligation is assumed to update forward-looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

About Everest Metals Corporation

Everest Metals Corporation Ltd (EMC) is an ASX listed Western Australian resource company focused on discoveries of Gold, Silver, Base Metals and Critical Minerals in Tier-1 jurisdictions. The Company has high quality Precious Metal, Battery Metal, Critical Mineral Projects in Australia and the experienced management team with strong track record of success are dedicated to the mineral discoveries and advancement of these company's highly rated projects.

EMC's key projects include:

REVERE GOLD AND BASE METAL PROJECT: is located in a proven prolific gold producing region of Western Australia along an inferred extension of the Andy Well Greenstone Shear System with known gold occurrences and strong Coper/Gold potential at depth. (JV – EMC at 51% earning up to 100%)

MT EDON CRITICAL MINERAL PROJECT: is located in the Southern portion of the Paynes Find Greenstone Belt – area known to host swarms of Pegmatites and highly prospective for Critical Metals. The project sits on granted Mining Lease. (JV – EMC at 51% earning up to 100%)

MT DIMER TAIWAN GOLD PROJECT: is located around 125km north-east of Southern Cross, the Mt Dimer Gold & Silver Project comprises a mining lease, with historic production and known mineralisation, and adjacent exploration license.

ROVER PROJECT: is located in a Base Metals and Gold rich area of Western Australia' Goldfields, associated with Archean Greenstone belts.

For more information about the EMC's projects, please visit the Company website at:

www.everestmetals.au



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 testwork sample referred to this announcement were derived from Reverse Circulation (RC) drilling programs, drill chips. Multiple holes drilled to obtain the samples.
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"> RC drilling was completed using a face sampling hammer.
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. No drilling results 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.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • No sub-sampling techniques were applied. • Sample preparation followed by standard protocols. • The size of the samples is considered appropriate.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • All sample analyses and testwork were undertaken at ECU's Mineral Recovery Research Centre, using ICP-MS for assay and XRD for mineralogical studies. • Assay procedures are considered appropriate. • Acceptable levels of accuracy and precision have been established. No handheld methods are used for quantitative determination. • 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"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • No drilling intersections are being reported.
Location of data points	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • Grid system used is Australian Geodetic MGA Zone 50 - GDA94. • The locations of all drillholes were recorded using a Garmin handheld GPS and averaging for 90 seconds. Expected accuracy is $\pm 3m$ for easting and northing.
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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</i> 	<ul style="list-style-type: none"> • Not applicable. • No mineral compositing has been done

Criteria	JORC Code explanation	Commentary
	<p><i>classifications applied.</i></p> <ul style="list-style-type: none"> <i>Whether sample compositing has been applied.</i> 	
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i> 	<ul style="list-style-type: none"> Not applicable.
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> All geochemical samples were collected and logged by either EMC staff or the laboratory. Each sample was given a barcode at the laboratory and the laboratory reconciled the received sample list with physical samples.
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/reviews of the data have been undertaken at this stage.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section apply to this sections)

Criteria	Statement	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> The area is located within Mining Lease M59/714, about 6km southwest of Paynes Find in central Western Australia, covering 192.4 hectares. The tenement M59/714 held by Everest Metals Corporation (51%). EMC have a farm-in agreement to acquire up to 100% of the rights. M59/714 is valid until 26 October 2030. The tenement is in good standing and no known impediments exist.
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> Historical tantalum production has been recorded. Pancontinental Mining -1980's. Haddington Resources/Australian Tantalum -2002-2003. MRC Exploration: 2019-2021.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> Numerous pegmatites are found located within the southern portion of the Paynes Find greenstone belt, South Murchison. Regional geology consists of partly foliated to strongly deformed and recrystallised granitoids intruding Archean ultramafic and felsic to mafic extrusive. Isolated belts of metamorphosed sediments are present with

Criteria	Statement	Commentary
		<p>regional metamorphism attaining greenschist and amphibolite facies.</p> <ul style="list-style-type: none"> • Late pegmatite dykes/ sills intrude the mafic and felsic volcanics in a contrasted position to regional orientation. • The mining lease area has proven Lithium rich zones associated with the pegmatites, as well as historical mining for Tantalum (manganotantalite and alluvial deposits: 1969-1974 Mt Edon by Alfredo Pieri), beryl and microcline feldspar (Goodingnow pits, 1975-1978, Mark Calderwood). • The zonal nature of this pegmatite field has previously been defined with microcline feldspar (including amazonite) in the east (historically mined) and more complex albite rich zones containing Niobium and Lithium in the west (the current Mining Lease area). Lepidolite-Zinnwaldite (Lithium mica) rich pegmatites have been previously identified. • Recent studies highlighted present of economic Rubidium grade in well-developed mica rich zones of Mt Edon pegmatites.
Drill hole Information	<ul style="list-style-type: none"> • <i>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:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • All intercepts relating to the Mt Edon pegmatite have been included in public releases during each phase of exploration. • There are no further drill hole results that are considered material to the understanding of the exploration results.
Data aggregation methods	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • Not applicable. • No data aggregation was undertaken. • No metal equivalent values have been reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> 	<ul style="list-style-type: none"> • Not applicable.

Criteria	Statement	Commentary
	<ul style="list-style-type: none"> If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	
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"> Not relevant.
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"> This report provides the total information of all metallurgical tests available to date and is considered to represent a balanced report.
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.
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 is currently in a project optimisation phase with various work programs underway. Metallurgical work for extraction and purification of rubidium and lithium is continuing at ECU's Mineral Recovery Research Centre (MRRC). Work is underway to produce a mineral resource in accordance with JORC (2012).