

13 December 2021

## **Mavis Lake Lithium Project Update**

Critical Resources Limited (ASX:CRR) (“**Critical Resources**” or the “**Company**”), is pleased to provide an update on the Mavis Lake lithium project in Ontario, Canada (“**the Project**”).

### **Highlights**

- **Transaction nearing completion with Budgets prepared for the 2022 works program**
- **An aggressive ~5,000m exploration campaign planned at Mavis Lake to work towards defining a JORC compliant Resource**
- **Metallurgical test work planned in 2022 to test for battery grade  $\text{Li}_2\text{CO}_3$  of 99.5% purity**
- **Airborne survey completed and data under review to identify additional drill targets**
- **SRK Consulting (“SRK”) have completed a site visit and provided positive feedback on the Project**
- **Assays pending from core samples selected during SRK site visit**
- **Final approval from the Investment Review Branch of Canada (“IRB”) for acquisition pending**
- **All due diligence complete**
- **With the Lithium sector remaining strong and with significant investments currently being made the company is actively seeking value adding complimentary opportunities in the Canadian Lithium space**

The Company is pleased to provide an update on the Mavis Lake lithium project in Ontario, Canada. Signing of the binding terms sheet to acquire the Project was announced on 25 October 2021. The acquisition is now nearing completion and will be voted on at the upcoming General Meeting on Wednesday 15 December 2021.

Critical Resources Chief Executive Officer Alex Biggs said “We are excited to begin working on the Mavis Lake Project and are pleased to be nearing transaction completion. We are actively developing a work program that we feel will unlock real value at Mavis Lake. Work has already begun to define new drill targets following our recent airborne survey and we look forward to getting on the ground in 2022 to begin defining the value proposition of the Project.”

### Mavis Lake Project Description

The Mavis Lake Lithium Project is 19 kilometres east of the town of Dryden, Ontario. The Project is in close vicinity to the Trans-Canada highway and railway major transportation arteries linking larger cities such as Thunder Bay, Ontario, to the southeast and Winnipeg, Manitoba, to the west. The region boasts excellent infrastructure with hydro-power located a few kilometres to the south-west of the project. The region is a well-established lithium province with multiple projects located within the vicinity.

<sup>1,2</sup>Previous drill programs have yielded high-grade Li<sub>2</sub>O intercepts including 55.25m at 1.04% Li<sub>2</sub>O from 80.75m in drill hole MF18-53 and 26.30m at 1.70% Li<sub>2</sub>O from 111.9m inc. 7.70m at 2.97% Li<sub>2</sub>O from 130.5m in drill hole MF17-491, presenting significant exploration potential.

Project location and prospect location are shown in Figure 1 and Figure 2 respectively.

**Figure 1 – Mavis Lake project location**

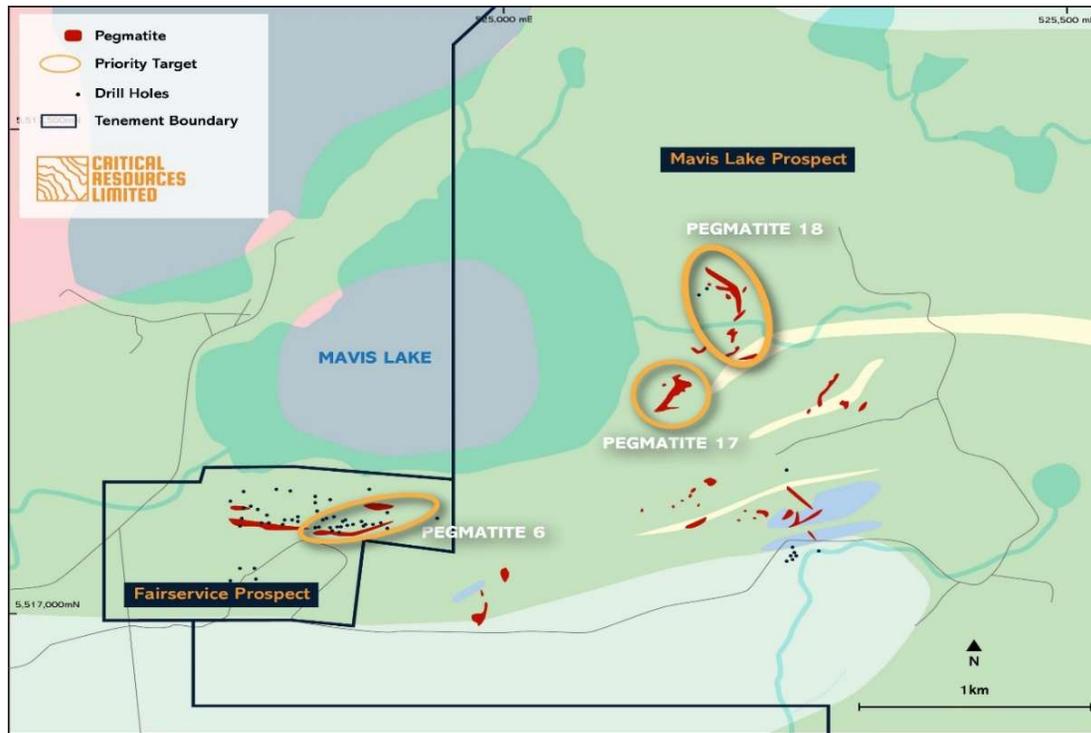


<sup>1</sup>The reported intersections reported are down hole measurements and are not necessarily true width.

### Critical Resources Announcement

<sup>2</sup>25 October 2021 – Canadian High Grade Lithium Asset Binding Terms Sheet Signed

**Figure 2: Location of Mavis Lake prospects**



**Figure 3: Mavis Lake-Fairservice outcrop traces and pegmatite surface projections interpretative map**

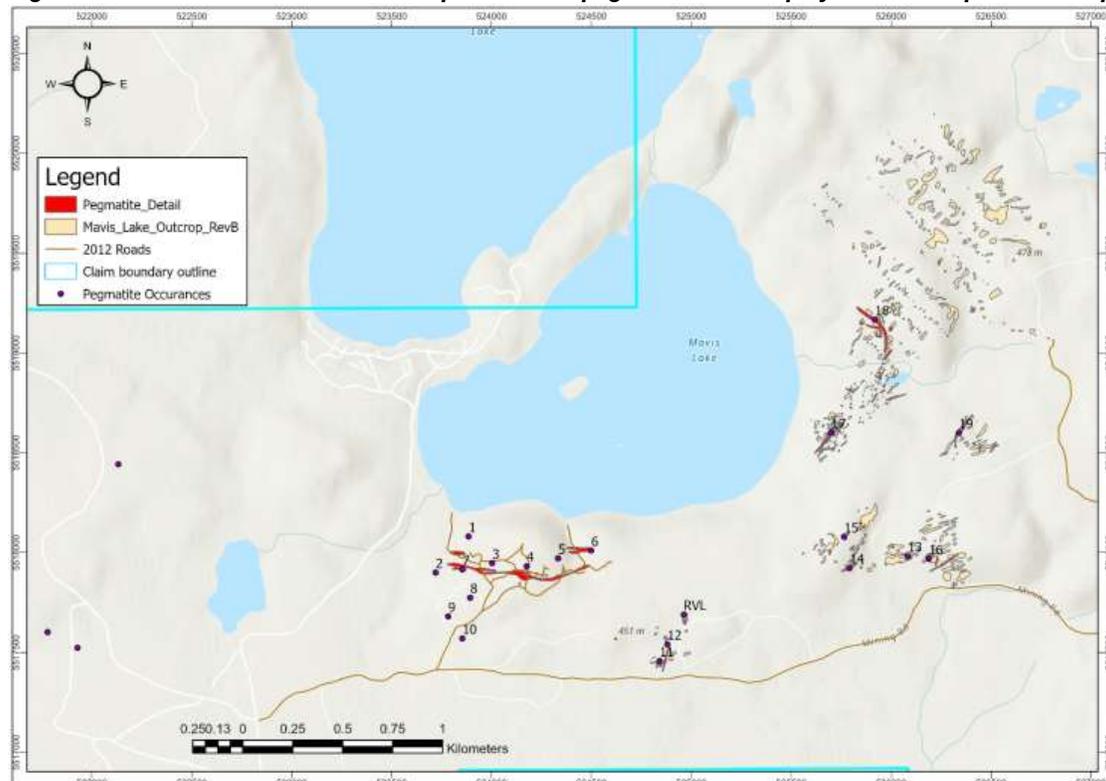


Figure 3 shows an interpretative map as prepared by SRK demonstrating pegmatite outcrops across the lease area.

Historical drilling has intercepted pegmatites in multiple areas at good intercepts and grades. Figure 4 shows an example of pegmatite intercepts from drill hole MF17-40 between 74.95-96.80m.

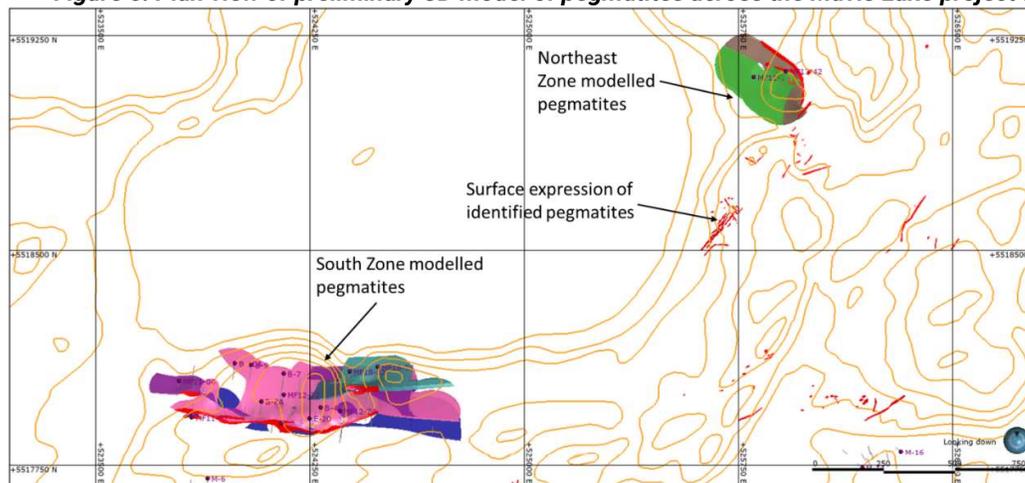
**Figure 4: An example of pegmatite intercepts from drill hole MF17-40 between 74.95-96.80m**



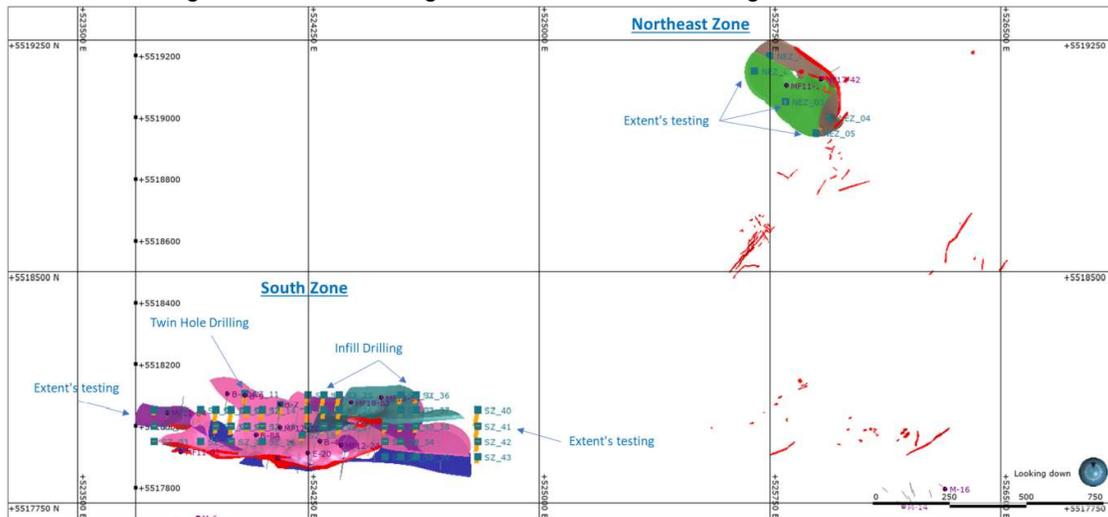
A preliminary 3-D model of the pegmatites at Mavis Lake has been completed by SRK as shown in Figure 5. This model has been used to develop an initial 5,000m drill program as shown in Figure 6.

SRK have indicated that there is potential for mineralised pegmatite intrusions that could be extracted economically.

**Figure 5: Plan view of preliminary 3D model of pegmatites across the Mavis Lake project area**



**Figure 6: SRK Consulting recommended 2022 drill targets at Mavis Lake**



### Forward Exploration Works

The Company plans an aggressive approach to exploration at Mavis Lake with a view to delineating a JORC compliant Resource. Planned activities are as laid out below.

#### *Interpretation of Airborne Survey Data*

Interpretation of the recently completed airborne survey will potentially allow identification of new targets and help define the strategy for the next drill program.

#### *Surface Mapping and Sampling*

Surface mapping and sampling of outcropping pegmatites will assist in identifying targets in collaboration with the airborne survey data. Further surface exploration of the lease outside of the known Fairservice and Pegmatite 18 prospects is expected to yield further target areas.

#### *Core Logging*

Core from previous drilling campaigns is stored locally close to the Mavis Lake site. It is planned that during the winter months core logging may prove appropriate to assist in gaining an understanding of orientation of the lithium bearing pegmatites as well as reviewing continuity of mineralisation to assist in development of a JORC compliant Resource model in the future.

Figure 7 shows core taken from drill hole MF18-53 including internal waste returning 55.25m at 1.04% Li<sub>2</sub>O from 82.75m.

**Figure 7: Drill hole MF18-53 including internal waste returning 55.25m at 1.04% Li<sub>2</sub>O from 82.75m**



#### *Metallurgical Testing – Battery Grade Concentrate Determination*

If appropriate mass of existing core is available then metallurgical test work is planned to test for battery grade Li<sub>2</sub>CO<sub>3</sub> of 99.5% purity. A review of existing core has been completed as part of the SRK site visit with selected samples taken for verification assaying. A future core logging and photographing program will be implemented on existing core samples which is stored near the Mavis Lake site.

#### *Exploration Strategies*

A number of strategies will be employed across the Project area including density sampling, gravity survey, ground magnetic surveys, surface mapping, structural data interpretation, lithological mapping and geochemical sampling.

#### *Drill Program Design*

Based on the activities outlined above a preliminary drill program of 5,000m or greater has been designed with drilling permits to be lodged as soon as possible. A secondary 5,000m drill program will be designed based on drilling results and data interpretation from the various exploration strategies that will be employed.

#### *Permitting*

Enquiries regarding permitting and approvals have already begun with a view to beginning drilling as soon as possible. There are no weather restrictions as to when drilling can begin, and it is the Company's intention to begin exploration diamond drilling as quickly as possible post transaction completion.

#### *Exploration Drilling and Resource Delineation*

The Company plans to complete diamond drilling across the Mavis Lake tenements, initially focused on the Fairservice and Pegmatite 18 prospects. As more targets are identified both across the tenements and at depth further drilling will be deployed. The strategy is to define a JORC compliant Resource which satisfies the milestones as agreed in the binding agreement of 5.0 million tonnes and 10.0 million tonnes.

#### **The Lithium Industry in Ontario – Tesla Battery Gear Manufacturing Plant Opens**

Tesla has recently announced the opening of a battery gear manufacturing plant in Markham, Ontario demonstrating the significance of Ontario as one of the world's leading lithium provinces. The facility will be the first branded Tesla Canada manufacturing facility in Canada.

A significant amount of activity in the lithium exploration sector is occurring in Ontario currently. Due to the quality of lithium assets in the region, the current buoyant lithium market and the intent of North American manufacturers to source lithium for battery manufacturing from the province, it is an excellent time to be gaining a foothold in Ontario.

#### **Investment Review Branch (“IRB”) of Canada Approval**

Purchase of Canadian assets by foreign companies must receive approval under the Investment Act of Canada and the IRB. Applications were submitted on 5 November 2021 with the relevant authorities in Canada. The Company will update the market in due course.

#### **Cautionary Statement**

Critical Resources is optimistic about concluding the Mavis Lake Lithium transaction, however as at the date of this announcement there cannot be any assurance that the conditions precedent with respect to the transaction will be completed to the satisfaction of each party (ASX Announcement 25 October 2021). Accordingly, investors are cautioned against making investment decisions based on this announcement.

**This announcement has been approved for release by the Board of Directors.**

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#### **FORWARD LOOKING STATEMENTS**

Information included in this release constitutes forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as “may”, “will”, “expect”, “intend”, “plan”, “estimate”, “anticipate”, “continue”, and “guidance”, or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management’s good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company’s business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company’s business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company’s control.

Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking

statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

#### **NO NEW INFORMATION**

Except where explicitly stated, this announcement contains references to prior exploration results, all of which have been cross-referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements.

#### **ABOUT CRITICAL RESOURCES LIMITED**

Critical Resources is a base metals exploration and development focused company headquartered in Perth, Western Australia and is listed on the Australian Securities Exchange (ASX:CRR). The Company has recently been undergoing a structured process of change at the Director and Executive level. These changes mark the commencement of a renewed focus by the Company on providing shareholder value through the exploration, development and advancement of the Company's long held NSW assets and also of its Copper assets in Oman.