

01 February 2022

Airborne Geophysical Survey Interpretation Reveals New Significant Potential Target Areas at Mavis Lake

Highlights

- **Geological trends identified demonstrating potential for continuity between Pegmatite 6 and Pegmatite 18 prospects**
- **New areas of interest identified across the Mavis Lake property**
- **Further interpretation required in conjunction with surface mapping to identify and rank additional drill targets**
- **Supports the highly prospective nature of the Mavis Lake property and the ability for expansion to existing mineralisation**
- **Allows the Company to continue its aggressive exploration campaign at Mavis Lake**

Critical Resources Limited (ASX:CRR) (“Critical Resources” or the “Company”), is pleased to advise that it has received initial interpretation of the airborne geophysical survey flown over Mavis Lake in October 2021 which collated magnetic, radiometric and VLF electromagnetic data. The survey has provided data regarding geological trends and potential drill targets that demonstrate a significant mineralisation footprint at the Project.

Critical Resources Managing Director Alex Biggs said: “These results are a strong endorsement that the Mavis Lake property possesses what we interpret as the right geological setting to host significant pegmatite mineralisation. We are well aware of the existing mineralisation at both the Pegmatite 6 and Pegmatite 18 prospects, but our plan is to demonstrate potential continuity, increasing both scale and exploration potential”.

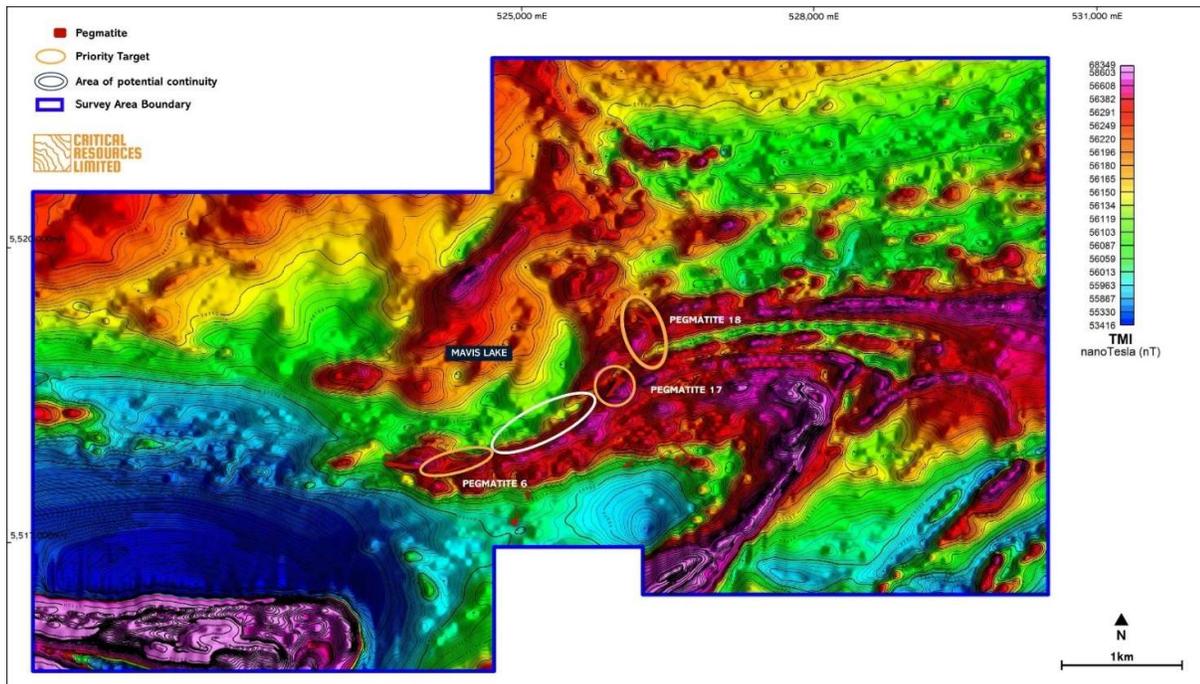
Geophysical Data Interpretation

Interpretations of the magnetic data set from the geophysical survey have identified geological trends that demonstrate the potential for continuity between the Pegmatite 6 and Pegmatite 18 prospects over circa 3kms, as seen in Figure 1. This potential continuity has not previously been tested by drilling, providing a new exploration area within the Mavis Lake property. Surface mapping will not only help identify drill targets, but act as a basis for further detailed geophysical interpretation.

Further interpretation of the geophysical data set that may identify significant geological areas such as structural deformation resulting in favourable conditions for pegmatite development is continuing.

Figure 1 represents the total magnetic intensity (TMI) of rock-forming minerals present. This is achieved by measuring the variations of the Earth’s magnetic field. Data is presented as magnetic highs or lows depending on the susceptibility of the rock.

Figure 1: Mavis Lake total magnetic intensity (TMI) identified from airborne survey



Mavis Lake Project Description

The Mavis Lake Lithium Project is located approximately 20 kilometres east of the town of Dryden, Ontario. The Project is in close vicinity to the Trans-Canada highway and railway, with major transportation arteries linking the project areas with 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 exploration and development province, with multiple projects located within the vicinity.

^{1,2}Previous drill programs have yielded high-grade Li₂O intercepts presenting significant exploration potential, including:

- 55.25m at 1.04% Li₂O from 80.75m in drill hole MF18-53 and
- 26.30m at 1.70% Li₂O from 111.9m
 - inc. 7.70m at 2.97% Li₂O from 130.5m in drill hole MF17-491

Project location and prospect location are shown in Figure 2 and Figure 3 respectively.

¹The reported intersections reported are down hole measurements and are not necessarily true width.

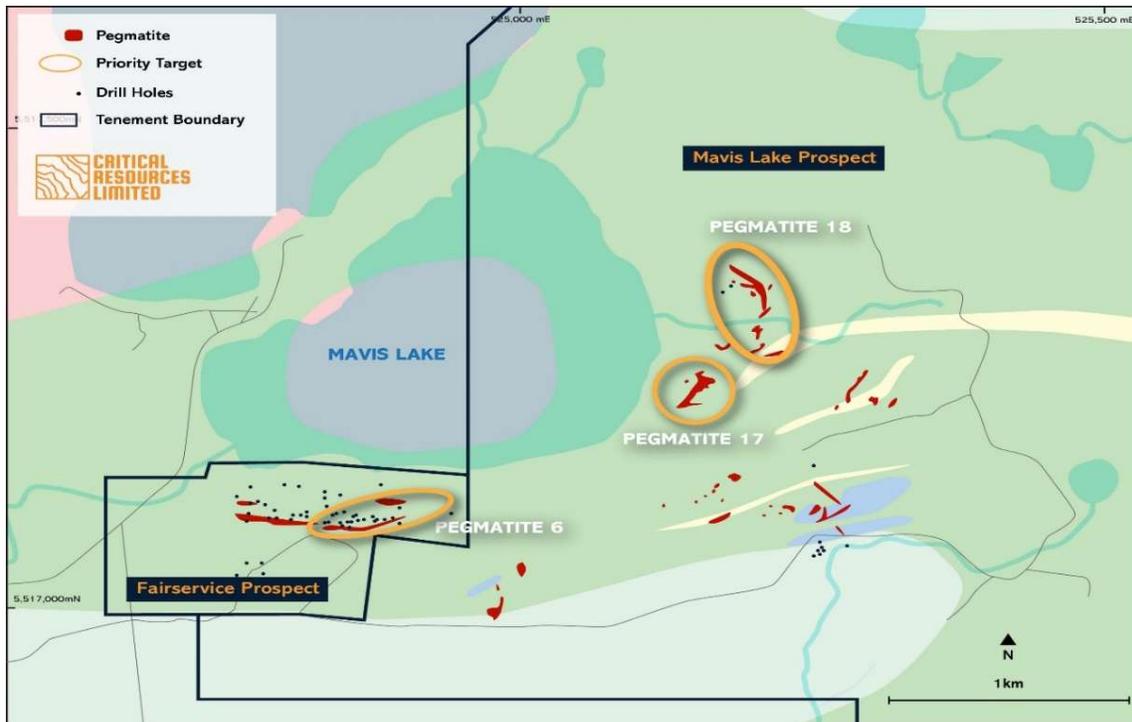
Critical Resources Announcement

²25 October 2021 – Canadian High Grade Lithium Asset Binding Terms Sheet Signed

Figure 2: Mavis Lake location



Figure 3: Location of Mavis Lake prospects



Airborne Magnetic-Radiometric-VLF Survey

The purpose of the airborne survey was to gain detailed magnetic, radiometric and VLF electromagnetic data over the entire tenement package. The survey was completed via light aircraft.

Prior to this survey, detailed magnetic data only existed over ~25% of the tenement and there was no useful radiometric data. All data sets are being employed to build a detailed geological interpretation over the entire tenement package. The radiometric data over known pegmatite occurrences will be assessed to see if a useful potassium radiometric signature is present to allow discrimination of pegmatite occurrences within the background mafic rocks. If this is the case, more detailed ground radiometric surveys will be considered over prospective areas going forward that will allow for the identification of pegmatite occurrences.

Flight path and location map for Mavis Lake are shown in Figure 4 and Figure 5 respectively.

Figure 4: Flight path across Mavis Lake tenements for airborne survey

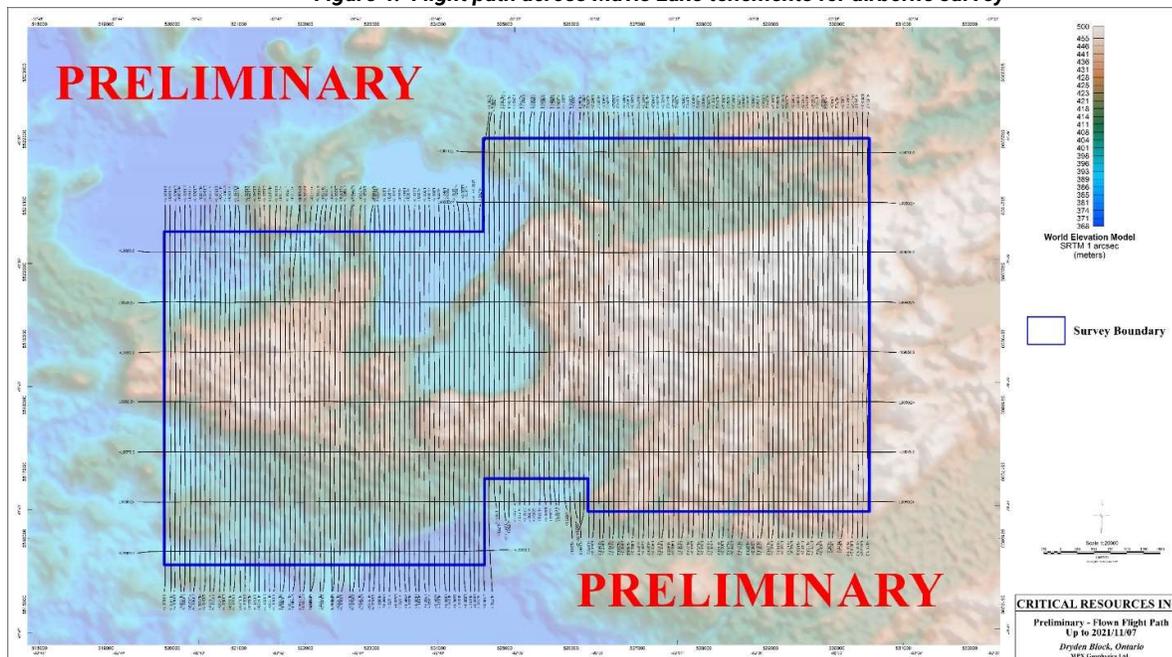


Figure 5: Area location map provided by Google Earth



Forward Work Program

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

Interpretation of Airborne Survey Data

Interpretation of the airborne survey will continue to facilitate identification of new targets and help define the strategy for subsequent drill programs.

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 Pegmatite 6 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 Mineral Resource model in the future.

Metallurgical Testing – Battery Grade Concentrate Determination

Metallurgical test work will be conducted on suitable core samples to identify and confirm mineral processing properties and allow flow sheet development to produce a low-impurity, high-grade (6%) spodumene concentrate, suitable for downstream conversion to battery grade lithium chemicals.

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. A secondary drill program will be designed based on drilling results and data interpretation from the various exploration strategies employed.

Permitting

Permitting is underway.

Exploration Drilling and Resource Delineation

The Company plans to complete diamond drilling across the Mavis Lake tenements, initially focused on the Pegmatite 6 and Pegmatite 18 prospects. As more targets are identified both across the tenements and at depth, further drilling will be deployed.

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

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ABOUT CRITICAL RESOURCES LIMITED

Critical Resources is a base metals and lithium 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, its newly acquired Lithium assets in Canada and also of its Copper assets in Oman.

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, 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.