

PRESS RELEASE

Critical Elements Lithium Announces appointment of Mr. Yves Perron as Vice-President Engineering, Construction, and Reliability

August 2nd, 2022 - MONTRÉAL, QUÉBEC – Critical Elements Lithium Corporation (TSX-V: CRE) (US OTCQX: CRECF) (FSE: F12) ("**Critical Elements**" or the "**Corporation**") is pleased to announce the appointment of Mr. Yves Perron as Vice-President Engineering, Construction and Reliability.

Mr. Yves Perron, Eng., MBA brings extensive experience in mining sector, engineering and construction in Québec to the Corporation. He was appointed Vice-President, Engineering and Construction by Stornoway Diamond in June 2012 and Vice-President, Engineering and Construction for Mason Graphite in August 2018. Mr. Perron served as Vice-President Engineering and Construction for Loop Industries since January 2021. Mr. Perron has over 25 years of experience in project management in the industrial sector within major international firms. Prior to joining Stornoway, Mr. Perron was Vice-President, Business Development and Project Manager at Delsaer and Seneca. He also held several management positions in areas of production, operation start-ups, maintenance, engineering and project management with ArcelorMittal and Xstrata. Mr. Perron holds a Bachelor Degree in Mechanical Engineering from Université du Québec – École de Technologie Supérieure in Montréal and a DEC in Civil Engineering Technology. In addition, he holds an MBA from Université du Québec in Montréal as well as an Executive MBA from Université Paris Dauphine.

In connection with this appointment, Mr. Perron has been awarded 300,000 stock options of the Corporation at an exercise price of \$1.53 per share for a term of five years. These options will vest over a 12-month period at a rate of 25% per quarter, subject to terms and conditions of the Company's Stock Option Plan.

Jean-Sébastien Lavallée, CEO of Critical Elements commented: "We are very pleased to welcome Yves to our team. Yves was central to the success of the construction of Renard, a diamond project of nearly \$1 billion of construction capital. He and his team were able to execute on the construction of this large mine project in Eeyou Istchee territory, Québec ahead of schedule and under budget. We are sure to benefit from his background and experience in delivering one of the most recent major operations successfully built in the Province."

About Critical Elements Lithium Corporation

Critical Elements aspires to become a large, responsible supplier of lithium to the flourishing electric vehicle and energy storage system industries. To this end, Critical Elements is advancing the wholly owned, high purity Rose lithium project in Québec. Rose is the Corporation's first lithium project to be advanced within a land portfolio of over 700 square kilometers. On June 13th, 2022, the Corporation announced results of a feasibility study on Rose for the production of spodumene concentrate. The after-tax internal rate of return for the Project is estimated at 82.4%, with an estimated after-tax net present value of US\$1.9 B at an 8% discount rate. In the Corporation's view, Québec is strategically well-positioned for US and EU markets and boasts good infrastructure including a low-cost, low-carbon power grid featuring 93% hydroelectricity. The project has received approval from the Federal Minister of Environment and Climate Change on the recommendation of the Joint Assessment Committee, comprised of representatives from the Impact Assessment Agency of Canada and the Cree Nation Government; The Corporation is working to obtain similar approval under the Québec environmental assessment process. The Corporation also has a good, formalized relationship with the Cree Nation.

For further information, please contact:

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This news release contains "forward-looking information" within the meaning of Canadian Securities legislation. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "scheduled", "anticipates", "expects" or "does not expect", "is expected", "scheduled", "targeted", or "believes", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information contained herein include, without limitation, statements relating to mineral reserve estimates, mineral resource estimates, realization of mineral reserve and resource estimates, capital and operating costs estimates, the timing and amount of future production, costs of production, success of mining operations, the ranking of the project in terms of cash cost and production, permitting, economic return estimates, power and storage facilities, life of mine, social, community and environmental impacts, lithium and tantalum markets and sales prices, off-take agreements and purchasers for the Corporation's products, environmental assessment and permitting, securing sufficient financing on acceptable terms, opportunities for short and long term optimization of the Project, and continued positive discussions and relationships with local communities and stakeholders. Forward-looking information is based on assumptions management believes to be reasonable at the time such statements are made. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information.

Although Critical Elements has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. Factors that may cause actual results to differ materially from expected results described in forward-looking information include, but are not limited to: Critical Elements' ability to secure sufficient financing to advance and complete the Project, uncertainties associated with the Corporation's resource and reserve estimates, uncertainties regarding global supply and demand for lithium and tantalum and market and sales prices, uncertainties associated with securing off-take agreements and customer contracts, uncertainties for the Project, as well as those risk factors set out in the Corporation's year-end Management Discussion and Analysis dated August 31, 2021 and other disclosure documents available under the Corporation's SEDAR profile. Forward-looking information contained herein is made as of the date of this news release and Critical Elements disclaims any obligation to update any forward-looking information, whether as a result of new information, future events or results or otherwise, except as required by applicable securities laws.