



PRESS RELEASE

CRITICAL ELEMENTS LITHIUM ANNOUNCES EXPLORATION PLANS FOR 2022 INCLUDING UP TO 25,000 METERS OF DRILLING

April 6, 2022 - MONTRÉAL, QUÉBEC – Critical Elements Lithium Corporation (TSX-V: CRE) (US OTCQX: CRECF) (FSE: F12) ("**Critical Elements**" or the "**Corporation**") is pleased to announce an exploration program for 2022.

The Corporation is preparing an aggressive exploration program for 2022 with the following objectives:

- Expand the main Rose Lithium-Tantalum ("**Rose**", "**Project**", "**Rose Project**") deposit by drilling
- Drill test several satellite showings proximal to the Rose deposit
- Drill the Lemare Lithium project targeting delineation leading to an initial Mineral Resource Estimate
- Conduct an extensive surface exploration program including compilation, artificial intelligence (AI) targeting, prospecting, mapping, rock sampling, and soil sampling with the goal of finding new lithium mineralization warranting follow up drilling
- Prospect and sample the targets identified by the Goldspot Discoveries AI system in 2021 (see press release dated September 7, 2021 for more details)

The Corporation is working to secure diamond drill rigs for the full year with a program of up to 25,000 meters divided between the Corporation's projects:

- 10,000 meters for the expansion of the Rose Lithium-Tantalum deposit
- 7,000 meters to delineate an initial Mineral Resource Estimate at the Lemare Lithium project
- 8,000 meters to explore for and test new targets identified

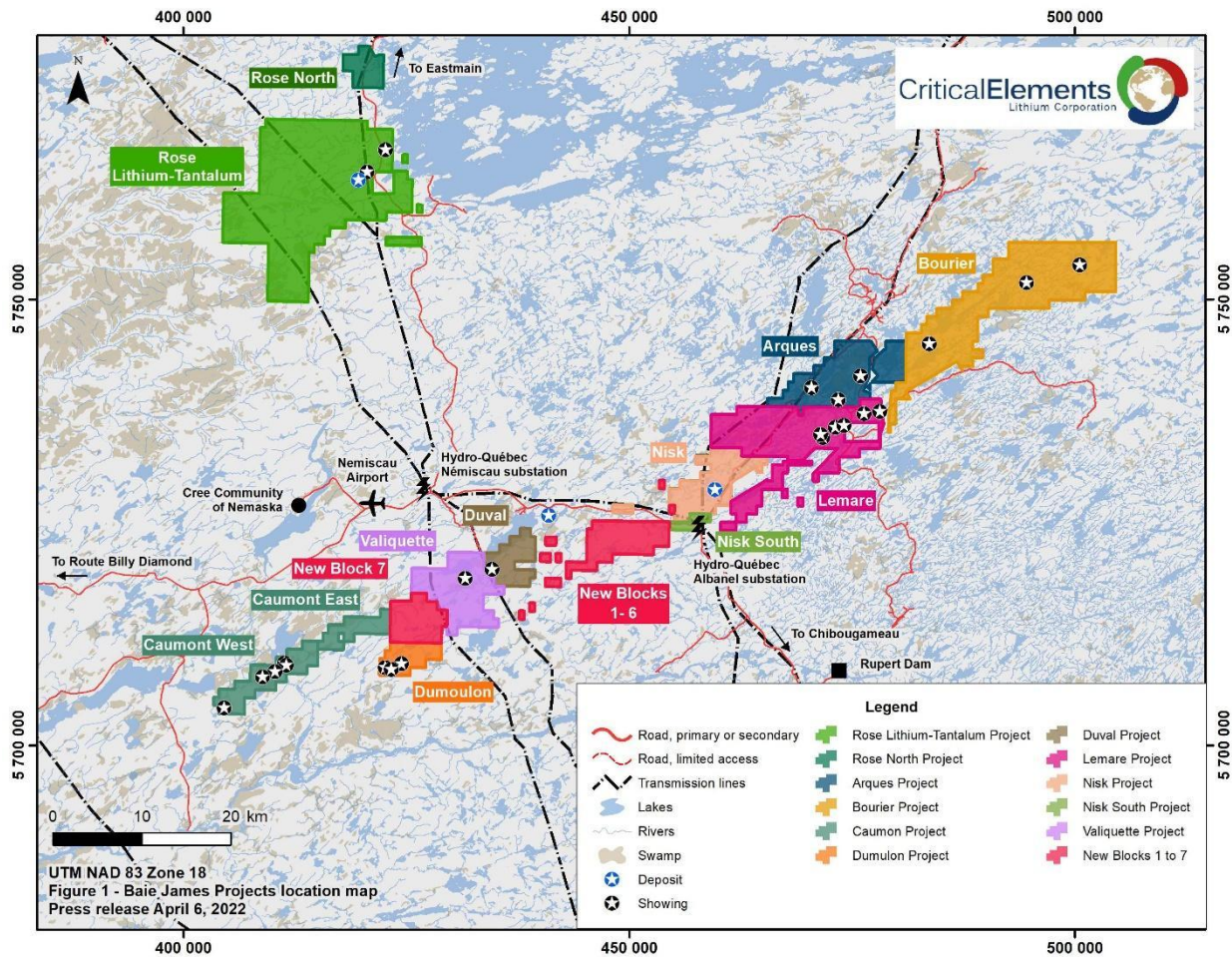


Figure 1: James Bay projects location map

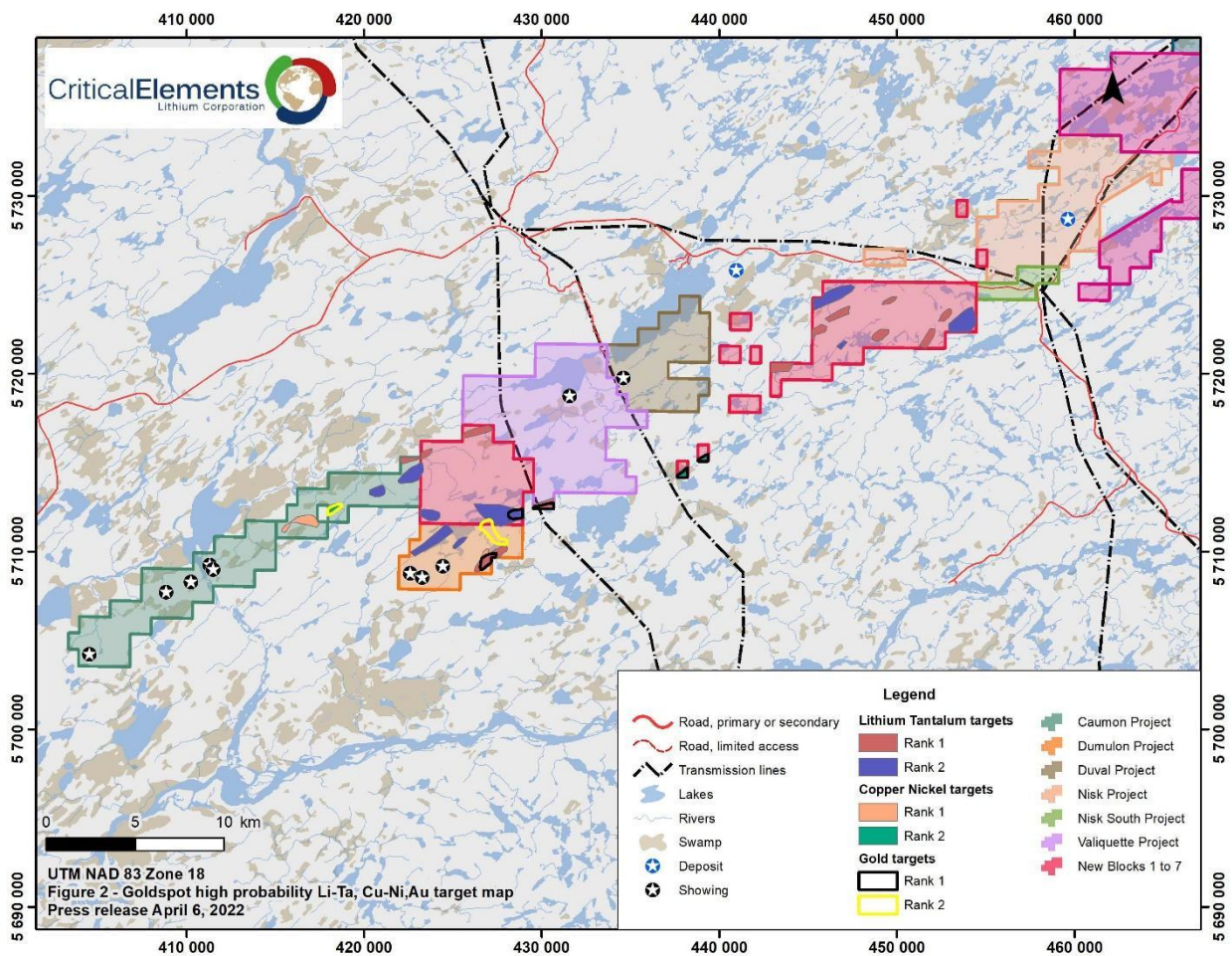


Figure 2: Goldspot probability Li-Ta, Cu-Ni, Au target map

CORPORATE UPDATE

Permitting

In August 2021, Critical Elements announced that the Federal Minister of Environment and Climate Change had rendered a favorable decision in respect of the proposed Rose Project. In a Decision Statement, which included the conditions to be complied with by the Corporation, the Minister confirmed that the Project is not likely to cause significant adverse environmental effects when mitigation measures are taken into account (see press release dated August 11, 2021 for more details).

The Rose Project is also subject to the provincial environmental and social impact assessment and review procedure pursuant to the Québec *Environment Quality Act* in accordance with Chapter 22 of the James Bay and Northern Québec Agreement (“**JBNQA**”). This process runs parallel to the federal process. The review of the impact study is conducted jointly by the Cree Nation Government and the Government of Québec under the Environmental and Social Impact Review Committee (“**COMEX**”).

As noted in the Press Release of February 17, 2022, the provincial assessment is well advanced and has undergone several rounds of questions from COMEX that have been answered by Critical Elements in the normal course of the assessment process. At this time, Critical Elements has received no further questions from COMEX and remains confident in a positive outcome given the stated support for lithium project development in the Province of Québec. Global recognition of Québec’s appeal is manifest in the recent announcements of significant investments in the EV battery supply chain by BASF and General Motors – POSCO Chemical in the Province.

Once a recommendation decision is made by the COMEX, the recommendation is then transmitted to the Minister of the Environment and the Fight Against Climate Change of Québec, who may then issue a Certificate of Authorization allowing the Rose Project to proceed. This process may yet take several weeks if a decision was made without further questions.

First Nations Relationship

In July 2019, Critical Elements announced that the Cree Nation of Eastmain, the Grand Council of the Crees (Eeyou Istchee), the Cree Nation Government and the Corporation had signed an impact and benefit agreement, referred to as the Pikhuutaau Agreement (the “**Pikhuutaau Agreement**”), concerning the development and operation of the Rose Project.

The Pikhuutaau Agreement is a binding agreement that governs the long-term working relationship between the parties while respecting Cree traditional activities and ensuring the promotion of Cree economic and social development based on mutual trust and respect during all phases of the Project through a sustainable development approach. It provides for training, employment, and business opportunities for the Crees and particularly the Crees of Eastmain at the Project, as well as for the cooperation and involvement of the Cree parties with Critical Elements in the environmental monitoring during all phases of the Project. The Pikhuutaau Agreement also ensures financial benefits for the Cree parties on a long-term basis, consistent with the Cree Nation Mining Policy and with Critical Elements’ approach to develop the Project while ensuring the promotion of Cree economic and social development in a mutually beneficial manner.

Despite the isolation imposed by the COVID-19 pandemic, Critical Elements has maintained its relationship with the Cree community. Certain initiatives contemplated in the Pikhuutaau Agreement have already commenced. We are proud of this relationship and look forward to working with the Cree community through project development and operation.

Engineering Studies

As announced in the Press Release of June 7, 2021, Critical Elements retained the services of Metso Outotec and WSP in Canada (“WSP”) to prepare an engineering study for a chemical plant to produce high quality lithium hydroxide monohydrate for the electric vehicle and energy storage system battery industries. The end-product of the plant would be battery grade lithium hydroxide monohydrate (LMH, >56.5%). It is anticipated that the plant capacity would be approximately 27,000 tpa of LMH, as Lithium Carbonate Equivalent (LCE). Supportive pilot plant work has been ongoing, processing samples from the Rose Project. It is expected that the results of the chemical plant engineering study will be released in the second quarter of 2022.

In the Press Release of February 17, 2022, Critical Elements announced the retention of Bumigeme Inc., WSP, and Golder Associates Ltd to prepare front-end engineering design work for the process plant and related infrastructure and the detailed design of the co-disposal facility for the waste rock and filtered tailings at the Rose Project. In addition, an update to the 2017 Feasibility Study for the Rose Project mine and concentrator will be completed. The Updated Feasibility Study will include a review of pricing for spodumene concentrates, and a review of the capital and operating costs. We expect results from the Updated Feasibility Study to be released in the second quarter of 2022.

Potential Catalysts

Looking forward, Critical Elements recognizes the importance of a timely and positive recommendation from COMEX and the receipt of a Certificate of Authorization from the Québec Minister of the Environment and the Fight Against Climate Change. We expect that these events may catalyze long-standing discussions regarding offtake and concurrent strategic project and/or corporate investments, which may in turn catalyze completion of project financial engineering. Delivery in the second quarter of 2022 of the engineering studies referenced above, may support a Final Investment Decision by the Corporation and commencement of construction for the Rose Project mine and concentrator targeting commencement of production in 2024, based on the timeline outlined in the 2017 Feasibility Study.

Critical Elements is committed to communicating material events to the market in a timely manner. Through the first quarter of 2022, the Corporation has been actively participating in multiple face-to-face and virtual initiatives reaching thousands of shareholders and investors, highlighting the competitive advantages of the Rose Project and its home jurisdiction, Québec. Market participants also recognize the importance of the completion of the Québec permitting process and its potential as a market catalyst.

Qualified persons

Paul Bonneville, Eng., is the qualified person that has reviewed and approved the technical contents of this news release on behalf of the Corporation.

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. In 2017, the Corporation completed a feasibility study on Rose for the production of spodumene concentrate. The internal rate of return for the Project is estimated at 34.9% after tax, with a net present value estimated at C\$726 million 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:

Patrick Laperrière
Director of Investor Relations and Corporate Development
514-817-1119
plaperriere@cecorp.ca
www.cecorp.ca

Jean-Sébastien Lavallée, P. Géo.
Chief Executive Officer
819-354-5146
jslavallee@cecorp.ca
www.cecorp.ca

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Cautionary statement concerning forward-looking statements

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 the completion of the 2022 exploration program and its related objectives, the completion of the provincial permitting process and its potential positive effects on the Corporation and the Project, the completion of engineering study for a chemical plant to produce high quality lithium hydroxide monohydrate, the preparation of the front-end engineering design work for the process plant and related infrastructure, the update to the 2017 Feasibility Study, off-take agreements and purchasers for the Corporation's products, securing sufficient financing on acceptable terms 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: results of the Corporation's 2022 exploration program and effects on the Corporation's stated objectives, results of the engineering study for a chemical plant to produce high quality lithium hydroxide monohydrate, issues encountered in connection with the front-end engineering work, impact of the Updated Feasibility Study on the Project, 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 with respect to social, community and environmental impacts, uncertainties with respect to optimization opportunities 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.