

PRESS RELEASE

Critical Elements Lithium Announces New High-grade Discovery within the Rose Project with Promising Grades of up to 5.62% Li₂O

October 17th, 2023 - MONTRÉAL, QUÉBEC – Critical Elements Lithium Corporation (TSX-V: CRE) (US OTCQX: CRECF) (FSE: F12) ("**Critical Elements**" or the "**Corporation**") is pleased to announce the first grab sample results from the newly discovered spodumene-bearing pegmatite located approximately 8 km west of the Rose deposit (**Figure 1**).

The Rose Lithium-Tantalum project ("**Rose** or the "**Project**") is situated within the Rose and Rose South property blocks (**Figure 1**), which constitute 395 km², or only 38% of the 1,050 km² in the Corporation's highly prospective exploration portfolio in Québec.

Summer 2023 Initial Prospecting Results

During the summer of 2023, Critical Elements conducted a prospecting program over several areas, including the Rose, Rose South, Rose North and Nemaska belt properties. The objective of the field program was to identify new pegmatite bodies using systematic rock geochemical sampling of all pegmatite bodies in order to refine the geological interpretation of the properties and prioritize for further exploration work including drilling. A total of 866 rock samples were collected during the exploration campaign.

As reported on September 12th, 2023 ([press release](#)), several new outcrop discoveries have been identified in the Rose pegmatite swarm. To date, 4 spodumene-bearing pegmatite outcrops have been identified in this New Discovery Area. At this early stage, the exact strike length, width and orientations of these dykes is unknown, but the apparent strike length along the outcrops exceeds 400 metres. To date, the results from the initial 10 selected samples have been received. All samples are lithium-bearing and 50% of them report values over 3% Li₂O with some results as high as **3.02% Li₂O, 3.62% Li₂O, 3.60% Li₂O, 3.37% Li₂O, and 5.62% Li₂O**. (**Table 1 and Figure 2**). *The reader is cautioned that grab samples are selective by nature and may not represent average grades of the mineralization in the pegmatites.*

Table 1: New Discovery – Selected sample results

Property	Sample number	UTM NAD 83 ZN18		Li ₂ O (%)	T a ₂ O ₅ (ppm)
		Easting	Northing		
Rose	E074801	411047	5764032	3.60	67
Rose	E074802	411028	5763991	2.79	191
Rose	E074803	410986	5763951	3.02	207
Rose	E074804	411062	5763922	2.78	116
Rose	E074805	411060	5763908	1.74	285
Rose	E074806	411162	5763736	5.62	53
Rose	E074807	411162	5763736	2.41	217
Rose	E074808	411118	5763624	3.37	92
Rose	E074809	411118	5763624	3.62	158
Rose	E074811	411118	5763624	0.46	57

Note: Grab samples are selective by nature and may not represent average grades of the pegmatite

Jean-Sébastien Lavallée, CEO of Critical Elements Lithium commented, "Today's results are very exciting as the exploration team is now planning a large-scale drilling program at Rose. Furthermore, with more than 395 km² of property at Rose and Rose South, we believe that there might be potentially multiple discoveries in this highly prospective area within trucking distance to the proposed Rose concentrator."

Figure 1: Rose Lithium-Tantalum and Rose South Projects - New Discovery Location Map

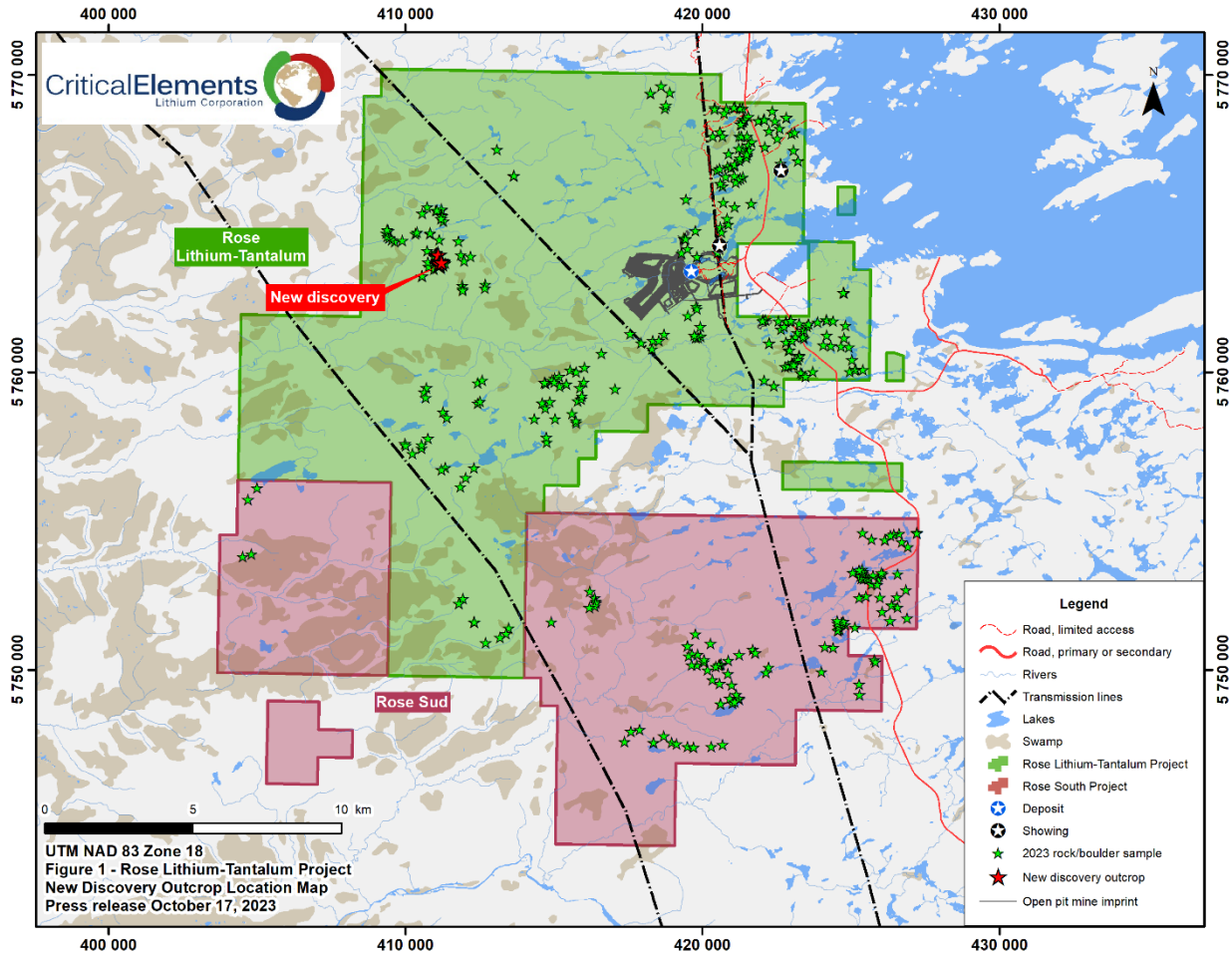
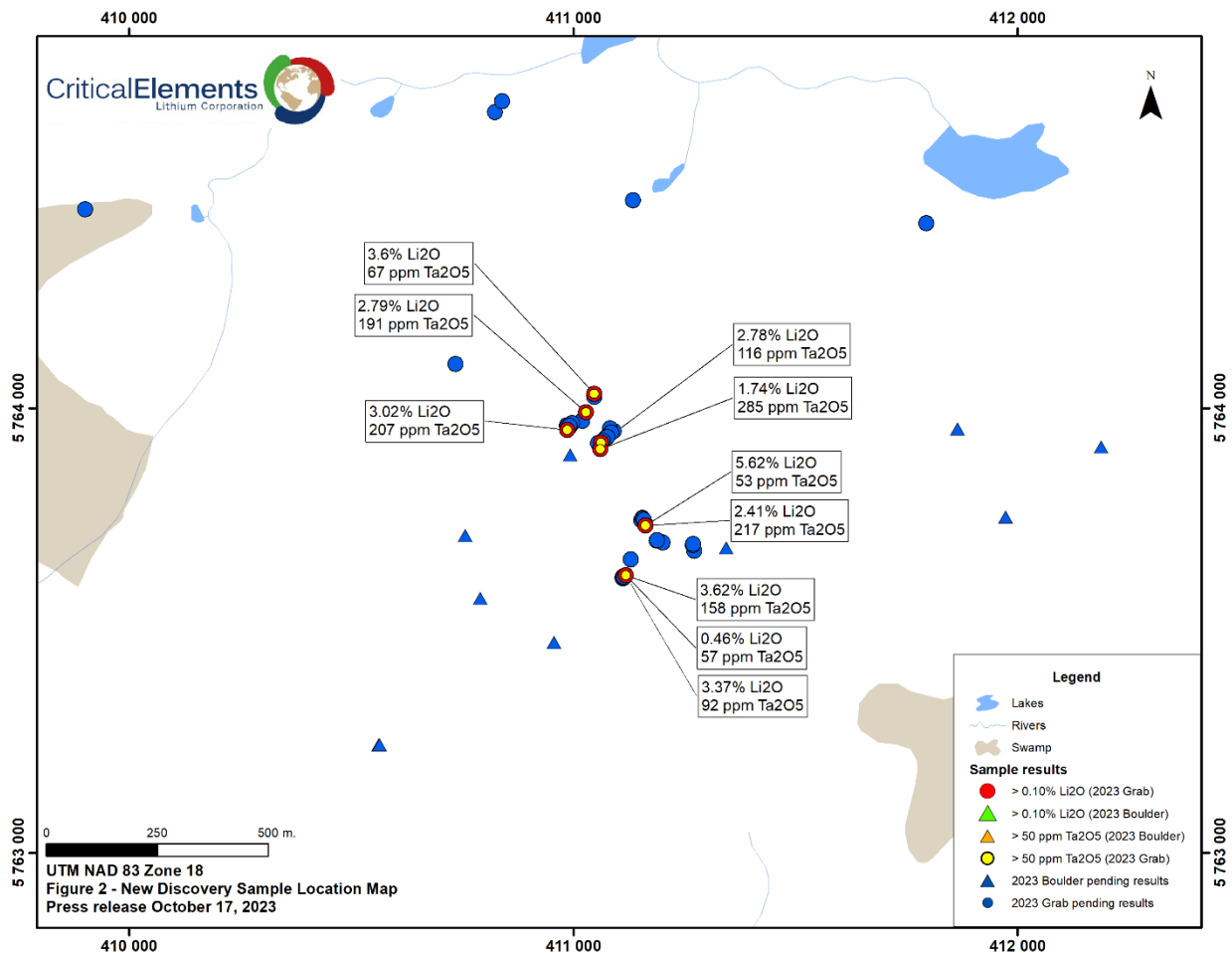


Figure 2: Rose Lithium-Tantalum and Rose South Projects - New Discovery Samples Location Map



Note: Grab samples are selective by nature and may not to represent average grades of the pegmatite

Management is currently designing a large-scale drill program with multiple rigs to test the new discoveries and potentially expand the Rose project resource. Details of this extensive program will be forthcoming in the near-term.

Quality assurance/quality control

Quality assurance and quality control procedures have been implemented to ensure best practices in sampling and analysis of the samples. Standards and blanks were regularly inserted into the sample stream. The samples were delivered, in secure tagged bags, directly to the ALS Minerals laboratory facility in Val-d'Or, Quebec. The samples are weighed and identified prior to sample preparation. The samples are crushed to 70% minus 2 mm, then separated and pulverized to 85% passing 75 µm. All samples are analyzed using sodium peroxide fusion ME-MS-89L, with full analysis for 52 elements. Value over 25,000 ppm Li were re-assays using Li-ICP-82b and value over 2,500 ppm Ta₂O₅ were re-assays using Ta-XRF10.

Qualified persons

Paul Bonneville, Eng, is the qualified persons that have 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-Tantalum project in Québec, the Corporation's first lithium project to be advanced within a land portfolio of over 1,050 km². On August 29, 2023, the Corporation announced results of a new Feasibility Study on Rose for the production of spodumene concentrate. The after-tax internal rate of return for the Project is estimated at 65.7%, with an estimated after-tax net present value of US\$2.2B 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 94% 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, received the Certificate of Authorization pursuant to section 164 of Québec's *Environment Quality Act* from the Québec Minister of the Environment, the Fight against Climate Change, Wildlife and Parks, and the project mining lease from the Québec Minister of Natural Resources and Forests under the Québec *Mining Act*.

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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 the results and completion of the 2023 exploration program (including the potential of the Corporation's Nemaska trend properties) and its related objectives. 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: final and complete results of the Corporation's 2023 exploration program and effects on the Corporation's stated objectives, as well as those risk factors set out in the Corporation's Management Discussion and Analysis for its most recent quarter ended May 31, 2023 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.