

PRESS RELEASE

CRITICAL ELEMENTS LITHIUM PROVIDES A CORPORATE UPDATE

HIGHLIGHTS

- **Critical Elements confirms ongoing interest and progress in the Rose Project financing negotiations with potential strategic partners.**
- **Critical Elements continues to work towards a Rose Project timeline that targets commencement of production of high quality spodumene concentrate in 2026.**
- **Management continues its procurement program to purchase long lead time items to protect the Rose Project timeline.**
- **Detailed engineering continues to advance with a high degree of confidence consistent with the Rose Project timeline.**
- **Programs to meet extensive pre-construction requirements under governmental authorizations and the 2019 Pihkuutaau Agreement are on-target.**
- **An initial drill program to test the new Rose West discovery and other targets is expected to commence in early 2024.**
- **While the market for lithium and lithium equities has corrected over the past year, management views the future positively.**

December 20th, 2023 - MONTRÉAL, QUÉBEC – Critical Elements Lithium Corporation (TSX-V: CRE) (US OTCQX: CRECF) (FSE: F12) ("**Critical Elements**" or the "**Corporation**") is pleased with the progress being made to advance the unique Rose Lithium-Tantalum Project ("**Rose Project**") in Eeyou Istchee, Québec and, ultimately, achieve its vision to become a large-scale, sustainable, and reliable vertically integrated supplier of lithium for the emerging electric vehicle and energy storage industries.

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 Corporation's highly prospective 1,050 km² exploration portfolio in Québec.

Summer 2023 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 further exploration work including drilling. A total of 774 rock samples were collected (866 samples including QA/QC) during the exploration campaign with 95 samples reporting values over 100 ppm Ta₂O₅ and/or values over 0.10% Li₂O.

As reported on [September 12th, 2023](#) and in [October 17th, 2023](#), the press releases state 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 400m. All results from the summer program have now been received with selected results over 3% Li₂O including **3.18% Li₂O**, **3.00% Li₂O**, **3.98% Li₂O**, **3.91% Li₂O**, and **5.10% Li₂O**. Full table of best results is shown in **Table 1**. *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 provides all sample results with values over 100 ppm Ta₂O₅ and/or values over 0.10% Li₂O. Remaining samples did not return significant values.*

Table 1: Best new results from summer program 2023

Property	Sample number	UTM NAD 83 ZN18 Easting	UTM NAD 83 ZN18 Northing	Li ₂ O (%)	T a ₂ O ₅ (ppm)	Type
Rose	H873531	421352	5768890	0.01	185	Grab
Rose	H873532	421268	5768886	1.69	72	Boulder
Rose	H873533	421093	5768907	1.66	86	Boulder
Rose	H873536	420412	5768913	0.63	69	Grab
Rose	H873538	420723	5768722	0.00	164	Grab
Rose	H873539	421393	5768515	0.01	167	Boulder
Rose	H873542	421543	5767658	0.99	107	Boulder
Rose	H873675	421414	5768519	1.65	105	Boulder
Rose	H873677	421332	5768427	0.01	298	Boulder
Rose	H873679	421290	5768348	0.00	258	Grab
Rose	H873681	420588	5768104	0.01	170	Grab
Rose	H873684	421233	5767712	0.84	116	Boulder
Rose	H873685	421314	5767757	1.88	76	Boulder
Rose	H873686	421505	5768053	1.54	167	Boulder
Rose	H873697	421495	5767336	0.93	136	Boulder
Rose	H873698	421498	5767337	1.24	135	Boulder
Lemare	H873721	471869	5735655	0.01	110	Grab
Lemare	H873736	472499	5734797	0.01	124	Grab
Rose	H874055	422629	5767034	0.01	195	Grab
Rose	H874238	412188	5763913	0.01	365	Boulder
Rose	H874242	416007	5759675	1.07	50	Boulder
Rose	H874307	419413	5764506	1.69	57	Grab
Rose	H874312	417940	5761003	0.01	108	Boulder
Rose	H874317	411112	5763622	2.92	338	Grab
Rose	H874404	420826	5765183	2.19	136	Boulder
Rose	H874408	420600	5764228	0.01	471	Grab
Rose	H874409	420604	5764235	0.01	183	Grab
Rose	H874411	420576	5764152	0.01	123	Grab
Rose	H874413	420511	5764032	0.08	410	Grab
Rose	H874423	419508	5761920	3.18	204	Boulder
Rose	H874425	411269	5763692	0.03	447	Grab
Rose	H874427	411110	5763619	2.79	277	Grab
Rose	H874428	411129	5763660	2.61	80	Grab
Rose	H874429	411188	5763702	1.84	371	Grab
Rose	H874431	411201	5763699	3.00	274	Grab
Rose	H905009	411110	5763619	1.09	911	Grab
Rose	H905011	411153	5763748	0.46	170	Grab
Rose	H905013	411060	5763918	3.62	551	Grab
Rose	H905204	411111	5763618	2.95	116	Grab

Rose	H905205	411112	5763617	3.98	214	Grab
Rose	H905206	411112	5763617	3.91	225	Grab
Rose	H905207	411112	5763620	1.45	107	Grab
Rose	H905208	411112	5763620	1.60	114	Grab
Rose	H905209	411113	5763621	2.40	105	Grab
Rose	H905211	411019	5763971	1.36	116	Grab
Rose	H905212	411007	5763963	1.03	245	Grab
Rose	H905213	411081	5763942	2.36	307	Grab
Rose	H905214	411082	5763942	1.32	308	Grab
Rose	H905215	411083	5763945	1.61	330	Grab
Rose	H905216	411085	5763945	5.10	449	Grab
Rose	H905241	411073	5763933	3.37	49	Grab
Rose	H905242	411076	5763934	4.17	374	Grab
Rose	H905243	411067	5763926	1.39	20	Grab
Rose	H905244	411054	5763920	4.52	413	Grab
Rose	H905245	411155	5763753	1.88	178	Grab
Rose	H905246	411161	5763741	0.76	130	Grab
Rose	H905247	411156	5763751	1.08	150	Grab
Rose	H905248	411159	5763744	3.88	287	Grab
Rose	H905249	411159	5763748	1.10	203	Grab
Rose	H905256	410993	5763895	1.56	207	Boulde r
Rose	H905257	410985	5763961	3.39	314	Grab
Rose	H905258	410987	5763959	0.71	151	Grab
Rose	H905259	410992	5763958	0.02	226	Grab
Rose	H905261	410991	5763960	1.15	3	Grab
Rose	H905262	411047	5764028	0.21	85	Grab
Rose	H905263	411047	5764026	0.02	177	Grab
Rose	H905264	411188	5763703	2.17	142	Grab
Rose	H905265	419289	5764026	1.13	137	Boulde r
Rose	H905266	419421	5764507	0.02	106	Grab
Rose	H905267	419415	5764510	0.67	267	Grab
Rose	H905268	410562	5763243	1.85	98	Boulde r
Rose	H905269	410562	5763243	5.19	98	Boulde r
Rose	H905271	410563	5763243	3.57	189	Boulde r
Rose	H905272	419431	5764492	0.95	68	Grab
Rose	H905351	419576	5763409	1.85	423	Grab
Rose	H905352	419596	5763391	0.93	155	Grab
Rose	H905353	419596	5763388	1.60	254	Grab
Rose	H905354	419594	5763453	1.15	158	Grab
Lemare	H905377	470949	5734033	0.78	178	Grab

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

Figure 1: Rose Lithium-Tantalum and Nemaska Belt Projects - Location Map

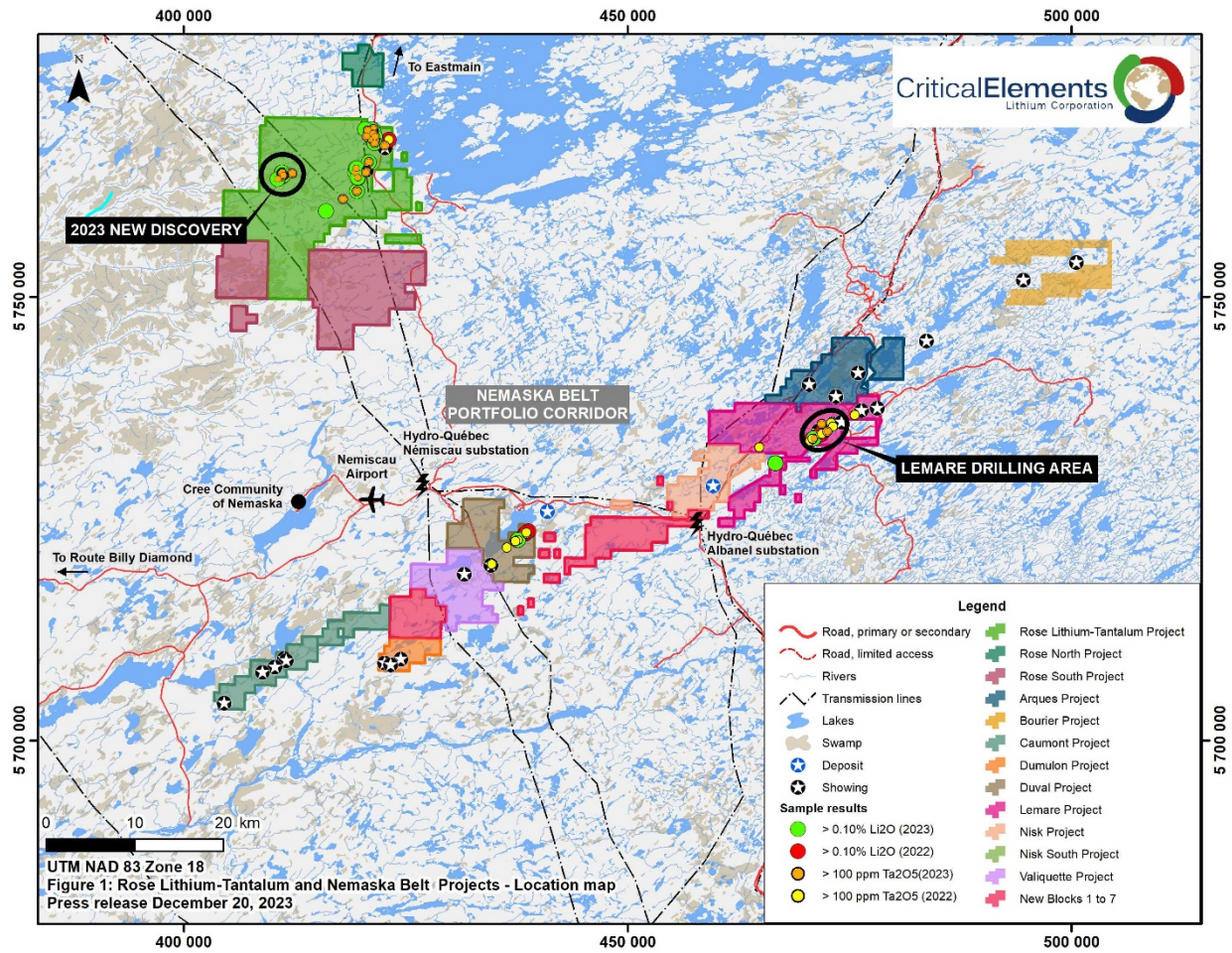
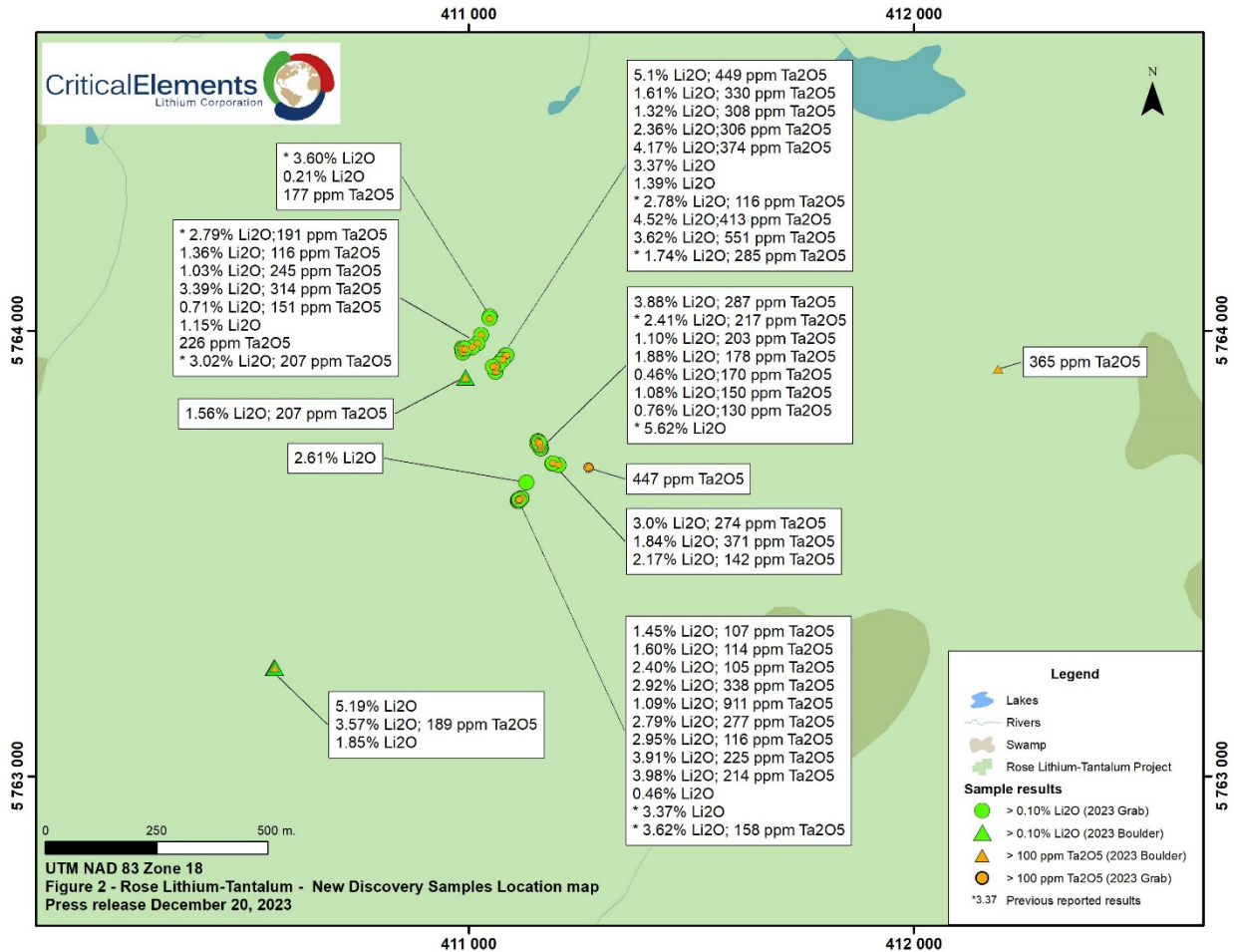
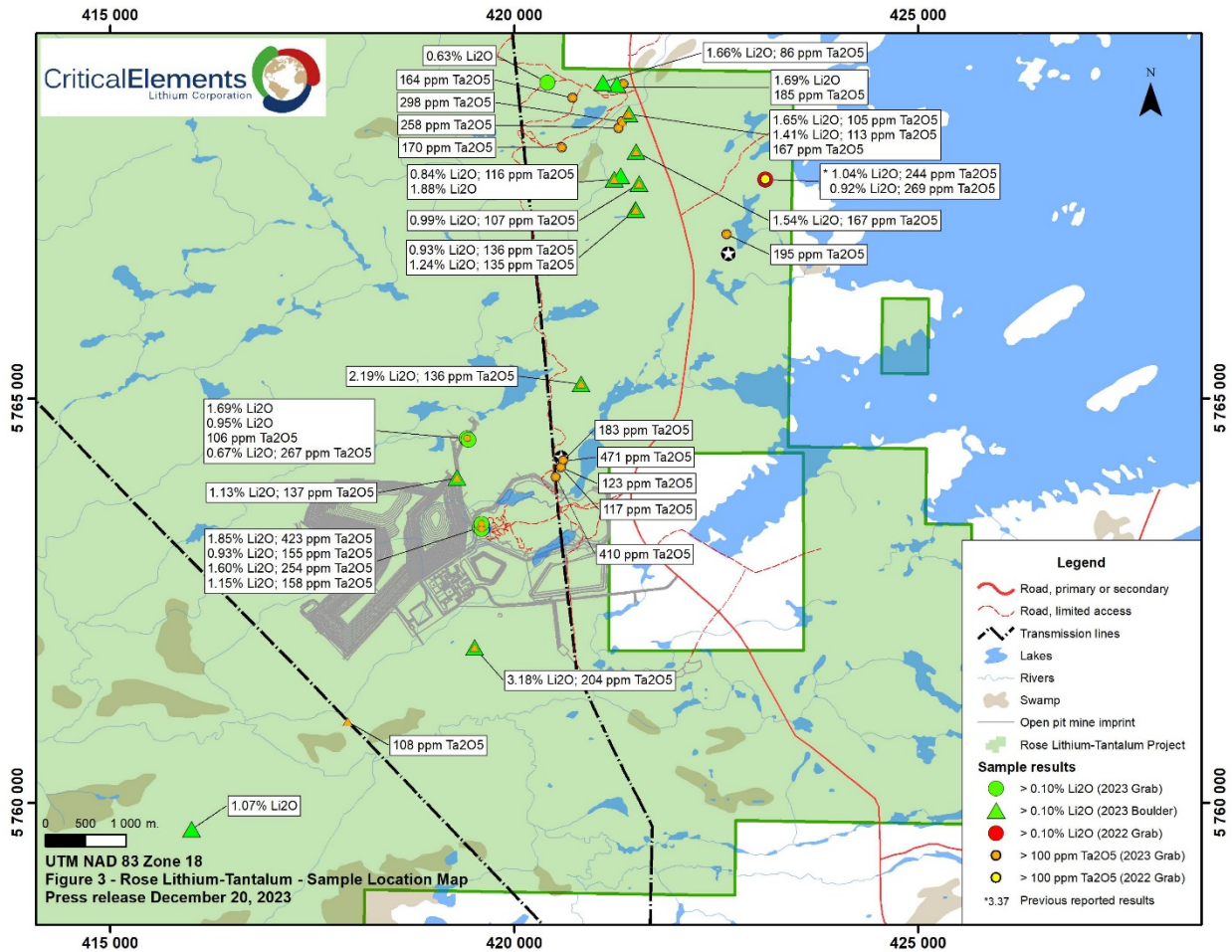


Figure 2: Rose Lithium-Tantalum - New Discovery Sample Location Map



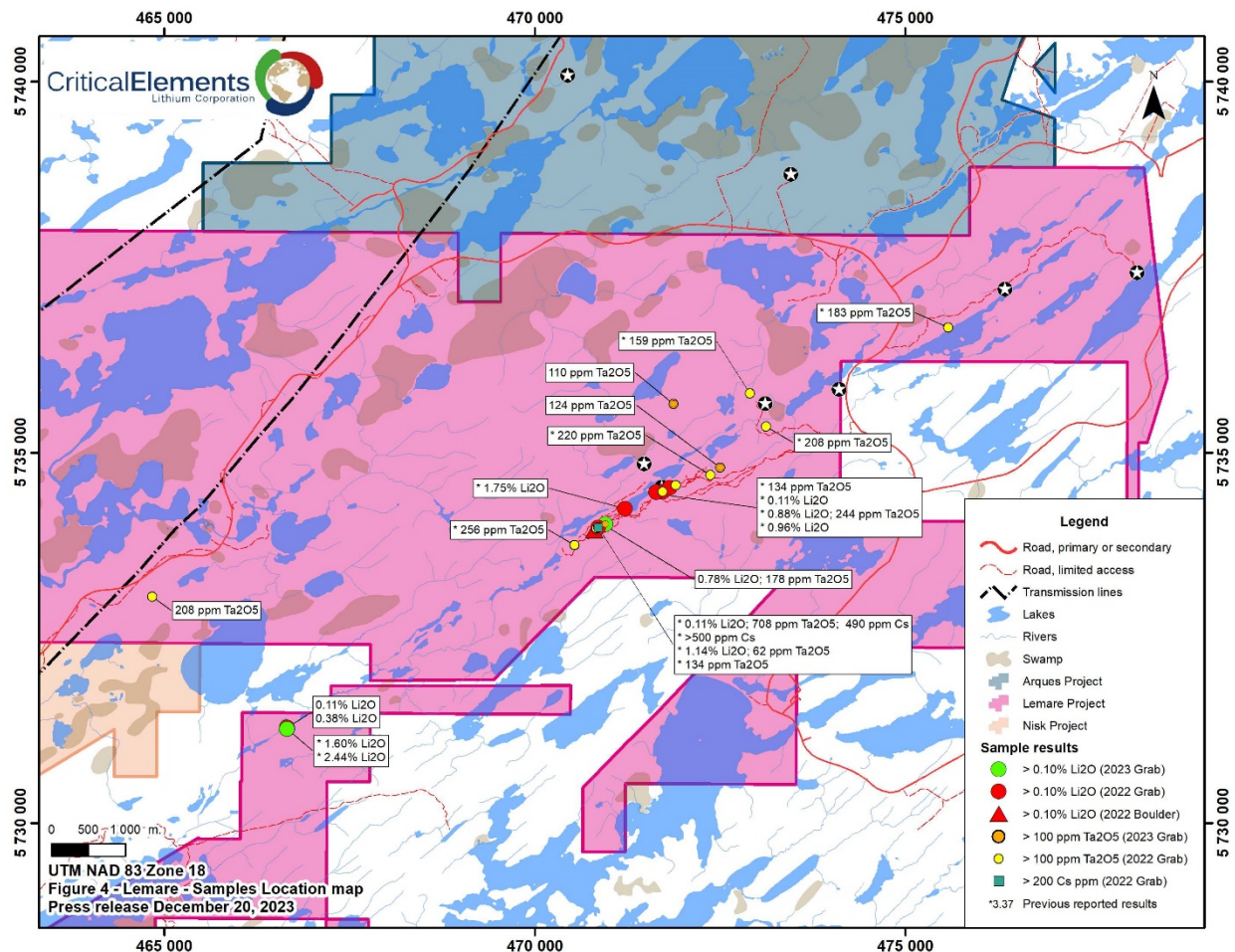
Note: Grab samples are selective by nature and may not represent average grades of the pegmatite

Figure 3: Rose Lithium-Tantalum - Sample Location Map



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

Figure 4: Lemare Sample Location Map



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

Project Financing and Strategic Partner Negotiations

Critical Elements is pleased to provide investors with an update on the ongoing assessment of expressions of interest for financing and developing the Rose Project in collaboration with potential strategic partners. Despite expectations for a conclusion earlier this year, the Corporation recognizes the intricacy of these negotiations and due diligence, requiring time and thorough consideration. Investors can be assured of a continued interest from potential partners, and that the Corporation believes that the process is progressing positively. Management is committed to securing an optimal outcome for the Rose Project's financing and development. We appreciate your continued support and patience as we work towards a mutually beneficial partnership. Additionally, it is crucial to note that this process is progressing in tandem with the overall development of the Rose Project, as detailed below.

The Rose Project Timeline

Critical Elements continues to work towards a Rose Project timeline that targets commencement of production of high quality spodumene concentrate for chemical conversion and high purity technical concentrate for the glass and ceramics industry in 2026. Furthermore, protecting the Rose Project's timeline has been a primary objective for management. Significant steps include the change in project scope to incorporate the construction of our own 500-worker camp 4km from the proposed mine site (see the Feasibility Study filed on SEDAR + [October 11, 2023](#)). In addition, Critical Elements has commenced its procurement program focused on ensuring long lead time items are available as needed, advanced detailed engineering, and continued delivery of construction pre-conditions. These pre-conditions are required under the [Pihkuutaau Agreement](#) signed in July 2019, the favorable decision statement from the federal Minister of the Environment and Climate Change announced [August 11, 2021](#), the Certificate of Authorization under Section 164 of Québec's *Environment Quality Act* announced [November 2, 2022](#), and the mining lease granted under the *Québec Mining Act* and announced [September 18, 2023](#). Critical Elements is proud to have achieved these very important milestones, which collectively ensure that

eventual production is achieved at the highest levels of environmental and cultural sustainability, an essential component in our close relationship with our Cree neighbours in Eeyou Istchee and a unique quality highly valued input in the global battery value chain.

Procurement Program

Critical Elements announces that following the order to purchase long lead time equipment (315 kV to 25 kV transformers – see press release [October 12, 2023](#)), the Corporation has now ordered several batches of electrical equipment. These include 315 kV circuit breakers from industry-leading GEPR Energy Canada Inc. (GE). These purchases will secure the start-up of the power station as quickly as possible.

Jean-Sébastien Lavallée, Chief Executive Officer of the Corporation stated: "Once again, Critical Elements has taken action to reduce the risks related to the Rose Project schedule. We are getting closer and closer to our goal of becoming a lithium producer for the electric car market."

Detailed Engineering and Construction Pre-Conditions

The Corporation has been working over the last several months to meet extensive pre-construction requirements under governmental authorizations:

- The fish habitat compensation plan and the wetland compensation plan in Cree territory have been updated in collaboration with stakeholders and are now submitted to federal and provincial authorities for approval.
- The new camp location has been confirmed, and the environmental impact assessment with this new camp and new borrow pits has been completed and filed to the authorities for approval.
- The summer monitoring program and field surveys have been completed.

Detailed engineering continues to progress well, while working to optimize the planned facilities of the Rose Project:

- Detailed engineering continues to advance with a high degree of confidence consistent with the Rose Project timeline.
- Following the LIDAR flyover, up to date topographical data was available, which allowed the engineering team to further refine earthworks design.
- Site-wide water balance and water management strategy has been reviewed with updated data. This has enabled design optimization of the water storage pond and mine water treatment plant.
- Design of the co-disposition stockpile progressed well, modelling of its phases over time is completed. Stability analysis is underway.
- Technical specifications were issued for major process equipment, allowing the tendering process to be initiated. Firm proposals have been received for the first set of equipment and are under technical and commercial analysis.
- The procurement management program to purchase long lead items is on schedule to support the Rose Project Concentrator detailed engineering.

Exploration Update

Critical Elements has recently received the required drilling permit and has initiated preparation for a drilling program on the exciting new discovery discussed above located only 8km west of the Rose Project (see press releases dated [September 12th, 2023](#) and [October 17th, 2023](#)), located within a portion of the Corporation's highly prospective 1,050 km² exploration portfolio. The objective of the drilling program is to test, confirm and expand the new zone identified by prospection during the summer. The Corporation plans to start with a program of approximately 5,000m during its winter program on the new discovery with the objective to quickly test the dimension and grade of the new zone and assess the potential to expand the Corporation's mineral resource inventory. The drilling program will be adjusted and, potentially, expanded based on results of the initial drilling results on the new discovery.

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

Yves Perron, Eng. MBA, Vice-President Engineering, Construction and Operations and Sébastien Perreault, P. Eng., are 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*.

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 expectations regarding Rose project-level activities including (i) completion of the permitting process, (ii) securing a strategic partnership and project financing leading to a Final Investment Decision and (iii) respecting the Rose project ramp up and commissioning timeline, expectations regarding potential value creation from ongoing and future exploration activities on the Corporation's projects, and the Corporation's ongoing business plan. Such forward-looking information and statements are based on numerous assumptions, including that general business and economic conditions will not change in a material adverse manner, that fundamentals of lithium / spodumene demand and EV market growth and capacity will continue to be strong, that project financing will be available on reasonable terms, and that governmental and other approvals required to conduct the Company's development activities and planned exploration will be available on reasonable terms and in a timely manner. Although the assumptions made by the Corporation in providing forward-looking information or making forward-

looking statements are considered reasonable by management at the time, there can be no assurance that such assumptions will prove to be accurate.

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: negative operating cash flow and dependence on third party financing, uncertainty of additional financing, reliance on key management and other personnel, potential downturns in (i) general economic conditions, (ii) demand for lithium / spodumene and (iii) EV market growth, capacity and demand, actual results of exploration activities being different than anticipated, changes in exploration programs based upon results, risks generally associated with the mineral exploration industry, environmental risks, changes in laws and regulations, community relations and delays in obtaining governmental or other approvals, as well as those risk factors set out in the Corporation's year-end Management Discussion and Analysis for its most recent year ended August 31, 2023 and other disclosure documents available under the Corporation's SEDAR+ profile (www.sedarplus.ca).

Forward-looking information contained herein is made as of the date of this news release. Although the Corporation has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking information or implied by forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking statements or information. The Company undertakes no obligation to update or reissue forward-looking information as a result of new information or events except as required by applicable securities laws.