Champion Electric Reports Lithium Discovery from the Initial Field Program at Its James Bay Lithium Properties in Eeyou Istchee, Quebec

Toronto, Ontario--(Newsfile Corp. - December 18, 2023) - <u>Champion Electric Metals Inc.</u> (CSE: LTHM) (OTCQB: CHELF) (FSE: 1QB0) ("**Champion Electric**" or the "**Company**") is delighted to announce that the Company has made a spodumene discovery from rock and till sampling at its James Bay lithium properties (the "**Property**"). Spodumene is the primary ore mineral in lithium pegmatite deposits.

The <u>ongoing exploration program, which began in spring 2023</u>, included close to 700 rock samples and well over 300 till samples which were collected late this summer and fall 2023 (Figure 1).

Current Highlights of 2023 Sampling Program:

- Angular spodumene boulders recovered from sample pit at the new Western prospect (Figure 2)
 - Till sample from the same site yielded >1,500 grains of spodumene (Figure 3)
 - No significant outcrop in the area or immediately up-ice
- Three large fractionation trends identified from rock geochemistry (Figure 3)
 - Western trend is in the vicinity of the Western prospect
 - Anomalous lithium rock samples occur in clusters that are more than 15 km and 40 km east of the Western prospect (Figure 1)

"The discovery of the angular spodumene boulder and delicate spodumene crystals in till samples presents evidence that a spodumene bearing pegmatite system exists nearby and within a few kilometres of Patriot's Corvette deposit. We anticipate the remaining till sample results shortly and will focus our exploration planning on vectoring back to the source of the transported spodumene," **commented Jonathan Buick, President & CEO.** "Our James Bay lithium properties are mostly covered by glacial and alluvial deposits. For this reason, we strategically split the surface sampling program between outcrop rock sampling and till sampling for the target areas beneath the cover. All this newdata and the addition of geophysics planned for this winter will make our 2024 program very exciting."

The outcrop sampling and mapping concentrated in areas of reported potential pegmatite occurrences. Some of the rock samples contained highly anomalous lithium (Li), cesium (Cs), tantalum (Ta), and beryllium (Be), but significant outcropping spodumene has yet to be encountered. Additionally, field portable analytical methods and laboratory geochemistry identified three large areas with favourable chemistry for the formation of lithium pegmatites.

Till Sampling Program

The till sampling program discussed in the exploration update provided on <u>5 October 2023</u> was completed on 26 October 2023. A total of 338 till samples are being processed for pegmatite indicator minerals, heavy minerals, and geochemical analysis (Figures 5 and 6). The Champion Electric technical team is testing and comparing two different processing and analytical methodologies. The highlight of the preliminary results received for 91 samples to date is the presence of spodumene grains in several till samples at the newly identified Western prospect. One sample returned several thousand spodumene grains and two fist-sized angular boulders of spodumene. The spodumene grains in the till samples are dominated by delicate crystals, which would not survive great transport distances. The team is extremely encouraged by these exceptional results which are evidence of a mineralised system being present nearby. The interpreted direction of glacial ice movement is from the northeast, as shown on the maps. The Company controls the mineral rights for tens of kilometres up-ice from this new showing.

The spodumene crystals in the till sample have been confirmed by microscopy, and multiple geologists have confirmed the spodumene in hand sample. Geologists at the lab also independently confirmed the largest spodumene boulder by scanning electron microscope (SEM). Small fragments from the suspected spodumene boulder were glued on a double-sided carbon tape and put into a Zeiss Sigma 300 VP SEM to perform point analyses. The SEM measured the Al₂O₃/SiO₂ ratio of the mineral. Even though conventional energy-dispersive spectrometry (EDS) cannot detect nor quantify lithium, spodumene has a very specific Al_2O_3/SiO_2 ratio, which can only be mismatched with pyrophyllite (a talc-like mineral). The analysis confirmed that the boulder is composed of spodumene.

The Company is awaiting the reporting of the data from the full till sampling program, which will include extensive mineralogical data on heavier minerals from within the till. The resulting database will also include valuable indications of gold, copper, nickel, and zinc that may occur within the large area being sampled. Silt-sized portions of the samples will also be submitted for geochemical analysis.

Rock Sampling Program

The technical team has now received analytical results for all of the 670 rock samples collected during the 2023 field season. The results corroborated the field observations and in-field XRF mapping of magma fractionation trends, indicating the presence of three distinct fertile pegmatite systems with anomalous Li, Cs, Ta concentrations and favourable rubidium to potassium ratios (Rb:K) in certain mineral phases. The maximum lithium assay from the program was 0.62% Li₂O. That sample occurred approximately 40 km east of the Western prospect in the eastern fractionation trend. The western trend has been significantly upgraded with the discovery of the spodumene fragments at the Western prospect, and there are at least two samples along that trend with more than 0.1% Li₂O.

Geophysics, LiDAR and Plans for 2024

No outcropping bedrock has been identified to date in the area immediately up-ice from the new Western spodumene discovery. Tailored ground gravity surveys are being planned for early 2024 as a method to accurately delineate potential blind pegmatite bodies intruding into the metabasaltic host rocks under shallow cover. Since approximately 75% of the Property is covered by glacial and alluvial sediments, till sampling and geophysical techniques will be important prospecting tools. Considering the recent positive results, it is anticipated that systematic till sampling will be conducted over much of the remainder of the Property in 2024.

The Company has also received the final data from the light detection and ranging (LiDAR) survey and high-resolution aerial photography. The team is currently processing and interpreting the results so that new targets can be visited during the 2024 field campaign.

Sampling techniques and QA/QC

Under the supervision of senior staff, samplers collected rock samples from outcrops using rock hammer, chisel, and sometimes diamond saws. The location for each sample was recorded using a handheld GPS. Geologists placed the samples in plastic bags with bar-coded sample tags inserted for identification. The sample bags were gathered into larger rice bags to organize and facilitate transport to the lab. Champion geologists or contractors maintained secure custody of the samples until transporting them to Activation Laboraties in in Val d'Or, Quebec for sample preparation and analysis.

Each sample was prepared with the RX1 (crushed and pulverized) method and analyzed after peroxide fusion using ICP-OES + ICP-MS (Ultratrace-7 method). Champion's QA/QC protocol dictates the insertion of certified standards and blanks into the sample stream as a check on laboratory quality. The sample stream also includes blind duplicates every 50 samples. Actlabs also routinely inserts certified standards, blanks and pulp duplicates as part of their internal QA/QC standard procedure. Results from these QC samples are also reported.

The results reported herein exhibited satisfactory results from these QA/QC measures.

Qualified Person

Dr. Eric Hebert, P.Geo., Senior Geological consultant, is a member (#0842) of the Ordre des Géologues du Québec (OGQ) and a qualified person within the meaning of National Instrument 43-101, and has reviewed and approved the technical information contained in this press release.

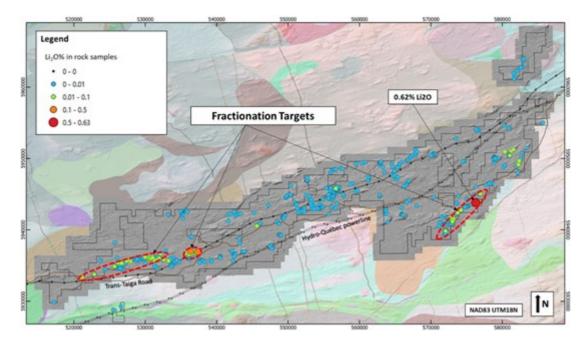


Figure 1: Lithium in rock sampling and primary target areas over regional geology (courtesy of MERN) and satellite topography

To view an enhanced version of this graphic, please visit: <u>https://images.newsfilecorp.com/files/8681/191407_ad1b4a1ec4bd7947_001full.jpg</u>



Figure 2: Fist-sized angular spodumene boulders retrieved from a till sample at the Western prospect (courtesy of IOS Services Geoscientifiques)

To view an enhanced version of this graphic, please visit: <u>https://images.newsfilecorp.com/files/8681/191407_ad1b4a1ec4bd7947_002full.jpg</u>



Figure 3: Grains of spodumene in till sample fraction 0.25 - 0.50mm from the Western prospect (courtesy of Overburden Drilling Management)

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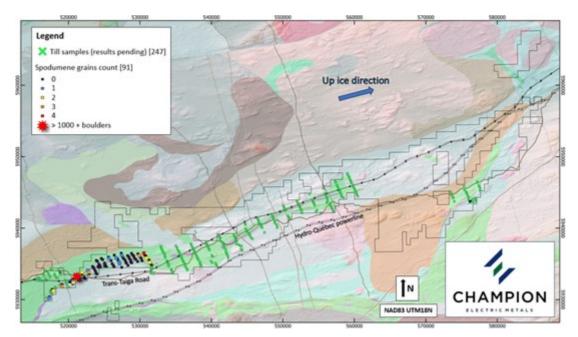


Figure 4: Till sampling locations and preliminary spodumene counts over geology and topography

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About the Project

The Company's lithium properties cover the northern extension of the Lac Guyer Greenstone Belt which hosts neighboring Patriot Battery Metals' Corvette and <u>Winsome Resources' Cancet advanced</u> <u>projects</u> in the prolific James Bay region of Quebec (Figure 5).

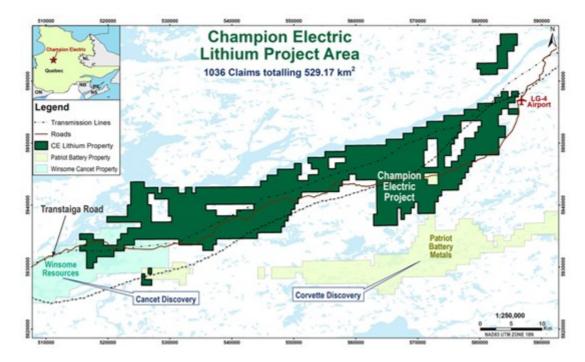


Figure 5: Champion Electric Lithium Project location map

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About Champion Electric Metals Inc.

Champion Electric is a discovery-focused exploration company that is committed to advancing its highly prospective lithium properties in Quebec, Canada and cobalt properties in Idaho, United States. In addition, the Company owns the Baner gold project in Idaho County and the Champagne polymetallic project in Butte County near Arco.

The Company's shares trade on the CSE under the trading symbol "LTHM", on the OTCQB under the trading symbol "CHELF", and on the Frankfurt Stock Exchange under the symbol "1QB0". Champion Electric strives to be a responsible environmental steward, stakeholder and contributing citizen to the local communities where it operates, taking its social license seriously, employing local community members and service providers at its operations whenever possible.

ON BEHALF OF THE BOARD OF CHAMPION ELECTRIC "Jonathan Buick" Jonathan Buick, President and CEO

To learn more, please visit the Company's SEDAR profile at <u>www.sedarplus.com</u> or the Company's corporate website at <u>www.champem.com</u>.

For further information, please contact: **Investor Relations and Communications** Phone: (416) 567-9087 Email: <u>investors@champem.com</u>

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