



**FOR IMMEDIATE RELEASE**

## **Platinex Confirms Tantalum Discovery at Muskrat Dam Critical Minerals Project, NW Ontario**

Toronto, Ontario, February 15, 2024 - **Platinex Inc. (CSE: PTX) (OTCQB: PANXF, Frankfurt: 9PX)** ("**Platinex**" or the "**Company**") is pleased to announce results from fieldwork at the Muskrat Dam Critical Minerals Project which covers key portions of the Muskrat Dam Lake greenstone belt in Northwest Ontario. Field observations and bulk rock chemical data from samples collected at the Axe Lake claim block in September 2023 have revealed anomalous levels of rare metals (Rb, Cs, Ta, Nb) and lithium. Although historical government mapping indicated favourable geology in the area, this exploration program was the first time to target rare metals and represents the confirmation of rare metal values in the Axe Lake Deformation Zone ("ALDZ") in the Muskrat Dam Lake greenstone belt. The Muskrat Dam Critical Minerals Project is held by Green Canada Corporation (GCC), in which Platinex has majority equity ownership.

The Muskrat Dam Project is located in Northwestern Ontario, approximately 125 km northeast of Frontier Lithium's PAK lithium project and 125 km northwest of Newmont's Musselwhite gold mine.

Highlights of the discovery include:

- chemically evolved, tourmaline-muscovite granitic pegmatite dyke swarm exposed over a
- minimum 0.5 by 2.2 km area on the Severn River
- beryl-type pegmatites with anomalous Rubidium (Rb) (845 ppm), Cesium (Cs) (42 ppm), Tantalum (Ta) (158 ppm), Niobium Nb (64 ppm), and Lithium (Li) (141 ppm)
- highest Tantalum 158 ppm or 225 times its mean upper continental crust value
- 40% of Nb/Ta ratios are below 2.0, signifying extreme fractionation
- pegmatite distribution controlled by Axe Lake Deformation Zone (ALDZ), a major ductile transcurrent fault system with 30 km inferred strike length on property
- similar deep crustal fault zones host rare metal pegmatite systems elsewhere, such as the Pakeagama Lake lithium pegmatite group in the Bearhead Lake deformation zone
- similarity of tectonic setting and lithochemistry to the Red Sucker Lake lithium pegmatite group, 160 km northwest in Manitoba, ostensibly in the same regional fault system

"The Muskrat Dam Critical Minerals Project was originally staked for its copper/nickel prospectivity, but the comprehensive work by Dr. Breaks and Mr. Osmani on the Axe Lake Deformation Zone has added a significant new aspect to the project," says Greg Ferron, President and CEO, Platinex Inc.

"Tantalum is not easily found in economic concentrations, so these very early indications are particularly interesting as they shine a light on the Axe Lake Deformation Zone and the structural control of the mineralization in a major fault system," says Dr. Fred Breaks, Geological Advisor, "Of interest, is the ratio of niobium to tantalum which suggests that tantalum was being concentrated compared to niobium. The

significance of the other rare metals found in these grab samples serve as indicators to the tantalum, which in today's world, has the higher value."

The field examination of the 6,175-hectare Axe Lake claim block occurred from September 4-10, 2023, and included collecting 62 grab samples in two confined areas of the large claim block (see Figure 1). The work focused on an initial evaluation of lithium and related rare metals (Cs, Rb, Ga, Nb, and Ta). Also, it examined specific interelement magmatic indicator ratios as a function of granitic pegmatite rock type.

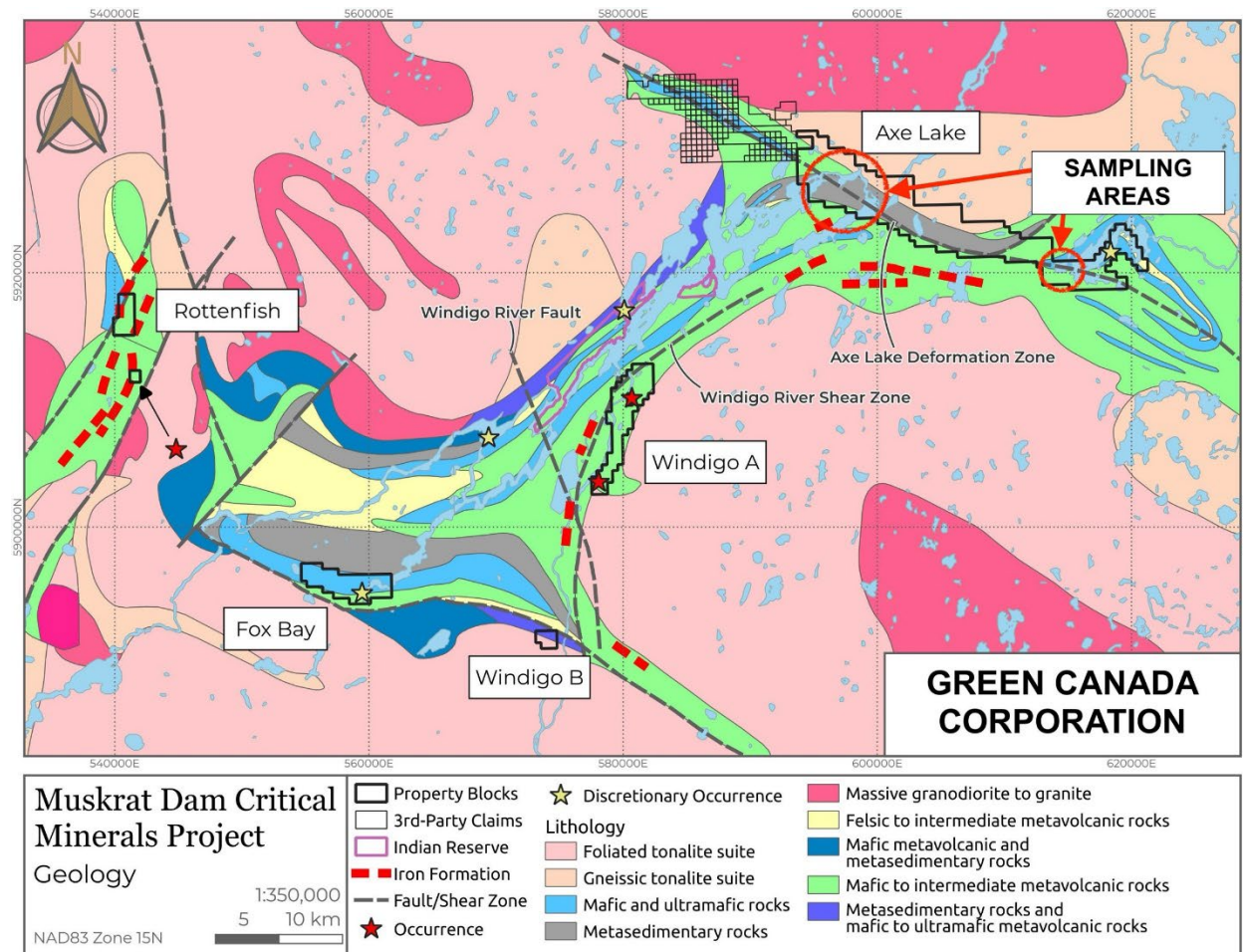


Figure 1: Muskrat Dam Critical Minerals Project

The ALDZ represents part of a significant regional fault zone system that extends at least 70 km northwest into the Sachigo-Ponask lakes area and into Manitoba, where lithium pegmatite mineralization (petalite) occurs at Red Sucker Lake. Deep crustal fault systems importantly represent S-type peraluminous pegmatitic granite generation sites via anatexis of clastic metasedimentary protoliths and as conduits for the emplacement of resulting fractionated granitic pegmatitic melts to higher crustal levels. Many rare metal pegmatite groups in the Superior Province of northwestern Ontario occur within major ductile deformation zones, most notably in the Bearhead Lake deformation zone ("BLDZ"), 160

km southwest of Axe Lake, where Frontier Lithium<sup>1</sup> has established resources of 26 mt (M&I) of 1.62% Li<sub>2</sub>O and 32.4 mt (Inferred) 1.41% Li<sub>2</sub>O. Complex-type, petalite-subtype pegmatites are now known over a 54 km strike length of the BLDZ with the recent discovery by Blaze Minerals Ltd.<sup>2</sup>

The Axe Lake pegmatite group also compares with the 0.5 by 14 km Red Sucker Lake, Manitoba pegmatite group, situated 155 km northwest, which contains a petalite pegmatite zone with a range of 0.57 to 1.48% Li<sub>2</sub>O.<sup>3</sup> The pegmatitic groups in both areas show a significant overlap of data fields in the Nb vs. Ta and Cs vs. Rb diagrams, further supporting a similar fertile granite system at Axe Lake along the same regional fault system. Possible fertile parent granite bodies may exist in the batholithic areas immediately northeast of the ALDZ in the Severn River area adjacent to the greenstone belt boundary.

The Muskrat Dam Critical Minerals Project was selected as part of the Ontario Junior Exploration Program (OJEP). Under OJEP, the Company will receive a grant covering 50 percent of qualifying exploration expenses accrued at the project between April 1, 2023, and February 15, 2024, with a maximum grant amount of \$200,000. OJEP is an initiative of the Government of Ontario that aims to attract investment in early exploration, expand the pipeline of mineral development projects, including critical minerals, and lead to more mines and jobs in Ontario.

#### **About Tantalum**

Tantalum is resistant to corrosion, superconductive, and incredibly hard. It is important for modern technology as it is used in electronic circuits and capacitors, as well as semi-conductors, superalloys (Jet Engines), and medical implants.<sup>4</sup> In 2023, the price of tantalum was approximately USD\$190/kg. The demand for Tantalum is forecast to grow at CAGR of 5.26%.

#### **QA/QC**

Analytical work was undertaken by ALS Global utilizing the complete characterization package CCP-PKG-05. This package combines rock analysis, trace elements by fusion, aqua regia digestion for the volatile trace elements, carbon and sulphur by combustion analysis, and several detection limit options for the base metals. OREAS 753 lithium-certified reference material and two split duplicates of field samples were inserted into the sample stream.

#### **Qualified Person**

The technical information presented in this news release has been reviewed and approved Dr. Fred Breaks, P. Geo, a qualified person as defined by National Instrument 43-101, Standards of Disclosure for Mineral Projects.

---

<sup>1</sup> Frontier Lithium Inc. [https://www.frontierlithium.com/\\_files/ugd/dec7de\\_844a5e2cc2234a1babbbea1879ce5573.pdf](https://www.frontierlithium.com/_files/ugd/dec7de_844a5e2cc2234a1babbbea1879ce5573.pdf)

<sup>2</sup> Blaze Minerals Ltd. 2023. Multiple high-grade lithium results from channel sampling, North Spirit Lake project. <https://www.blazelimited.com.au/wp-content/uploads/2023/12/61185316.pdf>

<sup>3</sup> Chackowsky, L.E. 1987, Mineralogy, geochemistry and petrology of pegmatitic granites and pegmatites at Red Sucker Lake and Gods Lake, northeastern Manitoba. A thesis submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfillment of the requirements of the degree of MASTER OF SCIENCE 1987.

<sup>4</sup> <https://resourcecapitalfunds.com/insights/mining-and-minerals-101/tantalum/>

### **About Platinex Inc.**

Platinex Inc. creates shareholder value through the opportunistic acquisition and advancement of high-quality projects in prolific Ontario mining camps. Current assets include a 100% ownership interest in the W2 Copper-Nickel-PGE Project near the "Ring of Fire" in northern Ontario and a 75% interest in the South Timmins Mining joint venture with Fancamp Exploration, which is focused on gold exploration along the Ridout-Tyrell Deformation Zone near IAMGOLD's Côte Gold operation in the southwest Abitibi. Platinex also holds majority ownership in Green Canada Corporation, which holds uranium assets in Saskatchewan, Ontario and Quebec, as well as an option to earn as a 100% ownership interest in the Muskrat Dam Critical Minerals Project in northwestern Ontario. In addition to its mineral exploration assets, Platinex holds a portfolio of net smelter return (NSR) royalties on gold, PGE, and base metal properties in Ontario. Having put together a strong and diversified project portfolio and an expert technical team, the Company is focused on comprehensively exploring and evaluating each project to maximize shareholder value. Platinex is based in Toronto, Canada, with a primary listing on the Canadian Securities Exchange under the symbol PTX. The company is also listed in Frankfurt under the symbol 9PF and on the OTCQB in the United States as PANXF.

For additional information on Platinex, please visit the Company's website at <https://platinex.com/>.

For further information, please contact:  
Greg Ferron, President and Chief Executive Officer  
Phone: 416-270-5042  
Email: [gferron@platinex.com](mailto:gferron@platinex.com)

### **Forward-Looking Information**

*This news release contains forward-looking information which is not comprised of historical facts. Forward-looking information is characterized by words such as "plan", "expect", "project", "intend", "believe", "anticipate", "estimate" and other similar words, or statements that certain events or conditions "may" or "will" occur. Forward-looking information involves risks, uncertainties and other factors that could cause actual events, results, and opportunities to differ materially from those expressed or implied by such forward-looking information. Factors that could cause actual results to differ materially from such forward-looking information include, but are not limited to, changes in the state of equity and debt markets, fluctuations in commodity prices, delays in obtaining required regulatory or governmental approvals, and includes those risks set out in the Company's management's discussion and analysis as filed under the Company's profile at [www.sedar.com](http://www.sedar.com). Forward-looking information in this news release is based on the opinions and assumptions of management considered reasonable as of the date hereof, including that all necessary governmental and regulatory approvals will be received as and when expected. Although the Company believes that the assumptions and factors used in preparing the forward-looking information in this news release are reasonable, undue reliance should not be placed on such information. The Company disclaims any intention or obligation to update or revise any forward-looking information, other than as required by applicable securities laws.*

*Neither the CSE nor its Regulation Services Provider (as that term is defined in the policies of the CSE) accepts responsibility for the adequacy or accuracy of this release.*