Standard Uranium Announces Engagement of Fleet Space Technologies for ExoSphere Multiphysics at Flagship Davidson River Project

18.12.2024 | Newsfile

Vancouver, December 18, 2024 - Standard Uranium Ltd. (TSXV: STND) (OTCQB: STTDF) (FSE: 9SU) ("Standard Uranium" or the "Company") is pleased to announce the engagement of Fleet Space Technologies to implement their ExoSphere Ambient Noise Tomography ("ANT") and ground gravity surveys on the Company's flagship Davidson River project. Standard Uranium is pleased to be the first uranium company to deploy the industry leading innovative technology in the southwest Athabasca basin.

Highlights

- First ANT Survey in the SW Basin: The Company and Fleet Space are partnering to complete what will be the first combination ANT-Gravity surveys in the southwestern Athabasca Basin region on the Davidson River project.
- Targeted Multiphysics: Multidisciplinary approach to targeting through Fleet space's end-to-end mineral exploration solution, ExoSphere, collecting ground gravity data in tandem with real-time ANT data, upgrading historical work and layering additional geophysics over known uranium-bearing corridors on the Davidson River project.
- Uranium Deposit Vectors: ANT-Gravity grids covering uranium-bearing structural corridors on the Project are designed to characterize lithological variations and alteration signatures, in addition to further refining the structural architecture of known basement conductors on Davidson River. The results of the surveys will assist in prioritization of target areas on the Project for upcoming drill programs.

"We are very excited to be working with the Fleet Space team on what will be the first deployment of ExoSphere Multiphysics surveys in the southwest Athabasca Basin," said Sean Hillacre, President & VP Exploration of Standard Uranium. "I look forward to de-risking our exploration strategies and upgrading our drill targets at Davidson River through these cutting edge technologies, which will provide additional discovery vectors on our flagship project."

First ExoSphere Multiphysics in the SW Athabasca Basin Region

Fleet Space Technologies is transforming critical mineral discovery with its end-to-end mineral exploration solution, ExoSphere, which combines satellite connectivity, 3D multiphysics, and artificial intelligence ("AI") to image mineral systems up to depths of 5 km in real-time. Over 40 leading exploration companies like Rio Tinto, Barrick, and Gold Fields, among many others, use ExoSphere's real-time 3D subsurface imaging on projects across five continents.

ExoSphere is a vertically integrated solution, combining Fleet Space's LEO satellite network, satellite-enabled smart seismic sensors, and predictive AI models to streamline data acquisition, processing, integration, and delivery of targeting insights in a single workflow. Deployed in an array across an area of interest, Fleet Space's lightweight, hand-deployable seismic sensors ("Geodes") transmit high-quality 3D Ambient Noise Tomography ("ANT") data, measured from naturally occurring environmental seismic vibrations in the ground, to Fleet Space's satellites for processing into actionable insights for exploration teams in the field. This simplifies data operations, enhances the quality and speed of data-driven targeting selection, and helps to minimise environmental footprint across the lifecycle of a project.

Leveraging the collected ANT data, ExoSphere will automatically conduct a cover correction of the gravity

data collected simultaneously to remove false positive anomalies due to the geometry of the overburden and basement contact. The combination of data will create a 3D density model providing a multidimensional view of subsurface structures and differentiation of rock types and potential alteration signatures to aid in drill target selection and prioritization.

Figure 1. Overview of the western Athabasca Basin region highlighting Standard Uranium's Davidson River project as well as projects under option and available for JV. ExoSphere multiphysics surveys will be conducted on the company's Davidson River project.

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/10633/234239_b1d49644b43e4a3f_002full.jpg

Davidson River Project

- Size & Location: The Davidson River project covers more than 30,700 hectares across ten mineral claims in the southwestern Athabasca Basin region, approximately 25-30 kilometres west of NexGen's Arrow deposit and Fission Uranium's Triple R deposit, and 5 kilometres south of the present-day margin of the Athabasca Basin.
- Geophysical/Geological Signatures: The project encapsulates the inferred extension of the Patterson Lake corridor, a structural trend that hosts the neighboring Arrow and Triple-R uranium deposits. Four main conductive corridors have been identified on the Project, totalling more than 70 kilometres of prospective strike length. The new multiphysics surveys will add additional targeting layers to expedite discoveries on the Project.
- Drilling Highlights: The summer 2022 program revealed the best intersections of prospective alteration and structure to date along the Bronco and Thunderbird trends, including wide graphitic structural zones on Bronco and oxidized alteration on Thunderbird, in addition to elevated radioactivity and dravite alteration.
- Machine Learning: Data-driven machine learning techniques will contribute to drill targeting at Davidson River through anomaly detection and mapping of EM data, in addition to anomaly matching based on the footprints of known world-class uranium deposits in the area including the Arrow and Triple-R deposits. The machine learning techniques will also be applied to the Company's internal drilling and geochemical databases.
- Next Steps: Planned 2025 drilling will follow up on the most prospective basement structures and alteration zones intersected to date and begin testing new target areas prioritized by the new ANT-Gravity surveys. Standard Uranium plans to follow up on prospective drilling results from 2022 and test brand new high-priority targets akin to the neighboring JR Zone discovery within the new southeast claim blocks.

Standard Uranium holds more than 94,000 hectares of prime exploration real estate across the prolific Athabasca Basin region, which hosts the highest-grade uranium deposits on the planet. The Company boasts an attractive portfolio of uranium exploration projects currently available for option ranging from early-stage to drill-ready projects throughout the Athabasca region, providing turn-key opportunities with permits in hand, First Nations agreements signed, vendors secured, and highly prospective uranium targets.

QP Statement

The scientific and technical information contained in this news release has been reviewed, verified, and approved by Sean Hillacre, P.Geo., President and VP Exploration of the Company and a "qualified person" as defined in NI 43-101.

Historical data disclosed in this news release relating to sampling results from previous operators are historical in nature. Neither the Company nor a qualified person has yet verified this data and therefore investors should not place undue reliance on such data. The Company's future exploration work may include verification of the data. The Company considers historical results to be relevant as an exploration guide and to assess the mineralization as well as economic potential of exploration projects.

*The Company considers uranium mineralization with concentrations greater than 1.0 wt% U_3O_8 to be "high-grade".

** The Company considers radioactivity readings greater than 300 counts per second (cps) to be "anomalous".

***Natural gamma radiation in outcrop reported in this news release was measured in counts per second (cps) using a handheld RS-125 super-spectrometer and a downhole Reflex EZ-Gamma probe. Readers are cautioned that scintillometer and gamma probe readings are not uniformly or directly related to uranium grades of the rock sample measured and should be treated only as a preliminary indication of the presence of radioactive minerals.

About Standard Uranium (TSXV: STND)

We find the fuel to power a clean energy future

Standard Uranium is a uranium exploration company and emerging project generator poised for discovery in the world's richest uranium district. The Company holds interest in over 233,455 acres (94,476 hectares) in the world-class Athabasca Basin in Saskatchewan, Canada. Since its establishment, Standard Uranium has focused on the identification, acquisition, and exploration of Athabasca-style uranium targets with a view to discovery and future development.

Standard Uranium has successfully executed three joint venture earn-in partnerships on their Sun Dog, Canary, and Atlantic projects totaling over $23.8M in work commitments over the next three years from 2024-2027, all of which will be managed by Standard's experienced exploration team.

Standard Uranium's Davidson River Project, in the southwest part of the Athabasca Basin, Saskatchewan, comprises ten mineral claims over 30,737 hectares. Davidson River is highly prospective for basement-hosted uranium deposits due to its location along trend from recent high-grade uranium discoveries. However, owing to the large project size with multiple targets, it remains broadly under-tested by drilling. Recent intersections of wide, structurally deformed and strongly altered shear zones provide significant confidence in the exploration model and future success is expected.

Standard Uranium's eastern Athabasca projects comprise over 42,384 hectares of prospective land holdings. The eastern basin projects are highly prospective for unconformity related and/or basement hosted uranium deposits based on historical uranium occurrences, recently identified geophysical anomalies, and location along trend from several high-grade uranium discoveries.

Standard Uranium's Sun Dog project, in the northwest part of the Athabasca Basin, Saskatchewan, comprises nine mineral claims over 19,603 hectares. The Sun Dog project is highly prospective for basement and unconformity hosted uranium deposits yet remains largely untested by drilling despite its location proximal to uranium discoveries in the area.

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Cautionary Statement Regarding Forward-Looking Statements

This news release contains "forward-looking statements" or "forward-looking information" (collectively, "forward-looking statements") within the meaning of applicable securities legislation. All statements, other than statements of historical fact, are forward-looking statements and are based on expectations, estimates

and projections as of the date of this news release. Forward-looking statements include, but are not limited to, statements regarding: the timing and content of upcoming work programs; geological interpretations; timing of the Company's exploration programs; and estimates of market conditions.

Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors that could cause actual events or results to differ from those expressed or implied by forward-looking statements contained herein. 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. Certain important factors that could cause actual results, performance or achievements to differ materially from those in the forward-looking statements are highlighted in the "Risks and Uncertainties" in the Company's management discussion and analysis for the fiscal year ended April 30, 2024.

Forward-looking statements are based upon a number of estimates and assumptions that, while considered reasonable by the Company at this time, are inherently subject to significant business, economic and competitive uncertainties and contingencies that may cause the Company's actual financial results, performance, or achievements to be materially different from those expressed or implied herein. Some of the material factors or assumptions used to develop forward-looking statements include, without limitation: that the transaction with the Optionee will proceed as planned; the future price of uranium; anticipated costs and the Company's ability to raise additional capital if and when necessary; volatility in the market price of the Company's securities; future sales of the Company's securities; the Company's ability to carry on exploration and development activities; the success of exploration, development and operations activities; the timing and results of drilling programs; the discovery of mineral resources on the Company's mineral properties; the costs of operating and exploration expenditures; the presence of laws and regulations that may impose restrictions on mining; employee relations; relationships with and claims by local communities and indigenous populations; availability of increasing costs associated with mining inputs and labour; the speculative nature of mineral exploration and development (including the risks of obtaining necessary licenses, permits and approvals from government authorities); uncertainties related to title to mineral properties; assessments by taxation authorities; fluctuations in general macroeconomic conditions.

The forward-looking statements contained in this news release are expressly qualified by this cautionary statement. Any forward-looking statements and the assumptions made with respect thereto are made as of the date of this news release and, accordingly, are subject to change after such date. The Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by applicable securities laws. There can be no assurance that forward-looking 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 statements.

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