

#### STANDARD URANIUM LTD.

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## **NEWS RELEASE**

Standard Uranium Discovers New Visible Mineralization at Surface and Pinpoints Drill Targets at Sun Dog Project near Uranium City, Saskatchewan

Recent prospecting by Standard Uranium and Aero Energy has bolstered drill targets through discovery of new uranium zones at multiple target areas

Vancouver, British Columbia, July 18, 2024 — Standard Uranium Ltd. ("Standard Uranium" or the "Company") (TSX-V: STND) (OTCQB: STTDF) (Frankfurt: FWB:9SU) is pleased to announce new prospecting results and drill target areas at its Sun Dog Uranium Project ("Sun Dog", or the "Project") located near Uranium City in northwestern Saskatchewan. A drilling campaign is scheduled to commence in the coming week, designed to test high-priority targets with the potential to discover high-grade, unconformity-related basement-hosted uranium mineralization along structural and conductive corridors.

The Project is currently under a three-year earn-in option agreement (the "**Option**") with Aero Energy Ltd. ("**Aero**") (TSX-V: AERO) that was executed on October 20, 2023. The program will be funded by Aero and will be operated by the Company.

**Embed:** https://www.youtube.com/watch?v=gbjmmnPRfsw

Caption: Video: Standard Uranium President and VP of Exploration Sean Hillacre talks with Steve Darling of Proactive to discuss the upcoming drill campaign at Sun Dog with Aero Energy

# **Highlights:**

- **Drilling at Sun Dog Imminent:** Multiple prospective drill targets have been prioritized following prospecting of conductive (graphitic) rock trends identified from the recent VTEM<sup>TM</sup> Plus airborne survey.
- Undrilled Target Areas: Targets are designed to test conductive corridors marked by newly discovered radioactive graphitic fault zones outcropping at surface (Figure 1).
- Wishbone Target Area: Recent prospecting has outlined new and historical uranium mineralization at surface with radioactivity readings up to 22,300 counts per second\* ("cps") within and immediately adjacent to graphitic pelite (Figure 2) that has never been drill tested.

- **McNie Target Area:** More than 4km of untested VTEM<sup>TM</sup> conductors off-set by major faults which host known uranium showings to the east and to the west towards the past-producing Gulch uranium mine (Figure 3).
- Spring-Dome Target Area: New and historical zones of strong radioactivity >65,535 cps\* at surface associated with visible uranium mineralization have been discovered during the recent prospecting program at the Spring-Dome target area (Figure 4).
- **Historical High-Grade Uranium Assays:** The Wishbone and Spring-Dome Target Areas contain numerous historical high-grade\*\* uranium assays from outcrop samples that range from **0.30% to 17.4% U**<sub>3</sub>**O**<sub>8</sub><sup>1,2</sup>.
- **2024 Drill Program:** Drilling is expected to commence on July 21<sup>st</sup> with the program comprising approximately 1,000 to 1,200 metres within five (5) to seven (7) drill holes. The program will be results-driven with modification made based on ongoing results and interpretations.

**Sean Hillacre, President / VP Exploration of Standard Uranium, commented:** "Our recent prospecting program at Sun Dog significantly upgraded our target zones for this summer's drill program. Locating and mapping radioactive graphitic pelitic rocks at surface, which are the ideal host rocks we are targeting, is exceptional. The technical team and I were pleasantly surprised by the quality of the showings we were able to ground truth and expand, sharpening our targeting for drilling to start next week."



Photo: Aero Energy CEO, Galen McNamara, and Technical Advisor, Garrett Ainsworth, measuring surface radioactivity at the Wishbone target area on the Sun Dog Project.

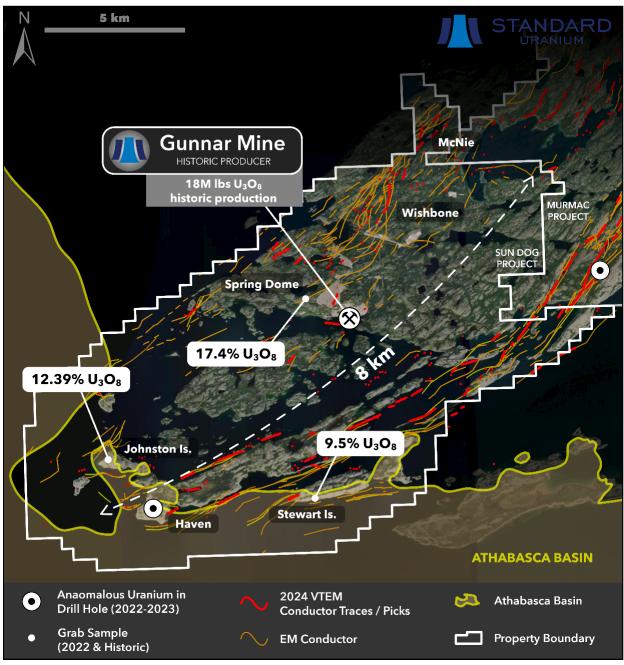


Figure 1. Overview of the Sun Dog Project highlighting 2024 summer drill target areas, high-grade uranium occurrences, and EM-conductors.

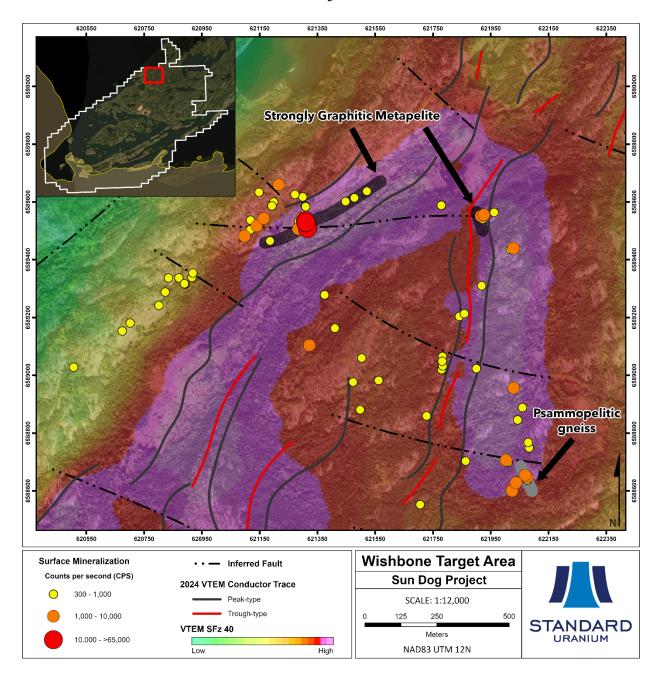


Figure 2. Detail map of the Wishbone target area highlighting newly discovered mineralized graphitic metapelite outcrop, anomalous surface radioactivity\*\*\*, and untested VTEM conductors.

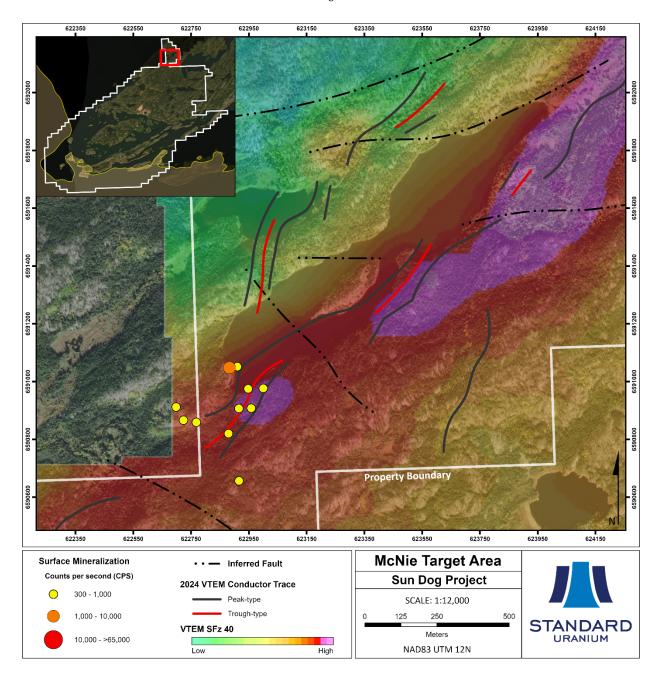


Figure 3. Detail map of the McNie target area highlighting untested VTEM conductors, faults, and surface radioactivity.

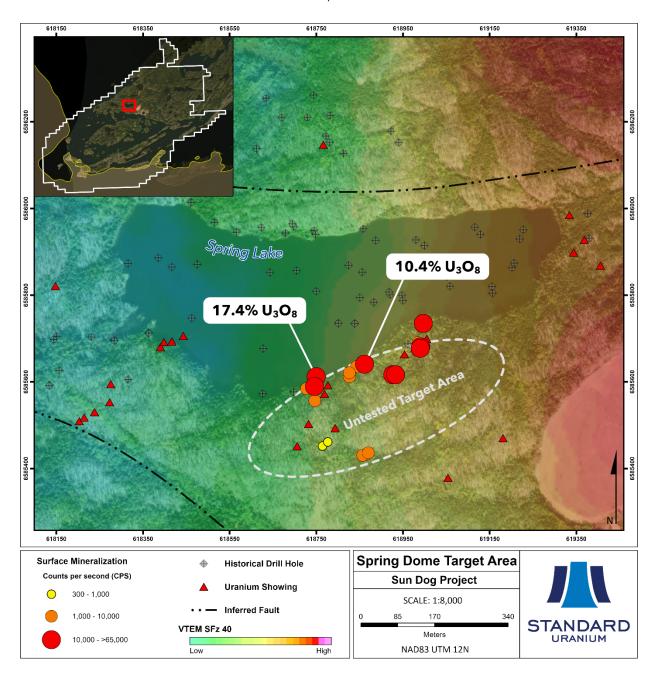


Figure 4. Detail map of the Spring-Dome target area highlighting historical and newly discovered strong radioactivity >65,000 cps at surface.

# **Drill Target Selection**

Target Selection for 2024 Drill Campaign

Targets were selected and prioritized through an iterative approach working in collaboration with Aero and Convolutions Geoscience teams. Recent prospecting and mapping at the Wishbone, McNie, and Spring-Dome target areas has outlined multiple outcrops of favourable uranium host-rocks, including graphitic pelite, which is commonly radioactive over >200 m of collective strike

length. Structural measurements and radioactivity mapping has further refined drill targets in these areas.

Targets are ranked and prioritized based on geophysical signature, geological/structural setting, proximity to historical uranium occurrences of interest, and the Company's recent prospecting and mapping campaign. A total of seven (7) priority targets were identified (Figure 1) to encompass a variety of target types and provide a third phase of regional testing across the Project:

### Wishbone Target Area:

- Approximately five kilometres of strike length along a regional scale anticline, defined by strong VTEM conductors with associated radioactivity that has never been drill tested.
- Graphitic pelitic rocks have been mapped along both fold limbs, hosting strong radioactivity up to 22,300 cps.
- Mineralized cross-cutting faults have been mapped in the overlying rocks which intersect the uranium-bearing graphitic pelite unit.
- Historical outcrop sampling at the northwestern graphitic pelite exposure returned assay results of 0.32% U<sub>3</sub>O<sub>8</sub> and 0.30% Cu (SMDI #2095).

# McNie Target Area:

- Approximately four kilometres of untested VTEM conductor strike length.
- The corridors are off-set by significant E-W trending regional faults, which host known uranium showings to the east towards the newly discovered zone at target H15 on the Murmac Project, and to the west towards the past-producing Gulch uranium mine.

## Spring-Dome Target Area:

- Historically explored Gunnar-style target focused on mineralized carbonatized granites and pitchblende veins and fractures.
- The Spring-Dome area has been historically drilled with intersections over 1.0% U<sub>3</sub>O<sub>8</sub>; however, several showings of uranium south of known drilling with values up to 17.4% U<sub>3</sub>O<sub>8</sub> and radioactivity readings >65,535 cps have not been properly drill-tested.
- The Company is currently evaluating the priority of this area through prospecting, mapping, and geological modeling. The target area south of Spring Lake represents the possibility of a uranium deposit akin to the nearby past-producing "Beaverlodge-style" Gunnar mine.

Other high-priority target areas including Haven, Java, and Skye are being reviewed with new datasets and models for a possible winter drill program in 2025.

# Recent Geophysical Data Acquisition & Interpretation

A helicopter-borne geophysical survey, including electromagnetics and magnetics, was completed during late April 2024. The survey was undertaken by Geotech Ltd. using the VTEM<sup>TM</sup> Plus geophysical system. The survey covered the entire Project on a 100-metre line spacing, obtaining new coverage and refining historical EM surveys on the Project. Ground gravity data acquired during 2022 and historical resistivity data were subject to 3D inversion and modelling. The

geophysical data processing, interpretation and integration to assist in the prioritization of drill targets was completed by Convolutions Geoscience Corporation ("Convolutions").

# Background & Previous Work

Sun Dog covers an area of 48,443 acres in nine mining claims, located 15 km from Uranium City on the northern margin of the Athabasca Basin. It hosts the historical Gunnar Uranium Mine, discovered in 1952, which doubled Canada's uranium production and became the largest uranium producer globally in 1956. The Gunnar Mine produced approximately 18M lbs of U<sub>3</sub>O<sub>8</sub> between 1953 and 1981<sup>1,2</sup>.

During this time exploration efforts in the area primarily focused on "Beaverlodge-style" deposits, typically lower-grade, fault-hosted mineralization visible at the surface. This approach did not target, and would not have been effective for, the high-grade "unconformity-related" basement-hosted deposits associated with graphitic rocks more recently discovered near the Athabasca Basin's edge (e.g. Arrow, Triple R).

These deposits are associated with graphite-rich rocks, evident as electromagnetic (EM) conductors in geophysical surveys. These graphite-rich rocks, softer than surrounding quartzite and granitoid lithologies, are largely not exposed at the surface. Instead, they are typically found in deeply weathered valleys, concealed by glacial till, soil and small lakes. The historical exploration methods applied included airborne radiometric and surface prospecting, identifying radioactive anomalies and drill testing their extents. This approach is not effective for this type of basement-hosted mineralization.

Recent exploration efforts by Standard Uranium have focused on the most promising historical target areas along the edge of the Athabasca Basin, namely Skye, Java, and Stewart Island, testing down-dip extensions of structures hosting uranium at surface with the aim of discovering high-grade unconformity mineralization and basement "roots" of the mineralizing systems underlying the Athabasca sandstones.

Prospecting by the Company led to the discovery of a new high-grade uranium showing named the Haven discovery and several zones of visible uranium mineralization at surface that returned uranium assay results of 3.58% U<sub>3</sub>O<sub>8</sub>, 1.7% U<sub>3</sub>O<sub>8</sub>, and 0.7% U<sub>3</sub>O<sub>8</sub>. The expanded surface expression of mineralization on south Johnston Island displayed scintillometer readings >10,000 cps and locally off-scale (>65,535 cps) and the historical mineralized surface occurrences on Stewart Island were confirmed with scintillometer measurements ranging from >500 cps to >65,535 cps. Radioactivity measurements were collected with hand-held RS-121 or RS-125 scintillometers.

Standard Uranium carried out two drill programs on the Project during the winters of 2022 and 2023. In total 2,469 m of diamond drilling was completed across fourteen drill holes. The 2022 and 2023 diamond drill programs were successful in identifying key geological characteristics prospective for significant uranium mineralizing systems on the Project, including widespread hydrothermal alteration zones containing dravitic clays, reactivated graphitic shear zones and quartz-hematite breccias, and uranium mineralization including 0.042 wt.% U<sub>3</sub>0<sub>8</sub> from 79.0 to 79.5 m and 0.021 wt.% U<sub>3</sub>0<sub>8</sub> from 79.5 to 80.0 m in drill hole SD-23-013.

\*Natural gamma radiation in outcrop reported in this news release was measured in counts per second (cps) using a handheld RS-125 super-spectrometer. 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.

\*\*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".

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 on the Sun Dog Project is 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 will 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 the Project.

## **About Standard Uranium (TSX-V: 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 209,867 acres (84,930 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 completed 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.

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 highgrade 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 eight eastern Athabasca projects comprise thirty mineral claims over 32,838 hectares. 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, is comprised of 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 sufficient drilling despite its location proximal to uranium discoveries in the area.

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#### References

- 1. 2022 Winter Mineral Assessment Report, Sun Dog Property, Northern Saskatchewan, Canada, Standard Uranium, 2022
- 2. Information obtained from Saskatchewan Mineral Deposit Index and historical report from Uranium City Resources, 2007

## **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, 2023.

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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