Nuclear Fuels Summarizes Initial Kaycee Uranium Project Drill Program; Commences Expanded 2024 Program

CSE:NF
OTCQX:NFUNF

VANCOUVER, BC, Aug. 29, 2024 /CNW/ -**Nuclear Fuels Inc.** (CSE: NF) (OTCQX: NFUNF) **("Nuclear Fuels" or the "Company")** announces today the commencement of an expanded drill program and provides a summary of results from the initial successful drill program, completed during the first half of 2024 at its priority Kaycee In-Situ Recovery ("ISR") Uranium Project in Wyoming's Powder River Basin. The completed program was designed to confirm and expand uranium mineralization associated with two (of seven) known historic resource areas along the 36-mile trend. Importantly, the drill program indicated the potential connection of the Saddle and Spur Zones and also identified previously unknown deeper zones.

Greg Huffman, Chief Executive Officer, stated: "The compilation of information from the initial 200 drill hole program at the Kaycee ISR Uranium Project has provided the Nuclear Fuels team with a series of high priority targets for our new expanded program. Our experienced field crew has the new drill program underway and we look forward to regular drill updates through the balance of 2024 and into 2025."

To view project maps please visit: https://bit.ly/4g01ZQ5

Specific highlights include:

- The drill program resulted in the identification of additional mineralized horizons, through deeper drilling below or adjacent to, previously known historic resources or mineralized areas;
- The drill program led to the discovery of a southerly extension trending from the Spur Zone towards the Saddle Zone, approximately 2 miles from the Saddle Zone;
- 169 drill holes were completed at an average depth of 522 feet at the Saddle Zone (an area of approximately 1,000 acres) and 31 drill holes at an average depth of 497 feet at the Spur Zone, (an area in excess of 120 acres) located approximately 2 miles along trend to the northwest of the Saddle Zone;
- 75% of the holes returned anomalous gamma values with 47 holes returning Grade Thickness ("GT") of 0.25 or better with a combined 209 feet at an average grade of 0.124 % eU_3O_8. Grade Thickness, or GT, is defined as the product of the uranium grade ("eU_3O_8%") multiplied by the thickness of the intercept (in feet). In the Powder River Basin ("PRB") of Wyoming potentially ISR-recoverable uranium mineralization with a GT of greater than 0.25 is considered suitable for inclusion in a potential wellfield at a conservative uranium price of 50.00 per pound;
- The completion of an evaluation of over 500 historic well logs resulting in an increase to the permit area including 700 new drill hole locations.

Saddle Zone Drilling

In the initial drill program, 169 drill holes were completed in the Saddle Zone; 32 of which returned GT's of 0.25 or better. 85 drill holes were located within and immediately adjacent to the historic resource area. The remaining 84 drill holes were either large step out drill holes of up to 0.5 miles or designed to test new targets. The best drill results, from the historic resource area, returned 6.5 feet of 0.187% eU_3O_8 with a GT of 1.216 (NF News Release dated December 7, 2023). Deeper drilling through the Saddle Zone, and to the southeast of the Saddle Zone, intercepted anomalous mineralization in deeper formations than had been previously identified.

Spur Zone Drilling

In the initial drill program, 31 drill holes were completed in the Spur Zone; all located within the historic resource or as small step-outs holes from known mineralization. 15 drill holes returned better than 0.25 GT with 5 drill holes in excess of 0.4 GT; the best hole having two well mineralized intervals. Hole SR23-002 intercepted 3.5 feet of 0.141% eU_3O_8 from a depth of 415.5 feet (GT of 0.494) plus 4.5 feet of 0.233% eU_3O_8 from a depth of 422.0 feet (GT of 1.049), for a combined GT of 1.543 (NF News Release dated February 27, 2024). 4 of the drill hole results at the Spur Zone returned GT values over 1.0 with one returning a GT of 0.776.

Importantly, the holes drilled to the south of previously known mineralization such as SR23-024 identified a new extension to the mineralization trending toward the Saddle Zone approximately 2 miles away. SR24_024 returned 0.109% eU_3O_8 over 4.0 feet from a down hole depth of 313.5 feet (GT of 0.436). Extending this newly identified mineralization is a top priority for the current drilling program.

Newly Acquired Oil & Gas Drill Logs

The evaluation of over 500 newly acquired oil and gas logs combined with the integration of the information into the Company's historic drill database and the first 200 holes drilled in the initial program, has increased the Company's understanding of the overall geology, trend and the relationship of known zones at the Kaycee Uranium Project. The combination of information has identified several new target areas and resulted in the implementation of a more comprehensive program planned for Q3 and Q4 2024. As a result, a drill permit application was submitted for an expanded exploration permit and has subsequently been approved. The expanded drilling permit allows for 700 drill holes designed to confirm and expand existing zones while importantly, testing high priority new targets along the expanding 36-mile trend.

Kaycee Uranium Project, Wyoming

The Kaycee Project in Wyoming's Powder River Basin ("PRB"), Nuclear Fuels' priority project, consists of over 42 square miles of mineral rights over a 36-mile mineralized trend hosting more than 110 miles of identified roll fronts. The Kaycee Project is believed to be the only project in the PRB where all three known historically productive sandstone formations (Wasatch, Fort Union, and Lance) are mineralized and potentially accessible for ISR extraction. The Kaycee Project, under Nuclear Fuels, represents the first time since the early 1980's that the entire district is controlled by one company.

In 2023, Nuclear Fuels acquired the Kaycee Project from enCore Energy Corp., which retains a back-in right for 51% of the project by paying 2.5X the exploration costs and financing the Kaycee project to production (costs recoverable from production) upon Nuclear Fuels establishing a minimum 15 million pound eU_3O_8 43-101 compliant resource.

Wyoming is a proven and prolific uranium producer with a pro-energy government and established regulatory regime for the permitting and extraction of uranium through ISR technology. As Wyoming is one of the few "Agreement States" hosting ISR uranium deposits, where the federal government and the Nuclear Regulatory Commission have ceded regulatory authority to the state government, permitting, and advancing uranium projects is more efficient and streamlined as compared to most other states. Wyoming, with over 250 million pounds of historic production, ranks as the state with the second most uranium production to date; most of which has been through the ISR method since 1990; predominantly from the Powder River Basin.

Drill holes were completed by Single Water Services using a rotary drill rig. Chip samples are collected for lithological logging every five feet. Century Geophysics of Tusla Oklahoma is contracted to conduct downhole gamma ray, resistivity, spontaneous potential, and deviation. Century Geophysics calibrates the downhole tools in the US Department of Energy uranium logging Test pits in Casper Wyoming to ensure the accuracy of the down hole gamma ray log measurements. % eU_3O_8 is a measure of gamma intensity from a decay product of uranium and is not a direct measurement of uranium. Numerous comparisons of eU_3O_8 and chemical assays of Powder River Basin core samples indicate that eU_3O_8 is a reasonable indicator of the actual uranium assay.

The technical content of this news release has been reviewed and approved by Mark Travis, CPG., a contractor to the Company, and a Qualified Person as defined in National Instrument 43-101.

About Nuclear Fuels Inc.

Nuclear Fuels Inc. is a uranium exploration company advancing early-stage, district-scale In-Situ Recovery ("ISR") amenable uranium projects towards production in the United States of America. Leveraging extensive proprietary historical databases and deep industry expertise, Nuclear Fuels is well-positioned in a sector poised for significant and sustained growth on the back of strong government support. Nuclear Fuels has consolidated the Kaycee Wyoming district under single-company control for the first time since the early 1980s. Currently executing its second drill program at the Kaycee Project, the Company aims to expand on historic resources across a 33-mile trend with over 110 miles of mapped roll-fronts defined by 3,800 drill holes. The Company's strategic relationship with enCore Energy Corp., America's Clean Energy Company™, offers a mutually beneficial "pathway to production," with enCore retaining the right to back- in to 51% ownership in the flagship Kaycee Project in Wyoming's prolific Powder River Basin.

The Canadian Securities Exchange has not reviewed this press release and does not accept responsibility for the adequacy or accuracy of this news release.

Certain information in this news release constitutes forward-looking statements under applicable securities laws. Any statements that are contained in this news release that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements are often identified by terms such as "may", "should", "anticipate", "expect", "potential", "believe", "intend" or the negative of these terms and similar expressions. Forward-looking statements in this news release include, but are not limited to, statements relating to planned exploration programs and the results of additional exploration work in seeking to establish mineral resources as defined in NI43-101 on any of our properties. Forward-looking statements necessarily involve known and unknown risks, including, without limitation, risks associated with the completing planned exploration programs and the results of those programs; the ability to access additional capital to fund planned and future operations; regulatory risks including exploration permitting; risks associated with title to our mineral projects; the ability of the company to implement its business strategies; and other risks including risks contained in documents available for review at www.sedar.com under the Company's profile. Readers are cautioned not to place undue reliance on forward-looking statements as there can be no assurance that the plans, intentions or expectations upon which they are placed will occur. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement.

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