

Nuclear Fuels Releases Technical Report for the Kaycee Uranium Project

Exploration Target Identified of 11.5 to 30 Million Pounds

VANCOUVER, BC, Oct. 8, 2024 /CNW/ - **Nuclear Fuels Inc.** (CSE: NF) (OTCQX: NFUNF) ("Nuclear Fuels" or the "Company") today released a NI 43-101 Technical Report for the Kaycee In-Situ Recovery ("ISR") Uranium Project located in Wyoming's Powder River Basin. The Technical Report, prepared by WWC Engineering, has identified an exploration target of 11.5 to 30 million pounds of uranium (" U_3O_8 ") supported by available historical data from previous operators and recent exploration recently conducted by Nuclear Fuels.

Significant highlights of the Technical Report include:

- An exploration target of 11.5 to 30 million pounds uranium ("U₃O₈) at average grades of 0.06% to 0.10%;
- A more extensive, in-depth review of historical data identified approximately 430 miles of roll fronts, an increase from the +110 miles previously outlined. Approximately 10% of the mapped redox trends have been explored with close-spaced drilling;
- The identification of the presence of multiple stacked roll fronts in each of the three stratigraphic formations that are known to host uranium mineralization:
- Indication the uranium mineralization lying under the water table may be amenable to In-Situ Recovery ("ISR"), based on
 historical metallurgical and mineral processing test work. ISR is an economical and environmentally responsible means of
 extracting uranium through wellfield technology and the use of oxygenated water, eliminating the use of conventional mining
 techniques;
- Details regarding the eleven (11) reported areas of historical uranium resources occurring at depths that range from less than 50 to 1,300 feet with a shallow water table typically lying between 50 and 250 feet.
- The Technical Report recommended that the Company should continue the current drilling program to delineate mineralization and explore for additional mineralized areas on the Project. In addition, the Technical Report recommended that the Company should prepare a classified mineral resource estimate for the Project, contingent on positive results of the drilling program.

To view project maps please visit: https://bit.ly/3NhnBdO.

Greg Huffman, Chief Executive Officer, stated: "We are experiencing a nuclear renaissance and significantly increased uranium activity in the region, including the announced planned restart of the ISR operations immediately to the east of Kaycee Project. The Kaycee Technical Report provides an exploration target which potentially represents a new uranium resource in Wyoming's prolific Powder River Basin. The Technical Report, combined with encouraging results from our ongoing drill program, increases our confidence that the Kaycee project has the potential to emerge as another uranium development project in the Powder River Basin."

Methodology to estimate an exploration target range based on historical data includes:

- Average grade and thickness for the mineralized zones in the Wasatch and Fort Union formations were calculated based on the historical data;
- Grade-Thickness calculated as weighted averages based on the number of drillholes in the various mineralized zones. Grade
 Thickness ("GT"), is defined as the product of the uranium grade (U₃O₈%) multiplied by the thickness of the intercept (in feet).
 In the Powder River Basin of Wyoming, potentially ISR- recoverable uranium mineralization with a GT of greater than 0.20 is
 considered suitable for inclusion in a potential wellfield;
- Outlines of the historically mapped mineralized areas were digitized with the area and length of the mineralized zones calculated;
- The average width of the mineralized zones was established by dividing the area of the mineralized zones by their length;
- The average width for each formation was multiplied by the length of the roll front trends to estimate the total area of mineralized trend for each formation;
- Mineralization does not occur along the entire roll front trend; therefore, a Trend Mineralization Factor was calculated for the Wasatch and Fort Union formations by dividing the length of the historically mapped mineralized zones by the total roll front trend length for each mineralized zone;
- The weighted average GT and Trend Mineralization Factor for the Wasatch and Fort Union formations was used for the purposes of calculating an exploration target in the Lance Formation.

Kaycee ISR Uranium Project Exploration Target¹

Formation	Exploration Target Average Grade (USOS N)	Exploration Target Average Thickness (Seet)	Exploration Target Average GT	Total Trend Length (thousand feet)	Exploration Target Average Trend Width (feet)	Exploration Target Area (thousand square feet)	Exploration Target Tonnage (million tons)	Exploration Target Potential Quantity (million ibs USOE)
Wasanch	0.309%	4.91	0.61	628	54	33,600	5.5	12.0
Fort Union	0.095%	5.18	0.57	1,259	-69	86,346	7.2	13.6
Sance		100	0.19	36.7	61	22,430	2.1	4.3
Total	0.101%			2,254		142,876	14.8	30
Wasanch	0.054%	3.67	0.20	628	54	33,600	3.6	3.9
Port Diseas	0.065%	3.85	0.25	1,259	69	86,346	4.6	6.0
Sance	100	100	0.22	36.7	61	22,430	2.3	2.6
Total	0.060%			2,254		142,376	9.6	11.5
	Wasanch Fort Union Lance Speak Wasanch Port Union Lance	Terrent Average Grade (U SOS N) Washish 0.2096 Ann Linon 0.095% Lance 0.161% Washish 0.054% Washish 0.054% Ann Linon 0.055% Lance 0.055%	Treget Average Average Thickness (Freedom). Treget Average (Freedom). Treget (Freedom). (Freedom). Treget (Freedom). (Freedom). Treget (Freedom). (Freedom). Treget (Freedom). (Freedom). Treget (Freedom). Treget (Freedom). Treget	Teget Average Average Richards Stepper Average Richards Stepper Average Richards Stepper Average Richards Stepper Average Review Stepp	Taget Aurorga Aurorga Aurorga Taget Auro	Name	Equivalent Equ	Equipment Equi

Kaycee ISR Uranium Project Exploration Target (CNW Group/Nuclear Fuels Inc.)

The Kaycee Technical Report can be found on the Nuclear Fuels website at: https://bit.ly/3YcCOD1.

Kaycee Uranium Project, Wyoming

The Kaycee Project in Wyoming's Powder River Basin ("PRB"), Nuclear Fuels' priority project, consists of over 55 square miles of mineral rights over a 36-mile mineralized trend hosting approximately 430 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 uranium 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. 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, making permitting and advancing uranium projects more efficient and streamlined as compared to most other states. Wyoming, with over 250 million pounds of historic uranium production, ranks as the state with the second most uranium production to date, most of which has been through the ISR technology since 1990, predominantly from the PRB.

The NI 3-101 Technical Report will be made available on SEDAR and the Company's website within the time prescribed by NI 43-101. The technical content of this news release has been reviewed and approved by Christopher McDowell, MBA, P.G., a Project Manager with WWC Engineering, independent of Nuclear Fuels and a Qualified Person as defined in National Instrument 43-101.

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 in a nuclear renaissance. 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 35-mile trend with over 430 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.

¹ NI 43-101 Technical Report - Kaycee Uranium Project WWC Engineering September 6, 2024.

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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