



NEWS RELEASE
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Nuclear Fuels Reports High Grade Intercept of 0.205% eU₃O₈ over 8.0 feet from the First Drill Program at the Kaycee Uranium Project's East and West Stirrup Zones; Extends Known Mineralization 1,000 Feet

VANCOUVER, British Columbia – October 30, 2024 – Nuclear Fuels Inc. (CSE:NF | OTCQX:NFUNF) (“Nuclear Fuels” or the “Company”) announced today the best results to date from the on-going drill program at the Kaycee In-Situ Recovery (“ISR”) Uranium Project (the “Project”) in Wyoming’s Powder River Basin (“PRB”). The current drill hole results are from the Company’s first drilling on the historic Stirrup West and East Zones which lie ~2.7 miles from the Saddle Zone and 1 mile from the Spur Zone. Drilling at the Stirrup West Zone returned up to 0.205% eU₃O₈ over 8.0 feet with a Grade Thickness (“GT”) of 1.640, representing the highest GT encountered by the Company. Drilling at Stirrup East Zone has confirmed high grade historic mineralization, and extended the Zone by ~1,000 feet to the northeast (0.107%eU₃O₈ over 4.5 feet with a total hole GT of 0.854). In the PRB, potentially ISR-recoverable uranium mineralization with a GT of greater than 0.20 is considered suitable for inclusion in a potential wellfield.

Significant Highlights of the Q3/24 Kaycee Project Drilling Program include:

- Drill hole JD24-002 at Stirrup West intersected 5 separate mineralized intercepts with a single 8.0 foot interval returning 0.205% eU₃O₈ for a Grade Thickness (“GT”) of 1.640 and a total hole GT of 1.821;
- Drill hole JD24_058 was drilled as a step out hole to the north of the historical mineralization at the Stirrup West Zone and returned 0.077% eU₃O₈ over 5.0 feet, with a GT of 0.385. This hole, along with additional step out holes drilled to the south of the historical mineralization, suggests the potential to significantly extend the Stirrup West Zone to the north as well as towards the Spur Zone to the south;
- Hole JD24_063 at Stirrup East Zone returned 0.107% eU₃O₈ over 4.5 feet, with a GT of 0.482, as well as an additional interval of 0.057% eU₃O₈ over 6.5 feet, for a total hole GT of 0.854 extending mineralization 1,000 feet to the northeast from the historic resource area;
- A total of 107 holes were drilled with an average depth of 498.9 feet, with 83% (90) of these drill holes returning anomalous uranium; 18 of the drill holes returning GT of 0.2 or better.

To view project maps please visit: <https://bit.ly/48rMHA5>

Greg Huffman, Chief Executive Officer, stated: “We continue to be impressed with not only our confirmation of existing historical areas of uranium mineralization, but by how quickly we have been able to extend several of the Zones at Kaycee along trend. We are now of the belief that a number of these discrete historical areas are likely to connect and combine into larger mineralized areas.”

Table of Significant Results from the Kaycee Uranium Project Drill Program

Drill Hole ID	Depth (ft)	From (ft)	To (ft)	Grade (%eU ₃ O ₈)	Thickness (ft)	Grade Thickness (GT)	Total Hole GT
STIRRUP WEST ZONE							
JD24_002	840	431.5	432.5	0.024	1.0	0.024	1.821
		452.0	453.5	0.042	1.5	0.063	
		458.0	466.0	0.205	8.0	1.640	
		467.0	468.0	0.026	1.0	0.026	
		468.5	470.5	0.034	2.0	0.068	
JD24_033	525	436.5	437.0	0.022	0.5	0.011	0.455
		445.5	446.0	0.022	0.5	0.011	
		454.5	457.5	0.134	3.0	0.402	
		473.5	474.5	0.031	1.0	0.031	
JD24_035	530	462.5	466.0	0.110	3.5	0.385	0.755
		468.5	471.0	0.148	2.5	0.370	
JD24_058	515	466.5	471.5	0.077	5.0	0.385	0.385
STIRRUP EAST ZONE							
JD24_018	430	255.0	258.5	0.201	3.5	0.704	0.704
JD24_022	410	253.0	255.0	0.023	2.0	0.046	0.317
		267.0	269.5	0.041	2.5	0.103	
		270.0	273.0	0.056	3.0	0.168	
JD24_043	435	222.5	225.5	0.198	3.0	0.594	0.826
		244.5	248.5	0.058	4.0	0.232	
JD24_048	435	260.5	264.0	0.094	3.5	0.329	0.329
JD24_055	335	272.5	275.0	0.095	2.5	0.238	0.542
		286.0	290.0	0.076	4.0	0.304	
JD24_063	340	278.5	285.0	0.057	6.5	0.373	0.854
		290.5	295.0	0.107	4.5	0.482	

Drill holes are reported that returned significant zones of uranium mineralization with >2 ft thickness at or above a grade cut-off of 0.02 per cent eU₃O₈ or that are relevant to exploration targeting. (1) % eU₃O₈ by Gamma logging is a measure of gamma intensity from a decay product of uranium. Gamma log assays may be in disequilibrium with ICP-MS assays. Comparisons of eU₃O₈ Gamma log and ICP-MS assays of Powder River Basin core samples indicate that eU₃O₈Gamma is comparable to ICP-MS uranium assay in the Powder River Basin. (2) Grade Thickness, or GT, is defined as the product of the mineral grade multiplied by the thickness of the mineralization.

Stirrup Zone Drill Program

The Stirrup West and Stirrup East Zones are located approximately 0.8 miles north and 1.2 miles northeast of the Spur Zone, respectively. In Q3/24, 74 drill holes were completed at the Stirrup Zones to an average depth of 491.0 feet and were designed to confirm mineralization encountered during previous exploration work in the 1970s and early 1980s, as well as to test for possible extensions of the mineralized zones. Of the 74 holes completed at the Stirrup Zone, 50% (37 drill holes) returned anomalous gamma values; 16 holes returned a GT of 0.20 or better, including 6 holes with a GT greater than 0.5.

The exploration program at the Kaycee Uranium Project continues to drill step outs from known historic resources along trend as we extend the known mineralization, while we are also testing regional targets

that have not been previously explored for uranium mineralization. These targets have been generated by the evaluation of over 500 newly acquired oil and gas logs, and would represent potential new uranium discoveries on the Project.

Kaycee Uranium Project, Wyoming

The Kaycee Project in Wyoming's PRB, Nuclear Fuels' priority project, consists of 55 square miles of mineral rights over a 35-mile mineralized trend hosting 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 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. 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 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 PBR.

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 Tulsa 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 PBR 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 35-mile trend with over 430 miles of mapped

roll-fronts. 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.

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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.