CanAlaska Completes Key Extension Uranium Project Earn-In to Consolidate 100% Ownership

29.08.2023 | Newsfile

Geochemical Assay Results Confirm Uranium Enrichment Present in Faults

Geikie Uranium Project Advancing to Stage 3 of Earn-In Agreement

Vancouver, August 29, 2023 - CanAlaska Uranium Ltd. (TSXV: CVV) (OTCQX: CVVUF) (FSE: DH7N) ("CanAlaska or the "Company") is pleased to announce it has met the terms of the Property Option Agreement ("POA") with Durama Enterprises Limited ("Durama"), and has obtained 100% ownership of the Key Extension project (the "Project"). The project, consisting of 13,707 hectares, is located in the Southeastern Athabasca Basin, approximately 10 kilometres southwest of the Key Lake uranium mine and mill near Highway 914 (Figure 1). The Company is also pleased to announce that it has received assay results from the 2023 winter exploration program, which confirm uranium enrichment associated with hydrothermal alteration and structure.

Figure 1 - Enterprise Project Location

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/2864/178772_dd8216eac4ec8bb7_002full.jpg

100% Ownership of Key Extension Project

The Company earned 100% interest in the Project by undertaking work and payments in a single stage. The Company made total cash payments of $50,000, issued 300,000 common shares in the Company with the approval of the TSX Venture Exchange, and completed work totalling a minimum of $850,000. As part of the transaction, the Company granted a 1.5% Net Smelter Return (NSR) royalty to Durama. Two adjacent pre-existing CanAlaska mineral claims have been added to the Key Extension project to create a contiguous 13,707-hectare block only 10 kilometres southwest of the Key Lake uranium mine and mill.

The Company completed a ground-based geophysical survey in the winter of 2022 that identified multiple large gravity low features associated with interpreted structural corridors. A property-wide high-resolution airborne radiometric and magnetic survey identified magnetic lineaments associated with the gravity anomalies. Seven drillholes totalling 2,239 metres were completed during the winter of 2023. Significant outcomes from the drilling program included: identification of multiple graphitic rock units with large reactivated and brecciated fault zones; associated hydrothermal alteration, and; elevated radioactivity (see Press Release dated April 4th, 2023: CanAlaska Drills Elevated Radioactivity at Key Extension Project - CanAlaska Uranium Ltd.).

Winter 2023 Drill Program Geochemical Assay Results

Assay results from the winter 2023 drill program on the Key Extension project have been received confirming uranium enrichment in drillholes KEY007 and KEY010 (Table 1). Both holes were completed in Target Area 1, where 20 - 40 metre wide stacked graphitic rock units containing multiple metre to sub-metre scale semi-brittle fault zones were intersected in association with hydrothermal chlorite, clay, silicification, and secondary hematite alteration. KEY010 intersected 0.05% U_3O_8 from 243 - 243.3 metres, associated with a sheared limonite, chlorite, and clay altered granite immediately below the faulted and altered graphitic package (Figure 2). KEY007, completed 500 metres southeast of KEY010, intersected two zones of uranium enrichment. The upper zone in KEY007, from 337.8 to 340.8 metres, averaged 0.013% U_3O_8. The lower

zone in KEY007, from 353.6 to 359.6 metres, averaged 0.013% U_3O_8. Both intervals of uranium enrichment in KEY007 are contained within sheared and chlorite altered granite immediately below a faulted graphitic pelite package.

The 2023 drilling program successfully intersected graphitic host rocks showing evidence of multiple post-Athabasca structural reactivation events, hydrothermal alteration, and associated uranium enrichment. These features are commonly associated with basement-hosted uranium deposits elsewhere in the Athabasca Basin. Results of this inaugural drill program indicate evidence for likely uranium-bearing hydrothermal fluids moving through the basement rocks on the Key Extension project. Beyond follow-up drilling of the significant results from Target Area 1, the Company believes more than 16 kilometres of untested target corridor have now been identified as high priority for future drill testing.

Figure 2 - Key Extension Winter Target Corridor Locations

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/2864/178772_dd8216eac4ec8bb7_005full.jpg

Table 1 - 2023 Key Extension Winter Exploration Drilling Results

DDH	From (m)	To (m)	Length (m)[2]	Average Grade (% U_3O_8)	Maximum Grade (% U_3O_8)
KEY007[1,3]	337.8	340.8	3.0	0.013	0.02
KEY007[1,3]	353.6	359.6	6.0	0.013	0.03
KEY010[1,4]	243	243.3	0.3	0.05	0.05

1. Intersection interval is composited above a cut-off grade of 0.01% U_3O_8 with a maximum of 1.0 m of internal dilution.
2. All reported depths and intervals are drill hole depths and intervals, unless otherwise noted, and do not represent true thicknesses, which have yet to be determined.
3. KEY007 was drilled at an azimuth of 290˚ with an inclination of -60˚, collared at 441,526 mE / 6,331,311 mN, 525 m A.S.L. (UTM NAD83 Z13N).
4. KEY010 was drilled at an azimuth of 310˚ with an inclination of -65˚, collared at 441,365 mE / 6,331,764 mN, 530 m A.S.L. (UTM NAD83 Z13N).

CanAlaska CEO, Cory Belyk, comments: "Assay confirmation of uranium enrichment within and near zones of significant faulting is an exciting outcome from this first drill program at Key Extension. It confirms CanAlaska's belief that Key Extension is one of the best brownfield exploration plays located on one of the most prolific uranium ore-deposit-hosting fault systems in the Athabasca Basin. The nearby Key Lake uranium deposits were worldclass and this region is remarkably underexplored. This infrastructure-rich area is the perfect location to make a new discovery in the backdrop of a uranium fuel market that needs it. We invite interested parties to discuss with CanAlaska how they can get involved in one of our numerous discovery opportunities."

Geochemical Sampling Procedures

All drill core samples from the 2023 winter program were shipped to the Saskatchewan Research Council Geoanalytical Laboratories (SRC) in Saskatoon, Saskatchewan in secure containment for preparation, processing, and multi-element analysis by ICP-MS and ICP-OES using total (HF:NHO3:HClO4) and partial digestion (HNO3:HCl), boron by fusion, and U_3O_8 wt% assay by ICP-OES using higher grade standards. Assay samples are chosen based on downhole probing radiometric equivalent uranium grades and scintillometer (SPP2 or CT007-M) peaks. Assay sample intervals comprise 0.3 - 0.7 metre continuous half-core split samples over the mineralized interval. One half of the split sample is retained and the other sent to the SRC for analysis. The SRC is an ISO/IEC 17025/2005 and Standards Council of Canada certified analytical laboratory. Blanks, standard reference materials, and repeats are inserted into the sample stream at regular intervals by CanAlaska and the SRC in accordance with CanAlaska's quality assurance/quality control (QA/QC) procedures. For results from the Key Extension project, a qualified person employed by CanAlaska has performed detailed QAQC and data verification, were possible, of all datasets prior to

disclosure.

All reported depths and intervals are drill hole depths and intervals, unless otherwise noted, and do not represent true thicknesses, which have yet to be determined.

Other News

The Company is drilling at its West McArthur uranium project in the Eastern Athabasca Basin. The primary objective of the drill program is advancing the Pike Zone discovery, including continued focus on expansion of basement-hosted high-grade uranium mineralization as well as continued unconformity target testing. In addition, the Company has identified a series of high-priority resistivity drill targets along the C10S mineralized corridor, the most compelling located approximately 1.8 kilometres northeast of the high-grade Pike Zone uranium discovery.

The Company is pleased to announce that Basin Energy has satisfied the conditions to achieve 60% ownership in the Geikie uranium project. In addition, Basin Energy has elected to proceed to Stage 3 with the potential to earn up to 80% interest in the Geikie project. The Company is currently completing a detailed fixed-wing Falcon Airborne Gravity Gradiometer (AGG) survey on the Geikie project to identify potential target areas of enhanced basement alteration associated with previously interpreted and drill defined structural corridors.

About CanAlaska Uranium

CanAlaska Uranium Ltd. (TSXV: CVV) (OTCQX: CVVUF) (FSE: DH7N) holds interests in approximately 350,000 hectares (865,000 acres), in Canada's Athabasca Basin - the "Saudi Arabia of Uranium." CanAlaska's strategic holdings have attracted major international mining companies. CanAlaska is currently working with Cameco and Denison at two of the Company's properties in the Eastern Athabasca Basin. CanAlaska is a project generator positioned for discovery success in the world's richest uranium district. The Company also holds properties prospective for nickel, copper, gold and diamonds. For further information visit www.canalaska.com.

The qualified technical person for this news release is Nathan Bridge, MSc., P.Geo., CanAlaska's Vice President, Exploration.

On behalf of the Board of Directors
"Cory Belyk"
Cory Belyk, P.Geo., FGC
CEO, President and Director
CanAlaska Uranium Ltd.

Contacts:

Cory Belyk, CEO and President
Tel: +1.604.688.3211 x 138
Email: cbelyk@canalaska.com

General Enquiry
Tel: +1.604.688.3211
Email: info@canalaska.com

Forward-looking information

All statements included in this press release that address activities, events or developments that the Company expects, believes or anticipates will or may occur in the future are forward-looking statements. These forward-looking statements involve numerous assumptions made by the Company based on its experience, perception of historical trends, current conditions, expected future developments and other factors it believes are appropriate in the circumstances. In addition, these statements involve substantial known and unknown risks and uncertainties that contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements will prove inaccurate, certain of which are beyond the Company's control. Readers should not place undue reliance on forward-looking statements. Except as required by law, the Company does not intend to revise or update these forward-looking statements after the date hereof or revise them to reflect the occurrence of future unanticipated events.

To view the source version of this press release, please visit https://www.newsfilecorp.com/release/178772