

SUITE 1040 – 885 WEST GEORGIA STREET VANCOUVER, BC CANADA V6C 3E8

July 27, 2011

TSXV: UAX OTCQX: ATURF

## ATHABASCA URANIUM ACQUIRES KEEFE LAKE PROPERTY OPTION

Athabasca Uranium Inc. ("Athabasca" or the "Company") is pleased to announce that it has entered into an agreement with an arm's-length vendor by which the Company has the option to earn a 100% interest in the Keefe Lake Project in northeast Saskatchewan.

The 12,832-hectare Keefe Lake Project is comprised of three contiguous claims on the eastern margin of the uranium-rich Athabasca Basin, the most productive uranium-producing region in the world. The Project is approximately 22 kilometers southeast of the McArthur River Mine, the world's largest high-grade uranium mine with proven and probable reserves of 335.5 million pounds  $U_3O_8$  and an average reserve grade of over 15%. The Keefe Lake Project was most recently explored by Mega Uranium in 2007-2008, with approximately \$3,000,000 expended on exploration in a two phase work program that included a Mag/EM airborne survey and a high-definition 2D seismic reflection survey.

The Company can earn a 100% interest in the Project by paying an initial \$65,000 and issuing 3,500,000 common shares to the Vendor on regulatory approval, by completing \$5,000,000 in qualified exploration work on the Project within five years, and by making an additional cash payment of \$1,500,000 on or before the fifth anniversary of the Agreement. A 2% net smelter return royalty has been granted to the Vendor, of which 1% may be purchased by the Company for \$1,500,000. The Agreement is subject to regulatory approval.

With this acquisition, the Company now controls over 52,000 hectares on the shallow eastern side of the Athabasca Basin. "The Keefe Lake Project is a marquee project which we believe is a true company-maker. The preliminary work already completed there vaults the Company forward nearly two full years on the exploration timeline. With one of the most sophisticated ground surveys in the world already completed, the Company will be able to immediately prioritize targets for diamond drilling. The acquisition of this project was an opportunity that Athabasca could not pass up - it is a project that we believe will add value to the Company in the near term and for years to come," commented Gil Schneider, Athabasca President & CEO.

In 2008, Aeroquest International Ltd. completed a 737 line-kilometer helicopter-borne geophysical survey over the Keefe Lake property. This geophysical survey consisted of an AeroTEM IV ('Oscar' System) time domain helicopter electromagnetic survey and a magnetic survey. The survey was flown at 200-meter line spacing in a NW-SE flight direction. The survey was successful in delineating multiple EM anomalies coincident with magnetic lows and interpreted faults.

In 2007-2008 Kinetex Resources completed a high-definition 2D seismic reflection survey on the northern two claim blocks of the Keefe Lake Project to: (a) define the unconformity along all the lines and generate a structural depth map of this subsurface contact; and (b) establish relevant structural trends in the basement to identify potential target areas for future mineral exploration. Approximately 50 kilometers of access line over the Keefe Lake Project were completed as well as 69 line-kilometers of 2D seismic reflection data acquisition over 8 seismic lines. This survey has been performed on several important uranium deposits and mines in the Athabasca Basin, including the McArthur River Mine, and the Millennium Deposit. Kinetex also performed this survey for Hathor Exploration, which was instrumental in the discovery of their Roughrider Zone.

Processing and interpretation of the survey data was completed by the Seismic Laboratory of the Geology Department of the University of Saskatchewan under the supervision of Zoltan Hajnal, PhD, Professor of

Geophysics. The seismic survey was successful in generating high quality and regionally coherent data sets. The intersecting survey lines provided sufficient information for establishment of the prominent regional structural framework in the prospect area. The data revealed, with significant details, the multi-phase deformation of the subsurface. The high level of correlation between the seismic trends and the magnetic signatures is a clear indication that the seismic data reveal structural environments in the basement very promising for mineral exploration in the prospect area.

## About Athabasca Uranium

Athabasca Uranium Inc. is a junior uranium exploration and development company trading on the TSX Venture Exchange under the symbol UAX. The Company's stated vision is to acquire and explore prospective properties located in the uranium-rich Athabasca Basin in northeast Saskatchewan, utilizing leading-edge technologies to become a world-class uranium mining company. Additional information on Athabasca Uranium, its properties and exploration activities is available at the Company's website: www.athabascauranium.com.

## ON BEHALF OF THE BOARD OF DIRECTORS

"Gil Schneider"

Gil Schneider, President & CEO

For information, please contact the Company Toll-Free at: (866) 869-8072 or by e-mail at info@athabascauranium.com.

Neither the TSX Venture Exchange nor its Regulations Services Provider (as that term is defined in policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.