Suite 1040 – 885 West Georgia Street Vancouver, BC Canada V6C 3E8

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ATHABASCA URANIUM CLOSES ON EAST KEY LAKE OPTION FIRST PHASE

Athabasca Uranium Inc. is pleased to announce that it has received regulatory approval for, and subsequently closed on the first phase of its option to acquire the East Key Lake Property, a 769-hectare property located on the eastern margin of the uranium-rich Athabasca basin in northeast Saskatchewan.

As announced on February 2, 2011, the Company has the option to earn a 100% interest, subject to a 1% net smelter return royalty ("NSR") in East Key Lake by paying an initial \$40,000 and issuing 1,000,000 common shares to an arm's-length vendor and by making additional payments totalling \$750,000 over the next 42 months and by filing \$3,000,000 in exploration expenditures on the Property within four years. The 1% NSR may be purchased by the Company for \$1,500,000. The Company has now made the initial payment of cash and shares, fulfilling its first commitment under the Option agreement.

The East Key Lake Project is located on the eastern margin of the uranium-rich Athabasca Basin, the most productive uranium-producing region in the world. The Property is adjacent to Hathor Exploration's Russell South Project and Triex Minerals' Highrock Project, and is approximately 15 kilometers from Cameco's Key Lake Mine, which has historic production of over 200 million pounds of uranium and is currently processing ore from the McArthur River Mine. East Key Lake is the first of three strategic acquisitions in the Athabasca Basin on which the Company has an exclusive right of first offer, as announced January 20, 2011.

At East Key Lake, preliminary results from the Company's airborne Z-TEM survey have shown excellent correlation with the Saskatchewan government's EXTECH IV regional Mag/EM survey conducted in 2004. An examination of total magnetic intensity (TMI) revealed a roughly northeast-trending magnetic feature, interpreted as an archean granitic fold or body. In addition, electromagnetic (EM) data revealed a significant conductive anomaly coincident with a magnetic low, just west of the magnetic high. This conductive region has been preliminarily evaluated as a high priority target zone at East Key Lake. Uranium-rich mineralization at the Key Lake, Collins Bay and McClean mines were all discovered at or near conductive sandstone layers at the transition between sandstone and granitic zones, presumably because these are regions of faulting through which mineralizing fluids have entered the Basin.

About Athabasca Uranium

Athabasca Uranium Inc. is a uranium exploration and development company exploring an aggregate of over 31,000 hectares strategically located in the uranium-rich Athabasca Basin region of northeast Saskatchewan. The Company's stated vision is to explore the region using leading-edge technology to become a world-class uranium mining company. Additional information on Athabasca Uranium and its vision is available on the Company's website at www.athabascauranium.com.

ON BEHALF OF THE BOARD OF DIRECTORS

"Gil Schneider"

Gil Schneider, President & CEO

For information, please contact the Company:

Toll-Free: (866) 869-8072

E-mail: <u>info@athabascauranium.com</u>