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## **ATHABASCA URANIUM INTERSECTS STRONG ALTERATION ZONE AT KEEFE LAKE**

Athabasca Uranium Inc. is pleased to report that diamond drill hole AU4-1, part of a multi-hole winter drilling program at its Keefe Lake Project in northeast Saskatchewan, has intersected a large zone of strong and sustained alteration, beginning at approximately 172 meters true depth. Hole AU4-1 has now crossed 370 meters, at an 80-degree angle, bearing southeast towards a subtle subsurface EM anomaly identified through Aerotem interpretations. The main alteration zone is a 25-meter thick interval of clay minerals at and below the unconformity; this overprints a 170+-meter multi-generational healed quartz stockwork, overprinting an older mylonite. At depth, the basement mylonite contains granitic pegmatite veins up to 50 centimeters thick. Select samples have been sent for PIMA and geochemical analysis.

The Company considers these drilling results to date as highly significant, as major uranium discoveries in the Athabasca Basin such as McArthur River, Key Lake and Millennium were primarily the result of drill-testing of strong alteration zones related to conductor features and not the drill testing of specific graphitic conductor systems. Strong alteration features as observed at Keefe Lake are the primary guide to the discovery of uranium mineralization. For example, the Key Lake and Millennium deposits, initially missed in first-pass conductor system drilling, were discovered by step-out fenced holes drilled *across* alteration zones. Millennium was discovered by drilling off conductor and deeper into a basement alteration system. McArthur River was found by drilling *along the strike-trend* of a pronounced alteration system where conductors were largely absent.

Target AU4-1 was identified through an evaluation of a high-definition 2D seismic survey done by the University Of Saskatchewan Seismic Department under the direction of Dr. Zoltan Hajnal, PhD (GeoPh), part of the team that identified Hathor Exploration's Roughrider Zone. Aerotem interpretation at Keefe Lake was performed independently by Condor Consulting and Living Sky Geophysics, David Bingham BSc, PGeo.

Athabasca President Gil Schneider commented: "The discovery of this profound alteration is yet another exploration milestone achieved. We intend to extend this program into 2012 to aggressively test this and other high value targets."

Dr. Peter Born, PGeo, Athabasca Uranium's qualified person, is responsible for the geological content of this news release.

### *About Athabasca Uranium*

Athabasca Uranium Inc. is a uranium exploration and development company exploring an aggregate of over 60,000 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](http://www.athabascauranium.com).

ON BEHALF OF THE BOARD OF DIRECTORS

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