

June 26, 2012

TSXV: UAX
OTCQX: ATURF**ATHABASCA URANIUM ENCOUNTERS
ADDITIONAL URANIUM INTERVALS AT KEEFE LAKE**

Athabasca Uranium Inc. (“Athabasca” or the “Company”) is pleased to provide an update on the Keefe Lake Uranium Project in the Athabasca Basin, Saskatchewan. The Company has received the results of the lithochemical and PIMA/clay alteration samples and has conducted further analysis on Hole KEF-12-08, which was drilled to a depth of 553 metres (374 metres beyond the unconformity), as first reported on April 30, 2012. Basement alteration was found to continue beyond the expected regolith alteration to the bottom of Hole KEF-12-08, which was drilled to test the extent of alteration encountered at the bottom of Hole AU4-01, which was drilled to a depth of 402 metres in 2011.

Drill Hole KEF-12-08 confirmed the base metal enrichment (Lead, Cobalt, Arsenic and Nickel) in the sandstone, which was encountered in Hole AU4-01. In addition to confirming the elevated uranium enrichment (112ppm U* over 2 metres) at approximately 400 metres depth which was encountered in Hole AU4-01, two other zones of anomalous uranium mineralization were encountered at a greater depth. These additional intervals, listed below, are associated with hematite alteration and fracturing of altered quartzofeldspathic gneiss.

Keefe Lake Drilling 2011-2012				
Hole	Depth from(m)	Depth to (m)	Width (m)	U (ppm)
KEF-12-08	470.9	471.5	0.54	116
KEF-12-08	546.9	547.9	0.5	175
AU4-01 (previously announced)	400	402	2	112

Despite the great depths of the mineralized zones, the Company continues to focus on an unconformity deposit model, believing that the deeper mineralized zone is the “plumbing system” for a shallower deposit; unconformity depths at Keefe Lake are typically at 170 metres. In addition, the discovery of base metal enrichment in the overlying sandstone, and uranium enrichment at depth, as well as the high degree of silicification (which has been repeatedly fractured and healed), is significant in that it indicates that the Keefe Lake Alteration Zone has been subject to multiple hydrothermal alteration events, typical of Athabasca Basin deposits. The target area, which is coincident with a magnetic low feature that extends for several kilometers to the northeast and southwest, appears to extend beyond 325 metres into the basement. All holes at Keefe Lake showed alteration that extended into the basement. The Company will examine petrographic thin sections of core taken in the basement rocks in the area in order to determine the qualitative mineralogical and alteration features of the basement alteration zone.

The Company continues to combine a diverse suite of leading-edge exploration techniques in order to provide direction for additional exploration targets at Keefe Lake. The University Of Saskatchewan Seismology Lab, under the direction of Dr. Zoltan Hajnal, is currently processing data derived from the borehole geophysical survey performed by SEMM Logging. Sonic data, examining the acoustical properties and responses of geological layers, will be used to calibrate and refine the 2D seismic dataset that was instrumental in identifying the high value targets at Keefe Lake.

With regard to the results, UAX President Gil Schneider commented: “The Company is extremely pleased with results to date: uranium grades encountered and the size and scale of the alteration zone at Keefe is remarkable, and are typical of those found in the outer envelopes of major Basin deposits. Athabasca’s exploration team will further examine all results with an eye to making a world class discovery.”

At Volhoffer Lake, assays determined that weakly radioactive samples encountered at the unconformity were due to thorium mineralization. The Company is evaluating data from the 2012 drilling program and picking new drill targets at Volhoffer that lie along the northeast trending conductor series.

Neil McCallum, P.Geo, of Dahrouge Geological Consulting Ltd., a Qualified Person, has reviewed and approved the disclosure of technical information within this news release.

**2012 samples were analysed by SRC Geoanalytical Laboratories (an SCC ISO/IEC 17025: 2005 Accredited Facility) of Saskatoon for analysis. The uranium content above is by ICP-MS (partial digestion).*

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.

ON BEHALF OF THE BOARD OF DIRECTORS

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