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ATHABASCA URANIUM PROVIDES EXPLORATION UPDATE

Athabasca Uranium Inc. is pleased to report that core samples from the Company's 2011 diamond drilling program at Keefe Lake are currently undergoing geochemical analysis at the Saskatchewan Research Council. As reported previously, five holes (1,645 meters total) were completed at Keefe Lake in late 2011, with two holes encountering significantly anomalous alteration and a third hole containing chloritic alteration at various intervals below the unconformity, a common feature found in the host rocks containing uranium mineralization. One hundred and sixty nine core samples will be subject to ICP1 (Multi Element Uranium Exploration Package) by partial & total digestions, as well as Boron by ICP-OES and Uranium by Fluorimetry. In addition, 43 of the samples will be tested for gold by Fire Assay. PIMA (Portable Infrared Mineral Analysis) is also being employed to aid with clay type analysis and identification of "pathfinder minerals." Results are expected shortly.

Subsequently, the Company intends to begin geological modeling and commissioning of a reinterpretation of its seismic dataset with the intention of reconciling the geological layers and enhancing drill targets at Keefe Lake. Gil Schneider, President commented "The 2011 drilling program confirmed that the seismic interpretation performed by the University of Saskatchewan under the direction and supervision of Dr. Zoltan Hajnal, PhD (GeoPh) was very accurate in predicting subsurface structures. The refined interpretation will be extremely valuable in guiding the Company to discovery." Athabasca has also expanded its drilling permit at Keefe Lake to include an additional 13 holes totalling 3,900 meters.

In addition, the Company is also pleased to report that it has received a drilling permit for its property at Volhoffer Lake, which adjoins and is part of the Keefe Lake Project. The Volhoffer permit covers up to 26 holes, totalling 7,800 meters. The Company is currently designing a program to test ground conductors delineated at Volhoffer by a ground EM and gravity survey conducted in 1980 by Uranex Exploration. The conductors lie predominantly within interpreted faults, areas identified as sharp boundaries between magnetic lows and highs.

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.

ON BEHALF OF THE BOARD OF DIRECTORS

"Gil Schneider"

Gil Schneider, President & CEO

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