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TSXV: UAX
US Symbol: ATURF**ATHABASCA URANIUM IDENTIFIES NEW KEEFE LAKE TARGETS (INCLUDING D-ZONE)
& PROVIDES CORPORATE UPDATE**

Athabasca Uranium Inc. (“Athabasca” or the “Company”) is pleased to report the preliminary interpretive results of the multiphase airborne Mag/EM survey conducted over portions of its Keefe Lake, Fisher River and McGregor Lake uranium projects located on the southeastern margin of the Athabasca Basin, Saskatchewan. The 736-line kilometer V-TEM survey was designed to examine subsurface anomalies as well as magnetic features that may control alteration and mineralization events.

KEEFE LAKE - Confirmation of D-ZONE drill targets

At the Company’s flagship Keefe Lake Project, preliminary interpretation has identified a series of subtle northwest-trending conductive anomalies, lying within a wide magnetic low, between the Keefe Lake Alteration Zone and Cameco’s Harrigan Deposit. The presence of these subtle conductors (possibly regions of alteration) supports the hypothesis that these two aforementioned zones are related by an area of dilation (“D-Zone”), observed in the magnetic data as a strong and pronounced low. The subtle conductors were first identified in electromagnetic data from a 2005 GEOTEM regional survey as an AdTau anomaly. The VTEM anomalies correspond with two high-value targets that have favourable basement lithology (biotite gneiss/pelitic) and are related to the Tebbemor fault system. In addition, Illitic clays, which often form in alteration halos around uranium deposits, and boulder samples anomalous in uranium and pathfinder minerals such as lead and boron have been discovered in the D-Zone. Data from the 2013 VTEM survey will be incorporated into the active interpretation matrix, which includes 2D seismic and a host of downhole and historical geophysics, to further refine targets for the Keefe Lake Phase 3 drilling program, slated for later this year.

FISHER RIVER - Large conductive subsurface anomaly identified

At Fisher River, a single large conductive zone, striking east-west and covering an area of approximately 4500 meters x 1500 meters, was identified. Resistivity depth imaging estimates depth to the top of the conductor is approximately 200 meters, this being near or at the unconformity. The conductive zone is considered to be a highly prospective target for uranium as it lies within a magnetic low, at the edge of a magnetic feature.

MCGREGOR LAKE - Large conductive subsurface anomaly identified

At McGregor Lake, a single clear local target was identified, situated in the northeastern portion of the McGregor 2 block. Resistivity depth imaging estimates the depth to the top of the conductor is approximately 200 meters. There is good correlation with magnetic anomaly sources and combined TEM-magnetic interpretation is recommended for these areas. The McGregor property was surveyed with the Z-TEM system in 2011, and the Company is in the process of collating the two datasets.

The positive results at Fisher River and McGregor Lake have upgraded the prospectivity of these projects, and both may now be included in the fall drilling program.

On the results of the survey, Gil Schneider, Athabasca Uranium’s CEO commented “Once again, we have used leading-edge science to advance our projects - this VTEM survey appears to confirm our theory that the subsurface formations of Keefe Lake mirror those of Cameco’s Harrigan Deposit area. We are now more excited than ever to begin our specific Phase 3 drilling, to potentially uncover the next Basin deposit. Adding to that these new developments at Fisher and McGregor means we are very well-positioned to take advantage of the recent global resurgence of uranium”.

Corporate Update

The Company is pleased to report that at its Annual General and Special Meeting of Shareholders (“AGM”) held yesterday, all resolutions presented passed. By way of majority vote, the shareholders:

- re-appointed each of the four incumbent directors to the Board, including Gil Schneider, Paula Rogers, Kim Goheen and Barry Lee;
- re-appointed Davidson & Company LLP Chartered Accountants as auditor of the Company for the ensuing year;
- re-approved the 10-per-cent rolling stock option plan; and
- approved a change in the Articles of the Company to allow for an Advance Notice provision to be adopted by the Company.

Additional information respecting the AGM can be found in the Information Circular sent to the Company’s shareholders, available at www.sedar.com.

About Athabasca Uranium

Athabasca Uranium Inc. is a uranium exploration and development company exploring an aggregate of over 68,500 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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