

Form 51-102F3

MATERIAL CHANGE REPORT

Item 1 Name and Address of Company

Athabasca Uranium Inc. (the "Corporation")
1040 – 885 West Georgia Street
Vancouver, B.C. V6C 3E8

Item 2 Date of Material Change

May 13, 2011

Item 3 News Release

The news release was disseminated by the Corporation on May 13, 2011 through CNW Canada Newswire, Stockwatch and Market News.

Item 4 Summary of Material Change

The Corporation announced that it has received regulatory approval for, and subsequently completed the first phase of an option to acquire a 100% interest in the Hamilton Lake Property, a 5,873-hectare prospective uranium property in the Athabasca Basin region of Saskatchewan. The Corporation has paid \$25,000 and issued 600,000 common shares to a third party vendor in connection with exercising the option's first phase.

Item 5 Full Description of Material Change

5.1 Full Description of Material Change

For a full description of the material change, please refer to the news release of the Corporation dated May 13, 2011 attached hereto as Schedule "A".

5.2 Disclosure for Restructuring Transactions

Not applicable.

Item 6 Reliance on subsection 7.1(2) or (3) of National Instrument 51-102

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Executive Officer

For further information, contact:
D. Barry Lee, CFO
Telephone: 604-689-8336

Item 9 Date of Report

May 13, 2011

SCHEDULE “A”

ATHABASCA URANIUM INC.
Suite 1040 – 885 West Georgia Street
Vancouver BC V6C 3E8
Phone: 604-689-8336 / Fax: 888-691-0529

PRESS RELEASE

Athabasca Uranium Closes on Hamilton Lake Option First Phase

May 13, 2011 – Athabasca Uranium Inc. (“Athabasca” or the “Company”) is pleased to announce that it has received regulatory approval for, and subsequently closed on the first phase of its option to acquire the Hamilton Lake Property, a 5,873-hectare property located on the eastern margin of the uranium-rich Athabasca Basin region in northeast Saskatchewan.

As announced on April 28, 2011, the Company has the option to earn a 100% interest, subject to a 1% net smelter return royalty (“NSR”) in Hamilton Lake by paying an initial \$25,000 and issuing 600,000 common shares to an arm’s-length vendor and by filing \$3,000,000 in qualified exploration assessment credits within four years either on the Property itself or on Athabasca’s other properties under option within its Webb River Project area. 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 Hamilton Lake Property, the third of three strategic acquisitions in the Athabasca Basin on which the Company had negotiated an exclusive right of first offer, is contiguous with and now becomes part of the Company’s Webb River Project (the “Project”). The Project area is contiguous to the Denison/JNR Resources Moore Lake Project, lying just 14 kilometers northeast of the Company’s McGregor Lake Project and 29 kilometers southwest of the Company’s McCarthy Lake Project. The Hamilton Lake acquisition gives the Company an extensive aggregate 37,240-hectare exploration project area in the Athabasca Basin region.

Results of the Company’s recent heliborne Z-TEM (Z-Axis Tipper EM) survey conducted over the Project area (including Hamilton Lake) correlate strongly with the Saskatchewan government’s EXTECH IV regional Mag/EM survey conducted in 2004. The center of the property, which has a relatively low magnetic response, appears to be strongly dilated to the northeast. An array of northeasterly trending conductors was also identified by the Z-TEM, correlating strongly with airborne and ground VLF-EM and magnetometer surveys carried out by Sander Geophysics and Phantom Exploration Services in 1979-1980. Strong magnetic features appear to be acting as controls for these conductors. Further refinement of the Z-TEM data, currently in progress, is expected to produce viable exploration targets within the conductive array. The Company has engaged Condor Consulting of Lakewood, Colorado to complete inversions and interpretations of the Z-TEM data.

In addition, crews are scheduled to commence a ground-based IP resistivity survey on Z-TEM target zones to further refine diamond drill targets for the Company’s upcoming drilling program.

About Athabasca Uranium

Athabasca Uranium Inc. is a uranium exploration and development company exploring an aggregate of over 37,000 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 at 1-866-869-8072 or by e-mail: info@athabascauranium.com

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