CanAlaska Undertakes Uranium Exploration with Yellowcake plc

Vancouver, Canada, and London, UK, April 16th, 2007 – CanAlaska Uranium Ltd. (CVV – TSX.V) (“CanAlaska”) and the UK-based uranium investment company Yellowcake plc (PLUS:YEL) (“Yellowcake”) are pleased to report that they have entered into an agreement to undertake uranium exploration on CanAlaska’s 100%-owned Grease River Project. The Grease River Project is situated along the Northern rim of Canada’s Athabasca Basin in the Province of Saskatchewan and comprises twelve claim blocks totalling 68,250 hectares.

CanAlaska and Yellowcake have entered into an Option Agreement whereby Yellowcake may acquire a 60% ownership interest in the Grease River Project by making payments to CanAlaska totalling Cdn$300,000 in cash and 2.5 million Yellowcake shares, and funding exploration expenditures of Cdn$5.0 million over a four year period. Upon Yellowcake fulfilling its exploration commitments under the Option Agreement, the parties will form a joint venture to be owned 60% by Yellowcake and 40% by CanAlaska. CanAlaska will act as Operator for the project and will be responsible for carrying out all exploration activities.
The Athabasca Basin is widely considered as being the richest and one of the largest uranium producing regions in the world. The Grease River Project covers large and strong lake sediment and radiometric anomalies as identified from Geological Survey of Canada surveys performed in the 1970’s.

The lake sediment anomalies reach uranium (U) values of several hundred ppm and the radiometric anomalies show high equivalent uranium combined with elevated eU/eTh (uranium/thorium) ratios.

The area is underlain by Archean and Paleoproterozoic intrusives and metasediments and metavolcanic rocks. Some of the claims cover a north-south trending tectonic flexure and others straddle the Grease River Shear Zone, a regional structure that was active during the formation of the Athabasca Basin. The Fond du Lac unconformity uranium deposit is located along this major lineament.

Work done by several companies in the late 1970’s confirmed these anomalies and located lakes with even higher uranium values (up to 1,870 ppm uranium). In addition to these very high lake sediment anomalies, surface prospecting produced soil anomalies reaching 1.3 % uranium, and showings with up to 1.6% U₃O₈ in grab samples. To date, the source of most of the geochemical anomalies has not been found.

The pending 2007 summer exploration program will include airborne geophysics, lake sediment and soil geochemistry, prospecting, and mapping. The objective is to locate the geochemical anomalies and showings described in the historical work, put them in the framework of present-day knowledge of Athabasca uranium deposits, and define drill targets using prospecting, mapping of bedrock and surficial geology, geochemistry, and geophysics.

Mr. Peter Dasler, President & CEO of CanAlaska Uranium stated, “We are extremely pleased to welcome Yellowcake as our exploration partner on the Grease River project. The Grease River region is geologically prospective for uranium and has received scant exploration attention in the past. Along with Yellowcake, we believe that renewed efforts with modern exploration techniques will serve to provide us with better definition of the historical uranium anomalies”.

Mr. Robert Wallace, Chief Executive of Yellowcake plc stated, “In accordance with its strategy, Yellowcake plc has examined possible investments in uranium projects all over the world. We have selected Grease River
because of its location in the Athabasca district in mining-friendly Saskatchewan, its history of significant uranium showings at surface and its potential as a shallow, low-cost exploration and production project. We are delighted to have secured this agreement with CanAlaska which will be providing a top-class exploration team under the direction of its Chief Geologist Dr. Karl Schimann, one of the discoverers of the Cigar Lake uranium deposit”.

The Qualified Person for this news release is Peter Dasler, P.Geo.

About CanAlaska Uranium Ltd. -- www.canalaska.com
CanAlaska Uranium (CVV -- TSX.V, CVVUF -- OTCBB, DH7 -- Frankfurt) is undertaking uranium exploration in seventeen 100%-owned and two optioned uranium projects in Canada's Athabasca Basin. Since September, 2004, the Company has aggressively acquired one of the largest land positions in the region, comprising over 2,500,000 acres (10,117 sq. km or 3,906 sq. miles). In 2005/2006, CanAlaska expended over Cdn$15 million exploring its properties in the Athabasca Basin and has delineated multiple uranium targets. Initial drilling results from the West McArthur Project (now under an earn-in option to Mitsubishi Development Pty. Ltd.) revealed uranium mineralization and significant zones of hydrothermal alteration, indicative of a favorable environment for uranium deposition. Active drilling and exploration will continue in the winter of 2007 at West McArthur and at 4 other significant projects.

About Yellowcake plc -- www.yellowcakeplc.com
Yellowcake plc (PLUS:YEL) is the world's first portfolio company specialising wholly in investing in uranium explorers, developers and producers. Founded in February 2005, it floated on London's PLUS Markets in July 2005. Yellowcake commenced investing in quoted and unquoted uranium companies in late September 2005 and currently its portfolio includes 32 companies, with operations in Africa, Australia, Canada, Kazakhstan, Mongolia, Paraguay and the United States. Since it began investing, its portfolio value has risen over fourfold with a gain of 312% at 12 April 2007. Its strategy includes investing directly in uranium projects and Grease River represents the first such investment.

On behalf of the Board of Directors,

Peter Dasler, M.Sc., P.Geo.                    Robert Wallace
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The TSX Venture has not reviewed and does not accept responsibility for the adequacy or accuracy of this release: CUSIP# 13708P 10 2. This news release contains certain "Forward-Looking Statements" within the meaning of Section 21E of the United States Securities Exchange Act of 1934, as amended. All statements, other than statements of historical fact, included herein are forward-looking statements that involve various risks and uncertainties. There can be no assurance that such statements will prove to be accurate, and actual results and future events could differ materially from those anticipated in such statements. Important factors that could cause actual results to differ materially from the Company's expectations are disclosed in the Company's documents filed from time to time with the British Columbia Securities Commission and the United States Securities & Exchange Commission.

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